**Project number: LIFE18 IPE/SK/000010 –**
**LIFE-IP SK AQ Improvement**

**Annex II**
Description of the project

# *LIFE Integrated projects 2018*

## Stage 2 – FULL PROPOSAL

### Part A – administrative information

LIFE 2018

FOR ADMINISTRATION USE ONLY

LIFE18 IPE/

## PROJECT

Project title (*max. 120 characters*):
Enhancing the implementation of Air Quality Management Plans in Slovakia by strengthening capacities and competencies of regional and local authorities and promoting air quality measures

Project acronym (*max. 25 characters*):
LIFE-IP SK AQ Improvement

The project will be implemented in the following Country(s) and/or Administrative region(s):
The project area, which will directly benefit from the project activities, is the entire territory of Slovakia (5.4 mil. inhabitants, 49,035 km[2]) and Czech Republic (10.6 mil. Inhabitants, 78,866 km2). Furthermore, the neighbouring countries include Ukraine, Poland, Hungary, Austria and Germany.

Project activities will be implemented in 6 out of 8 NUTS statistical regions of Slovakia[1]: Banská Bystrica, Trenčín, Trnava, Žilina, Prešov, Košice, on which territory the air quality zones and agglomerations are located (see the map of the general location of the project area), including the Air Quality Management Areas (AQMAs).

Furthermore, selected municipalities, namely Bratislava, Košice, Banská Bystrica, Jelšava, Hnúšťa,Tisovec, Krompachy, Prešov, Prievidza, Nováky, Trenčín, Trnava, Nitra, Ružomberok, Žilina, located in the zones/agglomerations and AQMAs will be involved in project activities, as "other stakeholders[2]" (see the annex for more information).
The project will also focus at all the regions in the Czech Republic, (via the activity C4), as Slovakia and the Czech Republic both deal with many similar challenges.
The complete list of stakeholders is available in form B5.

Consortium partners take into account the possibility to involve as partners other regions or municipalities implementing and updating their related Air Quality Management Plans during the course of the project.

Expected start date: 1/1/2020 Expected end date: 31/12/2027

[1] https://ec.europa.eu/eurostat/documents/345175/7451602/2016-NUTS-3-map-SK.pdf

[2] The budget of the Slovak Environment Agency foresees to cover the cost associated with the work of 8 Air Quality Managers, which will be operating in these cities. Furthermore, additional 4 Air Quality Managers at municipal level will be covered from the budget of MoE SR.

## PROJECT POLICY AREA

You can only tick one of the following options:

**LIFE Integrated Project Nature**: Integrated project implementing prioritised action frameworks pursuant to Article 8 of the Habitats Directive which may include Green Infrastructure actions that contribute to the coherence of the Natura 2000 network in a cross-border context ☐

**LIFE Integrated Project Environment**: Integrated project implementing:

- waste management plans pursuant to Article 28 of the Waste Framework Directive ☐
- river basin management plans pursuant to Annex VII to the Water Framework Directive ☐
- air quality plans pursuant to the Air Quality Directive or national air pollution control programmes pursuant to the National Emission Ceilings Directive. ■

The project will implement the following plan/strategy (*full copy is to be provided if modified since Concept Note submission*):

**Air Quality Management Plans (AQMPs),** which were elaborated for the following Air Quality Management Areas in Slovakia:

| No. | NUTS Region of Slovakia | Involvement in the LIFE-IP SK | Air Quality Management Area | Involvement in the LIFE-IP SK |
|---|---|---|---|---|
| 1 | Bratislava | - | Territory of the capital city of SR Bratislava[3] | Stakeholder |
| 2 | Kosice | Associated beneficiary | Territory of the city Košice and villages Bočiar, Haniska, Sokoľany, Veľká Ida[4] | Stakeholder |
| 3 | | | Territory of the city Krompachy[5] | Stakeholder |
| 4 | Banska Bystrica | Associated beneficiary | Territory of the city Banská Bystrica[6] | Stakeholder |
| 5 | | | Territory of the city Jelšava and villages Lubeník, Chyžné, Magnezitovce, Mokrá Lúka, Revúcka Lehota[7] | Stakeholder |
| 6 | | | Territory of the city Hnúšťa, city parts Brádno, Hačava, Likier, Polom, city Tisovec and city part Rimavská Píla and village Rimavské Brezovo[8] | Stakeholder |

[3] http://www.minv.sk/?odbor-starostlivosti-o-zivotne-prostredie-1
[4] https://www.enviroportal.sk/uploads/files/Dokumenty/PZKO-Kosice.pdf
[5] https://www.enviroportal.sk/uploads/files/Dokumenty/PZKO-Krompachy-2013.pdf
[6] https://www.enviroportal.sk/uploads/files/Dokumenty/PZKO-Banska-Bystrica.pdf
[7] https://www.enviroportal.sk/uploads/files/Dokumenty/PZKO-Jelsava-Lubenik-2013.pdf
[8] https://www.enviroportal.sk/uploads/files/Dokumenty/PZKO-Hnusta-Tisovec-2013.pdf

| | | | | |
|---|---|---|---|---|
| 7 | Presov | Associated beneficiary | Territory of the city Prešov and village Ľubotice[9] | Stakeholder |
| 8 | Trencin | Associated beneficiary | Territory of the city Trenčín[10] | Stakeholder |
| 9 | | | Territory of the district Prievidza[11] | Stakeholder |
| 10 | | | Territory of Bystricany, Novaky, Zemianske Kostolany, Kamenec pod Vtacnikom and Cerenany | Stakeholder |
| 11 | Trnava | Associated beneficiary | Territory of the city Trnava[12] | Stakeholder |
| 12 | Zilina | Associated beneficiary | Territory of the city Žilina[13] | Stakeholder |
| 13 | | | Territory of the city Ružomberok and village Likavka[14] | Stakeholder |
| 14 | Nitra | - | Territory of the city Nitra[15] | Stakeholder |

The AQMPs are publically available here:

https://www.enviroportal.sk/ovzdusie/zlepsenie-kvality-ovzdusia?

Note:

Currently, 14 AQMAs above have been recommended in 2018 based on the air quality measurements in 2015-2017. LIFE-IP SK will cover all of them either through the work of associated beneficiaries or the direct involvement of stakeholders concerned (see the table above).

We confirm that the attached Air Quality Management Plans are still valid. These plans (with one exception) were adopted in 2013, the last one in 2016. Only the Air quality management plan for Bratislava agglomeration was abolished by the court.

AQMP of Bratislava is not valid, as the Slovak Court annulled its validity, due to missed key quantifiable indicators. The new plan is under preparation; therefore, concrete budget information necessary for implementation of measures is not available at the moment. We assume that measures will be financed by complementary funds available, as well as the City budget itself. As stated in B2a, MoE SR will cover Air Quality manager for Bratislava region[16].

[9] http://www.minv.sk/?informacie-odboru-starostlivosti-o-zivotne-prostredie-ochrana-ovzdusia
[10] http://www.minv.sk/?Programy_na_zlepsenie_kvality_ovzdusia_OUTN
[11] http://www.minv.sk/?Programy_na_zlepsenie_kvality_ovzdusia_OUTN
[12] https://www.enviroportal.sk/uploads/files/Dokumenty/PZKO-Trnava-2013.pdf
[13] http://www.minv.sk/?Ochrana_ovzdusia_za
[14] http://www.minv.sk/?Ochrana_ovzdusia_za
[15] http://www.minv.sk/?oddelenie-statnej-spravy-vod-a-vybranych-zloziek-zivotneho-prostredia-kraja
[16] 4 additional AQ managers will be hired directly by MoE SR, what will provide opportunity to start cooperation with the city of Bratislava, currently developing its new AQMP. One AQ manager can be assigned to the team preparing AQMP for Bratislava. This work can be beneficial both ways, as the AQ manager will learn from the day one directly in the field and can later apply this valuable experience while helping beneficiaries already enrolled. In the second stage, self-governing region of Bratislava and Nitra may also be included in the project. Assessment following ending of the first stage will re-open discussion on including interested municipalities and NGOs such as CEPTA as potential beneficiaries of the project.

The updating of these Plans is foreseen in the second half of this year (1 AQ plan) and first half of the next year (other AQ Plans), following the finalisation of the Air Protection Strategy. We have decided first to prepare the Air Protection Strategy, including measures to improve the air quality as well as guidance on how to elaborate new and more effective Air Quality Management Plans, as the current ones have not contributed sufficiently to air quality improvement. The new Strategy should identify effective measures and assess the cost-effectiveness of their implementation. We believe that the Strategy will help to introduce more effective measures in the fields of e.g. transport and household heating. They will be included in the Air Quality Management Plans even if they might be not very popular and would dependant on political will.

Currently, the MoE focuses on making air quality management more effective. The zoning on the territory of the Slovak Republic is currently being re-assessed. The aim is to better define the representative areas for purposes of the air quality assessment and management.

Introduction of the new zoning is connected with the installation of new monitoring stations to comply with requirements regarding the minimum number of sampling points for fixed measurements of concentrations of air pollutants in accordance with the requirement of the Directives 2008/50/EC and 2004/107/EC. New zoning will be realised by the installation of new 14 monitoring stations, which is expected in the first half of 2019.

Slovak Republic is currently in the process of improving the effectiveness of achieving air quality objectives. A necessary prerequisite is the correct setting of the air quality management mechanisms. Therefore, the current approach will be re-assessed. We are focusing on:

- Preparation of the Air Quality Strategy (part of the Air Protection Strategy) including effective measures and assessment of their cost-effectiveness,
- Extension of air quality monitoring network by 14 new monitoring stations,
- New zoning for the effective air quality management,
- Preparation of a subsidy scheme for the replacement of old boilers in households,
- Strengthening the enforcement of measures included in Air Quality Management Plans (by legislative amendments),
- Legally underpinning the competences and responsibilities of municipalities in the field of air quality management

The objective of the integrated LIFE project is to support capacity building and strengthen regional and local authorities in air quality management by creating positions of "air quality managers" at the level of local authorities (self-governing regions and selected cities/municipalities in the areas of air quality management).

We believe that building these capacities will help us make the air quality management system more effective, in situ, and also promote and implement tailor-made measures for specific areas. This is the reason why we apply for the integrated project.

## BENEFICIARIES

Name of the **coordinating** beneficiary (1): **Ministry of Environment of the Slovak Republic (MoE SR)**

Name of the associated beneficiary (2): Slovak Environment Agency (SEA)

Name of the associated beneficiary (3): Banska Bystrica Region

Name of the associated beneficiary (4): Trencin Region

Name of the associated beneficiary (5): Trnava Region

Name of the associated beneficiary (6): Zilina Region

Name of the associated beneficiary (7): Presov Region

Name of the associated beneficiary (8): Kosice Region

Name of the associated beneficiary (9): Slovak Hydrometeorological Institute (SHMI)

Name of the associated beneficiary (10): PEDAL Consulting (PEDAL)

Name of the associated beneficiary (11): Energy Research Center - Technical University of Ostrava (VSB)

## PROJECT BUDGET AND REQUESTED EC FUNDING

Total integrated project budget: 15 000 000 €

Total LIFE eligible project budget: 15 000 000 €

EC LIFE financial contribution requested: 9 000 000 € (60 % of total eligible budget)

| Coordinating Beneficiary Profile Information | | | |
|---|---|---|---|
| **Short Name** | MoE SR | **Beneficiary n°** | 1 |

| Legal information on the Coordinating Beneficiary | | | | | |
|---|---|---|---|---|---|
| **Legal Name** | Ministry of Environment of the Slovak Republic | **Legal Status** | | | |
| **VAT No** | 2023106679 | **Public body** | X | | |
| **Legal Registration No** | 42181810 | **Private commercial** | | | |
| **Registration Date** | 01/11/2010 (new legal entity, first establishment in 1992) | **Private non- commercial** | | | |
| **PIC No.** | 924386430 | VAT reimbursement | Yes: X | No: | |

| Legal address of the Coordinating Beneficiary | | | | | |
|---|---|---|---|---|---|
| **Street Name and No** | Namestie L. Stura 1 | | | **PO Box** | - |
| **Post Code** | 812 35 | **Town/City** | Bratislava | | |
| **Country Code** | SK | **Country Name** | Slovak Republic | | |

| Coordinating Beneficiary contact person information | | | |
|---|---|---|---|
| **Function** | Principal state advisor of the Air Protection Department | | |
| **Surname** | Nekola | **First Name** | Adam |
| **E-mail address** | adam.nekola@enviro.gov.sk | | |
| **Department / Service** | Air Protection Department | | |
| **Street Name and No** | Namestie L. Stura 1 | **PO Box** | - |
| **Post Code** | 812 35 | **Town/City** | Bratislava |
| **Country** | Slovak Republic | | |
| **Telephone No** | +421 2 5956 2664 | **Fax No** | +421 2 5956 2389 |

| Coordinating Beneficiary details | |
|---|---|
| **Website** | www.minzp.sk |

**Brief description of the Coordinating Beneficiary's activities and experience in the area of the proposal**

The Ministry of Environment of the Slovak Republic (MoE SR) is the central authority of the state administration responsible for the creation of environmental policy and for the protection of the environment, including the air protection.

The MoE SR is the national body responsible for the transposition of EU environmental legislation, including the Ambient Air Quality Directives and the NEC Directive.

The Department of Air Protection of the Directorate of Climate Change and Air Protection is responsible in the area of air protection and air quality, especially for the management of state administration performance in the area of air protection, it provides for the state supervision in the area of air protection, monitoring and assessment of air quality and shall ensure the coordination of air quality management plans on the territory of the Slovak Republic.

The MoE SR is also responsible for the development and implementation of the national Air Protection Strategy for Slovak republic by 2030, which consist of two key documents: The National Air Pollution Control Programme according to the NEC Directive and the Air Quality Strategy to meet the AAQD requirements. The Strategy is planned to be adopted by SR Government in 2019.

Within the LIFE integrated project, the MoE SR as the coordinating beneficiary will be responsible for the overall project management and coordination of project activities, as well as for the coordination of concrete measures to improve the air quality management in Slovakia including the development and implementation of Air Quality Management Plans elaborated for the Air Quality Management Areas on the territory of the SR, underpinned by the respective legislation.

## COORDINATING BENEFICIARY DECLARATION

The undersigned hereby certifies that:

1. The specific actions listed in this proposal do not and will not receive aid from the European Structural and Investment Funds or other European Union funding programmes. In the event that any such funding will be made available after the submission of the proposal or during the implementation of the project, my organisation will immediately inform the Contracting Authority.

2. My organisation *Ministry of Environment of the Slovak Republic* has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).

3. My organisation (which is legally registered in the European Union) will contribute 3 439 400 EUR to the project. My organisation will participate in the implementation of the following actions: C1.1, C1.2, C2, C3, D, E, F1, F2. The estimated total cost of my organisation's part in the implementation of the project is 5 563 717.

4. My organisation will conclude with the associated beneficiaries and co-financiers any agreements necessary for the completion of the work, provided these do not infringe on their obligations, as stated in the grant agreement with the Contracting Authority. Such agreements will be based on the model proposed by the Contracting Authority. They will describe clearly the tasks to be performed by each associated beneficiary and define the financial arrangements.

5. I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2018-2020 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative Guidelines provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At Bratislava on 9 JULY 2019

Signature of the Coordinating Beneficiary:

Name(s) and status of signatory:

Ing. László Sólymos
Minister of Environment of the Slovak Republic

## PUBLIC BODY DECLARATION

The undersigned hereby certifies that:

My organisation Ministry of Environment of the Slovak Republic is either

A. State or regional or local authority,

or

B. a body governed by public law, or an association formed by one or more of such authorities or bodies governed by public law, or an entity registered as private law body wishing to be considered for the purpose of this call as equivalent to "public body"; **it fulfils all four following criteria** and will prove it by providing evidence upon first request::

1. it is established for the specific purpose of meeting needs in the general interest, not having an industrial or commercial character, and
2. it has a legal personality and
3. it is financed, for most part, by the State, or regional or local authorities, or other bodies governed by public law; or subject to management supervision by those bodies; or having an administrative, managerial or supervisory board, more than half of whose members are appointed by the State, regional or local authorities or by other bodies governed by public law, and
4. **in the event the organisation stops its activities, its rights and obligations, liability and debts will be transferred to a public body**.

It should be therefore considered a "public body" for the purpose of this LIFE 2016 call for integrated project proposals.

I am legally authorised to sign this statement on behalf of my organisation.

At Bratislava on.....

Signature of the Beneficiary:

[redacted]

Ing. László Sólymos
Minister of Environment of the Slovak Republic

## PUBLIC BODY DECLARATION

The undersigned hereby certifies that:

My organisation Slovak Environment Agency is either

A. the State, or a regional or local authority,

or

B. a body governed by public law, or an association formed by one or more of such authorities or bodies governed by public law, or an entity registered as private law body wishing to be considered for the purpose of this call as equivalent to "public body"; **it fulfils all four following criteria** and will prove it by providing evidence upon first request::

1. it is established for the specific purpose of meeting needs in the general interest, not having an industrial or commercial character, and
2. it has a legal personality and
3. it is financed, for most part, by the State, or regional or local authorities, or other bodies governed by public law; or subject to management supervision by those bodies; or having an administrative, managerial or supervisory board, more than half of whose members are appointed by the State, regional or local authorities or by other bodies governed by public law, and
4. **in the event the organisation stops its activities, its rights and obligations, liability and debts will be transferred to a public body.**

It should be therefore considered a "public body" for the purpose of this LIFE 2018 call for proposals.

I am legally authorised to sign this statement on behalf of my organisation.

At Banska Bystrica on...[redacted]

Signature of the Beneficiary:

SLOVENSKÁ AGENTÚRA
ŽIVOTNÉHO PROSTREDIA
Tajovského 28
975 90 BANSKÁ BYSTRICA

Name(s) and status of signatory: RNDr. Richard Müller, PhD., Director General

## PUBLIC BODY DECLARATION

The undersigned hereby certifies that:

My organisation, Banská Bystrica Self-governing Region, is either

A. the State, or a regional or local authority,

or

B. a body governed by public law, or an association formed by one or more of such authorities or bodies governed by public law, or an entity registered as private law body wishing to be considered for the purpose of this call as equivalent to "public body"; **it fulfils all four following criteria** and will prove it by providing evidence upon first request::

1. it is established for the specific purpose of meeting needs in the general interest, not having an industrial or commercial character, and
2. it has a legal personality and
3. it is financed, for most part, by the State, or regional or local authorities, or other bodies governed by public law; or subject to management supervision by those bodies; or having an administrative, managerial or supervisory board, more than half of whose members are appointed by the State, regional or local authorities or by other bodies governed by public law, and
4. **in the event the organisation stops its activities, its rights and obligations, liability and debts will be transferred to a public body**.

It should be therefore considered a "public body" for the purpose of this LIFE 2018 call for proposals.

I am legally authorised to sign this statement on behalf of my organisation.

At Banská Bystrica on 19.6.2019

Signature of the Beneficiary: [redacted]

Name and status of signatory: Ján Lunter
President of the Banská Bystrica Self-governing Region

## PUBLIC BODY DECLARATION

The undersigned hereby certifies that:

My organisation Trenčiansky samosprávny kraj is either

A. the State, or a regional or local authority,

or

B. a body governed by public law, or an association formed by one or more of such authorities or bodies governed by public law, or an entity registered as private law body wishing to be considered for the purpose of this call as equivalent to "public body", **it fulfils all four following criteria** and will prove it by providing evidence upon first request::
    1. it is established for the specific purpose of meeting needs in the general interest, not having an industrial or commercial character, and
    2. it has a legal personality and
    3. it is financed, for most part, by the State, or regional or local authorities, or other bodies governed by public law; or subject to management supervision by those bodies; or having an administrative, managerial or supervisory board, more than half of whose members are appointed by the State, regional or local authorities or by other bodies governed by public law, and
    4. **in the event the organisation stops its activities, its rights and obligations, liability and debts will be transferred to a public body**.

It should be therefore considered a "public body" for the purpose of this LIFE 2018 call for proposals.

I am legally authorised to sign this statement on behalf of my organisation.

At Trenčín on 17 .....

Signature of the Beneficiary: [redacted]

Name(s) and status of signatory: **Ing. Jaroslav Baška**
**Chairman of the Trenčín Self-governing Region**

## PUBLIC BODY DECLARATION

The undersigned hereby certifies that:

My organisation **Self-Governing Region of Trnava** is either

A. the State, or a regional or local authority,

or

B. a body governed by public law, or an association formed by one or more of such authorities or bodies governed by public law, or an entity registered as private law body wishing to be considered for the purpose of this call as equivalent to "public body"; **it fulfils all four following criteria** and will prove it by providing evidence upon first request::
    1. it is established for the specific purpose of meeting needs in the general interest, not having an industrial or commercial character, and
    2. it has a legal personality and
    3. it is financed, for most part, by the State, or regional or local authorities, or other bodies governed by public law; or subject to management supervision by those bodies; or having an administrative, managerial or supervisory board, more than half of whose members are appointed by the State, regional or local authorities or by other bodies governed by public law, and
    4. **in the event the organisation stops its activities, its rights and obligations, liability and debts will be transferred to a public body.**

It should be therefore considered a "public body" for the purpose of this LIFE 2018 call for proposals.

I am legally authorised to sign this statement on behalf of my organisation.

At Trnava on 12.06.2019.

Signature of the Beneficiary:

Name(s) and status of signatory:

**Jozef Viskupič**
**Chairman of Trnava Self-Governing Region**

## PUBLIC BODY DECLARATION

The undersigned hereby certifies that:

My organisation *(add organisation's name)* Žilina Self – Governing Region is either

A. the State, or a regional or local authority,

or

B. a body governed by public law, or an association formed by one or more of such authorities or bodies governed by public law, or an entity registered as private law body wishing to be considered for the purpose of this call as equivalent to "public body"; **it fulfils all four following criteria** and will prove it by providing evidence upon first request:

1. it is established for the specific purpose of meeting needs in the general interest, not having an industrial or commercial character, and
2. it has a legal personality and
3. it is financed, for most part, by the State, or regional or local authorities, or other bodies governed by public law; or subject to management supervision by those bodies; or having an administrative, managerial or supervisory board, more than half of whose members are appointed by the State, regional or local authorities or by other bodies governed by public law, and
4. **in the event the organisation stops its activities, its rights and obligations, liability and debts will be transferred to a public body**.

It should be therefore considered a "public body" for the purpose of this LIFE 2018 call for proposals.

I am legally authorised to sign this statement on behalf of my organisation.

At Žilina on 12th june 2019

Signature of the Beneficiary:

Žilinský samosprávny kraj
v Žiline
-1-

[redacted]

Name(s) and status of signatory:

Ms. Erika Jurinová

Chairman of Žilina Self Governing Region

## PUBLIC BODY DECLARATION

The undersigned hereby certifies that:

My organisation **PRESOV SELF-GOVERNING REGION** is either

A. the State, or a regional or local authority,

or

B. a body governed by public law, or an association formed by one or more of such authorities or bodies governed by public law, or an entity registered as private law body wishing to be considered for the purpose of this call as equivalent to "public body"; **it fulfils all four following criteria** and will prove it by providing evidence upon first request:

1. it is established for the specific purpose of meeting needs in the general interest, not having an industrial or commercial character, and
2. it has a legal personality and
3. it is financed, for most part, by the State, or regional or local authorities, or other bodies governed by public law; or subject to management supervision by those bodies; or having an administrative, managerial or supervisory board, more than half of whose members are appointed by the State, regional or local authorities or by other bodies governed by public law, and
4. **in the event the organisation stops its activities, its rights and obligations, liability and debts will be transferred to a public body**.

It should be therefore considered a "public body" for the purpose of this LIFE 2018 call for proposals.

I am legally authorised to sign this statement on behalf of my organisation.

At PREŠOVE on 25. 06. 2019

Signature of the Beneficiary:

Name(s) and status of signatory: [redacted]

**PaedDr. Milan Majerský**

President of the Presov Self-Governing Region

## PUBLIC BODY DECLARATION

The undersigned hereby certifies that:

My organisation *(add organisation's name)* Košice Self – Governing Region is either

A. the State, or a regional or local authority,

or

B. a body governed by public law, or an association formed by one or more of such authorities or bodies governed by public law, or an entity registered as private law body wishing to be considered for the purpose of this call as equivalent to "public body"; **it fulfils all four following criteria** and will prove it by providing evidence upon first request::
    1. it is established for the specific purpose of meeting needs in the general interest, not having an industrial or commercial character, and
    2. it has a legal personality and
    3. it is financed, for most part, by the State, or regional or local authorities, or other bodies governed by public law; or subject to management supervision by those bodies; or having an administrative, managerial or supervisory board, more than half of whose members are appointed by the State, regional or local authorities or by other bodies governed by public law, and
    4. **in the event the organisation stops its activities, its rights and obligations, liability and debts will be transferred to a public body.**

It should be therefore considered a "public body" for the purpose of this LIFE 2018 call for proposals.

I am legally authorised to sign this statement on behalf of my organisation.

At Košice on 19.....June 2019

Signature of the Beneficiary: [redacted]

Name(s) and status of signatory: **Ing. Rastislav Trnka, president of Košice Self – Governing Region**

## PUBLIC BODY DECLARATION

The undersigned hereby certifies that:

My organisation *(add organisation's name)* Slovak Hydrometeorological Institute is either

A. the State, or a regional or local authority,

or

B. a body governed by public law, or an association formed by one or more of such authorities or bodies governed by public law, or an entity registered as private law body wishing to be considered for the purpose of this call as equivalent to "public body"; **it fulfils all four following criteria** and will prove it by providing evidence upon first request:

1. it is established for the specific purpose of meeting needs in the general interest, not having an industrial or commercial character, and
2. it has a legal personality and
3. it is financed, for most part, by the State, or regional or local authorities, or other bodies governed by public law; or subject to management supervision by those bodies; or having an administrative, managerial or supervisory board, more than half of whose members are appointed by the State, regional or local authorities or by other bodies governed by public law, and
4. **in the event the organisation stops its activities, its rights and obligations, liability and debts will be transferred to a public body.**

It should be therefore considered a "public body" for the purpose of this LIFE 2018 call for proposals.

I am legally authorised to sign this statement on behalf of my organisation.

At Bratislava on 17 -06- 2019

Signature of the Beneficiary:

[redacted]

Name(s) and status of signatory: RNDr. Martin Benko, PhD.
Director General

## PUBLIC BODY DECLARATION

The undersigned hereby certifies that:

My organisation *(add organisation's name)* **VSB - Technical University of Ostrava (Vysoká škola báňská – Technická univerzita Ostrava)** is either

A. the State, or a regional or local authority,

or

B. a body governed by public law, or an association formed by one or more of such authorities or bodies governed by public law, or an entity registered as private law body wishing to be considered for the purpose of this call as equivalent to "public body"; **it fulfils all four following criteria** and will prove it by providing evidence upon first request::
    1. it is established for the specific purpose of meeting needs in the general interest, not having an industrial or commercial character, and
    2. it has a legal personality and
    3. it is financed, for most part, by the State, or regional or local authorities, or other bodies governed by public law; or subject to management supervision by those bodies; or having an administrative, managerial or supervisory board, more than half of whose members are appointed by the State, regional or local authorities or by other bodies governed by public law, and
    4. **in the event the organisation stops its activities, its rights and obligations, liability and debts will be transferred to a public body**.

It should be therefore considered a "public body" for the purpose of this LIFE 2018 call for proposals.

I am legally authorised to sign this statement on behalf of my organisation.

At OSTRAVA on 18-06-2019

Signature of the Beneficiary:

[redacted]

Name(s) and status of signatory: .....

[redacted]

## ASSOCIATED BENEFICIARY DECLARATION and MANDATE

I, the undersigned,

**RNDr. Richard Müller, PhD.**

representing,

**Slovak Environment Agency (SEA)**

*official legal status or form*: **Public body**
*official registration No*: **00626031**
full official address: **Tajovského 28, 975 90, Banská Bystrica, Slovak Republic**
*VAT number*: **2021125821**

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement **LIFE-IP SK AQ Improvement** with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby:

1. Mandate

full official name of the coordinating beneficiary: Ministry of Environment of the Slovak Republic (MoE SR)
*official legal status or form:* public body
*official registration No*: 42181810
full official address: Námestie Ľ. Štúra 1, 812 35, Bratislava, Slovak Republic
*VAT Number*: 2023106679

represented by **Ms. Gabriela Fischerová, Director General, Directorate of Climate Change and Air Protection**

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to

provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

1. The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).
2. The associated beneficiary will contribute **1 554 429 EUR** to the project.

   My organisation will participate in the implementation of the following actions:

   C1.1, C2, E and F. The estimated total cost of my organisation's part in the implementation of the project is **3 962 336 EUR.**
3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
4. I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2018-2020 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At Banska Bystrica on 09 August 2019

Signature of the Associated Beneficiary:

[redacted]

SLOVENSKÁ AGENTÚRA ŽIVOTNÉHO PROSTREDIA
Tajovského 28
975 90 BANSKÁ BYSTRICA
12

Name(s) and status/function of signatory:

RNDr. Richard Müller, PhD., Director General

## ASSOCIATED BENEFICIARY DECLARATION and MANDATE

I, the undersigned

**Mr. Ján Lunter**

representing,

**Banská Bystrica Self-governing Region (BBSK)**

*official legal status or form*: regional public body
*official registration No*: 37 828 100
full official address: Námestie SNP 23, 974 01 Banská Bystrica, Slovak Republic
*VAT number*: 202 162 7333

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement **LIFE-IP SK AQ Improvement** with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby:

1. Mandate

full official name of the coordinating beneficiary: Ministry of Environment of the Slovak Republic (MoE SR)
*official legal status or form*: public body
*official registration No*: 42181810
full official address: Námestie Ľ. Štúra 1, 812 35, Bratislava, Slovak Republic
*VAT number*: 2023106679

represented by Ms. Gabriela Fischerová, Director General, Directorate of Climate Change and Air Protection

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

1. The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).
2. The associated beneficiary will contribute **43 200 EUR** to the project.

   My organisation will participate in the implementation of the following actions: C1.1, E and F.

   The estimated total cost of my organisation's part in the implementation of the project is **432 000 EUR**.
3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
4. I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2018-2020 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At Banská Bystrica on 12.07.2019

Signature of the Associated Beneficiary:

Name(s) and status/function of signatory:

[redacted]

Ing. Ján Lunter

Chairman of the Banská Bystrica Self-governing Region

## ASSOCIATED BENEFICIARY DECLARATION and MANDATE

I, the undersigned,

**Mr. Jaroslav Baška**

representing,

**Trenčín Self-governing Region (TSK)**

*official legal status or form*: regional public body
*official registration No:* 361 266 24
full official address: K dolnej stanici 7282/20A, 911 01 Trenčín, Slovak Republic
*VAT number*: 202 161 3275

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement **LIFE-IP SK AQ Improvement** with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby:

1. Mandate

full official name of the coordinating beneficiary: Ministry of Environment of the Slovak Republic (MoE SR)
*official legal status or form*: public body
*official registration No:* 42181810
full official address: Námestie Ľ. Štúra 1, 812 35, Bratislava, Slovak Republic
*VAT number*: 2023106679

represented by Ms. Gabriela Fischerová, Director General, Directorate of Climate Change and Air Protection

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

1. The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).
2. The associated beneficiary will contribute **43 200 EUR** to the project.

   My organisation will participate in the implementation of the following actions: C1.1, E and F.

   The estimated total cost of my organisation's part in the implementation of the project is **432 000 EUR.**
3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
4. I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2018-2020 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At Trenčín on 16 July 2019

Signature of the Associated Beneficiary:

TRENČIANSKY SAMOSPRÁVNY KRAJ

Name(s) and status/function of signatory:

Ing. Jaroslav Baška

Chairman of the Trenčín Self-governing Region

## ASSOCIATED BENEFICIARY DECLARATION and MANDATE

I, the undersigned,

**Mr. Jozef Viskupič**

representing,

**Trnava Self-governing Region (TTSK)**

*official legal status or form*: regional public body
*official registration No*: 37836901
full official address: Starohájska 10, 917 01 Trnava, Slovak Republic
*VAT number*: 202 162 8367

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement **LIFE-IP SK AQ Improvement** with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby:

1. Mandate

full official name of the coordinating beneficiary: Ministry of Environment of the Slovak Republic (MoE SR)
*official legal status or form*: public body
*official registration No*: 42181810
full official address: Námestie Ľ. Štúra 1, 812 35, Bratislava, Slovak Republic
*VAT number*: 202 310 6679

represented by Ms. Gabriela Fischerová, Director General, Directorate of Climate Change and Air Protection

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

1. The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).
2. The associated beneficiary will contribute **43 200 EUR** to the project.

   My organisation will participate in the implementation of the following actions: C1.1, E and F.

   The estimated total cost of my organisation's part in the implementation of the project is **432 000 EUR.**
3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
4. I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2018-2020 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At Trnava on 04.07.2019.

Signature of the Associated Beneficiary:

Name(s) and status/function of signatory:

[redacted]

Mgr. Jozef Viskup c

Chairman of the Trnava Self-governing Region

## ASSOCIATED BENEFICIARY DECLARATION and MANDATE

I, the undersigned,

**Ms. Erika Jurinová**

representing,

**Žilina Self-governing Region (ŽSGR)**

*official legal status or form*: regional public body
*official registration No*: 37 808 427
full official address: Komenského 48, 011 09 Žilina, Slovak Republic
*VAT number*: 202 162 66 95

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement **LIFE-IP SK AQ Improvement** with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby

1. Mandate

full official name of the coordinating beneficiary: Ministry of Environment of the Slovak Republic (MoE SR)
*official legal status or form*: public body
*official registration No*: 42181810
full official address: Námestie Ľ. Štúra 1, 812 35, Bratislava, Slovak Republic
*VAT number*: 202 310 6679

represented by Ms. Gabriela Fischerová, Director General, Directorate of Climate Change and Air Protection

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

1. The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).
2. The associated beneficiary will contribute **43 200 EUR** to the project.

   My organisation will participate in the implementation of the following actions: C1.1, E and F.

   The estimated total cost of my organisation's part in the implementation of the project is **432 000 EUR**.
3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
4. I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2018-2020 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At Žilina on 9. 7. 2019

Signature of the Associated Beneficiary:

Name(s) and status/function of signatory:

[redacted]

Ing. Erika Jurinová

Chairman of the Žilina Self-governing Region

## ASSOCIATED BENEFICIARY DECLARATION and MANDATE

I, the undersigned,

**PaedDr. Milan Majerský, PhD.**

representing,

**Prešov Self-governing Region (PSK)**

*official legal status or form*: regional public body
*official registration No:* 378 704 75
full official address: Námestie mieru 2, 080 01 Prešov, Slovak Republic
*VAT number*: 202 162 6332

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement **LIFE-IP SK AQ Improvement** with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby:

1. Mandate

full official name of the coordinating beneficiary: Ministry of Environment of the Slovak Republic (MoE SR)
*official legal status or form*: public body
*official registration No*: 42181810
full official address: Námestie Ľ. Štúra 1, 812 35, Bratislava, Slovak Republic
*VAT number*: 202 310 6679

represented by Ms. Gabriela Fischerová, Director General, Directorate of Climate Change and Air Protection

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

1. The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).
2. The associated beneficiary will contribute **43 200 EUR** to the project.

   My organisation will participate in the implementation of the following actions: C1.1, E and F.

   The estimated total cost of my organisation's part in the implementation of the project is **432 000 EUR.**
3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
4. I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2018-2020 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At Prešov on 15. 07. 2019

Signature of the Associated Beneficiary:

Name(s) and status/function of signatory:

[redacted]

PaedDr. Milan Majerský PhD.

Chairman of the Prešov Self-governing Region

## ASSOCIATED BENEFICIARY DECLARATION and MANDATE

I, the undersigned,

**Ing. Rastislav Trnka**

representing,

**Košice Self-governing Region (KSR)**

*official legal status or form:* regional public body
*official registration No:* 35541016
full official address: Námestie Maratónu mieru 1, 042 66 Košice, Slovak Republic
*VAT number:* 202 162 4924

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement **LIF SK AQ Improvement** with the Contracting Authority (hereinafter referred to as "the g agreement")

hereby:

1. Mandate

full official name of the coordinating beneficiary: Ministry of Environment of the Slovak Republic (MoE SR)
*official legal status or form:* public body
*official registration No:* 42181810
full official address: Námestie Ľ. Štúra 1, 812 35, Bratislava, Slovak Republic
*VAT number:* 202 310 6679

represented by Ms. Gabriela Fischerová, Director General, Directorate of Climate Change and Air Protection

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

1. The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).
2. The associated beneficiary will contribute **43 200 EUR** to the project.

   My organisation will participate in the implementation of the following actions: C1.1, E and F.

   The estimated total cost of my organisation's part in the implementation of the project is **432 000 EUR.**
3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
4. I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2018-2020 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At Košice on .....

Signature of the Associated Beneficiary:

Name(s) and status/function of signatory:

[redacted]

Ing. Rastislav Trnka

Chairman of the Košice Self-governing Region

## ASSOCIATED BENEFICIARY DECLARATION and MANDATE

I, the undersigned,

**RNDr. Martin Benko, PhD.**

representing,

**Slovak hydro meteorological institute (SHMI)**

*official legal status or form*: **Public body**
*official registration No*: **00 156 884**
full official address: **Jeséniova 17, 833 15 Bratislava, Slovak Republic**
*VAT number*: **2020749852**

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement **LIFE-IP SK AQ Improvement** with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby:

1. Mandate

full official name of the coordinating beneficiary: Ministry of Environment of the Slovak Republic (MoE SR)
*official legal status or form:* public body
*official registration No*: 42181810
full official address: Námestie Ľ. Štúra 1, 812 35, Bratislava, Slovak Republic
*VAT Number*: 2023106679

represented by **Ms. Gabriela Fischerová, Director General, Directorate of Climate Change and Air Protection**

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to

may be required.

provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

1. The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).
2. The associated beneficiary will contribute **345 008 EUR** to the project.

   My organisation will participate in the implementation of the following actions: D.1.

   The estimated total cost of my organisation's part in the implementation of the project is **820 000 EUR.**
3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
4. I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2018-2020 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At BRATISLAVA on 09 -08- 2019

Signature of the Associated Beneficiary:

Slovenský
hydrometeorologický ústav
PO BOX 15
Jeséniova 17, 833 15 Bratislava
(5)

[redacted]

Name(s) and status/function of signatory:

**RNDr. Martin Benko, PhD., Director General**

## ASSOCIATED BENEFICIARY DECLARATION and MANDATE

I, the undersigned,

**Robert MISKUF**

representing,

PEDAL Consulting, s.r.o. (PEDAL)

Official legal status or form: **Limited Liability Company**
Official registration No: **46 986 111**
Full official address: **Bjornsonova 4807/5, 03601, Martin, Slovakia**
VAT number: **SK2023677018**

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement LIFE-IP SK AQ Improvement with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby:

1. Mandate

Ministry of Environment of the Slovak Republic (MoE SR)
Public body
Official registration number: 42181810
Namestie L. Stura 1, 812 35, Bratislava, Slovak Republic
VAT Number: 2023106679

represented by Gabriela Fischerová, Director General, Directorate for Climate Change and Air Protection.

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in

particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

1. The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).
2. The associated beneficiary will contribute 140 938 € to the project.

   My organisation will participate in the implementation of the following actions: E, C2, F1, F2

   The estimated total cost of my organisation's part in the implementation of the project is 1 409 385 €.
3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
4. I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2018-2020 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At Bratislava on 1/3/2019

Signature of the Associated Beneficiary:

[redacted]

P E D A L

PEDAL Consulting s.r.o.
Bjornsonova 4807/5
036 01 Martin Slovakia
DIC 2023677018 IČO 46 966 111

**Robert MISKUF, CEO**

## ASSOCIATED BENEFICIARY DECLARATION and MANDATE

I, the undersigned,

**prof. RNDr. Snášel Václav, CSc., Rector of VSB – Technical University of Ostrava**

representing,

Vysoká škola báňská – Technická univerzita Ostrava
(VSB – Technical University of Ostrava)
Legal status: Public body
17. listopadu 2172/15, 708 00 Ostrava-Poruba
VAT number: CZ61989100

hereinafter referred to as "the associated beneficiary",

for the purposes of the signature and the implementation of the grant agreement **LIFE-IP SK AQ Improvement** with the Contracting Authority (hereinafter referred to as "the grant agreement")

hereby:

1. Mandate

Ministry of Environment of the Slovak Republic (MoE SR)
Public body
Official registration number: 42181810
Namestie L. Stura 1, 812 35, Bratislava, Slovak Republic
VAT Number: 2023106679

represented by Ms. Gabriela Fischerová, Director General of the Directorate for Climate Change and Air Protection

(hereinafter referred to as "the coordinating beneficiary")

to sign in my name and on my behalf the grant agreement and its possible subsequent amendments with the Contracting Authority.

2. Mandate the coordinating beneficiary to act on behalf of the associated beneficiary in compliance with the grant agreement.

I hereby confirm that the associated beneficiary accepts all terms and conditions of the grant agreement and, in particular, all provisions affecting the coordinating beneficiary and the associated beneficiaries. In particular, I acknowledge that, by virtue of this mandate, the coordinating beneficiary alone is entitled to receive funds from the Contracting Authority and distribute the amounts corresponding to the associated beneficiary's participation in the action.

I hereby accept that the associated beneficiary will do everything in its power to help the coordinating beneficiary fulfil its obligations under the grant agreement, and in particular, to provide to the coordinating beneficiary, on its request, whatever documents or information may be required.

I hereby declare that the associated beneficiary agrees that the provisions of the grant agreement, including this mandate, shall take precedence over any other agreement between the associated beneficiary and the coordinating beneficiary which may have an effect on the implementation of the grant agreement.

I furthermore certify that:

1. The associated beneficiary has not been served with bankruptcy orders, nor has it received a formal summons from creditors. My organisation is not in any of the situations listed in Articles 106(1) and 107 of Council Regulation No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union (OJ L298 of 26.10.2012).
2. The associated beneficiary will contribute 65 256 € to the project.

   My organisation will participate in the implementation of the following actions:

   C4 and F1. The estimated total cost of my organisation's part in the implementation of the project is 652 564 €.
3. The associated beneficiary will conclude with the coordinating beneficiary an agreement necessary for the completion of the work, provided this does not infringe on our obligations, as stated in the grant agreement with the Contracting Authority. This agreement will be based on the model proposed by the Contracting Authority. It will describe clearly the tasks to be performed by my organisation and define the financial arrangements.
4. I commit to comply with all relevant eligibility criteria, as defined in the LIFE Multiannual Work Programme 2018-2020 and the LIFE Call for Proposals including the LIFE Guidelines for Applicants.

This declaration and mandate shall be annexed to the grant agreement and shall form an integral part thereof.

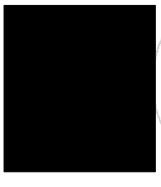
I am legally authorised to sign this statement on behalf of my organisation.

I have read in full the LIFE Model Grant Agreement and the Financial and Administrative GUIDELINES provided with the LIFE application files.

I certify to the best of my knowledge that the statements made in this proposal are true and the information provided is correct.

At OSTRAVA on - 8. 03. 2019

Signature of the Associated Beneficiary:






Name(s) and status/function of signatory:

**prof. RNDr. Snášel Václav, CSc., Rector of VSB – Technical University of Ostrava**

# ASSOCIATED BENEFICIARY PROFILE

| Associated Beneficiary profile information | | | |
|---|---|---|---|
| **Short name** | SEA | **Beneficiary n°** | 2 |

| Legal information on the Associated Beneficiary | | | | | |
|---|---|---|---|---|---|
| **Legal Name** | Slovak Environment Agency | **Legal Status** | | | |
| **VAT No** | SK2021125821 | **Public body** | X | | |
| **Legal Registration No** | 00626031 | **Private commercial** | | | |
| **Registration Date** | 17.5.1993 | **Private non-commercial** | | | |
| **PIC No.** | 998833057 | **VAT reimbursement** | Yes: | No: X | |

| Legal address of the Associated Beneficiary | | | | | |
|---|---|---|---|---|---|
| **Street Name and No** | Tajovskeho 28 | | | **PO Box** | - |
| **Post Code** | 975 90 | **Town/City** | Banska Bystrica | | |
| **Country Code** | SK | **Country Name** | Slovak Republic | | |

**Brief description of the Associated Beneficiary's activities and experience in the area of the proposal**

Slovak Environment Agency (SEA) is a cross-cutting professional organisation of the Ministry of Environment of the Slovak Republic with a national scope. SEA was established by the Slovak Minister of Environment's Decision dated May 17th, 1993. Since 2005, the SEA has guaranteed the quality of offered services while using an installed system of integrated management that includes a quality management system in accordance with EN ISO 9001 and an environmental management system in accordance with EN ISO 14001. SEA's Mission and Activities:

- Analysis and assessment of the environment
- Provision of environmental services
- Specialised care for the environment
- Landscape protection
- Environmental education
- Voluntary environmental policy tools
- International cooperation and reporting
- Environmental informatics and environmental data management
- Implementation of the operational programmes "Environment" and "Quality of the Environment" as an intermediary body
- Programming and implementation of environmental projects

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## ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

| Associated Beneficiary profile information | | | |
|---|---|---|---|
| **Short name** | BBSK | **Beneficiary n°** | 3 |

| Legal information on the Associated Beneficiary | | | | |
|---|---|---|---|---|
| **Legal Name** | Banská Bystrica Self-governing Region | **Legal Status** | | |
| **VAT No** | 202 100 7021 | **Public body** | x | |
| **Legal Registration No** | 37 828 100 | **Private commercial** | | |
| **Registration Date** | 01. 01. 2002 | **Private non-commercial** | | |
| **PIC No.** | | **VAT reimbursement** | Y | N |

| Legal address of the Associated Beneficiary | | | | | |
|---|---|---|---|---|---|
| **Street Name and No** | Námestie SNP 23 | | | **PO Box** | |
| **Post Code** | 974 01 | **Town/City** | Banská Bystrica | | |
| **Country Code** | SK | **Country Name** | Slovakia | | |

**Brief description of the Associated Beneficiary's activities and experience in the area of the proposal**

Banská Bystrica Self-governing Region is the largest of eight regional municipalities in Slovakia covering an area of 9 455 km$^2$. It has a population of approximately 660 thousand people with a population density less than 70 inhabitants per 1 km$^2$. The region is administratively divided into 13 districts (Banská Bystrica, Banská Štiavnica, Brezno, Detva, Krupina, Lučenec, Poltár, Revúca, Rimavská Sobota, Veľký Krtíš, Zvolen, Žarnovica, Žiar nad Hronom).

