FLEXIBILITIES IN THE EU'S 2030 EFFORT SHARING DECISION

REDUCING THE COSTS OF TACKLING 60% OF THE EU'S CLIMATE PROBLEM

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Executive summary

The Effort Sharing Decision (ESD) is a centerpiece of Europe's climate legislation as it sets annual emission reduction targets for each Member State for the greenhouse gas emissions from the transport, building, agriculture and waste sectors. The ESD was adopted in 2009 to implement the EU's 2020 climate target and has been designed for the 2013-2020 period. To implement the newly agreed 2030 climate target, the European Commission is expected to present a new legislative proposal to reduce emissions from ESD sectors in the 2021-2030 period in the first half of 2016.

Compared to the existing legislation, a number of key factors surrounding the EU's post-2020 targets have changed. A higher 2030 climate ambition and the decision not to make use of international carbon offsets has resulted in a search for new options to reduce emissions cost-efficiently – so called flexibilities.

Adjusting the ESD to these new parameters provides a unique opportunity to increase the potential of the ESD to act as a catalyzer for a climate-friendly transition of highly emitting sectors. A key challenge will be to design these flexibilities in a way to help reduce emissions cost-effectively while upholding the integrity of the climate target and subsequently drive emissions abatement in the transport, building, agriculture and waste sectors. Flexibilities with other EU climate instruments, such as using allowances from the EU's Emissions Trading System (ETS) or temporary forestry credits to meet ESD targets, should clearly be avoided as it could reduce the overall reduction effort which effectively increases EU's greenhouse gas emissions by up to 28% until 2030[3].

Drawing on the lessons learned with the ESD so far, this policy brief provides recommendations for flexibilities under the new ESD proposal for the 2021-2030 period.

Key recommendations :

- **Focus on early action**, by implementing additional policies up to 2020 that help ensure that the post-2020 climate targets can be met with limited use of flexibilities.
- **Introduce EU-wide policies for the post-2020 period**, especially for the transport, building, agriculture and waste sectors.
- **Auction a share of the allocations,** to implement the polluter-pays-principle.
- Ensure that **intra-EU offsets** help countries transition away from high-carbon systems, by introducing common selection criteria that channel finance to transformative projects such as deep renovation of buildings
- **Restrict borrowing levels**, to avoid further delay of action.
- **Oppose the use of ETS allowances to meet ESD targets**, to avoid undermining the 2030 emission reductions by up to 5%.
- **Disallow offsetting permanent emissions with temporary forestry sinks**, since this could significantly undermine the environmental integrity of the ESD.

Role of the Effort Sharing Decision in the EU's climate legislation

The EU's climate framework includes two main pieces of legislation to reduce greenhouse gas (GHG) emissions:

1. The EU Emissions Trading System (EU ETS) directive that covers emissions from large installations in the power and industrial sectors.

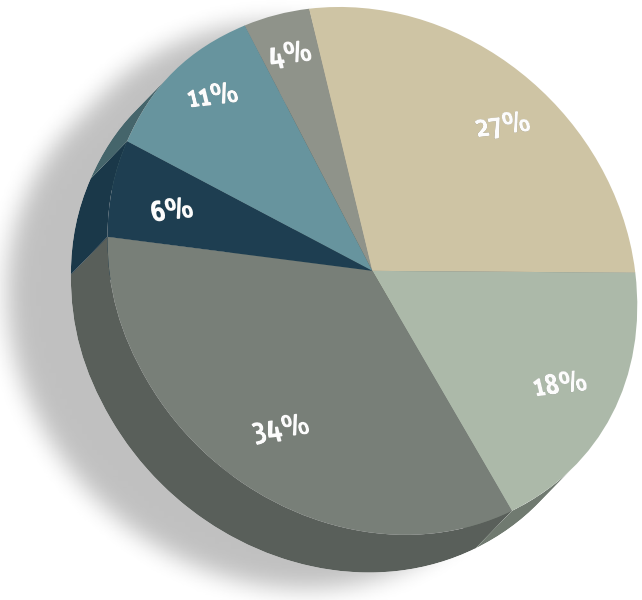
2. The Effort Sharing Decision (ESD) that sets emissions reductions targets for the sectors not covered by the EU ETS like transport, agriculture, buildings and waste.

