



NGVA
— Europe
for sustainable mobility

Carbon neutrality: which role for natural gas ?

EU GASON project - Final event

A.GERINI – Secretary General
Aldenhoven, 26th March 2019



CO₂
emissions
standards

**Renewable
Energy
Directive**

Pollutant
emissions
R.D.E.

**Clean Vehicle
Directive**

**Alternative
Fuels
Infrastructure
Directive**

**Energy
Taxation
Directive**

MEMBER STATE LEVEL

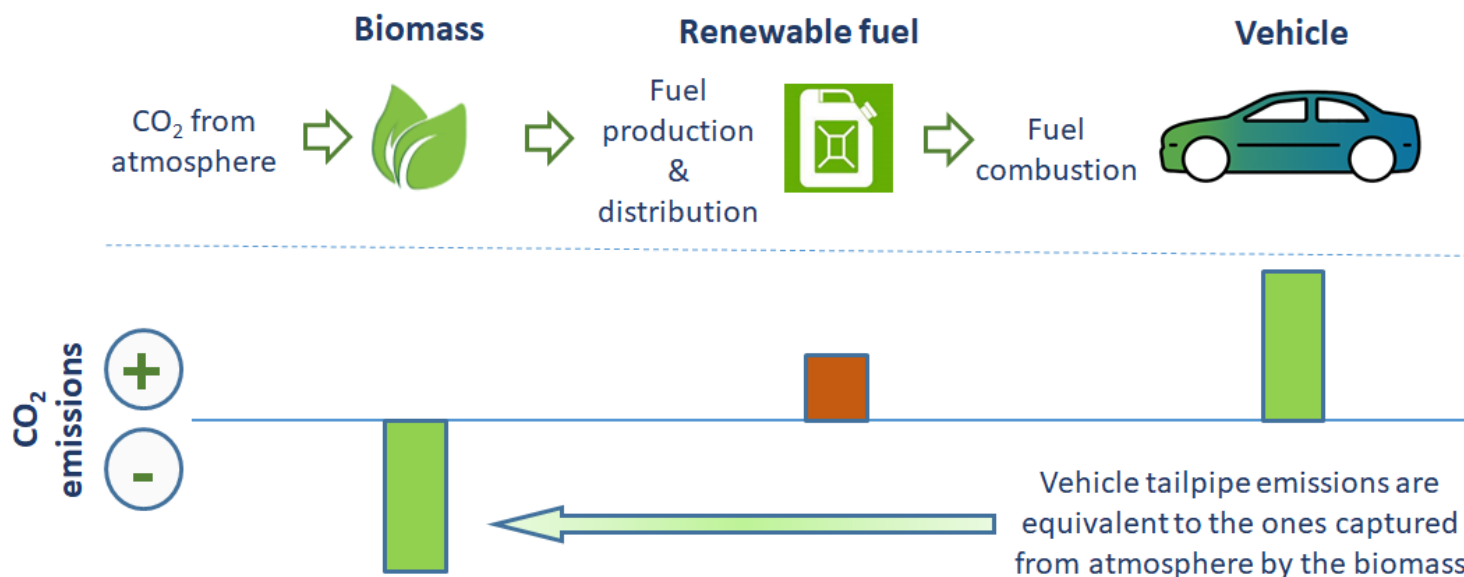
VAT
Excise Duties

Incentives

City bans



Renewable gas and CO₂ regulation



RENEWABLES



FOSSIL FUELS



Fuel

Vehicle

CO₂ emissions value as proposed in the RED II («default values»), considering contribution from combustion = to zero

PC & LCV

Article 7 Monitoring and reporting of average emissions

8a. Development of a common methodology for LCA assessment < 2023

Article 14 Review and report

1. Considering potential contribution from synthetic and advanced alternative fuels

HDV

Article 13 Review and report

1c ...developing a specific methodology to include the potential contribution to emission reductions of the use of synthetic and advanced alternative liquid and gaseous renewable fuels...< end 2022

