

A common emission dataset for the Po Basin Area

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U.O Modellistica Qualità dell'Aria e Inventari

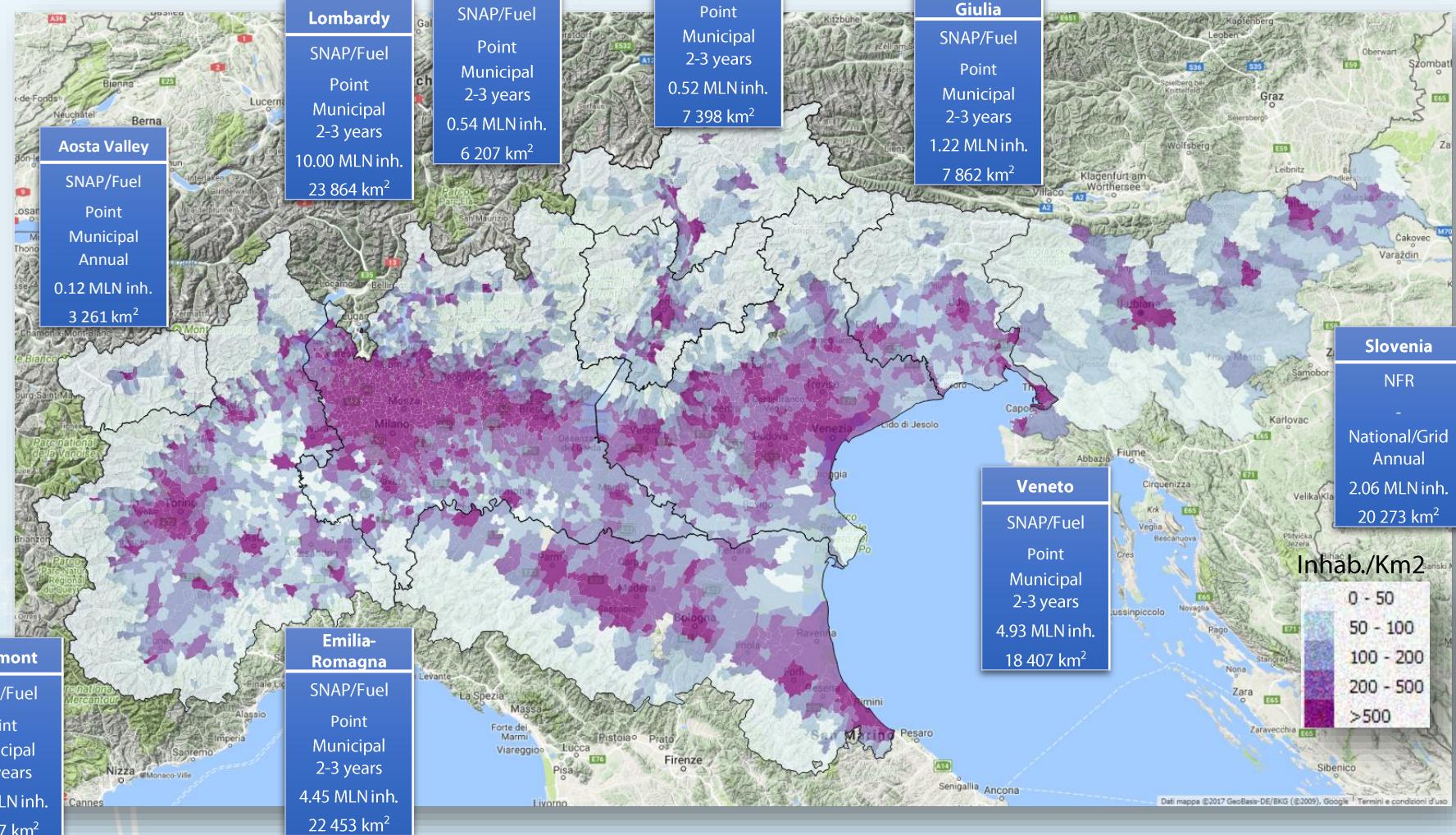
*1° MIDTERM CONFERENCE
THE PO BASIN TOGETHER FOR THE QUALITY OF AIR
MILAN 11/08/2019*

The Emissions Dataset

Goal: development of a common pollutant emission dataset on the Po-basin and Slovenia