The non-ETS sectors account for nearly 60% of the EU's emissions. Therefore the ESD is, next to the EU ETS, a central piece of Europe's climate legislation.

The ESD sets annual greenhouse gas emission reduction targets for each Member State based on its wealth as measured by the Gross Domestic Product (GDP) per capita.

The wealthiest Member States need to reduce their emissions by 20% below 2005 levels by 2020 and the poorest are allowed to increase emissions by 20% by 2020. These Member State targets add up to an overall EU ESD reduction target of 10% below 2005 levels by 2020.

The ESD targets for the 2013-2020 period are translated into an annual emission budget for each Member State. The budget, the so-called Annual Emission Allocation (AEA), corresponds to the absolute amount of emissions that a Member State can emit in a given year. In case of non-compliance, Member States are faced with an automatic penalty which takes into account the environmental cost of delaying emission reductions.



ESD EMISSIONS BY SECTOR [2012]

- 27% Residential and commercial (direct combustion)
- 18% Agricolture
- 34% Transport
- 6% Waste
- 11% Energy Industries
- 4% Industrial processes

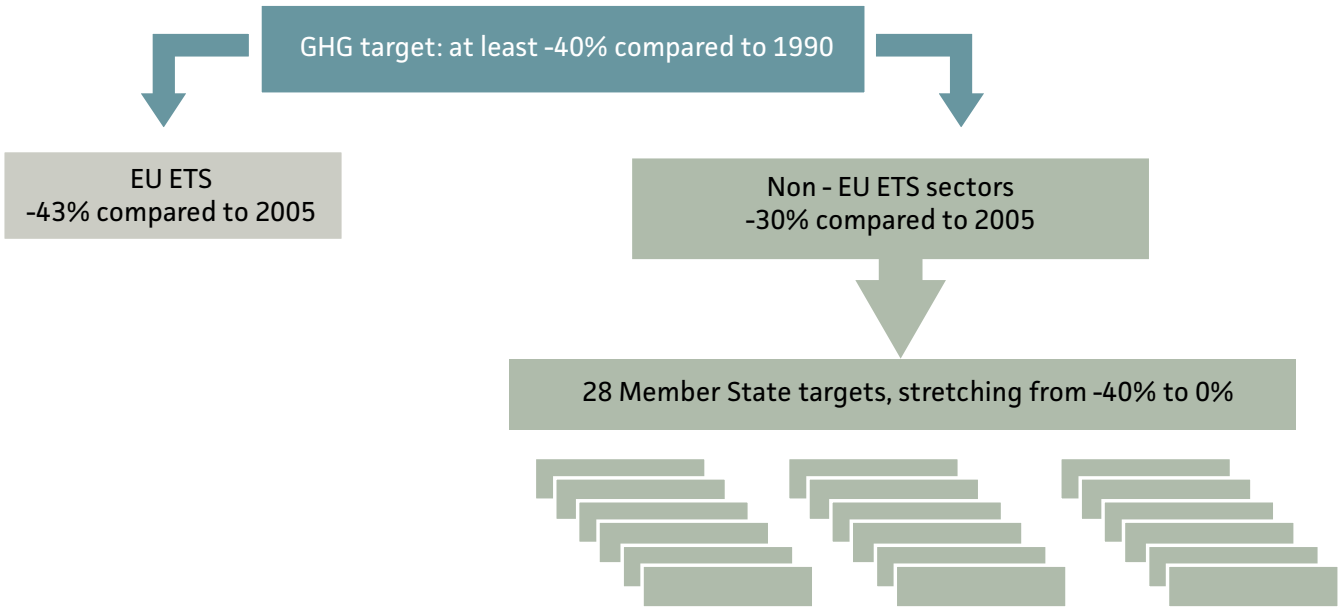
Experience with the ESD to date[1]

According to information submitted by Member States in December 2014[2], most Member States are projected to overachieve their targets. In 2013 - the first compliance year under the ESD - twenty-five Member States are likely to have met their target. Only three countries, Germany, Luxembourg and Poland, were not on track to meet their 2013 targets. Projections by Member States show that total ESD emissions are expected to remain lower than the ESD targets until 2020, resulting in a total of 15 Member States who could overachieve their ESD targets by up to 46% in 2020.

