November 2021

Emerging market companies hold the key to our climate future

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25 years of ESG

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In 2015, the year of the COPS21 conference in Paris, the global level of CO2 emissions reached 35.21 billion tons. In December that year, the Paris Agreement was signed, setting out a global framework to avoid dangerous climate change by limiting global warming to well below 2°C compared to the pre-industrial levels.

By 2019, global annual CO2 emissions reached the highest mark ever - 36.44 billion tons, representing a 3.5% increase from 2015. Using CO2 emissions data from the S&P Global Trucost, which estimates the hidden costs of unsustainable use of natural resources by companies, we calculated that the top 100 emitting companies in 2019 were responsible for 21% of global CO2 emissions. That's just based on their direct (Scope 1 & 2) emissions, but if we were to include emissions caused by their products (Scope 3), that would yield a much higher percentage.[1]

[1] A report by CDP published in 2017 estimates that 71% of global CO2 emissions are caused by 100 companies and individual economies. Whilst the methodology to reach this number is debatable, the report still provides useful insights into the fact that a limited number of companies are responsible, directly or indirectly, for the bulk of global emissions.
Griffin Dr. Paul, "CDP Carbone Majors Report 2017"

Clear divide emerging in CO_2 reduction efforts

In the run up to the COP26 conference in Glasgow, many have denounced the overall lack of progress and some have accusing ESG-focused investors of promoting sustainable goals while simultaneously investing in companies responsible for the ongoing increase in CO_2 emissions.

However, a dispassionate look at how individual companies have progressed since COP21 in 2015 shows clear divergence between developed and emerging market companies. Where investors have had their say, progress has happened. It also shows the limits of investor influence on the companies that are responsible for the bulk of global CO_2 emissions, especially when those companies are state-controlled or not publicly listed.

Why 2019 numbers?

In 2020 global CO_2 emissions went down by 4.5%[2] as the global economy contracted by 4.3%. The International Monetary Fund forecasts that global GDP will grow by 6% in 2021[3]. The catch up in global production will most likely be accompanied by a corresponding increase in global CO_2 emissions. It is therefore not unreasonable to use 2019 figures to estimate where the largest emitters are likely to stand by the end of 2021 in terms of emissions.

[2] BP Statistical Review of World Energy 2021 | 70th edition.
[3] International Monetary Fund, "World Economic Outlook Update", July 2021

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The worst CO_2 record: EM government-controlled companies

In the course of four years between 2015 and 2019, the ten worst contributors we identified in emerging economies (EE) increased their CO_2 emissions by between 11% (Gazprom) and 355% (PetroChina). Only one company within that top ten, ArcelorMittal, reduced its emissions.