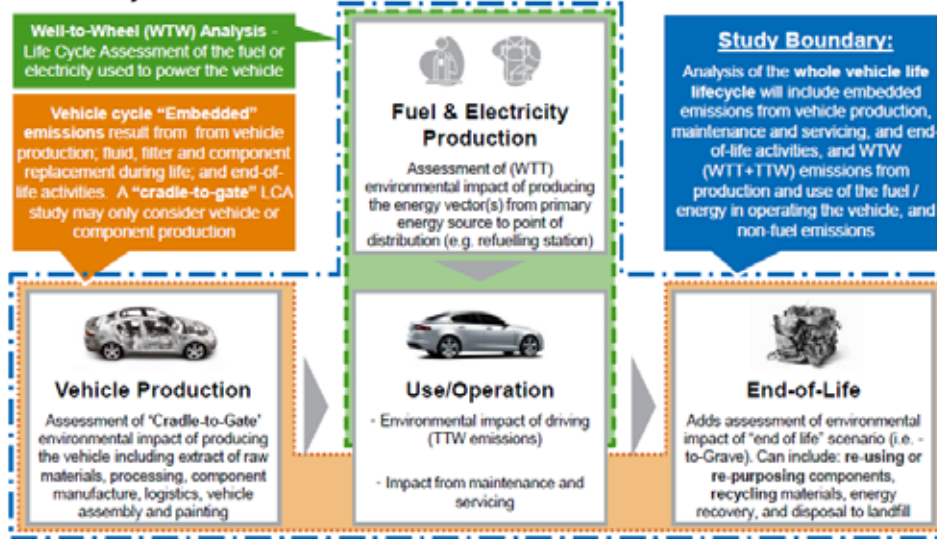
4. Development of a common methodology for LCA assessment < 2023

Life Cycle Assessment



Pilot study on determining the environmental impacts of conventional and alternatively fuelled vehicles through Life Cycle Assessment

Vehicle Life Cycle



Renewable gas

Traceability of the renewable gas used from the road transport system
Guarantees of Origin

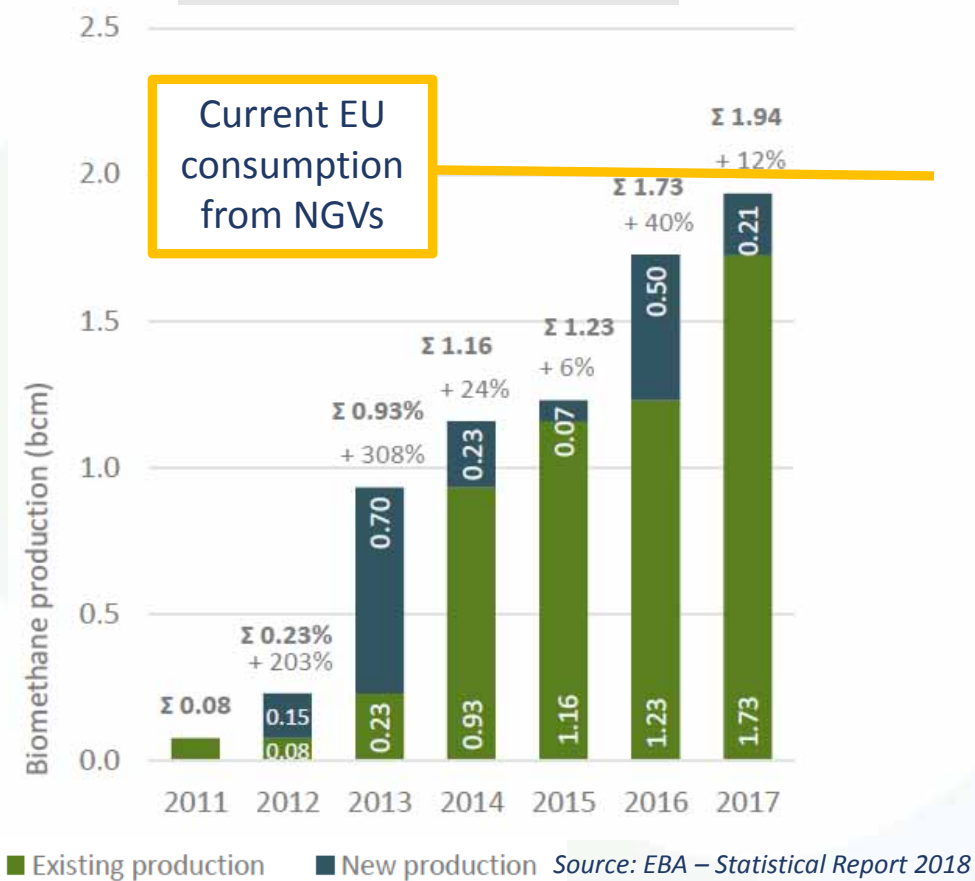
Extension of the current **SHARE** platform also to renewable fuels used in transport

