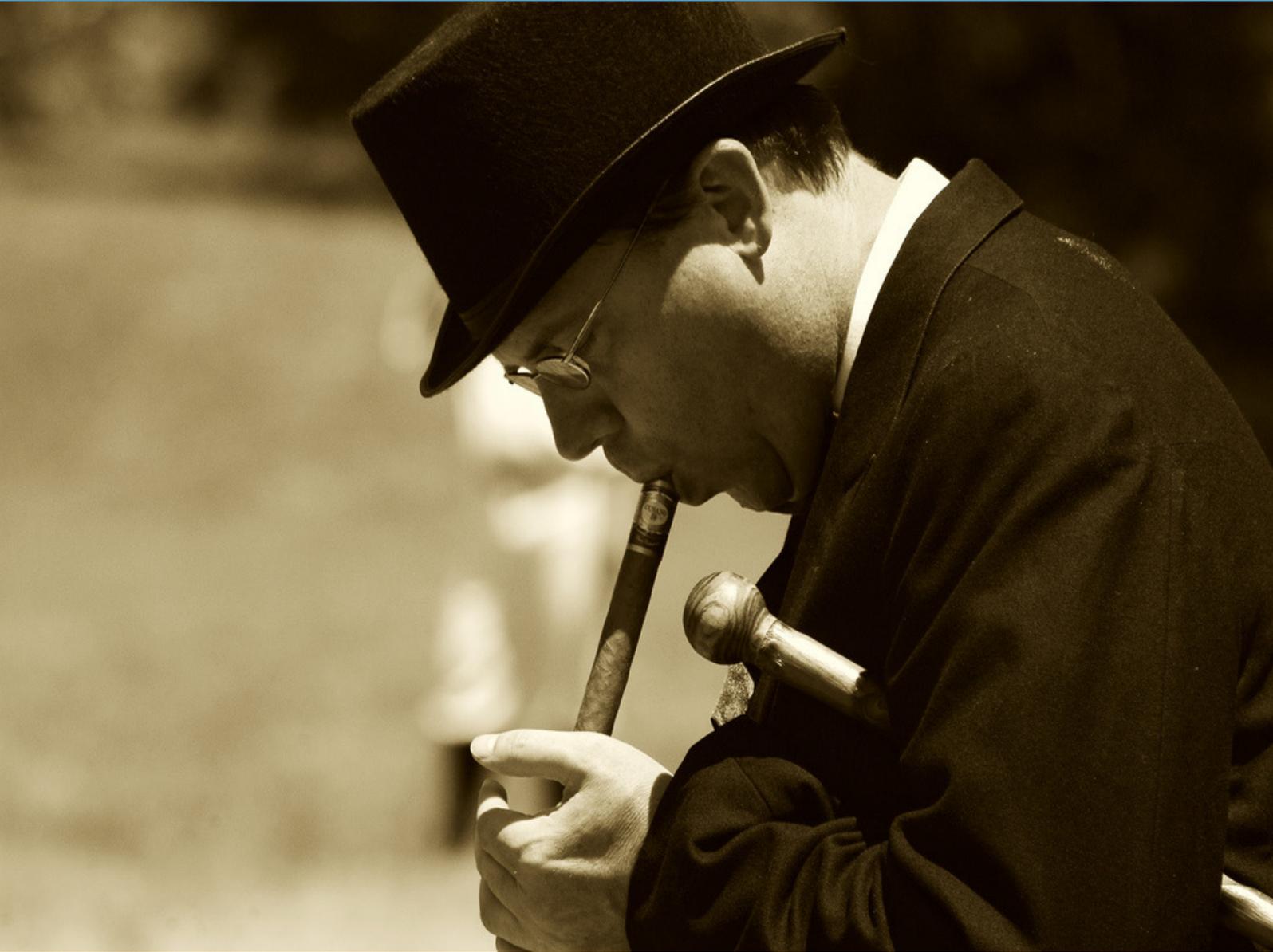


# The Carbon Rich List:

The companies profiting from the EU Emissions Trading Scheme



## About Sandbag

Sandbag is a UK based not-for-profit campaigning organisation dedicated to achieving 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 also 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 ETS faces in becoming a truly effective scheme for cutting emissions and to advocate the solutions that can help it to work better.

## About this report

Analysis of the EU Emissions Trading Scheme has so far has focussed on how the scheme is operating at an overall EU level, Member State level, across different industrial sectors and even at the level of individual installations. There has been little analysis of one very important aspect of the ETS, the functioning of the scheme at company level. The reason for this is the nature of the main data source, the Community Transaction Log, which reports allocations of emissions permits and verified emissions, but which does not require reporting at company level. For this report we have teamed with Carbon Market Data to use their company level data, combining it with our policy analysis of the EU ETS as a whole.

## About Carbon Market Data

Carbon Market Data is a market data vendor and carbon market research company, which offers information, consulting and technology services to a wide range of organisations in the world. The company was founded in early 2006 and is a pioneer in the domain of carbon market data supply. Their carbon information platforms can be accessed online or integrated directly into third parties' information systems. Carbon Market Data also provides raw data which is integrated into their clients' trading platforms and analysis tools.

Carbon Market Data offers online access to the World Emissions Trading Scheme (ETS) Database. The World ETS Database is a comprehensive analytical tool, which includes information on all mandatory carbon trading schemes in the world. CMD also provides access to the EU ETS Companies Database, a unique carbon disclosure solution including strategic carbon trading information on more than 800 companies displaying corporate carbon data at three levels: group level (equity-based), company level and installation level.

Report Authors: Anna Pearson

Sandbag Climate Campaign is a not-for-profit enterprise and is registered as a Community Interest Company under UK Company Law. Co. No. 6714443

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# Executive Summary

This report presents company level analysis of the EU Emissions Trading Scheme for 2008 and looking ahead till 2012 when the current phase of trading ends.

The EU ETS was set up 'to promote reductions of greenhouse gas emissions in a 'cost-effective and economically efficient manner' as a centrepiece of European efforts to tackle climate change. However, our company level analysis has uncovered a number of trends which have serious implications for the short and long term future of the ETS.

## Carbon Fat Cat Companies

For Phase 2 of the EU ETS running from 2008 to 2012 companies are to receive free allocations of EUA permits, each equivalent to one tonne of CO<sub>2</sub> emitted. As a result of generous allocations compounded by the impact of the global recession, many companies now find themselves in a position where they have far more permits to pollute than they require. Whether or not these companies choose to sell the permits to generate windfall profits they have been effectively handed significant assets by Member State governments across the EU – thus we have termed these companies, 'Carbon Fat Cats'.

