



# Assessing National Oil Companies transition plans: an essential tool for banks, investors and regulators

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# Introduction

National oil companies (NOCs) account for half of oil and gas production, 40% of investments in the sector and two thirds of the planet's hydrocarbon reserves. An assessment of 99 leading oil and gas companies, which includes 40 NOCs, shows that NOCs are expected to exceed international oil companies (IOCs) in their carbon budgets (World Benchmarking Alliance [WBA], 2023a). Any chance of limiting global warming to 1.5°C and even well below 2°C therefore requires a better understanding of how NOCs function and what levers can be activated to support their decarbonisation. This briefing builds on previous work from the authors, including an assessment of how investors can jumpstart energy transitions for NOCs and how NOCs themselves fare in their decarbonisation strategies (Picciariello et al., 2023; WBA, 2023b). It focuses particularly on more internationally exposed NOCs (those more dependent on debt or equity financing or those that are listed). Contrary to what is often perceived, like governments, financial actors can have an important impact on NOCs. As an example, the face value of foreign bonds from NOCs was worth about half a trillion USD in March 2023. Similarly, 10 of the world's largest banks have provided funding of USD 147 billion between 2016-2022 to eight NOCs, which are among the top 20 companies most responsible for oil and gas expansion (Rainforest Action Network et al., 2023).

However, there is still a disconnect between financial actors and the need for NOC decarbonisation. In particular, NOCs' credit ratings are currently not linked with their low-carbon transition plans. Given the heightened transition risks many NOCs will face in the future, the benefits of requiring such a link should act as a strong incentive for financiers to connect the dots.

The objectives of this brief are threefold. First, it will offer guidance to investors, banks, standard setters and governments on how NOCs can enhance their low-carbon transition plans and align their investments with the 1.5°C target under the Paris Agreement. Second, it will delve deeper into how different financial actors can drive NOC transition plans. Third, the brief seeks to build momentum ahead of the United Nations (UN) Climate Change Conference (COP 28) to raise the bar and ensure NOCs are held accountable for their investments, production plans and decarbonisation strategies.

The brief includes three sections. The first shows the state of play of NOC transition plans and the growth in climate disclosure frameworks. The second maps which financial actors can impact NOC decisions and what this impact can be. Finally, the brief concludes with recommendations to enhance NOC accountability.

As the wave of net-zero commitments is growing, so is the demand for more robust, publicly available data verified by independent third parties to assess the credibility of net-zero targets. This is testified by the UN High-Level Expert Group (HLEG) report released at COP 27 (HLEG, 2022). It can also be seen in the UN Framework Convention on Climate Change's 2023 release of an implementation plan in Bonn to operationalise the HLEG recommendations. This shows that companies (of which NOCs are no exception) will increasingly be scrutinised based on their climate commitments. Further, there is a recent trend of governments turning some of the best voluntary standards for business decarbonisation into national regulations.

The energy price crisis and exceptional profits registered by NOCs and oil and gas companies more generally may give the illusion that they are immune to the calls for decarbonisation and curbing the expansion of oil and gas extraction. Yet, peak demand for fossil fuels is predicted sooner by the International Energy Agency (IEA) than many oil and gas companies anticipate (IEA, 2022). Even if there is some uncertainty as to how fast it will decline thereafter, this inevitable peak and decline will expose



NOCs to a series of financial, economic, political and social risks. Although these risks will vary, they are particularly heightened in the case of NOCs, given their political and economic weight in their home countries and the degree to which many governments rely on the oil sector as a source of state revenues (Manley & Heller, 2021; see also, Coffin & Grant, 2021). As a result, there is an urgent need for all NOCs to reconsider their low-carbon transition plans and for financial actors to use their leverage to support a just and ambitious low-carbon transition.

While the current context may be seen as a challenge for reform, it is also very much a window of opportunity. As the United Arab Emirates convenes leaders to COP 28 to raise climate ambition, including for the oil and gas sector, now is the time to ensure this ambition lives up to its promise.



# Credible transition plans and climate disclosure frameworks are key means to increasing NOC transparency and accountability

## A growth in demand for transition plans and mandatory climate disclosures

Although the discussion around transition plans was not common several years ago, it has grown considerably. Banks, investors and regulators<sup>1</sup> are increasingly using such plans to assess exposure to transition-related risks<sup>2</sup> for those investing in or financing energy-intensive companies. The development of these tools also responds to wider public demand for more scrutiny on the credibility of corporate net-zero pledges.

Given their economic weight and importance for climate, NOCs deserve the same scrutiny as other privately or state-owned businesses. While net-zero pledges have increased significantly (UN Climate Change, n.d.), many still lack sufficient detail in terms of scope, targets (interim, long term, absolute and intensity) and wider integrity (New Climate Institute, 2022). In order to assess the credibility of company transition plans, a number of tools are available to banks, investors and regulators. The Assessing low-Carbon Transition (ACT)<sup>3</sup> methodology, co-developed by the French Agency for Ecological Transition (ADEME) and Carbon Disclosure Project (CDP), is one such tool.<sup>4</sup> In addition to ACT, other tools include those developed by the Transition Pathway Initiative on carbon intensity pathways and Climate Action 100+ (a collective grouping of investors pushing for more ambitious climate action).

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<sup>1</sup> The term *regulator* in this brief refers to standard setters and other government or financial regulatory bodies.

<sup>2</sup> Transition-related risks are understood as risks resulting from policy changes to shift to a low-carbon economy (Bank of England, 2019).

<sup>3</sup> Formally launched at COP 21, the ACT Initiative provides a corporate climate accountability framework with sectoral methodologies to assess companies' decarbonisation strategies and transition plans (ACT Assessing Low Carbon Transition, n.d.)

<sup>4</sup> ACT is registered at the UN Framework Convention on Climate Change Marrakech Partnership for Global Climate Action, recognised by the Glasgow Financial Alliance for Net Zero (2022) as an essential tool for companies to evaluate their transition plans and used by the French Central Bank to inform its new corporate transition risk indicator.



### **Box 1. What are transition plans, what are they for and how do we measure their credibility?**

Transition plans show the overall state of readiness of a company in a given sector to transition to a low-carbon economy and how much it aligns with a low-carbon scenario. Transition plans are particularly important, as they are both backward- and forward-looking, giving an indication to regulators and financial actors of whether and how companies are aligning with a 1.5°C pathway through both qualitative and quantitative information. This information can be used to anticipate the future financial, material and climate risks companies such as NOCs may be exposed to, including the risk of stranded assets and the loss of future revenues from oil. These plans are therefore essential in helping companies mitigate the risk of a permanent fall in oil demand linked to the energy transition. These plans are also crucial to support financial decision-making, determine the allocation of capital, and inform regulators and standard setters. Finally, they can also help mitigate the risks associated with climate policies that penalise high emitters and show more clearly how companies can support their countries' decarbonisation strategies.

WBA's Climate and Energy Benchmarks use the ACT methodologies and are an example of sectoral assessments that can indicate the credibility of company transition plans (WBA, n.d.). This credibility is based on a range of information, including the company's past, current and projected future emission trajectory compared to a low-carbon pathway (the IEA's 1.5°C pathway in the case of WBA benchmarks). It also includes the relevant direct and significant indirect (scopes 1–3) emission targets a company sets, its share of investment in low-carbon technologies and the company's locked-in emissions compared to its carbon budget. Finally, ACT measures other, more qualitative information, such as a company's level of climate engagement with suppliers, clients and policies and its level of management expertise on climate or development of new business models. In particular, WBA's Oil and Gas Benchmarks for 2021 and 2023 show whether 99 leading oil and gas companies (including 40 NOCs) have progressed or not in aligning with a 1.5°C trajectory and their commitments to human rights and a just transition (WBA, 2023b).

For WBA's Oil and Gas Benchmarks, the credibility of companies' low-carbon transition plans can be determined using the information mentioned above. More specifically, oil and gas companies must be aligned with a 1.5°C trajectory to have credible transition plans. This alignment itself demands that companies take a number of important steps. These steps include the significant reduction of operational emissions (scopes 1 and 2), halting the expansion of new oil and gas projects, and setting firm dates for the decline of oil and gas production.

