

Global Shift

Countries and Subnational Entities Phasing Out Existing Coal Power Plants and Shrinking the Proposed Coal Power Pipeline

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PS10 Solar Tower Plant in Spain
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Chvaletice Power Plant Occupation
in Czech Republic
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Introduction: Two Trends Squeezing Coal

According to recent news reports,(1)(2)(3)(4) coal power is being squeezed between two trends:

1. Shrinking Deployment of New Coal Plants. After a decade of unprecedented expansion, the amount of coal power capacity under development worldwide saw a dramatic drop in 2016, mainly due to shifting policies and economic conditions in China and India.(5)

2. Accelerating Retirement of Old Coal Plants. Aging coal fleets in Europe and North America are being phased out in favor of alternative power sources.(6)

The combination of shrinking deployment of new power capacity and accelerating retirement of old capacity provides the basis for a worldwide phase-out of coal power generation over the coming decades. This overview provides profiles of specific countries and sub-national entities where new coal power is being constrained or existing coal power is being partially or entirely phased out.

Shrinking Deployment of New Coal Power

From January 2016 to January 2017 the amount of proposed coal power in the pre-construction pipeline fell from 1,089,671 MW to 569,601 MW, a decline of 519,970 MW or 48%. Of this decline, 90% occurred in China and India, which accounted for 73% and 17% respectively. Both countries have experienced severe overbuilding of coal power capacity, leading to low capacity factors. In China, as detailed in this report, a series of policy measures announced by the National Energy Administration and National Development and Reform Commission imposed new restrictions on coal permitting and construction. Of particular note is an 85% decline from 2015 to 2016 in construction permits.(7)(8)(9)(10)(11)

In India, contraction of the pre-construction coal power pipeline was driven primarily by tightening availability of financing, as coal power was squeezed between falling load factors and rapidly expanding renewables. Lower costs for renewables have attracted large amounts of new investment financing, including US\$175 million from ADB to Power Grid Corporation of India to help India diversify its power mix by increasing its supply of clean energy, US\$20 billion from Japan's Softbank for partnerships with Taiwanese company Foxconn and Indian business group Bharti Enterprises, and US\$2 billion from EDF for Indian renewable energy projects.(12)

Worldwide, deployment of renewable power capacity has exceeded new coal power capacity in each of the past five years, with the gap steadily widening.(13)(14)

According to a report by UN Environment, the Frankfurt School-UNEP Collaborating Centre, and Bloomberg New Energy Finance, clean energy provided 55 percent of all new capacity added worldwide in 2016, and the total investment was about double the amount for generators driven by fossil fuels. Growth was driven by lower prices, including a fall of 10% in the average capital expenditure per megawatt for wind and solar.(15)

Accelerating Retirement of Old Coal Plants

As retirements of aging coal fleets have surged in recent years, increasing numbers of countries and major sub-national entities are undertaking partial or complete phase-outs of coal power.

Entities that have completed or are planning complete coal phase-outs include:

- Austria (2025)
- Beijing (2017)
- Belgium (2016)
- Berlin (2030)
- California (2014)
- Canada (2030)
- Connecticut (2021)
- Delhi city (2018)
- Finland (2030)
- France (2023)
- Hawaii (2022)
- Massachusetts (2017)
- New Mexico (2030)
- Netherlands (2030)
- New York state (2020)
- New Zealand (2022)
- Ontario (2014)
- Oregon (2020)
- Portugal (2030)
- Scotland (2016)
- Sweden (2030)
- United Kingdom (2025)

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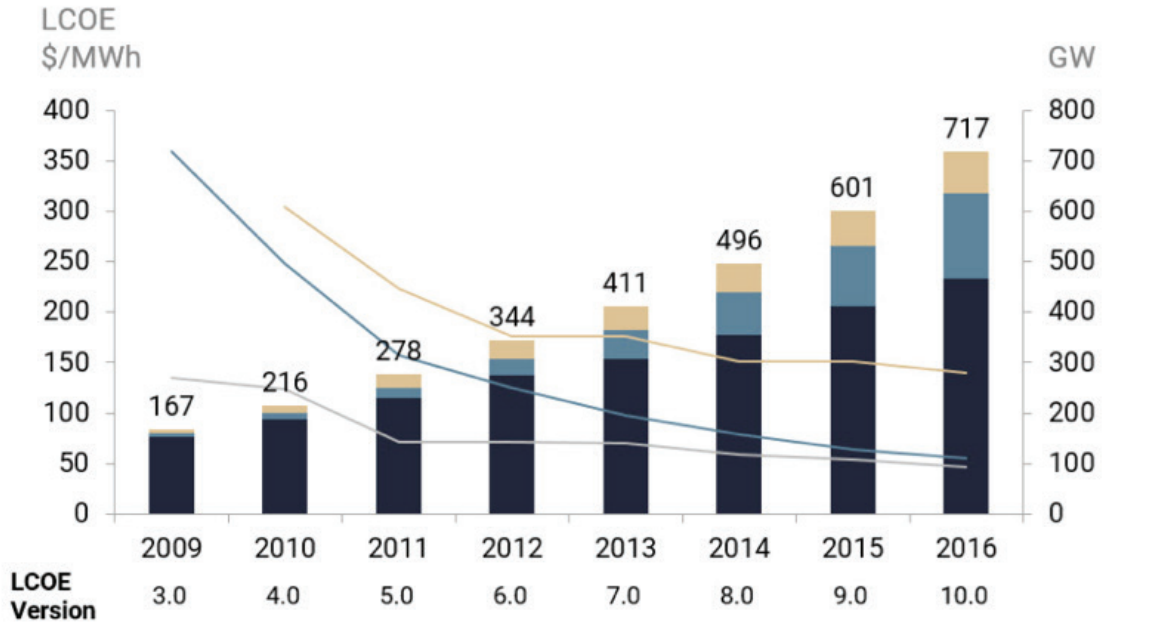


Figure 1: Unsubsidized Levelized Cost of Energy—Wind/Solar PV (Historical), from Lazard, “Levelized Cost of Energy Analysis 10.0,” 15 December 2016 at <http://bit.ly/2p2WGZq>

■ Cumulative Installed Commercial PV
■ Cumulative Installed Onshore Wind
■ Cumulative Installed Utility PV
— Wind LCOE Median
— Crystalline Utility-Scale Solar LCOE Median^(a)
— Rooftop C&I Solar LCOE Median^(b)

- Washington state (2025)

Other entities, already coal-free or nearly coal-free, have halted development of new coal power capacity. They include:

- Albania
- Belarus
- El Salvador
- Ghana
- Latvia

In addition to countries planning complete phase-outs of coal, other countries are accelerating retirements of coal plants, either by central government policy or by action by individual utilities. In March 2017, India Energy Minister Piyush Goyal stated that the country will retire 190 coal plants older than 25 years, totaling 55,000 MW of power. (16) In the United States, coal power retirement decisions at the individual utility level have led to 114,500 MW of coal power capacity retired or committed to retire since 2010, as of mid-April 2017. (17)

Falling Costs, Accelerating Deployment of Renewable Power

As shown in Figure 1, based on unsubsidized levelized historical costs for utility photovoltaics (PV), commercial PV, and onshore wind, falling prices for renewable power have tracked accelerating deployment of renewable capacity. As of December 2016, unsubsidized levelized costs for onshore wind ranged from US\$32 to US\$62 per MWh for onshore wind, and US\$46 to US\$56 per MWh for utility thin film PV, compared to US\$60 or more for coal, based on US supply sources and costs. (17)

In South Asia, costs for solar power have ranged even lower. In February 2017, three winning bids by Mahindra Renewables, Acme Solar, and Solenergi Power for the 750 MW Rewa solar park in Madhya Pradesh, India, came in at or below Rs2.97 (US\$.0459) per kWh. While the low costs spell trouble for developers of coal plants, the speed with which costs have dropped spells even more trouble. The winning bid was 32% lower than the record bid a year earlier, which itself was 25% lower than the previous record low. (18)

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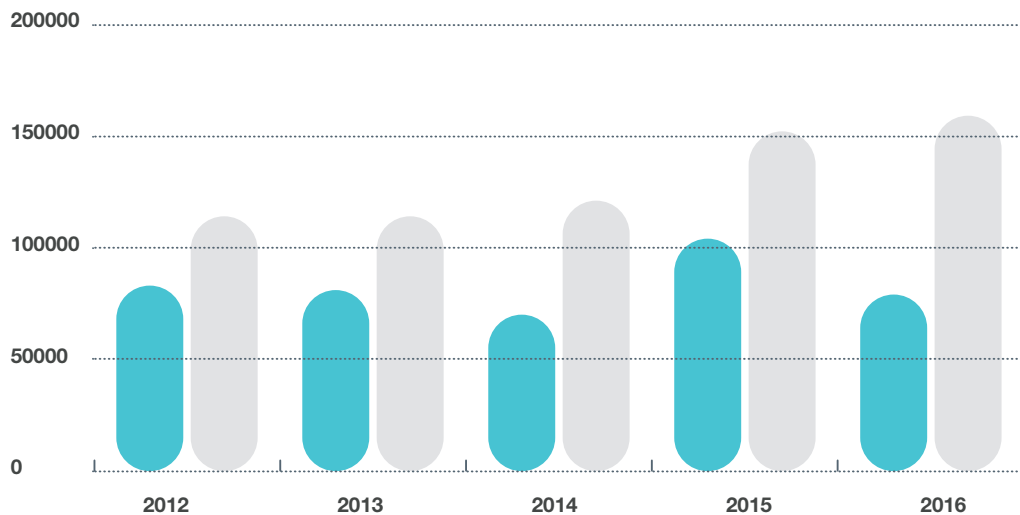


Figure 2: Global New Coal Power and Renewable Power Capacity (MW), 2012-2016.

Renewables include solar, wind, geothermal, and hydroelectric. Source: Global Coal Plant Tracker (July 2017) and International Renewable Energy Agency, "Renewable Energy Capacity Statistics 2017."



Coal



Renewable power

The rapid reductions have led to dramatic cuts in plans for coal plants, as developers fear losing large sums of money on "stranded assets." On March 28, 2017, India's state power company, NTPC, announced that it would likely cancel the 1600 MW expansion plans for two supercritical units at Kudgi Thermal Power Station. The Economic Times reported that officials "cannot ignore solar power when tariffs are falling so rapidly." In a recent tweet, India's Power Minister Piyush Goyal wrote, "We have crossed 10,000 MW of installed capacity of solar and in another 15 months we expect this to go up to 20,000 MW & 100,000 MW by 2022."⁽¹⁹⁾ As detailed below in the profile for India, construction is now frozen at 13 coal power plant projects in India due to lack of financing, as bankers and other financiers shift money from coal to solar.

Although India's solar prices are hitting record lows, other countries have reported even lower prices. In February 2016, Palo Alto, California approved a 25-year solar power purchase agreement with Hecata Energy for 26 MW of energy at the Wilsona Solar project at US\$0.37 per kWh. ⁽²¹⁾ In Abu Dhabi, JinkoSolar set a record in September 2016, bidding US\$0.0242 per kWh for 350 MW of solar power. The bid beat previous records of US\$0.0291 in Chile and US\$0.0299 in Dubai.⁽²³⁾

Like solar, wind power is also setting new lows in India's power auctions. In February 2017, Solar Energy Corp. of

India Ltd. received bids for Rs3.46 (US\$0.053) per kWh for 1,000 MW of power.⁽²²⁾ In the United States, the average levelized long-term price from wind power sales agreements has dropped to US\$0.02 per kWh, according to a the U.S. Department of Energy.⁽²⁴⁾

As shown in Figure 2, installation of new renewable power capacity has exceeded new coal installation for each of the past five years, and the gap between the two has widened. With prices for solar PV and wind continuing to rapidly fall, the transition of the electricity sector away from coal power to solar PV, wind, and other renewables will accelerate.

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Country and Subnational Profiles

Albania

• Status	Virtually coal-free; all coal power proposals cancelled
• Installed capacity (all)	2,151 MW (1)
• Renewables	85% (1)
• Coal power Dec. 2009	12 MW (2)
• Coal power June 2017	12 MW (3)(4)
• Change since 2009	Unchanged

Policy notes

Albania remains virtually coal free, with only 12 MW of small plants currently operating. Enel's proposal for a 2,000 MW coal-fired power plant at Porto Romano was cancelled after two years of consideration.(4)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/2yEQY5j>
- (4) Besar Likmeta, "Government Plans Huge Infrastructure Investment at Porto Romano," Balkan Insight, 14 July 2014 at <http://bit.ly/2ofdYS1>

Austria

• Status	Coal phase-out scheduled for 2025
• Installed capacity (all)	22,150 MW (1)
• Renewables	69% (1)
• Coal power Dec. 2009	1,351 MW (2)
• Coal power June 2017	635 MW (3)
• Change since 2009	53% decrease

