

Procedure file

Basic information	
COD - Ordinary legislative procedure (ex-codecision procedure) Regulation	2021/0223(COD) Procedure completed
Deployment of alternative fuels infrastructure Repealing Directive 2014/94/EU 2013/0012(COD)	
Subject 3.20.05 Road transport: passengers and freight 3.60.02 Oil industry, motor fuels 3.60.05 Alternative and renewable energies	
Legislative priorities Joint Declaration 2022 Joint Declaration 2023-24 Joint Declaration 2021	

Key players			
European Parliament	Committee responsible	Rapporteur	Appointed
	 Transport and Tourism	 VITANOV Petar	15/06/2023
		Shadow rapporteur	
		 GIESEKE Jens	
		 NAGTEGAAL Caroline	
		 DEPARNAY-GRUNENBERG Anna	
		 HAIDER Roman	
		 FIDANZA Carlo	
		 KOUNTOURA Elena	
		Committee for opinion	Rapporteur for opinion
 Environment, Public Health and Food Safety	 VONDRA Alexandr		29/09/2021
 Industry, Research and Energy	 BLOSS Michael		30/09/2021
 Regional Development			27/09/2021

Council of the European Union
European Commission

Commission DG

Commissioner

[Mobility and Transport](#)

VĂLEAN Adina-Ioana

European Economic and
Social Committee
European Committee of the
Regions

Key events

14/07/2021	Legislative proposal published	COM(2021)0559	Summary
13/09/2021	Committee referral announced in Parliament, 1st reading		
03/10/2022	Vote in committee, 1st reading		
04/10/2022	Committee report tabled for plenary, 1st reading	A9-0234/2022	Summary
17/10/2022	Debate in Parliament		
19/10/2022	Decision by Parliament, 1st reading	T9-0368/2022	Summary
19/10/2022	Matter referred back to the committee responsible		
24/05/2023	Approval in committee of the text agreed at 1st reading interinstitutional negotiations	PE746.979 GEDA/A/(2023)003058	
10/07/2023	Debate in Parliament		
11/07/2023	Results of vote in Parliament		
11/07/2023	Decision by Parliament, 1st reading	T9-0261/2023	Summary
25/07/2023	Act adopted by Council after Parliament's 1st reading		
13/09/2023	Final act signed		
22/09/2023	Final act published in Official Journal		

Technical information

Procedure reference	2021/0223(COD)
Procedure type	COD - Ordinary legislative procedure (ex-codecision procedure)
Procedure subtype	Legislation
Legislative instrument	Regulation
	Repealing Directive 2014/94/EU 2013/0012(COD)
Legal basis	Treaty on the Functioning of the EU TFEU 091-p1
Other legal basis	Rules of Procedure EP 159

Mandatory consultation of other institutions	European Economic and Social Committee European Committee of the Regions
Stage reached in procedure	Procedure completed
Committee dossier	TRAN/9/06915

Documentation gateway					
Legislative proposal		COM(2021)0559	14/07/2021	EC	Summary
Document attached to the procedure		SEC(2021)0560	15/07/2021	EC	
Document attached to the procedure		SWD(2021)0631	15/07/2021	EC	
Document attached to the procedure		SWD(2021)0632	15/07/2021	EC	
Document attached to the procedure		SWD(2021)0637	15/07/2021	EC	
Document attached to the procedure		SWD(2021)0638	15/07/2021	EC	
Committee draft report		PE719.568	14/02/2022	EP	
Amendments tabled in committee		PE729.978	21/03/2022	EP	
Amendments tabled in committee		PE729.986	21/03/2022	EP	
Amendments tabled in committee		PE729.987	21/03/2022	EP	
Committee opinion	ENVI	PE702.951	07/04/2022	EP	
Committee opinion	ITRE	PE702.990	27/04/2022	EP	
Committee opinion	REGI	PE703.063	02/05/2022	EP	
Committee report tabled for plenary, 1st reading/single reading		A9-0234/2022	04/10/2022	EP	Summary
Text adopted by Parliament, partial vote at 1st reading/single reading		T9-0368/2022	19/10/2022	EP	Summary
Coreper letter confirming interinstitutional agreement		GEDA/A/(2023)003058	26/04/2023	CSL	
Text agreed during interinstitutional negotiations		PE746.979	26/04/2023	EP	
Text adopted by Parliament, 1st reading/single reading		T9-0261/2023	11/07/2023	EP	Summary
Draft final act		00025/2023/LEX	13/09/2023	CSL	
Commission response to text adopted in plenary		SP(2023)459	30/10/2023	EC	

Additional information		
Research document	Briefing	19/11/2021

Final act
Regulation 2023/1804 OJ L 234 22.09.2023, p. 0001 Summary

PURPOSE: to set out new mandatory national targets for the deployment of sufficient alternative fuels infrastructure in the EU, for road vehicles, vessels and stationary aircraft.