Importantly, transition plans are now being integrated into mandatory climate disclosure requirements. Since the onset of the Task Force on Climate Related Financial Disclosures (TCFD), a number of countries have pushed for mandatory climate disclosures. These disclosure frameworks are not yet all aligned and vary in scope. Yet, their increasing number shows a willingness from investors, banks and regulators to push companies to disclose the financial and material risks they are exposed to. The United States Securities and Exchange Commission (SEC) is worth noting for its proposal to enhance and standardise climate-related disclosures for investors. While the final rules have yet to be announced, it is likely that, beyond targets and emission inventories, companies will also be requested to disclose their transition



plans along with yearly updates.<sup>5</sup> The European Sustainability Reporting Standard will also mandate companies to disclose their transition plans, with penalties for those that fail to comply. In addition, the European Commission might ask companies to also implement such transition plans with the Corporate Sustainable Due Diligence Directive, closing the loop with mandatory accountability for companies. The British Transition Plan Taskforce is working on similar expectations in the United Kingdom regarding the disclosure of companies' transition plans. Australia (Segal, 2023) and Singapore (Subjani, 2023) have also recently announced their mandatory climate disclosure requirements. These reporting requirements are important for a reliable review of company climate commitments against their actual progress in reducing emissions.

To date, these efforts have not yet fully reached most NOC jurisdictions. However, this is likely to change in the future, given the push by central banks, regulators and other financial actors.<sup>6</sup> Standards are also influencing one another, meaning developments in one jurisdiction will likely affect developments elsewhere. Recent developments in NOC jurisdictions indicate that NOCs will also likely be facing more stringent climate reporting requirements in the future (see Table 1). Some of the most prominent examples include the announcement from China's Securities Regulatory Commission that the country is very likely to develop mandatory environmental, social and governance (ESG) disclosure requirements in late 2023 (Blott, 2023).<sup>7</sup> Similarly, in India, the Securities and Exchange Board has made ESG reporting requirements for the top 1,000 listed companies mandatory as of 2023 (Uhryuk et al., 2021). Colombia (World Bank, 2022) and Malaysia (Sustain, 2023) are also increasingly incorporating climate risks into their investment decision-making. While NOCs are generally aware of these developments (Johnston et al., 2022), there is still a long road ahead for many to adhere to more robust standards. However, as they unfold, these regulatory developments will likely put more pressure on NOCs that remain non-transparent and do not develop credible transition plans. Similarly, while there is much room for progress, nationally determined contributions (NDCs) are increasingly referring to transition planning and, to a lesser extent, to the need to wind down oil and gas production (Jones, 2023). With revised NDCs expected in 2025, this may also further incentivise NOCs to develop more ambitious transition plans.

**Table 1: Overview of some existing mandatory climate disclosure requirements relevant to NOCs**

Country/region	Recent regulatory developments	State of existing legislation	Inclusion of transition plans	Relevance to NOCs
Brazil	The Brazilian Securities and Exchange Commission (CVM) issued Resolution CVM 59, and the Central Bank also requires banks to disclose climate-related information and risks they are exposed to.	In force since 2021–2022	Not yet	Direct (Petrobras)
Colombia	A green taxonomy 2022 and ESG and climate risk reporting	In force since 2022	Not yet	Direct (Ecopetrol)

<sup>5</sup> See, in particular, the proposed 17 CFR 229.Section 1503(c)(1) from the March 2022 proposed rule, The Enhancement and Standardization of Climate-Related Disclosures for Investors (SEC, 2022).

<sup>6</sup> These requirements can have distinct obligations for listed and large non-listed companies.

<sup>7</sup> The Ministry of Ecology and Environment did release mandatory requirements last year, but only for companies considered major emitters of pollutants and publicly traded companies sanctioned for infringing environmental rules.



	requirements were adopted for listed companies.			
China	Mandatory ESG reporting requirements are expected from the Securities Regulatory Commission.	Expected late 2023	Not yet	Direct (China National Offshore Oil Corporation, China National Petroleum Corporation, China Petroleum and Chemical Corporation, Sinochem, Shaanxi Yanchang Petroleum Group)
European Union (EU)	EU European Sustainability Reporting Standard E1, Corporate Sustainability Reporting Directive, Corporate Sustainable Due Diligence Directive	In triologue negotiations, to be enforced	Yes (gradual phase-in from 2024)	Indirect, some direct, such as Equinor
India	Mandatory ESG reporting requirements from the Securities and Exchange Board of India (SEBI) since 2023 for the top 1000 listed companies. This builds on work initiated in 2021 from SEBI on Business Responsibility and Sustainability Reports companies must file.	In force since 2023	Not yet	Direct (Gail, Indian Oil, Bharat Petroleum)
Indonesia	Government Regulation No. 47 of 2012 makes CSR reporting mandatory for “natural resource-based” and “natural resource-related” companies, which include oil and gas companies.  The Indonesia stock exchange has also become a TCFD supporter.	In force since 2012 but not related to transition plans	Not yet	Direct (Pertamina)
Malaysia	Financial institutions are expected to make climate disclosures mandatory soon,	Expected by 2024	Not yet	Direct (Petronas)





	aligning with TCFD's recommendation.			
United Kingdom	Transition Plan Taskforce and regulation by the British Financial Conduct Authority	In place, regulatory updates expected 2023–2024	Mandatory for listed companies	Indirect
United States	The SEC proposed rules to enhance and standardise climate-related disclosures.	Proposed	Yes	Indirect, some direct, such as Pemex

### What level of readiness have NOCs attained for their transition plans?

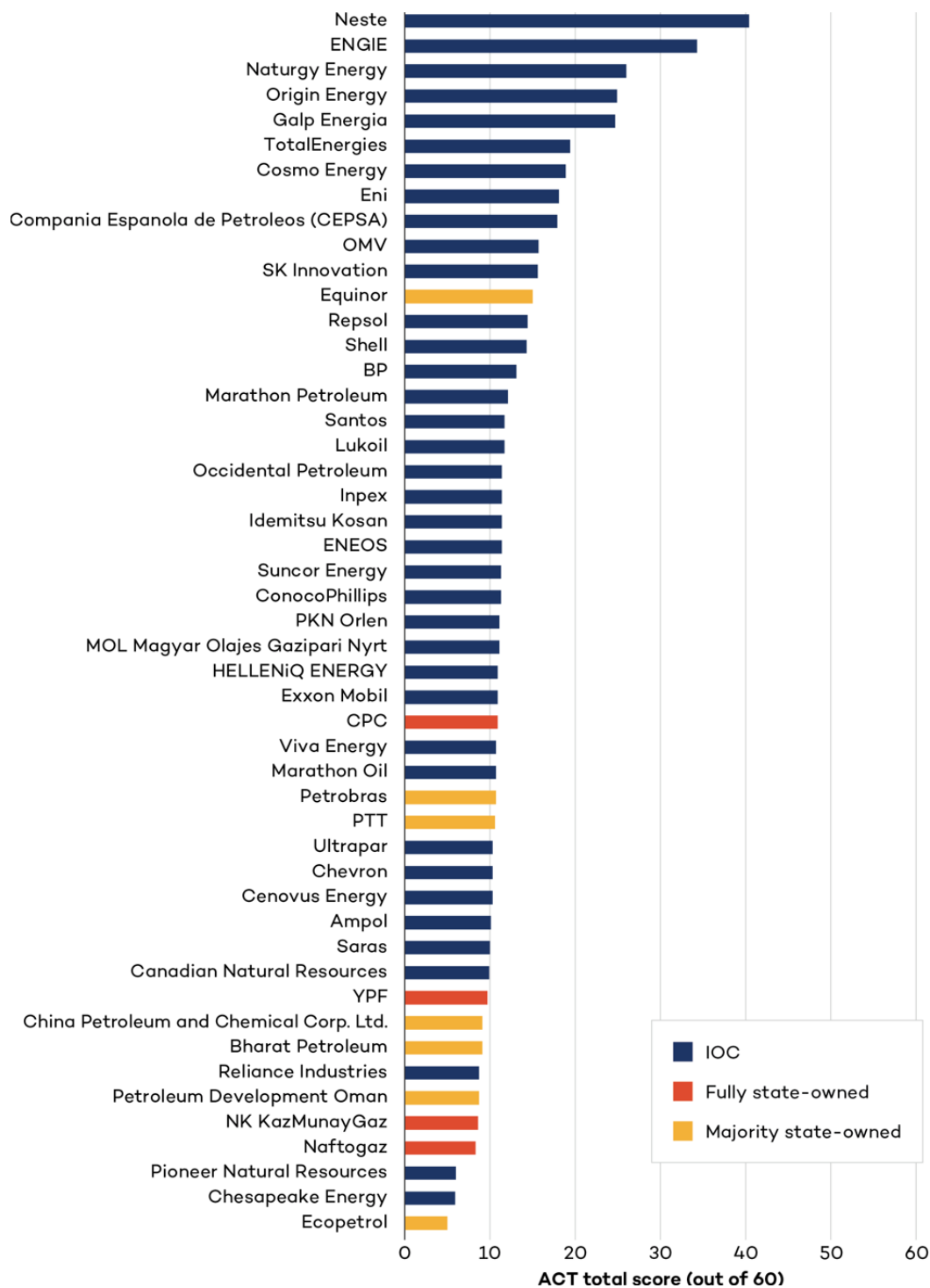
NOCs should not be seen as a monolithic bloc, given their varying characteristics (Gillies et al., 2021).<sup>8</sup> Some NOCs in lower-income countries may be facing a fossil fuel debt trap,<sup>9</sup> making the transition away from fossil fuels more challenging. Other NOCs are at a more advanced stage in their low-carbon transition. Yet, WBA's 2023 Oil and Gas Benchmark shows that the vast majority of NOCs, regardless of these differences, have yet to implement a credible transition plan (see Figure 1).

