

# Phasing out coal in Europe by 2025



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**About the author:** Fredrik Lundberg is an energy policy specialist in Sweden. He has worked for more than 30 years as a consultant and researcher for NGOs and government bodies.

**Cover illustration:** Sven Ångermark/Monoclick .

**Layout:** Sven Ångermark/Monoclick

**Language consultant:** Malcolm Berry, Seven G Translations, UK

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**Editor:** Reinhold Pape (AirClim).

**Address:** AirClim, Första Långgatan 18, 413 28 Göteborg, Sweden. Phone: +46(0)31 711 45 15  
Website: <http://www.airclim.org>.

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## Contents

Elements for a plan to phase-out coal in the Council of Europe region are presented .....	4
Phase out in the Beyond Coal Database area .....	5
Europe outside the scope of the Beyond Coal database .....	6
Peat and shale.....	6
Russia and Ukraine .....	6
Ukraine .....	8
Russia .....	8
Sources .....	9
Summary units: All coal power plant units in Europe in MW, November 2018 .....	9
First tranche: New planned coal power plants projects in Europe to be stopped by 2019.....	10
First tranche: Coal power plants under construction in Europe to be stopped by 2019.....	12
Second tranche: Coal power stations in Europe build before 1970 – to be closed by 2020 .....	13
Third tranche: Lignite power plants in Europe build between 1971-90 – to be closed 2021 .....	17
Fourth tranche: Hard coal power plants in Europe build between 1971-90 – to be closed by 2022 .....	20
Fifth tranche: Coal power stations in Europe build between 1991-2000 – to be closed by 2023 .....	23
Sixth tranche: Coal power plants build in Europe after 2000 – to be closed by 2025 .....	25
Russia coal power plant list .....	27
Ukraine coal power plant list.....	28

# Elements for a plan to phase-out coal in the Council of Europe region are presented

Coal is being phased out in Europe<sup>1</sup>. The EU produced 31 per cent less coal power in 2017 than in 2007. A much faster phase-out is needed for the climate, health and the environment. Here is a sketch of how to end coal power by 2025.

EU coal power plants emitted 652 million tonnes of CO<sub>2</sub> in 2016, 19 per cent of EU total CO<sub>2</sub>. The biggest coal power producer is Germany with 261 TWh in 2016 out of 694 TWh for the entire EU, followed by Poland with 133 TWh, Spain 45, Italy 33, the Netherlands 31 and the UK 31 TWh

In Europe outside the EU, the biggest are Russia 149 TWh, Turkey 92 and Ukraine 61 TWh, all according to the Beyond Coal database. Russia and Ukraine are outside the database, and are treated further down.

Change is possible, as can be seen in the UK, which produced 108 TWh of coal power in 2011, which was reduced to around 17 TWh in 2018. That coal power was mainly replaced with renewable power (some 65 TWh), biomass, increased efficiency (17 TWh less electricity use), and more net imports (9 TWh). Nuclear, gas and oil power are not part of the picture; they all decreased 2011-2018.

The EU and Europe as a whole could do the same. Around 180 GW of coal power currently in operation could be phased out step by step. The steps could be as follows:

- 1. Plants under construction, or planned, should immediately be stopped.** A new plant is a commitment for 40 years of several million tons per year. If built, the Gubin lignite power plant in Poland, 150 km from Berlin, is estimated to emit almost half a billion tons of CO<sub>2</sub> during its lifetime. New projects total 54 GW (see table 1), while those under construction total 6 GW (see table 2). Many of them are in Turkey.  
The first tranche of the phase-out is to stop construction and planning for new coal.
- 2. The oldest first.** There is some variation but older plants are usually less efficient and dirtier.  
The second tranche is units commissioned in 1970 and before. The oldest are from 1951. They account for some 33 GW.
- 3. Lignite is even dirtier than hard coal, so tranche 3 may be lignite units started 1971-1990.**  
This third tranche contains some 46 GW.
- 4. The fourth tranche includes 50 GW of hard coal units started 1971-90.**
- 5. The fifth tranche includes 21 GW of units started 1990-2000**
- 6. The sixth tranche contains the remaining 34 GW, i.e. units started from 2001 on.**

<sup>1</sup> Europe is defined here as the Council of Europe region with 47 member states <https://www.coe.int/en/web/portal/https://edoc.coe.int/en/map-of-the-member-states/5332-map-of-the-council-of-europe-47-member-states.html>

## Phasing out coal in the Beyond Coal Database area

Step	Measure	Gigawatts	Year
Tranche 1	stop future coal	54 plan +6 constr	2019
Tranche 2	units from 1970 and older	33	2020
Tranche 3	Lignite units 1971-90	46	2021
Tranche 4	Hard coal units 1971-90	50	2022
Tranche 5	Units 1991-2000	21	2023
Tranche 6	Remainder, 2001-	34	2025

As in the UK, coal would be replaced by mainly wind, solar, efficiency and some biomass, and in southern Europe also solar thermal power. Gas will be needed for balancing, but not necessarily using more gas per year.

Phasing out coal in the rest of Europe has drawbacks and advantage compared to the UK.

**Drawbacks:** Coal is still mined in some countries, which makes it politically more difficult to close both power plants and mines. Few countries have as much offshore wind power potential as the UK. The UK plants were very old, and either illegal or uneconomic to retrofit. That is not the case everywhere. Some countries, notably Poland, are now more dependent on coal power than the UK was in 2011.

**Advantages:** Renewables and efficiency will be a lot cheaper from 2019 on than the average for 2012-2018. Many countries have more power lines for importing/exporting power, many have more hydro (so as to balance wind and solar), most have more sun and biomass. In southern Europe, solar thermal is an option that is more expensive than photovoltaics, but with built-in storage. Southern Europe can also easier integrate more solar (and import some from the Sahara), as there is a fairly good match between summer afternoon peak demand for air conditioning and PV production. The potential for onshore wind power is good everywhere, but in the UK development was effectively stopped in 2014; few other countries have such self-imposed restrictions.

The UK has spent a lot of political attention on fruitless efforts to develop power, including fusion, so-called Generation IV, and CCS, none of which will have cut emissions a gram by 2025. Other countries could focus their efforts better. By 2025, or even earlier, parts of the battery vehicle fleet could be used to balance wind and solar. Electric cars could charge when power is abundant and, when possible, discharge to the grid when power is scarce. Much more is now known about how to integrate a large share of wind and solar into power production. Much of it could be left to the market if the price signal is allowed to be strong.

## Europe outside the scope of the Beyond Coal database

### Peat and shale

Outside the Beyond Coal database there are a number of Council of Europe countries which have zero or insignificant coal power: Andorra, Armenia, Azerbaijan, Belarus, Georgia, Liechtenstein, Moldova and San Marino. Whether Iceland and Albania are included or not, they have no coal power.

Belarus produces, uses, and exports peat, which is considered a kind of coal by the IEA, but it is not used for power. Peat has properties similar to lignite. Ireland and Finland also uses and produces significant amounts of peat, also for power, but this is not included in the database. Finland emitted 6 million tons<sup>2</sup> of CO<sub>2</sub> from peat in 2016, Ireland 3.4 Mtons<sup>3</sup> in 2016, most of which from power.

Estonia uses large amounts of oil shale, which is geologically different from hard coal, lignite and peat, but has roughly the same carbon and environmental footprint. The Eesti power plant alone emitted 8 million tons of CO<sub>2</sub> in 2017.

### Russia and Ukraine

The only European coal power nations outside the database area are Russia and Ukraine.

To establish a phase-out schedule for Russia's coal power, i.e. to pinpoint the oldest, dirtiest and most expendable coal power plants, there should be a list of plants, units, age, capacities, actual production, fuel used, and CO<sub>2</sub> emissions.

The data situation is difficult, at least in English; the exact age structure, the actual capacity, state of repair and even fuel used is not easily found in a consistent format. Thermal power plants is a term that sometimes means coal, sometimes both coal and gas. Some of the coal power plants are operated in combined heat and power (CHP) mode. If so, it makes a big difference both for emission intensity and for difficulty/ease of shutting them down. A CHP plant usually runs at full capacity only in winter, but then its hot water production keeps people from freezing to death. There is no way to see from statistical tables whether coal can be substituted immediately, or if a new heat or CHP plant will have to be built.

Sources lack data, or disagree on the number of units for a station, whether they are operating or not.

It is hard to find transparent criteria for the order of phase-out. It should be done as fast as possible, with grid stability as first priority, and after that safety and reliability of the units, public health (particles, SO<sub>2</sub>, NOx) and carbon footprint.

<sup>2</sup> [https://www.stat.fi/static/media/uploads/tup/khkinv/fi\\_nir\\_un\\_2016\\_20180415.pdf](https://www.stat.fi/static/media/uploads/tup/khkinv/fi_nir_un_2016_20180415.pdf) p 130

<sup>3</sup> <https://www.seai.ie/resources/publications/Energy-Emissions-2017-Final.pdf> p 14

To get some idea of the scale of the problem, according to BP,<sup>4</sup> Russia produced 153 TWh coal power in 2017 and Ukraine 51 TWh, compared with 694 TWh in the EU-28, of which 242 in Germany and 134 TWh in Poland. Russia got 14 per cent of its electricity from coal, Ukraine 32 per cent.

Coal output is increasing in Russia, much of it for export. Ukraine was a net importer of coal even before 2014 when the Donbass war started.

Though a tentative schedule for a phase-out in Ukraine and cannot be formulated, some things are nevertheless clear:

All plants in Ukraine and many in Russia are very old.

- **Wind and solar are under-developed. Ukraine and Russia combined produced 1.1 TWh of solar in 2017, compared to 11.5 TWh in the UK and 108 TWh in China. Wind power also produced 1.1 TWh in the two countries, compared to 107 TWh in Germany, 286 TWh in China and 15 TWh even in Poland.**
- **There is vast room for improved energy efficiency and demand-side management, which should make the phasing out of old coal power plants technically and economically effortless.**
- **Wind, solar and efficiency stand a much better chance of financing than coal power.**

Efficiency is very poor in both countries. “Ukraine is among the top 20 least energy-efficient countries in the world. Ukraine spends three times more on energy than Poland.” according to one study<sup>5</sup>.

Though a coal power phase-out looks cheap and easy, the two governments are not moving that way.

Present plans in Russia – the government still uses 5-year plans – foresee no major change before 2035. The government does not plan to phase-out coal. New fossil power plants are planned to start operation continually through the 2030s, while roughly the same amount of capacity is retired.

With the same retirement rate, without new fossil power plants, the emissions would thus drop, even in the absence of any policy. Actual coal power output is fluctuating, but lower than it was around 2008.

Ukraine has no plans to phase-out coal power, but it is actually decreasing. Output was 75 TWh in 2011 and 51 TWh in 2017, and kept decreasing<sup>6</sup> in 2018.

With the same tranche division as described for the countries covered by the Beyond Coal database, all Ukrainian and most Russian coal power plants should be slated for tranche 1 to 4, i.e. by 2022.

If the Russian and Ukrainian governments reversed their pro-coal policy, could something like that happen?

<sup>4</sup> BP Statistical Review of World Energy June 2018

<sup>5</sup> [https://www.flandersinvestmentandtrade.com/export/sites/trade/files/market\\_studies/Ukrainian%20Energy%20Market\\_0.pdf](https://www.flandersinvestmentandtrade.com/export/sites/trade/files/market_studies/Ukrainian%20Energy%20Market_0.pdf)

<sup>6</sup> <https://energo.dtek.com/en/media-center/press/dteks-production-indicators-for-9-months-of-2018/>

Much or all of this may be possible, as there is a lot of slack in the grid, as electricity consumption is much lower than in the 1980's. The grid should be able to manage large amounts of variable renewables.

Russia has abundant flexible options in hydro and gas power and some electricity export and import capacity. Ukraine has less gas and hydro power, but relatively larger capacity for exporting and importing electricity, and despite the frozen relations between Russia and Ukraine, natural gas trade increased in 2017.

The large share of nuclear power in Ukraine, some 55 per cent of its electricity production (85.6 TWh in 2017) is disquieting, and it may be a daunting task to decrease its dependence on it. Getting rid of 51 TWh of old coal power is much simpler.

Very large amounts of variable renewables could be absorbed by the system.

The problem is, obviously, that the power structures (pun can't be avoided) are resisting change, for roughly the same reasons as in Poland and Germany. The power companies want to protect their assets. Local politicians do not want rising unemployment, poverty, and political instability.

There are other jobs and economic opportunities in the construction of wind, solar and biomass power, in efficiency and in renovation of the grid, but not necessarily for the same people and in the same communities.

If the rest of the world, especially the rest of Europe, continues to switch from coal to renewables, Ukraine and Russia will also experience pressure to do the same, and find ways to do it. They should not get away with their very poor contributions to the Paris agreement. Both countries actually target large increases in their greenhouse emissions.

## **Ukraine<sup>7</sup>**

“Ukraine defines an ambitious, but at the same time substantiated and fair target with regard to the level of GHG emissions. It will not exceed 60% of 1990 GHG emissions level in 2030.”

This is hardly “ambitious”, considering that in 2016 its emissions were less than 36 per cent of the 1990 level.

## **Russia<sup>8</sup>**

“Limiting anthropogenic greenhouse gases in Russia to 70-75% of 1990 levels by the year 2030 might be a long-term indicator, subject to the maximum possible account of absorbing capacity of forests.”

Russia’s 2016 GHG emissions (including LULUCF) were less than 52 per cent of 1990 emissions.

*Fredrik Lundberg*

<sup>7</sup> [https://www4.unfccc.int/sites/submissions/INDC/Published%20Documents/Ukraine/1/150930\\_Ukraine\\_INDC.pdf](https://www4.unfccc.int/sites/submissions/INDC/Published%20Documents/Ukraine/1/150930_Ukraine_INDC.pdf)

<sup>8</sup> [https://www4.unfccc.int/sites/submissions/INDC/Published%20Documents/Russia/1/Russian%20Submission%20INDC\\_eng\\_rev1.doc](https://www4.unfccc.int/sites/submissions/INDC/Published%20Documents/Russia/1/Russian%20Submission%20INDC_eng_rev1.doc)

## Sources

The whole database can be downloaded from <https://beyond-coal.eu/data/>

The latest available update for this article was 16 November 2018. Under the tab “Plant” there is data for CO<sub>2</sub>, SO<sub>2</sub>, NOx, PM, health impact and further sources.

The distribution of plants by age and fuel (hard coal or lignite) is taken from the tab Units in this database and can be found here. There is less data for units than for plants, which often consists of several units. But the “units” list is more relevant for age, and also includes countries in western Balkans and Turkey.

Data for coal power production in TWh for various countries, and the European Union, is from <https://www.bp.com/content/dam/bp/en/corporate/excel/energy-economics/statistical-review/bp-stats-review-2018-all-data.xlsx>, tab “Electricity generation from coal”. BP also has statistics for wind, solar and other renewables, through 2017.

2018 data for the United Kingdom taken from <http://www.mygridgb.co.uk/last-12-months/>, other data from <https://www.gov.uk/government/statistical-data-sets/historical-electricity-data>

## Summary units: All coal power plant units in Europe in MW, November 2018

MW gross			
total for all	248 256		
constr	5 990		
deac/no longer coal	10 698		
retired	53 160		
retrofitting	1 673		
standby	5 398		
test phase	975		
operational	172 010		
sum	180 056		
	Summary tranches	MW	
Tranche 2	-1970	33 278	2020
Tranche 3	Lignite 1971-90	46 487	2021
Tranche 4	Hard coal 1971-90	50 044	2022
Tranche 5	1991-2000	21 158	2023
Tranche 6	-2001	33 788	2025
total for all		18 4755	

