E-Reporting

E-Reporting

H: air quality plans

Code, name, status, pollutants covered, date of the official adoption, timetable of implementation…

I: source apportionment

Regional, urban and local background increment…

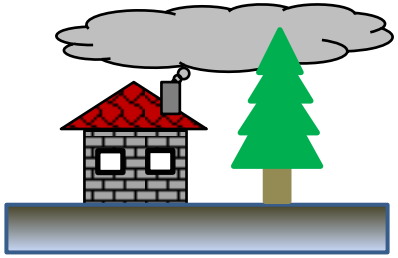
J: scenario for the attainment year

Reference year, baseline and projection scenarios…

K: measures

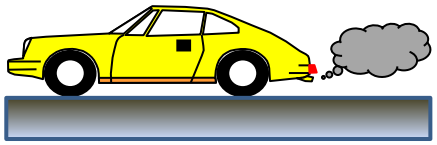
Sensitivity vs. Apportionment

$E_A^{PPM}, E_A^{NO_x}, E_A^{VOC}, E_A^{SO_2}, E_A^{NH_3}$



Source A

$E_B^{PPM}, E_B^{NO_x}, E_B^{VOC}, E_B^{SO_2}, E_B^{NH_3}$



Source B

ΔC : PM concentrations increment resulting from source A and B

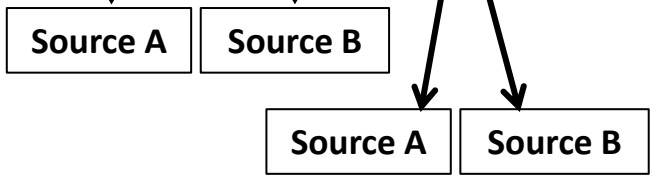
ΔC_A : PM concentrations increment resulting from source A

ΔC_B : PM concentrations increment resulting from source B

ΔC_{AB} : PM concentrations resulting increment from the interaction between sources A and B

Sensitivity: $\Delta C = \Delta C_A + \Delta C_B + \Delta C_{AB}$

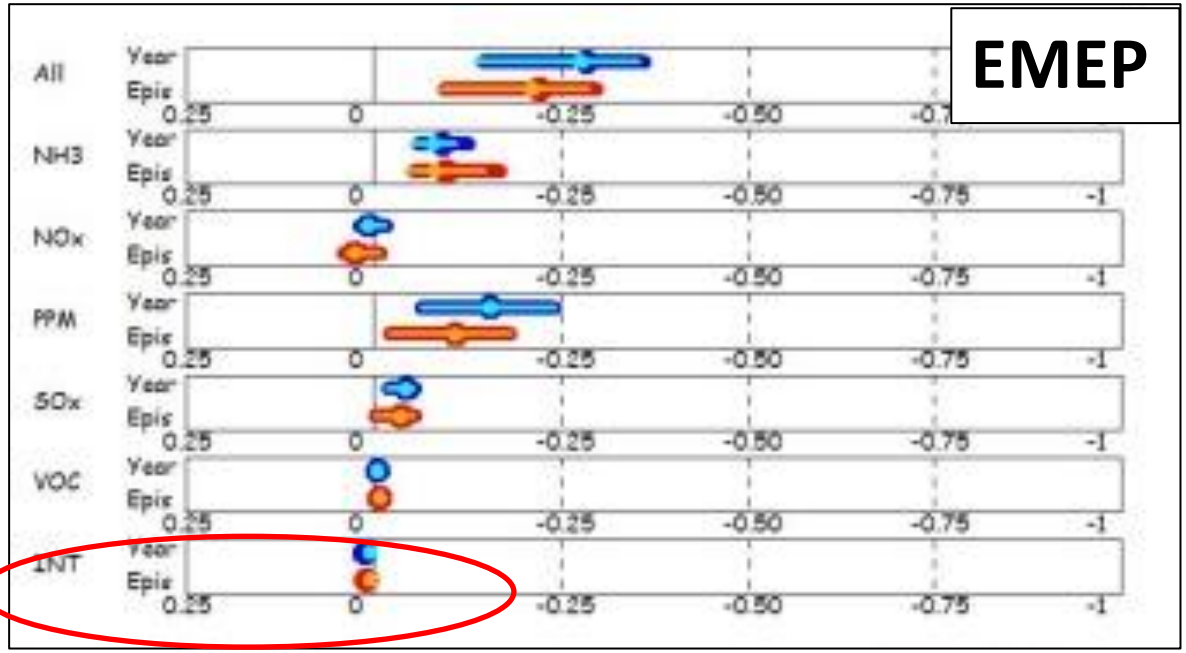
Apportionment:



