



# EU Energy Roadmap 2050

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## Outline

- (1) EU context and background
- (2) Low Carbon Economy Roadmap 2050 (CLIMA)
- (3) Approach to the Energy Roadmap 2050 – what we're aiming for

# (1) EU context and background

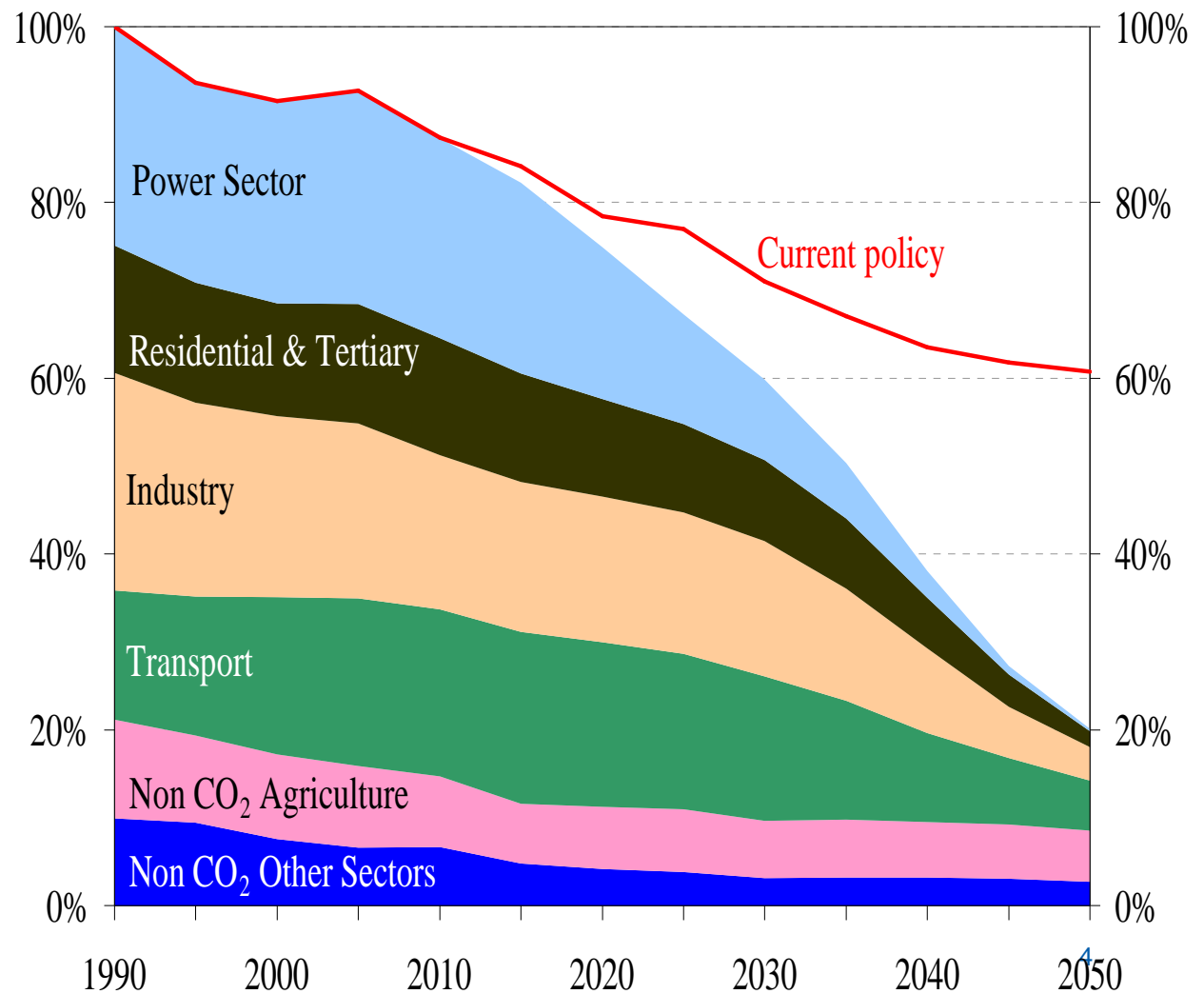
- European Council commits to GHG emissions reductions to 80-95% below 1990 levels by 2050 (Oct 2009)
- European Energy Summit (4 February 2011) confirms energy at top of political agenda
- European Council endorses key points in Commission's Energy 2020 strategy – “*Europeanisation*” of energy policy (Feb 2011):
  - » completion of internal market
  - » external coordination
  - » cooperation on both 2020 and 2050 goals
- Looks forward to elaboration of a low-carbon 2050 strategy – a framework for longer-term action in energy and related sectors
- Will keep developments under regular review

