

Methodology of the Global Coal Exit List (GCEL)

Which companies are covered by the Global Coal Exit List?

The aim of Urgewald's database is to capture the entire global coal industry. The GCEL currently provides coal-related data for about 3400 companies, comprised of over 1400 parent companies and over 1900 subsidiaries, affiliates and joint ventures.

Companies are put on the GCEL if they meet at least one of three clearly defined criteria. These criteria were designed to ensure the inclusion of all companies, for which coal constitutes an essential part of their business model, which are an integral part of the global coal industry or which are expanding coal-related business.

Companies are listed on the GCEL 2023 if they meet at least **one** of the following 3 criteria:

1. **Relative Criteria:** At least 10% of a company's power production or revenue is coal-related.
 - a. Companies from the mining, power and services sector with a **coal share of revenue of 10% or more.**

In contrast to many other data providers, we include all components of the coal value chain in this calculation. This includes: coal power generation, coal production, coal trading, coal logistics, coal processing, coal power transmission, coal chemicals (coal to gas/liquids), coal-related operation & maintenance services, coal mining services, coal-related engineering, procurement and construction services, coal exploration, coal equipment manufacturing, underground coal gasification, coal advisory services and all other activities that are thermal coal-related. If companies provide sufficient information, the GCEL differentiates between business activities related to thermal and metallurgical coal. Wherever possible, we calculate the **thermal** coal share of revenue.
 - b. Utilities¹ with a **coal share of power generation of 10% or more.**

If numbers on annual coal power generation were not available, the calculation is based on installed capacity.
2. **Absolute Criteria:** Companies whose annual thermal coal production exceeds or equals **10 million tons**, and companies whose installed coal-fired power capacity generation exceeds or equals **5 GW**. When determining coal-fired generation capacity or annual coal production, the respective generation and production numbers are only ascribed to companies if they are the actual asset owners. A coal mining services company that does not own any coal mines will have an annual coal production of 0 Mt in our database. However, it will of course be included if its coal share of revenue exceeds the 10% threshold.

¹ Based on the "Utilities" classification provided by the Global Industry Classification Standard (GICS), Bloomberg BICS, NACE, TE NAICS, TRBC and, if not available here, own research.

3. Expansion Criteria: Companies with coal power, coal mining or coal infrastructure expansion plans.

- a. Power: companies planning to develop new coal-fired power capacity of at least 100 MW prorated.
- b. Mining: companies engaged in coal exploration activities; planning to develop new coal mines, extend their coal mines by applying for new permits or that are involved in coal exploration activities.
- c. Services: companies involved in the development or expansion of coal transportation assets or infrastructure assets dedicated to support coal mines, coal transportation and coal-to-gas facilities.

Important coal-related and financial subsidiaries/affiliates/joint ventures of these companies are also included in the list.

Sources

Relevant coal-related data is mainly extracted from the companies' own reporting. This includes company websites, annual reports, financial reports, credit rating reports and other company documents such as investor presentations and stock exchange filings. In some countries, we also rely on official information provided on government-owned regional or national websites. In China, also bidding websites with reliable information about companies, university and recruitment websites are been used as additional sources. For the coal power and mining expansion data, we also check Global Energy Monitor's *Global Coal Plant/Mine Tracker* but only use them as additional sources. In cases, where there is no company website or report available, we use reporting from other companies in the company complex, like from parents, sister companies or subsidiaries, that present data on the respective company.

We always use the most recent information we can find during the research period and rely on the latest reports available.

Listing of subsidiaries, affiliates and joint ventures

The GCEL contains many subsidiaries (>50% ownership) of the companies that meet one or more of our criteria. Companies are very diverse in how they structure their business across different subsidiaries. Some utilities, for example, sell their coal power generation to their subsidiaries, which then market and distribute the power. Other coal power producers have special financing subsidiaries, whose task it is to raise new capital for the parent company. As subsidiaries are functionally part of the same company, we believe they should be divested along with the parent. Our position on the parent/subsidiary question is also based on the observation that corporations often shift funds and assets across different divisions and subsidiaries. As big conglomerates can have hundreds of subsidiaries, the GCEL only lists the subsidiaries that meet at least one of our criteria, are the vehicle for expansion or are financing subsidiaries.

Affiliates/joint ventures (<50% owned) are only listed additionally if they are already on the list as separate parent or as subsidiaries of another parent company.

