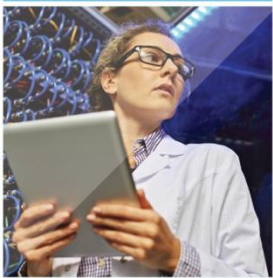




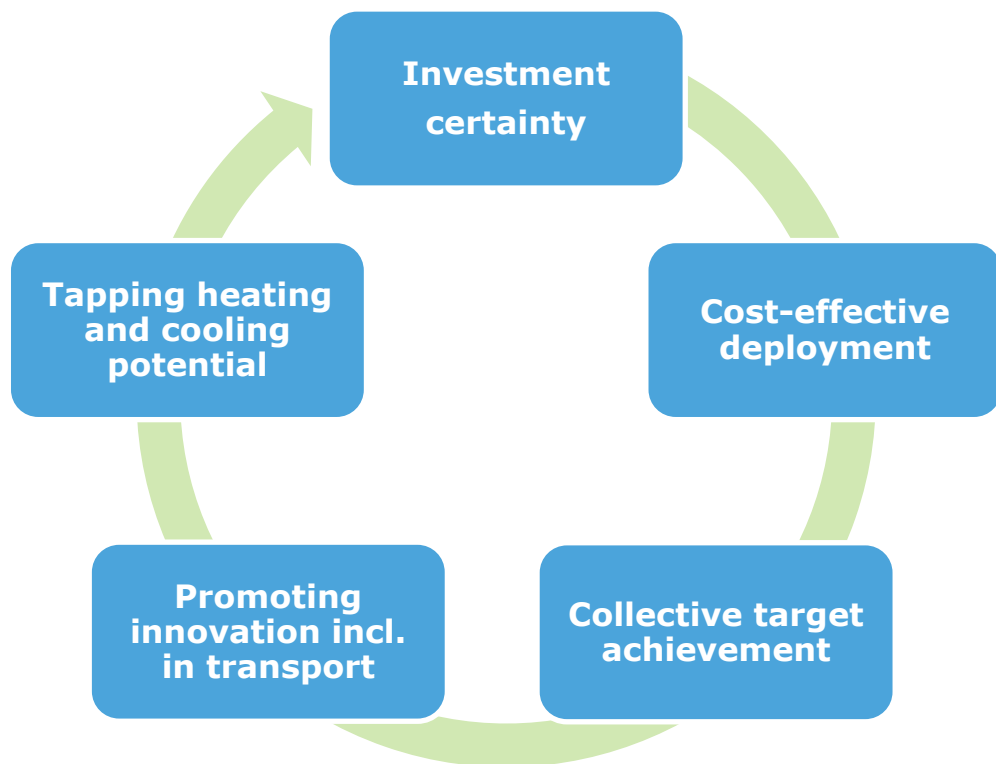
European
Commission



Proposal for a recast of the Renewables Directive for the period after 2020

30 November 2016

THE REVISED RES DIRECTIVE – MAIN OBJECTIVES

