

Ditching coal in North-Western Europe: Options on the table

04
MAY
2018

Debates Seminars and Round-table Conferences

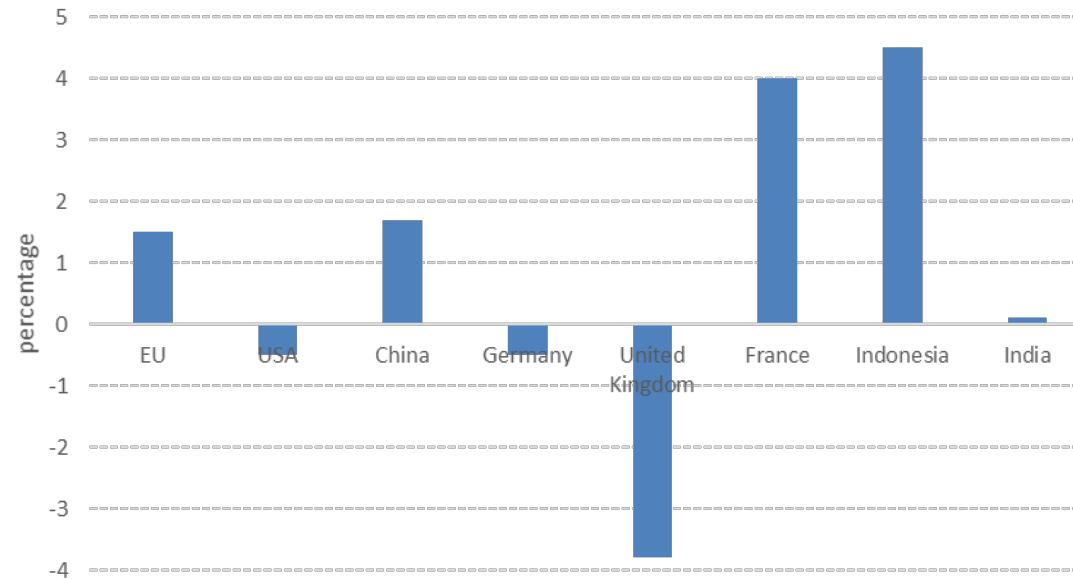
Bruxelles
from 09:00 to 11:30



**Marc-Antoine Eyl-Mazzega,
Director, Centre for Energy**

EU's climate leadership at risk: rising emissions

Change in energy-related carbon dioxide emissions by selected countries in 2017

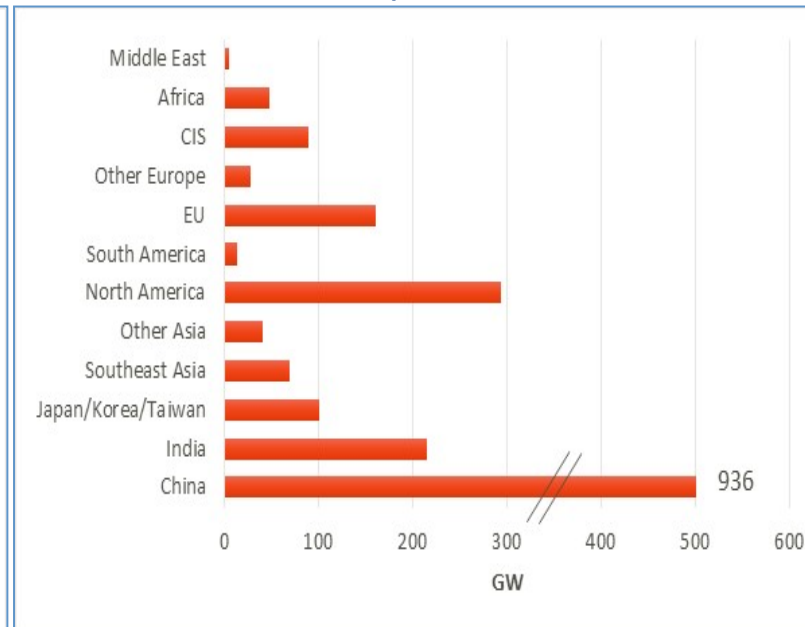
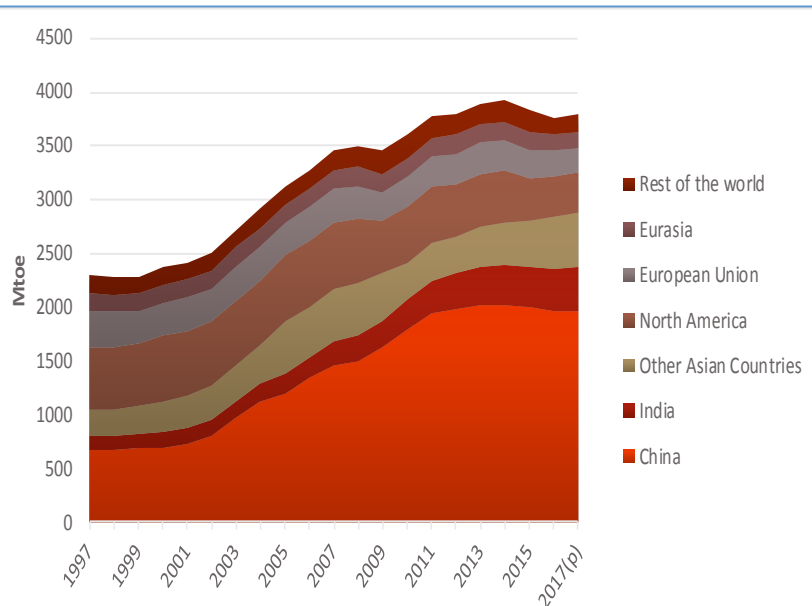