<sup>8</sup> Within WBA's company sample, the 99 oil and gas companies represent 80% of global oil and gas production. For the 40 NOCs assessed by WBA, the vast majority (38 companies) are fully vertically integrated working across the value chain with only two pure upstream players.

<sup>9</sup> A fossil fuel debt trap occurs when a country relies on fossil fuel revenue to pay debt but the fossil fuel projects do not generate the revenues expected, which can leave countries further indebted than when they began (Woolfenden, 2023).



**Figure 1: ACT<sup>10</sup> total scores of NOCs versus IOCs<sup>11</sup> in 2023 WBA's Oil and Gas Benchmark<sup>12</sup> (Note: The perfect score is 60.)**

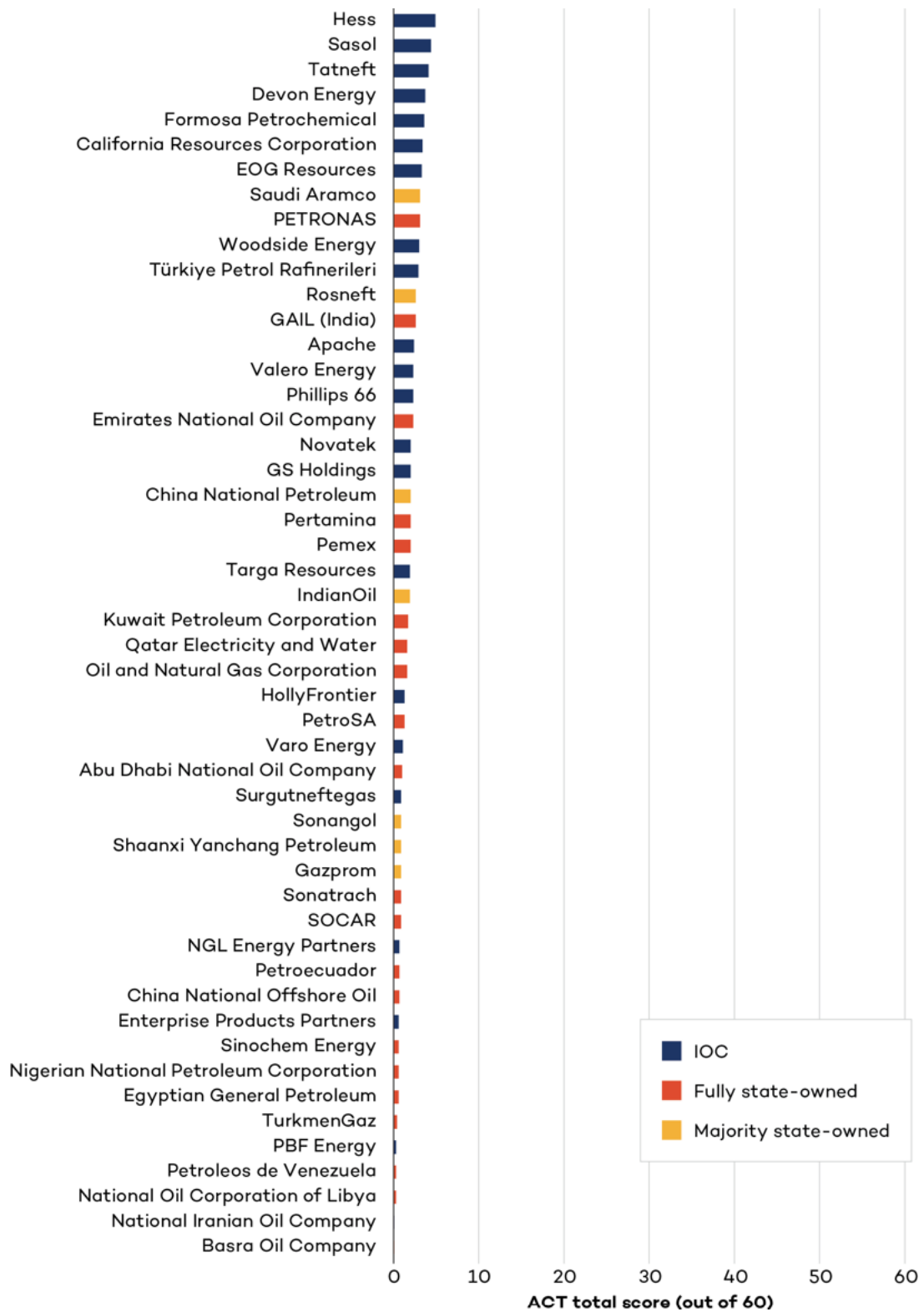


<sup>10</sup> The total ACT score out of 60 includes a performance score along with a trend and narrative score. For further overview of the ACT oil and gas methodology, see ACT Assessing low-Carbon Transition, 2021.

<sup>11</sup> IOCs here include other publicly listed and private companies and those with a minority state share.

<sup>12</sup> This figure includes both NOCs (majority and fully state-owned) and IOCs. IOCs are highlighted in blue, fully state-owned NOCs in brown and majority state-owned NOCs in orange.





It is interesting to note the distinction between fully state-owned and majority state-owned NOCs, with the latter performing better based on WBA's ACT assessment (see Figure 1). This is likely due to a combination of factors, including different regulatory requirements and a higher level of transparency for majority state-owned NOCs. Yet, despite some progress, there is still a lack of credible transition plans from many NOCs. This planning includes the type and quality of emissions, as well as production and investment data that NOCs disclose, which also affects their ability to properly assess their level of transition plan readiness. Evidence from WBA (2023b) shows that the level of transition plan readiness,<sup>13</sup> on average, is nearly three times lower for NOCs than for IOCs (see Figure 1).<sup>14</sup>

This is not to say that IOCs do not have significant room for improvement. Yet, in various areas of the ACT assessment, the level of NOC disclosure and performance remains particularly low (see Figure 2). For example, only three NOCs have set scope 3 targets (Equinor, Ecopetrol<sup>15</sup> and Gail), which represent the majority of emissions for fully integrated and semi-integrated companies. Similarly, only three NOCs (YPF, Equinor<sup>16</sup> and Petronas) disclose their low-carbon capital expenditure (capex) shares. Given the exceptional profits registered in 2022 and 2023, there is a missed opportunity to invest significantly more in clean energy, even if NOCs may not always be best placed to do so.<sup>17</sup> This is particularly the case given that the majority of the USD 4 trillion in oil and gas profits in 2022 was captured by NOCs (IEA, 2023b). These profits created more government revenue in both taxes and dividends. This higher NOC income and government's fiscal space should be used to increase the share of clean energy investments and diversification rather than reinvesting profits in new oil and gas projects (IEA, 2023c). This is both because reinvesting such profits in oil and gas is incompatible with financing a 1.5°C transition and because directing these investments can lower the financial risks many NOCs will face in the future (Jones et al., 2023).<sup>18</sup> For NOCs operating in low-income countries, there is also a strong case to be made to redirect these extraordinary profits to support the diversification of their home economies and prepare for a potential decline in their oil exports.

Interestingly, NOCs have already explored several avenues for reform. Figure 2 shows that, while much remains to be done, NOCs did marginally improve their performance compared to 2021, both in terms of developing low-carbon business models and setting emission reduction targets. However, overall and across modules, the climate performance of NOCs worsened in 2023 compared to 2021. This is

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<sup>13</sup> The level of transition plan readiness indicates how credible company transition plans are. See Box 1 for an overview of how WBA defines credible transition plans. In general, a company can be considered in transition when its total normalised score is at least 66/100. None of the oil and gas companies assessed by WBA meet this threshold (ACT Assessing low-Carbon Transition, 2023, pp. 81–83).

