



Further support to the preparation of an Impact Assessment report on the Revision of the EU Emissions Trading System Directive 2003/87/EC as regards aviation

Air Transportation Analytics
September – 2021

AIR TRANSPORTATION
ANALYTICS

LEGAL NOTICE

This document has been prepared for the European Commission however it reflects the views only of the authors, and the European Commission is not liable for any consequence stemming from the reuse of this publication. More information on the European Union is available on the Internet (<http://www.europa.eu>).

PDF

ISBN 978-92-76-46989-6

doi: 10.2834/150419

ML-09-22-036-EN-N

Luxembourg: Publications Office of the European Union, 2022

© European Union, 2022



The reuse policy of European Commission documents is implemented by the Commission Decision 2011/833/EU of 12 December 2011 on the reuse of Commission documents (OJ L 330, 14.12.2011, p. 39). Except otherwise noted, the reuse of this document is authorised under a Creative Commons Attribution 4.0 International (CC-BY 4.0) licence (<https://creativecommons.org/licenses/by/4.0/>). This means that reuse is allowed provided appropriate credit is given and any changes are indicated.

For any use or reproduction of elements that are not owned by the European Union, permission may need to be sought directly from the respective rightholders.

EUROPEAN COMMISSION

Directorate-General for Climate Action

Directorate B – European and International Carbon markets

Unit B3 – International Carbon Market, Aviation and Maritime

Contact: Ngoc-Lan Lang

E-mail: Ngoc-Lan.LANG@ec.europa.eu

European Commission

B-1049 Brussels

**Further support to the preparation
of an Impact Assessment report on
the Revision of the EU Emissions
Trading System Directive
2003/87/EC as regards aviation**

Table of Contents

Table of Contents	1
1. Assessing the economic, social and environmental impacts of the different policy options – Additional analysis related to COVID19 scenarios.....	2
1.1. What would be the impact on outcomes of higher SAF uptake than modelled in the initial impact assessment?	2
1.2. What are the likely administrative costs of the different policy options?.....	6
1.3. How do the different CORSIA policy options interact with the different auctioning share policy options?	7
1.4. What are the differences in model outcomes between immediate full auctioning and the swift phase-out of free allowances option?	9

1. Assessing the economic, social and environmental impacts of the different policy options – Additional analysis related to COVID19 scenarios

This update to the modelling assessment of future interactions of the EU ETS and CORSIA contains additional analysis related to the COVID19-adjusted model scenarios, including assessment of MRV costs and the interaction of different policy options with other proposed EC policy actions. The modelled policy options are unchanged from the previous impact assessment¹ and its update, and no additional model runs are carried out in this update. However, outputs from the previous model runs and literature assessments are used to make estimates of additional output metrics and the impact on existing output metrics of new scenario conditions. For the full context surrounding these calculations, including a description of the different policy options assessed, model specifications, and the scenario conditions used for the assessment, the reader is referred to the previous two impact assessment documents available alongside this one.

For this update, four questions were addressed:

1. What would be the impact on outcomes of higher SAF uptake than modelled in the initial impact assessment?
2. What are the likely administrative costs of the different policy options?
3. How do the different CORSIA policy options interact with the different auctioning share policy options?
4. What are the differences in model outcomes between immediate full auctioning and the swift phase-out of free allowances option (in terms of auctioning revenues, costs for airlines, and impact on ticket prices)?

These are discussed individually in the sections below.

1.1. What would be the impact on outcomes of higher SAF uptake than modelled in the initial impact assessment?

The uptake of Sustainable Aviation Fuel (SAF) could be higher than that analysed in the previous impact assessments if the proposed RefuelEU SAF mandate policy is applied.

