



Low-Emission Mobility & Clean Buses

Policy overview

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Policy Framework at EU level

Regulation

- Directive 2009/33/EC – Clean Vehicles Directive
 - ☞ general framework for public procurement of clean vehicles
- Directive 2014/94/EU – Alternative Fuels Infrastructure Directive
 - ☞ standardisation of relevant alternative fuels infrastructure

Financial Support

- Research: FP7 (e.g. ZeEUS), Horizon 2020 (e.g. Eliptic)
- Deployment (Connecting Europe Facility & CEF2)

Non-legislative Support measures

- European Clean Bus Deployment Initiative
- European Battery Alliance & Strategic Action Plan

Revision of Clean Vehicles Directive



- Extension of **scope**
 - Including rented, leased, hire-purchased vehicles and a set of service contracts
- Introduction of a **clean vehicle definition**
 - **LDV: based on tail-pipe emission-thresholds:**
 - 2025: 25gCO₂/km (M1,M2) or 40gCO₂/km (N1), 80% of RDE emission limits;
 - 2030:0gCO₂/km
 - **HDV:** Commission to set similar emission thresholds through a Delegated Act once EU HDV emission standards are in force. Until then, definition based on alternative fuels (**electricity, hydrogen, CNG/LNG**)

Revision of Clean Vehicles Directive



- **Minimum national targets** for clean vehicles' procurement
 - Defined as minimum % of clean vehicles in the total public procurement across a Member State
 - Calculated based on GDP per capita and urban population density
 - For each Member States, specific targets for LDVs, trucks and buses in 2025 and 2030. Ranges:
 - For cars/vans: between 16–35% in both 2025 and 2030 (2030 = ZEV)
 - For trucks: between 6-10% in 2025, 7-15% in 2030
 - For buses: between 29-50% in 2025, 43-75% in 2030
 - Flexibility in the distribution of effort within a Member State
- Reporting requirements for Member States

Global Outlook



“By 2030, we expect 84% of all municipal bus sales globally to be electric.

China has led this market in spectacular style, accounting for 99% of the world total last year.

The rest of the world will follow, and by 2040 we expect 80% of the global municipal bus fleet to be electric”

Source: Bloomberg New Energy Finance, March 2018

" Electric buses were seen as a joke at an industry conference in Belgium seven years ago when the Chinese manufacturer BYD Co. showed an early model. “Everyone was laughing at BYD for making a toy,” recalled Isbrand Ho, the Shenzhen-based company’s managing director in Europe.

" Their [electric buses] impact on energy use so far has become much greater than the passenger sedans produced by companies from Tesla Inc. to Toyota Motor Corp."





European
Commission

Global Outlook



Clean Bus Deployment Initiative



3 major elements

- Common political declaration
(signed by more than 80 actors now)
- Expert group under the Sustainable Transport Forum
 - Technology
 - Operations / Integration into City Infrastructure
 - Procurement
 - Financial implications
- Deployment and investment hub
(under preparation)



Strategic Action plan for Batteries

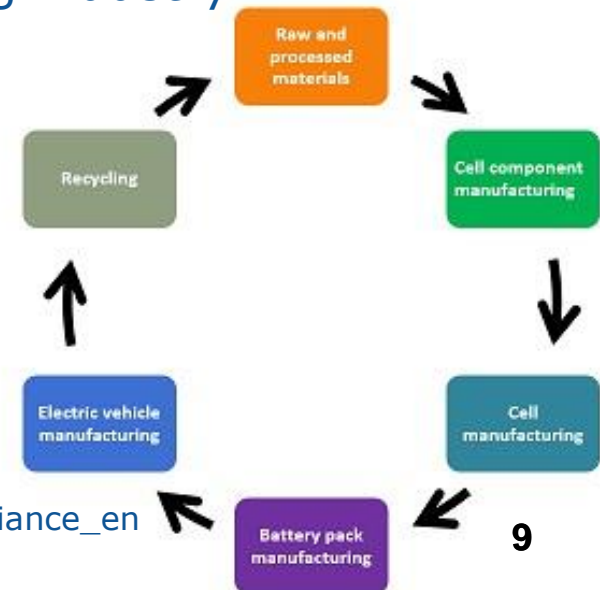
- Secure access to raw materials – as well as recycling of batteries;
- Support European battery cells manufacturing
- Stepped-up EU research and innovation
- Develop and strengthen a highly skilled workforce
- Sustainability of EU battery cell manufacturing industry - lowest environmental footprint possible
- Ensure consistency with the broader enabling and regulatory framework



