

**Press Release**

8 DECEMBER 2014: LIMA, PERU.

The Climate Accountability Institute is today releasing an update of the Carbon Majors Project — detailing the direct and product-related emissions traced to the major industrial carbon producers in the oil, natural gas, coal, and cement industries — through the year 2013: [climateaccountability.org/carbon\\_majors\\_update.html](http://climateaccountability.org/carbon_majors_update.html)

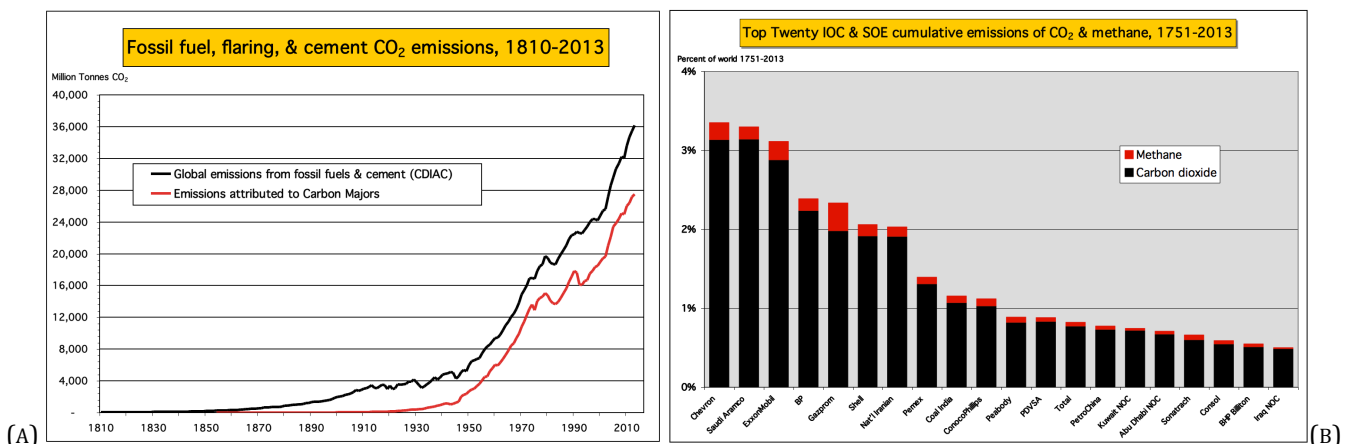
In January the Institute published a paper detailing for the first time the historic emissions of carbon dioxide and methane of the world’s largest fossil fuel producers from 1854 to 2010. The story broke in *The Guardian* in Nov 2013 ([tinyurl.com/qbcbbq3](http://tinyurl.com/qbcbbq3)) and appeared in dozens of newspapers and radio interviews worldwide.

Climate Accountability Institute (CAI) engages in research and education on anthropogenic climate change, dangerous interference with the climate system, and the contribution of fossil fuel producers’ carbon production to atmospheric carbon dioxide content.

**THE MAIN FINDINGS OF THE UPDATE TO 2013:**

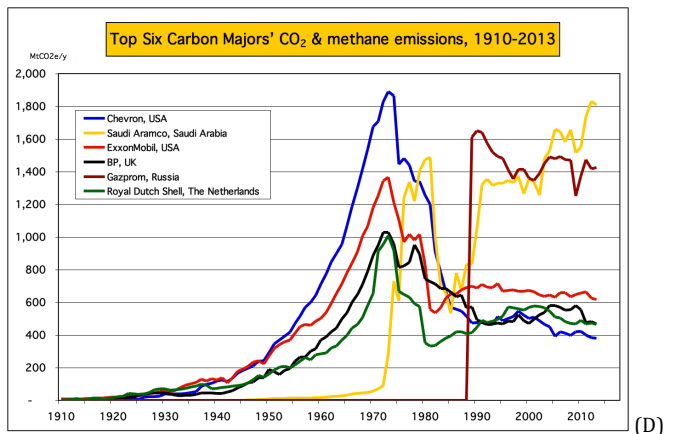
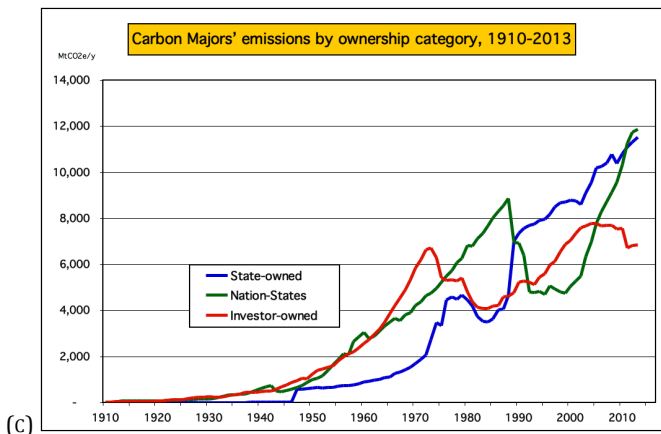
- Global emissions of carbon dioxide from all anthropogenic industrial sources (fossil fuel combustion and cement) totals 1,443 billion metric tonnes CO<sub>2</sub> (GtCO<sub>2</sub>) from 1751 to 2013 (Figure A);
- Emissions traced to the carbon fuels and cement produced by the ninety Carbon Major Entities through 2013 total 939 GtCO<sub>2</sub>, or 65 percent of all anthropogenic CO<sub>2</sub> since 1751 (Figure A);
- Emissions traced to fuels produced by the 50 investor-owned companies total 338 GtCO<sub>2</sub>e (21.6%), the 36 state-owned companies total 315 GtCO<sub>2</sub>e (20.1%), and to government-run industries total 362 GtCO<sub>2</sub>e (23.1%); historic emissions *not* traced to the 90 Carbon Majors total 551 GtCO<sub>2</sub>e (35.2%);
- Nearly one-third of all global industrial CO<sub>2</sub> from 1751 to 2013 are attributed to carbon fuels produced by the Top Twenty fossil fuel companies (Figure B and Table 1);
- Production by state-owned companies such as Saudi Aramco, Gazprom, & Coal India, and government-run industries (such as coal production in China) are rising faster than investor-owned companies, in line with their large reserves (Figures C and D);
- Half (50.2%) of all industrial CO<sub>2</sub> emissions since 1751 have been emitted from 1988-2014 (website).

