EuropeOn

ELECTRICAL CONTRACTORS ASSOCIATION

Annual Conference – 18 November 2020

Welcome to our Annual Conference!

Morning session: *from 10 AM to 11:30 AM CET*

Welcoming words from EuropeOn President Gérard Constantin

Renovating with Skill: switching on the Renovation Wave thanks to a modern electrical trade

Alison Crabb (DG EMPL)
Stefan Moser (DG ENER)
Pernille Weiss (MEP)
Aurélie Beauvais (SolarPower Europe)
Martin Bailey (EuropeOn)

Afternoon session: *from 1:30 PM to 3:00 PM CET*

Welcoming words from EuropeOn President Gérard Constantin

Consumer empowerment in the shift to zero-emission mobility: lessons learnt from the ground

Dario Dubolino (DG MOVE)
Ismail Ertug (MEP)
Alexander Neuhäuser (ZVEH, EuropeOn)
Olivier Toggenburger (Park'n Plug)
Julia Poliscanova (Transport&Environment)
Casto Cañavate (KNX)

Each of the 2 sessions will be followed by a Q&A time

Welcoming words

-

Gérard Constantin,
President of EuropeOn

Welcoming words from Gérard Constantin, EuropeOn President

300.000 BUSINESSES

1.8 MILLION PROFESSIONALS

€ 200 BILLION ANNUAL TURNOVER

#Skills4Climate

EuropeOn Annual Conference

KNX Media Partner

Austria - EleKtrotechniker

Belgium - Techlink

Denmark - Tekniq

England, Wales & Northern Ireland - ECA

France - FFIE

France - SERCE

Finland - STUL

Germany - ZVEH

Luxemburg - FGT

Netherlands - Techniek Nederland

Norway - Nelfo

Scotland - SELECT

Sweden - Installatörsföretagen

Switzerland - EIT.swiss

Welcoming words from Gérard Constantin, EuropeOn President

EuropeOn and e-mobility

Have a look at…

- Our report on e-mobility and job potential: by 2030, over 112.000 net jobs related to e-mobility can be created in our sector.

- Our 4 key recommendations on e-mobility: we released these ahead of the upcoming publication of the EU Sustainable Mobility Strategy.

Welcome to our Annual Conference!

Afternoon session: *from 1:30 PM to 3:00 PM CET*

Welcoming words from EuropeOn President Gérard Constantin

Consumer empowerment in the shift to zero-emission mobility: lessons learnt from the ground

Dario Dubolino (DG MOVE): State of play of AFID revision, upcoming Strategy, and charge point rollout across EU

Ismail Ertug (MEP): Constituents' expectations from EU mobility policy and how can e-mobility answer those needs

Alexander Neuhäuser (ZVEH, EuropeOn): Electromobility - opportunities and contribution of the electrical contractors

Olivier Toggenburger (Park'n Plug): Challenges and solutions to engage consumers in the energy transition through e-mobility and self-consumption

Julia Poliscanova (Transport&Environment): How can EU policies ensure a smooth transition (for consumers) towards zero-emission mobility

Casto Cañavate (KNX): Bridging the gap between smart buildings and e-mobility

The session will be followed by a Q&A time

Afternoon session (1:30-3:00 PM CET)

Consumer empowerment in the shift to zero-emission mobility: lessons learnt from the ground

A few reminders before starting

Once all of our distinguished panellists will have presented their views on this session, we will open the floor to all attendees for questions.

You can ask your questions whenever you want in the QUESTIONS Box (on the right side) and we will come back to them in the last 30 minutes of this Conference.

Thank you for being with us today, for EuropeOn's first ever online Conference

Renovating with Skill: switching on the Renovation Wave thanks to a modern electrical trade

State of play of AFID revision, upcoming Strategy, and charge point rollout across EU

-

Dario Dubolino, Policy Officer at DG MOVE

Zero-emission mobility

Update on key EU policies and initiatives

EuropeOn Conference, 18/11/2020

Vision for decarbonised transport

- **European Green Deal**: Europe to become carbon neutral by 2050
- **Climate Target Plan**: 55% emission reductions by 2030
- This requires emission reductions in all sectors
- **Transport emissions must decrease by 90% by 2050** to meet the Green Deal objectives

European Commission

Sustainable Mobility in the Green Deal

The Green Deal Communication calls for a shift to sustainable and smart mobility:

- **Multimodality**: improve public transport, shift freight from road to rail and inland waterways
- **Automated and connected multi-modal mobility:** new sustainable mobility services to reduce congestion and pollution
- **Transport prices must reflect its impact** on the environment and on health
- Faster deployment of **clean vehicles and alternative fuels**

European Commission

Sustainable mobility by transport mode

- All transport sectors – road, rail, aviation and waterborne transport – will have to contribute to the effort to reduce emissions
- **Road:** conventional cars will need to gradually be displaced by zero emissions vehicles
- **Aviation and maritime**:
  - Improve the efficiency of aircraft, ships and their operations
  - Increase the use of sustainably produced renewable and low-carbon fuels

Driving the decarbonisation of road transport

- CO2 emission performance standards for light- and heavy-duty vehicles
- Air pollutant standards for internal combustion engines
- Clean Vehicles Directive
- Alternative Fuels Infrastructure Directive

European Commission

Alternative Fuels Infrastructure Directive

EU needs an infrastructure that:

✓ **enables consumers** to recharge or refuel their vehicles **as easily as a conventional vehicle**;

✓ ensures **inter-operability** of infrastructures and services;

✓ handles **increased user demand**.

European Commission

AFID evaluation – State of play

- Report on application of the Directive, state of play of market and Member States' efforts – due by 18 November 2020
- Evaluation of the Directive ongoing
- Some of the key needs and shortcomings identified up to now:
  - Readiness to respond to substantially higher demand
  - Minimum requirements for infrastructure deployment
  - Customer services
  - Specific needs of heavy-duty vehicles

AFID revision – State of play

- Impact Assessment started, back to back with evaluation
- OPC closed; proposal due 2021
- Key objectives – Inception IA (published)
  - increase the number of recharging and refuelling points across Member States and across modes
  - ensure the full interoperability of infrastructure and infrastructure use services for all alternatively fuelled vehicles, vessels and aircraft
  - foresee adequate information for consumers, including information on location, accessibility, prices, payments and compatibility of fuels and recharging infrastructure
  - enable deployment of “smart recharging infrastructure“

Next steps

2020:

- **Sustainable and Smart Mobility Strategy**
- **ReFuelEU Aviation – Sustainable Aviation Fuels initiative**
- **FuelEU Maritime – Green European Maritime Space**

2021:

- **Proposal for Revision of the Alternative Fuels Infrastructure Directive**
- **Proposal for Revision of the TEN-T Regulation**
- **Proposal for more ambitious CO2 emission performance standards**
- **Proposal for more stringent air pollutant standards for road vehicles**
- **Proposal for Revision of the Renewable Energy Directive**