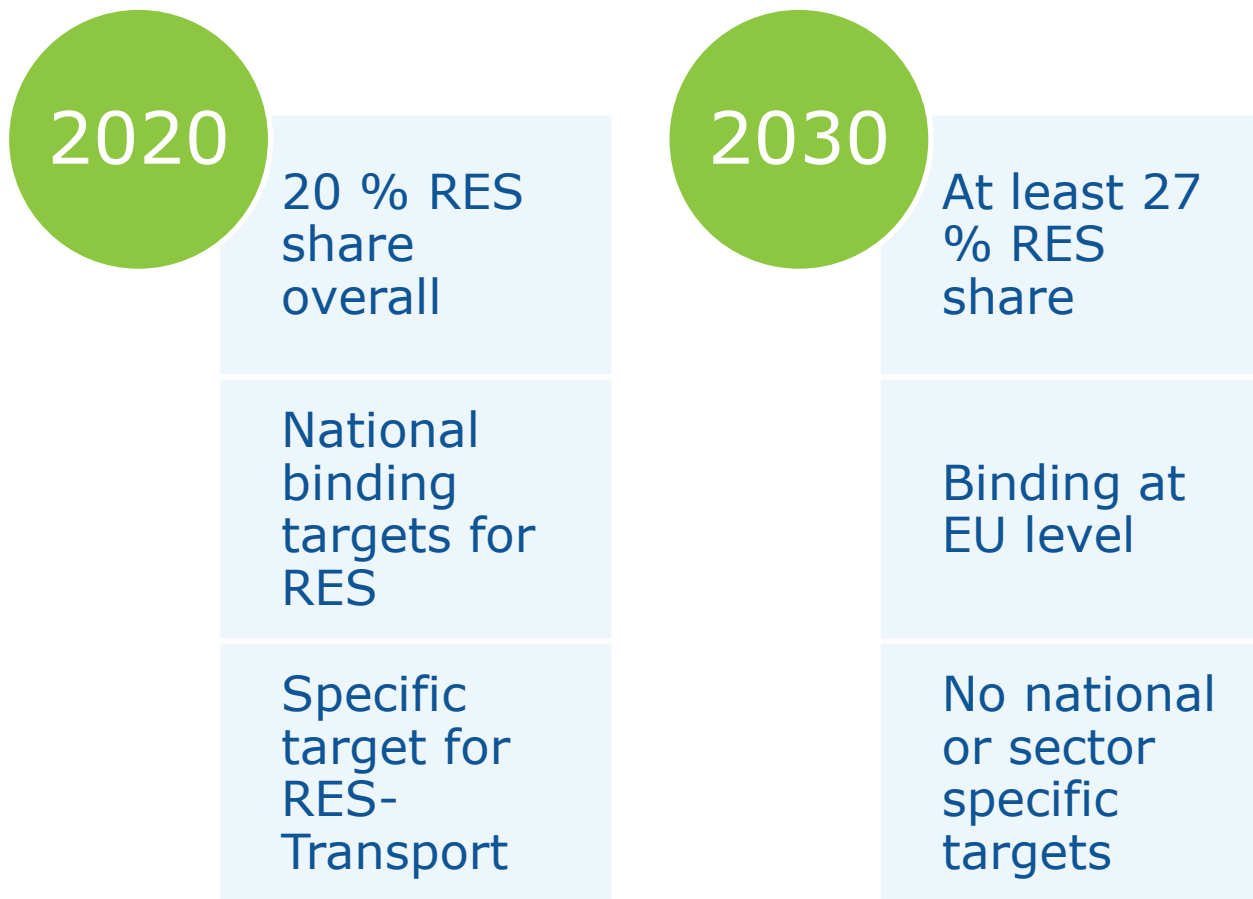


Contributing to the EU political priority of **becoming world number 1 in renewables**

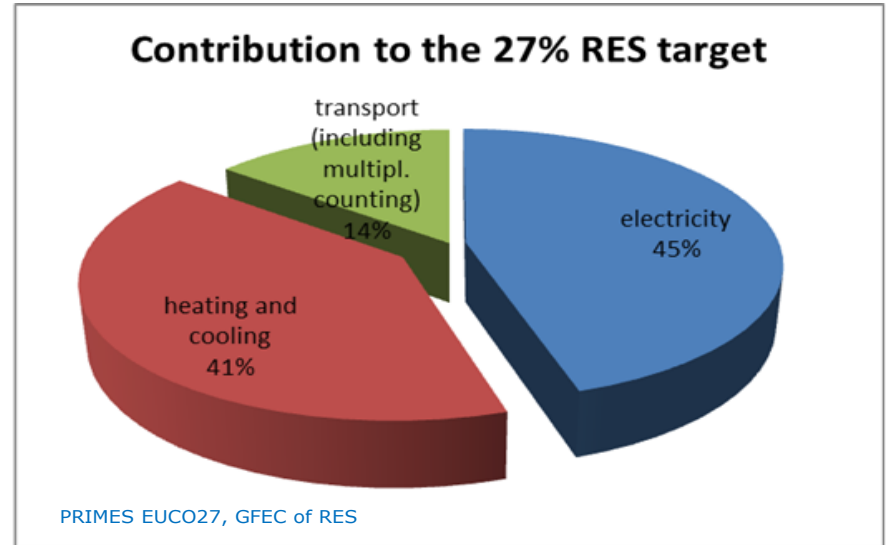
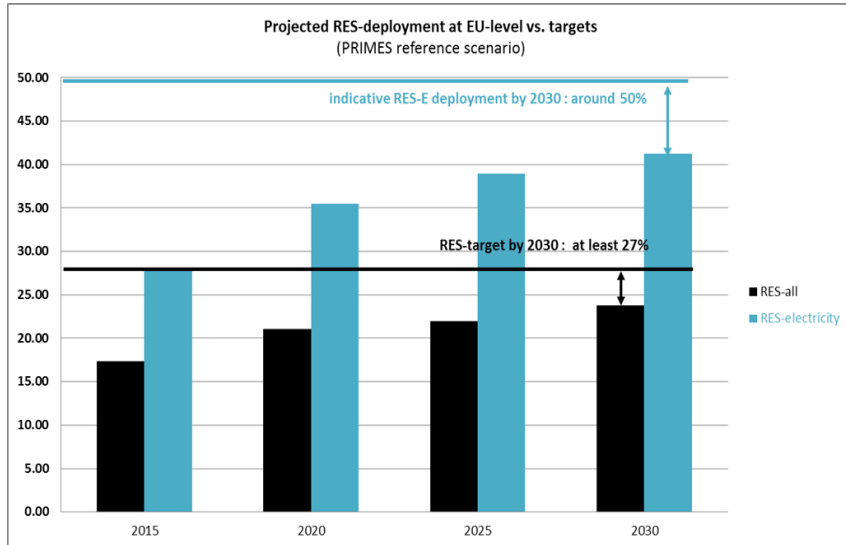
&

