



ALPSTAR Initial conference

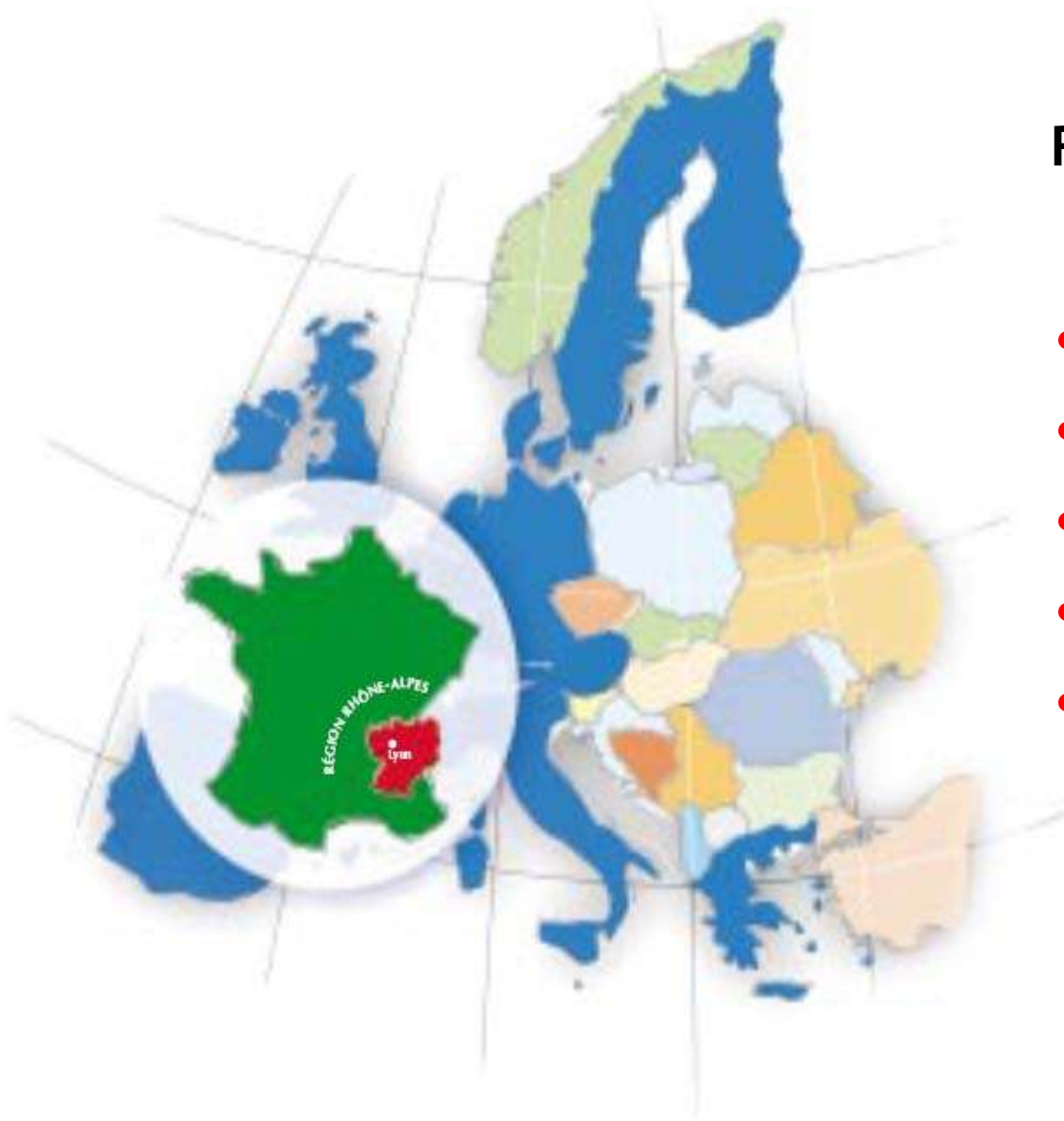
27th and 28th October 2011
Chambery, France

