

## EXPOSED: €58 billion in hidden subsidies for coal, gas and nuclear

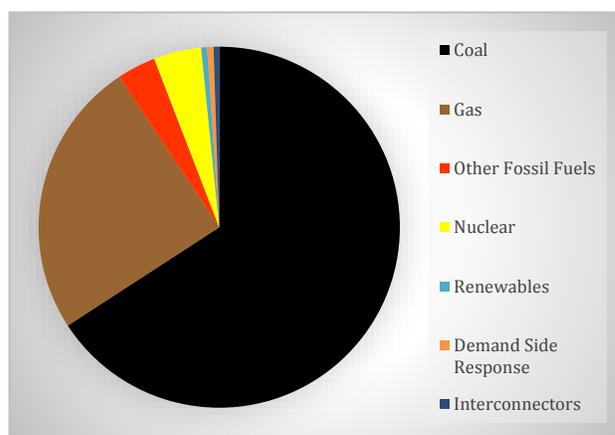
### New EU rules would allow big energy companies to continue cashing in on dirty energy

European governments are covertly adding almost €58 billion<sup>1</sup> to energy bills in order to prop up coal, gas and nuclear plants, according to data gathered by Greenpeace.

So-called capacity mechanisms – a type of subsidy given to coal, gas and nuclear plants supposedly to ensure supply in case extra power is needed – have almost quadrupled in the last twenty years. From 1998 to 2018, these subsidies to old, unprofitable and polluting power stations have cost consumers €32.6 billion. A number of European governments have already committed to a further €25.7 billion until 2040, with Belgium and Poland allocating the largest sums to date.



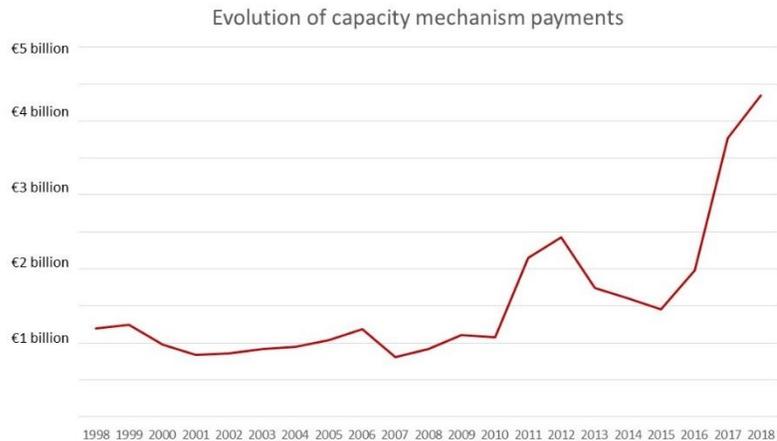
Greenpeace gathered and analysed publicly available data on past, existing and planned capacity payments in Europe. It was possible to identify the fuel source receiving the payment in slightly less than half the cases. Of these, 98% of the subsidies goes to fossil fuels and nuclear energy: 66% goes to coal plants alone, while gas receives 25%. Nuclear gets 4%, but France and the UK which have large-scale nuclear production provide 31% and 14% to nuclear respectively. Renewables, including hydro and bioenergy, receives 0.5%, and demand-side response (efficient management of energy use) and power interconnectors less than 0.5% each.



**Greenpeace EU climate and energy policy adviser Sebastian Mang** said: *“Big utilities are cashing in on subsidies that divert public money to keep unprofitable, polluting plants alive. Bankrolling dirty energy heats up the planet, contaminates the environment and endangers lives. Propping up coal, gas and nuclear is also slowing down the transition towards 100% renewable energy, which is crucial to avert the climate chaos Europeans are beginning to experience in their everyday lives. European governments must end this dirty practice.”*

<sup>1</sup> This number was extrapolated from the available data and the identifiable percentages different fuel sources receive. More information on methodology can be found in the data.

This autumn, national governments and the European Parliament will decide whether or not capacity mechanisms will be restricted by EU law. The Commission proposal for the Electricity Market Regulation and Directive, supported by the European Parliament, would require governments to prove that there is a security-of-supply issue before power utilities are granted subsidies. Under this proposal, only the plants emitting less than 550g CO<sub>2</sub>/kWh would be

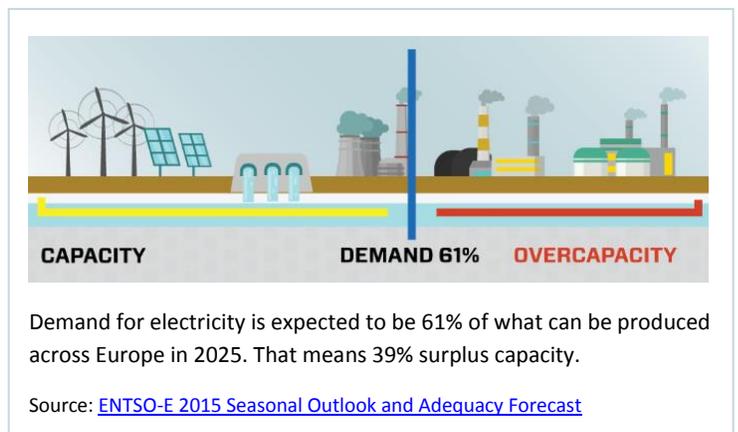


allowed to access capacity mechanisms after the assessment demonstrates a need. National governments rejected this proposal during an energy Council meeting on 18 December 2017. Large utilities have also rejected the proposal.