# First tranche: New planned coal power plants projects in Europe – to be stopped by 2019

Tracking ID (Global Coal Plant Tracker)	Unit name	Plant name	Region	Country	Owner	status	Project	Latitude	Longitude	Fuel type	Commissioning year (projected)	Projected lifetime CO2 emissions
Number of projects: 66												
G113821	Melnik V power station	Melnik power station	EU	Czech Republic	CEZ Group	Pre-permit	50,41	14,42	110	Lignite	2022	22,3
G107431	Niederaussem Unit L (BoAplus)	Niederaussem	EU	Germany	RWE	Pre-permit	51,00	6,67	1100	Lignite		178,4
G109588	Stade Dow Chemical	Stade Dow Chemical	EU	Germany	Dow Chemical Co.	Pre-permit	53,64	9,51	920	Hard coal		142,1
G106839	Meliti-II	Meliti Power Station	EU	Greece	Public Power Corp., CMEC	Announced	40,81	21,60	450	Lignite		75,9
G106738	Matra power station Unit 6 (renewed proposal)	Matra power station	EU	Hungary	Opus Global	Pre-permit	47,79	20,06	500	Lignite	2026	82,4
G103195	Gubin Power Project	Gubin Power Project	EU	Poland	PGE	Announced	51,95	14,73	3000	Lignite	2030	494,5
G113827	Leczna Power Station (Enea)	Leczna Power Station (Enea)	EU	Poland	Enea	Pre-permit	51,30	22,88	500	Hard coal		69,1
G107696	Ostroleka Power Station	Ostroleka Power Station	EU	Poland	ENERGA, Enea	Permitted	53,10	21,61	1000	Hard coal	2023	158,0
G108073	Polnoc Power station Unit 1	Polnoc Power Station	EU	Poland	Polenergia	Pre-permit	53,96	18,71	800	Hard coal		123,5
G108074	Polnoc Power station Unit 2	Polnoc Power Station	EU	Poland	Polenergia	Pre-permit	53,96	18,71	800	Hard coal		126,4
G113571	Pulawy power station (Grupa Azoty)	Pulawy power station (Grupa Azoty)	EU	Poland	Grupa Azoty	Announced	51,42	21,97	100	unknown		19,3
G108649	Rovinari Power Station Unit 7	Rovinari Power Station	EU	Romania	Complexul Energetic Oltenia	Pre-permit	44,91	23,13	600	Lignite	2020	101,2
G100066	Afşin-Elbistan power complex Units C-D-E-G	Afşin-Elbistan power complex	Turkey	Turkey	EÜAŞ	announced	38,35	37,01	4500	Lignite		759,1
G100076	Ağan power station	Ağan power station	Turkey	Turkey	Doğanlar Holding	Pre-permit	40,45	27,30	1540	Hard coal		233,9
G102683	Alpu power station Unit 1	Alpu power station	Turkey	Turkey	EÜAŞ, Turkish Coal Enterprise	Pre-permit	39,90	30,86	550	Lignite		89,2
G113501	Alpu power station Unit 2	Alpu power station	Turkey	Turkey	EÜAŞ, Turkish Coal Enterprise	Pre-permit	39,90	30,86	550	Lignite		89,2
G112799	Antes power station	Antes power station	Turkey	Turkey	Çelikler Holding	Pre-permit	37,37	28,03	160	Lignite		32,8
G106952	Ayas power station	Ayas power station	Turkey	Turkey	OVAK, Koç Holding	Permitted	36,82	35,87	625	Hard coal		96,5
G101194	Çankırı Orta Bereket power station	Çankırı Bereket power station	Turkey	Turkey	Çalık Holding	Permitted	40,62	33,11	135	Lignite		27,3
G101195	Çankırı Orta power station	Çankırı Orta power station	Turkey	Turkey	Çalık Holding	Pre-permit	40,62	33,11	150	Lignite		30,7
G101198	Çankırı Yıldızlar power station Unit 3	Çankırı Yıldızlar power station	Turkey	Turkey	Yıldızlar SSS Holding	Pre-permit	40,61	33,32	133	Lignite		27,2
G113855	Catalağzı power station Unit 3	Catalağzı-B power station	Turkey	Turkey	Bereket Enerji	Pre-permit	41,52	31,90	660	Lignite	1991	112,6
G112797	Çayırhan-B power station	Çayırhan power station	Turkey	Turkey	Kolin Group, Kalyon Group, Çelikler Partnership	Pre-permit	40,10	31,70	800	Lignite		135,0
G101248	Cebi Enerji power station Unit 1	Cebi Enerji power station	Turkey	Turkey	Kaptan Şirketler Group	Pre-permit	41,01	27,96	350	Hard coal		60,8
G113110	Çerkezköy power station Unit 1	Çerkezköy power station	Turkey	Turkey	TBD	Pre-permit	41,28	28,00	330	Lignite		61,2
G113499	Çerkezköy power station Unit 2	Çerkezköy power station	Turkey	Turkey	TBD	Pre-permit	41,28	28,00	330	Lignite		61,2
G113500	Çerkezköy power station Unit 3	Çerkezköy power station	Turkey	Turkey	TBD	Pre-permit	41,28	28,00	330	Lignite		61,2
G101595	Çırplılar power station	Çırplılar power station	Turkey	Turkey	Tasyapı Group	Pre-permit	39,82	27,34	200	Lignite		40,5
G113112	DETES 1 power station	DETES 1 power station	Turkey	Turkey	Demir Madencilik	Pre-permit	41,50	31,87	160	Lignite		32,4
G102375	Diler Elbistan power station	Diler Elbistan power station	Turkey	Turkey	Diler Holding	Permitted	38,16	37,33	400	unknown		70,6
G100075	Dinar Uluköy power station	Dinar Uluköy power station	Turkey	Turkey	TBD	announced	38,06	30,17	3500	Lignite		590,4
G102442	DOSAB cogeneration plant	DOSAB cogeneration plant	Turkey	Turkey	DOSAB	Pre-permit	40,24	28,96	50	Lignite		10,2
G102624	EMBA Hunutlu power station Unit 1	EMBA Hunutlu power station	Turkey	Turkey	State Power Investment Corporation, AVIC International Holding Corporation, and two Turkish local investors	Permitted	36,82	35,85	660	Hard coal		101,8
G102625	EMBA Hunutlu power station Unit 2	EMBA Hunutlu power station	Turkey	Turkey	State Power Investment Corporation, AVIC International Holding Corporation, and two Turkish local investors	Permitted	36,82	35,85	660	Hard coal		101,8
G102676	Ergene power station	Ergene power station	Turkey	Turkey	Eren Holding	Pre-permit	41,24	27,70	170	unknown		32,7
G113856	Helvacı power station	Helvacı power station	Turkey	Turkey	İC İCTAS Enerji	announced	40,08	27,17	270	unknown		52,6
G103750	HEMA Amasra power station	HEMA Amasra power station	Turkey	Turkey	Hattat Holding	Pre-permit	41,72	32,35	1320	Hard coal		208,3
G104831	Ilgın power station	Ilgın power station	Turkey	Turkey	Ciner Holding	Permitted	38,26	31,91	500	Lignite	2019	85,3
G104903	İrmak power station	İrmak power station	Turkey	Turkey	Büyükçikal Çandırı Elektrik Üretim A.Ş.	Pre-permit	39,79	26,33	1320	Hard coal		208,6
G105432	Kahramanmaraş Anadoluhisar power station	Kahramanmaraş Anadoluhisar power station	Turkey	Turkey	Ege Trade	Pre-permit	38,35	37,01	1200	Lignite		202,4
G105538	Kangal Etyemez power station	Kangal Etyemez power station	Turkey	Turkey	Soyak Holding	Permitted	39,08	37,30	135	Lignite		27,6
G105558	Karaburun power station Unit 1	Karaburun power station	Turkey	Turkey	Yıldırım Group	permitted	40,45	27,29	660	unknown		103,5
G105559	Karaburun power station Unit 2	Karaburun power station	Turkey	Turkey	Yıldırım Group	permitted	40,45	27,29	660	Hard coal		101,9
G102694	Kınık power station	Kınık power station	Turkey	Turkey	Polyak Eneyz Enerji Üretim Madencilik Sanayi ve Ticaret	Pre-permit	39,08	27,45	691	Lignite	2019	113,9
G105774	Kirazlıdere Thermal Power Plant-1	Kirazlıdere power complex	Turkey	Turkey	Yıldırım Group	permitted	40,38	26,99	660	Hard coal		100,2
G105775	Kirazlıdere Thermal Power Plant-2	Kirazlıdere power complex	Turkey	Turkey	Yıldırım Group	permitted	40,38	26,99	660	Hard coal		100,2
G105776	Kireçlik power station	Kireçlik power station	Turkey	Turkey	Hattat Holding	Pre-permit	41,37	31,59	1200	Hard coal		185,3
G105848	Konya Karapınar power station	Konya Karapınar power station	Turkey	Turkey	Istroenergo Group, Singa Energy Solutions, ACWA Power, Hornoritanska bane Prievida, others	announced	37,71	33,55	5000	Lignite		843,5
G106045	Kütahya Domanıç power station	Kütahya Domanıç power station	Turkey	Turkey	Çelikler Holding	Pre-permit	39,80	29,61	300	Lignite		56,3
G107078	Muğla power station	Muğla power station	Turkey	Turkey	TBD	announced	37,15	27,81	300	unknown		53,0
G107210	Namal power station	Namal power station	Turkey	Turkey	Namal Elektrik Üretim	Pre-permit	40,34	26,68	1000	unknown		160,5
G107288	Naren Karabığa power station Unit 1	Naren Karabığa power station	Turkey	Turkey	Naren Enerji Elektrik Üretim A.Ş.	Pre-permit	40,46	27,25	980	Hard coal		154,8
G107289	Naren Karabığa power station Unit 2	Naren Karabığa power station	Turkey	Turkey	Naren Enerji Elektrik Üretim A.Ş.	Pre-permit	40,46	27,25	980	Hard coal		154,8
G108801	Sanko Yumurtalık power station	Sanko Yumurtalık power station	Turkey	Turkey	Sanko Holding	Permitted	36,88	35,89	800	unknown		129,9
G110035	Teyo Tufanbeyli power station Unit 1	Teyo Tufanbeyli power station	Turkey	Turkey	Teyo Yatırım ve Diş Ticaret A.Ş., Weiqu Energy Investments	Pre-permit	38,23	36,25	350	Lignite		65,7
G110036	Teyo Tufanbeyli power station Unit 2	Teyo Tufanbeyli power station	Turkey	Turkey	Teyo Yatırım ve Diş Ticaret A.Ş., Weiqu Energy Investments	Pre-permit	38,23	36,25	350	Lignite		65,7
G110461	Uluköy power station	Uluköy power station	Turkey	Turkey	Kolin Group, Limak Holding, Kalyon Group	Pre-permit	38,20	30,27	640	Lignite		109,2
G113896	Yenidere power station Unit 1	Yenidere power station	Turkey	Turkey	Yenidere Termik Enerji	Pre-permit	37,51	28,67	100	Lignite		11,9
G113897	Yenidere power station Unit 2	Yenidere power station	Turkey	Turkey	Yenidere Termik Enerji	Pre-permit	37,51	28,67	100	Lignite		11,9
G113898	Yenidere power station Unit 3	Yenidere power station	Turkey	Turkey	Yenidere Termik Enerji	Pre-permit	37,51	28,67	25	Lignite		3,0
G113899	Yenidere power station Unit 4	Yenidere power station	Turkey	Turkey	Yenidere Termik Enerji	Pre-permit	37,51	28,67	25	Lignite		3,0

Tracking ID (Global Coal Plant Tracker)	Unit name	Plant name	Region	Country	Owner	Project status	Latitude	Longitude	Capacity	Fuel type	Commissioning year (projected)	Projected lifetime CO2 emissions
G111423	Yıldırım Elazığ power station	Yıldırım Elazığ power station	Turkey	Turkey	Yıldırım Group	Pre-permit	38,66	39,77	200	unknown		39,0
G111483	Yumurtalık IC İctas power station Unit 1	Yumurtalık IC İctas power station	Turkey	Turkey	İbrahim Çeçen Investment Holding	Pre-permit	36,77	35,79	600	unknown		96,3
G100525	Banovici Power Station	Banovici Power Station	Western Balkans	Bosnia & Herzegovina	RMU Banovici	Permitted	44,40	18,53	350	Lignite	2020	64,9
G101092	Bugojno Thermal Power Project Unit 1	Bugojno Thermal Power Project	Western Balkans	Bosnia & Herzegovina	Elektroprivreda BIH (EPBIH)	Announced	44,05	17,45	300	Lignite	2030	55,7
G102881	Gacko Thermal Power Plant Unit 2	Gacko Thermal Power Plant	Western Balkans	Bosnia & Herzegovina	Elektroprivreda Republike Srpske	Announced	43,17	18,51	350	Lignite		64,9
G105456	Kakanj Thermal Power Plant Unit 8	Kakanj Thermal Power Plant	Western Balkans	Bosnia & Herzegovina	Elektroprivreda BIH (EPBIH)	Permitted	44,09	18,11	300	Lignite	2022	55,7
G105457	Kakanj Thermal Power Plant Unit 9	Kakanj Thermal Power Plant	Western Balkans	Bosnia & Herzegovina	Elektroprivreda BIH (EPBIH)	Announced	44,09	18,11	300	Lignite	2032	55,7
G105521	Kamengrad Thermal Power Plant Unit 1	Kamengrad Thermal Power Plant	Western Balkans	Bosnia & Herzegovina	RMU Kamengrad	Announced	44,77	16,67	215	Lignite		43,5
G105522	Kamengrad Thermal Power Plant Unit 2	Kamengrad Thermal Power Plant	Western Balkans	Bosnia & Herzegovina	RMU Kamengrad	Announced	44,77	16,67	215	Lignite		43,5
G105843	Kongora Thermal Power Plant Unit 1	Kongora Thermal Power Plant	Western Balkans	Bosnia & Herzegovina	EP HZHB	Announced	43,65	17,33	275	Lignite		56,3
G105844	Kongora Thermal Power Plant Unit 2	Kongora Thermal Power Plant	Western Balkans	Bosnia & Herzegovina	EP HZHB	Announced	43,65	17,33	275	Lignite		56,3
G110406	Tuzla Thermal Power Plant Unit 7	Tuzla Thermal Power Plant	Western Balkans	Bosnia & Herzegovina	Elektroprivreda BIH (EPBIH)	Permitted	44,52	18,61	450	Lignite		75,9
G110407	Tuzla Thermal Power Plant Unit 8	Tuzla Thermal Power Plant	Western Balkans	Bosnia & Herzegovina	Elektroprivreda BIH (EPBIH)	Announced	44,52	18,61	450	Lignite	2027	75,9
G110434	Ugljevik-3 power station Unit 1	Ugljevik 3 power station	Western Balkans	Bosnia & Herzegovina	Comsar Energy (90%), Elektroprivreda Republike Srpske (10%)	Permitted	44,68	18,97	300	Lignite		55,7
G110435	Ugljevik-3 power station Unit 2	Ugljevik 3 power station	Western Balkans	Bosnia & Herzegovina	Comsar Energy (90%), Elektroprivreda Republike Srpske (10%)	Permitted	44,68	18,97	300	Lignite		55,7
G106667	Mariovo Power Station	Mariovo Power Station	Western Balkans	FYROM	ELEM	Announced	41,12	21,81	300	Lignite	2033	56,3
G107694	Oslomej reconstruction	Oslomej power station	Western Balkans	FYROM	ELEM	Pre-permit	41,58	21,00	129	Hard coal		24,7
G107376	New Kosovo power station	New Kosovo power station	Western Balkans	Kosovo	KEK	Pre-permit	42,67	21,17	500	Lignite	2023	82,4
G108037	Prijevlja Power Station Unit II	Prijevlja Power Station	Western Balkans	Montenegro	Elektroprivreda Crne Gore	Pre-permit	43,33	19,33	254	Lignite		50,2
G105886	Kostolac B3	Kostolac Power Station	Western Balkans	Serbia	EPS	Pre-permit	44,73	21,21	350	Lignite		64,9
G105913	Kovin power station Unit 1	Kovin power station	Western Balkans	Serbia	Serbian Oil Company (NIS)	Announced	44,75	20,97	350	Lignite		64,9
G105914	Kovin power station Unit 2	Kovin power station	Western Balkans	Serbia	Serbian Oil Company (NIS)	Announced	44,75	20,97	350	Lignite		64,9
G109625	Štavalj Power Station	Štavalj Power Station	Western Balkans	Serbia	EPS	Announced	43,27	20,00	300	Lignite		56,3
									54462			

Source: Global Coal Plant Tracker (status: 12 Jul 2018)

## First tranche: Coal power plants under construction in Europe – to be stopped by 2019

EBC unit ID	Unit name	Plant name	Country	Region	Fuel type	Commissioning year	Owner	Retirement year (Announced)	Date of retirement announcement	Retirement year	Covered by country phase-out? [if yes, phase-out year]	Retirement announced?	Unit type	Unit status (gross)	Capacity	MW_el_gross	
DE-50-4	DE-50	Datteln 4	Datteln	Germany	EU	hard coal	Uniper	2020			no	no	CHP	Construction	construction	1 100	
EL-5-5	EL-5	Ptolemaida 5	Ptolemaida	Greece	EU	lignite	PPC	2019			no	no	CHP	Construction	construction	660	
PL-13-11	PL-13	Turow B11	Turow	Poland	EU	lignite	PG&E	2019			no	no		Construction	construction	460	
PL-16-5	PL-16	Opole B5	Opole	Poland	EU	hard coal	PG&E	2018			no	no		Construction	construction	900	
PL-16-6	PL-16	Opole B6	Opole	Poland	EU	hard coal	PG&E	2019			no	no		Construction	construction	900	
PL-70-7	PL-70	Jaworzno 3 B7	Jaworzno 3	Poland	EU	hard coal	Tauron	2019			no	no		Construction	construction	910	
PL-254-1	PL-254	Zabrze II 1	Zabrze II	Poland	EU	hard coal	Fortum	2018			no	no	CHP	Construction	construction	220	
TR-25-1	TR-25	Can II 1	Can II	Turkey	Turkey	Lignite	Ödaş Enerji	2018			no	no	conventional	Construction	construction	330	
TR-29-1	TR-29	Soma Kolin Kayraklı power station 1	Soma Kolin	Turkey	Turkey	lignite	Kolin Group	2018			no	no	conventional	Construction	construction	255	
TR-29-2	TR-29	Soma Kolin Kayraklı power station 2	Soma Kolin	Turkey	Turkey	lignite	Kolin Group	2018			no	no	conventional	Construction	construction	255	
																	5990

Source: European Coal Plant Database (status: 16 Nov 2018)

## Second tranche: Coal power stations in Europe build before 1970 – to be closed by 2020

### Unit Data

EBC unit ID	EBC plant ID	Unit name	Plant name	Country	Region	Fuel type	Owner	Commissioning year	(Announced) Retirement year	Covered by country phase-out? [if yes; year of retirement]	Retirement announced?	Unit type	Unit status (gross)	Unit status (detailed)	Capacity
PL-180-3	BG-10	Republika (Pernik) 5	Republika (Pernik)	Bulgaria	EU	lignite	Bingham Management	1951			no	CHP	open	operational	158
PL-20-1	CZ-24	Komorany I 1	Komorany	Czech Republic	EU	lignite	EPH	1951			no	industrial	open	operational	158
PL-20-2	CZ-24	Komorany I 2	Komorany	Czech Republic	EU	lignite	EPH	1951			no	industrial	open	operational	660
PL-40-1	CZ-24	Komorany I 3	Komorany	Czech Republic	EU	lignite	EPH	1951			no	industrial	open	operational	1 100
PL-40-2	CZ-16	Teploarma Československe Armary (CSA)	Teploarma Československe Armary (CSA)	Czech Republic	EU	hard coal	Veolia	1952			no	CHP	open	operational	900
RS-1-1	CZ-26	Olomouc	Olomouc	Czech Republic	EU	hard coal	Veolia	1952			no	CHP	open	operational	220
CZ-53-2	PL-223	Zeran B1	Zeran	Poland	EU	hard coal	PGNiG	1954			no	CHP	open	operational	330
CZ-8-5	CZ-24	Komorany II 4	Komorany	Czech Republic	EU	lignite	EPH	1955			no	industrial	open	operational	255
CZ-8-6	CZ-24	Komorany II 5	Komorany	Czech Republic	EU	lignite	EPH	1955			no	industrial	open	operational	255
DE-215-1	PL-180	Czehnica 3	Czehnica	Poland	EU	hard coal	PGE	1955			no	CHP	open	operational	660
PL-200-1	PL-20	Miechowice 1	Miechowice	Poland	EU	hard coal	Fortum	1955			no	CHP	open	operational	460
PL-40-3	PL-20	Miechowice 2	Miechowice	Poland	EU	hard coal	Fortum	1955			no	CHP	open	operational	900
RS-1-2	PL-40	Elblag 1	Elblag	Poland	EU	hard coal	ENERGA	1955			no	CHP	open	operational	910
CZ-24-8	PL-40	Elblag 2	Elblag	Poland	EU	hard coal	ENERGA	1956			no	CHP	open	operational	105
CZ-44-2	RS-1	Kolubara A1	Kolubara A	Serbia	Western Balkans	lignite	EPS-Elektroprivreda Srbije	1956			no	conventional	open	operational	32
CZ-44-3	CZ-8	Hodonin 1	Hodonin	Czech Republic	EU	lignite	CEZ	1957			no	heat	open	operational	20
CZ-44-4	CZ-8	Hodonin 2	Hodonin	Czech Republic	EU	lignite	CEZ	1957			no	heat	open	operational	24
PL-140-4	DE-215	Krefeld-Uerdingen L 57	Krefeld-Uerdingen	Germany	EU	hard coal	Currenta GmbH & Co. OHG	1957			no	industrial	open	operational	50
PL-187-5	PL-200	Szczecin 1	Szczecin	Poland	EU	hard coal	PGE	1957			no	CHP	open	operational	386
PL-91-2	PL-40	Elblag 3	Elblag	Poland	EU	hard coal	ENERGA	1957			no	CHP	open	operational	22
PL-91-4	RS-1	Kolubara A2	Kolubara A	Serbia	Western Balkans	lignite	EPS-Elektroprivreda Srbije	1957			no	conventional	open	operational	35
CZ-24-3	CZ-24	Komorany II 6	Komorany	Czech Republic	EU	lignite	EPH	1958			no	industrial	open	operational	32
CZ-44-5	CZ-44	Tisova I 2	Tisova	Czech Republic	EU	lignite	CEZ	1958			no	CHP	open	operational	55
DE-226-1	CZ-44	Tisova I 3	Tisova	Czech Republic	EU	lignite	CEZ	1958			no	heat	open	operational	55
PL-198-1	CZ-44	Tisova I 4	Tisova	Czech Republic	EU	lignite	CEZ	1958			no	heat	open	operational	25
PL-198-2	PL-140	Ostroleka A 4	Ostroleka	Poland	EU	hard coal	Energa	1958			no	CHP	open	operational	25
CZ-33-1	PL-187	Stalowa Wola B7	Stalowa Wola	Poland	EU	hard coal	Tauron	1958			no	CHP	open	operational	32
CZ-33-2	PL-91	Konin B2	Konin	Poland	EU	lignite	ZEPAK	1958			no	conventional	open	operational	55
CZ-33-3	PL-91	Konin B3	Konin	Poland	EU	lignite	ZEPAK	1958			no	conventional	open	operational	50
CZ-33-4	CZ-24	Komorany II 7	Komorany	Czech Republic	EU	lignite	EPH	1959			no	industrial	open	operational	57
CZ-33-5	CZ-44	Tisova I 5	Tisova	Czech Republic	EU	lignite	CEZ	1959			no	heat	open	operational	28
CZ-33-6	DE-226	Frechen/Wachtberg	Frechen/Wachtberg	Germany	EU	lignite	RWE	1959			no	industrial	open	operational	69
CZ-61-1	PL-198	Pomorzany A	Pomorzany	Poland	EU	hard coal	PGE	1959			no	CHP	open	operational	12
CZ-9-1	PL-198	Pomorzany B	Pomorzany	Poland	EU	hard coal	PGE	1959			no	CHP	open	operational	32
CZ-9-2	CZ-33	Opatovice 1	Opatovice	Czech Republic	EU	lignite	EPH	1960			no	CHP	open	operational	34
CZ-9-3	CZ-33	Opatovice 2	Opatovice	Czech Republic	EU	lignite	EPH	1960			no	CHP	open	operational	57
CZ-9-4	CZ-33	Opatovice 3	Opatovice	Czech Republic	EU	lignite	EPH	1960			no	heat	open	operational	57
FI-19-1	CZ-33	Opatovice 4	Opatovice	Czech Republic	EU	lignite	EPH	1960			no	CHP	open	operational	57
PL-107-1	CZ-33	Opatovice 5	Opatovice	Czech Republic	EU	lignite	EPH	1960			no	heat	open	operational	34
PL-107-2	CZ-33	Opatovice 6	Opatovice	Czech Republic	EU	lignite	EPH	1960			no	heat	open	operational	125
CZ-36-2	CZ-61	Plzenska energetika ELU III K1	Plzenska energetika ELU III	Czech Republic	EU	lignite	EPH	1960			no	CHP	open	operational	50
DE-228-1	CZ-9	Melnik I 1	Melnik I	Czech Republic	EU	lignite	CEZ	1960			no	heat	open	operational	65
HU-8-1	CZ-9	Melnik I 2	Melnik I	Czech Republic	EU	lignite	CEZ	1960			no	heat	open	operational	32
HU-8-2	CZ-9	Melnik I 3	Melnik I	Czech Republic	EU	lignite	CEZ	1960			no	heat	open	operational	13
HU-8-3	CZ-9	Melnik I 4	Melnik I	Czech Republic	EU	lignite	CEZ	1960			no	heat	open	operational	128
HU-8-4	FI-19	Naantali-1 1	Naantali-1	Finland	EU	hard coal	Fortum	1960		2030	no	CHP	open	operational	67
PL-182-3	PL-107	Laziska B1	Laziska	Poland	EU	hard coal	Tauron	1960			no	conventional	open	operational	67
PL-182-4	PL-107	Laziska B2	Laziska	Poland	EU	hard coal	Tauron	1960			no	conventional	open	operational	60
PL-182-5	CZ-36	Plana	Plana	Czech Republic	EU	lignite	C-Energy Bohemia spol. s r.o.	1961			no	CHP	open	operational	60
PL-182-6	DE-228	Wedel 1	Wedel	Germany	EU	hard coal	Vattenfall	1961			no	CHP	open	operational	60
PL-221-7	PL-182	Skawina B3	Skawina	Poland	EU	hard coal	CEZ	1961			no	CHP	open	operational	60
PL-91-5	PL-182	Skawina B4	Skawina	Poland	EU	hard coal	CEZ	1961			no	CHP	open	operational	60
RS-1-3	PL-182	Skawina B5	Skawina	Poland	EU	hard coal	CEZ	1961			no	CHP	open	operational	60
CZ-44-8	PL-182	Skawina B6	Skawina	Poland	EU	hard coal	CEZ	1961			no	CHP	open	operational	60
DE-155-2	PL-221	Siekierki WSIB 07	Siekierki	Poland	EU	hard coal	PGNiG	1961			no	CHP	open	operational	116
DE-163-6	PL-91	Konin B4	Konin	Poland	EU	lignite	ZEPAK	1961			no	conventional	open	operational	125
DE-228-2	RS-1	Kolubara A3	Kolubara A	Serbia	Western Balkans	lignite	EPS-Elektroprivreda Srbije	1961			no	conventional	open	operational	125
DK-10-2	CZ-44	Tisova I 3	Tisova	Czech Republic	EU	lignite	CEZ	1962			no	conventional	open	operational	46
PL-126-1	DE-155	Leverkusen G 22	Leverkusen	Germany	EU	hard coal	Currenta GmbH & Co. OHG	1962			no	industrial	open	operational	151

