

The Clean Mobility Package

eurelectric position paper

February 2018

eurelectric is the voice of the electricity industry in Europe.

We speak for more than 3,500 companies in power generation, distribution, and supply.

We Stand For:

Carbon-neutral electricity in Europe well before mid-century

We have committed to making Europe's electricity cleaner. To deliver, we need to make use of **all low-carbon technologies**: more renewables, but also clean coal and gas, and nuclear. Efficient electric technologies in **transport and buildings**, combined with the development of smart grids and a major push in **energy efficiency** play a key role in reducing fossil fuel consumption and making our electricity more sustainable.

Competitive electricity for our customers

We support well-functioning, distortion-free **energy and carbon markets** as the best way to produce electricity and reduce emissions cost-efficiently. Integrated EU-wide electricity and gas markets are also crucial to offer our customers the **full benefits of liberalisation**: they ensure the best use of generation resources, improve **security of supply**, allow full EU-wide competition, and increase **customer choice**.

Continent-wide electricity through a coherent European approach

Europe's energy and climate challenges can only be solved by **European – or even global – policies**, not incoherent national measures. Such policies should complement, not contradict each other: coherent and integrated approaches reduce costs. This will encourage **effective investment** to ensure a sustainable and reliable electricity supply for Europe's businesses and consumers.

eurelectric. Powering people.

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Delivering on low-emission mobility

A eurelectric position paper

February 2018

KEY MESSAGES

- To deliver on the Paris Agreement, the EU power sector is committed to becoming carbon-neutral well before 2050. Thus, the electricity sector can be a valuable partner for other sectors to deliver the needed emission reductions.
- eurelectric is pleased with the timely publication of the Clean Mobility Package, which has the potential to significantly promote decarbonisation and electrification of the European road transport.
- However, we are convinced that the proposed CO₂ emissions standards for cars and vans fail to deliver. They lack the necessary ambition to put Europe on track for the decarbonisation of the transport sector.
- Vehicle emission standards should be based on an increased average emission reduction rate of 5,5% per year or more and on the World Harmonised Light Vehicles Test Procedure (WLTP). It should also be matched with realistic data from real driving.
- The failure to apply penalties when missing the goals will render the proposed benchmarking system largely ineffective. Instead, car manufacturers should be required to sell a certain share of low and zero emission cars and vans, which should be aligned with the proposed thresholds for “clean vehicles” under the Clean Vehicles Directive.
- Public authorities should lead by example. Thus, the Clean Vehicles Directive should require public authorities to only procure clean vehicles as of 2030, with national midway-targets for 2025.
- Alternative fuels infrastructure is needed and will follow the deployment of vehicles, ensuring economic efficiency, continuous integration of innovation and delivering best services to the final users. In this context, eurelectric welcomes the additional available funding announced in the Alternative Fuels Action Plan, as well as the clear messages on standardisation, interoperability and application of technologies which enable smart charging at large scale.

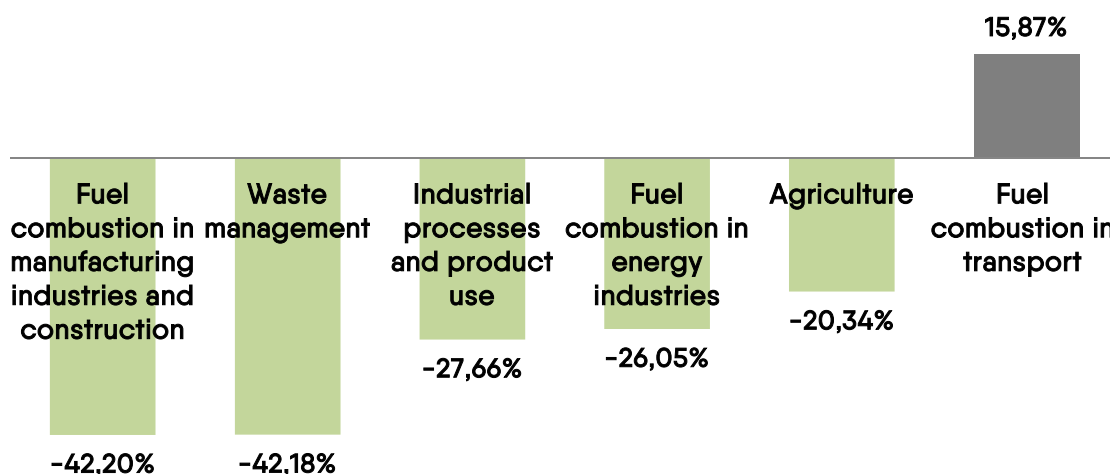
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Introduction

Europe is at a crucial moment in time, where – in order to deliver on the Paris Agreement – the power sector is committed to becoming carbon-neutral well before 2050, while other sectors such as transport have to seriously increase emission reduction efforts. Emissions from transport are both in absolute and in relative terms higher than in 1990.

