

5 June 2013  
Cambridge

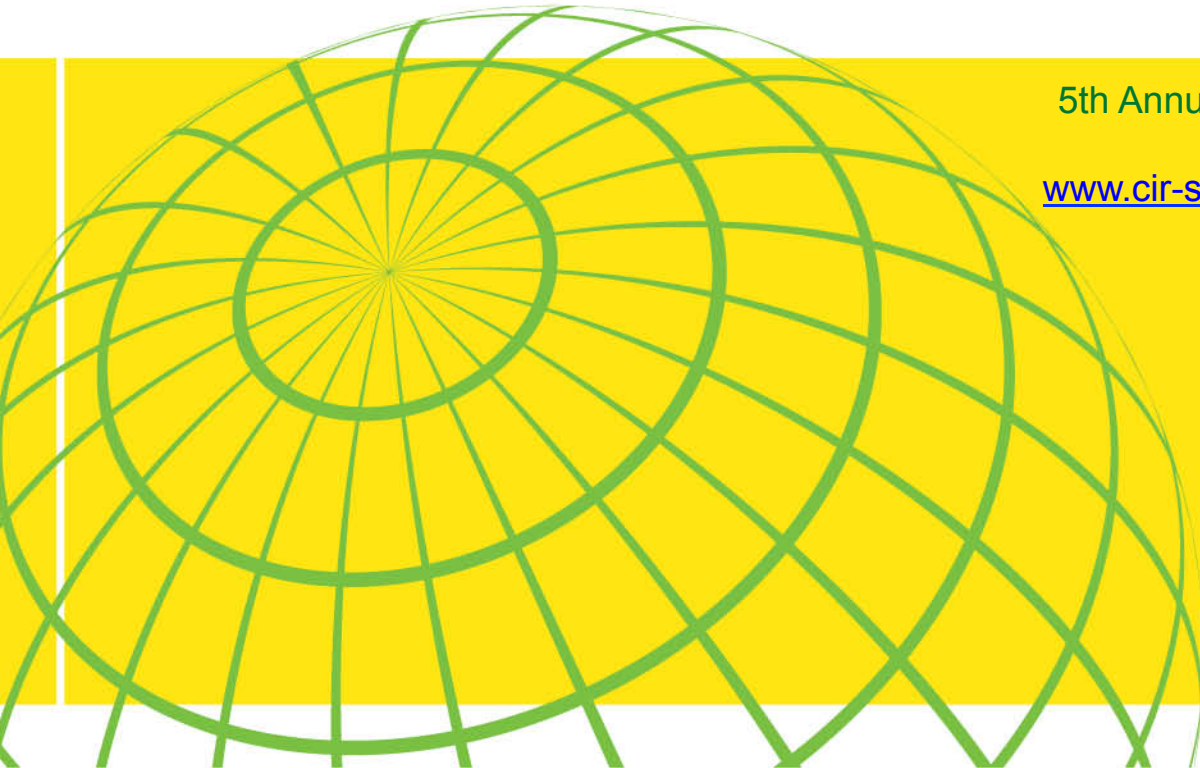
# BP Energy Outlook 2030

Dominic Emery, Chief Development Office, BP  
Alternative Energy