Policy notes

Austria began shrinking its coal power fleet in 2000. Zeltweg power station (137 MW) was retired in 2001. Voltsberg power station was retired in 2006. Timelkam power station (66 MW) was retired in 2008. Riedersbach power station Unit 1 (55 MW) was retired in 2010. St. Andrae power station (248 MW) was retired in 2011. Duernrohr power station Unit 1 was retired in 2015.(3) In November 2015, Oesterreichs Energie announced that Austria's last three coal-fired power plants (Riedersbach II,

Mellach, and Durnohr) will be closed at the end of 2025.(4)(5)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/2yEQY5j>
- (4) "Austria to close coal plants by 2025, worth up to 1.5m tCO₂e," ICIS, 23 November 2015, at <http://bit.ly/2nntsFk>
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Beijing

• Status	Coal phased out in 2017
• Installed capacity (all)	9,808 MW (1)
• Renewables	12% (1)
• Coal power Dec. 2009	3,245 MW (2)
• Coal power June 2017	0 MW (3)
• Change since 2009	100% decrease

Policy notes

Over the past three years Beijing has phased out its coal power fleet, shutting the Gaojing power station (600 MW) in 2014, Beijing Jingneng power station (150 MW) in 2015, Shijingshan power station (800 MW) in 2015, Beijing Yire power station (400 MW) in 2015, and Huaneng Beijing power station (845 MW) in 2016.(3)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/1UCQKwg>

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Belarus

• Status	Coal-free; all coal power proposals cancelled
• Installed capacity (all)	9,896 MW (1)
• Renewables	1% (1)
• Coal power Dec. 2009	0 MW (2)
• Coal power June 2017	0 MW (3)
• Change since 2009	Unchanged

Policy notes

Belarus remains coal free. Two proposed projects, Lelchitsy power station (400 MW) and Zelwa power station (1,000 MW), have not progressed and appear to be abandoned.

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/2yEQY5j>
- (4) "Lelchitsy power station," SourceWatch at <http://bit.ly/1vUQI5>
- (5) "Zelwa power station," SourceWatch at <http://bit.ly/2pi6xr1>

Belgium

• Status	Coal phased out in 2016
• Installed capacity (all)	18,835 MW (1)
• Renewables	19% (1)
• Coal power Dec. 2009	2,000 MW (2)
• Coal power June 2017	0 MW (3)
• Change since 2009	100% decrease

Policy notes

Belgium's phase-out of coal power has been implemented via a series of individual plant retirement decisions. Mol power station was retired in 2010, Ruijen power station was retired in 2012 and 2013, Arwirs power station was retired in 2013, and Genk-Langerlo power station was retired in 2016.(4)(5)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009

- (3) Global Coal Plant Tracker, February 2017 at <http://bit.ly/2yEQY5j>
- (4) "Belgium kicks the coal habit," Greenpeace, April 1, 2016 at <http://bit.ly/2nlw4D8>
- (5) "Genk-Langerlo power station," SourceWatch, at <http://bit.ly/2nlwQjk>

Berlin

• Status	Coal phase-out scheduled for 2030
• Installed capacity (all)	2,863 MW (1)
• Renewables	36% (1)
• Coal power Dec. 2009	1323.6 MW (2)
• Coal power June 2017	1080 MW (3)
• Change since 2009	18% decrease

Policy notes

In May 2017 the Berlin city's government announced that the city will stop using lignite by the end of 2017 and will end all coal-fired power generation by 2030 (4)(5)(6)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at July 2017 at <http://bit.ly/2hBWMSf>
- (4) "Berlin advances coal phase-out," press release 11 May 2017 at <http://bit.ly/2hBNxS6>

California

• Status	In-state phase-out completed in 2014; imported coal power phase-out expected in 2025
• Installed capacity (all)	78,781 MW (1)
• Renewables	41% (1)
• Coal power Dec. 2009	452 MW (2)
• Coal power June 2017	0 MW (3)
• Change since 2009	100% decrease

Policy notes

Coal-fired power generation in California has been on the decline since 2005, when the 1,636 MW Mohave Generating Station, based in Nevada but mainly serving

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California, was retired.(4) From 2006 through 2016, a total of 3,463 MW of capacity from imported and in-state coal plants was removed from California’s resource portfolio. (5) This included the retirement of the state’s final coal-fired power plants from 2012 to 2014: Hydrogen Energy California (62 MW), Stockton Cogeneration Facility (60 MW), Mt. Poso Cogeneration Plant (38 MW), Rio Bravo Jasmin Power Plant (38 MW) and Rio Bravo Poso Power Plant (60 MW).(6) California’s coal phase-out is the result of the California Emission Performance Standard (EPS), which was mandated by Senate Bill 1368 and applies to baseload generation owned by or under contract with utilities.(7) Imported coal power is expected to end entirely in 2025.(8)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/1UCQKwg>
- (4) “Mohave Generating Station,” SourceWatch, accessed April 2017 at <http://bit.ly/2nnMtH3>
- (5) “Coal-Fired Power in Steady Decline in California Since 2005,” California Energy Commission, 12 December 2016 at <http://bit.ly/2nnQZ8n>
- (6) Global Coal Plant Tracker, February 2017 at <http://bit.ly/1UCQKwg>
- (7) “SB 1368 Emission Performance Standards,” California Energy Commission at <http://bit.ly/2no34KO>
- (8) “Actual and Expected Energy From Coal for California - Overview,” California Energy Commission, 3 November 2016 at <http://bit.ly/2nnUZGe>

Canada

• Status	Coal phase-out scheduled for 2030
• Installed capacity (all)	143,427 MW (1)
• Renewables	63% (1)
• Coal power Dec. 2009	16,368 MW (2)
• Coal power June 2017	9,809 MW (3)
• Change since 2009	40% decrease

Policy notes

Environment Minister Catherine McKenna announced on November 21, 2016, that Canada will completely phase out traditional coal power by 2030 and will work with the

country’s four remaining coal-using provinces to reach the overall goal. The country’s goal is to achieve 90% of the country’s electricity from sustainable sources by 2030.(4) (5)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/2yEQY5j>
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- (5) “Canada plans to phase out coal-power electricity by 2030,” The Guardian, 21 November 2016 at <http://bit.ly/2nlshFC>

China

• Status	Implementing measures to limit coal fleet growth
• Installed capacity (all)	1,650,000 MW (2)
• Renewables June 2017	Hydro 332,110 MW; Wind 148,640 MW; Solar 77,420 MW (2)
• Coal power 2010	648,972 MW (1)
• Coal power 2016	942,590 MW (2)
• Change since 2010	45% increase

Policy notes

After two decades of rapid growth, coal-fired power generation in China slowed in 2011 and turned into a decline in 2013, the result of slowing demand and growing use of renewable energy. Despite the decline in generation, power generators failed to respond and continued building new capacity resulting in a crisis of overcapacity and low plant utilization rates.(3)

To tackle the increasing coal power bubble, the Chinese government released a series of policies in 2016 and 2017.

