

Challenges in designing effective and publicly acceptable air quality policies in Emilia-Romagna Region and in the Po Valley

Marco Deserti, Katia Raffaelli

Regione Emilia-Romagna

Servizio Tutela e Risanamento Acqua, Aria e Agenti fisici

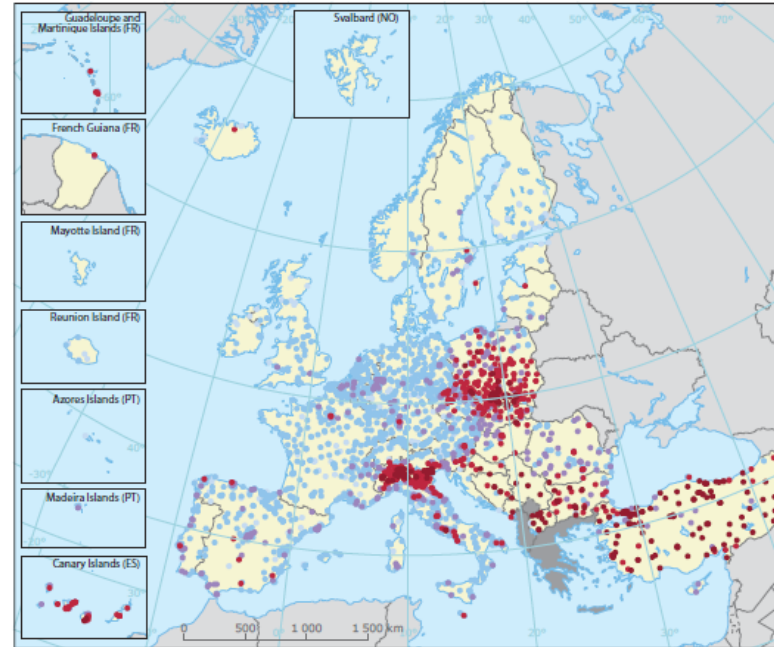
The Po Valley: a wide-spread challenge



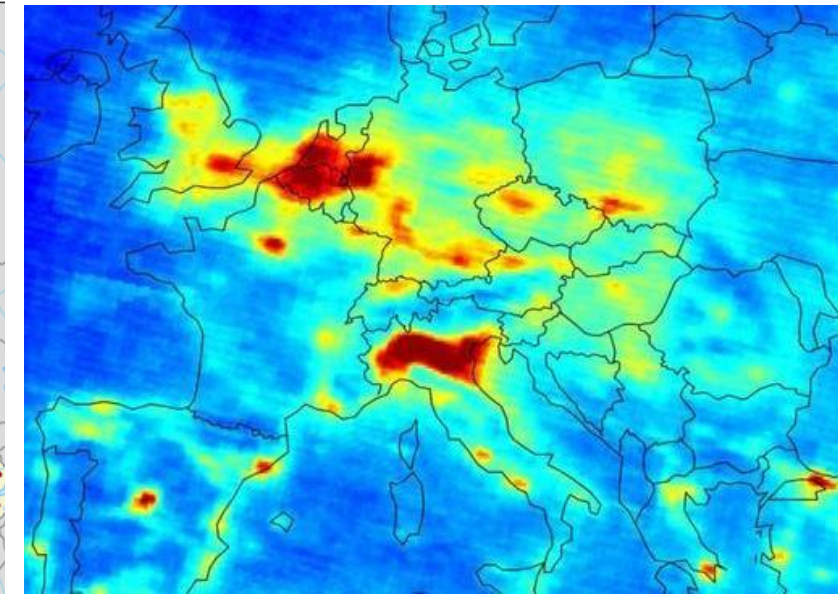
- Emilia-Romagna is located in the Po Valley, a wide-spread area where exceedances of EU limit and target values are registered for Particulate Matter, Nitrogen Oxides and Ozone
- Air quality is influenced by the orographic and meteorological conditions of the Po Valley and the Northern Adriatic Basin
- A complex situation that requires big interventions, coordinated at all the levels (national, interregional, regional and local)



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

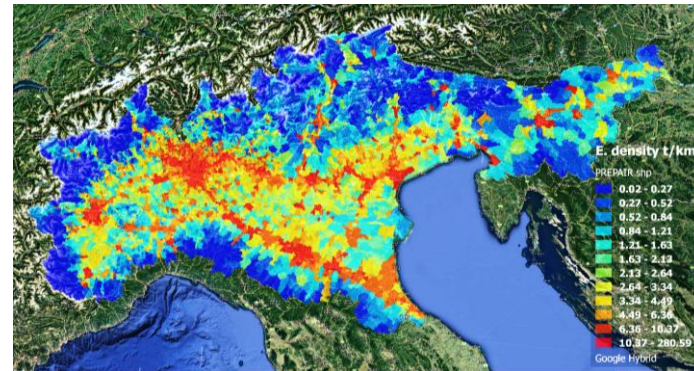
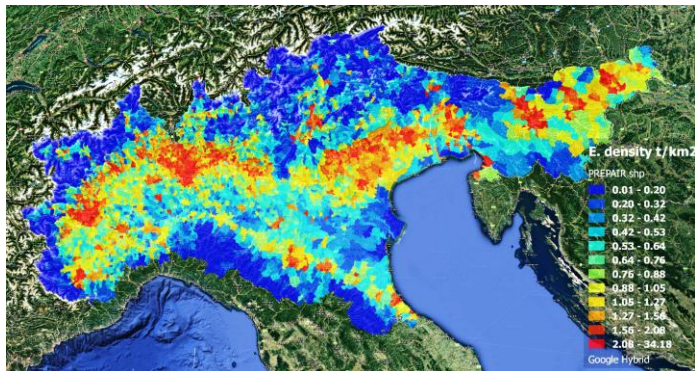


