

Methodology of the Global Coal Exit List (GCEL)

How did Urgewald Identify the Companies on the Global Coal Exit List?

The aim of Urgewald's database is to capture the entire global coal industry. The GCEL shows coal-related data for 775 companies and additionally lists 1157 subsidiaries and joint ventures. To identify the companies which are relevant for our research, we used data we had already gathered in a previous project when we analyzed the investment portfolio of the Norwegian Government Pension Fund. We then looked at the member lists of national and international coal associations and researched the members of these associations. We also included companies listed in the CoalSwarm Database as they are planning new coal power plants. In addition, we considered NGO-based information as, for example, compiled by CoalWire, a newsletter on coal campaigns worldwide. All in all, we undertook in-depth research on over 2,000 companies to determine which ones should be listed on the GCEL.

We developed 3 criteria for including companies on the Global Coal Exit List. Companies were listed if they meet at least one of the following criteria:

1. Percentage Criteria: 30% or more of the company's power production or revenues are coal-based.
 - a. Companies which have a **coal share of revenue above 30%**.
This calculation includes: mining, transport, marketing & trade, power & distribution, processing, equipment, exploration and all other activities, if they are partly or completely coal-related.
 - b. Utilities which have a **coal share of power generation above 30%**
In case numbers on annual generation were not available, the calculation was based on installed capacity.
2. Absolute Criteria: Companies whose annual coal production equals **20 million tons** or more, and companies whose installed coal-fired capacity equals **10.000 MW** or more.
3. Expansion Criteria: Companies with **coal mining or coal power expansion plans**.
 - a. Mining: new coal mines, meaningful expansion of coal production or exploration activities.
 - b. Power: companies planning to develop, own or operate new coal-fired power plants of at least 300 MW.
 - c. Services: Where information was available, infrastructure expansion was included.

How did we Collect this Information?

After identifying the companies, Urgewald compiled all relevant coal data on them. We extracted this data from companies' own reporting. This included company websites, annual reports, investor presentations and stock exchange filings. We only resorted to other databases and sources in cases where original company information was not available. We always used the most recent information we could find. In cases where no English

information was available, we worked with researchers in the respective countries to gather the material needed.

In some cases, companies did not provide enough information to calculate the coal share of revenue or coal share of power production. In these cases, we made an estimate based on the company's available information. Estimates are indicated in the database by the signs "bigger than" (>) and "smaller than" (<).

The GCEL contains many subsidiaries or joint ventures of the companies that meet one or more of our criteria. In our view, all subsidiaries of the mother companies listed on the GCEL should be divested. 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 is to raise new capital for the mother company. Functionally, these subsidiaries are part of the same company, and should be divested along with the mother. Our position on the mother/subsidiary question is also based on the observation that corporations often shift cash and assets across different divisions and subsidiaries. We therefore only researched specific figures for individual subsidiaries in special cases.

Manual explaining the columns in the Download Version of the GCEL:

<u>Abbreviations:</u>	
NA:	Specific numbers are not available, but from our research we see that the company is active in the respective field (e.g. coal production).
No entry:	No information in this field was found or available
Cspp:	Coal Share of Power Production
Csr:	Coal Share of Revenue
CtG/CtL:	Coal to Gas / Coal to Liquids
HQ:	Headquarters
EPC:	Engineering, Procurement and Construction
MW:	Mega Watt
GWh:	Giga Watt hours
Subsidiaries/JV:	Subsidiaries/Joint Ventures

Parent Company

The term Parent Company is used here to name the highest level of the corporate structure of a company that fulfills one or more of the criteria.

Company

Both Parent Companies **and** Subsidiaries appear in this column. Parent Companies are marked in blue and Subsidiaries in white. Subsidiaries are generally on the list because their parent company fulfills one or more of the criteria, but in some cases we also included specific data on individual subsidiaries.

Sector:

Mining: Companies with an entry (number or NA) in the column coal production.

Power: Companies with an entry (number or NA) in the column cspp or installed capacity.

Services: Companies active in coal trading, exploration, transport, developing, engineering, construction, manufacturing, equipment, CtG/CtL, logistic, processing, infrastructure, EPC, finance and other coal-related activities.

Country of Coal Activity:

Power/Mining companies: Countries of coal mining, coal exploration and/or coal power operations

All companies: Countries of planned power and mining expansion

Expansion Plans Coal Power (Prorated) in MW:

Prorated new coal power capacity planned by the company.

The Prorated Megawatt 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 and under construction. This project-based data was extracted from the CoalSwarm Database.

Expansion Plans Coal Power (Total) in MW

Total planned coal power capacity of projects the company is involved with.

The Term "Planned" includes projects that are announced, pre-permitted, permitted and under construction. This project-based data was extracted from the CoalSwarm Database.

Countries of Coal Power Expansion

Countries where the new coal plants will be built.

Countries of Coal Mining Expansion

Countries where the company plans an expansion of coal mining.

Installed Coal Capacity

If there is a number or NA, the company is involved in coal power production.

Coal Share of Power Production (red=capacity)

The Coal Share of Power Production was calculated using data on the company's annual power generation. If there were no generation (GWh) numbers available, we looked for capacity based numbers (MW). Capacity based percentages are recorded in red. In some cases, we made an estimate based on the information in the annual report or on the company's website.

Coal Share of Revenue

The Coal Share of Revenue was calculated using the data in the company's consolidated financial statement. The calculation of the coal share of revenue includes: coal mining, coal transport, coal marketing & trade, coal power & distribution, coal processing, coal equipment, coal exploration and all other activities, which are partly or completely coal-related.

Revenues of coke production and steel production are not included in the "coal revenue". If we could not find any numbers on the coal revenue, we made an estimate (>30%, >50%, >90%) based on the information in the annual report or on the company's website.

Annual Coal Production (in million metric tons)

If there is a number or NA, the company is involved in coal mining. It includes both the production of thermal and metallurgical coal as many companies do not provide differentiated figures in their reports.

120 biggest Coal Plant Developers

expc: Company is on the Top 120 Coal Plant Developers List

exps: Important subsidiary of the parent company on the Top 120 Coal Plant Developers List
Green marking: Is among the group of companies which account for half of the new coal plants in the pipeline.

Grey marking: On the GCEL this company is listed as subsidiary.

120 biggest Mining Companies (by production)

Green marking: Is among the companies responsible for half of the world's annual coal production.

Yellow marking: Worldwide ranking of the company in regards to its annual coal production.

120 biggest Power Companies (by installed capacity)

Green marking: Belongs to the group of companies responsible for half of the world's installed coal power capacity.

Yellow marking: Worldwide ranking of the company in regards to its coal power capacity.

No Database is Perfect

We did our best to achieve a broad coverage of companies in all regions of the world, and to find and document the relevant information for each of these companies. However, there are still gaps and there may also be mistakes in the database due to the fact that the information is sometimes hard to find or just not available. Therefore, we are happy to receive any additions or corrections to develop this database further.