



LIFE 15 IPE IT 013

LIFE IP PREPAIR

Po Regions Engaged to Policies of Air

Background

- The Po Valley represents a significant nonattainment area for PM, NO₂ and O₃ air quality limit values
- Around 450 000 tons of NO_x, 90 000 tons of PM, 250 000 tons of NH₃ 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, NO₂ and O₃ 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, NO₂, O₃, NH₃, 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

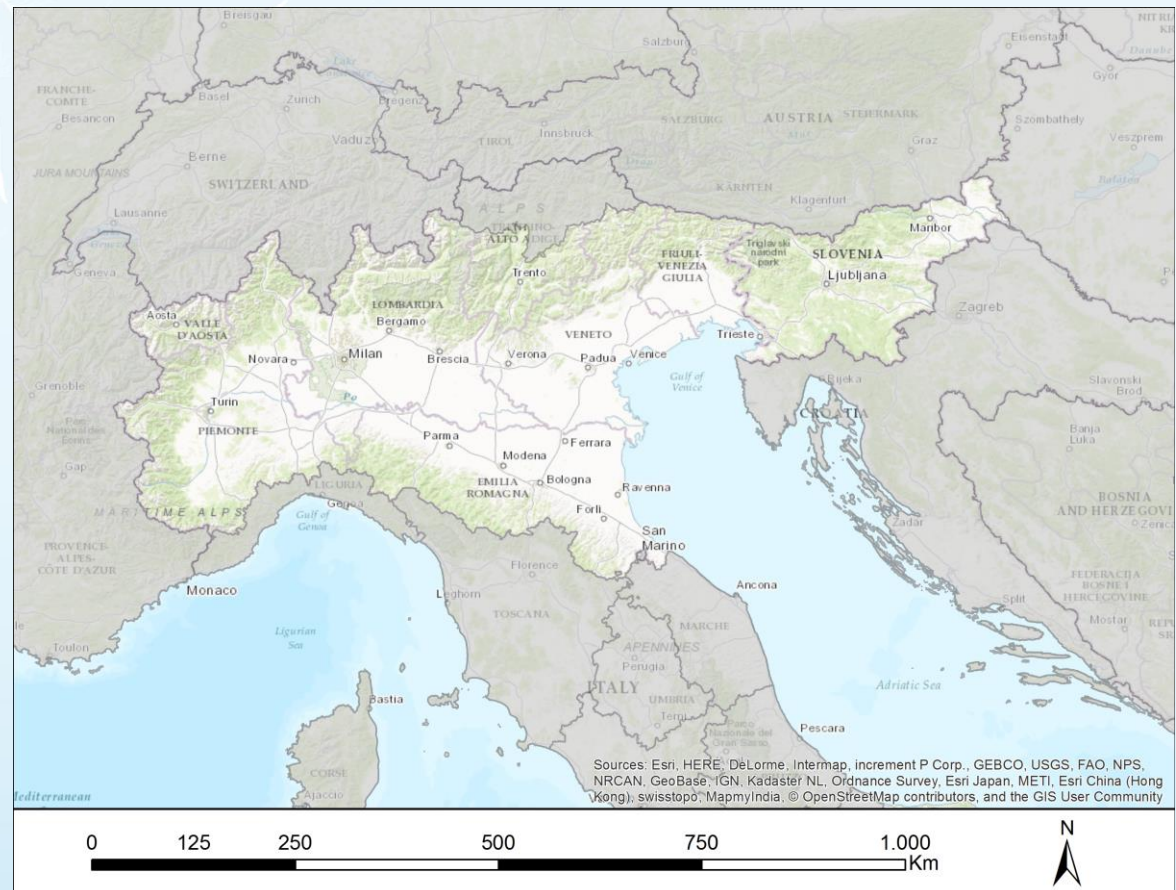
ARPAE Emilia-Romagna; ARPA Lombardy; ARPA Piedmont; ARPA Veneto; ARPA Valle d'Aosta; ARPA Friuli Venezia Giulia; Slovenian Environment Agency

3 Municipalities

Bologna; Turin; Milan

2 Private non-commercial agencies

ERVET; FLA



Emilia Romagna Region (coordinating beneficiary)



Torre Palù, Goro (Ferrara)



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Lombardy Region



Lago di Annone, Lecco

Piedmont Region



Langhe, Cuneo

Veneto Region



Venezia

Autonomous Province of Trento



View of the Garda lake from the Paganella

Friuli Venezia Giulia Region



Fella river, Moggio Udinese

Valle d'Aosta Region



Monte Cervino, Cervinia

Slovenia



Bled lake

Municipality of Bologna



Bologna city center



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Municipality of Milan



Cathedral of Milan

Municipality of Turin



Turin city center



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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



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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

Fields of action/thematic pillars

BIOMASS

- specific education and qualification actions for freelances on the design, maintenance and control of domestic wood-burning plants
- awareness-raising activities for citizens on good practices.
- Optimization of the local supply chain of biomass.

AGRICULTURE

- development of a common evaluation tool for the reduction of emissions in the farms
- dissemination of good practices on the use of fertilizers through also a system of assistance to farmers in order to optimize its spreading by using low-emissions techniques.

TRANSPORTS

Developing common tools for the support of the public, electric and cycling mobility and for a rational management of the transport of goods, also by adopting pilot and demonstrative actions.

Fields of action/thematic pillars

ENERGY EFFICIENCY

- provide guidelines for small and medium enterprises
- develop an integrated approach to all actors involved in the chain of condos
- realize local info-points in support of public bodies for promoting the green public procurement.

EMISSIONS EVALUATION AND MONITORING

- realization of a permanent platform for data sharing
- monitoring and evaluation of air quality in the Po basin, including the effects of the cross-border pollution between Italy and Slovenia.

COMMUNICATION AND NETWORKING

Specific communication actions addressed to public operators, privates and local communities are foreseen. Networking is particularly important for sharing and capitalizing other projects' results, for avoiding overlapping and for strengthening the synergies between different initiatives.

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

Initial conference, June 8 and 9, 2017



Meeting in Venice, September 28 and 29, 2017



Monitoring visit, November 28 and 29, 2017





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Thank you!



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