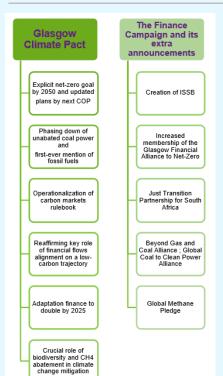


ESG Monitor

SPECIAL FEATURE: COP26 UPDATE FRIDAY, DECEMBER 3, 2021

COP26 FINANCIAL COMPAIGN AT A GLANCE - ACHIEVEMENTS AND PROGRESS

The 2021 United Nations Climate Change Conference - COP26 Summit held in Glasgow, from 31 October to 13 November 2021 has led to major advance in many areas, albeit further substantial efforts are needed to meet the below 2 degrees Celsius target (3.6 degrees Fahrenheit). This special feature of the ESG Monitor summarizes noteworthy developments and focusses on the progress made on the financial sector front. The Finance Campaign encompasses four pillars: risk management, mobilization of capital, net-zero alignment, and disclosure.



After intense negotiations, the COP26 summit resulted in the **Glasgow Climate Pact.** 197 countries have signed this set of principles and goals to address climate change challenges. **This agreement completes the Paris rulebook and constitutes progress, albeit some crucial topics remain unsettled**.

- Ahead of the COP27 in Egypt next year, parties committed to publish updated plans to cut greenhouse gas emissions by 45% by 2030 and contribute to the net-zero goal¹ by 2050. It is the first agreement to explicitly mention such a goal (e.g., §22, §32).
- An agreement was reached on the fundamental norms related to **Article 6 of the Paris Agreement on carbon markets**, making it fully operational. It also gives more certainty and predictability to both market and non-market approaches in support of mitigation. Article 54 is also consistent with the Paris Agreement², by recalling the **key role played by the financial sector in mitigating climate change**³.
- Financial flows dedicated to adaptation to climate change will double by 2025 (from 2019 levels), and Parties aim to reach the \$100 billion goal every year by 2023 (that should have been achieved by 2020).
- There is an unprecedented mention of fossil fuels in the Pact, with a focus on "phasing down" unabated coal power⁴ and "inefficient" fossil fuel subsidies. The language adopted by the Pact remains weaker than expected by climate science (e.g., International Energy Agency), considering it does not provide for a phasing-out of all coal power plants needed to not overshoot the 2°C temperature increase.

Specific sections emphasize the crucial role of biodiversity and ecosystems in mitigating climate change⁵. It points out the role of methane (CH4) emissions in

climate change and invites Parties to substantially reduce them by 2030.

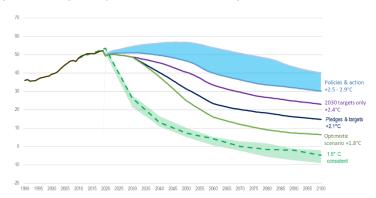
COP26 has also sped up climate action. Of relevance to the financial sector are several tangible steps forward:

- The establishment of the International Sustainability Standards Board (ISSB)has been announced by the IFRS Foundation to enhance the quality, transparency, and reliability of climate and ESG related reportings.
- The Glasgow Financial Alliance to Net-Zero⁶ that brings together net-zero finance initiatives in one sector-wide coalition now includes over 450 financial firms across 45 countries responsible for assets of over \$130 trillion. Key methodological concerns remain, as there are no near-term plans, deadlines, or commitments to decarbonize portfolios and balance sheets at this stage.
- The United States, the United Kingdom, Germany, France, and the European Union have partnered to provide a funding of \$8.5bn to support South Africa in phasing out coal ("The **Just Transition Partnership**").
- The creation of the Beyond Gas and Coal Alliance and the Global Coal to Clean Power Alliance⁷ (both governmental).
- Over 100 countries representing 70% of the global economy and nearly half of anthropogenic methane emissions including
 the U.S. and the EU have joined the Global Methane Pledge⁸.

Remaining under 1.5 degrees Celsius of temperature increase is a critical condition, supporting the need for a stronger commitment to bend the temperature curve and reach the climate ambition

Current 2030 target pledges fall short of the Paris Agreement goals to reach the crucial limit of 1.5 degrees Celsius by 2100.