The graph below illustrates the development:



GHG emissions dynamic (1990 compared to 2015) by relevant sectors in the EU28,
Source: EUROSTAT

Electrification is one major driver to reduce energy consumption in road transport. Electrified transport will have to be integrated in the wider power system. If this is done well, electric vehicles can provide a valuable resource for the power system, while improving energy efficiency and air quality (and thus public health). With electrified transport, cities are also one step further on their journey to smart cities.

CO₂ standards for cars and vans

Relevance of the legislative initiative

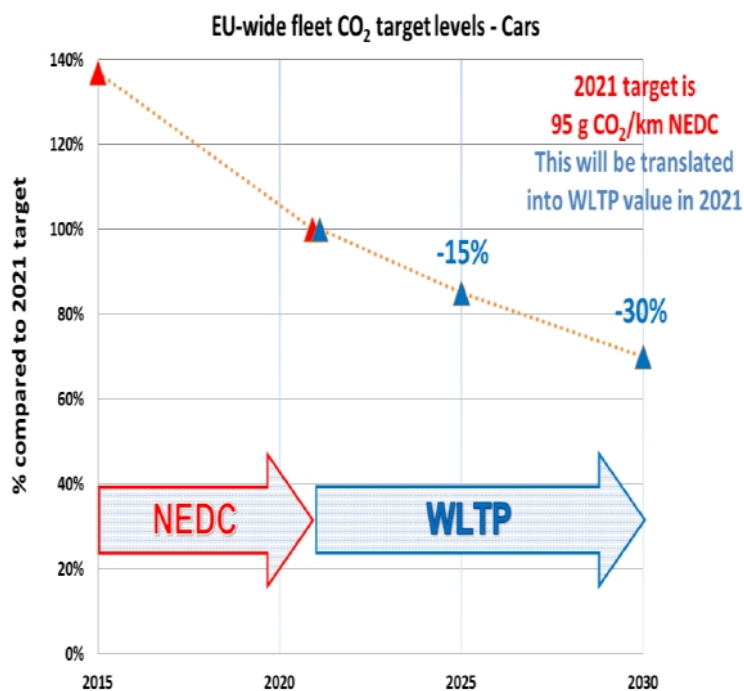
CO₂ standards for cars and vans have proven to be very effective since their introduction in 2008 in lowering emissions from passenger cars. According to the European Commission¹ CO₂ standards have been the cause for 65% to 85% of the emission reductions achieved since 2010 concerning passenger cars. These standards also delivered emission reductions at much lower costs than initially assumed – manufacturers achieved the standards for 2015 with less than 20% of the initially estimated costs for cars and for less than 12% of the expected costs for vans.

The newly proposed Regulation prescribes fleet emission reductions of 15% in 2025 and 30% in 2030 for both cars and vans, compared to 2021 targets. eurelectric is concerned that this ambition level is insufficient to drive decarbonisation of road transport at the

¹ European Commission: Impact Assessment (part 1) of the proposed Regulation for emission performance standards for new passenger cars and new light commercial vehicles, 8 November 2017, p 15.

necessary speed. In order to reach the – now reconfirmed – goal of 60% EU transport sector emission reductions in 2050 (compared to 1990 levels), cars and vans will have to be completely decarbonised by 2050². Taking into account the average lifetime of a privately owned car, this requires that as of 2035 only zero emission cars and vans should be sold.

Worryingly, instead of increasing the level of ambition, the current proposal even decreases annual average emission reduction rate compared to what currently is in place, as demonstrated in the graph below:



Source: DG CLIMA, November 2017.

