



SIGNAL
CLIMATE ANALYTICS

STATE OWNED ENTERPRISES

Global Impact. No Transparency. Little Accountability.

SIGNAL BRIEF

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Signal Brief: State Owned Enterprises

Global Impact. No Transparency. Little Accountability.



Key Finding #1

State Owned Enterprises comprise 23 of the top 50 global corporate emitters responsible for 27% of global annual anthropogenic emissions.



Key Finding #2

Of the 23 emitters, 15 report no emissions publicly, and there is little evidence they are following a pathway to transparency and decarbonization in line with a 1.5 degree world.



Key Finding #3

Corporate super-emitters who are the least transparent generally underperform on shareholder return, but non-transparent SOEs escape this penalty likely due to market distorting externalities.

Context

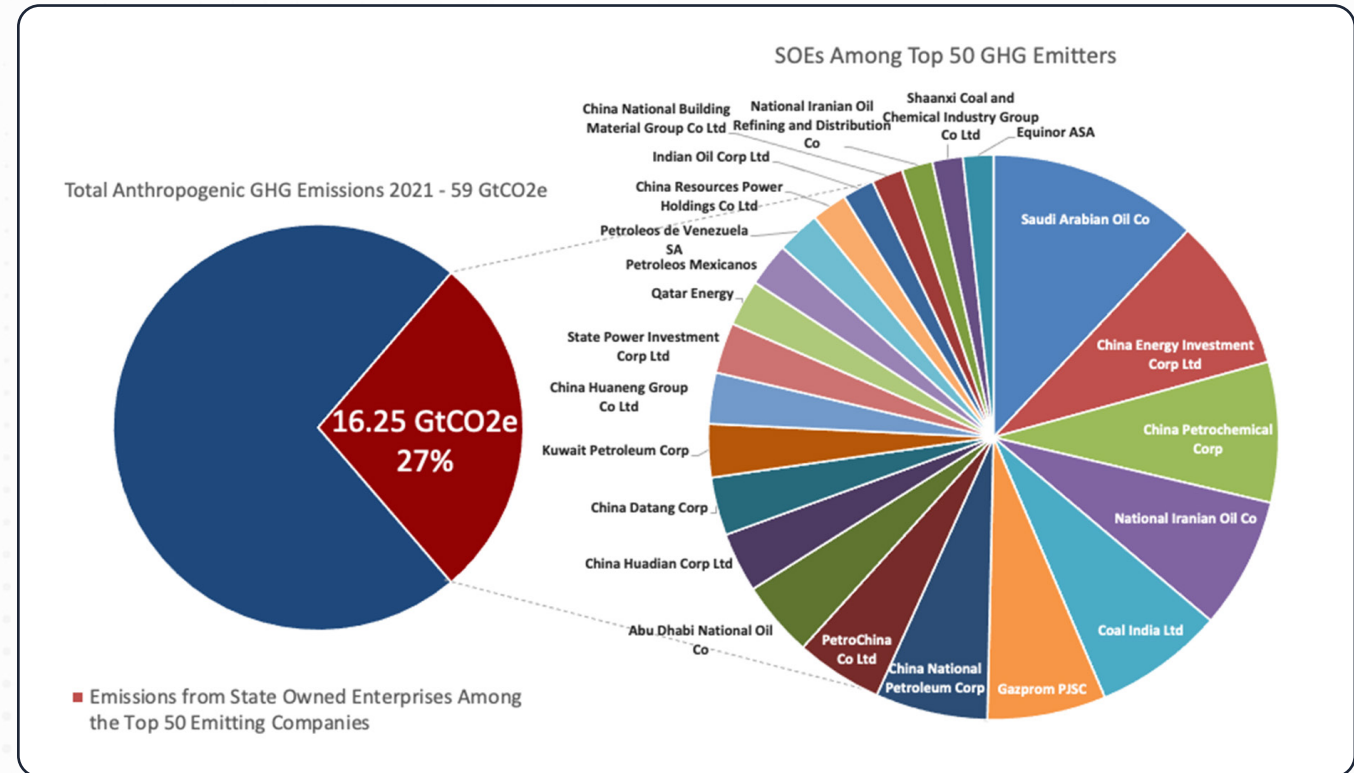
Effectively measuring emissions and managing decarbonization strategies can often take a decade or more. Our prior research on the largest and most carbon intensive global businesses indicates that there are a growing number of firms that have successfully translated leadership, vision and strategy into results both for shareholders and the planet. This Signal Brief builds on our prior work on the decarbonization pathway that nearly all large businesses have followed to deliver these results. This report examines a remarkable lack of leadership among nation states as witnessed by the performance of their state owned enterprises (SOEs) who as a group account for a vast quantity of undisclosed global greenhouse gas emissions.



