LIFE-REMY

Reducing **E**mission **M**odelling uncertaint**Y**

LIFE20 PRE/IT/000004

Project Abstract

REMY Reducing Emission Modelling uncertaintY
LIFE20 PRE/IT/000004

- **Duration**: 36 months 1/5/2021 – 30/4/2024
- **Financial contribution**:
  - Total cost: 1'538'414 €
  - Requested European Union Contribution: 923'048 € (60%)
- **Project type**: LIFE prepatory project
  - According to the LIFE Regulation, Preparatory projects address specific needs for the development and implementation of Union environmental or climate policy and legislation
  - REMY meets the specific need under the Environment sub-programme: "**Support for the compilation of emission inventories to improve air quality modelling**"

LIFE Preparatory Projects

Project Partners

Coordinating Beneficiary

TerrAria s.r.l.

Associated Beneficiaries

CSIC
Consejo Superior de Investigaciones Científicas

idaea
Institute of Environmental Assessment and Water Research

RSE
Ricerca Sistema Energetico

AGENZIA MOBILITÀ AMBIENTE TERRITORIO

IOŚ-PIB
Instytut Ochrony Środowiska
Państwowy Instytut Badawczy

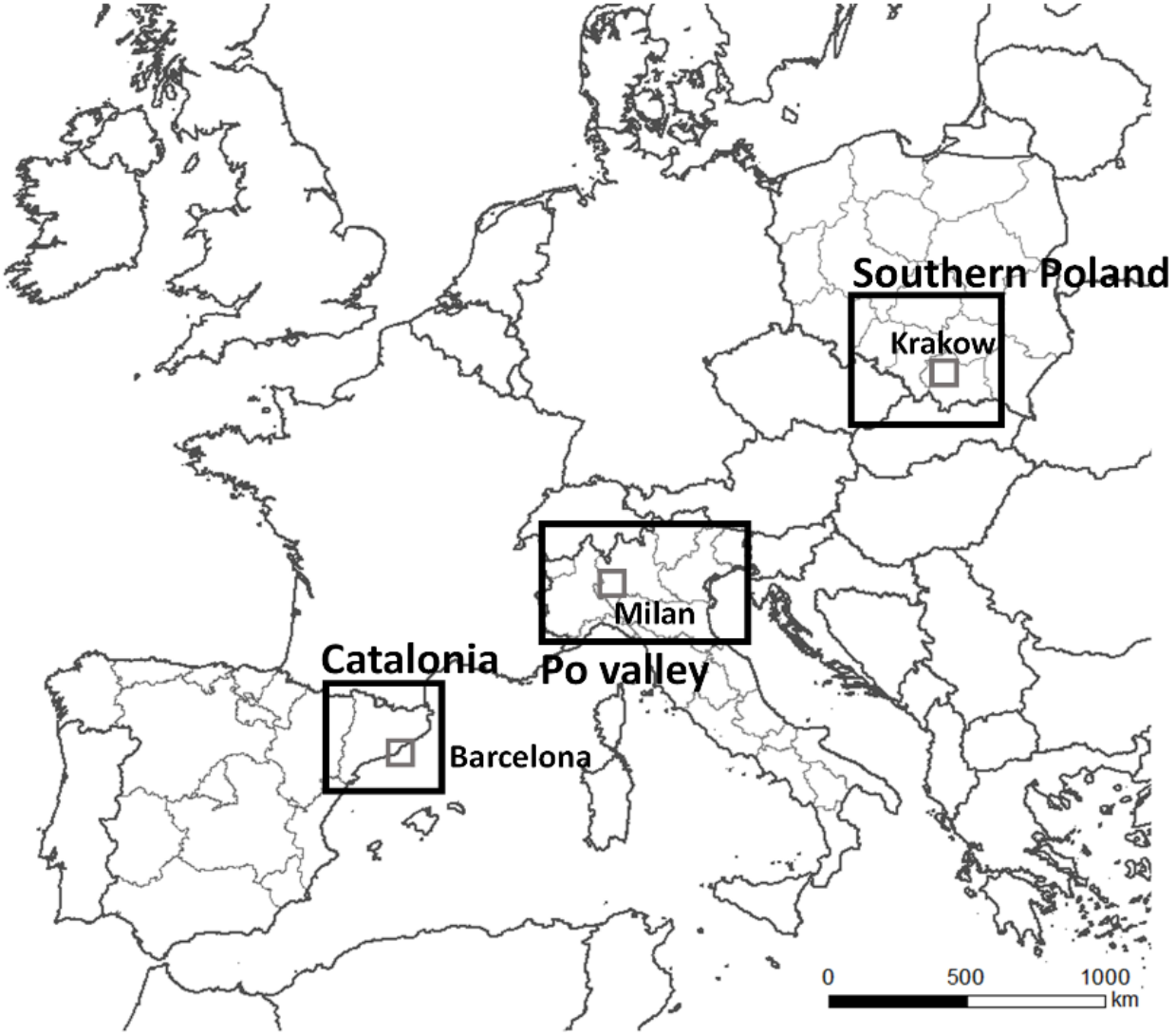
Project Objectives

- Provide updated, comprehensive and harmonized recommendations to **support modelling groups** in reducing modelling uncertainties related to **emission processing**.

- Contribute to a **better development, implementation and evaluation** of air quality assessment, air quality plans and source apportionment in the framework of the Ambient Air Quality Directives.

- Provide **operational guidelines concerning integration and harmonization of urban/regional emission inventory**, emission estimates for most uncertain sources, modelling of emission and formation processes involving primary and secondary organic particulate generation, multiscale modelling in urban and peri-urban areas including both CTM and local modelling also including spatially varied resuspension.