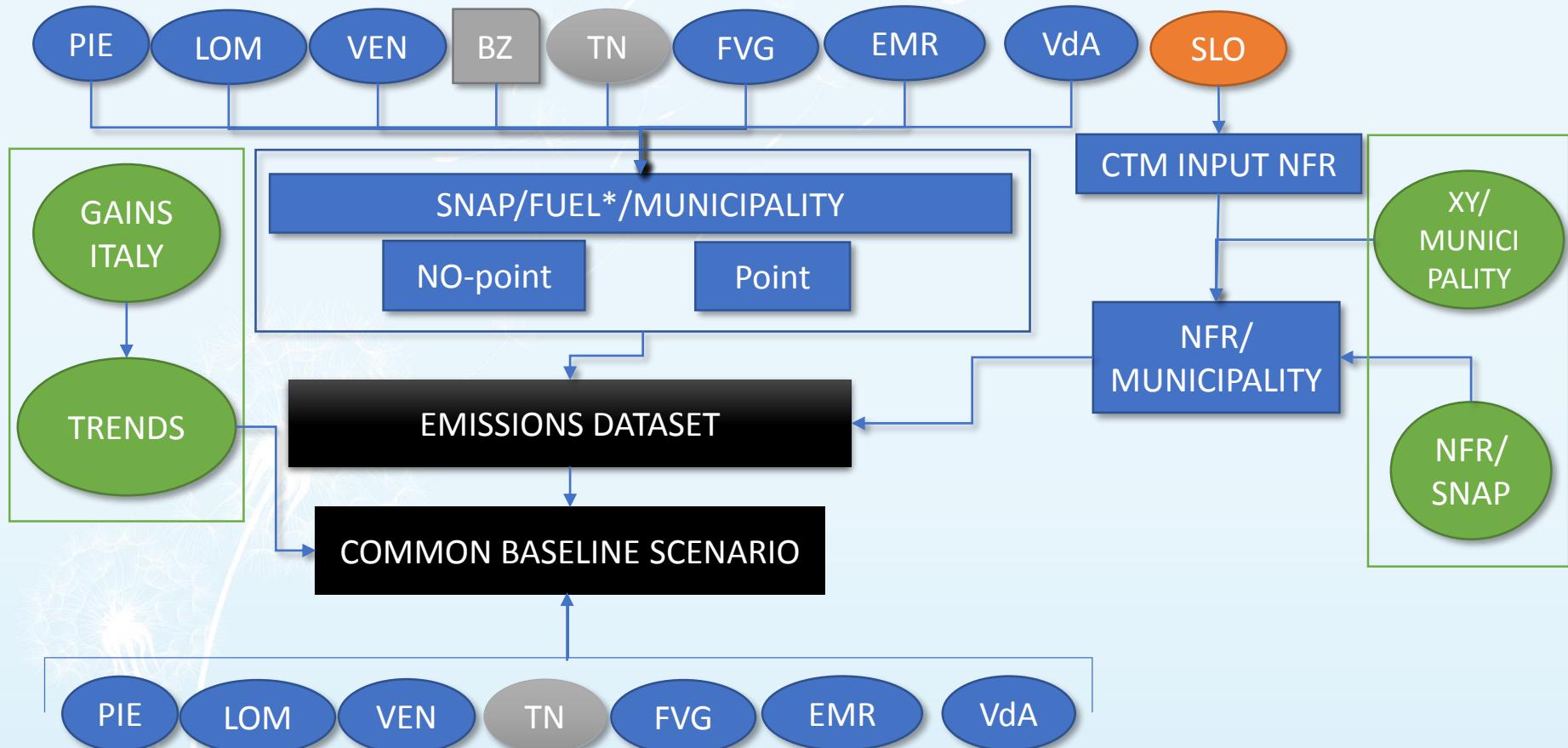
- Preliminary analysis of the existing data on the domain
- Definition of a data main fluxes between the project partners and stakeholders
- Emission estimates on the Prepair domain (Po-basin and Slovenia)
- Definition procedure for the preparation of emission scenarios according to future trend analysis
- Development of the baseline emission scenario to 2025

Domain of Analysis



The extent of the domain of analysis covers about **135 000 Km²** and encompasses a population of around **28 million inhabitants**.