EBC unit ID	EBC plant ID	Unit name	Plant name	Country	Region	Fuel type	Owner	Commissioning year	Date of retirement [Announced] [Retirement year]	Retirement announced?	Unit type	Unit status (gross)	Unit status (detailed)	Capacity	
SK-18-1	DE-163	Luenen 6	Luenen	Germany	EU	hard coal	STEAG	1962		no	conventional	open	operational	55	
SK-18-2	DE-228	Wedel 2	Wedel	Germany	EU	hard coal	Vattenfall	1962		no	CHP	open	operational	65	
UK-50-1	DK-10	Asnaes 2	Asnaes	Denmark	EU	hard coal	Ørsted	1962	2023	yes	CHP	open	operational	65	
UK-50-2	PL-126	Mielec 1	Mielec	Poland	EU	hard coal	E-Star Plc	1962		no	CHP	open	operational	65	
BG-10-4	SK-18	Martinska 1 (TG 2)	Martinska	Slovakia	EU	lignite	Martinska	1962		no	CHP	open	operational	110	
DE-13-1	SK-18	Martinska 2 (TG 3)	Martinska	Slovakia	EU	lignite	Martinska	1962		no	CHP	open	operational	110	
DE-13-2	UK-50	Uskmouth 13	Uskmouth	United Kingdom	EU	hard coal	SIMEC	1962		no	2025	conventional	open	operational	110
PL-13-4	UK-50	Uskmouth 14	Uskmouth	United Kingdom	EU	hard coal	SIMEC	1962		no	2025	conventional	open	operational	110
BG-11-1	BG-10	Republika (Pernik) 4	Republika (Pernik)	Bulgaria	EU	lignite	Bingham Management	1963		no	CHP	open	operational	102	
BG-11-2	PL-13	Turow B4	Turow	Poland	EU	lignite	PGE	1963		no	no	conventional	open	operational	105
BG-14-1	BG-14	Brikel 1	Brikel	Bulgaria	EU	lignite	Bakkar	1964		no	no	conventional	open	operational	139
BG-14-2	BG-14	Brikel 2	Brikel	Bulgaria	EU	lignite	Bakkar	1964		no	no	conventional	open	operational	147
BG-14-3	BG-14	Brikel 3	Brikel	Bulgaria	EU	lignite	Bakkar	1964		no	no	conventional	open	operational	30
BG-14-4	CZ-19	Kolin K5	Kolin	Czech Republic	EU	lignite	Veolia	1964		no	no	CHP	open	operational	121
BG-14-5	CZ-19	Kolin K7	Kolin	Czech Republic	EU	lignite	Veolia	1964		no	no	CHP	open	operational	25
BG-14-6	CZ-24	Komorany III 8	Komorany	Czech Republic	EU	lignite	EPH	1964		no	no	industrial	open	operational	136
CZ-19-1	CZ-29	Trebovce TG 33	Trebovce	Czech Republic	EU	hard coal	Veolia	1964		no	no	CHP	open	operational	136
CZ-19-3	ES-33	Vellila I	Vellila	Spain	EU	hard coal	Iberdrola	1964		no	no	conventional	open	operational	30
CZ-24-5	FI-19	Naantali-1 2	Naantali-1	Finland	EU	hard coal	Fortum	1964		no	2030	CHP	open	operational	30
CZ-29-1	IT-24	Fusina GR1	Fusina	Italy	EU	hard coal	Enel	1964		no	2025	conventional	open	operational	60
DE-227-1	PL-13	Turow B5	Turow	Poland	EU	lignite	PGE	1964		no	no	conventional	open	operational	60
ES-33-1	PL-13	Turow B6	Turow	Poland	EU	lignite	PGE	1964		no	no	conventional	open	operational	60
FI-19-2	PL-91	Konin B1	Konin	Poland	EU	lignite	ZEPAK	1964		no	no	conventional	open	operational	60
IT-24-1	SK-14	Novaky ENO B 1	Novaky	Slovakia	EU	lignite	EPH, Enel	1964		no	no	CHP	open	operational	60
PL-13-5	SK-14	Novaky ENO B 2	Novaky	Slovakia	EU	lignite	EPH, Enel	1964		no	no	CHP	open	operational	4
PL-13-6	DE-13	Niederaussem C	Niederaussem	Germany	EU	lignite	RWE	1965		no	no	conventional	open	operational	32
PL-91-1	DE-81	Eschweiler-Weisweiler E	Eschweiler-Weisweiler	Germany	EU	lignite	RWE	1965		no	no	conventional	open	operational	33
RO-18-4	IT-13	Monfalcone 1	Monfalcone	Italy	EU	hard coal	A2A	1965		no	2025	conventional	open	operational	107
SK-14-7	BA-4	Tuzla G3	Tuzla	Bosnia & Herzegovina	Western Balkans	lignite	EPBiH	1966		no	no	CHP	open	operational	125
SK-14-8	BG-8	Maritsa East 2-1	Maritsa East 2	Bulgaria	EU	lignite	Bulgarian Energy Holding (BEH)	1966		no	no	conventional	open	operational	261
DE-125-5	CZ-40	Chomutov K3	Chomutov	Czech Republic	EU	lignite	Actherm	1966		no	no	CHP	open	operational	261
DE-13-3	CZ-42	Prerov K-13	Prerov	Czech Republic	EU	hard coal	Veolia	1966		no	no	CHP	open	operational	28
DE-81-5	PL-251	Zofiowka Moszczenica	Zofiowka Moszczenica	Poland	EU	hard coal	Społka Energetyczna Jastrzębie	1966		no	no	CHP	open	operational	110
IT-13-1	PL-5	Lagisza B6	Lagisza	Poland	EU	hard coal	Tauron	1966		no	no	conventional	open	operational	125
PL-187-6	PL-5	Lagisza B7	Lagisza	Poland	EU	hard coal	Tauron	1966		no	no	conventional	open	operational	335
BA-4-1	SI-3	Te-Tol 1	Te-Tol	Slovenia	EU	hard coal	Termoelektrarna Toplarna	1966		no	no	CHP	open	operational	363
BG-11-3	SK-13	Vojany EVO1 5	Vojany I	Slovakia	EU	hard coal	EPH, Enel	1966		no	no	conventional	open	operational	165
BG-8-1	SK-13	Vojany EVO1 6	Vojany I	Slovakia	EU	hard coal	EPH, Enel	1966		no	no	conventional	open	operational	125
CZ-40-2	TR-21	Tuncbilek 3	Tuncbilek	Turkey	Turkey	lignite	Çelikler	1966		no	no	conventional	open	operational	100
CZ-42-2	BG-8	Maritsa East 2-2	Maritsa East 2	Bulgaria	EU	lignite	Bulgarian Energy Holding (BEH)	1967		no	no	conventional	open	operational	110
DE-106-16	BG-8	Maritsa East 2-3	Maritsa East 2	Bulgaria	EU	lignite	Bulgarian Energy Holding (BEH)	1967		no	no	conventional	open	operational	177
DE-125-6	DE-81	Eschweiler-Weisweiler F	Eschweiler-Weisweiler	Germany	EU	lignite	RWE	1967		no	no	conventional	open	operational	41
PL-251-1	IT-11	La Spezia 3	La Spezia	Italy	EU	hard coal	Enel	1967		no	2025	conventional	open	operational	125
PL-5-6	PL-90	Patnow I B1	Patnow I	Poland	EU	lignite	ZEPAK	1967		no	no	conventional	open	operational	41
PL-5-7	PL-90	Patnow I B2	Patnow I	Poland	EU	lignite	ZEPAK	1967		no	no	conventional	open	operational	120
SI-3-1	RS-2	Kostolac A1	Kostolac A	Serbia	Western Balkans	lignite	EPS-Elektroprivreda Srbije	1967		no	no	conventional	open	operational	120
SK-13-5	SI-3	Te-Tol 2	Te-Tol	Slovenia	EU	lignite	Termoelektrarna Toplarna	1967		no	no	CHP	open	operational	42
SK-13-6	SK-4	Teko 1	Teko	Slovakia	EU	hard coal	Teko	1967		no	no	CHP	open	operational	110
TR-21-1	SK-4	Teko 2	Teko	Slovakia	EU	hard coal	Teko	1967		no	no	CHP	open	operational	110

Capacity	Unit status (detailed)	Unit status (gross)	Unit type	Covered by country phase-out? [if yes, year of retirement]	Retirement announced?	Date of retirement announcement	(Announced) Retirement year	Commissioning year	Owner	Fuel type	Region	Country	Plant name	Unit name	EBC unit ID	EBC plant ID	
BG-8-2	UK-59	West Burton 1	West Burton	United Kingdom	EU	hard coal	EDF	1967				no	2025	conventional	open	operational	340
BG-8-3	UK-59	West Burton 2	West Burton	United Kingdom	EU	hard coal	EDF	1967				no	2025	conventional	open	operational	270
DE-227-2	UK-59	West Burton 3	West Burton	United Kingdom	EU	hard coal	EDF	1967				no	2025	conventional	open	operational	600
DE-81-6	UK-59	West Burton 4	West Burton	United Kingdom	EU	hard coal	EDF	1967				no	2025	conventional	open	operational	200
DK-10-4	BG-8	Maritsa East 2-4	Maritsa East 2	Bulgaria	EU	lignite	Bulgarian Energy Holding (BEH)	1968				no	no	conventional	open	operational	200
IT-11-1	CZ-12	Prunerov I 3	Prunerov	Czech Republic	EU	lignite	CEZ	1968				no	no	CHP	open	operational	100
PL-90-1	CZ-12	Prunerov I 4	Prunerov	Czech Republic	EU	lignite	CEZ	1968				no	no	CHP	open	operational	32
PL-90-2	CZ-12	Prunerov I 5	Prunerov	Czech Republic	EU	lignite	CEZ	1968				no	no	CHP	open	operational	55
RS-2-1	CZ-12	Prunerov I 6	Prunerov	Czech Republic	EU	lignite	CEZ	1968				no	no	CHP	open	operational	66
SI-3-2	DE-100	Gelsenkirchen-Scholven B	Scholven/Buer	Germany	EU	hard coal	Uniper	1968				no	no	CHP	open	operational	533
SK-4-1	DE-13	Niederaussem D	Niederaussem	Germany	EU	lignite	RWE	1968				no	no	conventional	open	operational	533
SK-4-2	PL-114	Lodz 3 - 1	Lodz 3	Poland	EU	hard coal	Veolia	1968				no	no	CHP	open	operational	533
UK-28-1	PL-114	Lodz 3 - 2	Lodz 3	Poland	EU	hard coal	Veolia	1968				no	no	CHP	open	operational	533
UK-28-2	PL-114	Lodz 3 - 3	Lodz 3	Poland	EU	hard coal	Veolia	1968				no	no	CHP	open	operational	547
UK-28-3	PL-114	Lodz 3 - 4	Lodz 3	Poland	EU	hard coal	Veolia	1968				no	no	CHP	open	operational	547
UK-28-4	PL-90	Patnow I B3	Patnow I	Poland	EU	lignite	ZEPAK	1968				no	no	conventional	open	operational	547
UK-59-1	PL-90	Patnow I B4	Patnow I	Poland	EU	lignite	ZEPAK	1968				no	no	conventional	open	operational	547
UK-59-2	UK-57	Ratcliffe 1	Ratcliffe	United Kingdom	EU	hard coal	Uniper	1968				no	2025	conventional	open	operational	177
UK-59-3	UK-57	Ratcliffe 2	Ratcliffe	United Kingdom	EU	hard coal	Uniper	1968				no	2025	conventional	open	operational	110
UK-59-4	UK-57	Ratcliffe 3	Ratcliffe	United Kingdom	EU	hard coal	Uniper	1968				no	2025	conventional	open	operational	110
BG-8-4	UK-57	Ratcliffe 4	Ratcliffe	United Kingdom	EU	hard coal	Uniper	1968				no	2025	conventional	open	operational	110
CZ-12-3	BA-2	Kakanj G5	Kakanj	Bosnia & Herzegovina	Western Balkans	lignite	EPBiH	1969				no	no	CHP	open	operational	110
CZ-12-4	BG-17	Sliven	Sliven	Bulgaria	EU	lignite	Toplofikacia Sliven EAD	1969				no	no	CHP	open	operational	370
CZ-12-5	CZ-2	Ledvice III 1	Ledvice	Czech Republic	EU	lignite	CEZ	1969				no	no	CHP	open	operational	55
CZ-12-6	CZ-41	Malesice III	Malesice	Czech Republic	EU	hard coal	Pražská teplárenská a.s.	1969				no	no	CHP	open	operational	55
DE-100-1	CZ-41	Malesice II	Malesice	Czech Republic	EU	hard coal	Pražská teplárenská a.s.	1969				no	no	CHP	open	operational	55
DE-13-4	DE-100	Gelsenkirchen-Scholven C	Scholven/Buer	Germany	EU	hard coal	Uniper	1969				no	no	CHP	open	operational	200
PL-114-1	DE-163	Lunen 7	Lunen	Germany	EU	hard coal	STEAG	1969				no	no	CHP	open	operational	200
PL-114-2	DE-20	Berlin-Reuter C	Berlin-Reuter	Germany	EU	hard coal	Vattenfall	1969	2030	19-Oct-17	yes	no		CHP	open	operational	543
PL-114-3	DE-35	Bremen-Farge	Bremen-Farge	Germany	EU	hard coal	Engie	1969				no	no	conventional	open	operational	543
PL-114-4	ES-31	Narcea GR II	Narcea	Spain	EU	hard coal	Gas Natural Fenosa	1969				no	no	conventional	open	operational	543
PL-90-3	HR-1	Plomin 1	Plomin	Croatia	EU	hard coal	HEP d.d.	1969	2017	15-May-13	yes	no		conventional	open	operational	543
PL-90-4	HU-12	Matra 1	Matra	Hungary	EU	lignite	RWE	1969				no	no	conventional	open	operational	110
UK-57-1	HU-12	Matra 2	Matra	Hungary	EU	lignite	RWE	1969				no	no	conventional	open	operational	30
UK-57-2	HU-12	Matra 3	Matra	Hungary	EU	lignite	RWE	1969				no	no	conventional	open	operational	110
UK-57-3	HU-12	Matra 4	Matra	Hungary	EU	lignite	RWE	1969				no	no	conventional	open	operational	110
UK-57-4	HU-12	Matra 5	Matra	Hungary	EU	lignite	RWE	1969				no	no	conventional	open	operational	110
BA-2-1	IT-24	Fusina GR2	Fusina	Italy	EU	hard coal	Enel	1969				no	2025	conventional	open	operational	55
BG-17-1	PL-90	Patnow I B5	Patnow I	Poland	EU	lignite	ZEPAK	1969				no	no	conventional	open	operational	370
CZ-2-2	PL-90	Patnow I B6	Patnow I	Poland	EU	lignite	ZEPAK	1969				no	no	conventional	open	operational	350
CZ-2-3	RS-4	Morava	Morava	Serbia	Western Balkans	lignite	EPS-Elektroprivreda Srbije	1969				no	no	conventional	open	operational	132
CZ-2-4	UK-15	Cottam 1	Cottam	United Kingdom	EU	hard coal	EDF	1969				no	2025	conventional	open	operational	380
CZ-41-3	UK-15	Cottam 2	Cottam	United Kingdom	EU	hard coal	EDF	1969				no	2025	conventional	open	operational	166
CZ-41-4	UK-15	Cottam 3	Cottam	United Kingdom	EU	hard coal	EDF	1969				no	2025	conventional	open	operational	125
DE-100-2	UK-15	Cottam 4	Cottam	United Kingdom	EU	hard coal	EDF	1969				no	2025	conventional	open	operational	100
DE-163-7	CZ-17	Karvina 1	Karvina	Czech Republic	EU	hard coal	Veolia	1970				no	no	CHP	open	operational	100
DE-20-3	CZ-30	Zavod 4 K5	Zavod 4	Czech Republic	EU	lignite	TAMEH Czech	1970				no	no	industrial	open	operational	220
DE-35-1	CZ-30	Zavod 4 K6	Zavod 4	Czech Republic	EU	lignite	TAMEH Czech	1970				no	no	industrial	open	operational	232
ES-31-2	CZ-30	Zavod 4 K7	Zavod 4	Czech Republic	EU	lignite	TAMEH Czech	1970				no	no	industrial	open	operational	232
HR-1-2	CZ-30	Zavod 4 K8	Zavod 4	Czech Republic	EU	lignite	TAMEH Czech	1970				no	no	industrial	open	operational	171
HU-12-1	CZ-30	Zavod 4 K9	Zavod 4	Czech Republic	EU	lignite	TAMEH Czech	1970				no	no	industrial	open	operational	123
HU-12-2	CZ-30	Zavod 4 K10	Zavod 4	Czech Republic	EU	lignite	TAMEH Czech	1970				no	no	industrial	open	operational	200
HU-12-3	CZ-30	Zavod 4 K11	Zavod 4	Czech Republic	EU	lignite	TAMEH Czech	1970				no	no	industrial	open	operational	200

