



European Association of Automotive Suppliers

## CoRAI Automotive Intergroup Conference

**“Going green! A slippery road for automotive jobs, skills and funding?”**

*Sigrid de Vries*

*CLEPA Secretary General*

*Online, 25 November 2021*

# EUROPEAN SUPPLIERS AT A GLANCE



**75%**

Of the vehicle value  
Comes from suppliers



**€ 600 bn**

Turn over each year



**€30 bn**

Invested in R&D  
each year, 30% of the  
private sector R&D  
investment in the EU



**± 9.000**

Patents filed by the automotive  
industry each year



**14**

National associations and 14  
associated members within  
CLEPA



CLEPA represents over

**3.000** companies

producing the on

average **30.000**

parts composing a vehicle

# THE FUTURE OF MOBILITY IS NOW



- Megatrends: digital and green
- Magnitude of the transformation is unprecedented
- Challenges require decisive & concerted action



# SECURING MOBILITY FOR ALL



Transport has an important societal role to play, we need to guarantee that the future will provide mobility that is:

**Accessible**

**Affordable**



# GREEN DEAL ?

## CLEPA'S VISION:

Let's make it work together!



Supportive and reliable regulatory framework



Transformation, not disruption

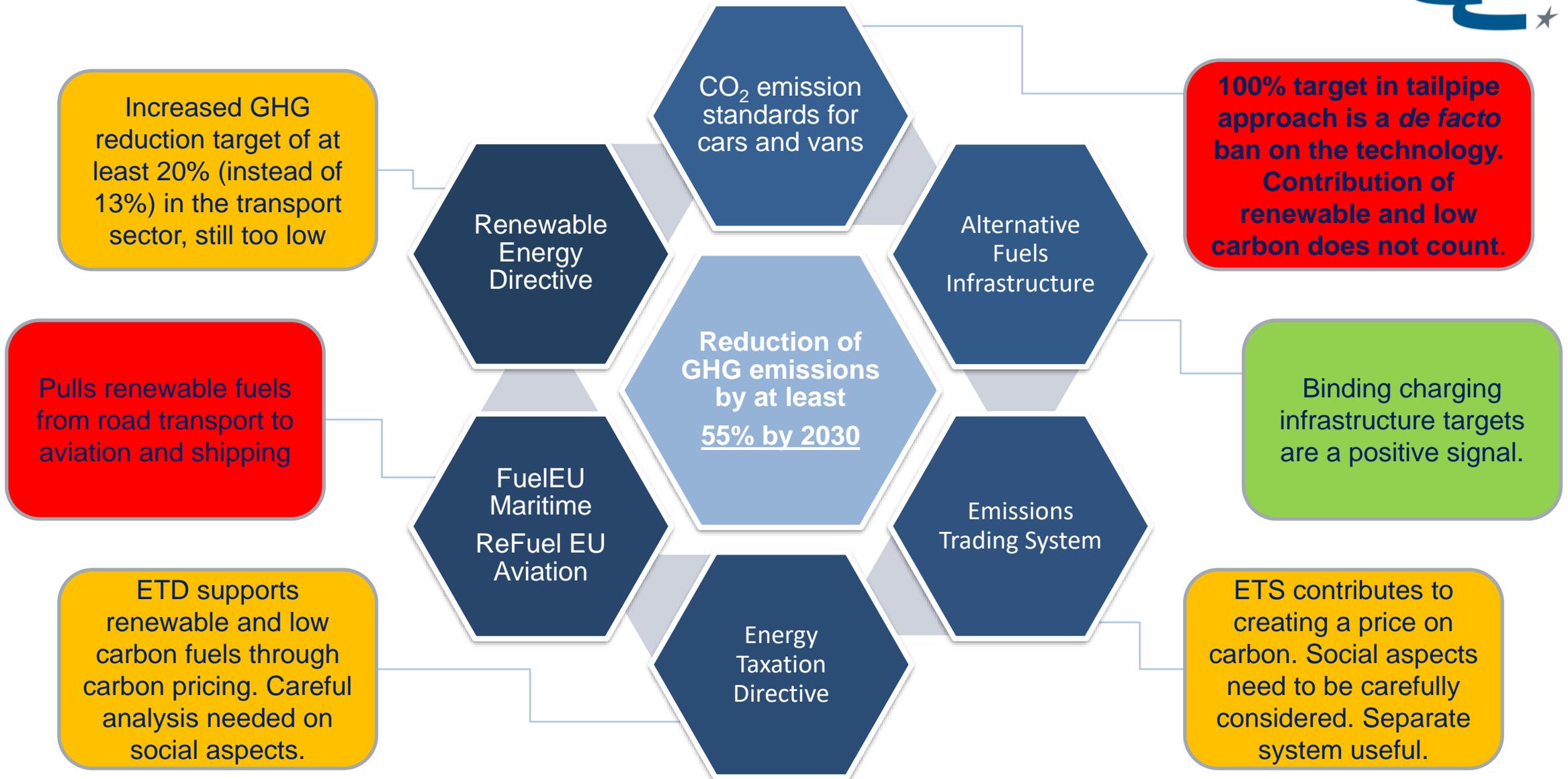


Focus on research, innovation, investment and employment



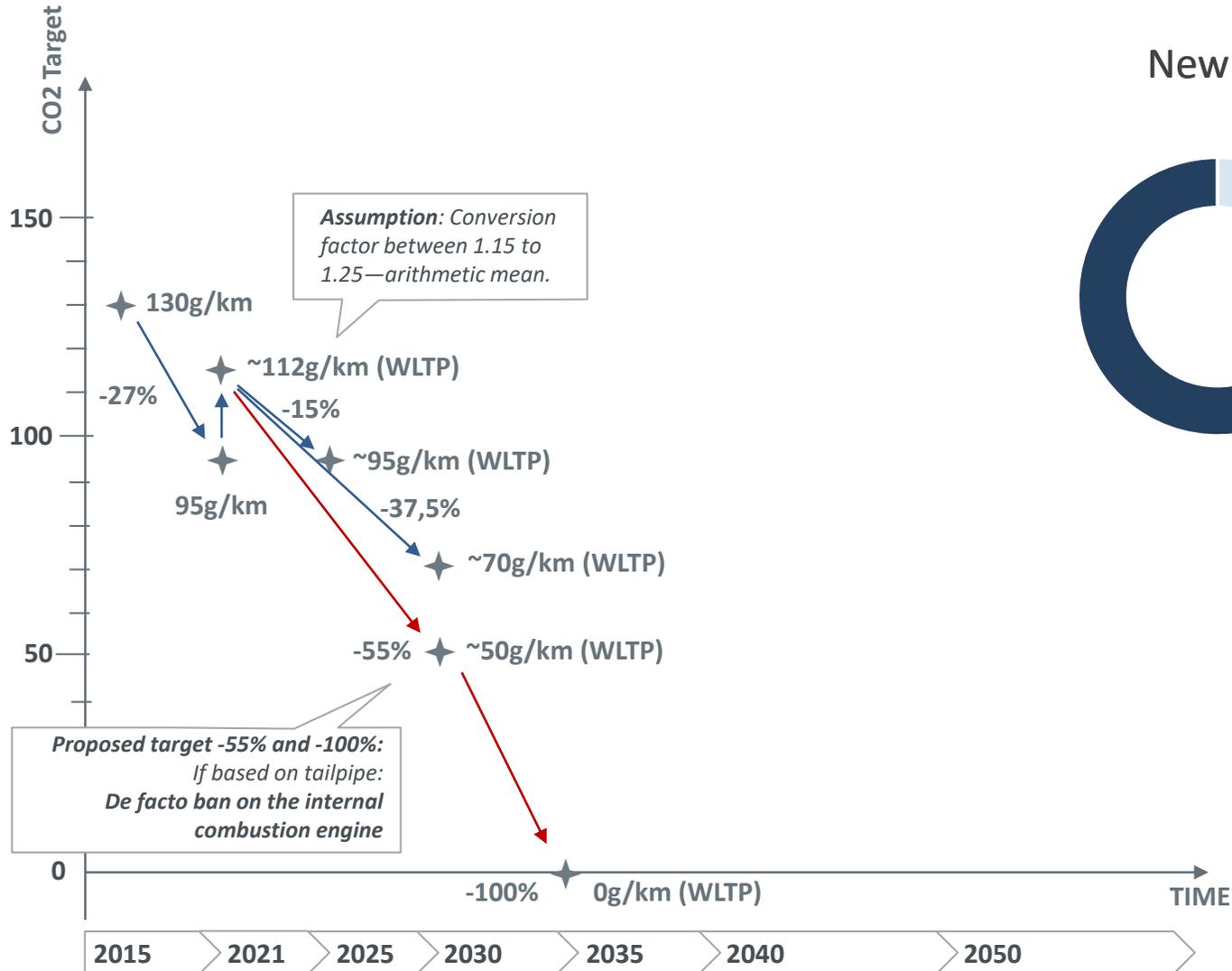
Holistic approach

# FIT FOR 55 PACKAGE

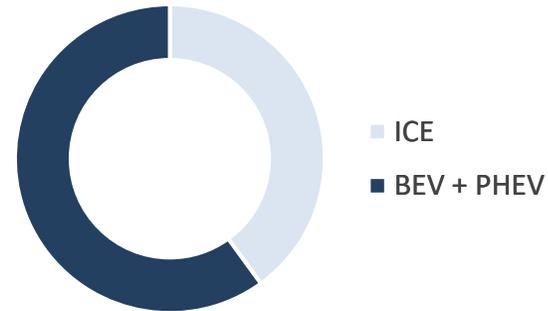


# FIT FOR 55: NEW CO2 TARGETS

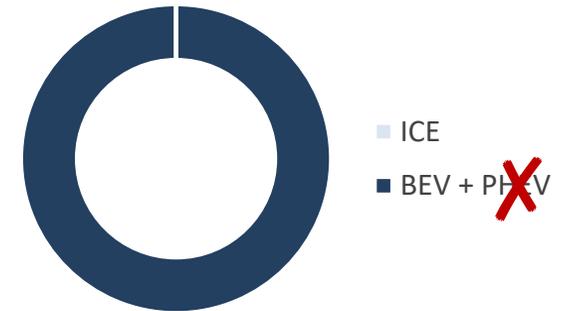
## A DEFACTO BAN ON THE COMBUSTION ENGINE



