sandbag

Consultation Response

Revision of the EU ETS Directive

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About Sandbag

Sandbag is a UK-based not-for-profit think tank conducting research and campaigning for environmentally effective climate policies.

Our research focus includes reform of the EU Emissions Trading Scheme, the EU 2020 and 2030 climate & energy packages, Carbon Capture Utilisation & Storage, and the phase-out of old coal in Europe. The International Centre for Climate Governance ranks us in the top twenty global climate think tanks.

For more information visit our website at www.sandbag.org.uk or email us at info@sandbag.org.uk

The European Commission is consulting on revision of the EU Emission Trading System (EU ETS) Directive. Sandbag's response is available below.

1. Free allocation and addressing the risk of carbon leakage

The European Council has concluded that free allocation to prevent the risk of carbon leakage should not expire as foreseen in the current legislation, but should continue also after 2020 as long as there are no comparable efforts to reduce emissions in other major economies.

1.1 The European Council called for a periodic revision of benchmarks in line with technological progress. How could this be best achieved in your view and, in particular, which data could be used to this end? How frequently should benchmarks be updated, keeping in mind administrative feasibility?

A minimal expectation is that, as part of the EU ETS revision, a new benchmarking exercise will be conducted across Europe updating the 2009 exercise. With new production and emissions data, new and new baselines for "historic activity levels", to identify Europe's 10% most carbon efficient facilities in each product category.

This results of this exercise should update the benchmark values used to determine free allocation in manufacturing sectors as defined under Article 10a of the ETS Directive except where these are weaker than the benchmarks in the previous benchmarking exercise.

A new benchmarking exercise should take place every five years to capture new developments in EU the industry and ensure carbon efficient production continues to confer a comparative advantage under the EU ETS. The timing of this review should be conducted in parallel with the five-yearly review of the carbon leakage list, and also ideally coincide with the beginning of shorter, five year ETS budget periods. (Also see answer to **Section 6.1** below).

Each ETS installation should list the product categories it is involved in (e.g. as NACE codes and descriptors) and the 10% best performing facilities in each product category should be clearly flagged in the EUTL. Ideally, all ETS installations should be ranked against best performers for each product category they are involved in. This could be a percentage figure corresponding directly to the percentage of benchmarked free allowances each installation can access for each product (e.g. 100% for best performers). This would help a wide range of stakeholders from seeing how deep remaining technology divides are between the best and worst performers in each product category.

1.2 The European Council has defined guiding principles for the development of post-2020 free allocation rules which provide inter alia that "both direct and indirect costs will be taken into account, in line with the EU state aid rules" and that "the most efficient installations in these sectors should not face undue carbon costs leading to carbon leakage" while "incentives for industry to innovate will be fully preserved and administrative complexity will not be increased" and while "ensuring affordable energy prices". Do you have views how these principles should be reflected in the future free allocation rules?

We welcome and endorse these principles from Article 2.4 of the European Council Conclusions.

We agree that the best way to take indirect costs into account is to maintain the option for Member States governments to compensate for these in accordance with the State Aid guidelines (see our answer to 1.4 below).

To prevent best performers from facing costs leading to carbon leakage, we propose that

a) “best performers” should first be more accurately and openly defined (see answer to 1.1 above)
b) carbon leakage protections should more accurately reflect genuine leakage exposure (see 1.3 below),
c) partial cessation rules should be adjusted, to better align free allocations with changing output levels, and
d) the cross-sectoral correction factor should become a measure of last resort, activated only when free allowances threaten to exceed the total annual supply of allowances

Europe is struggling to attract investment into its industrial sectors against strong international competition and a steadily declining cap on emissions. Europe therefore needs a strong industrial strategy, complimented by a sensibly designed ETS in order to develop a strong low-carbon industrial base in Europe. This will require direct support for industrial abatement technologies (see Section 2 below), but will also require getting the incentives right to ensure best performers do not face undue costs that could lead to carbon leakage. Instead we want the ETS to confer a comparative advantage on clean manufacturers that attracts best performers to Europe.

A first precaution then is to ensure that best performers do not run short of allowances because they have increased output. The Council Conclusions clearly state that “future allocations will ensure better alignment with changing production levels in different sectors”, however they also say that “administrative complexity will not be increased”. Sandbag have proposed a method for making free allocation more responsive to output with only slight amendments to existing rules and procedures. The existing rules already allow for some *ex-post* adjustments to free allocation based on output: the 2011 Benchmarking Decision introduced partial cessation thresholds to reduce the level of free allocation to ETS sub-installations if output declined drastically from historic baselines; however these thresholds require production to fall by half before allowances are correspondingly reduced, and no provision is made to increase allowances if production rises against baseline levels. We recommend refining these provisions to that they trigger a 10% fall in free allowances for every 10% drop in activity, and also a 10% rise in free allowances for every 10% increase in output.