PROPOSED ACT: Regulation of the European Parliament and of the Council.

ROLE OF THE EUROPEAN PARLIAMENT: the European Parliament decides in accordance with the ordinary legislative procedure and on an equal footing with the Council.

BACKGROUND: Directive 2014/94/EU on the deployment of alternative fuels infrastructure sets out a framework of common measures for the deployment of such infrastructure in the EU. It requires Member States to set up national policy frameworks to establish markets for alternative fuels and ensure that an appropriate number of publicly accessible recharging and refuelling points is put in place, particularly also to enable free cross-border circulation of such vehicles and vessels on the TEN-T network. However, there are shortcomings to the current policy framework.

There is no detailed and binding methodology for Member States to calculate targets and adopt measures, their level of ambition in target setting and supporting policies in place varies greatly. A comprehensive and complete network of alternative fuels infrastructure does not exist across the EU.

Therefore, this new initiative seeks to ensure the availability and usability of a dense, widespread network of alternative fuels infrastructure throughout the EU. All users of alternative fuel vehicles (including vessels and aircraft) need to be able to move through the EU at ease, enabled by key infrastructure such as motorways, ports and airports.

The European Green Deal launched a new growth strategy for the EU that aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy. The [European Climate Law](#) has made the EU's climate neutrality target by 2050 legally binding.

The Commission has presented a complementary and interconnected set of proposals as part of the 2030 Climate and Energy Fit for 55 package to achieve the greenhouse gas emission reduction target of at least 55% compared to 1990. This Fit for 55 legislative package is the most comprehensive building block in the efforts to implement the ambitious new 2030 climate target, and all economic sectors and policies will need to make their contribution.

CONTENT: under this proposal, the Commission sets up a new Regulation repealing the current Directive 2014/94/EU on the deployment of alternative fuels infrastructure. The new Regulation:

- lays down provisions for the rollout of certain recharging and refuelling infrastructure for light- and heavy-duty road transport vehicles, vessels and aircraft;
- sets out provisions for Member States to ensure minimum coverage of publicly accessible recharging points dedicated to light- and heavy-duty road transport vehicles on their territory, including on the TEN-T core and comprehensive network. To ensure that drivers are able to charge or fuel their vehicles at a reliable network across Europe, the proposed Regulation will require Member States to expand charging capacity in line with zero-emission car sales, and to install charging and fuelling points at regular intervals on major highways: every 60 kilometres for electric charging and every 150 kilometres for hydrogen refuelling;
- provides further provisions for ensuring user-friendliness of recharging infrastructure. This includes provisions on payment options, price transparency and consumer information, non-discriminatory practices, smart recharging, and signposting rules for electricity supply to recharging points;
- provides further provisions for ensuring user-friendliness of refuelling infrastructure for hydrogen, including through minimum requirements on payment options, price transparency and contractual choice;
- contains provisions for Member States to ensure until 1 January 2025 minimum coverage of publicly accessible refuelling points for liquefied natural gas dedicated to heavy-duty vehicles on the TEN-T core and comprehensive network;
- sets out provisions for Member States to ensure installation of a minimum shore-side electricity supply for certain seagoing ships in maritime ports and for inland waterway vessels;
- requires Member States to ensure an appropriate number of LNG refuelling points in maritime TEN-T ports and to identify relevant ports through their national policy frameworks;
- concerns minimum provisions for electricity supply to all stationary aircraft in TEN-T core and comprehensive network airports;
- reformulates provisions for Member States national policy frameworks;
- sets out reporting obligations corresponding to provisions for Member States on national policy frameworks and national progress reports;
- covers user information requirements in the form of fuel labels and information requirements on fuel price comparison.

