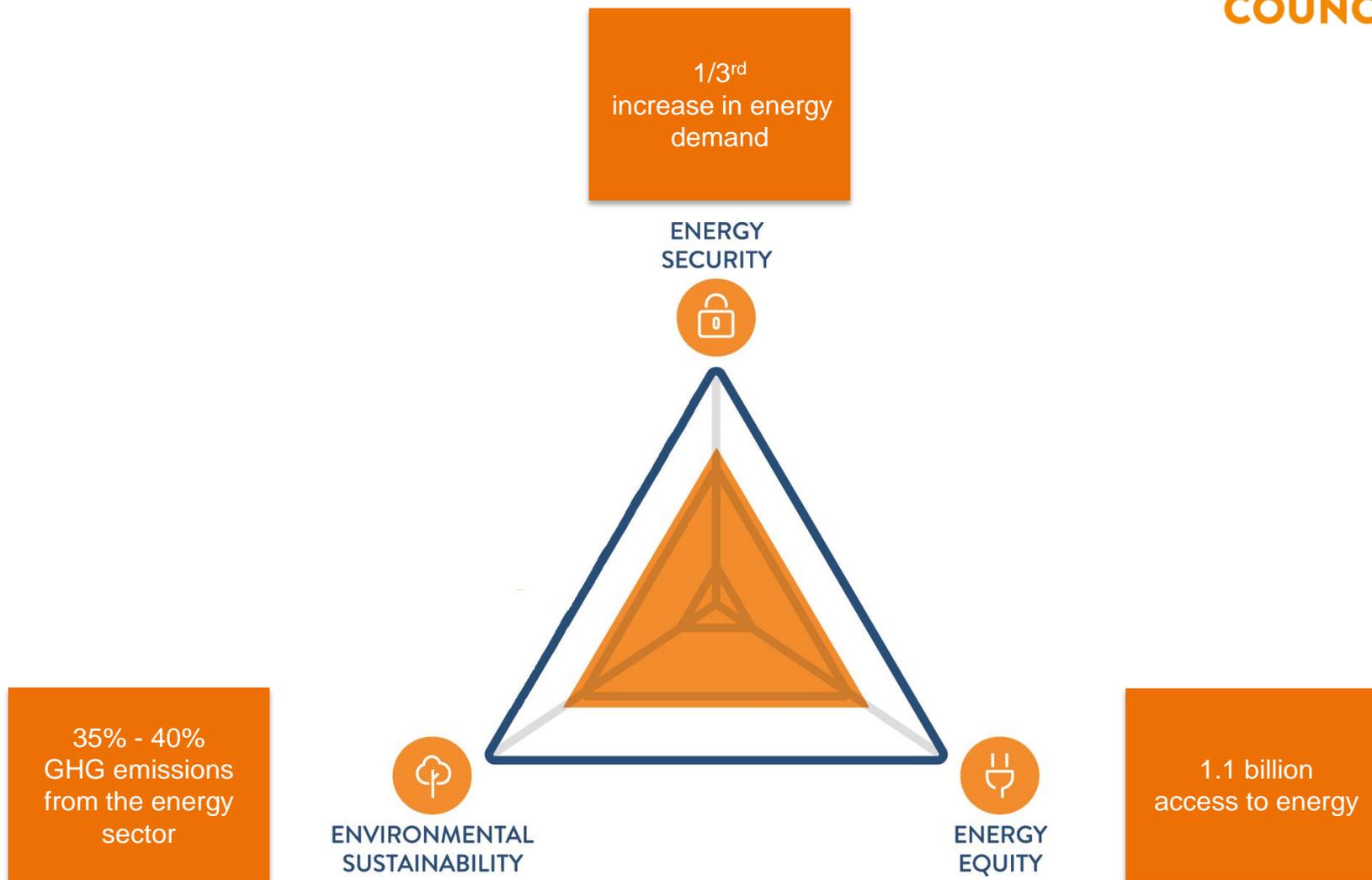


World Energy Trilemma 2016

Defining measures to accelerate the energy transition