While this result seems like good news at first sight, closer inspection at the reasons show that the overachievement is mainly caused by the combination of weak targets and overgenerous flexibilities. Member States have reported that they will meet their targets without implementing additional measures. They will thus achieve these targets without any new actions to reduce emissions, a clear indication that the targets were not set strong enough. In addition, the overgenerous flexibility options – notably the use of international offset credits – further lowers the incentive to implement mitigation policies at home.

This means that Member States can accumulate the emission allowances that are handed out to them but remain unused. Since Member States receive more emission allowances than what they will emit, a surplus equal to 700 – 2,000 Mt CO_2-eq will build-up until 2020.

The Effort Sharing Decision in the 2021-2030 period



Reducing emissions in the ESD sectors is crucial for achieving the EU's climate objectives for the year 2030 and beyond. At the European Council meeting in October 2014, EU leaders therefore decided that the Effort Sharing Decision approach will continue for the 2021-2030 period in order to reduce emissions in the non-ETS sectors by 2030 by 30% compared to 2005.

The ESD targets for the 2021-2030 period are to be distributed using a similar methodology as for the current ESD, e.g. based on each country's wealth as measures by its GDP per capita. The wealthiest Member States need to reduce their emissions by 40% below 2005 levels by 2030 and the poorest are allowed to stabilize their 2005 emissions by 2030. However, the targets for Member States with a GDP per capita above the EU average shall be adjusted to reflect the different cost-effective reduction potentials.