NEDC: New European Driving Cycle

WLTP: World Harmonised Light Duty Test Procedure

eulectric advocates for an increase or at least a continuation of the annual emission reduction rate. In the current Regulation, the average emission reduction rate for cars is 5%, and for vans 5,5% – thus, the reduction rate should at least be kept at 5,5% for the period between 2021 and 2030.

It is generally agreed that CO₂ standards are the most important single legislative driver of the electrification of road vehicles – at least if the compliance is ensured by the relevant authority. As it becomes increasingly challenging for manufacturers to comply with the standards through the improving of fuel efficiency for internal combustion engine vehicles, these standards provide an inherent incentive for a fuel switch.

² Massachusetts Institute of Technology (MIT) : Personal Vehicles Evaluated against Climate Change Mitigation Targets, <http://pubs.acs.org/doi/abs/10.1021/acs.est.6b00177>, accessed on 22 January 2018. And also Oeko Institut : Targets for the non-ETS sectors in 2040 and 2050, <https://www.transportenvironment.org/sites/te/files/publications/2050%20ESR%20targets%20v5.pdf>, accessed on 22 January 2018.

CO₂ standards also have a crucial part to play for the achievement of other policies. Road transport represents around 24% of EU transport energy consumption³ and in 2015 used about 20% more energy than in 1990⁴. Thus, reduction of energy use in road transport will be crucial to reach the EU energy efficiency targets. With electric cars and vans being over 3 times⁵ more energy efficient than a comparable internal combustion engine vehicle in a tank-to-wheel perspective, electrification (driven by strict emission standards) is the major driver to reduce energy consumption in road transport. This should be taken into account in the relevant legislation.

The attainment of the Effort Sharing Regulation (ESR) emission reductions hugely depends on emissions from car and vans. With the help of emission standards, emissions reductions from road transport are feasible and in many cases cheaper than emission reductions from the other Effort Sharing decision sectors, agriculture and buildings. Many Member States thus heavily depend on ambitious CO₂ standards to be able to reach their individual ESR target and would benefit from a coordination of this tool at European level.

In order to achieve both 60% emission reduction objective for transport in 2050 and 30% emission reduction objective for non-ETS sectors in 2030 the emission reduction for cars and vans needs to be much higher than proposed by the Commission⁶.

Scope, definitions and ambition level: detailed assessment

Topic	Article	Commission Proposal	eurelectric assessment
Scope	Article 1 (1)	Emission performance requirements for new passenger cars and vans in one regulation instead of two separate regulations	OK
Re-iteration of the 2020 standard	Article 1 (2)	Re-iteration of the 2020 standard, as this will be the baseline for the 2025 and 2030 emission reduction	OK
Standard setting for 2025 and 2030	Article 1 (4)	Average emission reduction of the new passenger car and van fleet of 15% by 2025, and of 30% by 2030	Disagree Level of ambition not sufficient in order to put Europe on track to reach the 60% transport emission reduction goal in 2050.

³ Eurostat: Consumption of Energy, http://ec.europa.eu/eurostat/statistics-explained/index.php/Consumption_of_energy, accessed on 20 November 2017.

⁴ Eurostat: Consumption of Energy, http://ec.europa.eu/eurostat/statistics-explained/index.php/Consumption_of_energy, accessed on 20 November 2017.

⁵ See for example : US Environmental Protection Agency, <https://www.fueleconomy.gov/feg/evtech.shtml>, accessed on 22 January 2018. In a well-to-wheel perspective, electric vehicles can be over 10 times more energy efficient, depending on the technology of electricity generation and the fuel to compare it to.

⁶ Transport & Environment October 2017: Cars and vans CO₂ regulations: even ambitious EU standards deliver less than half transport emission reductions needed to meet 2030 climate targets.

			Furthermore, it will be instrumental to make sure that the baseline is not artificially inflated when the switch from NEDC to WLTP is calculated. This technical aspect will have a significant impact on the actual emission reductions. b
Definitions	Article 3	Inclusion of 'zero- and low-emission vehicle' into the definitions, with a threshold of tailpipe emissions of 50g CO₂/km, as determined by the World Light Vehicle Test Procedure (WLTP)	Disagree The threshold for low-emission vehicles should be set at 40g CO₂/km for vans and at 25g CO₂/km for cars and thus be aligned with the definition of 'clean vehicles' under the proposed Clean Vehicles Directive
Specific emission targets	Article 4 (1)	From 2021 until 2024, the specific emission target of each manufacturer shall be determined based on the WLTP reference target As of 2025, the specific emission target is calculated based on the 2025 target including a 'ZLEV' factor based on the share of sold low- and zero-emission vehicles, which results in a bonus in emission standards of maximum 5 %. This bonus is kept after 2030, if the share of low- and zero-emission vehicles is over 30% of new sales.	OK. WLTP has replaced the outdated NEDC test cycle. Disagree The sale of low- and zero-emission vehicles helps each manufacturer to achieve its target. Rather than giving a bonus on CO₂ standards to those who sell such vehicles, Europe needs an obligatory sales quota of zero and low-emission vehicles on manufacturers, which can be either

