

Response to the Amendments to the Monitoring Reporting and Verification (MRV) Framework

Airbus pioneers sustainable aerospace for a safe and united world. The Company constantly innovates to provide efficient and technologically-advanced solutions in aerospace, defence, and connected services. In commercial aircraft, Airbus designs and manufactures modern and fuel-efficient airliners and associated services. Airbus is also a European leader in space systems, defence and security. In helicopters, Airbus provides efficient civil and military rotorcraft solutions and services worldwide.

Airbus welcomes the opportunity to share its views and expertise with the European Commission and hence to actively contribute to the European Commission's work in establishing an MRV framework for non-CO2 emissions of aviation, as laid down by the revised EU Emissions Trading System (ETS) Directive.

At the Farnborough Air Show in July 2024, CTOs of leading aviation companies have reiterated their [engagement](#) on reducing aviation's non-CO2 emissions. To tackle non-CO2 emissions, the aviation industry – in collaboration with research institutions, universities, and other key stakeholders – is intensively working and supporting scientists to increase and mature the understanding of non-CO2 emissions generation and related climate effects. This should enable the sector to identify the most appropriate reduction and mitigation solutions.

Airbus is actively working on a large portfolio of projects - in collaboration with research institutions, universities and other key stakeholders - to progress faster on increasing the understanding of non-CO2 emissions generation, effects and on evaluating solutions covering all potential non-CO2 mitigation options: fuel, engine technology and flight operations. Major projects led by Airbus comprise extensive flight test campaigns such as ECLIF3 and VOLCAN as well as the SESAR3-funded project CICONIA.

With regard to the draft delegated act, Airbus acknowledges and appreciates the European Commission's efforts in having integrated important recommendations of stakeholders, such as principles around transparency, the ease of reporting supported by data collection using existing sources as well as the commitment to the continuation of research, into the draft proposal of the MRV framework. In particular, we welcome Recital 25, which establishes the MRV process as a distinct exercise from carbon pricing. The European Commission has also included elements to streamline administrative processes and establish secure data collection mechanisms. Airbus welcomes all of these elements.

While we acknowledge that the European Commission has chosen today's best available surrogate non-CO2 emission impact models for the MRV framework, Airbus would like to underline that significant research work is still required to enhance the understanding of the non-CO2 impacts and to improve their quantification. Airbus' understanding is that those available models are simplified models which are derived from more complex models, which are, themselves, still under development to try to better capture all relevant processes. Flight-by-flight impact assessment is even more complex since it requires high resolution capability, which is not the case yet. As a result, Airbus' view is that there is a considerable risk that considered models are not accurate enough for the intended purpose and believes that it would be reasonable to reconsider and to concentrate the core non-CO2 MRV framework on non-CO2 emissions reporting in a first step, but to make the comprehensive and consistent data collected through the MRV available to the scientific community for strengthening and accelerating research. Dedicated funding programmes to accompany this phase would be of essence.

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We recognize that the non-CO2 MRV framework is an important additional step in a multi-year journey to support ongoing significant efforts of industry and academia to better understand and reduce the sector's non-CO2 effects. Additionally, it encourages innovation.

Ongoing research, including research based on the data of the MRV will, however, still be needed to address these uncertainties and non-CO2 effects adequately.

However, there are several areas where the MRV framework could be further improved. We strongly encourage the European Commission to take full advantage of the aviation sector's capabilities and knowledge so that the MRV framework more efficiently supports the scientific community and industry in their ongoing efforts to tackle the non-CO2 climate impacts of aviation.

Key Areas for improvement:

1. SCOPE:

Airbus welcomes Recital 26's provision for the intra-EU scope during the initial years. However, we suggest implementing a thorough review process at the end of 2026 - once the two-year period concludes - to assess the outcomes and effectiveness of the MRV framework before considering any extension of the scope.

