METHODOLOGY DOCUMENT
MSCI SUSTAINABILITY AND CLIMATE

November 2025

MSCI Fossil Fuels and Power Generation Metrics Methodology (components of MSCI Climate Change Metrics)

Contents

MSCI Fossil Fuels and Power Generation Metrics overview

Objective

The objective of the MSCI Sustainability and Climate (MSCI S&C)[1] Fossil Fuels and Power Generation Metrics methodology is to identify companies involved in fossil fuel-related assets and activities such as fossil fuel reserves, resource extraction, fossil fuel processing, power generation and generation capacity, related revenues and capital investments. The metrics are based on disclosed data and estimates derived from company disclosures and eligible third-party sources (e.g., government sites, NGOs). MSCI Fossil Fuels and Power Generation Metrics are an ESG data offering made up of raw data and processed data including absolute measure and estimates.

Coverage universe

MSCI fossil fuels and power generation metrics cover constituents of the MSCI ACWI IMI, constituents of other select equity indexes[2],[3] and fixed income issuers.[4]

MSCI S&C covers all companies in the universe mentioned above, including both energy-intensive and non-energy-intensive sectors.

Metric types

MSCI fossil fuels and power generation metrics are structured in three categories:

- *Power Generation,*
- *Fossil Fuel Exposure and*
- *Capital Expenditure (CapEx) Data*

These metrics are components of MSCI S&C's Climate Change Metrics offering.

[1] MSCI Sustainability and Climate products and services are provided by MSCI S&C and certain related entities, and are designed to provide in-depth research, ratings and analysis of environmental, social and governance-related business practices to entities worldwide.

[2] MSCI China A International, MSCI Pakistan IMI, MSCI Argentina Standard, MSCI Domestic Kuwait, MSCI EFM AFRICA, MSCI Australia IMI+, MSCI New Zealand IMI+, MSCI Europe IMI+, MSCI UK IMI+.

[3] The factors indicating involvement in storage and distribution of thermal and metallurgical coal have a smaller coverage than the other fossil fuel and power generation metrics dataset (as mentioned in Exhibit 2). This is because the factors indicating involvement in storage and distribution of thermal and metallurgical coal have coverage as per the "MSCI SFDR Adverse Impact Metrics Methodology" document.

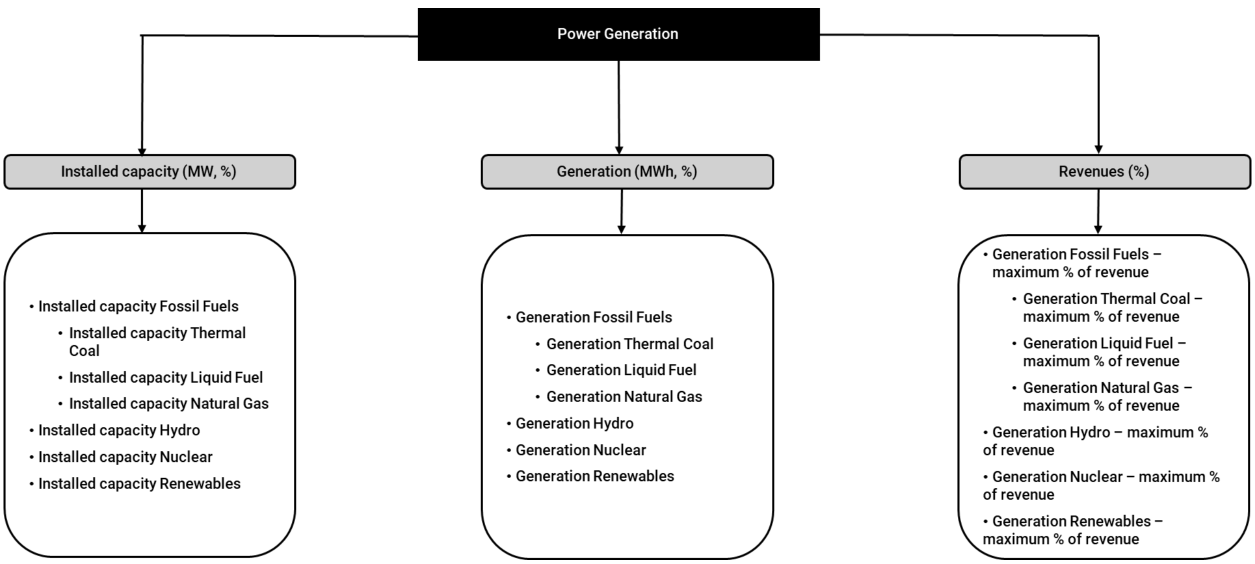
[4] Corporate constituents of the Bloomberg Global Aggregate index that meet our minimum disclosure threshold.

Power Generation Metrics methodology

MSCI S&C provides a power-generation module containing:

- Installed capacity data by fuel type.
- Power-generation volumes by fuel type.
- Power-generation revenue by fuel type.

Exhibit 1: Power generation factors



Notes: Thermal coal includes coal that is used for generating power. This type of coal typically includes lignite, bituminous, anthracite, sub-bituminous and steam coal. It excludes power generation from coke oven gas and peat. MSCI S&C uses the terms liquid fuel and oil interchangeably. They both imply fossil fuel-based oil and exclude bio-based oils and liquid hydrogen. Natural gas includes fossil fuel gas and excludes bio-based gases and hydrogen. Hydropower includes both large and small hydropower. It does not include pumped storage hydropower. Renewables include solar (photovoltaic and concentrated solar power), wind (offshore and onshore), biomass- based power, biogas based power, waste-to-energy, geothermal, wave tidal and ocean power. We currently do not capture power generation from fuel cells. All of the above include power or electricity and do not include heat/steam. Source: MSCI S&C; data as of September 2025

Fuel Mix

Installed capacity data by fuel type

Company-reported installed capacity (MW) by fuel type is provided, where available. It covers capacity used both for captive consumption and for selling electricity, but excludes any heat generation capacity.

Estimating MW by fuel type:

- If a company provides total installed capacity and percentages for each fuel type (but not megawatts [MW]), MSCI S&C calculates the MW for each fuel by multiplying the total capacity by the percentage.

Special cases:

- For hybrid or co-fired power plants, capacity is evenly split among the relevant fuel types.

Power-generation volumes by fuel type

Company-reported power-generation volume in megawatt hours (MWh) by fuel type is provided, where available. It includes:

- Power generated for captive consumption.
- Power generated for sale.

The following are not included:

- Power that is purchased.
- Heat generation (In cogeneration systems, only power data is captured — not heat).
- Power generated from storage technologies (e.g., batteries and pumped storage hydropower).

Where companies report total power-generation volume and percentages by fuel type rather than power-generation volume by fuel type (MWh), total power-generation volume is multiplied by the percentage for each fuel type to calculate MWh figures.

If a company reports total power-generation volume and percentage installed capacity by fuel type instead of power-generation volume by fuel type, the following approach is applied:

- Multiply the percentage installed capacity by fuel type to respective average plant load factors to estimate the proportion of power generation by fuel type.[5]
- Convert those proportion values to percentages and multiply those percentages by the total power-generation volume to estimate the power-generation volume by fuel type.

Power generation revenue by fuel type

Company-reported revenue percentage from power generation by fuel type is provided, where available. If a company reports revenue from power generation and uses only one type of fuel, this figure is applied.

[5] Plant load factor is a measure of a power plant's capacity utilization.

If a company's total power generation revenue is known (either reported or estimated), but revenue breakdown by fuel is not known, then MSCI S&C multiplies the total power-generation revenue by that company's fuel mix to estimate the power-generation revenue by fuel type.

