



ASOCIAȚIA PRODUCĂTORILOR ȘI IMPORTATORILOR DE AUTOMOBILE
THE ASSOCIATION OF AUTOMOTIVE MANUFACTURERS AND IMPORTERS

Global / national perspectives on the evolution of electric mobility and infrastructure

www.apia.ro

SMART CITIES of ROMANIA
Bucharest, 23 October 2019

- ***The car park in Romania; the evolution of the “green cars”***
- ***Global perspectives of electro mobility***
- ***Local initiatives for the development of electro mobility***
- ***APIA VISION 2019-2030 «Sustainable, safe and efficient mobility»***



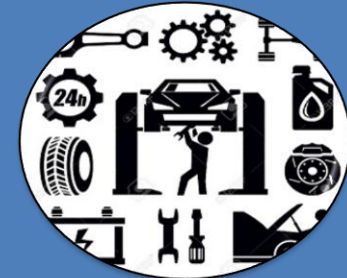
Vehicle manufacturers and official importers for most auto brands:

FORD, ALFA ROMEO, AUDI, BMW & MINI, CITROEN, FIAT, HONDA, HYUNDAI, IVECO, JAGUAR & LAND ROVER, KIA, MAN, MAZDA, MERCEDES & SMART, MITSUBISHI, OPEL, PEUGEOT, SEAT, SKODA, SUZUKI, TOYOTA & LEXUS, VOLKSWAGEN, VOLVO



Suppliers of automotive services:

ALLIANZ TIRIAC ASIGURARI, AUDATEX SERVICES, IMPULS LEASING IFN, NEW KOPEL CAR IMPORT, REMATHOLDING, ROMEXPO SA, DELOITTE ROMANIA, SGS ROMANIA



Suppliers of automotive components & accessories:

AUTONET, CROMINVENT, FALCON ELECTRONICS, GOODYEAR, LUKOIL LUBRICANTS EAST EUROPE, NOVATECH

Asociatia Producatorilor si Importatorilor de Automobile – APIA – since 1994!



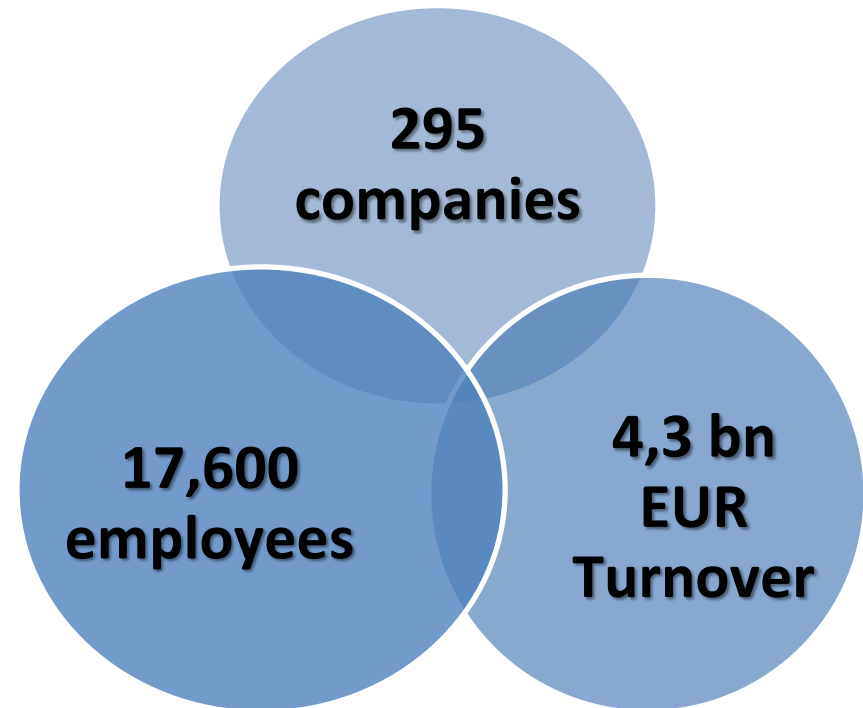
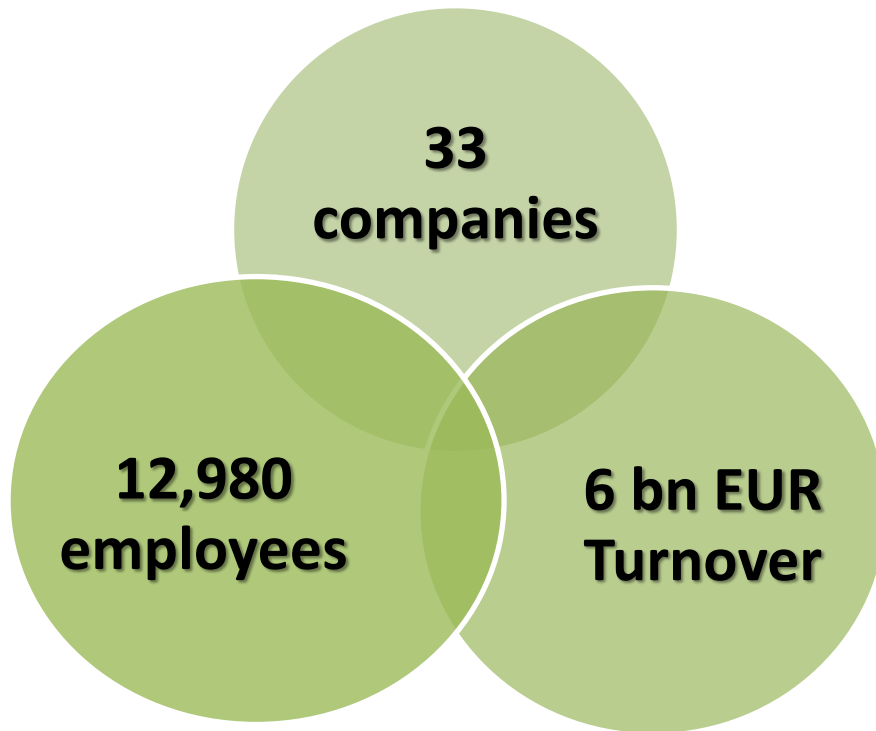
1996 – APIA becomes full member of OICA – International Organization of Automobile Manufacturers



