



Collaborating in energy data exchange

Dealing with commercially confidential information

Presented by : Pierrick Yalamas

Torino, 19th November 2015



Co-funded by the Intelligent Energy Europe Programme of the European Union

OREGES Rhône-Alpes in a few words

- ▶ A **12-years old** regional energy and GHG emissions observatory
- ▶ A **network of organisations**, sharing data to assess energy consumption, energy production and GHG emissions both at regional and at local level
- ▶ Use of a **model in collaboration with the Air quality observatory** - consistent data
- ▶ It provides inventory data to public authorities to help them define, implement and monitor their regional and local SEAP. **Data updated on a yearly basis, available in various formats at municipal level**
- ▶ www.oreges.rhonealpes.fr
- ▶ <http://data4action.eu/fr/>

Estimating energy consumption and GHG emissions in the industry sector

- ▶ Disaggregating regional data on energy consumption in industry (by number of employees) is not very accurate
- ▶ Importance to use as much real data as possible
- ▶ Main source of real data
 - ▶ Obligation by national state for many industrial establishments to report air emissions, GHG emissions, and energy consumption (Directive 2014/95/EU)
 - ▶ Examples : <http://prtr.ec.europa.eu>
- ▶ Database obtained by the regional observatory
 - ▶ specific agreement with the delegation of the national state in the region
 - ▶ Need to follow some rules

Main rules to be applied dealing with commercial sensitive data

- ▶ A data result « R » is based on:
 - ▶ X data of energy consumption of an industry
 - ▶ And namely Y commercially sensitive data on energy consumption of an industry
 - ▶ other data (total energy consumption of this kind of industry on the territory,
- ▶ Rules to be used: result « R » should not be given if:
 - ▶ It represents less than 3 industries → ($X = Y = 1$ or 2)
 - ▶ It is built with a commercial-sensitive data representing more than 85% of the result
- ▶ X, Y, and corresponding energy consumption should be tracked during the calculation process

Some kinds of results

Energy consumption of the industry sector on a territory

-999

means : can not be given because of commercial sensitivity issue

	Coal	Fossil fuels	Gas	Electricity	Thermal renewa	Other	Total
Municipality 1	0	21	0	12	0		0
Municipality 2	0	10	0	0	0		0
Municipality 3	1	14	0	22	0		0
Municipality 4	0	10	0	4	1		0
Municipality 5	1	78	0	33	1		0
Municipality 6	1	10	22	92	0		0
Municipality 7	0	25	0	96	8		0
Municipality 8	21	94	-999	1044	9		0
Municipality 9	0	66	17	67	0		0
Municipality 10	1	36	0	30	0		0
Municipality 11	0	7	0	0	0		0
Municipality 12	0	11	0	7	1		0
Group of municipalities	24	381	-999	1406	20		0



Process to deduce missing figures

Dealing with « indirect » confidentiality management which figure to be masked ?

	Coal	Fossil fuels	Gas	Electricity	Thermal renewa	Other	Total
ipality 1	0	21	0	12	0	0	0
ipality 2	0	10	0	0	0	0	0
ipality 3	1	14	0	22	0	0	0
ipality 4	0	10	0	4	1	0	0
ipality 5	1	78	0	33	1	0	0
ipality 6	1	10	22	92	0	0	0
ipality 7	0	25	0	96	8	0	0
ipality 8	21	94	-999	1044	9	0	0
ipality 9	0	66	17	67	0	0	0
ipality 10	1	36	0	30	0	0	0
ipality 11	0	7	0	0	0	0	0
ipality 12	0	11	0	7	1	0	0
of municipalities	24	381	-999	1406	20	0	0

First conclusions

- ▶ **There is not only one solution**
- ▶ Choices of sectors / kinds of fuel / municipalities for which data will be masked
 - ▶ Should be discussed among the partners of the regional observatory
- ▶ Other points to be discussed
 - ▶ Exact scope of the data to be potentially disseminated (one time)

Feedback from Rhône-Alpes observatory

- ▶ Discussion during a steering committee
 - ▶ Merge industry and waste management sectors to overcome problems where there is an incinerator
 - ▶ Give priority
 - ▶ To energy consumption of all sectors → data on tertiary sector are not given when there is a confidentiality issue on industry
 - ▶ To energy consumption of industry sector for a group a municipality → when there is a confidentiality issue on a municipality, data on another is not given
- ▶ Development of a semi-automatic process to implement these decisions
 - ▶ More than one-month work development
 - ▶ Will be applied every year in a few days
- ▶ Test on more than 30 territories for several months : no bug identified yet

Feedback from Rhône-Alpes observatory : results on a territory

Applying directly the rules

	Total	Other	Coal	Fossil fuels	Gas	Electricity	Thermal renewable energy
All sectors	16	0	0	6	4	5	2
Residential	6	0	0	2	1	3	1
Tertiary	1	0	0	0	0	0	0
Agriculture	1	0	0	1	0	0	0
Industry and waste management	4	0	0	0	-999	1	0
Transportation	3	0	0	3	0	0	0

After dealing with indirect confidentiality issues

	Total	Other	Coal	Fossil fuels	Gas	Electricity	Thermal renewable energy
All sectors	16	0	0	6	4	5	2
Residential	6	0	0	2	1	3	1
Tertiary	1	0	0	0	-999	-999	0
Agriculture	1	0	0	1	0	0	0
Industry and waste management	4	0	0	0	-999	-999	0
Transportation	3	0	0	3	0	0	0

Conclusion

- ▶ A key point has been overcome
 - ▶ Data on energy consumption of industries can be given at local level
 - ▶ Without any problem of confidentiality
- ▶ No specific analysis is needed at each request of data
 - ▶ Spare time
 - ▶ Avoid mistakes
- ▶ To be seen as a key point of a quality management system of the regional observatory
- ▶ Start discussing with local authorities and industries about « free » data.

DATACTION

Thank You!

- ▶ For Further Information and support:
 - ▶ www.data4action.eu

- ▶ Pierrick Yalamas
 - ▶ RhôneAlpÉnergie-Environnement
 - ▶ Pierrick.yalamas@raee.org



DATACTION



Co-funded by the Intelligent Energy Europe
Programme of the European Union