The main problem with air in Banská Bystrica Self-governing Region is represented by high level of the $PM_{10}$ and $PM_{2.5}$ concentration (in 2017 region had two air quality management areas for $PM_{10}$, in 2015 region had three air quality management areas for $PM_{10}$ and $PM_{2.5}$).

Under the Act No. 302/2001 Coll. on Self-government of Higher Territorial Units, Banská Bystrica Self-governing Region has no competencies in managing air quality.

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## ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

| Associated Beneficiary profile information | | | |
|---|---|---|---|
| **Short name** | TSK | **Beneficiary n°** | 4 |

| Legal information on the Associated Beneficiary | | | | |
|---|---|---|---|---|
| **Legal Name** | Trenčiansky samosprávny kraj | **Legal Status** | | |
| **VAT No** | 202 161 3275 | **Public body** | X | |
| **Legal Registration No** | 361 266 24 | **Private commercial** | | |
| **Registration Date** | 01.12.2001 | **Private non-commercial** | | |
| **PIC No.** | | **VAT reimbursement** | Y | ~~N~~ |

| Legal address of the Associated Beneficiary | | | | | |
|---|---|---|---|---|---|
| **Street Name and No** | K dolnej stanici 7282/20A | | | **PO Box** | |
| **Post Code** | 911 05 | **Town/City** | Trenčín | | |
| **Country Code** | SK | **Country Name** | Slovakia | | |

**Brief description of the Associated Beneficiary's activities and experience in the area of the proposal**

The territory of the Slovak Republic is divided into eight territorial units – Self-Governing Regions. They were established in 2001 by the decision of the National Council of the Slovak Republic under the Act on the Self-Governing Regions No. 302/2001 on Administration of the Higher Territorial Units. By virtue of this Act, the Self-Governing region of Trenčín became an organization governed by its regional authorities.

It is located in the north-western Slovakia, has an area of 4,502 km² and a population of 609,828. The Self-Governing Region of Trenčín belongs to Slovakia´s smaller regions. It is situated in the area of middle reaches of the longest Slovak river, the Váh, and the upper reaches of the river Nitra. Both local inhabitants and foreign visitors realize its great landscape diversity on relatively small territory. The White Carpathians and Small Carpathians Mountains - a part of well-known Carpathians mountain range – are dominant features of Region´s landscape.

From administrative point of view, the Self –Governing Region of Trenčín is divided into 9 districts with Prievidza being the largest, and Myjava the smallest one. Remaining districts are: Trenčín, Bánovce nad Bebravou, Ilava, Nové Mesto nad Váhom, Partizánske, Považská Bystrica a Púchov. Altogether, there are 276 municipalities, out of which 18 are towns.

Trenčín Self-governing Region is an entity in air quality action plan for air quality management for the cadastral territory of Trenčín for pollutants PM10 and PM2.

According to the action plan Trenčín Self-governing Region shall carry out short-term measures - educational activities as notifications in local media (regional newspaper, TSK website) after exceeding the limit values for pollutants PM10 and PM2.

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## ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

| Associated Beneficiary profile information | | | |
|---|---|---|---|
| **Short name** | TTSK | **Beneficiary n°** | 5 |

| Legal information on the Associated Beneficiary | | | | |
|---|---|---|---|---|
| **Legal Name** | Self-Governing Region of Trnava | **Legal Status** | | |
| **VAT No** | 202 310 66 79 | **Public body** | x | |
| **Legal Registration No** | 37 836 901 | **Private commercial** | | |
| **Registration Date** | 01. 12. 2001 | **Private non-commercial** | | |
| **PIC No.** | | **VAT reimbursement** | Y | N |

| Legal address of the Associated Beneficiary | | | | | |
|---|---|---|---|---|---|
| **Street Name and No** | Starohajska 10 | | | **PO Box** | 128 |
| **Post Code** | 917 01 | **Town/City** | Trnava | | |
| **Country Code** | SK | **Country Name** | Slovakia | | |

**Brief description of the Associated Beneficiary's activities and experience in the area of the proposal**

Self-Governing Region of Trnava is the second smallest region in Slovak Republic. As the only one it neighbours with three states – Czech Republic in the length of 45 km, Austria in the length of 12 km and Ungarn in the length of about 48 km. The total area of the region is 4 148 km$^2$. It consists of seven districts: Trnava, Dunajská Streda, Galanta, Hlohovec, Piešťany, Senica a Skalica. On the territory of the TTSK live more than 562 thousand citizens.
The flat region is closed up by the hills of Little Carpathians, Považský Inovec and Nitra Heights and rivers Váh and Danube. Geographically the region is divided into three parts – northern part on the Záhorská plain, Lower Považie and Podunajská plain. In terms of mountains, the only ones that play an important part is the northern part of the Small Karpaty. Each of the parts has a specific and different profile of the country. Out of the minerals, the most important are the deposits of oil and gas in Vienna basin, which extend to Senica and Skalica districts.

For Self-Governing Region of Trnava does not derive competence in air quality given by Act no. 302/2001 Z.z. on self-government of higher territorial units (the Act on Self-Governing Regions) therefore we do not have experience in this area.

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ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

| Associated Beneficiary profile information | | | |
|---|---|---|---|
| Short name | ŽSGR | Beneficiary n° | 6 |

| Legal information on the Associated Beneficiary | | | | |
|---|---|---|---|---|
| Legal Name | Žilina Self – Governing Region | Legal Status | | |
| VAT No | 202 162 66 95 | Public body | x | |
| Legal Registration No | 37 808 427 | Private commercial | | |
| Registration Date | 1.12.2001 | Private non-commercial | | |
| PIC No. | 900905349 | VAT reimbursement | Y | |

| Legal address of the Associated Beneficiary | | | | | |
|---|---|---|---|---|---|
| Street Name and No | Komenského 48 | | | PO Box | |
| Post Code | 011 09 | Town/City | Žilina | | |
| Country Code | SK | Country Name | Slovakia | | |

**Brief description of the Associated Beneficiary's activities and experience in the area of the proposal**

Since Žilina Self-Governing Region was not given competences in the field of air quality by the Act no. 302/2001 Z.z. on self-government of higher territorial units (the Act on Self-Governing Regions) therefore we do not have any experience in this area.

Žilina Self – Governing Region is an independent territorial self-governing unit established on the basis of the Act Nr. 302/2001 on self-government of higher territorial units.

Žilina Self – Governing Region is a legal entity administering its own property and providing public services for its citizens within the legal framework of Slovakia. It takes care of comprehensive development of its territory and the citizens' needs. The competencies include transport, regional planning and development, landscape planning, social care, education, sports, culture, health service, human pharmacy and tourism and emergency management too.

Žilina Self-Governing Region is situated in the northwest of Slovakia and is the third largest region (6809 km2) of the Slovak Republic. The region is neighbouring the Czech Republic in the west and Poland in the north and also shares the border with three other Slovak regions - Trenčiansky, Banskobystrický and Prešovský. There are more than 690 000 inhabitants. The region is divided into five historical subregions (Horné Považie, Kysuce, Liptov, Orava and Turiec) and 11 districts (Bytča, Čadca, Dolný Kubín, Kysucké Nové Mesto, Liptovský Mikuláš, Martin, Námestovo, Ružomberok, Turčianske Teplice, Tvrdošín and Žilina).

Significant advantages of the Žilina self – governing region are high-quality industrial infrastructure, progressive industries, strong cultural and historical backgrounds, and natural wealth.

More than half of the area covers natural areas with varying degrees of protection. The natural qualities of the Žilina Self – Governing Region enable the development of tourism, especially

mountain tourism, cycling and winter sports.

The territory of Žilina Self-Governing Region includes the regions with deteriorated air quality within Slovakia, not only in the areas with controlled air quality (cities of Žilina, Ružomberok). Significant air pollution in the region comes from solid fuels in households - mostly wood of different quality. The biggest problem occurs mainly in the districts of Čadca and Namestovo, where there is the highest number of solid fuel households in Slovakia.

## ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

| Associated Beneficiary profile information | | | |
|---|---|---|---|
| **Short name** | PSK | **Beneficiary n°** | 4 |

| Legal information on the Associated Beneficiary | | | | | |
|---|---|---|---|---|---|
| **Legal Name** | Prešov Self – Governing Region | **Legal Status** | | | |
| **VAT No** | 2021626332 | | **Public body** | x | |
| **Legal Registration No** | 37870475 | | **Private commercial** | | |
| **Registration Date** | 1.12.2001 | | **Private non-commercial** | | |
| **PIC No.** | | | **VAT reimbursement** | Yes x | No |

| Legal address of the Associated Beneficiary | | | | | |
|---|---|---|---|---|---|
| **Street Name and No** | Námestie mieru 2 | | | **PO Box** | |
| **Post Code** | 080 01 | **Town/City** | Prešov | | |
| **Country Code** | SK | **Country Name** | Slovakia | | |

**Brief description of the Associated Beneficiary's activities and experience in the area of the proposal**

According to the documents drawn up for PSK, the specific Economic and Social Development Program of Self-governing Region of Prešov for the Period of 2014 – 2020, in the territory of Prešov Region, they interfere with:

- Areas requiring special protection of air for PM10 and PM2.5 pollutants for Prešov, Vranov nad Topľou, Ľubotice, Hencovce, Kučín, Majerovce and Nižný Hrabovec.
- National Parks - Tatra National Park, Low Tatras National Park, Pieniny National Park, Slovak Paradise National Park and Poloniny National Park - Protected Landscape Areas - Protected Landscape Area of Vihorlat and Protected Landscape Area of Eastern Carpathians,
- Spa facilities - The spa area of the High Tatras, Vyšné Ružbachy and Bardejovske spa. The main sources of air pollution come from point sources of industrial production and from mobile sources (automobile transport).

In the Prešov region, the atmosphere is most polluted in the territory of the Vranov nad Topľou district. The air is the most heavily burdened by energy exhalates (heating plants, power plants), chemical industry and transport, in particular individual car transport and road freight transport, which is negative the impacts are closely related to the transport performance and the resulting consumption fuels. Air pollution and greenhouse gas emissions are, for example, and resources biomass combustion, hazardous waste incinerators, central heat sources, local heating solid fuel systems, domestic fuel boilers, small and medium-sized industrial sources without proper separation technology, building dust, streets, unpaved areas, agricultural land and stone quarries.

**Area:** 8 973 km² (18.3% of Slovakia)
**Population:** 823 826 (14.8 % of Slovakia) (zdroj: ŠÚ SR)
**Population density:** 91,73 inhabitants per km²
**Communities:** 665
**District:** 13
**Currency:** EURO (from 1/1/2009)

The Prešov Region is located in the northeast of the Slovak Republic. With an area of 8 973 km², it occupies 18.3% of the state's area, the area of which is the second largest region

in the Banskobystrický region. The Long North Border represents the state border with Poland. In the east of the border region with Ukraine, in the south with the Košice region, in the southwest, on a small stretch, adjacent to the Banská Bystrica region and to the west with the Žilina region.

In terms of area, the Prešov region is the second largest in Slovakia. It is made up of the historical regions of northern, central and (partially) southern Spiš, of Upper and Lower Šariš and of Upper Zemplín.

There are 665 communities in the region, of which 23 are classed as town. The Prešov region has a higher population than any other in Slovakia although its density of population is the second lowest in the country. Almost 50 % of the region's inhabitants live in its towns, the largest of which is the regional capital, Prešov, the third largest city in Slovakia with a population about of 90 000.

In terms of administration the region is divided into 13 districts.

Most of the territory of the region is a mountainous landscape with a rich and specific cultural - historical tradition and recreational potential. However, mountainous region is also a disadvantage, especially from the point of view of international and national traffic - communication links.

## ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

| Associated Beneficiary profile information | | | |
|---|---|---|---|
| **Short name** | KSR | **Beneficiary n°** | 8 |

| Legal information on the Associated Beneficiary | | | | |
|---|---|---|---|---|
| **Legal Name** | Košický samosprávny kraj (Košice Self-Governing Region) | **Legal Status** | | |
| **VAT No** | 2021624924 | **Public body** | x | |
| **Legal Registration No** | 35541016 | **Private commercial** | | |
| **Registration Date** | 1.12.2001 | **Private non-commercial** | | |
| **PIC No.** | 997539368 | **VAT reimbursement** | ¥ | N |

| Legal address of the Associated Beneficiary | | | | | |
|---|---|---|---|---|---|
| **Street Name and No** | Námestie Mararatónu mieru 1 | | | **PO Box** | |
| **Post Code** | 042 66 | **Town/City** | Košice | | |
| **Country Code** | SK | **Country Name** | Slovak Republic | | |

**Brief description of the Associated Beneficiary's activities and experience in the area of the proposal**

Kosice Self-governing Region is located in the south east of the Slovak Republic (SR). With the population of 798 103 (in 2017) it is the second most populous region. With an area of 6 754 km$^2$, it covers almost 14% of the Slovak Republic. In the east it borders with the Ukraine, in the south with Hungary, in the west with the region of Banská Bystrica and in the north with the region of Prešov.

Figure 1 Kosice Self-governing Region


*Source: Kosice Self-governing Region*

KSR consists of eleven districts: Kosice I to IV, Kosice-surroundings, Gelnica, Michalovce, Rožňava, Sobrance, Spišská Nová Ves, and Trebišov. Residential structure of the Kosice region is based on 440 municipalities; 17 of those are represented by towns. The capital of the region is the city of Kosice with 236 thousand inhabitants, which figures at the administrative, industrial, business, economic, educational, cultural and historical centre of the Eastern Slovakia territory. By its population Kosice is the second largest city in Slovakia after the national capital Bratislava.

The region is located in the north, mild zone with average annual temperature of 8-10 °C, but the south east reaches temperatures which are inland sub-tropic temperatures. The largest river in the region is Hornád. The region of Kosice has very good traffic connections. International road routes and railways

are all across the area and Kosice has an international airport. The region has these areas of tourism: Kosice and surroundings, Dolný Zemplín, part of Spiš and part of Gemer.

The Kosice region has a great number of national natural monuments, natural monuments, protected areas, national natural reservations and natural reservations. There are four large protected areas located in the Kosice region (the Slovak Paradise, Slovak Carst, Vihorlat and Latorica). The first two are popular destinations for the tourists.

Košice Self-governing Region provides professional, administrative and organizational work with tasks of self-government of higher territorial units under Act no. 302/2001 about Self-Governing Regions.
KSR provides and coordinates the development and implementation of the program of economic and social development of the self-governing region. Cooperates with ministries and other government bodies within the preparation of the national strategy of regional development, update of the Conception of Slovakia's territorial development and framework programming documents for the disbursement of EU funds. Establishes the Regional Innovation Strategy and designs Regional Innovation Policies. Creates conditions for establishment and development of territorial cooperation and partnerships, improvement of the business environment, cooperation with other regions and other regional governments, universities, association of towns and municipalities, micro-regions and municipalities and other entities. KSR's total stuff is above 240 with annual revenue more than 150 mil Euros.

KSR staff has been heavily involved in European Programmes, including 5 and 6 FP, INTERREG initiatives, EQUAL initiative, EEA grants, structural funds programs in 2007 – 2013 /2014-2020 period. We have extensive experience in participation and management of international projects in the area of regional development, socio-economic analysis, foreign direct investments, business field, knowledge management, e-government, best practice analysis, vocational training, infrastructural development etc.

## ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

| Associated Beneficiary profile information | | | |
|---|---|---|---|
| Short name | SHMU | Beneficiary n° | 9 |

| Legal information on the Associated Beneficiary | | | | |
|---|---|---|---|---|
| Legal Name | Slovenský hydrometeorologický ústav (Slovak Hydrometeorological Institute) | Legal Status | | |
| VAT No | SK202-07-49-852 | Public body | X | |
| Legal Registration No | 00 156 884 | Private commercial | | |
| Registration Date | 01/01/1969 | Private non-commercial | | |
| PIC No. | | VAT reimbursement | | N |

| Legal address of the Associated Beneficiary | | | | | |
|---|---|---|---|---|---|
| Street Name and No | Jeséniova 17 | | | PO Box | 15 |
| Post Code | 833 15 | Town/City | Bratislava | | |
| Country Code | SK | Country Name | Slovakia | | |

**Brief description of the Associated Beneficiary's activities and experience in the area of the proposal**

SHMU is an expert institute of the Ministry of the Environment in the areas of meteorology, air quality and hydrology. Its responsibilities include operation of the network of meteorological, hydrological and air quality monitoring stations, publication of annual reports on climate, water and air quality, weather forecasting, meteorological, hydrological and smog warning systems, provision of information to public, applied research, and consultancy to the government and public.

The responsibilities of the Department of Air Quality include:

- Operation of the national air quality monitoring network and daily validation of AQ data,
- Operation of the national emission inventory system for industrial point sources (NEIS)
- Emission estimates and reporting of basic pollutants, heavy metals, POPs and greenhouse gasses in accordance with international obligations,
- EU reporting on the air quality,
- National and local air quality assessment using mathematical modelling,
- Declaration of air quality management areas (AQMA),
- Air quality assessment and modelling for the Programs for the improvement of the air quality in AQMA,
- Publication of annual Air Quality Assessment reports,
- Various air quality analyses and studies.

## ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

| Associated Beneficiary profile information | | | |
|---|---|---|---|
| **Short name** | PEDAL | **Beneficiary n°** | 10 |

| Legal information on the Associated Beneficiary | | | | | |
|---|---|---|---|---|---|
| **Legal Name** | PEDAL Consulting, s.r.o. | **Legal Status** | | | |
| **VAT No** | SK2023677018 | **Public body** | | | |
| **Legal Registration No** | 46 986 111 | **Private commercial** | X | | |
| **Registration Date** | 17 January 2013 | **Private non-commercial** | | | |
| **PIC No.** | 950224126 | **VAT reimbursement** | Yes: X | No: | |

| | | | |
|---|---|---|---|
| **Street Name and No** | Bjornsonova 4807/5 | **PO Box** | |
| **Post Code** | 03601 | **Town/City** | Martin |
| **Country Code** | SK | **Country Name** | Slovakia |

**Brief description of the Associated Beneficiary's activities and experience in the area of the proposal**

**PEDAL Consulting (www.pedal-consulting.eu)** is an **innovation and management consulting company, with the origins in 2010,** that focuses its activities in: (i) The provision of **business and innovation support services to farmers, entrepreneurs, start-ups and SMEs** (more than 100 clients) as well as public authorities; (ii) The **design, management and implementation of European innovation support and research projects, support actions and policy studies** in various sectors, including Environment, Agriculture, BioEconomy, Energy (including bio-energy), , etc. and their related **vertical and horizontal business networks and value chains**; and (iii) The **development and implementation of International Tenders** according to respective requirements– pan-European market leader through its TENDERIO service (ww.tenderio.com).

PEDAL holds thorough experience and deep knowledge concerning the **attributes and specific characteristics of environment at European, national and regional level**. The company not only participated as a key partner in **relevant EU projects** but also **provides highly customized services to SMEs and leading companies of the broader environmental sector** to enhance their research and innovation capacities. Furthermore, through the abovementioned activities, the company has obtained an **extensive network** of stakeholders involved in the broader bioeconomy sector and the related value chains.

It should be also noted that since 2010, the company has participated in more than **35 successful research and innovation projects and studies** as well as **support actions** funded by the EC (FP7, H2020, Erasmus Plus, COSME etc.), in some cases as **Project Coordinator or Work Package Leader**. In the framework of these projects, **it has successfully carried out numerous awareness raising/ knowledge transfer/ networking and collaboration/ innovation support activities and services, as well as large and small-scale surveys** (utilizing several techniques) with a view to **mapping perceptions (needs, concerns, preferences, etc.) of targeted audiences** and mining meaningful market insights to fuel qualitative and qualitative analysis and translate the collected data into business intelligence.

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## ASSOCIATED BENEFICIARY PROFILE (complete for each Associated Beneficiary)

| Associated Beneficiary profile information | | | |
|---|---|---|---|
| **Short name** | VSB | **Beneficiary n°** | 11 |

| Legal information on the Associated Beneficiary | | | |
|---|---|---|---|
| **Legal Name** | Vysoká škola báňská – Technická univerzita Ostrava | **Legal Status** | |
| **VAT No** | CZ61989100 | **Public body** | X |
| **Legal Registration No** | 61989100 | **Private commercial** | |
| **Registration Date** | 1.1.1995 | **Private non-commercial** | |

| Legal address of the Associated Beneficiary | | | | | |
|---|---|---|---|---|---|
| **Street Name and No** | 17. listopadu 2172/15 | | | **PO Box** | / |
| **Post Code** | 708 00 | **Town/City** | Ostrava - Poruba | | |
| **Country Code** | CZ | **Country Name** | Czech Republic | | |

**Brief description of the Associated Beneficiary's activities and experience in the area of the proposal**

VSB – Technical University of Ostrava (hereinafter referred to as "VSB–TUO") was founded in Příbram in 1849. It continued in the tradition of the first mining school in Jáchymov, founded in 1716. According to the Government Decree No. 9/1945 Coll., and the Decree of the President of the Czech Republic No. 69/1945 Coll., it was transferred into Ostrava with the title "Vysoká škola báňská v Ostravě". By Act No. 192/1994 Coll., its name was changed to: "Vysoká škola báňská – Technická univerzita Ostrava". VSB–TUO is part of the system of higher education institutions as the highest educational system in the Czech Republic. VSB–TUO is a university of technical and economic interests. For more information: www.vsb.cz.

The project will be performed by the Energy Research Center (hereinafter referred to as "ERC"), which was set up on March 2, 1999, with the support of the management of the VSB–TUO and the special subsidy of the Ministry of Education, Youth and Sports of the Czech Republic for the project "Use of energy sources" within the program "Strengthening research in higher education". The workplace was based on the long-term experience of the staff of the Department of Energy at the VSB–TUO. In January 2002, ERC acquired the status of the university institute within the Act No. 111/1998 Coll., on higher education institutions. The scope of ERC activities is very diverse and occupies a wide field of different areas. The most important ones are research and development and cooperation with industrial partners. For more information: vec.vsb.cz.

An extension of the traditional educational show "Smokeman acts" is proposed by ERC, which is known in the Czech Republic and Slovakia (see web site: http://vec.vsb.cz/smokeman/o-smokemanovi/o-smokemanovi.html). The aim of the show is to bring to public the principles of proper combustion in local combustion devices.

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## CO-FINANCER PROFILE AND COMMITMENT FORM

| Legal Name and full address of the co-financer | | | | | |
|---|---|---|---|---|---|
| **Legal Name** | Ministry of the Environment of the Czech Republic | | | | |
| Legal address of the co-financer | | | | | |
| **Street Name and No** | Vršovická 1442/65 | | | **PO Box** | N/A |
| **Post Code** | 100 10 | **Town/City** | Prague | | |
| **Country Code** | CZ | **Country Name** | Czech Republic | | |
| **Financial commitment** | | | | | |
| **We will contribute the following amount to the project:** | **195 769,- Euro** | | | | |
| **Status of the financial commitment** | | | | | |
| Confirmed ☒ | | To be confirmed ☐ | | | |
| **Signature of the authorised person** | | | | | |
| **Name and status of the authorised person (obligatory):** | Mgr. Richard Brabec<br>Deputy Prime Minister and the Minister of the Environment | | | | |
| **Date of the signature (obligatory):** | 11. 3. 2019 | | | | |
| **Authorised signature (obligatory):** | [redacted] | | | | |
| **Comment** | | | | | |
| These funds will be used to co-finance 30 % of the total costs of VSB´s participation in the project (10 % will be covered by VSB). | | | | | |

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## OTHER PROPOSALS SUBMITTED FOR EUROPEAN UNION FUNDING

**Please answer each of the following questions:**

- Have you or any of your associated beneficiaries already benefited from previous LIFE co-financing? (Please cite LIFE project reference number, title, year, amount of the co-financing, duration, name(s) of coordinating beneficiary and/or partners involved):

**MŽP SR - Ministerstvo životného prostredia Slovenskej republiky / Ministry of Environment of the Slovak Republic**

**Microtus**
LIFE project reference number: LIFE08 NAT/SK/000239
Project title: Microtus - Conservation of root vole *Microtus oeconomus mehelyi
Duration: 1. 1. 2010 - 31. 12. 2016
Total project budget: 3 626 018 €
EU contribution: 2 719 513 €
Name of Coordinating beneficiary: Regional Association for Nature Conservation and Sustainable Development (Slovakia)
Name of Associated beneficiaries: Water Research Institute (Slovakia), Comenius University in Bratislava-Faculty of Natural Sciences (Slovakia), National Park Neusiedler See–Seewinkel (NP NSS), Austria rout Circle Association (Pisztráng Kör–PK) (Hungary), Society for the Study and Conservation of Mammals (VZZ), The Netherlands, Ministry of Environment of the Slovak Republic (MŽP SR, Slovakia)

**SHMÚ – Slovenský hydrometeorologický ústav / Slovak hydrometeorological Institute**

**LIFE-IP MAŁOPOLSKA**
LIFE project reference number: LIFE14 IPE/PL/000021
Project title: Małopolska Region - Implementation of air quality plan for Małopolska Region - Małopolska in a healthy atmosphere
Duration: 1. 1. 2015 - 31. 12. 2023
Total project budget: 16 771 099 €
EU contribution: 9 914 871 €
Name of Coordinating beneficiary: Małopolska Region
Name of Associated beneficiaries: Gmina Lubień, Poland Gmina Chełmiec, Poland Miasto Kraków, Poland Gmina Andrychów, Poland Miasto Bochnia, Poland Gmina Bolesław, Poland Gmina Brzeszcze, Poland Gmina Bukowina Tatrzańska, Poland Gmina Bystra-Sidzina, Poland Gmina Czernichów, Poland Gmina Dobczyce, Poland Miasto Gorlice, Poland Gmina Kamionka Wielka, Poland Gmina Liszki, Poland Gmina Łapsze Niżne, Poland Gmina Miechów, Poland Gmina Mogilany, Poland Gmina Nawojowa, Poland Gmina Niepołomice, Poland Miasto Nowy Targ, Poland Gmina Nowy Targ, Poland Gmina Oświęcim, Poland Gmina Poronin, Poland Gmina Rabka-Zdrój, Poland Gmina Skawina, Poland Gmina Słomniki, Poland Gmina Stary Sącz, Poland Gmina Stryszawa, Poland Gmina Sułoszowa, Poland Gmina Świątniki Górne, Poland Miasto Tarnów, Poland Gmina Wadowice, Poland Gmina Wieliczka, Poland Gmina Wieprz, Poland Gmina Zabierzów, Poland Gmina Zakopane, Poland Gmina Zielonki, Poland Przedsiębiorstwo Oszczędzania Energii ESCO Sp. z o.o., Poland Stowarzyszenie Krakowski Alarm Smogowy, Poland Krajowa Agencja Poszanowania Energii S.A., Poland Vlaamse Instelling voor Technologisch Onderzoek NV, Belgium Slovenský hydrometeorologický ústav, Slovakia, Ministerstvo životního prostředí České republiky, Czech Republic Miasto Nowy Sącz, Poland

**SAŽP – Slovenská agentúra životného prostredia / Slovak Environment Agency**

**LIFE-Ostrovné lúky**
LIFE project reference number: LIFE12 NAT/SK/001155
Project title: LIFE – Ostrovné lúky - Conservation of birds in the SPA Ostrovné lúky
Duration: 1. 1. 2014 - 31. 12. 2020
Total project budget: 2 672 353 €
EU contribution: 1 336 176 €
Name of Coordinating beneficiary: Regional Association for Nature Conservation and Sustainable Development (Slovakia)
Name of Associated beneficiaries: Comenius University in Bratislava, Faculty of Natural Sciences (Slovakia), Slovak Environmental Agency (Slovakia), Water Research Institute (Slovakia)

**WATLIFE**
LIFE project reference number: LIFE08 INF/SK/000243
Project title: WATLIFE - Enhancement of Public Awareness of the Importance of Water for Life, its Protection and Sustainable Use in Accordance with the Water Framework Directive
Duration: 1. 1. 2010 - 31. 12. 2013
Total project budget: 1 056 895 €
EU contribution: 527 272 €
Name of Coordinating beneficiary: Water Research Institute (Slovakia)
Name of Associated beneficiaries: Slovak Environmental Agency (Slovakia), DAPHNE (Slovakia)

The Associated Beneficiaries that are not mentioned in the above list have not participated in the other LIFE projects yet.

- Have you or any of the associated beneficiaries submitted any request for financing for actions or part of this project to other European Union financial instruments? To whom? When and with what results?

No, neither the Coordinating Beneficiary nor any of the Associated Beneficiaries submitted requests for financing of actions or part of this project to other European Union financial instruments.

## LETTER OF INTENT FROM MANAGING/COMPETENT AUTHORITY/ENTITY

## PROFILE AND COMMITMENT FORM

| Title of the LIFE Integrated Project |
|---|
| **Title:** Enhancing the implementation of Air Quality Management Plans in Slovakia by strengthening capacities and competencies of regional and local authorities and promoting air quality measures |

| Legal information on the MANAGING/COMPETENT AUTHORITY/ENTITY | | | | | |
|---|---|---|---|---|---|
| **Legal Name** | Ministry of Environment of the Slovak Republic | | | | |
| **Legal address of the MANAGING/COMPETENT AUTHORITY/ENTITY** | | | | | |
| **Street Name and No** | Námestie Ľ. Štúra 1 | | | **PO Box** | - |
| **Post Code** | 812 35 | **Town/City** | Bratislava | | |
| **Country Code** | SK | **Country Name** | Slovak Republic | | |

| Confirmation | |
|---|---|
| **We confirm that the complementary actions identified in this proposal and intended to be financed by the OP Quality of Environment 2014-2020 (ERDF/CF) are in principle eligible for financing.** | Yes ■ No ☐<br>Comments: Preliminary assessment. Final assessment on the eligibility will be done after verification of project documentation and fulfilment of criteria for selection of operations. |
| **We confirm that the proposal indicates correctly the potential financial contribution from the OP Quality of Environment 2014-2020 (ERDF/CF)** | Yes ■ No ☐<br>Comments: Assessment of requests for funding is ongoing and decision on the financial contribution will be done after the ongoing selection process. |
| **We confirm that the proposal indicates correctly the timing of potential funding from the OP Quality of Environment 2014-2020 (ERDF/CF).** | Yes ■ No ☐<br>Comments: The timing is in close connection with the ongoing verification process of received requests for funding. |
| **We confirm that during the assessment of applications for funding (to be) received by our authority, we (will) take into account that they are linked to the LIFE integrated project.** | Yes ■ No ☐<br>Comments: Projects funded by the OP QE are automatically linked to the LIFE integrated project through the achievement of particular key impact indicators such as PM and NOx. |

| Status of the financial commitment | |
|---|---|
| Committed/confirmed ■ | To be committed/confirmed ☐ |
| Comments: | |

| Signature of the authorised person | |
|---|---|
| **Name and status of the authorised person (obligatory):** | Matej Ovčiarka, director general<br>Directorate for environmental programmes and projects |
| **Date of the signature (obligatory):** | [redacted] |
| **Authorised signature (obligatory):** | |

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## LETTER OF INTENT FROM MANAGING/COMPETENT AUTHORITY/ENTITY

## PROFILE AND COMMITMENT FORM

| Title of the LIFE Integrated Project | | | | | |
|---|---|---|---|---|---|
| **Title:** Enhancing the implementation of Air Quality Management Plans in Slovakia by strengthening capacities and competencies of regional and local authorities and promoting air quality measures | | | | | |
| **Legal information on the MANAGING/COMPETENT AUTHORITY/ENTITY** | | | | | |
| **Legal Name** | The Ministry of Transport and Construction of the Slovak Republic | | | | |
| **Legal address of the MANAGING/COMPETENT AUTHORITY/ENTITY** | | | | | |
| **Street Name and No** | Námestie slobody 6 | | | **PO Box** | 100 |
| **Post Code** | 810 05 | **Town/City** | Bratislava | | |
| **Country Code** | SK | **Country Name** | Slovak Republic | | |

| Confirmation | |
|---|---|
| **We confirm that the complementary actions identified in this proposal and intended to be financed by the Operational Programme Integrated Infrastructure (CF/ERDF) are in principle eligible for financing.** | Yes ■ No ☐<br>Comments: Preliminary assessment. Final assessment on the eligibility will be done after verification of project documentation and fulfilment the criteria for selection of operations. |
| **We confirm that the proposal indicates correctly the potential financial contribution from the Operational Programme Integrated Infrastructure (CF/ERDF).** | Yes ■ No ☐<br>Comments: Available allocation for modernisation of public transport means and infrastructure and modernisation and electrification of railways. |
| **We confirm that the proposal indicates correctly the timing of potential funding from the Operational Programme Integrated Infrastructure (CF/ERDF).** | Yes ■ No ☐<br>Comments: Preliminary assessment. Final assessment on the timing will be done after verification of project documentation. |
| **We confirm that during the assessment of applications for funding (to be) received by our authority, we (will) take into account that they are linked to the LIFE integrated project.** | Yes ■ No ☐<br>Comments: Projects funded by the OPII are automatically linked to the LIFE integrated project through the achievement of particular key impact indicators such as PM10 and $NO_2$. |

| Status of the financial commitment | |
|---|---|
| Committed/confirmed ☐ | To be committed/confirmed ■ |
| Comments: | |

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| Signature of the authorised person | |
|---|---|
| **Name and status of the authorised person (obligatory):** | Juraj Méry, general director<br>Project Management Division<br>Ministry of Transport and Construction of Slovak Republic |
| **Date of the signature (obligatory):** | 16.7.2019 |
| **Authorised signature (obligatory):** | [redacted] |

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## LETTER OF INTENT FROM MANAGING/COMPETENT AUTHORITY/ENTITY

## PROFILE AND COMMITMENT FORM

| Title of the LIFE Integrated Project | | | | | |
|---|---|---|---|---|---|
| **Title: Enhancing the implementation of Air Quality Management Plans in Slovakia by strengthening capacities and competencies of regional and local authorities and promoting air quality measures** | | | | | |
| **Legal information on the MANAGING/COMPETENT AUTHORITY/ENTITY** | | | | | |
| **Legal Name** | Ministry of Agriculture and Rural Development of the Slovak Republic | | | | |
| **Legal address of the MANAGING/COMPETENT AUTHORITY/ENTITY** | | | | | |
| **Street Name and No** | Dobrovičova 12 | | | **PO Box** | |
| **Post Code** | 821 66 | **Town/City** | Bratislava | | |
| **Country Code** | SK | **Country Name** | Slovak Republic | | |

| Confirmation | |
|---|---|
| **We confirm that the complementary actions identified in this proposal and intended to be financed by the Interreg V-A SK-AT (ERDF) are in principle eligible for financing.** | Yes ■ No ☐<br>Comments: Preliminary assessment. Final Assessment of the Eligibility of specific projects will be done after the evaluation of applications and fulfilment of conditions set by the Monitoring committee. |
| **We confirm that the proposal indicates correctly the potential financial contribution from the Interreg V-A SK-AT (ERDF).** | Yes ■ No ☐<br>Comments: Available allocation for green infrastructure and green mobility measures. |
| **We confirm that the proposal indicates correctly the timing of potential funding from the Interreg V-A SK-AT (ERDF).** | Yes ■ No ☐<br>Comments: Preliminary assessment. Final Assessment of the Eligibility of specific projects will be done after the evaluation of applications and fulfilment of conditions set by the Monitoring committee. |
| **We confirm that during the assessment of applications for funding (to be) received by our authority, we (will) take into account that they are linked to the LIFE integrated project.** | Yes ■ No ☐<br>Comments: The call contains identified synergic and complementary effects. Contribution to transport and mobility-related air pollution reduction is one of the criteria of applications' assessment. |
| **Status of the financial commitment** | |

| | |
|---|---|
| Committed/confirmed ☐ | To be committed/confirmed ■ |
| Comments: | |

| Signature of the authorised person | |
|---|---|
| **Name and status of the authorised person (obligatory):** | Katarína Mihaľová,<br>Director General<br>Section of cross-border cooperation programmes |
| **Date of the signature (obligatory):** | 16. 7. 2019 |
| **Authorised signature (obligatory):** | [redacted] |

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## LETTER OF INTENT FROM MANAGING/COMPETENT AUTHORITY/ENTITY

## PROFILE AND COMMITMENT FORM

| Title of the LIFE Integrated Project | | | | | |
|---|---|---|---|---|---|
| **Title:** Enhancing the implementation of Air Quality Management Plans in Slovakia by strengthening capacities and competencies of regional and local authorities and promoting air quality measures | | | | | |
| **Legal information on the MANAGING/COMPETENT AUTHORITY/ENTITY** | | | | | |
| **Legal Name** | Ministry of Agriculture and Rural Development of the Slovak Republic | | | | |
| **Legal address of the MANAGING/COMPETENT AUTHORITY/ENTITY** | | | | | |
| **Street Name and No** | Dobrovičova 12 | | | **PO Box** | |
| **Post Code** | 821 66 | **Town/City** | Bratislava | | |
| **Country Code** | SK | **Country Name** | Slovak Republic | | |

| Confirmation | |
|---|---|
| **We confirm that the complementary actions identified in this proposal and intended to be financed by the Integrated regional operational programme 2014 - 2020 (ERDF) are in principle eligible for financing.** | Yes ■ No ☐<br>Comments: Preliminary assessment. Final assessment of the eligibility of specific projects will be done after the expert evaluation of application form. |
| **We confirm that the proposal indicates correctly the potential financial contribution from the Integrated regional operational programme 2014 - 2020 (ERDF).** | Yes ■ No ☐<br>Comments: Available allocation for energy efficiency improvement in apartment houses, urban transport improvement (traffic fluency, replacement of old buses, parking facilities, cycling roads etc.) |
| **We confirm that the proposal indicates correctly the timing of potential funding from the Integrated regional operational programme 2014 - 2020 (ERDF).** | Yes ■ No ☐<br>Comments: Preliminary assessment. Final assessment of the eligibility of specific projects will be done after the expert evaluation of application form. |
| **We confirm that during the assessment of applications for funding (to be) received by our authority, we (will) take into account that they are linked to the LIFE integrated project.** | Yes ■ No ☐<br>Comments: Part of the main principles of selection of operations for each investment priority is the contribution to the improvement of air quality. |

| Status of the financial commitment | |
|---|---|
| Committed/confirmed ☐ | To be committed/confirmed ■ |
| Comments: | |

**Signature of the authorised person**

| | |
|---|---|
| **Name and status of the authorised person (obligatory):** | Emil Pícha, Director General<br>Section of the Regional Development Programmes |
| **Date of the signature (obligatory):** | 16.7.2019 |
| **Authorised signature (obligatory):** | [redacted] |

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LETTER OF INTENT FROM MANAGING/COMPETENT AUTHORITY/ENTITY

PROFILE AND COMMITMENT FORM

| Title of the LIFE Integrated Project | | | | | |
|---|---|---|---|---|---|
| Title: Enhancing the implementation of Air Quality Management Plans in Slovakia by strengthening capacities and competencies of regional and local authorities and promoting air quality measures | | | | | |
| **Legal information on the MANAGING/COMPETENT AUTHORITY/ENTITY** | | | | | |
| Legal Name | Slovak Innovation and Energy Agency | | | | |
| **Legal address of the MANAGING/COMPETENT AUTHORITY/ENTITY** | | | | | |
| Street Name and No | Bajkalská 27 | | | PO Box | |
| Post Code | 827 99 | Town/City | Bratislava | | |
| Country Code | SK | Country Name | Slovakia | | |

| Confirmation | |
|---|---|
| We confirm that the complementary actions identified in this proposal and intended to be financed by the OP Quality of Environment 20L4- 2020 (OP QE) are in principle eligible for financing. | Yes ■ No ☐ Comments: |
| We confirm that the proposal indicates correctly the potential financial contribution from the OP QE. | Yes ■ No ☐ Comments: |
| We confirm that the proposal indicates correctly the timing of potential funding from the OP QE. | Yes ■ No ☐ Comments: |
| We confirm that during the assessment of applications for funding (to be) received by our authority, we (will) take into account that they are linked to the LIFE integrated project. | Yes ■ No ☐ Comments: |

| Status of the financial commitment | |
|---|---|
| Committed/confirmed ■ Comments: | To be committed/confirmed ☐ |

| Signature of the authorised person | |
|---|---|
| Name and status of the authorised person (obligatory): | Ing. Alexandra Velická, PhD., General Director |
| Date of the signature (obligatory): | [redacted] |
| Authorised signature (obligatory): | |

# *LIFE Integrated projects 2018*

## Stage 2 – FULL PROPOSAL

### Part B – technical summary and overall context of the project

## SUMMARY DESCRIPTION OF THE PROJECT (English version)

### 1. Overall context/background/geographical scope

IP itself:

Air quality in the project area

The Slovak Republic, as well as its neighbouring countries, especially the Czech Republic and Poland belong to the EU Member States facing problems with air quality, being subject to the infringement procedure due to non-compliance with the AAQD requirements, and having negative impacts on public health and environment.

Despite some improvements achieved over the past years, the situation still remains unsatisfactory.

The main air quality problems in Slovakia are caused by exceeding concentrations of suspended particles (PM10 and PM2,5) coming mainly from burning solid fuels for household heating, benzo(a)pyrene (80% of BaP is coming from household heating), and nitrogen oxide (NO2) emissions coming mainly from transport. Some air quality problems were also indicated in relation to ground-level ozone (O3).

The sources of air pollution in respective Air Quality Management Areas (AQMAs) are described in the Air Quality Management Plans (AQMPs)[17].

Significant share of the local air pollution by the emissions of PMs and BaP is represented by emissions generated by household heating. The main reasons for this can be found in burning solid and low-quality fuels (even waste) or inappropriate heating techniques in households, which is also connected with the low level of public awareness (but also due to energy poverty), as well as missing competences to ensure inspections of small air pollution sources. Besides household heating, one of the key AQ problems especially in cities relates to traffic and emissions from transport (mainly NOx).

The contribution of agricultural activities (main source of ammonia emission) on the creation of secondary PMs has to be considered as well.

In some areas, the air pollution is still caused by local industrial sources.

Slovakia shares borders with the most polluted countries in the EU and Ukraine, therefore the transboundary air pollution pose another considerable issue. Ukrainian relevant authorities will be invited to the selected conferences of our LIFE IP, which will be conducted in the framework of activities E and C2, and thus complement activities of the UNECE Air Convention[18].

The air quality in the neighbouring countries (mainly CZ and PL) is also highly affected by the air pollution caused by household heating. Since Slovakia, Czech Republic and Poland are influencing each other's air quality and have similar air pollution sources, it is very important that all three countries cooperate very closely together, as foreseen in this project. Slovakia (the Slovak Hydrometeorological Institute) together with the Ministry of Environment of the Czech Republic have joined the Polish LIFE integrated project Malopolska in a healthy atmosphere (LIFE14 IPE PL 021) aiming at the implementation of Air Quality Plan issued for Malopolska Voivodship and application of an updated air quality

[17] See form A1 for more information.

[18] https://www.unece.org/info/media/news/environment/2018/national-roundtable-meeting-in-ukraine-to-encourage-ratification-of-the-key-unece-air-convention-protocols/doc.html

model that would allow to plan and assess joint set of measures to achieve favourable air quality in all three countries.

The proposed IP will build on good practise and experience gained from the cooperation in this project (LIFE IP Malopolska) and support the dissemination and transfer of project results through cooperation and networking with other stakeholders and other neighbouring countries, including Ukraine, that could benefit from the projects experience and results.

