MÉXICO-ALEMANIA

DIÁLOGOS POR UN FUTURO SUSTENTABLE | TRANSICIÓN ENERGÉTICA HACIA UNA ECONOMÍA DE BAJO CARBONO

La Embajada de Alemania en México y el Centro Mario Molina le invitan a participar en la 10ª edición de los Diálogos por un Futuro Sustentable México-Alemania

Key Messages
Transformation of the Energy Sector

Lugar: Hacienda de los Morales, CDMX
Confirmar asistencia: mrodriguez@centromariomolina.org

Miércoles 21 de junio, 2017
Registro: 14:30
Evento y brindis: 15:00-18:30

Embajada de la República Federal de Alemania Ciudad de México

ALEMANIA MÉXICO ALIANZA PARA EL FUTURO

centro mario molina

Dr.-Ing. Harald Diaz-Bone / harald@diaz-bone.de

Key messages

- Implementation of the Paris Agreement asks for ambitious climate action at global scale
- Main options are improved energy efficiency and shift to renewable energy sources (RES)
- RES-electricity share has been growing recently in many countries and for many reasons
- Transforming the energy system on time can safe cost and stimulate the labour market
- Key to success: A regulatory and fiscal framework that stimulates the transition process

Ambitious climate action is needed at global scale

Rio 1992

Kyoto 1997

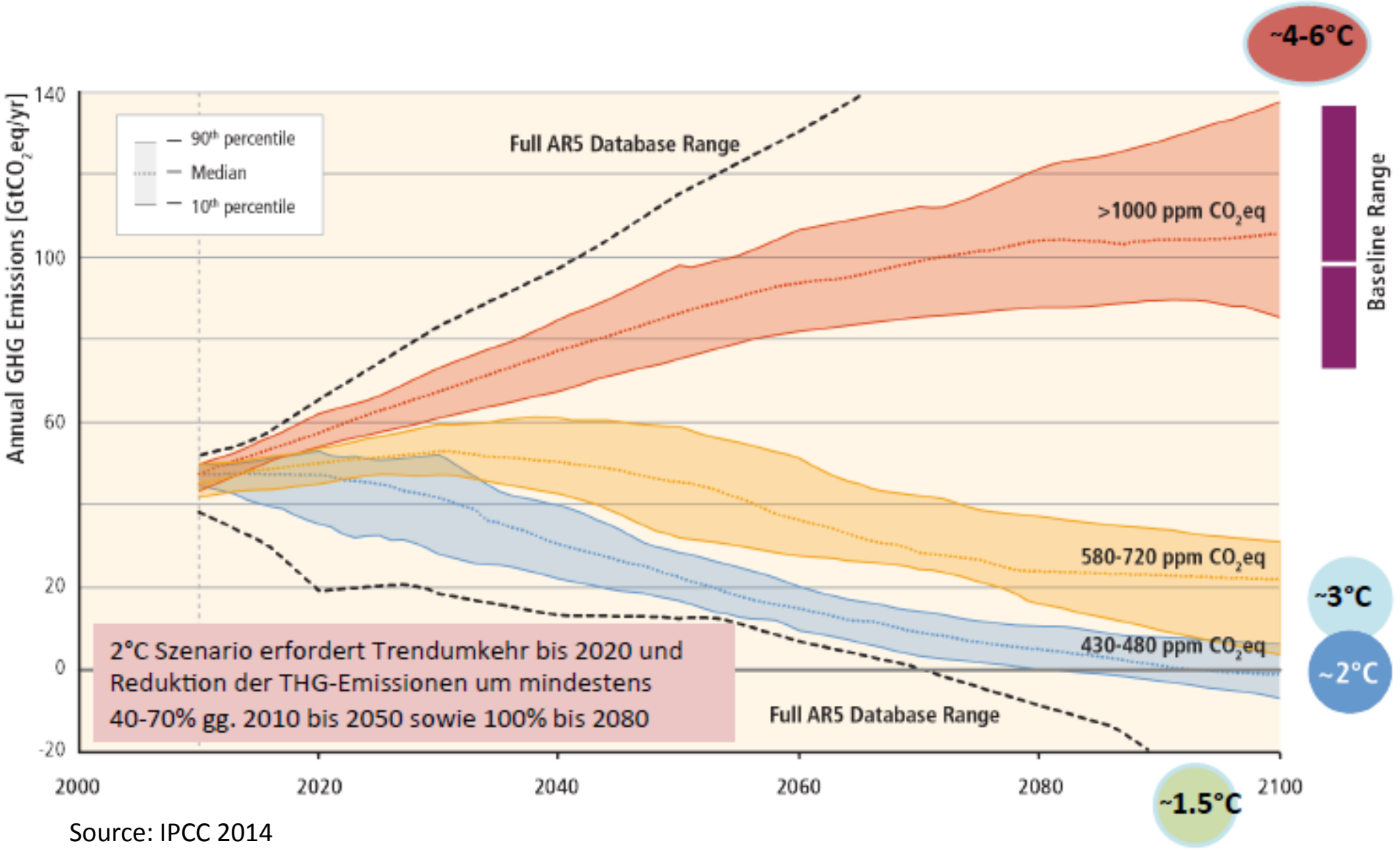
Copenhagen 2009

Paris 2015

PARIS 2015

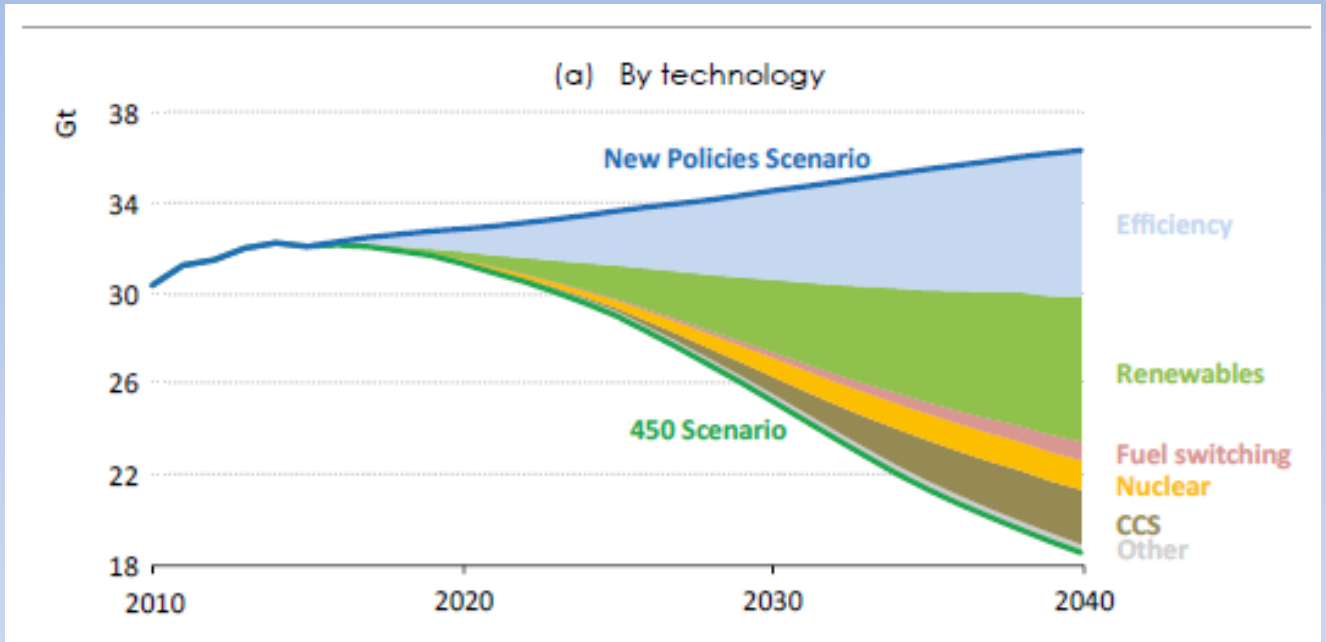
- Aim: Hold the increase in the global average temperature to well below 2 °C (above pre-industrial levels)
- IPCC: Achieving this goal needs a decarbonization of the energy sector (phase out of fossil fuels)
- 195 countries agreed to contribute through ambitious emission cuts (NDCs) in order to achieve this goal
- Share in global GHG: Germany 2.56%, Mexico 1.70%