Deployment of alternative fuels infrastructure

The Committee on Transport and Tourism adopted a report by Ismail ERTUG (S&D, DE) on the proposal for a regulation of the European Parliament and of the Council on the deployment of alternative fuels infrastructure, and repealing Directive 2014/94/EU of the European Parliament and of the Council.

The committee recommended that the European Parliament's position adopted at first reading under the ordinary legislative procedure should amend the proposal as follows:

Mandatory recharging

The proposed Regulation sets out minimum national targets for the deployment of sufficient alternative fuels infrastructure in the Union, for road vehicles, vessels, trains and stationary aircraft. It lays down common technical specifications and requirements on user information, data

provision and payment requirements for alternative fuels infrastructure. Member States should present their deployment plans for this infrastructure by 2024.

Targets for electric recharging infrastructure dedicated to light-duty vehicles

According to the amended text, electric charging pools for cars would have to be deployed at least every 60 km along main EU roads by 2026. Following a reasoned request by a Member State, the Commission may grant an exemption from the maximum distance requirement for TEN-T roads with a total annual average daily traffic of less than 1500 light-duty vehicles, provided that the infrastructure cannot be justified in socioeconomic cost-benefit terms. Where such a derogation is granted, Member States may allow a higher maximum distance of up to 100km between recharging points.

In densely populated areas and regions with a lack of available off-street parking or high uptake in registered light duty electricity vehicles, Member States shall ensure that the number of publicly accessible recharging stations is increased accordingly in order to provide the necessary infrastructure and support the market development.

Member States should ensure that all publicly accessible recharging pools along the TEN-T comprehensive network that allow cycle traffic, are equipped with a household power plug that allows for charging of electric power cycles. The report stated that in the case of rapid market uptake of electric vehicles in any relevant reporting period, Member States should shorten the specified deadlines accordingly and increase the targets for recharging pools accordingly.

Targets for electric recharging infrastructure dedicated to heavy-duty vehicles

For trucks and buses, the same requirements would apply by 2026, but only on core TEN-T networks. Parliament also want charging stations for trucks in a safe and secure parking place to be deployed more quickly: two charging stations from 2028 instead of one from 2031 as proposed by the Commission. In all cases, some deployment exemptions would apply to outermost regions, islands and roads with very little traffic.

Targets for hydrogen refuelling infrastructure of road vehicles

The amended text suggested setting up more hydrogen refuelling stations along main EU roads compared to the Commission proposal (every 100 km as opposed to every 150 km) and to do it faster (by 2028 as opposed to by 2031).

Simple recharging and maintenance

Parliament advocates the simplification and harmonisation of recharging stations. Users of alternative fuel vehicles should be able to pay easily, the price should be displayed per kWh or per kg, be affordable, comparable and accessible to all vehicle brands. Additionally, if possible, devices using an internet connection with which for instance a Quick Response code can be specifically generated and used for the payment transaction may be provided.

Operators of publicly accessible recharging points should ensure that the recharging stations operate correctly throughout their commercial lifetime. Regular maintenance and repair should be executed as soon as any malfunction is detected.

Signposting should also be deployed at an appropriate distance on the TEN-T road network leading up to parking and rest areas where such alternative fuels infrastructure is installed.

Members also called for an EU access point for alternative fuels data to be set up by 2027 to provide information on the availability, waiting times and prices at different stations.

Maritime transport

According to Members, Member States should ensure that an appropriate number of refuelling points for LNG, ammonia and hydrogen are put in place at TEN-T core maritime ports by 1 January 2025.

Deployment of alternative fuels infrastructure

The European Parliament adopted by 485 votes to 65, with 80 abstentions, amendments to the proposal for a regulation of the European Parliament and of the Council on the deployment of alternative fuels infrastructure, and repealing Directive 2014/94/EU of the European Parliament and of the Council.

The matter was referred back to the committee responsible for interinstitutional negotiations.

The main amendments adopted in plenary concern the following points:

Mandatory recharging

The proposed Regulation sets out minimum national targets for the deployment of sufficient alternative fuels infrastructure in the Union, for road vehicles, vessels, trains and stationary aircraft. Member States should present their deployment plans for this infrastructure by 2024.