Because the updated model runs including COVID19 impact for the EU ETS/CORSIA assessment assume lower oil prices than the initial impact assessment, SAF uptake when all input parameters are set to nominal values is small (typically under 1% over the period to 2035). For other combinations of input parameters used in the sensitivity analysis, SAF uptake can be higher. For example,

¹ Assessment of ICAO's global market-based measure (CORSIA) pursuant to Article 28b and for studying cost passthrough pursuant to Article 3d of the EU ETS Directive, European Commission, September 2020

Covid19-impacted model runs which use the high oil price trend modelled and optimistic assumptions about technology characteristics see an intra-EU/EFTA SAF share of around 5% by 2035. The combination of low oil prices during the Covid19 pandemic period and fuel price hedging by airlines means that even in the high oil price trend analysis, there is a period of several years in the early 2020s when airlines experience low fuel prices. This in combination with assumptions about how fast SAF production can be increased once it has become cost-effective mean that SAF shares are still <1% in 2030 in these model runs. However, these model runs assume that airlines will adopt SAF if they can reduce their costs by doing so, rather than because they are required to do so.

The ReFuelEU impact assessment projects a SAF share of 4-8% in 2030, driven in this case by a SAF blending mandate. The longer-term trajectory towards 63-68% SAF uptake in 2050 is consistent with SAF uptake of 8-14% in 2035 if uptake is assumed to increase at a constant percentage rate per year. This uptake is associated with an increase in blended jet fuel prices of 3.1-3.3% in 2030, rising to 21-5-22.3% in 2040, if using SAF price assumptions from the RefuelEU impact assessment (*Figure 1*). If the same percentage rate increase trend assumptions are used, this translates to roughly an 8.2-8.6% increase in fuel costs in 2035.

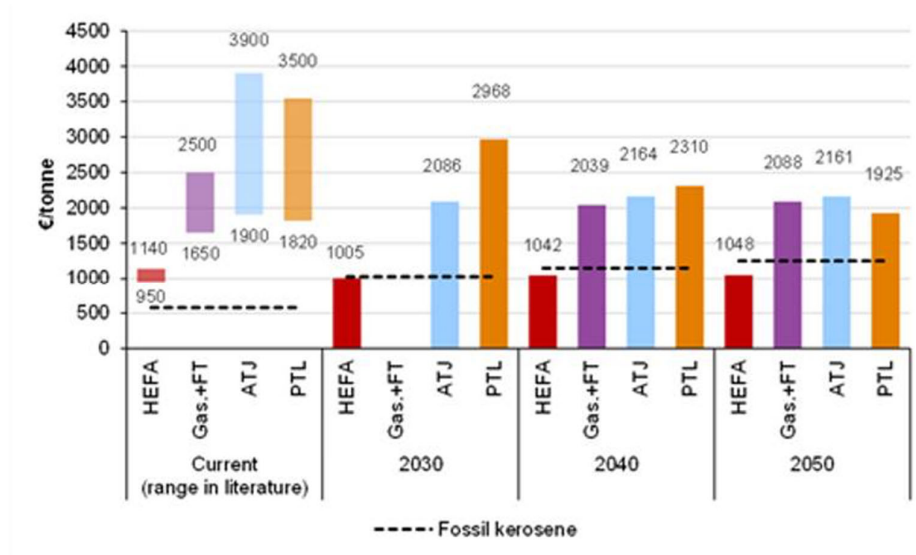


Figure 1. SAF price assumptions from the RefuelEU impact assessment.

There are several impacts that could result from adding ReFuelEU to the EU ETS/CORSIA modelling:

First, there will be a greater number of EU ETS biofuel exemptions than previously modelled. Across all model runs in the Covid-19 update, year-2030 and year-2035 EU ETS-eligible aviation CO₂ are at least 37% and 41% above the EU ETS aviation cap, respectively. This means that even a 14% SAF share will not bring aviation emissions below or close to the cap. As such, we would expect only a small change in net CO₂ emissions within EU ETS scope. Because SAF is fully exempt from the EU ETS, but SAF fuel lifecycle CO₂ is not zero, there is the possibility of a small increase in net CO₂, though this may be balanced out by SAF use on non-ETS routes. The main impact on the EU ETS would be a reduction in the number of

EUAs that airlines buy from other sectors, and a corresponding reduction in airline carbon costs. The extent of this reduction is discussed below.