Furthermore, we expect to collaborate very closely with the LIFE IPs which recently kicked off in Hungary[19] (LIFE17 IPE/HU/000017) and Bulgaria[20] (LIFE17 IPE/BG/000012) as well as in Italy[21] (LIFE15 IPE/IT/000013). The more detailed list of the projects (ongoing or finalised), the outcomes of which will be used also in the context of our activities, is as follows:

- LIFE IP MAŁOPOLSKA: for increasing the quality of air in the Malopolska region
- LIFE project CLEAN HEAT: for a significant reduction of particulate matter caused by wood burning
- LIFE project ATMOSYS[22] (LIFE09 ENV/BE/000409) - Policy support system for atmospheric pollution hot spots: We will use their modelling tool when conducting "D" activities.
- LIFE + RESPIRA[23] (LIFE13 ENV/ES/000417): Its goal is to demonstrate that the urban air pollution intake by cyclists and pedestrians can be reduced by using new technologies and other options in urban planning, urban design and mobility management.
- CLAIRO - CLear AIR and Climate Adaptation in Ostrava and other cities (https://www.uia-initiative.eu/en/uia-cities/ostrava). Technical University, which is the associated beneficiary of this project, is implementing the CLAIRO project.
- Clean Air (LIFE11 ENV/DE/000495): For addressing the problem of continuing violations of air pollution limits by strengthening environmental governance and increasing access to justice, which helps to improve compliance with EU legislation.
- LIFE AIRUSE project (http://airuse.eu/): for the air quality mitigation measures.
- LIFE VAQUUMS (https://vaquums.eu/about): for determining the quality levels currently being attained by innovative measuring techniques for particulate matter, ozone and nitrogen dioxide.
- Pilot project of the European Parliament —Effect of residential solid waste burning ambient air quality in Europe and potential mitigation measures
- Interreg project e-MOTICON: for the diffusion of electric mobility
- LIFE project BrennerLEC: for the creation of a "Lower Emission Corridor" along the Brenner axis
- Horizon project Clair City: for the reduction of air pollution in the cities
- LIFE+ project Climate ChangE-R: for the identification and implementation of cultivation and breeding techniques with a lower production of CO2
- Interreg project REFORM: for the the implementation and deployment of Sustainable Urban Mobility Plans
- CLIMAERA project: for the development of planning tools in support of public policies related to air quality in the regions of ALCOTRA territory

[19] http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=7008
[20] http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=7009
[21] http://www.lifeprepair.eu/?lang=en
[22] http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=3758#PD
[23] http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=5080

- Interreg project MITIMPACT: for the forecasting and evaluation of climate change and photochemical air pollution on transboundary vegetation
- Interreg Central Europe AWAIR project: for the improvement of the environmental management capacity in central Europe through the promotion and adoption of agreed measures and strategies on air pollution
- FREVUE project: for the development of innovative solutions related to electric vehicles operating "last mile" freight movements in urban centres
- Interreg Med project ENERJ: for enhancing and improving the coordination of SEAP's and other relevant energy Efficiency Plans, in order to reach Energy Saving and the National targets on public buildings' energy efficiency
- Interreg Med project REMEDIO: for strengthening the cities ability to use low-carbon transport systems for their mobility plans
- Interreg Med project GO SUMP: capitalisation and mainstreaming of projects' results and solutions for sustainable mobility in the Mediterranean at transnational level
- Horizon project NeMo: for making electro mobility more attractive and facilitate its mass adoption in the road transport sector
- Interreg Central Europe project FIRECE: for increasing capacities of regional operators to better manage energy plans particularly in terms of locally available financial resources
- Interreg Central Europe project BOOSTEE-CE: for improving the governance of energy efficiency in existing public buildings and ultimately reduce energy consumption in different central European areas
- LIFE project GYSTRA: for the improvement of the air quality of the cities by detecting vehicles whose emissions are higher that allowed
- Horizon project iSCAPE: for integrating and advancing the control of air quality and carbon emissions in European cities
- LIFE project ASPIRE: for a sustainable mobility of goods in urban areas
- H2020 Project ICARUS: for integrated climate forcing and air pollution reduction in urban systems

The aim of the project is to support and reinforce the administrative structure and capacity to ensure effective implementation of AQMPs as well as to promote air quality measures and increase the public awareness about the importance of air quality and its improvement. It will support the horizontal and vertical coherence in air quality management structure as well as support synergies between different policies and air quality objectives, which was highlighted as crucial point for the achievement of improved air quality also during the Clean Air Dialogue held between the European Commission and Slovak authorities on 24 and 25 April 2018 in Bratislava[24]. The LIFE IP will therefore contribute to meeting national emission standards.

To this end, the "Shared conclusions of the Clean Air Dialogue between Slovakia and the European Commission, taking place in Bratislava on 24-25 April 2018[25]" state the following:

**"The Commission encourages Slovakia to make full use of the available EU funding mechanisms also to support the air quality and emission reduction objectives in national Air Quality Plans and the National Air Pollution Control Programme. Although the primary objectives might not be the reduction of air pollutions, the objectives of the Rural Development Programme, the Operational Programmes under the Structural Funds, the European Fund for Strategic Investments, the Connecting**

[24] https://ec.europa.eu/info/news/clean-air-dialogue-between-commission-and-slovakia-promotes-actions-cleaner-air-2018-apr-26_en

[25] http://ec.europa.eu/environment/air/pdf/conclusions%20of%20Clean%20Air%20Dialogue%20between%20SK%20and%20EC%20final.pdf

**Europe Facility (CEF) for Transport, and more can also cover actions that benefit clean air. For future use of EU funding, Slovakia could consider priority axes and investment priorities that include air quality. Integrated Projects under the LIFE programme are relevant for the development of national or regional plans, programmes and strategies also in Slovakia."**

Therefore, this LIFE IP directly answers the encouragement of the European Commission expressed in the Conclusions above.

**Gap assessment**
Several hurdles at local, regional and national level undermine the effective realisation of AQMPs. This LIFE IP aims to significantly remove them.

At the regional and local level, several problems hindering the promotion and implementation of air quality measures have been identified, such as weak competences and responsibilities of respective authorities, missing enforcement and control mechanism, insufficient coordination of air quality management among respective authorities at national, regional and local level, as well as lack of coherence between different policies and air quality objectives.

The above mentioned also relates to the problematic implementation of Air Quality Management Plans (AQMPs) and of individual measures included in those plans, which thereby remain ineffective and unable to achieve expected results (improved air quality).

In Slovakia, the authorities responsible for drafting AQMPs are the respective district offices in the seat of the regions (state administration authorities at the level of region, under the Ministry of Interior of the Slovakia).

In the preparation of AQMPs, the district offices in the seat of region as state level administration authorities under the Ministry of Interior SR shall cooperate with respective regional authorities (self-governing regions) and local authorities (municipalities[26]), who should bear the responsibility for the implementation of individual measures to improve air quality falling under the scope of their specific competences and located at their territory. However, the level of enforcement of the AQMPs and achievements in air quality improvement is not sufficient and depends on limited capacities at regional and local level.

Strengthening the role of regional and local authorities in the air quality management structure is one of the key issues pointed out during discussions on the preparation of the Air Protection Strategy of the SR by 2030, which is currently being developed by the MoE SR[27] and which will include the National Programme to Reduce Emissions (NAPCP) as well as the Air Quality Strategy. In this regard, the Ministry of Environment of the SR is going to prepare amendments of current legislation in order reinforce the binding nature of the AQMPs and their enforcement and to pass certain competences to self-governing authorities and municipalities. It is expected that the changes in legislation and in competences will bring new requirements for regional and local authorities. The IP is meant to contribute and underpin this process of improving the governance structure in air quality management in Slovakia.

[26] 34 municipalities signed up for Covenant of Mayors and committed to develop their Sustainable Energy (and Climate) Action Plans. The plans are in different stage of preparation, and none of them is published yet. During the project implementation, the Air Quality Managers are expected to ensure possible synergies among the Plans and project, particularly in the area of emission reduction of pollutants from household heating and energy efficiency in public buildings. City of Prešov and Trnava are both involved in LIFE IP as a stakeholder and committed to develop SECAP.

[27] https://www.minzp.sk/strategia-ochrany-ovzdusia.html

The following main problems hindering effective air quality management at regional and local level can be listed: 1) Lack of personal capacities and financial sources of regional and local authorities; 2) Lack of competences and expertize; 3) Lack of knowledge on air quality development at regional/local level; 4) Lack of methodological guidance and coordination between national and regional/local level; 5) Low level of awareness and behavioural patterns of local residents

**Geographical scope**

The project activities relate to the AQMAs. However, it is expected that the project will have impact on the whole territory of Slovakia. Furthermore, the VSB will cover the whole territory of the Czech Republic.

With regard to the air quality management system in Slovakia, the key activities will be implemented in:

a) 6 NUTS regions in Slovakia, which are territorial units including also AQMAs and have responsibilities in relation to air quality measures included in AQMPs at regional level; Project activities will be implemented in all 6 out of 8 NUTS regions: Banská Bystrica, Trenčín, Trnava, Žilina, Prešov, Košice, on which territory the air quality zones and agglomerations are located (see the map of the general location of the project area), including the Air Quality Management Areas (AQMAs). The two unrepresented regions (Bratislava and Nitra) will be covered by the municipalities of Bratislava and Nitra from the position of stakeholders (see below).

4 additional AQ managers will be hired directly by MoE SR, what will provide opportunity to start cooperation with the city of Bratislava, currently developing its new AQMP. One AQ manager can be assigned to the team preparing AQMP for Bratislava. This work can be beneficial both ways, as the AQ manager will learn from the day one directly in the field and can later apply this valuable experience while helping beneficiaries already enrolled. In the second stage, self-governing region of Bratislava and Nitra may also be included in the project. Assessment following ending of the first stage will re-open discussion on including interested municipalities and NGOs such as CEPTA as potential beneficiaries of the project.

b) Selected municipalities (cities) in AQMA, which have responsibilities in relation to air quality measures included in AQMPs at local level: Bratislava, Košice, Banská Bystrica, Jelšava, Hnúšťa,Tisovec, Krompachy, Prešov, Prievidza, Nováky, Trenčín, Trnava, Nitra, Ružomberok, Žilina

The project will also focus on all the regions in the Czech Republic, as Slovakia and the Czech Rep. both deal with many similar problems.

**Why our Life IP falls under the IP definition?**

The project will complement the EU interventions that support the implementation of actions specified in the AQMPs.

Complementary actions:

The implementation of IP project activities will induce complementary actions focused on the implementation of individual measures identified in the Air Quality Management Plans (AQMPs). It will facilitate the effective spending of available structural funds in the current programming period 2014 - 2020 and optimise the use of EU funds in the next programming period to achieve air quality objectives (European Structural and Investment Funds, including Rural Development Programme). Project partners recognise the fact that

according to the European [28], the Air Quality aspects are among the key priorities. In this connection, the Air Quality topics will be adequately reflected in the future national operational programmes covering the period 2021-2027.

For the implementation of these measures, effective use of available funds to reduce emissions and improve air quality will be promoted, both from national and EU sources. The key objective of complementary actions will be the replacement of obsolete solid fuel boilers in households, other measures will aim at improving energy efficiency in buildings, promoting sustainable transport solutions and green measures which should have impact on the improvement of air quality (see more detail in section on Expected Complementary Actions under point 3). The implementation of complementary actions will correspond with measures to reduce emissions and improve the air quality and contribute to the achievement of objectives of the Air Protection Strategy in Slovakia.

Air Protection Strategy 2030 consists of two separate documents, one of which is NAPCP. This document is currently available for public hearing, link:

https://www.minzp.sk/spravy/aktuality/narodny-program-znizovania-emisii-pripomienkove-konanie.html

Second document of the Air Protection Strategy is Air Quality Strategy, which is being currently developed. No draft for distribution is available at this point in time.

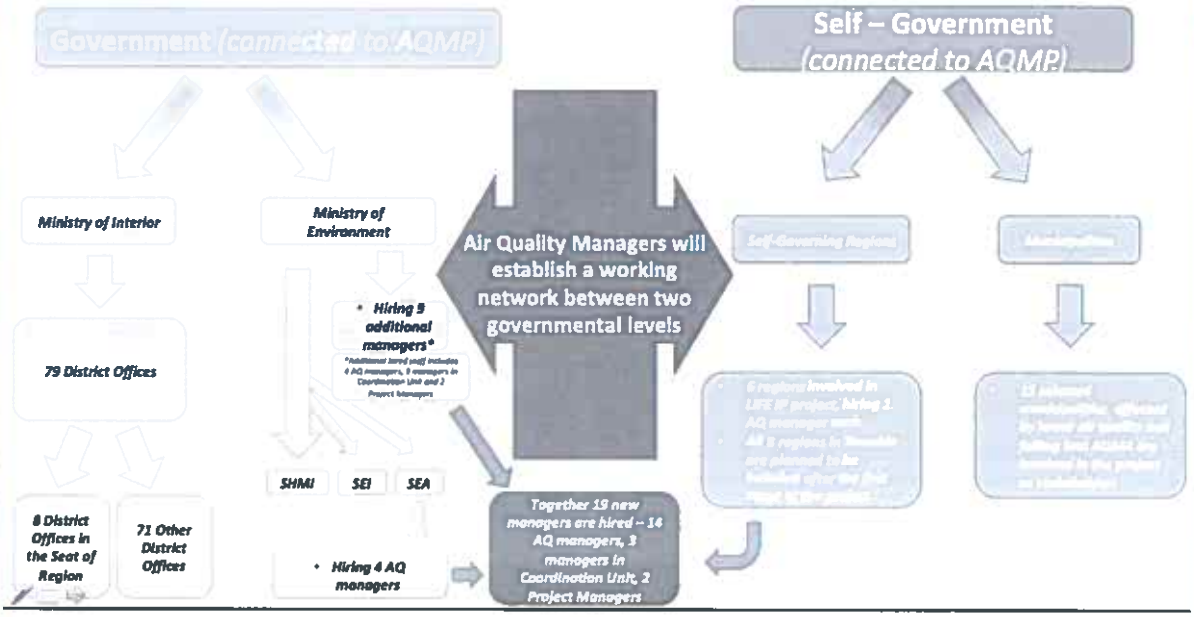
During the implementation of LIFE IP, AQ managers will use all available relevant documents, learn from them and use the knowledge in order to apply appropriate and correct measures to targeted areas. Air Protection Strategy, consisting of two separate documents [National Air Pollution Control Programme and Air Quality Strategy], is designed to set future improvement in air quality in Slovakia. The Strategy will serve as the main pillar to actual regional implementation of measures, making it two-way operation: Air Protection Strategy being used at all governmental levels, and also AQ managers learning from it and teaching other managing authorities about its potential contributions to air quality. Air Protection Strategy and AQ managers, will together help especially in AQMP preparation, as a part of Air Quality Strategy which will serve as a Guidance for AQMP preparation.

Preparation of AQMP is in competence of district offices in the seat of region, but they cooperate with affected municipalities, self-governing regions, NGOs, industries, as well as other district offices involved. This process is set to be participative and set by the Air Act, making the process mandatory. All of the stakeholders are also responsible for implementation of measures directly connected to their competences (self-government) or their contribution to air pollution (industry). District offices in the seat of region monitor the implementation, collect data and re-evaluate AQMP. AQ managers will be also involved in evaluation, but not responsible for its execution.

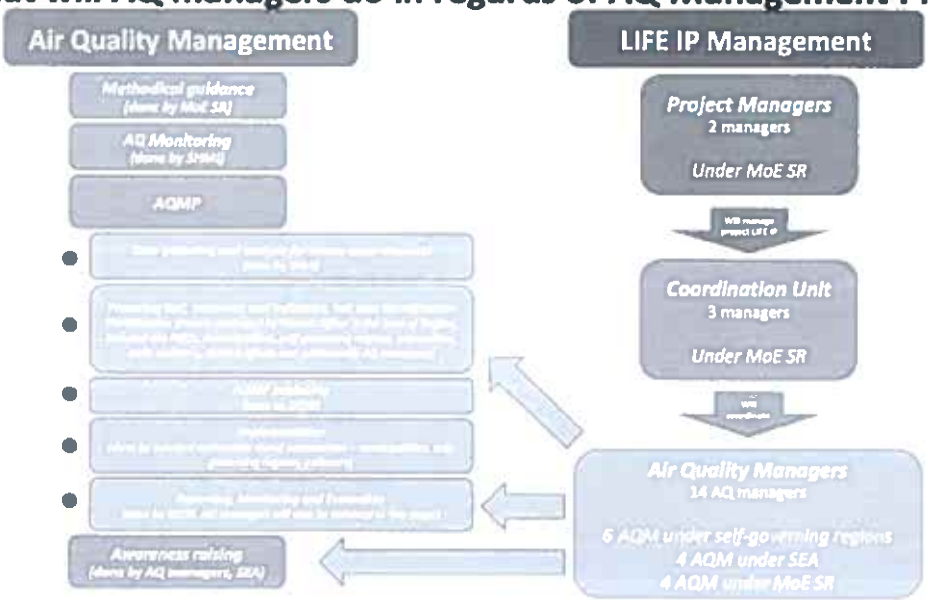
Communication between district offices and self-governing regions, or municipalities is often rigid and slow. Proposed IP project will create a network of AQ managers providing a managing layer from above, allowing for quick and flexible cooperation. NAPCP is prepared and published by MoE SR. Once the document is approved by the Slovak Government, all of the involved ministries are required to implement measures stated in NAPCP. The implementation will be monitored by MoE. MoE will also collect data and evaluate and assess further changes. The position and the role of Air Quality Managers in this process is illustrated in the diagrams below.

[28] https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/european-semester_en

## Where do AQ managers fit in?




## What will AQ managers do in regards of AQ Management Plan?




Municipalities will have the main role in implementing measures proposed by them (while preparing AQMP) or ordered to them by relevant District Office in the Seat of Region (DOSR) in AQMP. Responsibility for implementation of measures is ordered by Air Act. Each stakeholder implements measures specific for him. Polluters have to comply with measures related to the pollution produced by them, such as dust reduction, technology renovation, reconstruction, cleaning and general maintenance. Municipalities are responsible for measures directly related to their responsibilities, such as construction of new gas networks, greenification, road renovation, road sprinkling etc.
Additionally, municipalities have to:

- Participate in development of Air Quality Management Plans
- Include measures taken in its urban planning documents

Note: New legislation is currently under preparation that will oblige municipalities and self-governing regions to draw up plans of measures that include both long-term and short-term measures to improve air quality, if directed by DOSRs. These plans of measures aim to specify the measures identified in the Air Quality Management Plans.

Municipalities have, according to the Air Act competence to establish zones with restricted mobile air pollution sources and establish low emission zones by a generally binding regulation

The municipalities are responsible in particular for the measures resulting from the competences of municipalities under Act no. 369/1990 Coll. on municipal establishment, such as:

- Maintenance of municipal roads (IV. class roads)
- Public spaces and their use, planting of greenery
- Territorial planning within the municipality
- Public transport

**2. Project objectives:**

IP itself:

The main objective of the project is to support effective air quality management with the aim to improve the air quality and reduce the exposure of population to harmful impacts of air pollutants.

The project will strengthen and enhance the realisation of AQMPs in AQMAs on the territory of the Slovak Republic.

Specific project objectives[29] are:

- ✓ Enhancing effective air quality management and implementation of AQMPs (C1.1 and C1.2)
- ✓ Promoting air quality measures and raising awareness of the importance of air quality (C2)
- ✓ Accelerating the implementation of measures to minimise negative impacts of household heating and transport on the air quality (C3)
- ✓ Support the exchange of heat sources (boilers) in households (C4.1 and C4.2)
- ✓ Improving air quality monitoring and reporting at regional and local level (D)

Complementary actions:

Complementary to the activities of the IP, focusing on the enhancement of governance structure in air quality management and AQMP implementation mechanisms, complementary actions will relate to the implementation of concrete (investment) measures included in the AQMPs (or measures to be included in updated AQMPs), such as the replacement of obsolete solid fuel boilers in households, improving energy efficiency in buildings, construction of cycling routes, promoting sustainable transport solutions and alternative transport means including electro-mobility, purchase of low-emission vehicles

[29] Note: Note: The objective: "Assessment of health and economic impacts incurred by air pollution", which was presented in the concept note is not part of this project because, in the meantime the Institut of Environmental Policy secured the funding to implement these activities in the context of other project. Therefore, in order to avoid double-funding, this activity is not part of this LIFE IP. However, we will build on the results of the other project.

for public transport, purchase of cleaning mechanisms, revitalization of public space and other green measures which contribute to the improvement of air quality.

**3. Actions and means involved:**

Actions financed by LIFE:

**Establishment of Air Quality Managers & Air Quality Coordination Unit**

This task will build capacities of regional and local authorities to strengthen air quality planning and management of authorities at regional and local level, which often lack competences, capacities and resources to perform all necessary tasks related to air protection and to the implementation of air quality measures. Within the project, **Air Quality Managers**, established in 7[30] self-governing regions and in selected municipalities located in the AQMAs, shall gain necessary competences, skills and know-how in order to:

- ✓ Help regional and local authorities with managing air quality issues
- ✓ Report and monitor air quality at regional and local level,
- ✓ Promote air quality measures and raise the awareness in field of air protection and air quality.

The activity will also include specific trainings and workshops aimed at:

- ✓ Detailed requirements for elaboration of effective local Air Quality Plans
- ✓ Analytical work on air quality & pollution development in municipalities, regions and districts
- ✓ Providing information on funding possibilities from national and EU funds (ESIF) and preparation of projects and grant applications for available funds aimed at air quality improvement
- ✓ Providing technical advice to citizens operating small air pollution sources (boilers and heating devices)
- ✓ Effective communication of the air quality importance towards citizens
- ✓ Sharing experience and good practice in the field of air quality management among experts, incl. experts from other countries
- ✓ Trainings on performing inspections of domestic boilers and their operation.

Another part of the activity will be the establishment of an "**Air Quality Coordination Unit**", which will provide for methodological guidance and tools to support and coordinate the work of AQ managers. The AQ Coordination Unit will also be responsible for the centralized monitoring of the progress in implementation of AQMPs.

**Promoting air quality measures and raising awareness of the importance of air quality**

The activity will aim at preparation and realization of information and awareness raising campaigns as well as educational programmes. Cooperation and networking with partners from the Czech Republic and other countries (see the list of projects under point 1 of this section) is foreseen.

*Awareness rising campaigns*

Awareness raising campaigns will focus on different target groups, such as general public (adults), teachers, school students/children and representatives of self-governing authorities (self-governing regions, municipalities).

[30] The Air Quality Manager for the Bratislava region will be employed directly through the MoE SR.

The activity will focus on information about the current situation in air quality, its causes and consequences and on information about air quality measures. The activities will include elaboration and dissemination of information materials, publications and media presentations, including social media.

*Educational programmes*

The activity will include workshops and exchange of experience within Slovakia and also of other (mainly neighbouring) countries. The activity will include preparation and dissemination of information leaflets and study materials in order to:

- **Educate representatives of self-governing authorities aimed at the implementation of air quality measures, exchange of experience and solution:** The aim is to educate decision makers at regional and local level and to explain the importance of air quality improvement in terms of public interest, in particular in relation to public health.
- **Education about the benefits of district heating for the improvement of local air quality:** The aim is to promote the use of district heating as an effective measure to reduce emissions from household heating (clean energy), improvements in heat supply planning. The activity will include workshops, preparation and dissemination of information leaflets and study materials.
- **Provide training on proper heating techniques and recommendations for cleaner heating:** The aim is to explain proper heating techniques and teach people to use them. Activities will be aimed at proper operation of boilers, preparation of fuel, explanation of negative impacts of air pollution, including the "indoor pollution" etc. (educational events, including demonstrations).
- **Provide training in the field of sustainable transport/mobility:** The aim is to develop expert materials and educational programmes, to organize the trainings on ecodriving and to prepare and implement Sustainable Urban Mobility Plans[31] etc.
- **Deliver educational and awareness activities and campaigns for teachers, students and school children:** The aim is to create and to implement selected educational and training activities focused on teachers, students and school children[32].

The information and awareness campaigns will build on the experience from on-going campaigns undertaken in Slovakia, Czech Republic and in other EU Member States with the aim to use all means available to promote a robust campaign addressing as many citizens as possible.

**Accelerating the implementation of measures to minimise negative impacts of household heating and transport on air quality (C3 , C4.1, C4.2)**

- Demonstration projects aimed at household heating

Under this activity, complex approach in implementing various air quality measures will be demonstrated in selected municipalities, including educational activities (motivation, proper burning techniques), concrete investment measures (replacement of old boilers) and monitoring of the progress in air quality improvement. The effectiveness of measures and their synergies will be assessed. The results shall be used by designing regional and local policies, as well as legislation to improve the effectiveness of air quality measures.

- Pilot Projects aimed at the development of feasibility study on transport solutions for the air quality improvement in selected cities

[31] This is complementary to the projects run by the IROP.

[32] One of the main objectives is to create new travelling habits based also for instance on the gaming elements.

The key objective of this activity is to provide incentives to selected cities in AQMAs, where the main air quality problems are caused by traffic to provide for the elaboration of feasibility studies aimed at transport solutions to improve air quality, such as introduction of low-emission zones or introducing charged entrance to the cities etc. The results of these studies should be incorporated into the Sustainable Mobility Plans.

VSB will implement the following activities in the Czech Republic:

✓ Support the exchange of heat sources (boilers) in households (C4.1 and C4.2)

**Improving air quality monitoring and reporting at regional and local level**

For proper and effective decision making and setting measures, availability of statistical data is indispensable. The aim of the activity is to improve the quality and availability of air quality data at local level.

- Local data collection and evaluation of emissions inventories

The main objective of the activity will be the creation of a detailed residential heating database, which is necessary for efficient targeting of measures as well as for the evaluation of their impacts in future using high resolution air quality modelling. The activity will be performed by the Slovak Hydrometeorological Institute.

- Air quality modelling

Based on the detailed local emission inventories, air quality modelling will be performed at regional and local level, as an analytical part of the AQMPs, including the assessment of impacts of various measures on the air quality improvement. The activity will be performed by the Slovak Hydrometeorological Institute.

**Monitoring of the effects of implementation Air Quality Management Plans**

The activity will mainly consist of the following tasks.

- Local data collection, evaluation of emissions inventories and monitoring of the impact of implemented measures on AQ

- Reporting on the implementation progress

The calculations will be made in selected regions/municipalities of Slovakia in cooperation with the provider and Slovak Hydrometeorological Institute. Pollutants of principal interest are PM2,5, PM10 and NOx. The aim is to target Slovak regions individually, starting with those heavily affected and if possible extending the quantification to those without specifically known air quality or with better air quality.

- Assessment of air quality improvement potential in selected regions of Slovakia

Activity will be carried out by the Environmental Policy of the MoE SR, in cooperation with the Slovak Hydrometeorological Institute[33].

**Complementary actions:**

[33] The appropriate budget was allocated to the subcontracting of this task.

One of the main objectives of LIFE IP is to mobilise financing for air quality protection. The main sources include OP Quality of Environment, IROP. All in all nearly EUR 1086 million will be spent on implementation of complementary measures, which include:

- Replacement of obsolete solid fuel boilers in households
- Replacement of old boilers in public buildings
- Support for the use of renewable energy sources (RES)
- Improvement of energy efficiency
- Renovation of public buildings (including insulations and modernisation of heating systems, use of district heating systems)
- State-aid scheme aimed at the protection of environment in energy sector
- Promoting electromobility
- Modernization of transport infrastructure including urban and improvement of sustainable urban transport
- Other transport measures
- Green infrastructure measures
- Other urban planning measures

Other complementary measures include several projects aimed at the air quality improvement, including replacement of old boilers by more efficient ones, improving energy efficiency in public buildings (including insulations), cleaning of roads and creating green infrastructure, promoting electromobility etc. are supported on a yearly basis from the Environmental fund. Complementary to the project, development of municipal low carbon plans and preparation of updated Air Quality Management Plans is foreseen.

**4. Expected results (main outputs and achievements, qualitative and quantitative):**

Linked to Actions of LIFE IP (short and):

1. Enhanced capacities and competences of self-governing regions and municipalities for effective implementation of tasks related to AQMPs measures by the creation of new working position of "Air Quality Manager". 6 AQ managers will be hired by self-governing regions. 4 AQ managers hired by SEA and 4 AQ managers hired by MoE SR. All of them will share the same competencies and roles, creating stable network across governmental and self-governmental levels. This means that all of the AQ managers can be involved in revisions and improvement of existing AQMPs, as we expect that all of them will contribute to their implementation. Additional to 4 AQ managers at MoE we will hire 3 managers as Coordination Unit and 2 managers as Project Managers, so altogether 9 additional people at MoE SR. Improved management of regional and local air quality authorities and coordination from national level (AQ Coordination Unit)
2. Increased awareness of decision makers (at the level of self-governing regions and municipalities) about the importance of measures to improve air quality, air quality planning and reporting
3. Increased public awareness about the air quality and health impacts among citizens, behavioral changes of citizens with impacts on air quality (household heating, green transport)
4. Developing information materials and media outcomes on air quality, promoting air quality issues through information campaigns and education programmes (it is expected that campaigns will be implemented every year in each of the respective region)
5. Introduction of regional and local air quality monitoring and reporting
6. Collection of statistical data at regional level related to household heating
7. Improved air quality modelling and reporting at regional and local level (analytical part of the AQMPs), including the assessment of impacts of measures on the air quality
8. Conducting a deep air quality analysis of local air pollution impacts directly linked to health effects and implied costs
9. Update and revision of AQMPs

Linked to complementary actions (short and long term):

1. Replacement of old/solid-fuel boilers
2. Improved (lower) energy need for flat area ($m^2$) in households after realization of the project by 10% (17.7 kWh/m2/year) in comparison with the actual situation.
3. Increased energy efficiency
4. Increased use of renewable energy sources
5. Increased use of electromobiles and alternative transport means
6. Improvement of transport systems and traffic situation in cities
7. Increased use of public transport and sustainable (green) transport means (cycling routes etc.),
8. Reduce emissions of $PM_{2\,5}$ in households after realization of the project based on National Air Pollutants Inventory by 3 515 tons/year (25%) in comparison with the actual situation
9. Increased amount of funds (both EU and national) allocated for air quality measures
10. Development of new AQMPs

Estimated quantification of expected results (e.g. estimated emission reductions of PM 2,5) is about 3 515 tons/year.

**5. Expected contribution of the project to the implementation of the target plan/strategy**

LIFE IP:

The activities of the project will significantly support the effectiveness of the implementation of AQMPs, which currently lack satisfactory level of enforcement. Substantial improvements and enhancement of the air quality management are needed. These needs are directly linked to necessary legislative changes, which will strengthen the competences as well as responsibilities of bodies involved in the management of air quality in Slovakia and Czech Republic, including the preparation and implementation of AQMPs.

The key objective of the project is to enhance the capacities and competences of regional and local authorities, which will have to take a much more active role both in development and implementation of individual AQMPs as well as measures included in these AQMPs.

This is expected to be achieved through the establishment of specialized working positions of AQ managers who will carry out the tasks necessary for an effective AQMPs preparation and implementation.

**Complementary actions**

It is expected that available funds from EU and national sources will be allocated to support complementary actions focusing on measures included in AQMPs. Incentives motivating regional and local authorities to apply for these funds will be promoted.

Taking into account the current stage of preparation of the next programming period, it is not possible to identify the possibilities and available funds. However, based on the prioritization of air quality issues at the EU policy level, it is expected that the amount of funds available will substantially increase. Future subsidy schemes should be well prepared and better targeted to achieve the expected results especially in areas where the air quality issue is of major urgency.

**6. Main stakeholders involved in the project:**

Project partners and other stakeholders: See section A1 and B5

**7. Long term sustainability (including capacity building)**
It is expected that the specialized working position of air quality manager will become an important element of air quality management at the level of regional and local authorities responsible for the implementation of AQMPs and will be maintained once the IP is finalised. It is believed that during the lifetime of the project, the working position of air quality manager will be considered beneficial as an effective tool to coordinate, promote and supervise the implementation of AQMPs, improve the communication and awareness of citizens and relevant stakeholders, and support the common understanding of the importance and impacts of air quality. This should result in giving higher priority to the air quality issues and support a serious approach to solving the problems.

Changes in behaviour and raising awareness are also crucial from the long-term point of view. The duration of the project might create a solid base for the introduction and use of effective practice in implementing air quality measures and improving the overall situation in this field. The sustainability of the project will be supported by the revision of national air protection legislation, which will strengthen the involvement, competences and obligations of regional and local authorities in air quality management.

Another significant contribution of the project, in a long term point of view, is the improvement in AQMPs development. It is expected that the project will also bring inputs for the preparation of new (updated) and more effective AQMPs of improved quality. Complementary actions will also be better identified and linked to available funds.

**8. a) Is your project significantly climate related?** Yes ■ No ☐

**b) Is your project significantly biodiversity-related?** Yes ☐ No ■

**If you consider your project to be significantly climate or biodiversity-related (you marked 'yes'), please explain why:**

Many of the measures included in AQMPs to reduce air polluting emissions at the same time contribute to the reduction of CO2 emissions, such as the replacement of old boilers using solid fuels with new, low-emission and energy efficient boilers, modernization of combustion plants, reduction of heat losses, reconstruction of the distribution network, support of central heating, insulation of buildings, installation of solar panels, heat pumps and other renewable energy sources.

## GENERAL DESCRIPTION OF THE AREA(s) TARGETED BY THE PROJECT

**Name(s)/Definition of the project area(s):**

The project area is the entire territory of Slovakia (5.4 mil. inhabitants, 49,035 km2) and Czech Republic (10.6 mil. Inhabitants, 78,866 km2).

**Comments:**

With regard to the air quality management system in Slovakia, the key activities will be implemented in:

a) 6 NUTS regions in Slovakia, which are territorial units including also AQMAs and have responsibilities in relation to air quality measures included in AQMPs at regional level;

Project activities will be implemented in all 6 out of 8 NUTS regions: Banská Bystrica, Trenčín, Trnava, Žilina, Prešov, Košice, on which territory the air quality zones and agglomerations are located (see the map of the general location of the project area), including the Air Quality Management Areas (AQMAs). The region of Bratislava will be covered by the MoE SR. Nitra Region will be covered by the municipality of Nitra from the position of stakeholders (see below).

b) Selected municipalities (cities) in AQMA, which have responsibilities in relation to air quality measures included in AQMPs at local level: Bratislava, Košice, Banská Bystrica, Jelšava, Hnúšťa,Tisovec, Krompachy, Prešov, Prievidza, Nováky, Trenčín, Trnava, Nitra, Ružomberok, Žilina.

4 additional AQ managers will be hired directly by MoE SR, what will provide opportunity to start cooperation with the city of Bratislava, currently developing its new AQMP. One AQ manager can be assigned to the team preparing AQMP for Bratislava. This work can be beneficial both ways, as the AQ manager will learn from the day one directly in the field and can later apply this valuable experience while helping beneficiaries already enrolled. In the second stage, self-governing region of Bratislava and Nitra may also be included in the project. Assessment following ending of the first stage will re-open discussion on including interested municipalities and NGOs such as CEPTA as potential beneficiaries of the project.

34 municipalities signed up for Covenant of Mayors and committed to develop their Sustainable Energy (and Climate) Action Plans. The plans are in different stage of preparation, and none of them is published yet. During the project implementation, the Air Quality Managers are expected to ensure possible synergies among the Plans and project, particularly in the area of emission reduction of pollutants from household heating and energy efficiency in public buildings. City of Prešov and Trnava are both involved in LIFE IP as a stakeholder and committed to develop SECAP.

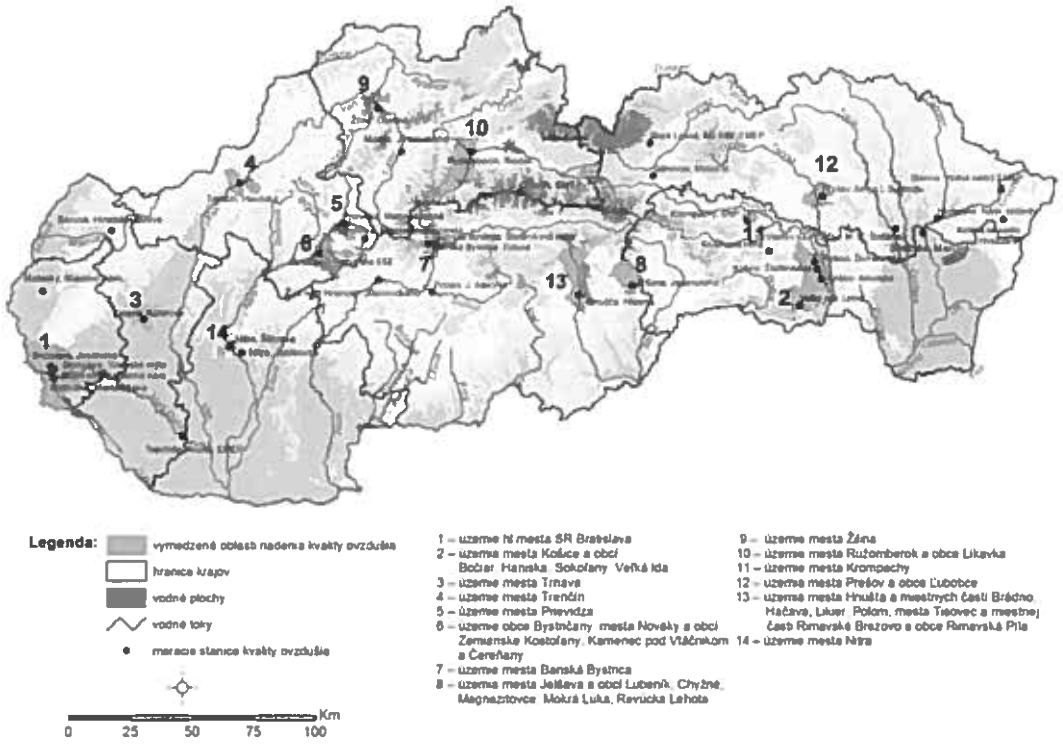
The project will also focus on all the regions in the Czech Republic.

Please refer also to the table presented in form A1.

## MAPS OF THE GENERAL LOCATION OF THE PROJECT AREAS

GENERAL OVERVIEW OF LOCATION(s) IN THE COUNTRY

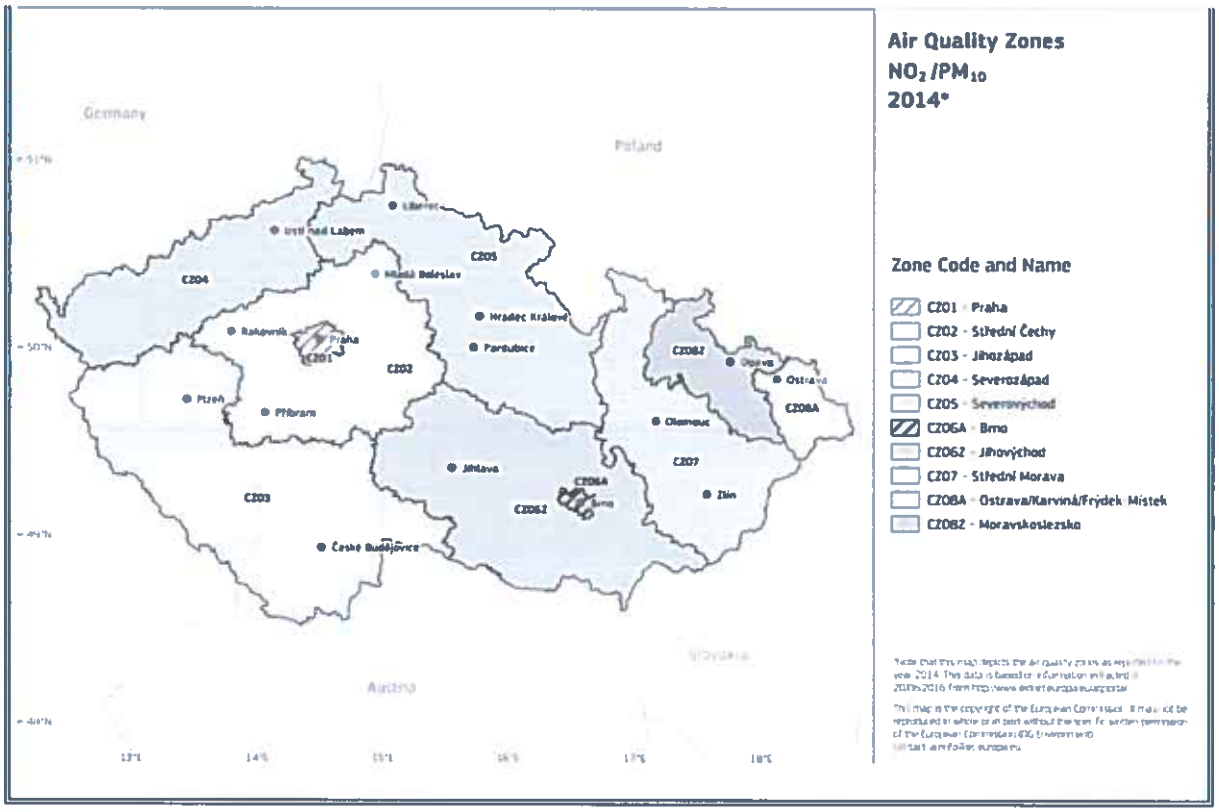
Map 1[34]: Air quality management areas in Slovakia




The territories of the 8 self-governing regions are defined by the black line. The AQMAs are labelled in pink colour.

Map 2: Air Quality zones and agglomerations in Czech Republic

[34] Maps can be provided in an A4 or A3 format.




All maps must be provided in an A4 or A3 format

## DESCRIPTION OF THE STRATEGY FOR THE IMPLEMENTATION OF THE OVERALL PLAN

**Short term (at least first 2.5 years):**

Within the project, Air Quality Managers shall gain necessary competences, skills and know-how in order to help regional and local authorities with managing air quality issues; reporting and monitoring air quality at regional and local level, promoting air quality measures and raising the awareness in the field of air protection and air quality. The Air Quality-Managers will cooperate with the Air Quality Coordination Unit, which will (in cooperation with respective national authorities, in particular with the MoE SR) provide for methodological guidance and tools to support and coordinate the work of Air Quality Managers. The AQ Coordination Unit will also be responsible for the centralized monitoring of the progress in implementation of AQMPs.

**Long term (beyond 2.5 years):**

Due to the scope of air protection measures in Slovakia, their implementation will exceed the time frame of 2.5 years. The continuation of measures initiated in the short term period will smoothly transform into long term perspective, as assumed in the AQMPs. However, the long-term measures will have to be periodically re-adjusted to reflect the changing conditions and the air quality. The AQMP updates will be coming every three years, but due to the new strategy under the preparation, some of them have not been updated in due time. This LIFE IP will also help to address the situation.

The strategy will also have to reflect expected new legal and/or financial tools, which will be enacted in the future. The scope of necessary legal changes, which should be introduced on the central level, is already provided in the AQMP. These changes are supposed to enable taking more effective air protection measures.

## EU ADDED VALUE OF THE PROJECT AND ITS ACTIONS

**Extent and quality of the contribution to the objectives of LIFE**

The LIFE IP aims to contribute to the objectives of Air Quality Management plans and obligations imposed by Directive 2008/50/EC. The measurable results of specific project actions are set to provide direct connection with the Directive obligations and goals. This contribution will materialize by aiming at the elimination of important barriers for effective implementation of AQMP. There are three specific barriers:

1. Insufficient capacities and missing know-how in the selected municipalities that are obliged to implement the AQMP
2. Lacking co-ordination between regional and local authorities and missing incentives to build cooperation between various authorities,
3. Limited awareness of air quality problem among regional and municipal policy makers, citizens in the selected municipalities and the general public.

The LIFE IP will tap the knowledge and best-practice experience from some selected projects (listed above). This knowledge transfer will support the decision-making processes and growth of know-how by the regional and local authorities.

**Extent and quality of the mobilisation of other funds**

The project will support effective mobilization of EU and domestic funds for air quality improvement (i.e. elimination of obsolete boilers, energy efficiency improvement, renewable energy sources and sustainable transport). Indicative allocations for actions related to air quality improvement amount to 1086 million Euro until 2020[35]. These include:

1. Replacement of obsolete solid fuel boilers in households – MA for OP QE is in the process of preparing call for proposals. Pursuant to the indicative schedule, the announcement of this call is planned in August 2019 in the amount of 30 mil. EUR from CF (previously planned 27 mil. EUR). With the average amount of support and taking into account the expected expenditure on administration of such support, approximately 10,000 boilers in households will be replaced.
2. Replacement of old boilers in public building – MA for OP QE announced call No. 45 in October 2018 within the OP QE aimed at replacing outdated boilers in public buildings with low emission boilers (with the exception of RES). This call is launched in the form of an open call with the allocation 30 mil. EUR and therefore, if the call is not closed by the date of implementation of the LIFE IP project, it will be possible to implement this project complementary to that open call. Applicants submitted projects in the sum of EU contribution 2,6 mil. EUR so far which are in the process of assessment.
3. Support for the use of RES (national project Green for Households): the Slovak innovative and energy agency announced OP QE in December 2018 call for national project providing support to households for the installation of photovoltaic panels, wind turbines, solar collectors and heat pumps in family and residential buildings. The national project is contracted at 48 mil. EUR and vouchers for households are currently being issued (estimated 21 000 households in total). The project is planned to be implemented until December 2023 and therefore it is possible to identify the complementarity between the project and the LIFE IP project.
4. Improvement of energy efficiency including the increase of renewable energy sources use in enterprises: Under OP QE, the Slovak innovative and energy agency announced in September 2017 call for proposals No. 30 with the allocation of EU 40

[35] These were the latest data available at the time of the submission of the full proposal.

mil. EUR. Applicants submitted projects in the sum of EU contribution over 40 mil. EUR, so the call was closed, and projects are in the process of assessment. In December 2018 call for proposals no. 46 had been announced with the allocation of 50 mil EUR and applicants submitted projects in the sum of EU contribution 10,5 mil. EUR so far which are in the process of assessment. These calls are launched in the form of an open call and therefore, if the call is not closed by the date of implementation of the LIFE IP project, it will be possible to implement this IP complementary to this call. Applicants submitted projects in the sum over EU 50 mil. EUR so far which are in the process of assessment.

5. Renovation of public buildings (including insulations and modernization of heating system, district heating: Under OP QE, the Slovak innovative and energy agency announced in December 2018 call for proposals No. 48 with the allocation of EU 50 mil. EUR. Applicants submitted projects in the sum of EU contribution over 50 mil. EUR , so the call will be closed at the end of June 2019 and projects are in the process of assessment This call is launched in the form of an open call and therefore, if the call is not closed by the date of implementation of the LIFE IP project, it will be possible to implement this IP complementary to this call.
6. Under the specific IROP objective 4.1 Increasing the energy efficiency of multi-dwelling buildings, a financing agreement was concluded on 28 May 2015, and entered into force on 30 September 2015. Increasing the Energy Efficiency of Apartment Buildings totalling 139 mil. EUR , of which EU funds total 111 mil. EUR. As a result of the IROP support under the specific objective 4.1 measures, the energy intensity of residential buildings will be reduced. According to the current state of implementation of financial instruments under the specific objective 4.1. the selection of a financial intermediary for the energy efficiency of residential buildings was completed in November 2018 and the contract is expected to be signed in the first quarter of 2019. Currently, the process of selecting a financial intermediary is subject to review by the Office for Public Procurement.
7. Urban transport improvement (traffic fluency, replacement of old buses, parking facilities, cycling roads etc.), under IROP, EU funds totalling 129 mil. EUR distributed amongst cycling activities: granted 30 mil. EUR, to be requested 35,5 mil. EUR (call is still in progress), replacement of buses: granted 29,6 mil. EUR and urban transport: granted 10,7 mil. EUR to be requested 23,5 mil. EUR (call launched in May 2019)
8. Green infrastructure measures, under IROP EU funds totalling almost 23 mil. EUR, granted 12,8 mil. EUR, to be requested 10,1 mil. EUR
9. Modernisation of public transport means and infrastructure, under OP II, amount of funding 322 mil. EUR, granted 144 mil. EUR (EU resources) calls launched in May 2016, received applications for funding under process of assessment
10. **Modernisation and electrification of railways under OP II, amount of funding 103 mil. EUR, granted 1,9 mil. EUR (EU resources) call launched in May 2016**

There are following activities of IROP in the transport sector contributing to the improvement of air quality identified in two areas:
1. Public passenger transport, particular traffic fluency, replacement of old buses, parking facilities, transfer terminals, etc.
2. Bicycle transport, particular cycling roads, bike sharing, etc.