1. 2100 warming projections based on pledges and current policies in place (as of November 2021)

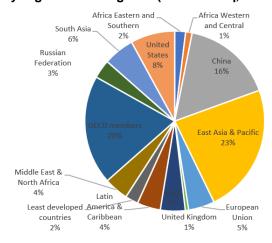


Source: Climate Action Tracker Project, according to IPCC SR 1.5 scenarios (update November 2021); World Bank Data

- Current policies in place would result in about 2.7°C of warming above pre-industrial levels, while nationally determined contributions by Parties to the Paris Agreement would limit warming to 2.4 °C. Following the COP26, warming estimates have decreased by about 0.3% due to the inclusion of renewed U.S and China targets.
- A substantial "ambition gap" remains between current pledges and policies and the temperature goals agreed upon in the Paris Agreement.
- The Glasgow Pact agreed to revisit the 2030 commitments and keep the 1.5°C target within reach.

The distribution of sources of greenhouse gas emissions worldwide reveals their spatial inequality and related transition challenges

2. Breakdown of total greenhouse gas emissions by region and categories (kt of CO2 eq, as of 2018)



- The unequal distribution of greenhouse gas emissions across the world shows discrepancy between OECD economies and non-OECD economies, with a large share stemming from the European Union, the United States, East Asia and the Pacific and China.
- Uneven distributions underpins difficult issues at stake behind the COP26 agreement, including the importance of counting imported and exported greenhouse gas emissions in mitigation policies, and "just" transition imperatives⁹.

¹ Net-zero means any residual emissions from hard-to-abate industries need to be removed from the atmosphere through technology or nature-based solutions.
² Article 2.1c: "This Agreement [...] aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, including by: (c) Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.
³ Article 54: "Parties underscore the urgency of enhancing understanding and action to make finance flows consistent with a pathway towards low greenhouse gas emission and climate-resilient development."

gas emission and climate-resilient development".

4 Coal power plants not using carbon capture and storage technology equipment".

⁵ About 92% of the updated "Nationally Determined Contributions" ahead of the COP26 include nature-based solutions, which harness the power of ecosystems to reduce emissions and adapt to climate impacts. See NDCs Increasingly Becoming a Forcefor Nature | WWF (panda.org)

⁶ See here: Amount of finance committed to achieving 1.5°C now at scale needed to deliver the transition | Glasgow Financial Alliance for Net Zero (gfanzero.com)

⁶ See here: Amount of finance committed to achieving 1.5°C now at scale needed to deliver the transition | Glasgow Financial Alliance for Net Zero (gfanzero.com)
⁷ "We will end new direct public support for the international unabated fossil fuel energy sector by the end of 2022, except in limited and clearly defined circumstances that are consistent with a 1.5°C warming limit and the goals of the Paris Agreement". See COP26) at the SEC — Glasgow 2021 (ukcop26.org)
⁸ See here: Launch by US, EU and Partners of the Global Methane Pledge (europa.eu) Countries commit to a collective goal of reducing global methane emissions

See here: <u>Launch by US, EU and Partners of the Global Methane Pledge (europa.eu)</u> Countries commit to a collective goal of reducing global methane emissions by at least 30% from 2020 levels by 2030" and to pursue the best available approaches to quantify the problem.
 See: Althor, G., Watson, J. & Fuller, R. Global mismatch between greenhouse gas emissions and the burden of climate change. *Sci Rep* 6, 20281 (2016), Jakob,

⁹ See: Althor, G., Watson, J. & Fuller, R. Global mismatch between greenhouse gas emissions and the burden of climate change. *Sci Rep* 6, 20281 (2016), Jakob, M., Marschinski, R. Interpreting trade-related CO₂ emission transfers. *Nature Clam Change* 3, 19–23 (2013), and https://ukcop26.org/supporting-the-conditions-for-a-just-transition-internationally/.

