



# THE FUTURE OF THE EU ELECTRICITY MARKET

ITRE PUBLIC HEARING  
10 July 2017

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# An electricity market fit for the Paris Agreement

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Climate change

Europe's record hot year made at least 35 times more likely by climate change, say scientists

2014 is set to be Europe's warmest year on record and greenhouse gas emissions played a major role new research shows

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9 June 2016 16:13

Paris deluge made up to 90% more likely by climate change, scientists say

Credit: Loïc Lagarde via Flickr

MULTIPLE AUTHORS 09.06.2016 | 4:13pm

Paris deluge made up to 90% more likely by climate change, scientists say

THE HUFFINGTON POST

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GREEN 12/21/2016 06:01 pm ET

North Pole Forecast To Be 50 Degrees Warmer Than Normal This Week

For the second year in a row, the Arctic is way hotter than it's supposed to be.

By Nick Visser

Temperatures in the Arctic are predicted to soar nearly 50 degrees above normal on Thursday in a pre-Christmas heat wave that will bring the frozen tundra scarily close to the melting point.

It's the second year in a row the North Pole — now in perpetual darkness after saying goodbye to the sun in late October

Just a few d  
widespread  
scientists a  
influenced

Europe's extreme June heat clearly linked to climate change, research shows

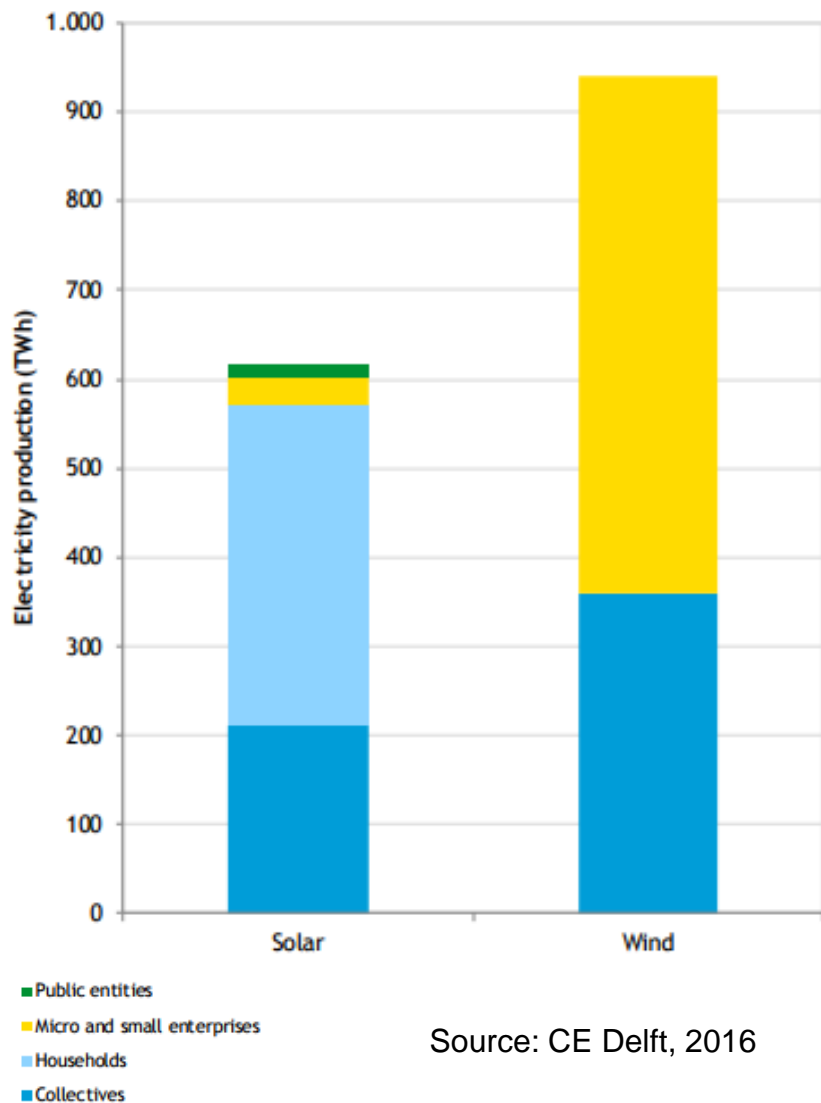
Heatwaves that saw deadly forest fires in Portugal and soaring temperatures in England were made up to 10 times more likely by global warming, say scientists

