

Decommissioning fossil fuel power plants between now and 2030 essential for Europe's low carbon future



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Decommissioning fossil fuel power plants between now and 2030 essential for Europe's low carbon future

Significant changes will be needed in the Member States' energy-generating mix if the European Union is to meet its 2050 goal to cut greenhouse gas emissions by 80-95 % compared to 1990 levels, according to a new European Environment Agency (EEA) report published today. While the European Union has made considerable progress in improving energy efficiency and using renewable energy sources, a well-planned transition out of carbon-intensive power generation is needed to meet the long-term aim of creating a low-carbon society.

“

A clear, forward-looking investment strategy is also necessary across the fossil fuel power sector to meet our long-term challenge to cut CO₂ emissions. Europe is committed to decarbonise its economy so we cannot afford to tie up our investments in emission-intensive technologies.

”

Hans Bruyninckx, EEA Executive Director

The EEA report 'Transforming the EU power sector: avoiding a carbon lock-in' stresses the need for Europe to become more forward-looking when it comes to investing in cleaner energy sources. It calls on the EU to seize the opportunity to 'decarbonise' the energy generating sector, replacing ageing and end-of-life coal-fired plants with renewable energy sources where possible between now and 2030. The report gives a detailed analysis of the energy generating sector, looking specifically at the technical lifetimes of existing fossil fuel capacity across Europe. It also draws a comparison showing that similar lifetimes in the future would be incompatible with the EU's climate goals and highlights that meeting these goals can only be realised if fossil fuel capacity decreases progressively within this decade.

Europe's electricity generating sector is at the heart of the EU's decarbonisation strategy. Power generation remains the largest greenhouse gas-emitting sector, being responsible for roughly one third of all energy-related greenhouse gas emissions and more than half of the verified emissions under the EU Emissions Trading Scheme (ETS). As such, the sector has a big role to play in meeting commitments on reducing emissions and improving air quality.

"I welcome today's report 'Transforming the EU power sector: avoiding a carbon lock-in' and

am grateful that EEA raised this discussion. It is indeed imperative that new investments that will be done in the next few years go rather towards clean energies such as renewable, and don't result in a carbon lock in from fossil fuels we can't have in our future energy system. The COP21 agreement, negotiated last year, has been ratified by enough countries to enter into force and give Europe a chance to set an example and become the global leader for energy efficiency," said Maroš Šefčovič, European Commission Vice-President in charge of Energy Union.

"Europe is now generating four times more wind power and 70 times more solar power as in 2005. This is good news, but a clear, forward-looking investment strategy is also necessary across the fossil fuel power sector to meet our long-term challenge to cut CO₂ emissions. Europe is committed to decarbonise its economy so we cannot afford to tie up our investments in emission-intensive technologies. Investing in renewables and energy efficiency provides the best return on our money," said Hans Bruyninckx, EEA Executive Director.

Avoiding a 'carbon lock-in'

The report illustrates that past trends of extending the life of large fossil fuel power plants (at or above 200 MWe capacity) or building new ones would clash with the EU's best-case decarbonisation scenarios as set out in the EU's Energy Roadmap 2050, resulting in fossil fuel overcapacity. This hypothetical situation is based on a detailed, unit-by-unit analysis of fossil fuel power capacity in Europe and its potential evolution up to 2030 based on current circumstances and technical lifetime assumptions.

At present, power plant operators tend to prolong the operation of inflexible, carbon-intensive plants. If this trend is sustained while new fossil fuel capacity is added to the system, all fossil fuel power plants would need to curtail their activity to meet the EU's commitment to reduce greenhouse gas emissions.

The report argues that a pan-European approach to climate and energy reduces the need for back-up fossil fuel generation capacity at national level. It also calls for an integrated and coherent tracking of progress towards EU climate and energy targets. This includes a regular sharing of information on the evolution of fossil fuel capacity and information on expected carbon-intensity levels over the short and medium term, to improve consistency in national and European decarbonisation efforts. It also suggests that an increased alignment of energy, climate and environmental policies can maximise benefits and speed up the transition to a secure, sustainable and competitive EU power sector.



The EEA report was presented by Maroš Šefčovič, European Commission Vice-President in charge of Energy Union, and Hans Bruyninckx, EEA Executive Director.

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