**State Owned Enterprises
comprise 23 of the top
50 global corporate
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anthropogenic emissions**

The top 50 group of global corporate emitters are responsible, directly or indirectly, for approximately 29 GtCO₂e of total annual anthropogenic emissions. SOEs are among the highest emitting entities in the top 50 super-emitter grouping.

In 2021, 23 SOEs in this group were responsible for approximately 16 GtCO₂e or 27% of the global annual total from all human sources¹.

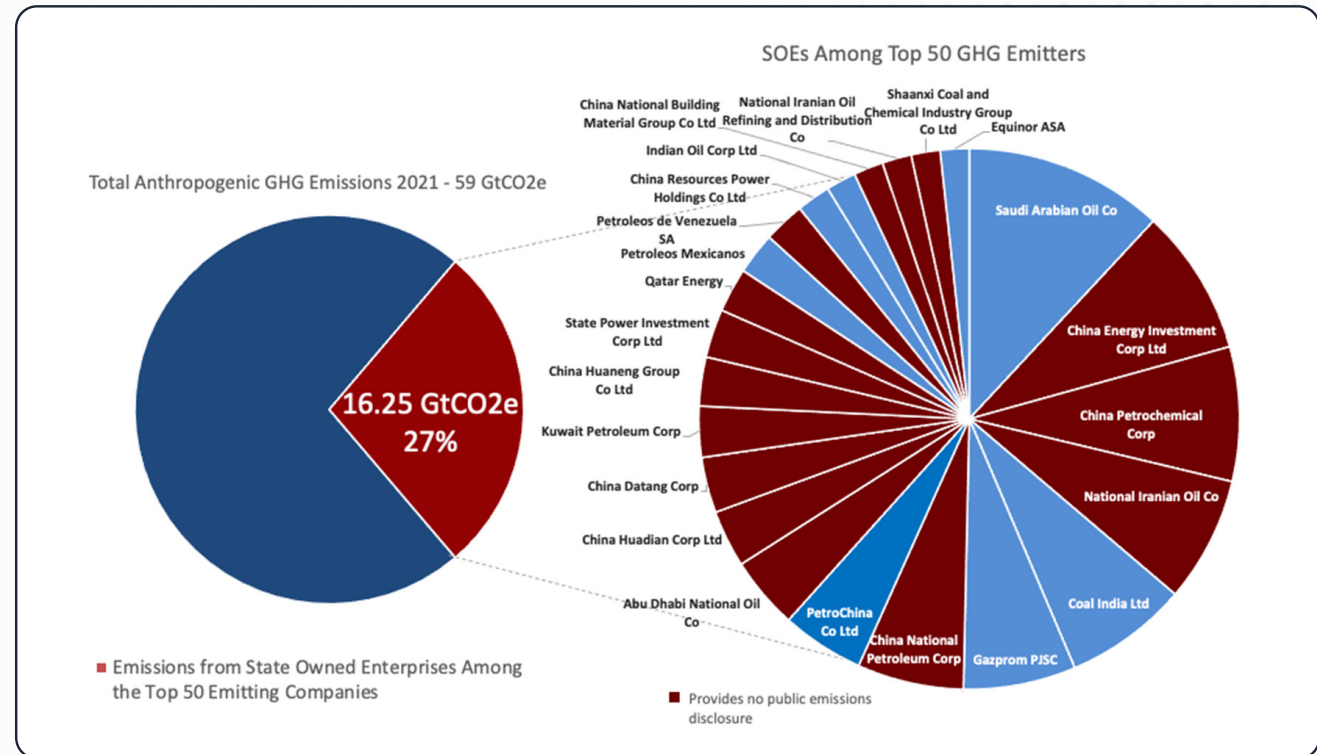


1. IPCC, 2022: Summary for Policymakers. In: Climate Change 2022: Mitigation of Climate Change, p. 11 estimates global net anthropogenic GHG emissions of 59 GtCO₂e https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_SPM.pdf

Of the 23 emitters, 15 report no emissions publicly, and there is little credible evidence they are following a pathway to decarbonize in line with a 1.5 degree world.