The central aim of the Institute’s work is to shift accountability for climate change and damages to the extant national and multinational entities that have produced and marketed the lion’s share of historic carbon fuels that drive climate change. We began by tracing historic emissions to the 90 Carbon Majors, now updated to 2013. The next step is modeling the atmospheric temperature response of attributed emissions; followed by a forward look at potential emissions from the same entities’ proved reserves. A foundational paper examining the ethical and legal dimensions of responsibility for climate change that also outlines how carbon producers can contribute to solving the climate problem while meeting their fiduciary responsibilities to shareholders, consumers, and society at large. These works are being published in peer-reviewed journals with scientists, historians, and scholars from major academic and advocacy institutions in the U.S. & Europe.



**Table 1. Cumulative emissions traced to major fossil fuel & cement producers, 1854-2013, Top 20 investor-owned and state-owned companies**

Entity	Product-related (fuels & cement)	Flaring, own fuel, vented CO <sub>2</sub>	Fugitive methane	Total emissions	Percent of global
	GtCO <sub>2</sub>	GtCO <sub>2</sub>	GtCO <sub>2e</sub>	GtCO <sub>2e</sub>	1751-2013
1. Chevron, USA	47.31	1.51	3.43	52.25	3.34%
2. Saudi Aramco, Saudi Arabia	47.79	1.17	2.49	51.44	3.29%
3. ExxonMobil, USA	43.24	1.60	3.71	48.56	3.10%
4. BP, UK	33.76	1.06	2.43	37.25	2.38%
5. Gazprom, Russian Federation	28.52	2.34	5.54	36.40	2.33%
6. Royal Dutch Shell, The Netherlands	28.80	1.04	2.33	32.17	2.06%
7. National Iranian Oil Company	28.94	0.86	1.87	31.66	2.02%
8. Pemex, Mexico	19.70	0.64	1.42	21.76	1.39%
9. Coal India	16.68		1.41	18.09	1.16%
10. ConocoPhillips, USA	15.30	0.69	1.57	17.55	1.12%
11. Peabody Energy, USA	12.79		1.08	13.87	0.89%
12. Petroleos de Venezuela	12.64	0.36	0.77	13.77	0.88%
13. Total, France	11.63	0.39	0.86	12.88	0.83%
14. PetroChina, China	11.10	0.34	0.74	12.18	0.78%
15. Kuwait Petroleum Corp.	10.92	0.25	0.53	11.70	0.75%
16. Abu Dhabi	10.16	0.31	0.68	11.15	0.71%
17. Sonatrach, Algeria	8.88	0.44	1.02	10.34	0.66%
18. CONSOL Energy	8.52	0.01	0.73	9.25	0.59%
19. BHP Billiton	7.91	0.07	0.67	8.65	0.55%
20. Iraq NOC	7.44	0.16	0.33	7.92	0.51%



Heede, Richard (2014) Tracing anthropogenic CO<sub>2</sub> and methane emissions to fossil fuel and cement producers 1854-2010, *Climatic Change*, vol. 122(1): 229-241; doi:10.1007/s10584-013-0986-y  
<http://link.springer.com/article/10.1007/s10584-013-0986-y>

Goldenberg, Suzanne (2013) Just 90 companies caused two-thirds of man-made global warming emissions, *The Guardian*, 20 November 2013: [tinyurl.com/qbcbbq3](http://tinyurl.com/qbcbbq3)

Charts and details of the Carbon Majors Update: [climateaccountability.org/carbon\\_majors\\_update.html](http://climateaccountability.org/carbon_majors_update.html)

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