The GCEL provides detailed information on important (category 1) subsidiaries, which at least meet one of the following criteria. These subsidiaries:

- issue their own annual reports or have credit rating reports,
- are listed or own listed subsidiaries/joint ventures,
- are one of the main agents of the company's coal-related activities (power, mining, services),
- meet one of our three criteria,
- are the main vehicle of the planned power/mining/infrastructure expansions.

We list and classify all other subsidiaries/affiliates/joint ventures as category 2 and only provide basic information for these companies such as their coal sector activity and the country of headquarters. Other information has occasionally been added.

Identification

For the identification of companies, we provide their legal name, headquarters and website. Additionally, we provide identification codes, including the ISINs for shares, LEIs, Bloomberg name and ID on request. There are only a few companies that cannot be identified by one of these systems. We also introduced a consistent GCEL company ID which allows financial institutions to track the companies over the years.

Data Monitoring and Updates

Company reports:

Our core research period finishes at the end of June, as an extended time period is needed for checking, analyzing and preparing our data for publication in October. Some companies publish their annual reports late, but these will still be considered if they are published by the end of August. If a company has not published a report until the end of our research period, we use the latest available one that can date back a year. However, in a few cases, we use data from company sources that is even older if no updated information is available and it seems reliable. In these rare cases, we also take information of the previous years into account.

Other data sources:

There are instances where information in the annual report is not the most up to date. If, for example, a coal power plant is retired, converted or sold outside the period covered by the company's reporting, we use more recent information and update the data accordingly. In these cases, our numbers will differ from what the company reports.

Corporate Events:

Events like mergers, acquisitions, or restructuring (insolvency, liquidation etc.) can lead to the addition or removal from the GCEL. These Corporate developments are only accounted

for during the annual review. In exceptional cases, we consider key developments we are aware of at the latest until the end of August.

Corrections:

In case false entries are discovered, the incorrect information will be updated during a quarterly update. The update may result in removing or adding a company in the list.

Estimates:

Wherever available, the company's own reporting is used to calculate different data points. However, sometimes companies do not provide enough information to calculate the exact numbers. In these cases, we provide a conservative estimate based on the company's available information. Estimates are indicated with ">" signs or by an interval.

Watch List

Companies are removed from the GCEL if they do not fulfill at least one criterion anymore. If the information availability changes and no reliable calculations can be done anymore, the company is removed from the list, even though it is possible it still fulfills a criterion but there is no recent source available to prove this.

We keep track of all companies researched. Even if they do not qualify for the GCEL, they are put on our "watch list". This list also contains companies that are in a restructuring process and for which no reliable data is currently available. If you have any questions on a company not listed in our public database, please contact us via coalexit@urgewald.org.

No Database is Perfect

We do our best to achieve a broad coverage of coal industry companies in all regions of the world and to find and document the relevant information for each of these companies. However, gaps and uncertainties still exist, due to the fact that information is sometimes hard to find or simply not available. We are therefore always happy to receive any additions or corrections to further develop this database!

Explanation of the Columns of the GCEL:

Abbreviations:

NA:	“not available”: Specific numbers are not available, but from our research we see that the company has coal activities in the respective field (e.g. coal production)
/:	“not existent” or “not applicable”: no calculation possible
NI:	No information was found or available
Empty cell:	The respective information for this cell was not researched
cspp:	Coal share of power production
csr:	Coal share of revenue
HQ:	Headquarters
MW:	Megawatt
GW:	Gigawatt
GWh:	Gigawatt hours
Mt:	Million metric tons

Column A to D: Why is this company on the list, i.e. which of the GCEL criteria are met?

Entry Explanation

- >10Mt: The company produces 10 million tons or more of (thermal) coal annually.
- >5GW: The company operates 5 GW or more of installed coal-fired capacity.
- cspp >10%: The coal share of power production equals 10% or more.
- csr >10%: The coal share of revenue equals 10% or more.
- expansion: The company meets the GCEL expansion criterion for either power, mining and/or infrastructure. The entry “subsidiary of a coal developer” indicates that this subsidiary does not have an expansion project itself but belongs to a parent company that meets the expansion criterion and thus should also be divested along with the parent. By filtering out all empty cells in this column, you receive our coal developers list.

Column E: Subsidiary/Affiliate/Joint Venture

Entry Explanation

- 1: The Subsidiary, Affiliate or Joint Venture is a category 1 company as explained above. For these companies a comprehensive research has been done.
- 2: The Subsidiary, Affiliate or Joint Venture is a category 2 company as explained above. For these companies’ basic information such as their coal sector activity and the country of headquarters has been included. Other information has occasionally been added when found.

