



Position paper of the European Clean Trucking Alliance on the Alternative Fuels Infrastructure (AFIR) proposal

Summary

The European Clean Trucking Alliance welcomes the AFIR proposal and calls on co-legislators from the European Council and European Parliament to increase its ambition in line with expected market deployment of zero emission trucks.

Electric truck charging:

- TEN-T core network: a charging pool with at least 5,000 kW of charging power every 60 km by 2025, 6,500 kW by 2030 (from 1,400 kW and 3,500 kW)
- TEN-T comprehensive network: a charging pool with at least 3,000 kW of charging power every 100 km by 2030, 5,000 kW by 2035 (from 1,400 kW and 3,500 kW)
- TEN-T urban nodes: 1,200 kW power output for each node in 2025 and 3,500 kW in 2030 (from 600 kW and 1,200 kW)
- Safe and secure parking areas: at least two charging points with at least 100 kW as early as 2025 and at least five charging points by 2030
- Logistic hubs and freight terminals: include targets (semi-)public DC opportunity charger at each of the logistic hubs and freight terminals by 2025.
- National fleet-based targets for charging deployment in line with national registrations and activity.

Hydrogen refuelling stations:

- Coverage of the TEN-T Core network by 2027 and of the TEN-T Comprehensive network by 2030 (150 km distance requirement between stations).
- One stations per urban node by 2030

Introduction

The members of the European Clean Trucking Alliance welcome the Alternative Fuels Infrastructure Regulation (AFIR) proposal and its much-awaited steer towards zero-emission road transport in Europe. The availability of infrastructure for zero-emission trucks and vans is one of the biggest challenges to decarbonising fleets and an ambitious AFIR law is crucial to make the switch to zero emission logistics. The new AFIR law should enable seamless cross-border zero-emission trucking across the EU as soon as possible. This means building with no delay sufficient zero emission infrastructure.

The members also welcome the following important steps forward (which co-legislators should maintain as part of the final law):

- The change of the legislative instrument, from a directive into a regulation. This ensures that the regulation has binding legal force throughout every Member State as well as a harmonised infrastructure roll out.
- The inclusion of binding national targets for deploying truck charging and hydrogen refuelling infrastructure to guarantee an even distribution of infrastructure. The introduction of binding targets for 2025 and 2030 for the deployment of zero-emission truck infrastructure along the TEN-T core and comprehensive network, as well as at urban nodes and in safe and secure truck parking areas, is a much-needed development for the transport industry.

The members stress that we must act now to ensure that zero-emission trucks are able to transport goods from one Member State to another without hurdles. Targets and requirements that are set in the AFIR law need to be future-proof and compatible with a rapid switch to zero emission.

However, despite this new encouraging framework, a few issues remain to enable emission-free road transport. To guarantee seamless zero emission cross-border transport in the EU, the European Clean Truck Alliance, which represent fleets of more than 380,000 vehicles and employ more than 2,3 million people, calls the European Council and European Parliament to improve the following from the current AFIR proposal:

1. Electric charging infrastructure

The European Commission foresees 110,000 battery electric trucks and 60,000 fuel cell trucks on the road in 2030. The Alliance highlights that the European Commission's seriously underestimates the market uptake potential of battery electric trucks given their projection falls short of the industry announcement of 270,000 battery electric trucks on the road in 2030¹ and of individual truck makers announcements which go even higher when aggregated. In the light of this, it is necessary to raise the ambition level of the truck charging targets.

¹ https://www.acea.auto/files/ACEA_Position_Paper-Heavy-duty_vehicles-Charging_and_refuelling_infrastructure.pdf

This current power levels proposed by the European Commission are not future proof as they fail to account for the upcoming Megawatt Charging System (MCS)² high-power charging standard for commercial vehicles which is supported by all the truck manufacturers and expected to be ready by the end of 2024.

The power output of the charging pools therefore needs to be increased to the highest feasible ambition:

1.1 TEN-T Core network

Along the TEN-T core network, publicly accessible recharging pools dedicated to heavy-duty vehicles and meeting the following requirements are deployed in each direction of travel with a maximum distance of 60 km in-between them:

i. by 31 December 2025, each recharging pool shall offer a power output of **5,000 kW** (instead of 1,400 kW) and include at least **four** recharging stations with an individual power output of **at least 800 kW** (instead of one of at least 350 kW);

ii. by 31 December 2030, each recharging pool shall offer a power output of **6,500 kW** (instead of 3,500 kW) and include at least **four** recharging stations with an individual power output of **at least 1,200 kW** (instead of two of at least 350 kW);

1.2 TEN-T comprehensive network

Along the TEN-T comprehensive network, publicly accessible recharging pools dedicated to heavy-duty vehicles and meeting the following requirements are deployed in each direction of travel with a maximum distance of 100 km in between them:

i. by 31 December 2030, each recharging pool shall offer a power output of **3,000 kW** (instead of 1,400 kW) and include at least **two** recharging stations with an individual power output of **at least 800 kW** (instead of one of at least 350 kW);

ii. by 31 December 2035, each recharging pool shall offer a power output of **5,000 kW** (instead of 3,500 kW) and include at least two recharging stations with an individual power output of **at least 1,200 kW** (instead of two of at least 350 kW);

1.3 Urban nodes

In anticipation of the revision of the regulation on CO₂ emission standards for heavy duty vehicles, coaches and buses, it is crucial to already lay the foundations for a hydrogen refuelling stations network beyond the TEN-T network.