New vehicles 2030



New vehicles 2035

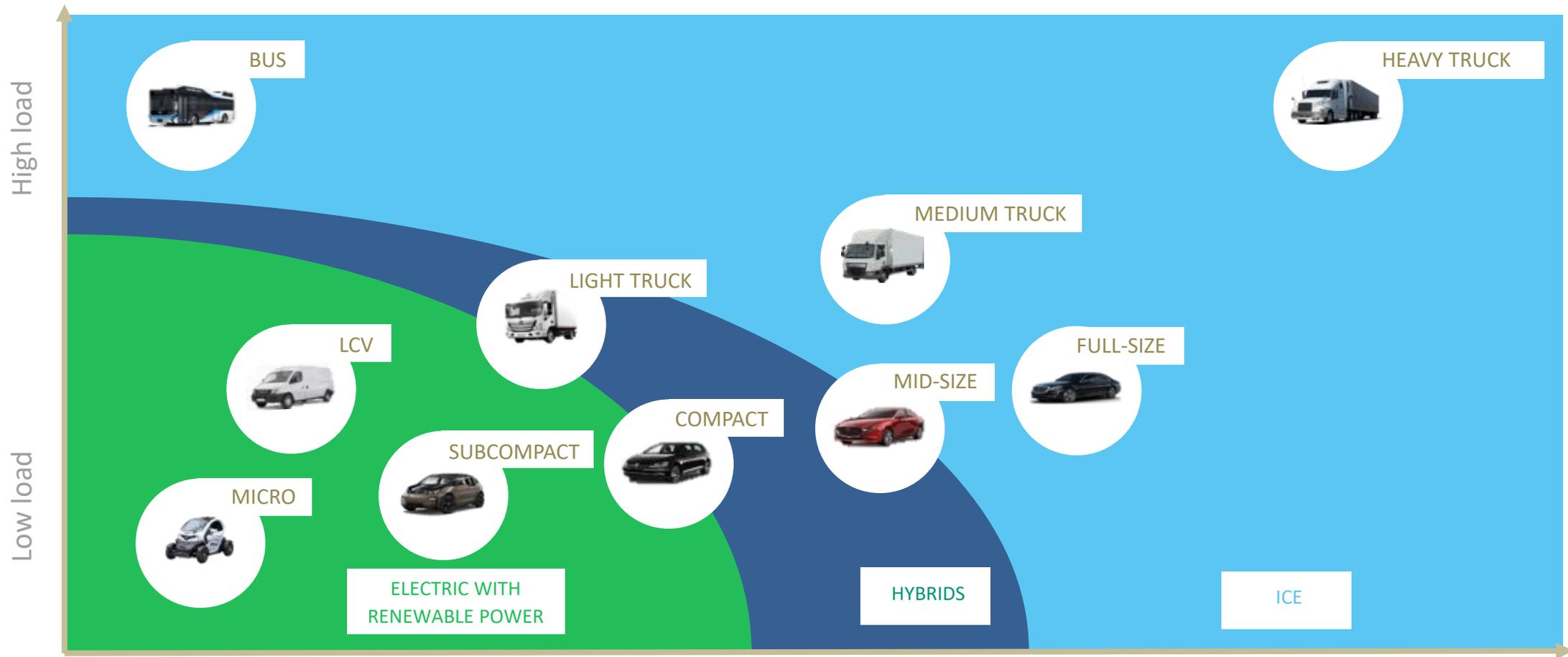


# TECHNOLOGY SOLUTIONS



Different Transport Requirements Need A Powertrain Mix

Mission profile > battery size > battery cost and weight > infrastructure investment > effect on environmental footprint