Firefighters try to extinguish a forest wildfire in Colmeal in central Portugal on 21 June. Photograph: Francisco Leong/AFP/Getty Images

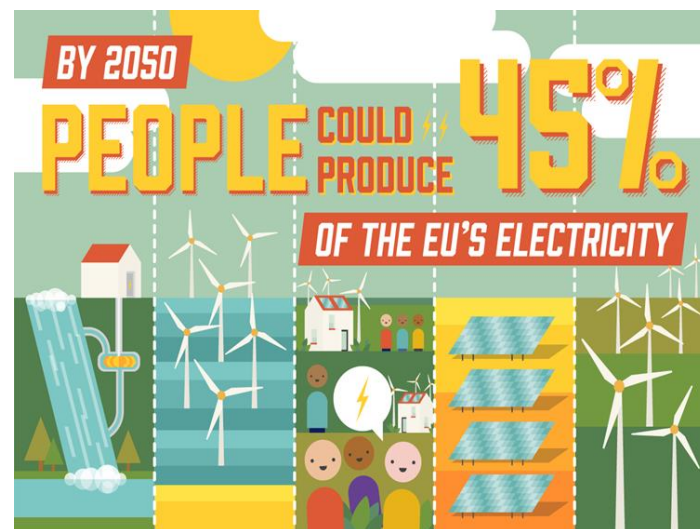
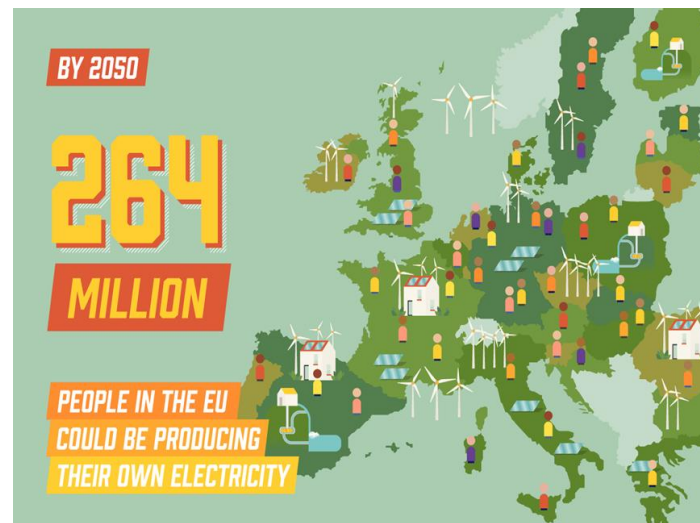


# ... and for European citizens

Estimated potential for electricity production  
By energy citizens, in 2050 for the EU28



Source: CE Delft, 2016



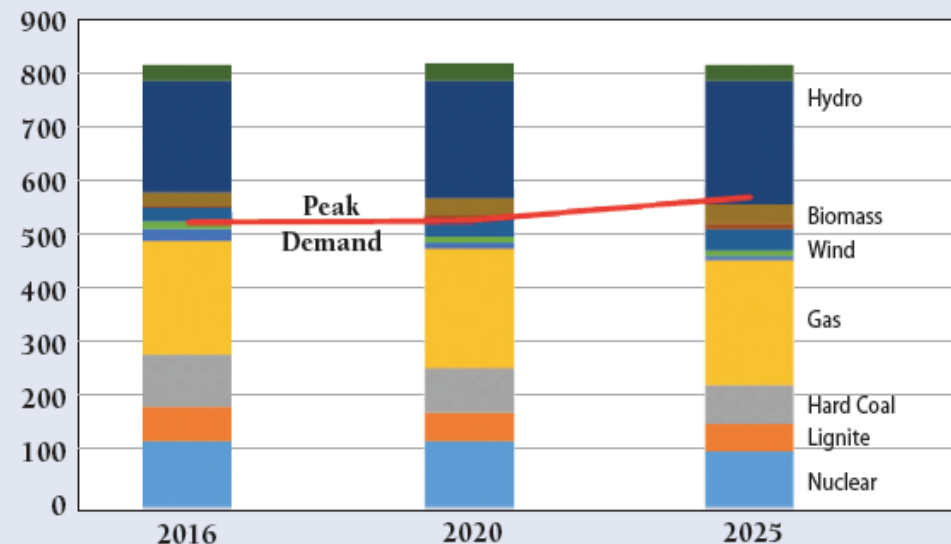
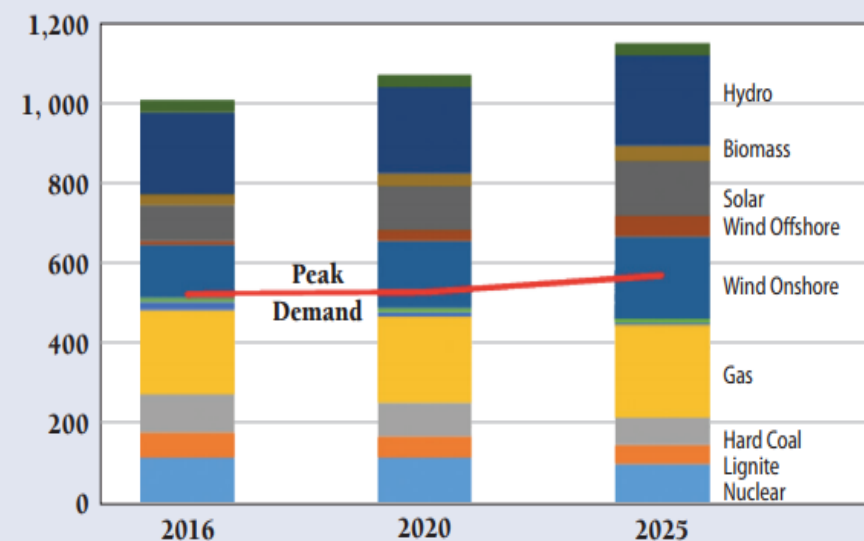
# The EU has an overcapacity of generation

