



European
Commission



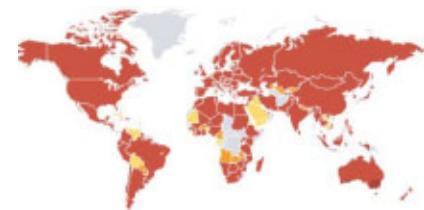
An enhanced renewables framework post-2020

September 2018

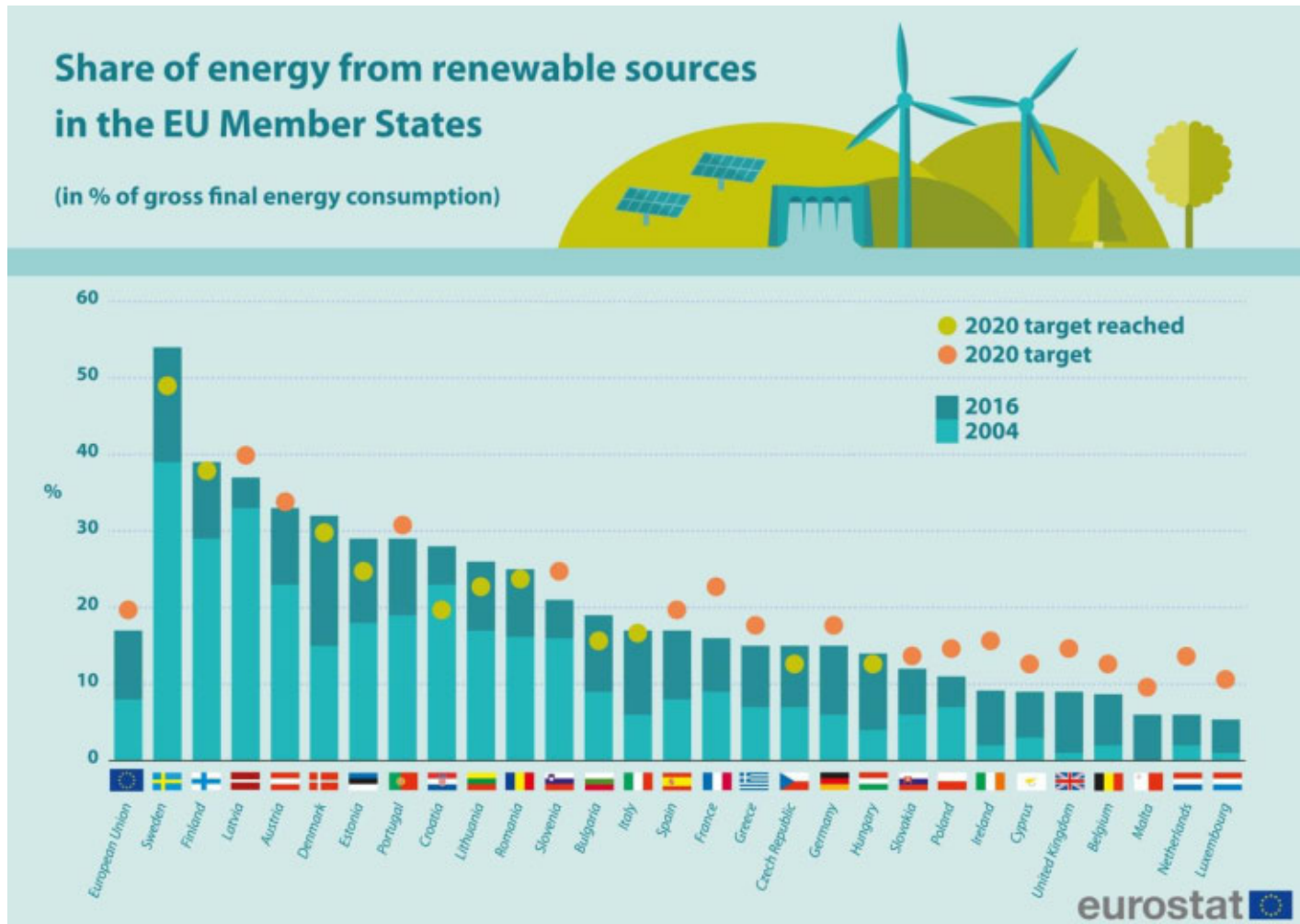


SETTING THE SCENE

- **Falling costs of renewables worldwide**
- **EU first mover** – today, 173 countries have renewable energy targets
- **How to retain leadership?**
 - Explore new areas for competitiveness: integrated systems, offshore, small-scale and decentralized solutions
- **Domestic benefits:**
 - ~ 1.4 million jobs
 - Reduced import dependency
- **Looking ahead:**
 - Increase efforts across sectors
 - Integrate high RES shares
 - Decentralize + empower consumers