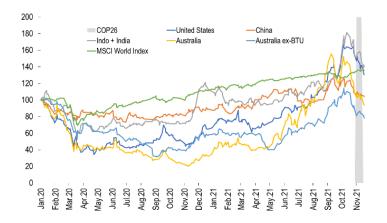
Pillar 1 of the Finance Campaign - Risk Management

An unprecedented commitment for coal phasing down; recent COP26 alliances affirm the risk of stranded assets¹⁰ and the need for enhanced risk management

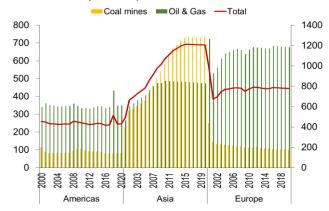
The depreciation of thermal coal stocks in 2021 has been notable with intensifying ESG pressures.

The recent rise of methane emissions in the energy sector justifies actions taken during the COP26 for abatement measures.

3. Evolution of coal miners' stocks performance vs. MSCI World Index (currency adjusted prices in USD, as of 18 November 2021)



4. Evolution of methane emissions across regions for the Coal mining and the Oil & Gas sectors (in million metric tons of CO2 equivalent)



Source: Bloomberg Intelligence, Bloomberg League Tables, IMF staff calculations, Global Coal Exit List (Oct. 2021 version)

- Amid mounting ESG pressures and with the Glasgow Climate Pact urging countries to accelerate the phasing out of coal power to limit global warming to 1.5°C, coal mining companies experience a more challenging road forward.
- The performance of U.S, Australian, Indonesian and Indian equity indexes composed of coal mining companies has decreased throughout 2020 before a slight increase in the first half of 2021. Indonesian and Chinese companies led the way with slower decrease in overall performance compared to 2020 (8% and 15%, respectively) than their U.S and Australian counterparts (29% and 50%, respectively). Since the COP26 summit, the downward trend has been reinforced.
- Global methane emissions have risen nearly 10% in the Oil and Gas and the Coal Mining sectors since 2000, resulting in record-high atmospheric concentrations of this greenhouse gas¹¹ (about 2.5 times above pre-industrial levels).
- Abating methane emissions¹² is a powerful way of reducing direct and indirect emissions from fossil fuel extraction and combustion¹³. Technologies to detect and measure methane emissions are becoming increasingly available. The Global Methane Pledge aims at incentivizing the deployment of these abatement technologies via voluntary or regulatory means.
- One hundred countries signed a pledge at the Glasgow summit to cut methane emissions by 30% by 2030.

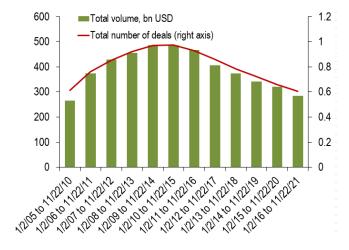
¹⁰ Stranded assets are assets that lose economic value well ahead of their anticipated useful life, whether that is a result of changes in legislation, market forces, disruptive innovation, societal norms, or environmental shocks (Kyra Bos, Joyeeta Gupta, Stranded assets and stranded resources: Implications for climate change mitigation and global sustainable development, *Energy Research & Social Science*, Volume 56, 2019, ISSN 2214-6296).
¹¹ Methane's atmospheric lifetime — around 12 years — is much shorter than that of CO2, which lingers for more than a century. But methane is, per unit, more

¹¹ Methane's atmospheric lifetime — around 12 years — is much shorter than that of CO2, which lingers for more than a century. But methane is, per unit, more than 20 times as potent as CO₂ as a greenhouse gas (over a 20-year period, the global-warming potential of one ton of atmospheric methane is similar to that of around 85 tons of CO₂, according to the IPCC).

around 85 tons of CO₂, according to the IPCC). ¹² These emissions come from a variety of sources along the coal and the oil and gas value chains (for the latter, from conventional and unconventional production), from the collection and processing of gas, as well as from its transmission and distribution to end-use consumers. While some of the emissions are accidental (e.g. seal or leaking valve), others are due to the design of the facility or equipment. ¹³ IEA, Methane Tracker, 2020.