Second, the effective fuel price to airlines will be higher. As discussed above, blended fuel prices are anticipated to be 3.1-3.3% higher in 2030, and may be around 8.2-8.6% higher in 2035. These factors are relatively small compared to the range of fuel prices assessed in the previous EU ETS/CORSIA modelling sensitivity analysis. For example, in the high oil price case, modelled fuel prices are around 35% higher than in the nominal oil price case in 2035. We would therefore expect outcomes in terms of airline costs and ticket prices to be closer to the nominal oil price case than the high oil price case. Airlines will also experience a small reduction in their carbon costs; however, the increase in fuel price is likely to be much larger than the reduction in carbon costs. Some estimates of these costs are given below.

Third, given changes in airline costs, airlines may increase ticket prices, and demand may decrease. These effects are likely to be relatively small. For example, the high oil price case discussed above has intra-EEA RPK roughly 4% lower than in the corresponding nominal oil price case. This suggests that differences in RPK and RTK from the level of change in airline fuel costs anticipated from ReFuelEU is likely to be of order 1%.

Finally, the uptake levels of some non-SAF emissions mitigation measures may change. Two effects are possible. First, because airlines will experience higher fuel costs, they may invest in technologies that reduce fuel use. Second, because they experience lower carbon costs, the impact of changes in carbon price will be slightly reduced. A comparison of typical model output operational carbon intensity at nominal and high oil price trajectories suggests that the magnitude of this effect is negligible over the time period modelled.

Table 1 gives first-order estimates of the areas of change that may have non-negligible impact, for intra-EU/EFTA operations and the nominal case for each policy option, in 2030 and 2035. In general, anticipated changes in fuel costs dominate over anticipated changes in carbon costs. Anticipated changes in demand and ticket price are made via interpolation between outcomes in model runs with nominal and high oil price assumptions to approximate the case where fuel and carbon cost changes match those estimated below. Estimates of net CO₂ are not included as net CO₂ outcomes depend on specific implementation details (for example, the fuel lifecycle emissions of the SAF pathway used and whether the selection of routes for which the policy applies is the same or different to the selection of routes the EU ETS is applied on). However, as discussed above, we would anticipate small increases in net CO₂ on EU ETS routes and decreases in net CO₂ on any routes to which the mandate applies but the EU ETS does not.

Table 1. First-order estimates of how some nominal case modelling outcomes might change with the implementation of ReFuelEU.

	Difference in total intra-EU/EFTA airline fuel costs, million € ₂₀₁₈ (%)		Difference in intra-EEA EUA purchase costs, million € ₂₀₁₈ (%)	
Year	2030	2035	2030	2035
Option 1	9970 (3.2%)	11500 (8.4%)	-52 (-9.2%)	-170 (-14.8%)
Option 2	9980 (3.2%)	11600 (8.4%)	-45 (-7.1%)	-153 (-12.6%)
Option 3	9980 (3.2%)	11600 (8.4%)	0 (0%)	0 (0%)
Option 4	9980 (3.2%)	11600 (8.4%)	-45 (7.1%)	-153 (12.6%)
Option 5	9980 (3.2%)	11600 (8.4%)	-44 (7.1%)	-149 (12.8%)
Option 6	9990 (3.2%)	11600 (8.4%)	-36 (-7.3%)	-124 (12.9%)
	Difference in average intra-EU/EFTA ticket price, € ₂₀₁₈ (%)		Difference in RTK, million (%)	
Year	2030	2035	2030	2035
Option 1	0.72 (0.4%)	1.76 (0.9%)	-307 (-0.4%)	-850 (-1.0%)
Option 2	0.72 (0.4%)	1.79 (0.9%)	-307 (-0.4%)	-860 (-1.0%)
Option 3	0.73 (0.4%)	1.85 (0.9%)	-313 (-0.4%)	-888 (-1.0%)
Option 4	0.72 (0.4%)	1.79 (0.9%)	-307 (-0.4%)	-860 (-1.0%)
Option 5	0.72 (0.4%)	1.80 (0.9%)	-307 (-0.4%)	-862 (-1.0%)
Option 6	0.72 (0.4%)	1.80 (0.9%)	-308 (-0.4%)	-864 (-1.0%)