Where companies do not disclose the revenue derived from power generation by fuel type, the following process is applied to estimate these figures:

- If a company reports power-generation volume by fuel type or if it reports power-generation volume and uses only one type of fuel for power generation, and it reports the price of electricity realized, power-generation revenue by fuel type is estimated as power generation volume multiplied by electricity price.
- Where the revenue from power-generation business of a vertically integrated electric utility company, involved in both electricity generation and transmission and distribution business, is not disclosed but the combined revenue of both businesses is disclosed, power-generation revenue is estimated as the proportion of its own electricity generated (MWh) to total electricity transmitted (MWh).
- Where the revenue from power generation is not disclosed or it is not possible to estimate it using the above methods, the revenue proportion of different business segments is estimated by multiplying the asset turnover ratios of different business segments by total assets employed in respective businesses.[6] These proportion values are then converted to percentages and multiplied by revenue to estimate the revenue at the business-segment level (including for power-generation business).

Additional calculations/estimations

Estimation of electric network versus gas network revenue

Power generation revenue of a company may also include revenue from transmission and distribution. Where this is the case, MSCI S&C uses the following approach: If a company's total network (transmission and distribution, [T&D]) revenue is known (either reported or estimated), but the split between electricity T&D & gas T&D revenue is not known, the ratio of the number of customers and/or network coverage (km) is applied as a proxy for the split between gas T&D and electricity T&D network revenue.

Treatment of discontinued operations - power

The decommission of power plants (coal, liquid fuel, natural gas, nuclear, hydropower or renewables, etc.), suspension of power plants, or divestment/selling ownership of power plants have an impact on energy generation by fuel type.

[6] For a company, the asset turnover ratio of a given business activity is the ratio of revenue to assets employed in that particular business activity.

If such an event happens at any point during a financial year, and revenue by fuel type is not directly reported, the percentage share of energy generation is applied to calculate the power generation revenue by fuel type.

The revenue from discontinued operations is removed from power generation revenues once a company publicly stops reporting any operations from a particular fuel type.

Installed capacity data and power generation data and evidence flags are removed when MSCI S&C identifies publicly available disclosures about the decommissioning, suspension or sale of the asset in question.

Treatment of related entities involved in power generation

In cases where a related entity's power generation revenue and volume (in MWh/MW) are not accounted for by the parent company in its disclosure:

- 100% of power-generation revenue and volume is mapped to the parent company if a subsidiary's financial data is consolidated by the parent company.

OR

- Where ownership is less than 50%, only power-generation volumes are allocated to the parent on a basis proportionate to its equity ownership in the related entity. Power generation revenues are only provided for the parent based on the consolidated revenues.

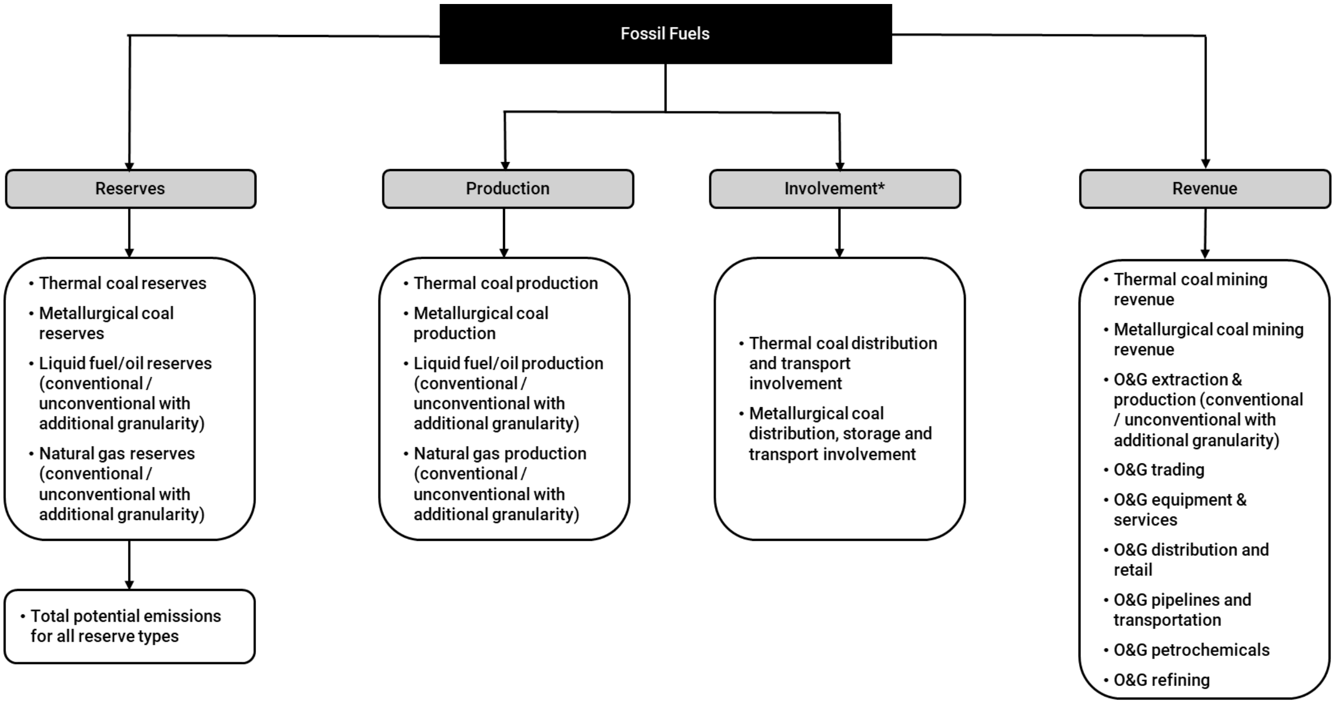
Fossil Fuel Exposure Metrics methodology

In addition to power generation data, MSCI S&C also identifies companies involved in fossil fuel:

- Reserves,
- Production, and
- Revenues.

Furthermore, MSCI S&C offers a detailed revenue breakdown for activities connected to the fossil fuel value chain.

Exhibit 2: Fossil fuels factors



Notes: *Involvement screens have a lower coverage universe than other factors. The involvement factors are provided only for companies in the MSCI SFDR Adverse Impact metrics coverage and not the Climate Change Metrics coverage, which is larger.

Reserves: MSCI S&C provides reserves data for thermal coal (in tons), metallurgical coal (in tons), conventional oil (in million barrels of oil equivalent [mmboe]), conventional gas (in mmboe), unconventional oil (in mmboe) and unconventional gas (in mmboe).

Production: MSCI S&C provides production data for thermal coal (in tons), metallurgical coal (in tons), conventional oil (in MBbls/day), conventional gas (in MMcf/day), unconventional oil (in MBbls/day) and unconventional gas (in MMcf/day).

Revenues: MSCI S&C provides percentage revenue data for the following:

i. Thermal coal mining
ii. Metallurgical coal mining
iii. Oil extraction and production (for both conventional and unconventional oil)
iv. Gas extraction and production (for both conventional and unconventional gas)
v. Oil and gas wells drilling
vi. Oil and gas exploration
vii. Oil and gas related equipment and services
viii. Oil distribution
ix. Gas distribution
x. Oil refining
xi. Gas processing

xii. Oil pipelines

xiii. Gas pipelines

xiv. Oil transportation

xv. Gas transportation

xvi. Oil retail

xvii. Gas retail

xviii. Oil and gas trading

xix. Petrochemicals

xx. Biofuels

- *Coal Revenue Data:*
  MSCI S&C reports coal-related revenues only from mining activities and contract mining services (in addition to coal-based power generation, covered earlier).
  We do not provide revenue data for coal-related equipment, services, or trading.
- *Coal Distribution & Transport:*
  MSCI S&C offers an evidence or involvement factor for these activities, but not revenue percentages.
- *Additional Data:*
  MSCI S&C also provides combined datasets using the above datapoints.
  Due to the large volume of datapoints, not all of them are listed here.
  Please refer to the "Carbon and Fossil Fuel" folder on ESG Manager or contact us directly for detailed information on the fossil fuel-related datapoints we offer.

Source: MSCI S&C; data as of September 2025

Fossil fuel reserves data

MSCI S&C provides reported fossil fuel reserves volume data under the following reserve categories for companies in the coverage universe:

1. Metallurgical coal (in tons).
2. Thermal coal (in tons).
3. Conventional oil (in mmboe).
4. Conventional gas (in mmboe).
5. Shale oil (in mmboe).
6. Oil shale & tar sands (in mmboe).
7. Shale gas (in mmboe).