*“...today, the capacity margin for Europe as a whole exceed two to three times the most commonly used generation adequacy standards. This indicates an overall situation of overcapacity in Europe in spite of the recently observed decline in conventional generation capacity.”*

ACER, September 2016

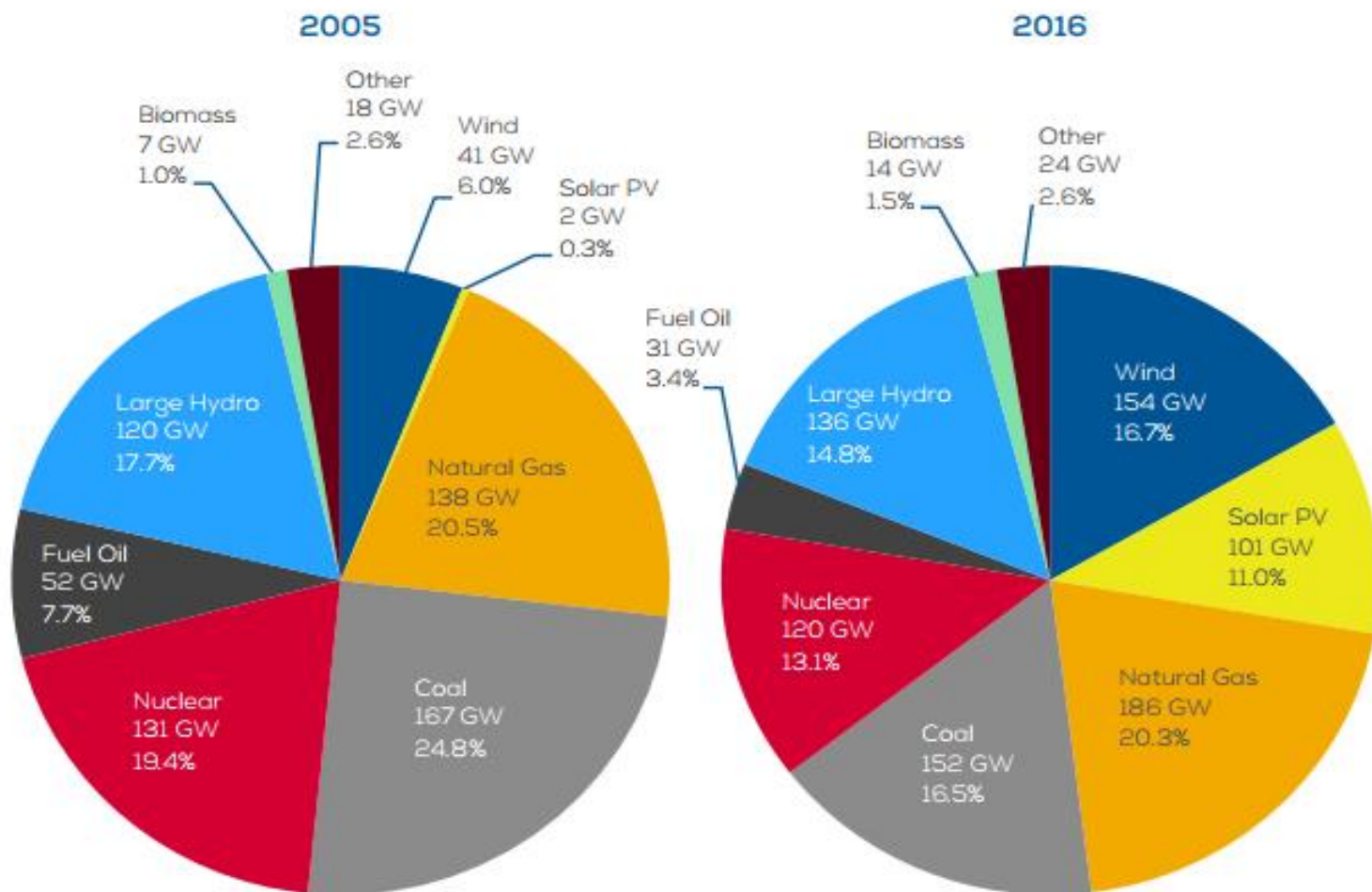
## Generating Capacity (GW) in the European Union