**Ban fossil fuels,  
not the internal combustion engine**

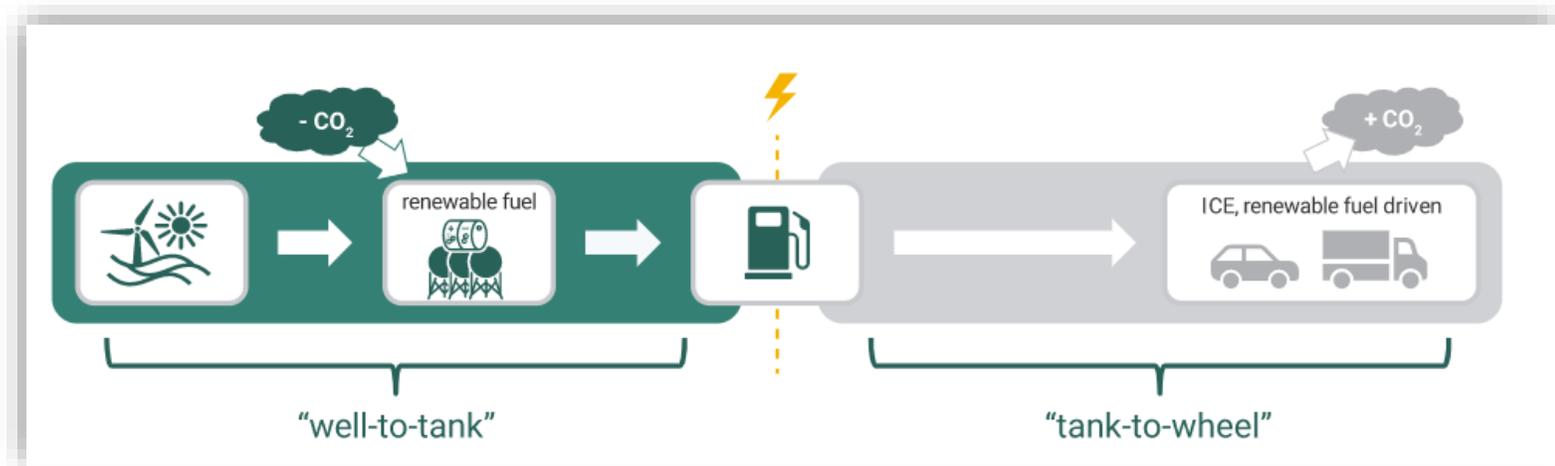
# RECOGNISING RENEWABLE FUELS



## Weaknesses of the current proposal for CO2 emission standards

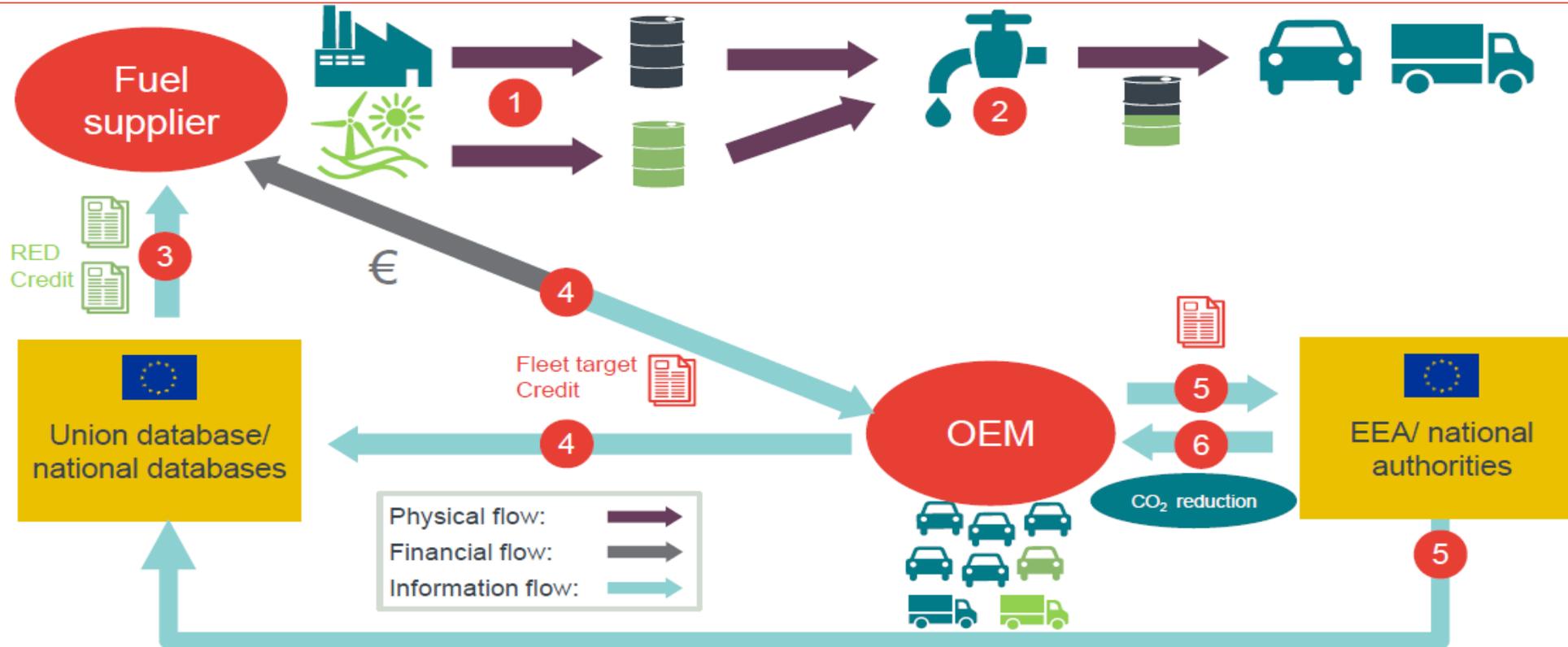
- The current proposal does not value the contribution of the sustainable and renewable fuels putting at risk the capital intensive investments that are needed
- Does not address the **transitional phase** of the decarbonisation path towards the climate neutrality (in particular, the decarbonisation of the **existing fleet**, the role of the **PHEVs**)
- Societal implications and are not taken into account

▶ The internal combustion engine is climate neutral when powered with sustainable renewable fuels.



# RECOGNISING SUSTAINABLE RENEWABLE FUELS

An overview of the crediting scheme



- 1 RE fuel production
- 2 RE fuels are supplied to final customers (often as a "blend")
- 3 Credits are issued and entered into national and Union database

- 4 OEM buys credits from fuel suppliers, this is reported to the RE fuel database – accounting separation to prevent double counting
- 5 OEM requests crediting against fleet target – responsible authority verifies the validity of credits
- 6 Equivalent CO<sub>2</sub> reduction amount is deducted from the initial emission value

# RECOGNISING SUSTAINABLE RENEWABLE FUELS



## The crediting scheme benefits



**Consumers** — Contributes to affordability of mobility



**Industrial scale** — The automotive industry has the capacity to invest and scale up production of renewable fuels



**Safety net** — Allows choice for use cases where electrification is not (yet) the best solution



**Level playing field** — Shifts the focus from banning technology to removing fossil fuels



**Faster and more efficient** — Renewable fuels reduce emissions from the existing fleet, no need to wait for fleet renewal.



**BEYOND SILOS APPROACH** - Create links between legislative tool for more efficiency

► Further reading on the functioning of the crediting system

<https://www.crediting-system-for-renewable-fuels.eu/>



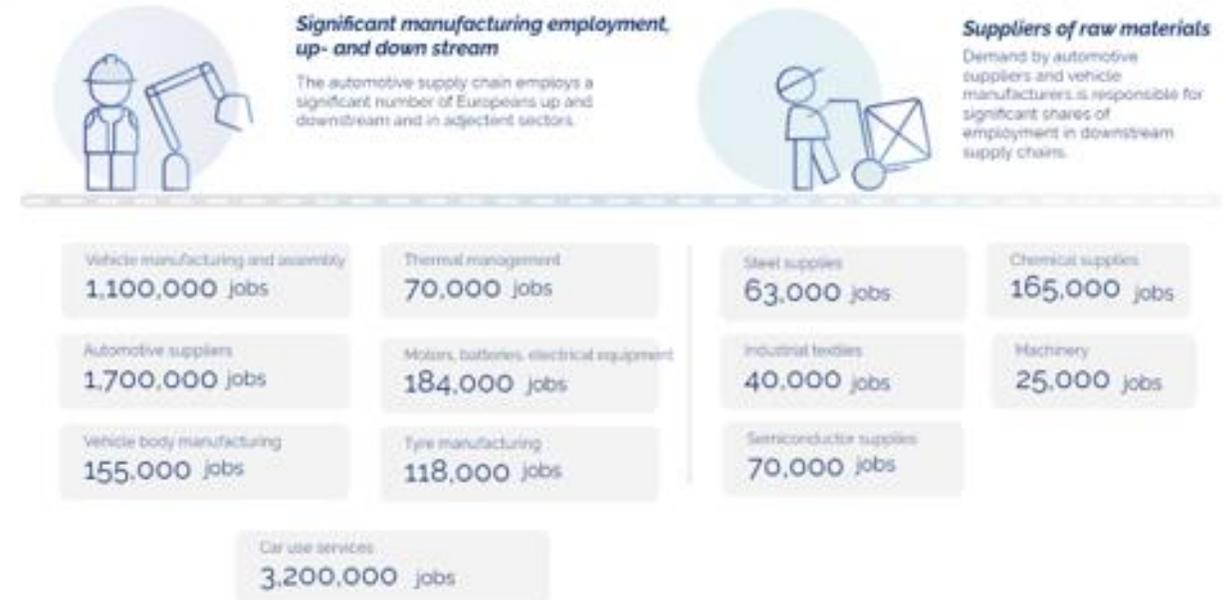
# Electric Vehicle Transition Impact Assessment: Study on Workforce of European Automotive Suppliers