<sup>14</sup> IOCs here include other publicly listed and private companies and those with a minority state share.

<sup>15</sup> In the case of Ecopetrol, it is worth highlighting the structural declines it is facing in its oil and gas production, which might lead the company to reach some of its climate targets earlier than expected.

<sup>16</sup> However, regarding its capex plan, Equinor publishes only the share of its gross capex dedicated to "low carbon." That includes carbon capture, utilisation and storage (CCUS) and hydrogen from oil and gas (Delaporte et al., 2023).

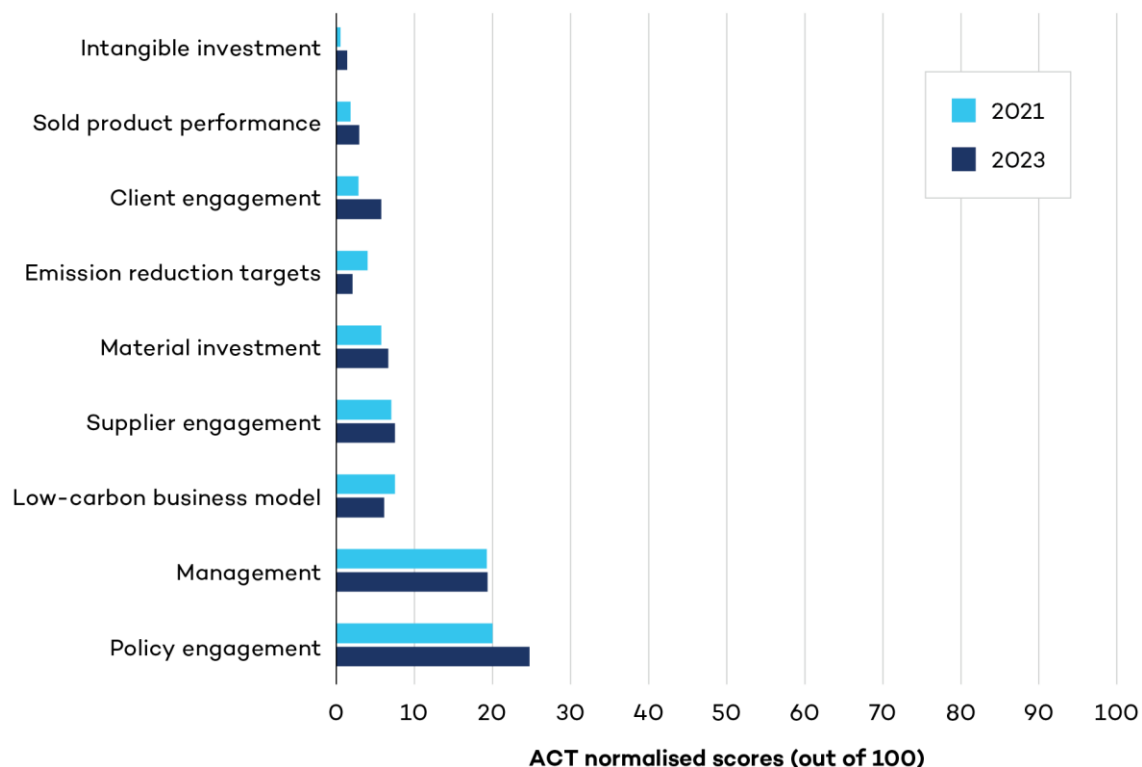
<sup>17</sup> It is worth highlighting that not all NOCs will necessarily be well placed to invest in renewables, and in some cases, this may be counterproductive and crowd out other public and private actors (Gillies et al., 2021). NOCs may also need to overcome the reluctance associated with low-carbon projects that are seen as a risk to the sustainability of their core business.

<sup>18</sup> For a number of NOCs and their governments, wider reforms to the international financial system and increasing the scale of private finance will be needed to reach these objectives. This is particularly the case as clean energy finance has tended to stagnate in low-income and emerging economies. For a good overview of ways in which NOCs can collaborate with their governments to increase the scale of private finance dedicated to clean energy, see the IEA's analysis on this topic (IEA, 2023a).



particularly due to the poor performance of NOCs in areas that are crucial for their decarbonisation, such as sold product performance (the heaviest-weighted module for fully integrated companies). This module requires, among other factors, for NOCs to show a reduction in their past and projected future emissions intensity across scopes 1, 2 and 3.

**Figure 2: Average ACT module scores for NOCs<sup>19</sup>**



## Why should regulators and financial actors ensure NOCs develop and implement credible transition plans?

NOCs that develop and start implementing more credible transition plans can benefit in several ways. This includes the ability to raise a higher level of transition finance<sup>20</sup> and gain access to new markets (Organisation for Economic Co-operation and Development [OECD], 2022). Research from the OECD (2022) shows that the development and subsequent implementation of credible transition plans are important factors that can affect the availability of transition finance. This can be particularly relevant for NOCs operating in lower-middle-income countries where public, private and international climate

<sup>19</sup> For a better overview of the indicators specific to each oil and gas ACT module see: <https://www.worldbenchmarkingalliance.org/publication/oil-and-gas/rankings/act/>. For comparability, scores across each module are normalised out of 100.

<sup>20</sup> The term *transition finance* in this brief refers to a “whole of economy” approach where finance is provided to decarbonise the most polluting and hard-to-abate sectors. In the case of oil and gas, the provision of such finance should be contingent on a commitment from companies to implement credible low-carbon transition plans that align with the IEA’s 1.5°C scenario. Among other factors, this also means that the provision of such finance is incompatible with the development of new oil and gas fields.



finance will need to be scaled up to decarbonise. Developing low-carbon business models,<sup>21</sup> as some NOCs have started to do, can increase access to transition finance. As low-carbon business models generate new sources of revenue for NOCs and their governments, this can also give them a stake in the energy transition. In turn, this can reduce the host state's vulnerability to falling revenues from declining oil demand. Further, as they mature, these business models can become more viable economic alternatives to oil and gas. A number of interesting practices are worth noting from NOCs, including supporting renewable energy production and scaling sustainable fuels and electric vehicle charging infrastructure. China National Petroleum Corporation stands out as one of the leading NOCs because of such practices as developing hydrogen refuelling stations throughout the country.

In addition, NOCs that develop more credible transition plans are less likely to face future stranded assets<sup>22</sup> and other transition-related climate risks. There are varying estimates of how high these stranded assets could be, depending on the assumptions and methodologies used. In the energy sector alone, stranded assets could be in the range of USD 1 trillion to 4 trillion, with upstream oil and gas assets and exploration costs representing a big share of these risks (IEA & International Renewable Energy Agency, 2017). These estimates are conservative and do not include the full picture of other potential stranded assets linked to loans and infrastructure abandonment and legacy debts and decommissioning. The higher-than-usual profits may give NOCs the illusion that they will have the financial ability to withstand such stranded assets. However, future projected decreases in demand and production may put a serious dent into these overly optimistic assumptions as revenues decline and production costs increase for a number of NOCs (Manley & Heller, 2021). Much of the research corroborates these findings. For example, research from Carbon Tracker shows that oil and gas companies (including NOCs) face significant risks of asset stranding, not just under the IEA's Net Zero Scenario but also its Sustainable Development Scenario (Coffin, 2021).<sup>23</sup> Importantly, private investors in OECD countries may be the most exposed to upstream oil and gas transition-related risks, which reinforces how important it is for such actors to engage with NOCs and their governments (Semieniuk et al., 2022). As part of these engagement efforts, transition plans play a key role, as they can be used to improve the climate and risk impact management strategies of NOCs.

In the case of NOCs, the risk of stranded assets has arguably even bigger implications than for IOCs, given the potential future impacts on government oil and gas revenues.<sup>24</sup> While this risk varies across NOCs due to a range of breakeven prices, few will be the last ones standing (Manley & Heller, 2021). The risk of stranding would not only affect financial actors but also the ability of NOCs and their governments to generate public revenues, employment and social services. A 2022 study from the International Labour Organization (ILO) shows that the global decline in job demand could be in the order of 3 million by 2030 for petroleum refining, extraction of crude petroleum and services related to crude oil extraction. This does not account for all indirect and induced jobs. While more research is needed to understand how this might affect NOCs individually, it is worth noting that, of the 40 NOCs

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<sup>21</sup> Low-carbon business models under the ACT methodology are defined as activities that contribute to the low-carbon transition, including shifting the company's energy mix to low-carbon energy, supporting activities that reduce energy demand and any activities that support carbon capture and storage (CCS), CCUS and negative emissions technologies. In the case of CCS and CCUS, NOCs should exercise a high level of caution given the high costs and the current lack of transparency around the permanence of emission reductions. The majority of CCS and CCUS projects are also geared toward enhanced oil recovery.