Sensitivity vs. Apportionment

$$\Delta C = \Delta C_A + \Delta C_B + \Delta C_{AB}$$

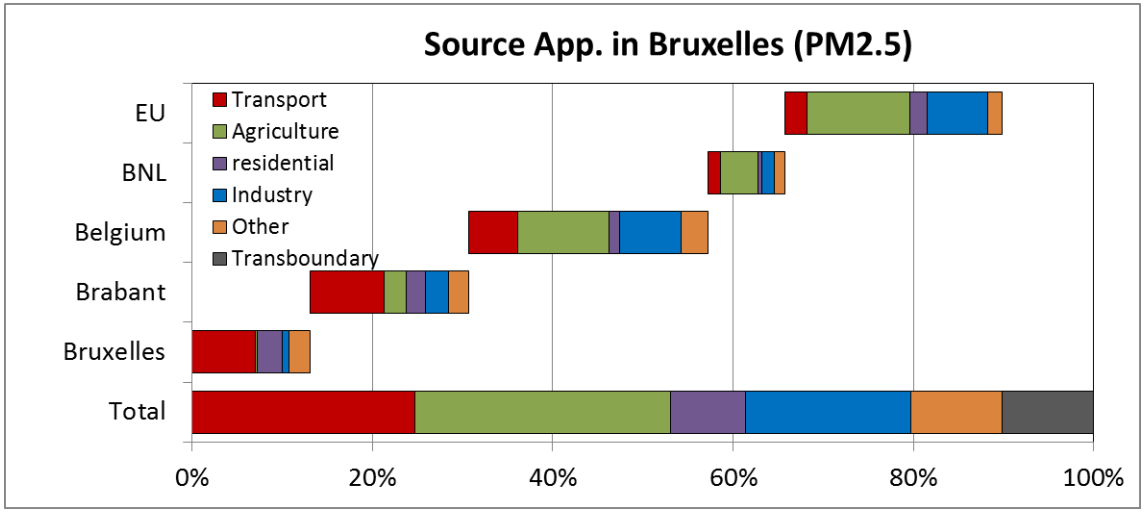
$$\Delta C = \Delta C_{PPM} + \Delta C_{NO_x} + \Delta C_{VOC} + \Delta C_{SO_2} + \Delta C_{NH_3} + \Delta C_{int}$$



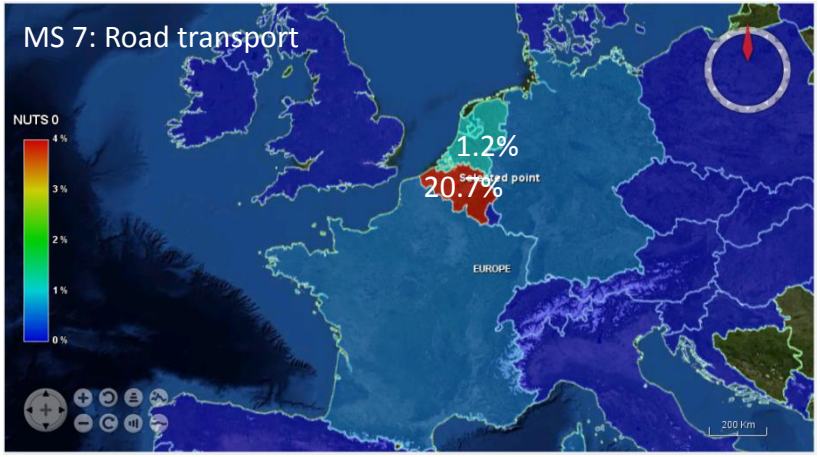
$\Delta C_{int} \approx 0$ for seasonal or yearly average **Sensitivity = Apportionment**

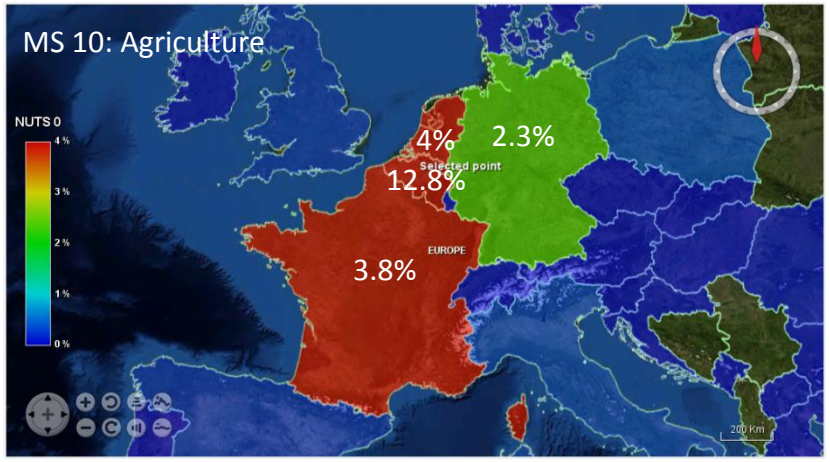
Example: Bruxelles

Source Apportionment



Governance control area





E-Reporting

(I) **Information on source apportionment (Article 13)**

(1) Code(s) of exceedance situation (link to G)

(2) Reference year

(3) Regional background: total

(4) Regional background: from within Member State

(5) Regional background: transboundary

(6) Regional background: natural

(7) Urban background increment: total

(8) Urban background increment: traffic

(9) Urban background increment: industry including heat and power production

(10) Urban background increment: agriculture

(11) Urban background increment: commercial and residential

(12) Urban background increment: shipping

(13) Urban background increment: off-road mobile machinery

(14) Urban background increment: natural

(15) Urban background increment: transboundary

(16) Local increment: total

(17) Local increment: traffic

(18) Local increment: industry including heat and power production

(19) Local increment: agriculture

(20) Local increment: commercial and residential

(21) Local increment: shipping

(22) Local increment: off-road mobile machinery

(23) Local increment: natural

(24) Local increment: transboundary

To be done next year:
future SHERPA development
WG4

E-Reporting

(J) **Information on the scenario for the attainment year (Article 13)**

(1) Code of exceedance situation (link to G)

(2) Code of scenario

(3) Code of air quality plan (link to H)

(4) Reference year for which projections are developed

(5) Reference year from which projections are started

(6) Source apportionment (link to I) EN 17.12.2011 Official Journal of the European Union L 335/105

(7) Relevant publication (data type 'Publication')

(8) Baseline: description of the emission scenario

(9) Baseline: total emissions in the relevant spatial unit

(10) Baseline: included measures (link to K)

(11) Baseline: expected concentration levels in the projection year

(12) Baseline: expected number of exceedances in the projection year

(13) Projection: description of the emission scenario

(14) Projection: total emissions in the relevant spatial unit

(15) Projection: included measures (Link to K)