Study by PwC Strategy& commissioned by CLEPA

# SUCCESS STARTS WITH KNOWING THE STAKES



Employment in thousands of jobs, automotive supply sector  
Source: Eurostat and National Associations



Automotive suppliers directly employ more than 1.7 million people across EU27, on top of 1.2 million with vehicle manufacturers

# OBJECTIVES OF THE STUDY



The study answers 3 guiding questions about the impact of the **EV transition on the European automotive supply industry**, with a focus on 7 key automotive markets:



What is the impact of different powertrain technologies and component requirements on value-add for automotive suppliers in Europe?



What is the corresponding effect on employment for automotive suppliers in Europe?



What would a mixed technology, EV-only or a radical EV-implementation scenario mean for climate targets, value-add and employment for automotive suppliers in Europe?

# KEY FINDINGS



Electrification puts **powertrain employment** significantly **at risk** (potential net loss of up to 275k employees until 2040)  
– *In all, 501k jobs at stake in the ICE domain, without counting employment created by electrification*



**Majority of future value-add** in powertrain technologies depends on **EU battery production** (70% of value-add)  
– *subsequently, European employment significantly depends on local battery production*



A **steep net reduction** of 291k jobs is expected **between the 2030 and 2035** timeframe alone  
– *A total of 360k jobs impacted in the ICE domain, pressure to transform towards future needs (e.g., software, electronics, infrastructure)*



A **mixed technology** scenario **mitigates** the impact on employment and creates value-add until 2040  
– *driven by hybrid vehicles market share*

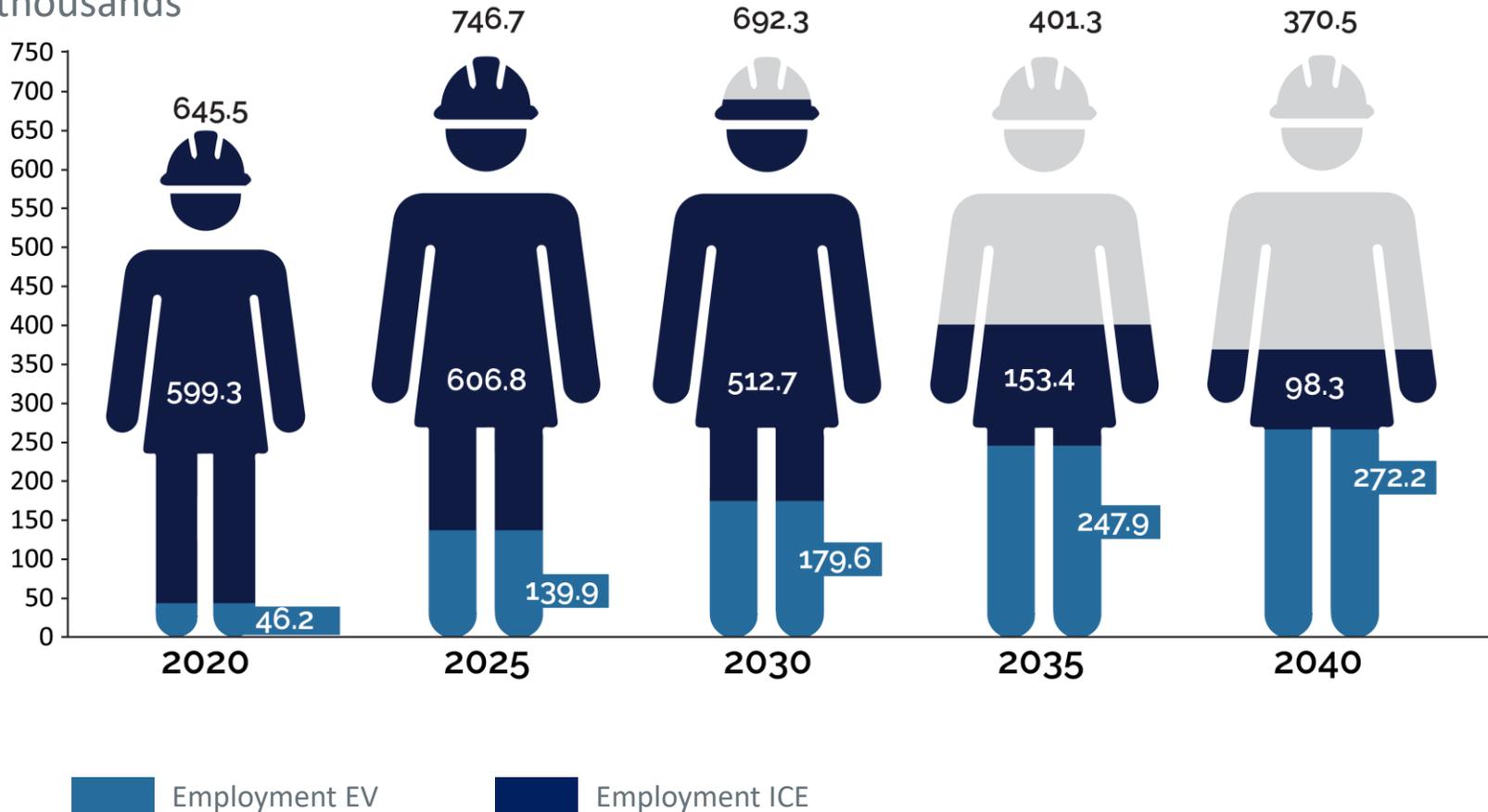


**Western European countries** will likely be best placed as strongholds in **EV production** (+56,2 €bn value-add until 2040)  
– *By contrast, Central Eastern European countries will shape the run-down of ICE vehicle production*