Achieving the at least 27 % EU-level binding renewables target cost-effectively

MOVING TO A COMPLETELY NEW AND MORE "COLLECTIVE" APPROACH



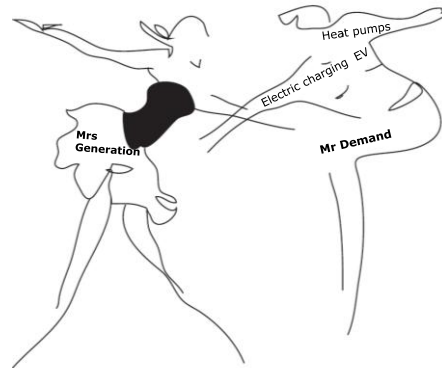
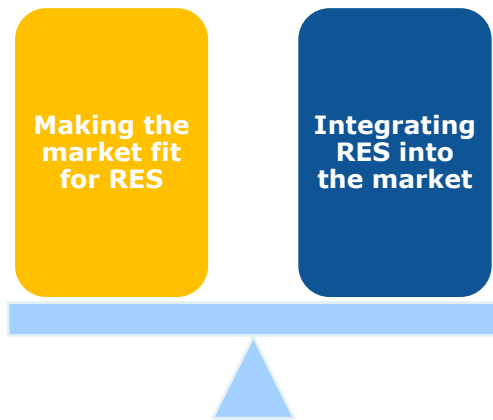
EU LEVEL ACTION ACROSS THE 3 SECTORS IS REQUIRED



No additional action would lead only to 24.3 % RES, non-cost efficiently and unevenly spread across the EU

The modelling shows that for a cost-effective target achievement **both Heating & Cooling and electricity will have to cover a major part of the effort**

ENSURING A HOLISTIC APPROACH ACROSS POLICY AREAS



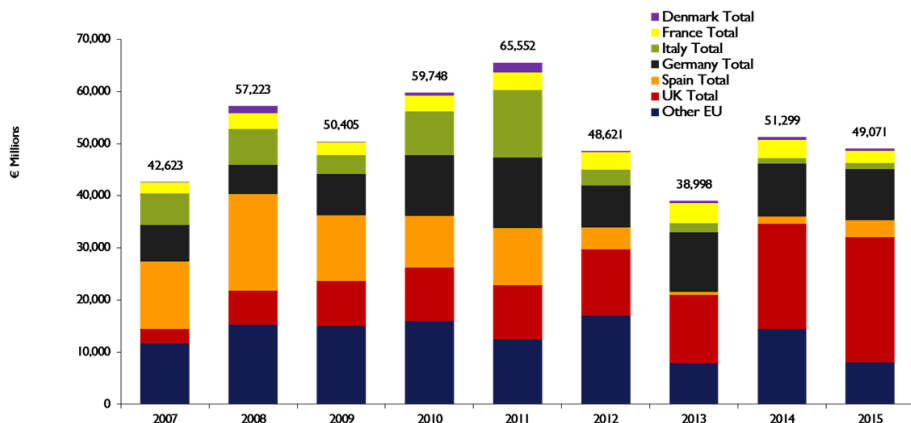
The **new market design** will be the foundation of the 2030 framework (short term markets, flexibility) and ensure RES generators can earn a high fraction of their revenues via the market

With the **governance initiative** underpinning the process across the 5 Energy Union dimensions

But also Energy Efficiency, Energy Performance of Buildings, Risk preparedness, the ETS and non-ETS proposals...