<sup>22</sup> In the case of fossil fuels, stranded assets refer to fossil fuel assets that lose their value as a result of changes linked to the energy transition. These changes can be economic (changes in demand and prices), physical and regulatory (with changes in legislation for example) (Carbon Tracker Initiative, 2017).

<sup>23</sup> For an overview of some of the differences between IEA *World Energy Outlook* scenarios see IEA, 2021.

<sup>24</sup> For further insights on how government oil and gas revenues could be affected, see Coffin & Grant, 2021.



assessed by WBA, none has effective just transition planning<sup>25</sup> mechanisms in place. To avoid future detrimental impacts on jobs, public revenues and wider economic development, it is crucial that NOCs also integrate just transition considerations<sup>26</sup> within their transition plans (Manley et al., 2019).

There are also a number of other socio-economic benefits for NOCs that accelerate their shift to a low-carbon economy, including a higher level of climate expertise at the board level.<sup>27</sup> This expertise can be an important way to mitigate reputational, social and other climate costs due to oil spills, damages to ecosystems, the release of pollution and mismanagement of waste (Palacios & Vidotto Carocati, 2023). Analysis conducted by WBA shows that while several NOCs have climate change management capability, this has slightly decreased from 2021 to 2023 (see Figure 3). Ecopetrol stands out as one of the leading NOCs with several relevant practices in place, such as board-level oversight of climate change and incentives to manage the low-carbon transition. Yet more can be done, including ensuring incentives at the management level are not tied to fossil fuel growth.<sup>28</sup>

## Banks, investors and governments must join forces to hold NOCs accountable

### Investors, banks and other financiers have an impact on NOCs

Many of the biggest NOCs are more exposed to investors and other financiers outside of their national borders than has been long believed to be the case (Picciariello & Mahdavi, 2023). Figure 3 shows that out of the 40 NOCs included in WBA's Oil and Gas Benchmark, around one fourth are listed on international stock markets outside of their national borders<sup>29</sup> and over half sell their bonds in international bond markets.

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<sup>25</sup> Just transition planning refers to how a company engages in social dialogue and mitigates potential detrimental social impacts of the low-carbon transition through time-bound targets for its workers, affected communities and business relationships.

<sup>26</sup> The ILO just transition guidelines provide essential information on the key components of a just transition (ILO, 2015). WBA's just transition methodology and assessments can also support regulators and financial actors in showing how NOCs are making progress on just transition (WBA, 2021).

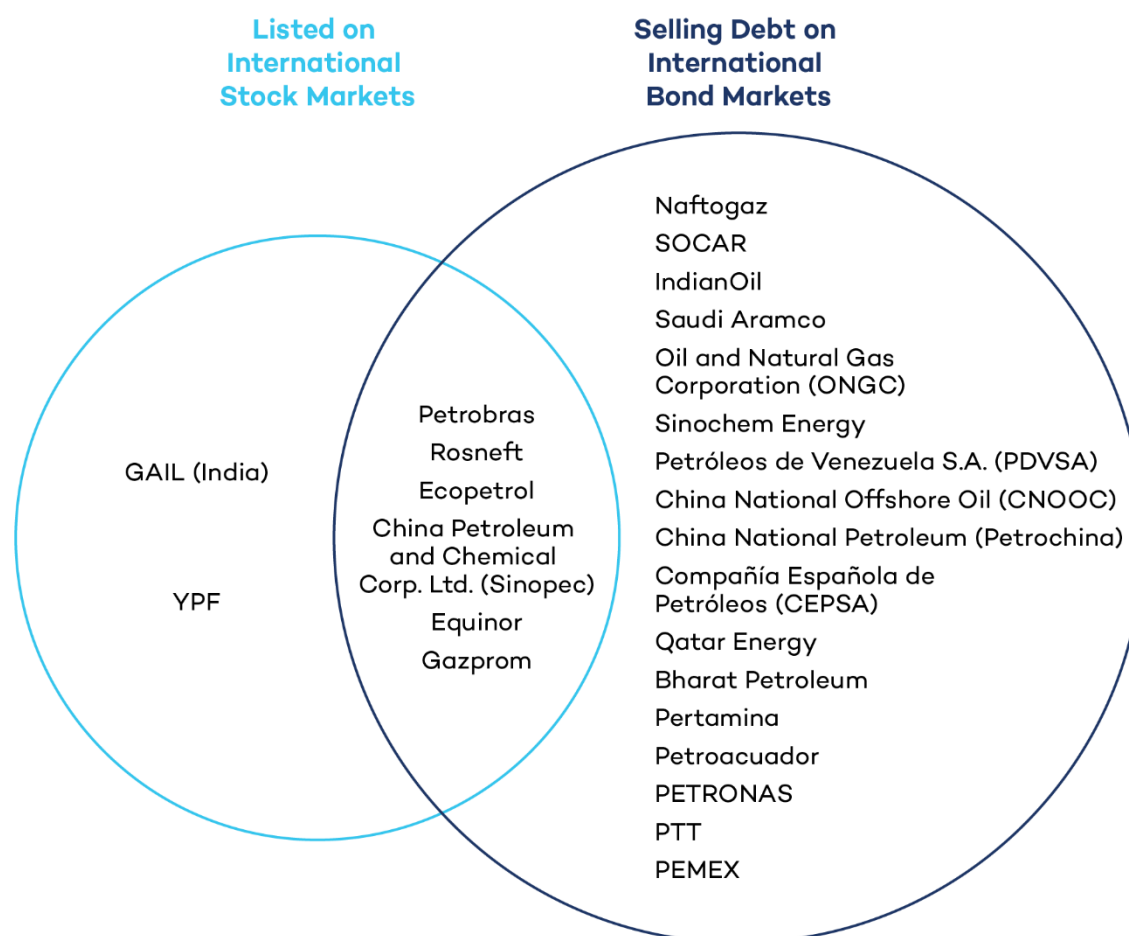
<sup>27</sup> For further overview on this, see Kenner & Heede, 2021.

<sup>28</sup> For further insights on this topic see O'Conner, 2022.

<sup>29</sup> Fourteen additional NOCs are publicly listed, but only on their own countries' national stock exchange, and have not been included in Figure 3.



**Figure 3. Classification of the 40 NOCs from the WBA assessment based on their exposure to international stock and debt markets (based on the authors' own research)<sup>30</sup>**



Indeed, NOCs themselves are becoming increasingly aware of the potential challenges such exposure and external regulations can create for their “business-as-usual” baselines (King Abdullah Petroleum Studies and Research Center, 2023).

Investors, banks and sovereign financiers may have considerable impacts on NOCs. Although the current context gives an immediate sense of certainty that oil and gas are here to stay, future decline in demand – and eventually production and changes in investors’ expectations (linked to pressures to

<sup>30</sup> In the absence of a full dataset providing such information, the classification in Figure 3 is based on the authors’ independent research, which relies on information provided on the companies’ websites, as well as websites such as [Cbonds](#) (n.d.) and the Financial Times (n.d.).





reduce financed emissions) – will also put more pressure on NOCs.<sup>31</sup> This will likely result in higher cost of capital and more restrictions for financing NOCs that do not improve their transition plans.

With the face value of foreign bonds from NOCs in March 2023 representing USD 550 billion (60% of outstanding related debt matures before 2030), access to bond markets in the future could become considerably more costly (Palacios & Vidotto Carocati, 2023). If NOCs are less able to refinance new debt, this may cause impacts at the government level as well. In July 2023, for example, the Mexican Finance Ministry bailed out Pemex to the tune of USD 4 billion, adding to nearly USD 45 billion in government support that the NOC already received under the current administration (since December 2018). This bailout is linked to Pemex's struggles to raise cheap capital after a sluggish operational year and a series of environmental accidents (Stillman, 2023; Vizcaino & O'Boyle, 2023).

Credit risks may increase for NOCs that do not develop credible transition plans (Reuters Staff, 2021). These risks may also extend to higher sovereign credit risks for the governments behind these NOCs. Currently, credit ratings for NOCs do not necessarily incorporate transition risks that many of these entities will face going forward. Figure 4 shows little correlation between an NOC's credit rating and its ACT score, a measure of a company's preparedness and progress toward achieving global climate goals.<sup>32</sup> Consider that some of the most credit-worthy NOCs – Abu Dhabi National Oil Company (ADNOC) and QatarEnergy, for example – have made little progress on transitioning to a low-carbon business model. Existing research suggests that credit rating agencies have not yet accurately incorporated climate risks into their creditworthiness rating. This conclusion would be in line with our findings about NOCs as well, but the situation is likely to change as transition plans become more mainstream within credit rating methodologies (Palacios & Vidotto Carocati, 2023). This is yet another reason for NOCs to improve their transition plans if they plan to rely on outside credit in the future to keep the cost of capital low.