Ambitious climate action is needed at global scale

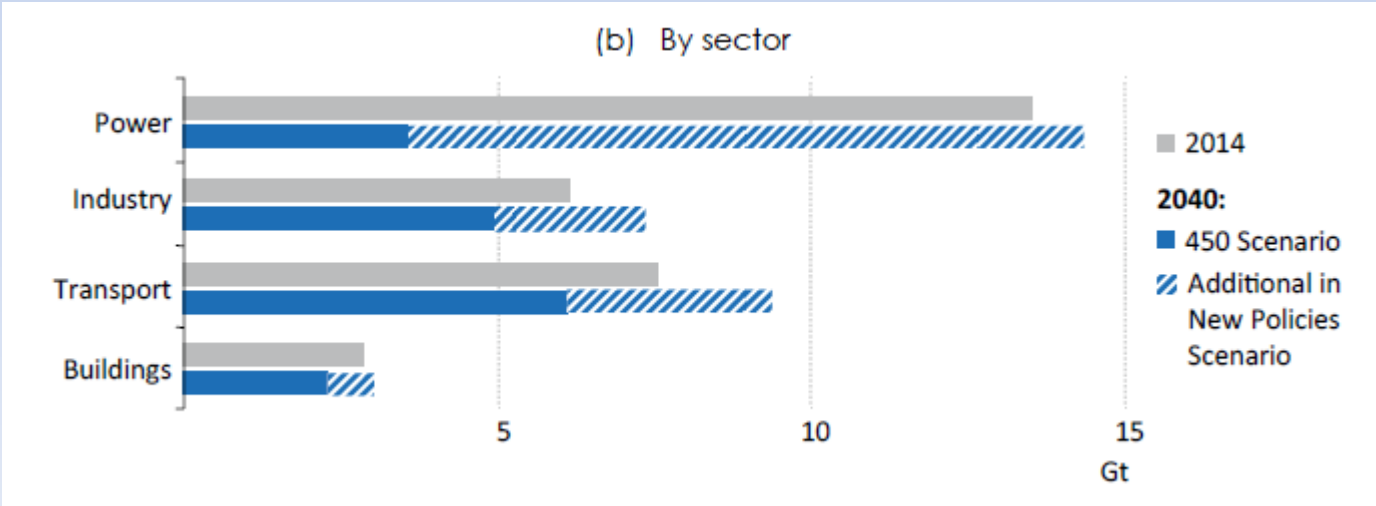


Source: IPCC 2014

Main options are energy efficiency and renewable energy sources

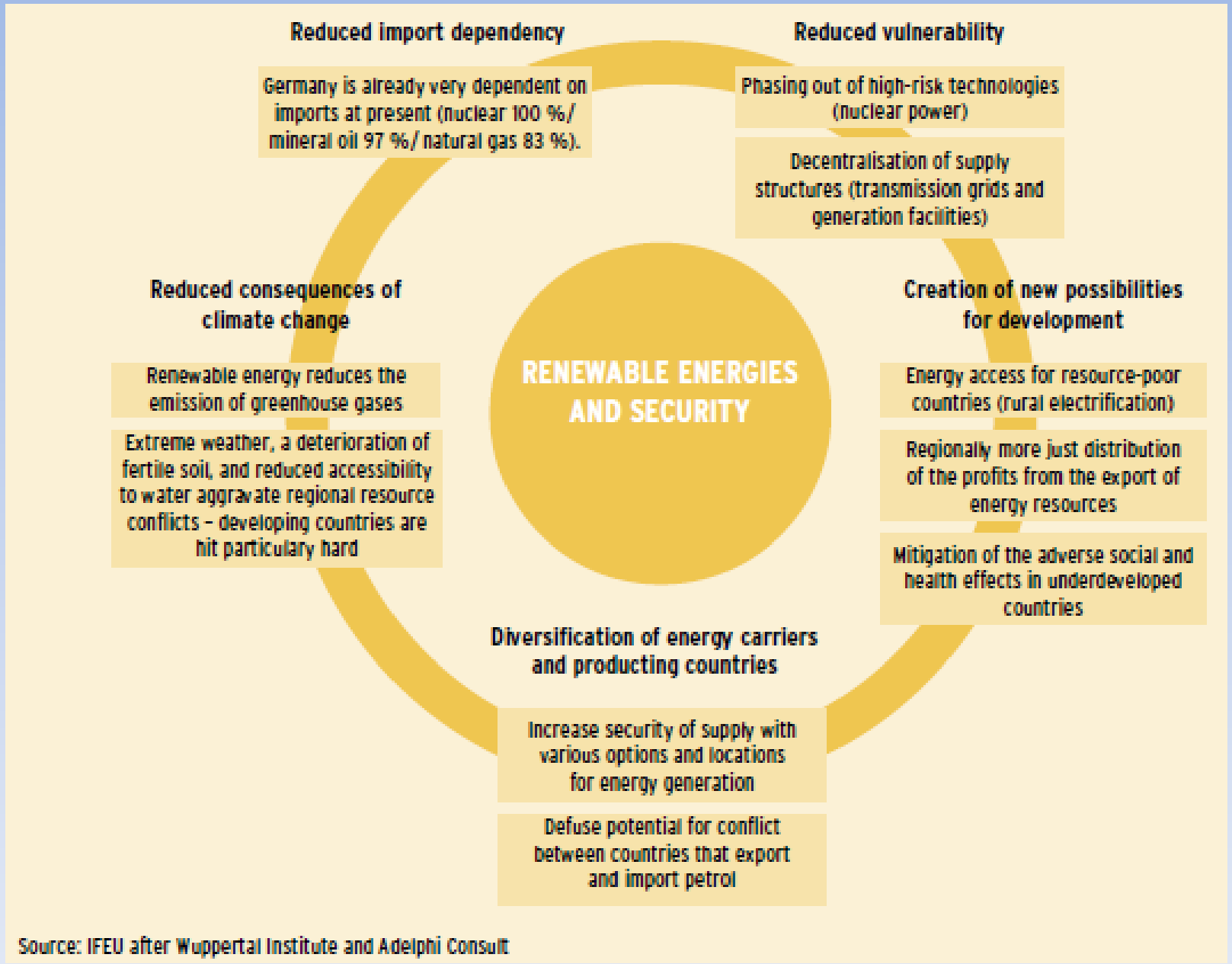


450 ppm CO_2 Scenario



