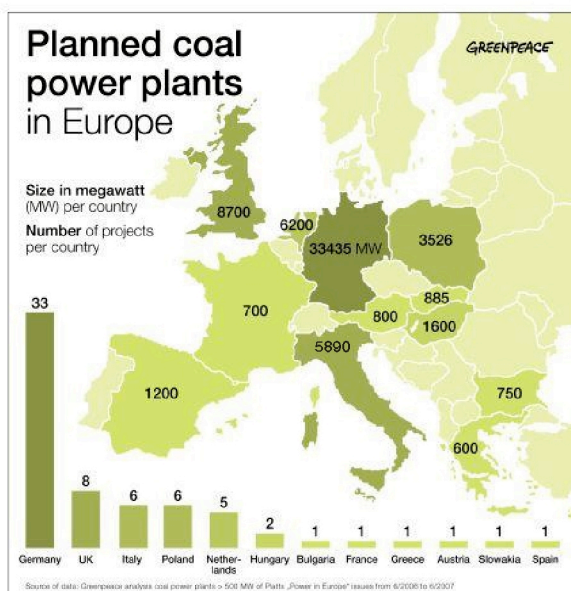


Coal-fired Power Stations and the European Union

The European Union (EU) has sought to position itself as a global leader on the issue of climate change. It is expected to meet its mandated 8 per cent reduction in greenhouse gas (GHG) emissions by the first commitment period of the Kyoto Protocol, 2008-2012. Outside of the Kyoto framework, the EU has committed to cutting its emissions by at least 20 per cent by 2020 and is willing to reduce by 30 per cent, if industrialised nations outside the EU follow suit. It has also pledged to meet 20 per cent of its energy needs from renewable energy over the same timeframe. Some EU Member States have opted to do more. Germany has set out to cut carbon dioxide (CO₂) emissions 40 per cent by 2020 while the Netherlands has adopted an ambitious programme that aims for a 30 per cent cut in GHG emissions by 2020. On the surface, the EU appears to be the poster child for tackling climate change. However, EU targets are incompatible with continued subsidies for coal and the building of new coal-fired power plants.

Coal and climate protection cannot co-exist

While EU leaders acknowledge the danger posed by climate change and the need to act quickly, EU nations are slow in shifting away from carbon-intensive energy sources. Coal, the dirtiest of fossil fuels, is witnessing a resurgence within the EU with a bevy of proposed projects in the pipeline. What's more, the EU has failed to outline a policy for coal subsidies after 2010; this lack of a policy could allow State aid for coal to continue for many years. Climate scientists have spelled out the need for industrialised countries to achieve a reduction in GHG emissions of at least 80 per cent by 2050 as part of a global target of at least 50 per cent cuts by 2050. The next round of emission reductions negotiated under the Kyoto process must mandate these deep cuts in emissions order to prevent the climate crisis spiralling out of control. Reaching these targets, however, will be impossible if coal is allowed a renaissance. Technologies such as carbon capture and storage (CCS) will not deliver them, despite assertions to the contrary.¹ As the InterAcademy Council recently noted, the proliferation of coal-fired power stations may pose "the single greatest challenge" to averting dangerous climate change.²



A Greenpeace analysis of large (greater than 500 MW) power generation projects in the phases of proposal, development, permitting or construction in Europe, as of June 2007, reveals a total of 210 power projects, of which 68 are coal-fired. Of the total 188,883 MW of capacity in the pipeline, 64,026 MW (or 34 per cent) will be coal-fired while only 16,239 MW, or 9 per cent, will be renewable energy. By far the most coal-fired power stations in the pipeline, 33, are in Germany. Next in line is the UK with eight projects, followed by Italy with six (conversions from oil-fired plant), Poland with six and the Netherlands with five. The figure to the left details the country breakdown by number of projects and total MW.

¹ For more information, www.greenpeace.org/raw/content/international/press/reports/briefing-ccs-carbon-capture-storage.pdf

² *Lighting the Way: Toward a Sustainable Energy Future*, 2007

Constructing a coal-fired station today means CO₂ emissions until 2050

The coming two decades will witness the largest turnover in electricity generating capacity the world has ever seen. Existing plants will need to be retired. Decisions made by governments and power companies on how to manage this turnover will define our energy supply for well over a generation. A snapshot compiled by Greenpeace (see above) of the plans for new electricity capacity in the EU reveals one-third of proposed and planned capacity could rely on coal (64,026 MW) and less than 10 per cent on renewable energy resources. If the average 1000 megawatt (MWe) power station generates 7 million tonnes (Mt) of CO₂ annually, these 64,026 MW would be responsible for an estimated 448.2 Mt of CO₂ every year. This is more than the entire annual GHG emissions of Spain.³

The climate imperative demands nothing short of an Energy Revolution

Maintaining the status quo with respect to our energy supply will not solve the climate crisis. The good news is that alternatives do exist. Renewable energy, combined with the smart use of energy can deliver half of the world's energy needs by 2050. This is both technically and economically feasible. Decades of technological progress have seen renewable energy technologies such as wind turbines, solar photovoltaic panels, biomass power plants and solar thermal collectors move steadily into the mainstream.⁴

The EU must close the door on all coal subsidies

Coal has no place in a climate-friendly energy scenario. To keep global mean temperature rise as far below 2 degrees Celsius as possible, emissions must peak by 2015 and begin falling dramatically thereafter. That means abandoning coal and not investing in false solutions like CCS, which will not be able to deliver the required emission reductions in time. One significant way to ensure that future energy decisions are appropriately focused is to eliminate subsidies for dirty energy. State aid for coal is permitted under a special derogation from EU law that expires in 2010.⁵ Although the European Commission has now said that this derogation will not be replaced, it has failed to outline a policy for the period after 2010. In effect, this creates a loophole through which governments can ask the Commission to allow an extension of State aid for many more years.

In 2005, eight member states granted coal State aid totalling €4.1 billion, or about €11 million per day. Germany and Spain granted the most aid - around 85 per cent of the total - with smaller amounts given by Poland, Czech Republic, Slovakia, Slovenia, Hungary and the UK.⁶ If Europe is as serious as it claims to be about fighting climate change, then it must divert public money and support from polluting energy sources such as coal to clean energy technologies, such as renewables and energy efficiency measures.

The time window for making the shift away from an energy paradigm that threatens our climate to one that protects it is short. Renewable energy and energy efficiency provide the only path to a truly secure and sustainable energy future that protects our climate. The time to act is now and the EU must lead the way.

³ reports.eea.europa.eu/technical_report_2006_10/en/eea_technical_report_10_2006.pdf

⁴ For more information,

www.energyblueprint.info/fileadmin/media/documents/regional/oecd_europe_report.pdf

⁵ Coal state aid is governed by Council Regulation 1407/2002 based on Article 89 of the EC Treaty (State Aid). Article 11 of the Regulation requires a mid-term review of its application.

⁶ European Commission's latest State Aid Scoreboard, COM(06)761, 11 Dec. 2006. Other figures (all for 2005) are: Hungary 38 million euro, UK 37 million euro, Slovenia 14 million euro, Slovakia 2 million euro, Czech Republic 0.3 million euro.