Source: Regulatory Assistance Project, based on ENTSO-e 2016 System Outlook & Adequacy Forecast



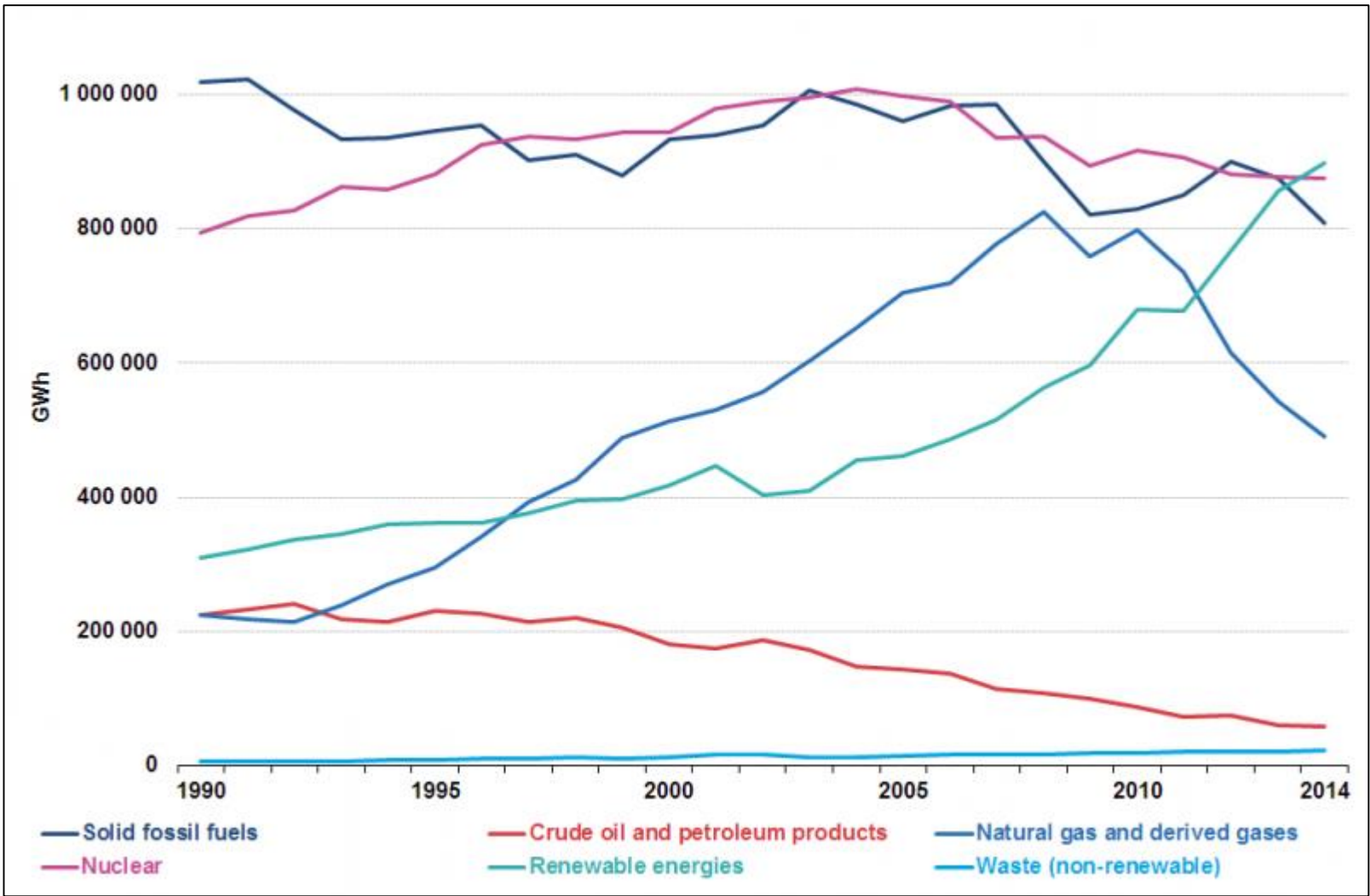
# ...and we're still adding more fossil fuel plants