Available indicative allocation in the first area is 29 million, in the second area 17 million.
There is not available allocation within Priority Axis 3– Public Passenger Transport in OP II at this time.

There is also Rural Development Program under Ministry of Agriculture, but currently there are no relevant calls and actions related to agriculture concerning air quality in this programming period 2014 - 2020. For the next period, the proposed Task Force will look for possible new synergies and propose new ones to be included in calls and actions of the new programming period, not only in IROP, but also in Rural Development Program. Our

Ministry of Environment is preparing a Code of Good Practice for farmers, which will help farmers to reduce NH3 emissions to reach desired NH3 reduction for 2030.

Other available funds for mobilization include state-aid scheme aimed at the protection of environment in energy sector state budget subsidy scheme aimed at the reduction of GHG and air polluting emission, improvement of energy efficiency, use of RES, modernization of district heating systems, introduction of BAT etc. (allocation 100 mil. EUR).

During the lifetime of LIFE IP, assigned project managers, working directly under MoE and funded from this grant will work on searching for relevant calls and synergies with other European funds, such as CEF or EFSI. Preparation of Sustainable Mobility Plans (SMPs) is done on municipal level and directly funded from IROP. Guidance for SMP preparation is developed by Ministry of Transport.

In order to effectively coordinate the project efforts with other ministries, the additional institute of the "Task Force" will be set up and included into the overall project management structure. The aim of this Task Force will be to establish close cooperation among all the relevant ministries managing complementary funds described in Form FP. We foresee that one representative from each ministry will be appointed and act as the main contact point for in the context of the Task Force.

The Project Coordinator will contact the Task Force members regularly in order to link to, create synergies, support and augment the activities they provide. The goal is to map the complementary funding provided as well as to avoid duplicating topics and filling the gaps.

All members of the Task Force will be invited to the Steering committee meetings as external observers without the right to vote.

Task force of the IP will work in parallel and following to the working group on synergies and complementarities established and managed by the Central Coordination Body (Office of the Deputy Prime Minister of SR for Investments and Informatization) which represents an active cooperation of Managing Authorities and other Authorities responsible for EU and Slovak financial instruments in the process of identification of synergies in drafted call for proposals. Each call for proposal under any OP is consulted and assessed at the preparation stage against synergies defined in the methodological document, which includes all synergies among the OPs defined at the beginning of the PO 2014-2020.

**Quality of multi-purpose mechanism, synergies and integration**
The Life IP will allow integration of various policies on the local level that for the time being are not integrated. Integration of these strategies will allow simultaneous and effective realization of the objectives of the EU policies in the following fields:

- ✓ Reduction of GHG emissions (part of EC climate policy actions)
- ✓ Improvement of air quality (reaching air quality requirements set out in the EU air quality directives e.g. Directive 2008/50/EC on ambient air quality and cleaner air for Europe)
- ✓ Promotion of energy efficiency (Directive 2012/27/EU on energy efficiency); - renewable energy sources.
- ✓ Renewable energy sources.

Thanks to the Air Quality Coordination Unit and training of Air Quality Managers the local authorities will have full understanding of the multi-purpose delivery mechanism (this will help them to reach several objectives at the same time). The Air Quality Coordination Unit will also provide knowledge of other benefits ensuing from these strategies health benefits, stimulation of green growth and jobs, etc.

**Replicability and transferability**

The project's best practices (Air Quality Managers, awareness raising campaigns and training material) generated during the project for selected municipalities have significant potential for replicability and transferability to other municipalities in Slovakia and other regions (not only in Slovakia but also in Czech Republic especially, partly also in Poland, where it can complement the effects from the Malopolska project, and potentially also in Hungary and other East European countries). The project will result in ready-to-use guidance for other municipalities and regions. Therefore, detailed procedures for operation of Air Quality Managers in municipalities and regions have to be carved and practically implemented. These should include also recruitment, training, supervision, and evaluation procedures. Also, any experience and design of financial instruments for air quality improvement will be transferred. These can relate to programming principles, operational and funding principles, and detailed rules for provision of financing.

It can be expected that Air Quality Managers will be employed in other municipalities (such resources are necessary for meeting policy targets and legal obligations for air quality improvement). The coordinating and associated beneficiaries will share the project experiences with environmental departments of other cities in Slovakia.

**Transnational, green procurement, uptake of research results:**

The Life IP make use of extensive uptake of results from other EU financed projects (both already financed and those that will emerge in the future). Some key identified projects are listed in the Section B1 and A7 above.

## BEST PRACTICE / INNOVATION / DEMONSTRATION CHARACTER OF THE PROJECT

BEST PRACTICE:

The Life IP project addresses multiple well-specified barriers that prohibit (among others) effective implementation of funding for air quality improvement measures, low public awareness of the air pollution problem and possible solutions to these problems. The project strategy is comprehensive: it tries to simultaneously eliminate several barriers to the same problem and by radically increasing the chances for more effective implementation of the air quality plan it constitutes a best practice approach.

Establishment of the Air Quality-Managers system (action C1.1 and C1.2) on the regional level promotes best available practices, as a lack of sufficient human and institutional capacities and know-how in regional offices and municipalities constitutes one of the key barriers for effective implementation of AQMP in these municipalities.

More specifically, the regional and municipal public authorities lack well-trained and qualified human resources. They also lack financial instruments and awareness raising tools to support air quality improvement measures. This problem is particularly visible in selected municipalities, where air quality is an important issue, but the local authorities were not equipped in any special way to fight with this problem. The regions and the municipalities should be at the forefront of the problem of tackling local air pollution, therefore developing a proper human resource base is of key importance for effective implementation of the AQMPs.

Shaping the regional air quality improvement policy is among the tasks of the Air Quality Managers. They should serve as the integrators of a number of strategic documents in the area of energy management and air protection and also foster decisive political steps at the regional and municipal level aimed at air quality improvement. These political steps include developing an integrated and effective local air quality improvement strategy. The strategies will be especially focusing on smoke control areas and searching for the transport solutions. This will allows exploiting different synergies between energy management and air protection.

Systematic approach towards strategizing and planning therefore constitutes a best practice element. This approach calls for combination of sufficient human resource (Air Quality Managers) and financial capacities (complementary actions) to create the basic for implementation of integrated strategy in the real-life.

Furthermore, the establishment of an "Air Quality Coordination Unit" should be perceived as a best practice. The AQ Coordination Unit will also be responsible for the centralized monitoring of the progress in implementation of AQMPs. To enable exploiting different synergies between respective air quality improvement measures (e.g. heat source replacement / energy efficiency improvement / small renewable energy sources), it is needed to focus all the necessary knowledge resources in one hub – the Air Quality Coordination Unit. The Unit will also help to relay communication between regional authorities (responsible for air quality improvement and the air quality plan) and municipalities (which are obliged to implement respective measures specified in the air quality plan). The communication so far was limited, due to a lack of such a coordinating institute, which would provide municipalities with continued access to comprehensive know-how on air quality improvement measures.

Another best practice employed in the project is that it will activate and integrate a wide range of stakeholders. These will include (but are not limited to) decision makers of all

levels, officials, opinion leaders (doctors, teachers, coaches, etc.), civil society (e.g. NGOs), universities and other higher education institutions, environmental inspectorates, funding institutions, industry associations, etc. It is important to provide space for any crucial group or institution that can have impact on any aspect of air quality improvement measures. These stakeholder will serve as a leverage for the actions taken and will make them sufficiently comprehensive. Detailed information on how each group of stakeholders is addressed in the project is available in the section on stakeholders.

The framework will also provide homogenous basis for development of air quality plans within the selected AQMA. It should be noted, that the LIFE IP will constitute a special opportunity for bringing together authorities that are responsible for air protection and implementation of the CAFE Directive in the selected AQMA. Providing such a basis is crucial, because only extensive communication will help to make informed decisions by the policymakers.

DEMONSTRATION:

One of the goals of this LIFE IP is to develop a comprehensive system that will remove local and regional barriers to effective implementation of the AQMPs in Slovakia. Its goal is to target capacity building needs by constituting Air Quality Managers, to improve public awareness by educational activities and involvement of a number of important stakeholders. LIFE IP includes a list of complementary measures, which target the financial barriers. Project actions will allow for mobilising substantial funds from these complimentary measures for air quality improvement in the region. The system developed under the LIFE IP, if proves successful in reaching air quality improvement objectives, will be promoted also in the Czech Republic. In this sense the project comprises demonstration elements.

PILOT (INNOVATION):

The key objective of this activity is to provide incentives to selected cities in AQMAs, where the main air quality problems are caused by traffic to provide for the elaboration of feasibility studies aimed at transport solutions to improve air quality, such as introduction of low-emission zones or introducing charged entrance to the cities etc. The results of these studies should be incorporated into the Sustainable Mobility Plans. Experience from other LIFE projects will be used and build on. The activity will be carried out by selected municipalities (cities) in cooperation with an expert consortium, including Air Quality Coordination Unit, MoE SR and relevant experts in the area of transport (university) and air pollution.

Regarding the introduction of low emission zones the project will also aim at sharing knowledge with CZ since some cities in CZ are already considering introduction of LEZ and have already prepared a feasibility study. This experience exchange may be valuable since the situation/structure of many CZ and SK cities is similar.

EFFORTS FOR REDUCING THE PROJECT'S "CARBON FOOTPRINT"

The activities provided for in the project are not carbon-intensive, as they focus on institutional capacity building in terms of staff, air quality modelling and awareness raising. However, the following efforts will be taken to reduce the carbon footprint of the activities envisaged in the project:

- ✓ Electronic means of communication will be used in all cases where direct meetings are not explicitly necessary to reduce the need of travel
- ✓ Participants of meetings, workshops, conferences will be encouraged to use climate friendly means of transport. If cars are used, car-pooling among stakeholders will be promoted;

- ✓ Printing is limited to the necessary minimum. However, given that activities within the awareness raising campaign will require printed materials, recycled paper will be chosen for this purpose
- ✓ In case of need to conduct the public procurement, the EU green public procurement criteria will be followed.

## STAKEHOLDERS INVOLVED IN THE PROJECT

*Project partners:*

Stakeholders can be divided into those that are involved as associated beneficiaries and those that will be involved in a different manner.

Coordinating beneficiary

The Ministry of Environment SR, plays a key role in preparation and implementation of the AQMP – as they are responsible for development of the plan and further for coordination of its implementation. They are also responsible for the programming and management of the Regional Operation Programme (complementary actions). MoE will also employ 4 Air Quality Managers at Municipal Level and 1 at Regional Level.

Associated beneficiaries

Associated beneficiaries include 6 self-governing (NUTS) regions, all of them are included in the AQMA, which means that they have to implement extensive actions aimed at air quality improvement. Thanks to the LIFE IP and complementary measures (i.e.funds that will be mobilised due to the LIFE IP for air protection) the main regional and local barriers hindering effective AQMP implementation will be removed: Seven Air Quality Managers will be created at the Regional level and additional Eight Air Quality Managers at the municipal level. They will be trained and be responsible for shaping and implementing the local air protection policy and mobilising external funds in this area, thus implementing the AQMP on the local level. Moreover, these authorities will receive significant know-how support from the Air Quality Coordination Unit. Capacity building at the local level addresses one of the main barriers hindering effective AQMP implementation.

The Slovak Environment Agency (SEA) is a professional organization of the Ministry of Environment SR with a national scope, focusing on the environmental care and landscape planning in accordance with the principles of sustainable development. SEA provides expert and supporting documentation for draft strategies, concepts, programmes and legal regulations for the Ministry of Environment SR. Moreover, it coordinates activities, holds conferences, seminars, trainings, exhibitions and other events, compiles plans and assesses their fulfilment, prepares or procures projects, standpoints, expert opinions, information and documents, provides environmental education activities and school programmes, provides professional supervision over application of environmental legal regulations and expert activities focused on fulfilment of commitments of the Slovak Republic resulting from international conventions, provides the Ministry with expert assistance in harmonisation of environmental legislation of the Slovak Republic with regulations and procedures of the European Union and cooperates with concerned expert institutions in the Slovak Republic and abroad. SEA will lead educational programmes and dissemination and awareness raising activities of the LIFE IP. SEA will also employ 8 Air Quality Managers at Municipal Level.

The Slovak Hydrometeorological Institute (SHMI) is a specialized organization providing hydrological and meteorological services at the national and international level. The SHMI's activities include the following: monitoring of quantitative and qualitative parameters of the air and water in Slovak territory; collecting, verifying, interpreting and archiving data and information on the condition and regime of air and water; describing developments in the atmosphere and hydrosphere; and issuing forecasts, warnings and other information regarding the atmosphere and hydrosphere. All the aforementioned data, information and

other research are made available to the public. In this LIFE IP, SHMI will be responsible for inventories, emissions reporting and air quality monitoring activities.

PEDAL Consulting is an innovation and management consulting company that focuses its activities in: (i) The provision of business and innovation support services to public authorities, entrepreneurs, start-ups and SMEs (more than 100 clients) and (ii) The design, management and implementation of European innovation support and research projects, support actions and policy studies in various sectors, including Environment, Agriculture, BioEconomy, Energy (including bio-energy), etc. and their related vertical and horizontal business networks and value chains. Since 2010, the company has participated in more than 35 successful research and innovation projects and studies as well as support actions funded by the EC (FP7, H2020, Erasmus Plus, COSME etc.), in some cases as Project Coordinator or Work Package Leader responsible for the project management and dissemination activities. Considering its track record, PEDAL will support mainly MoE SR and SEA in executing the project management, dissemination and public awareness activities, respectively.

VSB - Technical University of Ostrava draws on 170 years of research and academic excellence to provide world class education in 7 Faculties offering Bachelor's, Master's, PhD, and exchange programmes to students from six continents. State of the art research facilities, cooperation with leading companies, and partnerships with universities and research institutions the world over provide excellent opportunities for student, teachers, and researchers alike.

Other stakeholders

| **Stakeholder** | **Original description stated in proposal** | **Additional LIFE-related description** |
|---|---|---|
| Selected municipalities: Bratislava, Košice, Banská Bystrica, Jelšava, Hnúšťa,Tisovec, Krompachy, Prešov, Prievidza, Nováky, Trenčín, Trnava, Nitra, Ružomberok, Žilina. | They are covering all the AQMA for which the AQMPs were prepared. The cost of Air Quality Managers who will be operating in these municipalities will be covered from the project allocated to SEA. One Air Quality Manager at Regional Level will be covered from the budget allocated to MoE SR. | Municipalities will cooperate with Air Quality Manager, participating on AQMP preparation, approval, implementation and actualization. |
| CEPTA – Centre for Sustainable Alternatives | | NGO revising AQMP preparation, transparency, suggesting new politics and measures. |
| Ministry of Interior SR | Legal authority for the district offices in the seat of the region – state administration at regional level, responsible for the development of the AQMPs | AQMP publication, preparation and monitoring implementation |
| Ministry of Transport and Construction SR | Central state administrative authority for transport and construction, managing authority of the OP Integrated Infrastructure | They will be involved in potential transport solutions required for obtaining good air quality in cities. Approving authority for OP II and Housing |

| | | |
|---|---|---|
| | | Development State Fund (including Household Insulation programme) |
| Ministry of Agriculture and Rural Development SR | Central state administrative authority for agriculture and rural development, managing authority of the Rural Development Programme, Regional Operational Programme and Cross border programmes | Approving authority for aforementioned programmes (e.g. supporting Plans of Sustainable Mobility preparation, ) |
| Ministry of Health SR | Central state administrative authority | If available, providing data on citizens' health. Raising public awareness of air pollution impact on health |
| Ministry of Economy SR | Central state administrative authority in area of economy | |
| Slovak Environmental Inspectorate | State administration authority carrying out state surveillance and control of fulfilling the obligations of operators of air polluting sources | |
| Environmental Fund | Organisation established by law to provide state support for environmental protection, managing authority of this organisation is MoE SR. | Potential donor for various activities connected to air quality |
| Statistical Office of the Slovak Republic | Central body of state administration of the Slovak Republic for the branch of statistics, including surveys and data collection | Participating in the survey on heating modes and operations in households, and on air quality improvement |
| Universities (e.g. University of Zilina – expertise in the field of Transport, partner of the AIR TRITIA project implemented under the Interreg Central Europe Programme) | | Possible cooperation on feasibility studies in the area of transport solutions in cities (e.g. LEZ) |
| Opinion-forming circles on regional and local levels | In order to raise public awareness of the air pollution problem, it is necessary to involve such groups as, teachers and local businessman. Activation of this group of stakeholders will be done mainly through action C2 that includes local information and education campaigns, regional campaign, experience sharing and project promotion. | Raise public awareness in the area air quality. |

| | | |
|---|---|---|
| Local, regional and national media | Due to the necessity to increase public awareness on air pollution and possible air protection measures. Their involvement in the project will also bring the benefit of rising journalists' awareness about the problem of air pollution, its causes, its effects, solutions | Raise public awareness on air quality and current state of air quality of possible ways of funding in this area as well |
| Local, regional and national NGOs | Their involvement should translate directly to activation of local communities with respect to air quality improvement and increasing general public awareness of the air pollution problem in certain areas in Slovakia | NGO revising AQMP preparation, transparency, suggesting new politics and measures. |
| Civic initiative "For the Clean Air" | They expressed interest to participate with the MoE SR, especially in the context of the preparation of the "Plan of the air quality measures in Bratislava". Since this document will be the first of its kind, the guidance and methodology will be tested with them. | |
| Wood Stove Builders Guilde (http://www.cechkachliarov.sk/) | | Preparing manual on correct household heating in wood stoves, training new owners, possibly sharing information and data with AQ managers |
| Construction Chamber of the Slovak Republic: (https://www.stavebnakomora.sk/?page_id=552) | | Proposing new air quality improving measures in urban development (e.g. green buildings, green public spaces) |
| Slovak Chamber of Architects (https://www.komarch.sk/en/) | | Proposing new air quality improving measures in urban development (e.g. green buildings, green public spaces) |
| Civic Organisation "cyklokoalicia" (https://cyklokoalicia.sk/) | | Proposing bike-friendly solutions in city transport, cooperation with AQ manager in this matter |
| Slovak Public Health Association (https://eupha.org/savez-slovak-public-healthassociation) | | If available, providing data on citizens' health. Raising public awareness of air pollution impact on health |

| | | |
|---|---|---|
| Slovak Green Building Council (http://skgbc.eu/portal/) | | Proposing new air quality improving measures in urban development (e.g. green buildings, green public spaces) |
| Additional potential "Other stakeholder":<br><br>Slovak Chamber of Chimney Sweeps (https://www.kks-sr.sk/) | | Preparing manual on correct household heating, training new owners, possibly sharing information and data with AQ managers |

## EXPECTED CONSTRAINTS AND RISKS RELATED TO THE PROJECT IMPLEMENTATION AND MITIGATION STRATEGY

This section describes main identified risks that may have a negative impact on the implementation of the project in case no remedial measures are taken. More detailed information is presented in descriptions of respective activities.

Managing the LIFE IP will constitute a major challenge, due to the scale of the planned activities and a large number of partners and stakeholders involved in the project. This is why the Steering Committee will comprise of people with experience in implementation of projects with many partners and cooperation with regions and municipalities. Building on these experiences significantly increases the chances that the project is effectively and efficiently managed and that its objectives are fulfilled. Moreover, the project includes a number of communication solutions, fostering swift communication.

A number of risks are connected with the operation of the Air Quality-Managers system, i.e. one of the main measures under the IP. For each of these risks, however, preventive or remedial actions are specified. There is a risk that Air Quality Managers are not properly empowered within the municipal office structure or that people selected for this position are not properly qualified. There is also a possibility that Air Quality Managers will have low motivation and that their communication with stakeholders is ineffective. In order to prevent these situations, the Steering Committee will prepare guidelines on proper location of Air Quality Managers within the regional structures and will assess concrete proposals made in this respect by all municipalities. In periodic reports Air Quality Managers will have to provide information about effectiveness and results of their cooperation with municipal offices. The MoE SR will also prepare guidelines on necessary qualifications of Air Quality Managers. Any gaps in this respect will be filled by training organised by the Air Quality Coordination Unit. The MoE SR will be also responsible for formulating general guidelines and proposal for preventive/remedial actions regarding motivation of Air Quality Managers. It will also prepare guidelines on cooperation/communication with stakeholders and the Air Quality Coordination Unit will provide extensive support for Air Quality Managers on conducting local information and education campaigns. All aspects of Air Quality Managers work will be monitored through a system of periodic reporting to the Steering Committee, which will allow for assessing Air Quality Managers work, the outcomes of their activities and identifying problems.

As for local information and education campaigns, the main risk is associated with low activity of Air Quality Managers in terms of direct contact with residents and opinion-forming groups. In order to prevent this, Air Quality Managers will have to provide internal reports on the information measures taken. Moreover, their actions will be assessed in surveys filled by residents that use Air Quality Managers services. By the end of each year, a report assessing local education and information campaigns will be prepared (as a part of the annual report on AQMP implementation).

The following table presents some other (initially) identified critical implementation risks and related contingency plans.

| Description of risk | Probability | Probability (P) / Impact & Proposed mitigation measures |
|---|---|---|
| Difficulties in attracting relevant stakeholders | Medium | The partners of the consortium are already cooperating with a large number of regional and local stakeholders within their regions and are part of several networks and clusters. The existing network of contacts will be solidly enriched and widened through implementation activities. |
| Little or lack of cooperation among participant regions | Medium | The approach of the project with the direct participation of the regions will help identifying potential synergies among them. The coordination between Air Quality Managers and the Air Quality Coordinating Unit will enable the exchange of experiences and mutual support. |
| Dissemination and Communications is insufficient | Low | Dissemination leader has an extensive experience in leading these activities. SEA will be supported by a pool of expert organisations in communication. A solid strategy for D&C will be delivered within Action E. |
| Partner leaving the consortium | Medium | The consortium is highly qualified and would assume tasks from a partner leaving the project. Otherwise the partners would find within their large networks the best organisation for assuming the role lost. |
| Quality, scope and delay of partners work | Medium | A compulsory Work plan is established with operative plan to be prepared by Activity leaders to avoid low quality, loss of direction or too overload actions. In case this is detected, Coordinating Beneficiary will enter in contact with the Activity leader to revise. |
| Poor communication flow between partners | Medium | An open and dialectic approach will be applied in all the consortium meetings and correspondence and communication will be promoted and ensured by the well-experienced project coordinator, supported by PEDAL. |
| Problems between partners (internal disagreement, IPR...) | Medium | The project handbook will include all the procedures already accepted in the Consortium Agreement. A democratic and dialectic approach will be applied in all the consortium meetings and correspondence. IPR issues will be discussed and established within a common CA. |
| Lack of financial resources | Medium | Solvency of project partners has been assessed, ensuring their financial resources during the project execution. Most of the partners have already participated in national or EU projects, having a wide experience and history, which reduces this risk. |
| Error in the estimation of the tasks duration | Low | Steering of the project will be frequent. Milestones and deliverables have been placed for control. Under delays detection PC will encourage a review of task procedure and partners to place extra effort. |
| Municipalities will not act in accordance with the appropriate air quality measures. | Low | At this point in time, a new amendment of the Air Act is being formed and planned to be proposed to our government next year. This amendment will add competences to both self-governing regions and municipalities to oblige to draw up plans of measures that include both long-term and short-term measures to improve air quality, if directed by DOSRs. These plans of measures intend to specify the measures identified in the Air Quality Management Plans. More information on this subject is available in C1.1 |
| Long term capacity building within the public administrations is challenged due to frequent personnel fluctuations | Medium | The procedures that will be put in place throughout the whole life-cycle of the project (C1.1, C1.2, C2, C3, C4.1, C4.2, D, E) and backed up by the effective project management structure (F), will guarantee that more experts are simultaneously and continuously trained within the organisations concerned. This will significantly reduce the risk related to the loss of capacities and relevant skills. It is expected that the Air Quality Managers positions and the operation of the Coordination Unit will be active even after the end of the project. |

**Complementary measures**

Lack of obligatory emission standards for household appliances and lack of legal possibility to introduce smoke control areas in Slovakia may hinder successful implementation of key tasks envisaged in AQMP i.e. replacement of inefficient solid fuel boilers in houses and mitigation of road traffic. The replacement is voluntary and therefore there is significant risk that inhabitants will not be willing to replace boilers in their houses (even in the presence of subsidies for households). Currently public awareness raising campaign is the only tool available to mitigate this risk (before Slovak legislation is amended to allow the mandatory establishment of smoke control areas).

Lack of coal standards and low enforcement mechanisms. This risk will be mitigated only partially i.e. by controlling fuel use in those households that benefited from subsidy schemes.

Low enforcement mechanisms of illegal burning of garbage in solid fuel boilers. This risk will be addressed through development of the model enforcement mechanism in cooperation with municipal authorities, police, environmental inspectorate and city police.

## CONTINUATION / VALORISATION AND LONG TERM SUSTAINIBILITY AFTER THE END OF THE PROJECT

- How will you ensure the long term implementation of the plan and beyond?

Regional authorities are obliged by law to prepare an air quality plan for zones where limit and target values for respective air pollutants are exceeded. Pursuant to Slovak legislation, these plans have to be updated once every three years until binding air quality standards are achieved. This should help ensuring the choice of proper air protection measures. Moreover, air quality plans constitute acts of local law, which means that they are universally binding within areas that they refer to. Due to this, regions are obliged to implement concrete measures specified in the AQMP. If necessary, municipalities will develop local air quality plans. Therefore, Slovak legislation ensures that the plan targeted by the LIFE IP, i.e. the AQMP, will be implemented also after the end of the project, as long as air pollutant concentrations continue beyond the limit and target values.

The measures specified for implementation by regions and municipalities in the AQMP fall within the scope of competence of local governments (as defined in national legislation). Municipalities are responsible among other things for heat supply and local public transport, while mayors also manage local road systems. The Environmental Protection Act also provides for control of how AQMPs are implemented. The body authorised to do this is the Regional Environmental Protection Inspectorate, which can impose financial sanctions on private subjects that do not implement the tasks resulting from the AQMP.

Cooperation between key institutions responsible for implementation and financing of AQMP measures, common understanding of the long-term aim and the necessity of taking necessary action are essential for effective and efficient implementation of the AQMP. Implementation of the LIFE IP will allow for strengthening cooperation in the area of air protection between local and regional administration. Knowledge and competence potential will be developed, which will translate into better understanding of the problem between municipal staff, decision-makers and residents.

This whole set of legal tools and, even more importantly, cooperation on the local and regional level between key institutions and partners as well as development of the knowledge potential in regional administrative units guarantees that after the end of the LIFE IP, long term implementation of the AQMP is ensured and that it is effective and efficient.

Focus on reduction of greenhouse gases and protection of air quality will be subject of support also in the next programming period 2021 - 2027. Currently new proposal of general regulation for programming period 2021 – 2027 is in preparation.

- Which actions will have to be carried out or continued after the end of the project?

Action C1.1
The Air Quality Managers will provide direct assistance in implementation of municipal air protection tasks. Their employment will bring a number of benefits. Regions will have a coherent and integrated air protection and energy management strategy. The Air Quailty Managers will help in ensuring and effectively managing external funds for investment or education measures in such areas as air protection, energy efficiency improvement and RES deployment. Air Quality Managers will be useful also for residents, providing expert and financial assistance. Investments carried out with the help of Air Quality Managers will improve the standard of buildings and reduce maintenance costs. Given all the benefits

that municipalities and regions may derive from the work of Air Quality-Managers, it is assumed that their employment will continue after the end of the LIFE IP.

Cooperation between municipalities and regions and exchange of experiences from implementation of air protection measures, initiated under the LIFE IP, will be continued also after the end of the project. Municipalities will be able to cooperate among other things under subsequent projects or investment measures.

Action C1.2
The Air Quality Coordination Unit will remain operational. Within the LIFE IP, the Coordination Unit will gain expert knowledge, develop contacts with experts, institutions and foreign partners and increase cooperation with regions and municipalities. Thanks to all this the Coordination Unit will continue playing a key role in supporting and integrating air protection measures taken in the region.

Action C2
Measures connected with education of residents with respect to air protection have to be systematic and will be continued within municipal measures and in schools also after the end of the project.

Action D.1
The detailed residential heating database, which will be created under this action will continue to be updated in order to enable efficient targeting of measures as well as the evaluation of their impacts in future.

Furthermore, monitoring of the implementation of the AQMPs and preparation of analyses for their updates will remain within the scope of responsibilities of the MoE SR. In addition to this, after the end of the LIFE IP, the AQMPs will serve as a basis for regular reports presenting progress in implementation of measures aimed at air protection, inventorying of air pollutant emissions. The aim is to identify areas where there is a threat of exceeding limit and target values for air pollutants as defined in the CAFE Directive.

- How will this be achieved? What resources will be necessary to carry out these actions and how will those capacities be ensured?

In order to ensure that the key project actions are continued after its implementation it is necessary to highlight the positive effects of these actions. This requires ensuring that the project is properly managed and that the persons involved in its implementation possess necessary skills and knowledge and are sufficiently motivated. It will be crucial that the positive results and impacts of the project are clearly communicated to the decision-makers and public opinion. This will contribute to proper assessment of the usefulness of continuing project measures after the project ends. Positive public reception of measures at the municipal and regional levels will be essential for continuation of project activities. Financing for the continuation of project measures will come from the Ministry of Environment, resources of regions and from external sources.

- Will the staff recruited/trained during the project continue to work on the implementation of the plan?

As the Air Quality Managers will be useful in implementing municipal tasks that result from the AQMPs as well as tasks related to energy planning, energy saving and RES deployment, a large part of them will continue their work (in a similar extent) after the end of the project. It is expected that at least 2/3 of them will continue working in municipal and regional offices, where the scope of tasks and challenges related to energy management will remain wide despite significant air quality improvement.

For example, the transport policy will likely remain a challenge. In this respect it will be especially useful to continue employment of staff that within the IP will gain know-how and experience in conducting analyses on the impact of traffic changes on air quality in the city.

- How, where and by whom will the equipment acquired be used after the end of the project? (if relevant)

Computers and office equipment purchased under the project will be used for implementation of local and regional government tasks connected with environmental protection after the end of the LIFE IP. Due to the fast pace of technological development, it is difficult to state how long this equipment will be useful.

- To what extent will the results and lessons of the project be actively disseminated after the end of the project to those persons and/or organisations that could best make use of them (please identify these persons/organisations)?

The most important recipients of LIFE IP results are local and regional governments in Slovakia and Czech Republic but also other EU Member States. The problem of air pollution with particulate matter and benzo[a]pyrene occurs in the Czech Republic, Poland, Romania and Bulgaria. As the main source of air pollution remains the same (solid fuel burning), experiences gained in the project will be valuable for other areas. Project results at the end of LIFE IP will be actively promoted by its beneficiaries. Effects of AQMP implementation achieved thanks to the LIFE IP will be promoted during joint meetings, projects and events. Municipalities acting as associated beneficiaries in the project also develop cooperation with other local governments within various associations and initiatives. This will constitute an opportunity for presenting air protection effects and experiences from project implementation.

Air Quality Coordination Unit in cooperation with the Department of Air Protection at the Ministry of the Environment will disseminate the best practices from the project to other regions and municipalities. This will be done through different workshops, conferences and meetings after the end of the project, organised either by the Ministry itself or by other relevant organisations. MoE plans to adjust competences and responsibilities of municipalities via amendment of Air Protection Act. The extended competences will allow the municipalities more flexibility in implementing measures to ensure improvement of air quality management based on the LIFE project results.

If proven useful, after the project MoE will seek to continue the practice of supporting other municipalities to utilize AQ manager potential. Original AQ managers will be then considered also as trainers, supporting selection of new managers in involved areas and training them thereafter. *To secure projects sustainability we will also introduce a voluntary personal re-assessment of AQ managers if they need one, so we can always account for their qualification and productivity during the project.* Throughout the project, the key role of AQ manager will also be developing functioning network between governmental institutions and self-government. Expected network will generate confidence in system and support for any new municipalities interested in improving their own local air quality, also via measures proposed by either original, or newly hired and trained AQ manager. Municipalities will be addressed by each AQ manager during the project life-time in activities such as raising awareness, or local workshops. This information will also be available at to-be developed AQ portal, self-governing regions websites and AQ managers will provide a newsletter for addressed municipalities.

The project's website will be managed also after the end of the project. This will ensure that all interested parties will have continuous access to the knowledge base, reports, analyses presenting the project effects.

# *LIFE Integrated Projects 2018*

# Stage 2 – Full proposal

## Part C – detailed technical description of the proposed actions

**Important notes:**

- **All calculations and detailed cost breakdowns necessary to justify the cost of each action should be included in the financial forms F. In order to avoid repeating the financial information (with the risk of introducing incoherencies), Part C should only contain financial information not contained in the financial forms (e.g. details explaining how the cost of an action has been estimated).**
- **All forms in this section may be duplicated, so as to include all essential information.**
- **Each action described should have a clear indication of its physical target (e.g., action 1 will take place in area "X" and/or will target species "Y"). Whenever this is relevant, the location of these actions should also be identified on one or several maps which must be provided in annex.**
- **Any action that is sub-contracted should be just as clearly described as an action that will be directly carried out by the beneficiaries.**

## DETAILS OF PROPOSED ACTIONS

### A. Preparatory actions (elaboration of management/action plans, obtaining licences and permits, trainings, etc.)

The following preparatory actions are foreseen during the implementation phase of the LIFE IP.

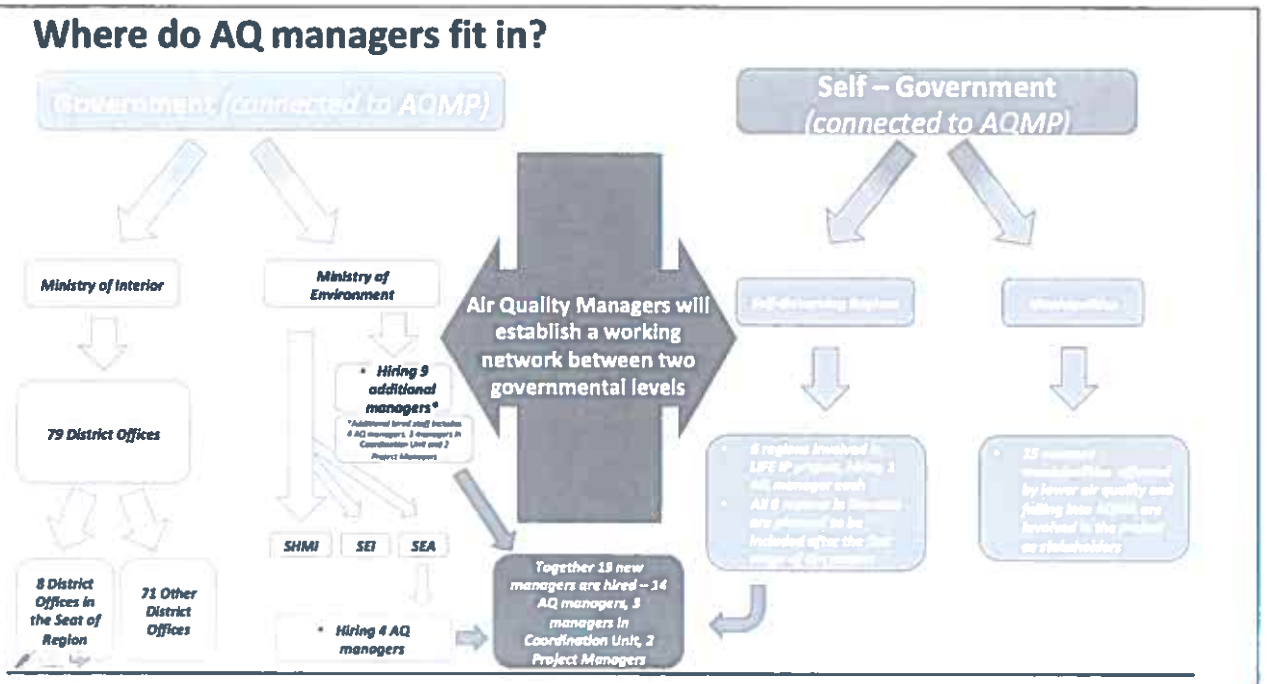
1. Development of a detailed concept of the system of the Air Quality Managers and the Air Quality Coordination Unit, which will define among other things responsibilities and necessary qualifications of Air Quality Managers, their desired position in the municipality, the scope of their tasks, the reporting and assessment scheme. A detailed description of the Air Quality Coordination Unit will contain its structure, operational rules, the functions it should fulfill and the services it should provide.
2. Production of a plan for the national and regional media campaign, defining the main messages to be communicated, the media to be used and the time of respective campaign rounds. The media plan will be prepared by SEA in cooperation with PEDAL and other project partners.
3. Elaboration of a plan for local education and information campaigns, specifying the means to be applied, the main stakeholders and target groups. The plan will be prepared by SEA, in cooperation with PEDAL and other associated beneficiaries.
4. The project handbook will be an internal document that will set the basis for the governance structure, the communication channels and methods, as well as the periodicity of the reporting to the Action Leaders, the Project Coordinator and the EC. It will also establish the conflict solving methods. This will be a living document that may change depending on the project needs during its whole lifecycle. Action F will contribute to the handbook by creating next contents: quality requirements for the project, organisational structure, general measures and actions taken, planning and control (including a contingency plan in case of deviation), conflict handling and IPR (according to the CA), risk management, files and archives. This document will be prepared by PEDAL in coordination with MoE SR.

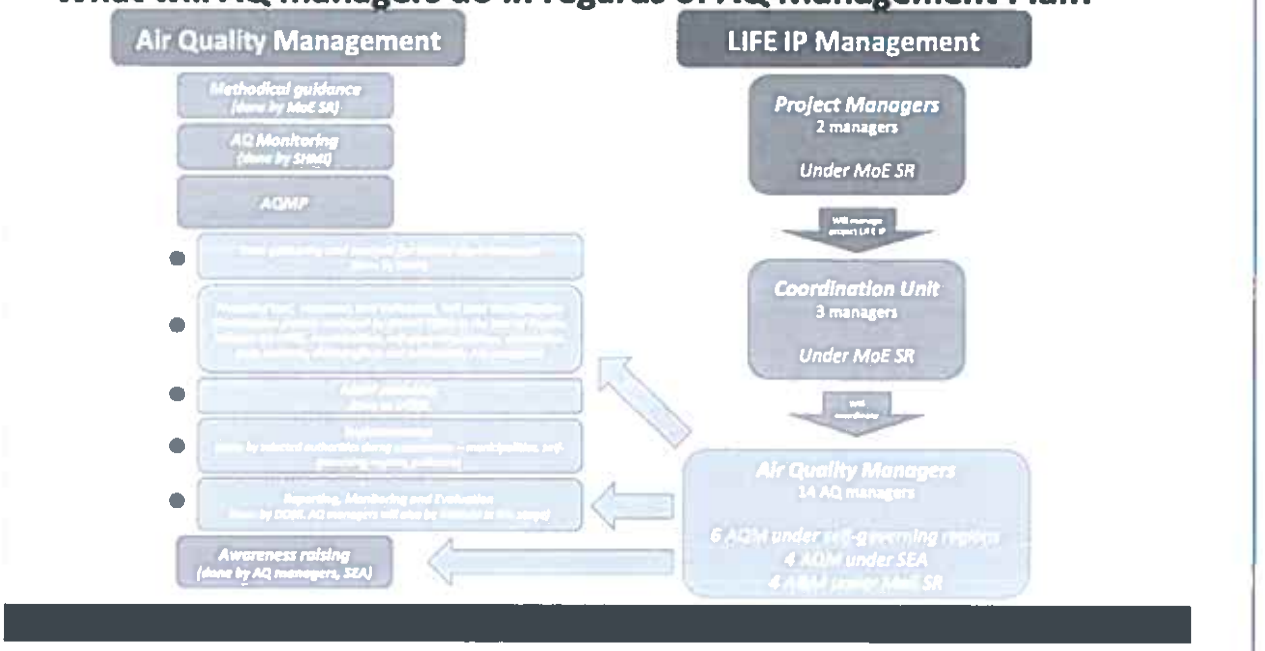
There are no permits necessary for the implementation of the project.

During the proposal-writing phase, MoE SR organized several meetings with the majority of Associated Beneficiaries. A dedicated meeting was organized with the representatives of all 8 Slovak Self-governing regions. Similarly, the MoE SR met with their counterparts from the Czech Republic in order to agree on the type and scope of their activities. These preparatory meetings constituted the first step in building a strong coalition for AQMP implementation.

## C. Concrete (conservation/implementation) actions

| Action C1.1 Air Quality Managers |
|---|
| **Beneficiary responsible for implementation:**<br><br>The main responsibility is taken by the MoE SR. |
| **Description (what, how, where and when):**<br><br>**Action C1.1 Air Quality Managers**<br>The main objective of this activity is to support the performance of air quality management through specialized working positions of "Air Quality Managers" in self-governing regions and in selected municipalities located in the AQMAs. Within the project, Air Quality Managers shall gain necessary competences, skills and know-how in order to help regional and local authorities with managing air quality issues; reporting and monitoring air quality at regional and local level, promoting air quality measures and raising the awareness in field of air protection and air quality. The project will build on experience and good practice from the LIFE IP Malopolska ("Eco managers") and other good examples.<br><br>Air Quality Managers will be part of a team at respective municipalities/administrations which will, based on best practices, apply possible measures to improve air quality. They will be responsible for analysing source apportionment of air pollution allowing for better targeting and identification of measures. They will also assist by providing ideas and possible options for funding of measures and propose a schedule for individual steps of measure implementation. Through discussion within the team of all Air Quality Managers, they ensure that cross-cutting and cross-regional measures are properly considered, plans are more harmonised, and variation in quality is acceptable.<br><br>6 AQ managers will be hired by self-governing regions. 4 AQ managers hired by SEA and 4 AQ managers hired by MoE SR. All of them will share the same competencies and roles, creating stable network across governmental and self-governmental levels. This means that all of the AQ managers can be involved in revisions and improvement of existing AQMPs, as we expect that all of them will contribute to their implementation. Additional to 4 AQ managers at MoE we will hire 3 managers as Coordination Unit and 2 managers as Project Managers, so altogether 9 additional people at MoE SR. Revision and improvement of NAPCP is in competence of Air Protection Department at MoE SR, participating with other involved ministries, but AQ managers may contribute from their field experience. |




As shown in diagrams above, there are two authorities that may be understood as "the region": self-governing region and district office in the seat of region (DOSR).

If we focus on self-governing regions, their competences in AQMP preparation are on participative basis and relation to municipalities is limited at this point in time, as new amendment of the Air Act is being formed and planned to be proposed to our government next year. This amendment will add competences to both self-governing regions and municipalities to oblige to draw up plans of measures that include both long-term and short-term measures to improve air quality, if directed by DOSRs. These plans of measures intend to specify the measures identified in the Air Quality Management Plans.

Currently, based on the competencies of Act No. 302/2001 Coll., self-governing regions will, in

particular, address measures concerning:

- Territorial planning activities of the self-governing region
- Creation and protection of the environment
- Maintenance of minor highways and primary streets (II. and III. class roads)
- Cooperation with municipalities in the development of social and economic development programs

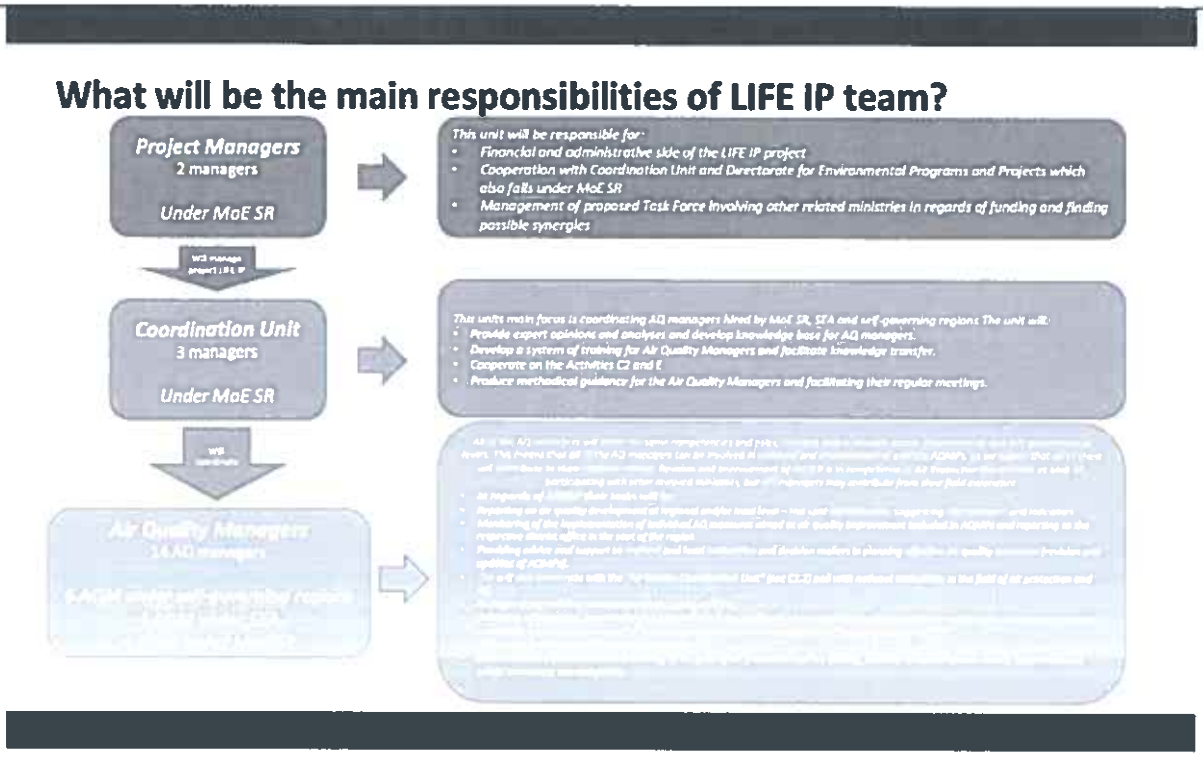
These competencies are already binding self-governing regions to improve environment, air quality included. Our amendment to the Air Act will widen these competencies and responsibilities. At this stage, self-governing region has no legal power over municipalities to comply with AQMP, but both have to participate in AQMP preparation and implementation. This was recognised as a possible risk with low probability and a corresponding mitigation measure was added to the table in Form B6.

