

# Essential elements of sound sustainability criteria for powerfuels

Impulse statement

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Powerfuels in the European energy transition:  
The need for effective regulation  
Brussels, 17 June 2019

# Sustainability issues around powerfuels can become a real showstopper – so let's address them early!

Let's not repeat the mistakes made in developing biofuels.

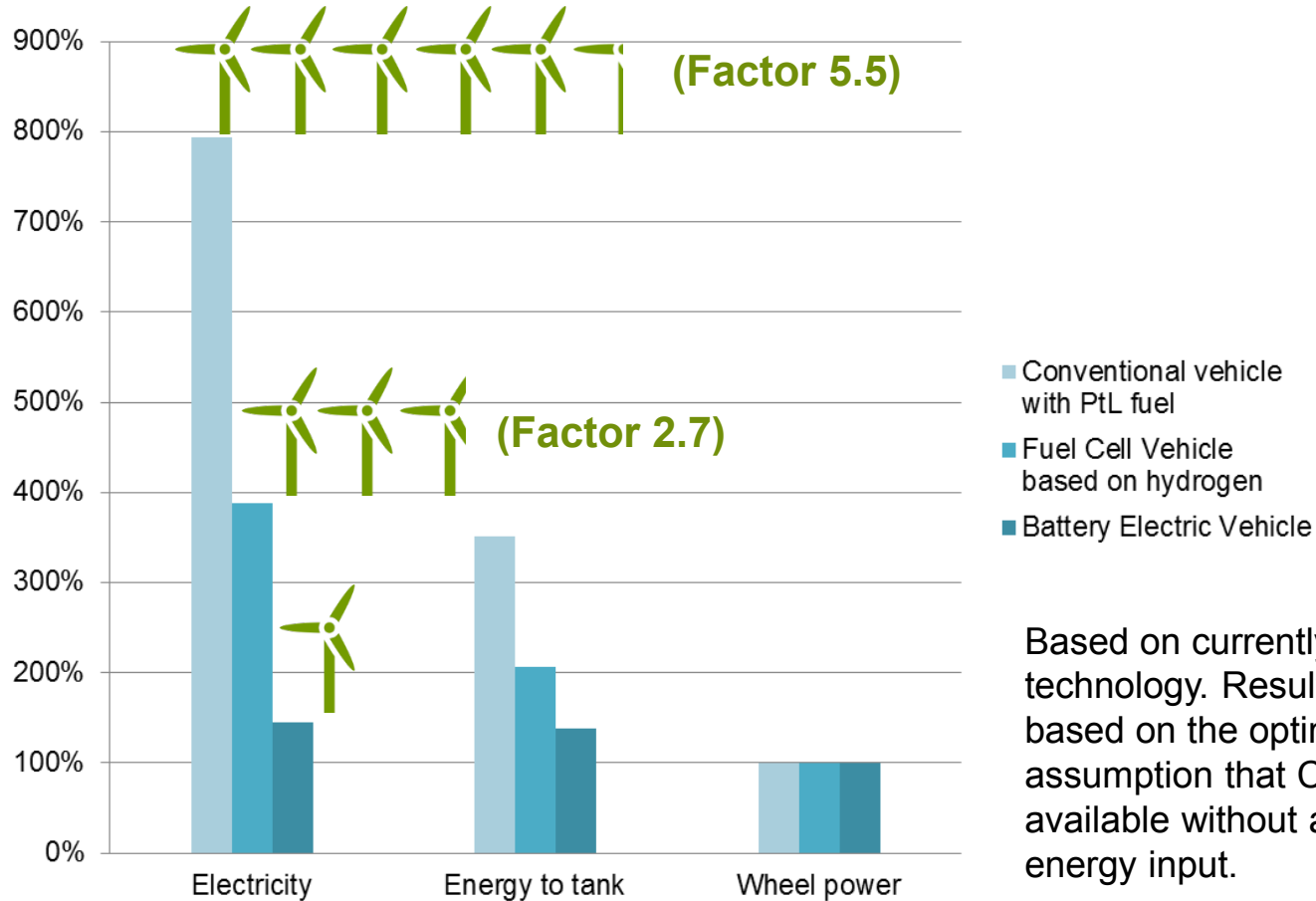
We need to develop a sound strategy before we roll out a new technology.



# Efficiency first!

## We should use electricity directly where possible

### RES electricity input for different paths of road vehicle electrification



Based on currently available technology. Results shown are based on the optimistic assumption that CO<sub>2</sub> for PtL is available without additional energy input.