- The top ten Carbon Fat Cats share between them 35 million surplus EUA permits in 2008 equivalent to the annual emissions of Latvia and Lithuania. The permits are worth an estimated €500 million at current carbon prices.
- Looking ahead to 2012 the Carbon Fat Cats will share an estimated 230 million surplus EUA permits worth €3.2 billion a sum far greater than the investment in renewable and clean technology for the same period, or indeed the EU Commission's budget for environment as a whole.

These companies are not required to make cuts to their CO<sub>2</sub> and as EU ETS rules allow permits to be banked for use in future phases of trading and are likely to be insulated from the need to make cuts to their CO<sub>2</sub> emissions going forward. Our findings run strongly counter to recent claims from industry groups that stronger climate change targets would damage competitiveness.

## Within Sector Analysis

For key industrial sectors covered by the EU ETS we found that whilst the majority of companies were over-allocated, benefiting far more than others, and some were in the opposite position with shortages of permits. For instance, whilst the cement sector was universally over-allocated, some companies within the Iron and Steel sector did not have enough permits to cover their emissions. The findings have important implications for the implementation of Phase 3 of emissions trading and raise questions as to whether EU companies are operating within a level playing field.

The power sector, on the other hand, is acting as a powerhouse for CO<sub>2</sub> reductions with analysis showing how a very small number of companies are required to deliver the majority of emissions reductions for the EU ETS as a whole and to compensate for the industrial surpluses.

- RWE and EON, the two companies most short of permits were required to carry out or pay for more equivalent emissions reductions than the net reductions for the scheme as a whole.
- The top six power companies short of permits were required to provide or pay for emissions reductions equivalent to the whole of the net ETS power sector reductions.

However, with most power companies buying EUA permits to comply with the ETS and passing the cost of compliance to EU power consumers; it is likely that EU citizens are unwittingly paying what amounts to a subsidy to industry without any cuts to CO2 emissions taking place.

## Recommendations

We recommend the following measures to prevent the 'hangover effect' of surplus permits from the current phase of emissions trading, from weakening the future impact and effectiveness of the EU ETS in cutting CO2 emissions.

### 1. Higher ambition with regard to targets:

The evidence of high surpluses amongst many industrial sectors and companies demonstrates that Europe can afford to go further in terms of the ambition it has set for the scheme.

### 2. Taking action to spur more investment in solutions:

With surplus permits watering down investment signals and the strength incentives for ETS participants to invest in abatement the ETS needs to be tightened.

- o Access to overseas offsets ought to be limited in order to drive greater carbon scarcity and thus investment in domestic abatement.
- o Permits held by Member States in their new entrants' reserves should be cancelled rather than being released for sale.
- o The EU should consult on measures and incentives to ensure that of the billions of Euros in asset value placed in the hands of companies, some is directed towards low carbon investment.

A radical approach to address the problems raised by surplus permits would be to remove industrial sectors from the Emissions Trading Scheme altogether, instead

making them subject to regulation on the best available technologies and carbon intensity standards relevant to them.

### 3. Revisiting the design of Phase 3:

Decisions relating to carbon leakage, benchmarking and levels of auctioning to the power sector should be revised and adjusted to take into account the levels of surplus permits from Phase 2. Whilst it is not easy to make these adjustments, failure to act will lock-in the problems that the process of free permit allocation has created thus far and competitive distortions between companies.

### 4. Better data and better analysis:

The EU must improve its monitoring of how the scheme is working by requiring and reporting on company level performance under the scheme. This will improve transparency and the quality of analysis on the ETS as a whole.

We offer these solutions to policymakers as a way to increase the effectiveness of the EU Emissions Trading Scheme and hope that they will stimulate and inform the on-going debate about the future of the scheme.

# Introduction

In this report we aim to shed light on some of the workings of the EU carbon market and in particular to examine how some of the EU's largest companies are able to make windfall profits from emissions trading. Understanding how these profits could occur and who they would accrue to is vital to the EU's ability to develop a better functioning market which delivers real impact on climate change and value for money for EU taxpayers.

We are collectively fascinated by the size of bankers' bonuses – they seem to visibly represent much of what is wrong with our financial system by rewarding the risk taking and unsustainable practices that some argue have led to the world's financial meltdown. Yet so far, the money that is being made on the carbon market is very opaque. We hope that this report will contribute to changing this.

The EU currently has the biggest emissions trading scheme in the world, but a laissez faire approach to market intervention is leaving it at risk of being a new breeding ground for rapid and undeserved profit. If there is one lesson learned from the international financial crisis, it is that successful markets go hand in hand with good regulation. There may be disagreement about how to regulate, but most now agree that markets left entirely to their own devices will often be driven by short term profit and cannot be relied upon to act in the interest of ordinary citizens.

But the carbon market isn't just a case of money being made. We also highlight the companies which are significantly short of valuable permits to pollute and those who are potentially operating at a competitive disadvantage in sectors where most companies have been given more than they need.