Toward Carbon Neutral Alps

Workshop session II

Energy scenarios for 2050: thinking ahead in the Alpine regions

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Rhônalénergie environnement



RHONE-ALPES REGION

- 5 650 000 inhabitants
 - 44 000 km²
 - 2 879 communes
 - 8 *Departements*
 - 3 urban areas :
Lyon,
Saint-Etienne,
Grenoble
-

Regional Air, Energy and Climate Plan

The plan bases itself on:

- **A diagnosis** on the questions of air quality, renewable energies, greenhouse gas emissions, energy consumption and the vulnerability of the territory in Climate changes
- **An exercise of prospective on horizons 2020 and 2050** on these various elements to determine the possible future of the region
- **The definition of objectives and orientations** ensuing from the previous exercises

Method

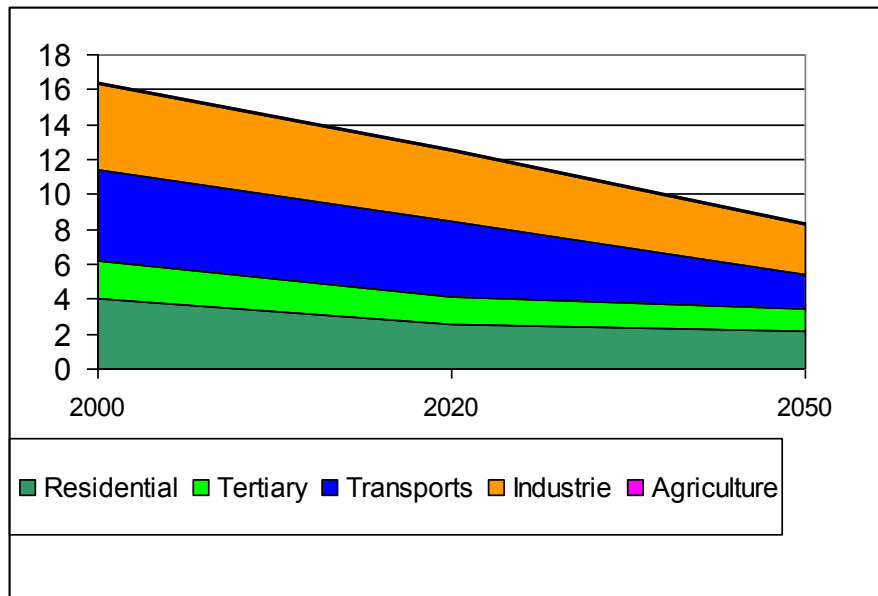
A governance representing all stakeholders : States,
Local authorities, Employees, Companies, civil society
(NGO Environmental, etc.)

5 working groups

- 3 sector-based approach workshops
 - Transport and Town planning ,
 - Building, housing and tertiary,
 - Industry, farming, forestry .
- 2 thematic workshops,
 - Adaptation to climate changes
 - Energetic production