Better aligning free allocation with production in this way, implies removing some of the predictability away from the annual auction supply, increasing the volume of allowances available for auction in years of weak industrial performance and decreasing the volume of auctions in years of strong industrial performance. Generally, we expect

that Member States will prioritise the protection of manufacturing jobs and traditional tax receipts from a strong manufacturing base over increased ETS auction volumes. This also implies changes to the ceiling on free allowances and the "cross sectoral correction factor" established in Article 10a. While a narrower carbon leakage list and more accurate and aggressive benchmarks should significantly reduce the volumes of free allowances applied for and approved, this still might not be sufficient to keep free allowances below the ceiling, especially in years of particularly high industrial output under a more "dynamic" free allocation system. This could see best performers facing reductions in their free allowances under the cross sectoral correction factor, imposing undue costs and, if they are exposed, carbon leakage. To avoid this, we recommend raising the ceiling on free allowances to the level of annual supply (after the Market Stability Reserve has adjusted auctions). In this way the cross sectoral correction factor will only come into effect when free allowances threaten to exceed the total supply of allowances available to the market.

An allocation system that is more responsive to changes in production puts the carbon efficiency benchmarks centre-stage, determining winners and losers in each sector under the ETS on the basis of efficiency rather than drops in production, and rewards clean manufacturers for increasing their output. This would foster an environment which attracted green industry to Europe instead of incentivising the offshoring of production.

We provide more information on this proposal in p.71-74 of our October 2014 report, 'Slaying the Dragon' (http://sandbag.org.uk/site_media/pdfs/reports/Sandbag-ETS2014-SlayingTheDragon.pdf)

1.3 Should free allocation be given from 2021 to 2030 to compensate those carbon costs which sectors pass through to customers? How could free allocation be best determined in order to avoid windfall profits?

Indirect costs

No, free allocation should not be awarded to industries to cover their indirect carbon costs.

The principle of emissions trading is that a tonne is counted as a tonne. Any move to include indirect emissions in the allocation methodology risks double counting and counter-acting price signals which incentivise efficiency improvements.

The state aid guidelines offer Member States a clear opportunity to compensate their energy intensive industries from the indirect costs they face under the EU ETS if their governments feel this is a spending priority, and the revenues their treasuries receive from auctioning allowances are typically more than sufficient to cover these indirect costs.

It would represent an invasion of the fiscal sovereignty of Member States to oblige them to spend their ETS revenues compensating these industries, when their treasuries feel there are other spending priorities, and it would be even more aggressive move to divert carbon allowances which are currently national property to their industries.

Wherever possible, allowances should be assigned to the installation where emissions are actually produced and published in the EU Transaction Log. Already there are profound transparency issues in the EU Transaction Log concerning the re-allocation of EUAs from steel and paper industries to neighbouring combustion facilities as part of flue gas transfers. This already makes it difficult to accurately identify problems with over or under allocation of allowances under current rules (See response to Section 5.3 and 6.6. below). A much larger re-assignment of allowances from Member States to energy intensive companies risks deeply obscuring the relationship between free allowances and emissions. It also risks creating undeserved windfalls and competitive distortions which will be hard to later identify.

Windfall profits

More generally, we feel that windfall profits to industries, are best avoided by applying the free allocation principles described in our answer to question 1.3: Narrower carbon leakage criteria, appropriate and realistic benchmarks, and free allocation that more closely tracks actual production.

Indicatively, if partial cessation thresholds were narrowed to 10% intervals as we advise, Sandbag estimates that in 2014 alone, 70% more allowances would have been withheld under partial cessation rules than is currently the case – even where we assume an increase in allowances to those sub-installations that had increased their emissions relative to baseline levels (NB: this calculation uses emissions in installations as a proxy for production in sub-installations). This principle of making a more nuanced response to changes in activity level could also be extended to indirect compensations under the State Aid Guidelines.

The current design of the carbon leakage list is particularly pernicious in delivering undeserved windfalls to manufacturers. Our analysis finds that virtually all (**99.97%**) of manufacturing activity has been defined as leakage exposed in Phase 3, owing to the inappropriately broad capture of the carbon leakage list. Inclusion on that list entitles sub-installations to access 80% more free allowances in Phase 3 than they would otherwise be available to them, and potentially more in Phase IV.

A range of measures should be introduced to make the carbon leakage list more targeted, including a more realistic and regularly updated carbon price, more specific criteria, and a more nuanced geographical appraisal of carbon leakage threats to different parts of Europe and from different regions outside of Europe.