A MORE EVEN DEPLOYMENT WOULD BE MORE COST-EFFECTIVE

EU RENEWABLE PROJECT INVESTMENT BY COUNTRY- NEW BUILD, M&A, REFINANCING (2007-2015)



Source: Bloomberg / New Energy Finance

HgCapital | Sector expert investors supporting management to grow industry champions

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Investments are increasingly concentrated in a few Member States with low cost of capital and policy frameworks perceived as more stable

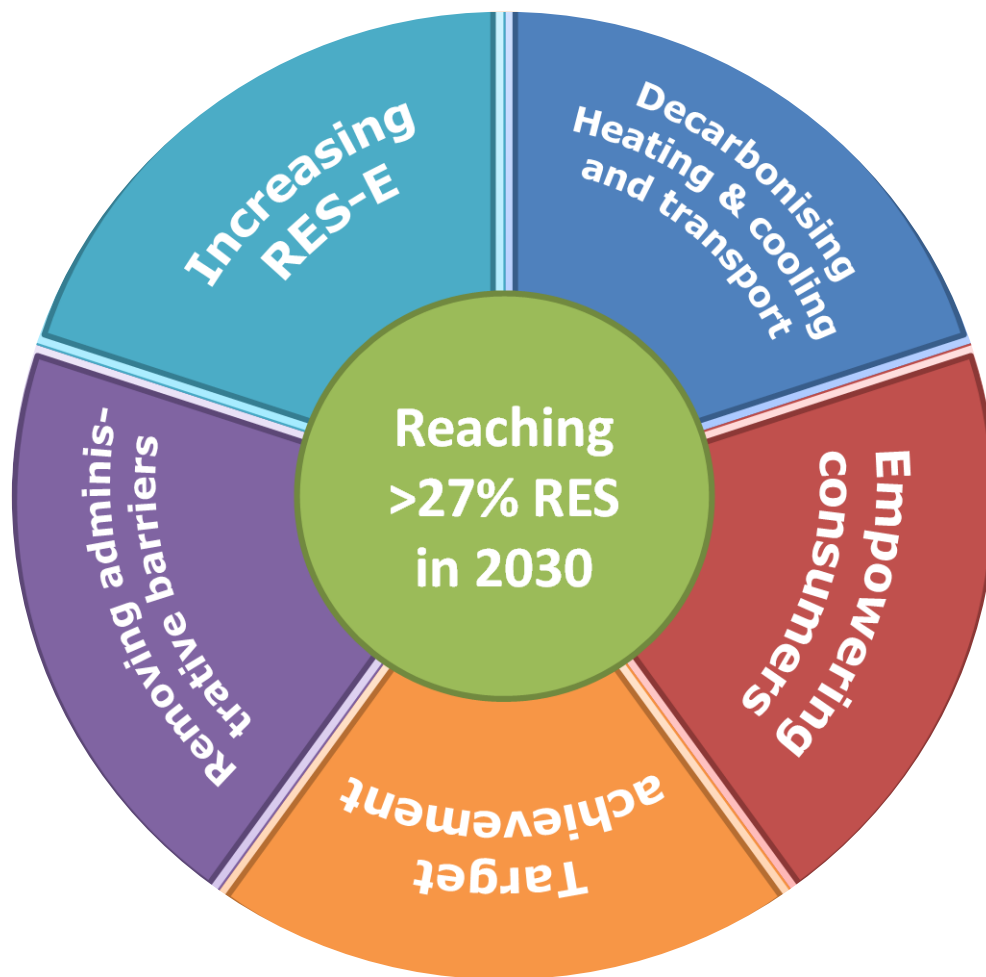
UK and Germany alone represented over 2/3 of all investments over 2013-2015

Various measures can ensure a more even and more cost-effective deployment of RES across the EU

e.g. Financial instruments tackling cost of capital, no retroactive changes, open up support schemes...