			achieved by selling zero-emission vehicles or by buying certificates from manufacturers who over-achieve their quota. It should also include a penalty for those manufacturers that do not achieve the proposed quota. This will provide investment security and plannability, for the vehicle manufacturers, for the charging equipment manufacturers, charge point operators, grid operators and electricity suppliers.
Share of vehicles taken into account	Article 4 (3)	Until 2020, only 95% of each manufacturer's new passenger cars shall be taken into account. As of 2021, 100% shall be taken into account.	Agree It is crucial that this Regulation covers 100% of the newly sold cars. It's regrettable that the previous Regulation established an exception for the year 2020.
Super-credits for the 2021 target	Article 5	The super-credit system is phased-out by 2023, as foreseen in the current Regulation.	Accept eulectric is critical towards super credits as they artificially inflate the numbers of low- and zero-emission vehicles. However, for the sake of regulatory certainty, we agree with keeping the initially planned timeline of this approach.
Rules for pooling	Article 6	The rules for pooling (ie several manufacturers deciding to jointly comply	OK

		with the emission standards) largely remain the same. The Commission may define detailed rules for pooling arrangements by an implementing act.	
Monitoring and reporting of average emissions	Article 7	This article largely didn't change. Member States shall record information for each new car or van registered on its territory and annually transmit the information to the Commission. The Commission shall keep a central, publically available register which displays the average specific emissions of each manufacturer and the relevant average specific emission target. New: type approval authorities are obliged to, without delay, report any deviations of CO₂ emissions of vehicles in use as compared to those indicated in the certificates of conformity of those vehicles. The Commission may adopt detailed rules for this reporting.	OK Agree This is trying to draw a lesson from the "diesel gate".
Excess emission premium	Article 8	Largely unchanged. In calendar year in which a manufacturer's or manufacturers' pool average emissions exceed their specific emissions target, the Commission shall impose an excess emission premium. The emission premium is 95€ / gCO₂/ vehicle sold. The excess emissions premiums are regarded revenue for the general budget of the EU.	Agree
Publication of performance of	Article 9	Largely unchanged. The Commission shall annually	Agree

manufacturers		publish specific emissions and specific emission targets for each manufacturer, the average specific emissions of all new cars and vans in the EU. New: It shall also publish the 2025 and 2030 EU fleet-wide targets (in g, based on WLTP).	
Derogations for certain manufacturers	Article 10	Small volume manufacturers (up to 10000 cars or 22000 vans sold/year) can continue to apply for a derogation from their specific emission target. In fact, the derogation period is extended as it is stated in the proposal that a maximum period of five calendar years is renewable Niche manufacturers (between 10000 and 300000 cars sold/year) cannot anymore apply for derogations.	OK
Eco-Innovation	Article 11	Largely unchanged. Eco-innovations are technologies that improve the efficiency of the vehicle in real-world driving but not on the test cycle. Manufacturers can still apply for consideration of CO2 savings through the use of innovative technologies. This contribution is capped at 7g CO2/km. New: the Commission can adjust the cap with effect from 2025 onwards.	Accept eurelectric is advocating for real-driving testing of CO2 emissions. If this is done, eco-innovations are not needed anymore. The current cap of 7g CO2/km is quite high and ideally should be lowered.
Monitoring of real-world energy consumption	Article 12	This is a new article. The Commission shall monitor, assess and publish information on the real world representativeness of the test cycle CO2	Partly agree The monitoring of the representativeness of the test cycle emission values is of