## Capacity mechanisms are a waste of money

In most countries that use capacity mechanisms, the funds are collected through an invisible levy on electricity bills and diverted to power plants that are not operating or plants deliberately operating at partial capacity. Utilities and governments argue that power reserves must be funded just in case there is a shortage in energy production, for example during extreme weather. However, these subsidies for **extra power are more often than not unnecessary, prop up uneconomical power plants, are harmful for the climate and are not guaranteed to work.**

**Capacity mechanisms are unnecessary because the capacity in Europe to produce energy significantly outweighs demand.** The illustration shows the EU's projected capacity to produce electricity based on installed infrastructure and peak electricity demand for 2025. Europe's overcapacity is expected to continue for a long time.



Because fossil fuels and nuclear energy are propped up by capacity mechanisms, their price is kept artificially low. This penalises renewable energy and distorts the market. Even if this overcapacity is not evenly spread across Europe, market-distorting capacity mechanisms also stifle investments in power interconnection, electricity storage and demand-side response. This translates into extra revenue for big utilities, which is paid for by energy consumers.

For example, [Spain suffers from 30% overcapacity](#), with [only 16.7% of its gas capacity being used](#). However, Spanish utilities are receiving €17.9 billion in capacity mechanisms, making Spain the biggest

beneficiary of capacity mechanisms in Europe. These subsidies keep surplus coal, gas and nuclear capacity on the market and artificially lower the price of coal, gas and nuclear energy in Spain for the producer.

**Capacity payments prop up otherwise uneconomical power plants.** In Poland, consumers are expected to pay €14.4 billion in capacity mechanisms between 2016 and 2030. Over two-thirds of this is expected to go to coal plants. An [analysis](#) of total support for coal shows that capacity mechanisms are the second biggest funding stream. Construction is meant to start on a new Polish coal plant in [Ostrołęka](#), which could not be built without capacity mechanisms. The future of Polish coal power is dependent on capacity mechanisms. [In Germany](#), capacity mechanisms have meant that coal, gas and oil power plants that were otherwise going to close were kept online.

**Capacity mechanisms are harmful because they contribute to climate change and air pollution.** In 2018, Europe experienced the warmest summer on record, causing severe droughts and countless wildfires in [ten European countries](#), from Spain to the Arctic circle. This extreme weather has been linked to climate change. Europe's coal plants alone emit [18% of the EU's carbon emissions](#) and [cause 19,500 premature deaths](#) every year because of air pollution.

**Capacity mechanisms often provide no return on investment because the capacity they funded is not called into use or does not work when extra capacity is needed.** In the UK, [£180 million](#) (€201 million) was paid for coal plants to stay on-line in case extra power was needed during the winter. For all three years when the scheme was in place (2014-2016), the plants were never used. In Germany, €1.6 billion was paid to lignite coal plants to stay on stand-by. Again, [these plants were not brought into operation](#).

On the other hand, plants that are subsidised to provide energy in emergencies are not necessarily able to do so in times of high energy consumption: coal and cooling water freeze in extreme cold and nuclear plants are often forced to shut down in extreme heat. [During the 2018 summer heat wave](#), French utility EDF shut down four reactors at three power plants; Swedish utility Vattenfall shut down one reactor; and nuclear plants in Finland, Germany and Switzerland cut back the amount of power they produced. France is providing €480 million in capacity payments to nuclear power, and the UK £466 million (€530 million).

In Bulgaria, consumers have spent €96 million since 2013 on capacity mechanisms. However, [during the winter of 2017](#), the coal power stations that were being subsidised to provide emergency electricity failed because the coal and the water needed to cool the plants froze. This came dangerously close to causing blackouts not only in Bulgaria, but in the wider South East region of Europe.

## **Blocking the transition to clean, decentralised, renewable energy**

The cost of installing wind turbines and solar panels has [fallen drastically](#). For example, in Germany, the average cost of a household solar PV installation has fallen by [more than 80%](#) since 1997. People and communities are producing more and more energy themselves. [New EU laws](#) have recently established their right to make, share and sell their own renewable energy. These advances in renewables are held back when billions of euros are poured into coal, gas and nuclear. Indeed, as

renewable energy prices fall, governments are pouring ever more money into keeping unprofitable coal, gas and nuclear power plants alive.

Europe's energy system needs to move towards a broad mix of energy resources which include different types of renewables, batteries and demand response. This would deliver a highly efficient, 100% renewables energy system that guarantees security of supply at least cost for Europe's energy consumers.

Europe's energy system is changing and will require more and more flexibility as energy production will increasingly need to reflect climate and renewable goals. Capacity payments discourage investments in renewable, decentralised energy sources as well as in storage. Capacity payments however, discourage investments in these energy resources and further entrench an old, dirty base load capacity that continues to lead to climate change.

### **Next Steps**

Energy ministers will meet on 18 September 2018 to discuss the EU's Electricity Market Regulation and Directive. The negotiations between the European Parliament, EU governments and the European Commission will continue until the end of the year, with the next session scheduled for 18 October. A final agreement is expected at the end of the year.

### **Contacts:**

**Sebastian Mang** - Greenpeace EU energy policy adviser: +32 (0)479 60 12 89,  
[sebastian.mang@greenpeace.org](mailto:sebastian.mang@greenpeace.org)

**Laura Ullmann** - Greenpeace EU communications officer: (0)476 988 584,  
[laura.ullmann@greenpeace.org](mailto:laura.ullmann@greenpeace.org)

**Greenpeace EU press desk:** +32 (0)2 274 1911, [pressdesk.eu@greenpeace.org](mailto:pressdesk.eu@greenpeace.org)

This press release is also available on: [www.greenpeace.eu](http://www.greenpeace.eu)

For breaking news and comment on EU affairs: [www.twitter.com/GreenpeaceEU](https://www.twitter.com/GreenpeaceEU)

Greenpeace is an independent global campaigning organisation that acts to change attitudes and behaviour, to protect and conserve the environment and to promote peace. Greenpeace does not accept donations from governments, the EU, businesses or political parties.