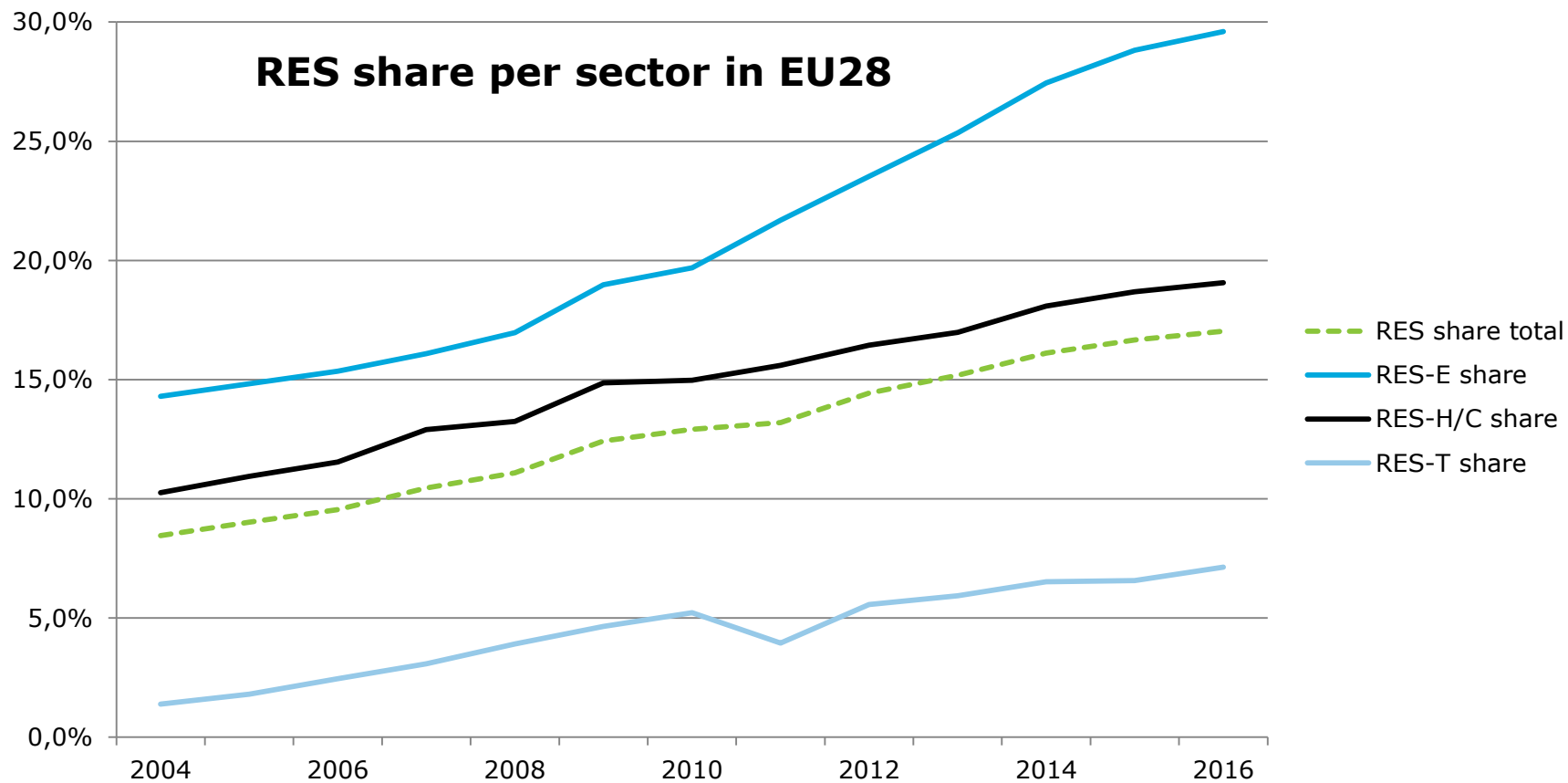


STATE OF PLAY - PROGRESS TOWARDS NATIONAL 2020 TARGETS



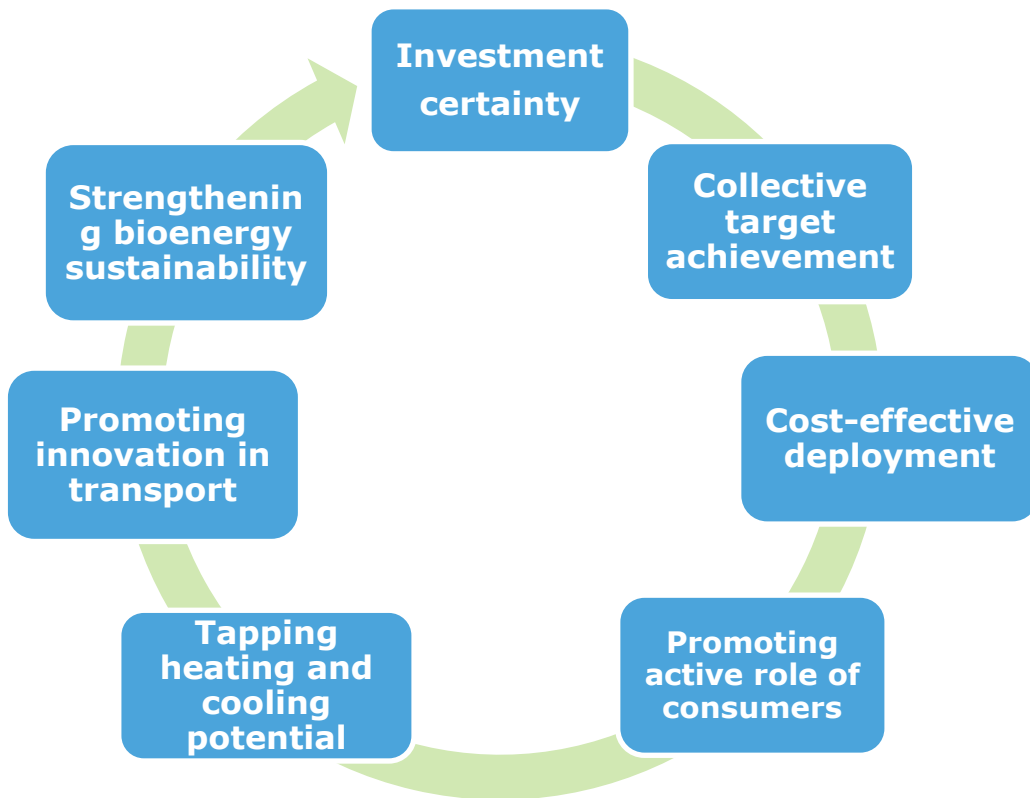
Source: EUROSTAT Shares 2016

STATE OF PLAY - PROGRESS BY SECTORS



Source: EUROSTAT Shares 2016

THE REVISED RENEWABLES DIRECTIVE – KEY OBJECTIVES



Contributing to the EU political priority of **world leadership in renewables**

&

Achieving the at least 32 % EU-level binding renewables target cost-effectively

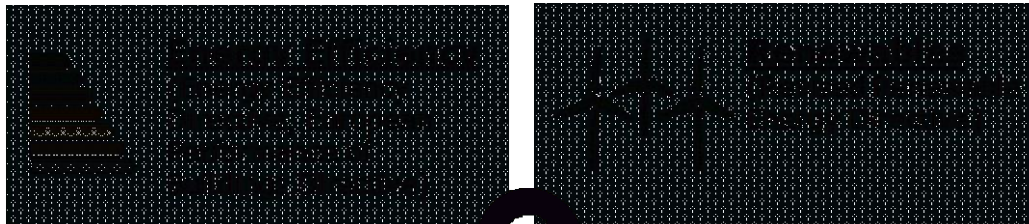
THE RIGHT REGULATORY FRAMEWORK FOR POST – 2020