The projected differences in fuel cost, EU ETS obligations, ticket price and RTK are well within the uncertainty range modelled in the sensitivity analysis. Other than the specific case of EUA purchases by airlines, the estimated impact of applying RefuelEU on intra-EU/EFTA routes is also nearly identical across all of the different policy options. In combination, they suggest that ReFuelEU will not change the relative outcomes of the different policy options over the period to 2035.

One further consideration is the impact of ReFuelEU on CORSIA. For Options 3 and 5, CORSIA also applies on intra-EU/EFTA routes. In 2030, CORSIA offset requirements are applied on a Sectoral basis, i.e., based on whole-scheme CO₂ growth above a whole-scheme 2019 baseline. This means that changes in intra-EU/EFTA scheme eligible CO₂, such as those resulting from ReFuelEU, would have relatively little impact on offset requirements.

For 2035, CORSIA offset requirements are based on a mixture of individual operator CO₂ growth (70%), and sectoral CO₂ growth (30%). The amount to which SAF use reduces intra-EU/EFTA operator CORSIA obligations depends on the

characteristics of the specific SAF type used, as CORSIA biofuel exemptions are dependent on fuel lifecycle emissions. It also depends on the extent to which SAF use can be assigned to one scheme or the other for the purposes of obtaining biofuel exemptions. However, Options 3 and 5 under nominal assumptions about input variables have intra-EU/EFTA CORSIA-eligible CO₂ around 6.7-6.9% above the year-2019 regional baseline level in 2035. This means that ReFuelEU in 2035 has the potential to reduce intra-EU/EFTA individual-growth CORSIA obligations to close to zero. In such a situation, year-2035 intra-EU/EFTA CORSIA offset requirements and allowance costs would be reduced by around 70%; however, because these costs are small to begin with, the impact of this change on airline costs, ticket prices and demand would be very small (roughly €3 million across all airlines, which is negligible compared to the change in fuel costs). Similarly, the impact of this situation on CORSIA as a whole would be small, as the affected offsets account for only around 3% of the CORSIA offset total for 2035.

The above analysis considers the impact of ReFuelEU on intra-EU/EFTA routes. Under most of the policy options considered above, changes in fuel cost and composition in extra-EU/EFTA routes will have minimal impact on EU ETS outcomes as the EU ETS is applied on intra-EU/EFTA routes only. If ReFuelEU and CORSIA both apply on extra-EU/EFTA routes then, similarly to intra-EU/EFTA routes, there is the potential for 40-70% reductions in CORSIA offset obligations on these routes in 2035. Again, similarly to the intra-EU/EFTA case, this is likely to have minimal impact on other system variables due to the low starting level for CORSIA costs.

1.2. What are the likely administrative costs of the different policy options?

Administrative costs were not estimated in the initial impact assessment or its update. However, literature assessments of administrative costs for airline emissions trading in general and CORSIA in particular can be derived from the existing literature. Nicklaß et al. (2019)² estimate yearly airline-level EU ETS MRV costs at €6,000-75,600, depending on airline size, based on a survey of aircraft operators. These estimates suggest that MRV costs are a small (typically under 5%) fraction of total operator EU ETS costs. Global estimates of MRV costs for CORSIA have been made by ICAO (2019)³. These include first-order estimates of costs to participating states, airline operators, and ICAO itself. Under the Mid scenario discussed in that report, 98.5% of CORSIA-related costs to airline operators are related to offsetting requirements, and 1.4% to MRV; MRV costs to states are around a third of those to airline operators. However, ICAO's assessment also assumes higher demand growth, and significantly higher carbon prices, than are assumed in the nominal post-Covid projections here. An alternative approach is to use the absolute yearly MRV and registry costs to airline operators for the