The evolution of loans to thermal corporates shows a substantial decline since the Paris Agreement

5. Evolution in volume of global loans made to Asian thermal coal companies (mining, power, services, and integrated companies) between 2001 and 2021



The substantial increase of the bond market for Asian coal companies shows a highly leveraged sector in a context of steady development of the coal sector across the region

6. Evolution in volume of corporate bonds issued by thermal coal Asian companies (mining, power, services, and integrated companies) between 2001 and 2021 (USD billions)



Source: Bloomberg League Tables, IMF staff calculations, Global Coal Exit List (Oct. 2021 version); Global Methane Initiative, IMF staff calculations, U.S Environmental Protection Agency

- The volume of bank loans granted to Asian coal companies has decreased by about 40% between 2015 and 2021. The overall number of deals as of November 2021 has almost returned to 2010 levels, under a 600-deal threshold for the period. Top parties for the vast majority of these deals are Chinese and Indian credit institutions (on average, a 14.6% share in total deals across the period 2001-2021).
- Ten countries with the largest coal power pipelines worldwide are alllocated in Asia (bar South Africa). Most coal developments projects are also mostly concentrated in Southeast Asia (i.e. ESG Monitor, 2 November 2021) in a context of coal demand supported by such growth in Asian markets¹⁴.
- Coal companies have benefited from favourable financial conditions. Debt issuance has reached record-high. The coal industry's debt market has grown by over 263% in the past two decades reaching \$1.024 trillion in stock as of November 2021. Chinese and Japanese banks are the top parties to these deals across the period.
- Looking forward, the Asian banking system's exposure to coal assets may cause some financial challenges given the ambitious transition set forth in the Glasgow Pact and other advances reached during the COP26 for this sector. In addition, there are social costs implied by the rapid coal mine closures, given the role of Asian markets in global manufacturing.

¹⁴ Most of the world's existing coal-fired power generation is in emerging and developing economies are indeed in Asia, while coal consumption in advanced economies has peaked in 2007. More than of the 195 coal plants being built around the world are in Asia – where coal plants are therefore still relatively young. Asian coal companies are highly leveraged, with growth in the coming years expected to be supported by higher coal prices. See: <u>Asia is set to support global coal demand for the next five years - News - IEA</u> and <u>It's critical to tackle coal emissions (worldbank.org)</u>.

Pillar 2 of the Finance Campaign - Mobilization of capital

The rise of sustainable finance "taxonomies" worldwide aims to support the global movement for capital mobilization towards low-carbon and transition projects and activities, while adaptation finance is still lagging

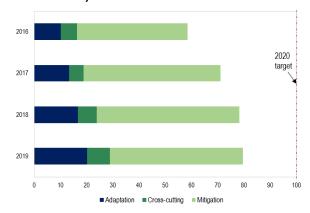
Countries developing taxonomies represent about 48% of global greenhouse gas emissions worldwide, participating to enhanced capital mobilization for "green" and transitional projects/corporates

7. Breakdown of greenhouse gas emissions by countries with existing or under development "green" and "transition" taxonomies (as of 2018)



Adaptation finance has been lagging the \$100 billion/year target, though COP26 has given a new breath to the issue

8. Breakdown of climate finance allocation provided and mobilized by developed nations* (as of 31 December 2019, in USD billions)



- * Including public and private sources (bilateral public climate finance, multilateral public climate finance attributable to developed countries, officially supported climate-related export credits, private finance mobilized by bilateral and multilateral finance interventions)

 Source: World Bank Data, IMF staff calculations
- The development of internationally-aligned sustainable finance classifications is one of the tools in supporting investors and other capital market participants to compare investment opportunities and align financial decisions on net-zero goals. They provide harmonized criteria to support mobilization of capital via new financial products and instruments dedicated to the transition. There has been a proliferation of taxonomies ahead of the COP26, with several countries (or economic unions) deploying or announcing taxonomies (the latest projects being the UK¹⁵ and the ASEAN¹⁶ ones).
- In view of their rapid deployment, the October 2021 Roadmap of the G20 Sustainable Finance Working Group suggests that jurisdictions should "consider developing sustainable finance taxonomies using the same language, voluntary use of reference or common taxonomies, and regional collaboration on taxonomies"