2012 – APIA becomes guest member of ACEM – European Association of Motorcycle Manufacturers

Asociatia Producatorilor si Importatorilor
de Automobile – APIA, in figures

.....and indirect authorized distribution &
aftersales services



10,3 bn EUR turnover = 5.1% of GDP



**ASOCIAȚIA PRODUCĂTORILOR ȘI
IMPORTATORILOR DE AUTOMOBILE**

Debates Forum – APIA members debate general issues and develop common programs or public position.

Representing APIA members in other national organizations (CCIR, ASRO, CST) or international organizations (OICA and ACEM)






Organizes SIAB - the only international auto show in Romania, registered in the OICA Official Calendar

It represents APIA members in front of public authorities and institutions and constantly collaborates with them on issues of interest to the automotive sector.

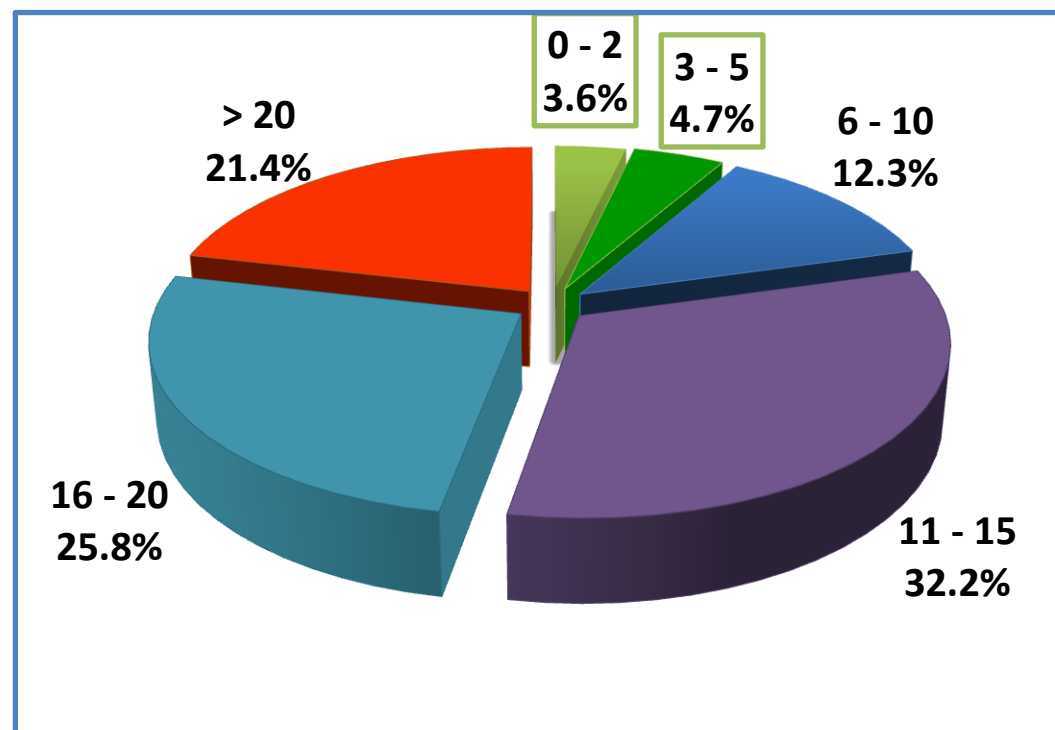
It organizes specific events (seminars, symposiums, conferences, etc.) through which it presents, analyzes and evaluates the evolution of the automotive sector and the public policies of interest to it.

Provides statistical information services (car park in Romania, car market in RO and EU), legislative, in the field of human resources, education etc.