Definition of the main flux of data

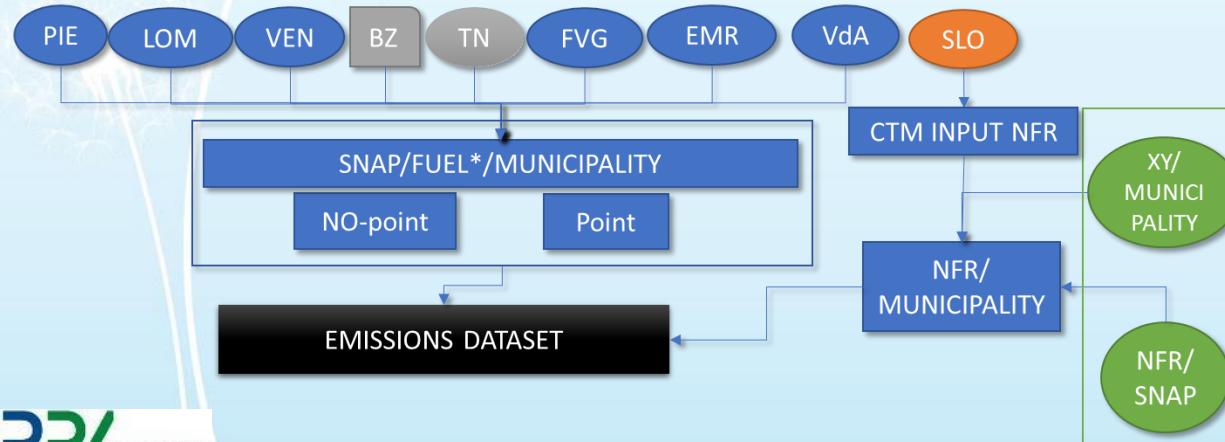


9 different partners and stakeholder involved

Emission share on the domain

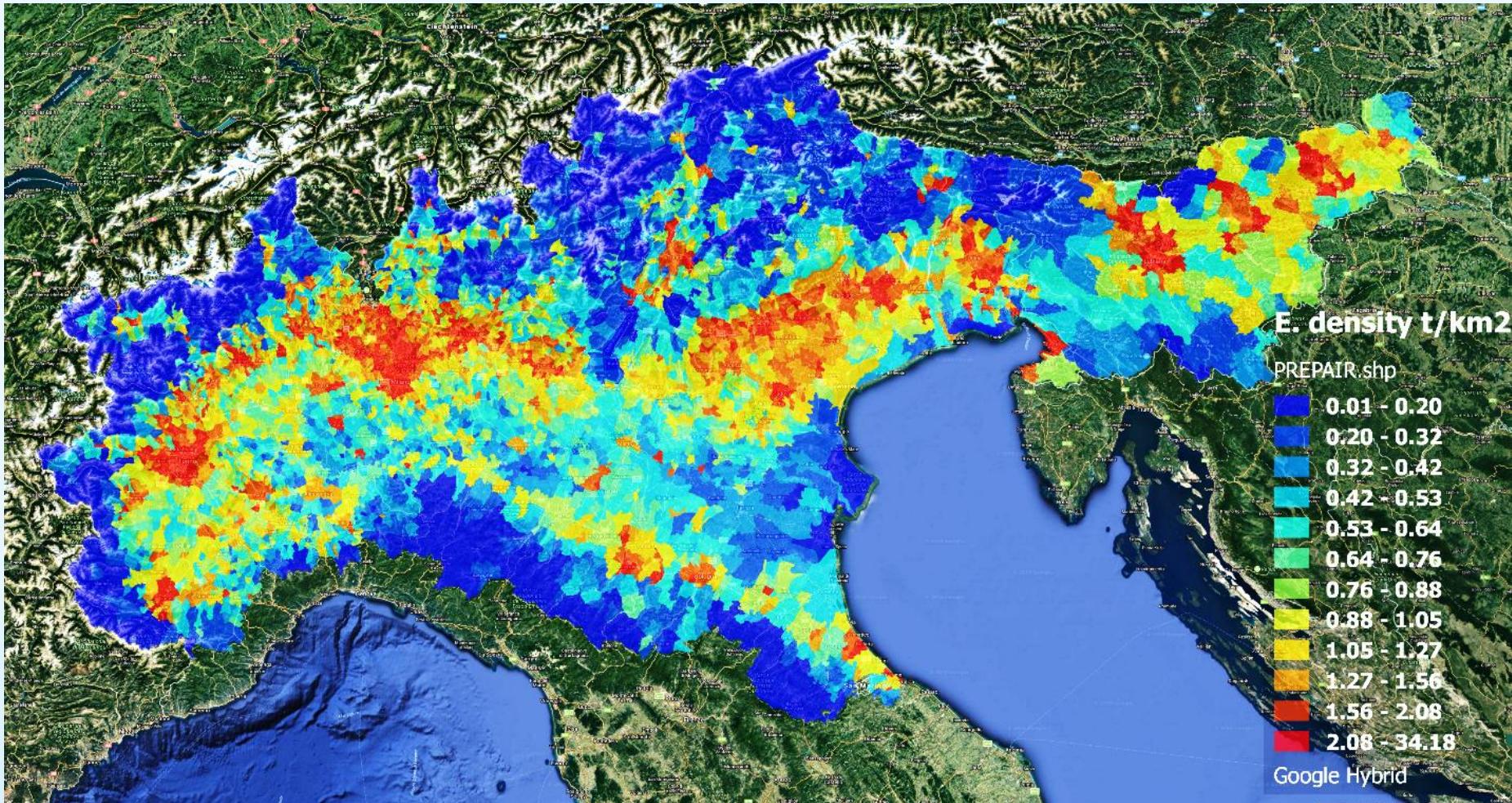
Main emission sectors are here highlighted:

Emission share on base year 2013	Po-basin			Po-basin and Slovenia		
	NH3	NOx	PM10	NH3	NOx	PM10
1-Combustion in energy and transformation industries	0%	6%	1%	0%	8%	1%
2-Non-industrial combustion plants	0%	9%	56%	0%	9%	59%
3-Combustion in manufacturing industry	0%	15%	4%	0%	14%	4%
4-Production processes	0%	3%	3%	0%	3%	3%
5-Extraction and distribution of fossil fuels and geothermal energy	0%	0%	0%	0%	0%	0%
6-Solvent and other product use	0%	0%	5%	0%	0%	4%
7-Road transport	1%	50%	20%	1%	51%	18%
8-Other mobile sources and machinery	0%	13%	4%	0%	12%	3%
9-Waste treatment and disposal	1%	1%	0%	1%	1%	0%
10-Agriculture	97%	1%	4%	97%	1%	6%
11-Other sources and sinks	0%	0%	3%	0%	0%	3%
Total	100%	100%	100%	100%	100%	100%



Emission density PM10 - 2013

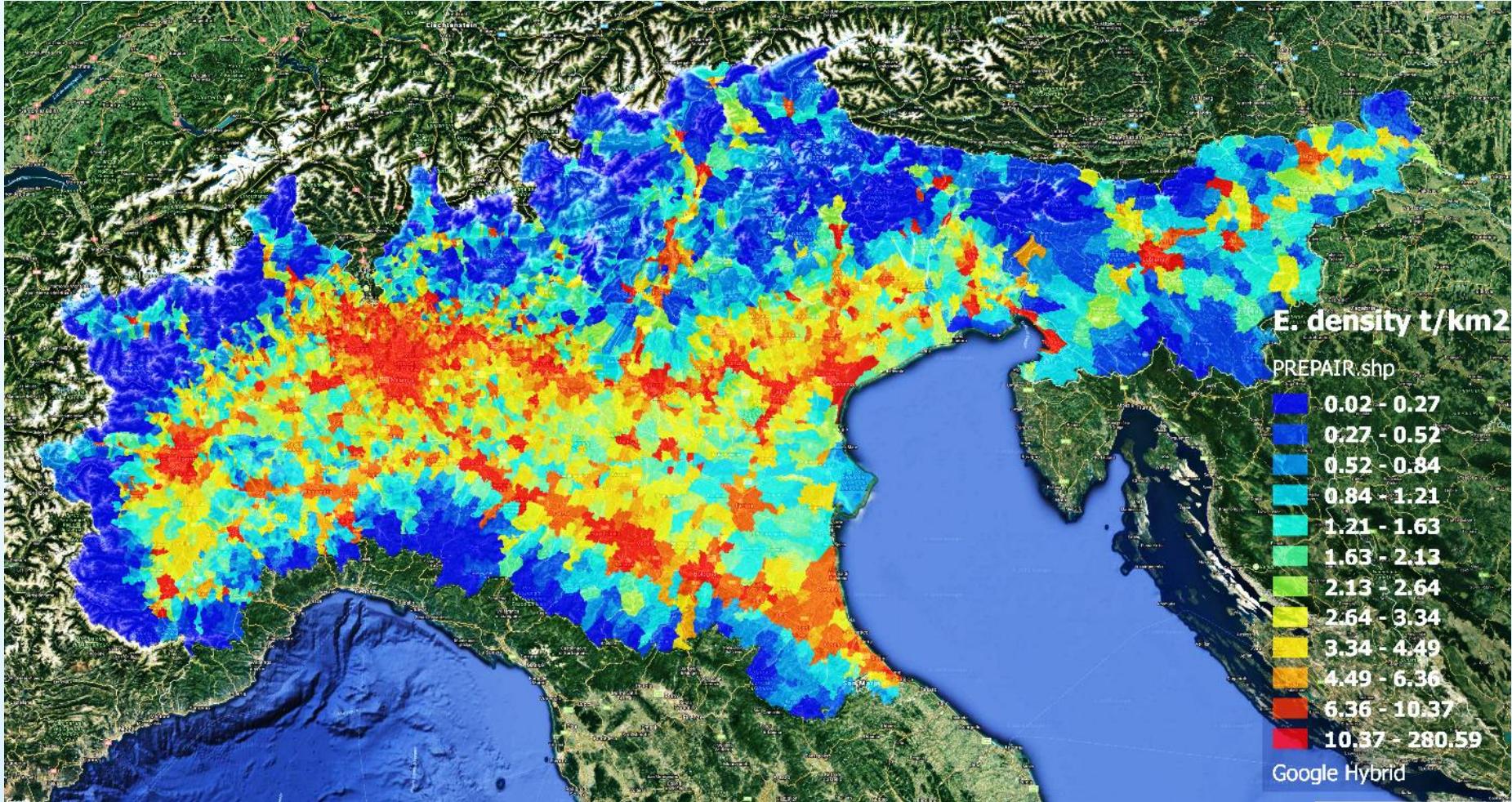
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Per capita emission of PM10: **3 kg/inh/year** (Po-basin), **3.4 kg/inh/year** (Po-basin and Slovenia), **4.3 kg/inh/year** (EU-28)