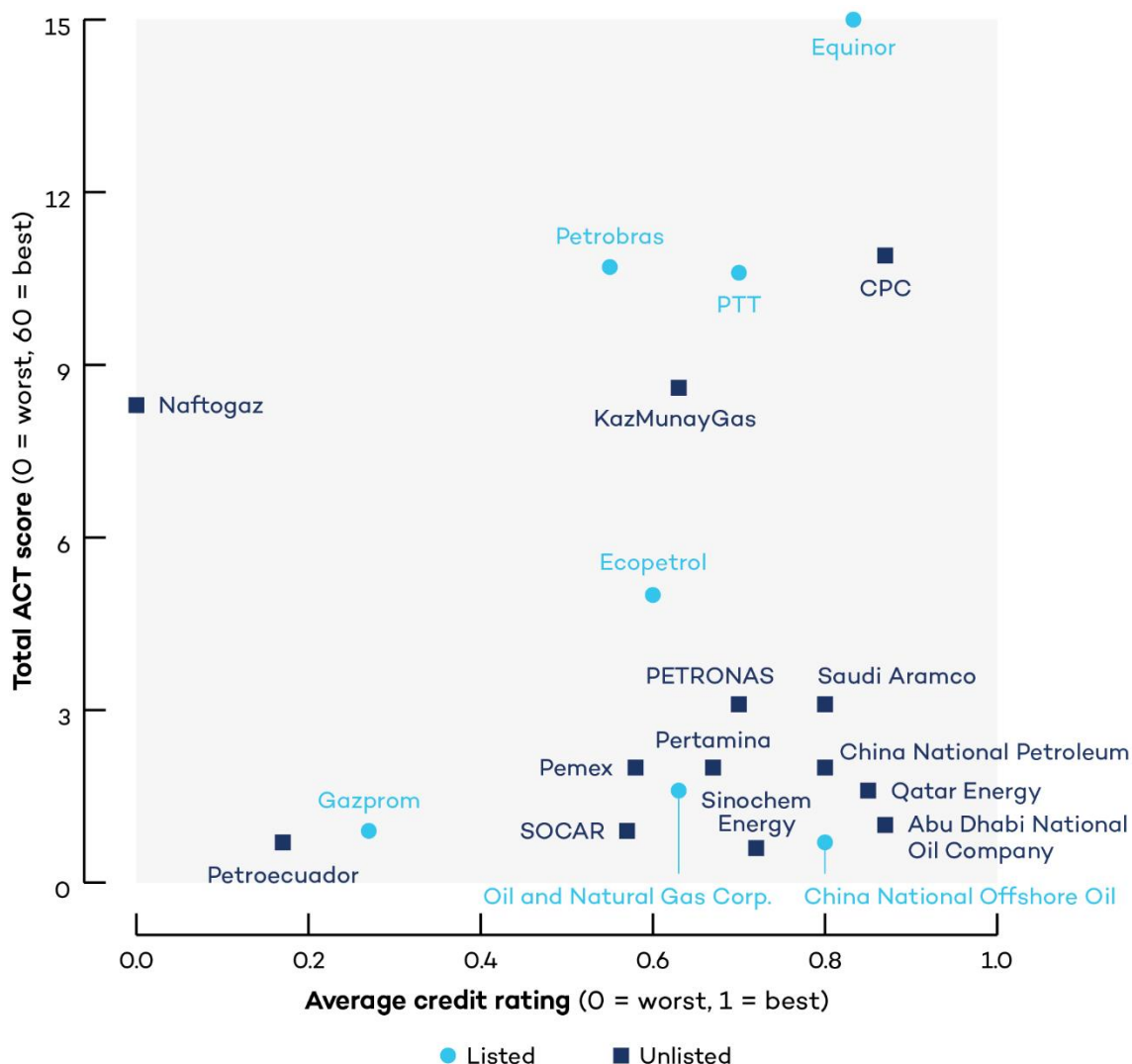
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<sup>31</sup> For an overview of how different 1.5°C-aligned energy scenarios may affect future oil and gas production, see IISD, 2022.

<sup>32</sup> A similar exercise was performed using ESG scores, which are less robust than ACT (Palacios & Vidotto Carocati, 2023). In turn, ACT scores can be used by banks and investors to assess the creditworthiness of NOCs and their governments.



**Figure 4. Credit ratings and ACT scores for NOCs<sup>33</sup>**



There is evidence that state-owned enterprises (SOEs), in general, pose financial liabilities for lenders given their higher-risk profile (Arrobbio et al., 2014; Asian Development Bank, 2021; Baum et al., 2019; Bova et al., 2016; Thia et al., 2023). NOCs are a subset of SOEs and thus share these risks – ranging from governance concerns to debt overburdening to bloated labour costs to limited innovation incentives – which are further compounded by oil-specific risks given the uncertainty in future demand. Exposure to these risks is concerning not just for equity holders and institutional debt lenders but also for sovereign financiers. Sovereign lenders are a key source of financing for NOCs and their home governments, especially for non-commercial operations that are managed by NOCs, such as fuel subsidy programmes and other quasi-fiscal service delivery programmes (Christiansen, 2013). Analysts view this as a fiscal pathway for their host governments in order to circumvent sovereign debt limits (Lupo-Pasini, 2021; WTW, 2023), which gives sovereign lenders a unique point of leverage to drive credible transition plans within NOCs that could otherwise lose a key piece of financial support.

<sup>33</sup> Credit ratings are drawn from Fitch (n.d.) and S&P Global (n.d.). Ratings are rescaled to a 0–1 range with 1 representing “AAA+” and 0 representing default (“D” or “RD”). Ratings correspond to the most recent credit rating as of August 3, 2023, with the exception of Gazprom (last published rating corresponds to Q4 2021).



## How investors and banks can drive NOC transitions

The closing of the 2023 Annual General Meeting season has produced disappointing results in terms of investors' engagement with the oil and gas sector on the climate front (Reclaim Finance, 2023).

However, general attention to more standardised climate disclosure tools and mechanisms, such as transition plans, continues to gain traction among different financial actors, especially commercial banks (Beyene et al., 2022a, 2022b; Rachmaninov et al., 2023; ShareAction, 2023) asset owners and managers, as well as other kinds of investors (Ceres, n.d.). This increased attention has not yet materially affected the sector's ability to finance its own operations. NOCs, in particular, may be more immune to such pressure than their private sector peers (Cunningham, 2022).

With that in mind, a focus on standardised disclosure and decarbonisation efforts by investors and financing institutions could affect or is already affecting NOCs in different ways (Palacios & Vidotto Carocati, 2023).<sup>34</sup>

1. A number of NOCs rely on financing from commercial banks, which issue general corporate lending and project finance to these NOCs. As such, banks have leverage in their due diligence policies and processes. This leverage could be activated at the beginning of a lending relationship, be present in loan contracts or be reflected in what commercial banks require NOCs to have in place within loan conditions. The same leverage applies when revolving and ongoing credit comes up for renewal, which opens up opportunities for the banks to engage with NOCs, including, for example, on credit risks and environmental and social risks. Banks are increasingly embracing net-zero commitments in their efforts to decarbonise their investment and lending activities. For most banks adhering to such commitments, the goal is to decarbonise their so-called "financed emissions" by 2030. This has implications for stricter evaluations of their clients' emissions regarding scopes 1 and 2, and often scope 3 as well, in a broader attempt to contribute to the energy transition. Indeed, some banks, such as BNP Paribas, are now excluding project-level financing to oil and gas fields, and a few others (such as La Banque Postale and Danske Bank) are also excluding corporate financing to companies that develop new oil and gas fields (Oil & Gas Policy Tracker, n.d.).
2. Minority-share listing by NOCs on stock markets might be limited in the future by increasingly predominant climate considerations by asset managers and asset owners. This potentially reduces important capital expenditure financing opportunities for NOCs. For those NOCs that continue listing equity on public markets, investors can engage successfully with NOCs on decarbonisation efforts. For instance, investors engaged Petrobras through Climate Action 100+ to urge the company to join the Oil & Gas Methane Partnership 2.0, a global initiative on methane emission reductions (Climate Action 100+, 2023). Similarly, Equinor committed to aligning its business strategy with the Paris Agreement goals as a result of engagement led by investors (Climate Action 100+, 2019). However, engagement needs to go beyond one specific level of action, such as methane, and extend to developing credible transition plans more broadly.

