

Carbon Fat Cats 2009

Company Analysis of the EU ETS



September 2010

About Sandbag

Sandbag is a not-for-profit campaigning organisation promoting real action to tackle climate change and focused on the issue of emissions trading. Our view is that if emissions trading can be implemented correctly, it has the potential to deliver the deep cuts in carbon emissions the world so badly needs to prevent the worst impacts of climate change.

Through producing rigorous but accessible analysis we aim to make emissions trading more transparent and understandable to a wider audience than those already involved in the market. In particular, we hope to shed light on the challenges the EU Emissions Trading Scheme faces in becoming a truly effective scheme for cutting emissions and to advocate the solutions that can help it to work better.

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Carbon fatcat companies

Earlier this year, our Carbon Fatcats report took a snapshot of the 10 most over-allocated companies in 2008. Now with the 2009 data available we can investigate how these same companies have fared another year into the Phase, as the recession has further depressed production levels.

In each case we find that the massive surpluses in 2008 were greatly augmented in 2009. In 2008 these top ten companies held 33 million excess permits. In 2009 this grew by 86 million tonnes, bringing them to 119 million permits so far this Phase, worth over €1.7 billion at current prices. These surpluses were then swelled by a further 10.5 million (or 8.8%) by using offsets for compliance, delivering an additional windfall of €21 million.⁵⁶

We find that nearly a quarter of the surpluses in the entire scheme are concentrated in the hands of just 10 companies.⁵⁷ The 8 industrial companies on our fatcat list have received excess allocations roughly equal to half (48%) the surpluses in the whole industrial sector.⁵⁸

All figures have been adjusted for estimates of the transfer of waste gases to nearby power stations.