EBC unit ID	EBC plant ID	Unit name	Plant name	Country	Region	Fuel type	Owner	Commissioning year	(Announced) Retirement year	Date of retirement announcement	Retirement announced?	Unit type	Unit status (gross)	Unit status (detailed)	Capacity	
HU-12-4	CZ-31	Vitkovice 1	Vitkovice	Czech Republic	EU	hard coal	CEZ	1970			no	no	industrial	open	operational	120
HU-12-5	CZ-31	Vitkovice 2	Vitkovice	Czech Republic	EU	hard coal	CEZ	1970			no	no	industrial	open	operational	546
IT-24-2	CZ-31	Vitkovice 3	Vitkovice	Czech Republic	EU	hard coal	CEZ	1970			no	no	industrial	open	operational	546
PL-211-5	CZ-31	Vitkovice Evi	Vitkovice	Czech Republic	EU	hard coal	CEZ	1970			no	no	industrial	open	operational	546
PL-90-5	CZ-32	Otrokovice K1	Otrokovice	Czech Republic	EU	lignite	LAMA ENERGY GROUP	1970			no	no	CHP	open	operational	546
PL-90-6	CZ-32	Otrokovice K2	Otrokovice	Czech Republic	EU	lignite	LAMA ENERGY GROUP	1970			no	no	CHP	open	operational	55
RS-4-1	CZ-65	Koprivnice TG3	Koprivnice	Czech Republic	EU	hard coal	Komterm	1970			no	no	CHP	open	operational	25
UK-15-1	CZ-65	Koprivnice TG4	Koprivnice	Czech Republic	EU	hard coal	Komterm	1970			no	no	CHP	open	operational	25
UK-15-2	DE-13	Niederaussem E	Niederaussem	Germany	EU	lignite	RWE	1970	2022	24-Oct-16	yes	no	conventional	open	operational	25
UK-15-3	DE-152	Kiel East	Kiel East	Germany	EU	hard coal	Uniper	1970	2019	22-Feb-18	yes	no	CHP	open	operational	18
UK-15-4	IT-13	Monfalcone 2	Monfalcone	Italy	EU	hard coal	A2A	1970			no	2025	conventional	open	operational	18
CZ-17-1	KS-1	Kosovo A3	Kosovo A	Kosovo	Western Balkans	lignite	KEK	1970			no	no	conventional	open	operational	19
CZ-30-2	PL-234	Wrocław B1	Wrocław	Poland	EU	hard coal	PGE	1970			no	no	CHP	open	operational	16
CZ-30-3	PL-98	Krakow B1	Krakow	Poland	EU	hard coal	PGE	1970			no	no	CHP	open	operational	22
CZ-30-4	RS-5	Nikola Tesla A1	Nikola Tesla A	Serbia	Western Balkans	lignite	EPS-Elektroprivreda Srbije	1970			no	no	conventional	open	operational	25
CZ-30-5	RS-5	Nikola Tesla A2	Nikola Tesla A	Serbia	Western Balkans	lignite	EPS-Elektroprivreda Srbije	1970			no	no	conventional	open	operational	25
CZ-30-6	RO-18	Paroseni	Paroseni	Romania	EU	hard coal	CE Hunedoara SA	1964			no	no	CHP	open	retrofitting	60
CZ-30-7	CZ-53	Porici II 2	Porici II	Czech Republic	EU	lignite	CEZ	1957			no	no	CHP	open	standby	32
CZ-30-8	HU-8	Oroszlány 1	Oroszlány	Hungary	EU	hard coal	MVM	1961			no	no	conventional	open	standby	60
CZ-31-1	HU-8	Oroszlány 2	Oroszlány	Hungary	EU	hard coal	MVM	1961			no	no	conventional	open	standby	60
CZ-31-2	HU-8	Oroszlány 3	Oroszlány	Hungary	EU	hard coal	MVM	1961			no	no	conventional	open	standby	60
CZ-31-3	HU-8	Oroszlány 4	Oroszlány	Hungary	EU	hard coal	MVM	1961			no	no	conventional	open	standby	32
CZ-31-4	BG-14	Brikel 4	Brikel	Bulgaria	EU	lignite	Bakkar	1964			no	no	conventional	open	standby	10
CZ-32-1	DE-227	Walheim 1	Walheim	Germany	EU	hard coal	EnBW	1964			no	no	conventional	open	standby	261
CZ-32-2	DE-125	Heilbronn 5	Heilbronn	Germany	EU	hard coal	EnBW	1965			no	no	CHP	open	standby	1
CZ-65-1	PL-187	Stalowa Wola B8	Stalowa Wola	Poland	EU	hard coal	Tauron	1965	2019		yes	no	CHP	open	standby	155
CZ-65-2	DE-106	Grevenbroich-Frimmersdorf P	Grevenbroich-Frimmersdorf	Germany	EU	lignite	RWE	1966	2021	24-Oct-16	yes	no	CHP	open	standby	150
DE-106-17	DE-125	Heilbronn 6	Heilbronn	Germany	EU	hard coal	EnBW	1966			no	no	CHP	open	standby	110
DE-13-5	DE-227	Walheim 2	Walheim	Germany	EU	hard coal	EnBW	1967			no	no	conventional	open	standby	20
DE-152-1	DK-10	Asnaes 4	Asnaes	Denmark	EU	hard coal	Orsted	1967	2023	2-Feb-17	yes	no	conventional	open	standby	325
IT-13-2	UK-28	Eggborough 1	Eggborough	United Kingdom	EU	hard coal	EPH	1967	2018	2-Feb-18	yes	no	conventional	open	standby	71
KS-1-3	UK-28	Eggborough 2	Eggborough	United Kingdom	EU	hard coal	EPH	1967	2018	2-Feb-18	yes	no	conventional	open	standby	165
PL-211-8	CZ-2	Ledvice II 2	Ledvice	Czech Republic	EU	lignite	CEZ	1969			no	no	CHP	open	standby	320
PL-234-1	CZ-2	Ledvice II 3	Ledvice	Czech Republic	EU	lignite	CEZ	1969			no	no	CHP	open	standby	33
PL-98-1	PL-211	Siersza B3	Siersza	Poland	EU	hard coal	Tauron	1969	2019		yes	no	conventional	open	standby	110
RS-5-1	DE-106	Grevenbroich-Frimmersdorf Q	Grevenbroich-Frimmersdorf	Germany	EU	lignite	RWE	1970	2021	24-Oct-16	yes	no	conventional	open	standby	25
RS-5-2	PL-211	Siersza B6	Siersza	Poland	EU	hard coal	Tauron	1970	2019		yes	no	conventional	open	standby	16
															33 278	

# Third tranche: Lignite power plants in Europe built between 1971-90 – to be closed 2021

## Unit Data

EBC unit ID	EBC plant ID	Unit name	Plant name	Country	Region	Fuel type	Owner	Commissioning year	(Announced) Retirement year	Date of retirement announcement	Retirement announced?	Covered by country phase-out? [if yes: phase-out year]	Unit type	Unit status (gross)	Unit status (detailed)	Capacity	MW_el_gross
BA-4-2	BA-4	Tuzla G4	Tuzla	Bosnia & Herzegovina	Western Balkans	lignite	EPBiH	1971			no	no	CHP	open	operational	25	
BG-3-3	BG-3	Maritsa 3	Maritsa 3	Bulgaria	EU	lignite	Topgrup EOOD / Draft EOOD	1971			no	no	conventional	open	operational	9	
CZ-10-3	CZ-10	Melnik II 1	Melnik II / III	Czech Republic	EU	lignite	CEZ	1971			no	no	CHP	open	operational	310	
CZ-10-4	CZ-10	Melnik II 2	Melnik II / III	Czech Republic	EU	lignite	CEZ	1971			no	no	CHP	open	operational	315	
CZ-38-2	CZ-38	Pocerady I 2	Pocerady	Czech Republic	EU	lignite	CEZ	1971			no	no	conventional	open	retrofitting	354	
DE-13-6	DE-13	Niederaussem F	Niederaussem	Germany	EU	lignite	RWE	1971	2022	24-Oct-16	yes	no	conventional	open	operational	171	
KS-1-4	KS-1	Kosovo A4	Kosovo A	Kosovo	Western Balkans	lignite	KEK	1971			no	no	conventional	open	operational	120	
CZ-38-3	CZ-38	Pocerady I 3	Pocerady	Czech Republic	EU	lignite	CEZ	1972			no	no	conventional	open	retrofitting	120	
CZ-38-4	CZ-38	Pocerady I 4	Pocerady	Czech Republic	EU	lignite	CEZ	1972			no	no	conventional	open	retrofitting	284	
DE-107-1	DE-107	Grevenbroich-Neurath A	Grevenbroich-Neurath	Germany	EU	lignite	RWE	1972			no	no	conventional	open	operational	200	
DE-107-2	DE-107	Grevenbroich-Neurath B	Grevenbroich-Neurath	Germany	EU	lignite	RWE	1972			no	no	conventional	open	operational	55	
SI-4-4	SI-4	Sostanj 4	Sostanj	Slovenia	EU	lignite	HSE	1972			no	no	conventional	open	operational	575	
BG-4-1	BG-4	Bobov Dol 1	Bobov Dol	Bulgaria	EU	lignite	Consortium Energia MK	1973			no	no	conventional	open	standby	200	
DE-107-3	DE-107	Grevenbroich-Neurath C	Grevenbroich-Neurath	Germany	EU	lignite	RWE	1973	2023	24-Oct-16	yes	no	conventional	open	operational	200	
TR-18-1	TR-18	Seyitomer 1	Seyitomer	Turkey	Turkey	lignite	Celikler	1973			no	no	conventional	open	operational	226	
TR-18-2	TR-18	Seyitomer 2	Seyitomer	Turkey	Turkey	lignite	Celikler	1973			no	no	conventional	open	operational	225	
BA-4-3	BA-4	Tuzla G5	Tuzla	Bosnia & Herzegovina	Western Balkans	lignite	EPBiH	1974			no	no	CHP	open	operational	225	
BG-4-2	BG-4	Bobov Dol 2	Bobov Dol	Bulgaria	EU	lignite	Consortium Energia MK	1974			no	no	conventional	open	operational	215	
CZ-15-1	CZ-15	Tusimice 1	Tusimice	Czech Republic	EU	lignite	CEZ	1974			no	no	CHP	open	operational	275	
CZ-15-2	CZ-15	Tusimice 2	Tusimice	Czech Republic	EU	lignite	CEZ	1974			no	no	CHP	open	operational	210	
CZ-15-3	CZ-15	Tusimice 3	Tusimice	Czech Republic	EU	lignite	CEZ	1974			no	no	CHP	open	operational	312	
CZ-15-4	CZ-15	Tusimice 4	Tusimice	Czech Republic	EU	lignite	CEZ	1974			no	no	CHP	open	operational	225	
CZ-76-1	CZ-76	Trmice 1	Trmice	Czech Republic	EU	lignite	CEZ	1974			no	no	heat	open	operational	53	
CZ-76-2	CZ-76	Trmice 2	Trmice	Czech Republic	EU	lignite	CEZ	1974			no	no	heat	open	operational	225	
CZ-76-3	CZ-76	Trmice 3	Trmice	Czech Republic	EU	lignite	CEZ	1974			no	no	heat	open	operational	225	
CZ-76-4	CZ-76	Trmice 4	Trmice	Czech Republic	EU	lignite	CEZ	1974			no	no	heat	open	operational	228	
CZ-76-5	CZ-76	Trmice 5	Trmice	Czech Republic	EU	lignite	CEZ	1974			no	no	heat	open	operational	225	
CZ-76-6	CZ-76	Trmice 6	Trmice	Czech Republic	EU	lignite	CEZ	1974			no	no	heat	open	operational	163	
DE-13-7	DE-13	Niederaussem G	Niederaussem	Germany	EU	lignite	RWE	1974			no	no	CHP	open	operational	163	
DE-13-8	DE-13	Niederaussem H	Niederaussem	Germany	EU	lignite	RWE	1974			no	no	conventional	open	operational	200	
DE-81-7	DE-81	Eschweiler-Weisweiler G	Eschweiler-Weisweiler	Germany	EU	lignite	RWE	1974			no	no	CHP	open	operational	210	
BG-4-3	BG-4	Bobov Dol 3	Bobov Dol	Bulgaria	EU	lignite	Consortium Energia MK	1975			no	no	conventional	open	operational	16	
DE-107-4	DE-107	Grevenbroich-Neurath D	Grevenbroich-Neurath	Germany	EU	lignite	RWE	1975			no	no	CHP	open	operational	687	
DE-81-8	DE-81	Eschweiler-Weisweiler H	Eschweiler-Weisweiler	Germany	EU	lignite	RWE	1975			no	no	CHP	open	operational	687	
EL-4-1	EL-4	Kardia 1	Kardia	Greece	EU	lignite	PPC	1975			no	no	conventional	open	operational	630	
EL-4-2	EL-4	Kardia 2	Kardia	Greece	EU	lignite	PPC	1975			no	no	conventional	open	operational	360	
EL-7-3	EL-7	Megalopoli 3	Megalopoli A	Greece	EU	lignite	PPC	1975			no	no	CHP	open	operational	114	
KS-1-5	KS-1	Kosovo A5	Kosovo A	Kosovo	Western Balkans	lignite	KEK	1975			no	no	conventional	open	operational	320	
DE-107-5	DE-107	Grevenbroich-Neurath E	Grevenbroich-Neurath	Germany	EU	lignite	RWE	1976			no	no	CHP	open	operational	222	
RO-15-3	RO-15	Rovinari 3	Rovinari	Romania	EU	lignite	CE Oltenia SA	1976			no	no	conventional	open	operational	200	
RO-15-4	RO-15	Rovinari 4	Rovinari	Romania	EU	lignite	CE Oltenia SA	1976			no	no	conventional	open	operational	200	
RS-5-3	RS-5	Nikola Tesla A3	Nikola Tesla A	Serbia	Western Balkans	lignite	EPS-Elektrorprivreda Srbije	1976			no	no	conventional	open	operational	200	
BA-2-2	BA-2	Kakanj G6	Kakanj	Bosnia & Herzegovina	Western Balkans	lignite	EPBiH	1977			no	no	CHP	open	operational	644	
CZ-38-5	CZ-38	Pocerady II 1	Pocerady	Czech Republic	EU	lignite	CEZ	1977			no	no	conventional	open	retrofitting	724	
CZ-38-6	CZ-38	Pocerady II 2	Pocerady	Czech Republic	EU	lignite	CEZ	1977			no	no	conventional	open	operational	788	
RO-15-5	RO-15	Rovinari 5	Rovinari	Romania	EU	lignite	CE Oltenia SA	1977			no	no	conventional	open	retrofitting	200	
SI-4-5	SI-4	Sostanj 5	Sostanj	Slovenia	EU	lignite	HSE	1977			no	no	CHP	open	deactivated	305	
TR-18-3	TR-18	Seyitomer 3	Seyitomer	Turkey	Turkey	lignite	Celikler	1977			no	no	conventional	open	operational	366	
TR-21-2	TR-21	Tuncbilek 4	Tuncbilek	Turkey	Turkey	lignite	Celikler	1977			no	no	conventional	open	operational	90	
BA-4-4	BA-4	Tuzla G6	Tuzla	Bosnia & Herzegovina	Western Balkans	lignite	EPBiH	1978			no	no	CHP	open	operational	114	
BG-9-1	BG-9	ContourGlobal Maritsa East 3-1	ContourGlobal Maritsa East 3	Bulgaria	EU	lignite	ContourGlobal	1978			no	no	conventional	open	operational	55	
RS-5-4	RS-5	Nikola Tesla A4	Nikola Tesla A	Serbia	Western Balkans	lignite	EPS-Elektrorprivreda Srbije	1978			no	no	conventional	open	operational	27	
TR-21-3	TR-21	Tuncbilek 5	Tuncbilek	Turkey	Turkey	lignite	Celikler	1978			no	no	conventional	open	operational	27	
BG-9-2	BG-9	ContourGlobal Maritsa East 3-2	ContourGlobal Maritsa East 3	Bulgaria	EU	lignite	ContourGlobal	1979			no	no	conventional	open	operational	367	
CZ-40-1	CZ-40	Chomutov K4	Chomutov	Czech Republic	EU	lignite	Achterm	1979			no	no	CHP	open	operational	55	
CZ-6-1	CZ-6	Chvaletice 1	Chvaletice	Czech Republic	EU	lignite	Severní Energetická a.s.	1979			no	no	CHP	open	operational	215	
CZ-6-2	CZ-6	Chvaletice 2	Chvaletice	Czech Republic	EU	lignite	Severní Energetická a.s.	1979			no	no	CHP	open	operational	215	
CZ-6-3	CZ-6	Chvaletice 3	Chvaletice	Czech Republic	EU	lignite	Severní Energetická a.s.	1979			no	no	CHP	open	retrofitting	220	

