Energy Technology Perspectives 2015: Mobilising Innovation to Accelerate Climate Action

Asia Clean Energy Forum
Manila, 18 June 2015
Jean-François Gagné
Energy Technology Policy Division,
International Energy Agency
Energy innovation is crucial in making the 2DS possible.

Energy innovation has already yielded solutions, but needs support and guidance to deliver on its promises.
Clean energy is not ramping up fast enough - Despite some progress

<table>
<thead>
<tr>
<th>Technology</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renewable power</td>
<td>Upward</td>
</tr>
<tr>
<td>Nuclear power</td>
<td>Upward</td>
</tr>
<tr>
<td>Gas-fired power</td>
<td>Upward</td>
</tr>
<tr>
<td>Coal-fired power</td>
<td>Downward</td>
</tr>
<tr>
<td>Carbon capture and storage</td>
<td>Upward</td>
</tr>
<tr>
<td>Industry</td>
<td>Upward</td>
</tr>
<tr>
<td>Fuel economy</td>
<td>Upward</td>
</tr>
<tr>
<td>Electric and Hybrid electric vehicles</td>
<td>Upward</td>
</tr>
<tr>
<td>Buildings</td>
<td>Upward</td>
</tr>
<tr>
<td>Smart grids</td>
<td>Upward</td>
</tr>
<tr>
<td>Co-generation and district heating and cooling</td>
<td>Downward</td>
</tr>
</tbody>
</table>

Evidence shows that despite continued progress in many areas, for the first time none of the technologies are in line with 2DS goals
The right support depends on the maturity of the technology and the degree of market uptake.
Building innovation capacity is key to successful technology deployment

Cooperation between industrial and emerging economies could be a win-win solution
Understanding local circumstances is essential to support innovation where it has the most impact.
IEA Implementing Agreements (IAs)

More than 6,000 scientists and experts representing 500 government agencies, research organisations, universities, energy companies, industries, businesses, and consultants. Over 1,400 projects completed to date.
Thank you

Explore the data behind ETP
IEA Energy Technology Activities

- Where do we need to go?
- Where are we today?
- How do we get there?
IEA Technology Roadmaps
Mapping where we need to go...


Q2 2015
Hydrogen
Fuel Cells

2016
Smart Grid
Update

Low-Carbon Technology Roadmaps
... 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
IEA Global Roadmap

Engages with public and private stakeholders to establish the barriers to technology deployment and the policies needed

IEA Technology Platform How2Guide

Provides practical information for policy makers and planners to establish a national or regional technology-specific roadmap
Investment in our future pays off...

...and it is cost effective to make the transition