By 31 December 2025, in each urban node publicly accessible recharging points dedicated to heavy-duty vehicles providing an aggregated power output of at least **1,200 kW** (instead of 600 kW) are deployed, provided by recharging stations with an individual power output of at least 150 kW, and

² <https://www.charin.global/technology/mcs/>

include at least **two** recharging station with an individual power output of at least **350 kW** (instead of zero);

By 31 December 2030, in each urban node publicly accessible recharging points dedicated to heavy-duty vehicles providing an aggregated power output of at least **3,500 kW** (instead of 1,200 kW) are deployed, provided by recharging stations with an individual power output of at least 150 kW, and include at least **four** recharging station with an individual power output of at least **350 kW** (instead of zero);

1.4 Safe and secure truck parking areas

To enable the electrification of long-haul trips it will be essential to deploy overnight public chargers at truck parking areas. The European Commission proposed to set a target of one overnight charger of 100 kW at each safe and secure parking area by 2030. The members recommend increasing the ambition for overnight charging and equipping safe and secure parking areas:

i. by 31 December 2025, in each safe and secure parking area at least **two** one recharging station dedicated to heavy-duty vehicles with a power output of at least 100 kW is installed (instead of zero);

ii. by 31 December 2030, in each safe and secure parking area at least **four** one recharging station dedicated to heavy-duty vehicles with a power output of at least 100 kW is installed (instead of one);

Furthermore, every new or renovated truck parking area (in particular those which are financially supported by the EU) should be pre-equipped for charging facilities with a connection to the medium or high voltage grid. Grid connections should be future proof to account for future charging demand.

Currently, there are not enough safe and secure parking areas in Europe, the members call on the EU to speed up their deployment and to consider nearby parking areas to deploy overnight chargers in case there are not enough spaces.

1.5. Destination charging

Trucks will also need to charge while they are located at logistic hubs or freight terminals for loading and unloading goods. Co-legislators should therefore include targets (semi-)public DC opportunity charger at each of the logistic hubs and freight terminals by **2025**.

1.6 National fleet-based targets

In order to guarantee that the supply of public charging is rolled out at pace with the market developments of electric trucks on the road, the AFIR law should include national fleet-based targets for heavy duty vehicle chargers. Given that trucks don't necessarily operate in the country they were registered, the national fleet-based target could be complemented with metrics which take into account the truck activity within a country.

2. Hydrogen refuelling stations

For long haul applications the technological race is still open, battery electric trucks with or without dynamic charging as well as fuel cell hydrogen trucks are the current technology options. This means that both charging and refuelling stations will be needed along the highway. The investments in charging and refuelling infrastructure should be considered complementary and not alternative and should reflect market potential of the different technologies.

The infrastructures implemented today will have to meet the needs of today's and tomorrow's vehicles. Therefore, the regulation shall promote the implementation of dual-pressure hydrogen refuelling stations to ensure that the infrastructure benefits as many road users as possible.

Green hydrogen refuelling stations (HRS) should be deployed to enable zero-emission trips across the European Union (along and beyond the TEN-T networks). To that end Member States shall ensure that:

i. by 31 December 2027 (instead of 2030) publicly accessible hydrogen refuelling stations with a maximum distance of 150 km in-between them along the TEN-T core.

ii. by 31 December 2030 publicly accessible hydrogen refuelling stations with a maximum distance of 150 km in-between them along the TEN-T comprehensive network.

iii. by 31 December 2030, at least one (instead of one) publicly accessible green hydrogen refuelling stations are deployed in each urban node.

3. Strong national policy frameworks

Beyond the minimum targets set out in the AFIR proposal, Member States should support the deployment of zero emission infrastructure by complementary and supportive measures.

Regarding dynamic charging (Electric Road Systems), Member States should include in their National Policy Framework (NPF) the deployment of Electric Road Systems like overhead catenary infrastructure where it makes most economic sense.

Member States and the EU should ensure long-term investment certainty for end users through regulatory incentive schemes for zero-emission vehicle technology and infrastructure, especially in the early market development phase. All forms of truck charging (depot charging, destination charging, and public charging) need to be addressed and eligible for public funding, with the required grid upgrades.

As highlighted by the current proposal, Member States should “improve measures to remove possible obstacles with regards to planning, permitting and procuring”. To remove bottlenecks in speedy infrastructure deployment, the Alliance recommends that co-legislators should improve the current wording and set harmonised requirements regarding permitting procedures, such as setting a maximum deadline of 6 months for obtaining permits or authorisations for grid connections.

4. Synergies with TEN-E and TEN-T regulations

European legislators should also ensure synergies with the revision of the TEN-E regulation and TEN-T regulation. Electricity will be needed along the highways, be it for Megawatt chargers or for onsite production of green hydrogen, thus reinforcement of the electricity grid should be planned

accordingly. Grid planning should take into account the integration of locally produced renewable energy and allow vehicle-to-grid.

The members of the European Clean Trucking Alliance strongly encourage co-legislators to consider these recommendations as a matter of urgency. The right decisions need to be taken now if we want the European trucking industry to be a global leader in the shift towards zero emission as well as to reach national and European climate goals.

We remain at your disposal to discuss these issues in more detail.

The European Clean Trucking Alliance

On behalf of,