(16) Projection: expected concentration levels in the projection year

(17) Projection: expected number of exceedances in the projection year

To be discuss with **WG4** or **WG1**

To be discuss with **WG2**

To be discuss with **WG4**

E-Reporting

(H) **Information on air quality plans (Article 13)**

(1) Provider (data type 'Contact Details')

(2) Change documentation (data type 'Documentation of Change')

(3) Air quality plan: code

(4) Air quality plan: name

(5) Air quality plan: reference year of first exceedance

(6) Competent authority (data type 'Contact Details')

(7) Air quality plan: status

(8) Air quality plan: pollutants covered

(9) Air quality plan: date of official adoption

(10) Air quality plan: timetable of implementation

(11) Reference to air quality plan (web link)

(12) Reference to implementation (web link)

(13) Relevant publication (data type 'Publication')

(14) Code of the relevant exceedance situation(s) (link to G)

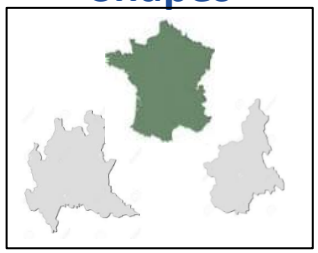
To be discuss with **WG4**

Next presentation (**11:00**)
is about
Abatement Measures
(Alexandra Monteiro)

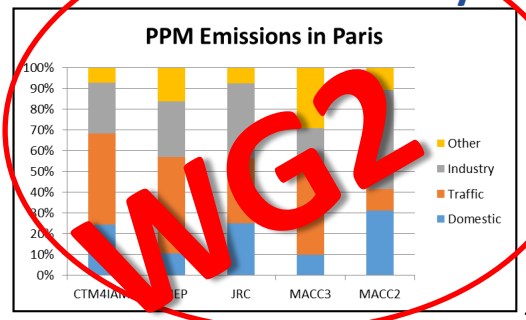

Hvala

AQM and Emission Inventory

Shapes



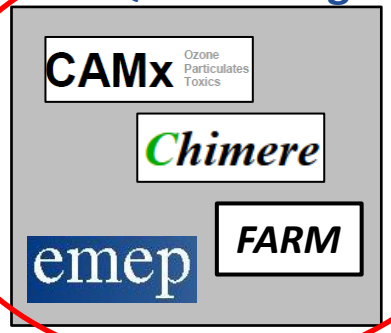
Emission Inventory



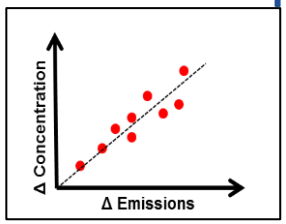
WG2

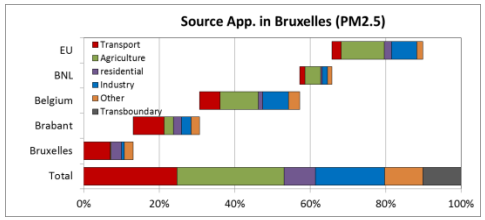
SHERPA

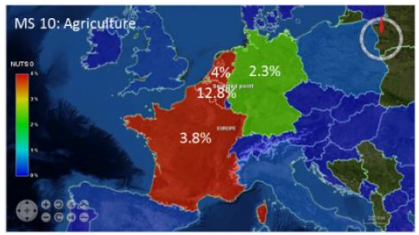
AQ Modelling



S/R Relationships





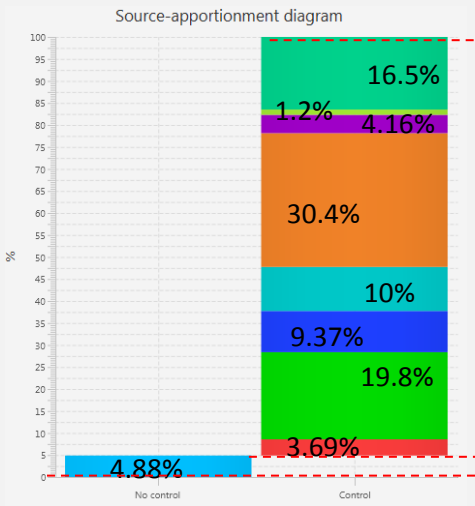


WG3

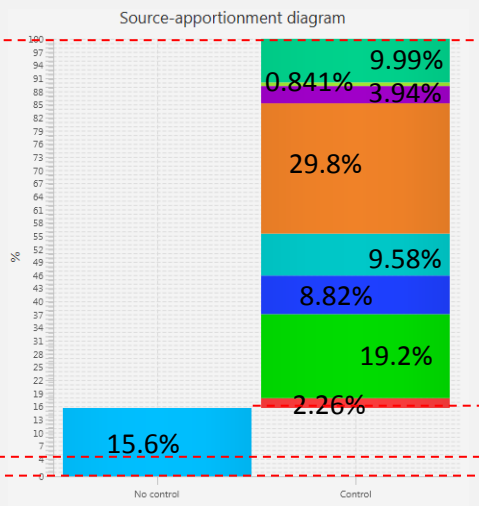
Reduction (or Tagged) Areas

Reduction of:

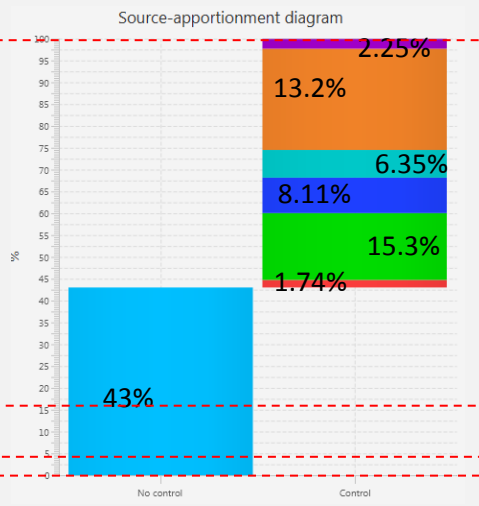
1. all European countries

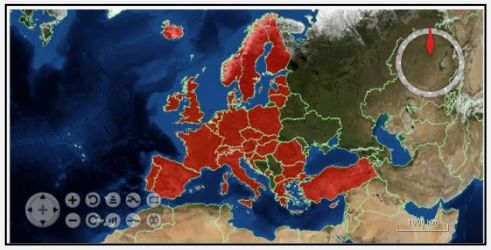


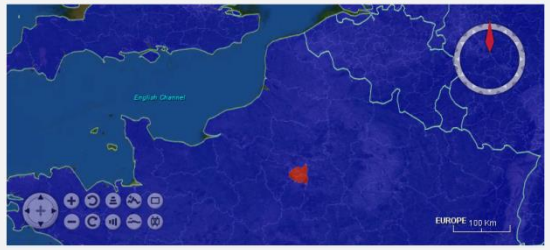
2. France



3. Paris



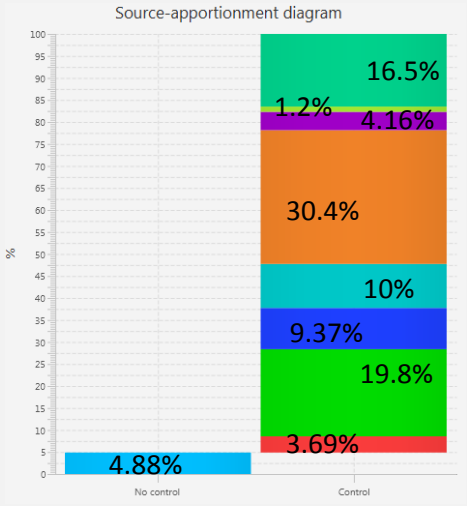




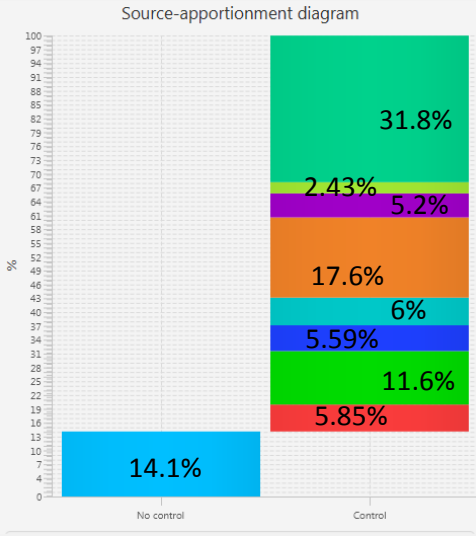
Reduction (or Tagged) Areas

Source apportionment

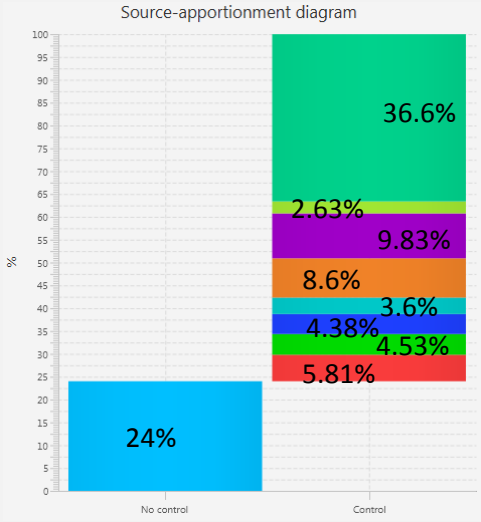
1. over Paris



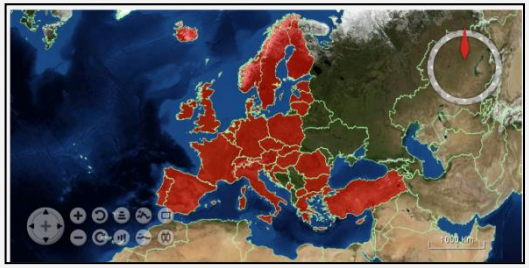
2. over Lens



