

RECOMMENDATIONS FOR ASSET MANAGERS | POWER SECTOR

February 2023

This document is part of a set of recommendations for asset managers to develop their climate policies. To be found <u>HERE</u>.

General sector overview

Coal-fired power generation is one of the highest emitting sectors in the world. Although many financial actors have already adopted restrictions on coal power funding, there are still 476 GW of new coal-fired power capacity still in the pipeline worldwide, 61% of this in China.¹

It is estimated that 42% of global coal power plants now run at a loss, and this numbers is projected to rise to 50% by 2030. By 2040, 72% will be unprofitable. Even with a "below 2°C" scenario, investors and governments will likely face over US\$267 billion in stranded assets.²

Despite its repeated depiction over the past couple of decades as a "clean alternative" to coal, fossil gas power emits high levels of GHGs, particularly when methane emissions from its production and transport are considered. A fossil gas combined-cycle plant can emit 403 to 513 gCO2e/kWh from a life cycle perspective compared to 751 to 1095 gCO2e/kWh for coal power.³

In 2022, for the first time, global energy transition investments equalled fossil fuels investments.⁴ The significant shift toward "clean energy" is a trend unlikely to be reversed as the energy world entered what the IEA describe as "a new industrial age – clean energy manufacturing age".⁵

Overall objectives

According to the IPCC, the UNEP and the IEA, for the power generation sector to be aligned with a 1.5°C scenario, fossil fuel-fired power capacity must stop expanding and all unabated plants should be closed by 2040 worldwide. In the OECD and Europe, coal-fired plants should be closed by 2030 and fossil gas-fired plants by 2035. There must be an immediate halt to approvals for new unabated coal-fired power plants. No new unabated fossil gas-fired power plants shall be built since fossil gas-fired power plants commonly have an operational lifetime of at least 30 years. 8.

Investments in the power sector must be massively reoriented from fossil fuels to conservation, energy efficiency, and renewable energy. To meet the IEA's NZE scenario, for every one dollar spent globally on fossil fuels by 2030, at least nine dollars must be invested in what the IEA classifies as "clean energy and efficiency investments". In the NZE, 40% of electricity generation comes from wind and solar by 2030 when annual capacity additions of all renewables reach 1,200 GW compared to the 290 GW renewables capacity installed in 2021. To achieve this, the annual spending on "clean energy investments" (energy efficiency, clean fuels and clean power, network and storage) needs to reach USD 4.2 trillion in 2030. This requires a larger contribution from the private finance than seen today: whereas public spending currently plays a larger role, private capital will account for nearly 60% of global clean energy spendings (85% in advanced economies) by 2030.

What to expect from companies

Asset managers shall expect portfolio utilities and power generation compagnies to meet the following minimal criteria:

- ✓ Immediate commitment to a net zero by 2050 objective aligned with a 1.5°C scenario.
- ✓ Immediately stop coal expansion plans and commit to meet in the short-term the following milestones:
 - → Stop new unabated fossil fuel-fired and biomass-fired plants.
 - → Commit to end coal-related activities by 2030 at the latest in OECD and European countries, and by 2040 worldwide.
 - → Commit to bringing fossil gas-related activities close to zero by 2035 at the latest in OECD and European countries, and by 2040 worldwide.
 - → By 2030, for every dollar of capex investment spent in fossil fuel-fired power sector, at least 4 dollars shall be invested in sustainable power (See definition in "General Recommendations").¹¹ This ratio shall be increased to 1:9 if it includes production, storage, transport and energy efficiency measures.¹²
- ✓ Adopt a comprehensive climate transition plan that allows investors to assess its alignment with a 1.5°C scenario.
- ✓ Commit to submit the above-mentioned plan and an assessment of its ongoing implementation to an annual vote ("Say on Climate") at the AGM.

The climate transition plan shall include, at a minimum, the following indicators:

- ✓ Short-and medium-term GHG emissions reduction targets on Scopes 1, 2 and 3, expressed in both absolute and intensity emissions, encompassing all activities.
- ✓ Possible contribution of captured GHG volumes to achieving emissions reduction targets.
- ✓ Carbon offsetting approaches that may be implemented to complement the reduction targets.
- ✓ Targeted energy mix evolution over short and medium terms
- ✓ Short- and medium-term capex plans disaggregated by activity and by allocation between maintenance and development of any new assets.
- ✓ Short- and medium-term opex disaggregated by activity and by cost item.
- ✓ Explanation of baseline scenario used to set decarbonization targets and how this takes into account the best available science.

