# **OURPERTIC** Electric decade

Eurelectric green power strategy

18 August 2021 Kristian Ruby – Secretary General



# Europe's journey to carbon neutrality



The EU has decided to reduce greenhouse gas emissions by at least 55% compared to 1990



European Commission: EU climate action and the European Green Deal

#### Doubling down on power decarbonisation



 A few years ago, power sector decarbonisation was foreseen for 2045-2050.

• The new proposals will make it happen between 2035-2040.



Source: Ember-Agora (2018, 2019 & 2020) EC long-term strategy 2018 (black line); Power Barometer 2020 (grey line); EC 55 % impact assessment (green & blue lines)

# 2020: Renewables overtook fossil fuels



Source: Eurelectric calculation from Eurostat (2010-2019); Ember-Agora (2020)

#### Coal generation declining faster than expected



Source: Eurelectric's análisis based on European Commission's Baseline Scenario; Eurostat; EMBER Climate

# 82% power decarbonised by 2030



Source: Estimation from Eurostat (2019), Ember-Agora (2020), 2030 Impact Assessment report of EC (2030)

# All technologies needed for carbon neutrality



Sources: Eurelectric analysis based on Eurostat (solar, hydro & other RES), Wartsila, WindEurope (offshore & onshore), most ambitious scenarios from the EC LTS

#### Energy storage: a potential bottleneck?





Source: EC 55% GHG emissions reductions Impact assessment

# A serious market challenge: negative prices





Source: Wartsila (ENTSO-E data)

#### Investment in grids must ramp up



Source: Eurelectric calculations based on IEA WEO (2018, 2019, 2020). EC Impact Assessment study on 55% GHG emission reduction (2021-2030)

# Faster, deeper electrification needed



eurelectric powering people

Source: Eurostat; EC 55 % GHG reduction impact assessment; Power Barometer 2020

#### Charging stations yet to grow

Number of charging stations





Source: T&E Europe

#### Heat pump sales: ramp-up needed

Cumulative number of heat pumps (in Millions)





Source: European Heat Pumps Association

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