Column F: Parent Company

The term “Parent Company” is used to describe the highest level within the corporate structure of a company that fulfills one or more of the GCEL criteria. If this column is alphabetically sorted, the subsidiaries / affiliates / joint ventures appear beneath their parent.

Column G: Company

Both parent companies **and** subsidiaries/affiliates/joint ventures appear in this column. Parent Companies are marked in blue and subsidiaries/affiliates/joint ventures in white.

Column H: Coal Industry Sector

The coal-related activities are summarized into three sectors: Power, mining and services. Financial vehicles are categorized as Services (finance).

Entry	Explanation
Mining	Companies with a number or NA in the column coal production and companies that meet the mining expansion criterion.
Power	Companies with a number or NA in the column installed capacity and companies that meet the coal power expansion criterion.
Services	Companies with coal-related business other than coal mining and coal power. This includes: coal trading, coal logistics, coal processing, coal power transmission, coal chemicals (coal to gas/liquids), coal-related operation & maintenance services, coal mining services, coal-related engineering, procurement and construction services, coal exploration, coal equipment manufacturing, underground coal gasification, coal advisory services and all other activities that are thermal coal-related.
Services (finance)	Companies that are mainly operating in finance-related activities

Column I: Country of Headquarters

Country where the company is headquartered.

Column J: Region

Geographical region² where the company is headquartered.

Column K: Installed Coal Capacity

If this column shows a number or NA, the company has coal-fired power capacity.

² guided by the United Nations geoscheme with some adaptations

Entry	Explanation
Number	XY MW installed coal-fired capacity.
> Number	At least XY MW installed coal-fired capacity (exact lower bound).
0	0 MW installed coal capacity, but the company has power capacity using other types of fuels.
NA	The company has coal-fired power capacity, but exact data is not available.
NI	There is no information showing whether the company owns coal-fired capacity.
/	The company has no installed power capacity.
Empty	Not researched.

Column L: Installed Coal Power Capacity - Countries

The coal-fired power plants of the company are located in these countries.

Column M: Coal Share of Power Production

The coal share of power production is calculated based on the company's annual power generation. If there were no generation (GWh) numbers available, we looked for capacity-based numbers (MW). In some cases, we provide an estimate based on the information in the annual report or on the company's website.

Entry	Explanation
Number	XY% of the power generation or of the installed capacity is coal-fired.
> Number	It is estimated that at least XY% of the power generation or of the installed capacity is coal-fired (exact lower bound, estimated lower bound).
0%	0% of the power production is coal-fired, but it has other power generation.
NA	The company has coal-fired power generation, but no exact numbers are available.
NI	There is no information whether the company has coal-fired power generation.
/	The company has no power generation.
Empty	Not researched.

Column N: Coal Share of Power Production based on generation/capacity

Entry	Explanation
generation	The number shown in column M is based on power generation numbers.
capacity	The number shown in column M is based on capacity numbers. The capacity-based coal share of power production is only applied if not enough information about the company's generation is reported and thus a calculation or estimation of the generation share is not possible.

Column O: Coal Share of Revenue

The coal share of revenue was calculated on the basis of data provided in the company's financial reporting. Business activities relevant for the calculation of the coal share of revenue include: coal mining, coal transport, coal marketing & trading, coal power & distribution, coal processing, coal equipment, coal exploration and all other activities, which are coal-related. If the company discloses financial data related to its thermal coal-related business activities, we calculate the thermal coal share of revenue, which is specified in column P.

Revenue from coke, coalbed methane, steel and cement production are not included in our coal share of revenue calculation.

Detailed financial information regarding a company's coal-related business activities is not always available. Where possible, we then provide an estimate based on the information in the annual report or on the company's website.

Entry Explanation

number	The number for the csr is calculated based on company documents
>number	The csr is estimated higher than this number
XY%-XY%	The csr is estimated to lay in this interval.
0%	0% of the company's revenue is coal-related.
NA	The company has coal-related revenue, but no exact data is available.
NI	There is no information as to whether the company engages in any revenue-generating coal business.
/	The company has no operating revenue as of yet.
Empty	Not researched

Column P: Coal Share of Revenue thermal/total

thermal	The coal share of revenue shown in column O is calculated based on thermal coal-related business activities
total	The coal share of revenue shown in column O is calculated based on total coal-related business activities. The total coal share of revenue is only applied if there is not enough information about thermal coal-related business activities available and thus a calculation or estimation of the thermal coal share of revenue is not possible.