	Baseline	EUCO27
RES share in 2030	27%	27%
Assumptions	National support; diverging cost of capital	EU-wide support; same cost of capital
RES investments required (2021-2030)	€ 404 bn	€ 240 bn
Share of top 3 MS in total investments	67%	47%

DELIVERING A SET OF WELL-BALANCED MEASURES ACROSS SECTORS



ADDRESSING THE UNTAPPED POTENTIAL OF HEATING & COOLING

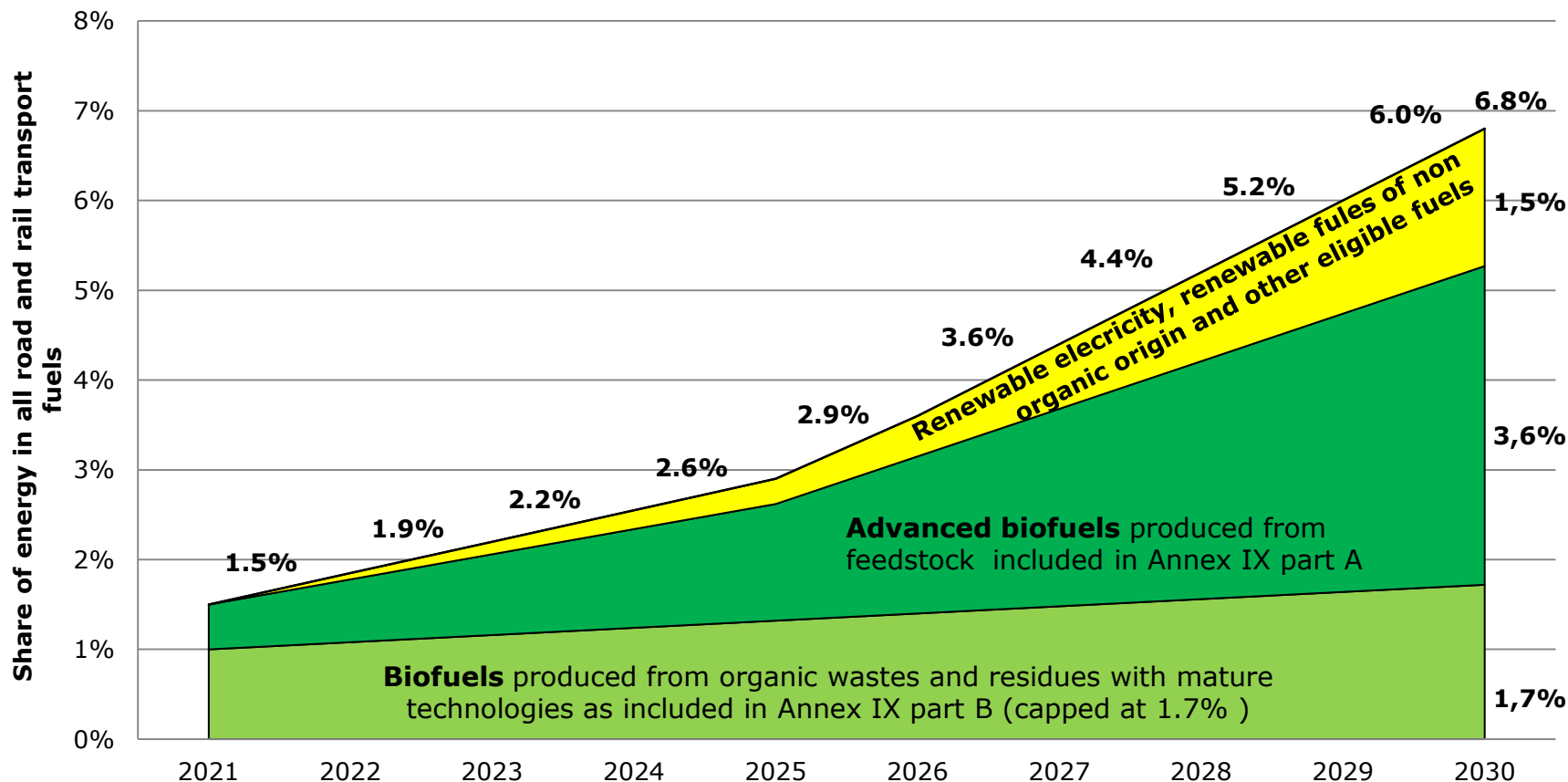
WHY

High untapped potential: a major contribution of renewable Heating and Cooling (i.e. 40%) is crucial for a cost-optimal target achievement
Risk of **missing the target** in the absence of action: the Heating and Cooling obligation would deliver one fourth of the total gap to reach the at least 27% RES target by 2030
Need to provide **visibility and certainty to investors**