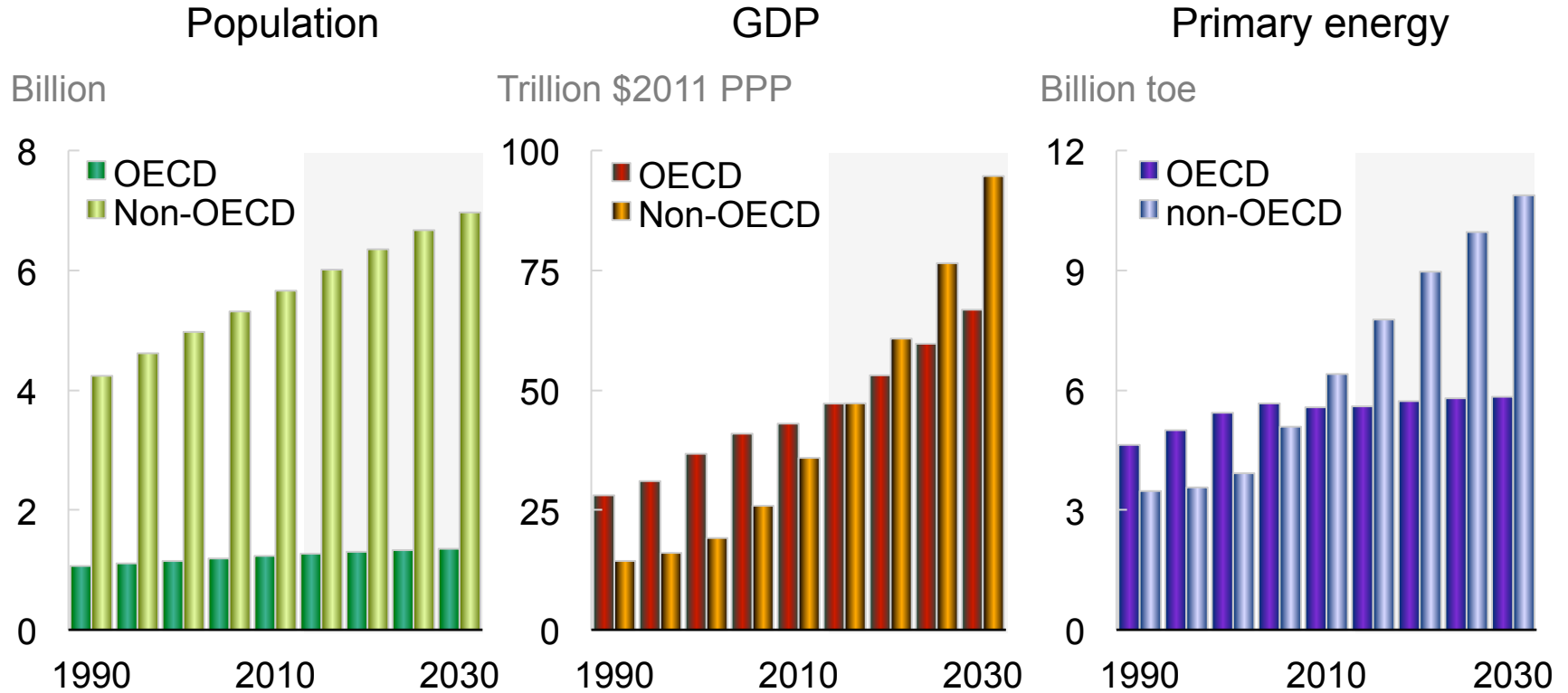


5th Annual Smart Grids & Cleanpower 2013  
Conference

[www.cir-strategy.com/events/cleanpower](http://www.cir-strategy.com/events/cleanpower)