European Commission

Thank you for your attention

Dario Dubolino

Directorate General for Mobility and Transport

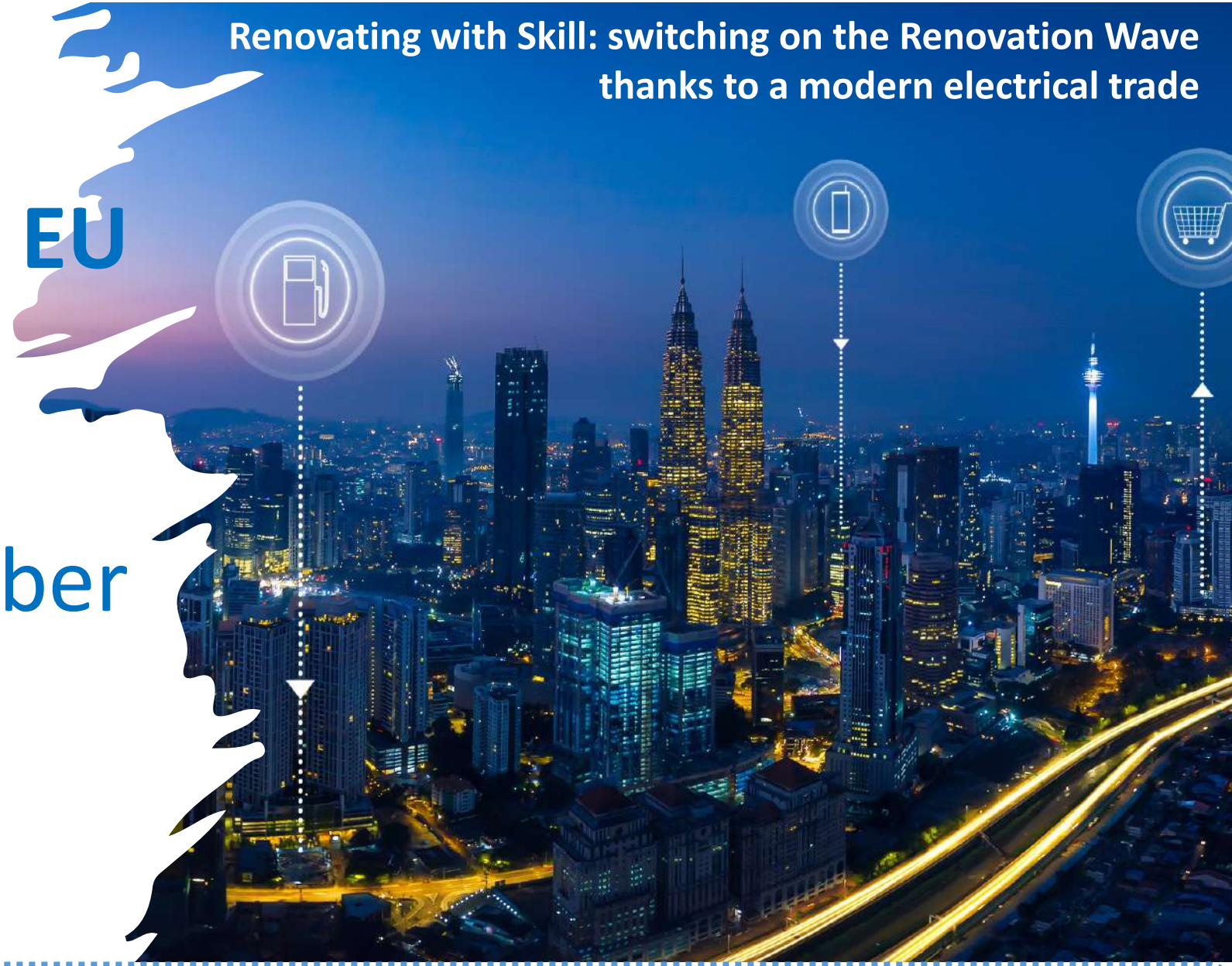
Unit B.4 Sustainable and Intelligent Transport

European Commission

Constituents' expectations from EU mobility policy

-

Ismail Ertug, Member of the European Parliament



Renovating with Skill: switching on the Renovation Wave thanks to a modern electrical trade

Electromobility – opportunities and contribution of the electrical contractors

-

Alexander Neuhäuser,

EuropeOn member, Deputy Managing Director of ZVEH

ZVEH

E-Mobility

Opportunities and contribution of electrical contractors

Energy Transition

- Stopping Climate Change:
  - ➔requires Energy Transition,
  - ➔requires Renewables,
  - ➔renewable production is mainly electricity

- But…
  - ➔production potential is limited.
  - ➔production is volatile.
  - ➔electricity is difficult to store.
- Therefore we need…
  - ➔to manage electricity
  - ➔to find storage possibilities
  - ➔to increase EFFICIENCY!!!!

Sector Coupling

- **Sector Coupling:** connecting the building sector and the mobility sector.
  - ➔ (decentralized) renewable production to be used in car batteries
  - ➔ Car batteries will provide Vehicle to Grid (V2G) services.
  - ➔ Vehicle to Building (V2B) services: battery can be used for local EMS („multiple use“)

Prosumer

- **Prosumer Models:** building owner as producer and consumer
  - ➔ Selling locally produced renewable energy to the market.
  - ➔ Selling energy management potential (grid and energy market).
  - ➔ Social implications: citizens able to participate in the Energy Transition.

Added Value Chances for SMEs

- Electromobility has the potential to boost the European economy
  - Installation is a growing market
    - 2019: around 185,000 public charge points*
    - 2025: around 1,3 million needed*
    - 2030: around 3,0 million needed*
    - high demand for private charging
  - high value-added services, e.g. energy managment service, Maintenance and other After Sales Services
- Electromobility will create highly qualified jobs**
- Electromobility will boost innovation.

*Source: https://www.transportenvironment.org/publications/recharge-eu-how-many-charge-points-will-eu-countries-need-2030

** 200.000 until 2030 according to EuropeOn Survey

A word about: Hydrogen Stategy

- Hydrogen will play an important role in the European energy suply.
- Electrical contractors provide services for the industry (~34 % of the turnover in Germany).
- H2 sector will be an interesting customer for our companies.

BUT…

- H2 has to be GREEN
- GREEN H2 will be limited.

THIS MEANS…

- H2 is precious and therefore does not make sense everywhere
  - Efficiency matters: double primary energy requirement for cars*
  - Price matters
- Energy Transition is not allowed to wait for H2

*Source: https://www.volkswagenag.com/de/news/stories/2019/08/hydrogen-or-battery--that-is-the-question.html#

ZVEH

What we need

- European Charging Infrastructure
  - ➔ close-knit coverage of public charging points with easy roaming and payment.
  - ➔ promotion of private charging points.
- Accelerate expansion of Renewable Energy
  - ➔ green mobility needs green energy.
  - ➔ green energy is mainly electricity coming from renewable sources.
- Preserve the Efficiency First Principle
  - ➔ H2 is not a solution for any transport application

Additional Key Benefits

- Charging @Home
  Charging @Work
  (~80%)
- Digital Appliances
  e.g. Plug and Charge
  ISO 15118
- Inductive Charging
- E-Mobility is quiet, fast and fun
- Possibility of
  100 % Renewable
  (Lifecycle climate neutral)
- (Local) Emission free
- High Efficiency
  Save Energy
  (~90% efficiency)
- Public Charging Anywhere
  „charge while you park“


ZVEH
Let´s go ahead

Alexander Neuhäuser, Attorney

Deputy Managing Director

Zentralverband der Deutschen Elektro- und
Informationstechnischen Handwerke (ZVEH)
Lilienthalallee 4
60487 Frankfurt am Main

» Phone: +49 (0) 69 247747-0
» E-Mail: a.neuhaeuser@zveh.de

Renovating with Skill: switching on the Renovation Wave thanks to a modern electrical trade

Challenges & solutions to engage consumers in the transition through e-mobility & self-consumption

-

Olivier Toggenburger,
Business Developer at
Park'n Plug

EuropeOn Annual Conference

Challenges & solutions to engage consumers in the energy transition trough e-mobility and self-consumption

Consumer empowerment in the shift to zero-emission mobility: lessons learnt from the ground

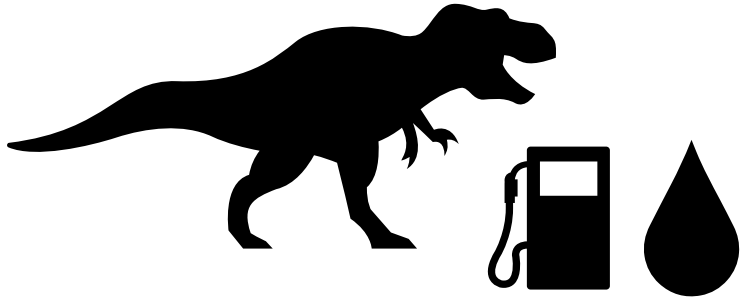
Olivier Toggenburger (Park’n Plug) - 18 November 2020

A strong symbol !

park'n plug
RECHARGE VÉHICULE ÉLECTRIQUE

Challenges

How to engage consumers ?