European Battery Alliance

- Launched in October 2017

https://ec.europa.eu/growth/industry/policy/european-battery-alliance_en



EU needs an infrastructure that

- fully covers the Trans-European Networks-transport (TEN-T) corridors' core network by 2025 as a key infrastructure backbone in the EU;
- sufficiently covers the whole transportation network for use by all vehicles and vessels;
- enables consumers to recharge or refuel their vehicles as easily as a conventional vehicle;
- ensures inter-operability of infrastructures and services across borders;
- handles increased user demand through smart grid management and storage technologies.





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Outlook to 2019 and beyond

Clean vehicles

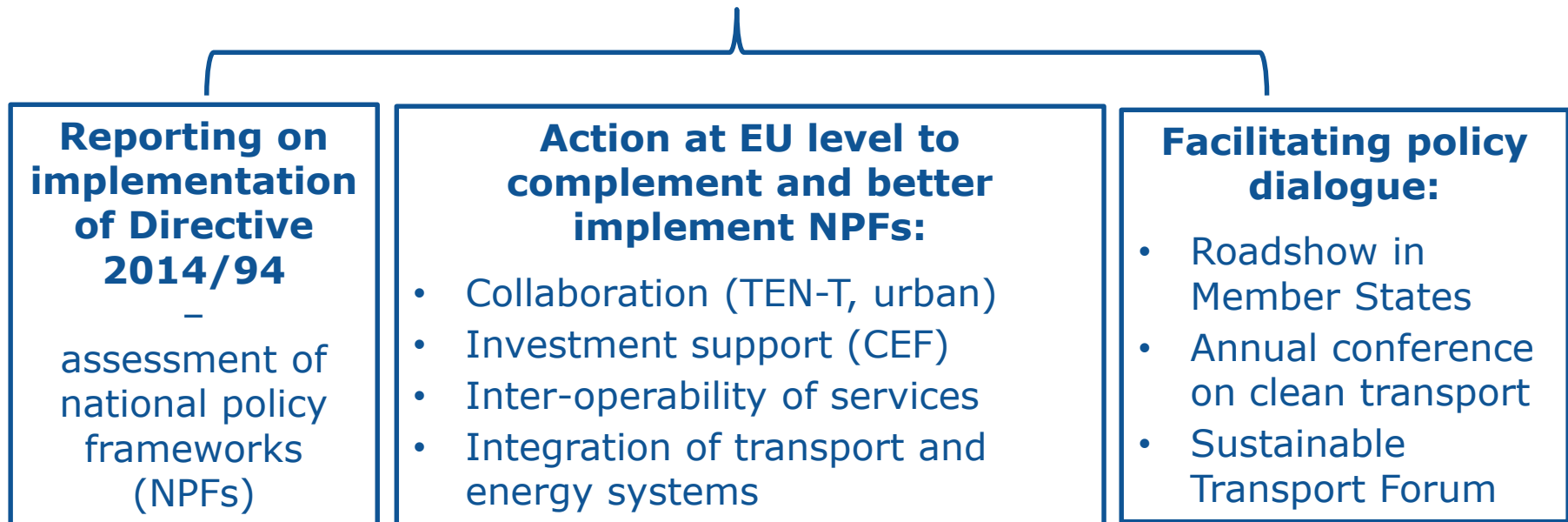
- General approach and first reading of Mob II policy initiatives under AT and RO presidency