Emission density NOx - 2013

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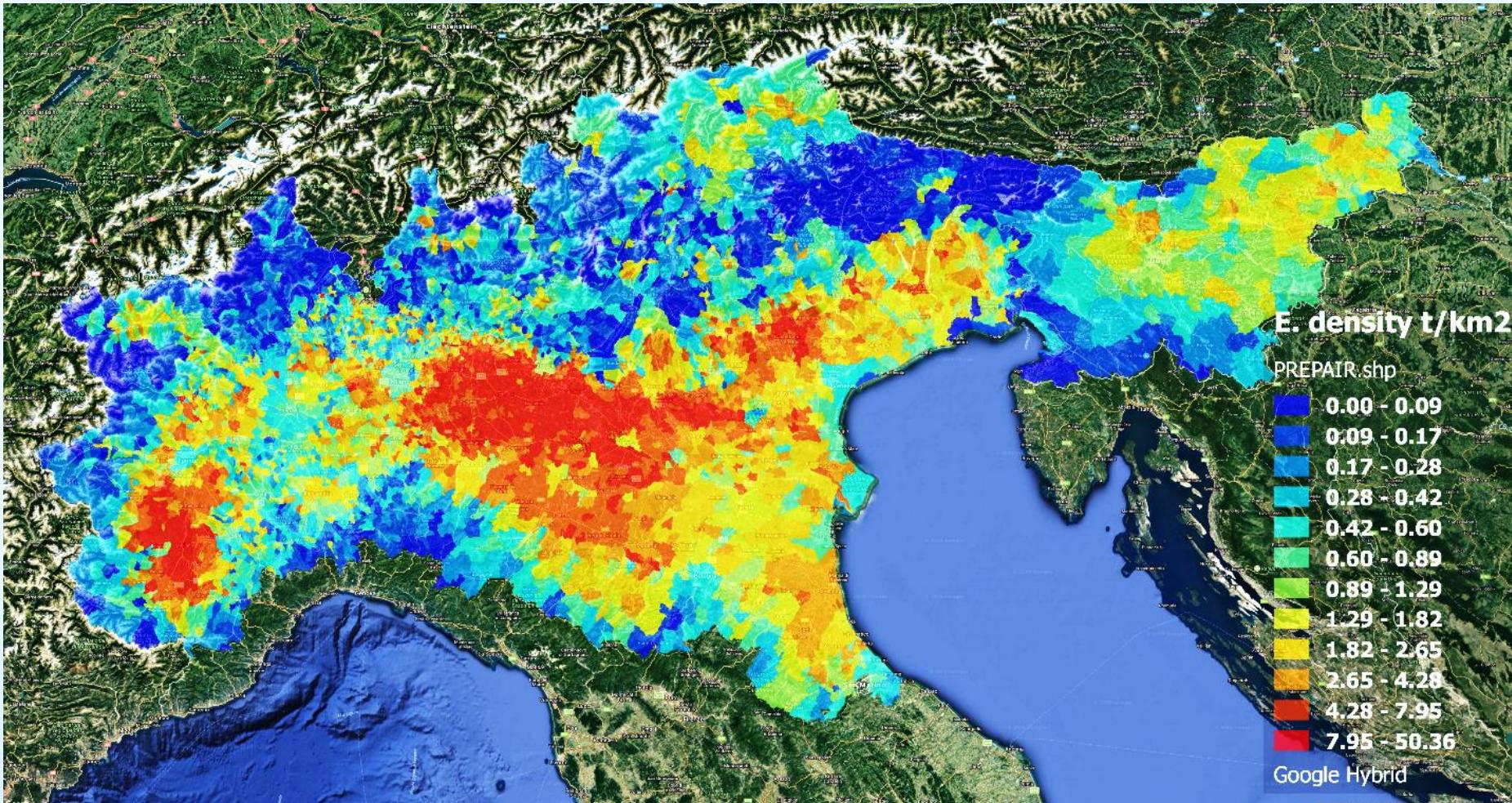