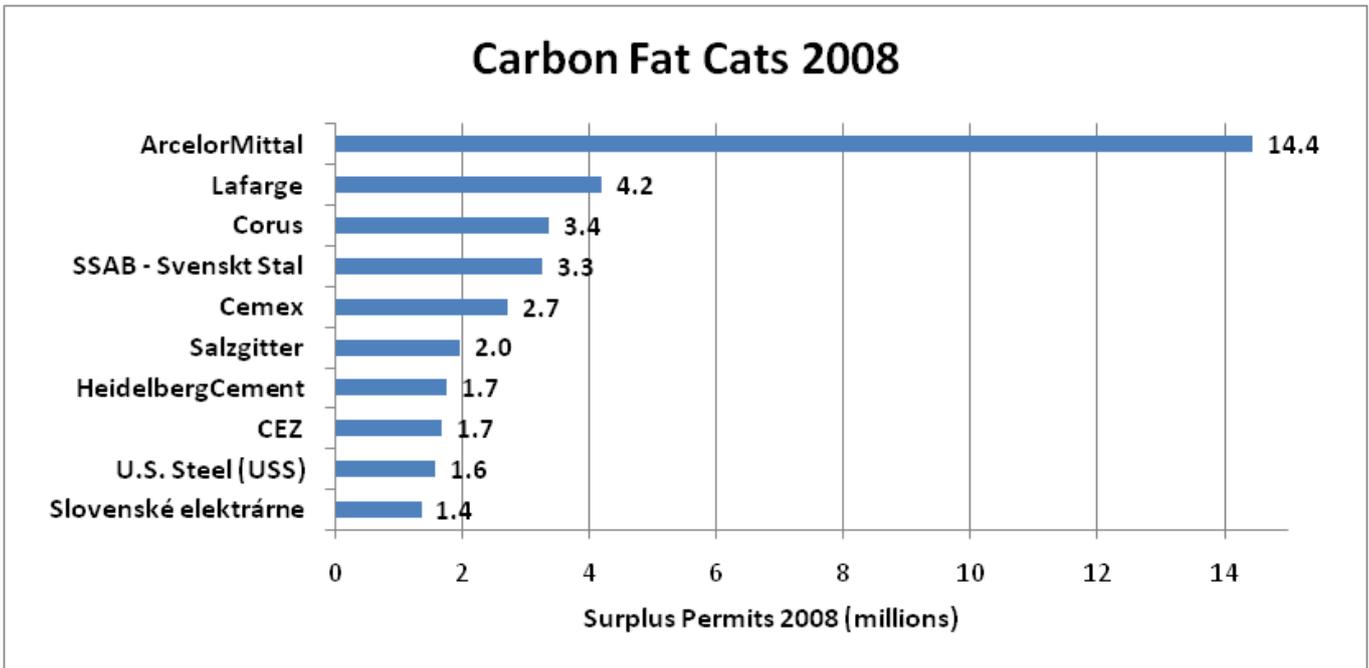
The EU is already making efforts to resolve some of the design flaws in the Emissions Trading Scheme, but some of the more significant improvements will only come into effect from 2013 onward, and are still the subject of fierce debate and opposition; in many cases from the same industries and companies currently profiting from the scheme. The debate on the ETS is currently limited in scope to implementation measures for Phase 3 including the scope of auctioning and

the benchmarks for continued free allocations to industry. Whether there is opportunity for a wider debate on the reform of the ETS depends on the high level political debate currently occurring within the EU on the 2020 CO2 reduction target and whether to increase it from 20% against 1990 levels, to 30%.

At the moment EU Member States are split on the need to move to 30%. The strongest opposition has come from European industry which has made repeated and vocal claims of the damage tougher targets would bring<sup>i</sup>. In identifying the businesses and industries who are actually profiting from the Emissions Trading Scheme as it stands and who will be insulated from its future impact, we hope to dispel some of these claims and that this briefing will encourage a wider and more informed debate on the immediate and long-term future of the Emissions Trading Scheme in Europe.

<sup>i</sup> See Business Europe letter to President Zapatero 2 February 2010 and letter to EU Council 10-11 December addressed to President Barroso, European Voice 21 January 2010 <http://bit.ly/bXBdU6>

# Carbon Fat Cats 2008



## The Top Ten Companies

Our 'Top Ten' is based on the companies with the most surplus permits available to sell<sup>ii</sup>. We believe these are the companies policymakers need to watch as they debate and arrive at final decisions about the future of the EU scheme. Interestingly some of the most vocal opponents of the EU taking on more ambitious targets feature in the list showing just how exaggerated the claims surrounding the impacts of higher ambition are.

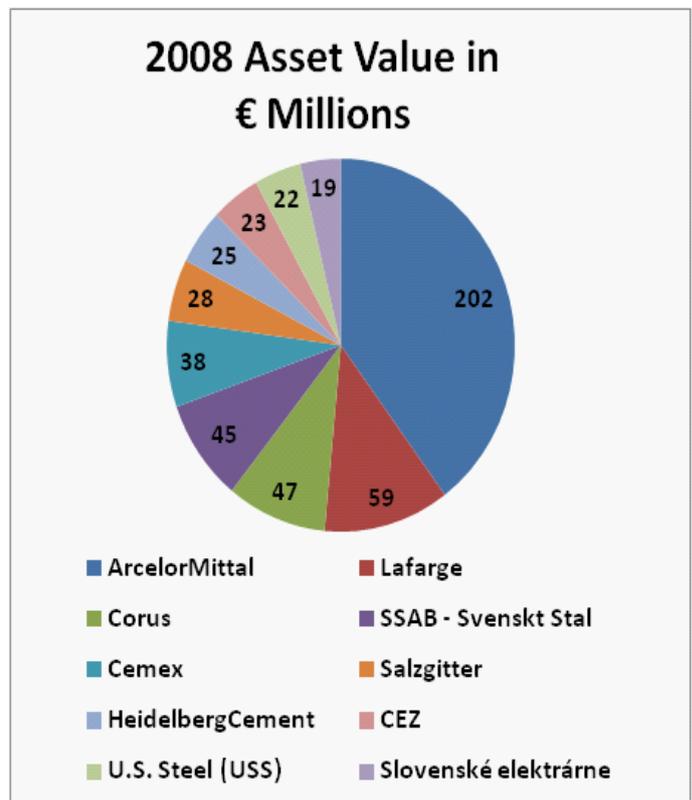
The ten companies featured in our rich list have between them 35 million tonnes worth of emissions permits equivalent to the annual emissions of Latvia and Lithuania<sup>iii</sup>. Over the five-year trading phase we estimate these companies could accrue as many as 230 million surplus permits<sup>iv</sup>.

## Just how much is being made?

The value of the spare permits held by companies in 2008 was €500 million at current market prices which have been around €14 per EUA. Even if the permits are not directly sold on for profit, the value will still remain on the company's books. Indeed, as the carbon price could rise in future years, so the assets value could increase.

Most of these permits will have been generated as a result of companies having more permits than they needed due to over allocation of free

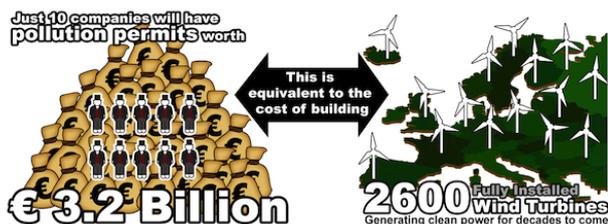
permits thanks to inflated projections of growth and the subsequent impact of the economic recession. Little or no actual 'effort' towards emissions reductions need have taken place, yet these companies will be able to literally bank the profits from the sale of their surplus permits or bank the actual permits for future use against climate change targets.



