



LIFE 15 IPE IT 013



# LIFE IP PREPAIR

## Po Regions Engaged to Policies of Air

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# Background

- The Po Valley represents a significant nonattainment area for PM, NO<sub>2</sub> and O<sub>3</sub> air quality limit values
- Around 450 000 tons of NO<sub>x</sub>, 90 000 tons of PM, 250 000 tons of NH<sub>3</sub> per year are emitted in the atmosphere by a wide variety of pollution sources mainly related to traffic, domestic heating, industry and energy production, fertilizers, breeding and other farming activities
- Meteorological conditions and the transport and dispersion of pollutants are strongly influenced by the morphological characteristics of the Po Valley and the northern Adriatic Basin. The transport of pollutants is limited by the Alps, the Apennines and the Dinaric Alps. Pollutants are transported across the Adriatic Sea, which influences the atmospheric circulation and the photochemical processes



Satellite Image of Northern Italy in the winter season (source: MODIS radiometer, NASA)

# Why an integrated project: scope and expected impacts

- Air quality in the Po Valley is influenced by the meteorological and morphologic conditions that prevent pollutants dispersion in the winter periods, causing exceedances of limit values → **Regional Air Quality Plans**: All the Regions have implemented air quality plans over the past decade, but these plans have not been fully succeeded in reducing levels of PM, NO<sub>2</sub> and O<sub>3</sub> within the EU standards. Coordinated and large-scale actions should be undertaken in the Po valley to further reduce the levels of background air pollution
- Since 2005 **Po Valley Agreements on air quality** → In 2013 establishment of common actions on the most emitting sources: **transport, biomass for domestic heating, energy efficiency, agriculture**, with the involvement of the Ministry for Environment and other competent Ministries

## **PREPAIR will**

- act on multiple sectors/policies and on multiple pollutants (PM, NO<sub>2</sub>, O<sub>3</sub>, NH<sub>3</sub>, VOC)
- help the full implementation of AQPs and of measures of the Po Valley Agreement *on a larger territorial scale* → **environmental concrete actions by Regions and Cities**
- establish a permanent data sharing infrastructure for monitoring and assessing air quality and measures implementation in the project area → **technical actions by EAs**
- allow to assess and reduce pollutants transportation across the Northern Adriatic Sea

## **and wants to**

- strengthen the synergies among Regions and Environment Agencies on air quality issues and policies
- establish a **Permanent government platform** composed by:
  - Representatives of the Regions involved in air quality issue
  - Representatives of the Authorities in charge of complementary funds
  - Stakeholders

# Main data

Integrated project financed under the thematic priority area Air of the Programme Life for Environment

Budget: 16.805.939 €

EU co-financing: 9.974.624 €

Beneficiary coordinator: Region Emilia-Romagna, Directorate General for Territorial and Environmental Care

17 Associated Beneficiaries

From: 1/2/2017 to 31/01/2024 (7 years– 3 phases)

Grant Agreement signed in December 2016



# Project area and beneficiaries

## 6 Regions

Region Emilia-Romagna; Region Lombardy, Region Piedmont, Region Veneto; Autonomous Province of Trento; Region Friuli Venezia Giulia;