- Global increase of 1,4%, after 3 years of stagnation:
 - Robust economic growth;
 - Lower fossil-fuel prices;
 - Weaker energy efficiency efforts;
- Regional differences: -0,5% in the US., +1,7% in China, **+1,5% in the EU**

Source: Carbon Brief, IEA, Global Energy & CO2 Status Report 2017, Umweltbundesamt

EU's share in global coal demand & power generation is small

Global coal consumption by major region/country, Split of installed coal power capacity in the world, 2018

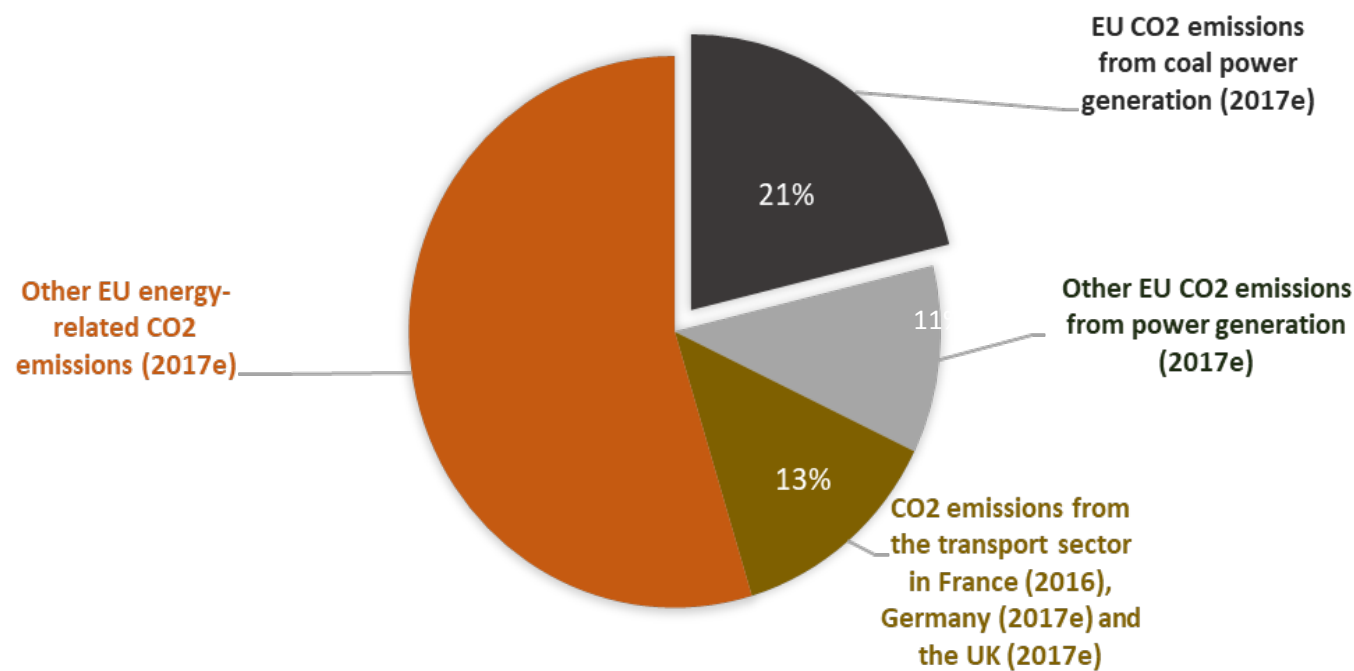


Source: Sylvie Cornot-Gandolphe, Coal Exit or Expansion, Note de l'Ifri, April 2018, based on: Global Coal Plant Tracker