Figure 1: Top ten CO_2 emitters from emerging economies

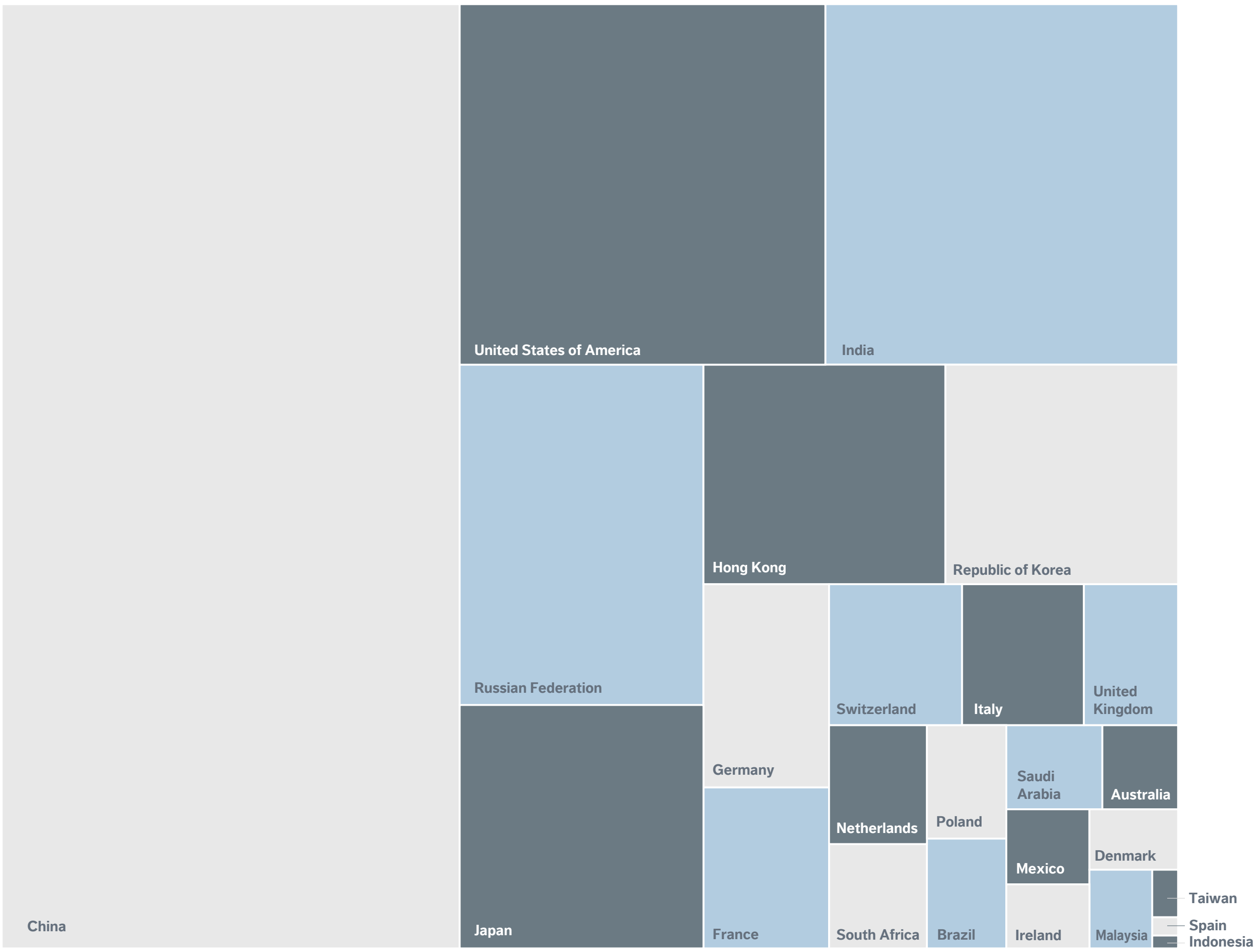
Tons CO_2	2019	2015	Change
Datang International Power Generation Co., Ltd.	587 106 275	137 441 133	327%
Huaneng Power International, Inc.	336 301 405	289 096 077	16%
GD Power Development Co.,Ltd	302 802 408	132 339 333	129%
Korea Electric Power Corporation	262 465 187	217 509 481	21%
China National Building Material Company Limited	261 126 843	85 083 888	207%
NTPC Limited	247 714 224	217 800 853	14%
Public Joint Stock Company Gazprom	245 539 103	227 262 585	8%
Anhui Conch Cement Company Limited	199 760 329	73 443 923	172%
ArcelorMittal	184 817 270	194 155 087	-5%
PetroChina Company Limited	174 080 000	38 225 204	355%

Source: S&P Global Trucost as at 2019

In total, the ten companies we identified are responsible for 2.8 billion tons of annual CO2 emissions, which is about the same as annual emissions of all of the 27 EU member states combined.

However, while the developed world's ten largest CO2 contributors reduced the level of their emissions by 17% between 2015 and 1029,the top ten emerging market CO2 contributors increased theirs by 58%.

Figure 2: The worst 100 CO2 polluters globally



Source: S&P Global Trucost as at 2019

The Bad 100

In total, the worst 100 CO_2 polluters globally increased their emissions by 1.3 Gt, which is almost as much as the total emissions of France, the UK and Germany combined in 2019. We consume more fossil energy every year, and that is what ultimately matters for climate change. These 100 companies emitted as much CO_2 as resulted from all human activities in the United States and Russia in 2019. These figures alone prove when it comes to CO_2 emissions, the most important greenhouse gas (GHG), a small number of companies, making products we can't get enough of, play a very significant role.

These figures also illustrate the wide disparity between regions. Companies based in emerging economies increased their emissions by an average of 46%, while those based in developed economies, mostly North America, Europe and Japan, reduced their emissions by 14% over the same period. In other words, some of the Western companies most often mentioned as lagging in progress to reach the Paris Agreement objective have already begun to shift their business towards less carbon intensive activities.