" In essence the new package is about tapping our green growth potential across the board"

Commissioner Miguel Arias Cañete (2016)



**Energy Union
Governance**

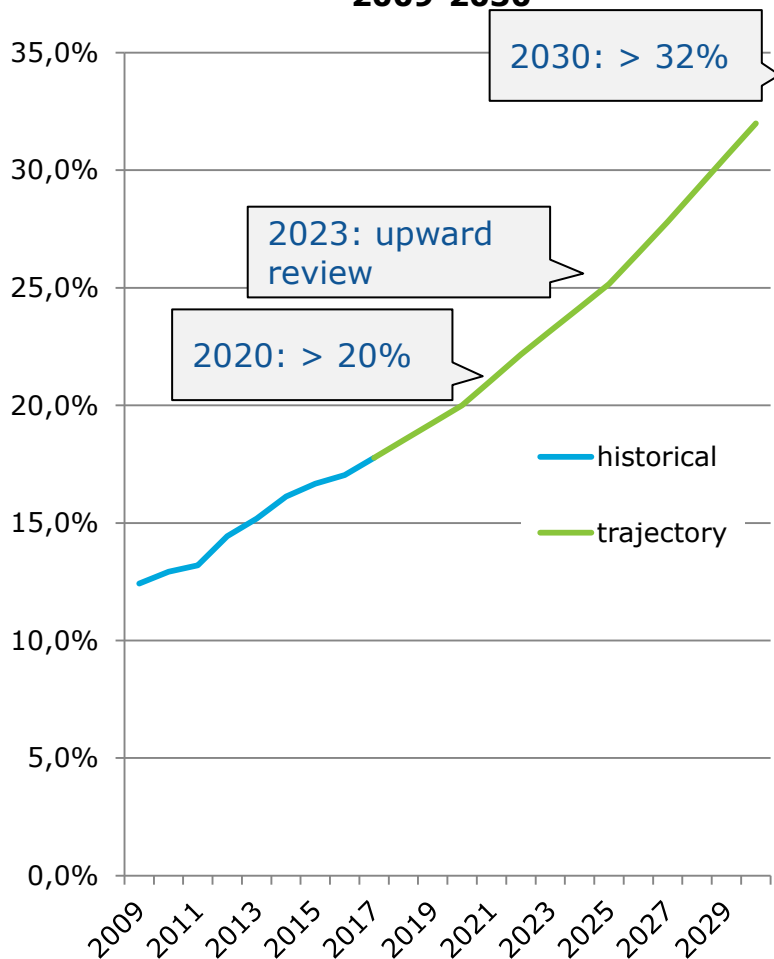


New Electricity Market Design
(including Risk Preparedness)