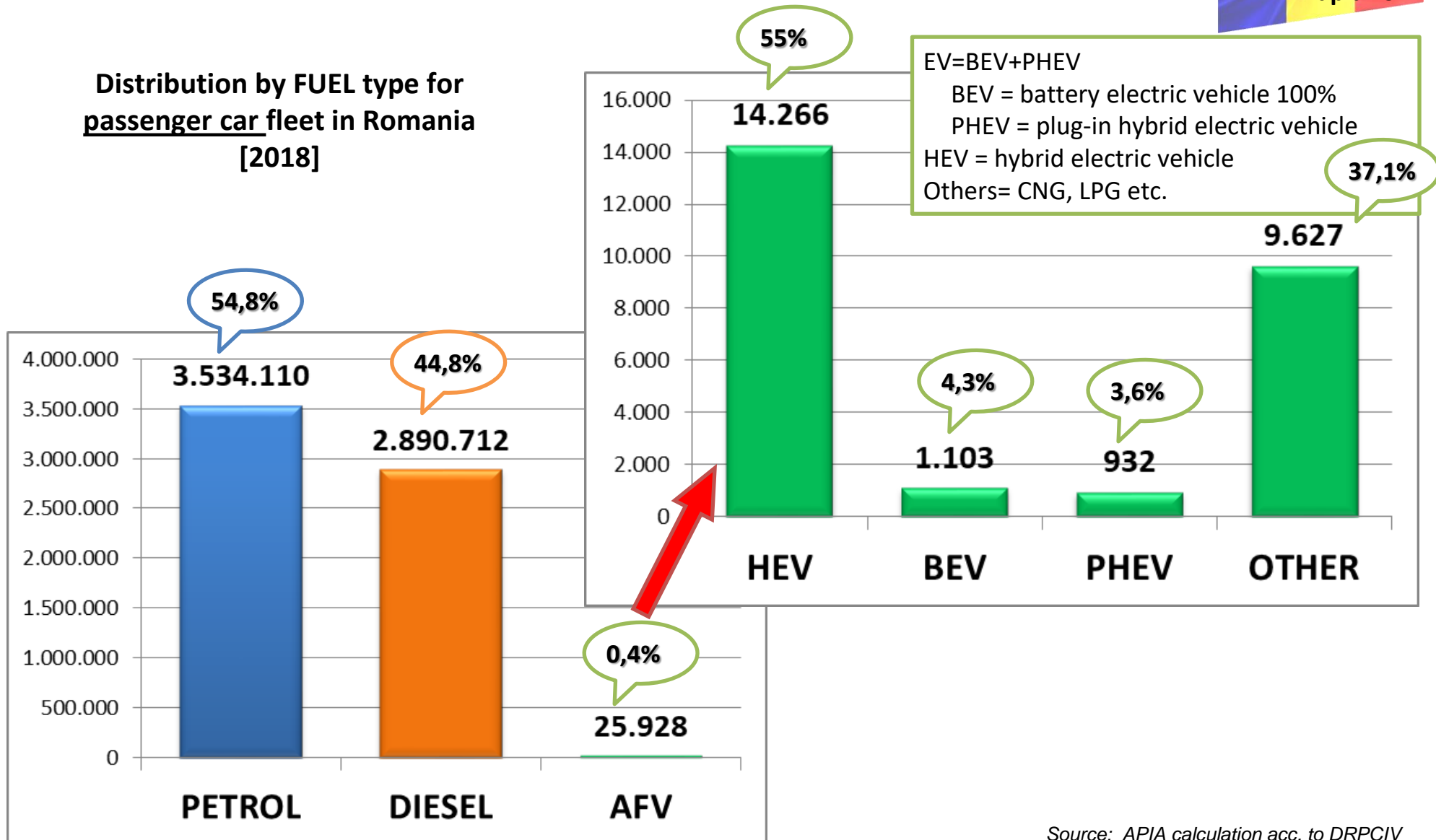
Romania vehicle fleet [2018]

	Passenger car	CV	Buses	Vehicle with 2-3 wheels	Others
TOTAL vehicles					
7.760.320	6.450.750	911.329	50.731	136.440	211.070

Distribution by AGE of passenger cars fleet [years, 2018]