To achieve consistency with industry reporting standards, MSCI S&C collects reported proved and probable reserves (2P) for coal and proved reserves (1P) for oil and gas. If a company does not report 1P reserves for oil and gas, then we use 2P reserve values for oil and gas.

Non-disclosure of reserves

If a company has previously reported reserves data but where data for the most recent financial year is not available:

- If production data is available, current reserves are estimated by subtracting production volumes from the previous reserve volumes. This is indicated in the notes and reflected as "Estimated" in the key.
- If production data is not available, the previous year's data is carried over. This is indicated in the notes and reflected as "Estimated" in the key.

  Coal reserves – special cases

  If no previous coal reserves data is available:

  - If the coal type is not reported by the company and the company does not fall in the Global Industry Classification Standard (GICS®)[7] steel sub-industry, the reported coal reserves are considered to be thermal coal.
  - If the coal type is not reported by the company and the company falls under the steel GICS sub-industry, the reported coal reserves are considered to be metallurgical coal.
  - When companies do not report a breakdown of coal reserves by type, a predefined allocation based on MSCI's proprietary estimation model is applied to distinguish between metallurgical and thermal coal reserves. For companies in the steel GICS

[7] GICS is the global industry classification standard jointly developed by MSCI and S&P Dow Jones Indices.

sub-industry, MSCI S&C uses the ratio of production of metallurgical coal to thermal coal to split reserves into metallurgical coal reserves and thermal coal reserves. Where the production split is also unavailable, we use the ratio of metallurgical coal revenue to thermal coal revenue and apply this revenue ratio to metallurgical coal and thermal coal reserves.

Oil and gas reserves – special cases:

When companies do not report a breakdown of oil and gas reserves, a predefined allocation based on MSCI's proprietary estimation model is applied to distinguish between oil and gas reserves.

- In cases where there is no split provided between conventional and unconventional reserves, but total reserves are presented, the number of production blocks can be used for the split.
- In cases where there is no split provided between conventional and unconventional reserves, but total reserves are presented, acreage can be used for the split where the number of production blocks is not available.

If MSCI S&C finds evidence that a company owns reserves but we do not have data on the volume of reserves, we flag the company for evidence of the relevant reserves without attributing volumes to them. This is applicable for thermal coal, metallurgical coal, oil and gas reserves.

Companies with investments in fossil fuel reserves

Fund managers are flagged for reserves ownership where the company discloses an equity interest of greater than 0% in a company that owns fossil fuel reserves. The following investment types are not flagged for involvement in fossil fuel reserves or revenues:

- Debt investments (e.g., provides loans/financing to a company that has upstream fossil fuels related projects). For such cases it is assumed, that the financing company does not have an equity interest in the reserves.
- Managed funds that invest in upstream oil and gas or coal companies. In these cases, the fund manager manages the fund for third parties. Unless there is clear evidence that the fund manager also invests in the fund, involvement flag is not activated for the fund manager.

Treatment of related entities involved in fossil fuel reserves

Thermal and metallurgical coal:

- If a parent company consolidates a related entity's thermal or metallurgical coal reserves in its financial statements, then 100% of those reserves are attributed to the parent company.

- If the reserves are not consolidated in the parent's annual report, then the reserves are attributed proportionally to the parent company, based on its equity ownership in the related entity.[8]

Oil and gas:

- If a parent company consolidates a related entity's oil and gas reserves in its financial statements, then 100% of those reserves are attributed to the parent company.
- If the reserves are not consolidated in the parent company's annual report, then the reserves are attributed to the parent in proportion to its equity ownership in the related entity.[9]

Total potential emissions

MSCI S&C collects data on fossil fuel reserves and uses the reserves values to determine potential emissions of a company. To convert these reserves to potential emissions, we use the following formula from the Potsdam Institute for Climate Impact Research:

$$E = R \times V \times C \times f$$

Where:

E is potential emissions (in megatons/million tons of carbon dioxide [MtCO2]),

R is proven recoverable reserves (in gigagrams [Gg]),

V is net calorific value of the fuel (in terajoules per gigagram [TJ/Gg]), (see Exhibit 3)

C is carbon content of the fuel (in tons of carbon per terajoule [tC/TJ]) see (Exhibit 3)

f is a conversion factor (MtCO2/tC, which is the ratio of the molecular weight of carbon dioxide to carbon divided by 106= (44/12)/106 = 3.6667 x 10-6).

Exhibit 3: Net calorific value and carbon content of different types of fossil fuels

Fossil Fuel Type	**Net calorific value of the fuel (terajoules per gigagram)**	**Carbon content of the fuel (tons ofcarbon per terajoule)**

[8] Note that this is done on a best effort basis, as long as data on the related entity is available in the public domain. If data on the related entity is not available to MSCI S&C, we would not be able to include it.

[9] Note that this is done on a best effort basis, as long as data on the related entity is available in the public domain. If data on the related entity is not available to MSCI S&C, we would not be able to include it.

Thermal Coal	18.9	26.3
Metallurgical Coal	28.2	25.8
Conventional Oil	42.3	20.0
Shale Oil	38.1	20.0
Oil Shale and Tar Sands	8.9	29.1
Natural Gas	48.0	15.3
Shale Gas	48.0	15.3

Sources: MCSI S&C and Intergovernmental Panel on Climate Change (2006 IPCC Guidelines for National Greenhouse Gas Inventories; https://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_1_Ch1_Introduction.pdf; Table 1.2 and 1.3).

Fossil Fuel Reserves – Energy Application

This screen identifies companies, regardless of industry, that show evidence of owning fossil fuel reserves likely intended for energy applications.

For high-intensity industries (i.e., industries belonging to energy and utilities GICS sector or diversified metals & mining GICS sub-industry), this factor flags companies with evidence of fossil fuel reserves (excluding metallurgical coal).

For other industries, this factor flags companies with evidence of fossil fuel reserves (excluding metallurgical coal) and revenue generation from business segments related to energy application of fossil fuels such as thermal coal mining, oil and gas exploration & production and oil and gas downstream activities (e.g., refining; distribution & retail; pipeline & transportation; trading and fossil fuel-based power generation).

Fossil fuel extraction and production data

Thermal coal extraction and production

MSCI S&C provides data on the production of thermal coal in tons. Production represents the output resulting from the extraction (mining) of thermal coal. The data may be disclosed directly by the company or estimated by MSCI S&C when disclosure is unavailable.

Metallurgical coal extraction and production

MSCI S&C provides data on the production of metallurgical coal in tons. Production represents the output resulting from the extraction (mining) of metallurgical coal. The data may be disclosed directly by the company or estimated by MSCI S&C when disclosure is unavailable.

Conventional and unconventional oil and gas extraction and production

MSCI S&C provides data on production of conventional and unconventional oil in million barrels per day (MBbls/day) and conventional and unconventional gas in million cubic feet per day (MMcf/day).

MSCI S&C ESG data products analytical personnel make a determination on whether production of oil and gas is classified as conventional or unconventional based on the method of production. However, MSCI S&C does not split conventional and unconventional oil or gas volumes in other upstream operations (e.g., at the equipment and services level) or downstream (e.g., during transportation and refining).

Non-disclosure of production for coal, oil and gas

MSCI S&C applies the following approaches when company-level production data is not disclosed or is incomplete:

- If a company does not report production, MSCI S&C attempts to source production data at the field level from other public disclosures (e.g., a joint venture partner).

  Example:
  If Company A and Company B co-own a production field, but only Company B discloses production volumes, MSCI S&C estimates Company A's production using Company B’s reported data, adjusted for Company A’s ownership share.

- If the company has previously reported production, but no data is available for the most recent financial year, MSCI uses the prior year’s production volume.

If MSCI S&C finds evidence of a company’s involvement in production but cannot estimate total production volume, the company is flagged for evidence of production activity but no production volume or revenue estimates are provided.