3. over Calais



Reduction over all Europe

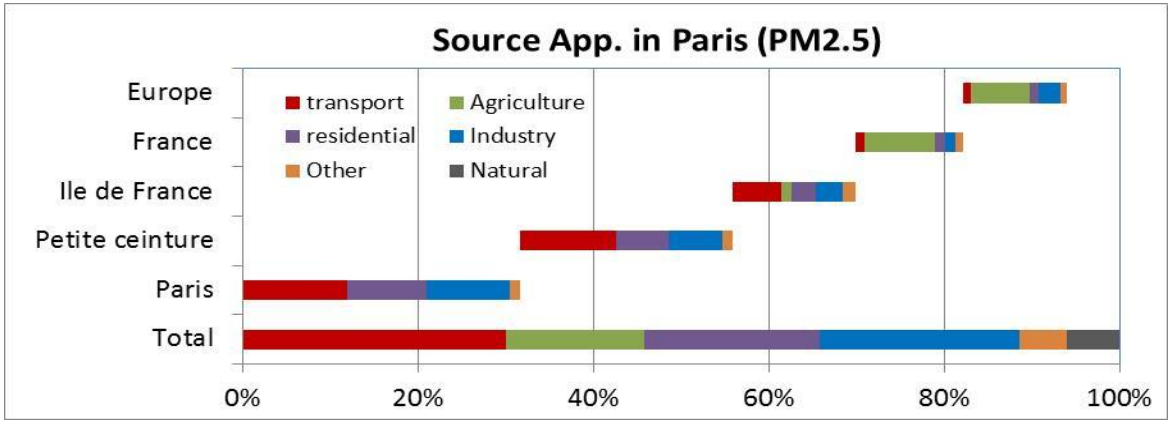


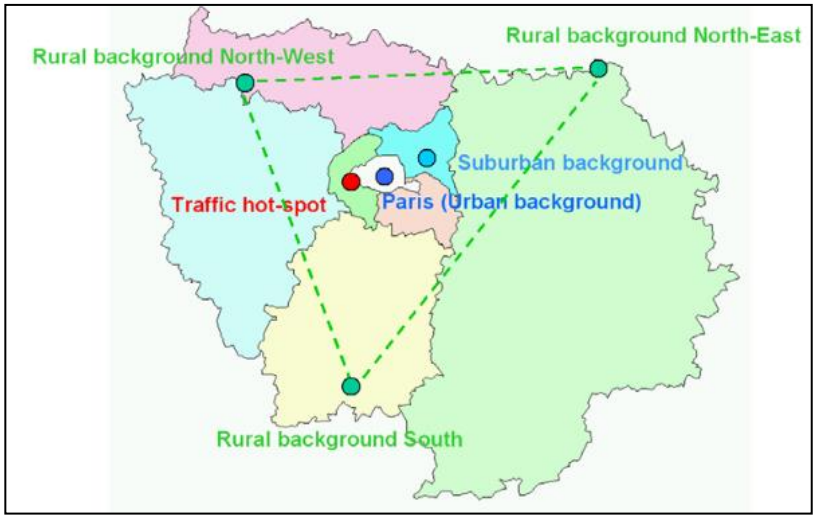
No control MS1 MS2 MS3 MS4 MS5
MS6 MS7 MS8 MS9 MS10

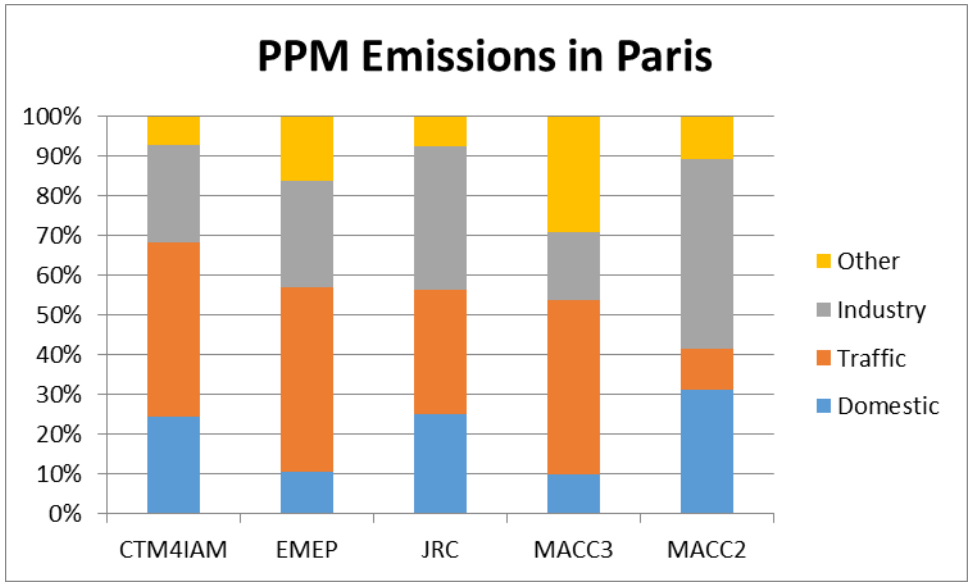
MS1: Energy production
MS2: Residential
MS3 and 4: Industrial production
MS5: Energy extraction and transport
MS6: Solvent
MS7: Road transport
MS8: Other mobile sources
MS9: Waste
MS10: Agriculture