DOSR on the other hand is directly responsible for AQMP preparation, reporting and evaluation. This means they can order both municipalities and self-governing regions to comply.
Also, to elaborate on already existing competencies of DOSR, they are as follows:

- Make information on air quality available to the public, annually publishes information on air quality and contributions of individual sources to air pollution for its territorial area – (according to the Air act § 13 - 1)
- Declare and identify areas requiring special air protection (AQMA)
- Have responsibility for making Air Quality Management Plans (according to the Air act § 10). This means that DOSRs:
    - Draw up draft plans, consult with Municipalities and other public bodies on measures and issue plans for implementation
    - Conducts a public consultation on the program proposal Evaluates the implementation of measures from the program
    - Review air quality programs every three years and update measures if necessary
- Draws up and publishes action plans by a generally binding decree (according to the Air act § 11),
- Declares the initiation and termination of the application of the action plans and communicates electronically to the affected entities
- In the event of a risk of exceeding the alert threshold, limit value or target value, it may, in accordance with the action plan, limit or stop the operation of the air pollution source for the necessary time.

*The competencies of the Air Quality Managers*

The MoE, as the project coordinator, will develop a standard set of mandatory requirements and a set of recommended requirements to be followed by local authorities when employing Air Quality Managers. The criteria will include among other things specialist qualifications (education, expertise) as well as the minimum level of experience and additional skills (including soft skills) of potential candidates (taking into account the scope of responsibility assigned to the position). The requirements will be adjusted to the current situation on the labour market.




*Recruitment of the Air Quality Managers*

The recruitment process will be carried out independently by individual associated beneficiaries, taking into account the criteria specified at the regional level, some of which may have to be further detailed at the municipal level.

The candidates' qualifications and experience will be taken into consideration. They have to be sufficiently empowered to be able to develop integrated air protection strategies and take decisions concerning the implementation of low-carbon economy at the local level.

*The roles and tasks of the Air Quality Managers*

Main tasks of Air Quality Managers are:

- ✓ Reporting on air quality development at regional and/or local level
- ✓ Monitoring of the implementation of individual AQ measures aimed at air quality improvement included in AQMPs and reporting to the respective district office in the seat of the region
- ✓ Providing information, consultations and technical advice to citizens and regional or local authorities in applying for measures or projects contributing to the improvement of local air quality (such as the replacement of solid fuel boilers etc.)
- ✓ Promoting funding possibilities for AQ measures
- ✓ Disseminating information and educating in the field of air protection and air quality, publicity in local/regional media, co-operation on public awareness campaigns etc.
- ✓ Cooperation with the "Air Quality Coordination Unit" (see C1.2) and with national authorities in the field of air protection and air quality. The Air Quality Coordination Unit will be established directly under MoE SR.
- ✓ Providing advice and support to regional and local authorities and decision makers in planning effective air quality measures (revision and updates of AQMPs).

It is expected, that the project activity will help boost new perception of the importance of prioritizing the air quality management and the funding through the project will facilitate the creation of specialized working position. It will also help to integrate AQ objectives and improve synergies with other policies and plans related to sustainable mobility, energy efficiency, climate

plans, noise and urban planning.

*Cooperation with other entities*

In order to carry out their tasks properly, the Air Quality Managers will have to cooperate with a number of entities at various levels. First of all, they will cooperate with local authorities and municipal officials from all organisational units, assisting the mayor/chairman of the city council/head of the local authority in pursuing an effective air quality improvement policy. Within the municipal framework, the Air Quality Managers will cooperate with members of local communities, entrepreneurs and opinion makers (local media, NGOs, local leaders (teachers, doctors)). The Air Quality Managers will also cooperate with project partners and other administrative bodies at the regional and national level.

*Training system for the Air Quality Managers*

The success of the project depends fundamentally on providing qualified human resources to deal with the development and implementation of integrated strategies for air protection at the municipal level. A system of professional support, training and knowledge transfer will be created as a part of the Air Quality Coordination Unit (C1.2), which will enable the achievement of the above-mentioned objective. It is equally important to act towards raising awareness and building relevant skills among key opinion leaders who can have a significant impact on the successful implementation of air protection strategies, which will be done under the action E and C2. For more information related to the training system, please refer to Action C1.2.

*Performance and motivation assessment*

The Air Quality Managers will report on a quarterly basis to the Air Quality Coordination Unit, whose representatives will be equipped with appropriate software tools to monitor and evaluate their' performance (action D). Meetings and training sessions will be held regularly in order to ensure central coordination (at the regional level) of activities carried out by the Air Quality Managers.

Their performance will be also evaluated on the basis of the results of satisfaction surveys conducted among their "clients" (local residents), competency tests or local authority supervision. The Air Quality Managers are expected to participate in study visits organised in order to share good practices and experience on the implementation of air quality measures.

*Ensuring continuity of action*

Information and knowledge provided to the Air Quality Managers will be made available to the employees of other municipalities and to independent parties via the Air Quality Coordination Unit. A pool of potential employees with qualifications and knowledge corresponding to those of the Air Quality Managers will thus be available on the labour market, which will ensure continuity in cases of long-term absence of an employee (sickness, maternity/paternity leave) or in cases where a given employee is dismissed due to inadequate performance.

As Air Quality Managers should bring multiple benefits to municipalities (integrated, effective air quality improvement strategies, external funding for air protection measures, etc.), it is assumed that 2/3 of Air Quality Managers will continue working for the municipalities and SEA after project completion.

**Reasons why this action is necessary**

One of the main barriers to effective implementation of the AQMP at the local level is the lack of human resources and organisational skills as well as insufficient knowledge and experience within municipal units. There are no specialists who could deal with comprehensive implementation of air quality protection tasks. As municipalities are responsible for implementation of measures specified in the AQMPs, this low human capacity translates into limited implementation of the

MAQP. Moreover, at the municipal level, basic strategic documents have not been drawn up at all (low-carbon economy plan, low-stack emission abatement programmes, the guidelines for heat, gas fuels and electricity supply plans), or they are inconsistent with one another and fail to implement the air protection strategy set out in the AQMPs. Due to the fact that local authorities are not actively involved in air protection, public awareness of the problem, one of the critical factors affecting successful implementation of all kinds of air quality initiatives, is limited.

Hiring an employee to handle tasks associated with the implementation of the AQMP will considerably increase the involvement of municipal bodies in this area. The Air Quality Managers will not only be responsible for obtaining external financing for air protection projects, but also for encouraging local residents to use the available instruments enabling them to replace the old heating boilers or conduct thermal modernisation of a building. The

Air Quality Managers will shape the local air protection policy (integrating different documents, such as low-carbon economy plan, low-stack emission abatement programmes, the guidelines for heat, gas fuels and electricity supply plans) and oversee its effective implementation in order to ensure the effectiveness and sustainability of the activities pursued.

**Constraints and assumptions**

There is a risk that Air Quality Managers will not be sufficiently empowered within the municipal structure to effectively pursue their tasks. The Steering Committee (SC) will prepare guidelines on the empowerment of the Air Quality Managers. The SC will also evaluate municipal offices' proposals in this respect. The Air Quality Managers will report to the SC on their cooperation with other organisational units of the municipality in periodic reports (every quarter).

There is a risk that the position of an Air Quality Manager is entrusted to an incompetent person. The SC will prepare guidelines specifying basic competences of the Air Quality Managers. Once competence gaps are identified, they will be addressed by the training at the Air Quality Coordination Unit.

Municipalities will have to monitor the progress of the Air Quality Managers' competency development and submit the findings to the SC. There is a risk that the objectives assigned to Air Quality Managers are unattainable. The SC will formulate guidelines on how to define objectives, implement them and deal with encountered barriers. Strategic and operational objectives will be defined for each municipality and progress in their implementation will be monitored and communicated to the SC.
There is a risk that cooperation and communication with stakeholders is ineffective. The
Air Quality Coordination Unit will provide targeted training in this area. Guidelines on effective communication will be prepared. The Air Quality Managers will receive substantial support in developing local information campaigns. They will have to report on these issues in periodic reports.

**Expected results:**

1) 6 AQ managers will be hired by self-governing regions. 4 AQ managers hired by SEA and 4 AQ managers hired by MoE SR. Additionally, MoE we will hire 3 managers as Coordination Unit and 2 managers as Project Managers, so altogether 9 additional people at MoE SR.
2) In targeted municipalities participating in the LIFE project, there will be faster replacement of boilers compared to other municipalities.
3) Regions employing Air Quality Managers have sufficient capacities to effectively carry out the tasks envisaged in the AQMP.
4) All regions introduce an integrated system for air quality management and energy consumption planning.
5) By the end of the LIFE IP, local residents become more aware and more engaged in air protection and green behaviour the increase in the awareness level will be monitored by means of quantitative research.

6) Annual reports produced each year on the tasks and activities implemented by Air Quality Managers, including evaluation of their work and progress towards their objectives (included in the annual report on AQMP implementation).
7) Implementation of the AQMP is assessed on an annual basis in a special report, outlining among other things the activities implemented by Air Quality Managers.

**Cost estimation:**
Phase 1:

Personnel cost:

| | | | | |
|---|---|---|---|---|
| MoE SR | C1.1 | Permanent | Project Manager | **79.980** |
| SEA | C1.1 | Additional | Project Manager | **0** |
| SEA | C1.1 | Additional | 4 x Air Quality Manager | **271.760** |
| MoE SR | C1.1 | Additional | 9 x Air Quality Managers out of which:<br><br>- 4 AQ managers hired to work on C1.1.<br><br>- 3 Managers for the Coordination Unit<br><br>- 2 Additional persons as Project Managers | **611.460** |
| MoE SR | C1.1 | Permanent | Project Manager | **16.960** |
| Banska B. | C1.1 | Additional | Air Quality Manager | **67.940** |
| Banska B. | C1.1 | Permanent | Project Manager | **16.960** |
| Trencin | C1.1 | Additional | Air Quality Manager | **67.940** |
| Trencin | C1.1 | Permanent | Project Manager | **16.960** |
| Trnava | C1.1 | Additional | Air Quality Manager | **67.940** |
| Trnava | C1.1 | Permanent | Project Manager | **16.960** |
| Zilina | C1.1 | Additional | Air Quality Manager | **67.940** |
| Zilina | C1.1 | Permanent | Project Manager | **16.960** |
| Presov | C1.1 | Additional | Air Quality Manager | **67.940** |
| Presov | C1.1 | Permanent | Project Manager | **16.960** |
| Kosice | C1.1 | Additional | Air Quality Manager | **67.940** |
| Kosice | C1.1 | Permanent | Project Manager | **16.960** |

Travel cost

| | | | | |
|---|---|---|---|---|
| SEA | C1.1 | Slovakia | 4 Air Quality Managers employed by SEA: On average the budget of 781,25 | **75.000** |

| | | | | |
|---|---|---|---|---|
| | | | EUR per person per month is allocated to travel in their respective areas | |
| MoE SR | C1.1 | Slovakia | 4 Air Quality Managers employed by MoE SR: On average the budget of 781,25 EUR per person per month is allocated to travel in their respective areas | **75.000** |
| MoE SR | C1.1 | Slovakia | 5 x Air Quality Manager attending at least 2 work related meeting every month (48 meetings in Phase 1 on average) | **72.000** |
| Banska B. | C1.1 | Slovakia | Air Quality Manager attending at least 2 work related meeting every month (48 meetings in Phase 1 on average) | **14.400** |
| Trencin | C1.1 | Slovakia | Air Quality Manager attending at least 2 work related meeting every month (48 meetings in Phase 1 on average) | **14.400** |
| Trnava | C1.1 | Slovakia | Air Quality Manager attending at least 2 work related meeting every month (48 meetings in Phase 1 on average) | **14.400** |
| Zilina | C1.1 | Slovakia | Air Quality Manager attending at least 2 work related meeting every month (48 meetings in Phase 1 on average) | **14.400** |
| Presov | C1.1 | Slovakia | Air Quality Manager attending at least 2 work related meeting every month (48 meetings in Phase 1 on average) | **14.400** |
| Kosice | C1.1 | Slovakia | Air Quality Manager attending at least 2 work related meeting every month (48 meetings in Phase 1 on average) | **14.400** |

Equipment:

| | | | |
|---|---|---|---|
| SEA | C1.1 | Laptop, mobile and office software for 4 Air Quality Managers | **7200** |
| MoE | C1.1 | Laptop and office software for the 9 Air Quality Managers | **14.700** |
| MoE | C1.1 | IT storage place | **2.400** |
| Banska B. | C1.1 | Laptop and office software for the Air Quality Manager | **1.500** |

| | | | |
|---|---|---|---|
| Trencin | C1.1 | Laptop and office software for the Air Quality Manager | **1.500** |
| Trnava | C1.1 | Laptop and office software for the Air Quality Manager | **1.500** |
| Zilina | C1.1 | Laptop and office software for the Air Quality Manager | **1.500** |
| Presov | C1.1 | Laptop and office software for the Air Quality Manager | **1.500** |
| VSB | C4.1 | Inforterma: props and gases needed for the show (propan butane etc.) | **4.167** |
| VSB | C4.1 | Aquaterm: props and gases needed for the show (propan butane etc.) | **2.083** |
| VSB | C4.1 | Smokeman roadshow: props for the show | **4.000** |
| VSB | C4.1 | Campagn on proper combustion in households: equipment needed for the spot (baloons, spirits etc | **4.688** |
| VSB | C4.1 | Ecoheating course education program: equipment and props needed for the course (baloons, spirits etc) | **2.000** |
| VSB | C4.2 | Monitoring of real parameters on combustion devices in households: props and fuels required for testing | **3.333** |
| VSB | C4.2 | Monitoring of real parameters on combustion devices in households: laboratory equipment (analyser) | **91.667** |
| Kosice | C1.1, E F | Laptop and office software for the Air Quality Manager | **1.500** |

External cost

| | | | |
|---|---|---|---|
| SEA | C1.1 | Budget for 4 quality managers for the organisation of meetings | 20000 |
| MoE SR | C1.1 | Budget for 4 quality managers for the organisation of meetings | 33.378 |

Other cost

| | | | |
|---|---|---|---|
| **MoE SR** | **C1.1** | Renting the office space for the 9 Air Quality Managers to be employed by MoE SR | **45.000** |
| **SEA** | **C1.1** | Renting the office space for the 4 Air Quality Managers to be employed by SEA | **40.000** |

**Deliverable products**

1) Guidelines specifying necessary education, qualifications and experience to be possessed by Air Quality Managers employed including the Terms of Reference and methodical instructions for the first year 29/2/2020.
2) Annual reports produced each year on the tasks and activities implemented by Air Quality Managers, including evaluation of their work and progress towards their objectives by 31/12/2020 and in subsequent years by corresponding dates. These reports summarising the implementation of AQMP.

**Milestones**

1) Development of draft employment criteria for Air Quality Managers (obligatory and recommended) by 29/2/2020
2) Employment of Air Quality Managers by 30/4/2020 at latest

**Action C1.2. Air Quality Coordination Unit**

**Beneficiary responsible for implementation**

The main responsibility is taken by the MoE SR.

**Description (what, how, where and when)**

Another part of the activity will be the establishment of an "Air Quality Coordination Unit", which will (in cooperation with respective national authorities, in particular with the MoE SR) provide for methodological guidance and tools to support and coordinate the work of the Air Quality Managers. The Air Quality Coordination Unit will also be responsible for the centralized monitoring of the progress in implementation of AQMPs. The Air Quality Coordination Unit will be established directly under MoE SR

The main role of the Air Quality Coordination Unit is to support the implementation of the AQMPs by providing highly qualified human resources responsible for shaping local air quality improvement strategies and implementing air protection initiatives at the municipal level (the Air Quality Managers). The Air Quality Coordination Unit will also be involved in developing the competencies of other key entities dealing with air protection, i.e. regional and municipal authorities from the whole Slovakia, opinion-makers, etc. The Air Quality Coordination Unit will also support the process of updating the MAQP. It will carry out its duties in accordance with the annual work plans drawn up by the Coordinator, who will be a part of the Project's Steering Committee.

The Air Quality Coordination Unit will:

- ✓ Provide expert opinions and analyses and develop knowledge base
- ✓ Develop a system of training for Air Quality Managers and facilitate knowledge transfer
- ✓ Provide support and consultancy to municipalities.
- ✓ Cooperate on the Activities C2 and E
- ✓ Produce methodical guidance for the Air Quality Managers and facilitating their regular meetings

The coordination unit will be established under the Slovak Ministry of Environment as the subsidized expert organisation of the Ministry of Environment SR.

Expert opinions, analyses, knowledge base

Preparation of methodology and implementation of an effective Air Quality Plan at the regional and local level requires continued support in the form of analyses and expert assistance, as well as active experience sharing with domestic and international institutions involved in air protection. Such support will be necessary during all phases of the project. Experience sharing with international institutions will be ensured under E, aimed at establishing a network for knowledge and experience sharing with other projects.

During the first two years of project implementation the following analyses and studies will be carried out:

1) An overview of experience gained by all project partners in the area of air protection. It will present the main lines of action and air protection strategies pursued by Slovakia, Czech Republic and Poland. Differences in legal frameworks and mechanisms for financing actions taken to improve air quality will be discussed.

2) Monitoring of compliance with regulations on the combustion of solid fuels in domestic and industrial boilers (e.g. in smoke control areas but also illegal burning of waste in domestic stoves and boilers, which is common in Slovakia). This area remains neglected and requires sufficient improvement. Development of a method for improving the monitoring system will involve analysing institutional and legal frameworks, as well as procedures and technical options for carrying out the monitoring activities (e.g. taking and analysing dust samples from domestic furnaces, etc.). Extensive consultations will have to be held with representatives of local authorities, municipal guards, police forces, Slovak Environmental Inspectorate, chimney sweep guilds, etc.

3) Enhancing skills and competences of Air Quality Managers in the field of air quality

Trainings and guidance will be provided for Air Quality Managers as well as public administration employees aimed at improving the expertise, know-how, skills and competences in the field of air protection and air quality management.

This activity will also include specific trainings and workshops aimed at:

- ✓ Detailed requirements for elaboration of effective Air Quality Plans
- ✓ Analytical work on air quality & pollution development in municipalities, regions and districts
- ✓ Providing information on funding possibilities from national and EU funds (ESIF) and preparation of projects and grant applications for available funds aimed at air quality improvement,
- ✓ Providing technical advice to citizens operating small air pollution sources (boilers and heating devices),
- ✓ Effective communication of the air quality importance towards citizens
- ✓ Sharing experience and good practice in the field of air quality management among experts, incl. experts from other countries,
- ✓ Trainings on performing inspections of domestic boilers and their operation

The framework and content of trainings will be provided at national level by the MoE SR in cooperation with the AQ Coordination Unit as well as other state level authorities (e.g. district offices in the seat of region, Slovak Environmental Inspectorate).

The training sessions and the materials will be available for all regions and municipalities, to ensure maximum support in their implementation of AQMP tasks. Training and advice will be provided on: pollution, monitoring and forecasting air quality; air quality and energy planning legislation; air protection and low-carbon growth strategies; energy efficiency of buildings; air protection financing; financial engineering and new financing model, conducting awareness-raising campaigns, communication with stakeholders, etc.

At the end of 2021, the project coordinator will define the scope of analyses, expert opinions, training and consultancy services to be carried out/provided in the subsequent phase of the project taking into account experience gained during Phase 1.

**Reasons why this action is necessary**

The main reason for establishing the Air Quality Coordination Unit is to provide a counseling and training base for the Air Quality Managers, which is a crucial success factor in the project. The Unit will ensure that high-quality knowledge is transferred to the Air Quality Managers and other target groups (decision makers, NGOs, opinion leaders).
Proper functioning of the system of the Air Quality Managers depends on the training and counseling base provided by the Air Quality Coordination Unit. Without this base it will not be possible to ensure an adequate supply of human resources required at the municipal level, which is one of the main barriers to effective AQMP implementation at local level.

Another reason for establishing the Air Quality Coordination Unit is to support the implementation of the AQMP at the regional level. Analyses and external studies need to be conducted in order to

solve the problems (knowledge/information deficits) identified in the course of AQMP implementation.

It is also crucial that the neighboring countries share their experiences and approaches in the area of air quality improvement, as the lessons learnt by one country can be usefully applied in other countries. To date, experience sharing in the neighboring countries has been rather limited. The activities in this respect that are foreseen under the Air Quality Coordination Unit will be coordinated with the activities under E.

**Constraints and assumptions**

The activities described above are subject to a relatively low risk. The risk of wrong adjustment of the training offer to the needs of the Air Quality Managers and decision-makers is low, as the Air Quality Coordination Unit and the interested parties will remain in regular contact. The Air Quality Managers and local administration will provide feedback to the Air Quality Coordination Unit on the services that they receive. The training programme will be adjusted to the current needs of the Air Quality Managers and other interested parties.

**Expected results**

- ✓ Entities dealing with air quality are more competent and qualified to perform their duties (the Air Quality Managers in particular), while good practices are transferred to the municipal level. In terms of quantity, 12 municipal and 7 regional Air Quality Managers have in-depth knowledge of air protection issues.
- ✓ Experience sharing between the Air Quality Managers is enhanced by means of a forum.
- ✓ Consultancy services are provided to other municipalities in the area of energy management and air protection.
- ✓ The knowledge base is developed and made available to a number of other entities (not only to the Air Quality Managers) including mayors, municipal councillors, control bodies, etc.
- ✓ A website presenting all the materials is launched.
- ✓ AQMP updating process is more effective as it will rely on the results of additional analyses.
- ✓ Practical assistance to competent bodies in taking decisions on air quality improvement and energy planning is provided by the Air Quality Coordination Unit
- ✓ Neighboring countries are able to mutually benefit from others' experiences in air quality improvement.

**Cost estimation**
Phase 1

Personnel

| | | | | |
|---|---|---|---|---|
| MoE SR | C1.2 | Permanent | Project Coordinator (50%) | **48.160** |
| MoE SR | C1.2 | Permanent | Project Manager | **59.706** |

**Deliverable products**

The deliverable products specified below refer only to Phase 1 of the project:

1) Training materials and a manual for the Air Quality Managers – by 30/4/2020
2) A report analysing different scenarios for low-stack emission abatement and energy efficiency improvement in the selected regions by 2030, including CATI research on a

representative sample of 1000 houses – by 30/6/2020
3) A review of Slovak, Czech and Polish experiences in the implementation of air quality plans within the area covered by the project (published in electronic version only) – by
4) A report analysing the possibilities for increasing the effectiveness of the control system over atmospheric pollutant emissions in Slovakia (published in electronic version only) – by 31/7/2020

**Milestones related to C1.2**

1) Establishment of Air Quality Coordination Unit by 31/3/2020
2) First training materials for the Air Quality Managers are prepared – by 30/4/2020
3) Trainings for Air Quality Managers begin – by 30/4/2020

**Action C.2 Educational programmes and public information**

**Beneficiary responsible for implementation:**
Slovak Environment Agency

**Description (what, how, where and when):**

This activity will aim at preparation and implementation of educational programmes and information activities. The aim of the action is, on the one hand, to increase awareness of local officials and public of the air pollution problem, its causes and effects; and, on the other, to promote air quality initiatives, encourage public involvement and provide information on the support instruments offered.

**1. Web-application on ambient air quality in Air Quality Management Areas for the public information**

Description:
- Information on announcement smog alerts, about cancellation smog alerts, reasons of announcement smog alerts, what is necessary to do in these cases, what measures were adopted for improving situations
- Information on daily exceedances of limit or target values for pollutants (data 1 – day) with short interpretation to public, what it means
- Historical air quality data about annual and daily exceedances of limit or target values with short interpretation to public, what it means
- Information on important stationary and mobile air pollution sources
- Information on adopted measures in air quality programmes
- Information on air pollution influence to human health

Reasons why this action is necessary:
- Support of the public interest in achieving good air quality
- Engagement of the public in implementing air quality management and process of developing air quality programmes
- Involving the public in the implementation of measures defined in the air quality programmes and in the control of implemented measures.

Milestones:
- 2020, updates and service web application continuously during whole project period

Deliverable product/Outputs:
- Web application

**2. Education of representatives of self-governing authorities aimed at the implementation of air quality measures, exchange of experience and solutions**

The aim is to educate decision makers at regional and local level and to explain the importance of air quality improvement in terms of public interest, in particular in relation to public health. Building

awareness about the possible solutions based on positive experiences with their implementation in other air quality management areas or abroad. The activity will include workshops and exchange of experience within Slovakia and also of other (mainly neighbouring) countries.

Workshops on Air Quality for Representatives of Self-Governing Authorities

Description:
Workshops will be thematically focused on:

- The process of creating Air Quality Management Plans and the role of self-government
- Examples of good practice - implementing measures to improve air quality
- Interconnection between documents of local and regional planning and air quality management documents
- Municipal financial sources and other sources of funding for the implementation of measures to improve air quality

Reasons why this action is necessary:

- Emphasize the responsibility of local and regional policy makers for the creation and implementation of measures to achieve good air quality

Milestones: 2021/2024

- 3 x in 1 year (West, Middle and East of Slovakia, 1 workshop = participants from 6 AQMAs, up to 60 people), 2 x during project duration, i.e. a total of 6 workshops during the project duration

Expected results/ Outputs:

- 6x1 day workshop for mayors, their deputies, professional staff from self-governing authorities falling within the area of air quality management, specialists, number of participants max. 60/1 workshop

**3. Education on the benefits of district heating for the improvement of local air quality**

The aim is to promote the use of district heating as an effective measure to reduce emissions from household heating (clean energy), improvements in heat supply planning. The activity will include workshops, preparation and dissemination of information leaflets and study materials.

Workshops on the importance of central heat supply (CHS) in terms of improving air quality

Description:
Workshop, thematically focused on:

- CHS in the context of planning the supply of heat to the population in the municipality
- CHS - Effective action to reduce emissions to air and others
- Solution of co-operation between heat generators for district heating plants and municipalities.
- Modernization of CHS
- Deciding on self-government when authorizing local heating sources
- Information on the benefits of CHS for cleaner air in cities

Reasons why this action is necessary:

- Support the implementation of measures to reduce emissions from local heating

Milestones: 2022/2025

- 3 times in 1 year (West, Middle and East Slovakia, 1 workshop maximum 60 people), 2 times during the project duration

Expected results/ Outputs:

- 6x1 day workshop for mayors, their deputies, local self-government employers, community

owners, housing co-operatives, number of participants max. 60

**4. Education on proper heating techniques and recommendations for cleaner heating**

The aim is to explain proper heating techniques and teach people to use them. Activities will be aimed at proper operation of boilers, preparation of fuel, explanation of negative impacts of air pollution, including the "indoor pollution" etc. (educational events, including demonstrations). The creation and dissemination of this educational program will likely be coordinated with partner from CZ (possibly also with PL) since improper local heating affects the air quality in both countries and is also believed to contribute to transboundary air pollution

Workshops on actions to reduce emissions from domestic heating

Description:
Workshop, thematic focused on:
- Government efficiency awareness for cleaner air in the heating in households
- Permitting and controlling the operation of small sources of air pollution – households
- Measures to reduce emissions from solid fuel heating in households
- Subsidy schemes to support the reduction of emissions from domestic heating

Reasons why this action is necessary:
- Support the implementation of measures to reduce emissions from local heating

These workshops will be held in 2021, 2023, 2025 and 2027

Expected results/ Outputs:
- 4x1-day workshop for mayors, their deputies, local self-government employers, number of participants max. 150 / workshop

**5. Education in the field of sustainable transport/mobility**

The aim is to develop expert materials and educational programmes, to organize the trainings to prepare and implement Sustainable Urban Mobility Plans etc. The activity will include educational events, trainings, exchange of experience

5.1 Methodological manual "Sustainable urban mobility"

Description: At the two-year intervals, a methodical thematic manual will be developed, it's graphical processing, printing, and distribution to the participants of the planned events, publication of the electronic version on the web page www.eurotm.sk.
The methodical manual will focus on various guidelines, sketches and examples of good practice to prepare and implement sustainable urban mobility plans.

Reasons why this action is necessary:
These methodological manuals will serve as supporting materials for education and public awareness in the theme of sustainable urban mobility.

The manuals will be developed in March 2020; March 2022, March 2024 and March 2026.

Expected results/ Outputs:
- Expert background for education and public awareness in the topic of sustainable urban mobility
- 500 copies per year, i.e. 2000 copies of this methodical manual during the whole 8 years of project duration
- Free access to an electronic version of this manual

5.2 Expert workshops "How to realize and prepare strategic sustainable urban mobility plans"

Description: A realization of half-day expert workshops in each Slovak self-governing regions with a focus on sustainable mobility. Participants will be representatives of self-governing regions, municipalities, including deputies of municipalities with a planned number of max. 25 persons. Each year there will take place 4 workshops in 4 selected self-governing regions on a selected theme. In 2-years intervals, there will repetitively take place workshops in each self-governing region. In total, 32 workshops will be realized during the whole project period.

Reasons why this action is necessary:
The reason for including this activity in the context of the project is to involve politicians and representatives of each Slovak self-governing region, municipalities in addressing measures to improve air quality. Moreover to introduce opportunities to prepare and implement strategic plans to promote sustainable urban mobility, also to inform how to raise finance for their implementation, examples of good practice, etc.

Expected results/ Outputs:
- 4 workshops per year
- Max. 25 participants of 1 workshop; i.e. 100 participants per year/800 participants during 8 years of the project duration

5.3 Study journey for examples of good practice in theme of sustainable urban mobility

Description: A realization of 2-3 days study journey for max. 25 persons. The aim of this activity will be the exchange of experience and examples of good practice on sustainable urban mobility in Slovakia in selected EU countries. This study journey will be attended by selected representatives of Slovak municipalities who were active in the national campaign European Mobility Week of previous years. The liaison will be the foreign local urban mobility coordinator, foreign influential experts for sustainable urban mobility, representatives of foreign self-government, Slovak study tour guide, and an interpreter. Students will have a secure transport to the selected venue, accommodation and meals.

Reasons why this action is necessary:
These study journeys will aim to raise education and public awareness in the theme of sustainable urban mobility and exchange of experience and examples of good practice on sustainable urban mobility.

Within the project duration (during 2020 – 2027), each year in the 2nd or 3rd quarter of the year, one study journey will take place in a selected EU country.

Expected results/ Outputs:
- Max. 25 participants of 1 study journey; i.e. 200 participants during 8 years of the project duration
- 8 visited EU countries

5.4 Promotional material

Description: The purpose of this activity is to procure promotional items - metal pens, lined notebooks in A5 size and roll-ups in size W 100 x H 200 cm. Pens and notebooks will be distributed to participants during workshops and study journey and will contain necessary project elements/logos. Roll-ups with necessary elements/logos will be updated in its graphics and text parts every year and used for each activity (workshops/study journey).

Reasons why this action is necessary:
The reason for this activity is to support the implementation of the activities being realized in the theme of sustainable urban mobility.

Timing: 1st quarter of each year of project duration (during 2020 – 2027)

Expected results/ Outputs:
- Metal pens: 1 year = 200 pcs pens with printed necessary project elements/logos; 8 years = 1600 pcs
- Lined notebooks in A5 size: 1 year = 200 pcs notebooks with printed necessary project elements/logos; 8 years = 1600 pcs
- Roll-ups: 1 year = 3 pcs roll-ups in size W 100 x H 200 cm; 8 years = 24 pcs

5.5 Sustainable urban mobility - promotion in the media

Description: The purpose of this activity is to ensure the production of TV and radio spots promoting the theme and focusing on the educational activities and public awareness activities of this project on the sustainable urban mobility, and the purchase of space in media (print and electronic media, TV, and radio).

Reasons why this action is necessary:
These TV and radio spots will promote education and public awareness in the theme of sustainable urban mobility.

Expected results/ Outputs:
- The output will be the promotion of educational, professional and public awareness events focusing on sustainable urban mobility.

**6. Educational and awareness activities and campaigns for teachers, students and school children**

The aim is to create and to implement selected educational and training activities focused on teachers, students and school children.

6.1 Education programme

Description:
The aim of the Education programme will be to increase the interest of children, pupils and students in air quality of the environment around them. The programme will have a character of Citizen Science Project with next activities. Its main activity will be: (a) monitoring of the air quality by lichens (based on insole morphology of lichens study for illustration of long-term effects of air pollution on biota), (b) air quality measurement by portable equipment (in order to analyse the source of air pollution, the main pollutants presented in the air, what are the places with really good air, and where is air the worst), (c) study of meteorological factors affecting the air quality (to understand the factors influencing distribution of pollutants in space). Within the programme, a web portal will be created, which will provide information on air quality data to be collected during air quality monitoring, as well as the manuals with the methodology for both the monitoring and the evaluation of the results collected will be prepared. Accompanying activities will be implemented. The presentation of the programme will be performed by methodological days and by different events for teachers, the coordinators of environmental training, and the University students. Information materials on the programme (worksheets, posters, leaflets, mapping methodology) will be developed and distributed to participating schools by post or during training days.

Target group: students of the primary schools, high schools, the universities, the public

Reasons why this action is necessary:
Promoting a main target group of the project - teachers, pupils and students in terms of building their awareness of air quality, its links to biota and to the health of the population.

Timing 2023 – 2027

- Web portal creation – where the data collected by individual schools involved in the programme will be presented
- Mobile monitoring equipment's with sensors for CO, $CO_2$, $SO_2$, temperature and air

huminity measurements (app. 20 sets), with trained staff in order to meet the needs of schools that are interested in this type of activity

- Training days - 5 times a year for 3 years - together 15 days
  Training manual for teachers: lichens bio indicator - 3,000 pcs
  Training manual for teachers Air quality monitoring by mobile equipments - 3,000 pcs
  Worksheets for pupils and students - 5,000 pcs
  Information leaflet - 10,000 pcs
  Identification keys with methodology: lichens bioindicator - 10,000 pcs
  Identification keys with methodology: meteorological factors - 10,000 pcs
  Matching game of lichens - 5,000 pcs
  Poster - 3,000 pcs
  Final programme report - 300 pcs
  Gift items: 3000 paper notebooks with pens, 1 200 pcs of magnifying glass, 3000 T-shirts with project logo prints,
  Prizes for participating schools (for 3 years): green vertical wall, excursion for 40 pupils, air purifier

6.2 ŠIŠKA environmental education festival

Description:
The mission of the Festival is to bring new ideas, knowledge, information from the field of environmental education. It provides space for active exchange of experience and opens the door to all environmental education enthusiasts. Within the framework of the project, two years will focus on the issues of Air.

Target group: teachers, coordinators and experts in environmental education, NGOs

Reasons why this action is necessary:
Promoting a main target group of the project - teachers, pupils and students in terms of building their awareness of air quality, negative impacts in case of deteriorated quality, and possibilities of measures to improve the unfavourable state.

Timing: 2024/2027

Expected results/ Outputs:

- 2 festivals involving 100 participants each year

Raising public awareness of the impact of low-stack emissions on air pollution and the related negative health effects is crucial for promoting the elimination of its sources in the affected cities. Without effective educational campaigns householders may not be too willing to switch to cleaner heating solutions.

Conducting education (and dissemination activities, which are further elaborated under Action E) combined with the media campaign is one of the fundamental tasks entrusted to Air Quality Managers. If local residents are to become involved in air protection, first they need to be aware of the problem of air pollution, identify it with their own municipality, understand its causes and effects and know about the available instruments to support air quality initiatives (grants, consultancy, etc.).

It is essential to reach the group of opinion leaders and multipliers who will contribute to reinforcing the message promoted by Air Quality Managers. This is why special reference materials will be developed for public, NGOs and teachers.

Direct contact between Air Quality Managers and local residents is highly important. This is why various events will be held to raise public awareness of the problem, Air Quality Managers will also take part in public events organised by municipal authorities.

**Constraints and assumptions**

Education and information actions are to be carried out by Slovak Environment Agency in close cooperation with Air Quality Managers, so the main risk is associated with their insufficient engagement in establishing contact with local communities, opinion leaders and multipliers. To mitigate that risk, Air Quality Managers and SEA will be submitting detailed reports on all education and information measures taken. They will also be required to hold a certain number of meetings with opinion leaders and community events.

**Expected results**

- Raising public awareness of air quality issues by distributing a set of reference materials in the municipalities taking part in the project: materials focusing on local residents and opinion leaders.
- Education activities targeting teachers, students and pupils.

The following materials will be produced and disseminated:

- Methodological manual "Sustainable urban mobility"
- Training manual for teachers
- Worksheets for pupils and students
- Information leaflet
- Identification keys with methodology
- Matching game of lichens
- Poster

**Cost estimation**

Phase 1

Personnel

| | | | | |
|---|---|---|---|---|
| SEA | C2 | Permanent | 1 Project Manager (70%) and 1 Financial Manager (30%) | **67.080** |
| SEA | C2 | Permanent | Expert 1 | **63.210** |
| SEA | C2 | Additional | Expert 2 | **50.740** |
| PEDAL | C2 | Additional | Project Manager | **112.660** |

Slovak Environment Agency (SEA) will participate in the implementation of the following actions: C1, C2, E and F. Activities will be provided by the project team composed of the project manager, financial manager, 4 Air Quality Managers and experts. Experts will have different roles and responsibilities to ensure defined activities. Given the nature of the activities, experts must have a different focus and experience. Different workloads as well as different levels of responsibility are the reason for the different rates used in the budget.

Travel

48 workshops and 2 educational festivals are scheduled to be organized during C 2 activity (Educational programmes and public information). The locations of workshops will vary across Slovakia. The locations are not exactly defined yet. Depending on the venue, the cost will also vary. It will also depend on the number of staff of SEA involved in workshops as needed. In view of the facts, we have calculated a cost of approximately € 270 per workshop (travel and subsistence costs).

| | | | |
|---|---|---|---|
| SEA | C2 | C2 travels | 3450 |

External

| | | | |
|---|---|---|---|
| SEA | C2 (1) | Web-application on ambient air quality in Air Quality Management Areas for public information (design, development and maintenance) | 5.000 |
| SEA | C1.1 | Budget for 8 quality managers for the organisation of meetings | 66.756 |
| SEA | C2 (5.1) | Metodological manual "Sustainable mobility" (500 printed copies) | 200 |
| SEA | C2 (5.1) | Contractors | 600 |
| SEA | C2 (5.3) | Study visits of good examples of good practise in theme of sustainable urban mobility (1 study visit each year, 25 participants each) | 8.520 |
| SEA | C2 (5.3) | Contractor | 1.000 |
| SEA | C2 (5.5) | Sustainable urban mobility - promotion in the media (TV and Radio) | 11.600 |

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|---|---|---|---|
| SEA | C2 (5.4) | Metal pens, Lined notebooks in A5 size, Roll-ups | 1.720 |
| SEA | C2 (2) | 6 x Workshop on Air Quality for representatives od Self-Governing Authorities (lunch, 2x coffee break, venue, technical equipment and assistance). Each workshop 60 participants. | 10.120 |
| SEA | C2 (2) | Contractors | 2.880 |
| SEA | C2 (4) | Workshop on actions to reduce emissions from domestic heating (lunch, 2x coffee break, venue, technical equipment and assistance). 150 Participants | 6.540 |
| SEA | C2 (4) | Contractors | 960 |
| SEA | C2 (5.2) | How to realize and prepare strategic sustainable urban mobility plans. 4 half-day workshops each year (lunch, coffee break, venue, technical equipment and assistance) | 3.200 |
| SEA | C2 (5.2) | Contractors | 2.400 |

**Deliverable products:**

- Web application
- 6x1 day workshop for mayors, their deputies, professional staff from self-governing authorities falling within the area of air quality management, specialists, number of participants max. 60/1 workshop
- 6x1 day workshop on the importance of central heat supply for mayors, their deputies, local self-government employers, community owners, housing co-operatives, number of participants max. 60/1 workshop
- 4x1-day workshop for mayors, their deputies, local self-government employers on actions to reduce emissions from domestic heating, number of participants max. 150 / 1 workshop
- Methodological manual "Sustainable urban mobility"
- 32x1-day expert workshop "How to realize and prepare strategic sustainable urban mobility plans" max. 25 participants/1 workshop
- 8x Study journey for examples of good practice in theme of sustainable urban mobility max 200 participants

- Promotional goods (metal pens: 1 year = 200 pcs pens with printed necessary project elements/logos; 8 years = 1600 pcs , lined notebooks in A5 size: 1 year = 200 pcs notebooks with printed necessary project elements/logos; 8 years = 1600 pcs, roll-ups: 1 year = 3 pcs roll-ups in size W 100 x H 200 cm; 8 years = 24 pcs)
  - Web portal of the programme – schools involved in the programme of biomonitoring (approx. 150 schools), and general public using information from the portal.
  - Training days - 5 times a year for 3 years - together 15 days
  - Training manual for teachers - 3,000 pcs
  - Worksheets for pupils and students - 3,000 pcs
  - Information leaflet - 10,000 pcs
  - Identification keys with methodology - 10,000 pcs
  - Matching game of lichens - 2,000 pcs
  - Poster - 3,000 pcs
  - Final programme report - 300 pcs
  - Gift items: 3000 notebooks with pens, 3000 pcs of t-shirts with print, 1 200 pcs of magnifying glass
  - Prizes for participating schools (for 3 years): green vertical wall, excursion for 40 pupils, air purifier

**Milestones**

- Phase 1: Educational programmes and public information accomplished (31/12/2021)
- Phase 2: Educational programmes and public information accomplished (31/12/2023)
- Phase 3: Educational programmes and public information accomplished (31/12/2025)
- Phase 4: Educational programmes and public information accomplished (31/12/2027)

**Action C.3 Accelerating the implementation of measures to minimise negative impacts of household heating and transport on air quality**

Beneficiary responsible for implementation:

MoE SR

**Description (what, how, where and when):**

Demonstration projects aimed at household heating

Under this activity, complex approach in implementing various air quality measures will be demonstrated in selected municipalities, including educational activities (motivation, proper burning techniques), concrete investment measures (replacement of old boilers) and monitoring of the progress in air quality improvement. The effectiveness of measures and their synergies will be assessed. The results shall be used by designing regional and local policies, as well as legislation to improve the effectiveness of air quality measures.

Activities will build on experience and knowledge sharing from other countries and projects (PL – LIFE IP Malopolska, DE - LIFE project Clean Heat etc.) and cooperation with the Czech Republic is also anticipated. The activity will be managed by MoE SR in cooperation with the Air Quality Coordination Unit, selected municipalities and Air Quality Managers.

Under this action, expert support will be offered to the inhabitants of selected regions. The action will include organisation of energy consultancy. The Air Quality Managers - will work in different locations in Slovakia, some will have permanent offices, some will organise information points in public places and will also arrange meetings with local residents at their houses. They will actively seek contact with the residents.

The main role of will be to provide information and assistance in the following areas:

- ✓ Replacement of the heating source from coal and other solid fuels to more eco-friendly solutions: advisors will provide expert assistance and will help in choosing the best solution
- ✓ Obtaining a subsidy to heating source replacement (help in preparing the necessary documents);
- ✓ Improvement of energy efficiency: advisors will provide more technical information,
- ✓ Conduct analysis with infrared cameras, advise on which energy efficiency measures are the most urgent and where to apply for financial assistance for conducting these measures
- ✓ Deployment of small RES in households;
- ✓ Reasons and health effects of air pollution in selected areas

One of the important tasks in this context of the Air Quality Managers is to mobilise citizens to heat source replacement and energy efficiency improvement as well as other measures that can contribute to air quality improvement in their area.

The activities related to the replacement of boilers will be funded and realized within OP QE through following calls:

- Replacement of obsolete solid fuel boilers in households – expected subsidy 30 mil. EUR, support of more than 10 000 households is expected with aim to replace solid fuel boilers by gas boilers,
- Replacement of old boilers in public building – open call is already launched with allocation 30 mil. EUR, focused on installation of low-emission boilers (except of RES), technological and technical measures to reduce air pollutant emissions from air pollution sources, in particular to meet the requirements of the National Emission Ceilings Directive and / or the Air Quality and Cleaner Air Directive in Europe are eligible, reduction of emissions due to replacement of old boilers by new low-emissions boilers represent measurable indicator for all supported projects (NH3, NOx, PM10, SO2, VOC).

As far as technical requirements are concerned, energy efficiency of supported installations (new boilers) has to be in line with Annex II of the Commission Regulation (EU) No 813/2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters.

In case of an already launched call on replacement of old boilers in public building, support will be provided as usual based on an application submitted by a public body and approved by the MA. Following successful installation and check by the MA, MA will transfer respective amount of grant to the beneficiary (public body).In case of a call on replacement of boilers in households (which is still under preparation, final version of the call is still under discussion, therefore some changes in the overall design may occur), support will be provided as follows. First (based on a call in question, published by a MA) a provider of support (public body) will be selected. Provider of support will (based on open non discriminatory procedure) select and contract future contractor who will be in charge of replacement of old boilers in households. Provider of support will sign an agreement / contract with future beneficiaries – households, setting out conditions for providing support on replacement of old boilers as well as maximum amount of support (in line with requirements set out in the call by the MA). Installation costs will by covered directly by the Provider of support (after it made sure that the installation was dully made) will transfer respective amount of money directly to the contractor.

Old boilers will be disposed in line with national legislation.

As stated, air quality will remain one of the priorities to be supported in following programming period 2021-2027, AQ managers will ensure that they are updated in activity C.3, supported also by Coordination Unit and Task Force. One of the initiation roles of MoE will be to set up the Task Force, determine the status, organizational order of the Task Force, prepare its Code of Conduct (deliverable 21), related activities, who will be the member, who will lead it, how the group will

work, the frequency of meetings, etc. This will ensure continuation of the project goals among other ministries and sustainability of the information flow. The task will be completed by the end of 2019.