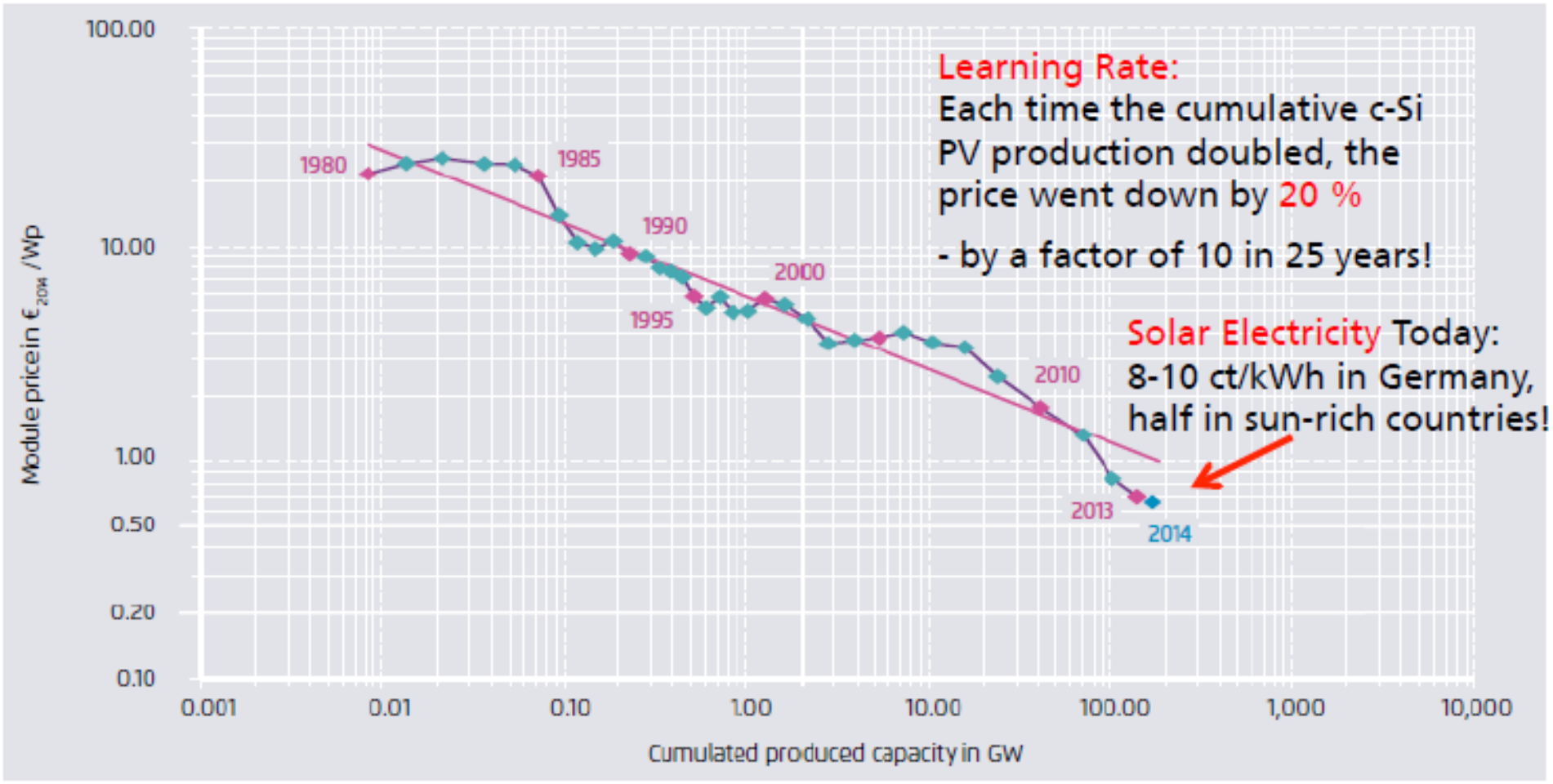
Source: IEA WEO 2016

Energy security and renewable energies



Source: IFEU after Wuppertal Institute and Adelphi Consult

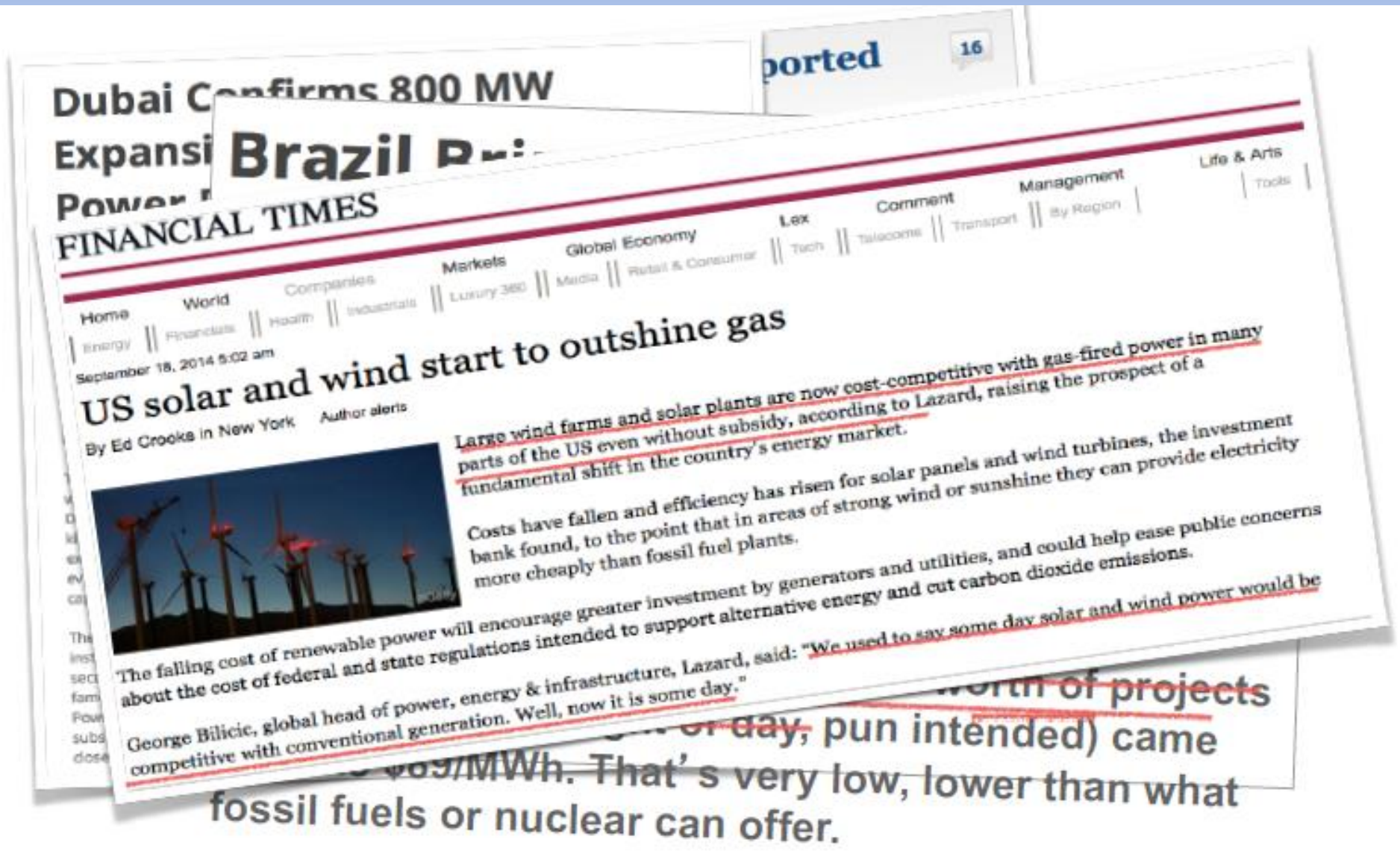
Falling cost of renewable energies



Source: Navigant Consulting; EUPD PV module prices (since 2006), Graph: ISE 2014

Solar PV Stuns in Mexico's First Clean Energy Auction 2016: 1,860MW won at 5 ct per kWh

Transforming the energy system on time can safe cost and stimulate the labour market