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nrg_ind_ren&lang=en

Number of biomethane plants

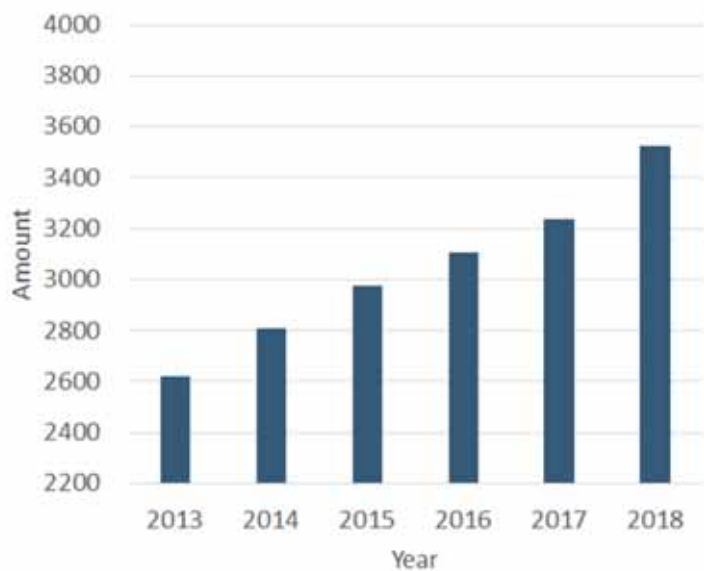


Biomethane production



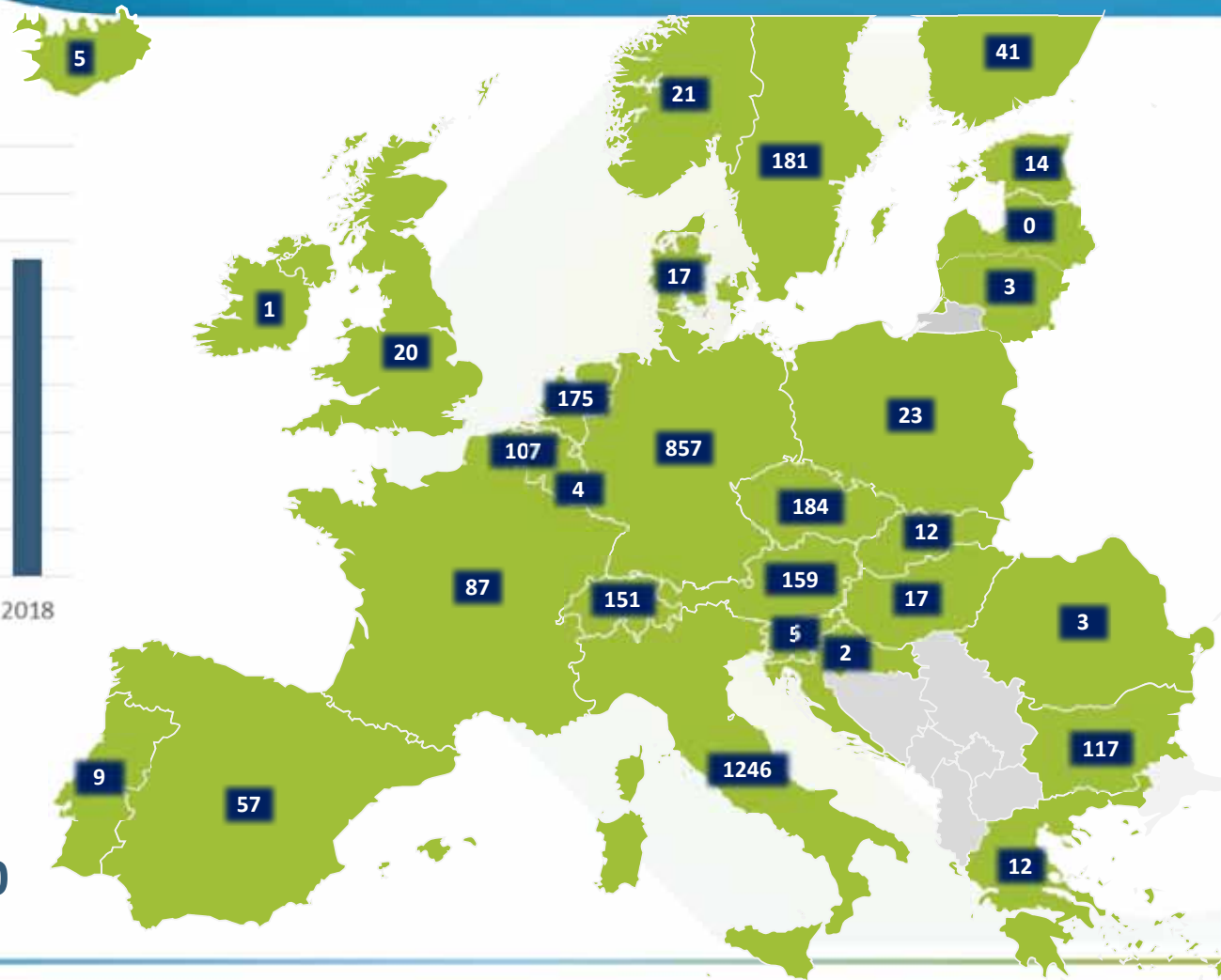
Gas refuelling infrastructure

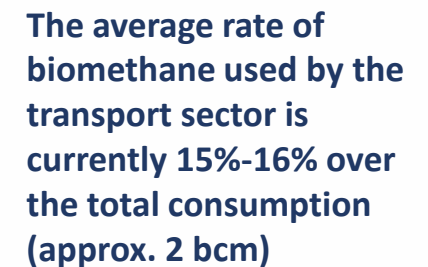
CNG stations EU + EFTA – Status 02-2019