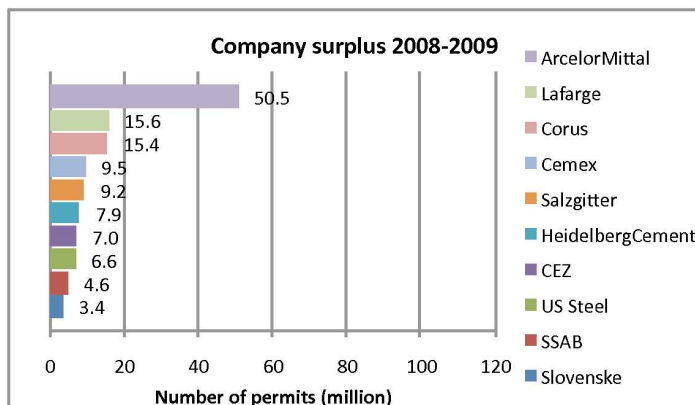


Figure C1

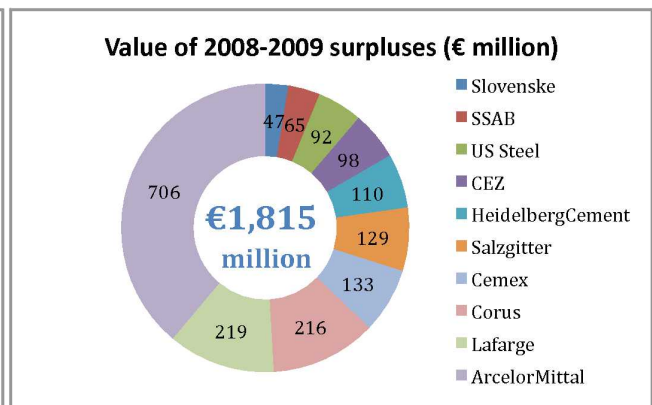


Figure C2

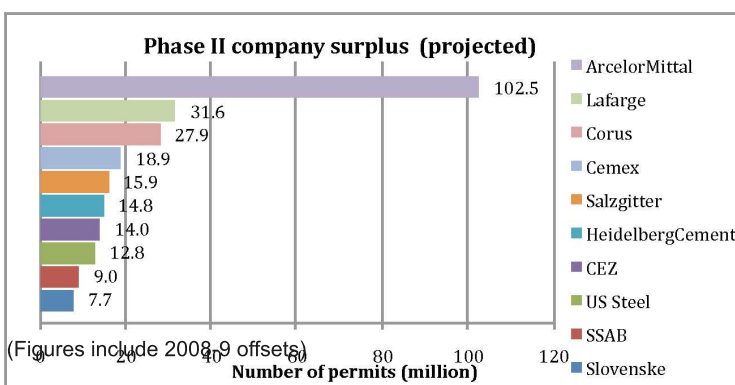


Figure C3

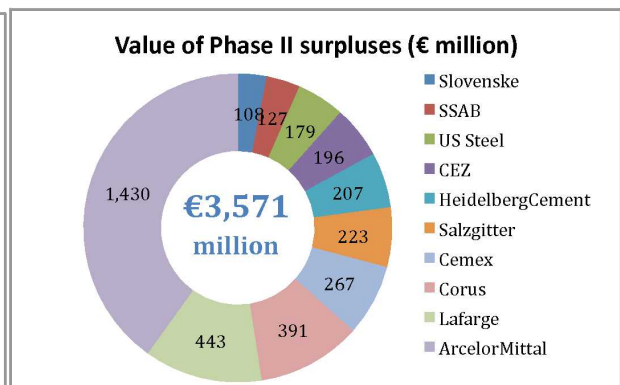


Figure C4

⁵⁶ EUAs are calculated at €14 and CERs at €12

⁵⁷ That is 130 million out of a total 2008-2009 industrial and power surplus of 566 million.

⁵⁸ Excepting the two power companies (CEZ and Slovenske) from our top ten, we reach a 2008-9 surplus of 109 million out of an industrial total of 226 million. As some of these industrial companies are in possession of installations combustion plant assets, strictly speaking this does not compare like with like.

Offset Substitution

Looking at a company level we see unambiguous evidence that offsets are being surrendered by surplus holding companies, suggesting that they are using the scheme for profit.

Of our ten carbon fatcats, only two – SSAB

and Slovenske Elektrane – have so far resisted the lure of offset substitution. In the Table C1 we list the substituted offsets both as absolute quantities and also as proportions of the emissions in each company. Lastly we translate these into profits at recent market prices.

Table C1: Offset substitution and indicative profits

Name	Offsets substituted in 2008-9	Proportion of 2008-9 emissions	Potential profits at margin of €2
Salzgitter	3,625,000	27.00%	€7,250,000
Corus	2,691,004	5.52%	€5,382,008
US Steel	1,505,000	9.11%	€3,010,000
Cemex	1,410,495	7.06%	€2,820,990
Heidelberg Cement	1,048,400	2.78%	€2,096,800
CEZ	115,030	0.15%	€230,060
Lafarge	108,542	0.24%	€217,084
ArcelorMittal	39,563	0.04%	€79,126
TOTAL	10,543,034	2.86%	€21,086,068

Overview of Phase II and Phase III

Phase II overview

Looking forward over the whole of Phase II we can expect these ten companies to accrue 255 million surplus permits worth €3.6 billion.⁵⁹ This is roughly equivalent to the ETS auction revenues hypothecated for renewables and CCS projects across the whole eight years of Phase III.⁶⁰ These have been adjusted for waste gas transfers.⁶¹

A 255 million surplus is 53% more than the 2009 emissions for these companies. If these permits are not sold to make windfall profits they represent an enormous buffer against future caps.

Phase III carryover

The Commission proposes to benchmark the free allocation of Phase III permits against the 10% least carbon intensive installations in each specific industrial subsector, using 2007 and 2008 as reference years. As a crude indication of how their Phase II surplus will protect them against benchmarks, we have calculated how the 8 industrial fatcats would perform as a group if their Phase III allocations were calculated roughly in line with the overall Phase III cap. We have, therefore, taken their slightly depressed 2008 emissions as an indicative baseline and applied a linear “technological evolution factor” (commencing in 2011) of 1.74%.⁶²