Example: Paris

Source Apportionment

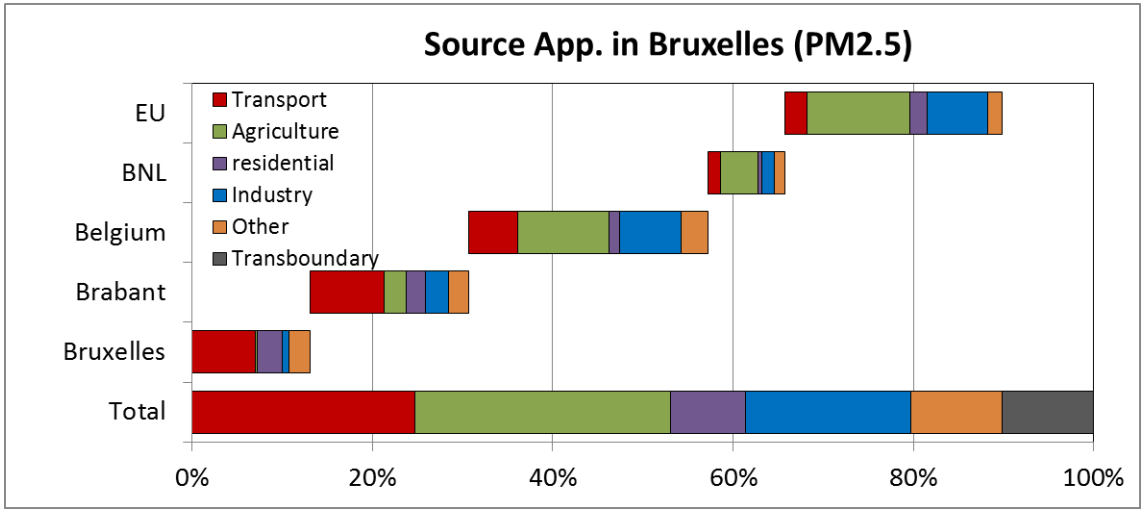




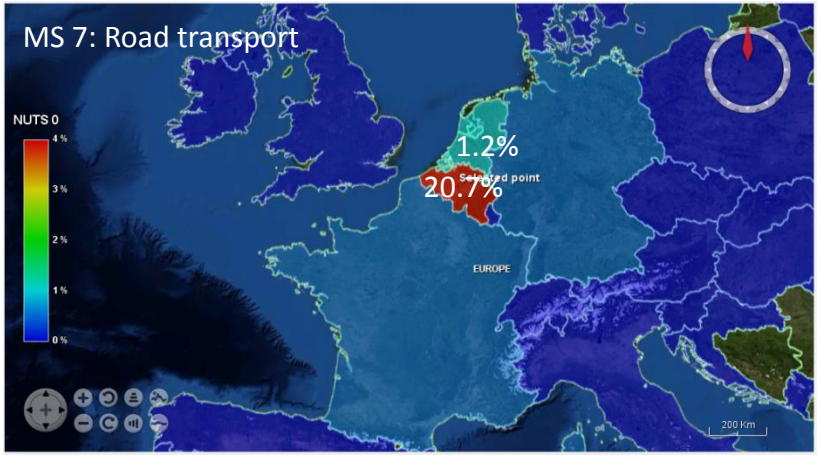


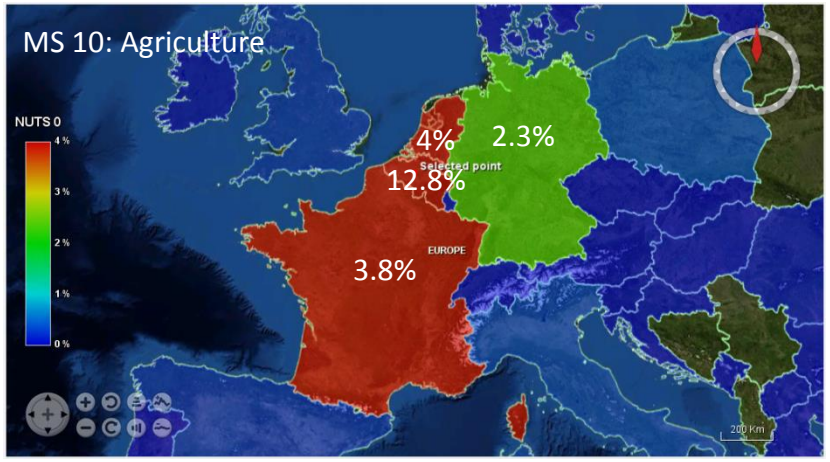
Example: Bruxelles

Source Apportionment



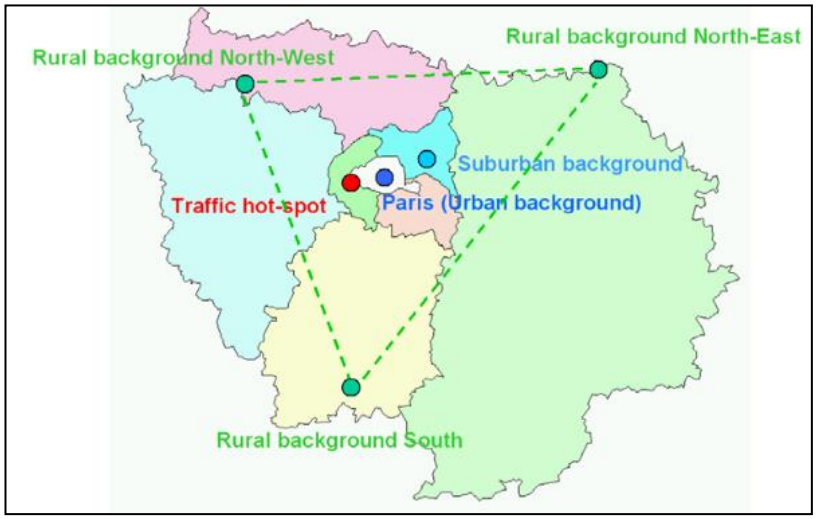
Governance control area

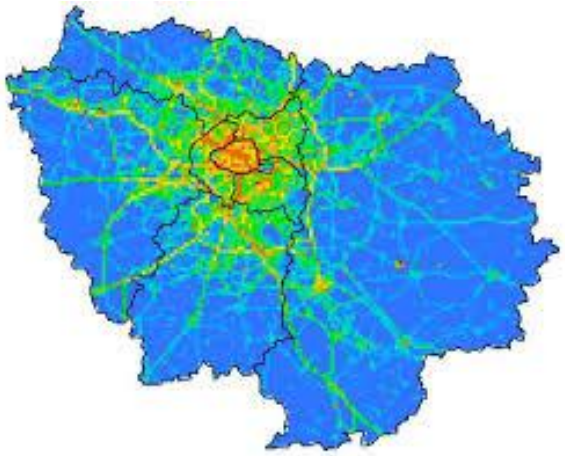


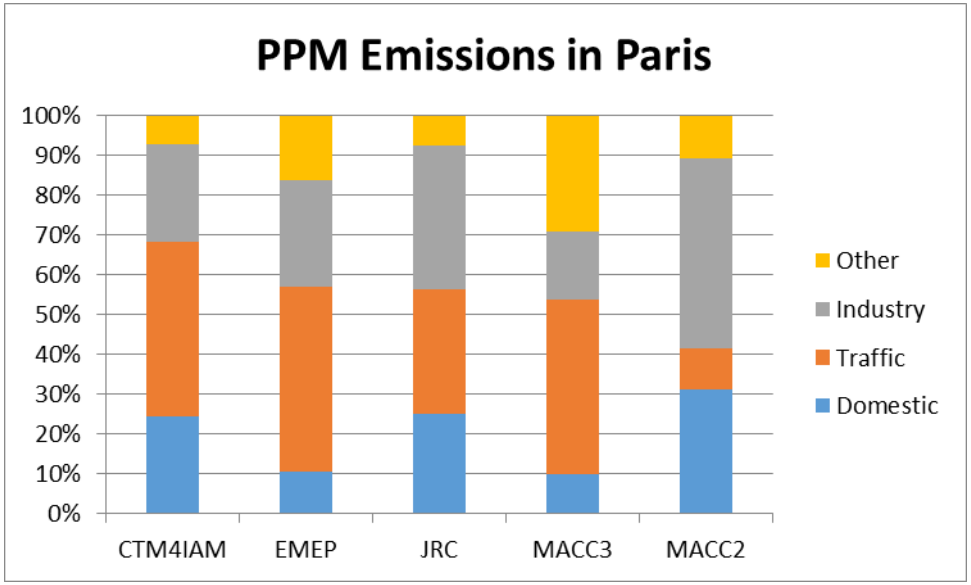


Urban site far from traffic (Paris)	Particles produced in Ile-de-France By the agglomeration	Imported particles