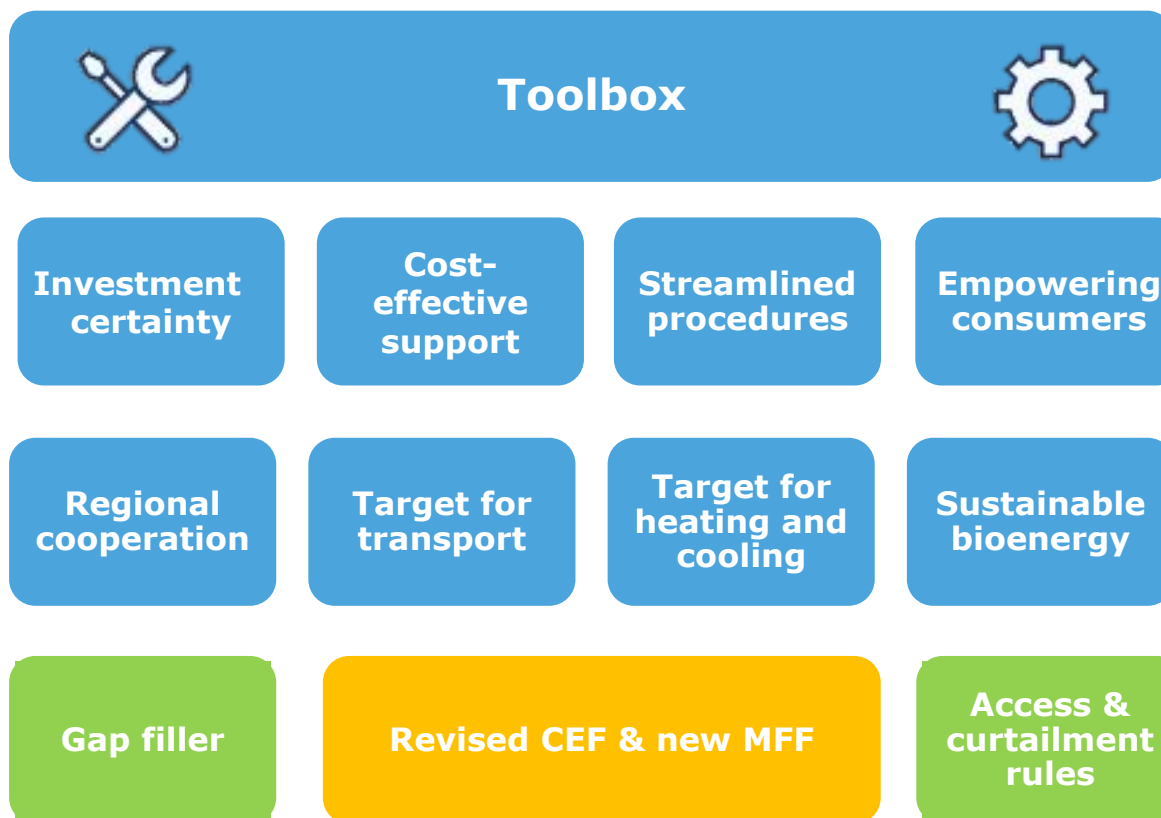
A NEW EUROPEAN APPROACH TO RENEWABLES

EU renewable energy share
2009-2030

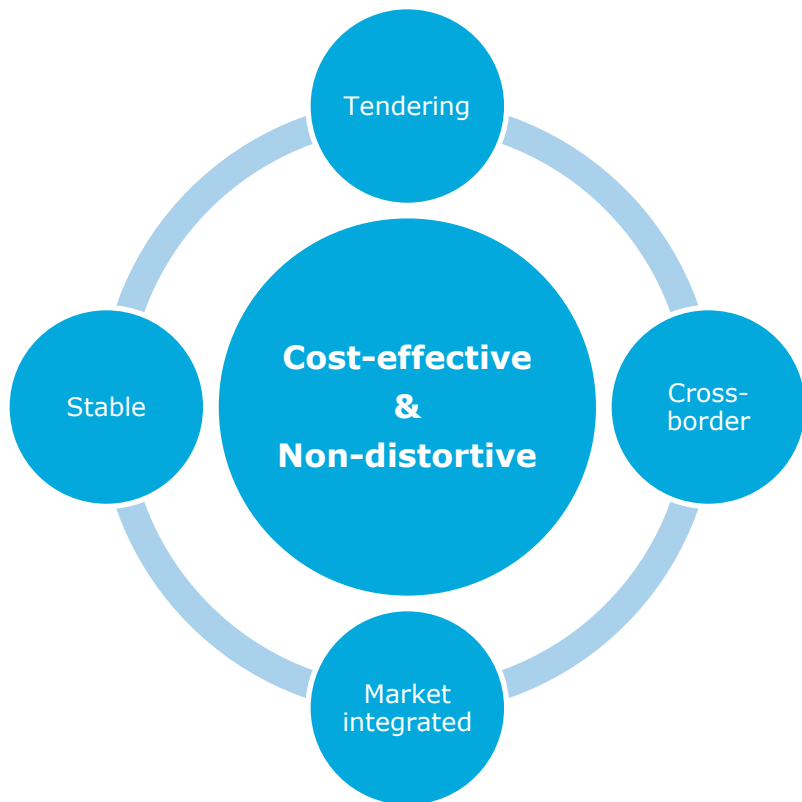


- **Binding EU-target of at least 32%** (upward review in 2023)
- Underpinned by **national contributions**
- **Formula** to assess contributions (in case of ambition gap)
- **Collective responsibility** of target achievement
- **Joint measures** (EU financial platform)

A SET OF WELL-BALANCED MEASURES TO GET TO AT LEAST 32%



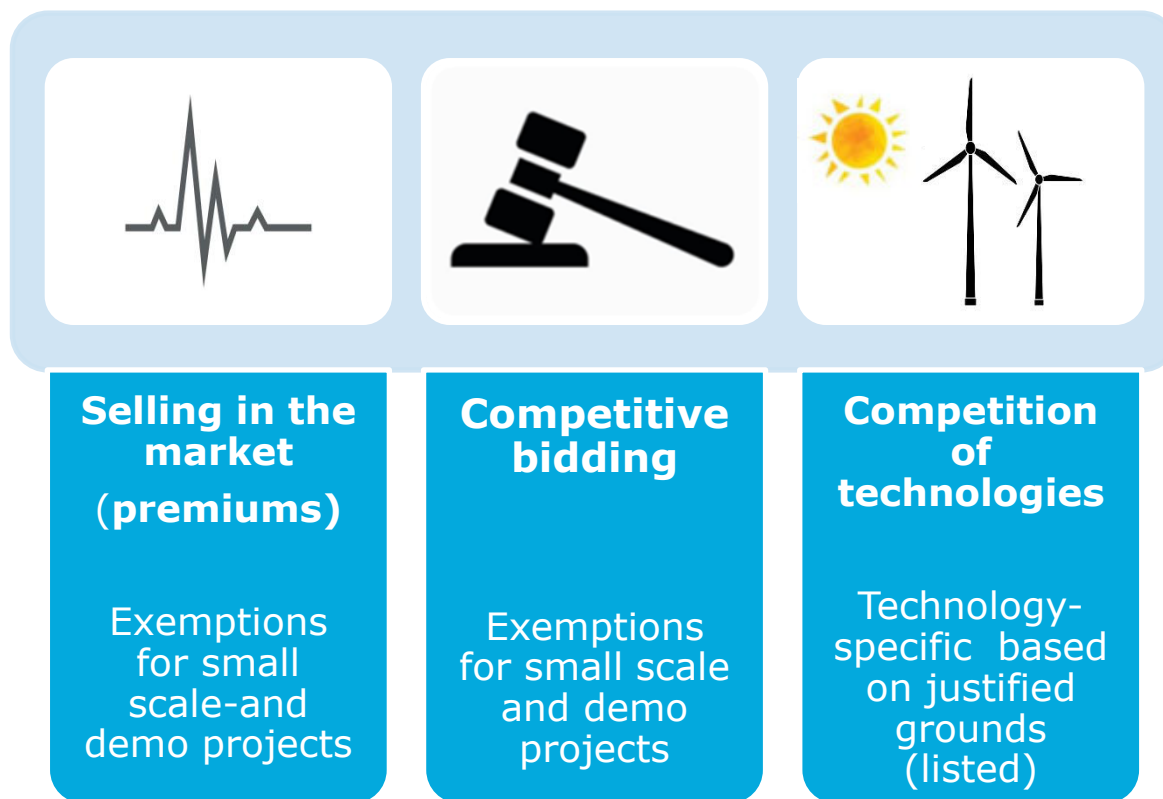
MAKING SUPPORT SCHEMES MORE COST-EFFECTIVE



"Getting best value for money"

- ~320 GW of net additional RES-E needed to reach 32%
- Support needs to be cost-efficient and non-distortive
- New design principles will foster:
 - More competition
 - More market integration
 - More coherence across MS

INCREASING COMPETITION AND MARKET INTEGRATION OF RES-E



Without prejudice to individual state aid procedures (case-by-case assessment)

INCREASING STABILITY AND PREDICTABILITY

Don't turn back time!