Asset managers shall require corporate climate transition plans to include a credible plan for dated closures of unsustainable assets, detailed on a facility-by-facility basis. These closures must be planned at a pace consistent with a 1.5°C scenario and accompanied by just transition plans, and funding for implementing all social and environmental obligations.¹³

In case the plants are not closed but sold, asset managers shall expect strong guarantees from the power producer that any new owners will:

- ✓ Close any coal plant before 2030 and any fossil gas-fired plant before 2035 if it is located in the OCED or European countries, or before 2040 elsewhere.
- ✓ Not convert any plants to other fossil fuels or biomass.
- ✓ Provide sufficient financial means and measures to ensure that all social and environmental obligations are met.

In case the plants are not closed but converted to other technologies, asset managers shall expect strong guarantees from the power producer that:

- ✓ A comparative analysis shows that this conversion is economically, ecologically, financially, and technically more advantageous than closure or replacement by renewable energies with equivalent production capacity.
- ✓ An environmental and climate impact assessment demonstrates that the conversion will not result in increased GHG emissions across the value chain (and not just at the combustion stage).
- ✓ A closure deadline consistent with a 1.5°C scenario, with a just and sustainable transition plan, including the guarantees concerning the capacity to fund and implement all workers and environmental obligations.¹⁴

Claims that a future power plant will be retrofitted with carbon capture and storage (CCS) or conversion to "low-carbon energy sources" (such as biogas or hydrogen¹⁵) shall not be used to delay a fossil fuel-fired plant's closure.¹⁶

Asset managers shall not consider a decarbonization target or a net-zero commitment as a substitute for a credible coal phase-out plan.

Recommendations on targeted restrictions

Asset managers shall adopt time-bound restrictions on an increasing number of fossil fuel and unsustainable power projects and companies, aiming to prevent the expansion of fossil and unsustainable assets in the power sector, while supporting their progressive phase-out. Achieving these measures will require the asset manager to:

- ✓ Make public its expectations from power generation companies and utilities, and any associated exclusions.
- ✓ Implement an engagement policy towards the relevant companies to induce them to meet expectations.
- ✓ Implement a progressive escalation strategy that would ultimately lead to a full exclusion in case expectations are not met.

Asset managers shall adopt restrictive measures over time to induce companies to stop their fossil and unsustainable expansion plans in the power sector:

- ✓ No new investment in fossil, unsustainable and biomass power plants.
- ✓ Exclusion of companies still involved in new coal plants.
- ✓ No new investment in companies with no commitment not to develop new fossil fuel and biomass plants (an exemption to this restriction may apply until 2025 for companies subject to engagement from investors through Climate Action 100+).

Asset managers shall commit to have no further portfolio exposure to fossil fuel-fired and unsustainable power plants according to the following timeframe:

- ✓ Unabated coal-fired power plants in OECD and European countries by 2030.
- ✓ Unabated fossil oil- and gas-fired plants in OECD and European countries by 2035.
- ✓ All unabated fossil fuel plants by 2040 worldwide.

Asset managers shall adopt restrictive measures over time to gradually reduce their exposure to these activities, while encouraging compagnies to plan a phase-out of their assets and support renewable energy development by committing to:

- ✓ Immediate exclusion of companies which derive more than 10% of their power production or installed power capacity from coal, and of companies with more than 2.5 GW of coal-fired power capacity.¹⁷
- ✓ Immediately making new investments conditional on a commitment by the power producers to the adoption of a net zero target by 2050 aligned with a 1.5°C scenario.
- ✓ From 2024, making new investments conditional on a commitment by the power producers to:
 - → Bring their fossil fuel activities close to zero by 2035 in OECD and European countries, and by 2040 worldwide.
 - → Allocate most of their capex to renewable energy, excluding unsustainable energy sources.