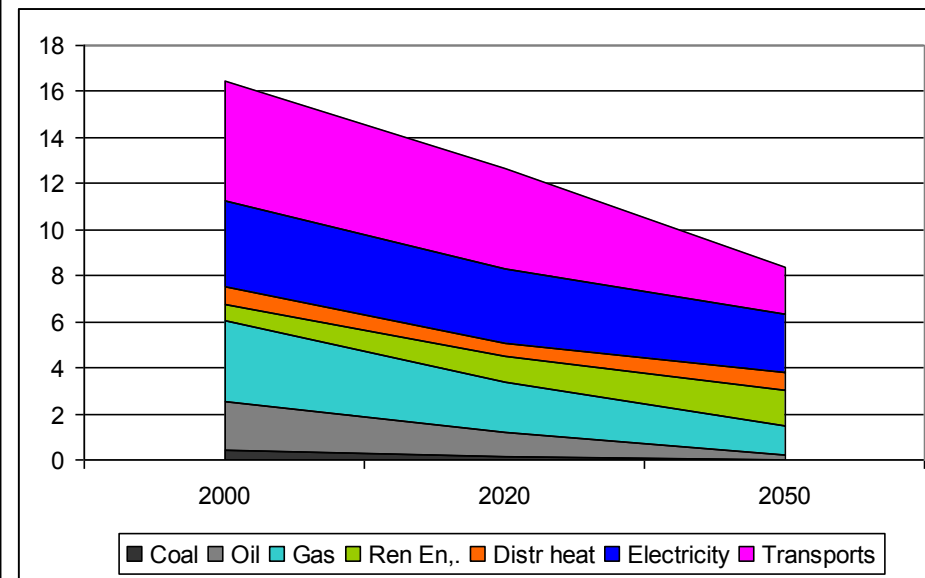
Scenario consumption factor 4

Consumption (MTOEq) by sectors



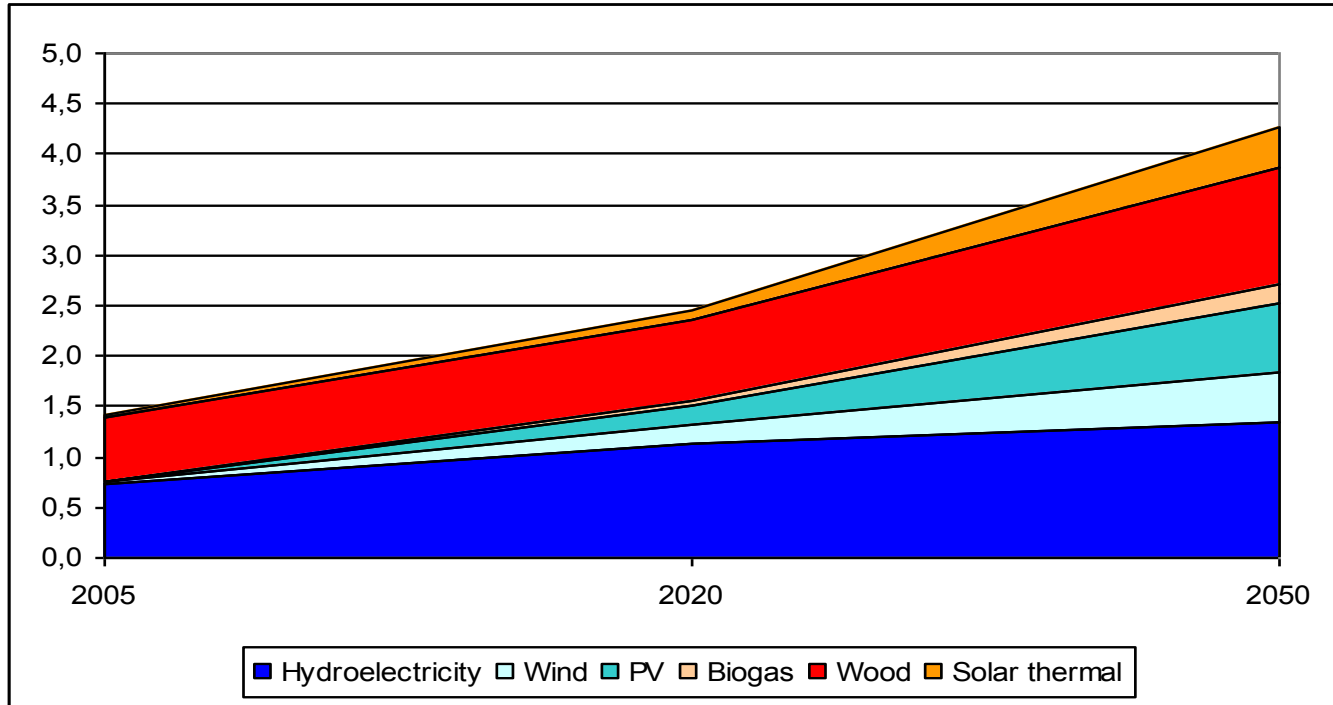
and