Remarkably, 61% of the emissions from the SOEs in the top 50 grouping comes from 15 SOE's who provide no public disclosure of their emission footprints.

Given this lack of transparency, what is the likelihood of those companies becoming more transparent and decarbonizing in line with a 1.5 degree world? Looking at the historical record as documented in prior research², the likelihood is low.



2. For a detailed set of findings on how corporations evolve towards transparency and decarbonization, see [Transparency: The Pathway to Leadership for Carbon Intensive Businesses](#).

As companies mature in their capacity to transform their products and processes, they typically follow a 5-step pattern reflecting increasing transparency on their greenhouse gas emissions (GHG) and plans to decarbonize their businesses.

It is very rare that companies who intend to decarbonize do not first measure and publicly disclose their footprints. The cultural progression of a super-emitter follows the pattern outlined below, moving from initial policy and reporting to 1.5 degree strategy-aligned target setting³:

3. For a recent ranking of the top 250 global corporate emitters on this set of stages see Signal's September 2022 report [Assessing 250 of the Largest Carbon Emitters for Transparency](#)

1

Initial Emissions Reporting

A Company starts measuring and disclosing its Scope 1 and 2 emissions.

2

Reporting Standards and Verification

A company demonstrates accounting transparency by subscribing to a reporting standard (e.g. GRI), disclosing to CDP, and obtaining third-party verification.

3

Complete Emissions Reporting

A company estimates and discloses relevant Scope 3 categories up and down the value chain.

4

Keystone Metric Reporting

A company estimates and discloses the most important emissions performance metric for tracking its contribution to a net-zero emissions future. In this Brief this is represented by a measure of emissions intensity (e.g. tCO₂e/BOE) in the SOE's that can be compared, benchmarked, and tracked in any meaningful way..

