

FAIRMODE pilot

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Air quality plans preparation

- Which are the air quality challenges in your domain? NO₂, PM_{2.5} ...
- In Emilia Romagna we have exceedances for NO₂, daily PM₁₀. We have regional action plan (PAIR2020) and we are involved in LIFE-IP Prepair.

How do you identify the main sources of pollution in/to your domain?

- We use emission tool named INEMAR, with proxy such populations, land use, traffic model
- The outputs are municipality based . Emilia romagna emission inventory (2013) has been compared with delta-emission tool with European top-down inventory (pubblication fairmode pilot submitted)

Air quality plans preparation

- Which tool/approach do you use to identify sources? Are you aware of differences between “source apportionment” and “planning” approaches?
- In order to give a simple and straight answer to the question “who is to blame for air pollution?” We used different approach
- 1) CTM output model with different emission scenarios (emission scenarios used to setup ANN). Not easy to explain to policy maker
- 2) a screening approach, expressing the emission of each anthropogenic precursor in terms of “PM10 equivalent”. Easy to explain to policy maker but is an rough approach

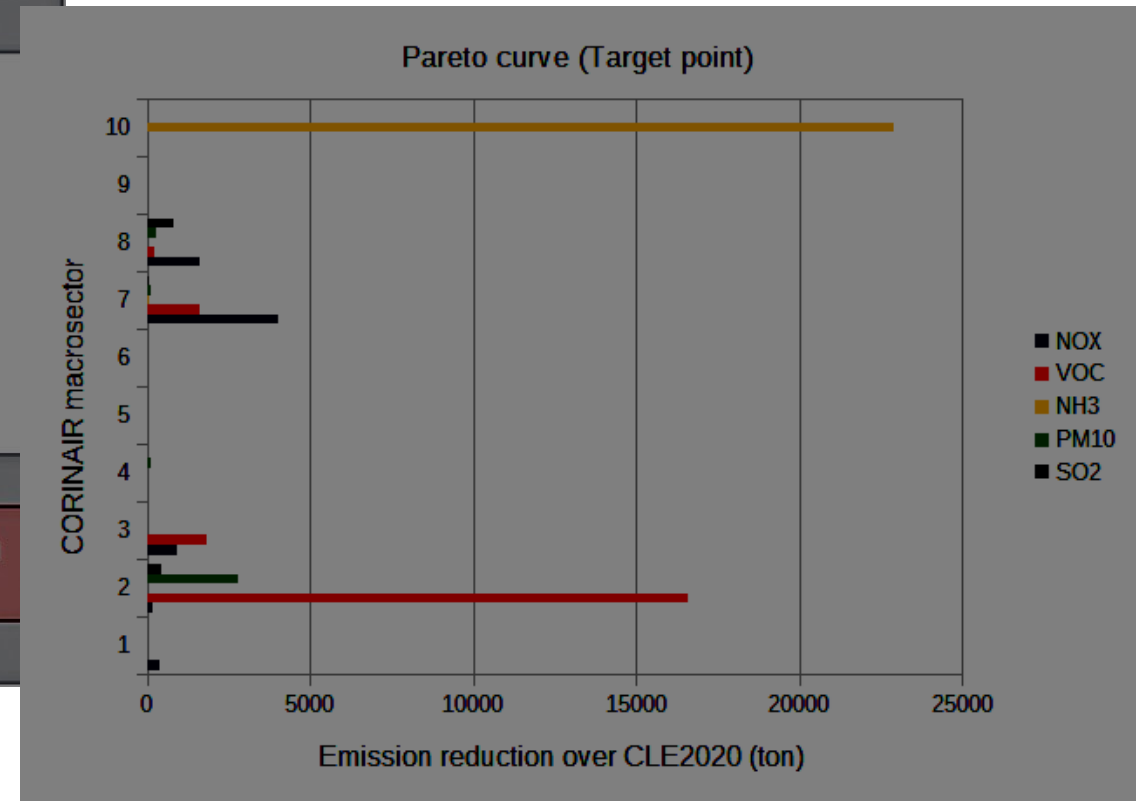
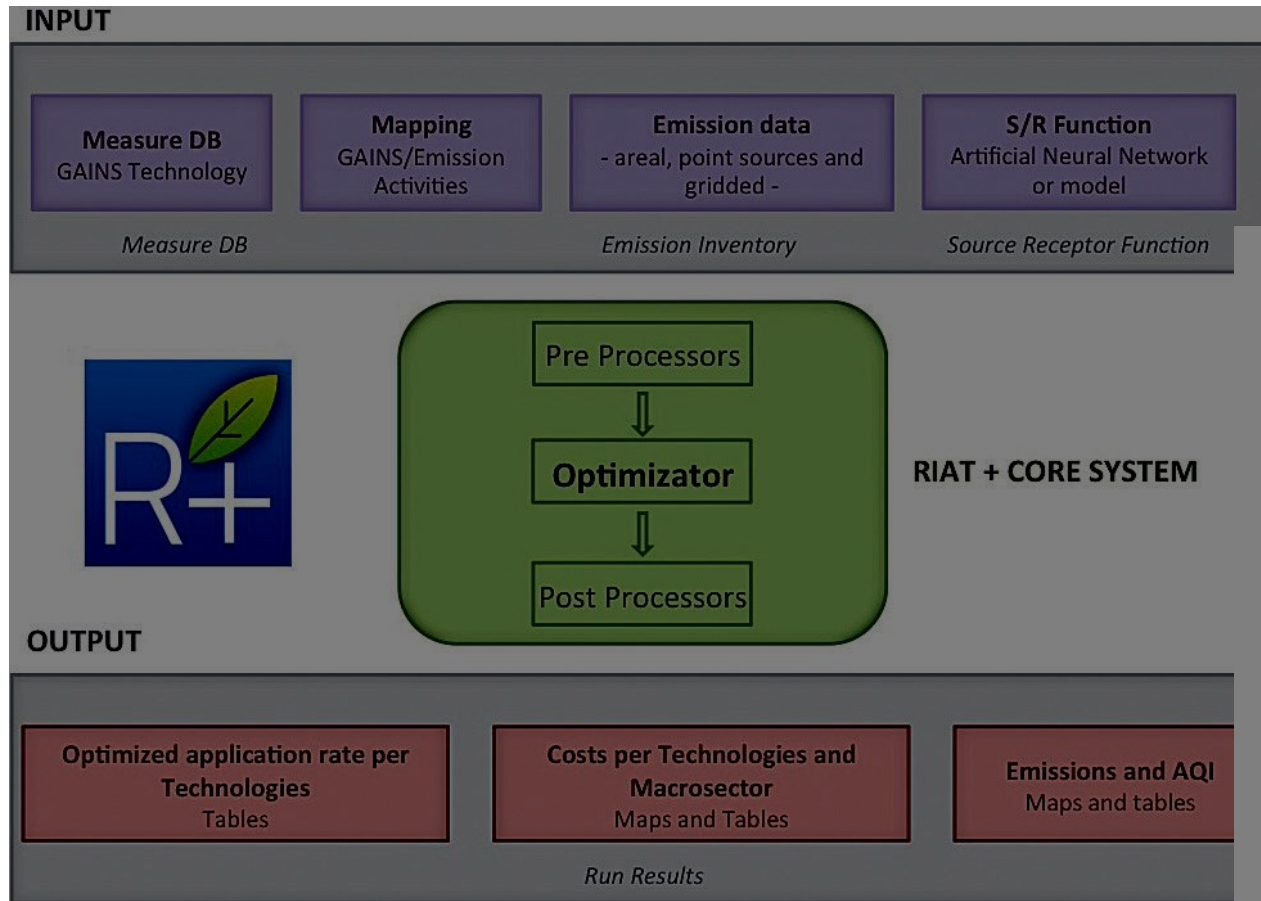
Air quality plans preparation