- The dinosaur footprint of **fossil energy** in the world
- Political, technological and economical challenges to identify
- Overall **societal and cultural barriers** to consider
- How to make **a whole population or society** switch to a **new environment** ?
- How to build **new value chains** in line with the development of e-mobility ?

park'n plug
RECHARGE VÉHICULE ÉLECTRIQUE

Solutions

Keys to the successful introduction of EVs

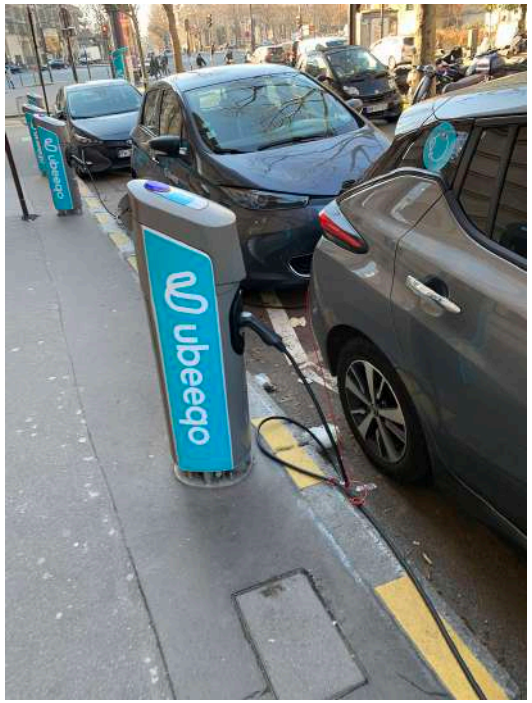
- **Political actions :** Regulation and incentives in France
- **Technological progress** : Battery technology to enhance the ability to store and use energy locally, smart charging, V2G
- **Market development** : Satisfying the consumer demand with a diversified offer of EVs and charging solutions
- The very important role of public and private organizations like AVERE

Solutions

Keys to the successful introduction of EVs

Political : Regulation and incentives in France

CRIT'Air



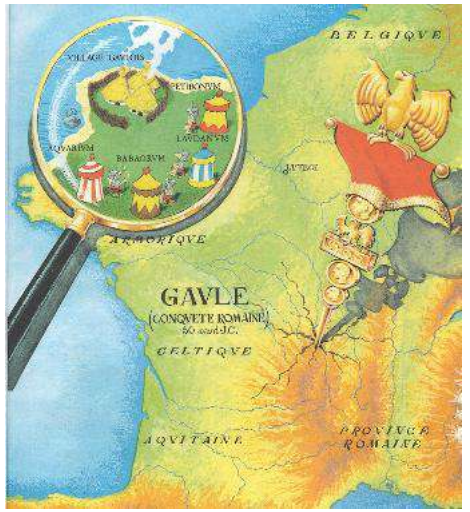
Public charging infrastructures UBEEQO in Paris

EDF new electric fleet

park'n plug
RECHARGE VÉHICULE ÉLECTRIQUE

Solutions

Keys to the successful introduction of EVs



Park'n Plug : Zoom on our activity

- Park'n Plug is a French leader in the installation and management of **charging infrastructures** in France since 2011
- 10 years activity which highlights **the possibility of a successful introduction** of e-mobility in France
- Our activity and key projects we participate i with public organizations like Enedis an ADEME are proof of success **-> what were th keys ingredients that led to the success of these projects ?**

BienVEnu

park'n plug
RECHARGE VÉHICULE ÉLECTRIQUE

Solutions

Keys to the successful introduction of EVs

BienVEnu

Case of BienVEnu : -> what were the keys ingredients that led to the success of these projects ?

ENEDIS L'ELECTRICITE EN RESEAU

ADEME

CentraleSupélec

Agence de l'Environnement et de la Maîtrise de l'Energie

Participation of public organisations and French universities

Cooperation in research and development

Definition of new offers for users to give birth new markets

WAVESTONE

TETRAGORA

CHANGEONS NOS TERRITOIRES !

Media and analysis of user experience as part of the projet

park'n plug RECHARGE VÉHICULE ÉLECTRIQUE

park'n plug
RECHARGE VÉHICULE ÉLECTRIQUE

Thank you !

Olivier Toggenburger (Park'n Plug) - 18 November 2020

How can EU policies ensure a smooth transition (for consumers) towards zero-emission mobility