Production data includes volumes both for internal use and external sale across all fossil fuel types MSCI tracks.

Treatment of related entities involved in fossil fuel production

Thermal and metallurgical coal:

If a parent company consolidates a related entity's thermal or metallurgical coal production in its financial statements, then 100% of that thermal or metallurgical coal production volume is mapped to the parent company.

If the parent company does not consolidate a related entity's production data in its financial statements, then thermal or metallurgical coal production volumes are allocated to the parent from the related entity proportionate to the parent's equity ownership in the related entity.[10]

Oil and gas:

If a parent company consolidates a related entity's oil or gas production in its financial statements, then 100% of that oil and gas production volume is mapped to the parent company.

If the parent company does not consolidate a related entity's production in its financial statements, then oil and gas production volumes are allocated to the parent from the related entity proportionate to the parent's equity ownership in the related entity.[11]

[10] Note that this is done on a best effort basis, as long as data on the related entity is available in the public domain. If data on the related entity is not available to MSCI S&C, we would not be able to include it.

[11] Note that this is done on a best effort basis, as long as data on the related entity is available in the public domain. If data on the related entity is not available to MSCI S&C, we would not be able to include it.

Fossil fuel revenue data

MSCI S&C provides data on percentage revenue for all companies within coverage for the following data points:

- Thermal coal mining revenue.
- Metallurgical coal mining revenue.
- Oil and gas revenue for:
  - upstream,
  - midstream and
  - downstream activities.

Coal mining revenue data and estimation

MSCI S&C fossil fuels and power generation metrics include revenue associated with thermal and metallurgical coal mining and involvement flags for the distribution and storage of coal.

Revenue estimation process

MSCI S&C relies on company-reported information in public annual reports, investor presentations, corporate websites, etc. to estimate revenues derived from mining thermal or metallurgical coal.

When publicly disclosed, revenues from related entities — such as joint ventures, associates, and affiliates—are included in the estimation. In such cases, companies are assigned a share of production volume or revenue that corresponds to their ownership stake.[12]

If a company discloses both *saleable coal production* and *run of mine* (ROM),[13] saleable coal production is used in estimations. In absence of saleable coal production, ROM is used.

Thermal & metallurgical coal mining revenue data

MSCI S&C provides the percentage of revenue (either reported or estimated) that companies derive from the mining of thermal and metallurgical coal and its sale to external parties, and contract mining services.

Thermal and metallurgical coal revenue are further detailed as follows:

- **By production type:** If revenue from thermal or metallurgical coal is reported directly, this figure is used. Where necessary, adjustment is made to exclude revenue from intra-company

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[12] Note that this treatment is different than the treatment of revenues for oil and gas. For oil and gas, only revenues from consolidated entities are captured. For coal, revenues from unconsolidated entities are also attributed to the company based on ownership share. This is because our clients have asked for the most comprehensive coverage of coal involvement and hence unconsolidated entities are included in the revenue calculations.

[13] Run of mine is the raw material mined prior to processing.

sales of thermal or metallurgical coal or other coal-related revenues that are not included in the thermal or metallurgical coal revenue factor.

- **By project:** If revenue is reported by project, MSCI S&C identifies which projects (including joint ventures) are thermal versus metallurgical coal projects and aggregates the associated revenues.
- **By region:** If revenue is reported by region, company projects (including joint ventures) are mapped to each region. Where possible, production volumes and average sales price data are projected for the fiscal year in question to estimate revenues for each relevant project.
- If revenue from thermal and metallurgical coal is not disclosed separately, however total revenue from coal mining operations is reported, the number of mines is used as a proxy to split total mining revenues between thermal and metallurgical and estimate a revenue percentage associated with each coal type.
    - Example: if a company has operations in 12 mines out of which one is thermal and 11 are metallurgical, 1/12th of the company's coal revenues is allocated to thermal coal mining and 11/12th revenue is allocated to metallurgical coal mining
- If revenue from thermal and metallurgical coal is not disclosed separately and it is not possible to source the number of mines the company has an ownership stake in, its entire coal revenues are allocated to the coal type with majority operations. The flag for evidence of production for the other coal type is activated without assigning a revenue percentage.
- Mining Services Revenue: If the company does not disclose a split between thermal and metallurgical mining services revenues, its entire mining services revenues are included in thermal coal mining revenues.

MSCI S&C's thermal coal revenue does not include:

- Revenue from metallurgical coal (in other words, coal used in the production of steel);
- Coal mined for internal power generation (for example, in the case of vertically integrated power producers);
- Intra-company sales of mined thermal coal;
- Revenue from coal trading;
- Royalty income for companies not involved in thermal coal extraction operations.

MSCI S&C's metallurgical coal revenue does not include:

- Revenue from thermal coal (in other words, coal used for power generation);
- Coal mined for internal use in steel production;
- Intra-company sales of mined metallurgical coal;
- Revenue from coal trading;
- Royalty income for companies not involved in metallurgical coal extraction operations.

Treatment of discontinued operations- thermal and metallurgical coal

When a company sells a coal mine, suspends operations, or divests a coal division, it directly impacts the maximum revenue percentage reported at the company level.

- If such changes occur during a financial year, MSCI S&C calculates the maximum revenue percentage based on the revenues contributed by those operations for that year.
- Once the company stops reporting any revenue from those discontinued operations in its official disclosures, that revenue is removed from the maximum revenue percentage.

Impact on Reserves

If the suspension, decommissioning, or sale of a mine affects the company's coal reserves:

- MSCI S&C removes the associated reserves volume and reserves flags.
- This removal happens when publicly available company disclosures confirm the asset is no longer in operation or owned by the company.

Treatment of joint ventures and associates for coal mining

In case a company is involved in coal mining through JV and associates, coal mining revenue from the JV or associate is taken into account while estimating coal mining revenue percentage of the company. The calculation also accounts for the percentage ownership of the company in the respective JV or associate.

Oil and gas revenue related to extraction and production

MSCI S&C provides percentage of revenue (reported or estimated) generated from oil and gas extraction and production activities. Company-reported extraction and production revenue by category are provided, if available. In other cases, when there is no disclosure, MSCI S&C provides estimates as detailed later in this section.

The following categories are provided, as a percentage of total reported revenue (note that these include related royalty revenue):

- Oil and gas extraction and production revenue (%).
- Conventional oil and gas extraction and production revenue (%).
- Unconventional oil and gas extraction and production revenue (%).
- Oil sands extraction and production revenue (%).
- Shale oil extraction and production revenue (%).

- Shale gas extraction and production revenue (%).
- Arctic oil extraction and production revenue (%).
- Arctic gas extraction and production revenue (%).

These revenue factors do not include revenue from intra-company sales.

The following are provided separately from the extraction and production factors:

- Revenue from non-extraction activities:
    - Exploration.
    - Wells drilling.
    - Equipment and services.
    - Oil and gas refining.
    - Oil and gas distribution and retail.
    - Oil and gas pipelines and transportation.
    - Oil and gas trading.
    - Oil and gas petrochemicals.
    - Biofuel (this is not related to oil and gas but MSCI S&C does provide revenue from biofuel manufacturing as part of MSCI S&C's offering).

Estimation process: oil and gas extraction and production revenue by category

Where reported revenue data is not available, the estimation process is as follows:

- If the revenue from oil and gas production is reported and the company reports only one type of proven fossil fuels reserve (100% oil sands, 100% oil shale etc.), then this reserve type is used to determine the revenue category.
- If total production volume is reported and the company reports only one type of proven fossil fuel reserve (100% oil sands, 100% oil shale etc.), and if the realized price by geographic location is reported by the company, revenue is estimated as the production volume multiplied by the respective reported realized prices.
- If production volume by oil and gas type or field is reported and if the realized price by proven reserve type and by geographic location is reported by the company, then the revenue by category is estimated as production volume multiplied by the respective reported realized prices.
- If the split between conventional and unconventional type of production is not reported, but the company provides number of productive wells, then this split is used as a proxy proportion to estimate conventional and unconventional revenues.