- Are you aware of differences between “source apportionment” and “planning” approaches?
- A little bit, because my team has never had enough time for this topic but we are planning to collaborate with other ARPAs teams
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Future projections and measures

- How do you project in the future the current concentrations? Do you perform 'business as usual' scenarios for the future? Using which tools? GAINS Italy
- How do you select additional measures to be applied? How do you evaluate impacts and costs of additional measures?
- We used RIAT+ and a description of this methodology is published in the special issue of Int. Journal Environment and Pollution

RIAT+ tool and PAIR2020



Uncertainty and governance

- Do you evaluate uncertainties of your results? How?T
- The model output are evaluated using Deltatool QA Fairmode
- Do you coordinate the air quality plan with other policies? i.e. National air pollution control programmes (NEC directive)? Covenant Of Mayors? Mobility plans?
- LIFE-IP Prepair project has the aim to coordinate Po valley regional action plan. It is a big challenge because is not easy to share data, model and policies. Each plan has own future projection (2020,2025,2030) different methodology, etc

FAIRMODE tools

- Are you aware / are you using the source apportionment (SA) and planning FAIRMODE tools/resources?
- DeltaSA tool
- SPECIEUROPE database
- Dynamic indicators in the delta tool
- SHERPA
- We make some test with SHERPA. The “problem” is that the output of SHERPA depend on emission inventory and the policy maker would have result based on local emission
- We are going to use SA and planning tools, in collaboration with other people in ARAPE who are aware with PMF approach.