2. NEATS:

- **Phased approach & continuous improvements:** The MRV framework should explicitly mention a phased approach to allow for the integration of new scientific findings from ongoing research.
 - Due to the remaining research work that is still required to enhance the understanding of the non-CO2 impacts and to improve their quantification, a clearly defined phased implementation plan must enable ongoing research results to mature and to be incorporated where appropriate/necessary.
 - The first phase should involve reporting trajectory and emissions using NEATS (without CO2 equivalent evaluation). Collected data must be made available to academia to accelerate research results.
 - Once sufficiently adequate impact assessment tools based on scientific consensus are available, this initial phase should be followed by a second phase where CO2 equivalent reporting will be implemented.
- **Regular and structured stakeholder participation and reviews, including academia and stakeholder involvement:**
 - Airbus welcomes the provisions of Article 56b(8) that introduces continuous updates to the NEATS tool. However, Airbus believes there should be clear provisions for scheduled, regular, and transparent peer reviews of the NEATS tool and its underlying models

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(including tools and processes to calculate the CO₂ equivalents). These reviews should actively involve all stakeholders - including industry for its expertise on aircraft emissions, related research and testing as well as diverse academia - in both the definition and updates of the tool to ensure it remains relevant and effective over time. For instance, this will allow the incorporation of the latest scientific consensus from climate research, developments of alternative fuel specifications, and developments in aircraft/proulsion technologies and validation of their impact on non-CO₂ emissions.

- The review process should take benefit of already existing forums that can support this process such as EASA's Aviation Non-CO₂ Expert Network (ANCEN).
 - Airbus proposes to support the development of the performance and emissions computation methodologies.
 - For the second phase, there should be provisions to ensure that previous values in the NEATS tool are recalculated whenever the model to calculate CO₂e in NEATS is updated. This recalibration will provide a correct value curve for future measures and ensure continuity and accuracy in emissions reporting.
 - Additionally, to ensure transparency and stakeholder buy-in, the NEATS model should be publicly available.
 - In addition, the role of verifiers should be expanded to include not only the verification of input values but also the scientific validation of methodologies used. This will ensure a greater robustness and credibility of the MRV framework.
- **SAF and RFNBO:** the NEATS tool should be flexible enough to incorporate and consider the actual fuel types (conventional fuel and SAF) usage and their characteristics.
 - **Timeline:** It is essential to have a clear timeline and understanding of the development of the NEATS tool, including the expected completion date, its design and implementation. This transparency is vital for stakeholders to plan and prepare both their reporting and their potential use of alternative models.
3. **Storage of data and Access (Article 56a, 7, d):** The monitored data should be securely stored for a minimum of five years (instead of 2 years currently proposed) to support ongoing scientific research, as scientific progress often requires extended timeframes and official research programs run over multiple years.
4. **Specific Research Initiatives:** The MRV framework must establish links with research and funding mechanisms to facilitate knowledge exchange with EU research projects in related fields.

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Airbus also advocates for increased support for further research and development, particularly in the area of high-altitude weather forecasting and flight-by-flight climate impact assessment, which is critical for understanding and mitigating non-CO2 climate impacts.

5. Other considerations:

In addition to the core aspects of the MRV framework, it is important to consider side effects of the MRV framework implementation to ensure a holistic approach to emission monitoring.

- **Definition of 'fuel flow'**

The draft proposal appears to contain an error in the definition of 'fuel flow'. In *Annex IIIa / 1. Definitions related to non-CO2 aviation effects / 33. 'fuel flow'* it should likely say: 'fuel flow' means the ~~mass~~ ~~volume~~ of fuel in kilograms that passes through the aircraft fuel system and into the aircraft's engines per second during the flight.

- **Alignment with the Refuel EU Aviation Regulation:** The criteria for SAF and RFNBO in this draft proposal should be aligned with the Refuel EU Aviation Regulation directive to streamline compliance and reporting processes for the stakeholders

Conclusion

Airbus recognises that in addition to the ongoing efforts of the industry and scientific community to address non-CO2 emissions and their climate effects, the non-CO2 MRV framework will be a complementary step in a multi-year journey to better understand and reduce the sector's non-CO2 effects.

All above mentioned recommendations are proposed to increase the framework's robustness and effectiveness. We would like to re-emphasise here in particular the following two points of high importance:

- Current capabilities to model non-CO2 emissions effects in a sufficiently accurate manner are limited and contain large uncertainties - to a point that we believe that in a first step the core non-CO2 MRV framework should concentrate on non-CO2 emissions. However, the comprehensive and consistent data collected through the MRV should be made available to the scientific community for strengthening and accelerating research. Dedicated funding programmes should accompany this phase to accelerate research results.
- We would like to encourage the EU Commission to involve industry in the framework's review process and to take full advantage of already existing forums such as EASA's Aviation Non-CO2 Expert Network (ANCEN) as well as specific industry expertise for the development of the performance and emissions computation methodologies.

Airbus stands ready to continue engaging and supporting the EU Commission and other stakeholders on non-CO2 emissions, their effects and potential mitigation solutions, for example in the form of a permanent and structured stakeholder dialogue.