The energy sector at a transition point

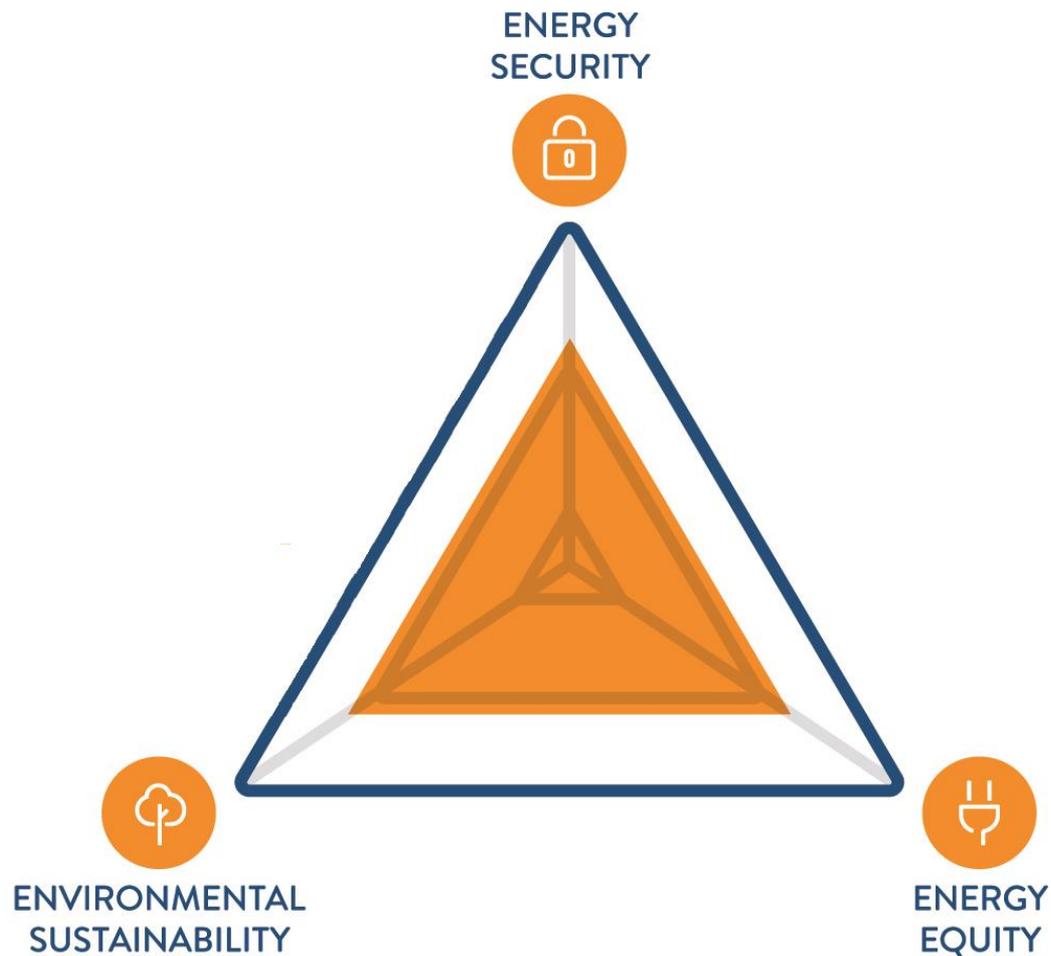


Balancing the 'energy trilemma'