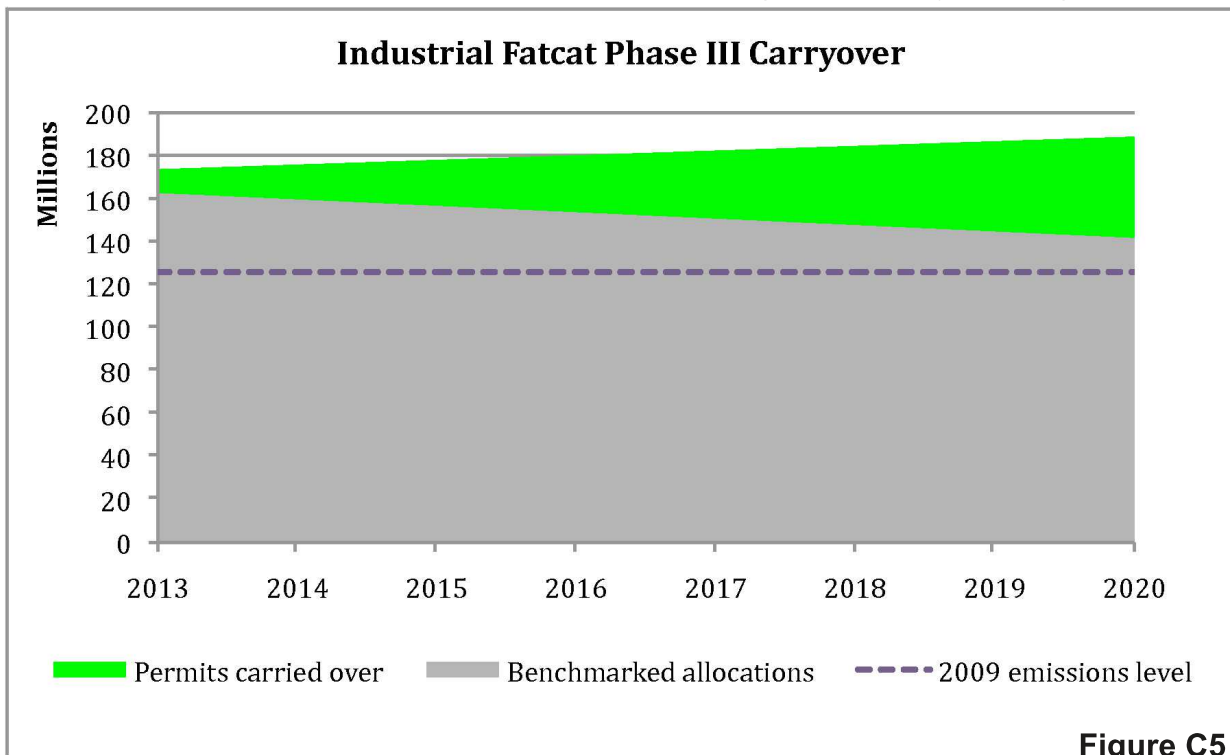


Figure C5

59 This projection ignores the contribution of offset substitution in 2010-2012 which is expected to be unusually high. The value of EUAs retained through offset substitution is prices at €2 (the difference between CERs and EUAs)

60 The revenue arising from auctioning 300 million permits will be set aside for these projects. See Article 10(a) 8 of the revised Emissions Trading Directive 2009/29/EC.

61 When projecting company performance forward across 2010-2012 we have assumed flue gas transfers follow emissions and allocation patterns as established in 2008 and 2009. Thus, 2010 flue gases and offsets are taken to be the average of 2008-9 levels, and are maintained at 2008 levels for the rest of the Phase.

62 This model is likely to be an overestimation of both the baseline and the technological evolution factor. Our technological evolution factor is more than double the 0.8% “evolution factor” in Dutch and Flemish benchmarks, but those benchmarks were set in 2001 and predated the ETS – which should in principle accelerate this evolution. A technological evolution factor would normally be expected to kick in from 2009 (See the CAN-Europe position paper at www.climnet.org)

We find that the fatcats' buffer of Phase II surpluses would not only protect them from making any emissions cuts across Phase III but would allow them room to grow their emissions 50% from 2009 levels by 2020 (see Figure C5).