		emission values.	course necessary. However, the Commission should in parallel work on establishing a real-world emission test cycle in order to have it at hand at the latest for the next round of CO2 standards.
Adjustments of utility parameter	Article 13	Test mass and mass in running order are utility parameters with which the emission savings effort is distributed among manufacturers. This parameter shall be adapted more regularly (every 2 years instead of every 3)	OK
Review and report	Article 14	The Commission shall in 2024 report to Council and Parliament on the effectiveness of the Regulation, the deployment of low- and zero-emission vehicles and recharging and refuelling infrastructure. The Commission may review the procedures of the test cycle and in particular make proposals to better reflect the real-world emissions of cars and vans.	Agree Disagree The wording of this article is too soft, the Commission should already now define what measures it takes when the gap widens beyond a defined limit.
Committee Procedure	Article 15	Standard article	No comment
Exercise of the delegation	Article 16	Standard article	No comment
Amendment to Type approval rules	Article 17	New Article. Type approval authorities shall conduct representative sample tests to verify that running, type approved vehicles	Agree

		conform to the CO2 emission values listed in their certificate of conformity.	
Repeal of current Regulations on emissions from cars and vans	Article 18	This Regulation replaces the current Regulations on CO2 emissions and fuel consumption from cars and vans as of January 2020.	OK

Clean Vehicles Directive

Relevance of the legislative initiative

The Clean Vehicles Directive sets rules for the public procurement of vehicles. Public authorities can be a driver and early adopter of clean vehicles and thus lead by example – however it should be ensured that the financial impact on public authorities is not disproportionally high. In this context, both financial support for clean vehicles procurement and additional measures on vehicle suppliers to produce a sufficient number of clean vehicles can be considered.

Even if the share of cars procured by public authorities is about 2% of the car market⁷, this can still have important impacts in the early stages of EV deployment. For the bus market, public authorities are currently the most important customers. In this sector the impact of the Directive will be decisive.

The second key aspect of the proposed Directive refers to the improvement of air quality in cities. One in three Europeans living in cities today endure air quality deemed illegal under EU air quality standards. Public transport by bus is usually running on diesel, thus considerably contributing to city air pollution. The same is true for other large vehicles delivering public services, like garbage collection vehicles. Cleaner technologies, like electric vehicles, can bring a considerable improvement here.

Heavy duty vehicles, including buses, are currently not subject to any CO2 emission standards. Even CO2 emission monitoring for these vehicles is still under way.⁸ Until an emission monitoring system and CO2 standards for heavy duty vehicles are in place, legislation such as the Clean Vehicles Directive are the only way to promote electrification and decarbonisation in this area.

⁷ Platform for Electromobility: Clean vehicles directive recast: how to make it work, August 2017, p. 1.

⁸ COM(2017)279, Proposal for a Regulation of the European Parliament and of the Council on the monitoring and reporting of CO2 emissions from and fuel consumption of new heavy-duty vehicles, Brussels, 31.5.2017.

Scope, definitions and ambition level: detailed assessment

Topic	Article	Commission Proposal	eurelectric assessment
Title	Article 1	The title now includes a reference to low-emission mobility	Agree
Scope	Article 3	The scope of the Directive is significantly widened. It now applies to vehicles purchased, leased or rented and also to contracts covering transport services.	Agree – however, the scope should be further widened: taxis (when falling under the definition of public procurement and contracts) and vehicles used for waste collection should be included.
Definitions	Article 4	Clean vehicles are defined based on maximum tailpipe CO₂ emissions and real driving pollutant emissions for vehicle types M1, M2 and N1 (cars and vans). For 2025 the threshold is 25g CO₂/km for M1 and M2 and 40g CO₂ for N1 vehicles. As of 2030 only zero emission vehicles are regarded clean. For vehicles of the type M3, N2 and N3 (very big passenger cars, trucks and buses) a list of clean technologies is defined.	Generally agree. However, natural gas as a fossil fuel, should only be considered “clean” in the case of trucks. For other applications, only non-fossil alternatives should be considered.
Update of Clean Vehicle Definition	Article 4a	The Commission is empowered to adopt a delegated act to update the definition of clean M3, N2 and N3 with CO ₂ tailpipe emissions and air pollutant thresholds.	Agree However, it has to be ensured that the definition of clean vehicles in these vehicle categories is equally strengthened from 2025 to 2030.
Minimum procurement targets per Member State	Article 5	Member States shall ensure that across the Member State public authorities comply with the minimum procurement targets. Member States	Agree