1. On 17 March 2016, China National Development and Reform Commission (NDRC) and National Energy Administration (NEA) released the overall guideline for regulating the coal power development to crack down on the severe and growing coal power overcapacity crisis. It states: 1) cancel permitting for unqualified coal power projects. 2) 13 provinces and regions should “strictly control” new capacity, delaying the approval of

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- new projects until after 2017. 3) A slightly longer list of provinces - 15, with considerable overlap - were told to put off construction of approved projects that had not yet broken ground. Combined heat and power (CHP) plants for residential heating and power, projects in coal power bases exporting power to other provinces, as well as projects supporting poverty reduction in revolutionary areas and poor areas are exceptions from the above. It is estimated by Greenpeace that 170 GW currently permitted and under construction coal power projects would be halted according to this guideline. http://www.sdpc.gov.cn/gzdt/201604/t20160425_798991.html
2. Along with the overall guideline, NEA released the Coal Bubble Alert System on the same day. It introduces coal power planning risk management mechanism, dubbed the “traffic light” system. The system is based on three factors, with provinces assessed on the profitability of their coal-fired generation, their existing coal capacity and their “resource constraints – such as water and air.” After adding these together, each province is assigned a color to signify the viability of its coal pipeline. Red means no new coal projects should be permitted. Orange indicates local governments and coal companies should tread carefully. Green indicates that there is plenty space for new coal power. In the warning for 2019, only Jiangxi, Anhui and Hainan have green light, Hubei is orange, and the rest 26 provinces all get red light, which means these provinces have to stop approving coal capacity they don’t need. http://www.jsdpc.gov.cn/zixun/tzgg_1/201605/P020160506368498872942.pdf
 3. On 18 April 2016, NDRC and NEA released guidelines to accelerate the retirement of outdated coal-fired plants that use older, dirtier technology. There was 28GW outdated coal-fired power capacity phased out in the 12th Five-Year-Plan (2010-2015) period. All provinces should set the retirement target for the 13th FYP according to the criteria in the guideline. Small units ranging from 50 MW to 300MW were included the checklist. The national target of the outdated coal power retirement for 13th FYP (2016-2020) period is 20GW. http://www.jsdpc.gov.cn/zixun/tzgg_1/201605/P020160506362298246752.pdf
 4. On 13 September 2016, NEA released the cancel list of the planned but unqualified coal power projects. It includes 15 planned coal projects located in nine provinces, with total capacity of 12.4GW. http://zfxgk.nea.gov.cn/auto84/201609/t20160923_2300.htm
 5. On 10 October 2016, NEA released the supplementary guideline for regulating the coal power development to enforce the guideline released in March. It expands the suspension for approval and initiate of new construction to projects for provincial self-demand in all 26 provinces that have coal power bubble red light. Projects started constructions in 2016 were ordered to stopped. It also ordered projects in coal power bases that were designed to export power to other provinces to scale down to about half of the planned capacity within 2020. CHP plants for residential heating and power are exempt from the restrictions. http://zfxgk.nea.gov.cn/auto84/201610/t20161020_2311.htm
 6. On 7 November 2016, NEA announced China’s 13th Five Year Plan for Power Sector, with a coal power capacity cap of 1,100 GW by 2020. There will be 150 GW approved and under construction coal power projects to be blocked to meet the 1,100GW cap by 2020. <http://www.sdpc.gov.cn/gzdt/201612/P020161222582159692449.pdf>
 7. On January 2017, NEA sent letters to 13 provinces to enforce the suspension of planning and construction of over 100 specific plants with more than 120 GW capacity in these provinces, and “scale control” limits on the amount that can be exported from particular power base areas.

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- (3) Lauri Myllyvirta and Xinyi Shen, “Burning Money: How China could squander over one trillion yuan on unneeded coal-fired capacity,” Greenpeace, July 2016 at <http://bit.ly/2bAlTm4>

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Connecticut

• Status	Phase-out scheduled for 2021
• Installed capacity (all)	9,687 MW (1)
• Renewables	2% (1)
• Coal power Dec. 2009	614 MW (2)
• Coal power June 2017	400 MW (3)
• Change since 2009	35% decrease

Policy notes

Connecticut's coal power capacity has been declining since the retirement of the AES Thames Generation Plant (213 MW) in 2011.(1) The state's last operating coal plant, Bridgeport Harbor Station, is scheduled for retirement by 2021.(2)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/1UCQKwg>
- (4) Gregory B. Hladky, "Connecticut's Last Coal-Fired Power Plant to Be Closed," Courant Community, 12 February 2016 at <http://cour.at/2p2oJby>

Delaware

• Status	Phasing out coal on a plant-by-plant basis
• Installed capacity (all)	3,528 MW (1)
• Renewables	1% (1)
• Coal power Dec. 2009	1,097 MW (2)
• Coal power June 2017	445 MW (3)
• Change since 2009	59% decrease

Policy notes

Delaware coal power capacity has been declining since 2010, with the closure of the Edge Moor Power Plant (698 MW) in 2010 and the closure of the Indian River power station Units 1-3 (338 MW) in 2013 and 2014. The last operating unit in the state is the Indian River power station Unit 4 (442 MW).(4)(5)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009

- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/1UCQKwg>
- (4) "Edge Moor Power Plant," SourceWatch at <http://bit.ly/2okayOr>
- (5) "Indian River power station," SourceWatch at <http://bit.ly/2okbbHH>

Delhi (city)

• Status	Last major plant within the city to close in 2018
• Installed capacity (all)	4449 MW (1)
• Renewables	57% (1)
• Coal power Dec. 2009	1102.5 MW (2)
• Coal power June 2017	705 MW (3)
• Change since 2009	36% decrease

Policy notes

While there remain a number of coal-fired power stations within a close proximity to Delhi, the last power station within the city, Badarpur power station, is scheduled to close in 2018.(4)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/2yEQY5j>
- (4) "Badarpur power station," SourceWatch at <http://bit.ly/2yEQImL>

Denmark

• Status	Reducing reliance on coal
• Installed capacity (all)	10,662 MW (1)
• Renewables	25% (1)
• Coal power Dec. 2009	4619 MW (2)
• Coal power June 2017	2837 MW (3)
• Change since 2009	39% reduction