² Niklaß, M., Dahmann, K., Grewe, V., Maertens, S., Plohr M. and Scheelhaase, J., 2019. Integration of non-CO₂ effects of aviation under the EU ETS and CORSIA. https://www.umweltbundesamt.de/sites/default/files/medien/1410/publikationen/2020-07-28_climatechange_20-2020_integrationofnonco2effects_finalreport_.pdf

³ ICAO, 2019. Analysis on the estimation of CO₂ emissions reductions and costs expected to result from CORSIA.

preparatory stage and first phase of the scheme as assessed by ICAO (2019). These absolute values are relatively independent of the carbon price and the level of demand growth (although within that system they will differ between small operators who are eligible to use simplified reporting procedures, and larger operators, who are not). This analysis assesses initial setup costs to airlines of around €4,000-400,000 if they are not eligible for simplified reporting procedures, or €0-800 if they are, and initial setup costs to states (including the national competent authorities) of around €4,000-400,000. Yearly costs to airlines are estimated to be around €4,000-17,000 for airlines that are eligible to use simplified reporting procedures, and around €8,000-80,000 for those which are not, i.e., at a similar level to EU ETS MRV costs. At the high end of CORSIA MRV cost estimates and the low end of CORSIA offset price estimates, this means that CORSIA MRV costs may be a significant fraction of offset costs (>10%). In combination, these estimates suggest that the increased MRV cost to EU/EFTA airline operators of complying with CORSIA is likely to be small compared to their existing carbon costs, but may be significant compared to the carbon-only costs of complying with CORSIA in the case that the CORSIA offset price remains low and few offsets are required. Additionally, many costs are common to both EU ETS and CORSIA administrative procedures and so CORSIA-only cost estimates effectively act as a cost ceiling. For states (including their national competent authorities), recurring costs are dependent on the number of airlines administered but a broadly representative cost range is around €140,000 – 260,000 per state per year.

1.3. How do the different CORSIA policy options interact with the different auctioning share policy options?

Costs related to the different auctioning share policy options were given in Table 1.19 of the updated impact assessment, but the impact on CORSIA costs was not included in that assessment. An updated table with CORSIA offset costs included is given below (Table 2). Note that, as discussed in the previous report, increasing CORSIA scope to include larger numbers of routes which are slow-growing and/or affected by COVID19 acts to decrease the total number of CORSIA offsets. The impact of EU ETS auctioning option on total CORSIA costs is very small. For policy options 1-4 the impact of different auctioning options on total CORSIA offset costs is under 0.5%. This is because under these options the two schemes do not apply on the same routes, so the only impact on CORSIA offset costs is the second-order impact of demand reduction on itineraries which have an EU ETS-covered segment and a CORSIA-covered segment. Under option 5, the two schemes do overlap, so auctioning option has a slightly larger impact on CORSIA costs. However, offset costs still change by less than 1% between different auctioning options. Option 6 behaves similarly to options 1-4, reflecting limited overlap between the two schemes.

Table 2. Total year 2023-2030 auctioning revenue and amount paid by aviation to other sectors for EUAs, by ETS/CORSIA policy and auctioning option, with all other scenario variables set to COVID19-adjusted nominal values.