Particle matters PM2.5	**32%**	**68%**
Primary sources	• **Chemical reaction in the air** (7%) • **Wood fired heating** (7%) • **Road traffic** (8%) • **Industry** (3%)	• **Chemical reaction in the air** (34%). • Residential and industrial **heating** (16%) • **Road traffic** (6%) • **Other transports** including naval (5%) • **Industry** (3%) • **Natural sources** (2%)

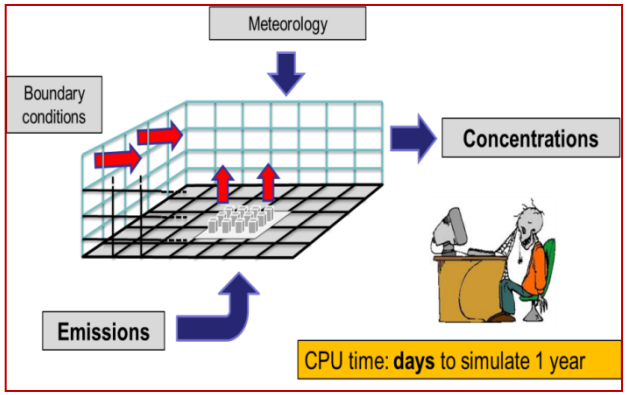
↑ Local actions ↑ National and European actions