- If the production volume is not reported, company production is estimated by sourcing the field-level production from other sources (example: other stakeholder's report) and scale it to the company's ownership
    - Example: Company A and Company B jointly operate a field. Company A does not report production from the field in its public disclosures, however, Company B reports the production in its disclosures. In such scenarios, Company B disclosures are used to estimate the production of Company A using the respective ownership percentage.
- If there is evidence that the company is involved in production, but the total production volume cannot be estimated or if the company does not disclose realized prices, then the company is flagged for evidence of corresponding oil and gas production type. However, no revenue estimates are provided for such cases.
- If revenues are estimated based on the methods above, then these would be further scaled as per company's external upstream revenues disclosed by the company.
- The revenue estimations only include consolidated revenues by the company.

Treatment of discontinued operations - oil and gas

Suspension of oil and gas operations or selling an oil/gas division are likely to have an impact on the contribution that such activities make to a company's revenues. If such an event occurs during a financial year, MSCI S&C uses the revenues contributed by the operations in question to calculate the maximum revenue percentage (for that year).

Revenue from such discontinued operations will be removed from percentage of revenue calculations provided at company level once the company stops reporting any revenue from these operations in its disclosures.

In case the suspension, decommissioning or sale of an oil and gas asset has an impact on a company's reserves, reserves flags and production volumes are removed when MSCI S&C identifies evidence of the suspension, decommissioning, or sale of the asset in question.

Treatment of related entities - oil and gas revenues

Revenues from joint ventures and associates are included in revenue estimations only when a company consolidates these revenues in its public disclosures (such as in segment reporting section of an annual report). If a company does not consolidate revenues from joint ventures and associates, these are not used in its oil and gas revenue estimation.

Oil and gas revenue related to other business activities in the value chain

MSCI S&C collects data on revenue derived from following oil and gas- related business activities (beyond extraction and production):

- Oil and gas refining and processing: this includes refining of oil and processing of gas.

- Oil and gas pipelines: this includes ownership and/or operation of oil and gas related pipelines and companies that facilitate oil and gas transmission via pipelines. This excludes revenues from terminals and storage facilities.
- Oil and gas transportation: this includes road, rail, shipping and air related transport of oil and gas. For some companies, it is difficult to split the revenue data for transportation of oil from transportation of gas. For such companies, MSCI S&C has attributed all the transportation revenue to oil.
- Oil and gas distribution: this includes revenues from oil and gas distribution pipelines, storage facilities, terminals and bulk stations.
- Oil and gas retail: oil and gas retail stations as well as liquefied petroleum gas bottling stations and related dealers.
- Petrochemical products: this includes manufacturing of petrochemical products as reported by the company.
- Trading of oil and gas: When a company reports revenue under trading of oil and gas, MSCI S&C captures it under this factor.
- Oil and gas equipment and services: this includes equipment and services across the value chain that comes in contact with the oil and gas (either in crude form or processed form) or that plays a critical role in oil and gas extraction and production, including construction of oil and gas rigs, refineries, pipelines, ship building and provision of other heavy construction services for oil and gas operations. This also includes leasing of land for oil and gas operations, rent and/or transport of equipment of oil and gas operations. Other solutions like provision of raw materials for oil and gas and the related supply chain, conducting seismic surveys, providing water and waste solutions, space solutions, communication services, fabrication services and transportation services for oil and gas.

Note that the following are not included:

- Manufacturing of industrial gases and catalysts.
- Manufacturing of cement used in construction of oil and gas refineries
- Development of software used in oil and gas operations.

In some cases, a company may only declare that it supplies to the oil and gas industry, but may not provide the revenues it derives from supplying to the oil and gas industry. In such a case, MSCI S&C estimates the revenues from supply to oil and gas by dividing the total revenues of the company by the total number of industries it serves and estimating this to be the revenue from each industry, including oil and gas. In case only a segment of the company serves the oil and gas industry, we would divide the revenues from that segment with the total number of industries served by that segment, and attribute a relevant portion of that to oil and gas related revenues.

Urgewald data

MSCI S&C provides Urgewald's Global Coal Exit List (GCEL) data on its distribution platforms. The screen identifies companies expanding their coal mining activities, developing new coal power plants, or building other coal-related infrastructure, such as coal export terminals or coal railway lines. The data are provided as raw data, without any intervention from MSCI S&C.

MSCI S&C publishes data annually from Urgewald's Global Coal Exit List indicating expansion based on the following criteria:

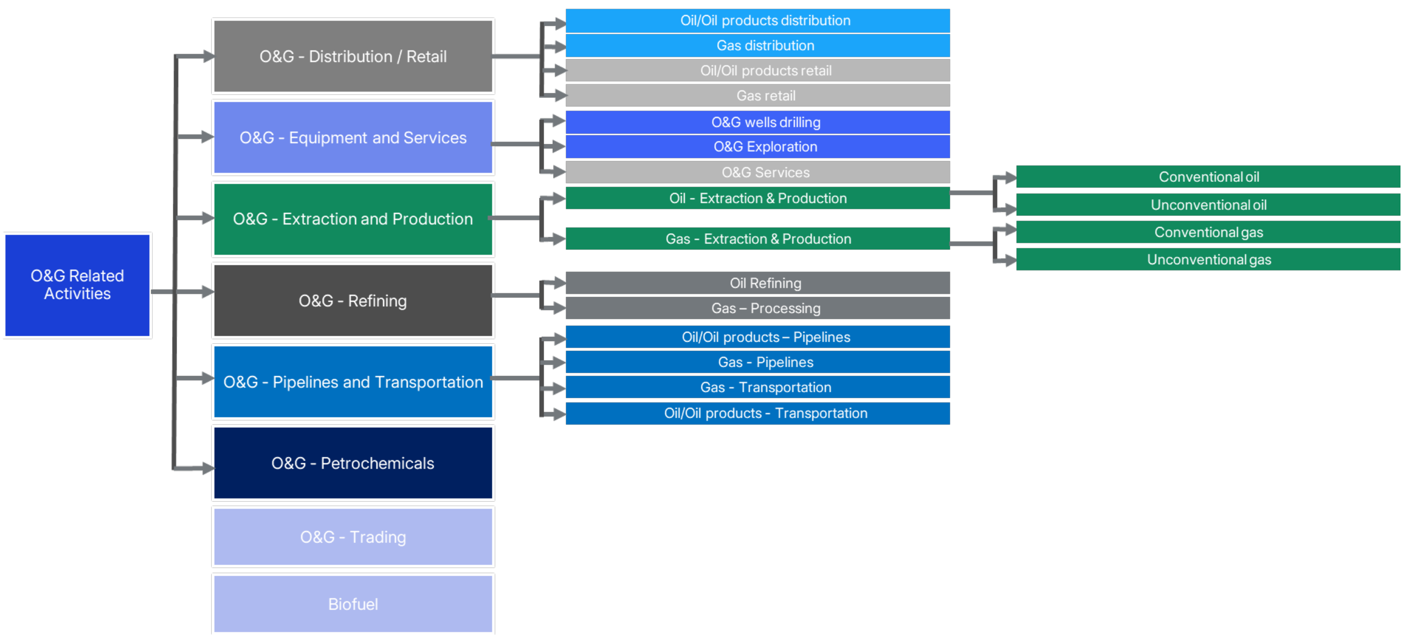
- Power: Companies planning to develop new coal-fired power capacity of at least 100 MW.
- Mining: Companies involved in coal exploration activities; planning to develop new coal mines or extending existing coal mines.
- Services: Companies involved in the development or expansion of coal transportation assets or other coal-related infrastructure such as coal-to-gas facilities.

MSCI S&C provides GCEL's coal power expansion plans data in total MW and prorated for companies with projects that have been announced, pre-permitted, permitted or under-construction. The coverage is based on Urgewald's listed equities mapped to the coverage universe. Companies in the GCEL list but outside of coverage universe may be omitted from the original list.