## 7 Environment Agencies

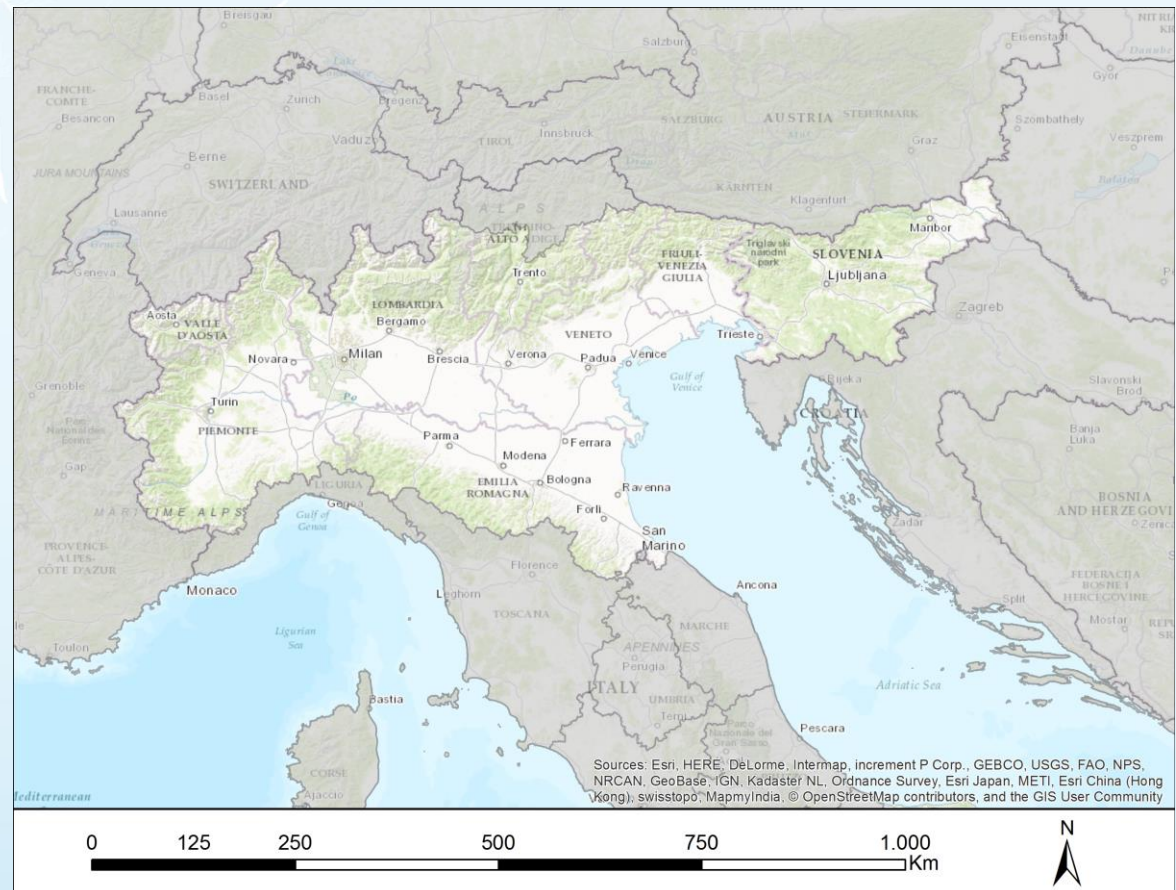
ARPAE Emilia-Romagna; ARPA Lombardy; ARPA Piedmont; ARPA Veneto; ARPA Valle d'Aosta; ARPA Friuli Venezia Giulia; Slovenian Environment Agency

## 3 Municipalities

Bologna; Turin; Milan

## 2 Private non-commercial agencies

ERVET; FLA



# General objectives

PREPAIR aims to implement actions in the territory of the Po Valley and Slovenia in order to improve air quality and comply with Dir. 2008/50/EC and the European strategy 'Clean Air for Europe'. PREPAIR will also contribute to achieving compliance with the National Emission Ceilings Reduction Commitments.

The general objectives are to:

- Implement measures included in the Air Quality Plans and in the Po Valley Agreement, creating the information needed for a preliminary assessment of their impact on air quality and acting on background levels in a synergic way
- Increase know-how and reinforce capacity building within public authorities and private operators
- Strengthen coordination among Po Basin authorities in the field of air quality
- Establish a permanent networking structure that involves the environmental agencies of the Po Valley and of the eastern border regions and Northern Adriatic basin, such as Slovenia
- Produce homogeneous assessment reports on the effectiveness of PREPAIR concrete actions on air quality in the Po Valley and the Northern Adriatic basin
- Assess the effectiveness and resources needed for measures to improve air quality
- Create a community that recognizes the risks for human health and for the environment posed by air pollution
- Create a network of national, regional and local governments, socioeconomic actors, research centers and other stakeholders

## Expected Results (summary)

PREPAIR focuses on four main areas – biomass burning, energy efficiency, transport and agriculture – in line with the Po Basin Agreement and the AQPs. Specific goals are to:

- Establish permanent infrastructure for sharing air quality and emissions data, including an accessible common database of observed and modelling air quality data
- Create a network of bike stations of the main cities of the Po Basin and train public officers and advisors, with the aim of raising awareness and providing technical information to the local authorities
- Promote electric mobility and sustainable driving and create a common App to promote public transport use at the Po Basin level
- Develop innovative processes for the optimization of freight transport and carry out demonstration actions aimed at improving short-range freight transport
- Increase awareness on the correct use of biomass and encourage the substitution of domestic heating biomass stoves with high-efficiency and low-emission ones
- Carry out training initiatives for the correct maintenance of biomass heating plants and study wood biomass consumption in order to improve the logistics of its supply in northern Italy
- Produce guidelines for the use of fertilizers with a high content of urea and tools for the adoption of the best available technologies applicable to livestock rearing
- Provide training on the efficient use of energy in industrial systems and address operators at the basin level on energy savings in the civil sector
- Produce operative tools and initiatives for increasing the capacity of local administrations on GPP and energy efficiency in public buildings