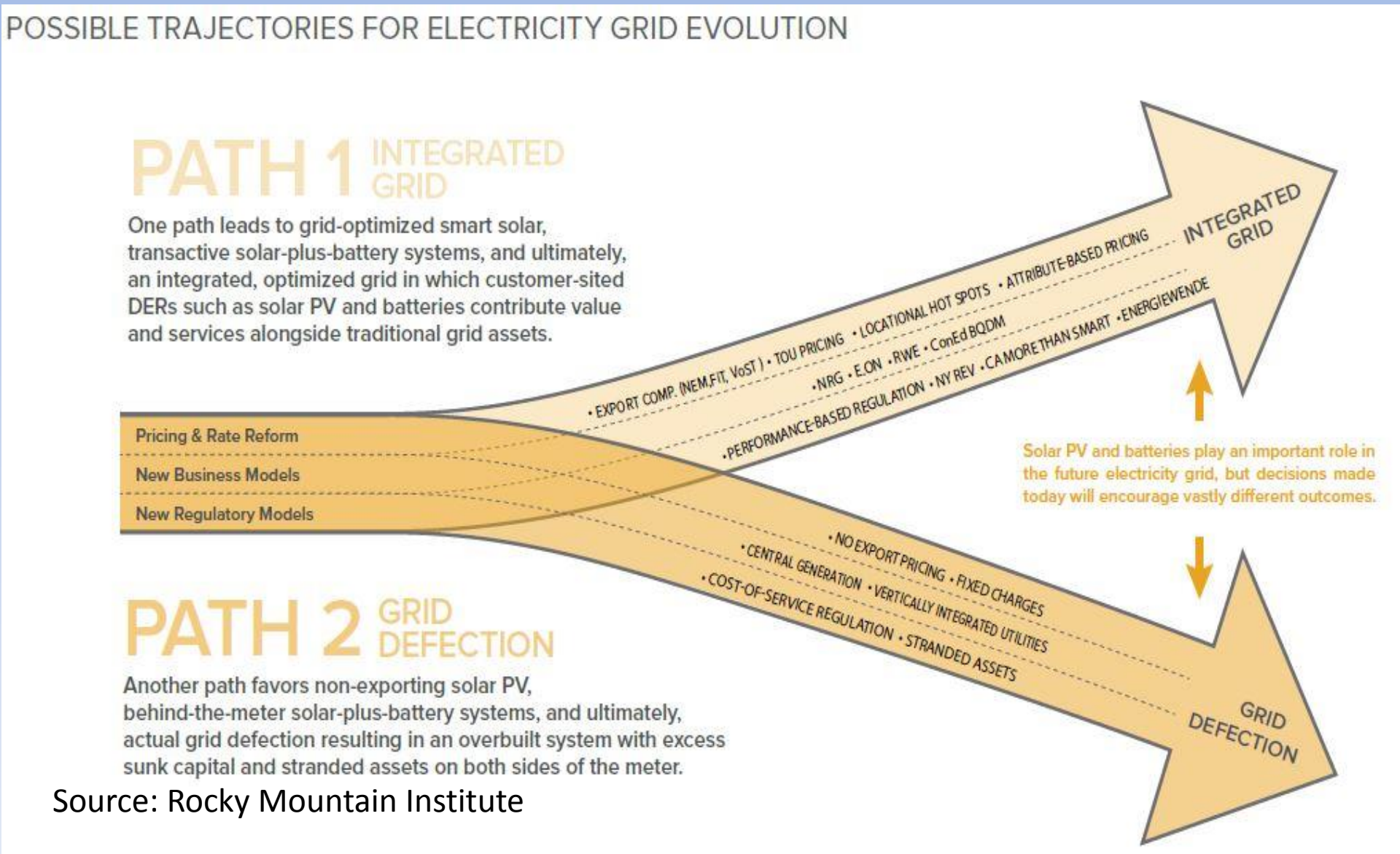


Policy implications for the electricity sector

- RMI 2014: Avoid grid defection through proactive regulation
- Carbon Trust 2016: Align incentives and remove barriers, monetize system benefits, reduce policy uncertainty, engage broad stakeholder in adapting market structures, define standards for performance and operation of storage
- ACORE 2016: A variety of ESS rises „behind the meter“ (backup power, demand