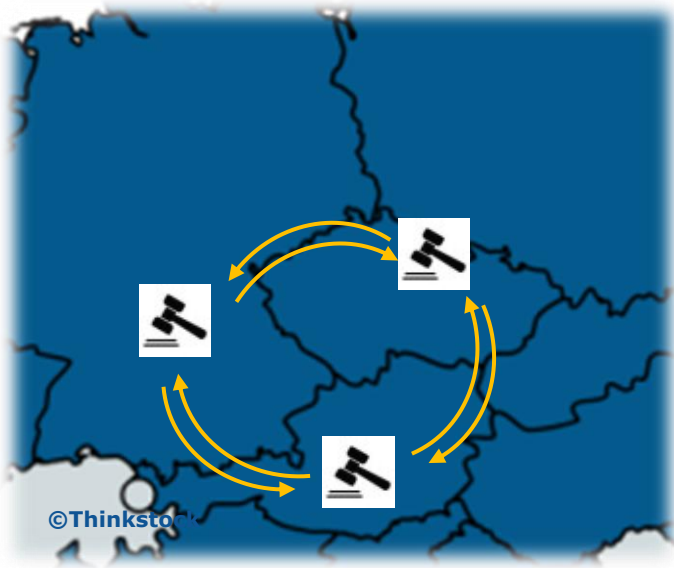


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Abrupt and "retroactive" changes are toxic for RES investments and ...make them more expensive

- Specific provision to **avoid "retroactive" changes** to support
- Revisions **may not compromise the economic viability** of supported projects
- Need to **publish long-term schedules** for support schemes

EUROPEANIZING SUPPORT: MAKE THE MOST OF OUR POTENTIAL

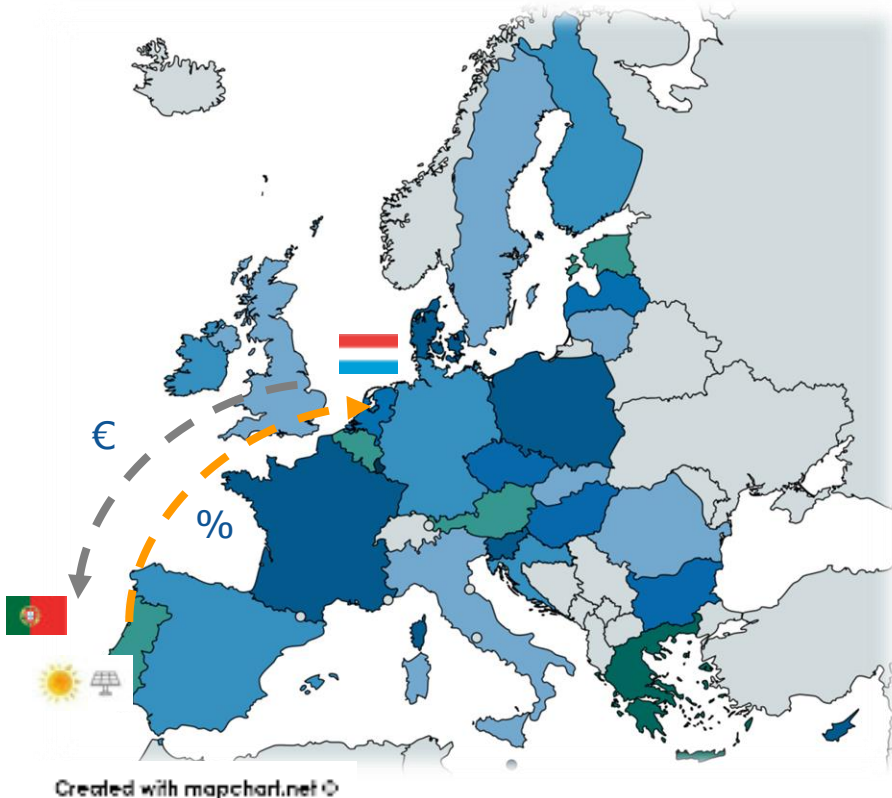


Cross-border auction - opened to neighbouring countries

Cross-border cooperation to reduce support costs and fosters alignment of support

- **Opening is encouraged**, but remains voluntary (indicative shares: 5% 2023-2026; 10% 2027-2030)
- **Review clause for 2023** to reassess a mandatory opening (of 5% by 2025 and 10% by 2030)

STRENGTHENING THE TOOLBOX FOR COOPERATION



- **Cooperation Mechanisms** are **maintained** and **strengthened** (→ statistical transfers, joint projects and joint support schemes)
- New **EU trading platform for statistical transfers**
- CEF window for cross-border renewables projects (MFF proposal)