Targets for electric charging infrastructure for light-duty vehicles

Member States should ensure that:

- (i) publicly accessible charging stations: (i) are deployed on their territory and distributed in a balanced way to support multi-modal travel; (ii) deployed on public roads in residential areas where vehicles typically park for extended periods of time;
- a sufficient number of publicly accessible recharging stations are enabled for smart and bi-directional charging;
- necessary electricity grid connection and capacity is provided.

Member States should ensure the deployment of minimum power output targets of recharging infrastructure at national level that is sufficient for: (i) 3 % of the total projected light-duty vehicle fleet by 31 December 2027; (ii) 5 % of the total projected light-duty vehicle fleet by 31 December 2030.

According to the amended text, electric charging pools for cars would have to be deployed at least every 60 km along main EU roads by 2026. Following a reasoned request by a Member State, the Commission may grant an exemption from the maximum distance requirement for TEN-T roads with a total annual average daily traffic of less than 1500 light-duty vehicles, provided that the infrastructure cannot be justified in socioeconomic cost-benefit terms. Where such a derogation is granted, Member States may allow a higher maximum distance of up to 100km between recharging points.

In densely populated areas and regions with a lack of available off-street parking or high uptake in registered light duty electricity vehicles, Member States should ensure that the number of publicly accessible recharging stations is increased accordingly in order to provide the necessary infrastructure and support the market development.

The Commission should review the need to include requirements for charging infrastructure to serve electrically power assisted cycles and L-category vehicles such as powered electric cycles and e-mopeds, and in particular the opportunity to equip charging infrastructure with a household power socket that makes it possible for such vehicles to be easily charged, since they represent a mode of transport that can help further reduce CO2 emissions and air pollution.

Targets for electric recharging infrastructure dedicated to heavy-duty vehicles

For trucks and buses, the same requirements would apply by 2026, but only on core TEN-T networks with charging stations providing an output of at least 100 kW. Members also want charging stations for trucks in a safe and secure parking place to be deployed more quickly: two charging stations from 2028 (instead of one from 2031 as proposed by the Commission) and four charging stations by 31 December 2030.

In all cases, some deployment exemptions would apply to outermost regions, islands and roads with very little traffic.

Targets for hydrogen refuelling infrastructure of road vehicles

The amended text suggested setting up more hydrogen refuelling stations along main EU roads compared to the Commission proposal (every 100 km as opposed to every 150 km) and to do it faster (by 2028 as opposed to by 2031).

Infrastructure targets for railway lines

The text stressed the urgent need to continue the deployment of alternative fuel infrastructure in the railway sector to ensure the move away from fossil fuel trains. Where direct electrification of railway lines is not possible, Member States should ensure the provision of an appropriate number of charging stations for battery-powered trains, and hydrogen refuelling stations for rail.

Maritime transport

According to Members, Member States should ensure that an appropriate number of refuelling points for LNG, ammonia and hydrogen are put in place at TEN-T core maritime ports by 1 January 2025.

Simple recharging and maintenance

Parliament advocates the simplification and harmonisation of recharging stations. Users of alternative fuel vehicles should be able to pay easily, the price should be displayed per kWh or per kg, be affordable, comparable and accessible to all vehicle brands. Additionally, if possible, devices using an internet connection with which for instance a Quick Response code can be specifically generated and used for the payment transaction may be provided.

Operators of publicly accessible recharging points should ensure that the recharging stations operate correctly throughout their commercial lifetime. Regular maintenance and repair should be executed as soon as any malfunction is detected.

Signposting should also be deployed at an appropriate distance on the TEN-T road network leading up to parking and rest areas where such alternative fuels infrastructure is installed.

Members also called for an EU access point for alternative fuels data to be set up by 2027 to provide information on the availability, waiting times and prices at different stations.

Deployment of alternative fuels infrastructure

The European Parliament adopted by 514 votes to 52, with 74 abstentions, a legislative resolution on the proposal for a regulation of the European Parliament and of the Council on the deployment of alternative fuels infrastructure and repealing Directive 2014/94/EU of the European Parliament and of the Council.

This Regulation establishes mandatory national targets leading to the deployment of sufficient alternative fuels infrastructure in the Union for road vehicles, trains, vessels and stationary aircraft. It lays down common technical specifications and requirements on user information, data provision and payment requirements for alternative fuels infrastructure.