2. Innovation fund

The European Council has concluded that 400 million allowances in 2021 to 2030 should be dedicated for setting up an innovation fund to support demonstration projects of innovative renewable energy technologies, carbon capture and storage (CCS) as well as low carbon innovation in industrial sectors. To make this fund operational, a legal basis has to be created in the EU ETS Directive while further implementation modalities can be set out in secondary legislation. The work can build on the experience with the existing "NER300" programme which made available 300 million allowances for CCS and innovative renewable energy technologies.

2.1 Do you see reasons to modify the existing modalities applied in the first two calls of the NER300? Are there any modalities governing the NER 300 programme which could be simplified in the design of the innovation fund? If you see the need for changes, please be specific what aspects you would like to see changed and why.

The NER300 programme was both too small to cover meaningful Capex and Opex for breakthrough technologies, and too poorly focused, so as to severely limit the number of CCS projects using it. The NER400 and other innovation funds are unlikely to be sufficient on their own to stimulate investment in need decarbonisation technologies in industry. The NER400 and the EU Energy and Climate Package as a whole should ensure that a combination of EU and MS level policies successfully triggers investment in these technologies. In this context the NER400 should:

Be larger. For example, the €300m awarded to the UK White Rose project is dwarfed by the estimated cost of the plant (~£2bn), a cost which does not include the massive infrastructure requirements. Because of the link with the ETS carbon price, the NER300 was hobbled by the ETS price crash. Sandbag does not expect the carbon price to rise significantly, even with the most ambitious Market Stability Reserve reform currently being considered, and so an NER400 fund would likely only total €3bn (given an ETS price of €7-8). This is not enough, even in whole, to kick-start CCS in Europe.

Be outcome focused. The aim of the NER400 should be to bring forward investment in technologies that significantly decarbonise (e.g. by more than 50%) the GHG emissions arising from industrial production in the EU.

Be ongoing. Investors will need to have confidence that support for decarbonisation technologies in the industrial sectors will be sustained over the lifetime of the technologies operation.

Be more responsive. Even ignoring the competition process, the NER300 had an 18 month examination and due diligence process, which is too long.

Cover whole projects. The NER300 is capped at 50% of total project costs. This cap should be removed since there are likely to be some Member States who are unable to match fund projects. Smaller scale CCS/U projects if correctly incentivised are very likely to come forward if the correct policy framework is in place.

Prioritisation of Industrial CCS over Power CCS: NER300 focused on tonnes of carbon stored per unit of energy produced. As such, the most-polluting plants, mainly coal, were prioritised in the merit order. NER400 should focus on carbon stored per Euro, in order to prioritise a wider range of solutions.

Initial and ongoing support for larger scale CCS investments will likely require Member State support mechanisms on top of the NER400 innovation fund. In the UK the Carbon Floor Price policy and Contracts For Difference introduced under an Energy Market Reform Package are aiming to bring on investment in CCS in the power sector and a group of industrial players clustered around Teesside are currently exploring policy options for financial support for industrial CCS projects.

All Member States receive revenues from auctions of EUAs and where finance is available it should be earmarked for industrial decarbonisation rather than stop-gap compensation payment schemes which aim to maintain the status quo.

Support for innovation on CCS should be focused on the application of technologies to industrial processes where is it most difficult, if not impossible, to replace fossil fuels with renewable energy. Sandbag has shown that coal power in the UK can be phased out without the necessity for CCS, but industrial processes are not necessarily as easy to decarbonise.

EU-wide CCS targets: The Commission should bring forward proposals for an EU-wide target for greenhouse gas sequestration, in order to stimulate Member States to offer the support to CCS, as has happened successfully with the Renewables targets.

The Funding Gap: The fund should be established as early as possible. The legislative basis for NER300 elapses in December 2015, whilst the start date of the NER400 is 2021, which would create a gap of at least seven years (assuming two years between the launch and the first awards). Prolonging the programme requires an immediate amendment of the ETS Directive, in order that the first calls take place well ahead before 2020 and the development of essential technologies can continue. Alternatively, there is a need for a 'bridge fund' between the NER300 and the NER400 to avoid discontinuation of funding to CCS and other crucial climate technologies.

2.2 Do you consider that for the extended scope of supporting low-carbon innovation in industrial sectors the modalities should be the same as for CCS and innovative renewable energy technologies or is certain tailoring needed, e.g. pre-defined amounts, specific selection criteria? If possible, please provide specific examples of tailored modalities.

New innovation funds must specifically cover CCS. Whilst the NER300 invested in a large number of breakthrough renewables technologies, it has so far been incidental to CCS in Europe. Renewables already have a large number of funding sources; CCS does not. Therefore at least 75% of the new fund should be allocated to emissions storage.

CCS projects are often defined as including the transportation and storage of CO2 however this need not be the case since renewables projects are not defined as including the transmission infrastructure or back up capacity required to maintain supply. CCS transportation and storage infrastructure where it involves infrastructure made available to 3rd parties should be included in the regulated asset bases of network operators.