EBC unit ID	EBC plant ID	Unit name	Plant name	Country	Region	Fuel type	Owner	Commissioning year	(Announced) Retirement year	Date of retirement announcement	Retirement announced?	Unit type	Unit status (gross)	Unit status (detailed)	Capacity	
CZ-6-4	CZ-6	Chvaletice 4	Chvaletice	Czech Republic	EU	lignite	Severní Energetická a.s.	1979			no	no	CHP	open	retrofitting	225
DE-32-13	DE-32	Boxberg N	Boxberg	Germany	EU	lignite	EPH	1979			no	no	CHP	open	operational	560
ES-6-1	ES-6	Andorra GR I	Andorra	Spain	EU	lignite	Endesa	1979			no	no	conventional	open	operational	210
ES-6-2	ES-6	Andorra GR II	Andorra	Spain	EU	lignite	Endesa	1979			no	no	conventional	open	operational	210
RO-15-6	RO-15	Rovinari 6	Rovinari	Romania	EU	lignite	CE Oltenia SA	1979			no	no	conventional	open	operational	205
RS-1-5	RS-1	Kolubara A5	Kolubara A	Serbia	Western Balkans	lignite	EPS- Elektroprivreda Srbije	1979			no	no	conventional	open	operational	750
RS-5-5	RS-5	Nikola Tesla A5	Nikola Tesla A	Serbia	Western Balkans	lignite	EPS- Elektroprivreda Srbije	1979			no	no	conventional	open	operational	500
RS-5-6	RS-5	Nikola Tesla A6	Nikola Tesla A	Serbia	Western Balkans	lignite	EPS- Elektroprivreda Srbije	1979			no	no	conventional	open	operational	326
BG-9-3	BG-9	ContourGlobal Maritsa East 3-3	ContourGlobal Maritsa East 3	Bulgaria	EU	lignite	ContourGlobal	1980			no	no	conventional	open	operational	368
DE-32-14	DE-32	Boxberg P	Boxberg	Germany	EU	lignite	EPH	1980			no	no	CHP	open	operational	368
EL-4-4	EL-4	Kardia 4	Kardia	Greece	EU	lignite	PPC	1980			no	no	CHP	open	operational	320
ES-6-3	ES-6	Andorra GR III	Andorra	Spain	EU	lignite	Endesa	1980			no	no	conventional	open	operational	50
MK-2-1	MK-2	Oslomej	Oslomej	Macedonia, Former Yugoslav Republic of	Western Balkans	lignite	JSC ELEM Skopje	1980			no	no	conventional	open	operational	560
RS-2-2	RS-2	Kostolac A2	Kostolac A	Serbia	Western Balkans	lignite	EPS- Elektroprivreda Srbije	1980			no	no	conventional	open	operational	227
BG-9-4	BG-9	ContourGlobal Maritsa East 3-4	ContourGlobal Maritsa East 3	Bulgaria	EU	lignite	ContourGlobal	1981			no	no	conventional	open	operational	500
CZ-10-5	CZ-10	Melník III	Melník II / III	Czech Republic	EU	lignite	CEZ	1981			no	no	CHP	open	operational	18
DE-186-1	DE-186	Jaenschwalde A	Jaenschwalde	Germany	EU	lignite	EPH	1981			no	no	CHP	open	operational	324
EL-4-4	EL-4	Kardia 4	Kardia	Greece	EU	lignite	PPC	1981			no	no	CHP	open	operational	366
PL-6-1	PL-6	Belchatow B1	Belchatow	Poland	EU	lignite	PGE	1981			no	no	conventional	open	operational	210
RO-17-4	RO-17	Turceni 4	Turceni	Romania	EU	lignite	CE Oltenia SA	1981			no	no	conventional	open	operational	500
TR-19-1	TR-19	Soma B 1	Soma B	Turkey	Turkey	lignite	Konya Şeker	1981			no	no	conventional	open	operational	780
CZ-12-10	CZ-12	Prunerov II 24	Prunerov	Czech Republic	EU	lignite	CEZ	1982			no	no	CHP	open	operational	325
CZ-12-11	CZ-12	Prunerov II 25	Prunerov	Czech Republic	EU	lignite	CEZ	1982			no	no	CHP	open	operational	358
CZ-12-9	CZ-12	Prunerov II 23	Prunerov	Czech Republic	EU	lignite	CEZ	1982			no	no	CHP	open	operational	359
CZ-37-1	CZ-37	Plzen 1	Plzen	Czech Republic	EU	lignite	Plzeňská tepárenská a.s.	1982			no	no	CHP	open	operational	125
DE-186-2	DE-186	Jaenschwalde B	Jaenschwalde	Germany	EU	lignite	EPH	1982			no	no	CHP	open	operational	647
ME-1-1	ME-1	Prijevlja	Prijevlja	Montenegro	Western Balkans	lignite	state and A2A	1982			no	no	conventional	open	operational	283
MK-1-1	MK-1	Bitola 1	Bitola	Macedonia, Former Yugoslav Republic of	Western Balkans	lignite	JSC ELEM Skopje	1982			no	no	conventional	open	operational	250
TR-19-2	TR-19	Soma B 2	Soma B	Turkey	Turkey	lignite	Konya Şeker	1982			no	no	conventional	open	operational	233
BA-1-1	BA-1	Gacko	Gacko	Bosnia & Herzegovina	Western Balkans	lignite	Elektroprivreda Republike Srpske (MHERS)	1983			no	no	conventional	open	operational	330
KS-2-1	KS-2	Kosovo B1	Kosovo B	Kosovo	Western Balkans	lignite	KEK	1983			no	no	conventional	open	operational	225
PL-6-2	PL-6	Belchatow B2	Belchatow	Poland	EU	lignite	PGE	1983			no	no	conventional	open	operational	225
PL-6-3	PL-6	Belchatow B3	Belchatow	Poland	EU	lignite	PGE	1983			no	no	conventional	open	operational	225
RO-17-5	RO-17	Turceni 5	Turceni	Romania	EU	lignite	CE Oltenia SA	1983			no	no	conventional	open	operational	225
RS-6-1	RS-6	Nikola Tesla B1	Nikola Tesla B	Serbia	Western Balkans	lignite	EPS- Elektroprivreda Srbije	1983			no	no	conventional	open	operational	225
TR-22-1	TR-22	Yatağan 1	Yatağan	Turkey	Turkey	lignite	Bereket	1983			no	no	conventional	open	operational	242
TR-22-2	TR-22	Yatağan 2	Yatağan	Turkey	Turkey	lignite	Bereket	1983			no	no	conventional	open	operational	179
CZ-19-2	CZ-19	Kolin K6	Kolin	Czech Republic	EU	lignite	Veolia	1984			no	no	CHP	open	operational	300
CZ-61-2	CZ-61	Příbramská energetika ELU III K3	Příbramská energetika ELU III K3	Czech Republic	EU	lignite	EPH	1984			no	no	CHP	open	operational	75
DE-186-3	DE-186	Jaenschwalde C	Jaenschwalde	Germany	EU	lignite	EPH	1984			no	no	CHP	open	operational	780
DE-251-1	DE-251	Fortuna Nord	Fortuna Nord	Germany	EU	lignite	RWE	1984			no	no	industrial	open	operational	339
EL-1-1	EL-1	Agiós Dimitrios 1	Agiós Dimitrios	Greece	EU	lignite	PPC	1984			no	no	conventional	open	operational	358
EL-1-2	EL-1	Agiós Dimitrios 2	Agiós Dimitrios	Greece	EU	lignite	PPC	1984			no	no	conventional	open	operational	380
KS-2-2	KS-2	Kosovo B2	Kosovo B	Kosovo	Western Balkans	lignite	KEK	1984			no	no	conventional	open	operational	666
MK-1-2	MK-1	Bitola 2	Bitola	Macedonia, Former Yugoslav Republic of	Western Balkans	lignite	JSC ELEM Skopje	1984			no	no	conventional	open	operational	16
PL-6-4	PL-6	Belchatow B4	Belchatow	Poland	EU	lignite	PGE	1984			no	no	conventional	open	operational	300
PL-6-5	PL-6	Belchatow B5	Belchatow	Poland	EU	lignite	PGE	1984			no	no	conventional	open	operational	300
SI-3-3	SI-3	Te-Tol 3	Te-Tol	Slovenia	EU	lignite	Termoelektrarna Toplarna	1984			no	no	CHP	open	operational	371
TR-22-3	TR-22	Yatağan 3	Yatağan	Turkey	Turkey	lignite	Bereket	1984			no	no	conventional	open	operational	350
TR-9-1	TR-9	Afsin Elbistan A 1	Afsin Elbistan A	Turkey	Turkey	lignite	ÜEAS	1984			no	no	conventional	open	operational	364
BA-5-1	BA-5	Ugljevik	Ugljevik	Bosnia & Herzegovina	Western Balkans	lignite	Elektroprivreda Republike Srpske (MHERS)	1985			no	no	conventional	open	operational	630
BG-8-5	BG-8	Maritsa East 2-5	Maritsa East 2	Bulgaria	EU	lignite	Bulgarian Energy Hold-ing (BEH)	1985	2020	24-Oct-16	yes	no	conventional	open	operational	339
BG-8-6	BG-8	Maritsa East 2-6	Maritsa East 2	Bulgaria	EU	lignite	Bulgarian Energy Hold-ing (BEH)	1985			no	no	conventional	open	operational	225
DE-126-1	DE-126	Helmstedt Buschhaus D	Helmstedt Buschhaus	Germany	EU	lignite	EPH	1985	2020	24-Oct-16	yes	no	conventional	open	standby	380

EBG unit ID	Unit name	Plant name	Country	Region	Fuel type	Owner	Commissioning year	Date of retirement announcement	Retirement announced?	Unit type	Unit status (detailed)	Unit status (gross)	Capacity			
EBG plant ID																
DE-186-4	DE-186	Jaenschwalde D	Germany	EU	lignite	EPH	1985		no	no	CHP	open	operational	228		
EL-1-3	EL-1	Agiros Dimitrios 3	Greece	EU	lignite	PPC	1985		no	no	CHP	open	operational	60		
PL-6-6	PL-6	Belchatow B6	Poland	EU	lignite	PGE	1985		no	no	conventional	open	operational	550		
PL-6-7	PL-6	Belchatow B7	Poland	EU	lignite	PGE	1985		no	no	conventional	open	operational	535		
RS-6-2	RS-6	Nikola Tesla B2	Serbia	Western Balkans	lignite	EPS-Elektroprivreda Srbije	1985		no	no	conventional	open	operational	379		
TR-19-3	TR-19	Soma B 3	Turkey	Turkey	lignite	Konya Şeker	1985		no	no	conventional	open	operational	36		
TR-19-4	TR-19	Soma B 4	Turkey	Turkey	lignite	Konya Şeker	1985		no	no	conventional	open	operational	310		
TR-9-2	TR-9	Afsin Elbistan A 2	Turkey	Turkey	lignite	EUAŞ	1985		no	no	conventional	open	operational	556		
EL-1-4	EL-1	Agiros Dimitrios 4	Greece	EU	lignite	PPC	1986		no	no	CHP	open	operational	55		
PL-6-8	PL-6	Belchatow B8	Poland	EU	lignite	PGE	1986		no	no	conventional	open	operational	324		
PL-6-9	PL-6	Belchatow B9	Poland	EU	lignite	PGE	1986		no	no	conventional	open	operational	670		
RO-14-3	RO-14	Govora 3	Romania	EU	lignite	Valcea County Council	1986		no	no	heat	open	operational	179		
SK-17-2	SK-17	Zvolenska B	Slovakia	EU	lignite	Zvolenska Teplarenska	1986		no	no	CHP	open	operational	370		
TR-23-1	TR-23	Yenikoy 1	Turkey	Turkey	lignite	Içtaş & Limak	1986		no	no	conventional	open	operational	701		
TR-9-3	TR-9	Afsin Elbistan A 3	Turkey	Turkey	lignite	EUAŞ	1986		no	no	conventional	open	operational	246		
DE-186-5	DE-186	Jaenschwalde E	Germany	EU	lignite	EPH	1987	2023	24-Oct-16	yes	no	CHP	open	operational	361	
EL-2-1	EL-2	Amintaio 1	Greece	EU	lignite	PPC	1987			no	no	CHP	open	operational	240	
EL-2-2	EL-2	Amintaio 2	Greece	EU	lignite	PPC	1987			no	no	conventional	open	operational	390	
PL-6-10	PL-6	Belchatow B10	Poland	EU	lignite	PGE	1987			no	no	conventional	open	operational	60	
RO-11-7	RO-11	Isalnita 7	Romania	EU	lignite	CE Oltenia SA	1987			no	no	conventional	open	operational	228	
RO-14-4	RO-14	Govora 4	Romania	EU	lignite	Valcea County Council	1987			no	no	heat	open	operational	370	
RO-17-7	RO-17	Turceni 7	Romania	EU	lignite	CE Oltenia SA	1987			no	no	conventional	open	operational	701	
RO-5-1	RO-5	Craiova II 1	Romania	EU	lignite	CE Oltenia SA	1987			no	no	conventional	open	operational	352	
RS-3-1	RS-3	Kostolac B1	Serbia	Western Balkans	lignite	EPS-Elektroprivreda Srbije	1987			no	no	conventional	open	operational	535	
TR-14-1	TR-14	Cayirhan 1	Turkey	Turkey	lignite	Park/Ciner	1987			no	no	conventional	open	operational	923	
TR-14-2	TR-14	Cayirhan 2	Turkey	Turkey	lignite	Park/Ciner	1987			no	no	conventional	open	operational	300	
TR-14-3	TR-14	Cayirhan 3	Turkey	Turkey	lignite	Park/Ciner	1987			no	no	conventional	open	operational	300	
TR-14-4	TR-14	Cayirhan 4	Turkey	Turkey	lignite	Park/Ciner	1987			no	no	conventional	open	operational	300	
TR-23-2	TR-23	Yenikoy 2	Turkey	Turkey	lignite	Içtaş & Limak	1987			no	no	conventional	open	operational	305	
BA-2-3	BA-2	Kakanj G7	Bosnia & Herzegovina	Western Balkans	lignite	EPBiH	1988			no	no	CHP	open	operational	370	
DE-150-1	DE-150	Kassel	Germany	EU	lignite	City of Kassel	1988			no	no	CHP	open	operational	324	
DE-43-1	DE-43	Chemnitz North II B	Germany	EU	lignite	City of Chemnitz	1988			no	no	CHP	open	operational	50	
MK-1-3	MK-1	Bitola 3	Bitola	Macedonia, Former Yugoslav Republic of Balkans	lignite	JSC ELEM Skopje	1988			no	no	conventional	open	operational	168	
PL-6-11	PL-6	Belchatow B11	Poland	EU	lignite	PGE	1988			no	no	conventional	open	operational	168	
PL-6-12	PL-6	Belchatow B12	Poland	EU	lignite	PGE	1988			no	no	conventional	open	operational	168	
RO-11-8	RO-11	Isalnita 8	Romania	EU	lignite	CE Oltenia SA	1988			no	no	conventional	open	operational	168	
RO-5-2	RO-5	Craiova II 2	Romania	EU	lignite	CE Oltenia SA	1988			no	no	conventional	open	operational	228	
TR-9-4	TR-9	Afsin Elbistan A 4	Turkey	Turkey	lignite	EUAŞ	1988			no	no	conventional	open	operational	230	
DE-186-6	DE-186	Jaenschwalde F	Germany	EU	lignite	EPH	1989	2022	24-Oct-16	yes	no	CHP	open	operational	67	
RO-17-3	RO-17	Turceni 3	Romania	EU	lignite	CE Oltenia SA	1989			no	no	conventional	open	operational	150	
TR-15-1	TR-15	Kangal 1	Kangal	Turkey	lignite	Konya Şeker	1989			no	no	conventional	open	operational	150	
TR-18-4	TR-18	Seyitomer 4	Turkey	Turkey	lignite	Çelikler	1989			no	no	conventional	open	operational	150	
BG-8-7	BG-8	Maritsa East 2-7	Maritsa East 2	Bulgaria	EU	Bulgarian Energy Holding (BEH)	1990			no	no	conventional	open	operational	500	
DE-43-2	DE-43	Chemnitz North II C	Chemnitz North II	Germany	EU	lignite	City of Chemnitz	1990			no	no	CHP	open	operational	72
TR-15-2	TR-15	Kangal 2	Kangal	Turkey	Turkey	Konya Şeker	1990			no	no	conventional	open	operational	163	
														46 487		

## Fourth tranche: Hard coal power plants in Europe built between 1971-90 – to be closed by 2022

EBClimate ID	EBClimate plant ID	Unit name	Plant name	Country	Region	Fuel type	Owner	Commissioning year	Retirement year	Date of retirement announcement [if yes: year of retirement]	Retirement announced?	Unit type	Unit status (gross)	Unit status (detailed)	Capacity	
BG-11-4	BG-11	Ruse Iztok 4 (steam generator 5)	Ruse Iztok	Bulgaria	EU	hard coal	Toplofikacia Ruse AD	1971			no	conventional	open	operational	9	
DE-172-4	DE-172	Marl 14	Marl	Germany	EU	hard coal	Evonik	1971			no	no	CHP	open	operational	200
DE-215-4	DE-215	Krefeld-Uerdingen N 230	Krefeld-Uerdingen	Germany	EU	hard coal	Currenta GmbH & Co. OHG	1971			no	no	industrial	open	operational	128
ES-19-1	ES-19	La Robla GR I	La Robla	Spain	EU	hard coal	Gás Natural Fenosa	1971			no	no	conventional	open	operational	55
PL-18-1	PL-18	Bydgoszcz II 1	Bydgoszcz II	Poland	EU	hard coal	PGE	1971			no	no	CHP	open	operational	210
PL-18-2	PL-18	Bydgoszcz II 3	Bydgoszcz II	Poland	EU	hard coal	PGE	1971			no	no	CHP	open	operational	210
PL-18-5	PL-18	Bydgoszcz II 4	Bydgoszcz II	Poland	EU	hard coal	PGE	1971			no	no	CHP	open	operational	200
UK-16-1	UK-16	Fiddler's Ferry 1	Fiddler's Ferry	United Kingdom	EU	hard coal	SSE	1971			no	2025	conventional	open	operational	110
UK-16-2	UK-16	Fiddler's Ferry 2	Fiddler's Ferry	United Kingdom	EU	hard coal	SSE	1971			no	2025	conventional	open	operational	120
UK-16-3	UK-16	Fiddler's Ferry 3	Fiddler's Ferry	United Kingdom	EU	hard coal	SSE	1971			no	2025	conventional	open	operational	110
UK-16-4	UK-16	Fiddler's Ferry 4	Fiddler's Ferry	United Kingdom	EU	hard coal	SSE	1971			no	2025	conventional	open	operational	110
UK-6-1	UK-6	Aberthaw 1	Aberthaw	United Kingdom	EU	hard coal	RWE	1971			no	2025	conventional	open	operational	200
UK-6-2	UK-6	Aberthaw 2	Aberthaw	United Kingdom	EU	hard coal	RWE	1971			no	2025	conventional	open	operational	320
UK-6-3	UK-6	Aberthaw 3	Aberthaw	United Kingdom	EU	hard coal	RWE	1971			no	2025	conventional	open	operational	61
ES-27-3	ES-27	Compostilla II GR III	Compostilla II	Spain	EU	hard coal	Endesa	1972			no	no	conventional	open	operational	32
FI-19-3	FI-19	Naantali-1 3	Naantali-1	Finland	EU	hard coal	Fortum	1972			no	2030	CHP	open	operational	50
PL-140-5	PL-140	Ostroleka B 1	Ostroleka	Poland	EU	hard coal	Energa	1972			no	no	conventional	open	operational	533
PL-140-6	PL-140	Ostroleka B 2	Ostroleka	Poland	EU	hard coal	Energa	1972			no	no	conventional	open	operational	533
PL-140-7	PL-140	Ostroleka B 3	Ostroleka	Poland	EU	hard coal	Energa	1972			no	no	conventional	open	operational	533
PL-178-1	PL-178	Rybnik B1	Rybnik	Poland	EU	hard coal	PGE	1972			no	no	conventional	open	operational	533
PL-178-2	PL-178	Rybnik B2	Rybnik	Poland	EU	hard coal	PGE	1972			no	no	conventional	open	operational	575
PL-96-1	PL-96	Kozienice B1	Kozienice	Poland	EU	hard coal	Enea	1972			no	no	conventional	open	operational	575
PL-178-3	PL-178	Rybnik B3	Rybnik	Poland	EU	hard coal	PGE	1973			no	no	conventional	open	operational	312
PL-43-2	PL-43	Gdansk 2 B 2	Gdansk 2	Poland	EU	hard coal	PGE	1973			no	no	CHP	open	operational	312
PL-96-2	PL-96	Kozienice B2	Kozienice	Poland	EU	hard coal	Enea	1973			no	no	conventional	open	operational	337
PL-96-3	PL-96	Kozienice B3	Kozienice	Poland	EU	hard coal	Enea	1973			no	no	conventional	open	operational	125
PL-96-4	PL-96	Kozienice B4	Kozienice	Poland	EU	hard coal	Enea	1973			no	no	conventional	open	operational	221
PL-96-5	PL-96	Kozienice B5	Kozienice	Poland	EU	hard coal	Enea	1973			no	no	conventional	open	operational	200
ES-11-1	ES-11	Abono GRI	Abono	Spain	EU	hard coal	HC Energia	1974			no	no	conventional	open	operational	200
FI-5-1	FI-5	Hanasari B 1	Hanasari B	Finland	EU	hard coal	Helen	1974	2024		yes	no	CHP	open	operational	200
IT-24-3	IT-24	Fusina GR3	Fusina	Italy	EU	hard coal	Enel	1974			no	2025	conventional	open	operational	200
IT-24-4	IT-24	Fusina GR4	Fusina	Italy	EU	hard coal	Enel	1974			no	2025	conventional	open	operational	200
PL-132-1	PL-132	Dolina Odra B1	Dolina Odra	Poland	EU	hard coal	PGE	1974	2019		yes	no	conventional	open	standby	1
PL-132-2	PL-132	Dolina Odra B2	Dolina Odra	Poland	EU	hard coal	PGE	1974	2019		yes	no	conventional	open	standby	16
PL-178-4	PL-178	Rybnik B4	Rybnik	Poland	EU	hard coal	PGE	1974			no	no	conventional	open	operational	20
PL-96-6	PL-96	Kozienice B6	Kozienice	Poland	EU	hard coal	Enea	1974			no	no	conventional	open	operational	20
PL-96-7	PL-96	Kozienice B7	Kozienice	Poland	EU	hard coal	Enea	1974			no	no	conventional	open	operational	16
PL-132-5	PL-132	Dolina Odra B5	Dolina Odra	Poland	EU	hard coal	PGE	1975			no	no	conventional	open	operational	320
PL-221-10	PL-221	Siekierki WSiB 10	Siekierki	Poland	EU	hard coal	PGNiG	1975			no	no	CHP	open	operational	222
PL-221-11	PL-221	Siekierki WSiK	Siekierki	Poland	EU	hard coal	PGNiG	1975			no	no	CHP	open	operational	232
PL-221-8	PL-221	Siekierki WSiB 08	Siekierki	Poland	EU	hard coal	PGNiG	1975			no	no	CHP	open	operational	225
PL-221-9	PL-221	Siekierki WSiB 09	Siekierki	Poland	EU	hard coal	PGNiG	1975			no	no	CHP	open	operational	228
PL-4-1	PL-4	Bedzin	Bedzin	Poland	EU	hard coal	EC Bedzin SA	1975			no	no	CHP	open	operational	225
PL-96-8	PL-96	Kozienice B8	Kozienice	Poland	EU	hard coal	Enea	1975			no	no	conventional	open	operational	210
RO-12-2	RO-12	Mintia 2	Mintia	Romania	EU	hard coal	CE Hunedoara SA	1975			no	no	CHP	open	operational	644
CZ-42-1	CZ-42	Prerov K4-5	Prerov	Czech Republic	EU	hard coal	Veolia	1976			no	no	CHP	open	operational	625
CZ-7-1	CZ-7	Detmarovice 1	Detmarovice	Czech Republic	EU	hard coal	CEZ	1976			no	no	CHP	open	operational	300
CZ-7-2	CZ-7	Detmarovice 2	Detmarovice	Czech Republic	EU	hard coal	CEZ	1976			no	no	CHP	open	operational	300
CZ-7-3	CZ-7	Detmarovice 3	Detmarovice	Czech Republic	EU	hard coal	CEZ	1976			no	no	CHP	open	operational	300
CZ-7-4	CZ-7	Detmarovice 4	Detmarovice	Czech Republic	EU	hard coal	CEZ	1976			no	no	CHP	open	operational	210
DE-192-3	DE-192	Quierschied-Weihler III	Quierschied-Weihler	Germany	EU	hard coal	STEAG	1976			no	no	CHP	open	operational	102
DE-233-1	DE-233	Wilhelmshaven 1	Wilhelmshaven	Germany	EU	hard coal	Uniper	1976			no	no	conventional	open	operational	165
ES-7-1	ES-7	As Pontes GR I	As Pontes	Spain	EU	hard coal	Endesa	1976			no	no	conventional	open	operational	120
ES-7-2	ES-7	As Pontes GR II	As Pontes	Spain	EU	hard coal	Endesa	1976			no	no	conventional	open	operational	102
PL-132-6	PL-132	Dolina Odra B6	Dolina Odra	Poland	EU	hard coal	PGE	1976			no	no	conventional	open	operational	82
PL-132-7	PL-132	Dolina Odra B7	Dolina Odra	Poland	EU	hard coal	PGE	1976			no	no	conventional	open	operational	228
PL-18-3	PL-18	Bydgoszcz II 2	Bydgoszcz II	Poland	EU	hard coal	PGE	1976			no	no	CHP	open	operational	210
PL-237-1	PL-237	Zabrze 1	Zabrze	Poland	EU	hard coal	Fortum	1976			no	no	CHP	open	operational	20
RO-12-3	RO-12	Mintia 3	Mintia	Romania	EU	hard coal	CE Hunedoara SA	1976			no	no	CHP	open	operational	200
DK-19-2	DK-19	Nordjylland 2	Nordjylland	Denmark	EU	hard coal	Aalborg Forsyning	1977			no	2030	CHP	open	standby	369
ES-7-3	ES-7	As Pontes GR III	As Pontes	Spain	EU	hard coal	Endesa	1977			no	no	conventional	open	operational	366
FI-2-1	FI-2	Suomenoja 1	Suomenoja	Finland	EU	hard coal	Fortum	1977			no	2030	CHP	open	operational	222
FI-5-2	FI-5	Hanasari B 2	Hanasari B	Finland	EU	hard coal	Helen	1977	2024		yes	no	CHP	open	operational	232
PL-115-1	PL-115	Lodz 4 BC- 50 -1	Lodz 4	Poland	EU	hard coal	Veolia	1977			no	no	CHP	open	operational	55
PL-132-8	PL-132	Dolina Odra B8	Dolina Odra	Poland	EU	hard coal	PGF	1977			no	no	conventional	open	operational	74
PL-70-1	PL-70	Jaworzno 3 B1	Jaworzno 3	Poland	EU	hard coal	Tauron	1977			no	no	conventional	open	operational	235
PL-70-2	PL-70	Jaworzno 3 B2	Jaworzno 3	Poland	EU	hard coal	Tauron	1977			no	no	conventional	open	operational	330
PL-70-3	PL-70	Jaworzno 3 B3	Jaworzno 3	Poland	EU	hard coal	Tauron	1977			no	no	conventional	open	operational	330
PL-70-4	PL-70	Jaworzno 3 B4	Jaworzno 3	Poland	EU	hard coal	Tauron	1977			no	no	conventional	open	operational	329
PL-70-5	PL-70	Jaworzno 3 B5	Jaworzno 3	Poland	EU	hard coal	Tauron	1977			no	no	conventional	open	operational	110
RO-12-4	RO-12	Mintia 4	Mintia	Romania	EU	hard coal	CE Hunedoara SA	1977			no	no	CHP	open	standby	200
DE-216-1	DE-216	Ulm Magirusstrasse 1	Ulm Magirusstrasse	Germany	EU	hard coal	EnBW	1978			no	no	CHP	open	operational	232
DE-216-3	DE-216	Ulm Magirusstrasse 3	Ulm Magirusstrasse	Germany	EU	hard coal	EnBW	1978			no	no	CHP	open	operational	225
DE-216-4	DE-216	Ulm Magirusstrasse 4	Ulm Magirusstrasse	Germany	EU	hard coal	EnBW	1978			no	no	CHP	open	operational	225