Total: 3,530

For real-time map visit
<https://www.ngva.eu/stations-map/>



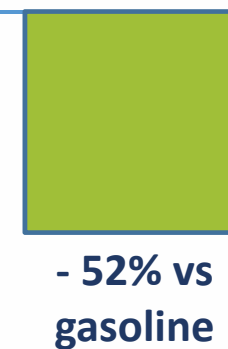


Current Situation

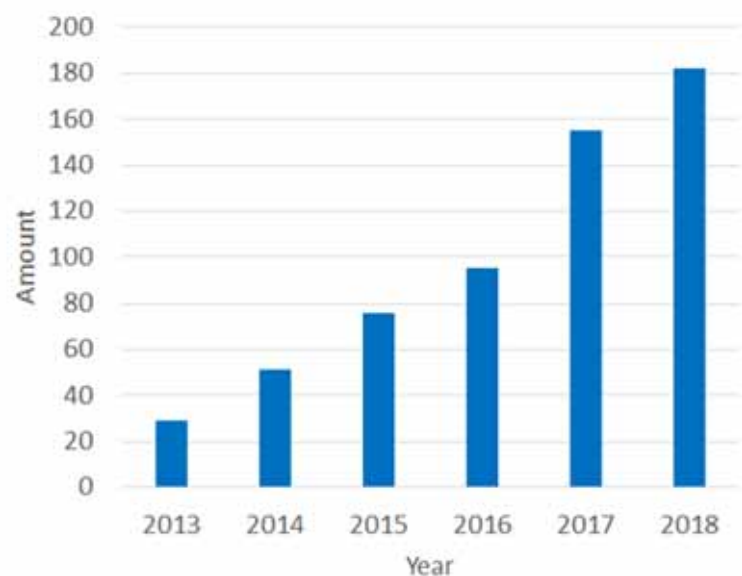


Additional Fuel Price Information EC Decision

VEHICLE EFFICIENCY €/100 KM



(Prices: EU average 2018)