	Status quo	Immediate phase-out	Swift phase-out	Slow phase-out	Slow reduction
Total EUAA auctioning revenue 2023-2030, million €₂₀₁₈					
Option 1	3410	22700	21900	14700	9000
Option 2	592	3950	3640	2360	1480
Option 3	0	0	0	0	0
Option 4	592	3950	3640	2360	1480
Option 5	592	3950	3640	2360	1480
Option 6	500	3320	3070	1980	1240
Total amount paid for EUAs from other sectors, 2023-2030, million €₂₀₁₈					
Option 1	13300	13000	13000	13100	13200
Option 2	4100	4070	4070	4080	4100
Option 3	0	0	0	0	0
Option 4	4100	4070	4070	4090	4090
Option 5	4080	4050	4050	4070	4070
Option 6	3190	3160	3160	3170	3180
Total amount paid for CORSIA offsets, 2023-2030, million €₂₀₁₈					
Option 1	360	360	360	360	360
Option 2	361	361	361	361	361
Option 3	99	99	99	99	99
Option 4	237	236	236	237	237
Option 5	97.4	96.5	96.5	96.8	97.1
Option 6	231	231	231	231	231

1.4. What are the differences in model outcomes between immediate full auctioning and the swift phase-out of free allowances option?

In both the initial set of model runs, and the updated set reflecting COVID19 impacts, the output differences between the immediate full auctioning and swift phase-out options are small, and mainly affect the years 2023 and 2024. After this point, differences between the two options are basically negligible (for example, there is not an appreciable ongoing difference in airline fleets, operations or ticket prices for any of the policy options). The main difference between the two auctioning options is that the increase in airline costs and ticket prices from moving to full auctioning comes into effect in a single year in the immediate full auctioning scenario, and is phased in over the time period to 2025 in the swift phase-out scenario. This means that year-2023 and 2024 demand are lower, and ticket prices higher, for the immediate phase-out option. Net CO₂ outcomes vary very little between the different auctioning options because the main demand effect is on routes covered by the EU ETS, and reductions in direct CO₂ on these routes lead to a proportional reduction in the number of allowances purchased from other sectors. Table 3 shows a comparison of metrics for the different auctioning options over the 2023-2025 time period. Because this is part of the pandemic recovery period, all estimates of impact during this time period are rather uncertain.

Table 3. Differences between immediate full auctioning option and swift phase-out option, 2023-2025 (expressed as absolute difference full auctioning case – swift phase-out case, and % change).

	Difference in EUAA auctioning revenue, million € ₂₀₁₈ (%)			Difference in amount paid for EUAs from other sectors, million € ₂₀₁₈ (%)		
Year	2023	2024	2025	2023	2024	2025
Option 1	202 (40%)	650 (20%)	0 (0%)	-2.3 (-0.6%)	-13 (-1.0%)	0 (0%)
Option 2	202 (40%)	100 (20%)	0 (0%)	-2.2 (-0.6%)	-1.2 (-0.3%)	0 (0%)
Option 3	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Option 4	202 (40%)	100 (20%)	0 (0%)	-2.2 (-0.6%)	-1.2 (-0.3%)	-0.1 (-0.02%)
Option 5	202 (40%)	100 (20%)	0 (0%)	-2.2 (-0.6%)	-1.2 (-0.3%)	0.0 (0%)
Option 6	170 (40%)	84 (20%)	0 (0%)	-1.8 (-0.6%)	-1.0 (-0.3%)	-0.1 (-0.03%)
	Difference in amount paid for CORSIA offsets, million € ₂₀₁₈ (%)			Difference in one-way intra-EU/EFTA ticket price, € ₂₀₁₈ (%)		
Year	2023	2024	2025	2023	2024	2025
Option 1	0.0 (0%)	0.0 (0%)	0.02 (0.5%)	0.4 (0.3%)	0.2 (0.1%)	0.0 (0%)
Option 2	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.4 (0.3%)	0.2 (0.1%)	0.0 (0%)