Policy notes

Denmark has been steadily shrinking its coal power fleet since 2004, as the country has moved aggressively to become a world leader in manufacturing and usage of wind power. Amager power station units 1 and 2 were retired in 2004 and 2010. Studstrup power station was retired in 2015. Stigsaes power station was retired in

Country and Subnational Profiles

2006 and 2012.(3) Danish energy company DONG has committed to phasing out coal from its energy mix by 2023.(4) Asnaes power station (1052 MW) will be converted to biomass by 2018.(5) Amager power station (263 MW) will be converted from coal to biomass by 2020.(6) Two major facilities without phase-out plants remain in operation: Nordjylland power station (716 MW) and Fyn power station (362 MW).(7) In addition, a 37 MW power plant on the island of Bornholm burns a combination of coal, oil, and wood chips.(8)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/2yEQY5j>
- (4) Sam Grover, "Danish energy giant commits to phasing out coal by 2023," Treehugger, 2 February 2017 at <http://on.wsj.com/2nloMPu>
- (5) "One step closer to a green future for Asnaes Power Station," 21 December 2015 at <http://bit.ly/2ojRmjh>
- (6) "Amagerverket," HOFOR, accessed April 2017
- (7) Global Coal Plant Tracker, February 2017 at <http://bit.ly/2yEQY5j>
- (8) Jacob Østergaard and John Eli Nielsen, "The Bornholm Power System: An overview," Centre for Electrical Technology, May 2010 at <http://bit.ly/2p2mVPM>

El Salvador

• Status	Coal-free; all proposed coal plants cancelled
• Installed capacity (all)	1,892 MW (1)
• Renewables	46% (1)
• Coal power Dec. 2009	0 MW (2)
• Coal power June 2017	0 MW (3)
• Change since 2009	none

Policy notes

AES Fonseca power station (220 MW) was originally proposed in 2009, but a doubling of the projected cost and difficulties with financing led to a delay in construction. In April 2011, La Union passed an ordinance prohibiting new power plants, then confirmed the ban in 2012; plans for the plant were abandoned.(4)(5)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/2yEQY5j>
- (4) "La Unión prohíbe inversiones energéticas," El Mundo, 15 February 2012 at <http://bit.ly/2oigE12>

Finland

• Status	Coal phase-out scheduled for 2030
• Installed capacity (all)	18,441 (1)
• Renewables	24% (1)
• Coal power Dec. 2009	3,347 MW (2)
• Coal power June 2017	2,119 MW (3)
• Change since 2009	37% decrease

Policy notes

Finland has been steadily reducing its reliance on coal power, with no new capacity additions since 1994 and retirements of capacity in 2003, 2012, 2014, and 2015. (3) In November 2016 the government announced the goal of entirely ending use of coal by 2030, transitioning to biofuels and renewable energy.(4)(5)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/2yEQY5j>
- (4) Alexandra Sims, "Finland Plans to Completely Phase Out Coal by 2030," The Independent, 25 November 2016 at <http://ind.pn/2nm171s>
- (5) Fred Lambert, "6 major countries have recently announced imminent phase-out of all coal-fired power plants," Electrek, 25 November 2016 at <http://bit.ly/2nLpVeO>

Country and Subnational Profiles

France

• Status	Coal phase-out scheduled for 2023
• Installed capacity (all)	126,229 MW (1)
• Renewables	30% (1)
• Coal power Dec. 2009	7,484 MW (2)
• Coal power June 2017	3,286 MW (3)
• Change since 2009	56% decrease

Policy notes

France has been phasing out coal since 2013. Provence power station Unit 4 (250 MW), Blénod power station Units 2 and 4 (500 MW), Hornaing-B power station (240 MW), and Le Havre-2 power station Units 1 and 2 were retired in 2013. Blénod power station Unit 3 (250 MW) and Lucy-3 power station (270 MW) were retired in 2014. Emile-Huchet power station Units 4 and 5 (468 MW), Le Maxe power station (500 MW), Bouchain power station (250 MW), and Vitry power station (540 MW) were retired in 2015.(3) In 2016, President Francois Hollande announced that the country will shut down all its remaining coal plants by 2023.(4)(5)(6)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/2yEQY5j>
- (4) Jameson Dow, "France is serious about carbon: will stop using coal by 2023, might carbon tax US goods if US pulls out of climate agreements," Electrek, 17 November 2016 at <http://bit.ly/2nLgGeC>
- (5) Charlotte England, "France to Shut Down All Its Coal-Fired Power Plants by 2023," The Independent, 17 November 2016 at <http://ind.pn/2nLE2AK>
- (6) Fred Lambert, "6 major countries have recently announced imminent phase-out of all coal-fired power plants," Electrek, 25 November 2016 at <http://bit.ly/2nLpVeO>

Ghana

• Status	Coal-free; all coal power proposals halted
• Installed capacity (all)	4,060 MW (1)
• Renewables	40% (1)
• Coal power Dec. 2009	0 MW (2)
• Coal power June 2017	0 MW (3)
• Change since 2009	Unchanged

Policy notes

Ghana remains coal free. According to Environment Minister Mahama Ayariga, the proposed Aboano power station (2100 MW) has been shelved on climate concerns.

References

- (1) Platts WEPP, July 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/2yEQY5j>
- (4) "Ghana is not building a coal plant - Minister," Ghana Business News, 10 October 2016 at <http://bit.ly/2phTJAW>

Hawaii

• Status	Coal phase-out scheduled for 2022
• Installed capacity (all)	2,866 MW (1)
• Renewables	14% (1)
• Coal power Dec. 2009	204 MW (2)
• Coal power June 2017	202 MW (3)
• Change since 2009	1% decrease

Policy notes

Hawaii's only coal-fired power plant, AES Hawaii Generation Plant, is scheduled to be retired in 2022.(4)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/1UCQKwg>
- (4) Duane Shimogawa, "Coal's days are numbered in HECO's new energy plans," Pacific Business News, 25 February 2016 at <http://bit.ly/2okbGSb>

Country and Subnational Profiles

India

• Status	Implementing measures to control coal fleet growth
• Installed capacity (all)	339,332 (1)
• Renewables	20% (1)
• Coal power Dec. 2009	89,099 MW (2)
• Coal power June 2017	218,091 MW (3)
• Change since 2009	145% increase