<sup>ii</sup> Source: CarbonMarketData ETS Companies' Database  
<sup>iii</sup> Source: EEA GHG Emissions 2007  
<sup>iv</sup> See Annex for full methodology of projections to 2012

Over the five-year trading period we estimate that the value of permits accruing to these ten companies will rise to €3.2 billion. This exceeds by a third the total EU budget for environment<sup>v</sup> and is more than double the funding announced in the European Energy Programme for Recovery (EEPR) for renewable and clean technologies both over the same period<sup>vi</sup>. In addition, the windfall profits companies could make, only just fall short of the total funds promised for renewable and carbon capture and storage in Phase 3 of the ETS covering a period of eight years<sup>vii</sup>.

The following diagrams highlight the power of these permits both in environmental and asset terms.



Without adjustment to EU policies and targets to take account of these surplus permits, the integrity, ambition and ultimately success of the EU's climate change policies could be compromised, especially the EU's hope to move towards an 85 to 90% CO<sub>2</sub> reduction by 2050.

## How money is made on the EU carbon market

Our assessment of how much companies are profiting from the trading scheme is based on a comparison of emissions allowances with actual emissions, revealing the total number of permits available for sale or to bank for future use. There are a range of other ways that companies can profit from emissions trading and our estimates are therefore likely to be under estimates. Companies

given the majority of their permits for free can:

- A. Sell surplus permits for a free windfall profit.
- B. Lend their permits to trading banks in order to generate a return, but also retain ownership of their permits for future use.
- C. Pass the full cost of permits on to customers even though they were received for free.
- D. Buy less expensive offset credits and use these for compliance while selling on the more valuable European allowance they received and pocketing the difference.

These factors must be born in mind when considering the overall impact of emissions trading on the EU economy. It is certainly not the case that the scheme is responsible for universal economic hardship as a result of taking action to combat climate change.

## Why do some companies have surplus pollution permits?

For the period from 2008 till 2012 all companies have been mandated to receive the majority of their allocations of permits for free. The rules governing this process were set at a Member State level. Each Member State was able to decide how many permits to hand out to its polluters in a National Allocation Plan (NAP) which was then subject to approval by the European Commission. Many countries chose to protect the competitiveness of their industrial sectors by giving them allocations based on generous business as usual projections which incorporated estimates of future growth. They compensated for this by allocating fewer permits to the power sector, which is not exposed to international competition. Initial over-allocation to these industries has since been compounded by the onset of recession.

All NAPs were submitted to the European Commission which reviewed the total number of permits each country wanted to give out. This enabled the Commission to derive an overall cap in line with the EU's commitment to reduce emissions by 20% against 1990 levels. However, the distribution of permits between sectors and companies was not properly examined. This was in part due to the limited capacity of the Commission to undertake such detailed assessments. The lack of data about company ownership of the installations in the scheme also prevented the Commission

<sup>v</sup> European Commission, January 2010: 'General Budget of the European Union for the Financial Year 2010, Page 16 <http://bit.ly/9QVtHv>

<sup>vi</sup> European Energy Programme for Recovery (EEPR) <http://bit.ly/b6Y1aR>

<sup>vii</sup> Under Article 10(a) 8 of the revised Emissions Trading Directive 2009/29/EC, 300 million EUA permits will be auctioned during Phase 3 of the ETS resulting in funding of approximately €4 billion going to renewable technologies and CCS projects.

from being able to properly assess any intra-EU competitive distortions or investigate any potential issues with regard to State Aid.

Data issues were compounded by additional factors which make an assessment of the trend in emissions in different sectors very difficult. These include a lack of clarity over how emissions permits change hands between the steel sector and the power sector when flue gases are sold as fuel and insufficient clarity about the effect of the changes in scope of the scheme between the first and second phases. Essentially by not requiring the data to be provided in a clear way the Commission has tied its hands behind its back when it comes to assessing the performance of the scheme. As a result there has been competitive distortion with some companies doing far better than others as is discussed in more detail in the sector based analysis further on in this report.

## Looking Ahead to 2013

Just as Russia's economic collapse in the 1990s made it easy for the country to meet its Kyoto targets to reduce emissions against 1990 levels, leaving it with a surplus of credits – so too the EU is now generating surplus EUA permits for private companies.

Unfortunately the impact of this competitive distortion does not end in 2012. Companies are able to carry over their permits, or the equivalent financial assets thus avoiding or delaying the impact of a more stringent Phase 3 scheme. The surpluses also create a hangover undermining the effectiveness of EU climate targets going forward. By 2013 we estimate that the companies in our 2008 Carbon Rich List could control at least 230 million surplus permits giving them significant power over overall EU emissions levels - only six countries<sup>viii</sup> have annual emissions exceeding 230 million tonnes of CO<sub>2</sub>.

For Phase 3 of the ETS, the majority of permits are to be auctioned in the power sector, but most industrial companies will not be required to participate in auctions. Instead they will receive free allocations benchmarked to the best performers in their sector. However, the hangover of surplus emissions permits from Phase 2 could mean that companies will be starting Phase 3 in very different positions. Even with strict benchmarks, some will not need to cut their CO<sub>2</sub> before 2020.

Benchmarks are currently subject to technical work and political debate. But let us assume that steel sector were required to cut its emissions at a rate of 1.74% per year, equivalent to 21% by 2020, in line with the overall reductions required by the directive. In this scenario, ArcelorMittal would have to cut their emissions by around 37 million tonnes cumulatively against a 2008 baseline of emissions. Even allowing for strong growth, the estimated 100 million permits that the company is likely to hold by 2012 will more than cover its obligations to cut in the subsequent period up to 2020. In addition, it is unlikely the steel sector will face such stringent reductions<sup>ix</sup>. So with EU ETS rules allowing permits to be carried over for use in future phases many companies will be insulated from the need to make cuts to their CO<sub>2</sub> emissions going forward, one form of insulation that EU climate policy could probably do without. Clearly there are important implications for the debates and decisions being taken around carbon leakage, benchmarking and the overall ETS cap.

But whilst the top ten companies represent an important part of this story, it is also interesting to look at what is happening in industrial sectors and the power sector as a whole.

<sup>viii</sup> Countries are France, Germany, Italy, Poland, Spain and the UK. Source EEA GHG data viewer.

<sup>ix</sup> We derive the cumulative figure of 37 million tonnes using ArcelorMittal annual emissions in 2008 as a baseline and a yearly reduction of 1.74% in emissions for each year from 2013 to 2012.