# EV-ONLY SCENARIO WILL SHED HALF A MILLION AUTO SUPPLIER JOBS



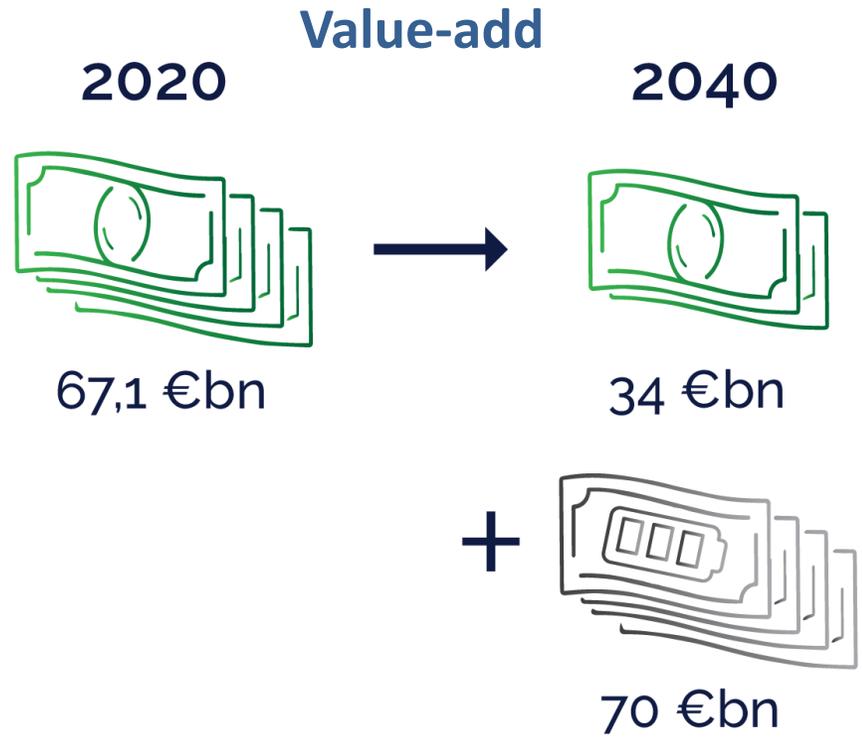
Employment  
in thousands



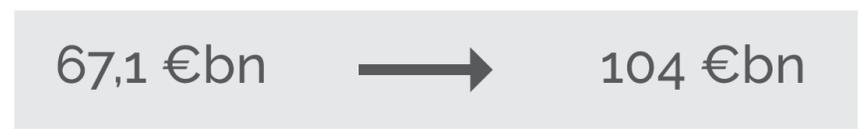
**-84% current jobs in ICE**

- 501K jobs will become obsolete from now until 2040
- This is about **one-third of current workforce**
- EV powertrain creates 226k new opportunities but still net loss of 275k jobs
- **Not 1:1 compensation** for ICE to EV powertrain employment

