

Mobilidade elétrica no contexto das cidades

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5 Abril 2022



www.polisnetwork.eu

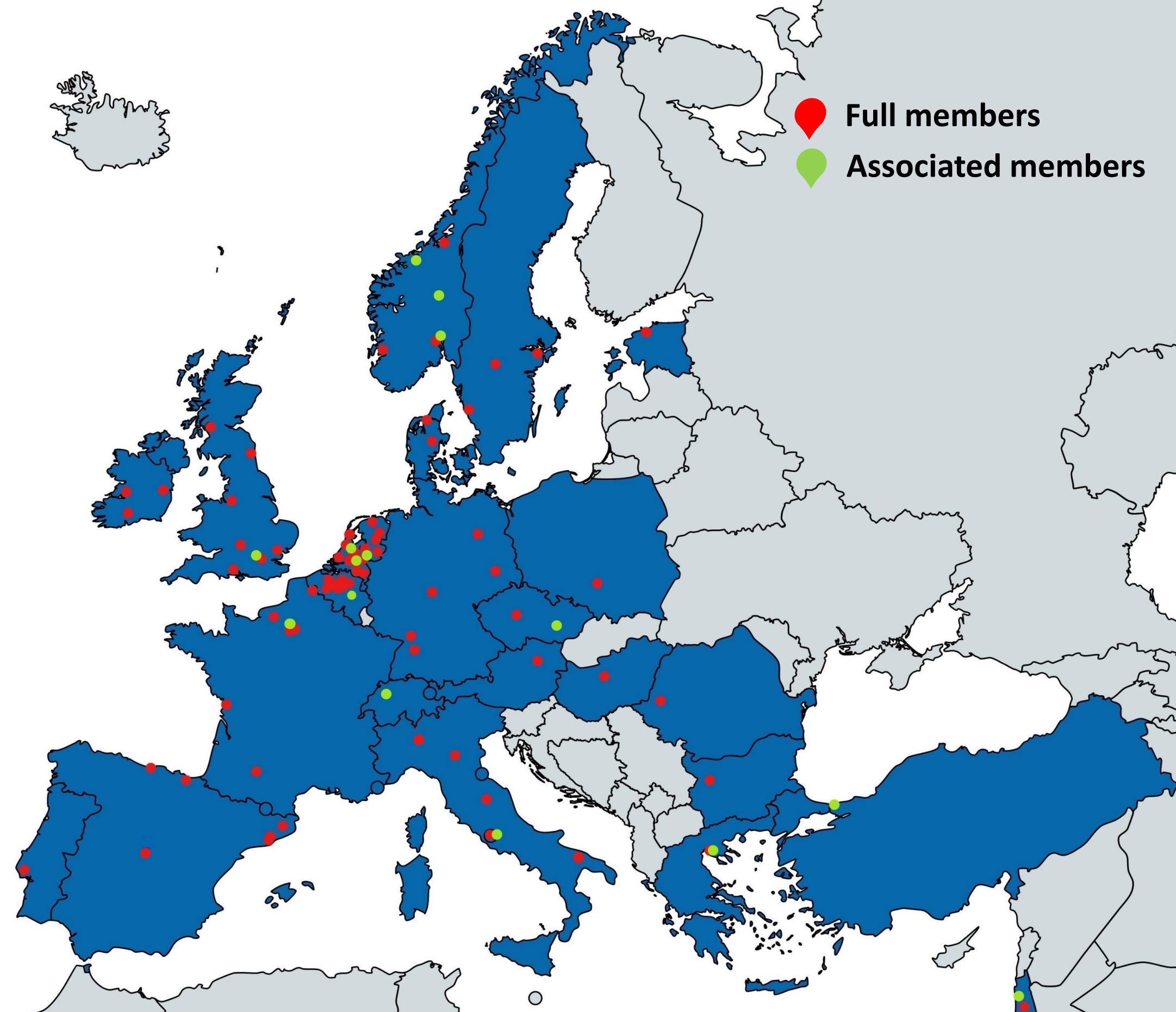


FÓRUM DA MOBILIDADE ELÉTRICA
SETÚBAL - 5 DE ABRIL 2022





What is POLIS?