Policy notes

The Ministry of Power stated in June 2016 that the country had enough coal-fired plants to meet demand through 2019, and recommended that developers curtail their plans accordingly.⁽⁴⁾ The draft National Energy Plan, released in December 2016, states that no further coal power capacity beyond that currently under construction will be needed until at least 2027.⁽⁵⁾ The government's call to curb further coal power expansion reflects the fact that power demand has not kept pace with expanding capacity, which grew from 71,121 MW in March 2007 to 211,562 MW in January 2017, leading to falling capacity factors and poor economics for coal plant operators. India is currently in the midst of a solar power revolution, with bids as low as Rs2.97 (US\$0.044) per kilowatt-hour, and governments proposals to install 275,000 MW of renewables (biomass, small hydro, wind, distributed solar PV, and utility-scale solar PV) by 2027.⁽⁶⁾⁽⁷⁾ The combination of excessive coal power capacity and declining cost of renewables has caused many financial backers of coal projects to withdraw support. According to the Ministry of Power's December 2016 Broad Status Report as well as additional reports from plant operators and photographic evidence, construction activity is now on hold for 31 coal plant units at 13 sites totaling 12,725 MW of capacity, mainly due to frozen financing, as shown in Table 1.⁽⁸⁾ Overall, the amount of capacity under construction in India declined by 47,606 MW from January 2016 to January 2017.⁽⁹⁾

In addition to the decline in plant construction, levels of activity declined from January 2016 to January 2017 in all pre-construction categories, including Announced (reduced by 26,110 MW), Pre-permit (reduced by 28,090 MW), and Permitted (reduced by 35,554 MW).⁽⁹⁾ Projects newly shelved or cancelled included four of India's UltraMega Power Projects in Chhattisgarh, Karnataka, Maharashtra, and Odisha, as announced by the government in June 2016.⁽¹⁰⁾ Overall, of the 16 Ultra Mega Power Projects originally proposed, only two were built, and both have been hindered by severe operating and financial stresses, along with citizen opposition.⁽¹¹⁾

Besides the highly publicized collapse of the last proposed UMPPs in 2016, numerous smaller projects were dropped from company plans without formal announcement, such as the Bhagalpur Power Project (2,640 MW) or the Adani Bhadreshwar Power Project (3,300 MW).⁽¹²⁾⁽¹³⁾ Others, such as the Adani Mundra Thermal Power Project Phase V (3,000 MW), were rejected by the environment ministry.⁽¹⁴⁾ Still others, such as Kudgi Super Thermal Power Project Phase II have been withdrawn (or are likely to be withdrawn) due to ever-cheaper solar power.⁽¹⁵⁾ Finally, sponsors of some projects, such as Welspun Energy, have simply left the coal sector in favor of building renewable, abandoning proposed plants such as Katni power station (3,200 MW).⁽¹⁶⁾

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/2yEQY5j>
- (4) "India won't need extra power plants for next three years, says government report," Economic Times, 2 June 2016 at <http://bit.ly/2nroqHg>
- (5) Ministry of Power, "Draft National Energy Plan: Generation," December 2016 at <http://bit.ly/2nrtT0C>
- (6) Tim Buckley, "IEEFA India: A Momentous Solar Event," 10 February 2017 at <http://bit.ly/2nrwt73>
- (7) Anthony Kleven, "Powering Asia's Renewable Revolution," The Diplomat, 6 January 2017 at <http://bit.ly/2p7t7WI>
- (8) Ministry of Power, "Broad Status Report of Thermal Power Projects in the Country," December 2016 at <http://bit.ly/2pfb9hm>
- (9) "Change from Jan 2016 - Jan 2017 by Country (MW)," Global Coal Plant Tracker at <http://bit.ly/1LYKrSN>
- (10) Debapriya Mondal, "Government plans to scrap four SPVs set up for UMPPs due to lack of interest from host states," The Economic Times, 9 June 2016 at <http://bit.ly/2o6MPNG>
- (11) Keith Schneider, "Chased by Drought Rising Costs, and Clean Technology, India Pivots on Coal-Fired Power," Circle of Blue, 11 April 2017 at <http://bit.ly/2o7xmwP>
- (12) "Bhagalpur Power Project," SourceWatch at <http://bit.ly/1eR2w1h>
- (13) "Bhadreshwar Thermal Power Project (Adani)" SourceWatch at <http://bit.ly/2o6P6sj>

Country and Subnational Profiles

Project	Units Halted	MW Halted	Ministry of Power, Broad Status Report, Dec 2016 at http://bit.ly/2peiSMB	State	Link
Bhavanapadu Thermal Power Project	2	1320	"Presently work is held up at site due to financial issues."	Andhra Pradesh	http://bit.ly/2gP6H7Z
Raigarh project (VISA Power)	2	1200	"Work is on hold due to financial crunch."	Chhattisgarh	http://bit.ly/KobRVc
Chandwa Power Project	4	1080	"Work held up due to payment issue to BHEL since 11/12."	Jharkhand	http://bit.ly/2gQ2Wzw
Tori power plant	2	1200	"Presently no work is in progress due to financial constraints."	Jharkhand	http://bit.ly/2gQ2uka
Gorgi power station	1	660	"Work is on hold at site due to financial crunch being faced by the developer"	Madhya Pradesh	http://bit.ly/2nrpb2Z
Amravati Thermal Power Project, Phase II	5	1350	"Due to financial constraints project has been put on hold."	Maharashtra	http://bit.ly/1i5q16l
Nasik RattanIndia Thermal Power Project Phase II	3	810	"Work at site has been put on hold since long back."	Maharashtra	http://bit.ly/2hdWgb4
Cuttack KVK Nilachal power station	1	350	"No work is under progress presently."	Odisha	http://bit.ly/2dlQpR8
Bijora power station	2	600	"Work at site put on hold due to financial crunch."	Maharashtra	http://bit.ly/1mbM3vT
Malibrahmani power station	2	1050	"Work held up due to financial constraints."	Odisha	http://bit.ly/1g1MCBk
Gadarwara power station (BLA)	1	45	"Presently work at site has been put on hold."	Madhya Pradesh	http://bit.ly/1gjXs4P
Banka Power Project	4	2640	"Presently no work is in progress at site."	Bihar	http://bit.ly/1drOesL
Lanco Amarkantak Thermal Power Project Phase II	2	1320	"Presently no work is going at the site due to financial problems."	Chhattisgarh	http://bit.ly/2nroBCA

Table 1: Troubled Indian Coal Plant Construction Sites

- (14) "Mundra Adani Thermal Power Project," SourceWatch at <http://bit.ly/1QBQH1H>
- (15) "NTPC may drop further expansion plans of Kudgi thermal project in Karnataka," The Economic Times, 28 March 2017 at <http://bit.ly/2p384of>
- (16) "Katni power station," SourceWatch at <http://bit.ly/1IUxgFh>