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<sup>34</sup> For an overview of the direct and indirect levers these financial actors can have on NOCs, see Figure 6 at the end of this section.



3. Access to bond markets by NOCs, which is currently extremely open and widespread, could be heavily limited over the coming years. While climate risks are not yet directly factored into formal credit ratings, the costs of securing debt may increase as financiers themselves become more climate conscious and aware of the risks linked to stranded NOC assets and the more general lack of compliance in transparency requirements (S&P Global, 2021). Bondholders can use this heightened risk to engage NOCs directly and collectively to drive climate compliance. For example, an active engagement strategy developed by the Rocky Mountain Institute focuses on tracking real-world outcomes and using investors' levers of influence. In turn, this influence is used to request performance improvements supported by clear milestones for progress and, if required, escalatory measures (Dodd & Ruiz Sierra, 2023).
4. Public development banks (PDBs) can support a more enabling domestic policy environment through technical assistance on fiscal and regulatory policy and decarbonisation pathways. These actors can also provide financial support to NOCs' governments to scale up low-carbon business models and conduct an assessment of sovereign risks linked to NOC activities. The International Development Finance Club (IDFC) (n.d.), a grouping of 26 PDBs with more than USD 4 trillion in assets, is an example (see Box 2).
5. Through their supervisory and macro-prudential role, central banks (both regional and national) can directly influence NOC transition plans. This influence can include adjustments in capital requirements based on the climate impacts of loans and the requirement for banks to disclose the climate risks they may be exposed to. The French Central Bank's 2023 announcement to publish a transition risk indicator based on ACT is an example of how such actors can influence company transition plans (Banque de France, n.d.).
6. Financial institutions also provide advice or consultancy services to NOCs, which presents another avenue for engagement. Engineering service companies that consult for NOCs may also be able to pursue engagement based on their technical capabilities.

### **Box 2. How PDBs can enhance the credibility of NOC transition plans**

PDBs are one of the financial actors outlined in Figure 5 that can indirectly support the decarbonisation of NOCs. As their name indicates, contrary to other financiers, these stakeholders have a mandate to support public development both domestically and internationally. Climate change is also increasingly recognised by PDBs as a key topic to engage in. For example, the IDFC has a dedicated working group on climate change and aligning finance with the Paris Agreement. Beyond knowledge sharing and capacity building, IDFC members are increasing their scale of clean energy and mitigation finance, which reached USD 245 billion in 2022 (IDFC, 2023).

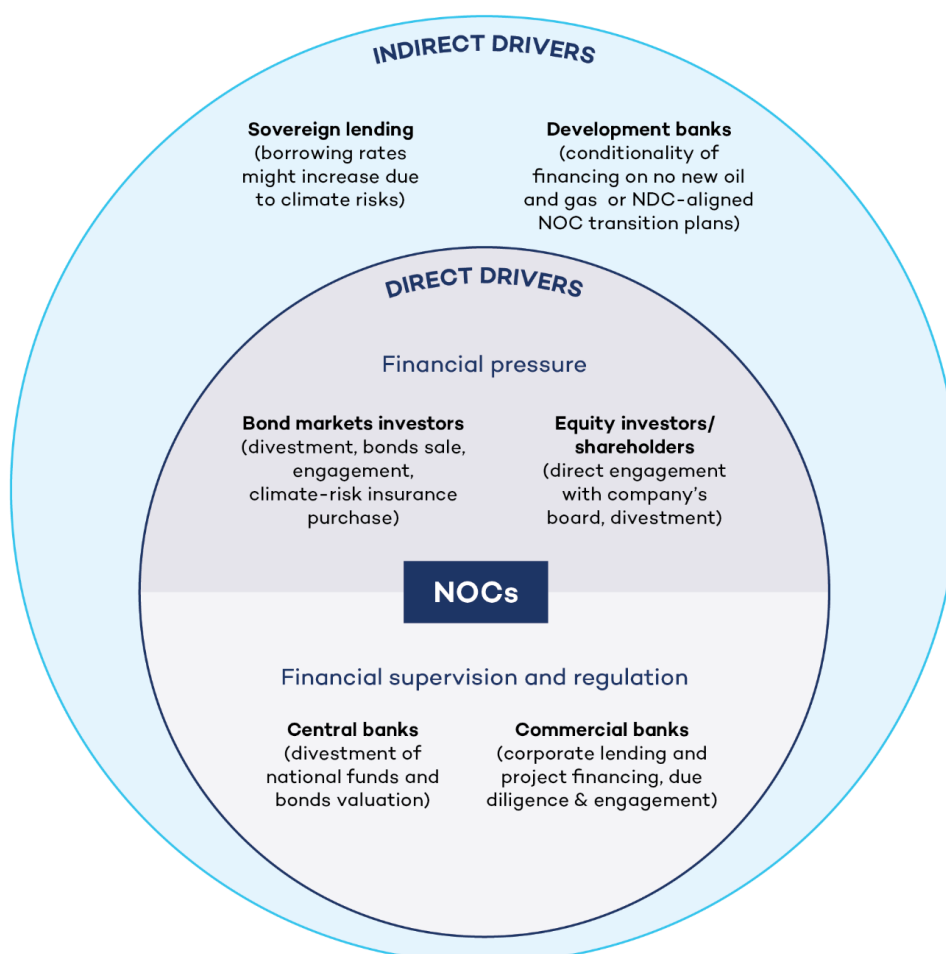
While PDBs do not necessarily engage with NOCs directly, they can support their decarbonisation indirectly through their interactions with NOC host governments. The type of support they can provide varies. It can include financial assistance through blended finance, green loans and bonds; imposing stricter conditionalities on financing linked to climate objectives; support for green budgeting; and wider advisory services. The latter can mean indirectly supporting an NOC with its understanding, development and, ultimately, the implementation of a low-carbon transition plan. It is also worth noting that not all PDBs are engaged in the NOC topic. Some – such as China



Development Bank (CDB), Banco Nacional de Desenvolvimento Economico e Social (BNDES) and PT Sarana Multi Infrastruktur (PT SMI), to name a few directly – operate in NOC jurisdictions, whereas others do not. In the case of BNDES, it is noteworthy that the PDB is also a Petrobras shareholder. Not all PDBs have the same potential leverage over NOCs, with certain PDBs more able to provide capital funding than others, such as CDB, Cassa Depositi e Prestiti (CDP), KfW Bankengruppe (KfW), Development Bank of Latin America (CAF) and PT SMI.

While it remains to be seen how PDBs use their leverage to indirectly support NOC low-carbon transition plans, there are already some interesting examples of engagement to date. For example, through the partnership between the Georgian and German governments, KfW is supporting green hydrogen development with the Georgian Oil & Gas Corporation (2023). While not directly related to oil and gas, during the pandemic, CAF also provided USD 7 billion in Latin America to accelerate renewable deployment and electric transport (Acosta, 2021). In other instances, PDBs have also collaborated with IOCs. In Italy, for example, CDP partnered with Eni to support green hydrogen and renewable energy production (Kulovic, 2020).

**Figure 5. Potential financial drivers of NOCs’ decarbonisation**



## What more could financial institutions do to engage with NOCs on decarbonisation?

Each of the five routes for influence listed below represents a potential avenue for engagement with NOCs. Financial actors could play an important role over the coming years in stimulating NOCs not only to increase their transparency but also to make serious plans and efforts to decarbonise. Investors and financial institutions should work on all fronts, but the highest stakes might vary from NOC to NOC. This depends mainly on NOC financing structures and their relative abilities to switch from one financing mechanism to another. It also depends on the extent to which local and national decarbonisation pathways feed into NOC transition plans. This may include a link between transition plans and NDCs along with any other sectoral oil and gas decarbonisation pathways developed at the country level.

