

# Appendix I

## Cumulative emissions 1988-2015

Producer	Cumulative 1988-2015 Scope 1 <sup>25</sup> GHG, MtCO <sub>2</sub> e	Cumulative 1988-2015 Scope 3 <sup>26</sup> GHG, MtCO <sub>2</sub> e	Cumulative 1988-2015 Scope 1+3 GHG, MtCO <sub>2</sub> e	Cumulative 1988-2015 Scope 1+3 of global industrial GHG, %
China (Coal)	9,622	119,312	128,933	14.3
Saudi Arabian Oil Company (Aramco)	4,263	36,298	40,561	4.5
Gazprom OAO	4,652	30,569	35,221	3.9
National Iranian Oil Co	2,468	18,037	20,505	2.3
ExxonMobil Corp	1,833	15,952	17,785	2.0
Coal India	892	15,950	16,842	1.9
Petroleos Mexicanos (Pemex)	2,055	14,749	16,804	1.9
Russia (Coal)	1,216	15,524	16,740	1.9
Royal Dutch Shell PLC	1,212	13,805	15,017	1.7
China National Petroleum Corp (CNPC)	1,479	12,564	14,042	1.6
BP PLC	1,072	12,719	13,791	1.5
Chevron Corp	1,215	10,608	11,823	1.3
Petroleos de Venezuela SA (PDVSA)	1,108	9,971	11,079	1.2
Abu Dhabi National Oil Co	1,135	9,635	10,769	1.2
Poland Coal	884	9,596	10,480	1.2
Peabody Energy Corp	266	10,098	10,364	1.2
Sonatrach SPA	1,490	7,507	8,997	1.0
Kuwait Petroleum Corp	767	8,194	8,961	1.0
Total SA	778	7,762	8,541	0.9
BHP Billiton Ltd	588	7,595	8,183	0.9
ConocoPhillips	654	6,809	7,463	0.9
Petroleo Brasileiro SA (Petrobras)	533	6,375	6,907	0.8
Lukoil OAO	557	6,193	6,750	0.8
Rio Tinto	297	6,445	6,743	0.7
Nigerian National Petroleum Corp	643	5,848	6,491	0.7
Petrolia Nasional Berhad (Petronas)	995	5,190	6,185	0.7
Rosneft OAO	571	5,295	5,866	0.7
Arch Coal Inc	182	5,514	5,696	0.6
Iraq National Oil Co	435	4,927	5,362	0.6
Eni SPA	672	4,647	5,319	0.6
Anglo American	114	5,173	5,287	0.6
Surgutneftegas OAO	482	4,653	5,135	0.6
Alpha Natural Resources Inc	343	4,561	4,904	0.5
Qatar Petroleum Corp	798	4,103	4,901	0.5
PT Pertamina	602	4,254	4,857	0.5
Kazakhstan Coal	418	4,317	4,735	0.5
Statoil ASA	198	4,497	4,695	0.5
National Oil Corporation of Libya	425	4,101	4,526	0.5
Consol Energy Inc	515	3,979	4,495	0.5
Ukraine Coal	286	4,143	4,429	0.5
RWE AG	499	3,701	4,201	0.5
Oil & Natural Gas Corp Ltd	193	3,367	3,560	0.4
Glencore PLC	228	3,159	3,387	0.4
TurkmenGaz	746	2,471	3,217	0.4
Sasol Ltd	259	2,936	3,195	0.4
Repsol SA	224	2,773	2,996	0.3
Anadarko Petroleum Corp	201	2,790	2,991	0.3
Egyptian General Petroleum Corp	383	2,444	2,827	0.3
Petroleum Development Oman LLC	372	2,397	2,769	0.3
Czech Republic Coal	277	2,430	2,706	0.3
Remaining 50 producers in sample	6,232	60,569	66,800	7.4
<b>Total sample (100 producers)</b>	<b>58,328</b>	<b>576,506</b>	<b>634,835</b>	<b>70.6</b>

25. Note that Scope 1 and Scope 3 cover only fossil fuel industry related activities; total Scope 1 and Scope 3 emissions for some producers may be higher.