		may decide to set higher targets than the ones suggested in this Directive.	
Level of procurement targets	Annex	The level of procurement targets for cars and vans range from 16% – 35% in both 2025 and 2030. For trucks, the procurement targets range from 6% in 2025 to 15% in 2030. For buses, they range from 29% in 2025 to 75% in 2030. For heavy-duty vehicles, those with zero emissions at tailpipe or fully operated on biomethane shall be counted as 1 to contribute to the mandate up until a minimum procurement mandate of 50%, after which all vehicles count as 0,5. All other vehicles falling under the definition of “clean vehicles” under this Directive, should be counted as 0,5 vehicles.	Disagree For clean cars and vans, the procurement targets should be close to 100% for all Member States. Taking into consideration expected cost reduction by falling battery costs and approaching economies of scale, the financial burden should be manageable. Most studies expect electric vehicles to be cheaper in a total cost of ownership perspective by mid-2020. For trucks and buses, the definition of clean vehicles is much less strict, thus the procurement targets for 2030 should also be at 100%, however combined with possibilities of financial support for the less wealthy public authorities. . =
Reporting	Article 10	The Commission shall report on the application of this Directive by the Member States every 3 years starting in January 2027, following reporting from the Member States which shall report by January 2026.	Agree

Action Plan on Alternative Fuels Infrastructure

Relevance of the legislative initiative

The action plan covers all alternative fuels covered in the Alternative Fuels Infrastructure Directive (AFI Directive), including electric charging infrastructure. The Commission has assessed the national framework plans on the implementation of the AFI Directive and published the assessment as part of the Clean Mobility Package.

As infrastructure is a crucial element for the deployment of all alternative transport fuels, eurelectric supports the decision to address this issue together with the measures increase the offer and demand of cleaner vehicles.

The action plan shall help to achieve the EU goal of an interoperable alternative fuel infrastructure by 2025. To this end, it identifies several priorities:

- completing and implementing the National Policy Frameworks,
- supporting investments by financial instruments,
- special action in urban areas with transparent access rules and sufficient infrastructure provision,
- ensuring the consumer buy-in by smart and connected mobility solutions, like interoperable electric vehicles' payment solutions,
- integration of electric vehicles into the grid with a coherent framework for demand response and acknowledgement of the need for smart charging.

Scope, definitions and ambition level: detailed assessment

eurelectric sees the action plan as very timely and relevant item and should not be seen as less important as the other, legal texts of the package. Specifically, it draws attention to the relevant issues:

- The action plan promises that € 800 million of new financial support for investments into alternative fuels infrastructure will be made available (€ 350 million from an increased Connecting Europe Facility (CEF) blending call plus € 450 million from undistributed NER300 allowances). eurelectric welcomes this financial support, but we believe that further funding might need to be made available, in order to leverage the € 22 billion⁹ that the Commission considers necessary for a sufficient deployment of charging infrastructure until 2030. With binding sales quotas, charging infrastructure deployment will be easier to plan and it becomes less likely that available infrastructure is under-used.
- The action plan clarifies that all projects receiving funding from the EU should fulfil the standards of charging infrastructure set out in the AFI Directive (i.e. a European plug standard). Connectivity of charging points is equally highlighted – the action plan states that all charging points should be digitally connected in real time.
- It specifies that Member States shall ensure that European and international smart charging standards are used. eurelectric welcomes the explicit recognition of the need for standardised infrastructure and smart charging.

⁹ European Commission: [Action Plan on Alternative Fuels Infrastructure](#), November 2011, p. 5

While the Action Plan rightly highlights the importance of charging infrastructure along the Trans-European Transport Networks (TEN-T) corridor and especially also in cities, it lacks recognition of the need for infrastructure in more remote areas of Europe. eurelectric encourages the Commission to not only focus on the TEN-T corridor, but to also leave flexibility to project applicants when it comes to the exact location of the charging infrastructure project. Furthermore, sufficient funding possibilities for depot charging of public transport vehicles (non-publically accessible, but in the context of public transport) needs to be ensured. eurelectric is positively notices that most national policy frameworks give consideration to alternatively fuelled public transport.

eurelectric pursues in all its activities the application of the following sustainable development values:

Economic Development

- Growth, added-value, efficiency

Environmental Leadership

- Commitment, innovation, pro-activeness

Social Responsibility

- Transparency, ethics, accountability



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