EBc unit ID	EBc plant ID	Unit name	Plant name	Country	Region	Fuel type	Owner	Date of retirement announced	Date of retirement announcement year	Commissioning year	Covered by country phase-out? [if yes; year of retirement]	Retirement announced?	Unit type	Unit status (detailed)	Unit status (gross)	Capacity
DE-216-5	DE-216	Ulm Magirusstrasse 5	Ulm Magirusstrasse	Germany	EU	hard coal	EnBW	1978			no	no	CHP	open	operational	225
DE-216-6	DE-216	Ulm Magirusstrasse 6	Ulm Magirusstrasse	Germany	EU	hard coal	EnBW	1978			no	no	CHP	open	operational	225
ES-7-4	ES-7	As Pontes GR IV	As Pontes	Spain	EU	hard coal	Endesa	1978			no	no	conventional	open	operational	220
PL-115-2	PL-115	Lodz 4 BC-50-2	Lodz 4	Poland	EU	hard coal	Veolia	1978			no	no	CHP	open	operational	210
PL-178-5	PL-178	Rybnik B5	Rybnik	Poland	EU	hard coal	PGE	1978			no	no	conventional	open	operational	330
PL-178-6	PL-178	Rybnik B6	Rybnik	Poland	EU	hard coal	PGE	1978			no	no	conventional	open	operational	345
PL-178-7	PL-178	Rybnik B7	Rybnik	Poland	EU	hard coal	PGE	1978			no	no	conventional	open	operational	163
PL-178-8	PL-178	Rybnik B8	Rybnik	Poland	EU	hard coal	PGE	1978			no	no	conventional	open	operational	163
PL-43-3	PL-43	Gdansk 2 B3	Gdansk 2	Poland	EU	hard coal	PGE	1978			no	no	CHP	open	operational	223
PL-96-9	PL-96	Kozienice B9	Kozienice	Poland	EU	hard coal	Enea	1978			no	no	conventional	open	operational	227
PL-98-2	PL-98	Krakow B2	Krakow	Poland	EU	hard coal	PGE	1978			no	no	CHP	open	operational	27
RO-12-5	RO-12	Mintia 5	Mintia	Romania	EU	hard coal	CE Hunedoara SA	1978			no	no	CHP	open	operational	27
RO-12-6	RO-12	Mintia 6	Mintia	Romania	EU	hard coal	CE Hunedoara SA	1978			no	no	CHP	open	standby	27
DE-130-1	DE-130	Mehrum 3	Mehrum	Germany	EU	hard coal	EPH	1979			no	no	conventional	open	operational	54
DE-34-6	DE-34	Bremen-Hafen 6	Bremen-Hafen	Germany	EU	hard coal	swb AG	1979			no	no	CHP	open	operational	120
IT-3-3	IT-3	Brindisi Nord 3	Brindisi Nord	Italy	EU	hard coal	A2A	1979			no	2025	conventional	open	standby	309
IT-3-4	IT-3	Brindisi Nord 4	Brindisi Nord	Italy	EU	hard coal	A2A	1979			no	2025	conventional	open	standby	163
PL-155-1	PL-155	Polaniec B1	Polaniec	Poland	EU	hard coal	ENEA	1979			no	no	conventional	open	operational	227
PL-180-1	PL-180	Czechnica 1	Czechnica	Poland	EU	hard coal	PGE	1979			no	no	CHP	open	operational	6
PL-180-2	PL-180	Czechnica 2	Czechnica	Poland	EU	hard coal	PGE	1979			no	no	CHP	open	operational	205
PL-70-6	PL-70	Jaworzno 3 B6	Jaworzno 3	Poland	EU	hard coal	Tauron	1979			no	no	conventional	open	operational	205
PL-96-10	PL-96	Kozienice B10	Kozienice	Poland	EU	hard coal	Enea	1979			no	no	conventional	open	operational	205
DE-79-2	DE-79	Erlangen Boiler 6 ST2	Erlangen	Germany	EU	hard coal	City of Erlangen	1980			no	no	CHP	open	operational	320
ES-16-3	ES-16	Puente Nuevo GR III	Puente Nuevo	Spain	EU	hard coal	Viesgo	1980			no	no	conventional	open	operational	225
ES-22-1	ES-22	Meirama 1	Meirama	Spain	EU	hard coal	Gas Natural Fenosa	1980			no	no	conventional	open	operational	50
FI-31-2	FI-31	Martinlaakso 2	Martinlaakso	Finland	EU	hard coal	Vantaa Energia	1980			no	2030	CHP	open	operational	225
PL-155-2	PL-155	Polaniec B2	Polaniec	Poland	EU	hard coal	ENEA	1980			no	no	conventional	open	operational	330
PL-155-3	PL-155	Polaniec B3	Polaniec	Poland	EU	hard coal	ENEA	1980			no	no	conventional	open	operational	110
PL-234-2	PL-234	Wroclaw B2	Wroclaw	Poland	EU	hard coal	PGE	1980			no	no	CHP	open	operational	340
PL-46-1	PL-46	Gdynia 3 - 1	Gdynia	Poland	EU	hard coal	PGE	1980			no	no	CHP	open	operational	348
DE-14-1	DE-14	Bergkamen A	Bergkamen	Germany	EU	hard coal	RWE	1981			no	no	CHP	open	operational	325
DK-10-5	DK-10	Asnaes 5	Asnaes	Denmark	EU	hard coal	Orsted	1981	2023	2-Feb-17	yes	no	CHP	open	standby	580
ES-18-3	ES-18	Lada IV	Lada	Spain	EU	hard coal	Iberdrola	1981			no	no	conventional	open	operational	80
ES-27-4	ES-27	Compostilla II GR IV	Compostilla II	Spain	EU	hard coal	Endesa	1981			no	no	conventional	open	operational	125
ES-3-1	ES-3	Alcudia II 1 GR I	Alcudia II	Spain	EU	hard coal	Endesa	1981			no	no	conventional	open	operational	242
FI-29-1	FI-29	Vaskiluoto 2	Vaskiluoto 2	Finland	EU	hard coal	Vaskiluodon Voima Oy	1981			no	2030	CHP	open	operational	242
FR-67-7	FR-67	Emile-Huchet 6	Emile-Huchet	France	EU	hard coal	Uniper	1981			no	2022	conventional	open	operational	104
PL-155-4	PL-155	Polaniec B4	Polaniec	Poland	EU	hard coal	ENEA	1981			no	no	conventional	open	operational	53
PL-8-2	PL-8	Bialystok B2	Bialystok	Poland	EU	hard coal	ENEA	1981			no	no	CHP	open	operational	227
UK-85-1	UK-85	Kilroot 1	Kilroot	United Kingdom	EU	hard coal	AES	1981			no	no	conventional	open	operational	535
UK-85-2	UK-85	Kilroot 2	Kilroot	United Kingdom	EU	hard coal	AES	1981			no	no	conventional	open	operational	640
DE-170-4	DE-170	Mannheim 7	Mannheim	Germany	EU	hard coal	RWE	1982			no	no	CHP	open	operational	250
DE-214-1	DE-214	Stuttgart-Muenster ST12	Stuttgart-Muenster	Germany	EU	hard coal	EnBW	1982			no	no	CHP	open	operational	242
DE-220-1	DE-220	Voelklingen-Fenne model	Voelklingen-Fenne model+heat	Germany	EU	hard coal	STEAG	1982			no	no	CHP	open	operational	370
DE-229-2	DE-229	Werdohl-Elverlingsen E4	Werdohl-Elverlingsen	Germany	EU	hard coal	ENERVIE	1982	2018	2-Mar-18	yes	no	conventional	open	operational	55
ES-25-1	ES-25	Anllares 1	Anllares	Spain	EU	hard coal	Gas Natural Fenosa	1982			no	no	conventional	open	operational	330
ES-3-2	ES-3	Alcudia II 2 GR II	Alcudia II	Spain	EU	hard coal	Endesa	1982			no	no	conventional	open	operational	179
FI-16-1	FI-16	Kymijarvi 1	Kymijarvi	Finland	EU	hard coal	Lahti Energia	1982	2019	yes	no	CHP	open	operational	283	
PL-107-3	PL-107	Laziska B9	Laziska	Poland	EU	hard coal	Tauron	1982			no	no	conventional	open	operational	250
PL-107-4	PL-107	Laziska B10	Laziska	Poland	EU	hard coal	Tauron	1982			no	no	conventional	open	operational	250
PL-107-5	PL-107	Laziska B11	Laziska	Poland	EU	hard coal	Tauron	1982			no	no	conventional	open	operational	70
PL-107-6	PL-107	Laziska B12	Laziska	Poland	EU	hard coal	Tauron	1982			no	no	conventional	open	operational	475
PL-155-5	PL-155	Polaniec B5	Polaniec	Poland	EU	hard coal	ENEA	1982			no	no	conventional	open	operational	535
PL-155-6	PL-155	Polaniec B6	Polaniec	Poland	EU	hard coal	ENEA	1982			no	no	conventional	open	operational	48
DE-172-5	DE-172	Marl 5	Marl	Germany	EU	hard coal	Evonik	1983			no	no	CHP	open	operational	365
DE-24-2	DE-24	Bexbach	Bexbach	Germany	EU	hard coal	STEAG	1983			no	no	conventional	open	operational	125
FR-22-2	FR-22	Cordemais 4	Cordemais	France	EU	hard coal	EDF	1983			no	2022	conventional	open	operational	212
FR-43-3	FR-43	Le Havre II 4	Le Havre II	France	EU	hard coal	EDF	1983			no	2022	conventional	open	operational	225
PL-155-7	PL-155	Polaniec B7	Polaniec	Poland	EU	hard coal	ENEA	1983			no	no	conventional	open	operational	230
DE-214-2	DE-214	Stuttgart-Muenster ST15	Stuttgart-Muenster	Germany	EU	hard coal	EnBW	1984			no	no	CHP	open	operational	630
DE-232-1	DE-232	Werne Gersteinwerk K2	Werne Gersteinwerk	Germany	EU	hard coal	RWE	1984			no	no	conventional	open	operational	630
DE-33-1	DE-33	Braunschweig 1	Braunschweig	Germany	EU	hard coal	Veolia	1984			no	no	heat	open	operational	239
ES-10-1	ES-10	Litoral GR I	Litoral	Spain	EU	hard coal	Endesa	1984			no	no	conventional	open	operational	330
ES-19-2	ES-19	La Robla GR II	La Robla	Spain	EU	hard coal	Gas Natural Fenosa	1984			no	no	conventional	open	operational	620
ES-23-3	ES-23	Soto de Ribera III	Soto de Ribera	Spain	EU	hard coal	HC Energia	1984			no	no	conventional	open	operational	228
ES-31-3	ES-31	Narcea GR III	Narcea	Spain	EU	hard coal	Gas Natural Fenosa	1984			no	no	conventional	open	operational	228
FI-6-1	FI-6	Salmisaari B1	Salmisaari	Finland	EU	hard coal	Helen	1984			no	2030	CHP	open	operational	12
FR-22-3	FR-22	Cordemais 5	Cordemais	France	EU	hard coal	EDF	1984			no	2022	conventional	open	operational	33
FR-49-2	FR-49	Chambiere 5	Chambiere	France	EU	hard coal	UEM	1984			no	2022	CHP	open	operational	535
FR-50-6	FR-50	Provence 5	Provence	France	EU	hard coal	Uniper	1984			no	2022	conventional	open	standby	48
PL-43-4	PL-43	Gdansk 2 B4	Gdansk 2	Poland	EU	hard coal	PGE	1984			no	no	CHP	open	operational	78
PL-98-3	PL-98	Krakow B3	Krakow	Poland	EU	hard coal	PGE	1984			no	no	CHP	open	operational	577
UK-66-4	UK-66	Drax 4	Drax	United Kingdom	EU	hard coal	Drax Power plc	1984			no	2025	conventional	open	operational	177
BG-11-5	BG-11	Ruse Iztok 5 (steam generator 7)	Ruse Iztok	Bulgaria	EU	hard coal	Toplofikacia Ruse AD	1985			no	no	CHP	open	operational	24
BG-11-6	BG-11	Ruse Iztok 6 (steam generator 8)	Ruse Iztok	Bulgaria	EU	hard coal	Toplofikacia Ruse AD	1985			no	no	CHP	open	operational	625
DE-100-6	DE-100	Buer	Scholven/Buer	Germany	EU	hard coal	Uniper	1985			no	no	heat	open	operational	58