Total: 182

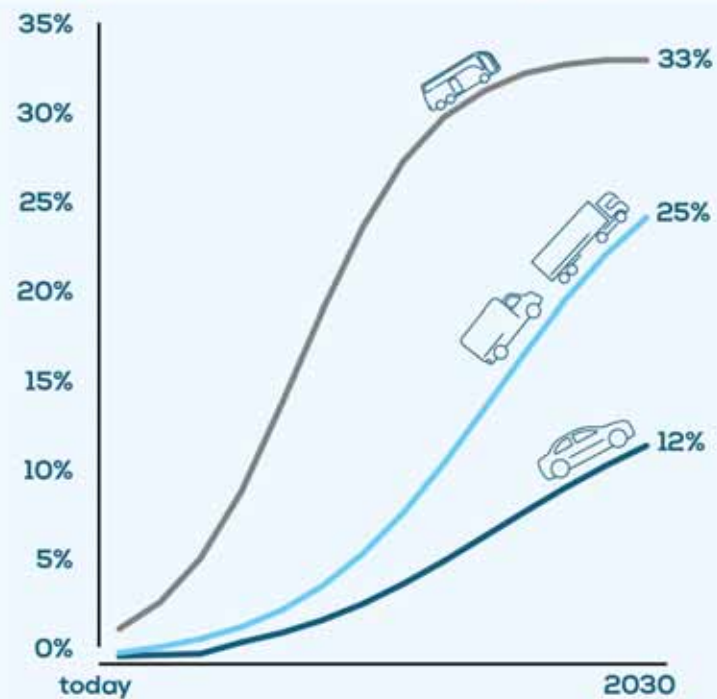
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Vision to 2030