5

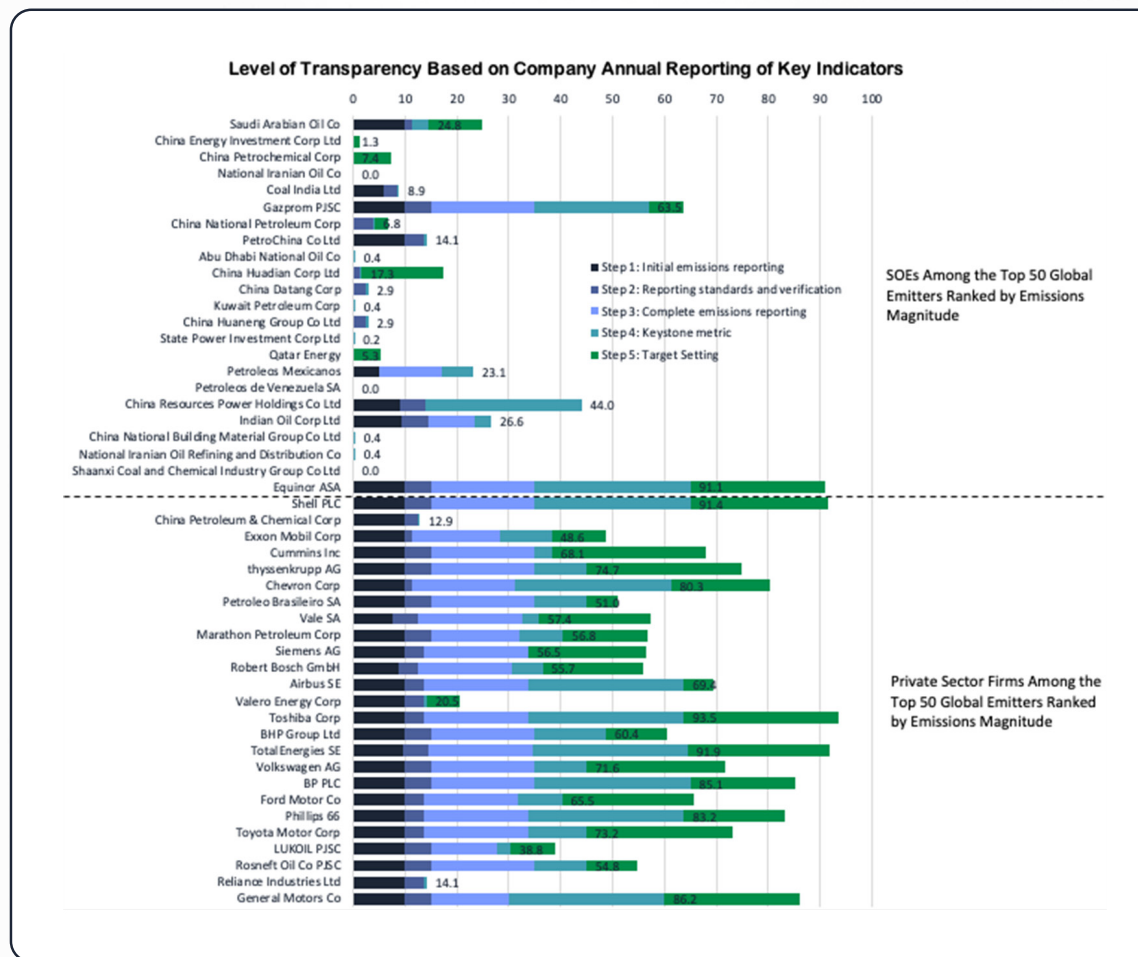
Target Setting

The company provides complete near and long-term target information with clarity over specific data points and thresholds necessary to understand its pathway against net-zero.

Taken together, these steps on the journey towards real transparency provide a template for understanding where a company is compared to its sector and the group of top 250 global super-emitters.

The graph below shows the progression towards real transparency –or lack thereof– of the top 50 emitters globally broken down into SOE and private sector subgroups for comparison.

The 23 SOEs among the top 50 emitters globally generally demonstrate poor transparency across all five of the progression steps with the exception of Gazprom PJSC and Equinor ASA. The remaining 27 private sector firms among the top 50 global emitter group showed much more promising transparency performance with an average weighted score of 63.2 compared to the SOE group’s 14.9.



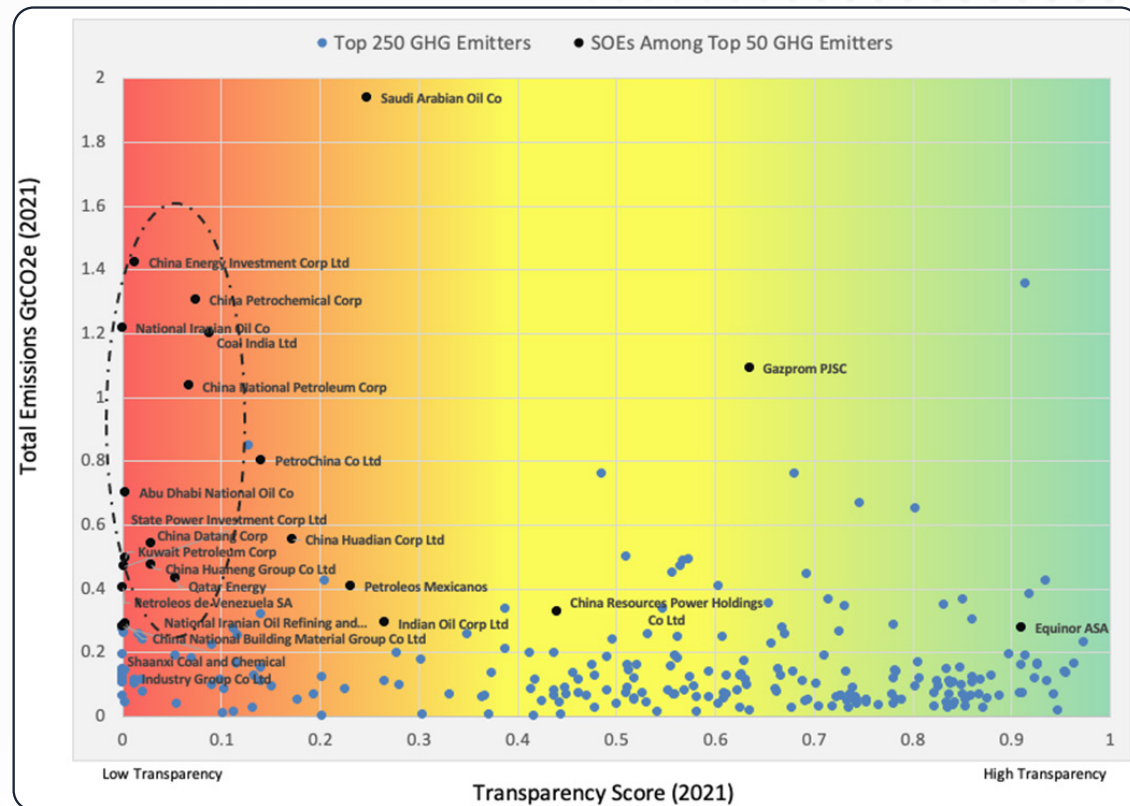
The graph below places the top 23 SOEs in the context of the top 250 global corporate emitters with the magnitude of emissions plotted on the vertical axis and the level of transparency using the steps above (“transparency score⁴”) plotted on the horizontal axis.