European Environmental Agency, Air Quality in Europe – 2019 Report



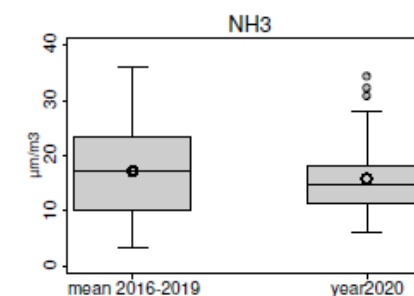
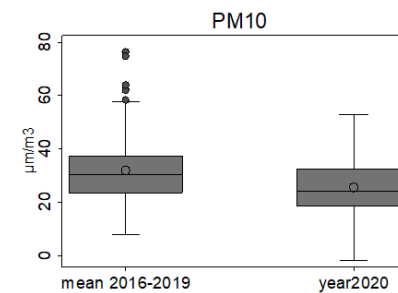
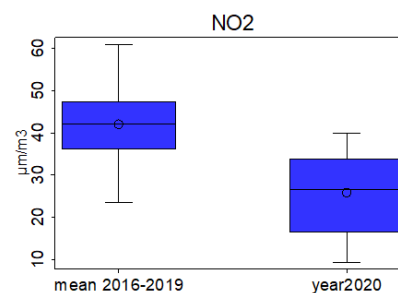
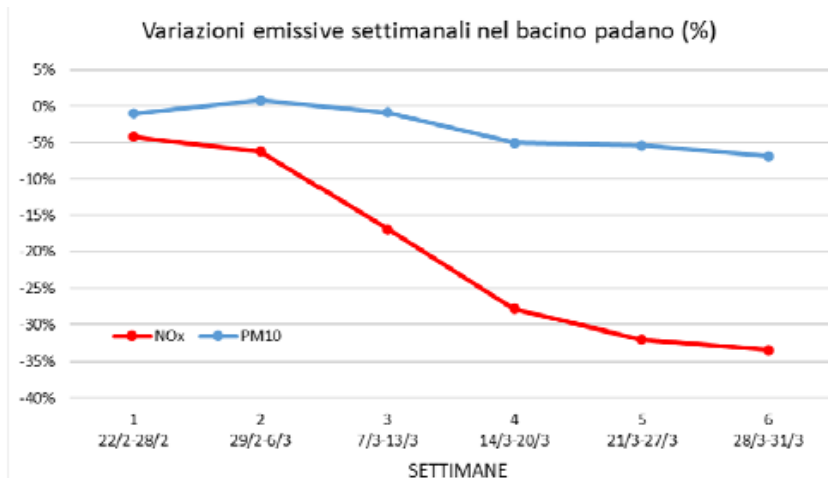
Sentinel 5p Nitrogen atmospheric column January to April 2019 (Source: ESA)

Reduction Targets and Scenarios



Emissions to be reduced in all macro-sectors (CLE-Plans-Agreements-Prepair)		
	% reduction compared to 2013	Tons
NO _x	39%	147528
PM10	38%	29876
NH ₃	22%	54170

Effects of the COVID-19 Lockdown



<http://www.lifeprepare.eu>

Lessons learnt

The first results confirm the general strategy of the Air Quality Plans adopted by the Po Valley Regions and of the interregional agreements (2005, 2007, 2013 and 2017):

- **Reduce the emissions of primary pollutants and of their precursors**
- **Act on all the emitting sectors**
- **Act at the scale of the whole Po Basin**

Summarizing:

It is possible to comply with the AQ LV reducing emissions on the Po Valley of about 40% (Nox, PM, NH3)

The contribution of the EU legislation to emission reduction is very important, especially for reducing NOx emissions by traffic

The emission reduction target requests the full implementation of new technologies. Time is necessary. Monitoring the AQ Plans is crucial, making the AQ plans faster is necessary (Prepair contribution).

Due to the specific geomorphological and climate conditions, the compliance to the EU LV in the Po Valley bears an element of great disparity if compared to other member states

Thanks for Your attention.

- ♦ <http://ambiente.regione.emilia-romagna.it/aria-rumore-elettrosmog/temi/pair2020>
- ♦ <http://ambiente.regione.emilia-romagna.it/aria-rumore-elettrosmog/temi/inquinamento-atmosferico>
- ♦ www.ambiente.regione.emilia-romagna.it
- ♦ www.liberiamolaria.it
- ♦ [http://www.lifepreair.eu./](http://www.lifepreair.eu/)