EBG unit ID	EBG plant ID	Unit name	Plant name	Country	Region	Fuel type	Owner	Commissioning year	Date of retirement announced	Retirement announced?	Covered by country phase-out? [if yes: year of retirement]	Unit type	Unit status (gross)	Capacity		
DE-125-7	DE-125	Heilbronn 7	Heilbronn	Germany	EU	hard coal	EnBW	1985		no	no	CHP	open	operational	380	
DE-140-1	DE-140	Ibbenbueren B	Ibbenbueren	Germany	EU	hard coal	RWE	1985		no	no	CHP	open	operational	110	
DE-148-5	DE-148	Karlsruhe 7	Karlsruhe	Germany	EU	hard coal	EnBW	1985		no	no	CHP	open	operational	50	
DE-236-1	DE-236	Wolfsburg West 1	Wolfsburg West	Germany	EU	hard coal	Volkswagen AG	1985	2022	8-Mar-18	yes	no	CHP	open	operational	370
DE-236-2	DE-236	Wolfsburg West 2	Wolfsburg West	Germany	EU	hard coal	Volkswagen AG	1985	2022	8-Mar-18	yes	no	CHP	open	operational	701
DE-8-4	DE-8	Altbach/Deizisau 1	Altbach/Deizisau 1+2	Germany	EU	hard coal	EnBW	1985		no	no	CHP	open	operational	300	
DE-86-6	DE-86	Flensburg 9	Flensburg	Germany	EU	hard coal	City of Flensburg	1985		no	no	CHP	open	operational	60	
ES-11-2	ES-11	Abono GR1	Abono	Spain	EU	hard coal	H C Energia	1985		no	no	conventional	open	operational	210	
ES-20-1	ES-20	Los Barrios 1	Los Barrios	Spain	EU	hard coal	Viesgo	1985		no	no	conventional	open	operational	232	
ES-27-5	ES-27	Compostilla II GRV	Compostilla II	Spain	EU	hard coal	Endesa	1985		no	no	conventional	open	operational	76	
IE-3-1	IE-3	Moneypoint 1	Moneypoint	Ireland	EU	hard coal	ESB Group	1985		no	2025	conventional	open	operational	816	
PL-159-1	PL-159	Poznan - Karolin BC50 (1)	Poznan-Karolin	Poland	EU	hard coal	Veolia	1985		no	no	CHP	open	operational	405	
PL-234-3	PL-234	Wroclaw BC3	Wroclaw	Poland	EU	hard coal	PGE	1985		no	no	CHP	open	operational	838	
PT-4-1	PT-4	Sines 1	Sines	Portugal	EU	hard coal	EDP	1985		no	2030	conventional	open	operational	153	
PT-4-2	PT-4	Sines 2	Sines	Portugal	EU	hard coal	EDP	1985		no	2030	conventional	open	operational	153	
UK-66-5	UK-66	Drax 5	Drax	United Kingdom	EU	hard coal	Drax Power plc	1985		no	2025	conventional	open	operational	589	
AT-11-1	AT-11	Mellach 1	Mellach	Austria	EU	hard coal	Verbund	1986	2020	17-Oct-17	yes	no	CHP	open	operational	356
DE-243-5	DE-243	Zolling-Leininger 5	Zolling-Leininger	Germany	EU	hard coal	Engie	1986		no	no	CHP	open	operational	305	
ES-33-2	ES-33	Velilla II	Velilla	Spain	EU	hard coal	Iberdrola	1986		no	no	conventional	open	operational	104	
FI-2-2	FI-2	Suomenoja 2	Suomenoja	Finland	EU	hard coal	Fortum	1986		no	2030	conventional	open	operational	394	
IE-3-2	IE-3	Moneypoint 2	Moneypoint	Ireland	EU	hard coal	ESB Group	1986		no	2025	conventional	open	operational	390	
IT-20-4	IT-20	Sulcis 3	Sulcis	Italy	EU	hard coal	Enel	1986		no	2025	conventional	open	operational	324	
RO-10-1	RO-10	Iasi II IASC	Iasi II	Romania	EU	hard coal	Veolia	1986		no	no	CHP	open	operational	179	
UK-66-6	UK-66	Drax 6	Drax	United Kingdom	EU	hard coal	Drax Power plc	1986		no	2025	conventional	open	operational	474	
AT-12-2	AT-12	Duernrohr 2	Duernrohr	Austria	EU	hard coal	EVN	1987	2025	yes	no	CHP	open	operational	310	
DE-187-4	DE-187	Petershagen Heyden 4	Petershagen Heyden	Germany	EU	hard coal	Uniper	1987		no	no	conventional	open	operational	80	
DE-21-1	DE-21	Berlin-Reuter West D	Berlin-Reuter West	Germany	EU	hard coal	Vattenfall	1987	2030	19-Oct-17	yes	no	CHP	open	operational	305
IE-3-3	IE-3	Moneypoint 3	Moneypoint	Ireland	EU	hard coal	ESB Group	1987		no	2025	conventional	open	operational	370	
PT-4-3	PT-4	Sines 3	Sines	Portugal	EU	hard coal	EDP	1987		no	2030	conventional	open	operational	50	
PT-4-5	PT-4	Sines 4	Sines	Portugal	EU	hard coal	EDP	1987		no	2030	conventional	open	operational	19	
DE-197-3	DE-197	Saarbruecken-Roemerbruecke steam turbine	Saarbruecken Roemerbruecke	Germany	EU	hard coal	Engie	1988		no	no	CHP	open	operational	324	
DE-21-2	DE-21	Berlin-Reuter West E	Berlin-Reuter West	Germany	EU	hard coal	Vattenfall	1988	2030	19-Oct-17	yes	no	CHP	open	operational	315
DE-67-6	DE-67	Duisburg-Walsum 9	Duisburg-Walsum	Germany	EU	hard coal	STEAG	1988		no	no	CHP	open	operational	330	
DE-86-7	DE-86	Flensburg 10	Flensburg	Germany	EU	hard coal	City of Flensburg	1988		no	no	CHP	open	operational	150	
IT-1-1	IT-1	Brescia 3	Brescia	Italy	EU	hard coal	A2A	1988		no	2025	CHP	open	operational	349	
DE-122-1	DE-122	Hannover 1	Hannover	Germany	EU	hard coal	Versorgungs- und Verkehrsgesellschaft Hannover mbH (VVG)	1989		no	no	CHP	open	operational	38	
DE-122-2	DE-122	Hannover 2	Hannover	Germany	EU	hard coal	Versorgungs- und Verkehrsgesellschaft Hannover mbH (VVG)	1989		no	no	CHP	open	operational	53	
DE-128-4	DE-128	Herne 4	Herne	Germany	EU	hard coal	STEAG	1989		no	no	CHP	open	operational	300	
DE-220-2	DE-220	Voelklingen-Fenne heat	Voelklingen-Fenne model+heat	Germany	EU	hard coal	STEAG	1989		no	no	CHP	open	operational	410	
DE-238-2	DE-238	Wuppertal-Elberfeld 3	Wuppertal-Elberfeld	Germany	EU	hard coal	WSW Wuppertaler Stadtwerke GmbH	1989		no	no	CHP	open	operational	33	
DE-37-1	DE-37	Bremen-Hastedt 15	Bremen-Hastedt	Germany	EU	hard coal	swb AG	1989		no	no	CHP	open	operational	75	
DE-89-2	DE-89	Frankfurt/Main West 2	Frankfurt/Main West	Germany	EU	hard coal	Stadtwerke Frankfurt am Main Holding	1989		no	no	CHP	open	operational	225	
DE-89-3	DE-89	Frankfurt/Main West 3	Frankfurt/Main West	Germany	EU	hard coal	Stadtwerke Frankfurt am Main Holding	1989		no	no	CHP	open	operational	390	
DK-11-2	DK-11	Amager 3	Amager	Denmark	EU	hard coal	HOFOR	1989		no	2030	CHP	open	operational	370	
IT-10-1	IT-10	Bastardo 1	Bastardo	Italy	EU	hard coal	Enel	1989		no	2025	conventional	open	operational	315	
TR-13-1	TR-13	Catalagzi 1	Catalagzi	Turkey	Turkey	hard coal	Bereket	1989		no	no	conventional	open	operational	364	
DE-17-3	DE-17	Berlin-Moabit A	Berlin-Moabit	Germany	EU	hard coal	Vattenfall	1990	2030	19-Oct-17	yes	no	CHP	open	operational	535
DE-183-1	DE-183	Offenbach	Offenbach	Germany	EU	hard coal	MVV Energie AG	1990		no	no	CHP	open	operational	233	
DE-188-1	DE-188	Pforzheim FBC	Pforzheim	Germany	EU	hard coal	SWP Stadtwerke Pforzheim GmbH & Co. KG	1990		no	no	CHP	open	operational	100	
DE-207-1	DE-207	Schweinfurt 1	Schweinfurt	Germany	EU	hard coal	GKS Gemeinschaftskraftwerk Schweinfurt GmbH	1990		no	no	CHP	open	operational	129	
DE-207-2	DE-207	Schweinfurt 2	Schweinfurt	Germany	EU	hard coal	GKS Gemeinschaftskraftwerk Schweinfurt GmbH	1990		no	no	CHP	open	operational	72	
IT-10-2	IT-10	Bastardo 2	Bastardo	Italy	EU	hard coal	Enel	1990		no	2025	conventional	open	operational	263	
PL-46-2	PL-46	Gdynia 3 - 2	Gdynia	Poland	EU	hard coal	PGE	1990		no	no	CHP	open	operational	75	
SE-11-1	SE-11	Vaertaverket II 1	Vaerta	Sweden	EU	hard coal	Fortum	1990	2022	21-Feb-17	yes	no	CHP	open	operational	330
														50 044		

## Fifth tranche: Coal power stations in Europe built between 1991-2000 – to be closed by 2023

EBC unit ID	EBC plant ID	Unit name	Plant name	Country	Region	Fuel type	Owner	Commissioning year	(Announced) Retirement year	Date of retirement announcement?	Covered by country phase-out? [if yes, year of retirement]	Unit type	Unit status (gross)	Unit status (detailed)	Capacity
DE-217-1	DE-217	Munich North 2	Munich North	Germany	EU	hard coal	Stadtwerke München GmbH	1991		no	no	CHP	open	operational	163
DE-252-1	DE-252	Huerth Ville/Berrenrath	Huerth Ville/Berrenrath	Germany	EU	lignite	RWE	1991		no	no	industrial	open	operational	163
DK-14-7	DK-14	Fyns 7	Fyns	Denmark	EU	hard coal	Funen district heating	1991		no	2030	CHP	open	operational	232
EL-8-1	EL-8	Megalopoli 4	Megalopoli B	Greece	EU	lignite	PPC	1991		no	no	conventional	open	operational	100
IT-2-1	IT-2	Brindisi Sud 1	Brindisi Sud	Italy	EU	hard coal	Enel	1991		no	2025	conventional	open	operational	60
PL-159-2	PL-159	Poznan - Karolin BC 100 (2)	Poznan-Karolin	Poland	EU	hard coal	Veolia	1991		no	no	CHP	open	operational	30
PL-8-3	PL-8	Bialystok B3	Bialystok	Poland	EU	hard coal	ENEA	1991		no	no	CHP	open	operational	12
RS-3-2	RS-3	Kostolac B2	Kostolac B	Serbia	Western Balkans	lignite	EPS- Elektroprivreda Srbije	1991		no	no	conventional	open	operational	17
TR-13-2	TR-13	Catalagzi 2	Catalagzi	Turkey	Turkey	hard coal	Bereket	1991		no	no	conventional	open	operational	100
TR-19-5	TR-19	Soma B 5	Soma B	Turkey	Turkey	lignite	Konya Şeker	1991		no	no	conventional	open	operational	75
DE-108-5	DE-108	Grosskrotzenburg Staudinger	Grosskrotzenburg Staudinger	Germany	EU	hard coal	Uniper	1992		no	no	CHP	open	operational	53
DE-86-8	DE-86	Flensburg 11	Flensburg	Germany	EU	hard coal	City of Flensburg	1992		no	no	CHP	open	operational	141
DK-5-5	DK-5	Esbjerg 3	Esbjerg	Denmark	EU	hard coal	Orsted	1992	2023	yes	no	CHP	open	operational	163
IT-19-1	IT-19	Fiume Santo 3	Fiume Santo	Italy	EU	hard coal	EPH	1992		no	2025	conventional	open	operational	365
IT-2-2	IT-2	Brindisi Sud 2	Brindisi Sud	Italy	EU	hard coal	Enel	1992		no	2025	conventional	open	operational	57
IT-2-3	IT-2	Brindisi Sud 3	Brindisi Sud	Italy	EU	hard coal	Enel	1992		no	2025	conventional	open	operational	362
PL-115-3	PL-115	Lodz 4 BC- 100 -3	Lodz 4	Poland	EU	hard coal	Veolia	1992		no	no	CHP	open	operational	300
PT-3-1	PT-3	Pego 1	Pego	Portugal	EU	hard coal	Engie, Marubeni, Endesa	1992		no	2030	conventional	open	operational	660
SK-17-6	SK-17	Zvolenska A	Zvolenska	Slovakia	EU	lignite	Zvolenska Teplarenska	1992		no	no	CHP	open	operational	100
TR-17-1	TR-17	Orhaneli 1	Orhaneli	Turkey	Turkey	lignite	Celikler	1992		no	no	conventional	open	operational	55
TR-19-6	TR-19	Soma B 6	Soma B	Turkey	Turkey	lignite	Konya Şeker	1992		no	no	conventional	open	operational	349
DE-119-11	DE-119	Hamburg-Tiefstack	Hamburg-Tiefstack	Germany	EU	hard coal	Vattenfall	1993		no	no	CHP	open	operational	163
DE-170-5	DE-170	Mannheim 8	Mannheim	Germany	EU	hard coal	RWE	1993		no	no	CHP	open	operational	179
IT-19-2	IT-19	Fiume Santo 4	Fiume Santo	Italy	EU	hard coal	EPH	1993		no	2025	conventional	open	operational	553
IT-2-4	IT-2	Brindisi Sud 4	Brindisi Sud	Italy	EU	hard coal	Enel	1993		no	2025	conventional	open	operational	31
PL-16-1	PL-16	Opole B1	Opole	Poland	EU	hard coal	PGE	1993		no	no	conventional	open	operational	407
DE-131-1	DE-131	Waehlitz	Waehlitz	Germany	EU	lignite	EPH	1994		no	no	CHP	open	operational	320
DE-195-1	DE-195	Rostock	Rostock	Germany	EU	hard coal	EnBW	1994		no	no	CHP	open	operational	660
FI-21-1	FI-21	Meri-Pori 1	Meri-Pori	Finland	EU	hard coal	Fortum	1994		no	2030	conventional	open	operational	660
NL-4-5	NL-4	Amer 9	Amer	Netherlands	EU	hard coal	RWE	1994		no	2030	conventional	open	operational	105
PL-16-2	PL-16	Opole B2	Opole	Poland	EU	hard coal	PGE	1994		no	no	conventional	open	operational	341
PL-43-5	PL-43	Gdansk 2 B5	Gdansk 2	Poland	EU	hard coal	PGE	1994		no	no	CHP	open	operational	25
TR-16-1	TR-16	Kemerko 1	Kemerko	Turkey	Turkey	lignite	İçtaş & Limak	1994		no	no	conventional	open	operational	397
TR-16-2	TR-16	Kemerko 2	Kemerko	Turkey	Turkey	lignite	İçtaş & Limak	1994		no	no	conventional	open	operational	179
BG-8-8	BG-8	Maritsa East 2-8	Maritsa East 2	Bulgaria	EU	lignite	Bulgarian Energy Holding (BEH)	1995		no	no	conventional	open	operational	205
CZ-43-1	CZ-43	Pribram 1	Pribram	Czech Republic	EU	lignite	Pribramská teplárenská a.s.	1995		no	no	CHP	open	operational	480
CZ-77-1	CZ-77	Vresova 1	Vresova	Czech Republic	EU	lignite	Sokolovská Uhelná AS	1995		no	no	CHP	open	operational	320
NL-1-1	NL-1	Hemweg 8	Hemweg	Netherlands	EU	hard coal	Vattenfall	1995		no	2030	conventional	open	operational	660
PT-3-2	PT-3	Pego 2	Pego	Portugal	EU	hard coal	Engie, Marubeni, Endesa	1995		no	2030	conventional	open	operational	386
TR-16-3	TR-16	Kemerko 3	Kemerko	Turkey	Turkey	lignite	İçtaş & Limak	1995		no	no	conventional	open	operational	37
CZ-43-2	CZ-43	Pribram 2	Pribram	Czech Republic	EU	lignite	Pribramská teplárenská a.s.	1996		no	no	CHP	open	operational	553
CZ-53-1	CZ-53	Porici II 1	Porici II	Czech Republic	EU	lignite	CEZ	1996		no	no	heat	open	operational	614
CZ-59-2	CZ-59	Zlin TG2	Zlin	Czech Republic	EU	lignite	Alpiq Generation	1996		no	no	CHP	open	standby	652
CZ-77-2	CZ-77	Vresova 2	Vresova	Czech Republic	EU	lignite	Sokolovská Uhelná AS	1996		no	no	CHP	open	operational	383
DE-144-1	DE-144	HKW Karcherstr.	Karcherstr.	Germany	EU	hard coal	SWK - Stadtwerke Kaiserslautern	1996		no	no	heat	open	operational	53
DE-200-1	DE-200	Schkopau A	Schkopau	Germany	EU	lignite	Uniper	1996		no	no	CHP	open	operational	228
DE-200-2	DE-200	Schkopau B	Schkopau	Germany	EU	lignite	Uniper	1996		no	no	CHP	open	operational	228
DE-51-1	DE-51	Dessau	Dessau	Germany	EU	lignite	Stadtwerke Dessau	1996		no	no	CHP	open	operational	232
PL-16-3	PL-16	Opole B3	Opole	Poland	EU	hard coal	PGE	1996		no	no	conventional	open	operational	4
SK-14-5	SK-14	Novaky ENO A 2 (TG 11)	Novaky	Slovakia	EU	lignite	EPH, Enel	1996		no	no	CHP	open	operational	200
CZ-61-3	CZ-61	Plzenska energetika ELU III K4	Plzenska energetika ELU III	Czech Republic	EU	lignite	EPH	1997		no	no	CHP	open	operational	685
DE-206-1	DE-206	Schwarze Pumpe A	Schwarze Pumpe	Germany	EU	lignite	EPH	1997		no	no	CHP	open	operational	341
DE-249-1	DE-249	Frankfurt/Oder 1	Frankfurt/Oder	Germany	EU	lignite	City of Frankfurt (Oder)	1997		no	no	CHP	open	operational	228
DE-8-5	DE-8	Altbach/Deizisau 2	Altbach/Deizisau 1+2	Germany	EU	hard coal	EnBW	1997		no	no	CHP	open	operational	38
EL-1-5	EL-1	Agios Dimitrios 5	Agios Dimitrios	Greece	EU	lignite	PPC	1997		no	no	CHP	open	operational	55
ES-10-2	ES-10	Litoral GR II	Litoral	Spain	EU	hard coal	Endesa	1997		no	no	conventional	open	operational	6
ES-3-3	ES-3	Alcudia II 5, GR III	Alcudia II	Spain	EU	hard coal	Endesa	1997		no	no	conventional	open	operational	200
ES-3-4	ES-3	Alcudia II 6, GR IV	Alcudia II	Spain	EU	hard coal	Endesa	1997		no	no	conventional	open	operational	15
FR-49-1	FR-49	Chambiere 3R	Chambiere	France	EU	hard coal	UEM	1997		no	2022	CHP	open	operational	490
PL-11-6	PL-11	Bielsko-Polnoc	Bielsko-Biala	Poland	EU	hard coal	Tauron	1997		no	no	CHP	open	operational	490
PL-16-4	PL-16	Opole B4	Opole	Poland	EU	hard coal	PGE	1997		no	no	conventional	open	operational	53
CZ-29-2	CZ-29	Trebovice TG 15	Trebovice	Czech Republic	EU	hard coal	Veolia	1998		no	no	CHP	open	operational	383
CZ-37-2	CZ-37	Plzen 2	Plzen	Czech Republic	EU	lignite	Plzeňská teplárenská a.s.	1998		no	no	CHP	open	operational	28
CZ-53-3	CZ-53	Porici II 3	Porici II	Czech Republic	EU	lignite	CEZ	1998		no	no	heat	open	operational	26

EBC unit ID	Unit name	Plant name	Country	Region	Fuel type	Owner	Commissioning year	Unit type	Capacity
								Unit status (gross)	Unit status (detailed)
DE-206-2	DE-206	Schwarze Pumpe B	Germany	EU	lignite	EPH	1998	CHP	open operational
DK-19-3	DK-19	Nordjylland 3	Denmark	EU	hard coal	Aalborg Forsyning	1998	CHP	open operational
PL-13-1	PL-13	Turow B1	Poland	EU	lignite	PGE	1998	conventional	open operational
PL-13-2	PL-13	Turow B2	Poland	EU	lignite	PGE	1998	conventional	open operational
PL-159-3	PL-159	Poznan - Karolin BC 50 (3)	Poznan-Karolin	Poland	EU	hard coal	Veolia	CHP	open operational
PL-20-3	PL-20	Miechowice 3	Miechowice	Poland	EU	hard coal	Fortum	CHP	open operational
PL-69-1	PL-69	Jaworzno 2 B2	Jaworzno 2	Poland	EU	hard coal	Tauron	CHP	open operational
PL-69-2	PL-69	Jaworzno 2 B3	Jaworzno 2	Poland	EU	hard coal	Tauron	CHP	open operational
PL-69-3	PL-69	Jaworzno 2 B4	Jaworzno 2	Poland	EU	hard coal	Tauron	CHP	open operational
RO-2-1	RO-2	Bacau 1	Bacau	Romania	EU	lignite	City of Bacau	CHP	open standby
CZ-22-1	CZ-22	Sko-Energo TG 90	Sko-Energo	Czech Republic	EU	lignite	ŠKO-ENERGO s.r.o.	CHP	open operational
CZ-22-2	CZ-22	Sko-Energo TG 80	Sko-Energo	Czech Republic	EU	lignite	ŠKO-ENERGO s.r.o.	CHP	open operational
DE-28-2	DE-28	Lippendorf S	Lippendorf	Germany	EU	lignite	EnBW/EPH	CHP	open operational
DE-48-1	DE-48	Cottbus 1	Cottbus	Germany	EU	lignite	Stadtwerke Cottbus GmbH	CHP	open operational
PL-76-1	PL-76	Katowice B1	Katowice	Poland	EU	hard coal	Tauron	conventional	open operational
CZ-18-3	CZ-18	Kladno TG4 (unit 4)	Kladno	Czech Republic	EU	lignite	Alpiq Generation	CHP	open operational
CZ-18-4	CZ-18	Kladno TG5 (unit 5)	Kladno	Czech Republic	EU	lignite	Alpiq Generation	CHP	open operational
DE-234-1	DE-234	Wolfsburg North A	Wolfsburg North	Germany	EU	hard coal	Volkswagen AG	2000	8-Mar-18 yes
DE-234-2	DE-234	Wolfsburg North B	Wolfsburg North	Germany	EU	hard coal	Volkswagen AG	2000	2022 8-Mar-18 yes
DE-28-1	DE-28	Lippendorf R	Lippendorf	Germany	EU	lignite	EnBW/EPH	no	no
DE-32-15	DE-32	Boxberg Q	Boxberg	Germany	EU	lignite	EPH	CHP	open operational
HR-1-1	HR-1	Plomin 2	Plomin	Croatia	EU	hard coal	HEP d.d.	CHP	open operational
PL-13-3	PL-13	Turow B3	Turow	Poland	EU	lignite	PGE	CHP	open operational
TR-15-3	TR-15	Kangal 3	Kangal	Turkey	Turkey	lignite	Konya Seker	CHP	open operational