Clearly, with such large surpluses already hoarded, this indicative benchmark totally fails to encourage the carbon fatcats to abate their emissions in Phase III. Very aggressive benchmarks, ideally accounting for overallocation in Phase II, must be pursued if we are to avoid wasting public funds continuing to line their pockets.

Repeating this benchmark model across each industrial fatcat, we see a similar story. Our most conspicuous carbon fatcat, ArcelorMittal, would be able to use its Phase II surplus of 102 million to grow its emissions 1.8% a year across Phase III, increasing its 2020 emissions to 75.6 Mt, 72% above 2009

levels (see Figure C6).

But while ArcelorMittal may be the most overallocated company in absolute terms, the most overallocated of our carbon fatcats in relative terms is Swedish Steel Company, SSAB. SSAB's 9 million permit Phase II surplus could allow it to grow its 2009 emissions two and a half times by 2020 (see Figure C7).

As our company analysis only examines the largest surplus holders in absolute terms, we can expect to find companies with equivalent or even larger proportional buffers elsewhere in the scheme. Our sectoral analysis in Section B found the ceramics sector to be the most disproportionately overallocated sector (see Figure B3), so this would probably be the best place to start.⁶³

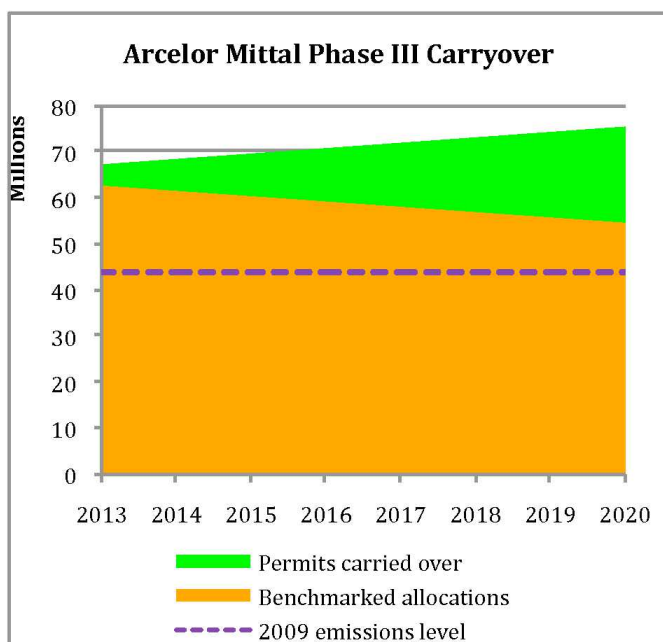


Figure C6

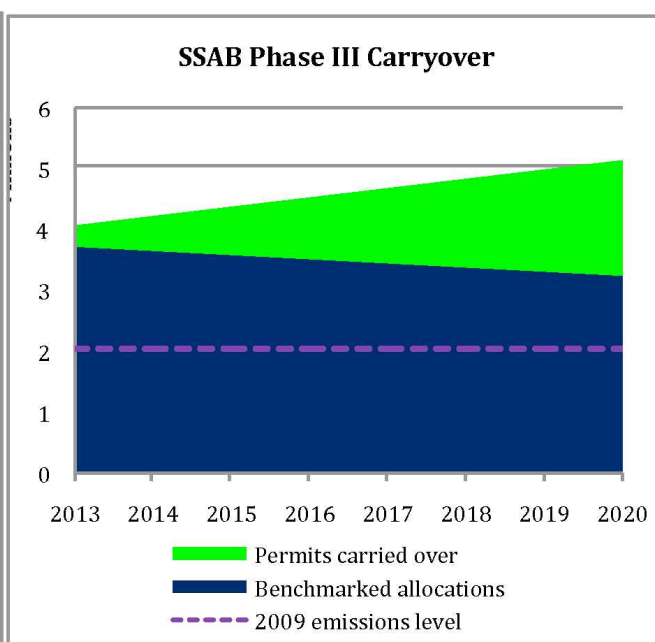


Figure C7

⁶³ The metal ore roasting sector is similarly disproportionately allocated, but this surplus is entirely owned by Corus and ArcelorMittal.