Country and Subnational Profiles

Latvia

• Status	Coal-free; all coal power proposals cancelled
• Installed capacity (all)	2,775 MW (1)
• Renewables	57% (1)
• Coal power Dec. 2009	0 MW (2)
• Coal power June 2017	0 MW (3)
• Change since 2009	Unchanged

Policy notes

Latvia remains coal free. The proposed Kurzeme power station (435 MW) has not progressed in over 13 years and appears highly unlikely.(4)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/2yEQY5j>
- (4) "Kurzeme power station," SourceWatch at <http://bit.ly/1IU2w6>

Massachusetts

• Status	Coal phase-out scheduled for 2017
• Installed capacity (all)	16,109 MW (1)
• Renewables	22% (1)
• Coal power Dec. 2009	1,768 MW (2)
• Coal power June 2017	1,124 MW (3)
• Change since 2009	36% decrease

Policy notes

Massachusetts has been reducing its coal-fired capacity since 2010 and will end all coal power generation in 2017. Somerset power station (173 MW) was retired in 2010 and 2011; Salem Harbor Station (328 MW) was retired in 2011 and 2014; and Mount Tom Station (136 MW) was retired in 2014.(3) The state's final coal plant, Brayton Point Station (1124 MW), will close in 2017.(4)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/1UCQKwg>
- (4) Erin Ailworth, "Owner reaffirms 2017 closing of Brayton Point plant," Boston Globe, 27 January 2014 at <http://bit.ly/2ofox7H>

Netherlands

• Status	Phase-out scheduled for 2030
• Installed capacity (all)	25,660 (1)
• Renewables	14% (1)
• Coal power Dec. 2009	4,020 MW (2)
• Coal power June 2017	5,860 MW (3)
• Change since 2009	46% increase

Policy notes

In September 2016 the Dutch parliament voted for a 55% cut in CO2 emissions by 2030, which would require close of the country's five remaining coal-fired power plants. The vote was not binding on the government, but the Liberal and Labour parties said they will push for speedy implementation of the motion.(4)(5)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/2yEQY5j>
- (4) Arthur Neslen, "Dutch parliament votes to close down country's coal industry," The Guardian, 23 September 2016 at <http://bit.ly/2nLBGBV>
- (5) Fred Lambert, "6 major countries have recently announced imminent phase-out of all coal-fired power plants," Electrek, 25 November 2016 at <http://bit.ly/2nLpVeO>

Country and Subnational Profiles

New Mexico

• Status	Phase-out scheduled for 2030
• Installed capacity (all)	9,279 MW (1)
• Renewables	21% (1)
• Coal power Dec. 2009	4382 MW (2)
• Coal power June 2017	3741 MW (3)
• Change since 2009	15% decrease

Policy notes

Coal-fired generation in New Mexico is declining as federal air quality regulations have tightened and as California has decided to stop purchasing electricity generated from coal. Shutdown of two of the four coal-fired generating units at New Mexico's largest power plant is scheduled to occur by the end of 2017, and three of the five coal-fired electricity generating units at the state's second-largest coal-fired power plant were retired in 2013. (2) Public Service Company of New Mexico is proposing to shed all of its coal-fired electricity in the next 14 years and replace it with solar, wind, natural gas and nuclear power. (4)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/1UCQKwg>
- (4) Albuquerque Journal, April 2017 at <http://bit.ly/2rHI3t6>

New York (State)

• Status	Coal phase-out scheduled for 2020
• Installed capacity (all)	40,838 MW (1)
• Renewables	20% (1)
• Coal power Dec. 2009	3,313 MW (2)
• Coal power June 2017	1,608 MW (3)
• Change since 2009	51% decrease

Policy notes

New York has been reducing its coal-fired capacity since 2011 and plans to end all coal power generation in 2020. AES Greenidge Generation Plant (115 MW) was retired

in 2011 and 2012; Danskammer Generating Station (386 MW) was retired in 2012; Trigen Syracuse Plant (90 MW) was retired in 2013; and Huntley Generating Station was retired in 2016. (3) The remaining plants operating in the state are all scheduled for retirement in 2020: AES Cayuga Generation Plant (327 MW), AES Somerset Generation Plant (655 MW), and Dunkirk Steam Station (626 MW).(4)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/1UCQKwg>
- (4) Andrew Follett, "New York Wants to Shut Down All Its Coal Plants By 2020," Daily Caller, 15 January 2016 at <http://bit.ly/2oflqg8>

New Zealand

• Status	Phase-out scheduled for 2022
• Installed capacity (all)	9,833 (1)
• Renewables	74% (1)
• Coal power Dec. 2009	1,021 MW (2)
• Coal power June 2017	500 MW (3)
• Change since 2009	51%

Policy notes

New Zealand began phasing out coal-fired generation in 2012. Huntly power station Units 3 and 4 were placed in long-term storage in 2012 and 2013, and permanently retired in 2015.(4) Genesis Energy announced in 2015 that it would retire the remaining two units of Huntly power station by December 2018.(5) In April 2016 the retirement date for the two units was changed to December 2022.(6)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/2yEQY5j>
- (4) "Huntly Power Station," SourceWatch, accessed April 2017 at <http://bit.ly/2nmgAyB>

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- (5) Joshua S. Hill, "New Zealand Coal-Fired Generation Coming to a Close," Clean Technica, 7 August 2015 at <http://bit.ly/2nmfH97>
- (6) Eric Frykberg, "Huntly power plants to stay open until 2022," RNZ, 28 April 2016 at <http://bit.ly/2nmwn0i>

Ontario

• Status	Coal phased out in 2014
• Installed capacity (all)	40,134 MW (1)
• Renewables	38% (1)
• Coal power Dec. 2009	6,594 MW (2)
• Coal power June 2017	0 MW (3)
• Change since 2009	100% decrease

Policy notes

Ontario began its coal closure plan in 2003. In April 2014, Thunder Bay Generating Station, the last power plant in the province, ceased operations.(4) The government estimated that the cost of coal-fired generation was \$4.4 billion annually when health, environmental, and financial costs were included.(5)(6)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/1UCQKwg>
- (4) "Creating Cleaner Air in Ontario: Province Has Eliminated Coal-Fired Generation," Ministry of Energy press release, 15 April 2014 at <http://bit.ly/2nlpzjJ>
- (5) "Cost Benefit Analysis: Replacing Ontario's Coal-Fired Electricity Generation," Ontario Ministry of Energy, April 2005 at <http://bit.ly/2nllaNz>
- (6) Fred Lambert, "6 major countries have recently announced imminent phase-out of all coal-fired power plants," Electrek, 25 November 2016 at <http://bit.ly/2nLpVeO>