Aggregate metrics and use cases – fossil fuels and power generation

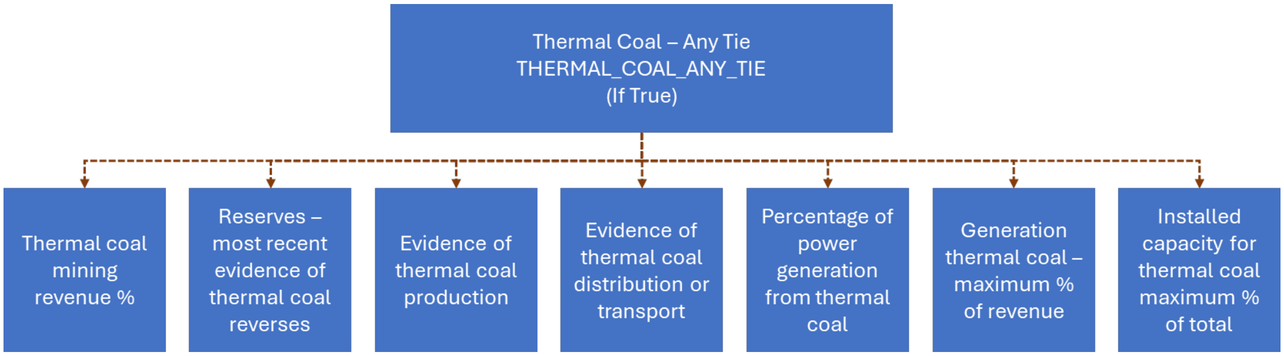
The underlying factors in the sections above are used to create aggregate factors across industries and fossil fuel and power generation activities related to oil, gas or coal. Factors like “any tie” aggregate existing underlying metrics. The following exhibits provide an overview of the aggregate metrics and their components:

Exhibit 4: Oil and gas value chain factors



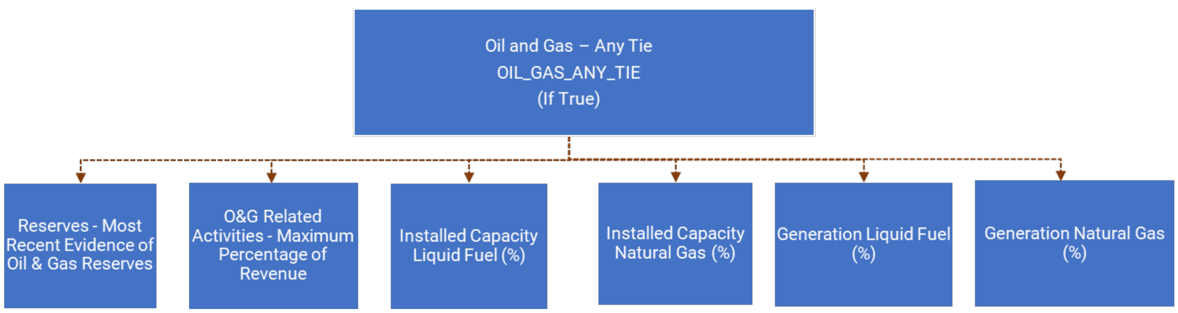
Notes: MSCI S&C also provides combined oil and gas factors for conventional and unconventional extraction and production. Note that oil and gas trading revenue is captured separately and is not part of the OG_REV factor. This is because trading is viewed as a commodity related activity and is not directly part of the extraction, production, manufacturing, distribution or transport, or sale of the oil and gas. Source: MSCI S&C; data as of September 2025.

Exhibit 5: Coal Any tie factor



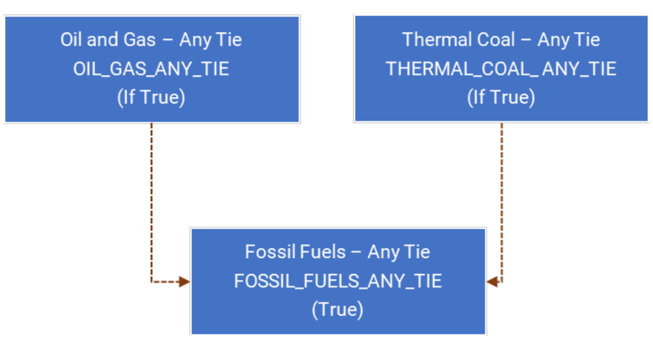
Source: MSCI S&C; data as of February 2025.

Exhibit 6: Oil and gas any tie factor



Source: MSCI S&C; data as of February 2025

Exhibit 7: Fossil fuel any tie factors



Source: MSCI S&C; data as of February 2025

Capital expenditure data and renewable energy capital expenditure ratio metrics

MSCI S&C provides the latest reported historical capital expenditure (CapEx) values for companies where forward-looking CapEx values are not available. Company-disclosed CapEx plans are captured within the below categories.

Exhibit 8: Business activity categorization of CapEx data

Business activity	Description of Business Activity	Reference
Electric networks	Electricity distribution and transmission	1
Gas networks	Utility gas distribution and transmission (excludes unregulated oil and gas transportation)	2
Heat networks	District heating and/or cooling networks	3
Total networks	**Sub-total**	**4 = 1+2+3**
Coal	Coal-fired power generation	5
Oil	Oil-fired power generation	6
Gas	Gas-fired power generation	7
Nuclear	Nuclear power generation	8
Total thermal generation	**Sub-total**	**9 = 5+6+7+8**
Hydro	Hydro-power generation	10
Wind	Wind power generation	11
Solar	Solar power generation	12
Biomass	Biomass power generation	13
Other renewables	Unspecified renewables technology or not specified as wind, solar and/or biomass	14
Total Renewables	**Sub-total**	**15 = 10+11+12+13+14**

generation		
Other 'green'	This includes electric vehicle manufacturing, electric vehicle charging infrastructure, hydrogen manufacturing, smart grids & networks (including hydrogen and electrification), battery production for green technology/ renewable grid, equipment manufacturing related to renewables like wind turbine, solar panels or components, carbon capture & storage, green or low carbon cement & steel, and low carbon customer solutions (energy efficiency, customer renewables installations, and retrofit).	16
Other	All other expenditure	17
Total capital expenditure	**Sub-total**	**18 = 4+9+10+16+17**

CapEx data collection and estimation

Company-disclosed CapEx by business activity and by fuel type for power generation are used, where available.

Where companies disclose total capital expenditure and proportions by business activity and/or fuel type expressed in percentage terms, the total value is multiplied by the proportion for each category to calculate CapEx per business activity and fuel type.

Where a company's disclosure is not available in this detail, the data at an aggregated category level are provided if possible (e.g., if capital expenditure in thermal power plants is available, but the exact fuel is unspecified, the amount would be captured within the 'Total thermal generation' sub-total.) MSCI S&C does not estimate the split by fuel.

This means that a null value may not always signify an actual zero CapEx in a category but could reflect a lack of corporate disclosure at this level of detail.

Where a company has not disclosed capital expenditure in a given business activity and there is evidence that the company's business mix does not include such activity (e.g., a company has no gas transportation network business and there is no mention of capital expenditure in gas networks in its disclosures), this is indicated as zero.

Where there is no forward-looking CapEx plans available, a breakdown of the latest reported historical capital expenditure is used. Allocation of latest reported CapEx follows the same principles as described above. The timeframe of CapEx data captured for each company is indicated in the supporting data fields (forward-looking or historical and CapEx plan start and end year).