# Powerfuels are not carbon neutral per se! Avoid high emissions by adding renewable generation

Powerfuels are renewable and climate-friendly

Really? We have to assess the impact of powerfuels on the electricity sector

We buy green power for our powerfuels plant

Usually this does not lead to any additional RES electricity production.

We will use excess renewables for producing powerfuels

Excess RES are scarce, intermittent and occur only at certain locations

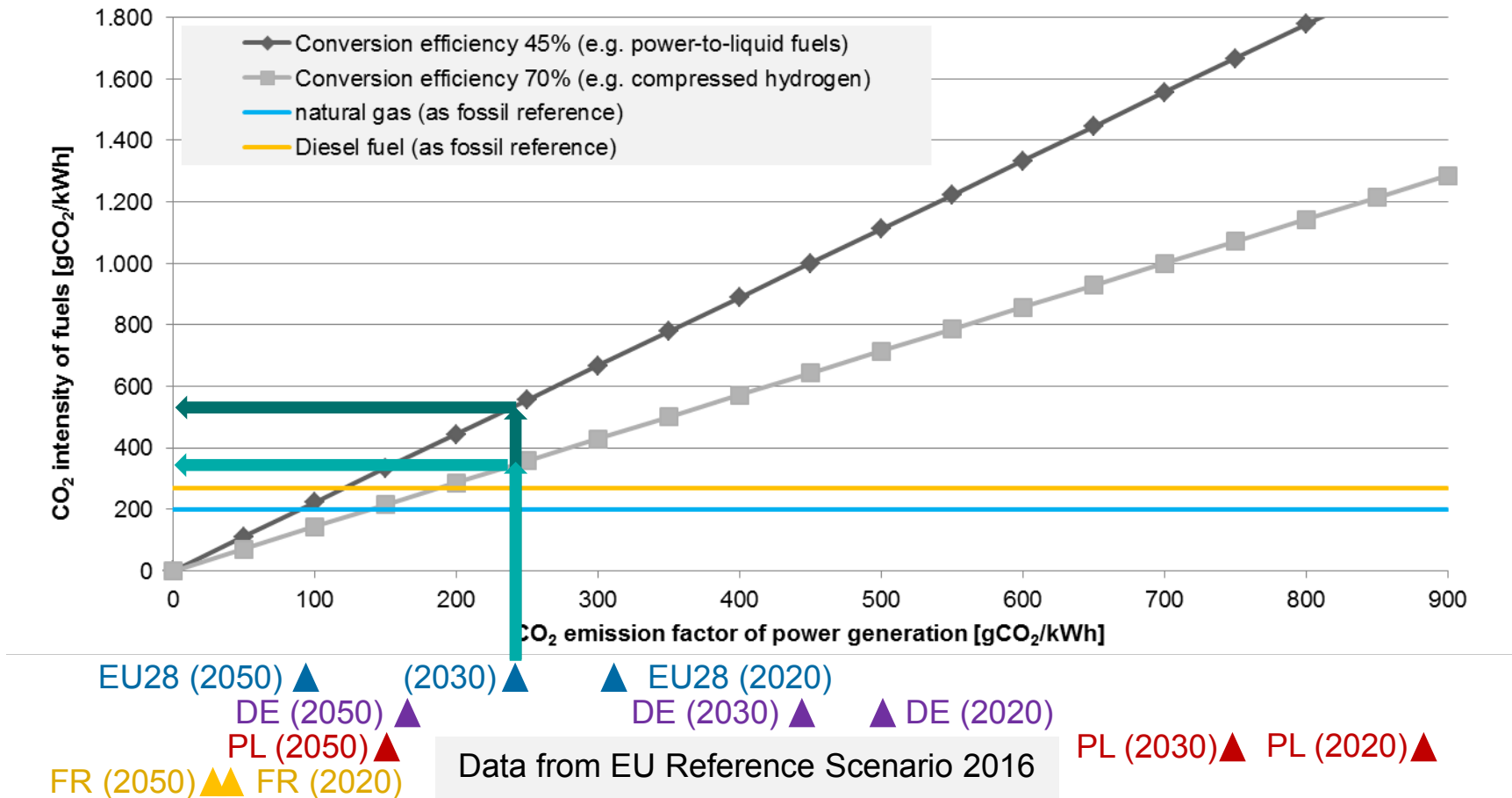
We will build new wind & PV plants for our powerfuels production