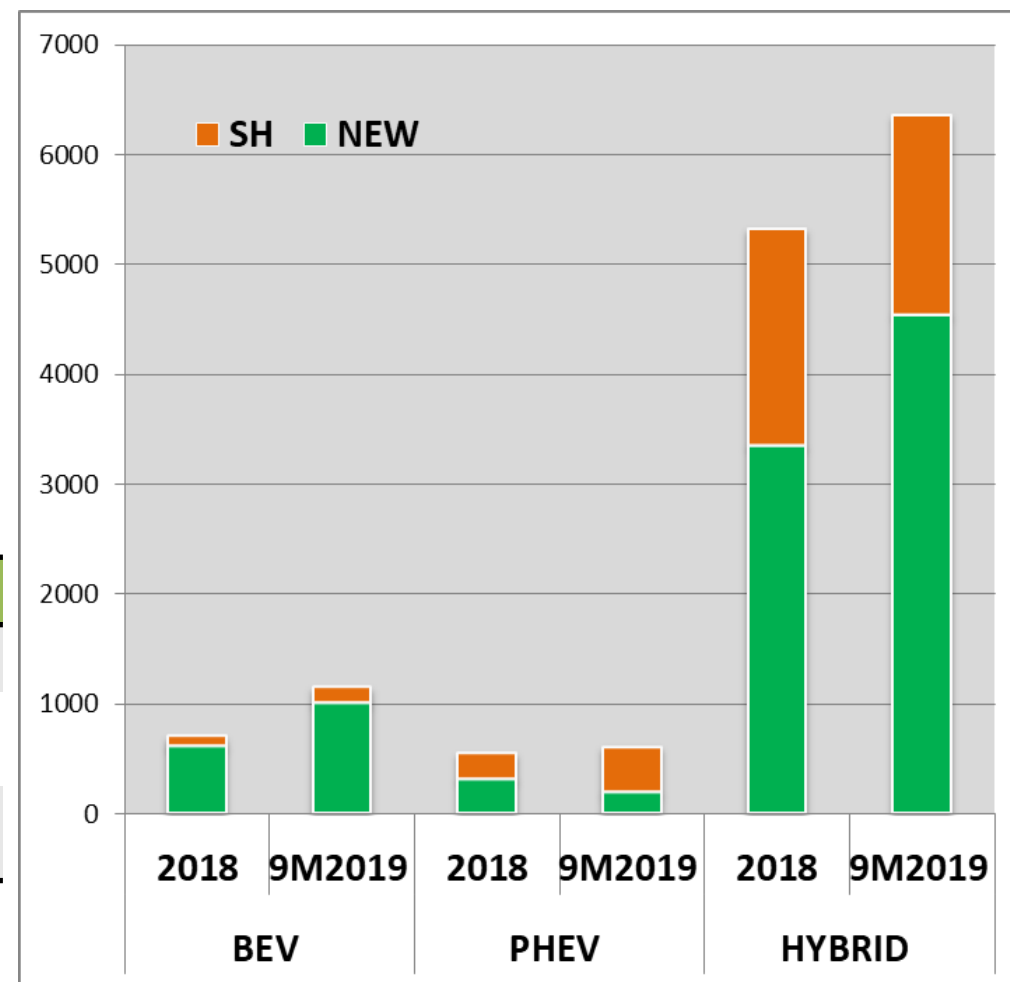


**Distribution by FUEL type for
passenger car fleet in Romania
[2018]**



Passenger cars registration – ELECTRIC & HYBRID in Romania

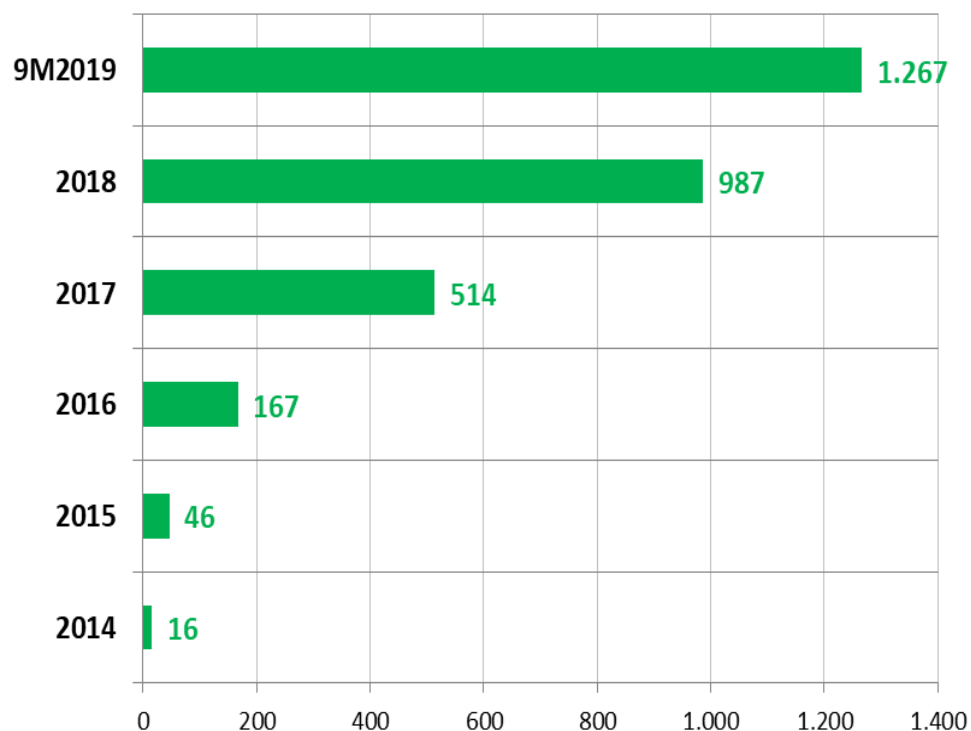
	BEV		PHEV		HYBRID	
<u>2018</u>	NEW	SH	NEW	SH	NEW	SH
ROMANIA	607	87	310	232	3.342	1.978
<u>% of total</u>	0,5%	0,02%	0,2%	0,05%	2,6%	0,4%



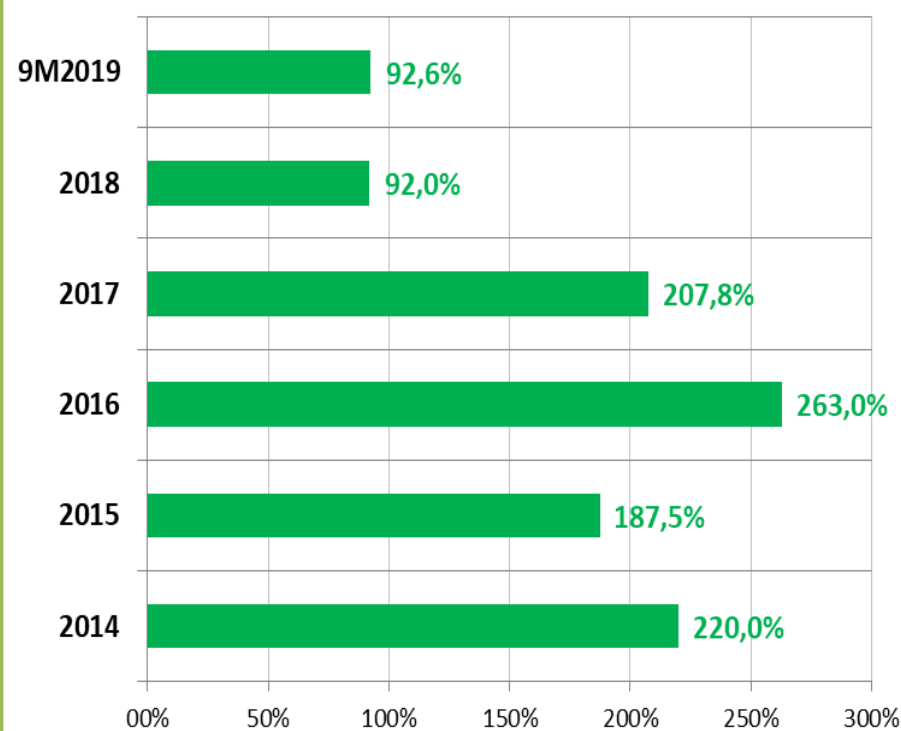
	BEV		PHEV		HYBRID	
<u>9M2019</u>	NEW	SH	NEW	SH	NEW	SH
ROMANIA	1.001	140	183	416	4.536	1.819
<u>% of total</u>	0,8%	0,04%	0,1%	0,1%	3,7%	0,6%