Sectors and technologies covered

The CapEx dataset covers the GICS sub-industries listed in Exhibit 9:

Exhibit 9: GICS sub industries covered by the CapEx dataset

GICS_SUBINDUSTRY	GICS_SECTOR
Automobile Manufacturers	Consumer Discretionary
Textiles	Consumer Discretionary
Motorcycle Manufacturers	Consumer Discretionary
Home Furnishings	Consumer Discretionary
Housewares & Specialties	Consumer Discretionary
Packaged Foods & Meats	Consumer Staples
Soft Drinks & Non-alcoholic Beverages	Consumer Staples
Agricultural Products & Services	Consumer Staples
Food Distributors	Consumer Staples
Household Products	Consumer Staples
Brewers	Consumer Staples
Electrical Components & Equipment	Industrials
Construction & Engineering	Industrials
Building Products	Industrials
Industrial Machinery & Supplies & Components	Industrials
Construction Machinery & Heavy Transportation Equipment	Industrials
Data Processing & Outsourced Services	Industrials
Environmental & Facilities Services	Industrials
Agricultural & Farm Machinery	Industrials

Exhibit 9: GICS sub industries covered by the CapEx dataset (continued)

GICS_SUBINDUSTRY	GICS_SECTOR
Airport Services	Industrials
Industrial Conglomerates	Industrials
Heavy Electrical Equipment	Industrials
Internet Services & Infrastructure	Information Technology
Construction Materials	Materials
Steel	Materials
Aluminum	Materials
Paper Products	Materials
Forest Products	Materials
Office REITs	Real Estate
Multi-Family Residential REITs	Real Estate
Single-Family Residential REITs	Real Estate
Hotel & Resort REITs	Real Estate
Self-Storage REITs	Real Estate
Industrial REITs	Real Estate
Oil & Gas Refining & Marketing	Energy
Oil & Gas Drilling	Energy
Oil & Gas Exploration & Production	Energy
Oil & Gas Storage & Transportation	Energy
Oil & Gas Equipment & Services	Energy
Gas Utilities	Energy
Coal & Consumable Fuels	Energy
Integrated Oil & Gas	Energy
Multi-Utilities	Utilities
Renewable Electricity	Utilities
Independent Power Producers & Energy Traders	Utilities
Electric Utilities	Utilities
Water Utilities	Utilities

Within the CapEx dataset, technologies considered renewable include hydro-power generation (regardless of scale), wind, solar, biomass, geothermal, wave. This set of technologies may not fully correspond to some regulatory classifications, including European Union regulations such as the EU Taxonomy on Sustainable Finance.

The selection of technologies has been driven by data availability. Companies often disclose CapEx in renewable technologies without specifying the technology breakdown. Hydropower and biomass are typically included as renewable in company disclosures and as a result are included as such in MSCI S&C's data.

Renewable energy capex ratio

The renewable energy CapEx ratio is calculated following the guidance in the EU Commission Delegated Regulation 2020/1816. This is defined as capital expenditure in renewable energy as a share of total company capital expenditure (e.g., category 15 divided by category 18 as per Exhibit 8 above). The calculation uses MSCI S&C's definition of renewable energy as defined above.

Exhibit 10: Renewable CapEx ratio calculations for two hypothetical companies

Sector	Company	Renewable energy CapEx (EUR billion)	Total CapEx (EUR billion)	Renewable energy CapEx ratio	Source
Utilities	HyCo1	12.5	29	**43%** = 12.5/29	CapEx plan for 2020-2022
Energy	HyCo 2	2.6	29	**9% =** 2.6/29	CapEx plan for 2020-2023

Assumptions:

1. **Ratio is dependent on MSCI S&C's definition of 'renewable energy'** - The ratio captures a limited set of lower carbon intensity activities, i.e., lower carbon power generation technologies only. Diversification into all other low carbon solutions or business activities such as electric vehicles infrastructure, energy efficiency, low carbon customer solutions, biofuels and others are currently excluded from the ratio.

2. **Ratio should be interpreted with caution for diversified businesses** - Comparison of investments in renewable energy generation against total company CapEx could lead to varying interpretations, especially for diversified utilities.

For example, HyCo's 1 renewable energy CapEx ratio is calculated at 43%. This differs substantially from its share of planned renewable power generation capacity additions relative to total company capacity additions (11,900 MW of solar, wind and hydro capacity additions represent 100% of HyCo's 1 planned capacity additions for the period 2020-2022). The reason for the difference is the denominator – the renewable energy CapEx ratio measures renewable energy CapEx against total company CapEx (including CapEx earmarked for business other than power generation). The ratio using capacity additions data measures renewables investments as a share within the power generation segment only.

EU Paris Alignment – Minimum Exclusion Components supporting template 1 for the EBA Pillar 3 ESG disclosure[14]

The screens below have been developed as a tool to support banks in aligning with the EU Paris-aligned Benchmarks referenced in climate disclosure regulations from the European Banking Authority (EBA), specifically EBA Pillar 3: disclosure of ESG risk. These screens identify companies within coverage of the fossil fuels and power generation metrics that may not align with the criteria of Article 12.1 (d) to (g) and Article 12.2 of the EU Commission Delegated Regulation (EU CDR), i.e., companies that may breach certain thresholds for revenues (reported or estimated) from fossil fuel-related activities or power generation emissions intensity, or that are involved in significant environmental controversies.[15]

The EBA published binding standards on Pillar 3 disclosures on ESG risks in January 2022.[16] Details on these standards, requirements and MSCI S&C's guidance on approaching them are provided in MSCI's EBA Pillar 3 ESG Risks Data Guide. As part of template 1, banks must identify their exposure to companies excluded from EU Paris-aligned Benchmarks, referencing Article 12.1 (d) to (g) and Article 12.2 of the EU CDR.

Using MSCI's fossil fuels and power generation data set, MSCI S&C provides the following screens to support alignment with EBA Pillar 3 Template 1:

- **Thermal Coal revenue**: Flags all companies deriving 1% or more of total revenue from the mining and extraction of thermal coal (including lignite, bituminous, anthracite and steam coal) and its sale to external parties. It excludes revenue from metallurgical coal, coal mined for internal power generation (e.g., in the case of vertically integrated power producers), intracompany sales of mined thermal coal, and revenue from coal trading (either reported or estimated).

  MSCI S&C also identifies companies that have a connection to the distribution or transport of coal. We do not collect revenues related to thermal coal distribution or transport due to a lack of consistent data – different issuers disclose involvement in thermal coal distribution or transport differently and most issuers only disclose an involvement in distribution or transport without mentioning related revenues. Hence, for now, we capture only involvement in distribution or transport of thermal coal. For thermal coal revenue, companies are flagged if

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[14] For all references to laws, rules or regulations, please note that the information is provided "as is" and does not constitute legal advice or any binding interpretation. Any approach to comply with regulatory or policy initiatives should be discussed with your own legal counsel and/or the relevant competent authority, as needed.

[15] Commission Delegated Regulation (EU) 2020/1818 of 17 July 2020 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards minimum standards for EU Climate Transition Benchmarks and EU Paris-aligned Benchmarks

[16] Final draft implementing technical standards on prudential disclosures on ESG risks in accordance with Article 449a CRR, January 24, 2022. EBA/IST/2022/01

they either derive 1% or more of total revenue from mining of thermal coal or are connected to the distribution or transport of coal.

- **Oil revenue**: Flags all companies deriving 10% or more of total revenue from oil related activities, including exploration, wells drilling, extraction, production, refining, distribution, pipelines and transportation but excluding biofuel production, petrochemicals production, revenue from retail and services companies, and trading activities.
- **Gas revenue**: Flags all companies deriving 50% or more of total revenue from natural gas related activities, including exploration, wells drilling, extraction, production, processing, manufacturing, or distribution, pipelines and transportation but excluding biofuel production, petrochemicals production, revenue from retail and services companies, and trading activities.
- **Power Generation revenue**: Flags all companies deriving 50% or more of total revenue from fossil fuel-based (including coal, liquid fuel, or natural gas) power generation. The average intensity for fossil fuel-based power generation is well above 100 g CO_2e/kWh and hence fossil fuel-based power generation is used as a proxy for power generation with emissions over 100 g CO2e/kWh.[17]
- **Environmental controversies**: Flags all companies involved in one or more environmental controversies classified as having a severe or very severe nature based on MSCI S&C's assessment. These controversies may indicate a violation of one or more of the environmental objectives referred to in Article 9 of Regulation EU (2020/852).
- **Exclusion from EU Paris Aligned Benchmarks**: Flags all companies that are flagged under any of the screens listed above, which may indicate exclusion from EU Paris Aligned benchmarks in accordance with Article 12.1 (d) to (g) and Article 12.2 of the EU CDR.