shifting/charge management, solar self-consumption, fast-charging of EVs) -> aggregate to provide additional value as capacity or grid resources

-> Grid regulators need to (re-)act now!

Key to success: A regulatory and fiscal framework that stimulates the energy transition

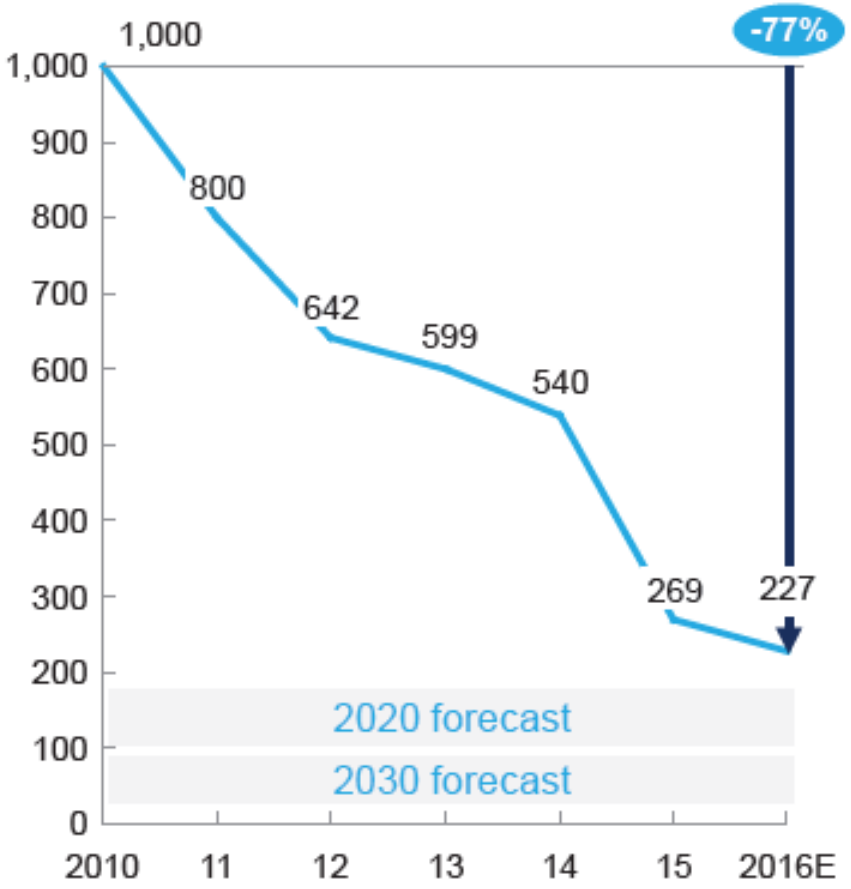


Source: Rocky Mountain Institute

Rapid decreases in battery prices have helped accelerate EV sales, especially in Europe and China