# The project structure

## **PROJECT MANAGEMENT AND MONITORING OF PROJECT PROGRESS (F) - 3 actions**

Administrative and financial management of the project, Independent Auditing, Establishing the governance permanent platform

### **PREPARATORY ACTIONS (A)**

#### **– 4 actions**

- emission data set
- system for the environmental accountability of the measures of AQ Plans
- preliminary assessment of AQ Plans
- network of special stations for the monitoring of the Plan's environmental effects

### **CONCRETE IMPLEMENTATION ACTIONS**

#### **(C) – 17 actions**

Environmental Actions in the fields of:

- agriculture
- biomass
- transports
- energy efficiency

Technical Actions regarding data sharing infrastructures, emission data warehouse and implementation of the integrated assessment model (RIAT+)

### **MONITORING ACTIONS (D)**

#### **– 6 actions**

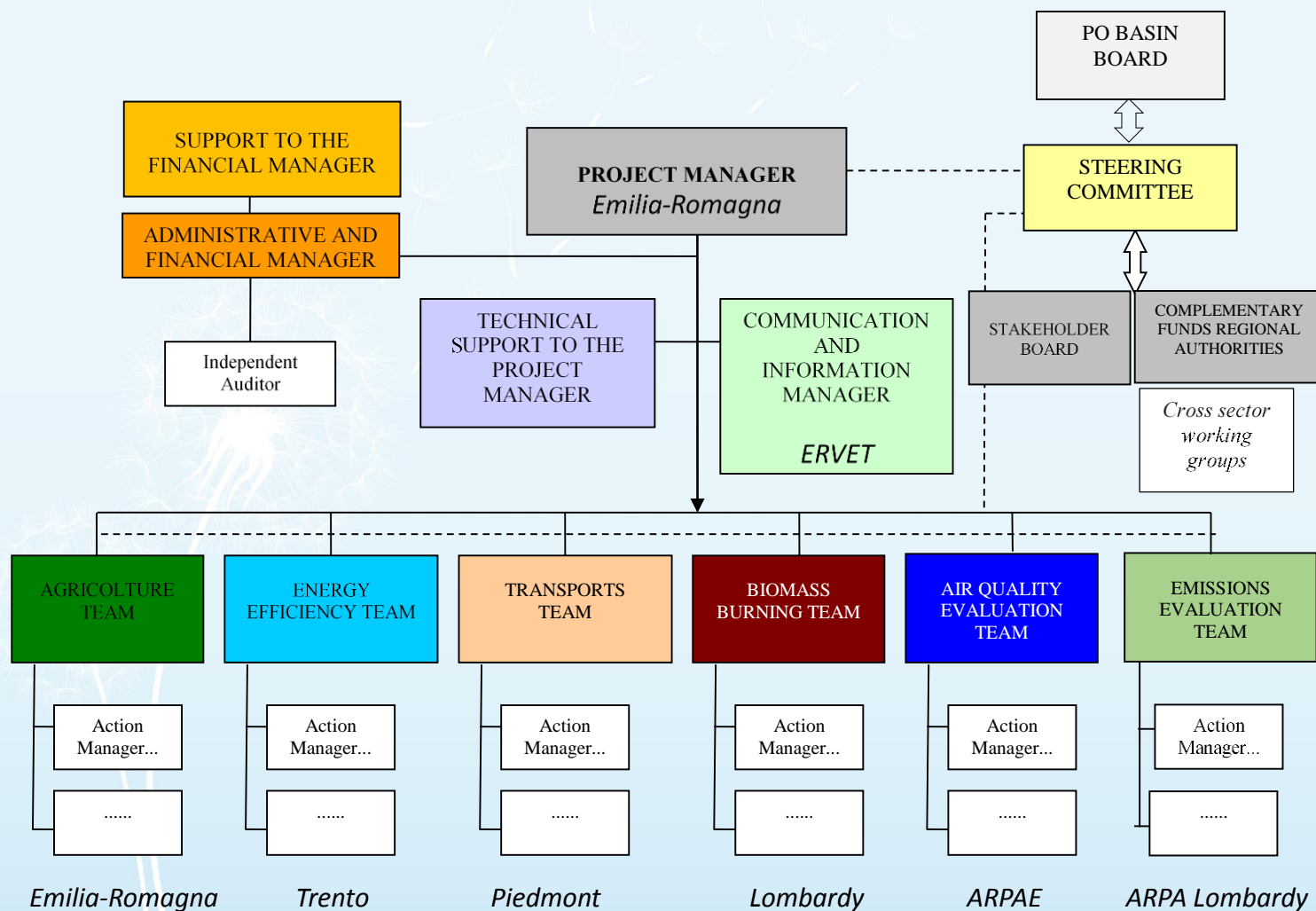
- collection and update of data (measures, emissions, traffic flows, biomass consumption)
- regular assessment of air quality
- monitoring and estimations of actions

