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#### Energy White Paper Ireland's Transition to a Low Carbon Energy Future 2015 -2030

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# Purpose of the Energy White Paper

- Sets a vision and framework to guide energy policy
- Update of energy policy from 2007 White Paper
- Covers period up to 2030
- Reflects significant European & international developments



### International Context

• Agreement by almost 200 countries at COP21

#### • Article 2:

Holding the increase in the global average temperature to well below 2° C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 ° C...



### **European Context**

- Emissions Trading System (ETS)
- Existing 2020 & proposed 2030 targets
- Energy Union:
  - Renewable Energy Directive
  - Energy Efficiency Directive
  - Emissions Trading System (ETS) reforms
  - Market reforms
  - Security of supply initiatives
  - Heating & cooling strategy



# 2020 Targets

#### • Renewable Electricity Sources (RES)

<ul> <li>Overall target</li> </ul>	16%	(8.6% 2014)
<ul> <li>Electricity (RES-E)</li> </ul>	40%	(22.7% 2014)
<ul> <li>Heat (RES-H)</li> </ul>	12%	(6.6% 2014)
<ul> <li>Transport (RES-T)</li> </ul>	10%	(5.2% 2014)

#### • Energy Efficiency:

- Target: 20% (8-9% 2014)
- Non-ETS Emissions Reduction (cumulative)
- Interconnection



## 2030 Targets

#### • Overall EU energy targets:

<ul> <li>Renewable energy:</li> </ul>	27%
<ul> <li>Energy efficiency:</li> </ul>	27%
– Interconnection:	15%

#### • Overall EU emission reduction targets:

<ul> <li>Total reduction (v 1990)</li> </ul>	40%
— ETS (v 2005)	43%
— Non-ETS (v 2005)	30%

National non-ETS target to be determined



# **Energy Policy in Ireland**

- <u>Sustainability</u>: driven by climate change targets
- <u>Security of Supply</u>: vital to the functioning of society and the economy
- <u>Competitiveness</u>: to ensure enterprises prosper creating employment/wealth and to help ensure affordable energy for domestic

<u>consumers</u>



## Citizens

Consultation

Neil Walker @DrNeilWalker · 15 Dec 2015 #energywhitepaper #ibec\_irl Official launch is tomorrow. Easily the most consulted-on document since the foundation of the Irish State!

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- 'Energy Citizens'
- Commitment to ongoing consultation
- Community participation
- National Energy Forum

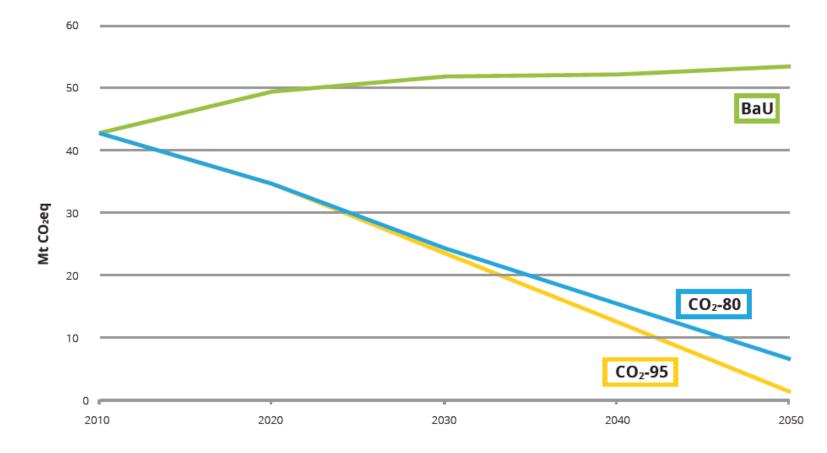


## Vision

- Low carbon energy system by 2050
- Emission from energy sector reduced by 80-95% by 2050
- Fossil fuels to drop from 92% of primary energy requirement to 26%-51%
- 2030 is significant milestone on transition



#### **Future Scenarios**





## **Electricity Sector**

- Cost of carbon reducing fossil fuel use
- New renewable energy support scheme
- Renewable Electricity Policy and Development Framework
- Grid connection policy
- CHP policy framework
- Examination of micro-generation



#### **Transport Sector**

- Biofuels obligation scheme
- Support adoption of zero and low emission vehicles
- Policy framework supporting infrastructure for alternative fuels (e.g. CNG, LPG, electricity)
- Measures to support modal shift, smart driving, public transport



### Heat Sector

- Renewable Heat Incentive
- Expanded Better Energy Programme
- Enhanced role for SEAI
- Part L of Building regulations
- District Heating policy framework
- Geothermal policy framework



# **Energy Security**

- Diversification: more renewables
- Infrastructure:
  - North-South Interconnector
  - Potential interconnectors to France & UK
- Storage:
  - 3 months supply of oil
  - Gas (including LNG)



### Competitiveness

- Ensure competitive markets
- Review of regulation
- Ensure policy choices are evidence based
- National affordable energy strategy
- Measure cost competitiveness



## Summary

- Transition to low carbon energy system
- Major changes in electricity, transport and heat sectors
- Increased use of renewable energy
- Increased focus on energy efficiency
- Investment in infrastructure