Per capita emission of Nox: **15 kg/inh/year** (Po-basin and Po-basin with Slovenia),
16.6 kg/inh/year (EU-28)

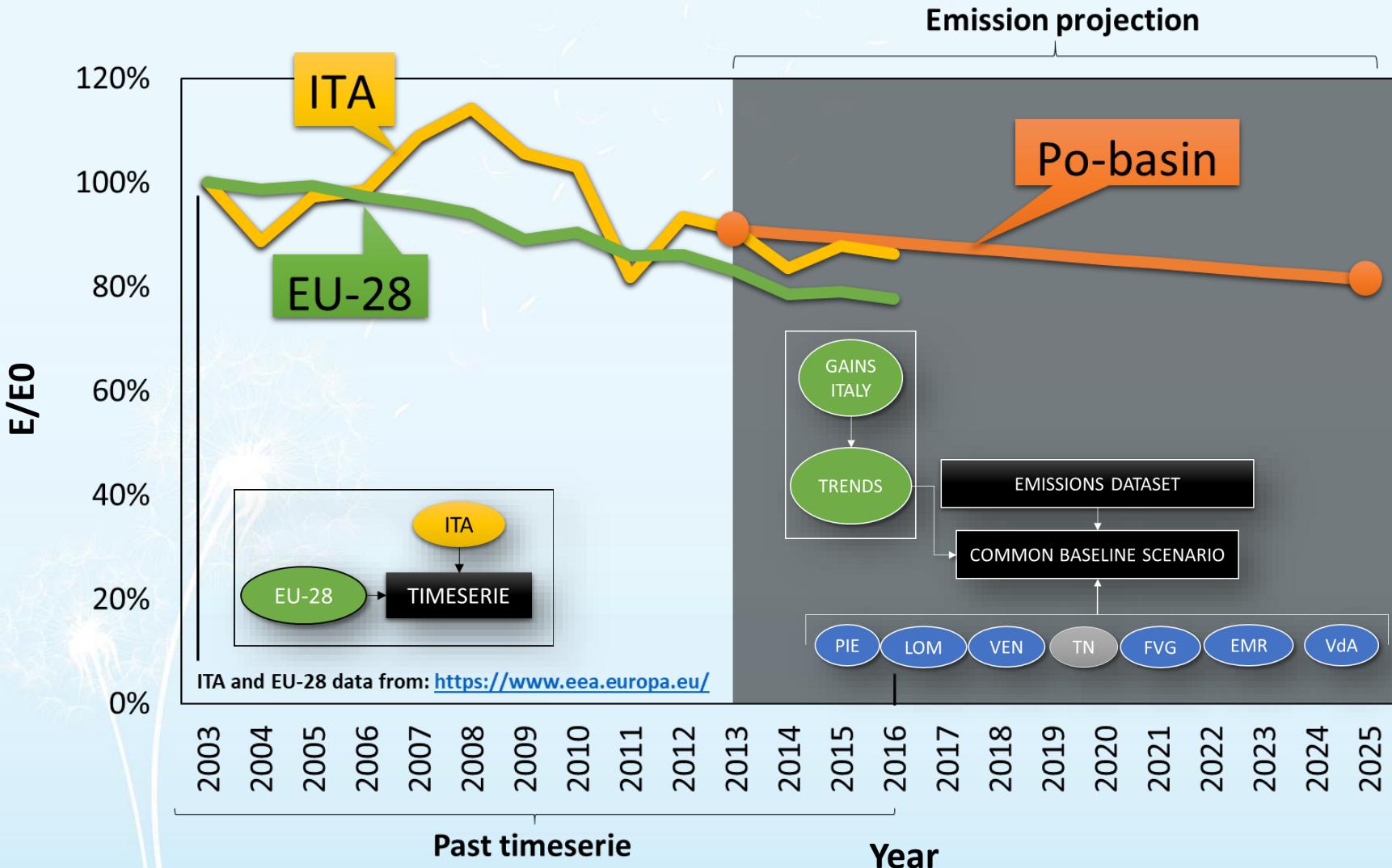