Market share natural gas vehicles in Europe

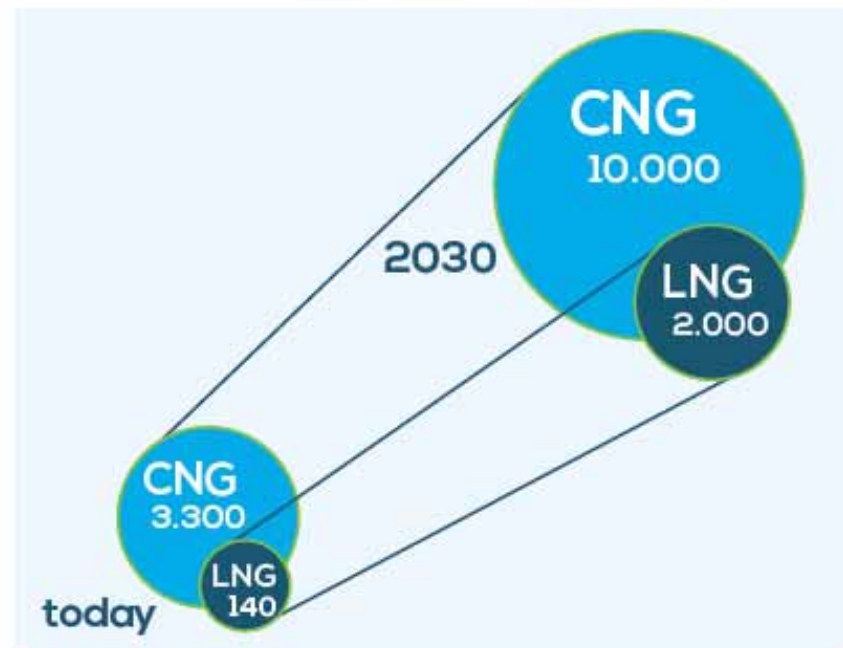


Natural gas vehicles fleet development

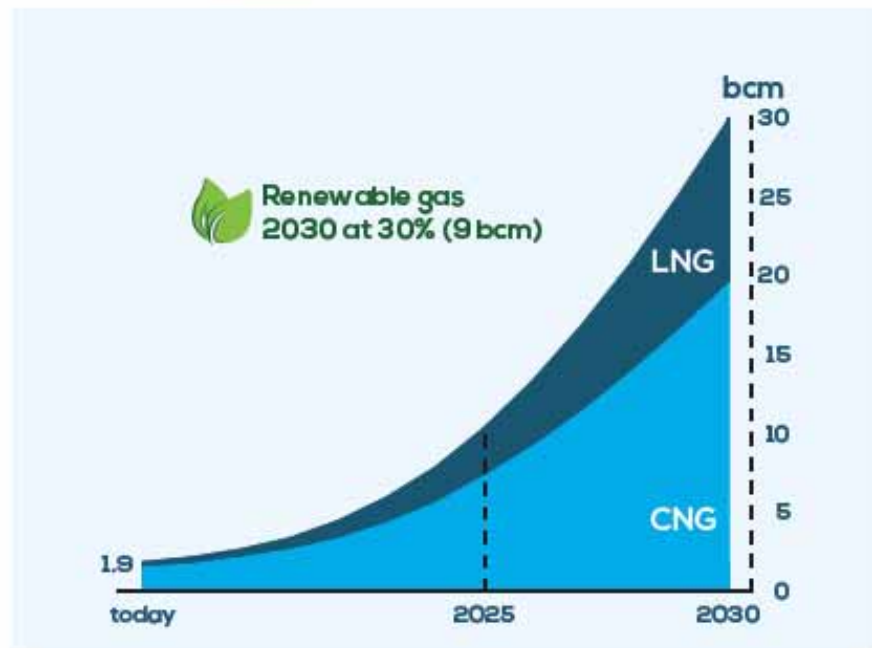
	today	2030