The European Parliament's position adopted at first reading under the ordinary legislative procedure amends the Commission's proposal as follows:

Targets for electric recharging infrastructure for light electric vehicles

Member States should ensure that in their territory charging stations for light electric vehicles open to the public are deployed in proportion to the uptake of light electric vehicles and provide sufficient power output for these vehicles. To this end, Member States should ensure that, by the end of each year, the following power output targets are cumulatively met: (a) for each battery electric light-duty vehicle registered in their territory, a total power output of at least 1.3 kW is provided by publicly available charging stations; and (b) for each plug-in hybrid electric light-duty vehicle registered in their territory, a total power output of at least 0.80 kW is provided by publicly available charging stations.

Under the amended text, electric charging stations with a capacity of at least 400 kW for cars should be deployed at least every 60 km on the TEN-T core network by 31 December 2025. The power must be increased to 600 kW by 31 December 2027. By 31 December 2027 at the latest, on at least 50% of the length of the overall TEN-T road network, each recharging park must provide an output power of at least 300 kW and include at least one recharging point with an individual output power of at least 150 kW.

Targets for electric recharging infrastructure reserved for electric heavy goods vehicles

For trucks and buses, charging stations should be provided every 120 km. These facilities should be installed along at least 15% of the length of the TEN-T road network by 31 December 2025, with an output power of at least 1400 kW. They should be installed on 50% of the major roads in the EU by 2028, with an output of 1400 kW along the TEN-T core road network and 2800 kW along the overall TEN-T road network.

By 31 December 2030, along the TEN-T core road network, each recharging pool offers a power output of at least 3 600 kW and includes at least two recharging points with an individual power output of at least 350 kW. Each recharging pool offers a power output of at least 1 500 kW and includes at least one recharging point with an individual power output of at least 350 kW.

By 31 December 2027 at the latest, each safe and secure parking area must be equipped with at least two publicly accessible recharging stations (four charging stations by 31 December 2030 at the latest) and provide an individual output power of at least 100 kW.

Targets for hydrogen refuelling infrastructure for road vehicles

Member States should ensure that hydrogen refuelling stations are deployed at least every 200 km along the TEN-T core network by 2031. Member States should reduce the capacity of a hydrogen refuelling station open to the public by up to 50% along roads in the TEN-T core network where the total annual average daily traffic is less than 2000 heavy duty vehicles and where the deployment of the infrastructure cannot be justified on socio-economic cost-benefit grounds.

Exemptions are provided for the outermost regions of the Union and for islands.

Charging infrastructure

Users of alternative fuel vehicles should be able to pay easily at recharging points (with payment cards or contactless devices and without a need to have a subscription). Prices of these fuels should be displayed per kWh, kg or per minute/session.

Infrastructures for liquefied methane for road transport vehicles

Until 31 December 2024, Member States should ensure that an appropriate number of publicly accessible refuelling points for liquefied methane are deployed, at least along the TEN-T core network, in order to allow heavy-duty motor vehicles using liquefied methane to circulate throughout the Union, where there is demand, unless the costs of doing so are disproportionate to the benefits, including environmental benefits.

Targets for shore-side electricity supply in maritime ports

The setting of binding targets for deployment should ensure that the industry has sufficient shore-side electricity for ships that are moored at the quayside in TEN-T core maritime ports and TEN-T comprehensive maritime ports to comply with those requirements. Therefore, clear targets for shore-side electricity infrastructure deployment in TEN-T ports are laid down.

Since Member States have different governance models for ports, in order to reach those targets, Member States should be able to decide on the best way for them in which to deploy infrastructure within their ports and in the different terminals according to their needs.

Targets for supply of electricity to stationary aircraft

Member States should ensure that, at all airports of the TEN-T core network and TEN-T comprehensive network, the provision of electricity supply to stationary aircraft is ensured by 31 December 2029, at all aircraft remote stands used for commercial air transport operations to embark or disembark passengers or to load or unload goods.

User information

Relevant, consistent and clear information should be made available as regards motor vehicles placed on the market which are capable of being regularly recharged or refuelled. That information should be made available: (a) in motor vehicle manuals and on motor vehicles, by the manufacturers, when those vehicles are placed on the market; (b) at recharging and refuelling points, by recharging and refuelling point operators; and (c) in motor vehicle dealerships, by the distributors.