Coordination with the managing authorities of individual OPs in relation to the OP 2021-2027 / 2028-2034 will be set upfront by the Task Force as described in B3, defined by the Code of Conduct – deliverable 21. Proposed new task is a workshop including AQ managers, Coordination Unit, LIFE Project Managers and Task Force, done every two years, presenting best practices from the field, informing on general attitude towards calls, actions and subsidies proposed by managing authorities. These workshops will be mutually beneficial, as Task Force will learn first-hand about their work, potentially motivating them to improve and AQ managers will learn more about future financial plans and schemes.

Pilot Projects aimed at the development of feasibility study on transport solutions for the air quality improvement in selected cities

The key objective of this activity is to provide incentives to selected cities in AQMAs, where the main air quality problems are caused by traffic to provide for the elaboration of feasibility studies aimed at transport solutions to improve air quality, such as introduction of low-emission zones or introducing charged entrance to the cities etc. The results of these studies should be incorporated into the Sustainable Mobility Plans. Experience from other LIFE projects will be used and build on. The activity will be carried out by selected municipalities (cities) in cooperation with an expert consortium, including Air Quality Coordination Unit, MoE SR and relevant experts in the area of transport (university) and air pollution.

Regarding the introduction of low emission zones the project will also aim at sharing knowledge with CZ since some cities in CZ are already considering introduction of LEZ and have already prepared a feasibility study. This experience exchange may be valuable since the situation/structure of many CZ and SK cities is similar.

The feasibility study is to examine which transport measures have the potential to reduce air pollution and their cost-effectiveness. Main topics can include: city transport analysis, suitable zone selection, evaluation of urban planning documentation related to LEZ, LEZ demarcation, transport re-organization, traffic sign planning, analysis of selected areas for LEZ, impact assessment based on traffic modelling and dispersion studies, cost effectiveness. The conclusions of the feasibility study will show whether the proposed measure is feasible at a reasonable cost and whether such a measure can be included in the Sustainable Mobility Plans. Programme period of 2014-2020 is just ending and new period of 2021-2027 is being formed, we do not know exactly when and which funds will be mobilized in this matter, nevertheless we are certain we will opt for any complementary funds available to this area.

The feasibility study on LEZ may be a direct part of NAPCP analysis of newly proposed measures. In current version of NAPCP, LEZ is considered as "Other potential measure". Once the feasibility study is conducted, its results may be published in NAPCP and considered as a primary measure for further emission reduction, if proven effective. By the published Guidance on SMP preparation by Ministry of Transport, Construction and Regional Development, the SMP is obliged to take into consideration already developed relevant strategic documents as well as requests of urban development plans. LEZ feasibility study is a helpful document, which ought to be stated and considered while preparing SMP.

**Reasons why this action is necessary**

In order to accelerate the implementation of measures to minimise negative impacts of household heating and transport on air quality, it is necessary to develop a system of advisors, who will provide more technical knowledge and assistance to the citizens.

They will also play an important role in increasing public awareness on the reasons of air pollution and its health effects, which is crucial for mobilising the citizens to replace heat sources with more eco-friendly solutions. The knowledge on the possibilities to improve energy efficiency of houses or to deploy small RES installations is limited. Therefore, it is crucial that such information is promoted among people that may benefit from such solutions.

**Constraints and assumptions**

This activity foresees close cooperation especially with Action C2 and E. MoE and the Air Quality Managers will therefore collaborate with SEA and PEDAL in order to ensure efficient and effective flow of information aong these three types of activities.

Expected results

- ✓ The LIFE-IP will contribute to increasing the number of replaced solid fuel furnaces in Slovakia due to the improved effectiveness and availability of local subsidies by 2 to 4 times.
- ✓ Administrative procedures for subsidy award are streamlined in order to make sure that all the interested parties receive their subsidies in the same year in which they file applications.
- ✓ Air Quality Managers - provide their advice to at least 50 residents per month, including at least 10 visits per month in apartments and houses in order to analyse possibilities for energy efficiency improvement.
- ✓ Increased awareness of residents with regard to the needs and possibilities of energy efficiency improvement in their apartments and houses.

**Cost estimation**
Phase 1

Personnel

| | | | | |
|---|---|---|---|---|
| MoE SR | C3 | Permanent | 2 x Project Manager | **159.960** |
| SEA | C3 | Additional | Project Manager | **0** |

Deliverable products:

1) Recommendations, published every two years, and input material to design regional and local policies, as well as legislation to improve the effectiveness of air quality measures by 31/12/2021, 31/12/2023, 31/12/2025, 31/12/2027
2) The 2 feasibility studies aimed at transport solutions to improve air quality in selected cities by 31/12/2027

Milestones:

1) The feasibility study finalised by 31/12/2027

**Action C.4 Support the exchange of heat sources (boilers) in households – an information campaign aimed at the operators of stationary combustion sources for solid fuel + diagnostics of real emission parameters**

**Beneficiary responsible for implementation:**

Energy Research Center, VSB - Technical University of Ostrava

**Description (what, how, where and when):**

**C.4-1 Nationwide campaign throughout the Czech Republic.**

i) Interactive information campaign - Smokeman acts

An extension of the traditional **educational show "Smokeman acts"** is proposed, which is known in the Czech Republic and Slovakia (see web site: http://vec.vsb.cz/smokeman/o-smokemanovi/o-smokemanovi.html). The aim of the show is to bring to public the principles of proper combustion in local combustion devices. Smokeman will present his show at two biggest exhibitions targeted on thermal technologies in the Czech Republic with his mobile boiler room and will show practical examples of widespread mistakes and how to combust properly. For example, the public can learn how they can determine at home how effective their combustion units are, how much they influence what comes out from their chimneys, what are the basic types of combustion devices, what are their basic characteristics and how to operate and take care of boilers, stoves and fireplaces properly. Smokeman's shows are also focused on children who learn about energy use and good combustion practices in an amusing way.

The Smokeman´s tent will be outside on two biggest exhibitions about thermal technologies and heating techniques in the Czech Republic. Aquaterm is once per two years in March in Prague, Infotherma is once a year in January in Ostrava. Infotherma is an important international exhibition held in Ostrava, one of the most polluted regions in the Czech Republic. Aquaterm is an international specialised fair held in Prague where an excellent traffic accessibility is and an impact of the fair is practically nationwide.

Suitably adapted educational show *Smokeman acts* will be used also as road show in cooperation with municipalities, especially in the coal regions (Moravian-Silesian Region, Usti region). The show will be held in public spaces (town squares etc.) and will concentrate on proper heating and common mistakes that lead to higher emissions. It is expected to organize at least 4 road shows per year.

The extension of the Smokeman show will be prepared and realized by current staff of the VSB.

ii) Campaign on proper combustion in households

The aim of this activity will be to create eleven video spots (1-3 minutes long) and texts about the proper heating practice, which will be further popularized on Internet, including the use of social networks.

The key parameter for creating the videos will be creating a script. It will be an entertaining storyline representing ten rules of proper heating, which will be presented by Smokeman's figure (a guide, animation/acting, comics) and a plot should be both entertaining and educational. The screenplay will appeal to elderly spectators who are the direct target group of the message, as well as the young ones who will become soon. An amusing (viral) content will be part of it as well as serious facts explaining why the observed phenomenon is important for the environment.

The first episode will be an introduction to the fact that we can influence what is emitted from the chimneys, and the next ten episodes will concentrate on the ten rules of proper heating. Video spots will form a complete block, so they will be made during the first 2 years of the project. Video spots will be accompanied by a dedicated web and social media page with more detailed information on different aspects of the solid-fuel use for heating. The campaign will also provide households with information on the possible action for lowering emissions from the heating by means of fuel shift, boiler replacement and energy efficiency measures together with the information on the possible public financial support for realization of such activities.

iii) Ecoheating course: educational program

The educational program will be about how to heat households better. This course is intended for government officials involved in air protection.

There will be a guided tour at the testing laboratory in the Energy Research Center which focuses for nearly 20 years on an issue of solid fuel heating in households. Smokeman's interactive presentation will be part of the course that will discuss the following topics, for example: i) certification of boilers and stoves, ii) differences between old and new combustion units, iii) what can be checked in households, including the sampling of ash etc., iv) how to heat in a better way. For the presentation real combustion equipment, functional models and physical and chemical experiments that are available at the Energy Research Center will be used. Participants of the course will be able to practice it. Ecoheating course will run continuously throughout the project (until 2025, for 6 years), 4 times per year with up to 20 participants per one course and will be provided by the current staff of VSB (min. 200 persons will be trained).

The awareness raising campaign in the Czech Republic is based on raising awareness of the impact of local heating in obsolete boilers or using low quality fuels (including waste). This averseness raising campaign is directly linked to the air quality plans - measure DB1 that aim at removing obsolete boilers using OP Environment (see below) or via private/other financial sources and measure EC1 that aim at informing public about air quality issues, including the health risks connected with local heating with solid fuels. These measures are included in all air quality plans that were issued for all zones and agglomeration in 2016.

The awareness raising campaign will bring operators closer to the problems caused by the use of unsuitable heating sources, inform them about the appropriate operation of their sources and the appropriate fuel and its storage. The knowledge of the legislative requirements put on the operators of small scale combustion installations will also increase, strengthening the impact especially of the regular inspection of boilers by a certified technician (required once in 3 years). At the same time, the educational campaigns will demonstrate to the audience what illegal waste combustion or combustion of unsuitable fuels look like in real life. The campaigns will certainly motivate operators to switch to environmentally friendly heating sources and help to fulfil measure DB1 of the air quality plans. Eradicating obsolete boilers is crucial for improving the air quality in the CZ since this air pollution source has the most serious impact on the air quality. Video spots focusing on proper heating techniques will be used to better spread the campaign among the population. Further details on this point are provided in the application form, action C4.

At present, a subsidy program (so-called "boiler subsidies") is in place at the Czech Republic, this program falls under the Operational Program Environment, which is financed via European funds. The program offers subsidies to replace an old, in 3 years non-compliant solid fuel boiler with a new gas or biomass boiler and heat pump that meets the eco-design requirements. About 50

thousand exchanges have already taken place in the Czech Republic and further financing is envisaged in the draft Operational Program Environment for the period 2021 - 2027. Further financing opportunities are in place for replacement of solid fuel heaters from the program New Green Savings (Nová zelená úsporám). The long-term aim is to replace all 80 000 (in 2011) of households that use solid fuel heaters (without water heating system) to heat their flats and houses as is indicated in the draft National Emission Reduction Plan (NAPCP) of the Czech Republic.

**C.4-2 Monitoring of real parameters on combustion devices in households**

A great unknown, which influence the emissions and the emission inventory from domestic heating, is the behaviour of the operators (of an average user of a solid fuel boiler). This activity will focus on answering following questions: i) What are the real impacts of the replacement of old boilers by new one (emissions, efficiency)? ii) What is the daily performance of the boiler output during the heating season? (iii) What is the average capacity of a combustion unit for solid fuels? iv) How many operating hours is a boiler operated at nominal output and at reduced output?

Long-term measurements of thermal and technical parameters of solid fuel boilers will be carried out directly at operators' houses (maximum in 10 households). During the long-term measurements the heat demand in households (with respect to a heating season) will be monitored. Emission measurements of the pollutants will be carried out. The measurements will be performed on the same combustion devices repeatedly during the heating season. Attention will be paid to factors affecting the operation of devices, such as the anticipated heat consumption during the heating season, the quality of fuels used and the maintenance of the devices.

The design and verification of a measurement equipment for measuring the operating parameters, will be carried out. The monitored parameters will be designed, individual measuring systems will be selected and verified (sensors, evaluation systems, data transmission). The monitoring system will be validated on a real facility in the accredited testing laboratory of the Energy Research Center of VSB and subsequently applied at real households.

Results will be used for information campaigns as well as for better assessment of the impacts of the boiler replacement.

The aim is also to create a tool that provides information for an evaluation of operational and emission parameters of the heating devices in a time scale of a heating season. Further objective is to determine and to reduce the differences between "labelled" and real operating values of emissions and efficiency of the solid fuel combustion units in households.

The obtained data will be used as an input for the update of the methods of national emission inventories from domestic solid fuel heating. The outputs will be useful also in the Slovak Republic, as well as in other countries of the EU.

A device for the collection and analysis of flue gas samples will be purchased. It is a flue gas analyser of O2, CO2, CO, NO, SO2 and TOC, which will be used for monitoring of real emissions of pollutants from households within this project. The CO2, CO, and SO2 components will be measured based on the NDIR principle, the O2 component will be measured paramagnetically, the NO component will be measured by chemiluminescence, and the TOC component will be measured by a flame ionization detector (FID).

The equipment will also include a collection apparatus that will serve to transport the gaseous sample of flue gas to the analyser. The collection apparatus will include at least a sampling probe with a heated particulate filter and a heated sample line from the sampling point to the flue gas analyser. The apparatus will further include a sample preparation that will contain at least a flue gas cooler to remove moisture from the flue gas sample (prior to entering the analyser), a safety filtration system, and a system for the sample delivery and distribution to the analyser.

Estimated ranges for particular compounds of flue gas analysers:

- O2: 0 - 25 vol %
- CO: 0 – 5000 ppm
- CO2: 0 – 30 vol %
- NO: 0 – 2500 ppm
- SO2: 0 – 3000 ppm
- TOC: 0 – 10000 ppm

This activity will be provided by the current staff of VSB.

**Reasons why this action is necessary**

Due to the high influence of local heating on air quality in the Czech Republic, it is very important to focus on this area. According to the emission inventories, emissions from household heating are responsible for up to 70 % of $PM_{2.5}$ emissions and for 98 % of all benzo(a)pyrene emissions (in 2016) in the Czech Republic.

We see opportunities for public awareness and involvement in the replacement of boilers and proper heating practice.

The reason for this project activity is the fact that a relatively small number of solid fuel heated households in the Czech Republic (about 15% of all households) produces more than 90% of some air pollutants (e.g. benzoapyrene). For efficient and ecological heating with solid fuels, the following four parameters have to be improved: i) type of combustion unit including the chimney, ii) type and quality of fuel, iii) influence of combustion unit operation, iv) maintenance and installation. It is not enough to have a low emission combustion device. Correct fuel has to be combusted as well, the boiler has to be operated and set up properly and the care of the boiler and the chimney has to be carried out. "Kotlíkové dotace" (English translation: "Boiler subsidies") in combination with the legislative requirements of the Air Protection Act are able to solve only the first parameter. With improved quality of the solid fuel boilers used in CZ, the quality of the maintenance of the other combustion installations such as solid fuel heaters, will have increasing share on the overall emissions from the domestic heating sector. For the improvement of these factors it is important to have a properly informed public. Planned nationwide information campaigns and campaigns at most relevant fairs and exhibitions, video spots, educational courses, will focus on the other important parameters. Education about proper heating techniques and the role of the quality of fuel will bring better information and awareness to users and operators of combustion devices. This will have a positive impact on reduction of emissions from combustion of solid fuels in the Czech Republic.

The reason for the focus on monitoring of real parameters of domestic solid fuel combustion units (mainly heat output) is to obtain the information for estimating real household consumption during a heating season, to determine real emissions of pollutants, thus estimating the impact of the "Boiler subsidies" on pollutant emissions and to ascertain the impact of awareness on behaviour of operators of domestic combustion units for solid fuels. Currently established emission factors for the solid fuel combustion in the small scale installations are composed of the emissions measured at reduced and nominal heat output, as these numbers significantly differ, the overall emissions are influenced by the real heat output throughout the year. Information on the further factors like intensity of fuel stoking frequency and quality of the fuel will also be established.

**Constraints and assumptions**

C.4-1 Nationwide campaign throughout the Czech Republic

i) Interactive information campaign – Smokeman show

- Cancellation of Aquatherm and Infotherma exhibitions (minimal risk, minimal impact). Elimination of the risk: possibility of another exhibition or trade fair, for example,

International Engineering Fair, Země Živitelka.

- Accident of mobile boiler room and loss of functional models (minimal risk, minimal impact). Elimination of the risk: Replacement of devices and models.
- The information campaign is not appropriately targeted (minimal risk, significant impact). Prerequisite: Intended fairs and exhibitions are focused on interested people for right ways of heating.
- Insufficient cooperation with municipalities, they will not provide for suitable public space, no interest in organizing the show (minimal risk, significant impact). Elimination of the risk – Targeting on municipalities with air quality problems caused by local heating

ii) Campaign for proper combustion in households

- Not finding a suitable subcontractor for video production (low risk, medium impact). Elimination of the risk: Quality selection process of the supplier, previous market survey, qualifications and references of a supplier.

iii) Ecoheating course: educational program

- Interest of officials (medium risk, medium impact). Elimination of the risk: A wider targeting of the educational program on primary and secondary school students.

C.4-2 Monitoring of real parameters on combustion devices in households

- This activity is conditional by co-operation of authorities and operators, because the measurements will be made mainly at real households. We assume that one-time measurements will be carried out together with regular inspections of the "Boiler subsidies" (small risk, significant impact). Elimination of the risk: Possibility to provide the operators of small combustion units without co-operation with authorities.
- Application of the automatic monitoring system requires repeated accesses to combustion units (medium risk, significant impact). Elimination of the risk: The risk and impact will be minimized by offering of testing fuel for the operators of the combustion units.

**Expected results**

- Trained visitors of Aquatherm and Infotherma exhibitions, information leaflets and brochures about proper heating;
- 11 video spots (1-3 minutes);
- Training materials for the Ecoheating educational program;
- Trained government officials involved in air protection;
- Trained secondary and elementary school students;
- Proposal of repeated one-time emission measurements and efficiency measurement at operators households;
- Automatic system for the monitoring of operating parameters of small combustion devices (wireless data transmission);
- Evaluation of measured operating and emission parameters of real heating sources in a time scale of individual heating seasons.

**Cost estimation**

Daily rates are based on average rates at VSB TU Ostrava.

Infotherma show specialist, Aquatherm show specialist and Smokeman roadshow specialist.
The job description of these three job positions is the same (the job will be done at different places, on different occasions). The content is the preparation and implementation of an interactive information campaign - Smokeman acts (the preparation of demonstration items, physical and chemical experiments, the exhibition installation).

Household heating expert / TV spot specialist
The preparation of technical content of video spots, the performance in video spots (practical shows about the proper heating in households, acted scenes).
The preparation of recorded scenes according to scenarios, the consultation with external assistance about video spots (director, cameraman, sound engineer, etc.).

Eco-heating expert
The organization, promotion, preparation of course content, teaching materials, the preparation of practical demonstrations about the proper heating. Lecturing of training courses held at the Energy Research Centre.

Household heating monitoring expert
The selection of those ones from the public, which are interested in monitoring, the preparation of monitoring systems, the installation/uninstallation of monitoring systems in monitored households, services of monitoring systems, repeated measurements of emissions, the evaluation of long-term measured data.

| | C.4-1 Nationwide campaign throughout the Czech Republic | | EUR |
|---|---|---|---|
| | **i) Interaktive information campaign - Smokeman Acts** | | |
| | **Infoterma show (one show per year, 6 shows in totals)** | | |
| VSB | personal | execution of the show - 37,2 person-days x EUR 141 daily rate x 6 years (one show per year) | 31 471 |
| VSB | travel | equipment and human transfer, per diem - estimated as EUR 833 per show x 6 years (one show per year) | 5 000 |
| VSB | equipment | props and gases needed for the show (propan butane etc.) - EUR 2083 per show x 6 years (one show per year) | 12 500 |
| VSB | other cost | rents and fees asociated with the show (rental of a tent, exhibitional rental fee etc), propagation materials - EUR 4167 per show x 6 years (one show per year) | 25 000 |
| | **Aquaterm show (one show every two years, 3 shows in total)** | | |
| VSB | personal | execution of the show - 37,2 person-days x EUR 141 daily rate x 3 years (one show per every second year) | 15 736 |
| VSB | travel | equipment and human transfer, per diem, acomodation in Prague - estimated as EUR 1667 per show x 3 years (one show every two years) | 5 000 |
| VSB | Equip. | props and gases needed for the show (propan butane etc.) - EUR 2083 per show x 3 years (one show every two years) | 6 250 |
| VSB | Equip. | rents and fees asociated with the show (rental of a tent, exhibitional rental fee etc), propagation materials - EU 5625 per show x 3 years (one show every two years year) | 16 875 |
| | **Smokeman Roadshow (4 shows per year)** | | |

| | | | |
|---|---|---|---|
| VSB | personal | execution of the show - 10 person-days x EU 141 daily rate x 4 shows per year x 6 years | 33 840 |
| VSB | travel | equipment and human transfer, per diem, acomodation (depending on the location of the show) - estimated as EU 417 per show x 4 shows per year x 6 years | 10 000 |
| VSB | Equip. | props for the show - EUR 500 per show x 4 shows per year x 6 years | 12 000 |
| VSB | other | rents and fees asociated with the show, educational materials - EUR 208 per show x 4 shows per year x 6 years | 5 000 |
| | **ii) Campagn on proper combustion in households (11 videospots in total, 5 spots in 2020, 4 spots in 2021 and 2 spots in 2022)** | | |
| VSB | personal | spot creation - 41,5 person-days per spot x EUR 141 daily rate x 11 spots | 64 367 |
| VSB | travel | coordination and prepatration meetings - 15 trips per spot (EUR 42 each travel) x 11 spots in total | 6 875 |
| VSB | external assistance | audiovisual equipment rental cost, animation, dubbing - EUR 4688 per spot x 11 spots | 51 563 |
| VSB | Equip. | equipment needed for the spot (baloons, spirits etc) - EUR 521 per spot x 11 spots | 5 729 |
| | **iii) Ecoheating course education program (4 courses per year - one course is two days long)** | | |
| VSB | personal | execution of the education course - 7.5 person-days x 141 CZK daily rate x 4 courses per year x 6 years | 25 380 |
| VSB | travel | travel to the education course for experts - EUR 42 per course x 4 courses per year x 6 years | 1 000 |
| VSB | travel | travel expences for participants - 20 people x EUR 21 per travel x 4 courses per year x 6 years | 10 000 |
| VSB | Equip. | equipment and props needed for the course (baloons, spirits etc) - EUR 250 per course x 4 couses per year x 6 years | 6 000 |
| VSB | external assistance | EUR 292 catering per course x 4 courses per year x 6 years + EUR 29 acomodation service for each participants x 20 participants x 4 cources per year x 6 years | 21 000 |
| | | | |
| | **C.4-2 Monitoring of real parameters on combustion devices in households** | | |
| VSB | personal | execution of the monitoring - in 2020 (EUR 141 daily rate x 212,5 person-days), 2021 (EUR 141 daily rate x 137,5 person-days ), 2022 - 2024 (EUR 141 daily rate x 112,5 person-days), 2025 (EUR 141 daily rate x 62,5 person-days), 2026 (EUR 141 daily rate x 37,5 person-days) | 111 038 |
| VSB | travel | equipment and human transfer, per diem - EUR 1625 per year x 7 years | 11 375 |
| VSB | Equip. | props and fuels required for testing - EUR 1667 per year x 7 years | 11 667 |
| VSB | Equimp. | laboratory equipment (analyser)- EUR 91667 | 91 667 |

| | | | |
|---|---|---|---|
| VSB | external assistance | data validation, maintanance, data collection and transfer, laboratory fee etc - EUR 1875 per year x 7 years | 13 125 |

**Deliverable products**

- 11 video spots (1-3 min) – 12/2021
- Information and training materials for Ecoheating – educational program – 12/2022
- Repeated one-time emission measurement and efficiency measurement at operators of combustion devices in households – 12/2024
- Automatic monitoring system for measurement of operating parameters of small combustion devices (wireless data transmission) – 12/2021
- Evaluation of measured operating and emission parameters of real heating sources in the time scale of individual heating seasons – 12/2026

**Milestones**

| | |
|---|---|
| 12/2020 | Ecoheating - educational program at the Energy Research Center for 2 days (4 courses, about 20 person per one course) |
| 12/2020 | Four educational Smokeman's roadshow in the Czech towns |
| 1/2021 | Smokeman show on the exhibition Infotherma 2021 |
| 12/2021 | Ecoheating - educational program at the Energy Research Center for 2 days (4 courses, about 20 person per one course) |
| 12/2021 | Automatic monitoring system for operating parameters of small combustion devices (wireless data transmission) |
| 12/2021 | Four educational Smokeman's roadshow in the Czech towns |
| 1/2022 | Smokeman show on the exhibition Infotherma 2022 |
| 3/2022 | Smokeman show on the specialised fair Aquatherm Praha 2022 |
| 6/2022 | Finalisation of 11 video spots on proper combustion in households |
| 12/2022 | Ecoheating - educational program at the Energy Research Center for 2 days (4 courses, about 20 person per one course) |
| 12/2022 | Four educational Smokeman's roadshow in the Czech towns |
| 1/2023 | Smokeman show on the exhibition Infotherma 2023 |
| 12/2023 | Ecoheating - educational program at the Energy Research Center for 2 days (4 courses, about 20 person per one course) |
| 12/2023 | Four educational Smokeman's roadshow in the Czech towns |
| 1/2024 | Smokeman show on the exhibition Infotherma 2024 |
| 3/2024 | Smokeman show on the specialised fair Aquatherm Praha 2024 |
| 12/2024 | Ecoheating – edu. program at the Energy Research Center for 2 days (4 courses, about 20 person per one course) |
| 12/2024 | Methods of repeated one-time emission measurement and efficiency measurement at operators of domestic combustion devices |
| 12/2024 | Four educational Smokeman's roadshow in the Czech towns |
| 1/2025 | Smokeman show on the exhibition Infotherma 2025 |
| 12/2025 | Ecoheating – edu. program at the Energy Research Center for 2 days (4 courses, about 20 person per one course) |
| 12/2025 | Four educational Smokeman's roadshow in the Czech towns |
| 1/2026 | Smokeman show on the exhibition Infotherma 2026 |
| 3/2026 | Smokeman show on the specialised fair Aquatherm Praha 2026 |
| 12/2026 | Evaluation of measured operating and emission parameters of real heating sources in the time scale of individual heating seasons |

## D. Monitoring of the impact of the project actions (obligatory)

| **Action D.** ***Monitoring of the effects of implementation Air Quality Management Plans*** |
|---|
| **Beneficiary responsible for implementation:**<br>Slovak Hydrometeorological Institute |
| **Description (what, how, where and when):**<br><br>Local data collection, evaluation of emissions inventories and monitoring of the impact of implemented measures on AQ<br><br>Currently, the available information on state level in the household heating and behaviour of residential sector is based on sparse data from the latest Census made by the Statistical Office of the Slovak Republic in 2011. The Slovak Hydrometeorological Institute in a cooperation with the Statistical Office of the Slovak Republic and the EUROSTAT provided pilot survey focused on households heating in 2017-2018. Results were published and contained more complex data on residential heating habits and composition of heating bodies. This pilot survey was an example how to address this issue. However, results and indication show that there are considerable regional differences in the composition and quality of fuels and boilers used for individual residential heating.<br><br>Supporting the actions of this project, further statistical survey is necessary for monitoring of results and effectiveness of implemented measures. Questions relating to the emission inventory side of the impacts will be proposed by the SHMI, questions regarding the socio-economic impacts[36] will be proposed by the MoE and public awareness questions will be proposed by SEA. These surveys would be requested in the beginning of the project, in the middle of project and the end of it. In addition, to fulfil conditions of this type of project, 3 years after the end of the project, the final survey will be needed.<br><br>The close cooperation with the Statistical Office of the Slovak Republic is essential during this project. This will ensure reliability of obtained data.<br><br>One of the value added of this activity could be special emission inventories of pollutants in a targeted regions interconnected with additional air quality monitoring using mobile automated monitoring stations in selected areas. These data will subsequently serve as a base for AQ modelling in abovementioned areas. This allow to focus special policies and measures to the selected regions.<br><br>The 14 new monitoring stations are part of National Air Quality Monitoring Network funded by OP QE this year. Financial resources are already allocated for its set-up and the supplier have been selected. First valid monitoring data from new stations are expected by |

[36] This part of the survey will relate to the awareness of air quality related issues, measures that need to be taken to improve it and support instruments available. The survey will be conducted at the beginning of project implementation closure. The research will cover all regions. Repeatability of the survey will enable comparison of awareness levels and possible changes in this area. Survey results will be used to verify the effectiveness of media campaigns and awareness raising actions (regional and local level) and, if applicable, to modify the scope of awareness-raising actions in the subsequent phases of the project.

Economic and social impact of the project will also be assessed to determine its direct and indirect effects on the economy and the quality of life of local residents.

the 1Q 2020. Exact location of these stations is available in the Annex.

Data from the entire National Air Quality Monitoring Network (38 AMS), which will be supplemented by 14 new stationary AMSs in 2019, will be used for the modeling and assessment of impacts on air quality.

In addition, campaign measurements will be carried out at the beginning and at the end of the project by mobile monitoring stations.

For comparison with other projects, e.g. the Malopolska project, data from several stations will be used for modeling (better accuracy will be achieved): 38 (original) AMS + 14 (new) AMS + campaign measurements by mobile stations. In relation to Atmosys - this project has developed a tool that SHMI will use to assess the impact of the measures taken (RIO interpolation model).

14 new AMS will be placed in regions, which were not fully monitored, unrelated to AQMAs. These locations are:

**Agglomerations**

- agglomeration Bratislava – Rača (PM10, PM2.5, NO, NO2, NOx)

**Regions**

- Bratislava – Pezinok (PM10, PM2.5, NO, NO2, NOx, O3, benzene)
- Banská Bystrica – Lučenec (PM10, PM2.5, NO, NO2, NOx, O3)
- Banská Bystrica – Žarnovica (PM10, PM2.5, NO, NO2, NOx, benzene)
- Košice – Trebišov (PM10, PM2.5, NO, NO2, NOx, O3)
- Nitra – Plášťovce (PM10, PM2.5, NO, NO2, NOx, O3)
- Nitra – Komárno (PM10, PM2.5, NO, NO2, NOx, O3)
- Prešov – Poprad (PM10, PM2.5, NO, NO2, NOx)
- Prešov – Bardejov (PM10, PM2.5, NO, NO2, NOx, O3)
- Trenčín - Považská Bystrica (PM10, PM2.5, NO, NO2, NOx, O3)
- Trenčín– Púchov(PM10, PM2.5, NO, NO2, NOx, SO2, CO, benzene)
- Trnava – Sereď (PM10, PM2.5, NO, NO2, NOx)
- Žilina - Liptovský Mikuláš (PM10, PM2.5, NO, NO2, NOx, SO2)
- Žilina – Oščadnica (PM10, PM2.5, NO, NO2, NOx, SO2, O3)

Reporting on the implementation progress

A reporting tool will be commissioned by the MoE in order to establish a database of progress reports on the implementation of air quality measures (envisaged in the AQMP) by individual municipalities. The tool will be used by all municipalities in the region, as they are expected to report to the MoE SR on the air protection measures taken by them. This software solution will facilitate and consolidate the process of collecting data on the measures taken at the municipal level, thus ensuring prompt and reliable assessment of progress made in implementing the AQMP. An annual summary report will be drawn up, setting out the scope of measures taken in the previous year, including their estimated effects in terms of pollutant emissions reduction.

**Reasons why this action is necessary**

Development of the reporting tool will enable efficient and swift information sharing and comprehensive analysis of the obtained data. Thanks to this tool it will be easy to compare measures across different time periods as well as respective municipalities and juxtapose them with the initial objectives.

The aim of the action is to assess the effectiveness of measures taken by analysing collected information. It will help determine which measures are effective and which of them should be modified or intensified.

Additional measurements of air quality in selected municipalities will make it possible to verify the effectiveness of implemented initiatives and, if necessary, to take additional action. It will contribute to supplementing already existing information on the state of air quality in the region, which will be valuable also in the context of AQMP update.

**Constraints and assumptions**

Obtaining a reliable and comprehensive inventory on the regional level to a large extent will depend on the quality of data available at the municipal level in this respect. These data can be used in order to prepare input data on the regional level. However, not all the data will be available, therefore, it will be necessary to take into account some estimates and relevant indicators.

Application of air quality measurement data for assessing the results of implemented actions bears the risk of distortion by meteorological conditions in a given year (cold vs. warm winter, windy vs. calm weather, many vs. few days with inversion conditions). It may turn out that the results of emission reduction measures are not fully visible due to unfavourable weather conditions.

**Expected results**

- ✓ An application to collect reports on municipal-level activities is prepared and used by municipalities as well as the MoE SR.
- ✓ Quantitative and qualitative information is obtained on air quality improvement measures carried out in the region.
- ✓ Annual reports on the implementation of air quality improvement measures are prepared. Feedback is provided to beneficiaries on the effectiveness of measures taken.
- ✓ Thanks to quantitative differences between the inventories prepared for respective periods it is possible to verify whether the number of low-stack emission sources has decreased.
- ✓ Additional air quality improvement measurements are conducted and relevant reports are prepared.

**Cost estimation**

Phase 1

Personnel

| | | | | |
|---|---|---|---|---|
| MoE SR | D | Permanent | Project Manager | **79.980** |
| SHMI | D | Permanent | Expert 1 | **15.158** |
| SHMI | D | Additional | Expert 2 | **45.580** |

SHMI: Expert 1 - person responsible for the professional oversight and performance of the statistical survey and the evaluation of the results. It will be a person who will ensure the creation of a questionnaire (correctness in terms of content), communication with the Statistical Office of the Slovak Republic and the resulting professional evaluation of the statistical survey.

Expert 2 – work related to mobile monitoring (transport and care of the monitoring stations, regular inspection, and maintenance). Employee responsible for the technical aspects of mobile monitoring - from the provision of electrical connections, through the transport and installation of the mobile station to the maintenance of the equipment itself.

External

Creating a questionnaire, training for interviewers, performing statistical surveys in households across Slovakia, processing of statistical questionnaire. This service will be provided by Statistical Office SR, conducting survey on several thousand respondents across the country.

| | | | |
|---|---|---|---|
| SHMI | D | Monitoring of the indicator related to the emissions reductions (survey) | 100.000 |

Other

- Electricity bill – contains cooling or heating of mobile container to laboratory conditions and operation of monitoring devices
- Power service – price for establishing a temporary electrical connection, which depends on distance from switchgear and necessary construction modifications
- The transport of the mobile monitor station – transport costs (fuel), calibration of monitoring devices before measurement, regular inspection of the equipment, calibration fuels, data transfer, and validation

| | | | |
|---|---|---|---|
| **SHMI** | **D1** | Electricity bill (1000 EUR per month per station). | **95.177** |
| **SHMI** | **D1** | 12 x Power service at 400 V | **24.000** |
| **SHMI** | **D1** | One-off cost associated with the transport of the mobile monitor station, including calibration, daily control, data validation (1000 EUR per one site) | **12.000** |

**Deliverable products**

1) Emission inventory for the selected regions available by 31/12/2021, 31/12/2025, 31/12/2027
2) Regional air quality assessment report and data base by 31/12/2023 and 31/12/2027

**Milestones**

1) The first residential emission inventory for selected regions available by 31/12/2021
2) Monitoring of the indicator related to the improvement of air quality 31/12/2027

## E. Public awareness and dissemination of results (obligatory)

***Name of the action:***
***E. Public awareness, dissemination and exploitation actions***

*Beneficiary responsible for implementation:*
Slovak Environment Agency
PEDAL Consulting

***Action description (what, how, where and when):***

This action will aim to disseminate the project's results widely and beyond the borders of the LIFE project, by involving other networks and projects. It draws information from the other actions giving it shape and providing the global coherence and structure required for appropriate dissemination activities.

Objectives of the campaign:

- ✓ Raising the awareness among local communities of the fact that the problem of air pollution affects their town/village as well.
- ✓ Raising the awareness among local communities of the fact that air pollution contributes to a number of negative health, economic (e.g. a drop in earnings from tourism) and social impacts (e.g. negative health impacts).
- ✓ Promoting the available instruments to support air quality initiatives (with particular reference to the elimination of low-stack emission sources): assistance offered by Air Quality Managers, subsidies for the replacement of obsolete heating systems with eco-friendly ones, support for householders to improve the energy efficiency of their homes if such instrument is created.
- ✓ Encouraging local communities to take advantage of the abovementioned complimentary instruments.

Awareness raising campaigns will focus on different target groups, such as general public (adults), teachers, school students/children and representatives of self-governing authorities (self-governing regions, municipalities).

**TASK1: Strategic Dissemination and Communication plan**

The dissemination and communication strategy will be devised with one main goal in mind: achieving the greatest possible impact within the allocated budget envelope, amongst the target groups identified. The plan will comprise the following stages:

Stage 1 – Strategy
The importance of situational analysis of the project will determine the definition of a coherent, consistent campaign. The brand strategy phase includes the creation at a holistic dimension of the project entire brand. For this, it is necessary to find, based on the goals and analysis performed in the previous stage, the answers and content for the central elements that will be the founders of all experiences and actions to be generated by the brand: values, attributes (how we want the brand to be perceived), positioning and brand language.

Stage 2 – Action plan
The Action Plan includes the detailed planning of all communication activities for LIFE IP SK and CZ campaign in a systematic manner. This involves:

- ✓ Creation of actions: creative definition of the communication action as well as the briefing of how this will be put into practice.

- ✓ Definition of Objectives: contextualization of the action in terms of how each action/message will be adapted to suit any particular target audience.
- ✓ Definition of and assignment to of the responsible party to carry out each action.
- ✓ Timing: definition of the time period of the action based on prior coordination with the other Actions
- ✓ Materials: definition of the communication materials to be created.

The dissemination and communication plan will be developed by PEDAL in close coordination with the SEA.

**TASK 2: Dissemination and communication activities**

Task 2.1 Development of the dissemination material

Based on the definition of the project's communication strategy, this task will be responsible for the creation of the visual identity and brand framework of the project including: Project logo; Standards manual; Keynote/Prezi; templates: Letterhead, Word, PowerPoint, email signature; Identifier hashtag for social networks; Brochure/leaflet model to be translated into each national language.

The information and awareness campaigns will build on the experience from on-going campaigns undertaken in Slovakia, Czech Republic and in other EU Member States with the aim to use all means available to promote a robust campaign addressing as many citizens as possible. Providing information on funding possibilities will be included as well.

| | |
|---|---|
| National and regional (municipal) TV stations | The TV campaign is supposed to raise awareness of the seriousness of the problem - 60 second spots (8 different versions) /published 48 times a year |
| Miniboards, posters | Using outdoor media helps strengthen the message and make it better remembered. Miniboards and posters will be used in some strategic locations (shopping centres, supermarkets, near the churches, community centres, means of public transport etc.). The aim of miniboards and posters is:<br>- Support of public interesting for achieving good air quality<br>- Engagement of public to implementation of air quality management and to process of making air quality programmes<br>- Attendance of public to implementation measures from air quality programmes and to control implemented measures from these programmes |
| Notice boards, with the LIFE logo, describing the project. | They will be displayed during the whole duration of the project permanently at strategic places, including the main entrances to the buildings of the coordinating beneficiary and all associated beneficiaries (public bodies). Furthermore, these notice boards will be also located temporarily at the venues of all project events (workshops, trainings, |

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|---|---|
| | conferences, meetings, etc.). Finally, the notice boards will be placed at the entry halls of the working stations of all Air Quality Managers. It is proposed that the description of such notice board will include the following information: "LIFE18 IPE/SK/000010: Enhancing the implementation of Air Quality Management Plans in Slovakia by strengthening capacities and competencies of regional and local authorities and promoting air quality measures |
| National and local radio stations | A spot-based campaign will be launched. 60-second spots (8 different versions) /published 48 times a year will inform in the project people about air quality, causes and consequences, air quality management, about a possibility to seek advice from Air Quality Managers, about support instruments, etc.<br>- Radio discussions – 16 radio discussions regarding information about air quality in air quality management areas, about causes and consequences of air pollution, measures for improving air quality, implementation of these measures and their effects etc. will be given by two/three expert participants. |
| Press | Press campaign contributes to awareness raising, this is also where more information can be published for people to take time to read about the details of the action. Ads will be placed both in the most widely read regional newspapers and in small local weekly magazines that will reach readers from selected municipalities. Additionally, some ads will be placed on local press web pages. |
| Email marketing targeted | E-mail marketing has very high clickcodes through rate (CTR). Targeting by post codes makes it possible to precisely reach the target group. Moreover, due to their capacity, information contained in e-mails can also help achieve educational objectives. |
| Google and content network campaign | A comprehensive online campaign to reach people living in the selected municipalities remarketing. The campaign will proceed along two lines: It will be targeted at householders potentially interested in having their boilers and furnaces replaced (e.g. via remarketing or behavioural campaign), but also at all the local residents (e.g. ads placed on web pages with local news). |

| | |
|---|---|
| Transit advertising (public transport and private buses), shopping centres, unaddressed direct mail, sampling of press materials at newsstands, advertising in cinemas | Most forms of outdoor advertising will be implemented in selected municipalities and in locations, where it is well-grounded will be used (outside large agglomerations such campaigns are much more difficult to implement). At the same time, when selecting the advertising media special attention will be paid to their information capacity and visibility.<br><br>Additionally, among the selected forms of advertising will be those allowing for precise targeting (e.g. unaddressed leaflets delivered by mail to houses from selected districts or areas of a given town such as those where old housing stock prevails, not to flats) |

Campaigns will be managed and carried out by the Slovak Environment Agency, having extensive experience in field of public information and awareness raising campaigns. Cooperation with partner from the Czech Republic is planned, as well as involvement of communication experts (PEDAL).

Task 2.2: Launch and maintenance of project website

The project website will constantly be updated with information of the project's ongoing activities and results. Among other, the public section of this website will also contain a dedicated:

- ✓ Section of news and events related to the project;
- ✓ General awareness section, to be updated with developments;

The project's website will be permanently linked to and publicised on other relevant websites and portals for children and teachers and the arrangement will be reciprocal to ensure maximum exposure.

SEA will be primarily responsible for this task.

Task 2.3 Dissemination in web and social networks

Use of social networks (SNS) will be an ongoing activity from the start of the project. It will reinforce the capacity of networking and visibility of the project during the whole period amongst the different stakeholders. For doing that, a specific plan of communication in social networks will be developed trying to adjust each individual use (each partner uses differently SNS) for the common purpose.

Consequently, the official website of LIFE SK, websites of project partners and blogs, social media such as LinkedIn, Facebook, Twitter, Instagram and YouTube will thus be used for promoting the project results.

Project newsletters once a year and press releases, with news and info project activities, events and outputs available.

Articles and publications in the relevant media, including national dissemination-related magazines, newspapers, etc. and scientific venues and journals. Articles/reviews will be published in different media in order to introduce the issues of air quality to a wider audience.

SEA will be primarily responsible for this task.

Task 2.4 Events, conferences and workshops.

During the first phase of the project the SEA will organize:

**International Conference for relevant stakeholders including self-governing regions and selected municipalities**

Description:

Conference will be focused on:
1. Information about LIFE project
2. Sharing experience in the field of air quality management at local and regional level
3. Good practices – measures for improving air quality
4. Financial mechanism for implementation of improving air quality measures

Reasons why this action is necessary:
- Support of disseminations of experience in air quality management at local and regional level

Milestones: 2020/2027

Expected results/ Outputs:
- 2 x 2 days international conference number of participants: 160

Similar workshops will be held during subsequent phases of the project.

Furthermore, there are numerous opportunities for participation in national and international events related to air quality. Project partners will set up and maintain the list of third-party events and investigate the opportunities to present there the objectives and / or findings of the LIFE IP.

SEA will be primarily responsible for this task, supported by other partners.

Task 2.5 Development and maintenance of the LIFE IP SK contact list

Technical infrastructure to maintain the project contact list will be created. The contact list will be created and maintained using a privacy enhancing contact management software that enables potential contacts to opt in and opt out of the LIFE IP SK project list, thereby respecting privacy principles and good practices in meeting data protection requirements. The contact list will be populated with the project partner contacts in the air quality domain, and will be built upon via networking initiatives, dissemination activities and via searching public records online in order to target stakeholder categories identified. Specific emphasis will be made to ensure adequate attention is given to a well-rounded sex/gender split to ensure that both male and female stakeholders are engaged with throughout the project. The contact list will also be used to encourage discussion and networking amongst contacts by inviting them to participate in the LIFE IP SK LinkedIn Group, thereby encouraging the development and use of a peer network.

**TASK 3: Liaison with existing networks and initiatives**

An important component of the LIFE IP SK project is to identify and liaise with existing networks and projects (Horizon 2020, FP7, Life, Norway Grants etc.) working towards encouraging higher local authorities' involvement in and commitment to cleaner air, enhancing their capacities of developing local/regional clean air initiatives. It involves contributing partners drawing on their own insights in combination with desk-based

research to identify the various initiatives that currently exist in Europe. Subsequently, partners will develop a plan for how to leverage these networks will work towards establishing relations with those networks, building synergies and contributing to effective network building.

**TASK 4: Exploitation and Sustainability Strategy**

The aim of this task is to explore the exploitability and sustainability of the Procedures, Tools and Results of LIFE IP SK in order to achieve lasting impact on the enhanced capacities of target local authorities in improving air quality.

Ministry of Environment will produce a report (intermediate and final) with the support of all the partners. The Strategy will collect all the Procedures, Tools and other results from all the partners and will set the targets, indicators and milestones for ensuring the project results' life after the completion of project. It will also specify the guidelines for exploitation and transfer of project results outside the original project network and duration.

The main objective is to give value to the results achieved by the project for their sustainability & exploitation. Exploitation is mostly related to the idea of convincing the key actors (local authorities and intermediary organisations) to use the main Procedures, Tools and other results of a project. Exploitation Strategy will ensure that the results of the project will be used and possibly transferred to other contexts (e.g. other localities, other areas and other sectors).

For instance, the feasibility study on LEZ developed by C3 may be a direct part of NAPCP analysis of newly proposed measures. In current version of NAPCP, LEZ is considered as "Other potential measure". Once the feasibility study is conducted, its results may be published in NAPCP and considered as a primary measure for further emission reduction, if proven effective. By the published Guidance on SMP preparation by Ministry of Transport, Construction and Regional Development, the SMP is obliged to take into consideration already developed relevant strategic documents as well as requests of urban development plans. LEZ feasibility study is a helpful document, which ought to be stated and considered while preparing SMP.