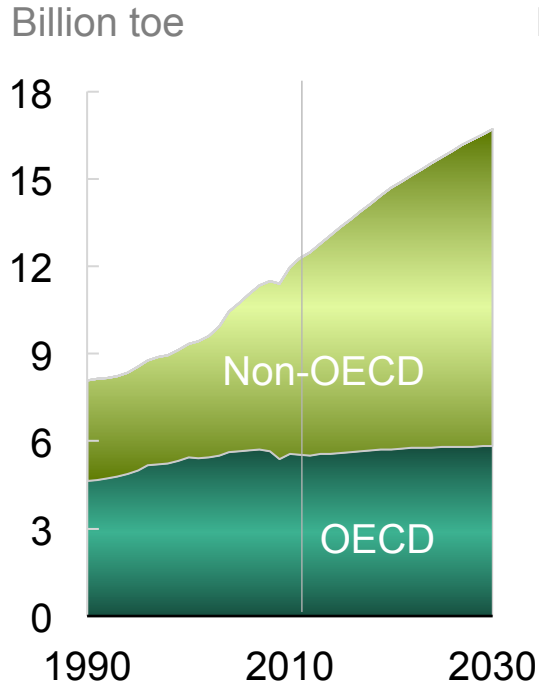


# Population, income and energy growth

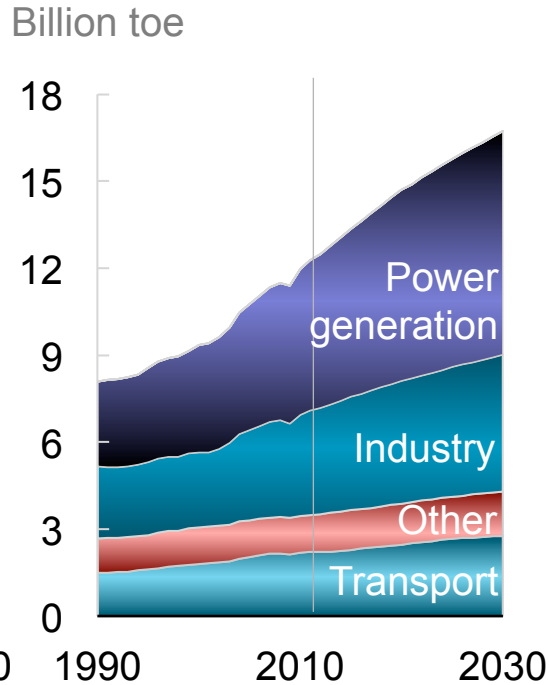


# Industrialisation drives energy growth

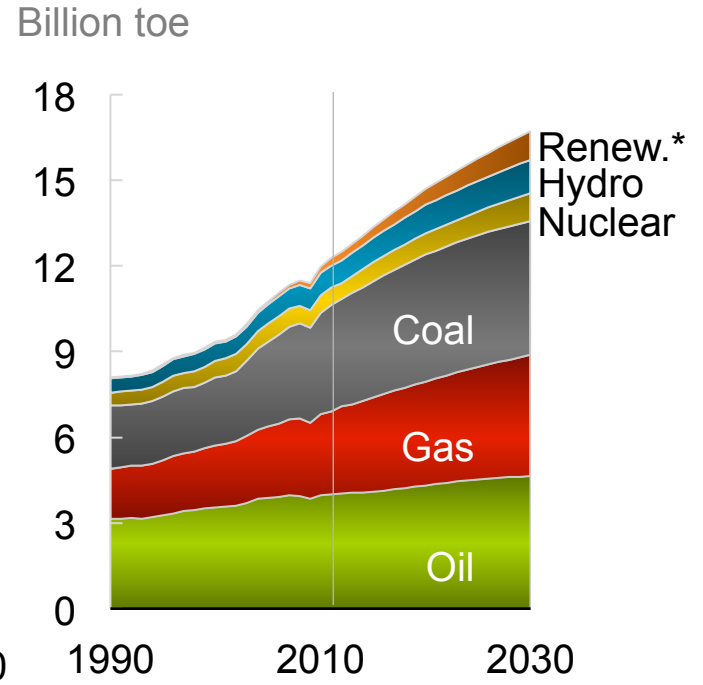
## By region



## By primary use

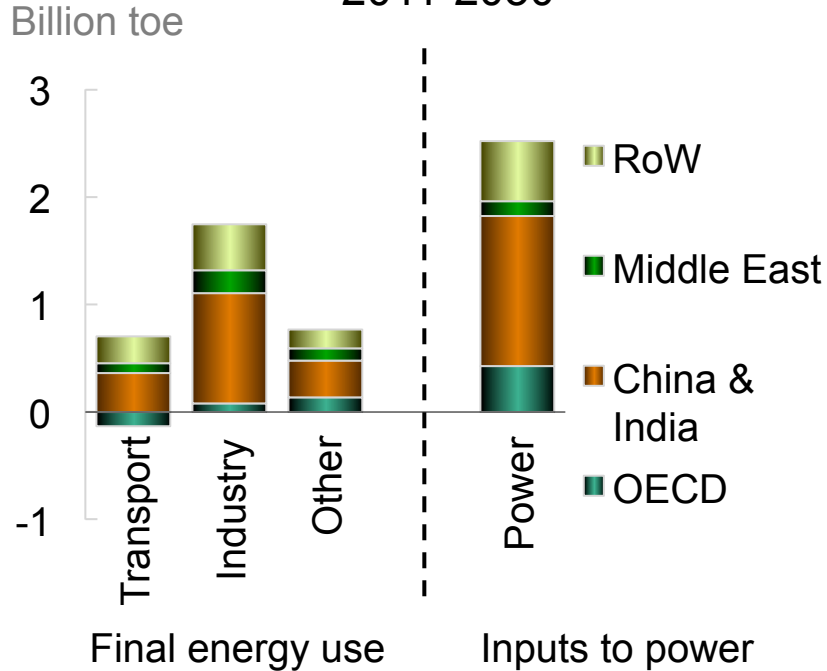


