

Energy Matters

How COP21 can shift the energy sector onto a low-carbon path that supports economic growth and energy access

Dr. Fatih Birol
Executive Director
International Energy Agency
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Energy is at the heart of the climate challenge



- The energy sector accounts for at least two-thirds of global greenhouse gas emissions
- Signals turn green in time for Paris COP21
 - ➤ Pledges of 175+ countries account for nearly 95% of energy-related emissions
 - > Renewables capacity additions at a record-high of 130 GW in 2014
 - Fossil-fuel subsidy reform, led by India & Indonesia, reduces the global subsidy bill below \$500 billion in 2014
- IEA Energy & Climate Statement, endorsed by all IEA member countries on eve of COP21
- Low energy prices bring gains to consumers, but must not be allowed to undermine the transition to a cleaner energy future

The coverage of climate pledges is impressive





Climate pledges for COP21 are consistent with a temperature rise of 2.7 °C, with investment needs of \$13.5 trillion in low-carbon technologies & efficiency to 2030

IEA messages to COP21



To shift the energy sector onto a low-carbon path that supports economic growth & energy access:

- 1. Take 5 key actions, led by energy efficiency & renewables, to peak then reduce global energy emissions
- 2. Use the Paris Agreement to drive short-term actions consistent with long-term emission goals
- 3. Accelerate energy technology innovation to make decarbonisation easier and even more affordable
- 4. Enhance energy security by making the energy sector more resilient to climate change impacts

2015 IEA Ministerial endorsed "3 pillars" to modernise the IEA



- 1. "Opening the doors of the IEA" to the emerging economies
 - 29 members at present plus Chile & Mexico in accession
 - China, Indonesia & Thailand have become IEA Association countries, the 1st step in an ongoing process of strengthening engagement
 - Many other countries are pursuing Association status
- 2. Greater emphasis on energy security, including gas supply security, broadened oil security, electricity security
- 3. IEA to put more focus on clean energy technologies & become "Central Bank" of energy efficiency

Conclusions



- Cost-effective action is possible in the energy sector that could lead global emissions to peak around 2020
- COP21 must send a strong signal to the energy sector
 - Long-term goal; 5-year reviews; and a strong tracking framework
- More focus needed on energy technology innovation & building energy sector resilience to climate impacts
- The IEA stands ready to support implementation, bringing together data, modelling, policy and technology