ACCELERATING ADMINISTRATIVE PROCEDURES

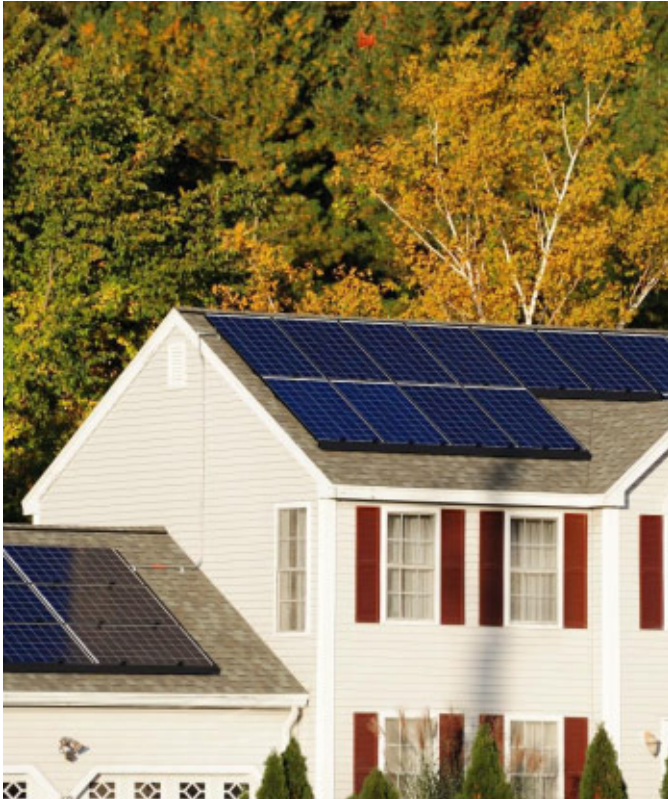
Putting an end to this...



- **Single contact point** for permit applicants
- **Clear time limits** for procedures:
 - Two years*
- Swift procedure for **repowering**:
 - One year*
- **Simple notification procedures for small installations** (up to 10.8 kW)

* One year extension under extraordinary circumstances

TOWARDS A DECENTRALISED ENERGY SYSTEM



- REDII will **empower citizens** and local actors to be active in the energy transition
- Objectives:
 - **mobilise private capital**
 - **increase local acceptance**
- For the first time, a **definition** and a new **legal regime** for **self-consumption** and for **renewable energy communities**
- **Facilitate uptake of long-term power purchase agreements (PPAs)**

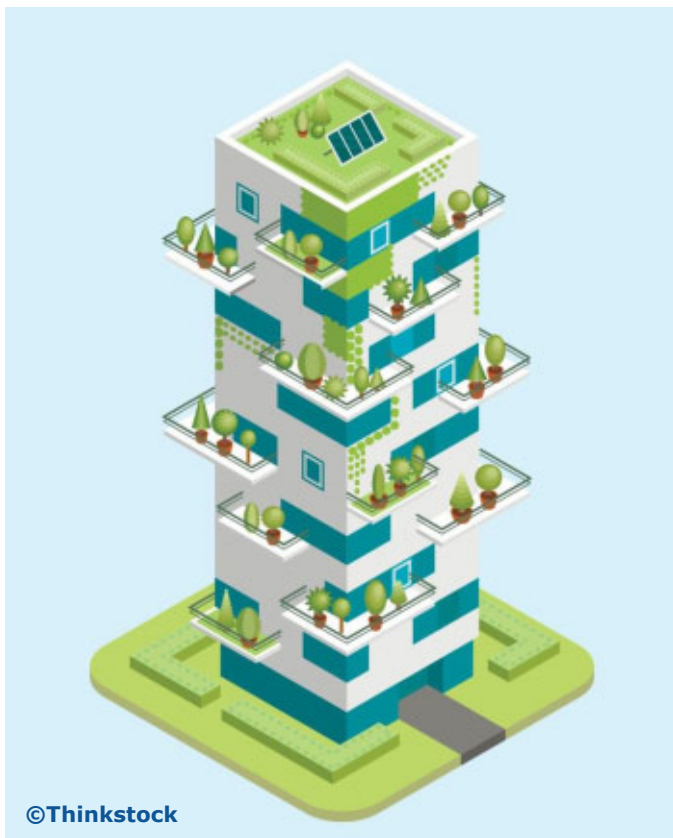
EMPOWERING ENERGY CONSUMERS: SELF-CONSUMPTION

Consumers entitled to become self-consumers, including multi-apartment blocks

- **No discrimination or disproportionate charges**
- Electricity **behind the meter not be charged. Exemptions:**
 - Installations larger than 30 kWp
 - Risk of financial instability of the system (after December 2026)
 - Electricity that benefits from support schemes
- **Remuneration** when feeding into the grid
- Self-consumers **active in the market:**
 - Power Purchase Agreements
 - Peer-to-peer trading
 - Other possibilities of MDI (demand response)
- **Enabling framework** by the end of 2019



EMPOWERING ENERGY CONSUMERS: RENEWABLE ENERGY COMMUNITIES



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Entitled to generate, sell and store renewable energy

- **Definition** for the first time in EU legislation
- Increased **participation** of citizens in the energy transition
- Communities can directly reap the **environmental, economic and social benefits** of renewable energy
- Any final energy customer can become member (while maintaining all rights and obligations)
- **Enabling framework** by the end of 2019

EMPOWERING ENERGY CONSUMERS: FOSTERING LONG TERM RES PPAs*



- **Help secure RES investments and reduce deployment costs**
- **MS to facilitate uptake of RES PPAs:**
 - **Assesing administrative and regulatory barriers**
 - **No disproportionate procedures and charges**
 - **Policies and measures in NECP**

* **Renewables Power Purchase Agreements (RES PPA) - direct contract with an energy generator towards the purchase of renewable electricity (eg: Corporate PPAs)**

