Energy Technology Perspectives: Collaboration on Energy Systems Transition

Gaps and Strategic Opportunities in International Collaboration on Low-Carbon Energy Technologies Workshop

27 February, 2014
IEA’s programme of work in energy technology

- Where do we need to go?
- Where are we today?
- How do we get there?
Energy Technology Perspectives (ETP) 2014

Carbon-neutral scenario (CNS) for the five Nordic countries

Note: Figures and data that appear in this report can be downloaded from www.iea.org/ftp/nordic
Understanding where we are

- IEA work on energy indicators
  - Energy Efficiency Indicators
    - Long history in the IEA
    - Recent push for better data
      - ID investment opportunities
  - Energy Technology and R&D indicators
    - Analysing Development and Deployment of Clean Energy Technologies
    - Emerging work stream
      - Defining solid and insightful indicators
      - Developing novel data sources
Two Complementary EE Indicators manuals being developed in parallel

- Development of indicators: to provide guidance and methodological tools to develop energy and energy efficiency indicators

- Statistics for indicators: to provide guidance on how to collect the data needed for those indicators
  - Includes a compilation of good and best existing practices from across the world

- Available from March 2014
Tracking Clean Energy Progress

Renewable power

Nuclear power

Gas-fired power

Coal-fired power

Carbon capture and storage

Industry

Electric and hybrid-electric vehicles

Biofuels

Fuel economy

Buildings

Smart grids
IEA Technology Roadmaps
Mapping where we need to go ...

2009

2010

2011

2012

2013

2014

• Energy Storage
• Hydrogen
... By building consensus among all stakeholders

- Goal to achieve
- Milestones to be met
- Gaps to be filled
- Actions to overcome gaps and barriers
- What and when things need to be achieved
India Cement Roadmap: Regional Vision Implementation

Technology Roadmap partners

In consultation with

Industry supporters

Principal supporter

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International Low-Carbon Energy Technology Platform

- Created in 2010 by the G8 and IEA Ministers
- IEA key tool for multilateral engagement with emerging and developing countries
- Entirely VC-funded

Two main streams of work:

- **Dialogue workshops**: sharing international best practice for deployment of low-carbon technologies
- **How2Guides**: series of manuals for development of technology roadmaps at the national level
More than 1,300 research projects to date
Linking public and private – IEA Members and Partners
6,000 scientists and experts
Nearly 500 government agencies, research organisations, universities, energy companies, consultants
Consistent data set for more than 50 energy supply and demand technologies

Free access on www.iea-etsap.org
# ETP 3-years Publication Programme

## ETP 2014

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## Partner Country

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* Each year included topics are: Low-carbon Generation, Fossil Fuels, Energy Demand, System Integration, and Policy and Finance
What is ETP?

It’s not just a book!

Energy Technology Perspectives 2012
Pathways to a Clean Energy System

Energy Technology Perspectives 2014

Tracking Clean Energy Progress

A wealth of ENERGY STATS
at your fingertips

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and iPad on iTunes and AppStore

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Analysis and modelling framework