New passenger car sales in Romania (2014 - 9M2019)

EV_PC (BEV+PHEV+EREV)

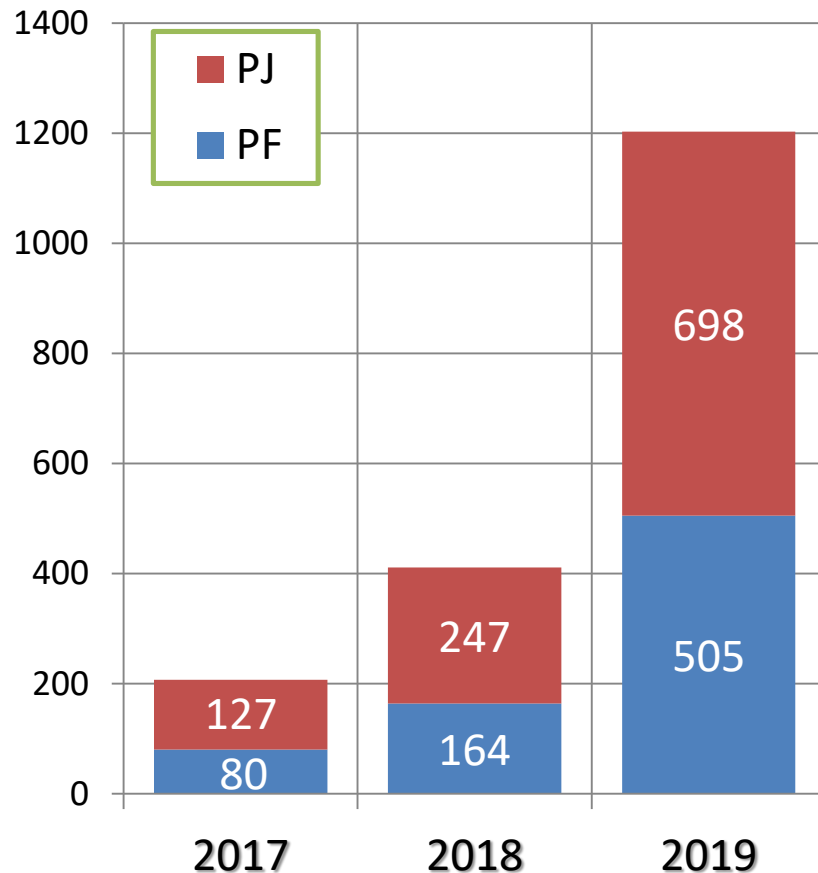


EV_PC % (YoY)



Program RABLA Plus EV

(acc. to AFM for Romania, EV reserved at **30 Sept**)



Program on reducing greenhouse gas emissions in transport, by promoting energy-efficient road transport vehicles **RABLA PLUS EV**, for acquisition of new pure electric vehicles or new hybrid electric vehicles

- **MAXIMUM AMOUNT** (max 50% of the selling price):
 - ✓ 45,000 lei (**9.600 EUR**) for new BEV
 - ✓ 20,000 lei (**4.200 EUR**) for new PHEV, which generates emissions less than 50 gCO₂/km NEDC.

	12M2018		10M2019	
subscription from <u>legal persons</u>	BEV	PHEV	BEV	PHEV
ROMANIA	921	221	1.329	259

„The automotive world will change more over the next ten years than it has during the course of the last 100 years.“

Dr. Wolfgang Porsche

*Chairman of the Porsche AG Supervisory Board and the
Porsche Automobil Holding SE*

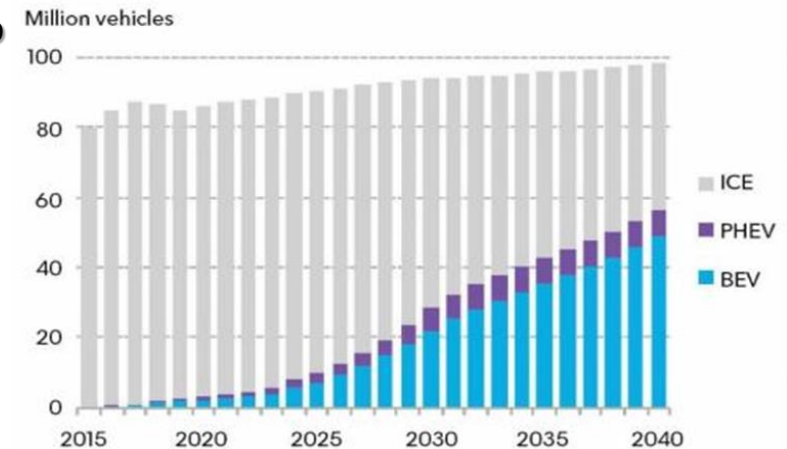
What analysts say....about EV

According to S&P Global, global EV car sales surged 63 percent in 2018—by 79 percent in China, by 81 percent in the U.S., and by 34 percent in Europe.

The International Energy Agency forecasts that EVs will grow from 3 million today to 125 million by 2030.