In spite of the relatively low gearing (i.e. the ratio of debt to total capital) of the sector, global figures show that only 40% of global emissions are produced by listed companies (Generation Investment Management, 2023), while all companies (including NOCs) have some sort of connection to the bond markets. In theory, this connection provides bond investors with an opportunity to exert pressure on some of the NOCs – for example, by elevating transparency among unlisted NOCs and requiring them to adopt the same financial and reporting requirements as listed NOCs. However, a number of complexities and loopholes have recently started to emerge. A recent piece of news involving Saudi NOC Saudi Aramco is quite instructive in this regard. In 2021, the company started a process to raise USD 28 billion; in order to access the much-needed bond markets, it created two subsidiaries (the Aramco Oil Pipelines Company and the Aramco Gas Pipelines Company) and sold 49% of the shares in each unit to consortiums led by EIG Global Energy Partners LLC and BlackRock Inc., respectively. Those, in turn, created two special purpose vehicles, EIG Pearl Holdings and GreenSaif Pipelines Bidco, to repay the bank loans obtained to finance the transaction in the first place. These special purpose vehicles were eventually able to sell Aramco bonds that had no direct connection to the fossil fuel industry and even made their way into JPMorgan's ESG indexes (Ritchie, 2023). What this example shows is, in the first place, the pressing need for many NOCs to access cheap financing, as in the case of bond markets. It also shows how transparent reporting requirements imposed by specific investors and funds could represent a barrier to accessing funding for a number of NOCs, often on the very basis of their business strategy and governance structure. In turn, this transparent reporting could become a strong leverage point for investors to exert some influence on NOCs' strategic decisions. However, this example also shows that the existence of complex financial structures creates loopholes. These loopholes do not guarantee for climate-aware investors (some of whom explicitly reject the option of purchasing NOCs bonds [Nordea, n.d.]) that ESG funds are aligned with their own purposes. In practice, this may weaken the ability of bond markets to create the right system of incentives for NOCs to improve their transparency and decarbonise. Finally, the example also shows that additional layers of screening or altogether alternative approaches need to be tested by investors.

The following routes could be effective instruments for climate-concerned investors. They can be applied to private companies as much as to NOCs, as long as NOCs resort to bond markets to finance their own debt (Sjösström & Erlandsson, 2020):

1. Investors involved in primary market transactions could have a dialogue with the company and set clear expectations on climate commitments. They can also potentially offer better terms to sustainable companies if they believe that such sustainability will have a positive impact on the company's future earnings.
2. Investors could try to increase the yield for NOCs by selling bond holdings, thereby increasing their cost of capital indirectly.



3. Investors can buy insurance protections to insure bond portfolios against downside risks; this is a direct way of speculating that higher climate-related risks will be priced into the company's bonds over time, potentially increasing bond prices and cost of capital for the bond-issuing company.
4. Divestments in the bond primary markets (i.e. concerning direct transactions between investors and companies/issuers) may push the companies to increase the proposed interest rate on offer, with direct cost of capital effects on NOCs.
5. Central banks can play a key role, both as investors and managers of national funds (such as the Norwegian Oil Fund or the Monetary Authority of Singapore), and decide to no longer invest in certain bonds. As financial regulators, central banks can influence bond valuations and the capital costs of climate-related economic activities.

It is worth noting that some NOCs might have more limited portfolio flexibility than IOCs to substantially move away from oil, as they or their national governments must balance the energy trilemma of low-carbon investments with national economic development and growth while providing local access to affordable energy. This is one of the key reasons why, beyond banks and investors, governments have a key role to play as majority shareholders in shaping new mandates for NOCs. This is the case for both more open, "international" NOCs and more "closed off" ones, whose policies and strategic direction are all affected, to varying but always considerable extents, by the broader climate agenda of their countries of origin.

Investors have ways to engage with governments that own NOCs. One of them is through governments' reliance on sovereign financiers for funding – including financing for non-commercial activities. It is likely to get increasingly difficult for NOC-owning governments to continue borrowing at low rates as sovereign lenders are forced by their home constituents to consider climate risks in their credit decisions. This challenge will pose an additional problem for NOCs' governments, many of which use NOCs for access to capital as a way to circumvent sovereign debt limits. Another important route is represented by the influence that development banks can exert over NOC governments. This influence can include making financing conditional on successful fossil fuel subsidy reform, on a commitment not to expand new oil and gas or on the alignment of a NOC's decarbonisation plan with the country's Paris-aligned NDC.

## Recommendations

There is a growing demand for credible climate transition plans in the oil and gas sector. Financial actors are increasingly using these plans to assess their exposure to myriad physical and policy-related risks from climate change and how these can translate into financial risks. Regulations are ramping up across jurisdictions to mandate climate-related disclosures, including company plans to address climate risks and the transition to a low-carbon economy. NOCs will have to meet the demand for transition plans in some form or another. This is due to NOCs' reliance on outside financial actors, NOCs' operational footprint in disclosure-mandating jurisdictions and the rising prominence of transition plans in NOCs' home-country NDC pledges. In addition, NOCs will see financial incentives to develop transition plans. This is linked to the fact that the implementation of credible transition plans can unlock higher levels of transition finance and access to new markets, along with a reduced risk of asset stranding and declining revenues for NOC-owning governments.



## Recommendations to financial actors

Investors, banks and other financial actors have numerous routes of engagement with NOCs over the adoption of transition plans to ensure that the companies are held accountable in their future investments and activities:

- Commercial banks and central banks have direct leverage over NOCs given project-specific and corporate financing. Banks should use this leverage to condition future financing and credit renewal for NOCs, enhancing their transition plans to make them Paris-aligned and exclude any new oil and gas development.
- Bondholders and shareholders have avenues of direct engagement via shareholder meetings and dialogues with NOC boards of directors. They also hold leverage based on the threat of future divestment and limitations on future listings of shares and debts by NOCs. Debt and equity owners can use this access and financial leverage to push NOCs to develop credible transition plans more broadly, rather than limiting their engagement to specific levels of action, such as methane abatement.
- Sovereign financiers and development banks have indirect influence over NOCs in their capacity to affect borrowing rates, finance conditionality and provide fiscal and regulatory assistance. Sovereign financiers and development banks can use their dual roles as lenders and providers of assistance to engage with both NOCs and their host governments.
- Conventional credit ratings are based on metrics that do not sufficiently incorporate climate and transition risks and do not value companies' efforts to embark on transition plans. To provide the right signals to financial actors and regulators, credit rating agencies should accurately incorporate climate risks into their creditworthiness rating.

## Recommendations to standard setters and regulators

Despite rising demand and the prospect of future benefits, NOCs have, by and large, failed to develop credible transition plans to date. While there is variation across NOCs in their transition plan readiness, many NOCs lack any kind of transition plan at all. In addition to financial actors, this briefing also provides a number of recommendations for standard setters and regulators to enhance NOCs' accountability.

As per WBA's ACT assessment, there are a number of key criteria that standard setters and regulators can use to evaluate NOC low-carbon transition plans. These criteria include the following:

- First and foremost, NOCs without any transition plan should prepare baseline information on the state of readiness of the company to transition to a low-carbon economy.
- NOCs must disclose their 2030 planned energy mix and low-carbon capex shares. Only three NOCs to date (YPF, Equinor and Petronas) disclose any information about investments in clean energy, lagging behind IOCs despite NOCs capturing a larger share of oil and gas profits. Scaling up low-carbon business models is key. Although NOCs have marginally improved their development of low-carbon business models, much more remains to be done, including ensuring that the onus is not only on developing CCS, CCUS and negative emission technologies. NOCs should strive to reduce energy demand and shift toward a sustainable energy supply. This shift includes supporting renewable energy production, sustainable fuels and gases, and electric vehicle charging infrastructure.
- Targets (both interim and long term) for reductions of scopes 1 to 3 emissions need to be ramped up and should include both absolute and intensity emissions. Again, only three NOCs (Equinor, Ecopetrol and Gail) have thus far set targets for reducing indirect emissions, which represent the majority of emissions in the oil and gas sector. Meeting these targets and reducing emissions across the value chain also requires NOCs to plan for a reduction in oil and gas production and halt the expansion of new projects.





- NOCs must ensure they have management-level expertise on climate with scenario planning, climate change oversight capability and incentives that are linked to climate and not fossil fuel growth.
- NOCs must adequately plan for a just transition in order to protect oil and gas workers, communities and suppliers. So far, only one NOC meets partial elements of just-transition planning.

NOCs are not immune to or insulated from external factors. Financial actors, regulators and standard setters can and should use this leverage to encourage NOCs to reconsider and improve their transition plans. Without a change in practices, NOCs, their host governments and financiers are exposing themselves to multiple financial, economic, social and political risks. Success will also be critical to realising an equitable and sustainable energy transition, as NOCs are expected to contribute the lion's share of greenhouse gas emissions from the oil and gas sector in the decades ahead. The upcoming major climate conference, COP 28, in the United Arab Emirates, will be an overdue opportunity to enhance NOC accountability to a low-carbon transition.

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