Re: Consultation on the revision of Regulation (EU) 2019/1242 setting CO2 emission performance standards for new heavy-duty vehicles

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Amazon welcomes the opportunity to provide input on the revision of Regulation 2019/1242 regarding CO2 emission standards for new heavy-duty vehicles (HDVs). Amazon is committed to transforming our fleet and transportation network as part of our goal to reach net-zero carbon by 2040, but our ability to do so is directly tied to the speed at which HDVs are developed, manufactured, and made available to end-customers like us. The European Commission has the unique ability to set the pace and direction of the European HDV market, and to incentivise and catalyse the industry. We strongly support increasing CO2 reduction targets and setting appropriate incentives for zero- and low-emission vehicle (ZLEV) adoption. We look forward to working with the Commission, our industry partners, and other stakeholders in developing and implementing policies to realize Europe's ambitious climate action goals.

Amazon seeks to be Earth's most customer-centric company, Earth's Best Employer, and Earth's safest place to work. Since 2010, we have invested over €100 billion in Europe, resulting in over 200,000 Amazon employees, and seventy fulfillment centers across the continent, connected by Amazon Transportation Services (ATS) to hundreds of delivery stations. This network is critical to serving our customers across Europe, connecting buyers and sellers, from ultra-dense urban centers to far-flung rural communities. ATS works with over 13,000 small- and medium-size enterprises to provide middle mile transport, including trucking and air cargo services.

This scale comes with a responsibility on our part. We know that our employees, our customers, and our partners want us to not just contribute, but to lead on sustainability and preserving our planet. This is what drove us to develop the Climate Pledge, our commitment to use 100% renewable power by 2025, and to reach net-zero carbon by 2040, ten years ahead of the Paris Agreement. In the nearer future, our Shipment Zero program will make 50% of all Amazon orders net-zero carbon by 2030, starting with Europe. Amazon fully supports the goals of the European Green Deal and Fit-for-55, and the development of a policy and regulatory environment that helps us, our customers, our industry, and our communities to achieve these important goals.

Transportation Presents Opportunities and Challenges in Decarbonisation

At the outset, we applaud the Commission's focus on sustainable transportation as part of the Green Deal, and its ongoing efforts to review, and as needed, revise targets to ensure that objectives are being met. Transportation, especially of freight and heavy goods, presents unique challenges; indeed, it is the only sector where emissions continue to grow despite efforts to adopt new technologies, improve efficiency, and deploy alternative fuel vehicles.

However, transportation presents significant opportunities, both for investment in sustainable practices and technology, and for implementation of smart policy that encourages this investment. As an example, the industry has seen significant progress towards ZLEV adoption in the last mile space, driven, at least in part, by effective incentives and emissions controls. By 2030, Amazon will deploy over 100,000 electric delivery vans; 10,000+ will be in operation this year globally. Working alongside our partners in the auto industry, including Rivian and Mercedes-Benz, this represents the largest ever deployment of commercial electric delivery vehicles, saving millions of metric tons of carbon per year. We're transforming our infrastructure, installing thousands of charging points in our delivery stations, with plans to add thousands more, to allow on-site dedicated charging

capacity for our delivery partners across Europe. Collectively, these investments will increase the overall size of the European EV fleet, reduce the transport sector's carbon footprint, and drive down emissions, especially in urban areas.

Challenges in Decarbonising Heavy-Duty Transport
By contrast to last mile delivery, where smaller vehicles and lighter payloads make ZLEVs immediately practical for deployment, challenges remain in the middle mile, including trucking, maritime, and air. ZLEV HDVs are not yet readily available at scale, and cost-prohibitive for many applications; likewise, the infrastructure to support their operations remains insufficient. To tackle this problem, Amazon is partnering with European equipment manufacturers to test prototypes, evaluate range and infrastructure needs, and provide real-world feedback on their operation.

Even as we invest and work with partners to invent and build new zero-emission HDVs, we are in parallel taking an "all-of-the-above" approach to reduce emissions of our transportation network in the short term. For example, we are deploying over 2,700 compressed natural gas (CNG) tractors globally, and purchasing renewable natural gas sourced from landfills and dairy farms. In 2020, we ordered battery-powered electric trucks from Lion Electric, and in 2021, we began testing hydrogen-powered trucks. Finally, we are buying our first N3-class (40t) electric vehicles this year and installing our first 350kW chargers to power them. Alongside alternative fuels, we leverage technologies that improve the efficiency of our existing vehicle fleet, including aerodynamic enhancements and automatic tire inflation systems that maximize fuel efficiency. In the UK, we operate over 500 hydraulically-powered double deck trailers, improving space utilization by up to 70% versus standard semi-trailers and driving down the number of trucks on the road. These investments provide immediate reductions in carbon emissions for freight transport, and allow us to test the performance of a range of sustainable technologies. But we are eager to move even faster, and the right policy environment will allow our industry to do so.