- EU represents 7,8% of total global installed coal fired power generation capacity
- EU represents 6% of global coal consumption

Coal-fired power generation is a key source of EU emissions

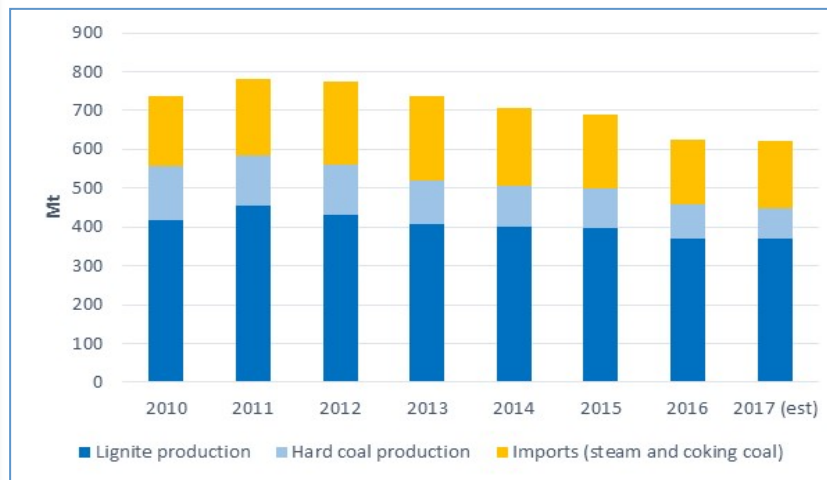
Energy-related CO2 emissions in the EU in 2017(e)



Source: Ifri based on IEA WEO2017 and Global Energy & CO2 Report 2018, Sandbag 2018, National statistics databases from France, Germany and the UK

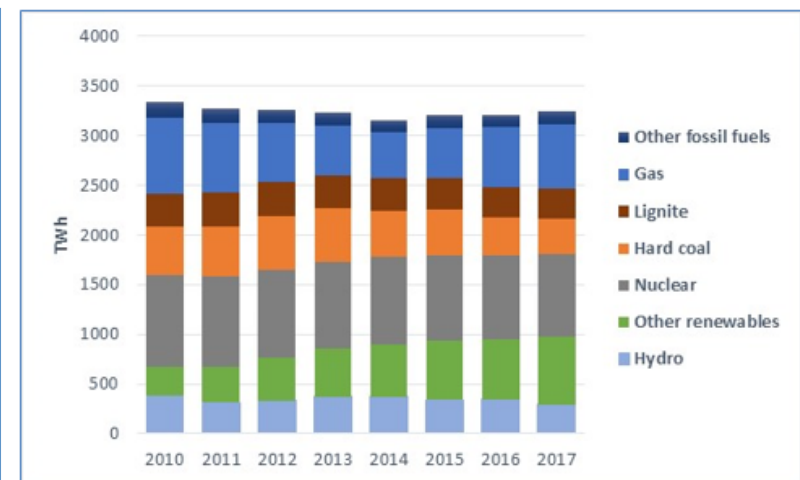
The slow decline of coal in the EU

Coal demand in the European Union (2010-2017)



Source: Ifri based on Euracoal, Eurostat and estimates by Sylve Cornot Gandolphe, Coal Exit or Expansion, Note de l'Ifri, April 2018

The EU power generation mix (2010-2017)