# Sectors under the EU ETS

The EU Emissions Trading Scheme covers around 40-50% of EU emissions focusing on the power generation and industrial sectors. This section of the report looks at how companies have fared within these different sectors. The top ten companies featured in our report were mainly from the Iron and Steel, and Cement Sector, with the addition of two large power companies from the Czech Republic and Slovenia respectively. In fact these latter two companies were exceptional within their sector, which was in the main short of permits with only five out of the top fifty companies registering a surplus. Indeed, the overall trend in Phase 2 of the ETS from 2008-2012 has been for power companies to shoulder entirely the burden of reaching the cap allowing industrial sectors to maintain or grow their emissions.

But just as the Iron and Steel, and Cement sectors dominate the top ten companies benefitting from the ETS, they are also the main players in the lobbying against increasing the stringency of the scheme. Indeed, these sectors and others have succeeded in obtaining exclusions from having to buy their permits at auction from 2013 and will instead continue to receive them for free. These free allocations will be benchmarked against the top 10% most efficient installations operating in the respective sector, but the debate on how exactly this will be done is extremely lively.

These provisions have been made to protect industries from so-called 'carbon leakage'; international competition with companies not subject to regulation of their emissions. However, the decisions made under the commitment process have not taken into account the surpluses or deficits of EUA permits that particular sectors will have on entering Phase 3. Instead, in considering the risk of carbon leakage, sectors were deemed to have been starting afresh in Phase 3. Even less attention has been paid to the relative position of companies within sectors.

For politicians and policy makers the fear is that jobs and industries will migrate outside the EU. But it is unclear on current evidence, that even generous free allocation prevents

this from occurring. At the end of 2009 Corus closed its UK Teeside steelworks with the loss of many jobs – this was despite the plant operating with surplus permits, a picture which will be familiar for plant closures across the EU. Even more worryingly, in the case of Corus is that it seems able to retain 7 million permits per year<sup>x</sup> for its Teeside plant because it is continuing limited activities there. This highlights the dangers of using mechanisms within an environmental scheme in order to safeguard jobs – the intent may be good, but the outcome may be that neither jobs nor the environment are protected.

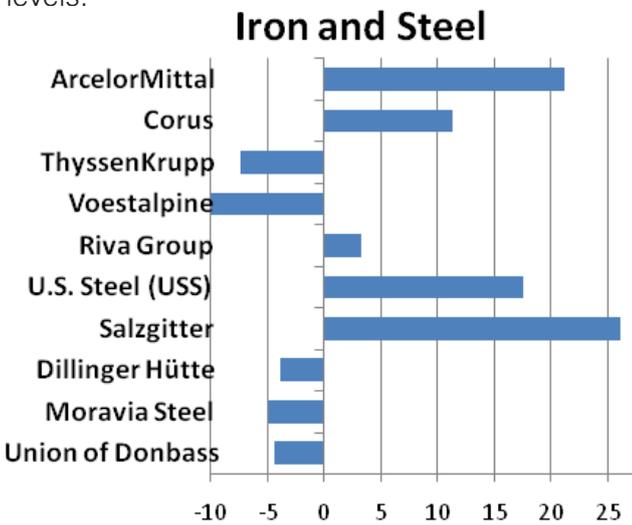
There is much at stake here, industrial sectors, through national allocation plans, may have been mandated by member state governments to receive what is equivalent to a subsidy for their operations. However, the case studies of key sectors in this chapter do highlight some disparity within sectors in terms of the allocations of permits that companies have been receiving. It is testimony to the flaws of the Phase 2 allocation process as a whole that both the overall industrial overallocation and uneven allocations between companies have been allowed to occur. Indeed, we may question whether some EU industrial sectors and companies are enjoying competitive advantage over foreign producers via the ETS. It is difficult to draw firm conclusions without detailed information on company's historical emissions trends and their production models. But what is clear is that there is real disparity within sectors on how companies are faring under the EU ETS, and, that at least some companies are likely to be at a significant competitive advantage as they enter Phase 3 of emissions trading. In the following analysis we represent the surplus or shortage of permits as a percentage of that company's overall emissions with companies shown in order of their volume of emissions.

<sup>x</sup> Downsizing deals - Corus to receive GBP 250 million in carbon credits <http://bit.ly/dsCOA3>

# Within Sector Analysis

## Iron and Steel

The following chart shows how the top ten companies in terms of volume of emissions in the iron and steel sector have fared under the ETS. We have made adjustment to take account of permits allocated for iron and steel companies where these are passed to third companies to allow the burning of waste gases to produce energy. It is interesting to note that in the iron and steel sector there is a real disparity between companies. However, when considering small to medium sized companies which are not represented in the chart here<sup>xi</sup>, allocations of emissions permits do appear to be more closely linked to emissions levels.



In early 2010 the iron and steel industry association Eurofer led opposition to any EU move to higher climate targets. Gordon Moffat, Director General of Eurofer stated that ‘the industry’s competitiveness (would be) further damaged,’ in the event of higher targets<sup>xii</sup>. But with the majority of iron and steel companies benefitting from the ETS as it currently stands and with the leading company ArcelorMittal having the potential to make profits of €1 billion by 2012, it is hard to see that any competitive damage has yet taken place.

Moffat goes on to state that ‘Steel already has to reduce its emissions in 2020 compared to 1990 by over 40% due to the ETS<sup>xiii</sup>.’ This figure is extremely misleading and almost certainly inflated – the industry had delivered significant cuts to its emissions before the ETS was introduced due to

<sup>xi</sup> Data on all Iron and Steel companies is given at [www.carbonmarketdata.com](http://www.carbonmarketdata.com) on the ETS companies’ database.

<sup>xii</sup> Eurofer Press Release, 21 January 2010; European manufacturing industry united against -30% climate change objective, <http://bit.ly/cfgtsh>, see also “By how much should the EU cut emissions?” <http://bit.ly/dhKUyT>

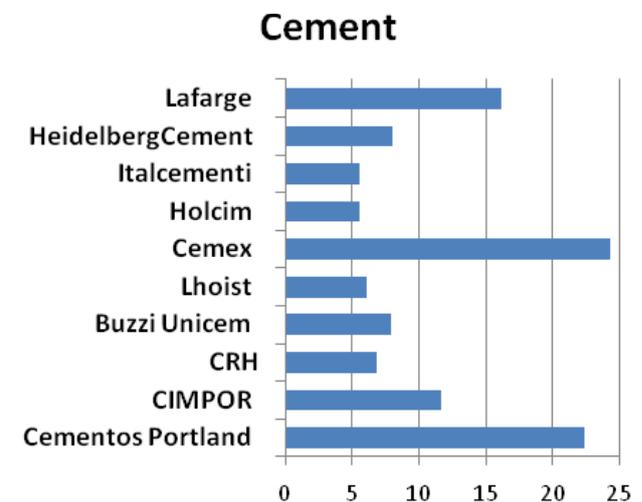
<sup>xiii</sup> Eurofer Press Release, as above.

improved technologies and the business rationale that improving energy efficiency adds to profit margins. But there is no evidence that the Iron and Steel sector has made any cuts to its emissions directly as a result of the ETS so far. Indeed, until the recession, the industry’s emissions had increased.