Not all industrial CCS projects require pipeline and off-shore storage. Mineralisation or carbonisation is a form of CCSU that produces saleable aggregates which permanently store CO2. This process is already in use in a small scale way in the UK. Mineralisation can provide an alternative to lime based cement production.

The modalities of the NER therefore need to be sufficiently flexible to enable support to be granted on an outcomes basis rather than be too proscriptive about the technologies or project elements at this stage.

3. Modernisation fund (energy efficiency and modernise energy system in low income countries)

The European Council has concluded that 2% of the total EU ETS allowances in 2021 to 2030 should be dedicated to address the particularly high investment needs for Member States with GDP per capita below 60% of the EU average. The aim is to improve energy efficiency and to modernise the energy systems of the benefitting Member States. The fund should be managed by the beneficiary Member States, with the involvement of the European Investment Bank (EIB) in the selection of projects. To make this fund operational, a legal basis has to be created (in the EU ETS Directive), while further implementation modalities can be set out in secondary legislation.

3.1 Implementation of the modernization fund requires a governance structure: What is the right balance between the responsibilities of eligible Member States, the EIB and other institutions to ensure an effective and transparent management?

No response for this section.

3.2 Regarding the investments, what types of projects should be financed by the modernisation fund to ensure the attainment of its goals? Should certain types of projects be ineligible for support?

3.3 Should there be concrete criteria [e.g. cost-per-unit performance, clean energy produced, energy saved, etc.] guiding the selection of projects?

3.4 How do you see the interaction of the modernisation fund with other sources of funding available for the same type of projects, in particular under the optional free allocation for modernisation of electricity generation (see section 4 below)? Would accumulation rules be appropriate?

3.5 Do you have views how the assessment of the projects should be reflected in the forthcoming 2030 governance process (e.g. national climate programmes, and plans for renewable energy and energy efficiency)?

3.6 Should the level of funding be contingent on concrete performance criteria?

4. Free allocation to promote investments for modernising the energy sector

The conclusions of the European Council provide for the continuation after 2020 of the mechanism foreseen in Article 10c of the EU ETS Directive, which allows some Member States to opt to hand out free allowances to power plants in order to promote investments for modernising the energy sector. The current Article 10c modalities, including transparency, should be improved to promote investments modernising the energy sector, while avoiding distortions of the internal energy market.

4.1 How can it be ensured that investments have an added value in terms of modernising the energy sector? Should there be common criteria for the selection of projects?

The allocations should contribute to power sector decarbonisation, and should never be provided refurbish coal and lignite power stations. It is not acceptable to keep funding high-carbon assets, spending money on incremental improvements, which in itself creates a carbon lock-in. Rather, allocations should be used to move to a true low carbon economy.

Installations receiving free allowances under Article 10c should be clearly labelled in the EUTL. The EUTL should record, and allow public access to, yearly 10c free allocation amounts. This would enable civil society scrutiny of the success of energy sector modernisation promotion.

4.2 How do you see the interaction of the free allocation to energy sector with other sources of funding available for the same type of projects, e.g. EU co-financing that should be made available for the projects of common interest under the 2030 climate and energy framework? Would accumulation rules be appropriate?

No response.

4.3 Do you have any views how the assessment of the projects should be reflected in the forthcoming 2030 governance process (e.g. as regards improving transparency)?

It must be publically available data to see where allocations go to, and how they are used.

Member States annual reports on Article 10c sponsored projects, identifying the installations involved, should be published on a common platform for easy public access.

4.4 The maximum amount of allowances handed out for free under this option is limited. Do you think eligible Member States should use the allowances for a period of time specified in advance (e.g. per year), or freely distribute them over the 2021-2030 period? (Please explain your motivation.)

Always by year, as otherwise enables up-front use of allocations, effectively increasing the ETS surplus.

4.5 Should there be priorities guiding the Member States in the selection of areas to be supported?

If so, which of the following areas, if any, currently supported through investments for modernisation of electricity generation up to 2020 should be prioritised for support up to 2030 and why?

- **Interconnectors**
- **Smart Grids**

- **Super-critical coal**
- **Gas**
- **Renewable energy**
- **Energy storage**
- **Energy efficiency**
- **Other (please elaborate)**

CCS should be included.

4.6 How can improved transparency be ensured with regard to the selection and implementation of investments related to free allocation for modernisation of energy? In particular regarding the implementation of investments, should allowances be added to auctioning volumes after a certain time period has lapsed in case the investment is not carried out within the agreed timeframe?

Member State annual reports, identifying the installations involved, should be made public and easily accessible on a common reporting platform.