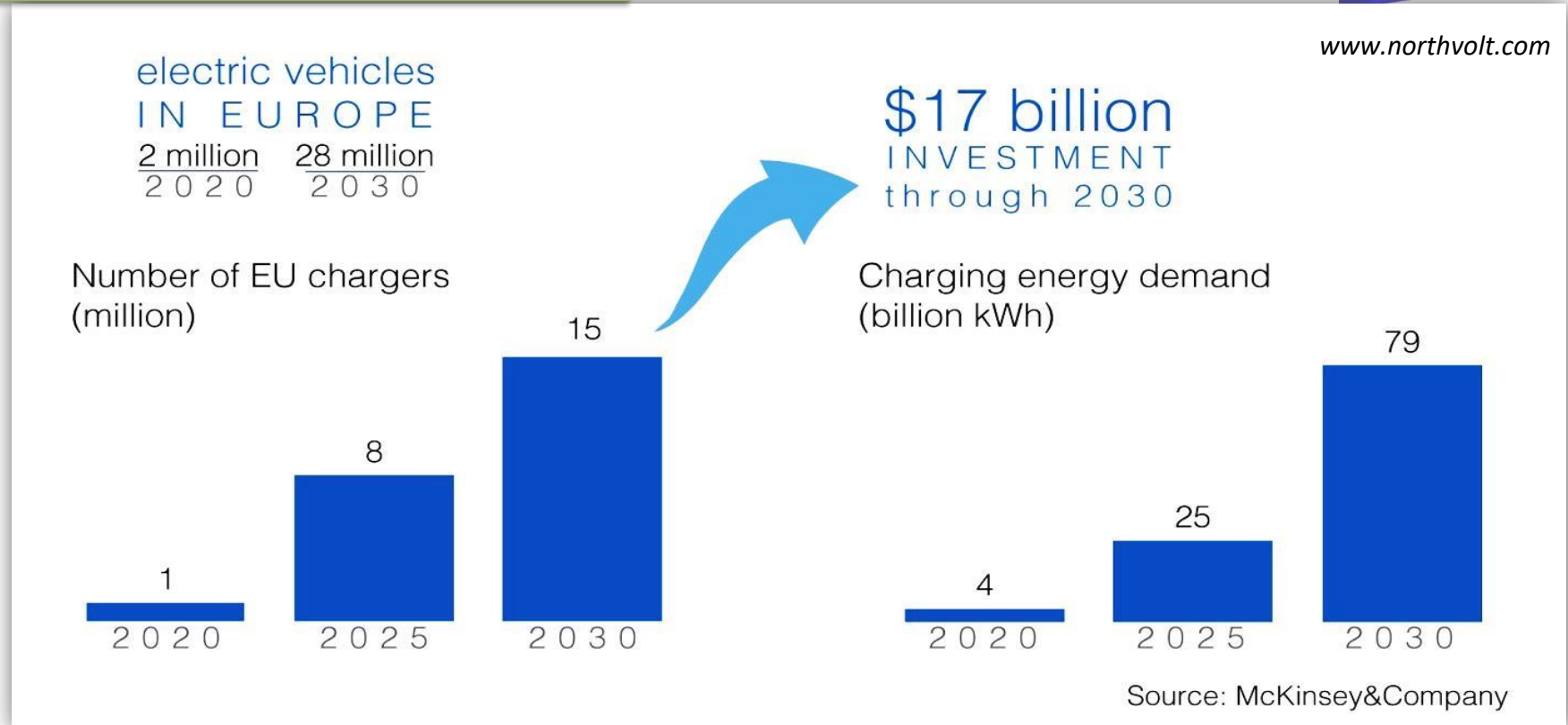
In its Electric Vehicle Outlook 2019, Bloomberg predicts that 57 percent of all global passenger vehicle sales will be electric by 2040