In fact, for the ETS to create generate real incentives for net cuts to emissions in the iron and steel sector, it will have to make up for the over-allocation to the sector thus far which has been compounded by the recent recession by mandating much greater cuts in the period from 2013 to 2020. Of course there will be some iron and steel companies that have not benefitted from the scheme thus far but this should not prevent a re-examination of the generous treatment of the sector as a whole. And if it is not the intent of policymakers to use the ETS to cut emissions in the iron and steel sector, we may question whether the companies should be removed from the ETS entirely, and subject instead to direct regulation.

## Cement

The top ten cement companies shown by volume of emissions are universally over-allocated as a percentage of their emissions. The trend continues across the sector with only three companies out of the top thirty producers registering shortages of permits, and only small shortages. On the whole, the larger companies seem to have fared better in terms of their allocations, with smaller companies having allocations which match their emissions more closely than is the case for large companies.



# The Power Sector - The Powerhouse for Emissions Reductions

In any market there is a need for demand, in the case of the EU ETS market in emissions permits this is predominantly provided by the power sector. Based on a 2008 baseline the sector would be required to make net cuts of a further 652 million tonnes of carbon to comply with the emissions cap for Phase 2 of emissions trading. However, overall the ETS would only require net cuts of 342 million tonnes of carbon for the same period<sup>xiv</sup>. The imbalance is due to the surpluses residing with industrial companies, partly caused by the onset of recession, but also over allocation in the first place. This means that power companies are compensating for industry in order for overall EU caps on emissions to be reached.

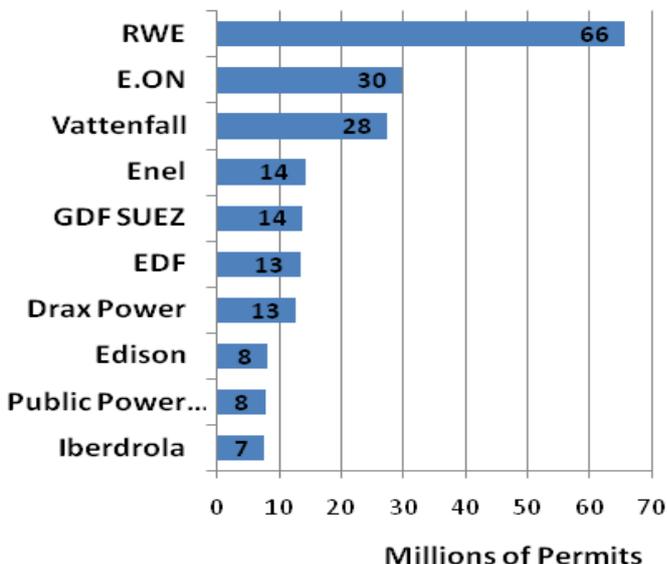
Looking at company level we find that it is actually just a handful of major power companies which completely dominate demand in the ETS. Being short of permits requires these companies to make a corresponding effort to cut their emissions. They can choose whether to do this directly, or whether to pay for extra permits or equivalent offset credits from overseas. Thus these companies are the major drivers towards achieving the caps set out in the EU ETS Directive.

## Top Ten Power Companies required to cut their Carbon Emissions

Here our top ten represents the companies who are most short of permits, rather than those with the greatest surpluses. Their total shortage of permits in 2008 was 200 million tonnes.

- RWE and EON are required to carry out or pay for more equivalent emissions reductions than the net EU ETS reductions.
- The top six power companies listed are required to provide or pay for emissions reductions equivalent to the whole of the net ETS power sector reductions.
- The top twenty power companies short of permits are required to pay for or make nearly three times the CO<sub>2</sub> cuts the EU ETS as a whole requires under the cap<sup>xv</sup>.

## Top Ten : Short of Permits



## What is going on?

Private power companies are required to deliver the emissions reductions for the Emissions Trading Scheme and indeed with the ETS as the centerpiece of European Climate Policy, a sizeable portion of the CO<sub>2</sub> reductions for the EU as a whole. As it is a carbon market, companies are relied upon to make these cuts in the most cost effective and efficient way in line with the aims of the ETS directive and also their commercial interests.

From interviews with a sample of companies we found that most pursued mixed compliance strategies which included efforts to cut their emissions along with purchasing extra EUA permits and offset credits. That these companies are investing in careful compliance strategies and making efforts to cut their carbon is testimony to the ETS working as it was intended. However, with a significant portion of the EUA permits available for purchase are the surplus permits that industrial companies do not need; power companies buying these 'hot air' permits are not paying for emissions reductions as a result of investment effort.

The major power companies listed above pass on the costs of complying with the ETS to their customers. So EU consumers who will be inadvertently subsidising industry and paying for CO<sub>2</sub> cuts which have required little or no effort. There is also the risk that they will also be charged for the free permits companies have received as well

<sup>xiv</sup> Sandbag, July 2009; ETS: S.O.S – Why the Why the flagship 'EU Emissions Trading Policy' needs rescuing

<sup>xv</sup> Net EU ETS yearly reductions = 85.5 MTCO<sub>2</sub>, Power Sector ETS reduction = 163 MTCO<sub>2</sub>. Sources: Sandbag, ETS: S.O.S report as above and Carbonmarketdata, ETS companies' database.

as those they have to buy. In this way, the power sector can also generate windfall profits.