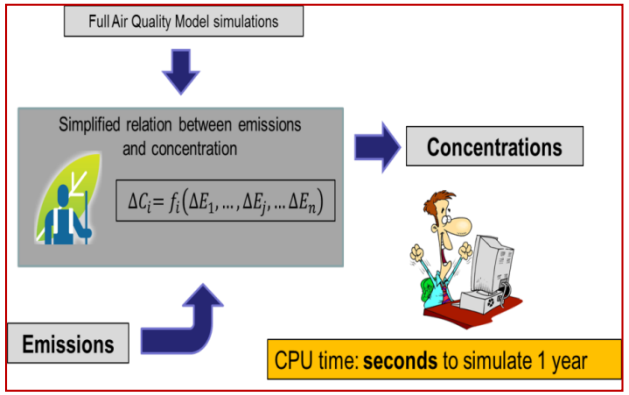


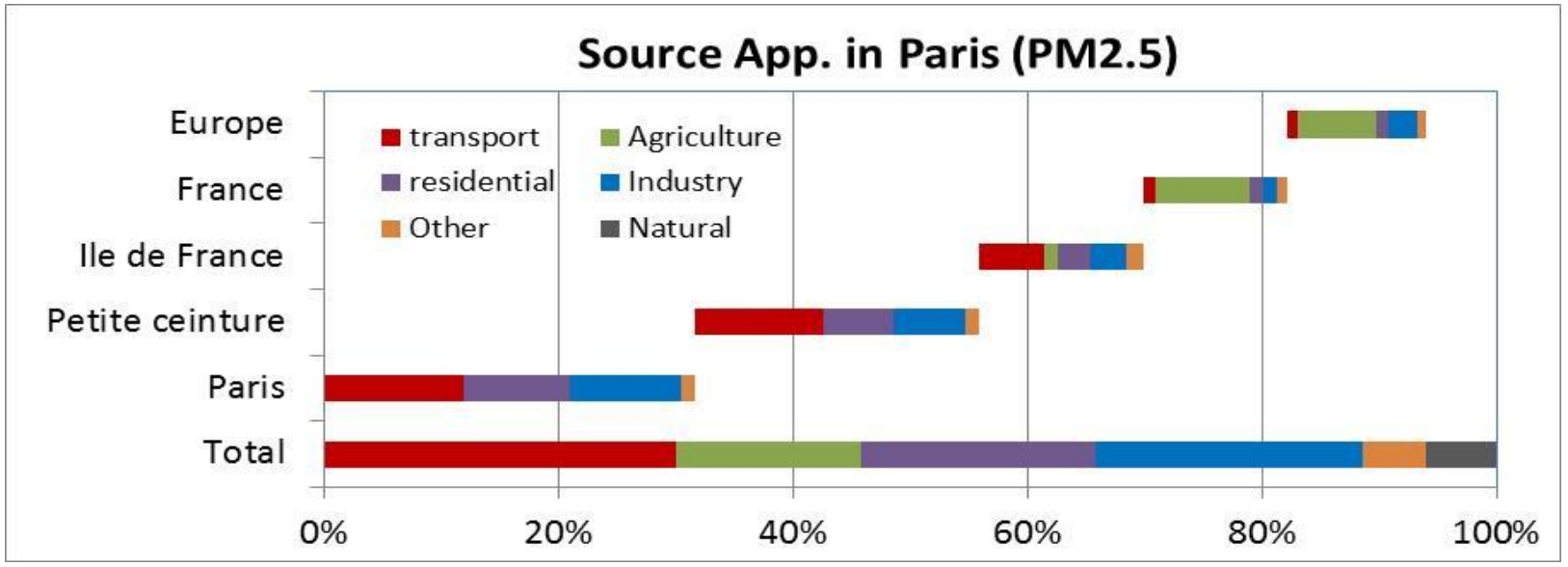


Complex Air quality models

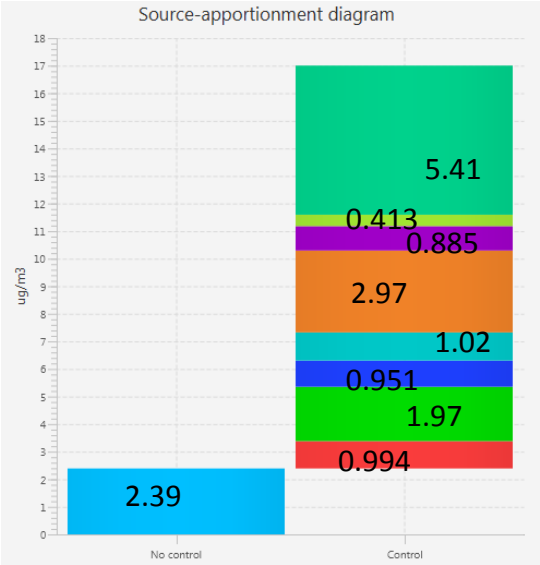


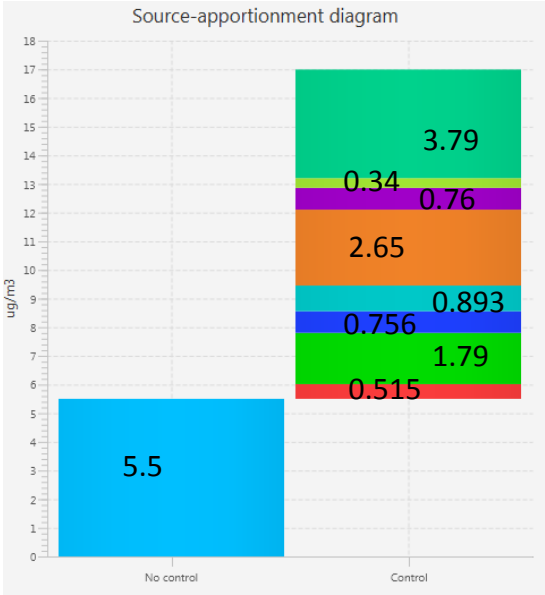
Simplified relationships

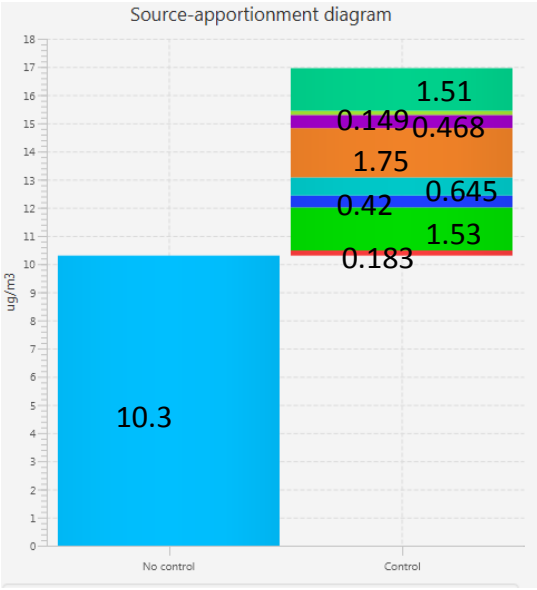




Source Contributions



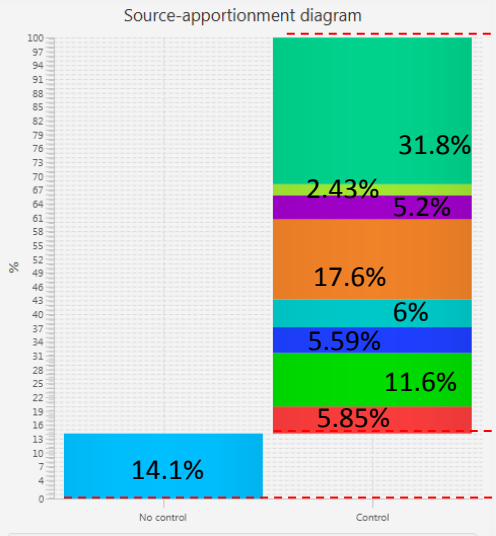




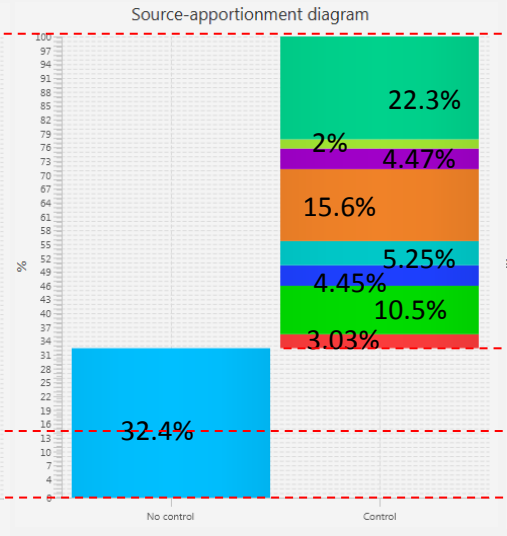
Source Contributions

Reduction of:

1. all European countries



2. regional area



3. Pas de Calais