Table C2: Fatcat emissions growth in Phase III

Company name	% increase of Phase III budget from carryover	Annual space for carbon growth in Phase III	2020 emissions as a % of 2009
SSAB	+32.6%	+3.9%	250.7%
Salzgitter	+29.8%	+3.4%	162.2%
Cemex	+22.9%	+2.0%	154.2%
ArcelorMittal	+21.7%	+1.8%	171.64%
US Steel	+20.1%	+1.5%	132.3%
Corus	+18.1%	+1.05%	108.4%
Lafarge	+17.3%	+0.9%	150%
Heidelberg Cement	+10.2%	-0.5%	112.81%
Aggregated figures	+19.2%	+1.3%	149.9%

Phase III carryover – combustion fatcats

In phase III the power sector in general shifts to a fully auctioned system. However, under Article 10c of the Emissions Trading Directive, some combustion plant will be entitled to “transitional free allocations”. This is for Economies In Transition with high dependence on coal. The maximum allowances an installation can receive in 2013 under this regulation is 70% of its average 2005-2007 emissions. This transitional free allocation will drop to zero in 2020.

If we assuming the full complement of both CEZ and Slovenske’s installations fall into

this category, and assuming a linear trajectory dropping 10% against the 2005-7 baseline each year, CEZ’s total Phase III budget will be augmented 11.45% by its carryover and Slovenske’s a staggering 61.09%.

Competitive distortions between industrial companies

We can explore whether these companies are being disproportionately advantaged by the scheme by comparing the scale of their surpluses and emissions proportionally against emissions and surpluses across whole sectors. While we recognise that comparing emissions data with allocations alone, without production data, is a crude measure of how a company is performing it is nevertheless an important indicator of how individual companies have come to dominate this scheme.

Looking through Table C3 we find the largest competitive advantage has been granted to Heidelberg Cement who holds more than half of the surplus in the whole cement sector while only accounting for 10% of cement emissions giving it a fivefold advantage over its competitors in the industry. Heidelberg also runs installations in the combustion and ceramics sectors and we find it disproportionately overallocated across all three of the sectors it participates in, with nearly three times the sectoral average in both overallocated combustion and ceramics.

Similarly, while it only represents 3.2% of iron and steel emissions, Salzgitter has managed to secure 13.3% of the sector's surplus, more than four times the sectoral average.

ArcelorMittal has operations spread across most of the sectors in the scheme and is disproportionately overallocated across all of them except for ceramics (which is just one installation in Poland). While accounting for more than three quarters of all surpluses in metal ore roasting, it accounts for only half of the emissions in that sector. On balance, ArcelorMittal has 50% more permits than its average competitors in the sectors it participates in.

We also find that 99% of the overallocation in the coke ovens sector accrues to Corus despite only accounting for 66% of coke

emissions, requiring all of its competitors in this sector (save ArcelorMittal) to face a shortfall. Corus's surplus in this sector is, counterbalanced by a low proportion of iron and steel surpluses, amounting to less than half of the sectoral average, this actually leaves Corus down 10% overall against the sectors it participates in.

This competitive advantage accruing to these companies through disproportional overallocations, should be a cause for concern to DG Enterprise and to other companies – especially those who may be net buyers under the scheme and may currently be obliged to directly line the pockets of their industry rivals.

While benchmarking of free allocations will mitigate against disproportionate overallocation in Phase III, the playing field will remain uneven until these benchmarks account and correct for lopsided allocation in Phase II which can provide either a direct financial head-start to these companies (if sold), or a hedge against carbon exposure (if banked forward).

