

# FUTUREDRIVEN

MANIFESTO

FOR ZERO-EMISSION  
TRUCKS AND BUSES



POWERING THE EU ECONOMY  
AND SERVING SOCIETY

acea

# WHY ARE TRUCKS AND BUSES ESSENTIAL?



## TRUCKS: GETTING THE JOB DONE

Trucks are the most versatile and cost-effective mode of transport. They are the backbone of European business, carrying almost 80% of goods by land.

Trucks ensure that essential goods reach consumers, and keep society on the move. They deliver most of our daily necessities, such as food or medical supplies. What is more, they support essential public services, such as construction, garbage collection, and firefighting and rescue services.

Trucks are also the foundation of the larger European logistics and transport system. Demand for transporting goods is growing, and all transport modes will have to improve further to meet future needs. Road transport is expected to remain the most widely used mode for moving goods.



## BUSES: A SUSTAINABLE CHOICE FOR ALL EUROPEANS

Buses have the lowest carbon footprint per passenger of any form of motorised transport, playing a crucial role in lowering emissions and improving air quality in cities. They help ease traffic congestion, with each bus capable of replacing 50 cars on the road. They also have an important societal role in supporting inclusion for people with limited access to individual mobility.

Buses are also the most widely used form of public transport, accounting for over half of all journeys in the EU, serving cities as well as suburban and rural areas. They are the most adaptable form of public transport in densely populated areas, requiring minimal investments to launch new lines or routes.

## WORLD LEADERS DRIVING EU COMPETITIVENESS

The European truck and bus industry is a world leader in technology and innovation. For instance, half of heavy trucks built in North America come from European manufacturers using European technology. The share is even higher for the crucial long-haul heavy-duty segment. In other world regions, such as South America, the Middle East and Asia, European manufacturers of trucks and buses also play a leading role.

The industry provides a strong base for European competitiveness, sustaining millions of highly skilled jobs, both upstream and downstream. Trucks also generate an annual trade surplus of almost €7 billion for the EU.

## NO GREEN DEAL WITHOUT TRUCKS AND BUSES!

Trucks are essential for the construction and maintenance of Europe's green infrastructure, and therefore make a sizeable contribution to decarbonising many other sectors. For instance, the charging and grid networks, renewable energy plants, or wind turbines needed to achieve climate neutrality would simply not be built without heavy-duty road transport. Put simply, the success of the European Green Deal relies on trucks and buses.

# WHAT MAKES TRUCKS AND BUSES DIFFERENT TO CARS?

## VERSATILE AND MULTIPURPOSE

Trucks and buses are not just bigger cars! They differ not only by their size and weight but also by their individuality. They serve a myriad of uses, often tailored to the specific needs of logistics and public transport operators. For instance, long-haul trucks are completely different from trucks that collect garbage, operate a crane, or extinguish fires.

## A B2B MARKET

Unlike the consumer-oriented car market, truck and bus transport is a business-to-business (B2B) market, driven by cost over a vehicle's life – known as the 'total cost of ownership' (TCO). Transport operators invest in trucks and buses to run their businesses in the most viable way; they must be able to earn money with them. Four out of five transport operators are SMEs, many of whom operate less than five vehicles. Cost efficiency is crucial for them to remain competitive.

## TRUCKS: MADE TO DRIVE

Whereas cars are parked much of the time, trucks are mostly on the move. A truck can easily drive up to 150,000 kilometres a year – that is over 12 times more than a typical car. In a B2B market, keeping trucks moving is a top priority.

### TRUCKS



Trucks carry almost  
**80% OF GOODS  
BY LAND**

**€7 BILLION**

Annual EU trade surplus  
generated by trucks



**150K  
KM PER YEAR**

A truck can easily  
drive up to 150,000  
kilometres in a year

1.5% of new trucks sold  
in the EU are electrically  
chargeable, a more than  
sixfold increase over the  
past five years

**1.5%**  


### BUSES

Buses account for over  
**half of public transport** **>50%**  
journeys in the EU

**50X**



Buses ease traffic  
congestion, with each  
bus capable of replacing  
**50 cars on the road**

16% of new buses sold are  
electrically chargeable, a  
**250% increase over the  
past five years**

**16%**  




### 3

## TRUCK AND BUS MANUFACTURERS' COMMITMENT TO CLIMATE NEUTRALITY

ACEA's truck and bus manufacturers are committed to achieving climate neutrality by 2050 at the latest, meaning that all new vehicles sold should be fossil-free by 2040 – [a pledge](#) taken by the industry in 2020.

Manufacturers are investing in and ramping up production of battery-electric and hydrogen-powered vehicles. However, without the right 'enabling conditions', transport operators will not invest in these vehicles. Planning certainty around all these supporting mechanisms is highly important for transport operators; without it they may postpone vehicle purchasing decisions. Policy makers must therefore match ambitious targets for truck and bus manufacturers with equally ambitious conditions to enable the market uptake of zero-emission vehicles (ZEVs).

Decarbonising all energy carriers (including electricity, hydrogen, liquid and gaseous fuels) will also be essential for achieving Europe's decarbonisation targets. Therefore, CO<sub>2</sub>-neutral fuels will play an important role in decarbonising road transport and the transition to climate neutrality.