Share in installed capacity in 2005 and 2016



Source: WindEurope

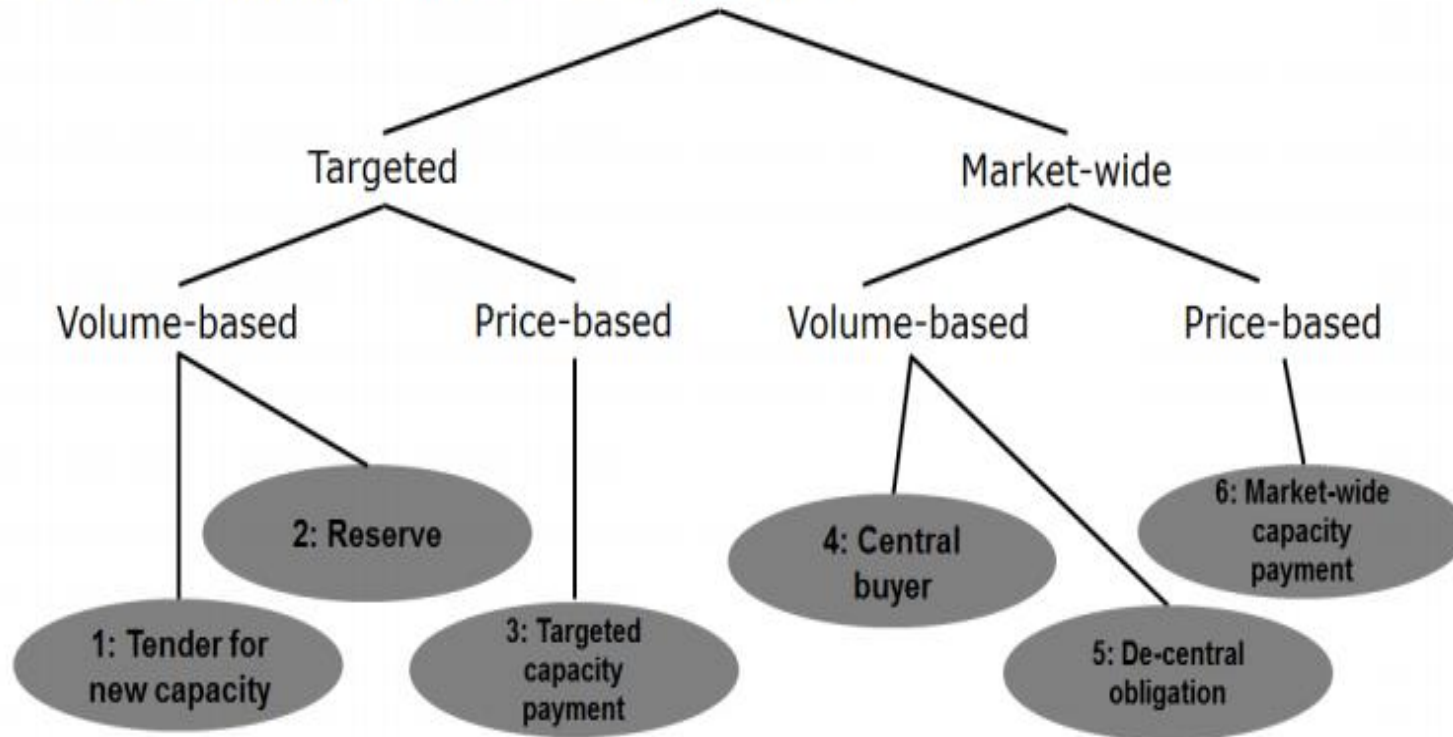
# Renewables still only providing 1/3 of electricity