Our working groups



Environment & Health



Active Travel & Health

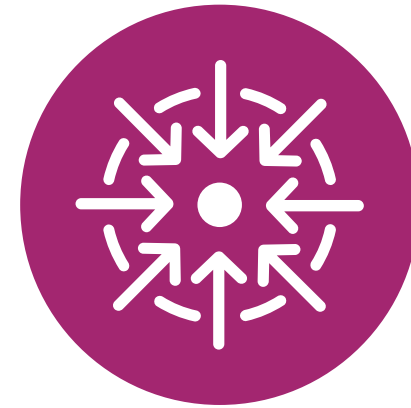
Clean Vehicles & Air Quality



Traffic Efficiency



Traffic Efficiency (ITS, traffic management, automation, MaaS, data,...)



Access



Access (public transport, infrastructure, pricing...)

Parking



Safety & Security



Safety & Security (street and road safety, protecting vulnerable users, gender...)



Governance & Integration



Governance & Integration
Urban Freight
Small and medium sized cities platform
Regions Working Group



Main urban mobility challenges & policy goals



AIR QUALITY



MODAL SHIFT



SAFER ROADS



DECARBONISATION



CV&AQ challenges & priorities - Electromobility

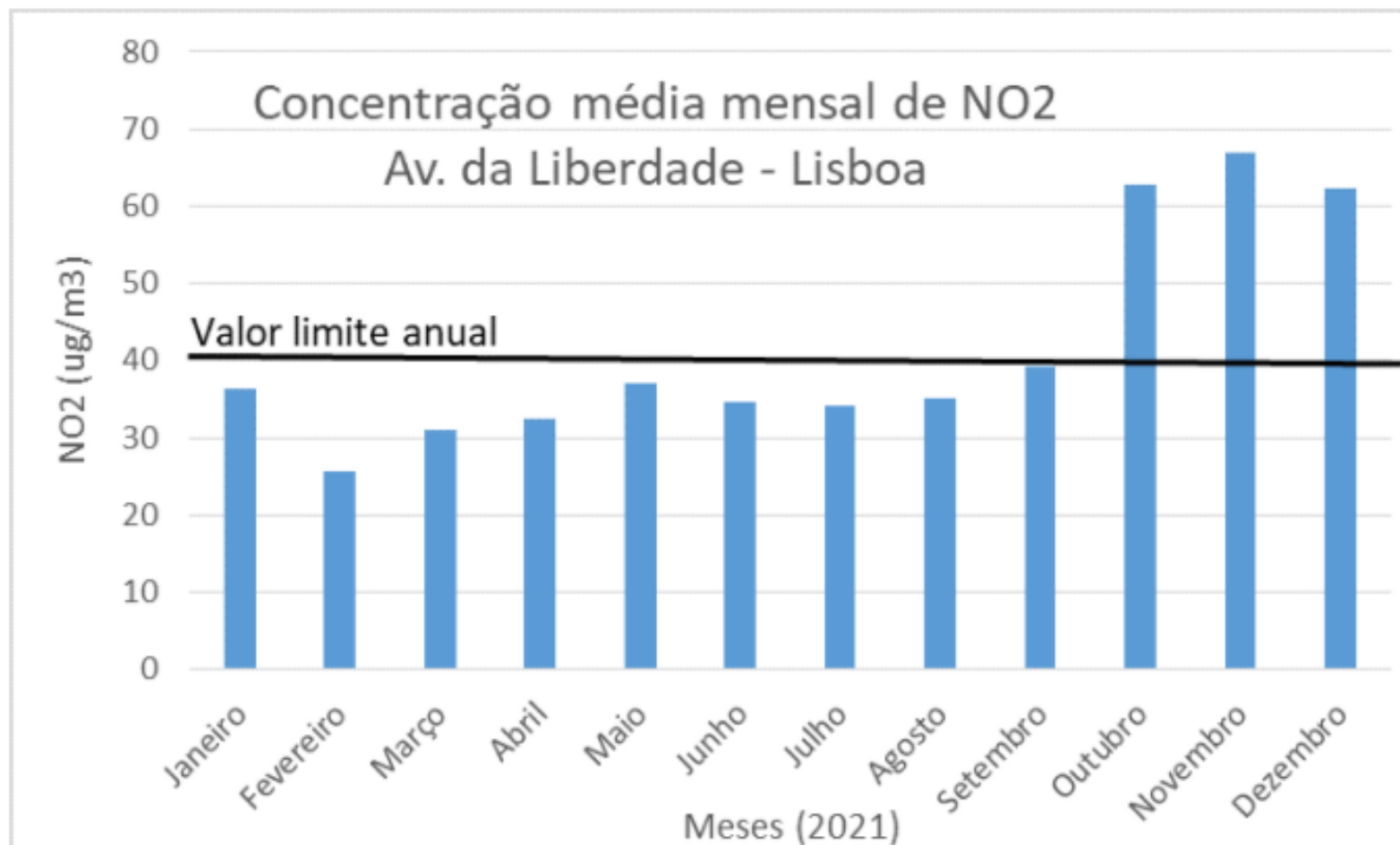
- Revisions/adoptions of the **relevant policies**:
 - **“Fit for 55” package** - 55% GEE emissions reductions until 2030
 - AFID/AFIR, RED, TEN-T, Energy Taxation Directive, EPBD
 - Clean Energy for all
- **Future-proof** recharging infrastructure concepts
- **Public vs. private** recharging infrastructure/**Shared** recharging infrastructure
- **User experience/user acceptance** of the recharging infrastructure
- **Clean energy**/energy decentralization/consumer vs. Prosumer