Alternative Fuels

- Update of EU alternative fuels report for 2019
- Member State reporting on implementation of National Policy Frameworks (Nov 2019)
- Evaluation of Directive 2014/94/EU in view of needs of amendments
- Continued implementation of standardisation programme

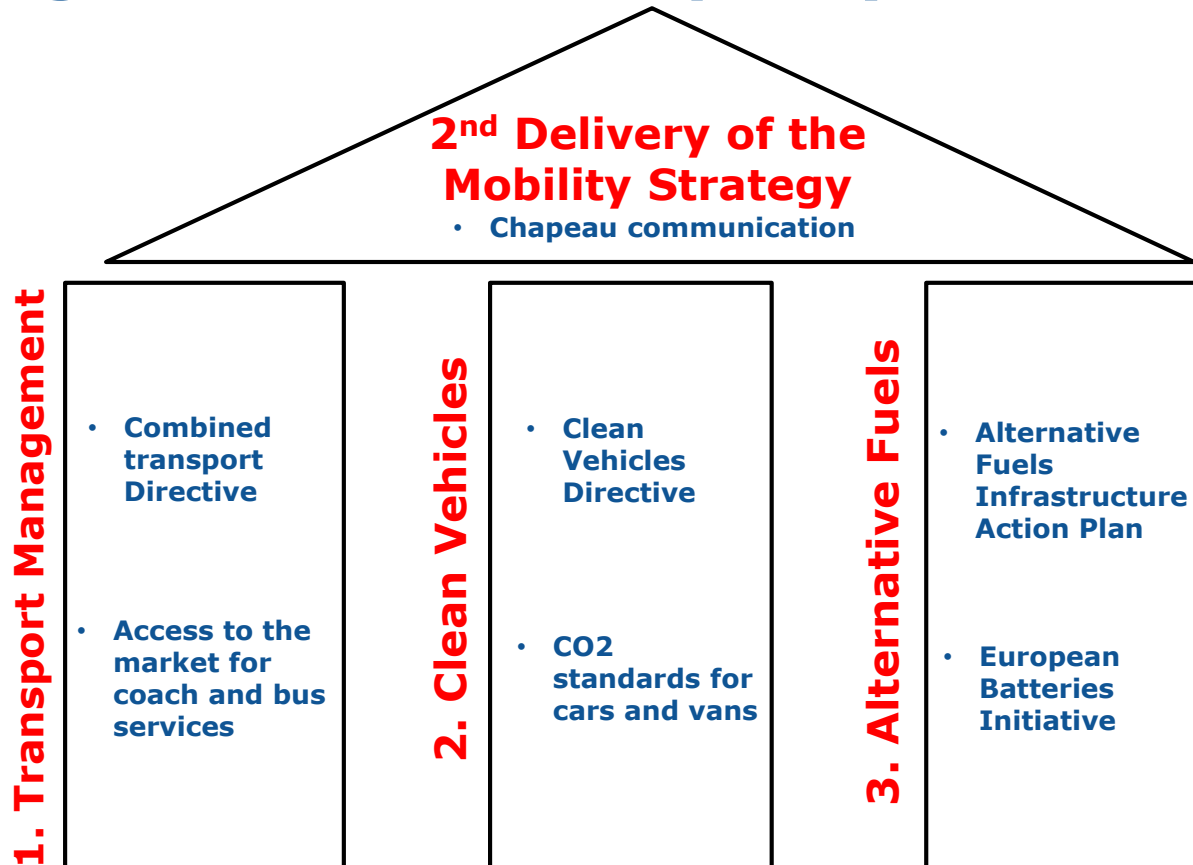
Backup Slides

Action Plan on Alternative Fuels Infrastructure (COM (2017) 652 final) to support implementation of Directive 2014/94/EU