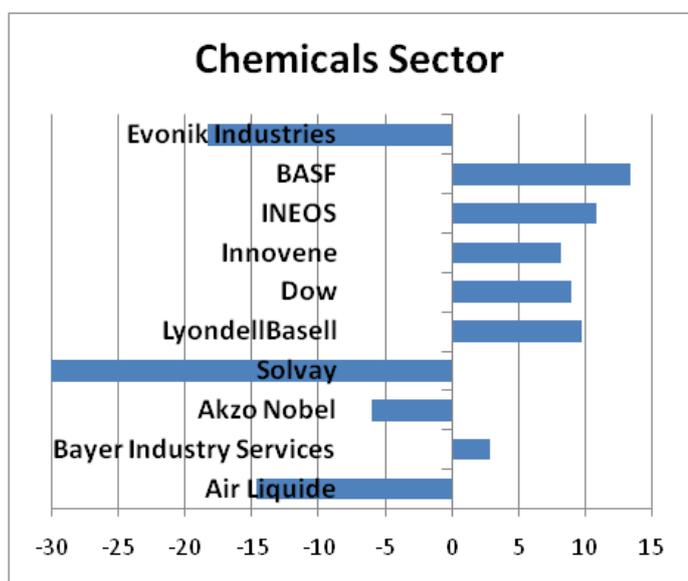
### The exceptions to the rule

The case of CEZ the Czech power company is a rare example of a power company not required to make any emissions reductions under the ETS. CEZ is operating with a large surplus of permits in 2008 enough to make it one of our carbon fat cats in 2008. It is also likely to carry over millions of permits into Phase 3. The Czech government in its national allocation plan has chosen to protect CEZ from being short of permits under the ETS and thus the need to reduce its emissions. The rationale could be to protect power consumers from higher prices, but as CEZ is majority state owned – the government could also stand to benefit from the surplus permits.

What is particularly interesting is that the Czech Government is now seeking to exclude CEZ from having to buy all its permits at auction in Phase 3 of the Emissions Trading Scheme. CEZ would undoubtedly be faced with a large permit bill as its generation mix relies heavily on coal. But when we consider that CEZ is one of the only companies not to have been short of permits in Phase 2, and that it will carry over a surplus of permits into Phase 3, this treatment of CEZ would be in sharp contrast to the rest of the power sector and to the EU objective of power sector de-carbonisation.

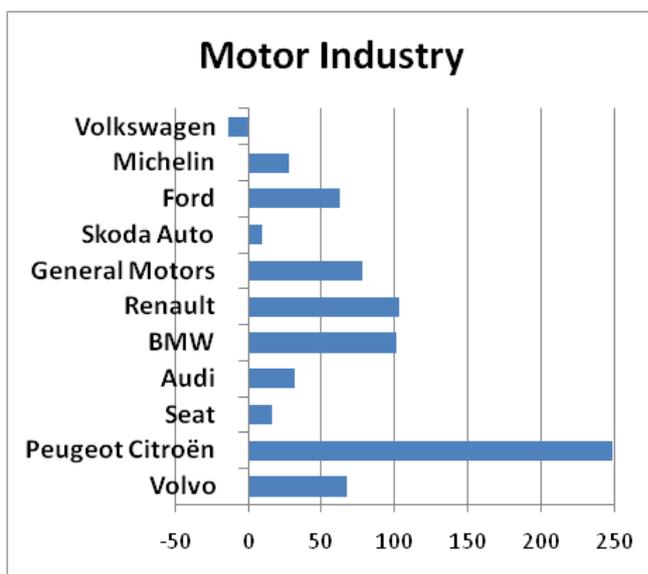
### Other Sectors

In the case of the chemicals sector we see one of the most dispersed trends. This may be down to the product types of the companies involved and without further knowledge of the sector it is hard



to discern any trend.

In the case of the car industry the percentage over-allocation which has taken place relative to companies' emissions is exceptionally high. The exception being Volkswagen, the largest producer of emissions, and a company which is alone in its sector with a shortage of permits. Peugeot is at the other end of the scale with 250% more permits than it requires to cover its emissions.



Again there seems to be little discernable pattern in terms of how companies have been allocated in the refining sector covering many famous oil and gas companies.

For many of the companies we have featured, the recession in 2009 will further increase the volume of surplus permits and potentially also the percentage over-allocations. Some companies will be starting with a shortage of permits while others will be starting Phase 3 with large surpluses but either way, most will continue to receive free permits. Some may choose to further strengthen their positions through investing in cheap CER offset credits during Phase 2 and submitting these thereby saving up more EUA permits. Investment decisions in energy efficiency and low carbon technologies will remain long term issues for companies anticipating future regulation but many will be cushioned from any short term costs from ETS compliance.

# Conclusions and Policy recommendations

The EU Emissions Trading scheme was set up 'to promote reductions of greenhouse gas emissions in a 'cost-effective and economically efficient manner' as a centrepiece of European efforts to tackle climate change<sup>xvi</sup>.

However, our analysis of how the scheme is currently functioning at a company level has uncovered a number of trends which have serious implications for the short and long term future of the ETS. These largely result from the decision to allocate for free the majority of permits to installations covered by the scheme.

A number of improvements have already been agreed for the how the scheme will operate from 2013 onwards, including increased use of auctioning. But with the banking of permits between phases, there is likely to be a significant hangover effect from this phase. This could weaken and undermine the effectiveness of the ETS from 2013 onwards unless action is taken to compensate.

To address this issue we would make the following recommendations:

## 1. Higher ambition with regard to targets

The EU's climate change targets to reduce CO<sub>2</sub> against 1990 levels were never set in line with the science which is commonly interpreted as requiring cuts from developed nations of between 25-40%. The EU's emissions trading scheme is set in line with only 20% and by 2020 has been translated into a 21% cut off 2005 levels for the capped sectors.

The evidence of high surpluses amongst many industrial sectors and companies demonstrates that Europe can afford to go further in terms of the ambition it has set for the scheme. The EU should decouple its internal climate policy from any link to the international negotiations and immediately commit to at least a 30% cut but 2020. As we have shown in previous reports and as this report again highlights it is now far cheaper and easier to hit the level of targets required by the science and we must now increase ambition.

## 2. Taking action to spur more investment in solutions

The surplus permits held by companies which have not been generated through effort to cut their emissions represent 'hot air' in the ETS. This is watering down the investment signal that participants in the scheme would otherwise receive by making it cheaper to comply with the scheme through buying 'hot air' permits than through taking action to cut emissions. In addition, the companies which hold the surpluses receive no real short term incentive to invest in abatement options of their own. In order to spur abatement investment in the EU to ensure we get onto a sustainable pathway towards the long term targets of 85-90% CO<sub>2</sub> cuts by 2050, the EU ETS needs to be tightened.