Table C3: Competitive distortions in fatcat companies

ArcelorMittal	Proportion of sector's emissions (2008-9)	Proportion of sector's surplus (2008-9)	Proportional surplus
Sector 1: Overallocated Combustion	2.14%	2.79%	130.42%
Sector 3: Coke ovens	0.65%	2.02%	312.63%
Sector 4: Metal ore roasting	49.81%	77.74%	156.07%
Sector 5: Iron and Steel*	34.07%	43.38%	127.32%
Sector 6: Cement	0.21%	0.53%	249.55%
Sector 8: Ceramic	0.10%	-0.02%	NA
TOTAL	7.45%	11.37%	152.56%
Lafarge	Proportion of sector's emissions (2008-9)	Proportion of sector's surplus (2008-9)	Proportional surplus
Sector 1: Overallocated Combustion	0.02%	0.04%	198.98%
Sector 6: Cement	12.97%	18.89%	145.62%
Sector 8: Ceramic	0.08%	0.02%	25.81%
Sector 9: Pulp and Paper	0.11%	0.03%	23.72%
TOTAL	3.56%	4.25%	119.29%
Corus	Proportion of sector's emissions (2008-9)	Proportion of sector's surplus (2008-9)	Proportional surplus
Sector 1: Overallocated Combustion	0.02%	0.04%	244.57%
Sector 3: Coke ovens	65.77%	98.91%	150.40%
Sector 5: Iron and Steel*	10.51%	5.70%	54.24%
Sector 6: Cement	0.17%	0.52%	310.31%
TOTAL	3.41%	3.08%	90.3%
Salzgitter	Proportion of sector's emissions (2008-9)	Proportion of sector's surplus (2008-9)	Proportional surplus
Sector 5: Iron and Steel*	3.32%	13.27%	400.18%

Cemex	Proportion of sector's emissions (2008-9)	Proportion of sector's surplus (2008-9)	Proportional surplus
Sector 6: Cement	6.05%	9.93%	164.07%
Sector 8: Ceramic	0.02%	0.05%	203.28%
TOTAL	5.68%	8.42%	148.17%
Heidelberg Cement	Proportion of sector's emissions (2008-9)	Proportion of sector's surplus (2008-9)	Proportional surplus
Sector 1: Overallocated Combustion	0.21%	0.65%	314.78%
Sector 6: Cement	10.41%	51.33%	493.22%
Sector 8: Ceramic	2.51%	6.94%	276.38%
TOTAL	3.17%	12.79%	402.79%
CEZ	Proportion of sector's emissions (2008-9)	Proportion of sector's surplus (2008-9)	Proportional surplus
Sector 1:	8.68%	2.13%	24.49%
Sector 99: Other	14.21%	34.68%	244.03%
TOTAL	8.95%	2.70%	30.12%
US Steel	Proportion of sector's emissions (2008-9)	Proportion of sector's surplus (2008-9)	Proportional surplus
Sector 5: Iron and Steel*	7.27%	7.08%	97.41%
SSAB	Proportion of sector's emissions (2008-9)	Proportion of sector's surplus (2008-9)	Proportional surplus
Sector 1:	0.07%	0.01%	19.23%
Sector 5: Iron and Steel*	2.38%	6.43%	269.91%
TOTAL	0.57%	1.43%	252.67%
Slovenske	Proportion of sector's emissions (2008-9)	Proportion of sector's surplus (2008-9)	Proportional surplus
Sector 1: Overallocated Combustion	0.90%	1.35%	149.47%

* Company steel allocations have been adjusted for estimated waste gas transfers. See Appendix 2 Notes on methodology for details.

Other things we do: Research consultancy



Sandbag is the NGO leading in research-led campaigning for effective emissions trading. Our informed reports, briefing papers, consultation responses and workshops have reached and influenced European policymakers at the highest levels and been widely reported in the European and international press.

Sandbag can provide your organisation with:

- **Commissioned reports:** our reports combine rigorous research with clear and targeted messaging.
- **Research and data analysis:** Sandbag has extensive experience analysing the key EU ETS data, and has developed some unique tools (such as our offset and emissions trading maps) to make these more transparent. Sandbag has also developed extensive profiles of specific sectors, companies and countries within the scheme.
- **Workshops:** We have provided workshops to MEPs and UNFCCC delegates on such topics as offset reform, carbon leakage, ETS reform, and sectoral trading.

For more information on our research consultancy services please contact info@sandbag.org.uk