

PRESS RELEASE – 10 MARCH 2017

Carbon Majors 2015 update: six companies responsible for one-third of emissions from oil and gas sector since 1988

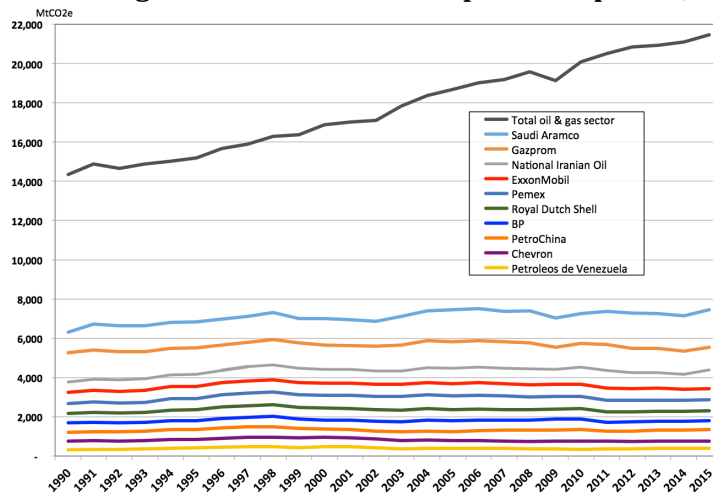
The Climate Accountability Institute’s and CDP’s updated *Carbon Majors Dataset* quantifies the central role of the oil and gas sector in driving global carbon dioxide emissions and highlights the risks and opportunities of the industry to aide or hinder the transition to a low-carbon economy. The *Dataset* is an update of operational and product-use emissions attributed to the largest fifty investor- and state-owned oil and gas companies from 1988 to 2015.¹

The oil and gas industry professes broad support for climate action. While most companies have reduced operational emissions, oil & gas production and emissions are both increasing, exploration budgets are recovering,² and industry forecasts defy climate concerns. The 2015 Update highlights the industry’s role in reducing the carbon intensity of the global energy system and the urgency of accelerating industry commitment to align with the 2°C pathway (or below) of the Paris Accord.

Key findings:

- Forty four percent of all industrial emissions of carbon dioxide since 1988 can be traced to the operations and products of the world’s fifty largest oil and gas companies;
- Ten of those companies — Saudi Aramco, Gazprom, National Iranian, ExxonMobil, Pemex, Royal Dutch Shell, BP, PetroChina, Chevron, and Petroleos de Venezuela — are responsible for 22% of all fossil fuel emissions and 40% of all oil & gas sector emissions since 1988;
- Since 1988, the fifty O&G companies contributed 31 GtCO₂e of direct operational emissions and 314 GtCO₂ in emissions from the use of their products (deducting for non-energy uses);
- The Fifty represent 70% of global oil & gas emissions of 490 GtCO₂e, and 41% of all fossil fuel emissions of 839 GtCO₂e, all since 1988.

Fig. 1. Global oil & gas emissions and the top ten companies, 1990-2015.



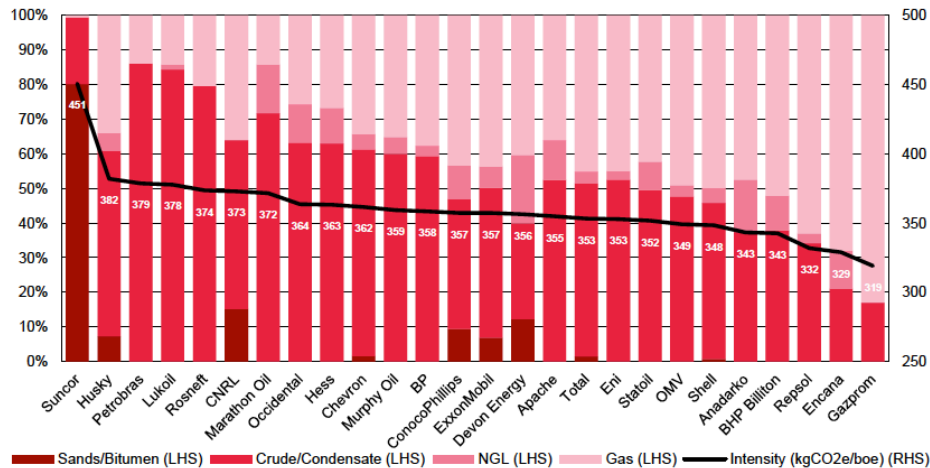
- Many oil and gas companies are increasing the share of production of natural gas — Shell, Total, and Statoil, for example — but the shift from carbon-intensive liquid fuels to gas and renewables remains modest and merit careful attention by investors;