Oregon

• Status	Phase-out scheduled for 2020
• Installed capacity (all)	17,590 MW (1)
• Renewables	71% (1)
• Coal power Dec. 2009	642 MW (2)
• Coal power June 2017	642 MW (3)
• Change since 2009	0%

Policy notes

Oregon's Boardman Plant (642 MW) will close in 2020. Proposals being considered under PGE's 2016 Integrated Resource Plan include a 315-acre solar farm or additional natural gas capacity. The state has a benchmark of 20 percent renewables by 2020, and aims to conserve 135 MW through energy efficiencies and 77 MW through peak power management.(4)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/1UCQKwg>
- (4) George Plaven, "PGE ponders new resources in Boardman," East Oregonian, 16 December 2016 at <http://bit.ly/2phGlaw>

Portugal

• Status	Phase-out by 2030 or earlier (possibly 2021)
• Installed capacity (all)	19,113 MW (1)
• Renewables	54% (1)
• Coal power Dec. 2009	1,866 MW (2)
• Coal power June 2017	1,878 MW (3)
• Change since 2009	1% increase

Policy notes

Portugal's National Programme for Climate Change 2020/2030 states that no coal power plants will be producing electricity in the country by 2030. Over the past 10 years, the country has steadily increased its electricity production from renewable sources, particularly wind and solar, complementing the existing hydropower available.

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The contracts for the country's two major coal plants, Sines power station (1250 MW) and Pego power station (628 MW), will end in 2017 and 2021 respectively. After those dates, the plants are expected to close unless government support is made available. Three factors are expected to increase pressure on the plants to close: new emissions trading rules, the need in a generating system dominated by renewables for greater generating flexibility than is possible with coal power, and improved interconnections among Portugal, Spain, and France.(4) (5)(6)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/2yEQY5j>
- (4) "Sines power station," SourceWatch, accessed April 2017 at <http://bit.ly/2nM5D4C>
- (5) "Pego power station," SourceWatch, accessed April 2017 at <http://bit.ly/2nLTixx>
- (6) Dave Jones and Kathrin Gutmann, "End of an Era: Why Every European Country Needs a Coal Phase-Out Plan," Greenpeace UK and Climate Action Network (CAN) Europe, 2015, page 13, at <http://bit.ly/2nM3Qnf>

Scotland

• Status	Phased out in 2016
• Installed capacity (all)	13,772 MW (1)
• Renewables	58% (1)
• Coal power Dec. 2009	3625 MW (2)
• Coal power June 2017	0 MW (3)
• Change since 2009	100% decrease

Policy notes

Scotland's last two coal-fired power stations, Cockerzie power station (1200 MW) and Longannet power station (2400 MW), were retired in 2013 and 2016 respectively.(3) (4)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009

- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/1UCQKwg>
- (4) Terry Macalister, "Longannet power station closes ending coal power use in Scotland," The Guardian, 23 March 2016 at <http://bit.ly/2nnCaTo>

Sweden

• Status	Likely coal phase-out by 2030
• Installed capacity (all)	38,598 MW (1)
• Renewables	56% (1)
• Coal power Dec. 2009	609 MW (2)
• Coal power June 2017	231 MW (3)
• Change since 2009	62% increase

Policy notes

With the exception of one 31 MW plant, Sweden's remaining coal fleet is scheduled to be retired by 2030.(3)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/2yEQY5j>

United Kingdom

• Status	Phase-out scheduled for 2025
• Installed capacity (all)	89,402 MW (1)
• Renewables	26% (1)
• Coal power Dec. 2009	25,349 MW (2)
• Coal power June 2017	13,100 MW (3)
• Change since 2009	55% decrease

Policy notes

From 2011 to 2016, the UK retired 16,331 MW of coal power capacity, including 1,131 MW in 2011, 2,500 MW in 2012, 3,120 MW in 2013, 1,360 MW in 2014, 500 MW in 2015, and 7,720 MW in 2016.(3) In November 2016 the government announced that the last the country would end all coal use for electricity in 2025.(4)

Country and Subnational Profiles

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/2yEQY5j>
- (4) Adam Vaughan, "Britain's last coal power plants to close by 2025," The Guardian, 9 November 2016 at <http://bit.ly/2nnOUth>

United States

• Status	Reducing coal power on a plant-by-plant basis
• Installed capacity (all)	1,144,165 MW (1)
• Renewables	18% (1)
• Coal power Dec. 2009	334,858 MW (2)
• Coal power June 2017	287,051 MW (3)
• Change since 2009	14% decrease

Policy notes

Since 2010, the United States has built 16,710 MW of new coal power and retired (including conversions to biofuels or natural gas) 63,954 MW of existing coal power. An additional 50,929 MW is scheduled for retirement. (3) The amount of coal power capacity retired since 2010 or scheduled for retirement amounts to 114,883 MW, or 34.3% of the 2010 fleet. Despite moves by the Trump administration to support coal, analysts and utility executives expect the existing trends to continuing, with no new coal power plants and steady phase-out of existing capacity.(4)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/2yEQY5j>
- (4) Taylor Kuykendall and Arsalan Malik, "Trump environmental order does little to change coal retirements plans," S&P Global, 30 March 2017 at <http://bit.ly/2oZJ9zf>

Washington (State)

• Status	Phase-out scheduled for 2025
• Installed capacity (all)	42,385 MW (1)
• Renewables	58% (1)
• Coal power Dec. 2009	1,404 MW (2)
• Coal power June 2017	1,404 MW (3)
• Change since 2009	0% decrease

Policy notes

The two units of the Centralia power station (1,404 MW) will be retired in 2020 and 2025.(4)

References

- (1) Platts WEPP, June 2017
- (2) Platts WEPP, December 2009
- (3) Global Coal Plant Tracker, July 2017 at <http://bit.ly/1UCQKwg>
- (4) "Centralia Generation Complex," TransAlta USA, accessed April 2017 at <http://bit.ly/2pi2ISz>

CoalSwarm and Greenpeace

Global Shift

Countries and Subnational Entities Phasing Out Existing Coal Power Plants and Shrinking the Proposed Coal Power Pipeline



Renewable energy facilities on a former US-base in Morbach. Mixture of wind, biomass and solar power run by the JuWi Group. A Vestas windmill and photovoltaic facilities.

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