

TIER Mobility: Position paper on the European Commission's framework for harmonized measurement of transport and logistics emissions – 'CountEmissions EU'

Introduction to TIER

<u>TIER Mobility</u> is the **leading global micro-mobility** operator with the mission to Change Mobility for Good. Founded in 2018, TIER has already rolled out its multi-modal micro-mobility services to over 250 partner cities across 22 countries.

Through our micro-mobility services we aim to contribute our share to the sustainable mobility transition by **enabling mode shift** away from emission intensive transport modes such as cars to low-carbon transport options. To date, our services **helped replace over 2 million car rides**, leading to nearly **50 million car kilometers** being avoided and an estimated CO2 savings of **8.2 million kg**.

TIER's experience with GHG accounting

At TIER, we believe in **evidence-based climate and sustainability action**. That is why we are heavily invested in and constantly improving the data foundation, methodological framework and analysis of our corporate-level emissions as well as product-level (cradle-to-grave) emissions of our vehicles and hardware.

In the last two years alone, TIER's Sustainability Team has completed **three corporate carbon footprints (CCF) and six life cycle assessments (LCA)** of three micro-mobility vehicle types. We use the results of our annual CCF not only to inform the quantity of offsets we acquire to maintain climate neutrality, but also to **identify leverage points for further emission reduction**. Furthermore, our product-level LCAs are used to zoom in to our product and operations and identify **opportunities for improvement** in the next iteration design of our vehicles and to **reduce the environmental impact** across the full lifecycle of our vehicles and service.

Recently, TIER has been an active contributor to the New Urban Mobility Alliance's (NuMo) working group that is developing a guide aiming to standardize the assessment of GHG emissions from micro-mobility vehicles and associated operations. TIER was also selected as an **official member of DG MOVE's Multimodal Passenger Mobility Forum** which also aims at regulating GHG emissions display in the context of Multimodal Digital Mobility Services.

TIER's positioning on the 'CountEmissions EU' proposal

Reducing the environmental impact of our company and products is a key focus of our business and considering our experience with GHG measurement, we welcome the 'CountEmissions EU' proposal and would like to take the opportunity to share feedback and insights from our experience and industry perspective.



Currently, there is a **fragmented** approach to determining the Global Warming Potential (GWP) of vehicles and associated operations in the micro-mobility and larger transport sector. This has led to challenges in comparing different vehicle models and transport modes.. Beyond enabling **fair comparison**, TIER believes that setting the **right policy framework** would also enable **greater transparency** in the transport sector and set the foundation for **expanding regulation and incentives** towards more sustainable modes, such as carbon credits etc. TIER is therefore **highly supportive of the European Commission's ambition to harmonize GHG emissions accounting at EU level.**

In this context, TIER would like to share the following feedback on European Commission's CountEmissions EU initiative:

1. The methodological framework

- Scope of the assessment: The scope of the common framework should be the full product life cycle (from cradle to grave), including emissions stemming from transport operations, energy production and use, and production and recycling of all means of transport used for a transport service.
- Data collection and processing: The framework should also provide guidance on how
 to collect and process data as well as how to work with / around missing data. It
 should ensure consistency in the way that assumptions are being formulated to enable
 comparability of the results.
- Industry-level guidance: The Commission should consider providing detailed guidance on GHG accounting for specific industries in the transport sector in addition to the higher-level framework to be applied to the whole sector.

2. Implementation and verification

- **GHG emission database:** The common framework should **endorse select emission factor databases** and calculation tools should be linked to open-source databases.
- **Voluntary standard:** The use of the framework should **not be mandatory** but instead transport operators should be **encouraged** by the Commission to adopt the framework and supporting tools as a voluntary standard for product GHG assessments.
- **Verification:** A **verification system** of the methodology and data inputs should be developed; however, the verification should be voluntary and seen as a quality label.
- Costs and administrative burdens: The use of the framework and supporting
 material/tools should not lead to a substantial increase in costs and administrative
 burdens for companies. This can mostly be achieved by ensuring that all supporting
 materials and tools are open access (or inexpensive) and easy to use.

3. Additional considerations

• Interpretation guidance: The industry would benefit from an interpretation guide for users and decision makers on how to interpret the results of product GHG assessments



as well as highlight the parameters that can considerably change the results. The Commission could have a role in defining such a guideline to enable interpretation consistency across Europe.

- MDMS regulation link: Requirements on GHG emissions display related to the upcoming regulation on Multimodal Digital Mobility Services (MDMS) should be based on the harmonised accounting framework defined as part of the CountEmissionsEU initiative.
- Future iterations: Future versions of the framework could provide guidance on other environmental impact categories and future work in this field could support corporate level GHG accounting and encourage public disclosure.