-

Julia Poliscanova,
Senior Director at T&E

Smooth transition to e-mobility for all

Julia Poliscanova,
Senior Director for Vehicles & Emobility, T&E

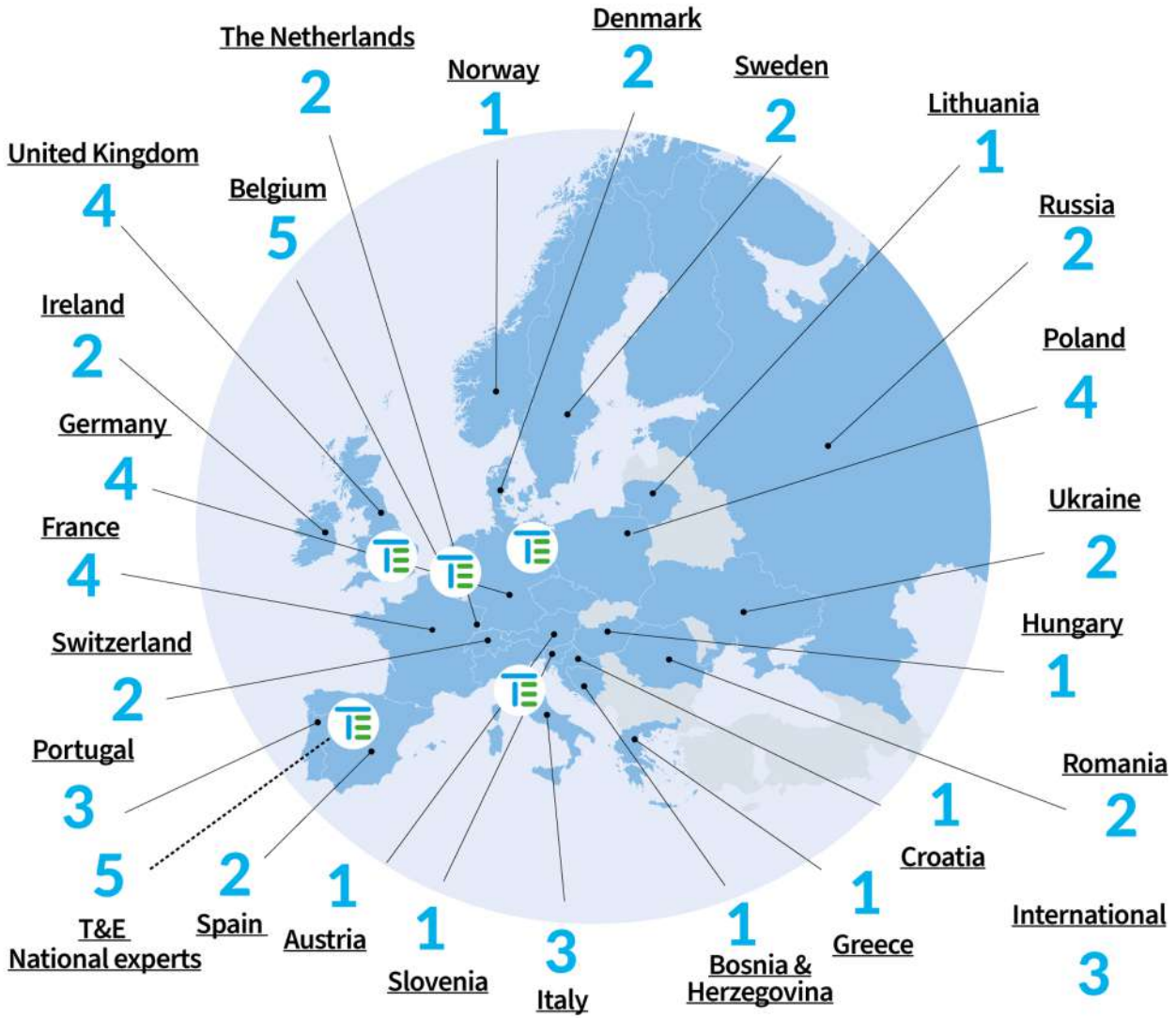
T&E: WHO WE ARE

Europe's leading clean transport campaign group

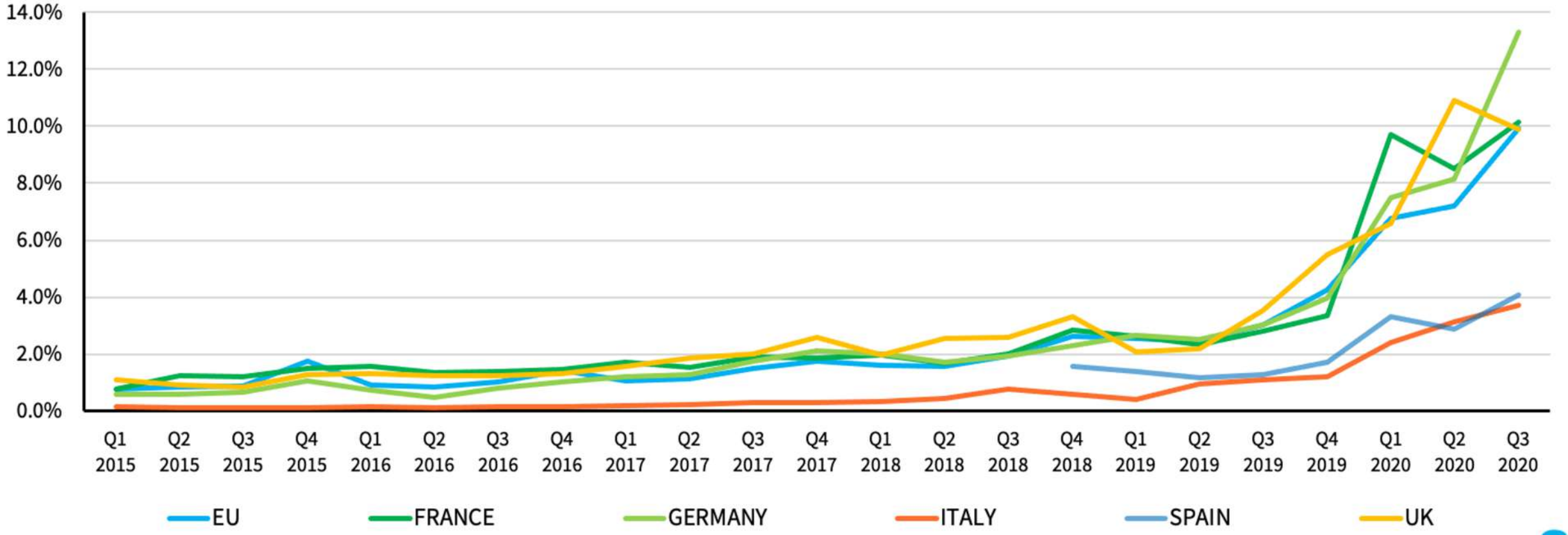
26 Countries

61 Members

6 National experts



Soaring electric car sales thanks to 2020/21 car CO2 standards



TRANSPORT & ENVIRONMENT

@transenv @transenv

transportenvironment.org

Source: Transport & Environment analysis of ACEA Statistics

More and better electric models for consumers

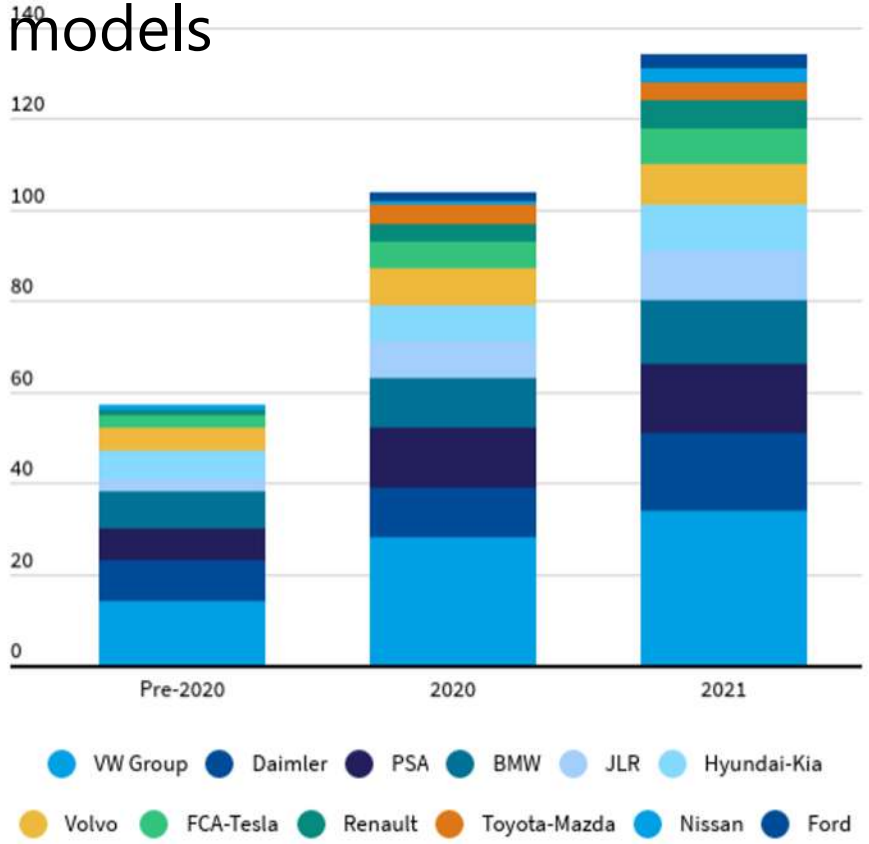
Battery electric car models only

Carmakers	Pre-2020 models	H1 2020	H2 2020	2021
PSA	Ampera-e, C-zero, iOn	e208, e2008, Corsa-e, DS 3 Crossback	e-C4	Mokka-e
VOLVO			XC 40, Polestar 2	
FCA	Model 3, S, and X		500e	Model Y
BMW	i3	Mini		iX3, iNext, i4
Renault	Zoe		Twingo	Dacia EV
mazda TOYOTA			MX-30, Lexus UX	
NISSAN	Leaf			Ariya
Ford				Mach-E
KIA HYUNDAI	Ioniq, Kona, e-Soul, e-Niro			
VW	eGolf, e-tron, Taycan, Mii, Citigo, eUp!	e-tron Sportback	ID.3, ID.4, Cupra el-Born	Enyaq, ID.5, e-tron GT,Q4 e-tron
LAND ROVER JAGUAR	I-Pace			XJ, J-Pace
DAIMLER	EQ C, Fortwo, Forfour			EQ A, EQ B, EQ S, EQ E