 17. This topic was a major issue debated during the COP26 Finance Campaign, that acted as a springboard for discussion on interoperability.
- While climate finance has overall grown over 2016-2018, with an increase of adaptation finance by 20% reaching \$20.1 billion in 2021, it remains far from its initially agreed target (i.e., the \$100 billion/year target decided at COP15 in Copenhaguen in 2009). In 2019, of the \$79.6 billion in climate finance, only 25% was dedicated to adaptation to climate change, while 63% was dedicated to climate change mitigation. Most of these funds were public loans and grants, both bilateral and multilateral, with only a limited share attributable to private finance.
- Discussions ahead of the COP26 concentrated on the diversity of funding sources and their reliability, as well as on target countries 18. Parties agreed in the Glasgow Climate Pact that climate finance dedicated to adaptation will double by 2025 (from 2019 levels), targeting around \$500 billion over the period 2021-2025.

¹⁵ See: Policy paper overview: Greening Finance: A Roadmap to Sustainable Investing - GOV.UK (www.gov.uk).

¹⁶ See: ASEAN Sectoral Bodies Release ASEAN Taxonomy for Sustainable Finance – Version 1 - ASEAN

¹⁷ See: <u>G20-Sustainable-Finance-Roadmap.pdf</u>.

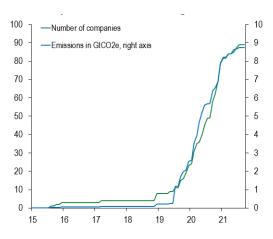
¹⁸ Independent Expert Group on Climate Finance. Delivering on the \$100 Billion Climate Finance Commitment and Transforming Climate Finance (Independent Expert Group on Climate Finance, 2020), Organization for Economic Co-operation and Development. Climate Finance Provided and Mobilized by Developed Countries: Aggregate Trends Updated with 2019 Data (OECD, 2021), Multilateral Development Banks. 2020 Joint Report on Multilateral Development Banks' Climate Finance (Multilateral Development Banks, 2020)., and Timperley J., The broken \$100 billion promise of climate finance – and how to fix it, Nature Climate Change, 20 October 2021.

Pillar 3 of the Finance Campaign – Net-zero alignment by 2050

COP26 has been a momentum for the Glasgow Financial Alliance for Net Zero, highlighting methodological steps are still needed to align with a net-zero objective

Private sector's largest emitters are committing to netzero emission targets

9. Climate Action 100+¹⁹ Focus Companies with Net-zero Targets and Their Projected Emissions Reduction (LHS: Number of Companies; RHS: GtCO2e)

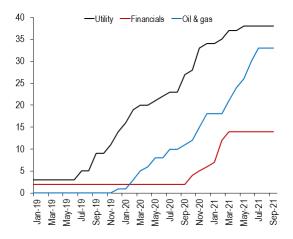


Source: BloombergNEF

- 236 focus companies, covering about 25% global emissions, have been selected for engagement. 96 of them have already set a net-zero target, a significant increase from 2020. If all 96 companies were to achieve their targets by 2050, annual emissions would fall by 10.8 GtCO2e, according to BloombergNEF.
- When a leading company sets a target, it tends to set off a chain reaction among competitors. This is why Climate Action 100+ has asked companies ahead of COP26 to publish medium term targets and disclosures to show progress, cautioning action if sufficient progress is not achieved in the next twelve months.
- Ahead of COP26, the Task-Force on Climate-Related Disclosures published guidance aiming to harmonize target-setting by companies, as well as metrics and transition plans²⁰. Such guidance has been extensively discussed during the Finance Campaign considering the increased need for full implementation of the "Stategy" and "Metrics and Targets" TCFD recommendations across sectors (e.g. ESG Monitor, 2 November 2021).

Companies in the Utilities and Oil and Gas sectors have set net-zero targets throughout 2021

10. Companies in Key Sectors Setting Net-zero Targets (Number of companies – including those not in the Climate Action 100+ group)



- Utility and oil & gas have seen a rapid increase in net-zero commitments since the summer of 2019, while financials have plateaued since early 2021. None of the financials with net-zero targets are also under the Climate Action 100+ group of focus companies. Materials (not represented in the graph) is the third largest industry group with net-zero emissions.
- The Glasgow Financial Allianz to Net Zero ²¹cochaired by Mark Carney and Michael Bloomberg fosuses on key areas that are critical to the netzero transition, in order to reach such targets. These areas of work for the next few months and years include: sectoral pathways (for major global industries), setting of transition plans for the real economy and for financial institutions, and developing portfolio alignment metrics.