Further background and context on each of these points is provided in the following sections.



1. The methodological framework

Scope of assessment

The common methodology should cover the full product life cycle (from cradle to grave) as opposed to tank-to-wheel or wheel-to-wheel assessments. As some vehicles perform better than others in different phases of the life cycle (raw materials, manufacturing and processing, logistics, usage, and waste disposal) it is essential to assess the full lifetime impact to enable fair comparisons. Furthermore, assessing smaller system boundaries could lead to burden shifting which is ultimately reducing the environmental impact in one stage of the product life cycle whilst increasing the impact in other stages in order to perform favorably for smaller scope assessments.

Data collection and processing

An assessment is only as good as the accuracy of its data inputs and/or assumptions. For this reason, the framework should provide guidance on best practices in collecting and processing data for these assessments as well as guidance on how to work around missing data. As is often the case with nascent industries, transport producers and service providers (e.g., micro-mobility operators) may lack empirical data in some categories - in our case for instance on vehicle lifespan and operational distances. Where empirical data is missing, the gaps are filled with proxy data based on respective assumptions. However, due to lack of guidelines and disclosure requirements, there have been inconsistencies across the industry in the use of assumptions and proxy data when calculating emission impact. The framework should address this by ensuring consistency in the way that assumptions are being formulated to enable comparability of the results.

Industry-level guidance

In order to ensure that each industry within the sector can apply the framework successfully to their mode of transport, the Commission could **consider developing micro level guidance on GHG accounting for specific industries**, in addition to the overarching framework. This will improve the comparability of results between transport modes by capturing relevant industry specifics.

2. Implementation and verification

GHG emission database

There is currently a wide range of GHG emission databases that can be utilized for GHG emission assessments (Eco-invent, GaBi, iLCA2010+ - see here for more). The emission factors between different databases vary depending on the methodology. What this means is that the same product assessed with two different databases can lead to very different results. For this reason, **the framework should provide guidance on which databases to use** and potentially the calculation tools should be linked to approved open-source databases.

Voluntary standard

The use of the framework and its supporting tools should not be made mandatory as it would require a mandatory verification system. This could present a lot of red tape for the sector and be a barrier for GHG accounting assessments. Instead, it should be widely adopted by the transport sector as a voluntary standard. Its use should be particularly encouraged when operators wish to publicly share or publish the result of the assessment, to allow users and



public administrations to make a fair comparison between the impact of different modes of transport and different vehicle models. For the micro-mobility industry, this will be most relevant during the tendering phase during which we are often required to submit GHG assessments of our vehicles.

Verification

We support the development of a **voluntary third-party verification system** that could be seen as a type of quality label. Based on our experience, the verification system should not only assess if the methodology was implemented correctly but it should also check that the data inputs are correct and realistic, where proxy data and assumptions are being used. This is primarily due to the fact that, in the context of GHG accounting assessments, the accuracy of the result is dependent on the quality of the data inputs.

Costs and administrative burdens

Whilst determining the Global Warming Potential (GWP) of our products is essential to determine our impact and progress on meeting our emission reduction targets, these assessments take a high amount of effort and resources. For this reason, this framework and the supporting software/tools should be open access, easy to use and they should be developed in a way that they are able to be used in-house without the need to contract additional external support. Overall, the framework should not lead to a substantial increase in costs and administrative burdens for companies.

3. Additional considerations

Interpretation guidance

For micro-mobility operators, the lack of a harmonized GHG emissions calculation approach has led to interpretation challenges in comparing the impact of different micro-mobility modes; differentiating between different micro-mobility operators offering the same mode; and making comparisons between micro-mobility and larger modes of transport. This can generate biases or contribute to misinformed decision-making at different levels (users, cities etc.). Developing a common methodology, supporting tools as well as **guidance on how to interpret the results could assist in ensuring their reliability and comparability**.

MDMS regulation link

Providing information to passengers on greenhouse gas (GHG) emissions of a trip is central to encouraging the uptake of more sustainable mobility modes in a multimodal context. To ensure comparability of different modes' carbon footprint and to support citizens' unbiased decision-making, **GHG emissions display in MDMS platforms should rely on the harmonized methodology defined by the European Commission** as part of this initiative. An appropriate timeline for implementing the accounting framework shall also be provided, to allow for the creation and implementation of associated technical and in-app developments.

Future iterations

Further iterations of the framework could go beyond providing guidance on assessing the global warming potential (climate impact) of transport to **include other environmental impact categories** that are becoming increasingly relevant as they are linked to other pieces of legislation (EcoDesign & WEEE). Furthermore, as well as providing product level GHG



accounting support, additional work in this sphere could be aimed at supporting corporate level GHG accounting and encouraging public disclosure of corporate emissions.