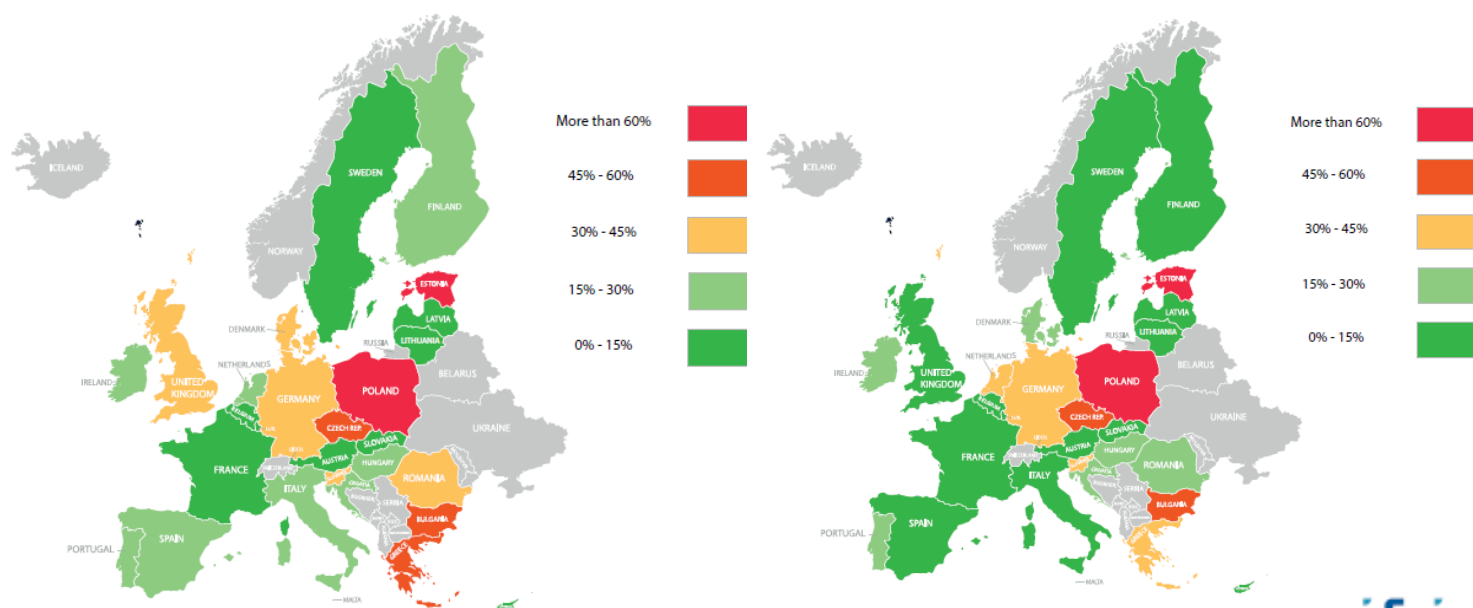
Source: Agora Energiewende and Sandbag, The European power sector in 2017

- Stagnating demand: -0,5% in 2017
- Since peaking year (2012), coal-based power gen. decreased by only 6,7 percentage points

Progress in reducing coal-fired power generation, yet coal well entrenched notably in Germany

Electricity generation from coal sources (% of total) in 2011

Electricity generation from coal sources (% of total) in 2016



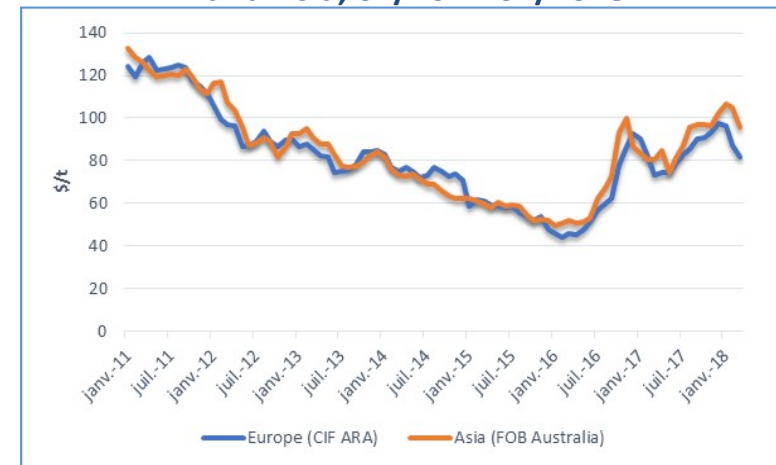
Higher coal & EU ETS prices: will this be sustained and enough?

EU ETS settlement prices, Nov-17 to Apr-18 (€/tCO₂)



Source: European Energy Exchange, Market Data, 30.04.18

Prices of imported steam coal into Europe and Asia, 01/2011-01/2018



Source: Sylvie Cornot-Gandolphe, Coal Exit or Expansion, Note de l'Ifri, April 2018, based on Sources: World Bank, Globalcoal.com

- EUA above 10€/t for the first time in six years
- Is the upward trend driven by the fundamentals or only reflecting speculative behaviours?
- With relatively high coal and carbon prices and relatively low gas prices, start of coal to gas switching...



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