Figure 3: Top ten CO_2 emitters from developed economies

Tons CO_2	2019	2015	Change
Holcim Ltd	128 276 789	180 374 930	-29%
Exxon Mobil Corporation	120 000 000	125 989 600	-5%
Nippon Steel Corporation	99 589 627	98 115 043	2%
Tokyo Electric Power Company Holdings, Incorporated	99 287 717	97 316 731	2%
RWE Aktiengesellschaft	96 505 452	153 600 003	-37%
The Southern Company	91 644 213	102 012 505	-10%
Duke Energy Corporation	85 541 828	109 626 101	-22%
Royal Dutch Shell PLC	80 621 630	80 999 835	0%
American Electric Power Company, Inc.	79 297 150	116 103 735	-32%
HeidelbergCement AG	79 023 255	58 743 768	35%
Enel SpA	75 347 277	122 091 940	-38%

Source: S&P Global Trucost as at 2019

If we look at CO_2 emissions at the company rather than country level, out of 43 developed market companies within the top 100, only 17 saw an increase in their combined Scope 1 & 2 emissions since the COP21. By comparison, 41 out of 57 companies from emerging economies saw an increase.

A case for tougher EM engagement

For investors, the lesson is clear: to make a significant dent in global CO_2 emissions, much more attention must be placed on emerging market companies. These companies, and the governments backing them, hold the key to our climate future. Such influence can either be exerted directly, through corporate engagement, or indirectly, through investment from developed economies in Paris aligned businesses.

Example 1: Out of the 167 companies currently targeted by the Climate Action 100+ collective engagement initiative, only 35 of them are based in emerging economies.

Example 2: 956 companies have set for themselves science-based greenhouse gas reduction targets. Amongst them 173 US based companies, but only 9 based in China and none in Russia.

In other words, many of the companies most responsible for today's CO_2 emissions and for the rise in emissions since the COP21 are out of reach or out of scope of the largest collective initiatives on climate. Even if some of the highest CO_2 emitting companies in emerging economies are out of reach for traditional investors, some are listed on various stock exchanges. Also, most of the worst CO_2 emmitting countries issue sovereign bonds that are purchased by international asset managers, creating opportunities for dialog and engagement to promote change.

Since a small number of companies are responsible for a large chunk of emerging economies' CO_2 emissions, they are disproportionally exposed to regulatory risks. If and when governments in emerging economies adopt more ambitious measures to limit CO_2 emissions, these companies will be the first to be impacted. And since these companies' CO_2 emissions are intimately correlated with their country's economic growth, one can understand why reducing absolute levels of CO_2 emissions is hard. Coal, steel and power generation companies currently represent a one way bet on their country's ability to keep their growth rate in positive territory, despite the environmental toll caused. The recent Chinese government orders to its coal industry to boost capacity in order to support economic growth[4] provides ample illustration of this conundrum.

Finally, investors should also pay attention to how large CO_2 emitters, especially in developed markets, intend to reduce their emissions. There is a difference between reducing emissions through asset disposal and reducing emissions through improving CO_2 and energy efficiency at production level. If the high CO_2 emitting assets are simply moved from one company balance sheet to another less visible or scrupulous entity, there will be no overall CO_2 reduction. If a range of efficiencies are adopted at production level to reduce CO_2, that will, in turn, lead to reduction in emissions.

[4] Financial Times, "China orders coal miners to boost output to counter energy crunch", October 8th 2021.

No piggybacking on Western climate efforts

Some ESG investors have been, perhaps rightly, criticised for setting their environmental criteria too low relative to the global CO_2 emission trajectories. However, what this criticism ignores is that many of the worst CO_2 emitters are currently out of reach of most mainstream European and US investment managers. Many are not publicly listed, and the few that are do not allow room for active engagement with their investors. Although still not aligned with a two degree (let alone 1.5-degree) scenario a number of companies in developed economies have started to shift their focus to low carbon solutions.

For investors, having woken up to their ability to drive change on environmental goals, the next step is to exert that influence carefully and not push these highly visible companies to sell their dirty assets to less visible, less scrupulous investors. In this area, like other climate change related areas, governments have a role to play to ensure a level playing field so all companies' impacts are accounted for and every company held accountable for their role in climate action.

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