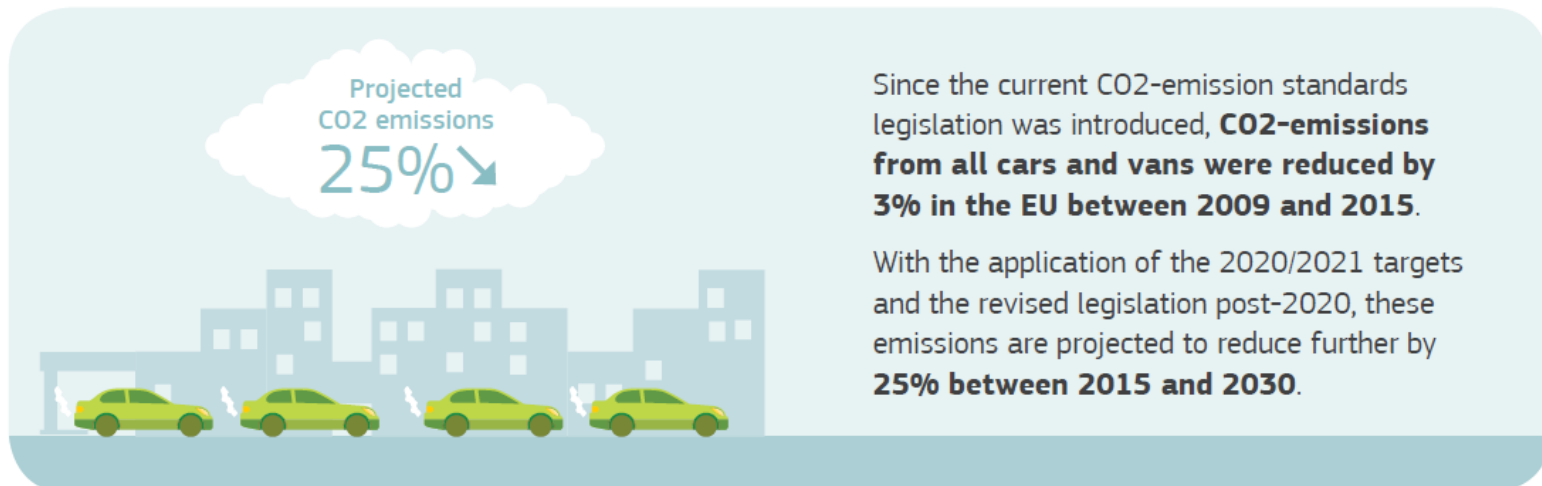
Mobility Package II

Using all levers in the policy mix



Complemented by other initiatives in 2017 on Eurovignette, testing procedures, energy performance of buildings, C-ITS etc.

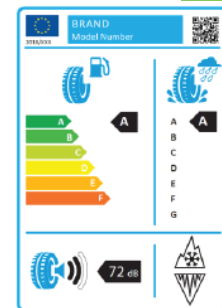
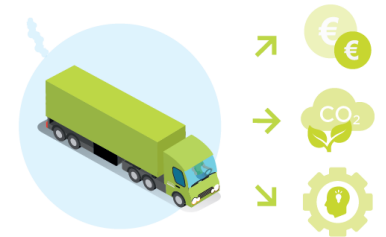
CO₂ emission performance standards



- Average new passenger car % vans emissions to be **15% lower in 2025** (starting point: 95 g Co₂/km and 147 g CO₂/km respectively) and to be **30% lower in 2030** compared to 2021
- Based on **WLTP** = targets expressed as percentage reductions compared to the average of the specific emission targets for 2021
- **Incentive mechanism** for low- and zero-emission vehicles
- New governance – **market surveillance** mechanisms

3rd Mobility Package: clean transport

- CO2 emission standards for HDV:
 - 4 groups of trucks = 65-70% of HDV emissions
 - Reduction targets: -15% in 2025, -30% in 2030
- Batteries Action Plan:
 - Integrated approach covering the whole value chain
 - Focus on sustainability
- EU Label for tyres:
 - Promotion of fuel-efficient, safe tyres with low noise level
 - Emission reductions & economic savings



More Information

For info or further questions on this seminar and the activities of the JASPERS Networking Platform, please contact the JASPERS Networking and Competence Centre at the following email:

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