**TASK 5: Mechanism to involve other municipalities and regions.**

Air Quality Coordination Unit in cooperation with the Department of Air Protection at the Ministry of the Environment will disseminate the best practices from the project to other regions and municipalities. This will be done through different workshops, conferences and meetings after the end of the project, organised either by the Ministry itself or by other relevant organisations. MoE plans to adjust competences and responsibilities of municipalities via amendment of Air Protection Act. The extended competences will allow the municipalities more flexibility in implementing measures to ensure improvement of air quality management based on the LIFE project results.

If proven useful, after the project MoE will seek to continue the practice of supporting other municipalities to utilize AQ manager potential. Original AQ managers will be then considered also as trainers, supporting selection of new managers in involved areas and training them thereafter. *To secure projects sustainability we will also introduce a voluntary personal re-assessment of AQ managers if they need one, so we can always account for their qualification and productivity during the project.* Throughout the project, the key role of AQ manager will also be developing functioning network between governmental institutions and self-government. Expected network will generate confidence in system and support for any new municipalities interested in improving their own local air quality, also via measures proposed by either original, or newly hired and trained AQ manager. Municipalities will be addressed by each AQ manager during the project life-time in activities such as raising awareness, or local workshops. This information will also be

available at to-be developed AQ portal, self-governing regions websites and AQ managers will provide a newsletter for addressed municipalities.

**TASK 6: Mutual learning workshops related to the OP 2021-2027 / 2028-2034**

Coordination with the managing authorities of individual OPs in relation to the OP 2021-2027 / 2028-2034 will be set upfront by the Task Force as described in B3, defined by the Code of Conduct – deliverable 21. Under this task, we will organize a mutual learning workshop gathering AQ managers, Coordination Unit, LIFE Project Managers and Task Force, done every two years, presenting best practices from the field, informing on general attitude towards calls, actions and subsidies proposed by managing authorities. These workshops will be mutually beneficial, as Task Force will learn first-hand about their work, potentially motivating them to improve and AQ managers will learn more about future financial plans and schemes.

**Reasons why this action is necessary**

Low level of public awareness of problems connected with air quality, its reasons/causes and impacts on health and environment has been identified as one of the key problems hindering the local air quality improvement and implementation of air quality measures. Without changing behavioural patterns and mind-set of citizens, significant changes are hardly to be achieved. Systematic and well-organized long-term awareness raising campaigns and effective use of communication tools should bring expected results in a long-term perspective.

**Constraints and assumptions**

The main risk associated with the action does not refer to its implementation as such (for which the co-beneficiary takes full responsibility), but rather to the relevance of the message promoted during the campaign. Improperly selected messages may reduce effectiveness of the campaign. In order to minimise this risk, regions and municipalities involved in the project will be invited to any public events organised by the LIFE IP.

**Expected results**

- Campaigns prepared and conducted in the territory of Slovakia will be employed, with focus on selected municipalities. It includes: TV and radio spots, miniboards, posters, leaflets, press advertising, advertorials, internet advertisements, internet mailing, Google and Facebook ads, ads on public transport vehicles in the municipalities.
- Residents will become more aware of air pollution its causes and health impacts, which will be quantitatively assessed on the basis of the results of public opinion surveys referred to in action D.
- Campaign materials (TV spots, radio spots, billboard, miniboard and poster creations, press advertising, advertorials, internet ads, other ads).
- TV and radio spots – 60 second spots (8 different versions) /published 48 times a year 2020-2027
- 16 radio discussions – 2 radio discussions a year 2020-2027
- Leaflets on air quality management in air quality management areas (around 350 printed leaflets per each of the 8 slovak regions)
- Miniboards and posters 2020-2027
- Notice boards
- A Layman's report will be produced in paper and electronic format at the end of the project. The aim is to present the main effects of project implementation in a simple and clear way. The report will be presented in English and Slovak language. It will be 5 to 10 pages long and present the project, its objectives, its actions and its results to a general public. The production of this deliverable will be lead by the coordinating beneficiary.

Conference for self-governing regions and selected municipalities and other stakeholders from Slovakia and Czech Republic – 2 conferences 2020/2027

**Cost estimation**
**Phase 1**

Personnel

| | | | | |
|---|---|---|---|---|
| SEA | E | Additional | Expert 3 | **61.060** |
| PEDAL | E | Permanent | Dissemination & Communication Manager | **112.660** |

Slovak Environment Agency (SEA) will participate in the implementation of the following actions: C1, C2, E and F. Activities will be provided by the project team composed of the project manager, financial manager, 4 Air Quality Managers and experts. Experts will have different roles and responsibilities to ensure defined activities. Given the nature of the activities, experts must have a different focus and experience. Different workloads as well as different levels of responsibility are the reason for the different rates used in the budget.

Travel

| | | | |
|---|---|---|---|
| SEA | E | E travels | 3450 |

External

| | | | |
|---|---|---|---|
| SEA | E | Information panels about air quality management in air quality management areas (advertisement cost and production of posters) | 38.600 |
| SEA | E | Broadcast and TV shots for improving air quality in air quality management areas (advertisement cost) | 45.000 |
| SEA | E | Broadcast discussion sessions (advertisement cost) | 10.000 |
| SEA | E | Leaflets on air quality management in air quality management areas (around 350 printed leaflets per each of the 8 Slovak regions) | 10.300 |
| SEA | E | Press campaign, e-mail marketing, google (advertisement cost) | 19.040 |
| SEA | E | Interpretation of events, translation, printing of documents and graphic design. | 8.000 |

| | | | |
|---|---|---|---|
| SEA | E | Conference for self-governing regions and selected municipalities and other stakeholders from Slovakia and Czech Republic (accommodation for 160 participants, 2x lunch, 1x dinner, 3x coffee break, venue, technical equipment and assistance) | 16.080 |
| SEA | E | Contractors (conference for self-governing | 1.920 |

| | | | |
|---|---|---|---|
| | | regions) | |

Public awareness and dissemination of results will be provided in accordance with the Strategic Dissemination and Communication plan. A lot of activities at local level in different cities are planned. The activities will include inter alia at least two international conferences. Depending on the venue, the cost will vary. In general, the cost for conferences was estimated at approximately 1 700 € per year.

**Deliverable products**

1) Dissemination & communication Plan by 30/4/2020
2) Annual reports on dissemination activities starting by 31/12/2020
3) Mechanism to involve other municipalities and regions 31/12/2027

**Milestones**

1) Dissemination & communication Plan prepared by 30/4/2020
2) All dissemination KPIs achieved by 30/4/2027

## F. Project Management and monitoring of project progress (obligatory)

***F.1 Name of the action: Project Management Activities***

***Beneficiary responsible for implementation:***
*Ministry of Environment SR, supported by PEDAL Consulting*

*Action description (what, how, where and when):*

**TASK 1: Overall Project Management**
MOE SR will act as the main contact with the EC, arranging meetings with the officer in charge of the project when required. MOE SR will distribute the funds among partners according to the Grant Agreement (GA) and the Consortium Agreement (CA). As a rule, the pre-financing will not be distributed until the CA is signed by the whole consortium.

MOE SR will be in charge of commissioning and applying effectively the designed governance structure and the communication flows and methods. These will be presented in the Kick-Off Meeting and gathered in the Project handbook deliverable for common understanding and follow-up.

The project handbook will be an internal document that will set the basis for the governance structure, the communication channels and methods, as well as the periodicity of the reporting to the task and Action leaders, the Project Coordinator and the EC. It will also establish the conflict solving methods. This will be a living document that may change depending on the project needs during its whole lifecycle. This task will contribute to the handbook by creating next contents: quality requirements for the project, organisational structure, general measures and actions taken, planning and control (including a contingency plan in case of deviation), conflict handling and IPR (according to the CA), risk management, files and archives.

LIFE IP will make use of a number of management tools, specially designed for European integrated projects. To this end, a user guide will be available for the partners. Moreover, MOE SR will acquire the licenses for an intranet system to support the coordination tasks and monitoring of the project progress. The intranet will be integrated in the public website of the project, which will be developed in Action E as a dissemination tool. Nevertheless the intranet aim is to provide to LIFE IP consortium a collaborative working space for developing and coordinating the project activities internally. In addition, MOE SR will also acquire a teleconference system license for the exclusive use of the consortium members, so as to save costs from travels and improve the internal communication of the project.

Finally, this task will also include the promotion of specific actions and control over gender issues along the project, including them, annually, in the reporting period's reports. Actions that would be undertaken to promote gender equality will also consider: 1) when contracting additional staff, special emphasis will be given to attract qualified female applications; 2) including women as much as possible in the performance of the different actions and tasks of the project; 3) promoting visibility in publication and citation of articles and activities.

**TASK 2: Progress monitoring and reporting**
MOE SR will track the progress of the project by the use of the intranet and with regular meetings between the members of the Steering Committee (SC). The SC, as execution body of the project will meet physically at least twice a year. In order to maximize the efficiency of the available resources, these meetings will be held back-to-back with workshops and other meetings organized under other Actions of the project. In addition, there will be arranged teleconference meetings with the SC, at least every three months

so as to update the state of the tasks. In the meetings, the technical and financial progress of the project will be reported. The technical and financial reports describing the progress of the project will be sent to the EC in accordance to the periods established in the GA.

At the beginning of the project (KoM), MOE SR will present a set of key performance indicators (KPI) in line with those included at proposal level above responding to the text of the project proposal to come up with a way to measure the project results. These documents of KPIs targets will be reviewed during the first 6 months of the project later on will be utilised to monitor the achievement of project outcomes and strategic objectives over its duration. All partners will be responsible of updating the information to the Action leaders, while Action leaders, together with the project coordinator, will be in charge of project reporting.

**TASK 3: Quality Assurance**

Quality management counts with this specific task due to its relevance and importance within the project. In the beginning of the project, MOE SR will provide to all the partners, and specifically to the Action leaders, the guidelines and instructions to ensure the quality of the works and, in general, the quality of the project. These procedures will be integrated in the corresponding deliverable, based on the following concepts: quality requirements of the project; planning and control; organizational structure; quality control of regular deliverables; quality control of key deliverables (key DLV); quality control of communication materials; quality control of the project.

Assurance of quality of the deliverables is a crucial issue. For that purpose specific instructions will be included in the Project Handbook. Regular deliverables will undergo a simpler preparation and review process, including DLV responsible, task participants, Action leader and PC in a step-by-step review process. Key DLVs, due to their high impact, will be object of a different review process. Technical partners and Project Coordinator, member with high expertise in DLV creation, will participate in the review process. MOE SR, as responsible of communication, will monitor the first stage of key DLVs scoping.

**TASK 4: Ethical and data management**

All key elements dealing with identifying and carefully follow Ethnical and data management high standard procedures will be considered in this task. The ethics issues are related to methods planned to be used in the studies that may require personal data collection. In the case of the LIFE IP project, it is an instrumental issue as many activities are subject to exchange of data and experiences, as a core of the overall project. Therefore, all the personal data to be collected during interview, brainstorming, questionnaire or workshops, will be carefully analysed and treated with the highest quality standards. In overall, the following elements will be developed: how to identify/recruit research participants, the way to carry out the informed consent procedures that will be implemented for the participation of humans and in regard to data processing. To this end, templates of the informed consent forms and information sheets covering the voluntary participation and data protection issues (in language and terms intelligible to the participants) will be developed and kept on file (to be specified in the grant agreement). On the other hand, following elements will be detailed studied and integrated in the management system: General Data Protection Regulation 2016/679 (GDPR) a detailed data protection policy for the project, how all of the data the LIFE IP intends to process is relevant and limited to the purposes of the research project, to safeguard the rights and freedoms of the data subjects/research participants, potential (If it is the case in the LIFE IP) personal data are transferred from the EU to a non-EU country or international organisation and how it is in accordance with Chapter V of the General Data Protection Regulation 2016/679.

**TASK 5: Establishment of the Task Force**

In order to effectively coordinate the project efforts with other ministries, the additional

institute of the "Task Force" will be set up and included into the overall project management structure. The aim of this Task Force will be to establish close cooperation among all the relevant ministries managing complementary funds described in Form FP. We foresee that one representative from each ministry will be appointed and act as the main contact point for in the context of the Task Force.

The Project Coordinator will contact the Task Force members regularly in order to link to, create synergies, support and augment the activities they provide. The goal is to map the complementary funding provided as well as to avoid duplicating topics and filling the gaps.

All members of the Task Force will be invited to the Steering committee meetings as external observers without the right to vote.

Task force of the IP will work in parallel and following to the working group on synergies and complementarities established and managed by the Central Coordination Body (Office of the Deputy Prime Minister of SR for Investments and Informatization) which represents an active cooperation of Managing Authorities and other Authorities responsible for EU and Slovak financial instruments in the process of identification of synergies in drafted call for proposals. Each call for proposal under any OP is consulted and assessed at the preparation stage against synergies defined in the methodological document, which includes all synergies among the OPs defined at the beginning of the PO 2014-2020.

**Reasons why this action is necessary**

Proper execution of project management activities should ensure appropriate implementation of actions provided for under the project as well as its coordination, management and supervision. To implement the project, it is necessary to define its objectives and then to monitor and assess the degree of their fulfilment. It is essential that effects of respective project phases are objectively assessed so that necessary modifications are identified and next phases are planned accordingly.

**Constraints and assumptions**

The management of the LIFE IP implementation will be challenging due to the scale of actions planned and a significant number of partners and institutions involved. Therefore, the managerial staff should consist of persons experienced in project implementation and cooperation with municipal governments.

In order to address this challenge adequately, project partners decided to involve the experts from PEDAL Consulting as the associated beneficiary. PEDAL has the long and proven track-record in implementing successfully EU funded projects of the similar type and scope.

PEDAL will work closely in tandem with the MoE SR in order to address appropriately the tasks listed in Action F1.

**Expected results**

1) Effective management of the project with the participation of 11 partners and about 20 other stakeholders. The project will contribute to broadening the knowledge and experience of the MoE SR and to the implementation of other valuable projects in the future.
2) Project implementation in accordance with the assumed deadlines and fulfilment of the project objectives.
3) Reports from each phase of project implementation are prepared by the MoE SR with the input of all partners
4) An independent assessment report and financial audit are prepared by external companies after each phase of project implementation.

**Cost estimation**
Phase 1

Personnel

| | | | | |
|---|---|---|---|---|
| MoE SR | F | Permanent | Project Coordinator (50%) | **48.160** |
| PEDAL | F | Permanent | Project Manager | **112.660** |

Travel

| | | | |
|---|---|---|---|
| VSB | F1 | 1x Kick off meeting (2 persons, 2 days) | 416,6666667 |
| MoE SR | F1, F2 | 1x Kick off meeting (2 persons, 2 days each)<br>1x Steering committee meeting (2 persons, 2 days each) | 0 |
| SEA | F1, F2 | 1x Kick off meeting (2 persons, 2 days each)<br>1x Steering committee meeting (2 persons, 2 days each) | 600 |
| MoE SR | F1, F2 | 1x Kick off meeting (2 persons, 2 days each)<br>1x Steering committee meeting (2 persons, 2 days each) | 0 |
| Banska B. | F1, F2 | 1x Kick off meeting (2 persons, 2 days each)<br>1x Steering committee meeting (2 persons, 2 days each) | 600 |
| Trencin | F1, F2 | 1x Kick off meeting (2 persons, 2 days each)<br>1x Steering committee meeting (2 persons, 2 days each) | 600 |
| Trnava | F1, F2 | 1x Kick off meeting (2 persons, 2 days each)<br>1x Steering committee meeting (2 persons, 2 days each) | 600 |
| Zilina | F1, F2 | 1x Kick off meeting (2 persons, 2 days each)<br>1x Steering committee meeting (2 persons, 2 days each) | 600 |
| Presov | F1, F2 | 1x Kick off meeting (2 persons, 2 days each)<br>1x Steering committee meeting (2 persons, 2 days each) | 600 |
| Kosice | F1, F2 | 1x Kick off meeting (2 persons, 2 days each)<br>1x Steering committee meeting (2 persons, 2 days each) | 600 |
| SHMI | F1, F2 | 1x Kick off meeting (2 persons, 2 days each)<br>1x Steering committee meeting (2 persons, 2 days each) | 0 |
| PEDAL | F1, F2 | 1x Kick off meeting (1 person, 2 days)<br>1x Steering committee meeting (1 person, 2 days) | 1300 |

Other

| | | | |
|---|---|---|---|
| MoE SR | F | Financial audit of Phase 1 | 5.903 |

**Deliverable products**

1) 8 regular annual progress reports on project activities starting by 31/12/2020
2) *Code of conduct for operating LIFE IP Task Force by 31/3/2020*

**Milestones**

1) A kick-off meeting initiating the project is organised – by 31/1/2020
2) Financial audit covering Phase 1 of the project are prepared – by 31/3/2022
3) Financial audit covering Phase 2 of the project are prepared – by 31/3/2024
4) Financial audit covering Phase 3 of the project are prepared – by 31/3/2026
5) Financial audit covering Phase 4 of the project are prepared – by 31/3/2028

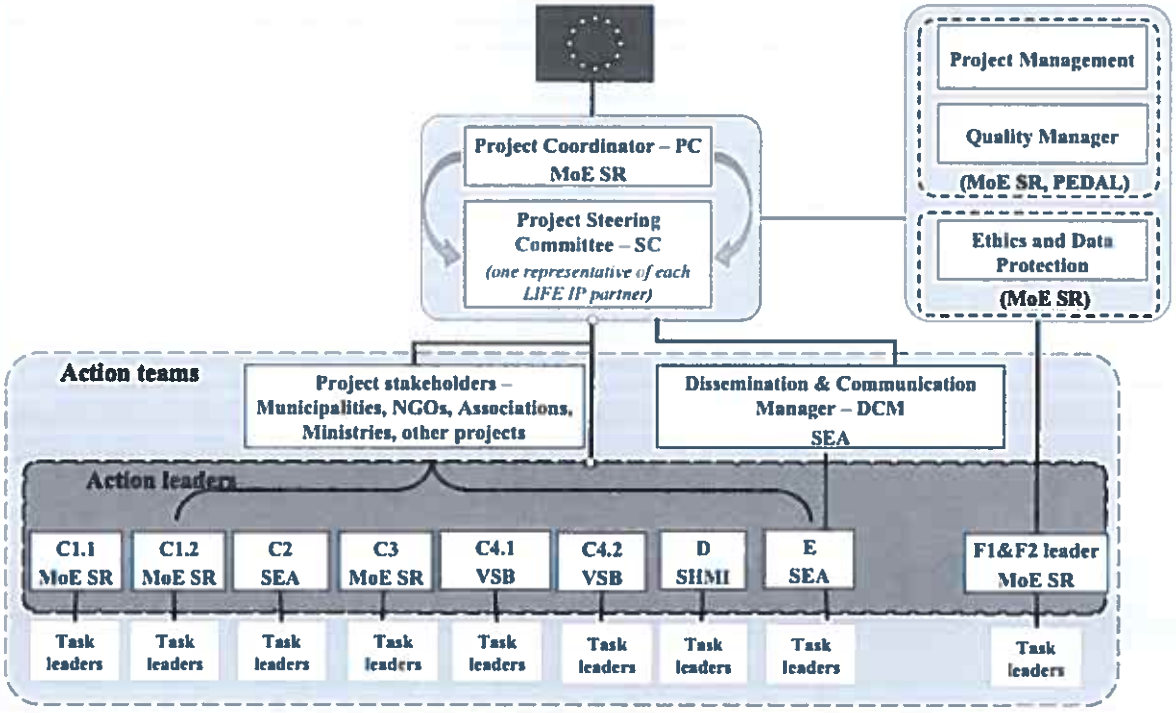
***F.2 Name of the action: Project Management Structure and Decision Making Mechanism***

***Beneficiary responsible for implementation:***
*Ministry of Environment SR*

*Action description (what, how, where and when):*

**TASK 1: Project Management structure**

The diagram below depicts the project management structure.




The various management levels, roles and responsibilities are briefly explained below.

Project Coordinator (PC)
The Project Coordinator (PC), Gabriela Fischerova (MOE SR), serves as the chairman for the Steering Committee (central decision maker of the project) and is responsible for the coordination of project activities. The PC coordinates and manages those items that affect the contractual terms with the EC (which will be fixed at the outset of the project), as well as the technical and scientific activities of the consortium. The mandate of the PC is outlined (but not limited to) the following: (i) Accomplishment of project objectives within time schedule & budget constraints; (ii) Overall project planning and scheduling and chairing the Project Steering Committee; (iii) Coordination of partners and organisation of project meetings; (iv) Internal (among the consortium partners) and external (to the EC) reporting, documentation and financial management (all of them through the Project Steering Committee); (v) Representation of the LIFE IP project and partnership to external

stakeholders and initiatives; and (vi) Communication with the EC.

Steering Committee (SC)
The Steering Committee (SC) consists of one representative per partner and is the formal decision-making body of the consortium dealing with all key strategic decisions. Individually, SC members are responsible for the on-time delivery of results on behalf of the partner they represent, assure the quality of the work executed, monitor budgetary and technical results, and gather input for internal and external reporting and documentation. Finally, the SC also coordinates and manages items affecting the contractual terms with the EC.

Ethics and Data Protection
As the project involves data and user involvement, a data protection and ethics protocol will be developed for the consortium to agree upon and follow. MOE SR will be responsible for ensuring an efficient and effective implementation of the project's Ethical requirements and Data Management, by tracking and ensuring that the relevant rules are understood and not contravened (Action E, Task 4). An "Ethics Manager" will be appointed by the SC at the kick-off meeting, who will monitor the partners activities to ensure that any unforeseen ethical issues will be handled in the appropriate manner. Data collected during interviews, surveys or any other activity will only be made public with the consent of participants. Additionally, the Ethics Manager together with the SC will ensure that all necessary approvals (if any required) will be obtained from Data Protection authorities in due time.

Dissemination Manager (DM)
The Dissemination Manager, Zuzana Lieskovska (SEA), will be responsible for the design and implementation of the "Dissemination and communication strategy", lead the partners' effort to increase awareness on the scope and activities of the LIFE IP, coordinate the dissemination and sharing of ideas with external stakeholders, and ensure the widest possible diffusion of LIFE IP' outcomes to its main target groups.

The Action Leader (AL)
The Action Leader (AL) will be responsible for the coordination of the partners collaborating under the specific Action to ensure the quality of the executed work as well as the accomplishment of the relevant project objectives and targets. The ALs will also be responsible for: (a) resolving day-to-day administrative, technical and resource problems within his/ her Action, (b) disseminating information relating to all aspects of the work to the other Actions ensuring smooth coordination of Action activities and (c) reporting to the upper levels of project management (PC, SC).

The selected management structure offers a good balance of the various elements that affect management design and operation (i.e. simplicity, flexibility, effectiveness, etc.). It is easily comprehended by every member of the LIFE IP team as it incorporates specific and clear roles.

**TASK 2: Decision making mechanisms and procedures**

Project Management Tools for planning, monitoring and reporting

The PC and PMO will utilize on-line Project Management Tools that facilitate project planning, monitoring, and information collection and reporting thus, ensuring that project information is always up-to-date, and can be reported in a timely and consistent manner. The respective tools will also feed the Periodic Reporting to the EC.

Information flow means and mechanisms

Project information flow will be channelled through: (i) mainstream electronic

communication (e.g. emails, phone, skype, internal web-site, etc.); (ii) bi-annually scheduled, and if necessary, ad-hoc SC meetings; (iii) ad-hoc virtual or physical technical meetings; (iv) internal semester progress reporting (from partners to PC); (iv) the project workshops and other events; and (v) within the preparation context for the official reporting to the EC.

Consortium meetings

Apart from the Kick-off meeting, seven (7) consortium meetings are scheduled. These meetings will constitute major milestones for planning, exchanging information among partners, assessing project progress and success (financial and technical) and for taking major decisions about project execution. Minutes of all meetings will be kept and circulated to all partners, including relevant Action Lists. Project partners will have a week upon receipt of the minutes to comment on them, otherwise they will be considered as approved and form part of the project's implementation plan.

Management and Quality Plan (MQP)

A Management and Quality Plan (MQP) tailored to project's size, complexity and particularities will be developed at the beginning of the project (M2). The MQP will operate as a tool for monitoring activities and measuring progress, reassuring both project smooth implementation and quality of deliverables.

Consortium Agreement (CA)

A Consortium Agreement (CA) between all LIFE IP partners will be signed before any partner commences work on the project. By entering to the CA, LIFE IP partners will further regulate specific rights, obligations and operational aspects that are not explicitly defined in the EC contract. The CA will be based in line to LIFE rules, set specific decision mechanisms and procedures and clarify all financial, dissemination, administrative, knowledge management, IPR, and other issues that may arise in the project.

Risk management

An initial identification of risks and related contingency plans can be found in B6. Critical Risks for implementation and contingency plans. A more comprehensive list will be included in the Management and Quality Plan (MQP), accompanied with the relevant contingency plans. The MQP will also include the specific procedure to be followed (i.e. the exact steps and documentation for reporting the risk, analysing it, establishing and putting in place the contingency actions and verifying their efficiency and effectiveness etc.), together with the respective responsibilities, whenever a new risk is identified or an already identified risk occurs. The list of risks will be updated on ad hoc basis (whenever new risks are identified). For every new major risk identified (e.g. identification of potential hazards in relation to work, time scheduling and/or budget constraints, etc.), a contingency plan will be prepared to safeguard the proper implementation of project activities, the quality of project results and deliverables and the on-time execution of events. Contingency plans will be incorporated to the overall organizational work plan of the project and will be further specified on particularities. Risks will be assessed separately and will be reported at least on a semester basis in the project internal reports.

Resolving conflict and controlling changes

The SC members and the ALs will immediately notify the PC of any events or circumstance that may significantly affect the performance of the work executed (e.g. suggestions for considerable improvements and modifications – changes in the methodology, timetable and task allocation, potential delays, disputes among partners, etc.). The PC will be responsible for and will try to resolve any raised issue by consulting the responsible APL and any partner(s) directly involved. The PC will try to reach a compromise between conflicting parties based on consensus and taking also into account the conformity/ compliance to project objectives and work plan. In the event of an unsuccessful mediation

by the PC, he will then forward the conflict to the SC for the final decision to be taken. The SC will try to respond to changes or settle conflicts by achieving consensus among all parties. If consensus cannot be achieved or/ and conflicts remain unsolved, the SC will decide on the matter through vote. Further details with respect to the decision-making, conflict resolution as well as the management of internal administrative – financial issues will be incorporated in the Consortium Agreement of the project, which will be prepared and signed by all partners at the launch of the project.

Reasons why this action is necessary:

The above-mentioned decision-making procedures and mechanisms enable the consortium to effectively manage LIFE IP, retain full control over its resources, schedule and activities, and continuously assess progress so as to respond to changes and risks that may stem from the internal and external environment. Consequently, LIFE IP consortium becomes fully equipped to ensure consistency among its activities and objectives, seek for high quality and ambitious outcomes, and thus, safeguard overall project success.

**Constraints and assumptions**

The management of the LIFE IP implementation will be challenging due to the scale of actions planned and a significant number of partners and institutions involved. Therefore, the managerial staff should consist of persons experienced in project implementation and cooperation with municipal governments.

**Expected results**

The Project Management Structure and Decision Making Mechanism successfully adopted and implemented

**Cost estimation**

The relevant cost items related are already covered by F1.

*Deliverable products:*

The Consortium Agreement by 31/12/2019

1. Interim report and request for payment for Phase 1 and Plan for Phase 2 (Deadline: 31/3/2022)
2. Interim report and request for payment for Phase 2 and Plan for Phase 3 (Deadline: 31/3/2024)
3. Interim report and request for payment for Phase 3 and Plan for Phase 4 (Deadline: 31/3/2026)
4. Final Report (Deadline: 31/3/2028)

**Milestones**

*All 7 Steering committee meetings implemented*

## DELIVERABLE, MILESTONES AND REPORTING SCHEDULE

## MAIN DELIVERABLE PRODUCTS OF THE PROJECT

| Name of the Deliverable | Code of the associated action | Deadline |
|---|---|---|
| 1) Guidelines specifying necessary education, qualifications and experience for Air Quality Managers to be selected, including Terms of Reference and methodological instructions for the first year | C1.1 | 29/2/2020 |
| 2) 8 annual reports produced by Air Quality Managers each year on the tasks and activities implemented, covering:<br>a. Evaluation of their work and progress towards their objectives<br>b. Reduction of per capita emissions of pollutants originating from home heating (PM10, PM2.5, benzo(a)pyrene) in targeted municipalities participating in the LIFE project<br>c. Assessment of capacities Quality Managers to of regions employing Air effectively carry out the tasks envisaged in the AQMP.<br>d. The status of all regions in terms of introducing an integrated system for air quality management and energy consumption planning.<br>e. The degree of increased awareness and engagement of local residents in air protection and green behaviour | C1.1 | 31/12/2020<br>31/12/2021<br>31/12/2022<br>31/12/2023<br>31/12/2024<br>31/12/2025<br>31/12/2026<br>31/12/2027 |
| 3) Training materials, a forum and a manual for the Air Quality Managers ensuring that entities dealing with air quality are more competent and qualified to perform their duties (the Air Quality Managers in particular) | C1.2 | 30/4/2020 |
| 4) A report analysing different scenarios for low-stack emission abatement and energy efficiency improvement in the selected regions by 2030 | C1.2 | 30/6/2020 |
| 5) The knowledge base, website, good practices and services aimed at more effective AQMP updating process and more impactful practical assistance to mayors, muni municipal councillors, control bodies, neighbouring countries and other stakeholders. | C1.2 | 30/6/2020 |
| 6) Web-application on ambient air quality in Air Quality Management Areas for the public information | C2 | 30/6/2020 |
| 7) Training material for teachers and schools including:<br>- Methodological manual "Sustainable urban mobility"<br>- Training manual for teachers<br>- Worksheets for pupils and students<br>- Information leaflet<br>- Identification keys with methodology<br>- Matching game of lichens<br>- Poster | C2 | 30/11/2023 |
| 8) The 2 feasibility studies for transport solutions to improve | C3 | 31/12/2019 |

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| air quality in selected cities | | |
| 9) Recommendations, published every two years, and input material to design regional and local policies, as well as legislation to improve the effectiveness of air quality measures. The reports will take into consideration:<br>f. The number of replaced solid fuel boilers in Slovakia<br>g. The level of streamlined administrative procedures for subsidy award in order to make sure that all the interested parties receive their subsidies in the same year in which they file applications.<br>h. The number of engaged householdls, who had received support and/or advice from the Air Quality Managers.<br>i. Increased awareness of residents with regard to the needs and possibilities of energy efficiency improvement in their apartments and houses. | C3 | 31/12/2021<br>31/12/2023<br>31/12/2025<br>31/12/2027 |
| 10) Information and training materials for Ecoheating – educational program including:<br><br>• Information leaflets and brochures about proper heating;<br>• 11 video spots (1-3 minutes)<br>• Training materials for the Ecoheating educational program;<br>• Training for the government officials involved in air protection;<br>• Training of the secondary and elementary school students; | C4 | 31/12/2022 |
| 11) Repeated one-time emission measurement and efficiency measurement at operators of combustion devices in households | C4 | 31/12/2024 |
| 12) Automatic monitoring system for measurement of operating parameters of small combustion devices (wireless data transmission) | C4. | 31/12/2021 |
| 13) Evaluation of measured operating and emission parameters of real heating sources in the time scale of individual heating seasons<br><br>The aim of this part of the project is to measure the operating parameters of boilers (performance, operating temperatures, etc.) in real households, which will be carried out during the long term and with repeated measurements of emission parameters (CO, NOx, CO2 or O2, dust) in frequently repeated operating conditions.<br><br>Current emission balances consider the heat loss of house basically only depending on the age of construction, but the reality is that each household has a different daily cycle of heat demand. This implies that the boilers are actually operated in different hours and in different modes.<br><br>The aim is to determine the emission parameters of the actually operated boilers in their typical operating conditions, to evaluate | C4 | 31/12/2026 |

| | | |
|---|---|---|
| which operating conditions of the boilers are the most common and also to evaluate which part of the season the boiler is operated at nominal output and which part is operated at reduced output.<br><br>The deliverable will be the quantification of differences between label and real pollutant emissions, including the evaluation of which part of the heating season the emission parameters of the boilers are significantly worse. E.g. when the boilers are operated at minimum output at the start and end of the heating season, or when operating at nominal output during cold days of the heating season.<br><br>The deliverable will also be the information obtained by the long-term measurement of operating parameters and the repeated measurement of emission parameters. This information will be processed into a research report that will be used to update emission balances.<br><br>The emission balance works with emission factors at nominal and reduced boiler output. The question still remains for what part of the heating season the boilers are operated at the reduced output and what part of the heating season at the nominal output.<br><br>The obtained information will also be communicated (presented) during the project as part of the educational actions outlined in Section C.4-1, in order to teach people to heat properly or possibly explain to public to which inadequate operating modes they should avoid to minimize differences in emission parameters set at the certification and in the real operation. | | |
| 14) Emission inventory for the selected regions<br><br>Emission inventory represents the official submission of annual national emission data of 27 air pollutants under the United Nations Economic Commission for Europe (UNECE) Convention on Long-term Transboundary Air Pollution (LRTAP Convention) and 5 air pollutants under Directive 2016/2284 / EU (NEC Directive). Emission inventories are required to monitor progress towards compliance with emission ceilings and reduction commitments of member states EU.<br><br>Emission inventories are annually prepared according to the legislative requirements and EMEP/EEA Guidelines considering rules of transparency, consistency, comparability, completeness and accuracy. Reporting is performed in the common structure by categories NFR (Nomenclature For Reporting) that covers particular sectors the economy (energy, combustion in industry, fugitive emissions, households, transport, industrial processes, solvents, agriculture, waste management). | D | 31/12/2021<br>31/12/2025<br>31/12/2027 |
| 15) Regional air quality assessment report and data base | D | 31/12/2023<br>31/12/2027 |
| 16) Dissemination & Communication Plan | E | 31/3/2020 |
| 17) Annual reports on Dissemination Activities including:<br>j. Campaigns prepared and conducted in the territory | E | 31/12/2020<br>31/12/2021 |

| | | |
|---|---|---|
| of Slovakia (including TV and radio spots, miniboards, posters, leaflets, press advertising, advertorials, internet advertisements, internet mailing, Google and Facebook ads, ads on public transport vehicles in the municipalities).<br>k. Campaign materials (TV spots, radio spots, billboard, miniboard and poster creations, press advertising, advertorials, internet ads, other ads).<br>l. TV and radio spots<br>m. Radio discussions<br>n. Leaflets on air quality management in air quality management areas (around 350 printed leaflets per each of the 8 Slovak regions)<br>o. Miniboards and posters 2020-2027 | | 31/12/2022<br>31/12/2023<br>31/12/2024<br>31/12/2025<br>31/12/2026<br>31/12/2027 |
| 18) Notice boards, with the LIFE logo | E | 31/3/2020 |
| 19) A Layman's report in Slovak and English language | E | 31/12/2027 |
| 20) Report on Mutual learning workshops related to the OP 2021-2027 / 2028-2034 | E | 31/12/2027 |
| 21) Mechanism to involve other municipalities and regions | E | 31/12/2027 |
| 22) Annual progress reports on project activities | F | 31/12/2020<br>31/12/2021<br>31/12/2022<br>31/12/2023<br>31/12/2024<br>31/12/2025<br>31/12/2026<br>31/12/2027 |
| 23) Code of conduct for operating LIFE IP Task Force | F | 31/3/2020 |

**MAIN MILESTONES OF THE PROJECT**

| Name of the Milestone | Code of the associated action | Deadline |
|---|---|---|
| 1) A kick-off meeting initiating the project is organised | F | 31/1/2020 |
| 2) Financial audit covering Phase 1 of the project are prepared | F | 31/3/2022 |
| 3) Financial audit covering Phase 2 of the project are prepared | F | 31/3/2024 |
| 4) Financial audit covering Phase 3 of the project are prepared | F | 31/3/2026 |
| 5) Financial audit covering Phase 4 of the project are prepared | F | 31/3/2028 |
| 6) Air Quality Coordination Unit established | C1.2 | 31/3/2020 |
| 7) First training materials for the Air Quality Managers are prepared | C1.1 | 30/4/2020 |
| 8) Employment of the Air Quality Managers | C1.2 | 30/4/2020 |
| 9) Trainings for Air Quality Managers begin | C1.1 | 31/5/2020 |
| 10) Training material for teachers and schools | C2 | 30/11/2023 |
| 11) The 2 feasibility studies aimed at transport solutions to improve air quality in selected cities | C3 | 31/12/2027 |

| | | |
|---|---|---|
| 12) C4.1 campaigns finalised | C4.1 | 31/12/2026 |
| 13) Emission inventory for the selected regions available | D | 31/12/2027 |
| 14) Completion of media campaign rounds | E | 31/12/2027 |
| 15) All project KPIs are achieved | F | 31/12/2027 |

**ACTIVITY REPORTS FORESEEN**

| Type of report | Deadline |
|---|---|
| Interim report and request for payment for Phase 1 | 31/3/2022 |
| Interim report and request for payment for Phase 2 | 31/3/2024 |
| Interim report and request for payment for Phase 3 | 31/3/2026 |
| Final Report | 31/3/2028 |

## TIMETABLE

*List all actions ordered by number and using their numbers or names. Tick as appropriate.*

| Action Number / name | 2019 | 2020 | | | | 2021 | | | | 2022 | | | | 2023 | | | | 2024 | | | | 2025 | | | | 2026 | | | | 2027 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | IV | I | II | III | IV | I | II | III | IV | I | II | III | IV | I | II | III | IV | I | II | III | IV | I | II | III | IV | I | II | III | IV | I | II | III | IV |
| **A. Preparatory actions, elaboration of management plans and/or action plans:** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A.1 | ■ | ■ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **C. Concrete (conservation/implementation) actions:** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C.1.1 | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| C1.2 | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| C2 | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| C2 - 1 | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| C2 - 2 | | | | | | ■ | ■ | | ■ | | | | | | | | | | | ■ | ■ | ■ | | | | | | | | | | | | |
| C2 - 3 | | | | | | | | | | | ■ | ■ | ■ | | | | | | | | | | ■ | ■ | | ■ | | | | | | | | |
| C2 - 4 | | | | | | | | ■ | | | | | | | | ■ | | | | | | | | | ■ | | | | | | | | ■ | |
| C2 – 5.1 | | ■ | | | | | | | | ■ | | | | | | | | ■ | | | | | | | | ■ | | | | | | | | |
| C2 – 5.2 | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| C2 – 5.3 | | | ■ | | | | ■ | | | | ■ | | | | ■ | | | | ■ | | | | ■ | | | | ■ | | | | ■ | | |
| C2 – 5.4 | | ■ | | | | ■ | | | | ■ | | | | ■ | | | | ■ | | | | ■ | | | | ■ | | | | ■ | | | |
| C2 – 5.5 | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| C2 – 6.1 | | | | | | | | | | | | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| C2 – 6.2 | | | | | | | | | | | | | | | | | | | | ■ | | | | | | | | | | | | | | |
| C3 | | | | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| C4.1 | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| C4.4 | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| **D. Monitoring of the impact of the project actions:** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D.1 | | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| **E. Public awareness and dissemination of results:** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E. | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Project webpage | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conference for regions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Information panels | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Broadcast and TV shots | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Broadcast discussion sessions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Press campaign | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Leaflets | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **F. Project management and monitoring of project progress:** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

*Annex: Location of the monitoring stations*

| Station | Cadastral area | Parcel | Area | Property List | Municipality | District | Region | Latitude | Longtitude |
|---|---|---|---|---|---|---|---|---|---|
| Pezinok | Grinava | | | | Pezinok | Bratislava III | Bratislavský | | |
| Bardejov | Bardejov | 3492/2 | 4254 | 6279 | Bardejov | Bardejov | Prešovský | 49,29988 | 21,277276 |
| Komárno | Komárno | 1497 | 835 | 6434 | Komárno | Komárno | Nitriansky | 47,76412 | 18,138552 |
| Liptovský Mikuláš | Liptovský Mikuláš | 891/1 | 12200 | 4367 | Liptovský Mikuláš | Liptovský Mikuláš | Žilinský | 49,0824 | 19,61866 |
| Lučenec | Lučenec | 5924/14 | 454 | 5414 | Lučenec | Lučenec | Banskobystrický | 48,33659 | 19,676025 |
| Sereď | Sereď | E 303 | 8417 | 591 | Sereď | Galanta | Trnavský | 48,28373 | 17,735082 |
| Trebišov | Trebišov | 3021/1 | 3993 | 4170 | Trebišov | Trebišov | Košický | 48,62834 | 21,713183 |
| Oščadnica | Oščadnica | 31/5 | 1917 | 1693 | Oščadnica | Čadca | Žilinský | 49,43538 | 18,88362 |
| Plášťovce | Plášťovce | 276/4 | 599 | 1 | Plášťovce | Levice | Nitriansky | 48,15975 | 18,978254 |
| Bratislava Podunajské Biskupice | Podunjské Biskupice | 1503/2 | 1635 | 4752 | Bratislava | Bratislava II | Bratislavský | 48,12862 | 17,216648 |
| Poprad | Veľká | 932/1 | 793 | 1 | Poprad | Poprad | Prešovský | 49,06147 | 20,285783 |
| Považská Bystrica | Považská Bystrica | 3732/11 | 17084 | 4376 | Považská Bystrica | Považská Bystrica | Trenčiansky | 49,11192 | 18,442692 |
| Púchov | Púchov | 1224/2 | 10655 | 2424 | Púchov | Púchov | Trenčiansky | 49,11897 | 18,324979 |
| Žarnovica | Žarnovica | 1343/1 | 450 | 1788 | Žarnovica | Žarnovica | Banskobystrický | 48,48289 | 18,719264 |

*LIFE 2018 ENVIRONMENT INTEGRATED PROJECTS*

## Stage 2 - Full proposal

**Proposal acronym: LIFE-IP SK AQ Improvement**

**FORM FA** **Proposal acronym: LIFE-IP SK AQ Improvement**

| Budget breakdown categories | Total cost in euro | Eligible Cost in euro | % of total eligible costs |
|---|---|---|---|
| **1. Personnel** | | 10.256.683 | 68,38% |
| **2. Travel and subsistence** | | 1.332.867 | 8,89% |
| **3. External assistance** | | 1.650.288 | 11,00% |
| **4. Durable goods** | | | |
| **Infrastructure** | 0 | 0 | 0,00% |
| **Equipment** | 210.013 | 210.013 | 1,40% |
| **Prototype** | | 0 | 0,00% |
| **5. Land purchase / long-term lease** | | 0 | 0,00% |
| **6. Consumables** | | 0 | 0,00% |
| **8. Other Costs** | | 568.842 | 3,79% |
| **9. Overheads** | | 981.307 | 6,54% |
| **TOTAL** | **15.000.000** | **15.000.000** | **100%** |

| Contribution breakdown | In euro | % of TOTAL | % total eligible costs |
|---|---|---|---|
| **Requested European Union contribution** | 9.000.000 | **60,00%** | **60,00%** |
| **Coordinating Beneficiary's contribution** | 3.439.400 | **22,93%** | |
| **Associated Beneficiaries' contribution** | 2.364.831 | **15,77%** | |
| **Co-financers contribution** | 195.769 | **1,31%** | |
| **TOTAL** | **15.000.000** | **100,00%** | |

budget must

**Please fill in the forms FC to F7 first. In these forms you are allowed to add lines but you cannot alter the formulas: please fill in only cells with yellow background.**

**Please check consistency of total amounts per cost category between form FB and forms FC to F7**

**Please refer to the relevant instructions given in the explanatory notes for filling in these forms**

**Important note: Please fill in manually overheads in this form: overheads cannot be above 7% of the total eligible direct costs excluding land purchase and the overhead costs themselves.**

**FORM FB** **Proposal acronym: LIFE-IP SK AQ Improvement**

**Breakdown of costs for Actions in Euro (excluding overhead costs)**

| Action number | Name of action | 1. Personnel | 2. Travel and subsistence | 3. External assistance | 4.a Infrastructure | 4.b Equipment | 4.c Prototype | 5. Purchase or lease of land | 6. Consumables | 7. Other costs | 8. Overheads | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C1.1 | Air Quality Managers | 5 930 086 | 1 233 600 | 267 027 | 0 | 64 200 | 0 | 0 | 0 | 260 000 | | 7.754.913 |
| C1.2 | Air Quality Air Quality Coordination Unit | 383 304 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 383.304 |
| C2 | Educational programmes and public information | 1 134 760 | 13 800 | 484 460 | 0 | 0 | 0 | 0 | 0 | 0 | | 1.633.020 |
| C3 | Accelerating the implementation of measures to minimise negative impacts of household heating and transport on air quality | 592 359 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 592.359 |
| C4.1 | Support the exchange of heat sources (boilers) in households – an information campaign aimed at the operators of stationary combustion sources | 170 793 | 37 875 | 85 688 | | 42 480 | | | | 46 875 | | 383.711 |
| C4.2 | Support the exchange of heat sources (boilers) in households – diagnostics of real emission parameters | 111 038 | 11 375 | 0 | | 103 333 | | | | | | 225.746 |
| D | Monitoring of the effects of implementation Air Quality Management Plans | 547 920 | 0 | 300 000 | 0 | 0 | 0 | 0 | 0 | 238 355 | | 1.086.275 |
| E | Public awareness, dissemination and exploitation actions | 694 951 | 13 800 | 513 113 | 0 | 0 | 0 | 0 | 0 | 0 | | 1.221.864 |
| F1 | Project Management Activities | 691 472 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 612 | | 715.084 |
| F2 | Project Management Structure and Decision Making Mechanism | 0 | 22 417 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 22.417 |
| | | | | | | | | | | | | 0 |
| | | | | | | | | | | | | 0 |
| | | | | | | | | | | | | 0 |
| | | | | | | | | | | | | 0 |
| | | | | | | | | | | | | 0 |
| | Overheads | | | | | | | | | | 981.307 | 0 |
| | TOTAL | 10.256.683 | 1.332.867 | 1.650.288 | 0 | 210.013 | 0 | 0 | 0 | 568.842 | | 14.018.693 |