## By fuel

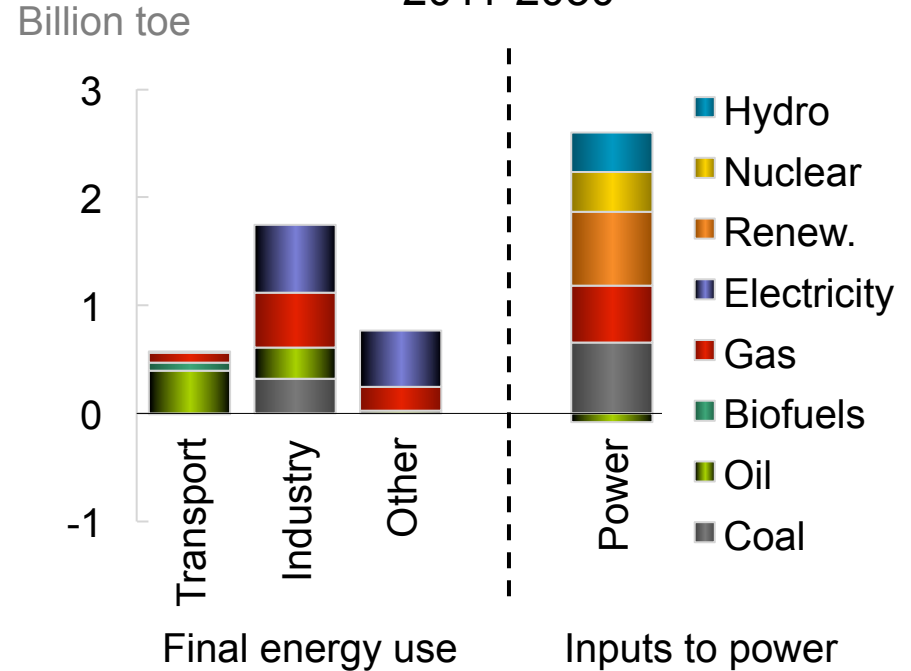


# The power sector leads primary energy growth

Growth by sector and region, 2011-2030



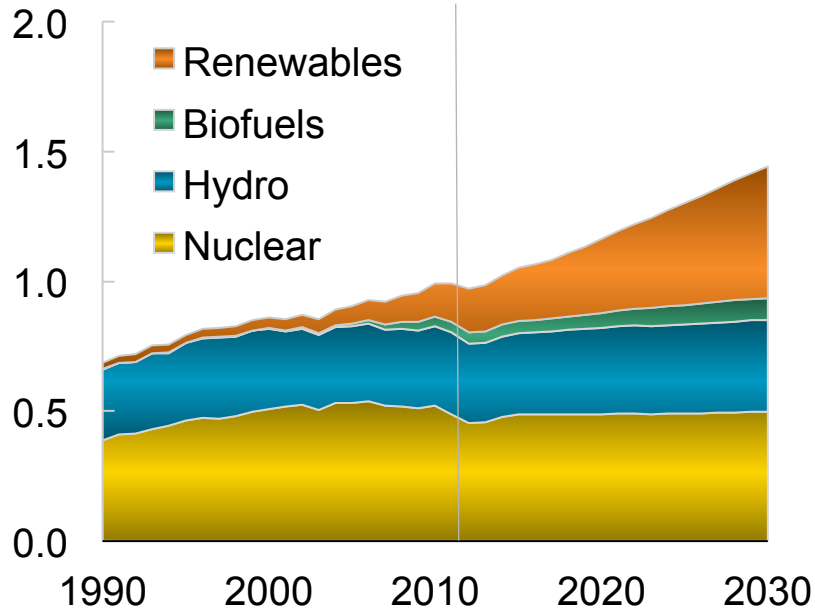
Growth by sector and fuel, 2011-2030