## (2) Low-Carbon Economy Roadmap (8 Mar 2011)

Basis of scenarios  
80% domestic  
reduction in 2050

### Efficient pathway:

-25% in 2020  
-40% in 2030  
-60% in 2040



## (2) Low carbon Economy Roadmap - sectoral milestones

<b>GHG reductions compared to 1990</b>	<b>2005</b>	<b>2030</b>	<b>2050</b>
<b>Power (CO<sub>2</sub>)</b>	<b>-7%</b>	<b>-54 to -68%</b>	<b>-93 to -99%</b>
<b>Industry (CO<sub>2</sub>)</b>	<b>-20%</b>	<b>-34 to -40%</b>	<b>-83 to -87%</b>
<b>Transport (incl. CO<sub>2</sub> aviation, excl. maritime)</b>	<b>+30%</b>	<b>+20 to -9%</b>	<b>-54 to -67%</b>
<b>Residential and services (CO<sub>2</sub>)</b>	<b>-12%</b>	<b>-37 to -53%</b>	<b>-88 to -91%</b>
<b>Agriculture (non-CO<sub>2</sub>)</b>	<b>-20%</b>	<b>-36 to -37%</b>	<b>-42 to -49%</b>
<b>Other non-CO<sub>2</sub> emissions</b>	<b>-30%</b>	<b>-72 to -73%</b>	<b>-70 to -78%</b>

### **(3) Energy Roadmap 2050 – concept**

- Sectoral roadmaps – more depth on global and EU context, dynamics in the sector, interplay of decarbonisation and other objectives
- Energy Council - Energy Roadmap 2050 should illustrate possible future fuel mixes and policy measures required to get there
- Scope – not just power sector
- Scenario analysis
- Purpose is not to choose one scenario but to apply long term perspective to EU energy policy

### **(3) Energy Roadmap 2050 – focus**

- Focus on getting the best out of Europe/ “cost of non-Europe” in transition to low-carbon energy system
- Encourage better understanding of implications for markets and of choices made by Member States
- Establish long term perspective across the energy policy agenda
- Signal for investors, significant investment needed

### (3) Energy Roadmap 2050 – first policy implications

**Some policy actions make sense in a broad range of scenarios, including:**

- RTD and innovation
- Energy efficiency
- Pan-European energy network
- Fully functioning internal energy market



### **(3) Energy Roadmap 2050 – preparation**

- Public consultation, other stakeholder contributions
- On going review stakeholder scenarios and position papers
- Advisory Group – independent experts (report)
- Discussions in Informal Energy Council, 2-3 May 2011 and Energy Council 10 June 2011
- DGs for Energy, July, focus on technology
- Impact Assessment – scenarios
- Planned adoption: November
- Priority of Danish Presidency

### (3) Energy Roadmap 2050 – information

- [http://ec.europa.eu/energy/strategies/2011/roadmap\\_2050\\_en.htm](http://ec.europa.eu/energy/strategies/2011/roadmap_2050_en.htm) - see “Energy Roadmap 2050 - State of Play”



Thank you for your kind attention