## Sixth tranche: Coal power plants built in Europe after 2000 – to be closed by 2025

EBC unit ID	EBC plant ID	Unit name	Plant name	Country	Region	Fuel type	Owner	Commissioning year	Retirement year (Announced)	Covered by country phase-out [if yes/year of retirement]	Unit type	Unit status (gross)	Unit status (detailed)	Capacity	
CZ-59-3	CZ-59	Zlin TG31	Zlin	Czech Republic	EU	lignite	Alpiq Generation	2001		no	CHP	open	operational	35	
CZ-59-4	CZ-59	Zlin TG32	Zlin	Czech Republic	EU	lignite	Alpiq Generation	2001		no	CHP	open	operational	934	
DE-13-9	DE-13	Niederaussem K	Niederaussem	Germany	EU	lignite	RWE	2002		no	conventional	open	operational	82	
PL-211-1	PL-211	Siersza B1	Siersza	Poland	EU	hard coal	Tauron	2002		no	conventional	open	operational	135	
PL-211-2	PL-211	Siersza B2	Siersza	Poland	EU	hard coal	Tauron	2002		no	conventional	open	operational	135	
EL-3-1	EL-3	Melitis (Florina) 1	Melitis (Florina)	Greece	EU	lignite	PPC	2003		no	CHP	open	operational	135	
PL-216-1	PL-216	Tychy 1	Tychy	Poland	EU	hard coal	Tauron	2003		no	CHP	open	operational	70	
PL-216-2	PL-216	Tychy 2	Tychy	Poland	EU	hard coal	Tauron	2003		no	CHP	open	operational	70	
PL-23-1	PL-23	Chorzow 2 B1	Chorzow 2	Poland	EU	hard coal	CEZ	2003		no	CHP	open	operational	934	
PL-23-2	PL-23	Chorzow 2 B2	Chorzow 2	Poland	EU	hard coal	CEZ	2003		no	CHP	open	operational	907	
SK-14-6	SK-14	Novaky ENO A 3 (TG 12)	Novaky	Slovakia	EU	lignite	EPH, Enel	2003		no	CHP	open	operational	210	
TR-12-1	TR-12	Can I Onsekizmart 1	Can I Onsekizmart	Turkey	Turkey	lignite	EÜAŞ	2003		no	conventional	open	operational	235	
TR-12-2	TR-12	Can I Onsekizmart 2	Can I Onsekizmart	Turkey	Turkey	lignite	EÜAŞ	2003		no	conventional	open	operational	171	
TR-3-1	TR-3	Colakoglu 1	Colakoglu	Turkey	Turkey	hard coal	Colakoğlu	2003		no	CHP	open	operational	25	
TR-5-1	TR-5	Isken Sugozu 1	Isken Sugozu	Turkey	Turkey	hard coal	Steag	2003		no	conventional	open	operational	30	
TR-5-2	TR-5	Isken Sugozu 2	Isken Sugozu	Turkey	Turkey	hard coal	Steag	2003		no	conventional	open	operational	1 012	
CZ-29-3	CZ-29	Trebovice TG 16	Trebovice	Czech Republic	EU	hard coal	Veolia	2004		no	CHP	open	operational	153	
DE-170-3	DE-170	Mannheim 6	Mannheim	Germany	EU	hard coal	RWE	2005		no	CHP	open	operational	153	
IT-20-3	IT-20	Sulcis 2	Sulcis	Italy	EU	hard coal	Enel	2005		no	conventional	open	operational	330	
TR-8-1	TR-8	ICDAS Celik 1	ICDAS Celik	Turkey	Turkey	hard coal	İçdaş	2005		no	conventional	open	operational	40	
TR-8-2	TR-8	ICDAS Celik 2	ICDAS Celik	Turkey	Turkey	hard coal	İçdaş	2005		no	conventional	open	operational	65	
TR-8-3	TR-8	ICDAS Celik 3	ICDAS Celik	Turkey	Turkey	hard coal	İçdaş	2005		no	conventional	open	operational	113	
TR-10-1	TR-10	Afsin Elbistan B 1	Afsin Elbistan B	Turkey	Turkey	lignite	EÜAŞ	2006		no	conventional	open	operational	113	
TR-10-2	TR-10	Afsin Elbistan B 2	Afsin Elbistan B	Turkey	Turkey	lignite	EÜAŞ	2006		no	conventional	open	retrofitting	18	
TR-10-3	TR-10	Afsin Elbistan B 3	Afsin Elbistan B	Turkey	Turkey	lignite	EÜAŞ	2006		no	conventional	open	retrofitting	174	
TR-10-4	TR-10	Afsin Elbistan B 4	Afsin Elbistan B	Turkey	Turkey	lignite	EÜAŞ	2006		no	conventional	open	operational	174	
PL-252-1	PL-252	Patnow II	Patnow II	Poland	EU	lignite	ZEPAK	2008		no	conventional	open	operational	207	
BG-2-1	BG-2	Deven 1	Deven	Bulgaria	EU	hard coal	Solvay	2009		no	conventional	open	operational	660	
DE-250-1	DE-250	Stuttgart-Gaisburg ST14	Stuttgart-Gaisburg	Germany	EU	hard coal	EnBW	2009		no	CHP	open	operational	660	
IT-7-3	IT-7	Torrevaldaliga Nord Sezione 4	Torrevaldaliga Nord	Italy	EU	hard coal	Enel	2009		no	2025	conventional	open	operational	72
PL-5-8	PL-5	Lagisza B10	Lagisza	Poland	EU	hard coal	Tauron	2009		no	conventional	open	operational	280	
TR-1-1	TR-1	Silopi 1	Silopi	Turkey	Turkey	lignite	Park/Ciner	2009		no	conventional	open	operational	350	
DE-154-1	DE-154	Cologne-Merkenich 6	Cologne-Merkenich	Germany	EU	lignite	Stadtwerke Köln GmbH (100% City of Cologne)	2010		no	no	heat	open	operational	137
IT-7-1	IT-7	Torrevaldaliga Nord Sezione 2	Torrevaldaliga Nord	Italy	EU	hard coal	Enel	2010		no	2025	conventional	open	operational	137
IT-7-2	IT-7	Torrevaldaliga Nord Sezione 3	Torrevaldaliga Nord	Italy	EU	hard coal	Enel	2010		no	2025	conventional	open	operational	137
PL-33-1	PL-33	Czestochowa	Czestochowa	Poland	EU	hard coal	Fortum	2010		no	CHP	open	operational	391	
TR-27-1	TR-27	Zonguldak Eren I 1	Zonguldak Eren I	Turkey	Turkey	hard coal	Eren	2010		no	conventional	open	operational	391	
TR-27-2	TR-27	Zonguldak Eren II 2	Zonguldak Eren II	Turkey	Turkey	hard coal	Eren	2010		no	conventional	open	operational	391	
TR-7-1	TR-7	Zonguldak Eren I 1	Zonguldak Eren I	Turkey	Turkey	hard coal	Eren	2010		no	conventional	open	operational	391	
BG-6-1	BG-6	AES Galabovo 1	AES Galabovo	Bulgaria	EU	lignite	AES	2011		no	conventional	open	operational	474	
BG-6-2	BG-6	AES Galabovo 2	AES Galabovo	Bulgaria	EU	lignite	AES	2011		no	conventional	open	operational	121	
FR-87-1	FR-87	Le Moule Caraïbe	Le Moule Caraïbe	France	EU	hard coal	Albioma	2011		no	conventional	open	operational	25	
PL-6-13	PL-6	Belchatow II B14	Belchatow	Poland	EU	lignite	PGE	2011		no	conventional	open	operational	660	
TR-4-1	TR-4	ICDAS Bekirli 1	ICDAS Bekirli	Turkey	Turkey	hard coal	İçdaş	2011		no	conventional	open	operational	460	
DE-107-6	DE-107	Grevenbroich-Neurath F	Grevenbroich-Neurath	Germany	EU	lignite	RWE	2012		no	conventional	open	operational	138	
DE-107-7	DE-107	Grevenbroich-Neurath G	Grevenbroich-Neurath	Germany	EU	lignite	RWE	2012		no	conventional	open	operational	85	
DE-32-16	DE-32	Boxberg R	Boxberg	Germany	EU	lignite	EPH	2012		no	conventional	open	operational	660	
DE-167-1	DE-167	Luenen-Stummhafen	Luenen-Stummhafen	Germany	EU	hard coal	Trianel Kohlekraftwerk Lünen GmbH & Co. KG	2013		no	CHP	open	operational	660	
DE-67-7	DE-67	Duisburg-Walsum 10	Duisburg-Walsum	Germany	EU	hard coal	STEAG	2013		no	conventional	open	operational	64	
PL-11-2	PL-11	Bielsko - Biala - 2	Bielsko-Biala	Poland	EU	hard coal	Tauron	2013		no	CHP	open	operational	668	
CZ-18-6	CZ-18	Kladno TG (unit 7)	Kladno	Czech Republic	EU	lignite	Alpiq Generation	2014		no	CHP	open	operational	668	
DE-121-5	DE-121	Hamm Westfalen E	Hamm Westfalen	Germany	EU	hard coal	RWE	2014		no	conventional	open	operational	174	
DE-148-6	DE-148	Karlsruhe 8	Karlsruhe	Germany	EU	hard coal	EnBW	2014		no	CHP	open	operational	335	
TR-2-1	TR-2	Atlas 1	Atlas	Turkey	Turkey	hard coal	Diler Holding	2014		no	conventional	open	operational	335	
TR-2-2	TR-2	Atlas 2	Atlas	Turkey	Turkey	hard coal	Diler Holding	2014		no	conventional	open	operational	38	
TR-4-2	TR-4	ICDAS Bekirli 2	ICDAS Bekirli	Turkey	Turkey	hard coal	İçdaş	2014		no	conventional	open	operational	858	
TR-6-1	TR-6	Izdemir Enerji 1	Izdemir Enerji	Turkey	Turkey	hard coal	İzmir Demir Çelik Sanayi A.Ş.	2014		no	conventional	open	operational	608	
DE-170-6	DE-170	Mannheim 9	Mannheim	Germany	EU	hard coal	RWE	2015		no	CHP	open	operational	1 100	
DE-246-1	DE-246	Hamburg-Moorburg A	Hamburg-Moorburg	Germany	EU	hard coal	Vattenfall	2015		no	CHP	open	operational	1 100	
DE-246-2	DE-246	Hamburg-Moorburg B	Hamburg-Moorburg	Germany	EU	hard coal	Vattenfall	2015		no	CHP	open	operational	675	
DE-247-1	DE-247	Wilhelmshaven Engie	Wilhelmshaven	Germany	EU	hard coal	Engie	2015		no	conventional	open	operational	820	
NL-11-1	NL-11	Maasvlakte Engie	Maasvlakte GDF	Netherlands	EU	hard coal	Engie	2015		no	2030	conventional	open	operational	790
NL-12-11	NL-12	Eemshaven 1	Eemshaven	Netherlands	EU	hard coal	RWE	2015		no	2030	conventional	open	operational	50
NL-12-2	NL-12	Eemshaven 2	Eemshaven	Netherlands	EU	hard coal	RWE	2015		no	2030	conventional	open	operational	136
SI-4-6	SI-4	Sostanj 6	Sostanj	Slovenia	EU	lignite	HSE	2015		no	CHP	open	operational	820	

Unit ID	EBC unit ID	Unit name	Plant name	Country	Fuel type	Owner	Covered by country phase-out? [if yes; year of retirement]	Unit type	Capacity
							Retirement announced?	Unit status (gross)	Unit status (detailed)
TR-1-2	TR-1	Silopi 2	Silopi	Turkey	Turkey	lignite	Park/Ciner	2015	conventional open operational 912
TR-1-3	TR-1	Silopi 3	Silopi	Turkey	Turkey	lignite	Park/Ciner	2015	conventional open operational 652
TR-11-1	TR-11	Bolu-Goynuk 1	Bolu-Goynuk	Turkey	Turkey	lignite	Aksa (Kazancı Holding)	2015	conventional open operational 652
TR-11-2	TR-11	Bolu-Goynuk 2	Bolu-Goynuk	Turkey	Turkey	lignite	Aksa (Kazancı Holding)	2015	conventional open operational 608
BA-3-1	BA-3	Stanari	Stanari	Bosnia & Herzegovina	Western Balkans	lignite	EFT	2016	conventional open operational 380
NL-10-1	NL-10	Maasvlakte 3	Maasvlakte 3	Netherlands	EU	hard coal	Uniper	2016	conventional open operational 911
PL-216-3	PL-216	Tychy 3	Tychy	Poland	EU	hard coal	Tauron	2016	CHP open operational 820
TR-20-1	TR-20	Tufanbeyli 1	Tufanbeyli	Turkey	Turkey	lignite	Sabancı, Uniper	2016	conventional open operational 820
TR-20-2	TR-20	Tufanbeyli 2	Tufanbeyli	Turkey	Turkey	lignite	Sabancı, Uniper	2016	conventional open operational 795
TR-20-3	TR-20	Tufanbeyli 3	Tufanbeyli	Turkey	Turkey	lignite	Sabancı, Uniper	2016	conventional open operational 870
TR-28-1	TR-28	Zonguldak Eren III 1	Zonguldak Eren III	Turkey	Turkey	hard coal	Eren	2016	conventional open operational 870
TR-28-2	TR-28	Zonguldak Eren III 2	Zonguldak Eren III	Turkey	Turkey	Hard coal	Eren	2016	conventional open operational 870
TR-24-1	TR-24	Yunus Emre 1	Yunus Emre	Turkey	Turkey	lignite	Naksan	2017	conventional Construction test phase 600
TR-24-2	TR-24	Yunus Emre 2	Yunus Emre	Turkey	Turkey	lignite	Naksan	2017	conventional Construction test phase 138
BG-2-2	BG-2	Deven 2	Deven	Bulgaria	EU	hard coal	Solvay	2017	conventional open operational 138
PL-96-11	PL-96	Kozienice B11	Kozienice	Poland	EU	hard coal	Enea	2017	open operational 138
TR-26-1	TR-26	Cenal 1	Cenal	Turkey	Turkey	Hard coal	Cengiz Holding A.Ş. and Alarko Holding A.Ş. (50-50 partnership)	2017	conventional open operational 138
TR-26-2	TR-26	Cenal 2	Cenal	Turkey	Turkey	Hard coal	Cengiz Holding A.Ş. and Alarko Holding A.Ş. (50-50 partnership)	2017	conventional open operational 300

## Russia coal power plant list

name	capacity	start yr	units	planned future operation 2030+	planned shutdown	planned expansion (units), MW start year	note
Primorskaya	195		3	y			
Vladimirska	80		1	y			
Cherepovetskaya	210		1		2021-25		
Kashirskaya 1	330			y		330	contradicting info at Sourcewatch
Kashirskaya 2	300					30	contradicting info at Sourcewatch
Tets 22	120		2	y			
Ryazanskaya 1	780	1973-74	3	y			lignite, Sourcewatch
Ryazanskaya 2	330	1973-74	1	y			lignite <a href="https://www.industryabout.com/country-territories-3/2137-russia/fossil-fuels-energy/32668-ryazanskaya-coal-power-plant">https://www.industryabout.com/country-territories-3/2137-russia/fossil-fuels-energy/32668-ryazanskaya-coal-power-plant</a>
Cherepetskaya 1	600		2		2021-25		contradicting info at Sourcewatch
Cherepovetskaya 2	265		1			65	
Cherepovetskaya 3	450		2	y			
Novocherkasskaya	528		2	y			
Novocherkasskaya	285		1	y			
Novocherkasskaya	300		1	y			
Novocherkasskaya 9	324	2020	1				
Verchny Tagilskaya	165		1		2021-25		
Serovskaya 1+2	188		2	y	2021-25		
Demidovskaya	660	2031	1				
Reftinskaya 1	1800	1970-75	6	y			
Reftinskaya 2	2000	1977-80	4	y			
Troitskaya 1	255		3		2021-25		
Troitskaya 2	556		2		Before 2020		
Troitskaya 3	485		1	y			
Troitskaya 4	660	2020	1				
Bijskaya 1-4	505		7	y	(1) 2021-25		
Autayskaya	660	2031	2	y			
Gozino Ozerskaya 1	340		2		170		
Gozino Ozerskaya 2	181		1	y			
Gozino Ozerskaya 3	210		1	y			
Gozino Ozerskaya 4	400		2	y			
Gozino Ozerskaya 5	225	2031	1				
Charanorskaya	430		2	y			
Charanorskaya	225		1			225	
Irkutskaya 10-1	1050		7	y			contradicting info <a href="https://www.industryabout.com/country-territories-3/2137-russia/fossil-fuels-energy/32783-irkutskaya-tec-1-coal-power-plant">https://www.industryabout.com/country-territories-3/2137-russia/fossil-fuels-energy/32783-irkutskaya-tec-1-coal-power-plant</a>
Irkutskaya 10- 2	660	2031	1	y			
Irkutskaya 9	540		8	y			
Novo Irkutskaya	708		6	y			
Ost-Ilimskaya	515		5	y			
Krasnoyaskaya 2	1250		9	y			
Berzovskaya 1-1	2400		3	y			
Berzovskaya 1-2	660	2031	1				
Nazarovskaya	810		6	y			
Nazarovskaya 2	498		1	y			
Tom-Osisnksaya 1	300		3		300 MW 2021-25		
Tom-Osisnksaya 2	124		1	y			
Tom-Osisnksaya 3	124		1	y			
Tom-Osisnksaya 4	800		4	y			
Tom-Osisnksaya 5	330	2031	3	y			
Yuzhno-Kuzbaskaya 1	265		5		53 MW 2021-25		
Yuzhno-Kuzbaskaya 2	176		2	y			
Yuzhno-Kuzbaskaya 3	113		1	y			
Yuzhno-Kuzbaskaya 4-5	175	2021	2		175 MW 2021-25		
Novo Kemerovskaya 1	80		1		80 MW 2021-25		
Novo Kemerovskaya 2	150		3		150 MW 2021-25		
Novo Kemerovskaya 3	50	2021	1		50 MW 2021-25		
Novo Kemerovskaya 4	100		2	y			
Novo Kemerovskaya 5	100			y			
Kemerovskaya 6	135		1	y			
Kemerovskaya 7	100		1	y			
Slavinskaya	660	2021	1		660 MW 2021-25		
Belovskaya 1	800		4	y			
Belovskaya 2	460		2	y			
Zapaso-Sibirskaya	330		3	y			
Novosibirskaya 5	1200		6	y			
Omskaya 5-1	200		2	y			
Omskaya 5-2	350		2	y			
Omskaya 5-3	185		1	y			
Primorskaya (Luchegorsk) 1	220		2		220 MW 2021-25		
Primorskaya (Luchegorsk) 2	192		2		192 MW 2026-2030		
Primorskaya (Luchegorsk) 3	840		4	y			
Primorskaya (Luchegorsk) 4	215		1	y			
Primorskaya (Luchegorsk) 5	420		2				

Name	Capacity	Start yr	Units	Planned shutdown	Planned future operation 2030+	Planned expansion (units), MW/start year	Note
Artyomavskaya 1	200		2	y			
Artyomavskaya 2	200		2				
Artyomavskaya 3	240	2021	2		240 MW 2021-25		
Artyomavskaya	215	2021	1		215 MW 2021-25		
Chabarovskaya 3	720		4				
Nerungrinskaya 1	210		1				
Nerungrinskaya 2	360		2				
Nerungrinskaya 3	225	2026	1		225 MW 2026-30		

<http://static.government.ru/media/files/zzvuuhfq2f3OJIK8AzKVxRgIbW8ENGp.pdf>

General scheme of placement of electricity production facilities in Russian Federation". Government Decree of June 9 2017 yellow signifies units planned or under construction.

## Ukraine coal power plant list

TPP name	MW and fuel type	Number of units and their capacity, MW	Date of commis-sioning (I and II courses)	Number of units on/off in 2012, MW
<b>DTEK Dniproenergo</b>				
Prydniprovská	4x150 + 4x300 anthracite	1958-1965	3x285 + 4x150+ 1x310	8 / 2
Kryvoriz'ka	10x300 anthracite	1965-1973	10x282	10 / 2
Zaporiz'ka	4x300 / 3x800* hard coal / gas	1972-1979	4x300 + 3x800*	7 / 4
<b>DTEK Shidenergo</b>				
Zuivska	4x300 hard coal	1982-1988	1x325+ 1x320 + 2x300	4 / 1
Lugansk	8x200 anthracite	1961-1969	3x175 + 4x200	7 / 1
<b>DTEK Zahidenergo</b>				
Ladyzyn	6x300 hard coal	1970-1971	6x300	6
Dobrotvir	2x150 + 3x100 hard coal	1953-1954, 1963-1964	1x150 + 1x160	2**
Burshtyn	12x200 hard coal	1965-1969	3x185 + 8x195+ 1x206	12 / 2
<b>DTEK Donetskoblenergo</b>				
Myronivska	1x100 + 1x60	1953	1x115	1
Donbasenergo	2x100 + 1x800 + 1x800* anthracite	1953-1954, 1967-1971	1x800	1
Slovianska				

[https://ua.boell.org/sites/default/files/a5\\_web\\_layout\\_kiev\\_boell.pdf](https://ua.boell.org/sites/default/files/a5_web_layout_kiev_boell.pdf)

Towards the end of the coal age in Ukraine?! 2 units deleted as data for first 10 months 2018 showed no production 2017-2018