# Non-fossil fuels

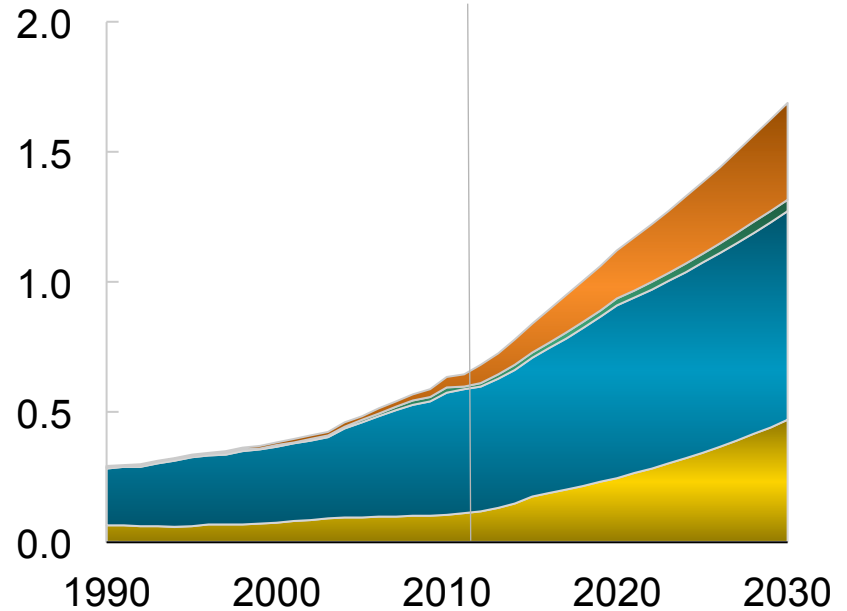
## OECD

Billion toe



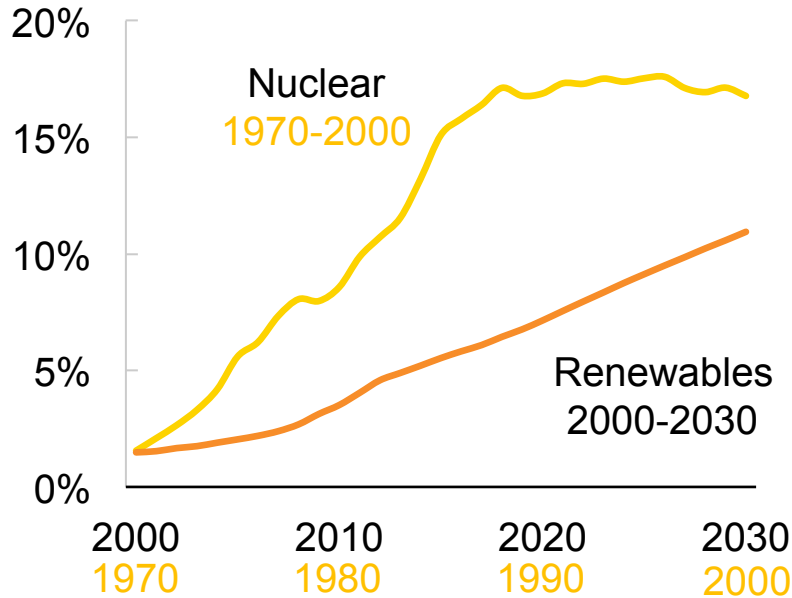
## Non-OECD

Billion toe



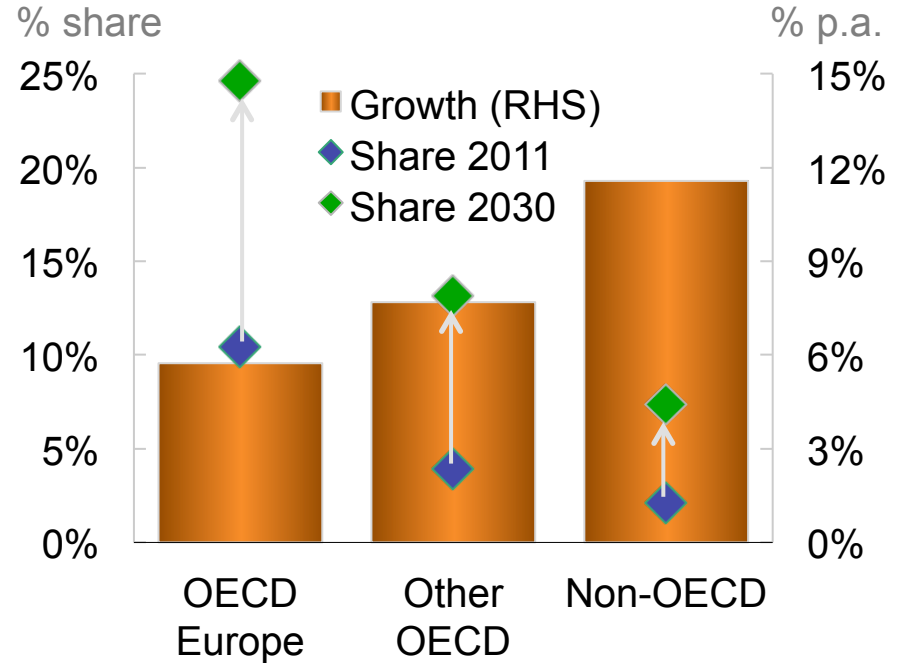
# Growth of renewables in power

## Share of power generation

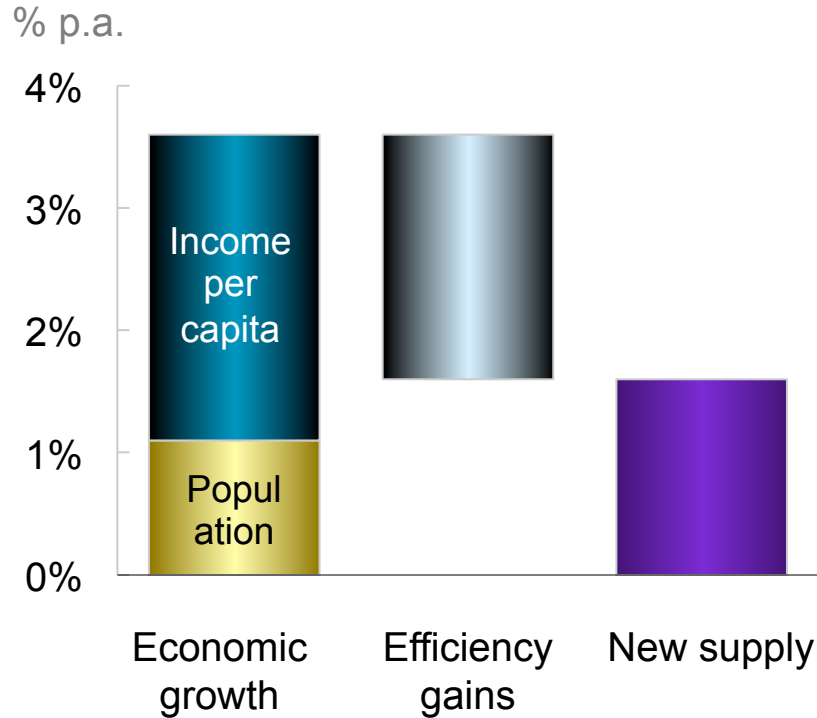


## Renewable power

Growth 2011-30, and share of power



# Conclusion



- Economic growth needs energy
- Competition and innovation are the key to meeting this need
  - energy efficiency
  - new supplies
- Energy security and climate change remain challenges