Option 3	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)
Option 4	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.4 (0.3%)	0.2 (0.1%)	0.0 (0%)
Option 5	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.4 (0.3%)	0.2 (0.1%)	0.0 (0%)
Option 6	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.3 (0.2%)	0.1 (0.1%)	0.0 (0%)
	Difference in one-way extra-EU/EFTA ticket price, €₂₀₁₈ (%)			Difference in intra-EU/EFTA airline carbon costs as a % of operating cost		
Year	2023	2024	2025	2023	2024	2025
Option 1	0 (0%)	0.6 (0.2%)	0.0 (0%)	0.0	0.5	0.0
Option 2	0 (0%)	0 (0%)	0 (0%)	0.0	0.0	0.0
Option 3	0 (0%)	0 (0%)	0 (0%)	0.0	0.0	0.0
Option 4	0 (0%)	0 (0%)	0 (0%)	0.0	0.0	0.0
Option 5	0 (0%)	0 (0%)	0 (0%)	0.0	0.0	0.0
Option 6	0 (0%)	0 (0%)	0 (0%)	0.0	0.0	0.0
	Difference in extra-EU/EFTA airline carbon costs as a % of operating cost			Difference in intra-EU/EFTA RTK, million (%)		
Year	2023	2024	2025	2023	2024	2025
Option 1	0.36	0.25	0.0	-144 (-0.2%)	-128 (-0.2%)	7 (0.0%)
Option 2	0.36	0.16	0.0	-144 (-0.2%)	-64 (-0.1%)	4 (0.0%)
Option 3	0.0	0.0	0.0	0 (0%)	0 (0%)	0 (0%)
Option 4	0.36	0.17	0.0	-144 (-0.2%)	-64 (-0.1%)	4 (0%)
Option 5	0.36	0.17	0.0	-144 (-0.2%)	-64 (-0.1%)	4 (0%)
Option 6	0.31	0.14	0.0	-126 (0.2%)	-50 (-0.1%)	3 (0%)
	Difference in extra-EU/EFTA RTK, million (%)			Difference in intra-EU/EFTA net CO₂, Mt (%)		
Year	2023	2024	2025	2023	2024	2025
Option 1	-17 (0%)	-824 (-0.4%)	44 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)
Option 2	-17 (0%)	-6 (0%)	3 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)
Option 3	0 (0%)	0 (0%)	0 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)

Option 4	-17 (0%)	-6 (0%)	3 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)
Option 5	-17 (0%)	-6 (0%)	3 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)
Option 6	-15 (0%)	-6 (0%)	-3 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)
	Difference in extra-EU/EFTA net CO₂, Mt (%)			Difference in global net CO₂, Mt (%)		
Year	2023	2024	2025	2023	2024	2025
Option 1	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)
Option 2	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)
Option 3	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)
Option 4	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)
Option 5	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)
Option 6	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)	0.0 (0%)

GETTING IN TOUCH WITH THE EU

In person

All over the European Union there are hundreds of Europe Direct information centres. You can find the address of the centre nearest you at: https://europa.eu/european-union/contact_en

On the phone or by email

Europe Direct is a service that answers your questions about the European Union. You can contact this service:

- by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),
- at the following standard number: +32 22999696, or
- by email via: https://europa.eu/european-union/contact_en

FINDING INFORMATION ABOUT THE EU

Online

Information about the European Union in all the official languages of the EU is available on the Europa website at: https://europa.eu/european-union/index_en

EU publications

You can download or order free and priced EU publications from: <https://op.europa.eu/en/publications>. Multiple copies of free publications may be obtained by contacting Europe Direct or your local information centre (see https://europa.eu/european-union/contact_en).

EU law and related documents

For access to legal information from the EU, including all EU law since 1952 in all the official language versions, go to EUR-Lex at: <http://eur-lex.europa.eu>

Open data from the EU

The EU Open Data Portal (<http://data.europa.eu/euodp/en>) provides access to datasets from the EU. Data can be downloaded and reused for free, for both commercial and non-commercial purposes.



Publications Office
of the European Union