Drawing on lessons learnt

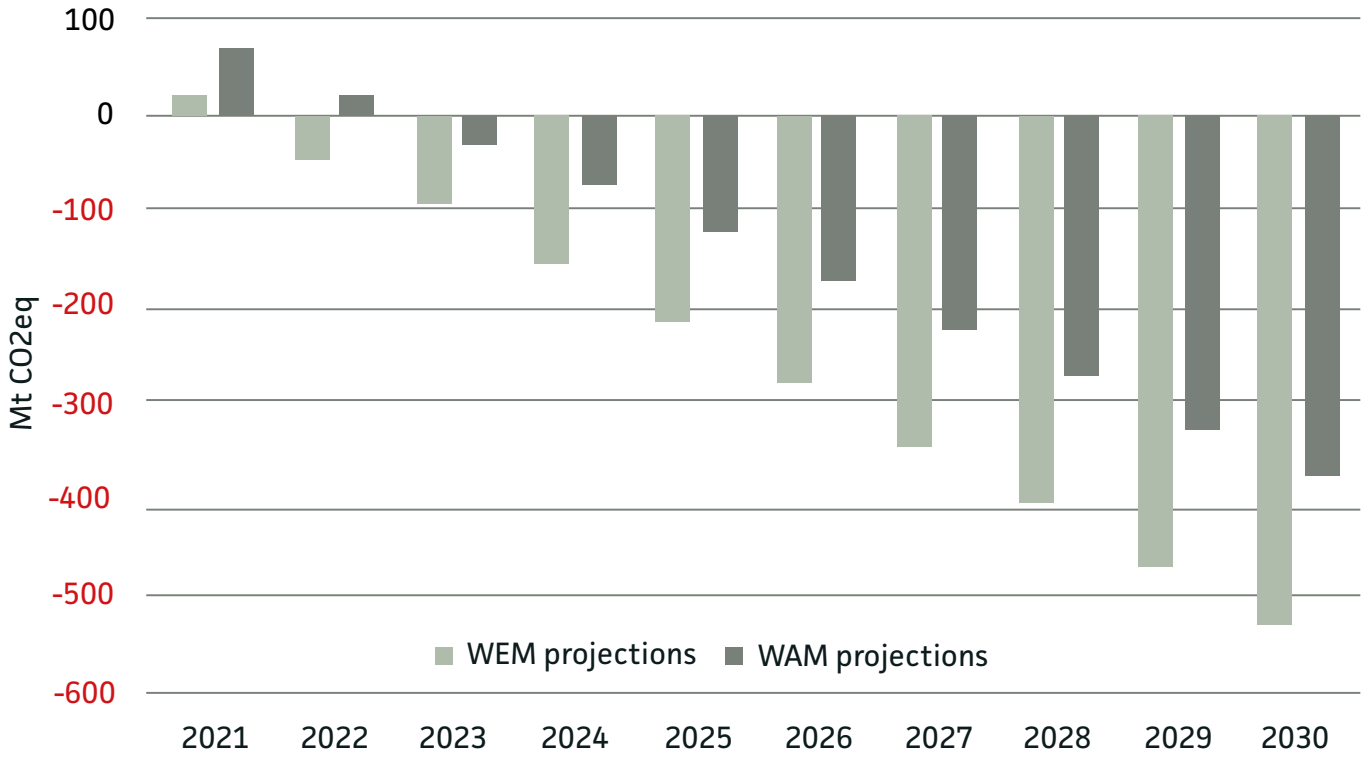
The experience with the ESD to date is useful for the development of the 2030 framework, but certain elements will be very different in the post-2020 period. First of all, EU leaders decided that the 2030 climate target must be fully met through domestic action, hence excluding the use of international offsets after 2020. Secondly, the target for the non-ETS sectors will be raised from -10% (2020) to -30% (2030) which is considerably more stringent than the target for the 2013-2020 commitment period.

The figure on next page shows that current and planned policies and measures are not sufficient to meet the post-2020 ESD targets. The EU needs to find additional, domestic emissions abatement in the order of 1,500-2,500 Mt CO_2-eq in the 2021-2030 period to meet the -30% target[3]. This means that new EU and national measures for the transport, buildings, agriculture and waste sector are critical to support the reduction of greenhouse gas emissions in these sectors. Such additional policy measures are for example:

- introducing ambitious CO_2 standards for new passenger cars and light-duty vehicles for the year 2025
- increasing the EU's 2030 energy savings target to 40% and strengthening existing energy saving policies
- incentivizing waste prevention, reuse and recycling as part of the Circular Economy Package
- drawing up national climate programmes for agriculture to reduce methane and nitrous oxide emissions

Starting early pays off

The figure on next page also highlights the importance of early action for the achievement of the 2030 climate target. Mitigation policies that are implemented today will reduce emissions until 2030 and beyond. It will hence be easier for Member States to meet their post-2020 climate targets if they start undertaking their planned additional policy measures up to 2020. If all EU countries start implementing these additional measures before 2020[4], this would not only help achieve the 2020 target, but it would also lead to an extra 1,000 Mt CO_2-eq emission reductions in the 2021-2030 period.



Notes: The red bars show the annual difference between the linear target path and the EU projections until 2030 based on Member States' data. A positive sign means that projected emissions are below the target path (overachievement/ surplus); a negative sign means that projected emissions are above the target path (deficit). WEM = With Existing Measures, WAM = With Additional Measures

Source: Öko-Institut based on (European Commission 2014), (EEA 2014)

Flexibilities - Options to make it cheaper to reach the ESD targets

European countries need to annually comply with their emission targets, but they are allowed to make use of several flexibility mechanisms to make this easier and less expensive. Options to make it cheaper for countries to reduce emissions under the current ESD legislative framework are listed in the box below.