Investing in Alternative Fuels Infrastructure
As these vehicles are developed, we must have the charging and fueling infrastructure to support them once they hit the road. Building infrastructure is a long-lead challenge, and we must make the significant investment required now to be in position to use the ZLEVs as they're manufactured. Conventional vehicles rely on an extensive refueling network built over decades, whereas the corresponding EV infrastructure is far from sufficiently available across EU member states, and with drastically diverging availability (70% of all charging stations in Europe are located in three countries). Because of the scale required, effective deployment of charging infrastructure must be guided by data, done in waves – not all at once – and in key freight corridors and locations targeted to maximize EV range and ensure en route recharging.

Amazon's transportation data scientists develop route optimization tools that maximize efficiency and sustainability of our European transportation network. For example, through data, we can predict whether an alternative fuel vehicle can reliably refuel or recharge on a certain route, or determine optimal locations and critical timelines for freight charger deployment, based on existing and predicted traffic. By identifying the best locations to deploy charging infrastructure, we can help prioritize the investments that result in the greatest utility. We look forward to working with industry, the Commission, and Member States to leverage this and other innovations to support rapid deployment of freight EVs.

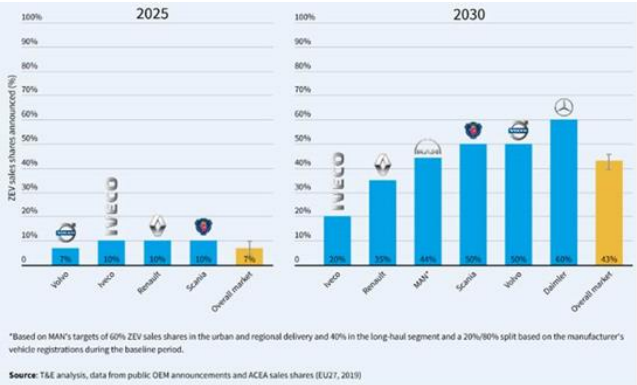
The Matter at Hand: Revising and Strengthening the CO2 Standards Regulation for Heavy-Duty Vehicles
In parallel to these partnerships and investments, it has become increasingly apparent that the current legislative framework does not sufficiently provide the signals necessary to broaden and scale ZLEV deployment. While manufacturers continue to take important steps in the development and manufacture of these vehicles, the sector simply has not achieved the economies of scale necessary to bring total cost of ownership for heavy-duty ZLEVs more in line with traditional vehicles. Amazon supports the Commission in its ambition to revise and strengthen the CO2 Standards Regulation for Heavy-Duty Vehicles, and would encourage the Commission to consider the following recommendations in its proposal:

1. More ambitious CO2 reduction targets are achievable and will accelerate ZLEV adoption in the EU.

The current target levels fall short of ensuring the necessary supply of ZLEVs needed to meet European Union climate ambitions, including Fit-for-55, and a more ambitious reduction of CO2 from HDVs is not only achievable but necessary to reduce transport sector emissions. Recent analysis from Transport & Environment shows that the current targets are too low to effectively drive ZLEV development; vehicle manufacturers could reach the existing targets without any zero-emission vehicles by 2025, and with only a minimal number by 2030. While we recognize that many OEMs are voluntarily investing and setting far higher targets for ZLEV sales than the existing regulation would require, the Commission should adjust its targets to levels that are realistic, but sufficient to spur investment and availability of ZLEV technology at scale. Amazon supports increasing the 2030 target from the current 30% to at least 50%, and introduction of an interim target of 30% by 2027 to accelerate ZLEV development.

2. The right incentive structure is critical to ZLEV adoption and market development.

Alongside more ambitious CO2 reduction targets, we also recommend reviewing incentive mechanisms. As the super-credit system makes way for a benchmark in 2025, the focus should be to increase the threshold beyond the current 2%. OEMs have announced planned ZLEV sales far beyond this point and the Commission should re-assess, based on these projections, and set a threshold level that balances ambition with flexibility. The scope of the benchmark should maintain to include LEVs in order to allow different sustainable technologies to accelerate.



3. A scope extension to medium trucks could unlock further emission savings, but the focus of this Regulation must remain on heavy (>16t) vehicles, which present the greatest decarbonisation challenges.

The Commission may consider whether to broaden the scope of vehicles to include medium duty trucks (7.5t to 16t), as this could amplify emissions reductions across a higher number of vehicles. However, we would caution that, in our experience, N.3 vehicles (>16t) has proven to be the most challenging to decarbonise, and these vehicles should continue to be the primary focus of the Regulation. If the inclusion of lighter trucks is considered, the Commission should ensure that these vehicles are additive, not an alternative, and the Regulation continues to prioritize the development and scale of ZLEV in the N.3 category.

Conclusion

Addressing climate change and carbon emission in the transport sector is a collective challenge, and Amazon is proud of the work that we have done, and will do, to improve the sustainability of our operations and meet our Climate Pledge ambitions. As we invest, collect data, experiment, and learn from our efforts, we will share these learnings with the broader transportation community and policy makers with the hope that our experience can help to move the industry forward at a rapid pace toward decarbonisation. We look forward to actively engaging with the Commission on the revision of this Regulation, and on other Green Deal proposals that will help Europe's freight sector do its part in the fight against climate change.