Pandemia melhorou qualidade do ar e reduziu consumo de energia e emissões

As estatísticas do ambiente do INE mostram "um aumento da energia produzida a partir de fontes renováveis", refletindo-se na diminuição dos gases de efeito de estufa e melhor qualidade do ar.



<http://zero.org>



AMBIENTE

Qualidade do ar na Europa melhorou durante a pandemia – mas os riscos mantêm-se

Em Portugal, à semelhança do resto da Europa, os níveis de poluentes na atmosfera melhoraram de 2019 e 2020 – e é possível que seja uma consequência das medidas restritivas de combate à pandemia impostas na Europa, como os períodos de confinamento e de paragens de actividade.

Lusa

21 de Setembro de 2021, 19:27

<https://www.publico.pt>

Lisboa. Níveis de poluição dispararam na avenida da Liberdade desde outubro

A poluição naquela avenida de Lisboa voltou a superar os limites de acordo com a associação ambientalista Zero, que pede uma Zona de Emissões Reduzidas.

DN/Lusa

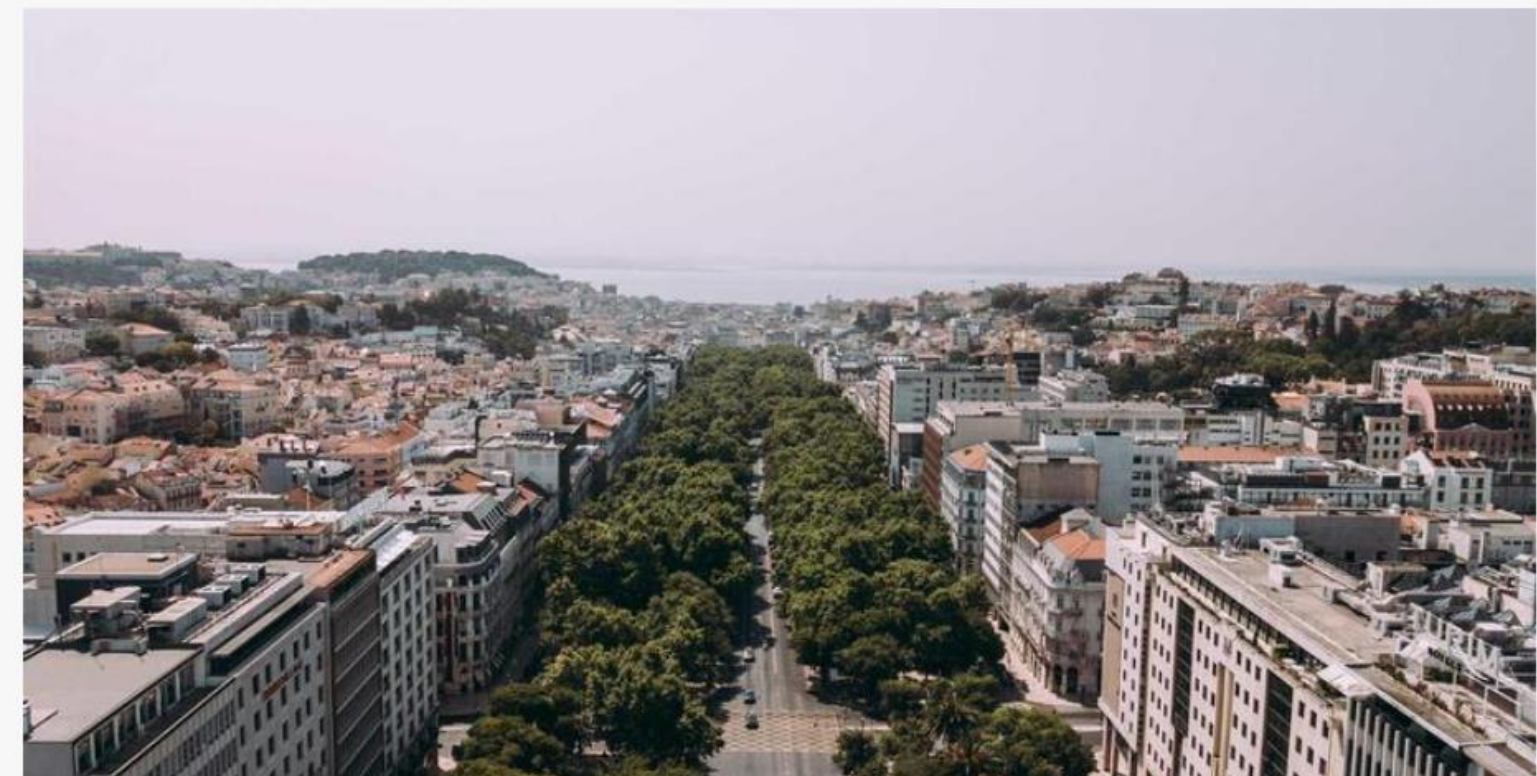
09 Dezembro 2021 — 08:04



TÓPICOS

- Ambiente
- Sociedade
- Lisboa
- Poluição
- Qualidade do ar

<https://www.dn.pt/>

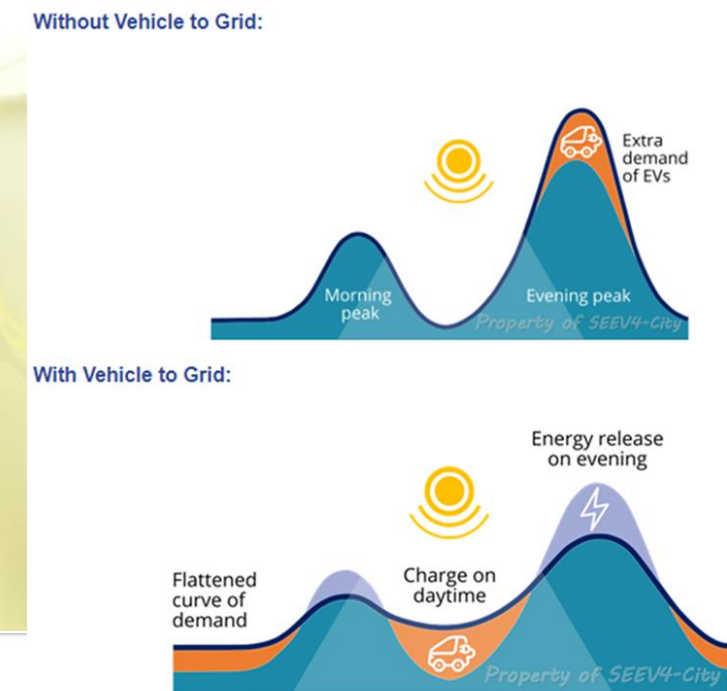


Multimodal

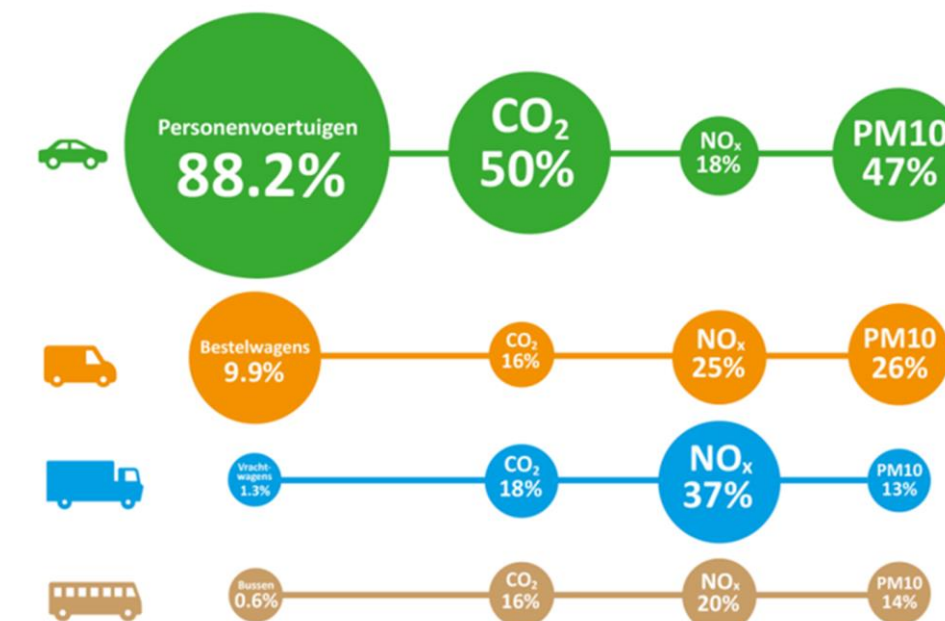
Captive Fleets

Charging infra

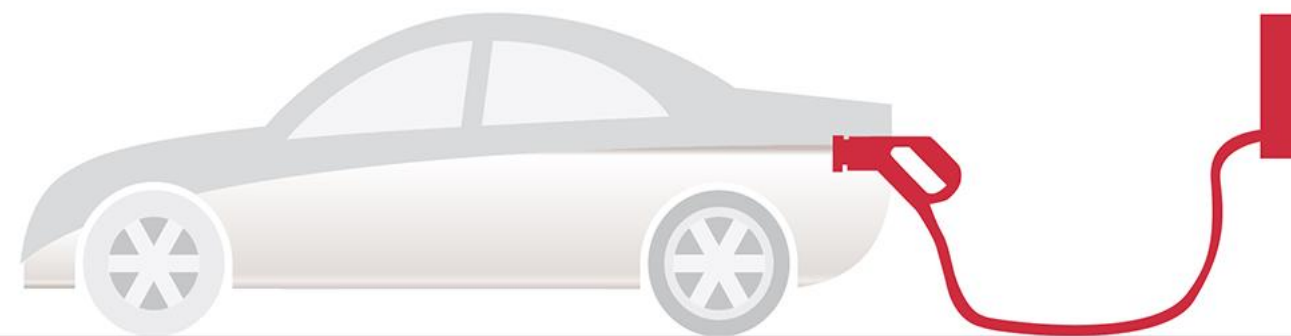
Smart grid



Total emissions city traffic in Rotterdam



Where does Electrification fit?