Column Q: Annual Coal Production (in million metric tons)

If this column shows a number or NA, the respective company is involved in coal mining. If a company discloses its thermal coal production, this number comprehends thermal coal production. If the company does not differentiate between thermal and coking coal, its total coal production is recorded. This difference is specified in column S.

Entry	Explanation
Number	XY million tons coal production. If thermal coal production numbers are available, they show up here. If the company does not provide distinct numbers for thermal coal, total coal production figures are listed.
> Number	The company produces at least exactly XY million tons of coal. There could be more coal production, that we cannot assess (exact lower bound). If thermal coal production numbers are available, they show up here. If the company does not provide distinct numbers for thermal coal, total coal production figures are listed.
0	No thermal coal production, but the company produces coking coal.
NA	The company produces coal, but no exact data is available.
NI	There is no information as to whether the company produces coal.
/	The company has no coal production.
Empty	Not researched.

Column R: Annual Coal Production thermal/total

thermal	The number in column R shows the annual thermal coal production.
total	The number in column R shows the annual total coal production. The total coal production is only applied if there is not enough information about thermal coal production available and thus a calculation or estimation of the thermal coal production is not possible.

Column S: Annual Coal Production - Countries

The company has coal mining operations in these countries.

Column T: Expansion Plans Coal Power (Prorated) in MW

As coal plants can have more than one owner, we calculate the “prorated” new coal-fired power capacity planned by each company. Depending on information availability, the prorated MW numbers were calculated according to the company’s ownership of the project or the number of companies involved. The term “planned” includes projects that are announced, pre-permitted, permitted or under construction.

Column U: Expansion Plans Coal Power (Total) in MW

Total planned coal-fired power capacity of projects the company is involved in. The term “planned” includes projects that are announced, pre-permitted, permitted and under construction.

Column V: Expansion Plans Coal Power - Countries

Lists the countries where the company is planning new coal-fired power plants.

Column W: Expansion Plans Coal Mining - Countries

If a company has coal mining expansion plans, this column provides the name of the country where the expansion is planned.

The mining expansion criterion is met by companies, which are planning to develop new coal mines, extend their coal mines by applying for new permits or that are involved in coal exploration activities.

1. The parent of a company flagged for mining expansion is also considered responsible for the expansion and meets the mining expansion criterion, if it owns more than or equals 50% of the company (subsidiary).
2. For large mining expansion projects with a capacity above 10Mt, the parent company of affiliates/joint ventures (10-50% owned) meeting the mining expansion criterion is also flagged for mining expansion.
3. Parents with an ownership of less than 10% in the project are not flagged as coal mine developers.

Column X: Expansion Plans Coal Infrastructure - Countries

If a company has coal infrastructure expansion plans, this column provides the name of the country where the expansion is planned.

The infrastructure expansion criterion is met by companies, which are involved in the development or expansion of infrastructure assets dedicated to support coal mines and coal transportation, such as coal terminals or coal railways.

The parent of the project company is also considered responsible for the expansion and meets the expansion criterion, if it owns more than 50% of the project.

Column Y: Company Website

The link to the website of the company is included here.

Column Z: Company Reports

If the company has an Annual Report, the link to the report is provided here. If the company has no Annual Report, a link to other reports, such as the Financial Report (FR), Social Responsibility Report (SR), Sustainability Report (SR), Financial Statement (FS), Credit Rating Report (CRR), Environmental and Social Assessment (ESIA) is included here. Sometimes the information in the respective row has been obtained from the parent company's or subsidiary's report. In this case, the annual report of the parent company or subsidiary is provided here.

Columns AA to AE: Old GCEL thresholds used in the GCEL 2017, 2019, 2020, 2021, 2022

These columns show which of the old thresholds the company fulfils.

Entry	Explanation
>20Mt:	The company produces 20 million tons or more of (thermal) coal annually.
>10GW:	The company operates 10 GW or more of installed coal-fired capacity.
cspp >20%:	The coal share of power production equals 20% or more.
cspp >30%:	The coal share of power production equals 30% or more.
csr >20%:	The coal share of revenue equals 20% or more.
csr >30%:	The coal share of revenue equals 30% or more.

Columns AF to AH: Rankings by power expansion, capacity and production

These columns rank the parent companies by planned power expansion capacity, installed coal power capacity and annual coal production and their subsidiaries/affiliates/joint ventures by adding 0.5 to the rank of the parent.

Columns AI and AJ: GCEL IDs