Source: Eurostat

# What are capacity mechanisms?

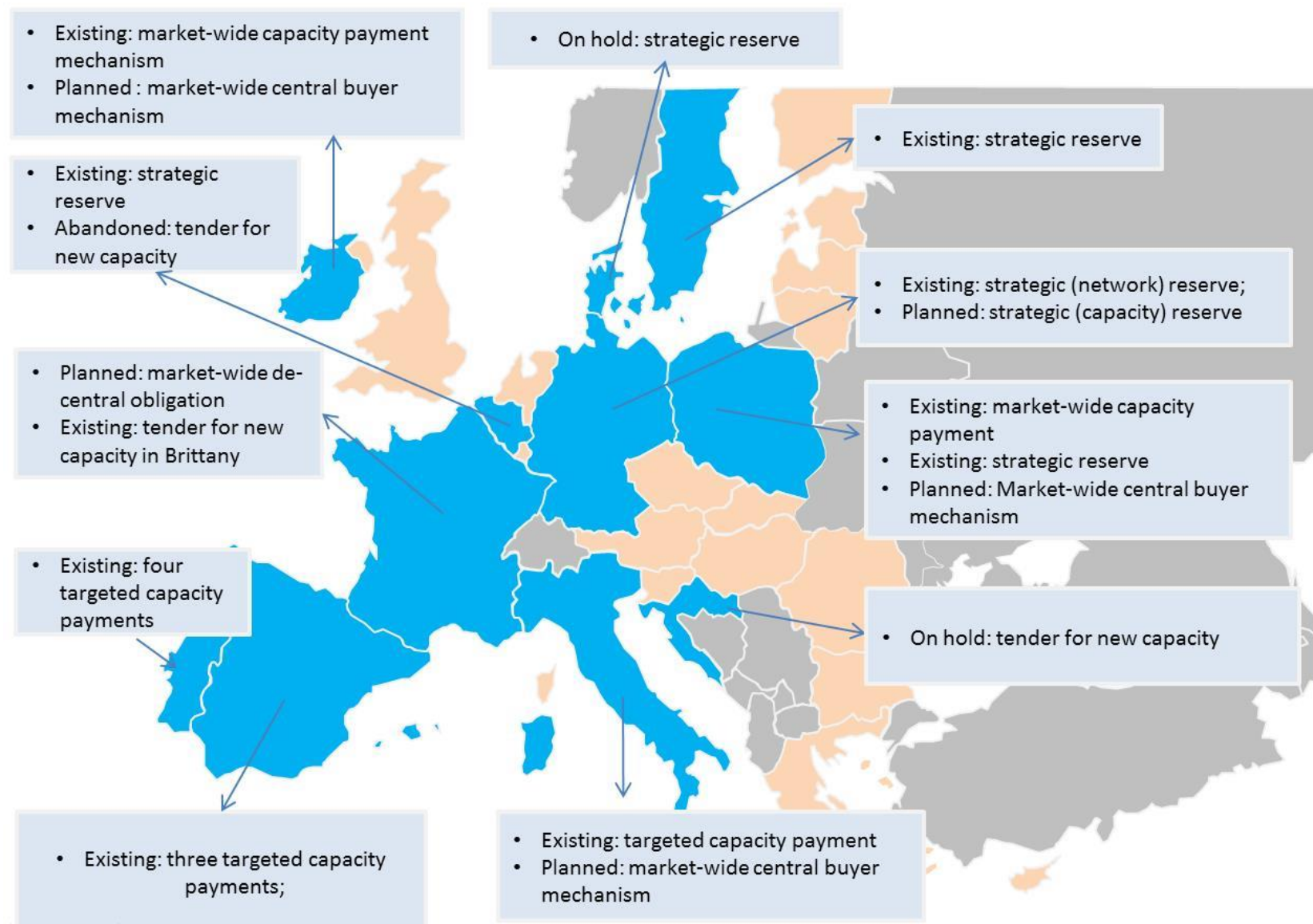
**Figure 23: Taxonomy of capacity mechanism models**



*Source: European Commission*



# Capacity mechanisms are already here





# ...and are already subsidizing fossil fuels

		Coal capacity payments £m				
Plant	Owner	2017/18	2018/19	2019/20	2020/21	TOTAL
Drax	Drax	£8	£24	£22	£25	£78
Ratcliffe	Uniper	£6	£35	£32	£41	£114
West Burton	EDF	£12	£26	£0	£29	£67
Cottam	EDF	£12	£34	£0	£0	£46
Aberthaw	RWE	£10	£29	£27	£33	£99
Fiddlers ferry	SSE	£9	£26	£0	£0	£35
Eggborough	EPH	£13	£0	£0	£0	£13
TOTAL COAL		£70	£173	£81	£128	£453

