International seminar on large scale balancing from Norwegian hydropower:

“Opportunities and challenges for large scale balancing power seen from a regional and local point of view”

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The Lister Region

- The Region has:
  - Valuable natural resources
  - Geographically strategically positioned
  - Strong process industry

- The region wants:
  - Local value creation
  - Local high qualified jobs
  - ... in a long term perspective
Norwegians loves natur!
• Onshore Wind
• Offshore Wind
• Big Hydro
• Small Hydro
• Pump Storage
• Grid
• Interconnectors
What’s important

Climate friendly x (Local) value creation

Invested nature
Our Industry

- Local high competent jobs
- Runs on local natural resources
  - 1/2 off our power consumption,
  - 1/3 of our power production
- Climate friendly production
  - More than 50% off our CO_2 emissions

Source: Institut für angewendte Ökologie (Öko-institut e.V.), 12.5.2011
Prices driven by wind generation (UK 2030)

Interruption generation

Electricity price

Prices spike at £7700/MWh
Our objectives

- Our aim is that the national energy and climate policy should make Norway a “green battery” for Europe.

- This is a long term goal and necessary legislations must be implemented to meet this goal.

- It is an absolute necessity that this new legislations must take regional interests in to the account:
  - When establishing new interconnectors
  - When strengthening the grid.
  - Make it more attractive to invest in hydro storage and installed capacity
  - Make it possible for regional industry to take advantage on renewable energy surplus
  - Local communities which is investing own natural resources should have a fair share of the value creation.