- One clear way of tightening the ETS would be to limit access to overseas offsets. In a tight market with carbon scarcity leading to a high EUA permit price companies may need this option, but as things stand, the access to CDM permits is further limiting the incentives for low carbon investment. Access to offsets in the next phase of trading should therefore be reduced in recognition of the reduced levels of effort being required under the ETS leading to weak domestic investment signals.

- Ensuring that further permits do not come to market should also be a priority. An estimated 300 million permits are held by Member States in New Entrant Reserves. These should be cancelled rather than being released into the market cancelling out some of the impact of surplus permits.

- In terms of spurring investment, windfall profits to companies who have not cut their emissions also represent lost investment which could have been directed towards low carbon technologies and improved energy efficiency. With an estimated €3.2 billion asset value in the hands of just ten companies by the end of 2012, we believe that the EU should consult upon possible incentives and measures which could ensure that at least some of this money to be directed towards de-carbonisation of the EU economy.

<sup>xvi</sup> Article 1, Emissions Trading Directive 2009/29/EC

A radical approach to this problem would be to remove industrial sectors from the Emissions Trading Scheme altogether, instead making them subject to regulation on the best available technologies and carbon intensity standards relevant to them. This would eliminate the problem of surplus permits being carried over to Phase 3 of the ETS, and in the short term, it would be possible to develop legislation and measures to prevent the sale of industrial permits to the power sector.

### 3. Revisiting the design of Phase 3

Even without overall reform of EU targets some elements of how the ETS will work for Phase 3 are still being determined. Decisions are being made on the levels of auctioning and whether some power companies will still be able to receive free permits. Industry benchmarks for the free allocations sectors are due to receive are being decided by comitology and the carbon leakage assessment entitling sectors to these free permits will also be subject to a limited review. Finally, rules determining what happens to EUA permits in the event of plant closures will also be finalised.

At present the calculations underlying these decisions are being made on the assumption that all installations will be starting Phase 3 with a blank sheet. However, it is clear that many companies and their installations have succeeded in accruing substantial surpluses of emissions that mitigate the need to take abatement action in the next phase of the scheme. In some cases the extent of the surplus could be so great as to insulate companies completely from the need to make any cuts.

Part of the problem is that most decisions are being made on an overall sector basis. However, the accrual of surpluses must be taken into account. This could require sectoral adjustments or company by company analysis to be carried out. But either way, both the carbon leakage decision on sectors exposed to competition, and the calculations of benchmarks for sectors, need to take into account the surplus permits from Phase 2. For companies in the power sector seeking specific exclusions from having to buy all permits at auction, their net position for Phase 2 should first be considered. Whilst it is not easy to make these adjustments, failure to act will lock-in the problems that the process of free permit allocation has created thus far.

### 4. Better data and better analysis

The EU must improve its monitoring of how the scheme is operating, it can only do this if it has the right information to work with. The requirements on companies to provide information must be tightened in the following ways:

- Parent company information must be provided to enable company level analysis of performance under the scheme;
- The sectoral definitions used to determine exposure to carbon leakage should be integrated with the EU ETS database to enable more fine grained assessment of sectoral performance under the scheme.
- The effect of scope changes made between 2007 and 2008 should be made clear and transparent to enable proper emission trend analysis
- Exchanges of permits between over-allocated steel plant and under-allocated combustion plant who receive flue gases as fuel must be made transparent. Ideally allocations should be made to the power plant not the steel plant.

Only when these data issues are resolved will the Commission be able to undertake accurate assessments of how the policy is performing helping to inform the future development of the scheme.

We offer these solutions to policymakers as a way to increase the effectiveness of the EU Emissions Trading Scheme and hope that they will stimulate and inform the on-going debate about the future of the scheme.

## Annex – Carbon Fat Cats Top Ten: Data and Methodology

v	sector	installati on count	allocated allowances 2008	verified emissions 2008	Surplus Permits	Waste Gas Adjustment	Net Surplus Permits	Estimated Surplus 2009	Estimated Surplus Phase 2
<b>ArcelorMittal</b>	Iron & Steel	85	89,038,947	68,258,166	20,780,78 1	6,340,884	14,439,897	42,041,545	99,801,132
<b>Lafarge</b>	Cement & Lime	50	30,039,167	25,854,750	4,184,417	0	4,184,417	6,769,892	23,507,560
<b>Corus</b>	Iron & Steel	13	34,525,797	26,989,279	7,536,518	4471457	3,065,061	14,705,533	26,965,777
<b>SSAB - Svenskt Stal</b>	Iron & Steel	3	7,164,051	3,913,416	3,250,635	0	3,250,635	4,698,599	17,701,139
<b>Cemex</b>	Cement & Lime	19	13,859,120	11,148,274	2,710,846	0	2,710,846	3,825,673	14,669,057
<b>Salzgitter</b>	Iron & Steel	9	9,502,591	7,532,633	1,969,958	0	1,969,958	4,757,032	12,636,864
<b>HeidelbergCement</b>	Cement & Lime	54	23,435,248	21,687,968	1,747,280	0	1,747,280	3,916,077	10,905,197
<b>CEZ</b>	Power & Heat	20	38,102,233	36,430,315	1,671,918	0	1,671,918	1,671,918	8,359,590
<b>U.S. Steel (USS)</b>	Iron & Steel	1	10,793,886	8,960,471	1,833,415	259297	1,574,118	4,985,432	11,281,904
<b>Slovenské elektrárne</b>	Power & Heat	3	5,475,653	4,123,511	1,352,143	0	1,352,143	1,352,143	6,760,715
<b>Total</b>							<b>35,966,273</b>	<b>88,723,845</b>	<b>232,588,936</b>

### Sources

1. Carbon Market Data online ETS companies' database.
2. EU CITL data verified data on emissions and allocations
3. Sandbag calculations of waste gas adjustments based on CITL data and location of adjacent power and steel plants on Sandbag online ETS map.
4. 2009 estimate of emissions is based on World Steel Association figures that steel output dropped 37% in 2009; we have assumed a corresponding 37% drop in emissions and waste gas permit transfers. For cement we assume a 10% drop in emissions for 2009 – there is limited data available so our estimate is conservative, based on national data from Spain reporting a 33% drop in cement consumption, [http://www.oficemen.com/noticia.asp?id\\_rep=793](http://www.oficemen.com/noticia.asp?id_rep=793)
5. Phase 2 estimated surplus is based on emissions in all sectors returning immediately to 2008 levels for the period 2010 to 2012. This is a conservative estimate as such quick recovery is unlikely.