TRANSPORT & ENVIRONMENT transportenvironment.org

Source: Source: Transport&Environment

Total number of electric car models



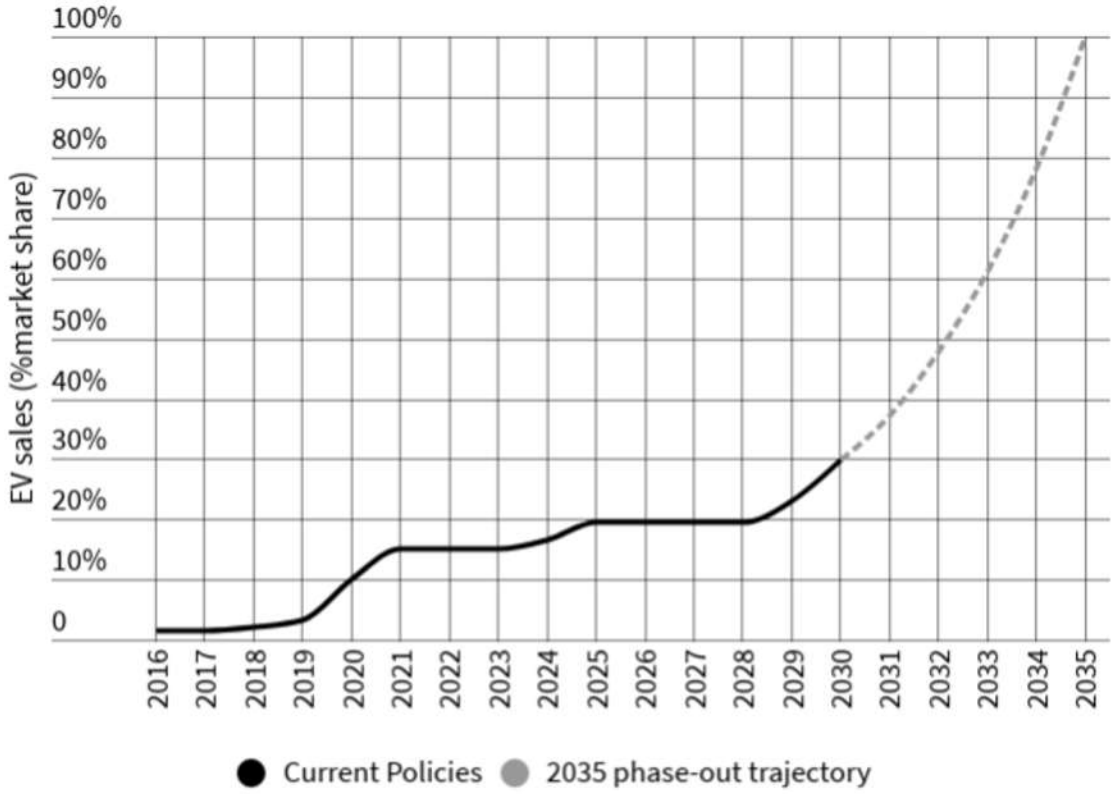
BUT: electric momentum risks stagnating after 2021

> EV sales trebling from 3% to 10% in 2020

>> Further surge to 15% in 2021

>>> Sluggish growth to a mere 20% EV sales in 2025 on current regulation

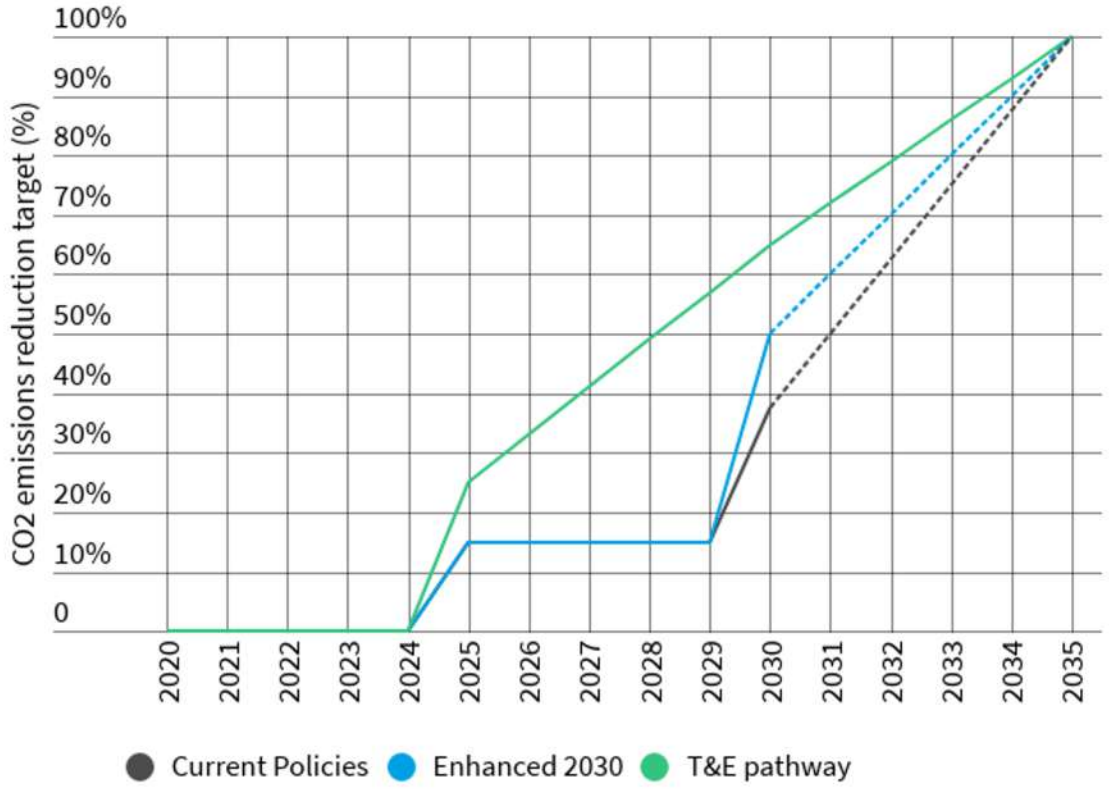
Almost no progress in 2020s without higher CO2 targets from 2025 onwards



Current Policies trajectory is based on the current CO2 emissions reduction targets of **-15% in 2025 and -37.5% in 2030.**

Higher ambition in 2020s for affordable EU-made EVs

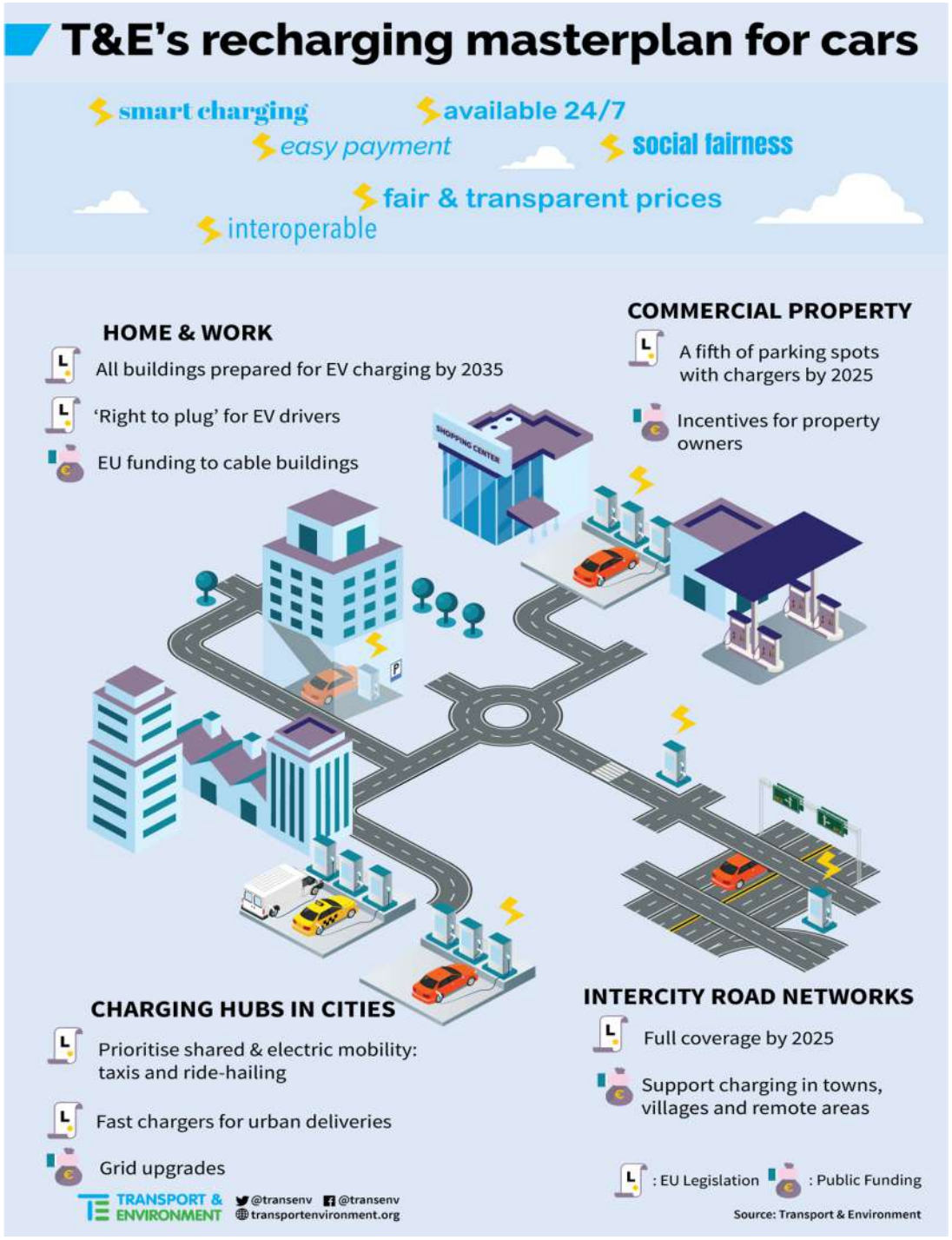
CO2 emission reduction trajectories



Higher 2030 target does little for EV ramp up in 2020s

T&E asks to:

- **Increase 2025 target to -25% CO2 reduction**
- **Increase 2030 target to -65% reduction**
- **Set annual targets 2025-2030**



Alternative Fuels Infrastructure Directive to become Zero Emissions Infrastructure Regulation

Learn from past mistakes: national binding targets & uniform Single Charging Market for all Europeans to benefit from the EV transition

Go beyond TEN-T:

- **charging in buildings (via EPBD)**
- **commercial properties: 1 in 5 spots by 2025**
- **city hubs for taxis, etc**

Charging service: put consumer needs 1st

“Right to plug”

Maintenance & uptime requirements

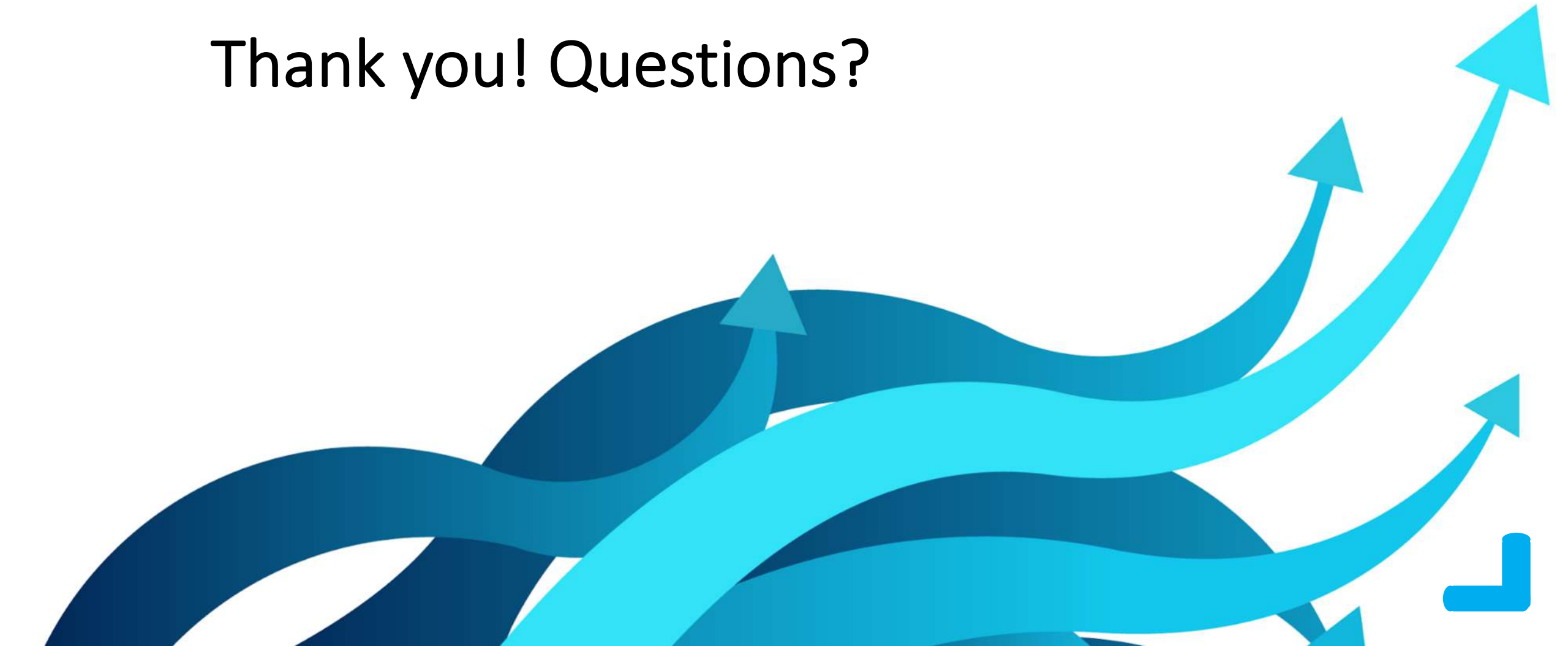
Connectivity to enable free access to data

Smart charging & grid integration

Ad hoc payments & transparent prices in EUR/kWh & session

Real-time data on pricing & availability of chargers

Thank you! Questions?



Renovating with Skill: switching on the Renovation Wave thanks to a modern electrical trade

Bridging the gap between smart buildings & e-mobility

-

Casto Cañavate,

Marketing Director at KNX Association

Smart home and building solutions.
Global. Secure. Connected.

Bridging the gap between smart buildings and e-mobility

A look to the future of EV charging

3 quick facts

The European Commission envisions an economy which proposed an objective of
net-zero emissions for transport by 2050