- → A comprehensive climate transition plan that allows investors to assess it against a 1.5°C scenario as a benchmark and is subject to an annual consultative vote at the AGM (as described above).
- ✓ Immediate commitment to exclude any company that sells any fossil fuel-fired plant, unless:
 - → In case the plants are not closed but sold, asset managers shall expect strong guarantees from the power producer that the new owners will:
 - Close any coal-fired plant before 2030 and any fossil gas—fired plant before 2035 if the plant is located in the OCED or European countries, or before 2040 elsewhere.
 - Not convert any plant to other fossil fuels or biomass.
 - Provide sufficient financial means and measures to ensure that all social and environmental obligations are met.
 - → In case new biomass or fossil gas plants are allowed, or in case plants are not closed but converted to another technology, asset managers shall expect strong guarantees from the power producer that:
 - A comparative analysis shows that this conversion is economically, ecologically, financially and technically more advantageous than closure or replacement by renewable energies with equivalent production capacity.
 - An environmental and climate impact assessment demonstrates that the conversion will not result in increased GHG emissions across the value chain (and not just at the combustion stage).
 - A closure deadline consistent with a 1.5°C scenario, with a just and sustainable transition plan, including guarantees concerning the capacity to fund and implement all worker and environmental obligations.¹⁸

An exception to the above measures may be made for the financing of activities or subsidiaries dedicated to the energy transition (e.g. the deployment of renewable energy). Dedicated funding (for example via use of proceeds bonds) must be explicitly earmarked and must not be used for other activities. More specifically, an exception could be tolerated for green bonds or other sustainable use of proceeds bonds if the issuer's definition of green is rigorously verified. A Second Party Opinion on the issuer's framework alone does not guarantee the sustainable attributes of these debt instruments. It is recommended for asset managers to have a public framework that clearly defines the projects they may finance with sustainable debt market instruments and to verify the compatibility of the overall strategy of the issuer with their own commitments.

This exception must remain temporary, and only apply for the time needed for the company to align its corporate strategy with a 1.5°C scenario. SLBs cannot be subject to such an exception because they benefit the whole company, including its dirty activities.

N.B.: These recommendations are specific to the power sector and shall be read and implemented in addition to other sets of recommendations, including those given in the "General recommendations".

¹ For more information: Urgewald, Global Coal Exit List 2022: no transition in sight, October 2022

- ³ UNECE, <u>Carbon Neutrality in the UNECE Region: Integrated Life-cycle Assessment of Electricity Sources</u>, March 2022.
- ⁴ Bloomberg NEF, Energy Transition Investment Now On Par with Fossil Fuel, February 2023.
- ⁵ International Energy Agency, <u>Energy Technology Perspectives 2023</u>, January 2023.
- ⁶ International Energy Agency, <u>Coal in Net Zero Transition: Strategies for rapid, secure and people-centred change</u>, November 2022
- ⁷ International Energy Agency, Net Zero by 2050: A roadmap for the global energy sector, October 2021
- ⁸ IISD, <u>Lighting the Path: What IPCC energy pathways tell us about Paris-aligned policies and investments</u>, June 2022
- ⁹ International Energy Agency, World Energy Outlook 2022, p.62, November 2022
- ¹⁰ International Energy Agency, World Energy Outlook 2022, p.138, November 2022
- ¹¹ Bloomberg NEF, <u>Investment Requirements of a Low-Carbon World: Energy Supply Investment Ratios</u>, October 2022.
- ¹² Reclaim Finance, WEO 2022 From the fossil fuel age to the clean energy era, November 2022.
- ¹³ For more information: International Energy Agency, <u>Phasing out unabated coal: current status and three case studies</u> October 2021. Beyond Coal, <u>Just transition in the context of European power utilities and Asset managers</u>, August 2020.
- ¹⁴ Ibid.
- ¹⁵ Although these technologies provide an advantage in terms of lowering GHG emissions for electricity generation, their level of maturity is far too low and the cost of conversion far too high to expect a reduction in emissions from the sector in the medium term. For example, current production level for low-carbon hydrogen is only around 0.5% of current hydrogen production being from low-carbon sources, that is about 0.03% of global fossil gas production (Source: IGU, Global Renewable and low-carbon gas report, 2021).
- ¹⁶ For more information: International Energy Agency, <u>CCS Retrofit</u>: <u>Analysis of the Globally Installed Coal-Fired Pow</u>er Plant Fleet, 2012
- ¹⁷ Urgewald's GCEL currently lists 20% of power production or installed power capacity from coal thresholds, and 5 GW of coal-fired power capacity. They will be lowered to 10% of the coal share of power capacity/generation and 2,5 GW of in the updated plan of 2023.
- ¹⁸ For more information: International Energy Agency, <u>Phasing out unabated coal: current status and three case studies</u> October 2021. Beyond Coal, <u>Just transition in the context of European power utilities and Asset managers</u>, August 2020.

² Carbon Tracker, <u>Powering Down Coal</u>: <u>Navigating the economic and financial risks in the last years of</u> coal power, November 2018