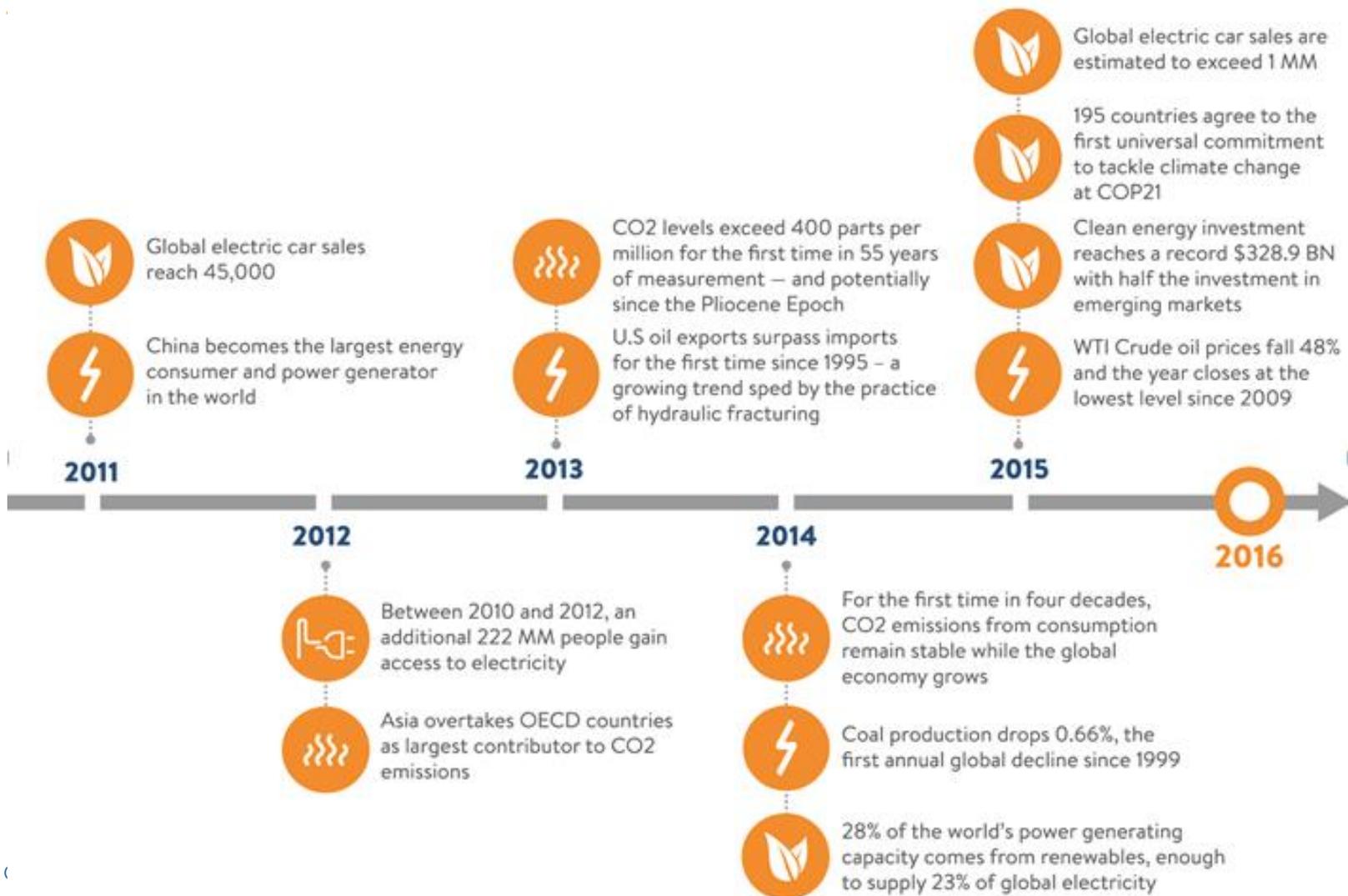
 **Energy security:**
The effective management of primary energy supply from domestic and external sources, the reliability of energy infrastructure and the ability of energy providers to meet current and future demand.

 **Energy equity:**
Accessibility and affordability of energy supply across the population

 **Environmental sustainability:**
Encompasses the achievement of supply and demand side energy efficiencies and the development of energy supply from renewable and other low-carbon sources.

