



Council of the European Union
General Secretariat

Brussels, 01 March 2017

**Interinstitutional files:
2016/0231 (COD)**

WK 2310/2017 INIT

LIMITE

**CLIMA
ENV
ENER
TRANS
AGRI
COMPET
ECOFIN**

This is a paper intended for a specific community of recipients. Handling and further distribution are under the sole responsibility of community members.

NOTE

From: General Secretariat of the Council
To: Working Party on the Environment

Subject: Non-ETS (ESR): WPE 2 March - Commission presentation on 2030 GHG emission reduction target

With a view to the WPE meeting on 2 March delegations will find attached Commission presentation on the above.

WK 2310/2017 INIT

LIMITE

EN



Explaining the at least domestic -40% reduction target for greenhouse gas emissions by 2030 compared to 1990

**Council Working Party Environment
March 2017
Commission presentation**

Contents

1. Summary
2. Scope of the EU 2030 target
3. How to calculate the 2030 target
4. Comments on the Polish non-paper
5. Conclusions

1. Summary

- The Commission's view is that what matters for achievement of the NDC is that our policies are credible to achieve an at least 40% GHG reductions by 2030. Therefore the target trajectories under the proposed EU legislation achieve in the year 2030 a reduction of -40% compared to 1990. The allocations provided in the legislative proposals on ETS and ESR do so.
- The Polish non-paper presents a different methodology to calculate an emissions budget for the period 2021-2030 to reflect the EU's NDC. It translates the NDC into a 10-year budget with the 2020 GHG target as starting point.
- Using a budget that starts based on 2020 targets is not in line with the EU Council conclusions to achieve a -40% reduction by 2030, and therefore the claimed available reserve of 907 MT is not available.

2. Scope of the EU 2030 target

- The EU target scope after 2012 is an economy-wide target which includes elements of international aviation.
- The EU NDC continues to apply this economy-wide approach for 2030, in line with Article 4(4) of the Paris Agreement (*'Developed country Parties should continue ... undertaking economy-wide absolute emission reduction targets'*).

2. Scope of the EU 2030 target

- The EU regulates its GHG emissions mainly through the Effort Sharing Decision/Regulation and the ETS Directive, which includes international aviation.
- For LULUCF emissions and removals, the commitment to deliver "no-debit" against the accounting rules in the LULUCF regulation proposal ensures neutrality with respect to the EU's GHG target.
- Additional action in the LULUCF pillar may contribute to the NDC achievement through the LULUCF flexibility under the ESR.

2. Scope of the EU 2030 target: aviation

- The 2030 target continues the scope applied for the EU 2020 climate target which includes elements of international aviation (recital 2 ESD, recital 3 ETS).
- The ETS Directive includes international aviation.
- The Commission's yearly report on the EU's progress towards achieving its GHG target includes **outgoing** aviation emissions.
- International aviation in the ETS has seen temporary derogations twice, with the 2nd relating to intra-EEA flights (and the 3rd proposal in co-decision now). A review is proposed once there is more clarity about the nature, content and legal instruments for the ICAO scheme.

3. How is the -40% 2030 target calculated

To achieve the -40% reduction by 2030 compared to 1990, the target is split in:

- a target of -30% for the ESR compared to 2005
- a target of -43% for the ETS compared to 2005 including aviation, to be achieved by the implementation of a Linear Reduction Factor of 2.2% from 2021 onwards in the ETS
- the split is based on a cost effective projection of GHG reductions by 2030 as included in the IA accompanying the 2030 Climate and Energy Framework proposal. This modelling applies the scope as under existing legislation including outgoing aviation.

3. How is the -40% 2030 target calculated

To determine if the EU target trajectory is consistent with a reduction of -40% compared to 1990, one has to check if the following match:

- An economy-wide 2030 target under the NDC of -40% compared to 1990 based on UNFCCC emissions inventories.
- The allocations under the ETS and ESR for the year 2030.

3. How is the -40% 2030 target calculated

2030 target under the NDC based on 1990 economy wide emissions

- UNFCCC inventories EU 2016:
1990 GHG emissions, including indirect CO₂ emissions,
excluding LULUCF and international aviation: **~ 5665 Mton**
- International aviation in 1990: **~70 Mton**
(representing outgoing aviation, intra- and extra-EEA)
- Total 1990 emissions: **~ 5735 Mton**

- The corresponding 2030 overall target: **~ 5735 x 60%**
= ~ 3441 Mton

3. How is the -40% 2030 target calculated

2030 ETS allowances for stationary installations

- On the basis of the 2,2% linear reduction factor, allocations under the EU ETS cap in 2030 will be ~1333 Mton
- This includes Norway, Iceland and Liechtenstein
- The EU-28 ETS cap in 2030 is around ~1% lower, or the equivalent of ~1320 Mton