Global long-term passenger vehicle sales by drivetrain

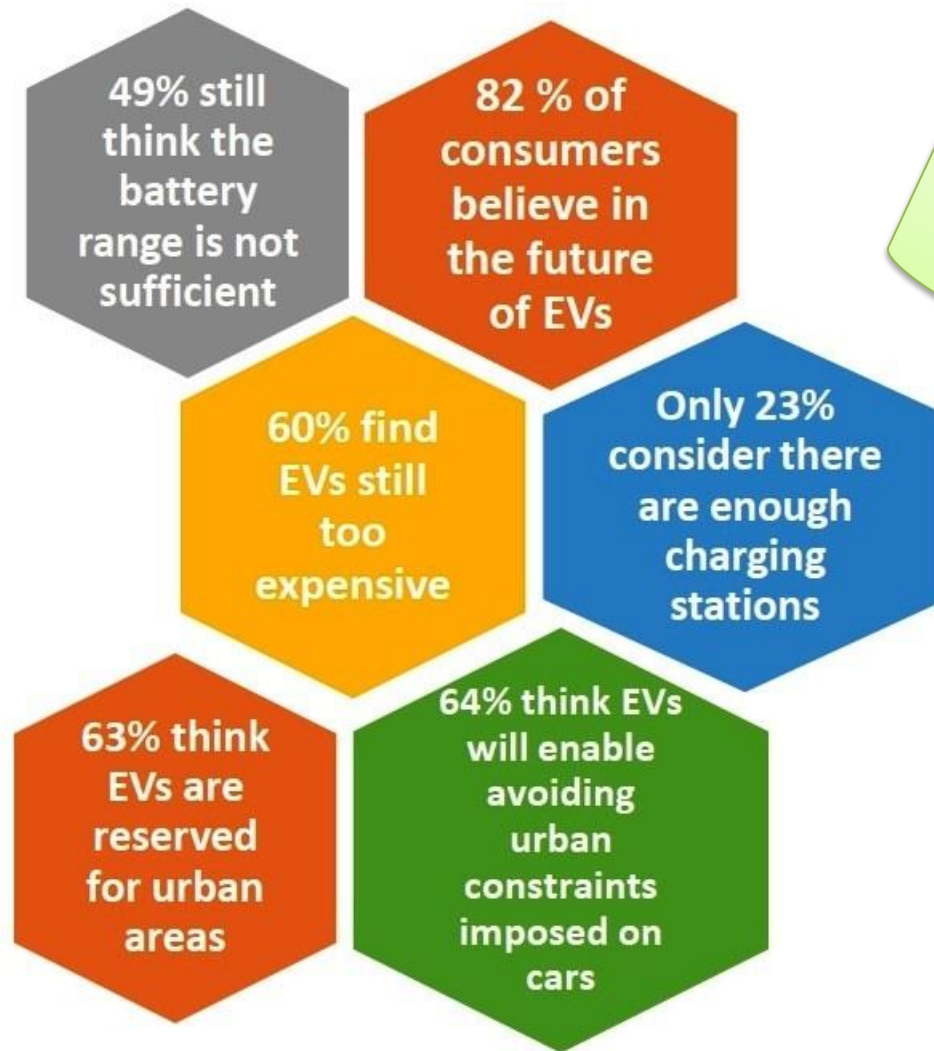


Source: BloombergNEF

What analysts say....about EV chargers



- EC estimates at least two million chargers will be needed in Europe by 2025.
- McKinsey, for instance, suggest that 8 million chargers will be deployed by 2025 to meet a base scenario of EVs on the road jumping from 2 million in 2020 to 28 million in 2030 (McKinsey, 2018).
- McKinsey also estimates that the EU's need for chargers will require some \$17 billion of investment from 2020 to 2030, to enable some 24 million chargers.
- **September 4th, 2019: ACEA, Eurelectric and T&E** are calling on the European institutions to facilitate a rapid roll-out of smart charging infrastructure for electrically-chargeable vehicles.



**An Educated Consumer
Is The Best Customer**

BENCHMARK STUDY:

“ROAD INFRASTRUCTURE & NEW MOBILITY “

released during the 26th **World Road Congress**, held in Abu Dhabi (UAE), 6 – 10 October 2019, organized by World Road Association (PIARC)

Electric Vehicle Charging Infrastructure: Guidelines for Cities (2018)

Report by [CleanTechnica](#) and [GreenWay](#), co-financed by the Connecting Europe Facility of the EU

Measures that municipalities have taken to incentivize EV adoption

1. Raising awareness
about the benefits of
e-mobility and its
influence for citizens'
health

2. Parking
incentives

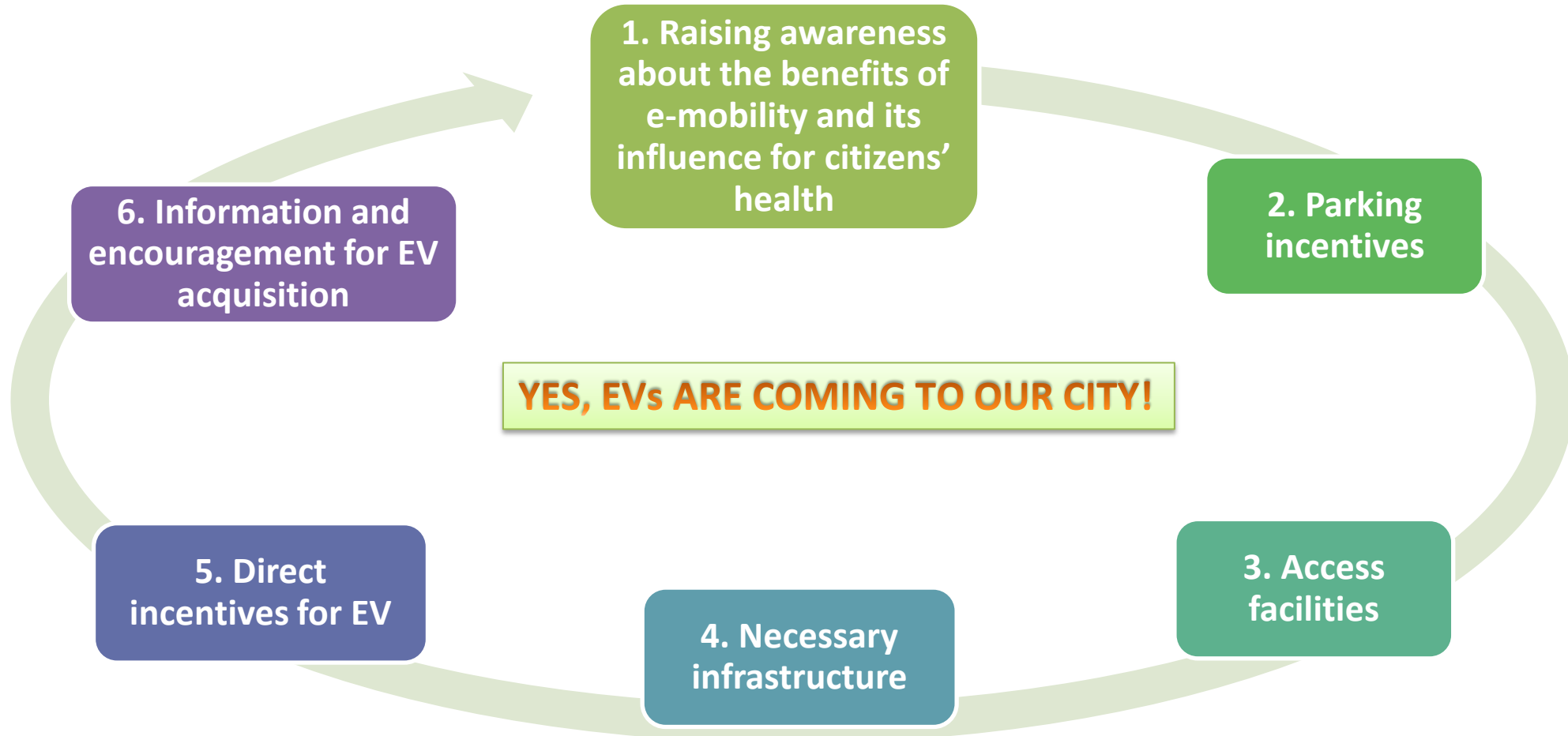
3. Access
facilities

4. Necessary
infrastructure

5. Direct
incentives for EV

6. Information and
encouragement for EV
acquisition

YES, EVs ARE COMING TO OUR CITY!