by energies



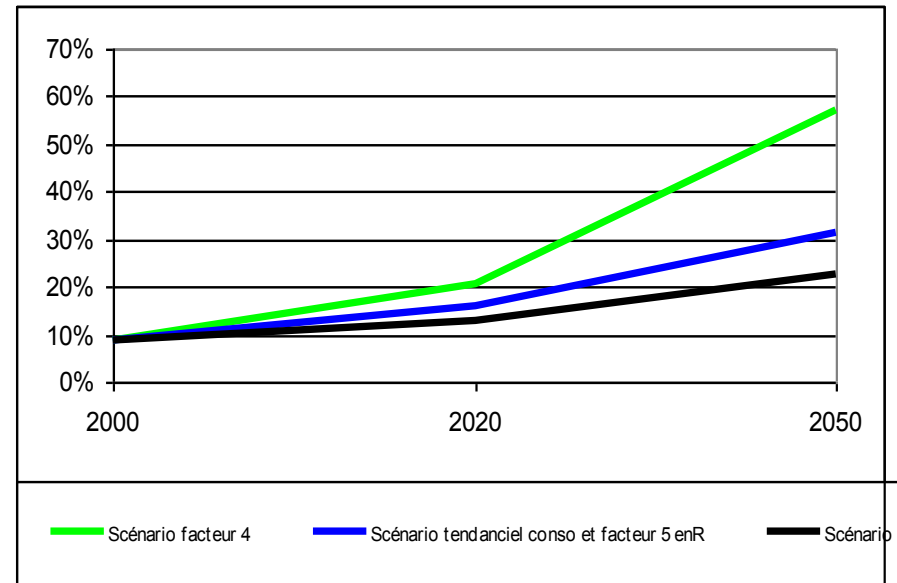
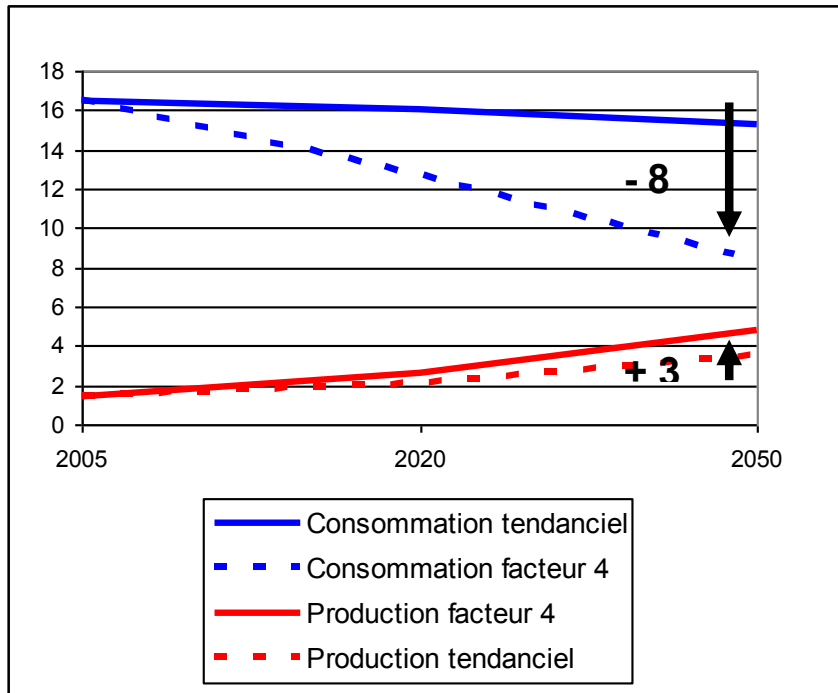
The most optimistic scenario divide the consumptions by 2 !