Source: Sandbag

European Commission - Press release

**State aid: Commission approves aid for French gas-fired power plant in Brittany, subject to conditions**

Brussels, 15 May 2017

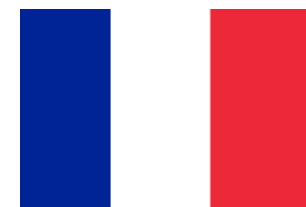
The European Commission has conditionally approved French plans to give aid to Compagnie Electrique de Bretagne for the construction of a gas-fired power plant in Landivisiau, Brittany. The measure addresses security of electricity supply concerns in Brittany and is both proportionate and necessary.

Commissioner Margrethe Vestager, in charge of competition policy, said: "The construction of the Landivisiau power plant in Brittany will help making sure that there are no electricity blackouts in Brittany. At the same time competition on the electricity market is preserved. The Commission has worked closely with France to ensure that support for the construction of the power plant is in line with EU state aid rules."

**“€94,000 per megawatt per year over a 20-year period”**

provides for a subsidy of €94,000 per megawatt per year over a 20-year period in return for a commitment from the plant operators to ensure electricity generation when required by the network operator.

The Commission's in-depth investigation found that the measure was compatible with EU state aid rules, in particular its 2014 Guidelines for Energy and Environmental Protection. This is because France has demonstrated that the measure is necessary for the construction of a viable power plant, which can ensure sufficient voltage levels in this part of the electric network. Currently, this part of the network is more exposed to voltage control issues because it is located far away from electricity generation plants. France has also demonstrated that the measure is appropriate to address the supply needs in the region, as the plant's output is flexible and can be ramped up and down at very short notice to ensure voltage levels at this location. Finally, the Commission considered that the aid amount is proportionate given the expected rate of return of the beneficiary.



...as far as we can tell

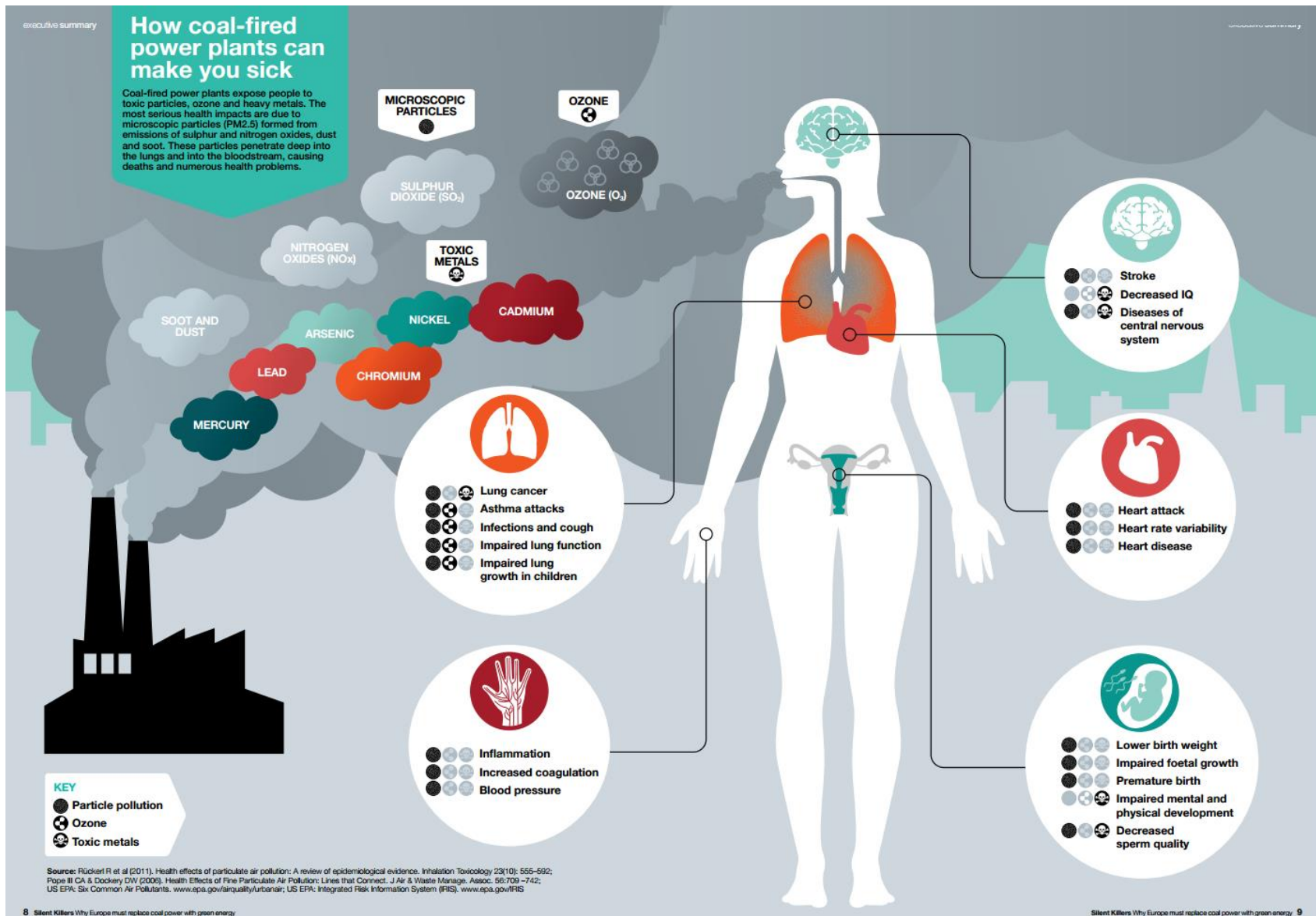
Tabla 1.- Retribución de los servicios de disponibilidad en el año 2011