WHAT

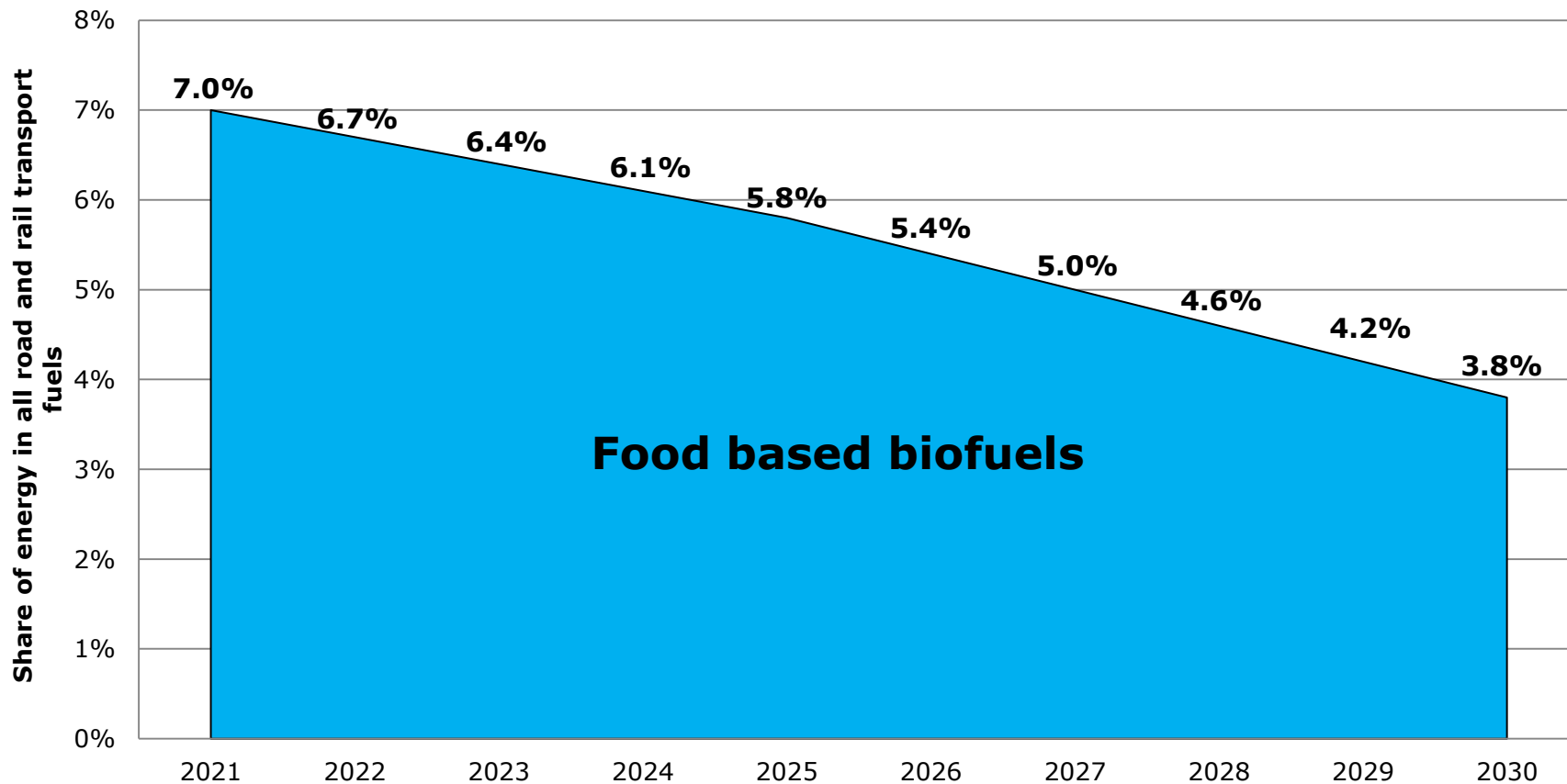
Options for Member States aimed at increasing the share of renewable heat by **1 percentage point in final energy consumption./-**

PROMOTING INNOVATION IN TRANSPORT



A EU blending mandate to increase the share of low carbon and renewable fuels in transport

ADDRESSING INDIRECT LAND USE CHANGE CONCERNS



A EU cap for gradually reducing the share of food-based biofuels by 2030

STRENGTHENED EU BIOENERGY SUSTAINABILITY

Biomass production

Improved sustainability criteria for **agriculture biomass**



New **sustainability criteria for forest biomass** (2-step approach)