5. SMEs / regulatory fees / other

In order to allow taking stock of the EU ETS aspects beyond those examined by the European Council, respondents are also invited to provide feedback on certain other questions.

The Commission ensures that better regulation principles govern all of the policy work, including that the specificities of small and medium sized enterprise (SMEs) are taken into due consideration. Member States can exclude certain small installations from the EU ETS in the current trading period (2013-2020) if taxation or other equivalent measures are in place that will cut their emissions. If such a possibility was to be reviewed, a legal basis would have to be created in the EU ETS Directive.

The accurate accounting of all emission allowances issued is assured by a single Union Registry with strong security measures. The operations were centralised in a single Registry operated by the Commission, following a revision of the ETS Directive in 2009. This has replaced Member States' national Registries. Despite the considerable resources from the EU budget required for maintaining the EU Registry, as does supporting work on auctioning, the Commission does not have the possibility to charge any fees. However, Member States administrators may still charge Registry fees to account holders administered by them. There are discrepancies in fees across different Member States.

5.1 Are there any EU ETS administrative requirements which you consider can be simplified? Do you see scope to reduce transaction costs, in particular for SMEs? If yes, please explain in detail.

No response.

5.2 Member States had the possibility to exclude small emitting installations from the EU ETS until 2020. Should this possibility be continued? If so, what should be the modalities for opt-out installations to contribute to emission reductions in a cost-effective and economically efficient manner? Should these be harmonised at EU level?

Sandbag would support the continued exemption of small emitters to reduce unnecessary bureaucracy, and because lowering their emissions would be better addressed under effort sharing.

5.3 How do you rate the importance of a high level of security and user-friendliness of the Union Registry? Do you think the costs for providing these services should be covered via Registry fees?

A high level of security is imperative, as is ease of use.

The EUTL should provide public access to all relevant data for understanding the balance of supply and demand of emissions permits under the ETS. Commission Regulation (EU) No 389/2013 of 2 May 2013 has resulted in a severe loss of data transparency. This should be reconsidered in the context of user-friendliness of the Union Registry for civil society engagement in future ETS Phases as well as for the current Phase. The EUTL should always include visibility on exchange of CDM credits for EUAs for compliance at the country and sector level if not at installation level.

The Operator Holding Account Table should include an additional field to record and share NACERev2 Code for each installation. The assignments of installations to NACErev2 Codes and to Main Activity Sector Codes (as defined in Section 7.2 of Guidance on interpretation of Annex I of the EU ETS Directive http://ec.europa.eu/clima/policies/ets/docs/guidance_interpretation_en.pdf) should be reviewed on a regular basis and updated for public access.

The EUTL should also be enhanced to more easily identify free allocations received by installations as a result of carbon leakage exposure and to identify best performing installations. This is required for better public understanding of, and support for, appropriate carbon leakage provisions.

Harmonised Registry fees could contribute to covering data services costs.

A significant barrier to understanding the balance of permit supply and demand at the country, sector and company level is related to the transfer of allowances between installations in connection with waste gas transfers for power generation. The user friendliness of the Union Registry would be significantly enhanced if this information were made public. This data is collected from installations via Worksheet J Transferred CO2 in their Annual Emissions Monitoring Plans http://ec.europa.eu/clima/policies/ets/monitoring/docs/t1_mp_installations_en.xls

For transactions, the ETS Registry is extremely difficult and counter-intuitive to use e.g. complexity of accessing statements, complexity of performing transactions, lack of receipts, etc. There is no oversight, and transactions rely solely on trust in the Registry. Receipts for proof of transactions should be immediately addressed, but there is a requirement for very basic modernisation and streamlining of the Registry site, in order to avoid unnecessary costs and delays for users.

5.4 Do you consider discrepancies in Registry fees in different Member States justified? Should Registry fees be aligned at EU level?

No response.

5.5 Under the current EU ETS Directive, at least 50% of the revenues generated from the auctioning of allowances should be used by Member States for climate-related purposes. For the calendar year 2013 Member States have reported to have used or to plan to use 87 % on average to support domestic investments in climate and energy. Do you consider the current provisions regarding the use of the revenues adequate for financing climate action? If not, please explain why?

No response.

6. General evaluation

6.1 How well do the objectives of the EU ETS Directive correspond to the EU climate policy objectives? How well is the EU ETS Directive adapted to subsequent technological or scientific changes?

The core principles of the ETS Directive correspond well to EU climate policy objectives, e.g. "to promote reductions of greenhouse gas emissions in a cost-effective and economically efficient manner" (Article 1 of the Directive). However several elements of the Directive are not aligned with this climate objective or other EU climate policy objectives.