3 quick facts

Electro-mobility can make transport cleaner and cheaper

More than

8,500,000

electric cars sold worldwide

By 2030, e-mobility will support

1,000,000

more European jobs

E-mobility could help cut air pollution from causing

400,000

premature deaths

E-mobility can help Europe cut the nearly

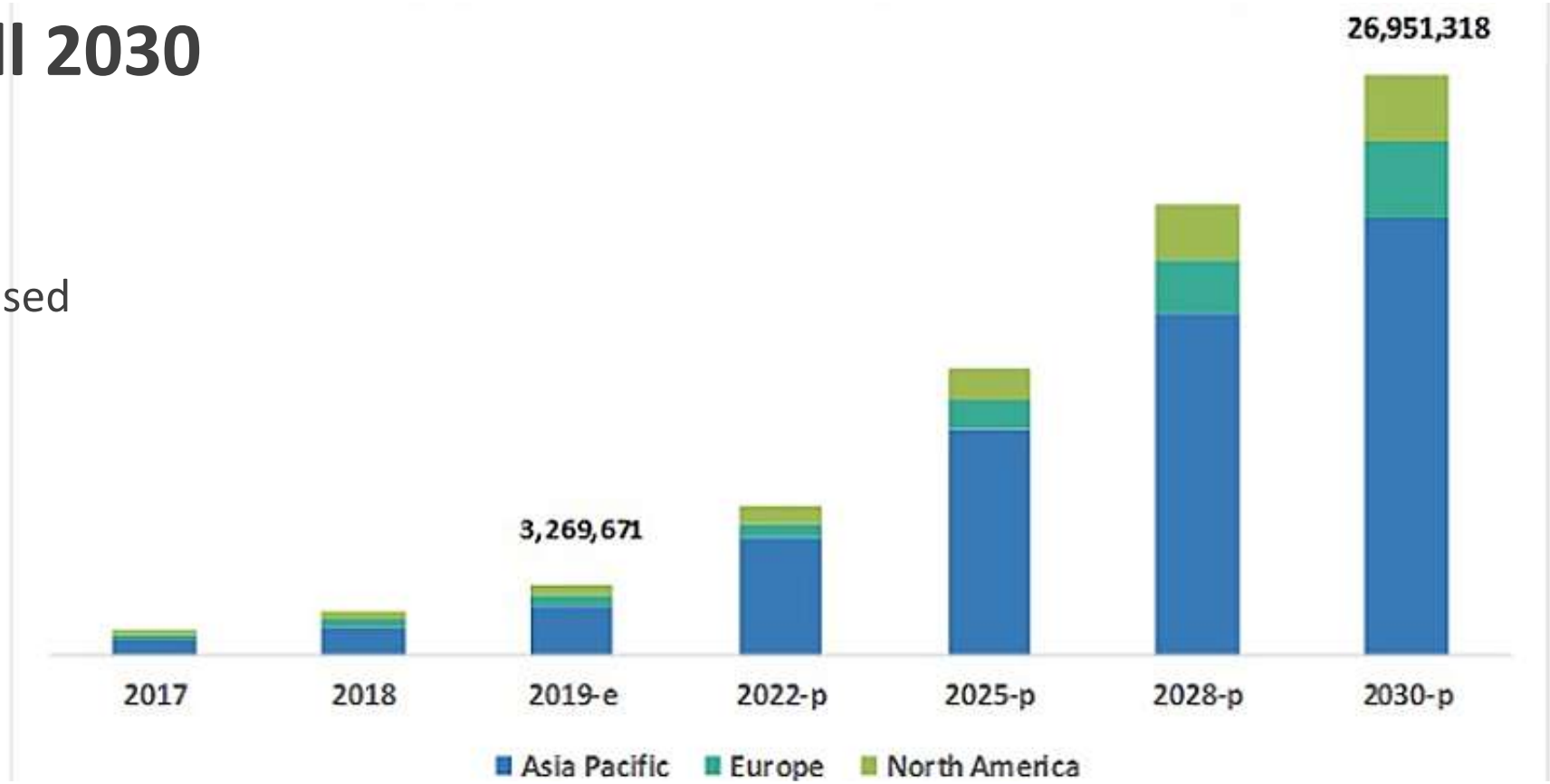
€1,000,000,000

it spends on oil each day

3 quick facts

EV Market growth till 2030

- 27 Mill. EV sold by 2030IP-based
- Source: Markets&Markets

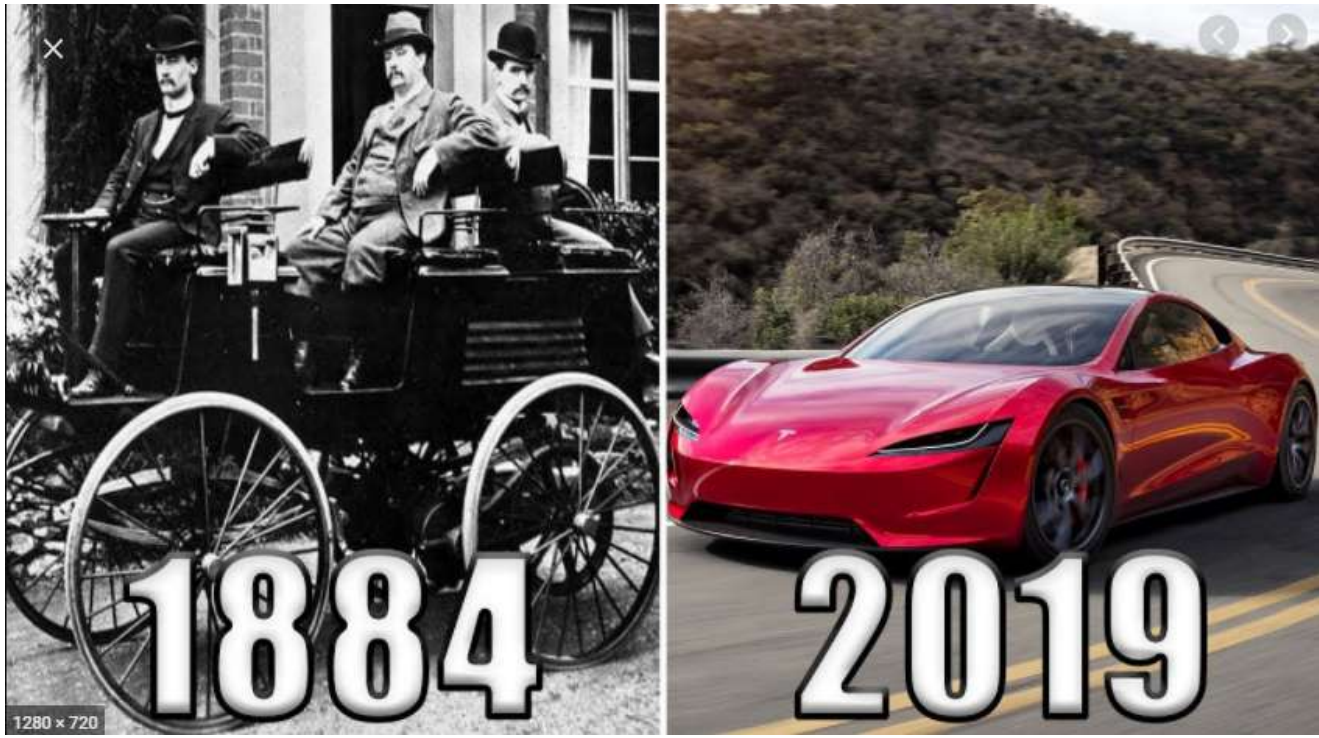


The future of our industry looks very promising!

- Digitalisation
- IP-based
- Cyber-secure

KNX IoT. The vehicle that Enables Evolution

- IP, the language to speak
- No interfaces anymore

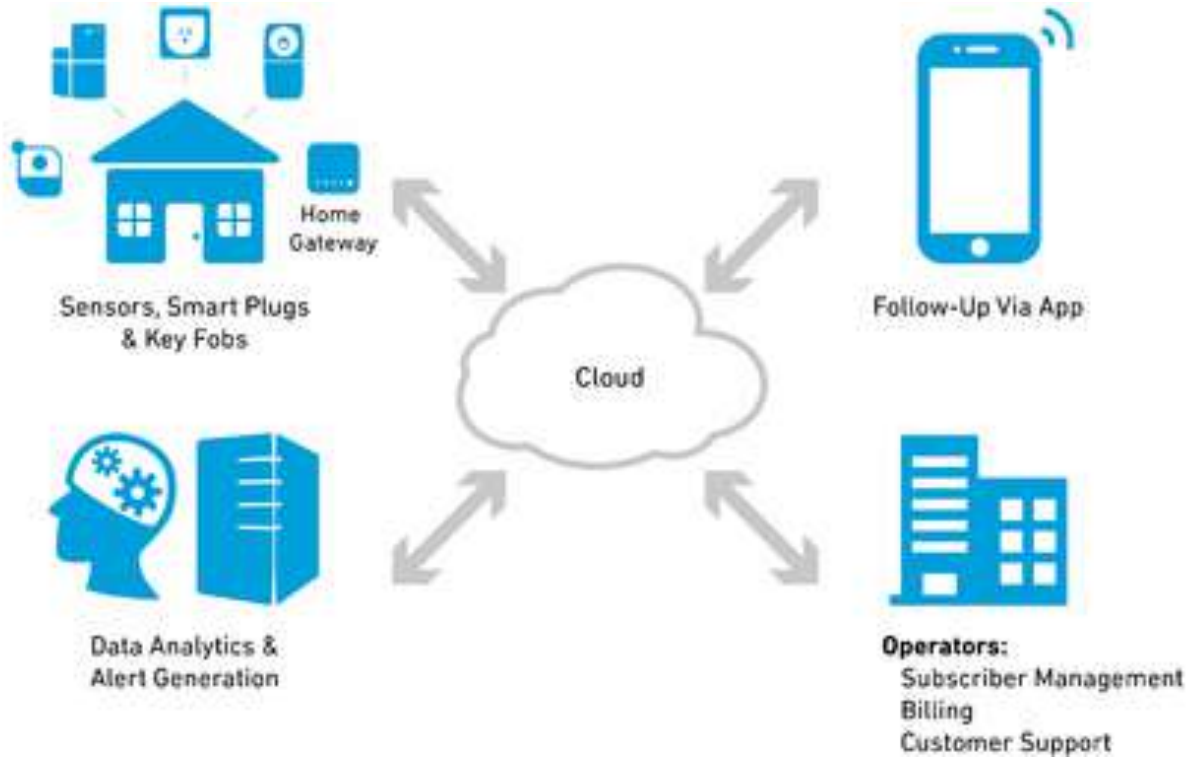


KNX IoT. The vehicle that Enables Evolution (2)

- Easy interaction
- (Self-)commissioning of devices
- Standard language between worlds
- Cyber-Security guaranteed

Services with KNX

Services with KNX increases functionality of devices as now devices will be working as an ecosystem. And at the same time, the very same devices will be able to collect and send information to the third parties to make sure the service in place will work without any problem.