Great! Make sure that you do not use public support and that the plants are not accounted towards the current EU RES targets

**Powerfuels should be produced from truly additional RES electricity!**

# Powerfuels are not carbon neutral per se! Avoid high emissions by adding renewable generation

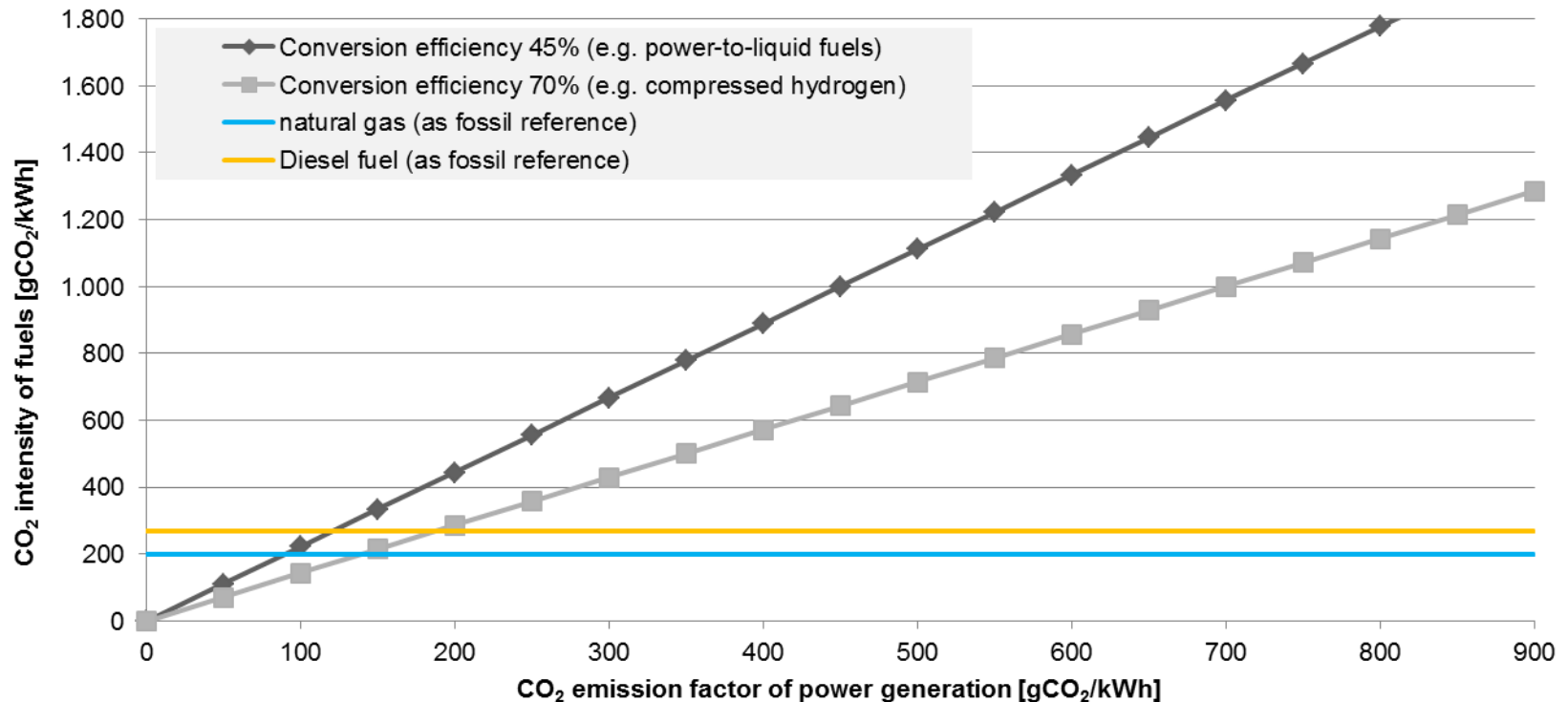
CO<sub>2</sub> intensity of powerfuels depending on electricity emission factor



# Powerfuels are not carbon neutral per se!

## Avoid high emissions by adding renewable generation

CO<sub>2</sub> intensity of powerfuels depending on electricity emission factor



▲ Truly additional renewable energy



# We need a strategy for sustainable powerfuels imports





# Upcoming EU and national regulation should be based on sound sustainability criteria for powerfuels





## Your contact



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