4. A “Transparency Score” is calculated by assessing the extent to which a company has achieved each of the stages, and then each stage is weighted in terms of its importance towards 1.5 degree alignment. For more detail on the methodology, please see Signal’s September 2022 report

[Assessing 250 of the Largest Carbon Emitters for Transparency](#)

5. All emissions from these 15 non-disclosing SOEs have been estimated by Signal’s research team who have expertise developed over decades of experience at CDP, Carbon Tracker and other leading research institutions.

As circled in the upper left quadrant of the graph, SOEs in the top 250 are some of the largest global emitters⁵. Historically, the likelihood of meaningful decarbonization being achieved is low when measurement and disclosure to stakeholders is not a consistently implemented management priority. The position of our group of SOEs at the far left of the graph also indicates a nearly complete lack of disclosure and target setting to reduce emissions going forward, and not surprisingly, the nation state owners of this group of SOEs also have low levels of decarbonization ambition. (see Appendix 1).



Corporate super-emitters who are the least transparent generally underperform on shareholder return, but non-transparent SOEs escape this penalty likely due to market distorting externalities.

The table below displays the top 250 total shareholder return vs transparency level analysis. The results generally indicate a meaningful market penalty for the lowest level of transparency with an average TSR of 7.2% in the Laggard group returning over the 2018-2021 period. The defender and contender groups also deliver significantly better returns. What might be inferred from this difference in an admittedly small sample over a relatively short period of time?

Total Shareholder Return & Transparency Score Relationship						
Company Transparency Performance Group	Transparency Score	TSR 2018	TSR 2019	TSR 2020	TSR 2021	TSR 2018-2021
Leaders	> .75	-7.9	18.8	-0.5	28.4	37.9
Contenders	>.5 and <.75	-7.2	16.8	3.3	29.6	46.2
Defenders	>.25 and <.5	-4.2	15.8	-6.6	48.1	43.6
Laggards	<.25	-17.0	9.8	-0.9	27.9	7.2

Generally, top 250 emitting firms whose leadership teams have committed to some degree of transparency meaningfully outperform those who have opted to avoid disclosure. Disclosure may be a good signal of general quality of management. Management teams with a stronger commitment to disclosure, especially in carbon intensive businesses like the top 250, may be signaling their growing preparedness to address the disruptive changes that lie ahead. They may be changing the culture in their organizations and, in important ways, signaling a commitment to innovation that will be essential to make transformation work. However, while this trend appears to hold for the top 250 generally, it does not hold for the SOE grouping of 23 in the top 50. These firms at the top of the emissions curve and at the bottom of the transparency curve do not suffer

a market penalty because of lack of transparency. In fact, they perform at or near the top in terms of TSR in the top 250 with an average of +44% TSR over the same 2018 to 2021 time period measured above. How can it be that the market penalizes publicly owned non-transparent super-emitters but not their SOE peers? What distorting externalities are at work?