EV charging a very special Service with KNX

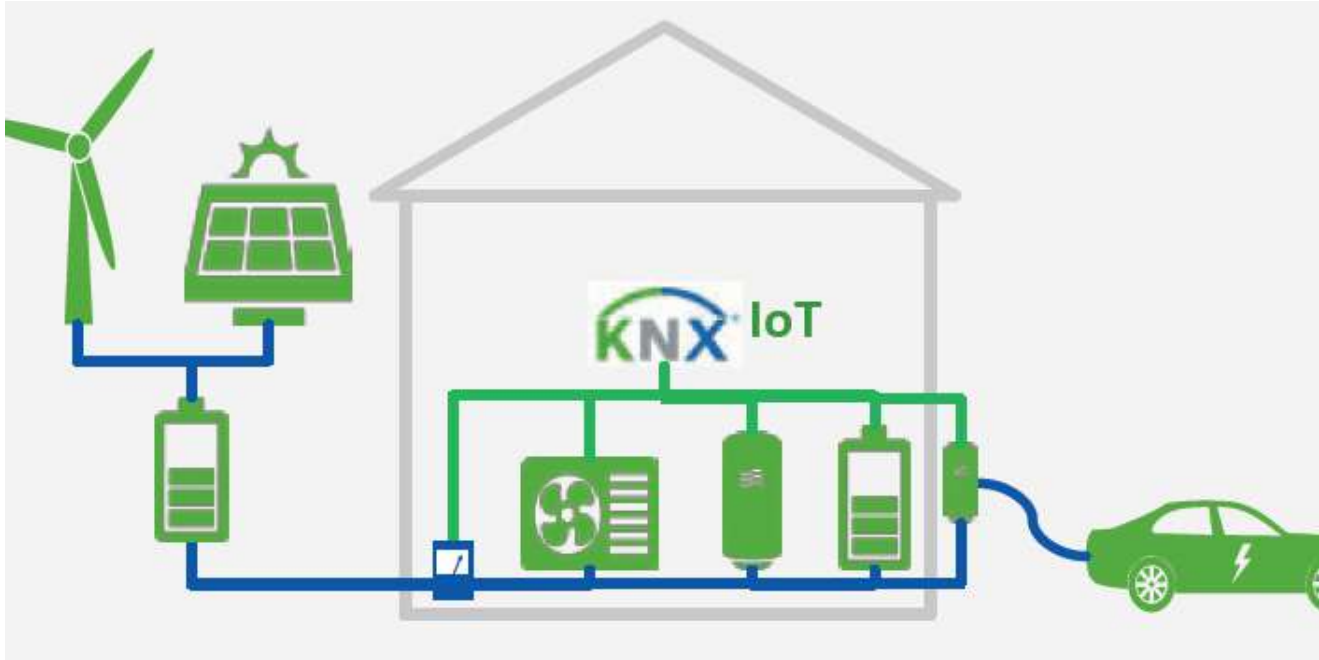
Seamless integration of energy management for mobility

- Clean energy integrated to the home/Building for EV charging
- Energy Management system controls the chargind according to conditions

EV charging uses cases

Use cases

1. Charging battery
2. Battery used as battery unit
3. Range control
4. …



Thanks.

Casto Cañavate Fernández
Marketing Manager

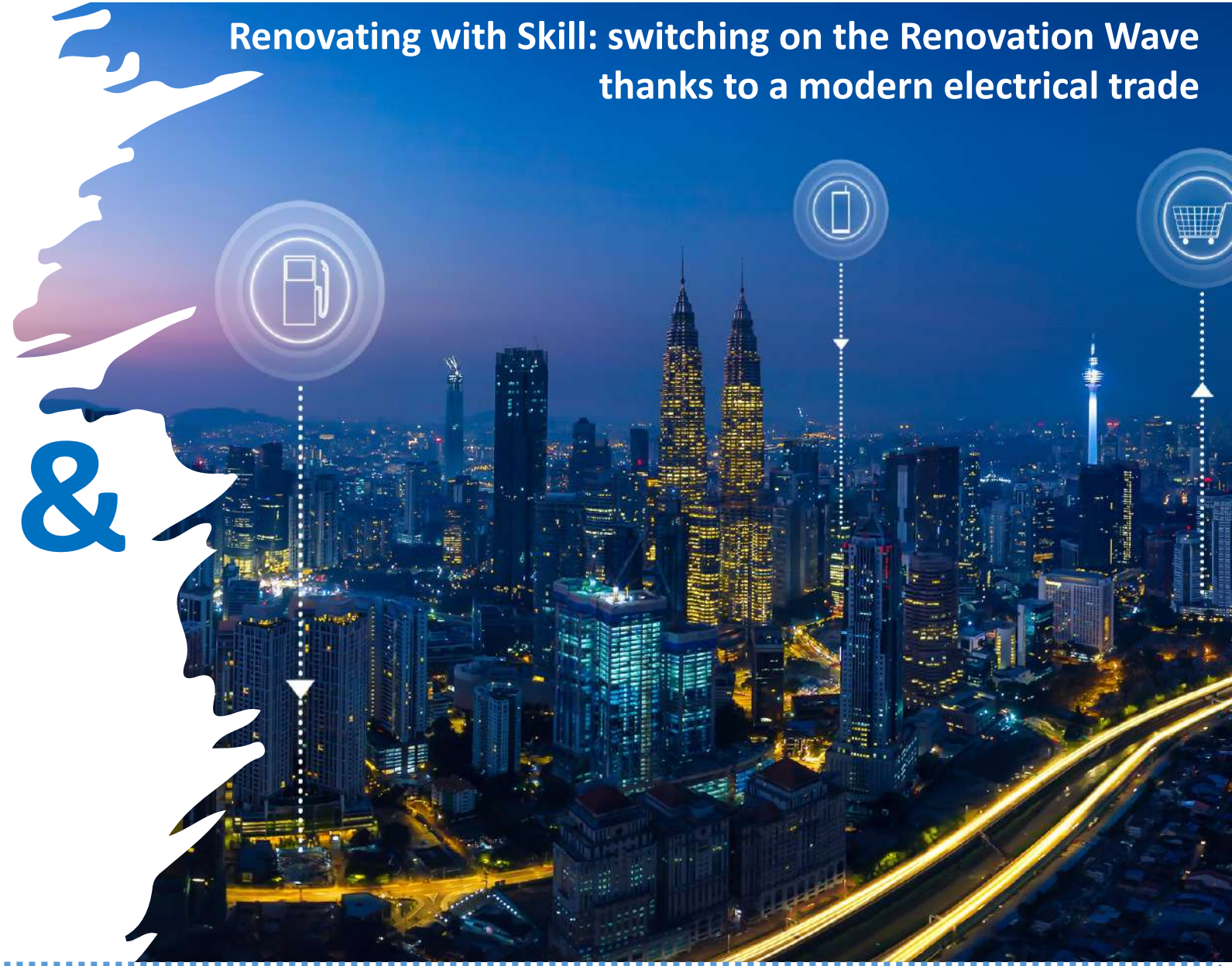
+32.487.523.216
Casto.Canavate@knx.org

For general questions:
info@knx.org – www.knx.org

Smart home and building solutions.
Global. Secure. Connected.

Join **us**
www.knx.org

Renovating with Skill: switching on the Renovation Wave thanks to a modern electrical trade



Questions & Answers

Thank you!

j.beaufils@europe-on.org https://europe-on.org/ EuropeOn_EU Sector Report

#Skills4Climate

EuropeOn
ELECTRICAL CONTRACTORS ASSOCIATION