



Directorate-General
for Energy



Towards a low carbon future – The EU strategy and vision about the role of technology development

Fabrizio Barbaso
Deputy-Director General at DG ENERGY

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- The context: the EU energy policy
 - Objectives of the EU energy policy
 - » Sustainability
 - » Security of supply
 - » Competitiveness
 - « 20-20-20 Targets »
 - » Reduction of CO2 emissions by 20%
 - » Increase of share of renewables in energy consumption to 20%
 - » Increase of energy efficiency → Reduction of anticipated energy demand by 20%

● The SET-Plan – the technology pillar of the European energy policy

- **Core idea** behind the European Strategic Energy Technology Plan (SET-Plan): make low-carbon technologies affordable and competitive
- **Approach:** focus on European Industrial Initiatives (EII) to
 - » Strengthen industrial participation in energy research and demonstration,
 - » Boost innovation
 - » Accelerate deployment of low-carbon energy technologies
- **Target sectors:**
 - » Wind power
 - » Solar power
 - » Biomass (in particular, second generation biofuels)
 - » Smart electricity grids
 - » Carbon sequestration (CCS)
 - » More efficient and safer nuclear power plants
 - » Electric and hydrogen-powered vehicles
 - » Energy-efficient products and services



**Ongoing EU Project (Downvind project):
Off-shore wind park with 5 MW turbines
(Scotland, North Sea, 2009)**



**Ongoing EU Project:
Four 7 MW Wind turbines are in operation,
Seven additional turbines will follow in Spring 2010
(Estinnes, Mons, Belgium, 2009)**



**Ongoing EU Project:
Solar Power Plant
(Sevilla, Spain, 2009)**



**Ongoing EU Project:
2nd Generation bio-fuels plant
(Choren Plant in Germany, 2009)**



Smart-Cities Vision for 2015: From Zero-Energy buildings towards Zero-Energy cities





Ongoing EU Project: CCS in the North Sea (Sleipner Oil Field, 2008)

**12 more projects
are selected
in the European Recovery Plan
to start in 2010
and to be operational before 2015**



● The way forward

- Building up on these success stories, more results are needed!
- Joint efforts with industry to increase investments in technology development are crucial!
- Additional funding for better and cheaper energy technologies: estimated at around 50 billion EUR for the next 10 years (2010 – 2020)!

Thank you
for your
attention!