The answers to these questions go beyond the scope of this Signal Brief but SOEs do enjoy a range of benefits and protections (subsidies, deregulation, low transparency requirements, political favoritism) that put them in a position qualitatively different from private sector players. The advantages make competitive neutrality with private sector players unlikely and in turn distort productivity, innovation, governance, and disclosure beyond the reach of market drivers and policymakers attempting to utilize those drivers.



Conclusion

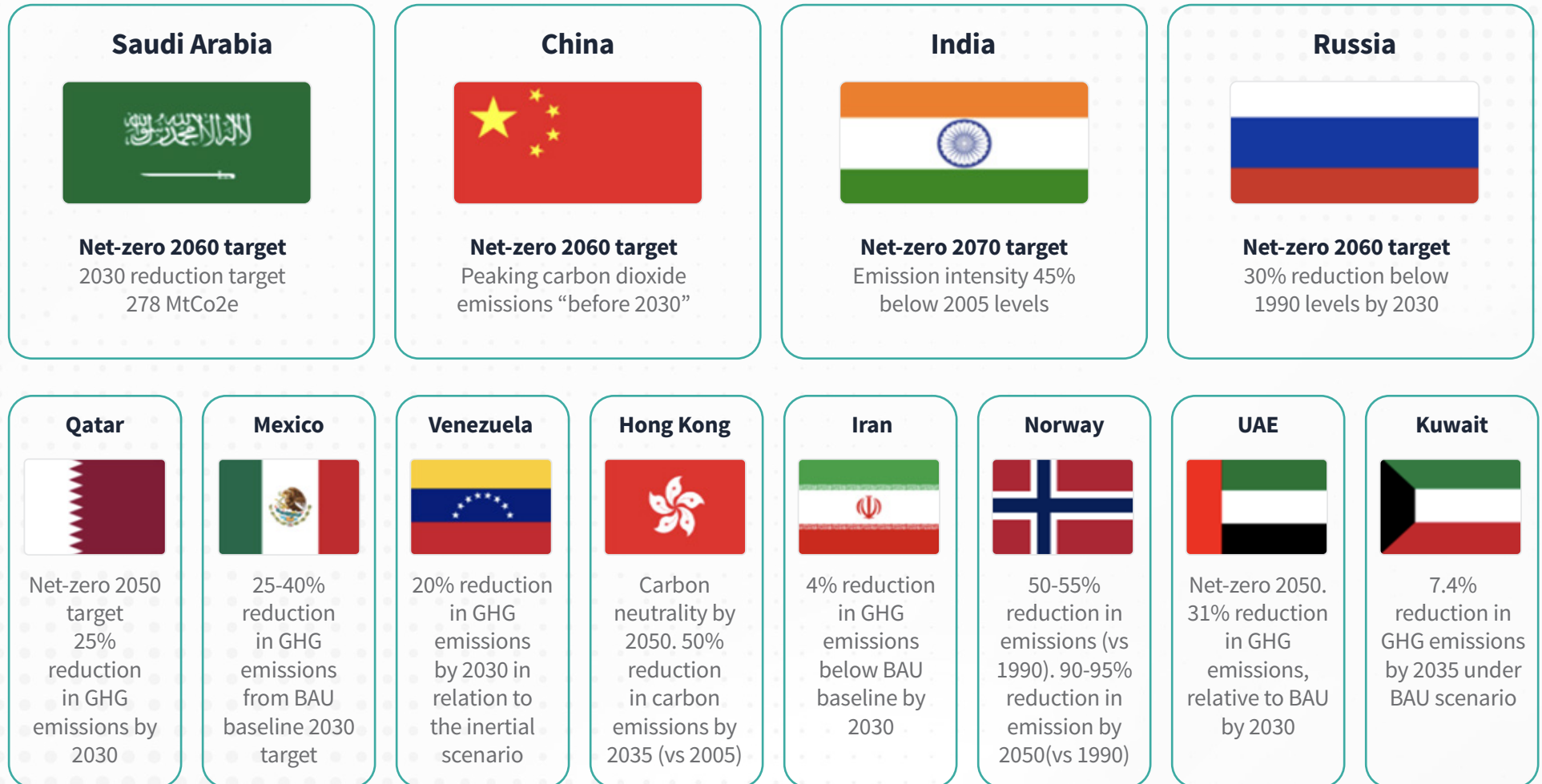
Grouped together, there is no collection of 23 companies in the world who emit more than these with as little transparency as the SOE's referenced in this research. These key actors are setting an example from both the top of government and the C-suites down the hall that should be scrutinized as the world tries to manage down emissions. In addition, there is clear evidence that underperformance on transparency translates into a “laggard penalty” in terms of shareholder returns for large emitters who are exposed to market and policy forces, but not for this group of SOEs who are largely shielded from public market pressures. As the saying goes, we can't manage what we can't measure, and in this case,