[17] IPCC Special Report on Renewable Energy Sources and Climate Change mitigation (SRREN), 2011. The largest lifecycle emissions are associated with the combustion of coal. Lifecycle assessments reviewed in the SRREN showed a range of 675-1689 gCO_2e/kwh electricity. Corresponding ranges for oil and gas were 510-1170 gCO_2e/kwh and 290-930 gCO_2e/kwh respectively.

Fossil Fuels and Power Generation Metrics process

Ongoing monitoring and update cycle

Data for fossil fuel exposure is updated throughout the year following the publication of companies' annual filings on a rolling schedule. MSCI S&C aims to publish data for fossil fuel exposure for constituents of the MSCI ACWI index within three months, and for other issuers within eight months, of the month when disclosure is made publicly available by the company.

For companies scheduled for an annual update in a given month, data is generally available in ESG Manager five business days before the end of that month.

Data sources

MSCI S&C uses preferred sources, when possible, to evaluate company's fossil fuels and power generation metrics. Preferred sources are detailed below.

MSCI S&C may also use supplemental sources in certain cases, including where preferred sources do not yield sufficient information for an evaluation to be made. These are detailed below.

Preferred sources – public disclosures

The following public disclosures are considered as primary sources to collect company data:

- **Company direct disclosure**: sustainability reports, annual reports and regulatory filings, and company websites.
- **Company indirect disclosure**: government agencies' published data, industry and trade associations' data, and financial data providers' data.

Preferred sources – third-party vendors

For selected fossil fuels and power generation metrics, wherever applicable, MSCI S&C uses third-party data vendors such as NGOs, third party databases and selected data vendors. All vendors are subject to MSCI S&C's vendor due diligence process.

Preferred sources – direct company communication

In certain cases, such as to confirm publicly disclosed power generation and fossil fuel reserves data or to inquire about information from outdated sources, MSCI S&C may communicate directly with companies to obtain clarifying information. MSCI S&C may also use company material that may not be directly provided on the official website, but on stock exchange websites.

Minimum data availability requirements

In certain cases, MSCI S&C uses estimates when a company-disclosed figure is not available. Estimates are typically derived from industry averages and extrapolation from company disclosures to derive more granular values (as in the cases of power generation/oil & gas revenue with minimum disclosures from companies) Many such bases of estimation are detailed above. In cases where MSCI S&C deems data to be insufficient to provide an estimate, MSCI S&C may choose to provide no metrics.

Data collection

Firstly, MSCI S&C uses data extraction and other automated techniques to identify companies that:

- Have an industry classification within defined parameters; or
- Have a business description that includes certain keywords.

Where involvement is potentially identified, ESG data experts review the preferred sources and, if required, the supplemental sources to assess fossil fuels and power generation involvement.

Data quality assurance

Data quality checks are conducted on all data prior to publication to address accuracy, completeness and validity. Automated data quality checks are conducted first and data that is flagged through these checks is subject to further review.

Methodology governance

MSCI S&C uses a committee structure to provide oversight and governance for the application of S&C methodologies:

Methodology determination:

MSCI S&C has established an internal methodology committee that presides over the development and review of all MSCI S&C methodologies, including the Fossil Fuels and Power Generation Metrics Methodology. All methodology update proposals are subject to market consultation prior to approval for implementation by this committee.

Methodology application:

The Fossil Fuels and Power Generation Metrics process includes multiple steps to review the quality of analysis and consistent application of methodology.

MSCI Carbon Methodology Committee ("Carbon MC"): The Carbon MC presides the interpretation of all evaluations related to carbon footprints, including carbon emissions, fossil fuels and power generation. This includes, without being limited to:

- Requests to deviate from the standard methodology (decisions involving a company's pending addition to, or removal from, fossil fuels and power generation evaluations for reasons that do not clearly fall within the current scope of the methodology).
- Periodic review of ESG evaluations prior to publication to ensure consistent methodology application.

- Methodological application clarifications or interpretations.

Entity selection & data mapping

ESG Evaluations, including fossil fuels and power generation metrics, may be attributed from a company to related companies. Companies are selected for evaluations through MSCI S&C's entity selection process — these are known as data entities. Evaluations are attributed to related companies through MSCI S&C's data mapping process.

Data entities

A data entity is defined as an entity subject to an evaluation. MSCI S&C conducts a review of the companies financing structure to determine which entity or entities with a group of companies should be evaluated for a given assessment.

Evaluation boundary

Where there are multiple fossil fuels and power generation evaluations within a group of companies, the fossil fuels and power generation evaluation boundary (that is, the extent of those companies that are included in the evaluation) may overlap, or a set of fossil fuels and power generation evaluations may be nested inside another, particularly where one of the companies is an equity issuer.

For fossil fuels and power generation metrics, the evaluation boundary for an equity issuer is the whole group of companies.

The evaluation boundary for a bond issuer that sits within a group but is financing only a discrete part of the group (e.g., a single business line or division, specific operating company, the captive finance activities, etc.) extends only to that part of the group. Any fossil fuels and power generation involvement identified for this discrete part of the group will also be reflected in the group's evaluation.

Data mapping

Data mapping is the process whereby assessments for a company (a data entity) are attributed to related companies. assessments are mapped based on observed parent-subsidiary relationships, subject to certain company and data point requirements.

Certain companies (such as those classified as financing companies) included in the coverage universe may be covered by data mapping from the relevant data entity.

Bond issuers outside the fossil fuels and power generation coverage universe may also have their evaluations mapped from parent entities that are included in the fossil fuels and power generation coverage universe.

Note that fossil fuels and power generation assessments are not mapped to:

- Equity issuers; or
- Companies that have already been assessed by MSCI S&C.

Appendix 1: Definitions of coal, oil and gas

Thermal coal:

Thermal coal refers to coal that is used for power generation. This type of coal typically includes lignite, bituminous, anthracite, sub-bituminous and steam coal.

Metallurgical coal:

Metallurgical coal, also known as coking coal, refers to coal used specifically for manufacturing steel. This type of coal typically includes a type of bituminous coal and some grades of anthracite coal.

Conventional oil and gas:

Conventional oil and gas refers to hydrocarbon liquids and gas which can be extracted, after the drilling operations, using the natural pressure of the wells and pumping or compression operations (vertical drilling).

Conventional oil refers to arctic onshore and offshore oil,[18] deep-water offshore oil, shallow-water offshore oil and other types of onshore and offshore oil found in conventional reservoirs and extracted using traditional drilling techniques.

Conventional gas refers to arctic onshore and offshore gas,[19] deep-water offshore gas, shallow-water offshore gas and other types of onshore and offshore gas found in conventional reservoirs and extracted using traditional drilling techniques.

Unconventional oil and gas:

Unconventional oil and gas include hydrocarbon liquids and gas that need to be extracted using additional technology, energy or investment from the source rock.

Unconventional oil includes shale oil, oil sands, oil shale, kerogen rich deposits, tar sands, bituminous shale, bitumen, synthetic crude oil, extra heavy oil and tight oil.

Unconventional gas includes shale gas, coal bed methane, coal seam gas and tight gas.

MSCI S&C makes a determination on whether production of oil and gas is classified as conventional or unconventional based on the production method. However, we cannot split volumes of conventional versus unconventional for oil and gas midstream and downstream (e.g., in transportation, refining or retail), equipment and services level.

[18] MSCI S&C defines arctic oil as oil and gas production within the Arctic Circle above 66.5 degrees North latitude.

[19] MSCI S&C defines arctic gas as gas production within the Arctic Circle above 66.5 degrees North latitude.

Notes:

i. Natural gas liquids (NGL) and condensates are classified as oil (and not gas).

ii. Liquified petroleum gas (LPG) is classified as gas (and not oil)

iii. Liquified natural gas (LNG) is classified as gas (and not oil).

iv. Compressed natural gas (CNG) is classified as gas (and not oil).

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