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# WHAT ARE THE CHALLENGES?

## A RAPIDLY EVOLVING WORLD

Europe's green and digital transformation represents the biggest challenge in over a century for vehicle manufacturers. This dual transformation brings entirely new value chains, which Europe has not yet fully developed. It also means that achieving sector-specific climate goals is dependent on factors that are outside the industry's control.

Other threats to the industry's competitiveness include fierce global competition, rising costs of doing business in Europe (such as high energy prices), growing protectionism, and a radically evolving geopolitical landscape.

## ROADBLOCKS TO MARKET DEMAND

The EU wants to position itself as a sustainability champion by setting the most ambitious decarbonisation targets for truck and bus manufacturers worldwide. But getting zero-emission vehicles on Europe's roads requires far more than setting binding targets (with high non-compliance penalties) for vehicle manufacturers, and just hoping that smooth implementation follows.

Truck and bus manufacturers operate in a B2B environment; this means they rely on customers buying zero-emission models to meet their CO2 targets. Transport operators will only consider investing in battery-electric or hydrogen-powered vehicles if they can be operated as profitably and seamlessly as conventional vehicles. It is not sufficient to only regulate the supply side; you also need to address demand.

Decarbonising road transport is a team sport involving players across the entire transport ecosystem. This means policy makers must also do their part by setting the right enabling conditions to support market demand.

## INSUFFICIENT AND INADEQUATE INFRASTRUCTURE

There are currently almost no charging points or hydrogen refilling stations suitable for trucks or buses in Europe. Trucks and buses require fast DC chargers, which can rapidly deliver significant power, minimising downtime to maintain operational efficiency. The near absence of infrastructure undermines seamless operation along highways, at depots, and during overnight charging sessions.

### *CO2 targets: zero emission vehicles and infrastructure needed*

CO2 target 2030		-45%	
Zero-emission vehicles needed on EU roads (minimum)		~400,000	
	Battery-electric vehicles	~330,000	
	Hydrogen-powered vehicles	~70,000	
Infrastructure			
	Publicly accessible charging points	Total	at least 50,000
		of which are MCS	~35,000
	Hydrogen refilling stations	6 tons/ day	at least 700
		2 tons/ day	~2,000

## INSUFFICIENT AND INADEQUATE INCENTIVES

Upfront investment costs remain higher for zero-emission models than conventional ones. As long as fossil fuels, such as diesel, remain more cost-competitive than climate-neutral power sources, transport operators will not switch to zero-emission models.

Unfortunately, carbon pricing schemes to shore up demand for zero-emission models are nowhere near sufficient. On top of this, almost a third of EU member states lack incentives for investing in electric trucks and buses. There is also a notable lack of coordination among member states, further exacerbating the challenge.

## FRAGMENTED REGULATORY FRAMEWORK

Europe lacks a coherent regulatory framework, especially between EU and national levels. CO2 reduction targets for vehicle manufacturers are also far more ambitious than for other transport and logistic stakeholders.

What is more, when setting regulations, policy makers also often overlook the unique characteristics of trucks and buses operating in a B2B market (for example rules on in-vehicle data).

# FIVE POLICY RECOMMENDATIONS FOR THE EU'S NEXT FIVE-YEAR MANDATE

[2024–2029]

1

## ESTABLISH CONDITIONS FOR RAPID MARKET UPTAKE OF ZERO-EMISSION TRUCKS AND BUSES

- Scale up charging and hydrogen refilling infrastructure deployment Europe-wide
  - AFIR targets will help kickstart deployment, but more ambition will be necessary to serve the projected fleet of zero-emission vehicles
- Ensure there is a business case for customers to invest in zero-emission vehicles
- Expand carbon pricing and incentive schemes and streamline these across member states
- Monitor the enabling conditions annually

2

## ENSURE WE ARE COMPETITIVE GLOBALLY

- Establish a level playing field for sustainably made European vehicles by securing free and fair trade rules and access to critical supplies
- Ensure a supportive policy framework built on a Circular Economy, the Net Zero Industry Act, and the European Chips Act

3

## MAKE TECHNOLOGY NEUTRALITY A GUIDING PRINCIPLE

- Ensure that all technologies are part of the decarbonisation mix, including fossil-free fuels, as the internal combustion engine will continue to play a long-term role in heavy-duty transport
- Decarbonise all energy sources (electricity, hydrogen, and fuels)

4

## ESTABLISH A COHERENT AND PREDICTABLE REGULATORY FRAMEWORK

- Avoid conflicting regulations (eg Weights & Dimensions Directive, PFAS, Euro 7, etc)
- Respect heavy-duty vehicle market specificities in future regulations (eg in-vehicle data rules)
- Avoid measures that disrupt the market (eg pre-buy and extended low-buy periods)

5

## SUPPORT VEHICLE CONNECTIVITY AND AUTOMATION TO IMPROVE SAFETY AND COMPETITIVENESS

- Minimise accidents through advanced driver-assistant systems (ADAS) and active safety technology
- Harmonise rules for automated trucks and buses

# acea

DRIVING MOBILITY FOR EUROPE

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