Naming Names: Two-Thirds of Industrial Emissions Are from Only 90 Institutions

Contributed by Jan Lundberg
21 November 2013

New peer-reviewed research has found that just 90 entities are responsible for extracting most of the fossil fuels that have been burned over the past 150 years. These “carbon majors” include 50 investor-owned companies, such as ChevronTexaco and Exxon-Mobil, 31 state-owned companies, such as Saudi Aramco and Pemex, and nine government-run industries in the former Soviet Union, China and other countries.

Emissions from burning these fuels total nearly two-thirds of all the carbon that has been emitted into the atmosphere during the industrial era.

Here is the entire news release on this study, from Climate Nexus, interestingly enough funded with oil money, in essence: "We are a sponsored project of Rockefeller Philanthropy Advisors, with funding provided by a number of foundations and philanthropies."

[First, since my childhood and first career were funded by oil money, when in the study I note that Chevron, Lundberg Survey's biggest client (when I was running the Survey), now exposed as the top greenhouse gasser in the list of the biggest investor-and state-owned entities, I can't feel so dogmatic about all people operating with some piece of oil company wealth. Chevron spewed enough CO2 & CH4 (methane) emissions in its history to the year 2010 to gain the dubious top historical spot at 3.52% of all global greenhouse-gas producers from all sectors, not just investor-and state-owned entities, if I glean from the Executive Summary correctly.]

New Study Traces Two-Thirds of Industrial Emissions to Just 90 Institutions

November 21, 2013

Researcher Rick Heede spent eight years combing through the publicly available data at the heart of the analysis. A paper was just published in the journal Climatic Change.

“This opens the books on where the industrial sources of carbon dioxide in our atmosphere ultimately came from,” Heede said. “This is the most complete picture we have of which institutions extracted coal, oil and natural gas and when. These are the companies and institutions that have created the products — used as intended — by billions of consumers that have led to persistently higher levels of atmospheric carbon dioxide and methane.”

In many cases, multinational companies have extracted more than most countries. The top ten carbon majors include ChevronTexaco, Exxon-Mobil, BP and Royal Dutch Shell, along with government-run industries in the former USSR, China and Poland, as well as the nationally owned Saudi Aramco, Gazprom and the National Iranian Oil Company.

Investor owned entities comprised 315 gigatonnes of carbon dioxide equivalent, while government-run industries, contributed 312 gigatonnes. State-owned companies produced 288 gigatonnes.

The largest investor-owned producers weigh heavily in the analysis. The top 20 produced fuels that comprised 29.5 percent of emissions, while the top 10 account for 15.8 percent. Five ‘oil majors,’ ChevronTexaco, ExxonMobil, BP, Shell, and ConocoPhillips account for a total of 181 gigatonnes of carbon dioxide over the past 130 years, amounting to 12.5 percent of total carbon emitted to the atmosphere.

Most of the top producers primarily extract oil. Coal producers Coal India and Peabody Energy rank eleventh and twelfth, respectively. The list also includes a handful of cement producers.

“When you can trace the lion’s share of humanity’s carbon emissions from fossil fuel use since the invention of the steam engine to a few dozen companies that have produced those carbon fuels, the story becomes more powerful than just looking at emissions on a country-by-country basis,” Heede explained. “You can look at this as coming from seven billion people or two hundred countries, or you can look at it as coming from these institutions, the heads of which could all fit on a bus together.”

Heede’s analysis accounts for the complicated partnerships, mergers, and changes in ownership that have occurred over the past century and a half. Heede says he also had to be careful to avoid double-counting extraction since companies often rely on subsidiaries or contractors to drill and produce fuels. Further, the study only counted carbon from entities that extracted enough fuel to produce 8 megatons worth of potential emissions in a given year.

Heede’s data could open up new opportunities to investigate the impacts that burning these fuels have had — and will continue to have — on the climate.

“Scientists could use this data to zoom in on the relationship between extracting fuels and changing the climate,” said Dr. Michael MacCracken, chief scientist for climate change programs at the Climate Institute. “That’s an exciting prospect since most current studies necessarily have to take a broad brush view of emissions by country."

Harvard science historian Naomi Oreskes noted that Heede’s research points to an evolving trend in climate science. "Many people argue that 'we are all responsible for climate change.' But this research shows that's a misleading statement, because some of us have used and profited from fossil fuels much more than others,” Oreskes said. “This study gives us some data to jump-start a discussion that more accurately addresses the responsibility issue."

Heede has previously published emissions inventories for non-governmental organizations, universities and businesses. He holds a master’s degree in geography from the University of Colorado.

Heede’s research was initially supported by Friends of the Earth and has received additional support from the Climate Justice Programme, Greenpeace International, and the Union of Concerned Scientists. Heede’s full methodology report, which Climatic Change did not have space for, is available on [one of] his website[s], CarbonMajors.org, along with an executive summary and a suite of graphics produced by Carbon Visuals.

* * * * *

Culture Change comment: while it is most useful to understand the biggest players, it is even more essential for us to grasp that we have power to change our lives and the world. People might first free their minds from the notion that we need all this energy being produced, no matter what the source. For when energy consumption is equated with

progress, facile justifications are made for nuclear power, "clean" coal, and fracked natural gas (which when burned emits "only" half the CO2 that burning oil does). Rocky Mountain Institute, for example, justifies coal burning for an idealized fleet of millions of electric cars long as renewable energy on the grid is not yet dominant. Most NGOs are right with the corporate media in pushing the fallacy of a renewable energy-based consumer society somehow maintaining too many people for a healthy, balanced ecosystem. Such a notion is impossible or unsustainable without cheap petroleum for the liquid fuels and chemicals for agriculture. Most disappointing is that the Utopia of the "clean energy economy," whether touted by the Sierra Club or President Obama, is the principal reason that energy curtailment today is a suppressed concept. - Jan Lundberg, independent oil industry analyst

Climate Nexus is a strategic communications group dedated to highlighting the wide-ranging impacts of climate change and clean energy solutions in the United States. Website: ClimateNexus.org

Contact information: Lynsy Smithson-Stanley, lsmithsonstanley "at" climatenexus.org, tel. 646-559-8284, or Aaron Huertas, ahuertas "at" ucsusa.org, 202-331-5458. Climate Nexus, 171 Madison Ave., Suite 901, New York, NY 10016 USA

Visit the other website of Rick Heede.

Art by Fernando Agudelo, whose other climate-change art has appeared on CultureChange.org, can be reached at modernart1a "at" yahoo.com. His website is
coroflot.com/fernandoart

New Report Finds Climate Change Caused By 7 Billion Key Individuals