¹⁹ Climate Action 100+ is an investor-led initiative to ensure the world's largest corporates greenhouse gas emitters take necessary action on climate change. The CA100+ Net-Zero Company Benchmark assesses the performance of the world's largest corporate greenhouse gas emitters against 11 sustainability-related indicators, including measuring TCFD alignment. Despite a rise in net-zero commitments, the inaugural 2020 CA100+ Net-Zero Company Benchmark revealed limited progress on climate transition

²⁰ See: Metrics and Targets - TCFD Knowledge Hub (tcfdhub.org).

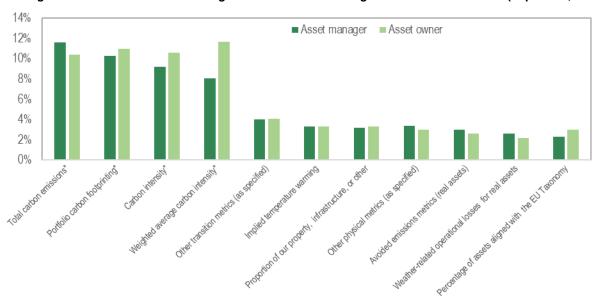
²¹ See: About | Glasgow Financial Alliance for Net Zero (gfanzero.com).

Pillar 4 of the Finance Campaign - Disclosure

Slow progress has been made on the publication of climate-related metrics and targets by capital market participants in 2020, supporting the need for consistent climate information architecture at international level, notably with the International Sustainability Standards Board

Despite a slight increase, publication of consistent climate-related metrics and targets by asset managers and asset owners remains relatively poor and inconsistent in 2020

11. Asset managers and asset owners indicating use of metrics to manage climate-related issues (in percent, as of 2020)



Source: TCFD Status Report (2021)

- Metrics and Targets have historically been poorly reported by asset managers and asset owners, amidst absent or light existing regulatory requirements (except in the European Union and the United Kingdom)²². When published, these metrics are most often not specified with details such as the assets under management covered or the underlying methodologies.
- Most published metrics by asset managers and asset owners are carbon footprint and exposure metrics (i.e. total carbon emissions, portfolio carbon footprinting²³, and carbon intensity²⁴). Portfolio's exposure to carbon-intensive companies (expressed in tons CO2e / \$M revenue) has been most published by asset owners in 2020. Other metrics that are not exposure-based, such as implied temperature warming or avoided emissions metrics, are much less often published.
- Low and divergent figures illustrate the wide range of reporting channels currently used by asset managers and asset owners worldwide, making it complex to publish consistent sets of metrics and targets.
- During the Finance Campaign the IFRS Foundation announced the creation of the International Sustainability Standards Board to help meet the demand for more consistent and comparable data across sectors and companies. The ISSB aims at delivering a baseline of standards that provide capital market participants with information about companies' sustainability-related risks and opportunities to help them make informed decisions²⁵. This development is in line with messages published by the IMF in a recent Staff Climate Note²⁶.

²² See: <u>TCFD Status Report 2021</u>.

²³ The carbon footprint indicator is composed of scope 1 and scope 2 greenhouse gas emissions that are allocated to an investor based on an equity ownership approach.

²⁴ Carbon intensity is the volume of carbon emissions per million dollars of revenue (carbon efficiency of a portfolio), expressed in tons CO2e/\$M revenue.

²⁵ See: IFRS - International Sustainability Standards Board. In July 2021, the Finance Ministers and Central Bank Governors of the G20 had released a communiqué committing to "work to promote implementation of disclosure requirements or guidance, building on the FSB's Task Force on Climate-related Financial Disclosures (TCFD) framework, in line with domestic regulatory frameworks, to pave the way for future global coordination efforts." The statement further welcomed the TCFD-aligned IFRSISSB work program and FSB Roadmap.

²⁶ See: <u>Strengthening the Climate Information Architecture (imf.org).</u>