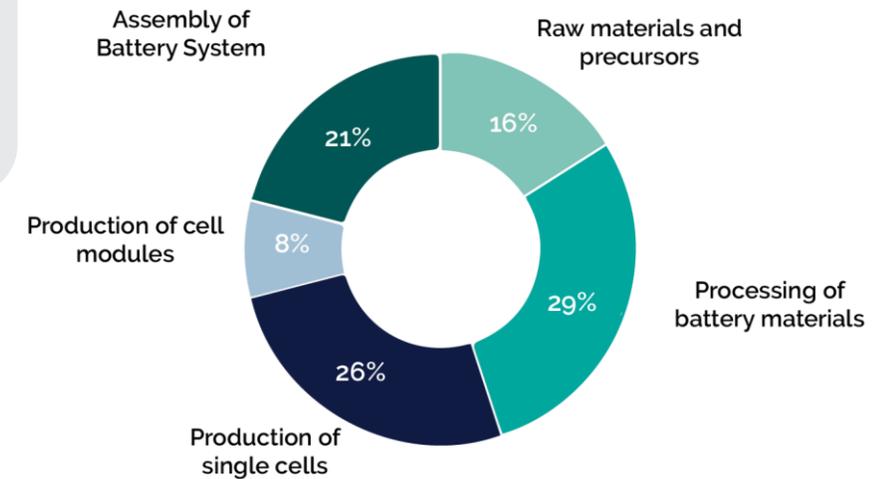
# MAJORITY OF VALUE-ADD HINGES ON UNCERTAIN EU BATTERY VALUE CHAIN



**70% of the total value-add is entirely dependent on European battery chain**



Share of battery value-add by area of activity

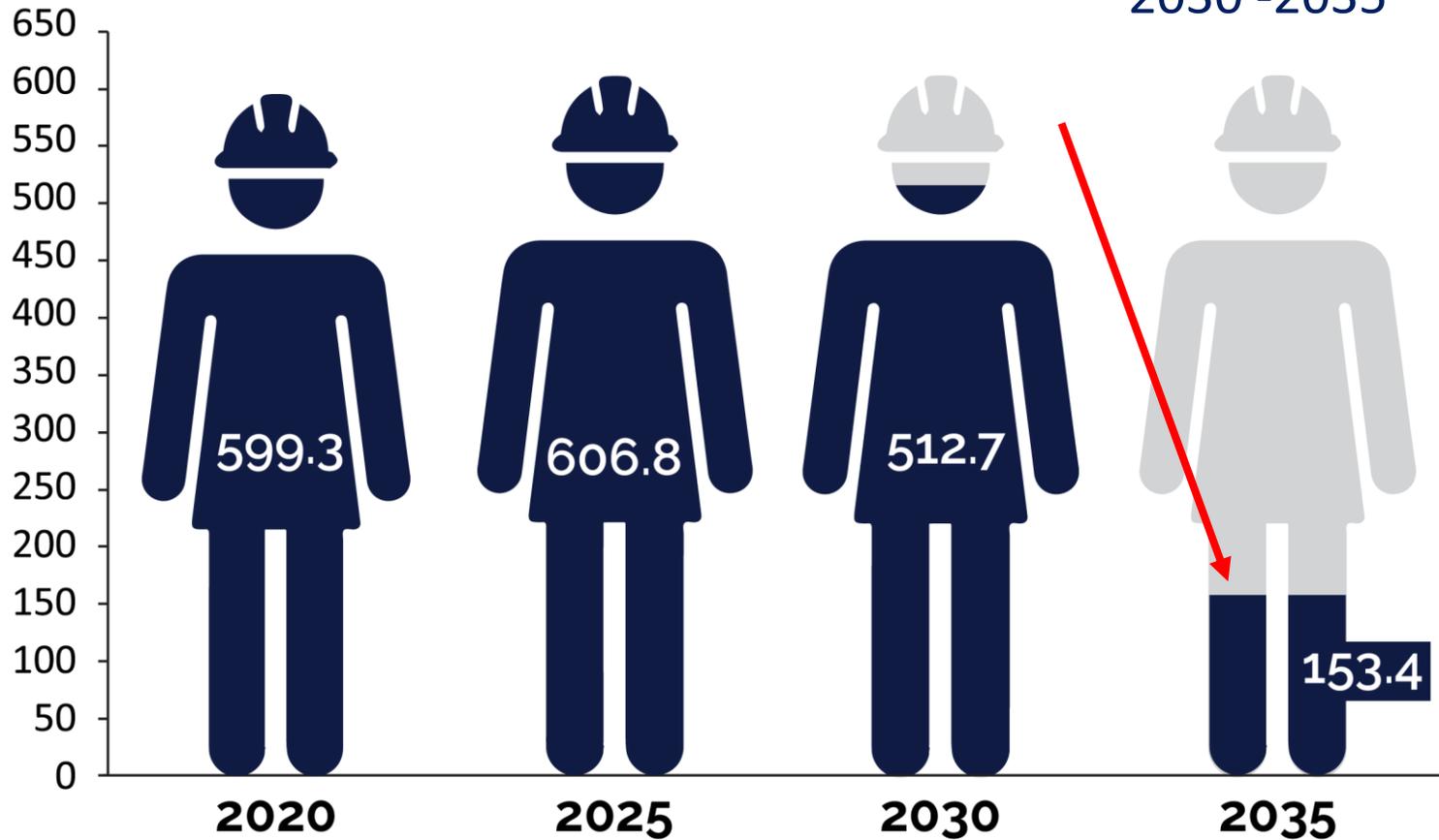


# EVERY MOMENT COUNTS – TRANSITION VS. DISRUPTION



Employment  
in thousands

## ICE Powertrain Employment



- 70% of the job losses in ICE powertrain production will happen in **just a 5-year period**
- **Very short time-frame to manage social and business impacts** + investments needed (grid, infrastructure, RES...)
- The faster the loss of ICE powertrain (**30-40% of overall employment**) the greater the pressure on regional economies, and less time to retrain workers

# AUTOMOTIVE SUPPLIERS LEFT BEHIND?



**Investments needed in ICE engine now with a ban in 2035 on the horizon.**



**CEE countries will remain highly dependent on ICE powertrain.**



**Highly specialised & SME suppliers have lesser options compared to OEMs.**

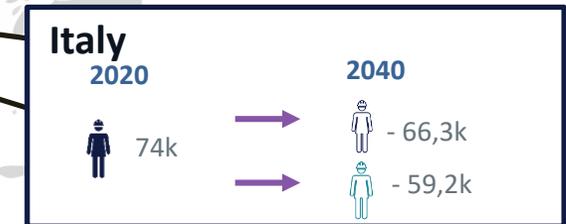
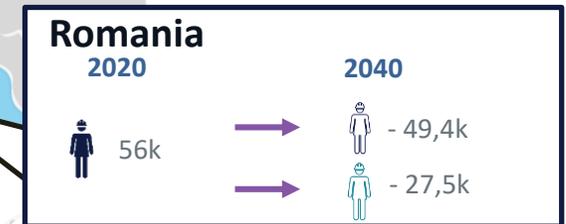
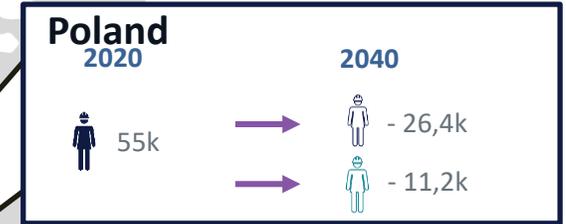
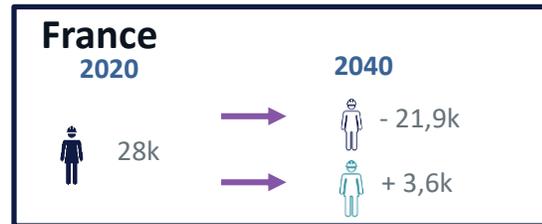
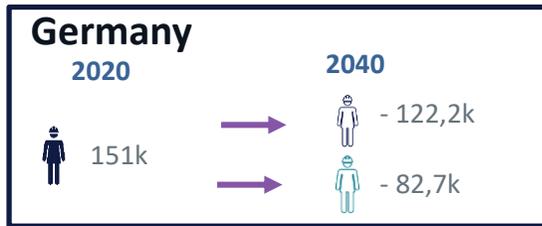
# GEOGRAPHICAL BREAKDOWN