26. Scope 3 refers specifically to Scope 3 Category 11 'use of sold products'.

## Appendix II

### 2015 Sample emissions

Producer	2015 Scope 1 <sup>27</sup> GHG, MtCO <sub>2</sub> e	2015 Scope 3 <sup>28</sup> GHG, MtCO <sub>2</sub> e	2015 Scope 1+3 GHG, MtCO <sub>2</sub> e	2015 Scope 1+3 of global industrial GHG, %
Saudi Arabian Oil Company (Aramco)	215	1,735	1,951	4.6
Gazprom OAO	108	1,030	1,138	2.7
National Iranian Oil Co	166	870	1,036	2.4
Coal India	54	971	1,025	2.4
Shenhua Group Corp Ltd	79	922	1,001	2.4
Rosneft OAO	83	694	777	1.8
China National Petroleum Corp (CNPC)	81	544	625	1.5
Abu Dhabi National Oil Co	61	523	584	1.4
ExxonMobil Corp	54	523	577	1.4
Petroleos Mexicanos (Pemex)	53	477	530	1.3
Royal Dutch Shell PLC	48	460	508	1.2
Sonatrach SPA	89	404	492	1.2
Kuwait Petroleum Corp	43	435	478	1.1
BP PLC	28	420	448	1.1
Qatar Petroleum Corp	73	341	414	1.0
Petroleos de Venezuela SA (PDVSA)	42	356	398	0.9
Peabody Energy Corp	10	387	397	0.9
Iraq National Oil Co	31	360	391	0.9
Petroleo Brasileiro SA (Petrobras)	27	355	382	0.9
Chevron Corp	36	341	377	0.9
Datong Coal Mine Group Co Ltd	32	333	365	0.9
China National Coal Group Co Ltd	30	320	350	0.8
Petroliam Nasional Berhad (Petronas)	59	281	340	0.8
Nigerian National Petroleum Corp	42	287	329	0.8
Lukoil OAO	3	325	328	0.8
Glencore PLC	35	287	322	0.8
BHP Billiton Ltd	27	290	317	0.7
Shanxi Coking Coal Group Co Ltd	19	298	317	0.7
Shandong Energy Group Co Ltd	24	290	314	0.7
Total SA	20	292	311	0.7
Shaanxi Coal Chemical Industry Group Co Ltd	23	273	296	0.7
Poland Coal	25	266	291	0.7
Yankuang Group Co Ltd	20	236	256	0.6
Arch Coal Inc	7	225	232	0.5
Eni SPA	23	208	231	0.5
Statoil ASA	12	219	231	0.5
TurkmenGaz	53	177	230	0.5
ConocoPhillips	24	199	224	0.5
Kazakhstan Coal	20	203	222	0.5
SUEK Ltd	18	200	218	0.5
Henan Coal Chemical Industry Group Co Ltd	18	197	215	0.5
Anglo American	5	210	215	0.5
Jizhong Energy Group Co Ltd	19	194	213	0.5
Surgutneftegas OAO	20	193	212	0.5
Shanxi Jincheng Anthracite Coal Mining Group Co Ltd	13	191	204	0.5
Bumi Resources	18	182	200	0.5
China Petrochemical Corp (Sinopec)	23	174	197	0.5
Kailuan Group Co Ltd	17	175	192	0.5
China National Offshore Oil Corp Ltd (CNOOC)	8	178	187	0.4
Shanxi Lu'an Mining Group Co Ltd	16	166	181	0.4
Remaining 174 companies in sample	902	8,392	9,294	21.9
<b>Total sample (224 companies)</b>	<b>2,955</b>	<b>27,610</b>	<b>30,565</b>	<b>72.1</b>

27. Note that Scope 1 and Scope 3 cover only fossil fuel industry related activities; total Scope 1 and Scope 3 emissions for some companies may be higher.

28. Scope 3 refers specifically to Scope 3 Category 11 'use of sold products'.

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