what a handful of governments mostly choose not to measure. The question we are left with is how to engage and encourage these actors who operate in a business and regulatory environment that is not much different from the not so distant past in the US and EU to make transparency in support of transformation a management priority. This report intends to spotlight those SOE that need to adopt the playbook on emissions reductions that is proving successful around the world. That plan begins with real transparency on emissions, disclosure of reduction targets, and the plans to get there. That's now something all stakeholders not only want to know, but need to know to avoid the worst consequences of climate change.



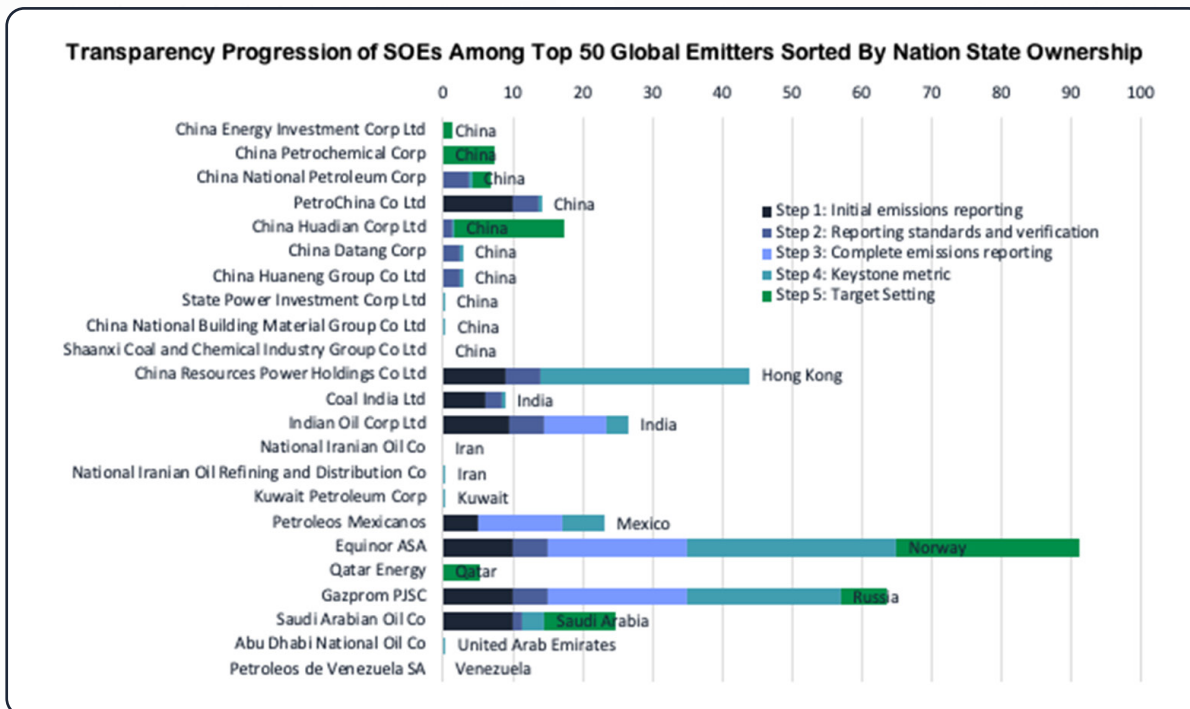
Appendix 1

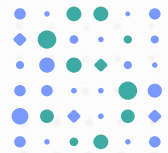
Decarbonization Targets of Top SOE Owning Nations and Corresponding Transparency Performance of Firms Under Ownership



Appendix 1

Decarbonization Targets of Top SOE
Owning Nations and Corresponding
Transparency Performance of Firms
Under Ownership





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