## **COMMUNICATION AND DISSEMINATION ACTIONS (E) – 5 actions**

- Promotion and dissemination of the project's actions results at local, national and international level
- Specific communication actions on particular IP/AQPs issues: domestic use of biomass, electric mobility, school targeted educational paths on air quality



# Management and thematic pillars



# Complementary funds

- Complementary actions amount at more than 850 M€
- The proportion between IP itself measures and complementary measures is 1:50
- Complementary funding from EAFRD, ERDF, regional and national funds
- PREPAIR will realize actions that are actually synergic to complementary ones
- The implementation of complementary actions will be monitored during the IP through a continuous exchange of data with the Managing Authorities of complementary funds



**RURAL  
DEVELOPMENT  
PLANS**



**REGIONAL  
DEVELOPMENT  
PROGRAMMES**



**PON METRO**

# The long term sustainability

## **Stakeholder boards (in each Region)**

- will involve local authorities (municipalities or association of municipalities), environmental and socio-economic associations in IP actions and outputs
- regional and provincial administrations will guarantee the maintenance of the *Stakeholder boards* also after the conclusion of the IP

## **Cross-sector working groups (in each Region)**

- will involve people in charge of the management of complementary actions and funds (mainly European development funds) and in charge of other relevant policies
- regional and provincial administrations will guarantee the maintenance of the *Cross-sector working groups* also after the conclusion of the IP, in order to extend its activity to the next European programming period (2021-2028) and maintain integration with other relevant policies

## **The Po Basin Board**

- involves representatives from Regions of the Po Valley and representatives of the environmental Agencies
- will be involved within the IP, both at political and scientific level, to validate IP monitoring and evaluation outputs, so as to ensure the corrective actions in case the measures adopted by the AQPs result not fully effective
- work in coordination with the *Steering Committee*

- **The relationships among the formally established groups and boards, their tasks and commitments after the end of the project, will be fully described in the *After Life Plan*.**
- **At the end of the project an *Agreement* among partners will be subscribed to ensure cooperation after the end of the project, the dissemination of PREPAIR's results, the commitment to the management of the data sharing infrastructure and tools developed.**

# Stakeholders

- All the stakeholders will be asked to give their input in the IP activities, through thematic workshops, working groups or direct auditions. Their involvement will be essential for collecting data and comparing experiences in order to define guidelines, e-learning modules, handbooks. Professionals and operators will be directly involved in many of the project actions, such as dedicated training initiatives which aim at increasing the capacity building of people and subjects called to implement the Air Quality Plans. At the end of the IP actions they will be involved in the dissemination of results and best practices through thematic conferences as well as through the dissemination tools of the project
- A stakeholder list will be created and constantly updated by the IP coordinating and associated beneficiaries and will be used in the different phases of the project
- The Stakeholder Boards will be called at the beginning of the IP and periodically during the project implementation (at least once in each project phase) . The regional and provincial administrations will guarantee the maintenance of the Stakeholder boards also after the conclusion of the IP, so as to ensure the involvement of key stakeholders in the implementation of the regional Air Quality Plans

# Communication and Networking

- Dissemination of project results
- Support to single concrete actions, es. e-learning platform
- Communication actions on biomass, electric mobility and school-targeted educational paths
- Networking with other Life and non-Life projects on related themes
- Website: [www.lifeprepar.eu](http://www.lifeprepar.eu)







With the contribution  
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Thanks for your attention!



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