	1.300.000	12.600.000 $\times 10$
	16.000	110.000 $\times 7$
	9.000	190.000 $\times 21$
	6.000	280.000 $\times 47$



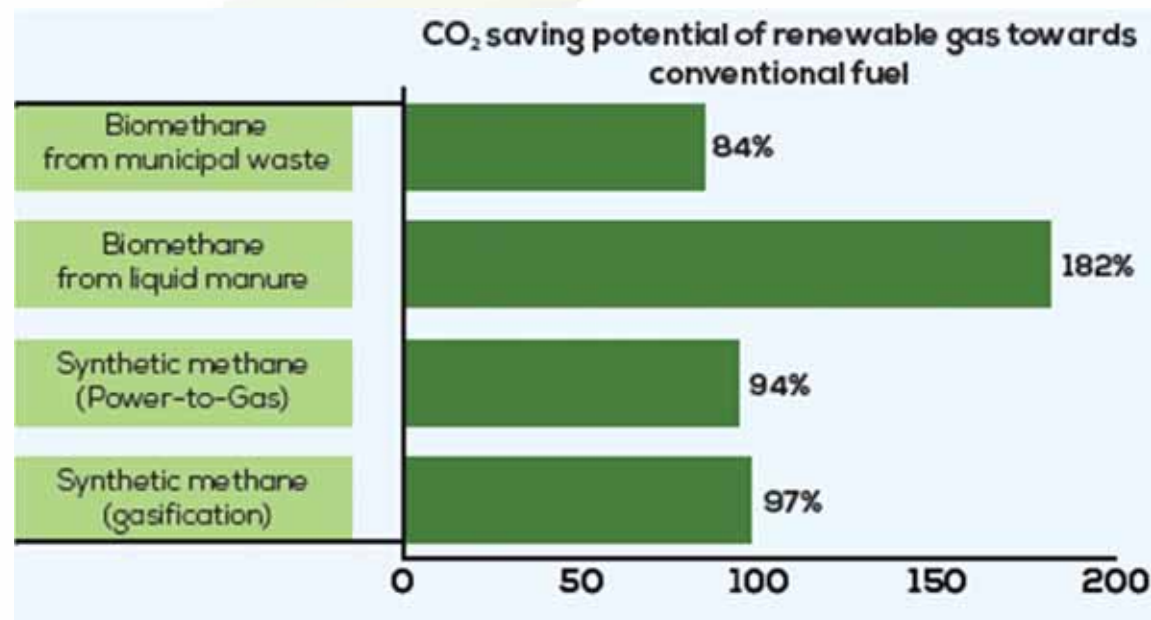
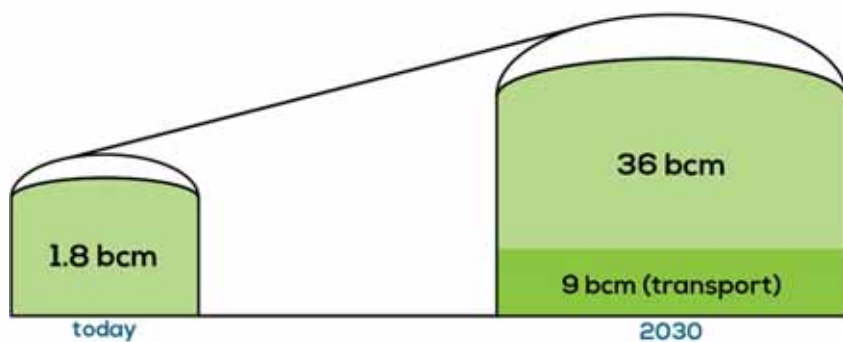
Stations