The amended text also provides for the establishment, by 2027, of a European access point for data on alternative fuels, to provide information on availability, waiting times and prices at the various stations

Deployment of alternative fuels infrastructure

PURPOSE: to deploy sufficient alternative fuels infrastructure in the Union, in particular for road vehicles, trains, vessels and stationary aircraft.

LEGISLATIVE ACT: Regulation (EU) 2023/1804 of the European Parliament and of the Council on the deployment of alternative fuels infrastructure and repealing Directive 2014/94/EU.

CONTENT : this Regulation establishes mandatory national targets leading to the deployment of sufficient alternative fuels infrastructure in the Union, which will enable the transport sector to significantly reduce its carbon footprint.

Main deployment targets for 2025 and 2030

The regulation sets out specific deployment targets to be achieved by 2025 or 2030, including:

- electric recharging pools with a capacity of at least 400 kW for cars will have to be deployed at least every 60 km on the core network of the European transport network (TEN-T) by 31 December 2025. The power must be increased to 600 kW by 31 December 2027. By 31 December 2027, on at least 50% of the overall TEN-T road network, each recharging pool must offer an output power of at least 300 kW and include at least one recharging point with an individual output power of at least 150 kW;

- no later than 31 December 2025, at least along 15% of the length of the TEN-T road network, charging stations for electric heavy goods vehicles must be deployed in each direction of travel; each charging station must provide an output power of at least 1400 kW and include at least one recharging point with a minimum output power of 350 kW;

- no later than 31 December 2030, recharging pools for electric heavy goods vehicles with a minimum output of 350 kW must be deployed every 60 km along the TEN-T core network and every 100 km on the wider TEN-T overall network;
- by 31 December 2027 at the latest, each safe and secure parking area must be equipped with at least two publicly accessible recharging stations (four charging stations by 31 December 2030 at the latest) and provide an individual output power of at least 100 kW;
- hydrogen refuelling stations serving both cars and lorries must be deployed from 2030 onwards in all urban nodes and every 200 km along the TEN-T core network;
- maritime ports welcoming a minimum number of large passenger vessels, or container vessels, must provide shore-side electricity for such vessels by 2030;
- airports must provide electricity to stationary aircraft at all gates by 2025, and at all remote stands by 2030.

Recharging infrastructure

Users of alternative fuel vehicles should be able to pay easily at recharging points (with payment cards or contactless devices and without the need for a subscription). Prices for these fuels should be displayed per kWh, per minute or per session.

Relevant, consistent and clear information will be made available as regards motor vehicles placed on the market which are capable of being regularly recharged or refuelled.

Operators of recharging or refuelling points will provide consumers electronically with comprehensive information on availability, waiting times or prices at the various stations. The regulation provides for a European access point for data on alternative fuels to be set up by 2027.

ENTRY INTO FORCE: 12.10.2023.

APPLICATION: from 13.4.2024.

Transparency				
ERTUG Ismail	Rapporteur	TRAN	08/03/2023	MUST & Partners S.r.l.
ERTUG Ismail	Rapporteur	TRAN	07/03/2023	Bayerische Motoren Werke Aktiengesellschaft Hydrogen Europe
ERTUG Ismail	Rapporteur	TRAN	01/03/2023	European Distribution System Operators (E.DSO)
ERTUG Ismail	Rapporteur	TRAN	28/02/2023	TRATON Group
ERTUG Ismail	Rapporteur	TRAN	02/02/2023	Hydrogen Europe
ERTUG Ismail	Rapporteur	TRAN	01/02/2023	Italian Ministry of Transport
ERTUG Ismail	Rapporteur	TRAN	31/01/2023	?koda Group a.s.
ERTUG Ismail	Rapporteur	TRAN	31/01/2023	Bayerische Motoren Werke Aktiengesellschaft
ERTUG Ismail	Rapporteur	TRAN	30/01/2023	Hydrogen Europe
ERTUG Ismail	Rapporteur	TRAN	24/01/2023	European Boating Industry
BILBAO BARANDICA Izaskun	Member	13/07/2022	ASOCIACIÓN ESPAÑOLA DE FABRICANTES DE AUTOMÓVILES Y CAMIONES	
FURORE Mario	Member	25/04/2022	IVECO GROUP N.V.	
DALUNDE Jakop G.	Member	09/03/2022	Lucid Motors	