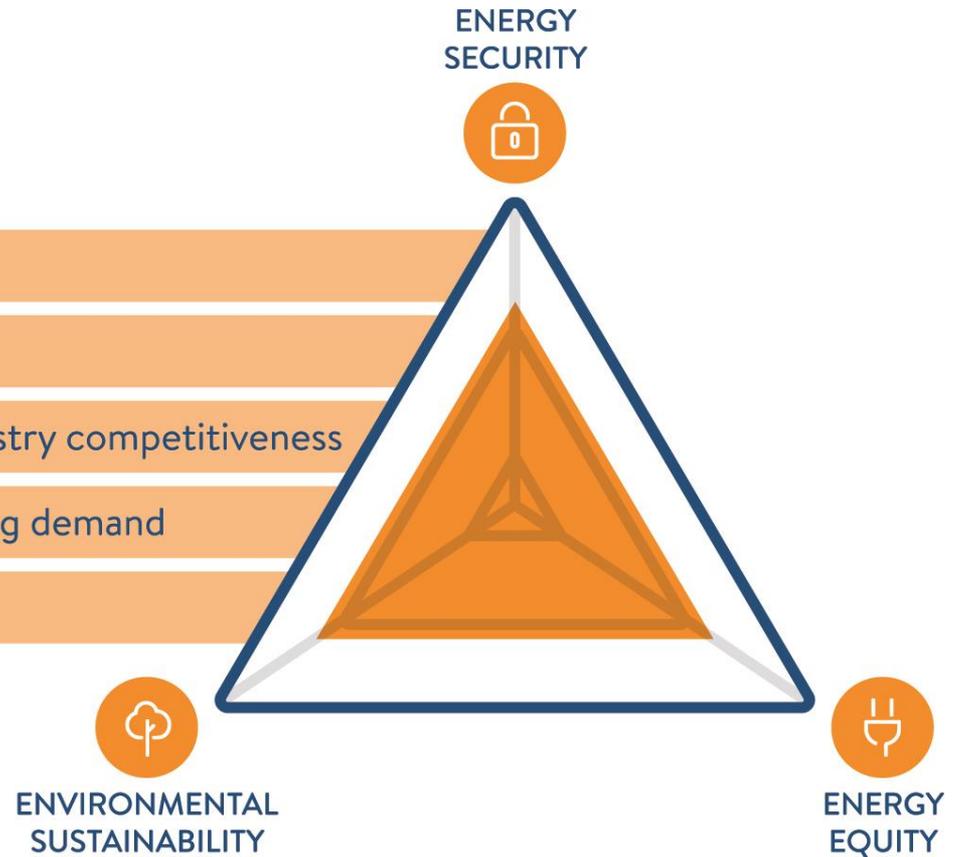


Policymaking during key global energy developments



Defining measures to accelerate the energy transition

1. Transforming energy supply
2. Advancing energy access
3. Enabling consumer affordability and industry competitiveness
4. Improving energy efficiency and managing demand
5. Decarbonising the energy sector



1. Transforming energy supply

- There is not single ‘correct’ road map to transform the energy supply.
- Clear and straightforward energy targets as well as consensus are necessary for a transition.
- Pilot project and analysing policy effectiveness is critical for the successful delivery and implementation of policies



TRANSFORMING ENERGY SUPPLY

2013 National Energy Strategy:

- Italy has made advances in diversification in gas supplies and gas storage capacity.
- Renewable energy reached 39% of total electricity consumption
- Early engagement of affected communities is critical in preventing project delays.

2. Advancing energy access

- More energy infrastructure is required to provide modern energy services to the 1.1 billion people without electricity.
- Innovative mechanisms and distributed generation can help low-income consumers and consumers in remote areas gain access electricity.



NAMIBIA

ADVANCING ENERGY ACCESS

Off grid energisation Master Plan:

- Energy shops offer information and sell energy equipment and serve as a payment collection point for credit financing for renewable energy technologies and products.
- Energy access in remote areas can be advanced by bringing together policy makers, technology providers and local entrepreneurs.

3. Addressing affordability

- Over the short term, subsidies can be vital for lower-income consumers and supporting social and economic programmes but efficiency needs to be assessed in the long term.
- Innovative mechanisms and distributed generation can help low-income consumers and consumers in remote



ARGENTINA

ENABLING CONSUMER AFFORDABILITY

Argentina prize tariff freeze:

- Argentina's government froze electricity prices in response to the 2001 economic crisis
- As a result there has been insufficient investments into energy in the country (Argentina became a net energy importer in 2011 for the first time since 1984).