Biomass end-use performance

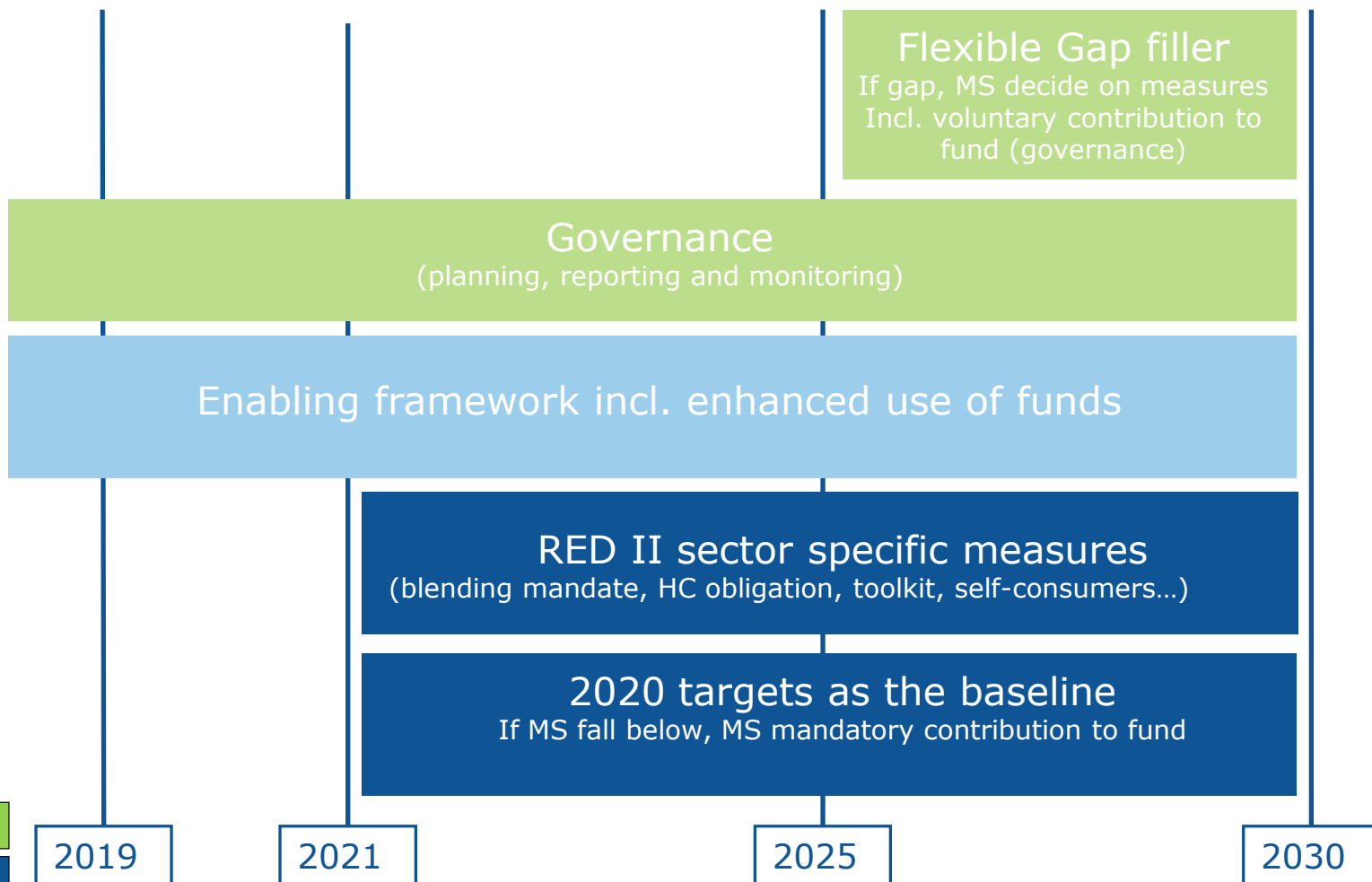
GHG emission saving requirements for biofuels and large-scale biomass in heat and electricity



In principle, only biomass electricity with CHP can be supported post-2020



ACHIEVING AT LEAST 27 % RENEWABLES AT EU LEVEL





European
Commission

ENERGY UNION