Scenario Renewable Energies production factor 5



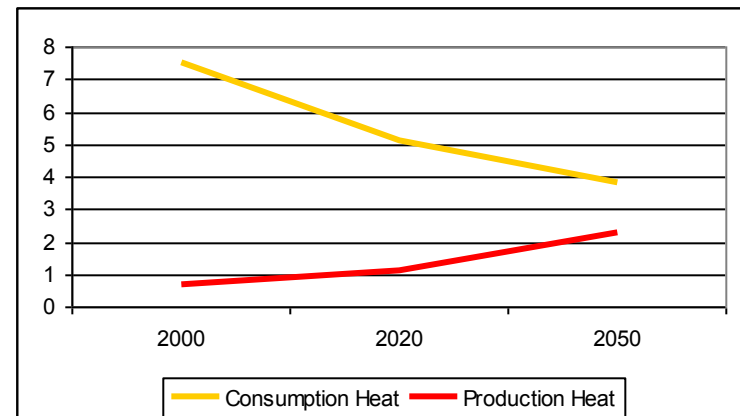
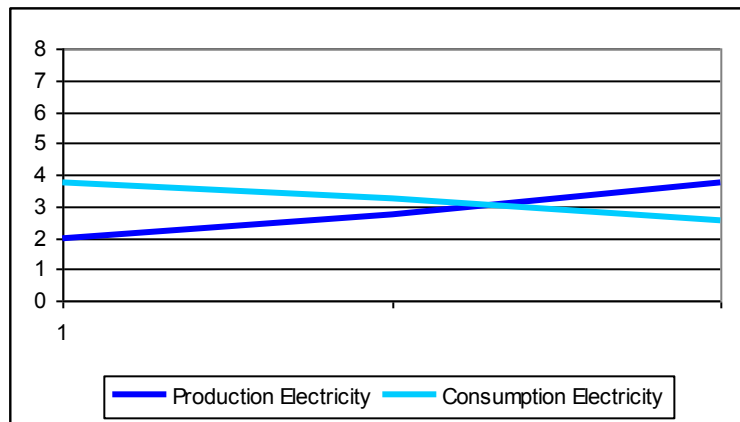
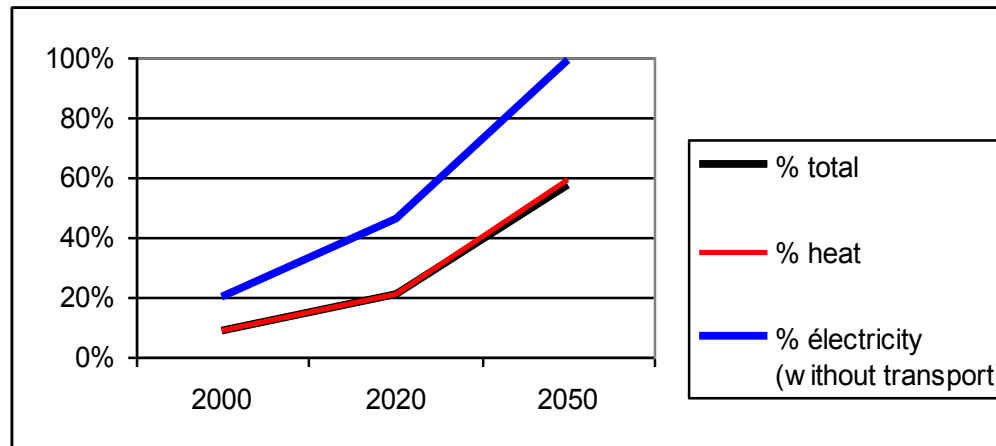
The most optimistic scenario increase the Renewable energy production by 3 !

Scenarii combination



Contribution of consumption reduction is necessary to reach a significant contribution of Renewable Energies

The situation is different for different uses



Objectives must be adapted to each territories

Regional objectives are the sum of territories contribution depending on

- Initial situation
- Air quality (Bad wood firing can have a great impact on dust emissions and air quality...)
- Evolution of population, level of life ...
- Local ressources (wood, wind, water, sun...)
- Local condition (mountain, altitude, transport ...)

Conclusion

Such Regional Plan are very important to :

- Take the measure of the objectives
- Have a vision of the stakes and the most important points

with local declination to

- Take into account local specificities
- Mobilise all ressources