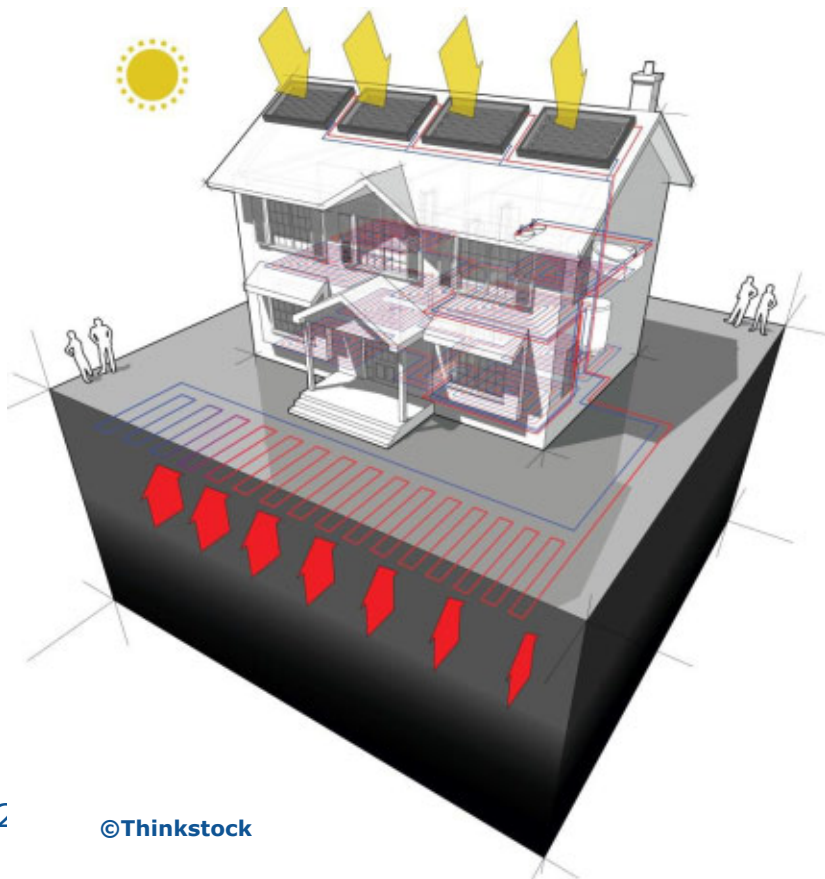
INFORMING CONSUMERS ABOUT THE ORIGIN OF THEIR ENERGY



- Guarantees of Origin (GOs) for **all types of RES**
- GOs shall be used as **proof of renewable electricity** on consumer bills
- Commission to assess establishment of a **EU-wide labelling system** for the promotion of RES from new installations
- **Market value of GOs** to be taken into account in RES support schemes

ADDRESSING THE UNTAPPED POTENTIAL OF HEATING & COOLING

- Target to **increase** renewables in heating and cooling by **1.3 percent point per year** (2020-2030):



- **Flexibilities:** high RES MS, high natural gas or cooling shares, dispersed settlement structures, 40% allowance for waste heat/cold
- **Illustrative** list of **measures** leaving flexibility for Member States and accessibility

District heating and cooling

- **1 ppt increase** in renewables and waste heat/cold
- **Third Party Access** for suppliers of renewables and waste heat/cold
- **Right to disconnect** from inefficient networks for consumers
- **Right to be informed** for consumers on renewables share and energy performance

Renewables in heating and cooling

A New Article for post-2020

Key provisions (Article 23):

- ❖ *1.3 ppt average annual increase in renewables in 2020-2030 (shall endeavour)*
- ❖ *1.1 ppt average annual increase if waste heat cold is not used due to an MS situation*
- ❖ *Flexibilities*
- ❖ *Indicative list of measures*
- ❖ *Optional: designate implementing entities and establish a list of measures*
- ❖ *Optional: annual reporting by implementing entities*

District Heating And Cooling

A New Article for post-2020

Key provisions (Article 24):

- Consumer information
 - Disconnection
 - 1 ppt annual increase in renewables & waste heat/cold (shall endeavour) or
 - Third Party Access
 - Assessment of electricity flexibility potentials
 - Waivers & Exemptions
- ➔ *Key principle: "efficient district heating & cooling" = at least 50% renewable energy or 50% waste heat or 75% cogenerated heat or a 50% combination of such energy and heat*

District Heating & Cooling: consumer information

Important new right for consumers

Final consumers must be provided information on:

- **the energy performance,**
- **the share of renewable energy**

in their district heating and cooling systems

- in an easily accessible manner (e.g. suppliers' websites, annual bills), or
- upon request

District Heating & Cooling: **disconnection**

Important new right for consumers

- Applies for non-efficient systems only
- Transition period until 31 December 2025 (approved plan needed)
- A whole building can disconnect, not individual apartments
- Customers, their joint undertaking and parties acting on their behalf can exercise the right
- Can be done by terminating or modifying the contract
- Can be made conditional on:
 - customers changing for a significantly better performing alternative
 - compensation payment if there is physical disconnection

District Heating & Cooling: Third Party Access and Alternative

Member States must implement at least one of the options:

- Third Party Access for suppliers from renewable and waste heat or cold sources

or

- Increase the share of renewables and waste heat/cold by at least 1 percentage point as an annual average in the periods of 2021-2025 and 2026-2030 (shall endeavour)

District Heating & Cooling: Third Party Access

- ❑ *Obligation to connect, or to offer to connect and purchase from renewables' and waste heat/cold' suppliers in order to:*
 - **meet demand from new customers;**
 - **replace existing heat or cold generation capacity;**
 - **expand existing heat or cold generation capacity.**
- ❑ *Possibility to refuse access*
 - **Lack of capacity due to RES, HE CHP, waste heat/cold**
 - **Technical parameters are not fulfilled**
 - **Excessive cost increase for final customers**
- ❑ *Exemptions*
 - **1.) Efficient district heating/cooling, 2.) efficient DHC with high-efficiency CHP, 3.) systems becoming efficient by 31 December 2025 based on an approved plan, 4.) > 20 MW**

District Heating & Cooling:

Increase by 1 ppt of RES/Waste heat or cold

- Can be applied instead of Third Party Access
- Member States shall endeavour to increase the share of renewable energy and waste heat or cold by at least 1 ppt as an annual average for the periods 2021-2025 and 2026-2030, starting from the shares of those energy sources in the district heating and cooling sector in 2020
- By implementing measures
- Measures must be included in NEAPs
- Any ppt above 60% in 2020 can be counted for the 1 ppt