Flexibilities in the current Effort Sharing Decision

Using international carbon offsets

Each year, a Member State is entitled to use international offsets up to the equivalent of 3% of its 2005 non-ETS emissions. Unused entitlements can be transferred to other Member States or banked for future use. This means that up to 750 million international credits can be used during the 2013-2020 period, equal to more than half of the overall reduction effort.

Banking and borrowing

Member States are allowed to bank any surplus (unused AEAs) to any future compliance year until 2020 without limitations. Member States are also allowed to borrow from the following years up to 5% of their annual target.

Using intra-EU transfers

A Member State is allowed to transfer its surplus units (e.g. unused AEA due to emissions that are lower than the target for that year) to another Member State without quantitative limitations. Such a transfer is only possible once compliance of the transferring Member State has been established for that year.

A Member State is also allowed to transfer up to 5% of its AEA allocation of a future year to other Member States, which may use these emission allocations any time until 2020. For example, a Member State which expects to over-comply with its targets and generate surplus AEA can initiate trade already today and does not need to wait until a specific year's compliance figure has been calculated.

Future flexibilities – do's and don'ts

EU leaders have decided that the availability and use of existing flexibility instruments will be "*significantly enhanced*" and a new flexibility with the EU ETS will be introduced after 2020. It is yet to be seen what type of flexibilities will be allowed and how they will be designed to make sure that all EU countries take ownership of the transition to climate-friendly societies and at the same time avoid bad flexibilities that could undermine EU's 2030 climate ambition.

Below is a short overview of flexibilities currently under discussion:

Auctioning – introducing the polluter-pays concept

In the public consultation on the post-2020 ESD, the European Commission put forward the idea of auctioning a certain percentage of AEAs as one of the options to increase the supply of AEAs that Member States can buy. There are several ways to implement auctioning in the ESD. For example, a central institution could auction a share (for example 1%) of all annual AEAs. Additionally, the introduction of an auction reserve price ensures that the auction does not settle on a carbon price that is too low to incentivize mitigation action in the non-ETS sectors. If in a certain year the floor price is not met, the auction and the respective AEAs should be cancelled which increases the EU's climate ambition.

Auctioning puts a price on carbon and introduces the polluter-pays concept to the ESD thereby making the costs of greenhouse gas emissions in national budgets more visible. Auctioning could generate revenues up to €9 billion during the 2021-2030 period[5] and could be earmarked for sustainable climate measures in the lower-income Member States to support the transition to a renewable-based economy in these countries. While this flexibility could allow richer countries to offset part of their emissions by purchasing an amount of AEAs at auction, it could also provide revenues to lower-income countries to reduce more emissions domestically.

Intra-EU offsetting with transformative projects[6] - reconciling equity and cost-efficiency

The creation of a project-based mechanism is another way to stimulate AEA transfers among Member States, which was advocated by several Eastern European countries ahead of the October 2014 Council meeting. Under intra-EU offsetting, a Member State can meet its ESD target by purchasing offset credits from a project that reduces emissions in another Member State.

Intra-EU offsets have several benefits. They can help catalyze action in Member States with more limited means to move away from high-carbon energy systems after 2020. This is important because the effort sharing principles for the post-2020 period are mostly based on fairness and therefore do not automatically guarantee that all Member States are engaged in the transition towards climate friendly societies. Intra-EU offsets involve the private sector and may lead to more action in those Member States where the ESD targets are relatively easy to meet as there might be little perceived interest for those governments to implement policies to reduce emissions beyond the target. Intra-EU offsets can also have spill-over effects in the host countries as local knowledge is enhanced and best practices can be developed.

The project-based mechanism can be designed in several ways, for example a centralized clearing house could be set up that brokers demand and supply based on common EU rules and procedures. Experience with the Clean Development Mechanism (CDM) and Joint Implementation (JI) has shown that without specific selection criteria, a market-based mechanism will be most successful in identifying the lowest cost mitigation opportunities. Intra-EU offsetting under the ESD must therefore include selection criteria that solely target transformative projects that are strategically important for the transition to an efficient and renewable-based economy, such as deep renovation of buildings, development of sustainable, low-carbon agricultural practices and the initial uptake of electric vehicles.

