



Energy research Centre of the Netherlands



Introduction to group discussion Strategic Planning

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Koen Schoots



Strategic Planning - Goals

- Identify technologies critical for meeting European Climate and Energy goals
- Quantify potential and related impact of these technologies on the EU policy goals
- Assess impact of research and demonstration investments on technology developments and further on related benefits to EU policy goals.

Perspectives from the ATEsT consortium

Strategic Planning - Issues

- *Technology performance and development potential*
 - Technology costs: (upfront) investment, O&M etc.
 - Technology environmental performance
 - Technical performance
- *Expected cost reduction*
 - Potential for cost reduction: (function of time or deployment)
 - Ultimate cost level
 - Cost effectiveness (€/ton avoided CO₂)
 - Total investment required to make technology competitive with incumbent technologies
 - Potential for (further) technical improvements

Strategic Planning - Issues

- *Technology deployment*
 - Maximum potential of a given technology and pathway
 - Time horizons
 - Regional specificities
 - Impact on the energy system structure

Strategic Planning - Issues

- *Policy indicators*
 - Potential impact of political decisions and overall
 - Share of renewable energy
 - Efficiency (overall, per sector, water, energy, land, etc.)
 - Employment security of supply
 - Economics
 - Societal costs
 - System boundaries (Competitiveness regional industry, health care)
 - Shifting technology options
 - Effect different support types on deployment and cost development

Questions for the discussion

- What energy technology policy questions are relevant?
- What tools are needed to answer these questions?
- How does the ATEsT framework fit the needs to support decision making on the SET-Plan?
- Which geographical levels (EU, MS, regions) should be addressed by the modelling framework?
- How do the specified tools relate to the possibilities models have to offer, i.e. are there models available to provide answers to specific policy questions?