¹ Heede, Richard (2014) Tracing anthropogenic CO₂ and methane emissions to fossil fuel and cement producers 1854-2010, *Climatic Change*, vol. 122(1):229-241; URL: <http://link.springer.com/article/10.1007/s10584-013-0986-y?view=classic>

² England, John (2016) *2017 outlook on oil and gas*, Deloitte LLP, 6 pp.

- Half of all industrial emissions of carbon dioxide since the dawn of the fossil fuel era have been emitted since 1988 (1989 if 2016 data are included);
- Global emissions from both oil and gas are *increasing*;
- Carbon-intensities of products vary by company, chiefly driven by proportion of fuels from bitumen and heavy oils to light crudes and natural gas liquids, and natural gas (Fig. 2).

Fig. 2. Carbon-intensity of product mix, twenty-five listed companies, 2015.



CDP chart: Paul Griffin. Product emissions only; excludes the carbon-intensity of extraction and processing.

Key points:

- Oil and gas companies knew or should have known by 1988 that emissions from their products would destabilize the climate;
- Companies are slow to commit to reduce emissions and shifting capital investment to low-carbon energy sources in alignment with science-based targets to avoid exceeding 2°C of warming, much less “well below” 2°C; company performance varies and worth watching;
- Moreover, progress is slow: direct operational emissions, the focus of company mitigation efforts, are decreasing, but oil and gas production and product-use emissions are *increasing*.

“Investors, portfolio managers, analysts, and consumers would do well to consider the performance of oil & gas companies with respect to emissions, trends, capital investment, and commitments to respect the boundaries of climate stewardship,” said Richard Heede, Director of the Climate Accountability Institute. “The Carbon Majors Dataset provides insights on the leading companies’ climate responsibilities, trends, and emerging risks. Companies that lead the transition to a low-carbon economy stand to lower risk and to increase profitability in the mid- to long-term.”

About Climate Accountability Institute: CAI is a tax-exempt research and educational institute focusing on anthropogenic climate change, dangerous interference with the climate system, the contribution of fossil fuel producers’ carbon production to atmospheric carbon dioxide content, and the risk and disclosure requirements of fossil fuel producers regarding emissions of greenhouse gases. The Institute gratefully acknowledges financial support from Wallace Global Fund, Rockefeller Brothers Fund, and CDP (for methodology). Climateaccountability.org

About CDP: CDP, formerly Carbon Disclosure Project, is an international, not-for-profit organization providing the global system for companies, cities, states, and regions to measure, disclose, manage, and share vital information on their environmental performance. CDP works with 827 institutional investors with assets of US\$100 trillion to motivate companies to disclose their impacts on the environment and natural resources and take action to reduce them. More than 5,600 companies disclosed environmental information through CDP in 2015. CDP.net

About the report: The Carbon Majors dataset was originally constructed by Richard Heede of Climate Accountability Institute. It covered coal, oil, natural gas, and cement company emissions dating back to 1854. In this version, CDP and CAI have updated oil and gas company emissions to 2015 and widened the sample of companies to rank the largest emitting oil and gas companies of 2015. The next version will provide a complete ranking of fossil fuel companies, including coal. Download [Methods & Results Report](#) and [Dataset](#).