Tecnología	€/MW/año <sup>26</sup>
Ciclos combinados	4.697
Centrales de carbón	4.702
Centrales de fuel-oil	4.517
Centrales hidráulicas de embalse y de bombeo	1.221
Resto de centrales (hidráulicas fluyentes y de régimen especial)	0

Fuente: Elaboración propia

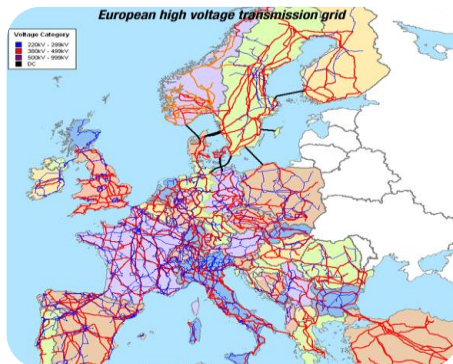


# Other impacts of capacity mechanisms

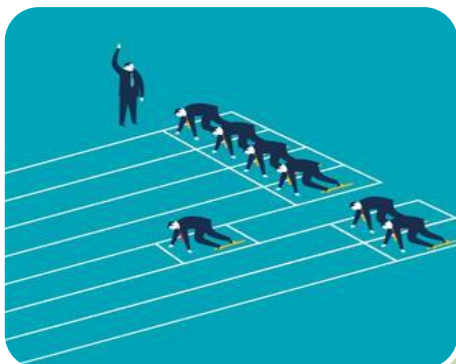


# Other impacts of capacity mechanisms

## Less cross-border electricity trade



## Distorted competition



## Higher bills for customers





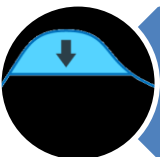
# What should we do instead?



Eliminate overcapacity: smart retirement + just transition



Remove price caps



Regulate for demand response and storage



Build interconnectors



Implement energy efficiency measures



Get bidding zones right

# Greenpeace recommends:



- ✓ Member states should only be allowed to implement capacity mechanisms if a European adequacy assessment shows there is a resource issue.
- ✓ Member states should be obliged to identify market distortions and put in place plans to eliminate them before implementing a capacity mechanism.
- ✓ Member states should be obliged to prioritise strategic reserves over market-wide capacity mechanisms. Any resources entering a strategic reserve should not be allowed to return to the market.
- ✓ Generation plants should only be eligible to participate in a capacity mechanism if they meet a 350g/kWh performance standard, comply with BREF standards and meet a minimum flexibility criteria – immediately.
- ✓ Capacity mechanisms should be open to all types of energy resources, including renewables, demand response and storage.
- ✓ Capacity mechanism contracts should be awarded for a maximum of 5 years at which time the need for the capacity mechanism should be reassessed.

The Greenpeace logo is displayed in a white, stylized, hand-drawn font in the upper right corner. Below it, several thin, white, wavy lines sweep across the slide from left to right, creating a sense of movement.

# GREENPEACE

**THANK YOU FOR YOUR ATTENTION**

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