The large surpluses that have accrued within the scheme, combined with political uncertainties that attach to a regulated market, have led to short term price-setting that has led to low-carbon prices and underinvestment that is not consistent with cost-effective achievement of the ETS caps. A well designed market stability reserve which starts immediately and prevents backloaded and unused allowances from flooding the market at the end of Phase 3 is of paramount importance for the ETS to fulfil its main aim here. Even these measures, however, might not be sufficient. Our forecasts suggest that, even with an early start and backloaded and unused allowances removed surpluses could remain at 2 billion almost indefinitely unless further action is taken to reduce supply (See our March 2015 briefing "Eternal Surplus of the Spineless Market": http://sandbag.org.uk/site_media/pdfs/reports/The_Eternal_Surplus.pdf)

Moreover, there are also important inconsistencies as to how the ETS budgets are set within Europe's climate targets and its long term objectives. Last October the European Council adopted a 2030 target to cut domestic emissions by 40% relative to 1990 levels. This has just been translated into Europe's INDC target for the UN Climate Negotiations. In the press reaction to this INDC, Climate and Energy Commissioner, Miguel Arias Canete says, *"It is our fair share of what has to be done to achieve the internationally agreed below 2°C target*." The press statement elaborates to say:

"The EU's intended contribution puts the EU on a cost-effective pathway towards long term domestic emission reductions of 80%. This is consistent with the Intergovernmental Panel on Climate Change (IPCC)'s assessment of the reductions required from developed countries as a group, to reduce emissions by 80-95% compared to 1990 levels by 2050." (Source: http://ec.europa.eu/clima/news/articles/news_2015030601_en.htm)

But sadly, the 40% target does not, in fact, put us on the cost-effective pathway towards the long-term target, as the Low Carbon Roadmap which laid out that cost-effective pathway specified that at a 2020 target of -25% domestic was required to achieve that aim. Moreover, Europe's current target are not consistent with the IPCC's assessment of the reductions required form developed countries as a group. Box 13.7 in the IPCCs 4th Assessment Report (Working Group) not only specifies that developed countries should reduce emissions in 2050 by 80-95% vs 1990 levels, but also that they should reduce emissions in 2020 by 25%-40%.

The EU's current targets are not consistent with its internal criteria for making either or a cost-effective or equitable contribution to fighting climate change. As a minimum this would revising the 2020 target to 25% domestic cuts vs 1990 levels, or slashing Europe's carbon budgets by a corresponding volume. For the traded sector, we estimate that this would require cancelling 2.6 billion ETS allowances by 2030, against the current Phase 3 cap and the proposed Phase 4 cap. This step up in ambition is imperative if Europe is to make a coherent and ambitious offer in the negotiations towards a climate deal in Paris (See page 74-75 of our 2014 report "Slaying the Dragon" for more details: http://sandbag.org.uk/site_media/pdfs/reports/Sandbag-ETS2014-SlayingTheDragon.pdf)

b) How well is the EU ETS Directive adapted to subsequent technological or scientific changes?

The EU ETS is presently poorly adapted to respond to either technological, scientific, economic or political developments.

The ambition of each ETS carbon budget is largely determined by estimating the cost of meeting that cap compared with business-as-usual emissions for the same period. In the case of the Phase 3 cap were set on the expectation that it would cost €30/t CO2 by 2020, based on an Impact Assessment for the Climate Package conducted in 2008. The demand for allowances has turned out to be far lower than predicted by that Impact Assessment as has the cost of abatement making the Phase 3 cap substantially easier to meet that policymakers had expected. In a carbon-constrained world, the appropriate policy response to cheaper and easier emissions goals is to increase the level of ambition. Unfortunately, the eight year compliance periods introduced in the last revision of the Directive have provided insufficiently frequent opportunities for policymakers to adjust the ambition of the scheme in light of these developments without them being accused of "changing the goal-posts".

While a well-designed Market Stability Reserve should help maintain appropriate incentives in the EU ETS by regulating supply if technological or economic or policy factors lead to unforeseen changes in demand, this will not change the fundamentals of the scheme, and can at best "hold the fort" until policymaker have their next formal opportunity to review the cap. **In light of this, we advise that the next revision of the Directive should re-instate shorter 5 year budget periods for the EU ETS.**

Another key oversight in the design of the offsetting provisions for 2008-2020 was to fix installations' offset entitlement to the volume of free allowances they received in in Phase 2. This essentially guaranteed that the supply of allowances in the EU ETS would be increased by 1.6 billion regardless of whether the relevant ETS installations actually needed them to reduce compliance costs over the period. This has been a huge contributor to the surpluses that have accumulated in the system. While there are currently no plans to introduce offsets to the ETS or the ESD after 2020, this has been suggested as a potential avenue for increasing ambition beyond the 40% domestic target currently agreed. **If offsets are re-introduced, conditions should be attached to their use to ensure these can only be used by facilities with a genuine pressing need for them. We stress, though, that policymakers' first recourse for increasing ambition should be cancelling excess EUAs from the EU ETS (either by tightening the Phase IV cap, or by cancelling EUAs that have accumulated in the Market Stability Reserve).**

6.2 What are the strengths and weaknesses of the EU ETS Directive? To what extent has the EU ETS Directive been successful in achieving its objectives to promote emission reductions in a cost-effective manner compared to alternatives, e.g. regulatory standards, taxation?