New business model - new agents





Electromobility in city context

- Low Emission Zones (ZER) / Zero Emission Zones (ZZE)
- Expansion of EV charging infrastructure
- Captive/Municipal fleet electrification
- Ensure oversight on local *MaaS* ecosystems
- Management of public space - ensure accessibility!



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Electromobility in city context

What does the user want?

- Charging during “off-peak” hours (during the night and nearby) – **convenience**
- Charging in accessible locations with multiple valences – **comfort**
- Adequate cost (kWh vs. minute billing) – **equity**
- Knowledge about location, operability and availability of EV chargers – **information**
- User-friendly, interoperable, transparent pricing infrastructure - **easiness**

What can cities offer?

- Public and private charging infrastructure in accessible places – **accessibility**
- Possibility of partial charging in places of frequent use – **opportunity**
- Reallocation of public space – **prioritization**



Development of a comprehensive public charging network by Public Authorities

- **Public Tender** with lots (e.g., Oeiras) or **Municipal Regulation** (e.g., Porto) – there is no “one-size-fits-all”
- **Permitting tariffs/taxation** - how much to charge? “Free” parking places for the Operator?
- Land use planning/**Integration with existing urban furniture** - avoid additional barriers for the elderly and people with disabilities
- **Grid connection** – requirements, liaison with E-REDES
- Promote **Smart grids**/renewable local energy generation
- EV charger Operators proposals - **streamline processes and timings**
- Promote EM in **Urban Logistics** (UCC with last-mile delivery via EVs)
- **Regulations and governance** (data collection/management, open-source and *MaaS...*)



Take into account other fleets

- Promote charging infrastructure... **if we want to accelerate change!**



Pinterest



CleanMobileEnergy Project



Final thoughts

- Urban areas in Europe show increasing signs of environmental stress - poor air quality, excessive noise and traffic congestion, increasing amounts of GHG emissions, among others
- Reducing emissions from road transport is a crucial aspect of the European Green Deal, and electric mobility plays a key role - up to 13 million EVs expected in 2025 requiring at least 1 million of publicly accessible recharging points
- Public Authorities are major actors in the promotion of Electromobility, but they sometimes lack technical capacity and resources
- Knowledge sharing and cooperation at national and EU-level are fundamental tools (via EU-funded projects and initiatives, networks of cities and regions e.g. POLIS...)

Available resources for Public Authorities

SUSTAINABLE TRANSPORT FORUM

Recommendations for public authorities on:

procuring, awarding concessions, licences and/
or granting support for electric recharging
infrastructure for passenger cars and vans

Version 1 – adopted by STF on 2 December 2020

ENTSO-E Position Paper Electric Vehicle Integration into Power Grids

31 March 2021



entsoe

CALIFORNIA GOVERNOR'S OFFICE OF BUSINESS AND ECONOMIC DEVELOPMENT

Electric Vehicle Charging Station Permitting Guidebook



California Governor's
Office of Business and Economic
Development (GO-BED)
JULY 2019

https://transport.ec.europa.eu/transport-themes/clean-transport-urban-transport/sustainable-transport-forum-stf_en



Some POLIS EU projects in Electromobility



Improve the experience of EV users

<https://echarge4drivers.eu/>



City-level demonstration and capacity building

<http://www.solutionsplus.eu/>



Urban Transports Community

<https://urban-transports.interreg-med.eu/>



RES and smart EV charging

<https://www.nweurope.eu/cleanmobilenergy/>



European Alternative Fuels Observatory

Information and support tool

<https://alternative-fuels-observatory.ec.europa.eu/>



Obrigado!



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