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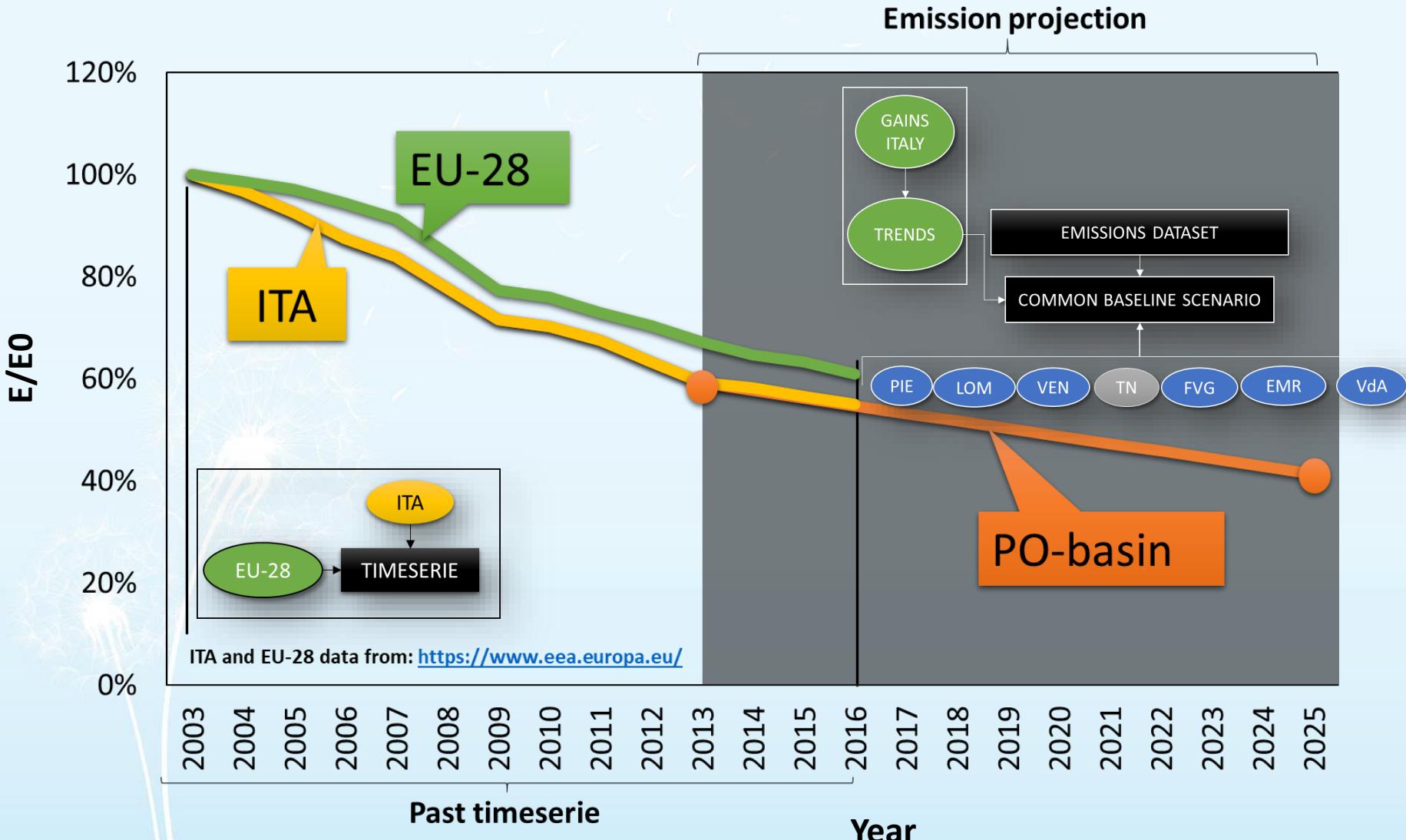
Emission density NH3 - 2013