The strengths of the ETS are:

- harmonisation across 31 countries
- decision making about investments is made the responsibility of the private sector
- broad coverage of emissions and sectors
- involves a relatively small number of regulated entities given the coverage
- abatement cost discovery for a predetermined level of ambition
- flexibility in compliance seeking out least cost abatement
- creation of an offset market that stimulated interest in carbon markets in China
- built in redistribution mechanisms between richer and poorer countries
- transparency of data (though this still needs to be improved)

Its weaknesses to date have been:

- insufficient supply side flexibility e.g. ability to respond to changing external factors
- insufficient scrutiny of Member State NAPs in phase II with regard to sectoral over-allocation and the competitive distortions this creates
- over optimistic assumptions about industrial growth and under estimation of abatement potential
- insufficient attention paid to over-lapping areas of policy at EU and MS level e.g. energy efficiency, air quality standards

- unfettered access to offsets – a price trigger should have been used
- lack of a transparent floor price for auctioned allowances
- a very poor methodology for assessing exposure to carbon leakage
- a cross sector correction factor that tries to address the above problem but in a very poorly targeted way
- very crude ex-poste partial cessation rules that are open to exploitation and which do not take into account increased production.

Since alternatives to the ETS are likely to take many years to introduce and will be every bit as hard fought over as the ETS, it is impossible to say to what extent the ETS has been successful against a hypothetical alternative. Regulatory standards such as those in the LCPD and IED are subject to capture by industry and harmonised taxation at an EU level remains impossible.

6.3 To what extent are the costs resulting from the implementation of the EU ETS Directive proportionate to the results/benefits that have been achieved, including secondary impacts on financing/support mechanisms for low carbon technologies, administrative cost, employment impacts etc.? If there are significant differences in costs (or benefits) between Member States, what is causing them?

No response.

6.4 How well does the EU ETS Directive fit with other relevant EU legislation?

Sandbag is soon to release a new report on the interaction between the ETS and other elements of the EU Climate and Energy Package. We conclude that it is possible and desirable for the ETS to exist alongside flanking policies but that more attention needs to be paid to managing this, since overlapping policies is one of the contributing factors to the build-up of surplus in the ETS.

There are three factors, which explain why a portfolio approach is justified:

1. **Non-price barriers:** As an IEA report on energy efficiency and carbon pricing concluded: "*It appears that not all market failures acting as barriers to optimal energy efficiency in the appliances sector can be addressed by carbon and energy pricing.*"
2. **Technology deployment:** Deployment of technology stimulates economies of scale and innovation in manufacturing which, in turn, helps achieve cost reductions in such technology. Yu et al studied the factors behind the learning curve of solar PV and found that from 1998 to 2006 ~50% of price reductions came from learning-by-doing and scale effects.
3. **Avoiding lock in:** Driving early retirement of coal plants is perhaps best achieved through a combination of carbon pricing and direct regulation. A carbon price – even a low one – is crucial to discourage coal burn and prevent high carbon lock-in. For example, a carbon price of €20 t/CO_2 reduces the profitability of a 300 MW of coal by around €33m per year. Despite the importance of carbon pricing, evidence suggests a very high price is needed to completely curtail the use of all existing coal across the EU e.g. the carbon price would need to rise as high as €100 t/CO_2 which is politically undesirable.
4. **EU Industry Policy:** As part of its Europe 2020 strategy, the EU Commission published a communication in 2012 stating: *"… the Commission seeks to reverse the declining role of industry in Europe from its current level of around 16% of GDP [at constant prices] to as much*

as 20% by 2020." According to World Bank data, emissions from EU manufacturing and construction peaked in the 1970s and remains 26% below output in 1960, while industry value calculated as a percentage of GDP declined 22% from 1991 to 2013. The failure of carbon capture and storage (CCS) policy in the EU has left a large hole in the 2020 Package, especially for industrials who were left with little or no additional support at an EU level for investment in decarbonisation.

Our main recommendations are as follows:

Clearer communication about the role of the ETS. Discontent about economic growth, energy costs and geopolitical instability have all influenced how the EU views climate policy and the role that the ETS plays within it. The ETS has been at the sharp end of this debate due to its colossal breadth of scope and the direct liability it places on the regulated entities it covers. The ETS will naturally attract more political resistance compared to other policies. A reformed ETS can play an important role but within limitations. The EU Commission needs to better articulate the role of the ETS including its strenghts, weaknesses and limitations.