4. Improving energy efficiency and managing demand

- Energy efficiency and managing energy demand continue to be perceived as top action priorities with huge potential for improvement.
- Cost savings alone are often insufficient to stimulate the adoption of energy efficiencies or behaviours: standards, performance ratings, labelling programmes, incentives and increased awareness of industry and consumers



INDIA

IMPROVING ENERGY EFFICIENCY AND
MANAGING DEMAND

Perform, Achieve, Trade

- Consumers receive specified energy consumption targets. Consumers that perform better can trade their energy savings certificates.
- Few of the efficiency project involved major technology or process changes.
- Private sector commitment and alternative financing solutions are crucial for the success for such schemes.

4. Decarbonising the energy sector

- COP 21 added increasing momentum to the global transition to low-carbon energy.
- Dynamic and flexible renewable energy investment policies are the key to responding to evolving market dynamics and technological developments.
- COP 21 climate goals will require a clear path to a meaningful carbon price signal



TURKEY

DECARBONISING THE ENERGY SECTOR

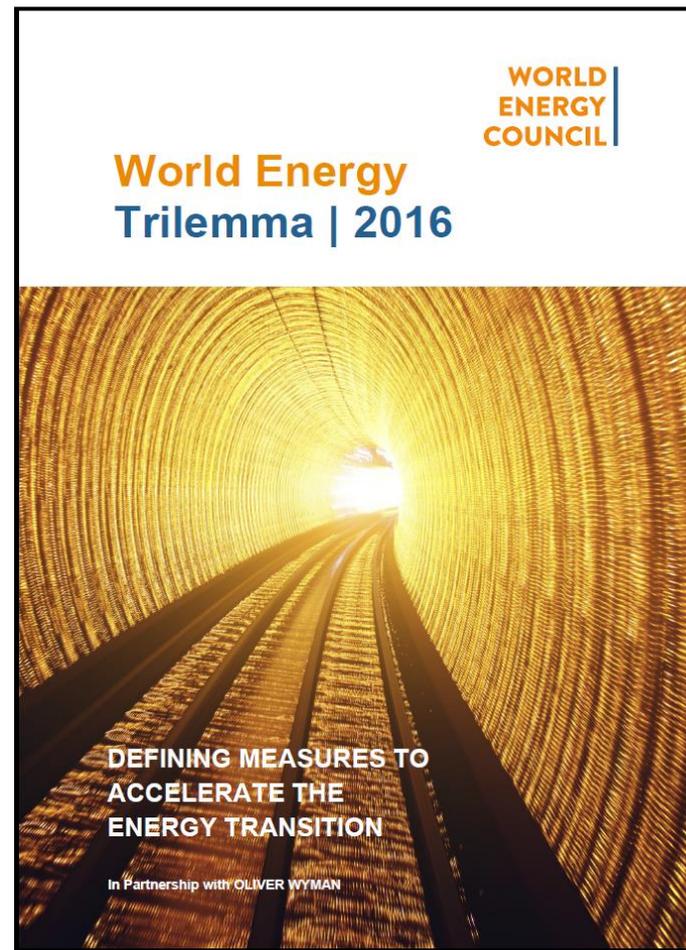
Law on Utilisation of Renewable Energy Resources (2005)

- Feed-in tariffs (FITs) are the main renewable energy support mechanism
- Turkey has doubled its installed renewable energy capacity between 2005 and 2010.
- Higher FIT rates and longer guarantee periods could improve the success of the programme.

Key recommendations

Policy matters: Policy choices and creating a regime to support a robust energy sector are critical to lasting energy trilemma performance regardless of a country's resources or geographic location.

Time matters: Policies and investments intended to change energy supply and demand at a national level will take time and will likely be disruptive. Countries must act now to progress on the trilemma with secure, equitable and environmentally sustainable energy to support a thriving energy sector, a competitive economy and a healthy society.



Further information

- Download the free report from the Council's website:
<https://www.worldenergy.org/publications/>
- Watch out for the launch of the Council's 2016 World Energy Trilemma Index in October during the 2016 World Energy Congress and find out more about your country ranking on our Index data page:
<https://www.worldenergy.org/data/>
- "Balancing the Energy Trilemma" will be at the core of the discussions during the 23rd World Energy Congress to be held in Istanbul, 9-13 October 2016. To find out more <http://wec2016istanbul.org.tr/>

Thank you