LIFE-REMY'S REGIONAL AND URBAN EVALUATING AREAS



SPAIN

CTM: CAMx (RSE)
RM: Barcelona (CSIC)
UM: UTAQ Barcelona (TA)

ITALY

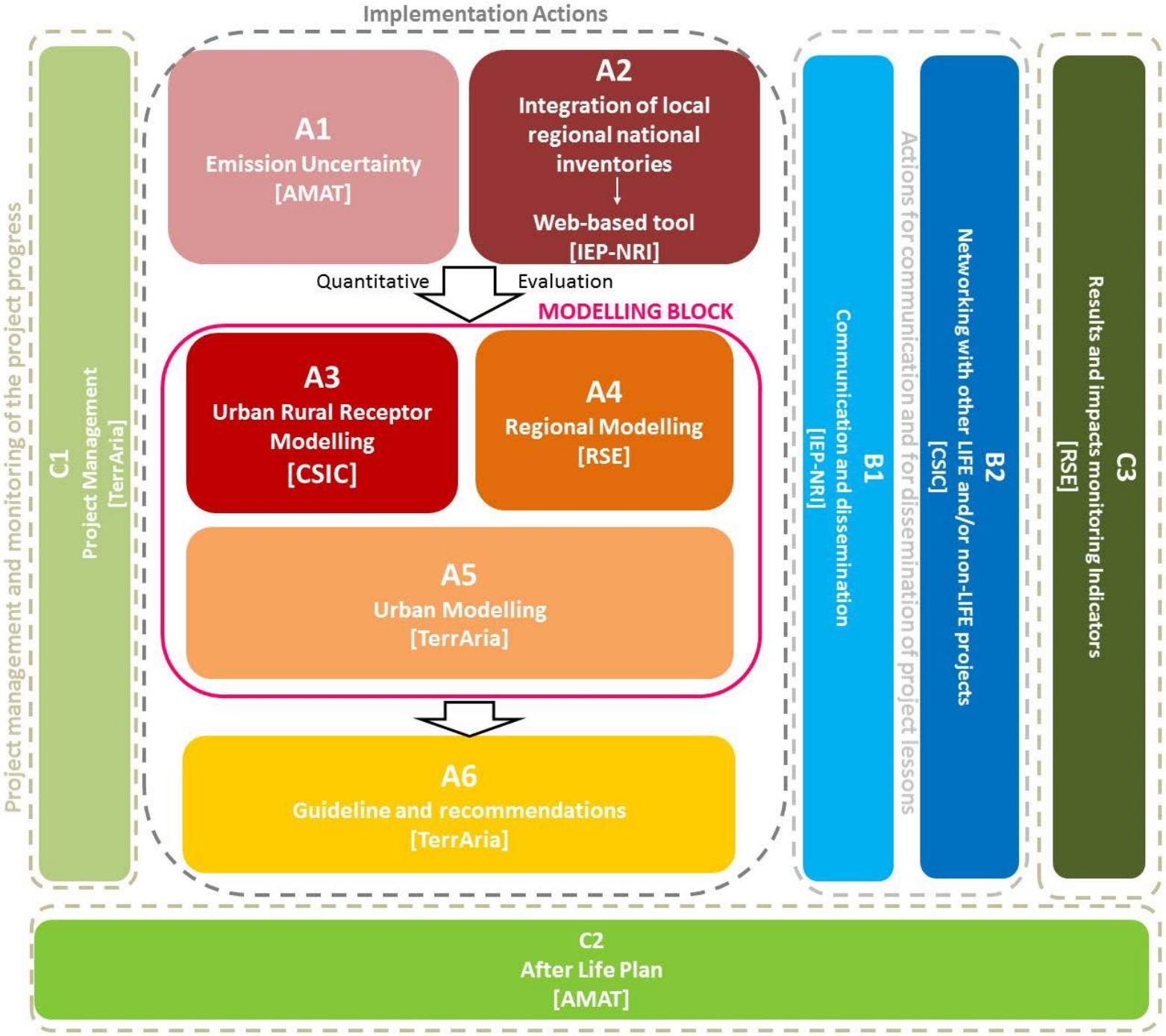
CTM: CAMx (RSE)
RM: Milan (CSIC)
UM: UTAQ Milan (TA/AMAT)
IAM: RIAT+ (TA)

POLAND

CTM: GEM-AQ (IEP-NRI)
RM: Krakow (CSIC/IEP-NRI)
UM: GEM-AQ Krakow (IEP-NRI)

CTM: Chemical Transport Model
RM: Receptor Model
UM: Urban Model
IAM: Integrated Assessment Model

Project Structure



Expected Results

- **Quantitative** results on the **impact of the emission uncertainty on air quality estimates and related performances**
- Uncertainty estimated on both the **BASELINE** and the **COVID19 SCENARIOS,** evaluation of the sensitivity to the **uncertainty in emission inventories before and after the application of project recommendations**
- Quantitative estimations of the **model performance,** mainly based on **FAIRMODE indicators**
- **Operational recommendations to support the compilation of emission inventories** and **to reduce air quality and consequent air planning uncertainty**

Stakeholder

Stakeholder involvement on the whole REMY project is fundamental and in particular in the sharing of the results on the uncertainty and of the recommendations to be included in the guideline.

The stakeholder involvement will at three levels

1. **FAIRMODE institutional board**
2. **Territorial board –** the specific regional results and implication will be shared and analyzed with the **stakeholder of REMY's areas of interest** (Po Valley, Catalonia, Southern Poland), with a particular focus to **PREPAIR project**
3. A more general involvement will be provided for air emission experts and modelers, from previous projects