MSR and 2030 Package modelling. The 2020 Package revealed how EU Commission modelling is vulnerable to error. Estimating emissions will always be challenging as carbon output is determined by complex interactions between electricity demand, economic growth, technology costs and fuel prices. Translating forecasting uncertainty into inflexible policies is at the heart of the problem with the 2020 Package. The introduction of the MSR (Market Stability Reserve) will introduce a welcome element of flexibility to the ETS. However, before setting budgets for the traded and non-traded sectors, a robust and transparent review of existing energy models must be undertaken. To avoid a situation whereby the 2030 Package simply mimics "business as usual" (BaU), the targets the EU sets for itself must be subject to regular review and flexible elements in the design must be incorporated.

Renewables deployment and ETS reform. Carbon pricing, market liberalisation and the increasing role of interconnection will improve the competitiveness of renewables in power markets and deliver the legally-binding EU target of increasing the share of renewable energy to at least 27% of energy consumption in the most cost-effective manner. The 15% interconnection target and internal energy market provisions should reduce the overall cost of renewable energy deployment. However, the EU Commission will still allow Member States to pursue more ambitious national targets, which could mean renewables continue to impact the ETS. This reinforces the need to include regular reviews of the 2030 Package and ensure MSR proposals are implemented.

EU industry transition policy and the role of the ETS. Any policy attempt to reverse the declining contribution of heavy industry to EU GDP needs to be couched in the context of the low carbon economy. The failed NER 300 approach should be abandoned in favor of a stand-alone policy mechanism that mimics the success of renewable energy policies. The focus of this policy should be to support Carbon Capture and Storage (CCS) in industrial sectors where alternatives are limited and where renewables struggle to penetrate.

6.5 What is the EU value-added of the EU ETS Directive? To what extent could the changes brought by the EU ETS Directive have been achieved by national measures only?

The main value added is harmonisation of a carbon price across all of the EU and the additional countries that have opted in. This has created a cross border market in carbon abatement which will allow finance to flow to least cost abatement wherever it exists.

It is highly unlikely that national measures would have created such comprehensive awareness among so many large-scale emitters of their exposure to the cost of emitting carbon. Whether they have yet to be motivated by the ETS to invest in abatement however, is a highly debatable point. High-energy prices have already incentivised efficiency improvements and the carbon price has been too low and unstable to justify significant investment without additional price support policies.

National ETSs would by their very nature be smaller and less liquid and could have created much higher carbon prices depending on national implementation rules. A patchwork of national schemes would not have included the solidarity elements that required richer countries to assist poorer countries through redistribution of allowances for auction.

6.6 Do you have any other comment on the revision of the EU ETS Directive that you would like to share?

We recommend revising Article 10, paragraph 1 of the ETS Directive to allow Member States to cancel some of their allowances reserved for auction. This paragraph of the ETS Directive currently specifies that "Member States shall auction all allowances that are not allocated free of charge in accordance with Article 10a and 10c". As a consequence, if a Member State wishes to cancel allowances as a means of unilaterally increase its own and Europe's climate ambition, it is obliged to purchase these from the market rather than removing these from its own registry. While the material effect on Member State coffers is essentially the same the political barriers are different. It is politically easier for a government to forgo a source of potential revenue than it is to make a new spending commitment. A small change to this paragraph of the Directive could therefore facilitate increased EU climate ambition.

In addition we have a range of transparency concerns that we feel should urgently be addressed during the next ETS revision.

As noted above in section 5.3, the loss of transparency on the volume of offsets surrendered by ETS installations for compliance since 2012 has been a major setback for civil society and other stakeholders to realistically assess the situation faced by many installations, companies, sectors and countries under the scheme. As an absolute minimum the volume of offsets surrendered by sector within each country should be made available to better assess the compliance costs key actor are likely to face.

Waste gas transfers have also been a profound source of obfuscation as to how important sectors like iron and steel, and pulp and paper are performing in the EU ETS and the EUTL should make clear which installations have transferred free allowances to each other each year and the specific volumes involved.

Given their importance and special treatment under the ETS Directive, clearer identification in the EUTL of the installations defined as power installations is also very important.

Finally, clearer data should be published on which account holders have chosen to cancel ETS allowances each year, and the specific quantities involved. This will be a factor in the total supply of allowances in circulation, affecting the operation of the market stability reserve if it is agreed, and is crucial in quantifying any increases in the environmental ambition of the scheme beyond the carbon budgets initially agreed.

About this briefing

Full information on Sandbag and our funding is available on our website (www.sandbag.org.uk).

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