**FORM FC** **Proposal acronym: LIFE-IP SK AQ Improvement**

## Coordinating Beneficiary's contribution

| Country code | Beneficiary n° | Beneficiary short name | Total costs of the actions in euro | Beneficiary's own contribution in euro | Amount of EC contribution requested in euro |
|---|---|---|---|---|---|
| SK | 1 | MoE SR | 5.563.717 | 3.439.400 | 2.124.317 |

## Associated Beneficiaries' contribution

| Country code | Beneficiary n° | Beneficiary short name | Total costs of the actions in euro | Associated beneficiary's own contribution in | Amount of EC contribution requested in euro |
|---|---|---|---|---|---|
| SK | 2 | SEA | 3.962.336 | 1.554.429 | 2.407.907 |
| SK | 3 | Banska Bystrica Region | 432.000 | 43.200 | 388.800 |
| SK | 4 | Trencin Region | 432.000 | 43.200 | 388.800 |
| SK | 5 | Trnava Region | 432.000 | 43.200 | 388.800 |
| SK | 6 | Zilina Region | 432.000 | 43.200 | 388.800 |
| SK | 7 | Presov Region | 432.000 | 43.200 | 388.800 |
| SK | 8 | Kosice Region | 432.000 | 43.200 | 388.800 |
| SK | 9 | SHMI | 820.000 | 345.008 | 474.992 |
| SK | 10 | PEDAL | 1.409.384 | 140.938 | 1.268.446 |
| CZ | 12 | VSB | 652.563 | 65.256 | 391.538 |
| **TOTAL** | | | **9.436.283** | **2.364.831** | **6.875.683** |

## Co-financers contribution

| Co-financer's name | Amount of co-financing in euro |
|---|---|
| **Ministry of the Environment of the Czech Republic** | 195.769 |
| | |
| | |
| | |
| | |
| | |
| | |
| **TOTAL** | **195.769** |

**FORM F1** **Proposal acronym: LIFE-IP SK AQ Improvement**

## Direct Personnel costs

| | | | Calculation => | A | B | A X B |
|---|---|---|---|---|---|---|
| **Beneficiary short name** | **Action number** | **Type of staff** | **Category/Role in the project** | **Daily rate** | **Number of person-days** | **Direct personnel costs** |
| **PHASE 1: From 1/1/2020 till 31/12/2021** | | | | | | |
| MoE SR | F | Permanent | Project Coordinator | 224 | **430** | **96.320** |
| MoE SR | C1.2 | Permanent | Action Manager | 186 | **321** | **59.706** |
| MoE SR | C3 | Permanent | 2 x Action Manager | 186 | **860** | **159.960** |
| MoE SR | D | Permanent | Action Manager | 186 | **430** | **79.980** |
| MoE SR | C1.1 | Permanent | Action Manager | 186 | **430** | **79.980** |
| SEA | C1.1 | Additional | Action Manager | 138 | **0** | **0** |
| SEA | C1.1, E F | Additional | 4 x Air Quality Manager | 158 | **1720** | **271.760** |
| SEA | C3 | Additional | Project Manager | 156 | **0** | **0** |
| SEA | C2 | Permanent | Action Managers | 156 | **430** | **67.080** |
| SEA | C2 | Permanent | Expert 1 (see section C2 for more info) | 147 | **430** | **63.210** |
| SEA | C2 | Additional | Expert 2 (see section C2 for more info) | 118 | **430** | **50.740** |
| SEA | E | Additional | Expert 3 (see section E for more info) | 142 | **430** | **61.060** |
| MoE SR | C1.1, C1.2, E F | Additional | 9 x Air Quality Managers out of which:<br>- 4 AQ managers hired to work on C1.1.<br>- 3 Managers for the Coordination Unit<br>- 2 Additional persons as Project Managers | 158 | **3870** | **611.460** |
| MoE SR | C1.1, E F | Permanent | Project Manager | 160 | **106** | **16.960** |

| | | | | | | |
|---|---|---|---|---|---|---|
| Banska B. | C1.1, E F | Additional | Air Quality Manager | 158 | 430 | 67.940 |
| Banska B. | C1.1, E F | Permanent | Project Manager | 160 | 106 | 16.960 |
| Trencin | C1.1, E F | Additional | Air Quality Manager | 158 | 430 | 67.940 |
| Trencin | C1.1, E F | Permanent | Project Manager | 160 | 106 | 16.960 |
| Trnava | C1.1, E F | Additional | Air Quality Manager | 158 | 430 | 67.940 |
| Trnava | C1.1, E F | Permanent | Project Manager | 160 | 106 | 16.960 |
| Zilina | C1.1, E F | Additional | Air Quality Manager | 158 | 430 | 67.940 |
| Zilina | C1.1, E F | Permanent | Project Manager | 160 | 106 | 16.960 |
| Presov | C1.1, E F | Additional | Air Quality Manager | 158 | 430 | 67.940 |
| Presov | C1.1, E F | Permanent | Project Manager | 160 | 106 | 16.960 |
| Kosice | C1.1, E F | Additional | Air Quality Manager | 158 | 430 | 67.940 |
| Kosice | C1.1, E F | Permanent | Project Manager | 160 | 106 | 16.960 |
| SHMI | D | Permanent | Expert 1 (see section D for more info) | 106 | 143 | 15.158 |
| SHMI | D | Additional | Expert 2 (see section D for more info) | 106 | 430 | 45.580 |
| PEDAL | C2 | Additional | Project Manager | 262 | 430 | 112.660 |
| PEDAL | F | Permanent | Project Manager | 262 | 430 | 112.660 |
| PEDAL | E | Permanent | Dissemination & Communication Manager | 262 | 430 | 112.660 |
| VSB | C4.1 | Permanent | Inforterma show specialist | 141 | 74,4 | 10.490 |
| VSB | C4.1 | Permanent | Aquaterm show specialist | 141 | 37,2 | 5.245 |
| VSB | C4.1 | Permanent | Smokeman roadshow specialist | 141 | 80 | 11.280 |

| | | | | | | |
|---|---|---|---|---|---|---|
| VSB | C4.1 | Permanent | Household heating expert/TV spot specialist | 141 | 373,5 | 52.664 |
| VSB | C4.1 | Permanent | Ecoheating expert | 141 | 60 | 8.460 |
| VSB | C4.2 | Permanent | Household heating monitoring expert | 141 | 350 | 49.350 |
| **PHASE 2: From 1/1/2022 till 31/12/2023** | | | | | | |
| MoE SR | F | | | | | 48.160 |
| MoE SR | C1.2 | | | | | 48.160 |
| MoE SR | C1.2 | | | | | 59.706 |
| MoE SR | C3 | | | | | 159.960 |
| MoE SR | D | | | | | 79.980 |
| MoE SR | C1.1 | | | | | 611.460 |
| SEA | C1.1 | | | | | 0 |
| SEA | C1.1, E F | | | | | 271.760 |
| SEA | C2 | | | | | 67.080 |
| SEA | C2 | | | | | 63.210 |
| SEA | C2 | | | | | 50.740 |
| SEA | C3 | | | | | 0 |
| SEA | E | | | | | 61.060 |
| MoE SR | C1.1, E, F | | | | | 67.940 |
| MoE SR | C1.1, E, F | | | | | 16.960 |
| Banska B. | C1.1, E, F | | | | | 67.940 |
| Banska B. | C1.1, E, F | | | | | 16.960 |
| Trencin | C1.1, E, F | | | | | 67.940 |
| Trencin | C1.1, E, F | | | | | 16.960 |
| Trnava | C1.1, E, F | | | | | 67.940 |
| Trnava | C1.1, E, F | | | | | 16.960 |
| Zilina | C1.1, E, F | | | | | 67.940 |
| Zilina | C1.1, E, F | | | | | 16.960 |
| Presov | C1.1, E, F | | | | | 67.940 |
| Presov | C1.1, E, F | | | | | 16.960 |
| Kosice | C1.1, E, F | | | | | 67.940 |
| Kosice | C1.1, E, F | | | | | 16.960 |
| PEDAL | C2 | | | | | 112.660 |
| PEDAL | F | | | | | 112.660 |
| PEDAL | E | | | | | 112.660 |
| SHMI | D | | | | | 0 |
| SHMI | D | | | | | 45.660 |
| VSB | C4.1 | | | | | 10.490 |
| VSB | C4.1 | | | | | 5.245 |
| VSB | C4.1 | | | | | 11.280 |
| VSB | C4.1 | | | | | 11.703 |

| | | | |
|---|---|---|---|
| VSB | C4.1 | | 8.460 |
| VSB | C4.2 | | 31.725 |
| **PHASE 3: From 1/1/2024 till 31/12/2025** | | | |
| MoE SR | F | | 48.160 |
| MoE SR | C1.2 | | 48.160 |
| MoE SR | C1.2 | | 59.706 |
| MoE SR | C3 | | 159.960 |
| MoE SR | D | | 79.980 |
| MoE SR | C1.1 | | 611.460 |
| SEA | C1.1 | | 0 |
| SEA | C1.1, E F | | 271.760 |
| SEA | C2 | | 67.080 |
| SEA | C2 | | 63.210 |
| SEA | C2 | | 50.740 |
| SEA | C3 | | 0 |
| SEA | E | | 61.060 |
| MoE SR | C1.1, E, F | | 68.000 |
| MoE SR | C1.1, E, F | | 16.960 |
| Banska B. | C1.1, E, F | | 68.000 |
| Banska B. | C1.1, E, F | | 16.960 |
| Trencin | C1.1, E, F | | 68.000 |
| Trencin | C1.1, E, F | | 16.960 |
| Trnava | C1.1, E, F | | 68.000 |
| Trnava | C1.1, E, F | | 16.960 |
| Zilina | C1.1, E, F | | 68.000 |
| Zilina | C1.1, E, F | | 16.960 |
| Presov | C1.1, E, F | | 68.000 |
| Presov | C1.1, E, F | | 16.960 |
| Kosice | C1.1, E, F | | 68.000 |
| Kosice | C1.1, E, F | | 16.960 |
| PEDAL | C2 | | 72.660 |
| PEDAL | F | | 112.660 |
| PEDAL | E | | 112.660 |
| SHMI | D | | 15.158 |
| SHMI | D | | 45.580 |
| VSB | C4.1 | | 10.490 |
| VSB | C4.1 | | 5.246 |
| VSB | C4.1 | | 11.280 |
| VSB | C4.1 | | 0 |
| VSB | C4.1 | | 8.460 |
| VSB | C4.2 | | 24.675 |

| PHASE 4: From 1/1/2026 till 31/12/2027 | | | |
|---|---|---|---|
| MoE SR | F | | 48.161 |
| MoE SR | C1.2 | | 48.160 |
| MoE SR | C1.2 | | 59.706 |
| MoE SR | C3 | | 112.479 |
| MoE SR | D | | 79.980 |
| MoE SR | C1.1 | | 611.460 |
| SEA | C1.1 | | 0 |
| SEA | C1.1, E F | | 271.760 |
| SEA | C2 | | 67.080 |
| SEA | C2 | | 63.210 |
| SEA | C2 | | 50.740 |
| SEA | C3 | | 0 |
| SEA | E | | 61.100 |
| MoE SR | C1.1, E, F | | 68.000 |
| MoE SR | C1.1, E, F | | 17.978 |
| Banska B. | C1.1, E, F | | 68.000 |
| Banska B. | C1.1, E, F | | 17.978 |
| Trencin | C1.1, E, F | | 68.000 |
| Trencin | C1.1, E, F | | 17.978 |
| Trnava | C1.1, E, F | | 68.000 |
| Trnava | C1.1, E, F | | 17.978 |
| Zilina | C1.1, E, F | | 68.000 |
| Zilina | C1.1, E, F | | 17.978 |
| Presov | C1.1, E, F | | 68.000 |
| Presov | C1.1, E, F | | 17.978 |
| Kosice | C1.1, E, F | | 68.000 |
| Kosice | C1.1, E, F | | 17.978 |
| PEDAL | C2 | | 112.660 |
| PEDAL | F | | 112.691 |
| PEDAL | E | | 112.691 |
| SHMI | D | | 15.284 |
| SHMI | D | | 45.580 |
| VSB | C4.1 | | 0 |

| | | | | |
|---|---|---|---|---|
| VSB | C4.1 | | | 0 |
| VSB | C4.1 | | | 0 |
| VSB | C4.1 | | | 0 |
| VSB | C4.1 | | | 0 |
| VSB | C4.2 | | | 5.288 |
| | | TOTAL => | 15941,1 | 10.256.683 |

## FORM F2

## Travel and subsistence costs

| | | | Calculation => | A | B | A + B |
|---|---|---|---|---|---|---|
| **Beneficiary short name** | **Action number** | **Destination (From / To)** | **Purpose of travel/number of trips and persons travelling, duration of trip (in days)** | **Travel costs** | **Subsistence costs** | **Total travel and subsistence costs** |
| **Phase 1: From 1/1/2020 till 31/12/2021** | | | | | | |
| MoE SR | F1, F2 | Bratislava | 1x Kick off meeting (2 persons, 2 days each) 1x Steering committee meeting (2 persons, 2 days each) | 0 | 0 | 0 |
| SEA | F1, F2 | Banska Bystrica / Bratislava | 1x Kick off meeting (2 persons, 2 days each) 1x Steering committee meeting (2 persons, 2 days each) | 200 | 400 | 600 |
| SEA | C1.1 | Slovakia | 4 Air Quality Managers employed by SEA: On average the budget of 781,25 EUR per person per month is allocated to travel in their respective areas | 25.500 | 49.500 | 75.000 |
| MoE SR | C1.1 | Slovakia | 4 Air Quality Managers employed by MoE SR: On average the budget of 781,25 EUR per person per month is allocated to travel in their respective areas | 25.500 | 49.500 | 75.000 |
| SEA | C2 | Slovakia | C2 travels | 3.075 | 375 | 3.450 |
| SEA | E | Slovakia | E travels | 3.075 | 375 | 3.450 |
| MoE SR | F1, F2 | Bratislava | 1x Kick off meeting (2 persons, 2 days each) 1x Steering committee meeting (2 persons, 2 days each) | 0 | 0 | 0 |
| MoE SR | C1.1 | Slovakia | 5 x Air Quality Manager attending at least 2 work related meeting every month (48 meetings in Phase 1 on average) | 24.000 | 48.000 | 72.000 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Banska B. | F1, F2 | Banska Bystrica / Bratislava | 1x Kick off meeting (2 persons, 2 days each) 1x Steering committee meeting (2 persons, 2 days each) | **200** | **400** | **600** |
| Banska B. | C1.1 | Slovakia | Air Quality Manager attending at least 2 work related meeting every month (48 meetings in Phase 1 on average) | **4.800** | **9.600** | **14.400** |
| Trencin | F1, F2 | Trencin / Bratislava | 1x Kick off meeting (2 persons, 2 days each) 1x Steering committee meeting (2 persons, 2 days each) | **200** | **400** | **600** |
| Trencin | C1.1 | Slovakia | Air Quality Manager attending at least 2 work related meeting every month (48 meetings in Phase 1 on average) | **4.800** | **9.600** | **14.400** |
| Trnava | F1, F2 | Trnava / Bratislava | 1x Kick off meeting (2 persons, 2 days each) 1x Steering committee meeting (2 persons, 2 days each) | **200** | **400** | **600** |
| Trnava | C1.1 | Slovakia | Air Quality Manager attending at least 2 work related meeting every month (48 meetings in Phase 1 on average) | **4.800** | **9.600** | **14.400** |
| Zilina | F1, F2 | Zilina / Bratislava | 1x Kick off meeting (2 persons, 2 days each) 1x Steering committee meeting (2 persons, 2 days each) | **200** | **400** | **600** |
| Zilina | C1.1 | Slovakia | Air Quality Manager attending at least 2 work related meeting every month (48 meetings in Phase 1 on average) | **4.800** | **9.600** | **14.400** |
| Presov | F1, F2 | Presov / Bratislava | 1x Kick off meeting (2 persons, 2 days each) 1x Steering committee meeting (2 persons, 2 days each) | **200** | **400** | **600** |

| | | | | | | |
|---|---|---|---|---|---|---|
| Presov | C1.1 | Slovakia | Air Quality Manager attending at least 2 work related meeting every month (48 meetings in Phase 1 on average) | 4.800 | 9.600 | 14.400 |
| Kosice | F1, F2 | Kosice / Bratislava | 1x Kick off meeting (2 persons, 2 days each)<br>1x Steering committee meeting (2 persons, 2 days each) | 200 | 400 | 600 |
| Kosice | C1.1 | Slovakia | Air Quality Manager attending at least 2 work related meeting every month (48 meetings in Phase 1 on average) | 4.800 | 9.600 | 14.400 |
| SHMI | F1, F2 | Bratislava | 1x Kick off meeting (2 persons, 2 days each)<br>1x Steering committee meeting (2 persons, 2 days each) | 0 | 0 | 0 |
| SHMI | D | Slovakia | ? | | | 0 |
| PEDAL | F1, F2 | Milan / Bratislava | 1x Kick off meeting (1 person, 2 days)<br>1x Steering committee meeting (1 person, 2 days) | 1.100 | 200 | 1.300 |
| VSB | C4.1 | Ostrava/Ostrava | Inforterma show: equipment and human transfer, per diem: 10 days, 4 persons | 1.547 | 120 | 1.667 |
| VSB | C4.1 | Ostrava/Praha | Aquaterm show: equipment and human transfer, per diem: 5 days, 4 persons | 1.542 | 125 | 1.667 |
| VSB | C4.1 | Ostrava/CZ cities | Smokeman roadshow: equipment and human transfer, per diem, acomodation: 16 days, 4 persons | 3.141 | 192 | 3.333 |
| VSB | C4.1 | Ostrava/Prague/CZ city | videospot creation: coordination and prepatration meetings: 135 trips, 1 persons | 5.203 | 422 | 5.625 |
| VSB | C4.1 | Ostrava/CZ cities | Ecoheating course education program: travel to the education course for experts (16 days, 4 persons) | 233 | 100 | 333 |

| | | | | | | |
|---|---|---|---|---|---|---|
| VSB | C4.1 | Ostrava/CZ cities | Ecoheating course education program: travel expences for participants 16 days, 20 persons | **3.333** | **0** | **3.333** |
| VSB | C4.2 | Ostrava/CZ cities | Monitoring of real parameters on combustion devices in households: equipment and human transfer, per diem: 20 days, 4 persons | **3.028** | **222** | **3.250** |
| VSB | F1 | Ostrava/Bratislava | 1x Kick off meeting (2 persons, 2 days) | **110** | **307** | **417** |

| Phase 2: 1/1/2022 till 31/12/2023 | | | |
|---|---|---|---|
| MoE SR | F1, F2 | | 0 |
| SEA | F1, F2 | | 600 |
| SEA | C1.1 | | 75.000 |
| SEA | C2 | | 3.450 |
| SEA | E | | 3.450 |
| MoE SR | F1, F2 | | 0 |
| MoE SR | C1.1 | | 72.000 |
| MoE SR | C1.1 | | 75.000 |
| Banska B. | F1, F2 | | 600 |
| Banska B. | C1.1 | | 14.400 |
| Trencin | F1, F2 | | 600 |
| Trencin | C1.1 | | 14.400 |
| Trnava | F1, F2 | | 600 |
| Trnava | C1.1 | | 14.400 |
| Zilina | F1, F2 | | 600 |
| Zilina | C1.1 | | 14.400 |
| Presov | F1, F2 | | 600 |
| Presov | C1.1 | | 14.400 |
| Kosice | F1, F2 | | 600 |
| Kosice | C1.1 | | 14.400 |
| SHMI | F1, F2 | | 0 |
| PEDAL | F1, F2 | | 1.300 |
| VSB | C4.1 | | 1.667 |
| VSB | C4.1 | | 1.667 |
| VSB | C4.1 | | 3.333 |
| VSB | C4.1 | | 1.250 |
| VSB | C4.1 | | 333 |
| VSB | C4.1 | | 3.333 |
| VSB | C4.2 | | 3.250 |
| **Phase 3: 1/1/2024 till 31/12/2025** | | | |
| MoE SR | F1, F2 | | 0 |
| SEA | F1, F2 | | 600 |
| SEA | C1.1 | | 75.000 |
| SEA | C2 | | 3.450 |
| SEA | E | | 3.450 |
| MoE SR | F1, F2 | | 0 |
| MoE SR | C1.1 | | 72.000 |
| MoE SR | C1.1 | | 75.000 |
| Banska B. | F1, F2 | | 600 |
| Banska B. | C1.1 | | 14.400 |
| Trencin | F1, F2 | | 600 |
| Trencin | C1.1 | | 14.400 |
| Trnava | F1, F2 | | 600 |
| Trnava | C1.1 | | 14.400 |
| Zilina | F1, F2 | | 600 |
| Zilina | C1.1 | | 14.400 |
| Presov | F1, F2 | | 600 |
| Presov | C1.1 | | 14.400 |

| | | | |
|---|---|---|---|
| Kosice | F1, F2 | | 600 |
| Kosice | C1.1 | | 14.400 |
| SHMI | F1, F2 | | 0 |
| PEDAL | F1, F2 | | 1.300 |
| VSB | C4.1 | | 1.667 |
| VSB | C4.1 | | 1.667 |
| VSB | C4.1 | | 3.333 |
| VSB | C4.1 | | 0 |
| VSB | C4.1 | | 333 |
| VSB | C4.1 | | 3.334 |
| VSB | C4.2 | | 3.250 |
| **Phase 4: 1/1/2026 till 31/12/2027** | | | |
| MoE SR | F1, F2 | | 0 |
| SEA | F1, F2 | | 600 |
| SEA | C1.1 | | 75.000 |
| SEA | C2 | | 3.450 |
| SEA | E | | 3.450 |
| MoE SR | F1, F2 | | 0 |
| MoE SR | C1.1 | | 72.000 |
| MoE SR | C1.1 | | 75.000 |
| Banska B. | F1, F2 | | 600 |
| Banska B. | C1.1 | | 14.400 |
| Trencin | F1, F2 | | 600 |
| Trencin | C1.1 | | 14.400 |
| Trnava | F1, F2 | | 600 |
| Trnava | C1.1 | | 14.400 |
| Zilina | F1, F2 | | 600 |
| Zilina | C1.1 | | 14.400 |
| Presov | F1, F2 | | 600 |
| Presov | C1.1 | | 14.400 |
| Kosice | F1, F2 | | 600 |
| Kosice | C1.1 | | 14.400 |
| SHMI | F1, F2 | | 0 |
| PEDAL | F1, F2 | | 1.300 |
| VSB | C4.1 | | 0 |
| VSB | C4.1 | | 0 |
| VSB | C4.1 | | 0 |
| VSB | C4.1 | | 0 |
| VSB | C4.1 | | 0 |
| VSB | C4.1 | | 0 |
| VSB | C4.2 | | 1.625 |
| | | **TOTAL =>** | **1.332.867** |

**FORM F3** **Proposal acronym: LIFE-IP SK AQ Improvement**

## External assistance costs

| Beneficiary short name | Action number | Procedure | Description | Costs |
|---|---|---|---|---|
| **PHASE 1: 1/1/2020 till 31/12/2021** | | | | |
| SEA | C2 (1) | Public Tender | Web-application on ambient air quality in Air Quality Management Areas for public information (design, development and maintenance) | 5.000 |
| SEA | C2 (5.1) | Public Tender | Metodological manual "Sustainable mobility" (500 printed copies) | 200 |
| SEA | C2 (5.1) | Public Tender | Contractors | 600 |
| SEA | C2 (5.3) | Public Tender | Study visits of good examples of good practise in theme of sustainable urban mobility (1 study visit each year, 25 participants each) | 8.520 |
| SEA | C2 (5.3) | Public Tender | Contractor | 1.000 |
| SEA | C2 (5.5) | Public Tender | Sustainable urban mobility - promotion in the media (TV and Radio) | 11.600 |
| SEA | E | Public Tender | Information panels about air quality management in air quality management areas (advertisement cost and production of posters) | 38.600 |
| SEA | E | Public Tender | Broadcast and TV shots for improving air quality in air quality management areas (advertisement cost) | 45.000 |
| SEA | E | Public Tender | Broadcast discussion sessions (advertisement cost) | 10.000 |
| SEA | E | Public Tender | Leaflets on air quality management in air quality management areas (around 350 printed leaflets per each of the 8 slovak regions) | 10.300 |
| SEA | E | Public Tender | Press campaign, e-mail marketing, google (advertisement cost) | 19.040 |
| SEA | E | Public Tender | Interpretation of events, translation, printing of documents and graphic design. | 8.000 |
| SEA | C1.1 | Public Tender | Budget for 4 quality managers for the organisation of meetings | 33.378 |
| MoE SR | C1.1 | Public Tender | Budget for 4 quality managers for the organisation of meetings | 33.378 |
| SHMI | D | Public Tender | Monitoring of the indicator related to the emissions reductions (survey) | 100.000 |
| VSB | C4.1 | public tender | Campagn on proper combustion in households: audiovisual equipment rental cost, animation, dubbing | 42.188 |
| VSB | C4.1 | public tender | Ecoheating course education program: catering + acomodation service for each participants | 7.000 |
| VSB | C4.1 | public tender | Monitoring of real parameters on combustion devices in households: data validation, maintanance, data collection and transfer, laboratory fee | 3.750 |
| **SEA** | **C2 (5.4)** | Public Tender | Metal pens, Lined notebooks in A5 size, Roll-ups | **1.720** |

| | | | | |
|---|---|---|---|---|
| **SEA** | **C2 (2)** | Public Tender | 6 x Workshop on Air Quality for representatives od Self-Governing Authorities (lunch, 2x coffee break, venue, technical equipment and assistance). Each workshop 60 participants. | **10.120** |
| **SEA** | **C2 (2)** | Direct treaty | Contractors | **2.880** |
| **SEA** | **C2 (4)** | Public Tender | Workshop on actions to reduce emissions from domestic heating (lunch, 2x coffee break, venue, technical equipment and assistance). 150 Participants | **6.540** |
| **SEA** | **C2 (4)** | Direct treaty | Contractors | **960** |
| **SEA** | **C2 (5.2)** | Public Tender | How to realize and prepare strategic sustainable urban mobility plans. 4 half-day workshops each year (lunch, coffee break, venue, technical equipment and assistance) | **3.200** |
| **SEA** | **C2 (5.2)** | Direct treaty | Contractors | **2.400** |
| **SEA** | **E** | Public Tender | Conference for self-governing regions and selected municipalities and other stakeholders from Slovakia and Czech Republic (accomodation for 160 participants, 2x lunch, 1x dinner, 3x coffee break, venue, technical equipment and assistance) | **16.080** |
| **SEA** | **E** | Direct treaty | Contractors (conference for self-governing regions) | **1.920** |

| PHASE 2: 1/1/2022 till 31/12/2023 | | |
|---|---|---|
| **SEA** | **C2 (1)** | **2.000** |
| SEA | C2 (5.1) | **200** |
| SEA | C2 (5.1) | **600** |
| SEA | C2 (5.3) | **8.520** |
| SEA | C2 (5.3) | **1.000** |
| SEA | C2 (5.5) | 11.600 |
| SEA | C2 (6.1) | **22.500** |
| SEA | C2 (6.1) | **3.600** |
| SEA | C1.1 | 33.378 |
| MoE SR | C1.1 | 33.378 |
| SEA | E | **47.500** |
| SEA | E | **45.000** |
| SEA | E | **10.000** |
| SEA | E | 10.673 |
| SEA | E | **4.500** |
| SEA | C2 (5.4) | **1.720** |
| SEA | C2 (6.1) | **95.000** |
| SEA | C2 (4) | **6.540** |
| SEA | C2 (4) | **960** |
| SEA | C2 (5.2) | **3.200** |
| SEA | C2 (5.2) | **2.400** |
| SEA | C2 (3) | **10120** |
| SEA | C2 (3) | **2880** |
| SEA | E | **8.000** |
| VSB | C4.1 | **9.375** |
| VSB | C4.1 | **7.000** |
| VSB | C4.1 | **3.750** |
| SHMI | D | **0** |
| **PHASE 3: 1/1/2024 till 31/12/2025** | | |
| **SEA** | **C2 (1)** | **2.000** |
| SEA | C2 (2) | 10.120 |
| SEA | C2 (5.1) | **200** |
| SEA | C2 (5.1) | **600** |
| SEA | C2 (5.3) | **8.520** |
| SEA | C2 (5.3) | **1.000** |
| SEA | C2 (5.5) | 11.600 |
| SEA | C2 (6.1) | **45.000** |
| SEA | C2 (6.1) | **7.200** |
| SEA | C2 (6.2) | **25.000** |
| SEA | C1.1 | 33.378 |
| MoE SR | C1.1 | 33.378 |
| SEA | E | **38.000** |
| SEA | E | **45.000** |
| SEA | E | **10.000** |
| SEA | E | **4.500** |
| SEA | E | **8.000** |

| | | | |
|---|---|---|---|
| SEA | C2 (5.4) | | 1.720 |
| SEA | C2 (4) | | 6.540 |
| SEA | C2 (4) | | 960 |
| SEA | C2 (5.2) | | 3.200 |
| SEA | C2 (5.2) | | 2.400 |
| SEA | C2 (3) | | 10120 |
| SEA | C2 (3) | | 2880 |
| SEA | C2 (2) | | 2880 |
| VSB | C4.1 | | 0 |
| VSB | C4.1 | | 7.000 |
| VSB | C4.1 | | 3.750 |
| SHMI | D | | 100.000 |

| PHASE 4: 1/1/2026 till 31/12/2027 | | | |
|---|---|---|---|
| **SEA** | **C2 (1)** | | **1.000** |
| SEA | C2 (5.1) | | **200** |
| SEA | C2 (5.1) | | **600** |
| SEA | C2 (5.3) | | **8.520** |
| SEA | C2 (5.3) | | **1.000** |
| SEA | C2 (5.5) | | 11.600 |
| SEA | C2 (6.1) | | **45.000** |
| SEA | C2 (6.1) | | **7.200** |
| SEA | C2 (6.2) | | **25.000** |
| SEA | C1.1 | | 33.381 |
| MoE SR | C1.1 | | 33.378 |
| SEA | E | | **47.000** |
| SEA | E | | **45.500** |
| SEA | E | | **10.000** |
| SEA | E | | **4.500** |
| SEA | E | | **8.000** |
| SEA | C2 (5.4) | | **1.720** |
| SEA | C2 (4) | | **6.540** |
| SEA | C2 (4) | | **960** |
| SEA | C2 (5.2) | | **3.200** |
| SEA | C2 (5.2) | | **2.400** |
| SEA | E | | **1.920** |
| SEA | E | | **16.080** |
| VSB | C4.1 | | **1.875** |
| SHMI | D | | **100.000** |
| | | **TOTAL =>** | **1.650.288** |

**FORM F4 a**

**Proposal acronym: LIFE-IP SK AQ Improvement**

## Durable goods: Infrastructure costs

| Beneficiary short name | Action number | Procedure | Description | Actual cost | Depreciation (eligible cost) |
|---|---|---|---|---|---|
| PHASE 1: 1/1/2020 till 31/12/2021 | | | | | |
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| PHASE 2: 1/1/2022 till 31/12/2023 | | | | | |
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| PHASE 3: 1/1/2024 till 31/12/2025 | | | | | |
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| PHASE 4: 1/1/2026 till 31/12/2027 | | | | | |
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| | | | TOTAL => | 0 | 0 |

**FORM F4 b** **Proposal acronym: LIFE-IP SK AQ Improvement**

## Durable goods: Equipment costs

| Beneficiary short name | Action number | Procedure | Description | Actual cost | Depreciation (eligible cost) |
|---|---|---|---|---|---|
| PHASE 1: 1/1/2020 till 31/12/2021 | | | | | |
| SEA | C1 1. E F | Public tender | Laptop, mobile and office software for 4 Air Quality Managers | 7.200 | 7.200 |
| MoE | C1 1. E F | Public tender | Laptop and office software for the 9 Air Quality Managers | 14.700 | 14.700 |
| MoE | C1 1. E F | Public tender | IT storage place | 2.400 | 2.400 |
| Banska B | C1 1. E | Public tender | Laptop and office software for the Air Quality | 1.500 | 1.500 |
| Trencin | C1 1. E | Public tender | Laptop and office software for the Air Quality | 1.500 | 1.500 |
| Trnava | C1 1. E | Public tender | Laptop and office software for the Air Quality | 1.500 | 1.500 |
| Zilina | C1 1. E | Public tender | Laptop and office software for the Air Quality | 1.500 | 1.500 |
| Presov | C1 1. E | Public tender | Laptop and office software for the Air Quality | 1.500 | 1.500 |
| VSB | C4 1 | direct treaty | Inforterma props and gases needed for the show | 4.167 | 4.167 |
| VSB | C4 1 | direct treaty | Aquaterm props and gases needed for the show | 2.083 | 2.083 |
| VSB | C4 1 | direct treaty | Smokeman roadshow props for the show | 4.000 | 4.000 |
| VSB | C4 1 | direct treaty | Campaign on proper combustion in households equipment needed for the spot (baloons, spirits etc | 4.688 | 4.688 |
| VSB | C4 1 | direct treaty | Ecoheating course education program equipment and props needed for the course (baloons, spirits | 2.000 | 2.000 |
| VSB | C4 2 | direct treaty | Monitoring of real parameters on combustion devices in households props and fuels required for | 3.333 | 3.333 |
| VSB | C4 2 | direct treaty | Monitoring of real parameters on combustion devices in households laboratory equipment | 91.667 | 91.667 |
| Kosice | C1 1. E F | Public tender | Laptop and office software for the Air Quality Manager | 1.500 | 1.500 |
| PHASE 2: 1/1/2020 till 31/12/2023 | | | | | |
| VSB | C4 1 | | | 4.167 | 4.167 |
| VSB | C4 1 | | | 2.083 | 2.083 |
| VSB | C4 1 | | | 4.000 | 4.000 |
| VSB | C4 1 | | | 1.042 | 1.042 |
| VSB | C4 1 | | | 2.000 | 2.000 |
| VSB | C4 2 | | | 3.333 | 3.333 |
| | | | | | |
| PHASE 3: 1/1/2024 till 31/12/2025 | | | | | |
| SEA | C1 1. E | | | 7.200 | 7.200 |
| MoE | C1 1. E | | | 14.700 | 14.700 |
| Banska B | C1 1. E | | | 1.500 | 1.500 |
| Trencin | C1 1. E | | | 1.500 | 1.500 |
| Trnava | C1 1. E | | | 1.500 | 1.500 |
| Zilina | C1 1. E | | | 1.500 | 1.500 |
| Presov | C1 1. E | | | 1.500 | 1.500 |
| Kosice | C1 1. E | | | 1.500 | 1.500 |
| VSB | C4 1 | | | 4.167 | 4.167 |
| VSB | C4 1 | | | 2.083 | 2.083 |
| VSB | C4 1 | | | 4.000 | 4.000 |
| VSB | C4 1 | | | 0 | 0 |
| VSB | C4 1 | | | 2.000 | 2.000 |
| VSB | C4 2 | | | 3.333 | 3.333 |
| | | | | | |
| PHASE 4: 1/1/2026 till 31/12/2027 | | | | | |
| VSB | C4 2 | | | 1.667 | 1.667 |
| | | | | | |
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| | | | | | |
| | | | TOTAL => | 210.013 | 210.013 |

**FORM F4 c**

**Proposal acronym: LIFE-IP SK AQ Improvement**

## Durable goods: Prototype costs

| Beneficiary short name | Action number | Procedure | Description | Actual Costs |
|---|---|---|---|---|
| **PHASE 1: 1/1/2020 till 31/12/2021** | | | | |
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| **PHASE 2: 1/1/2022 till 31/12/2023** | | | | |
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| **PHASE 3: 1/1/2024 till 31/12/2025** | | | | |
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| **PHASE 4: 1/1/2026 till 31/12/2027** | | | | |
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| | | | **TOTAL (sum above) =>** | **0** |

**FORM F5** roposal acronym: LIFE-IP SK AQ Improvement

## Land purchase or long-term lease of land / use rights

| | | Calculation => | A | B | C | (A x B) + C |
|---|---|---|---|---|---|---|
| Beneficiary short name | Action number | Description of land purchase / long-term lease / one-off compensation | Estimated cost per hectare (rounded to the nearest euro) | Area (hectares) | Associated charges (euro) | Expected cost (euro) |
| PHASE 1: 1/1/2020 till 31/12/2021 | | | | | | |
| | | | | | | 0 |
| | | | | | | 0 |
| | | | | | | 0 |
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| PHASE 2: 1/1/2022 till 31/12/2023 | | | | | | |
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| PHASE 3: 1/1/2024 till 31/12/2025 | | | | | | |
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| PHASE 4: 1/1/2026 till 31/12/2027 | | | | | | |
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| | | | | TOTAL => | | 0 |

FORM F6

Proposal acronym: LIFE-IP SK AQ Improvement

## Consumables

| Beneficiary short name | Action number | Procedure | Description | Costs |
|---|---|---|---|---|
| PHASE 1: 1/1/2020 till 31/12/2021 | | | | |
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| PHASE 2: 1/1/2022 till 31/12/2023 | | | | |
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| PHASE 3: 1/1/2024 till 31/12/2025 | | | | |
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| PHASE 4: 1/1/2026 till 31/12/2027 | | | | |
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| | | | TOTAL => | 0 |

**FORM F7** **Proposal acronym: LIFE-IP SK AQ Improvement**

## Other costs

| Beneficiary short name | Action number | Procedure | Description | Costs |
|---|---|---|---|---|
| PHASE 1: 1/1/2020 till 31/12/2021 | | | | |
| SHMI | D1 | Public Tender | Electricity bill (1000 EUR per month per station) | 95.177 |
| SHMI | D1 | Public Tender | 12 x Power service at 400 V | 24.000 |
| SHMI | D1 | Public Tender | One-off cost associated with the transport of the mobile monitor | 12.000 |
| MoE SR | F | Public Tender | Financial audit of Phase 1 | 5.903 |
| MoE SR | C1.1 | Public Tender | Renting the office space for the 9 Air Quality Managers to be | 45.000 |
| VSB | C4.1 | public tender | Inforterma: rents and fees asociated with the show (rental of a tent, exhibitional rental fee etc), propagation materials | 8.333 |
| VSB | C4.1 | public tender | Aquaterm: rents and fees asociated with the show (rental of a tent, exhibitional rental fee etc), propagation materials | 5.625 |
| VSB | C4.1 | public tender | Smokeman roadshow: rents and fees asociated with the show, educational materials | 1.667 |
| SEA | C1.1 | public tender | Renting the office space for the 4 Air Quality Managers to be employed by SEA | 20.000 |
| PHASE 2: 1/1/2022 till 31/12/2023 | | | | |
| MoE SR | F | | | 5.903 |
| MoE SR | C1.1 | | | 45.000 |
| VSB | C4.1 | | | 8.333 |
| VSB | C4.1 | | | 5.625 |
| VSB | C4.1 | | | 1.667 |
| SEA | C1.1 | | | 20.000 |
| PHASE 3: 1/1/2024 till 31/12/2025 | | | | |
| MoE SR | F | | | 5.903 |
| MoE SR | C1.1 | | | 45.000 |
| VSB | C4.1 | | | 8.333 |
| VSB | C4.1 | | | 5.625 |
| VSB | C4.1 | | | 1.667 |
| SEA | C1.1 | | | 20.000 |
| PHASE 4: 1/1/2026 till 31/12/2027 | | | | |
| SHMI | D1 | | | 95.178 |
| SHMI | D1 | | | 12.000 |
| MoE SR | C1.1 | | | 45.000 |
| MoE SR | F | | | 5.903 |
| SEA | C1.1 | | | 20.000 |
| | | | TOTAL => | 568.842 |

**LIFE Integrated Projects 2018 – FP**
**Financial Plan**

| Sources of financing | Actions/measures to be financed | Amount of funding<br>EUR | Status/date of Funding<br>granted/<br>to be granted/<br>to be requested | Authority/<br>entity managing the fund |
|---|---|---|---|---|
| | | | | |
| **LIFE PROJECT:** | | | | |
| EU contribution | NA | 9000000 | NA | NA |
| Contribution by beneficiaries | NA | 6000000 | NA | NA |
| Contribution by cofinancers | NA | 0 | NA | NA |
| TOTAL LIFE IP | | 15000000 | | |
| | | | | |
| **EU funds:** | | | | |
| *OP Quality of Environment (OP QE)* | *Replacement of obsolete solid fuel boilers in households* | 30.000.000,00 | ***to be requested*** *(call to be launched in August 2019)* | *MoE SR* |
| *OP Quality of Environment (OP QE)* | *Replacement of old boilers in public buildings* | 30.000.000,00 | ***to be granted*** *(call launched in October 2018, applications for funding received until July 2019 in the sum of EU contribution 2,6 mil. EUR, so far in the process of assessment)* | *MoE SR* |

| | | | | |
|---|---|---|---|---|
| *OP Quality of Environment (OP QE)* | *Support for the use of RES (national project Green for Households)* | 40.800.000,00 | ***granted 5,7** (out of 31,5) **mil. EUR** (call launched in December 2018, until July 2019 5,7 mil. EUR in EU contribution have been granted in vouchers; 31,5 mil. EUR of the total national project´s allocation is devoted to vouchers, the rest of the allocation is used to cover other running costs of the programme - national project)* | *Intermediate Body of OP QE - Slovak Innovative and Energy Agency on behalf of MoE SR as Managing Authority of OP QE* |
| *OP Quality of Environment (OP QE)* | *Improvement of energy efficiency (including the increase of renewable energy sources use in enterprises)* | 79.300.000,00 | ***granted 0,7** (out of 29,3) **mil. EUR** (call launched in September 2017 and closed in June 2019, until July 2019 0,7 mil. EUR in EU contribution have been granted, applications requesting grant in the total amont of 17,9 mil. EUR (from EU funds) are currently in various stages of approval and contracting procedure),* ***to be granted 50 mil. EUR** (call launched in December 2018; applications requesting grant in the total amont of 16,5 mil. EUR (from EU funds) are currently in various stages of approval/assesment, the rest has still to be requested)* | *Intermediate Body of OP QE - Slovak Innovative and Energy Agency on behalf of MoE SR as Managing Authority of OP QE* |
| *OP Quality of Environment (OP QE)* | *Energy consumption reduction of public buildings (including insulations and modernization of heating systems, district heating)* | 76.500.000,00 | ***granted 11,4** (out of 26,5) **mil. EUR** (call launched in February 2017 and closed in February 2018, 15,1 mil. EUR in EU contribution are still in contracting procedure)* ***to be granted 50 mil. EUR** (call launched in December 2018 and closed in June 2019, applications requesting grant in the total amont of 99,3 mil. EUR (from EU funds) are currently in various stages of approval/assesment)* | *Intermediate Body of OP QE - Slovak Innovative and Energy Agency on behalf of MoE SR as Managing Authority of OP QE* |

| | | | | |
|---|---|---|---|---|
| *OP Integrated Infrastructure (OP II)* | *Modernisation of public transport means and infrastructure* | 322.350.000,00 | *granted 144 mil. EUR (EU recoures) calls launched in May 2016, received applications for funding under process of assessmen* | *Ministry of Transport and Construction SR* |
| *OP Integrated Infrastructure (OP II)* | *Modernisation and electrification of railways* | 103.000.000,00 | *granted 1,9 mil. EUR (EU recoures) call launched in May 2016* | *Ministry of Transport and Construction SR* |
| *Integrated Regional Operation Programme (IROP)* | *Energy efficiency improvement in apartment houses* | 111.000.000,00 | *to be granted 111 mil. EUR* | *Ministry of Agriculture and Rural Development SR* |
| *Integrated Regional Operation Programme (IROP)* | *Urban transport improvement (traffic fluency, replacement of old buses, parking facilities, cycling roads etc.)* | 129.300.000,00 | *CYCLING:*<br>*granted 30 mil. EUR*<br>*to be requested 35,5 mil. EUR (call is still in progress)*<br>*REPLACEMENT of BUSES:*<br>*granted 29,6 mil. EUR*<br>*URBAN TRANSPORT:*<br>*granted 10,7 mil. EUR*<br>*to be requested 23,5 mil. EUR (call launched in May 2019)* | *Ministry of Agriculture and Rural Development SR* |
| *Integrated Regional Operation Programme (IROP)* | *Green infrastructure measures* | 22.900.000,00 | *granted 12,8 mil. EUR*<br>*to be requested 10,1 mil. EUR* | *Ministry of Agriculture and Rural Development SR* |

| | | | | |
|---|---|---|---|---|
| *Cross Border Programmes (AT-SK)* | *Green infrastructure and green mobility measures* | 9.655.000,00 | *to be granted (contract in preparation) 5 025 880 €*<br>*to be requested (in the process of assessment) 3 073 891 €*<br>*available allocation 1 155 120 €*<br>*Total 9 655 000€ (from ERDF)*<br><br>*Within IP 7c more than 11,3 Mio (there of 9,6 Mio from ERDF) dedicated to the actions for solution in the area of environment -friendly, low-carbon and safer transport network and services in the programme area. Currently more than half of the available sources is dedicated to the approved project, and the rest of allocation is reserved for submitted projects currently under evaluation. Therefore at the moment there is only 1,5 Mio at disposal under IP 7C.* | *Ministry of Agriculture and Rural Development SR* |
| **TOTAL (eg. ERDF)** | | 954805000 | | |
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| **TOTAL (eg. EAFRD)** | | 0 | | |
| **Subtotal EU:** | | 954805000 | | |
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| **Other public funds** | | | | |
| | | | | |
| **Subtotal public:** | | ***0*** | | |
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|---|---|---|---|---|
| **Private funds:** | | | | |
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| **Subtotal private:** | | ***0*** | | |
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| ***International funds:*** | | | | |
| | | | | |
| **Total complementary:** | | **954805000** | | |
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*Notes (if applicable):*