3. How is the -40% 2030 target calculated

2030 ETS allowances for aviation

- Aviation allocation in the ETS for 2030 is calculated by applying a 2.2% LRF from 2021 onwards on a 2020 amount that is calculated as 95% of average 2004-2006 CO₂ emissions
- To estimate this 2030 allocation with a scope equal to outgoing aviation, emission data is used from the EU 2016 inventory (both domestic and international aviation) representing all outgoing flights.
- The resulting estimate for EU ETS 2030 aviation cap would be ~111 Mton

3. How is the -40% 2030 target calculated

2030 ESR AEA allocation – methodology

Continuing the methodology applied in EU legislations for determining annual emission allocations (AEAs) under ESD:

1. Back-casting 2005 effort sharing "base year" emissions, consistent with latest ETS/ESD split:
$$\frac{2020 \text{ absolute ESD target}}{1 + 2020 \text{ relative ESD target}}$$
 - '2020 absolute ESD target' calculations re-run for each MS, updated with the latest available reviewed inventory estimate of 2005 total GHG emissions (*NB! only for the purpose of determining 2030 AEAs under the ESR*)
 - '2020 relative ESD target' percentages fixed in ESD Annex II
2. 2030 AEAs of each MS set as ESR Annex I % reduction, below the 2005 effort sharing "base year" emissions.

3. How is the -40% 2030 target calculated

2030 annual emission allocation - estimate

- To be set in an implementing act before 2021. A final calculation of annual emission allocations for 2030 in the ESR is not yet possible because it will require the most recent reviewed inventory available in 2020.
- Using the most recent estimates of 2020 absolute targets based on 2016 reviewed inventories, the 2030 EU28 annual emission allocations in the ESR would total **~2019 Mton**

3. How is the -40% 2030 target calculated

Summary

Best available EU-28 ESTIMATES for 2030 in Mton (based on 2016 inventory)		
EU economy-wide target under the NDC for 2030	$5735 \times 60\%$	3441
ETS allowances for 2030 (stationary & aviation)	$1320 + 111 = 1431$	$1431 + 2019 = \mathbf{3450}$
ESR allocation for 2030	2019	

- 2030 allocation for ETS and ESR is ~ 9 Mton higher than estimate of 2030 economy-wide NDC target, a very small difference equivalent to 0.2% of 1990 emissions.
- **Proposed EU allocation thus matches 2030 NDC target**

4. The Polish non-paper

- The Polish non-paper calculates an 2021-30 budget under the EU NDC and compares this with estimated allocations resulting from the ESR and ETS proposals.
- The Polish non-Paper estimates show a difference of 907 million tonnes over the 10 year period between the two approaches.
- The Commission does not agree with the interpretation of the NDC being a budget that has starting point 2020 targets.
- In this context one can note that the EU's commitment under CP2 is not calculated with a starting point based on 2008-12 targets following CP1.

4. The Polish non-paper

- Main reasons why there is a difference between estimated EU budget and ETS plus ESR allocations in the Polish non-paper:
- The non-paper and the legislative proposals implementing the at least -40% target apply **different sectorial scopes**.
- The PL non-paper determines the 2030 **endpoint allocation** of AEAs using PRIMES-GAINS modelling 2005 data rather than AEA allocation methodology.
- **Different starting points**: the non-paper compares a 2021 starting point based on the -20% target for 2020 with starting points of the proposed EU legislations, which are set differently. This leads to large difference for ESR sectors.

5. Conclusions

- Under the Paris Agreement, the EU should continue taking economy-wide absolute emission reductions.
- EU NDC is a self-standing commitment, that does not imply using existing 2020 targets as its starting point.
- Legislation proposed aims at having a credible incentive to achieve at least -40% domestically by 2030 compared to 1990.
- This has guided the ESR starting point proposal.
- Of importance in this context is also that the allocation under ETS and ESR add up to accomplish this economy-wide 2030 emissions reduction target.
- The precise numbers will continue to vary marginally due to updates of inventory estimates.



Thank you!

Visit DG Climate Action online:



[ec.europa.eu/
clima/](https://ec.europa.eu/clima/)



[facebook.com/
EUClimateAction](https://facebook.com/EUClimateAction)



[twitter.com/
EUClimateAction](https://twitter.com/EUClimateAction)



[pinterest.com/
EUClimateAction](https://pinterest.com/EUClimateAction)



[youtube.com/
EUClimateAction](https://youtube.com/EUClimateAction)