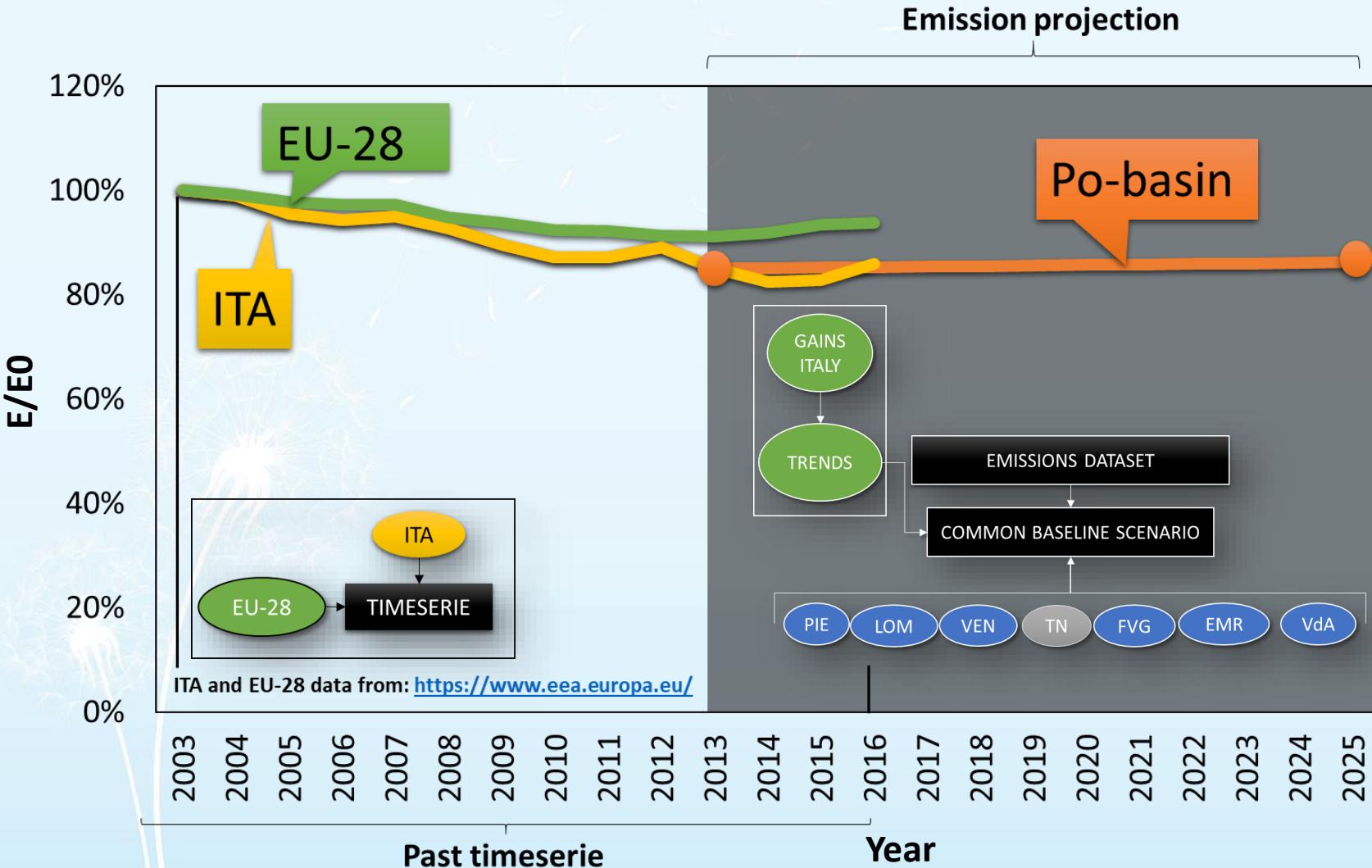
Baseline emission projection – PM10



Baseline emission projection – NOx



Baseline emission projection – NH3



Acknowledgments and references

- 6 people involved from ARPA Lombardia

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Elisabetta Angelino (AQ Emission Thematic Pillar)

- 13 reference partners contacted in the project

Monica Clemente (ARPA Piemonte), Erika Baraldo (ARPA Veneto), Silvia Pillon (ARPA Veneto), Giordano Pession (ARPA Valle d'Aosta), Alessandra Petrini (ARPA Friuli Venezia Giulia), Fulvio Stel (ARPA Friuli Venezia Giulia), Laura Pretto (Provincia autonoma di Trento), Elisa Mallochi (Provincia autonoma di Trento), Simona Maccaferri (ARPA Emilia Romagna), Chiara Agostini (ARPA Emilia Romagna), Rahela Zabkar (ARSO Slovenia), Damijan Bec (ARSO Slovenia), Massimo Guariento (Provincia autonoma di Bolzano)



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ARSO ENVIRONMENT
Slovenian Environment Agency