Increased banking and borrowing - delaying actions into the future and undermining the ESD target

Increasing the level of borrowing from the current 5% increases the risk of compliance problems at the end of the 2021-2030 period and delays mitigation actions into the future. The level of borrowing should therefore be further restricted to be similar to the annual reduction effort in the 2030 ESD (±2% of 2005 emissions).

The option to bank AEAs from the current Effort Sharing Decision to the post-2020 period is currently not possible and the idea was discarded by Member States ahead of the October 2014 council meeting. The surplus under the ESD could accumulate to 700-2,000 Mt CO_2-eq by 2020 which if carried-over to the 2021-2030 period would lead to a significant reduction of EU's 2030 climate ambition and cause that the actual emission reductions under the 30% ESD target may be as low as 16%.

ETS flexibility - undermining the ESD target and increasing the overall EU emissions up to 2030

In October 2014, EU leaders agreed[7] to establish a new flexibility by allowing several Member States to use a limited number of ETS allowances to comply with their ESD targets. This new flexibility was introduced at the request of certain richer Member States who feared that they were otherwise at risk of not meeting their post-2020 climate targets. The new flexibility would be implemented as a "one-off reduction of the ETS allowances" from the respective Member State's auction volumes in a particular year. The 2030 council conclusions specify that only Member States with national reduction targets significantly above both the EU average (the EU average is 30%) and their cost-effective reduction potential, plus Malta, are able to make use of the new flexibility.

The new flexibility is problematic since it allows certain countries to offset their non-ETS emissions by buying surplus ETS allowances, which could lead to postponed action in the ESD sectors and overall higher emission levels in the EU until 2030. This is because the ESD emissions will increase until 2030 by the amount of incoming ETS allowances, while the decline of the ETS surplus will not have a significant effect on ETS emissions until 2030 due to the structural oversupply of ETS allowances until at least 2030. Too broad application of the new ETS flexibility can lead to the use of up to 300 million ETS allowances, which could increase ESD emissions by up to 15% in the 2021-2030 period and cut the EU's overall mitigation effort by up to 5% in the 2021-2030 period[iii]. Governments are better off spending their scarce resources on mitigation measures in ESD sectors, which come with clear benefits to citizens in terms of job creation, cleaner air and improved access to public transport means, rather than on buying surplus ETS allowances.

	2030 target/cost-effective potential (min)	Theoretical level of flexibility in million AEAs (5% of cumulative deficit vs constant 2020)
Austria	33% / 27%	3.3
Belgium	31% / 24%	5.3
Denmark	37% / 31%	1.0
Finland	34.5% / 30%	1.6
Luxembourg	32.5% / 20%	1.0
Malta	Ind. Clause	0.1
Netherlands	34% / 28%	5.9
Sweden	36% / 29%	1.5

Table 1: Member States potentially eligible for the new ETS flexibility (Oeko-institut, 2015)

Forestry offsets – offsetting permanent emissions with temporary storage

In October 2014 EU leaders decided that the emissions and removals related to land use, land use change and forestry (LULUCF) will be integrated into the 2030 climate framework, which so far have been treated outside the EU's 2020 climate framework. In contrast to the other sectors, the LULUCF sector is a net sink of carbon which means that the sector stores more carbon than it emits. Through the carbon storage potential of soils and forests, the LULUCF sectors could potentially generate credits in the order of 1.4 billion (or 1,400 Mt CO_2-eq) in the 2021-2030 period[8]. While it is essential that also the LULUCF sector contributes to greenhouse gas mitigation, several EU countries see the LULUCF sink as a way to displace efforts in other sectors such as agriculture. However allowing forestry offsets into the ESD would severely undermine the emission reductions needed in the ESD sectors and could lead to a 23% increase of EU's greenhouse gas emissions in the 2021-2030 period.