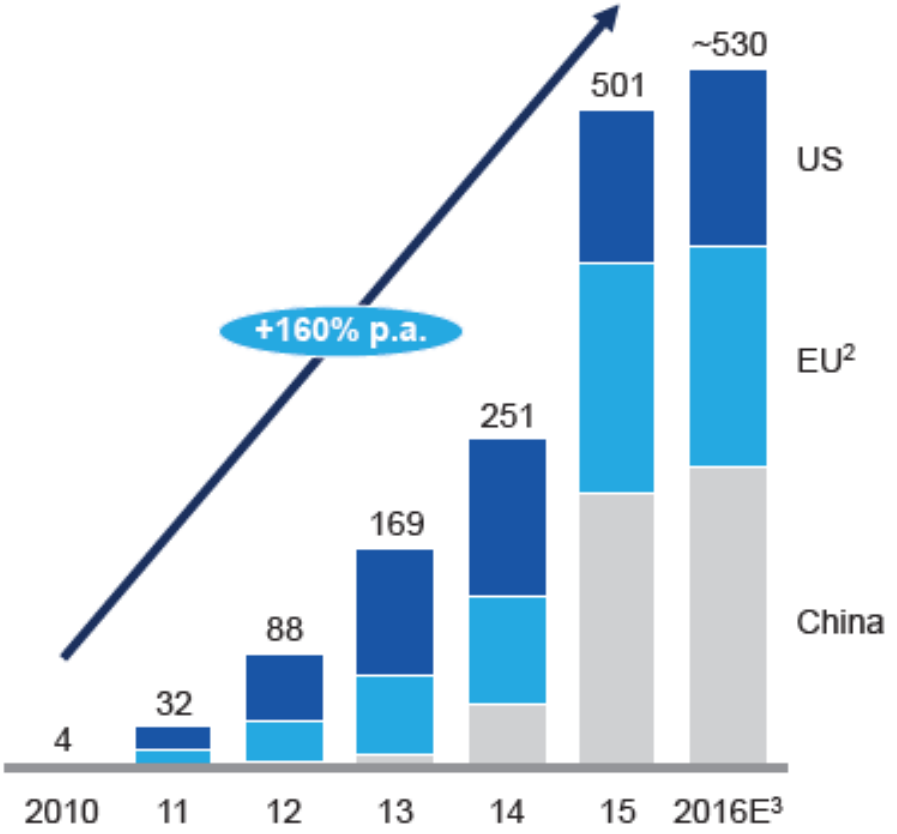
Average battery pack price

$ per kWh



US, EU, and China electric vehicle sales[1]

Units, thousands



1 Plug-in hybrid electric vehicles and battery electric vehicles; excludes low-speed vehicles and hybrid electric vehicles without a plug
2 Includes Denmark, France, Germany, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, and the UK
3 Extrapolated based on Q1-Q3 2016 IHS data and assuming continued growth in all three markets in Q4
SOURCE: IHS, Bloomberg, New Energy Finance

Automotive industry megatrends are self-reinforcing and will likely accelerate the transition to e-mobility in the long term

Examples of potential EV reinforcement points from other automotive megatrends

Autonomous

- EV vehicle architecture has a central control unit to facilitate autonomy
- Autonomous charging could add convenience

Connected

- A connected EV ecosystem could increase the convenience of charging
- Connected car grid solutions could enable cost-effective load balancing

Automotive industry megatrends

Shared

- Greater annual driving distances can offer a decisive TCO edge for EVs
- Some consumers may prefer access to multiple vehicle types over ownership (including EVs)

Electrified

- Tightening emissions efficiency rules make EVs necessary to meet standards
- Lower battery costs improve EV economics

SOURCE: McKinsey Sustainable Mobility Initiative

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IRENA Report Shows Renewables Are Gaining Ground in Nearly Every Measure

IRENA Membership

Events

IRENA event on 'Battery storage cost and market outlook 2030'
15 – 16 March 2017
Düsseldorf, Germany

Berlin Energy Transition Dialogue
20 – 23 March 2017
Berlin, Germany

Kick-off Meeting for RRA Mali
3 – 6 April 2017
Bamako, Mali

More Events