EV-only scenario



- Focus countries
- Europe as a whole: EU27 countries, EFTA, UK
- Net ICE powertrain employment
- Net overall powertrain employment (EV + ICE)

7 Focus countries cover ~74% of European automotive production



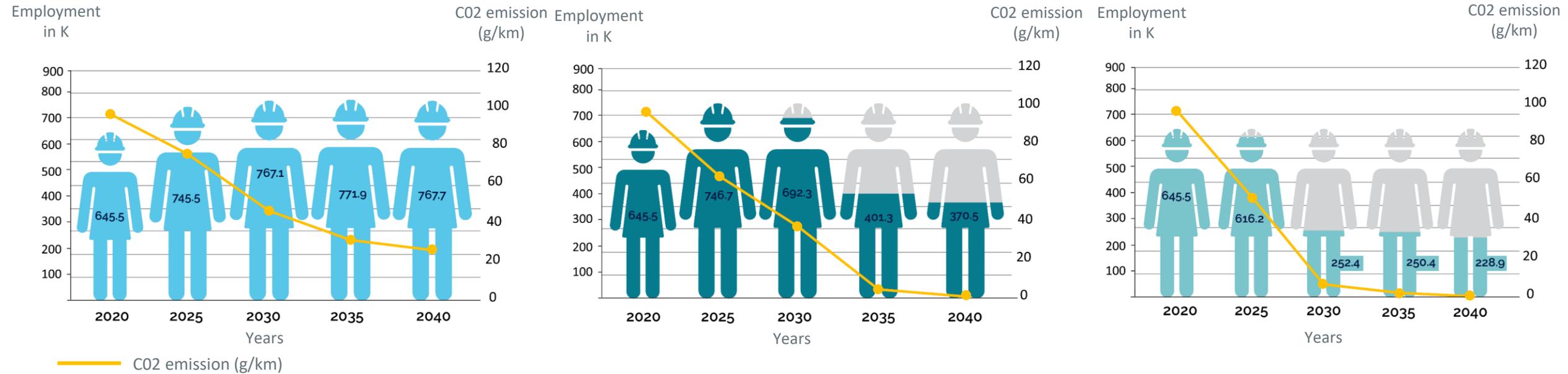
# A MIXED TECHNOLOGY SCENARIO PROVIDES THE MOST MANAGEABLE TRANSITION WITHOUT COMPROMISING ON CLIMATE



Mixed Technology Scenario

EV-only Scenario

Radical Scenario



EV-only leads to steep decline in jobs in a five-year period, radical scenario is completely unmanageable, **Mixed technology provides employment growth and stability**

CO2 is measured at the tailpipe only, the inclusion of a **WtW approach, recognising sustainable renewable fuels** has the potential to record further emissions reduction

# AUTOMOTIVE SUPPLIERS' KEY MESSAGES ON 'FF55'



All renewable energy solutions and clean drivetrain technologies are needed to decarbonise the road transport sector and achieve the EU's climate neutrality objective

## Technology open approach

- Enable the deployment of **all clean drivetrain technologies** (BEV, FCEV, ICE/PHEV, hydrogen combustion)
- **Avoid technology bans** leading to an EV only market
- **Shift from tailpipe to well-to-wheel** approach to account emissions

## Role for renewable fuels

- Acknowledge the **role of renewable and low carbon fuels**, also in reducing the enormous **infrastructure costs** of an electrification-only approach
- Introduce a **crediting scheme**
- Set a **more ambitious** GHG intensity reduction target in transport sector

## Social & Employment dimension

- Address the **social impacts** of higher carbon price
- Consider and address the **impact** of the proposed measures **on employment**, especially in regions with a dense automotive suppliers' industry

# ROUTE TO CLIMATE NEUTRAL



**Oliver Zipse, BMW:**

“If you say that 50% of the market in Europe will be pure electric in 2030, there is still the other 50%, and if you say you will not serve [this part] you are setting yourself on a course to shrink.”



**Herbert Diess, VW:**

“Bis 2030 ist keine andere Technologie wettbewerbsfähig, ob nun die Brennstoffzelle oder E-Fuels.”



**Akio Toyoda, Toyota:**

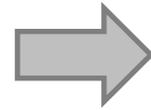
“Carbon is the enemy, not the internal combustion engine.”

# MAKING IT WORK

## Policy options & instruments



Electrification-only  
approach



Technology-open  
approach

### 1. Flanking measures

- charging infrastructure
- investments in e-fuels and hydrogen
- support for re- and upskilling
- Market incentives

### 3. Review clause

- Date, KPIs, corrective measures

### 2. Recognition of sustainable renewable fuels

- Introducing a “crediting scheme”
- Possible within the CO2 fleet regulation
- Credible use of range extenders, hybrids, plug-in hybrids, hydrogen combustion

### 4. Just transition: social dimension, transformation funding

***No compromising on climate goals***

# GREEN DEAL: ACCELERATING THE TRANSITION

How to make it work for mobility, society and industry



Integrated approach, 'just' transition, knowing the stakes



Recharging



Refuelling



Level playing field for  
powertrain technologies



Affordability



European Association of Automotive Suppliers

**Thank you!**

**CLEPA**

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<https://clepa.eu>