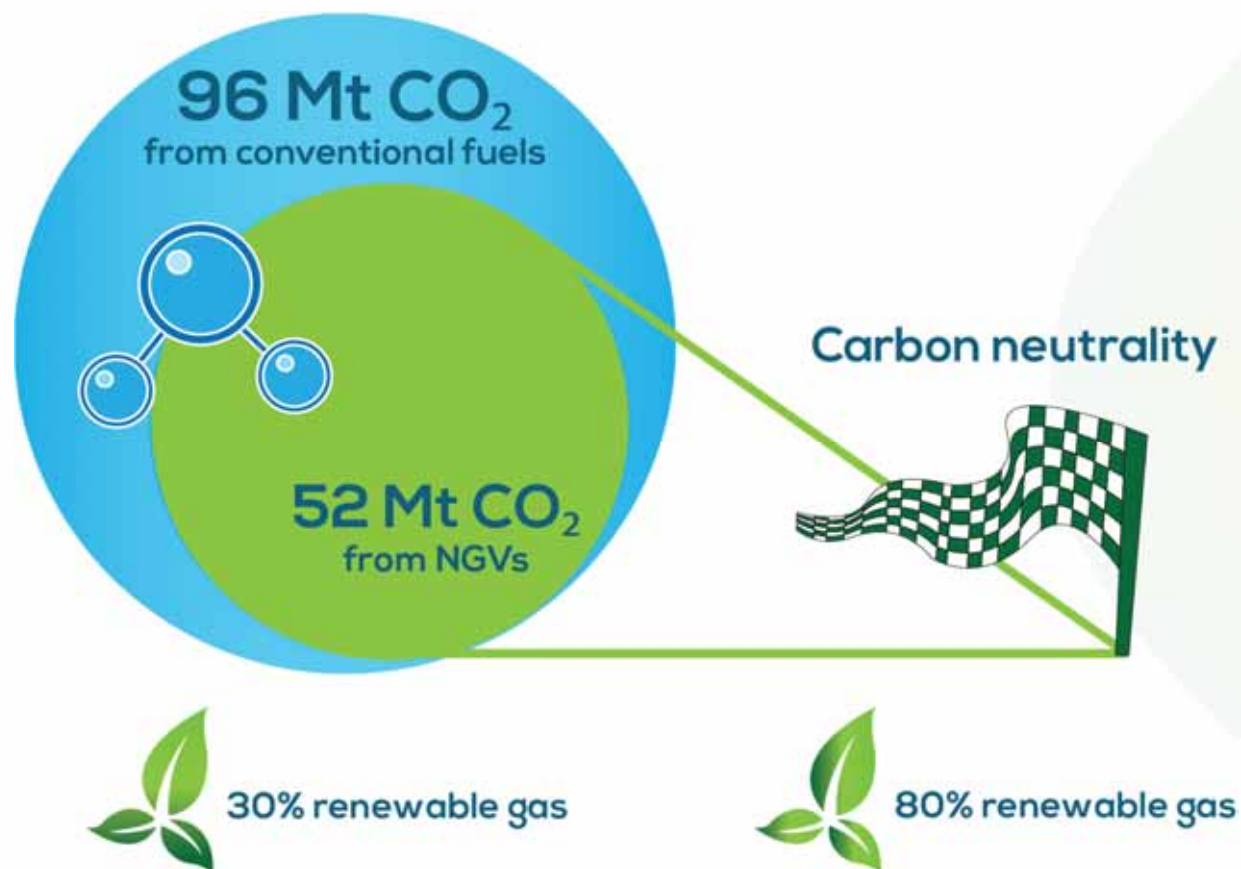


Fuel demand



Evolution in production



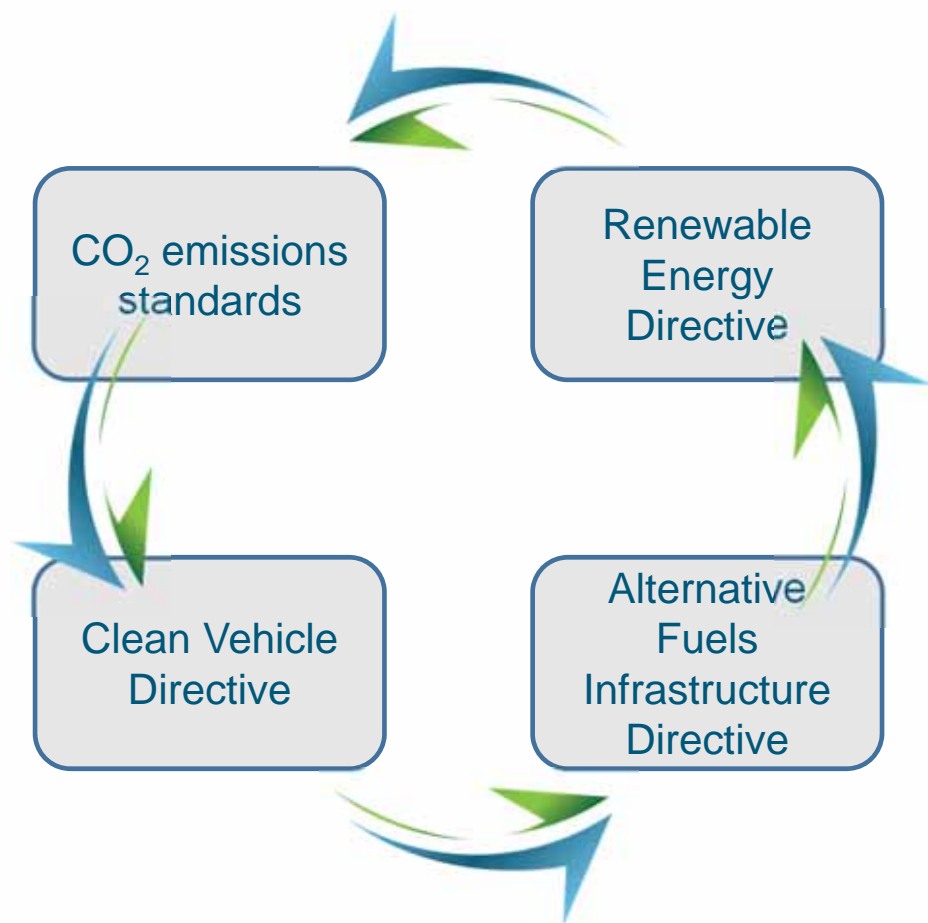


Natural gas can support a fleet of 13 million vehicles in 2030.

The conversion from conventional fuels through natural gas containing up to 30% v/v renewable gas will be able to approximately halve the CO₂ emissions on a Well to Wheel basis.

Thanks to methane capturing from liquid manure conversion, carbon neutrality can be reached with 80% v/v concentration of renewable gas.

Moving towards a system approach



Linking legislative measure is fundamental to create a system approach where introduction of renewable fuels is the result of a real market demand.

Renewable gas can immediately contribute to fight climate change, supporting the EU Industries and accelerating towards a circular economy model.



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