The LULUCF emissions and removals are characterized by potentially large annual fluctuations, while there are uncertainties relating to data reliability. These characteristics make the sector unfit for any flexibility with the ESD that has an annual compliance cycle. Similarly, planting trees in order to displace efforts in sectors where major emissions reductions are needed is risky because the forest sector is a large carbon sink where the permanence of stored carbon cannot be guaranteed, while the emissions from fossil fuels are permanent.

Recommendations for future flexibilities under the 2030 ESD

Focus on early action

Early action is crucial not only for the achievement of the EU's 2020 climate target, but also of future climate targets. Rather than wasting money on international offsets, Member States should implement additional measures to meet the current ESD targets, which will also lead to an extra 1,000 Mt CO_2-eq emission reductions in the 2021-2030 period.

Introduce EU-wide mitigation policies for the post-2020 period

Even when implementing all the currently planned additional policies up to 2020, the EU will fall short of 1,500 Mt CO_2-eq in the 2021-2030 period to meet the -30% target. Additional EU and national mitigation measures for the transport, building, agriculture and waste sector are needed to support the reduction of GHG emissions in the ESD sectors and can also limit the need for new flexibilities.

Implement the polluter-pays-principle

Auctioning a share of the overall annual AEAs puts a price on carbon and introduces the polluter-pays concept to the Effort Sharing Decision. The revenues should be earmarked to support the transition to a renewable-based economy in lower-income countries. It is recommended that if an auction floor price is not met in a year, the AEAs that were put to auction should be cancelled which will increase EU's climate ambition.

Ensure that intra-EU offsets help countries transition away from high-carbon systems

Intra-EU offsets can help catalyze action in Member States with more limited means to help avoid a lock-in of high-carbon energy systems after 2020. Such new approaches can be helpful, but common selection criteria must be introduced to ensure that only projects with strategic transformative potential, such as deep renovation of buildings, are financed.

Avoid the further delay of action

Borrowing from future years delays mitigation actions into the future and increases the risk of compliance problems at the end of the 2021-2030 period. The level of borrowing should be restricted up to the annual reduction effort in the 2030 ESD (±2% of 2005 emissions).

Oppose the use of ETS allowances as an easy way out for the ESD sectors

Member States should spend their scarce resources exploiting the mitigation potentials of ESD sectors, rather than on buying surplus ETS allowances. Using ETS allowances could provide an easy way out for sectors like transport and agriculture and could increase EU's greenhouse gas emissions by up to 5% until 2030[3].

Disallow offsetting permanent emissions with temporary forestry sinks

The LULUCF sector could generate around 1.4 billion credits in the 2021-2030 period[8]. Allowing temporary LULUCF sinks to offset permanent emissions could hence cut the ESD mitigation effort in half[8]. Furthermore, the characteristics of LULUCF make the sector unfit for any flexibility with the ESD that requires annual compliance.

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1 EEA (2014), Trends and projections in Europe 2014

2 http://mehi.hu/sites/default/files/jurgen_salay.pptx

3 Oeko-institut (2015), Enhanced flexibilities for the EU's 2030 Effort Sharing Decision

4 As indicated by Member States in their WAM (With Additional Measures) projections

5 Assuming that 30 million AEAs are auctioned every year (approx. 1% of 2005 ESD emissions and half of the annual reduction effort) and a carbon price rising from €20/AEA in 2021 to €40/AEA by 2030 (see Oeko-institut, 2015)

6 Climate Strategies (2015), Enhanced flexibility in the EU's 2030 Effort Sharing Agreement: issues and options

7 European Council (Oct 2014): *"A new flexibility in achieving targets – for Member States with national reduction targets significantly above both the EU average and their cost effective reduction potential as well as for Member states that did not have free allocation for industrial installations in 2013 – will be established through a limited, one-off reduction of the ETS allowances, to be decided before 2020, while preserving predictability and environmental integrity."*

8 See Oeko-institut (2015). It is assumed that the current LULUCF accounting rules are projected to the 2021-2030 period, and that the LULUCF sector does not get an ambitious target.