Initiatives to promote green transport in Romania:

European funds (REGIO)

- More than 450 Electric buses for Sibiu, Braila, Constanța, Focșani, Lugoj, Slobozia, Cluj, Iasi, Ploiești, Alba Iulia, Buzau, Zalau, Brasov....

Local initiatives

- **Bucharest:**
 - *grant 5,000 eco-vouchers of 9,000 lei (1,900 EUR) for the purchase of new cars EURO 6, non-diesel, hybrid or electric,*
 - *2019 program to grant 500 vouchers of 10,000 lei (2,000 EUR) to install fast charging stations for EVs (not yet launched)*
- **Iasi “OurAir”:** buy back the old cars and finance the green infrastructure (draft to the EU)
- **Bucharest & Iasi:** Restrictions and / or taxes for polluting vehicles
- **Micro-mobility** (Electric scooters for rent): **Timisoara** (E-TWOW), **Bucharest** (FLOW, LIME, e-WOLF)
- **Suceava:** from March 2019, 50% of the taxi authorisation are granted to EV only
- **Resita:** taxi authorisation are granted for EV or HEV only. Target: 50% to be EV in 2025.

IMPORTANT!

DIR. (UE) 2019/1161 - Clean Vehicle Directive - on the promotion of clean and energy-efficient road transport vehicles– **published in 12 July 2019)**

Mandatory public procurement targets are set for zero-emission vehicles and low-emission vehicles in all Member States, for non-polluting light vehicles (cars and vans) and zero-emission heavy vehicles (trucks and buses).

Romania

- **Light vehicles (PC and LCV): 18.7% (as of 2025)**
- **Heavy vehicles: 6% (2025) and 7% (2026 - 2030)**
- **Buses: 24% (2025) and 33% (2026 - 2030)**

[note: 50% of buses must be zero emissions]

- It extends the scope of the rules regarding the procurement practices concerned: public road transport services, occasional passenger transport (**taxi, rent a car, car-sharing**), special services for travelers, waste collection services, as well as and postal and parcel delivery services.
- It enters into force on August 2, 2019.
- It **must be transposed into national law by August 2, 2021**

APIA VISION 2019-2030 «Sustainable, safe and efficient mobility»



From the perspective of the **objectives of the 2030 UN Sustainable Development Agenda** (of which 4 are of interest also for the automotive industry), **APIA proposes** to the national and local authorities, the business environment and the entire automotive industry in Romania the following objectives for **improving air quality in cities** :

- a. Significant **reduction of CO2** emissions (2017 in Romania: 120.6 gCO2/km vs EU: 118.5 gCO2/km).
- b. **Reduction of NOx and PM** pollutant emissions, by stimulating the disposal / withdrawal of polluting motor vehicles from the national car park, by:
 - Make the awarding of **scrapping premiums**, both for **removing vehicles**, as well as for old and polluting motorcycles, without the obligation to purchase a new car / motorcycle.
 - Introducing traffic restrictions for vehicles with **pollution norms lower or equal to EURO4**, or with high noise level.

APIA VISION 2019-2030 «Sustainable, safe and efficient mobility» (cont.)

- c. Promoting (completing) the legislative framework on **public procurement** - so that it will stimulate the acquisition of **"green vehicles"**.
- d. **Promotion of alternative transport** systems, through:
- **financial support** from the central and local public authorities **for vehicles** that are friendly to the «ZLEV» environment (hybrid, electric) or powered by CNG or hydrogen.
 - supporting the **implementation of the infrastructure** for recharging green vehicles
 - promoting the **"green" public transport**, with electric vehicles or powered by CNG or hydrogen
 - increasing /developing **mobility solutions** such as car-sharing, car-riding, car-pooling
 - development **electric micro-mobility**, by supporting the use of electric bicycles/mopeds in public transport.
- e. **Citizens' education and social responsibility:**
- Installation of **pollution sensors** (national program funded by AFM).
 - **Daily monitoring** of air quality and public information through a **"pollution bulletin"**.
 - **Planting of trees** by the "providers" of CO2 emission, proportional to the weight that the respective industry has in the total CO2 emission of Romania.

Forecasts for Romania

Romania's energy strategy 2019-2030, with the prospect of the year 2050 [pending approval]



APIA VISION 2019-2030 Specific objectives for 2030

(with intermediate stage and re-evaluation in 2025)

The strategy **does not envisage a strong penetration of electric mobility until 2030** [...] the fleet of **electric cars** is estimated at **30,000 in 2025 and 126,000 in 2030**

A fleet of **electric vehicles of 40,000 in 2025 and 300,000 in 2030**

By **2030, 30% of LCVs** (under 3.5 tonnes) utility fleet will have **hybrid** technology engines

4,000 charging points in 2025 and 25,000 in 2030

In **2030**, the **slight increase** of the bus park to 24,000 and the minibus to 33,000 units

Double the bus fleet and replacing the current ones with ZLEV ones

By **2030**, the number of **hydrogen-powered cars could exceed 10,000**

Almost **60%** of the car fleet is expected to **have a form of electric** propulsion by 2050

Disposal of the national car park approx. **2 mil. by 2025 light and heavy vehicles > 11 years old, reaching 5.7 mil. in 2030**



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