District Heating & Cooling: Assessment of flexibility potentials

- Assessment of the potential of DHC systems to provide balancing and other system services, including demand response and storing of excess electricity from renewable sources, and whether the use of the identified potential would be more resource- and cost-efficient than alternative solutions.
- Electricity DSO must do the assessment at least every four years in cooperation with DHC operators in their respective area

District Heating & Cooling: Waivers

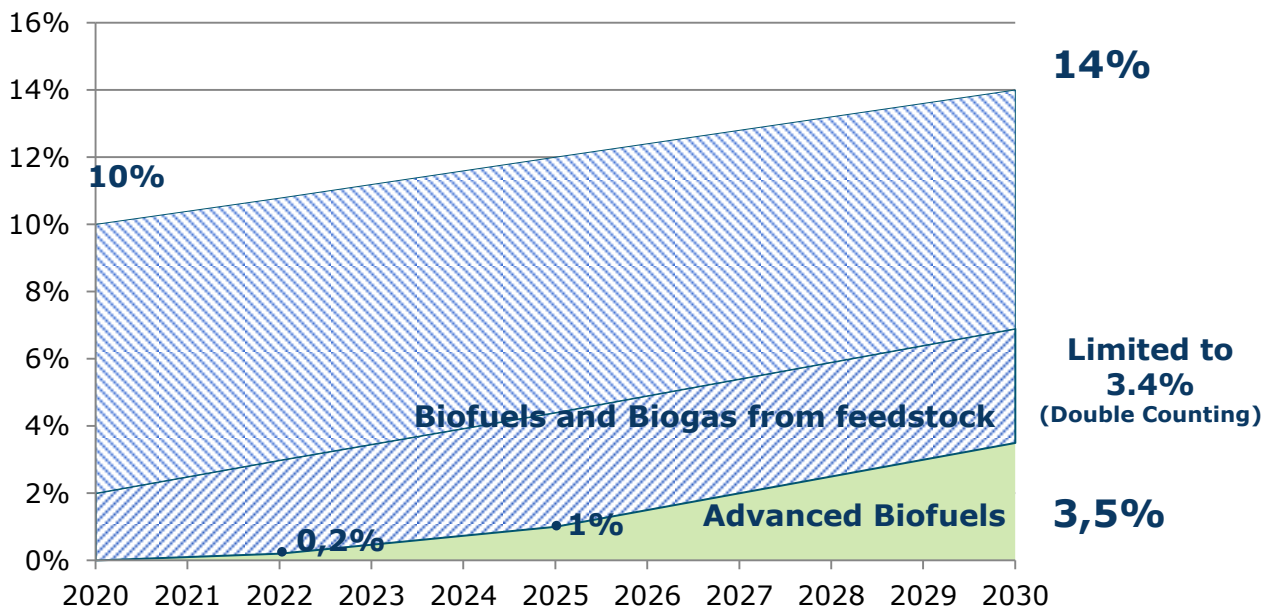
A MS is not required to apply the Article except for information provision (paragraph 1), where

(a) its share of district heating and cooling is less than or equal to 2 % of the overall consumption of energy in its heating and cooling sector on date of entry into force of the Directive;

(b) its share of district heating and cooling is increased above 2 % by developing efficient district heating and cooling based on its integrated national energy and climate plan or the assessment referred to in Article 15(7) of this Directive; or

(c) its share of efficient district heating and cooling constitutes over 90 % of total sales of its district heating and cooling.

MAINSTREAMING RENEWABLE ENERGY IN TRANSPORT



Multipliers

- Car: x4
- Train: x1.5
- Ship: x1.2
- Airplane: x1.2
- Drop of oil: x2

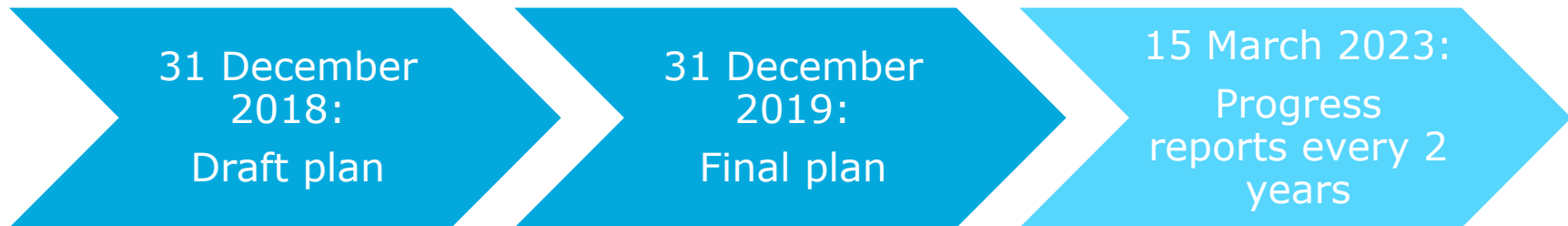
- **Conventional** biofuels, bioliquids and biomass from food and feed crops frozen around 2020 levels
- **High ILUC risk** biofuels first frozen, and then gradually reduced towards 0% by 2030

ENSURING BIOENERGY SUSTAINABILITY

- Reinforced **EU bioenergy sustainability criteria**:
 - *Enhanced **synergies with the circular economy** (e.g. waste hierarchy principles)*
 - *EU criteria extended to cover **biomass for heat/cooling and power***
 - *New risk-based criteria for **forest biomass** (ensuring sustainable harvesting & proper LULUCF accounting)*
 - *Higher **GHG emission saving targets***
- New energy efficiency criteria for **large-scale biopower**
- Enhanced EU and national **verification of the implementation** of the sustainability criteria
- Full **EU harmonization for biofuels**, partial harmonization for biomass in heat & power

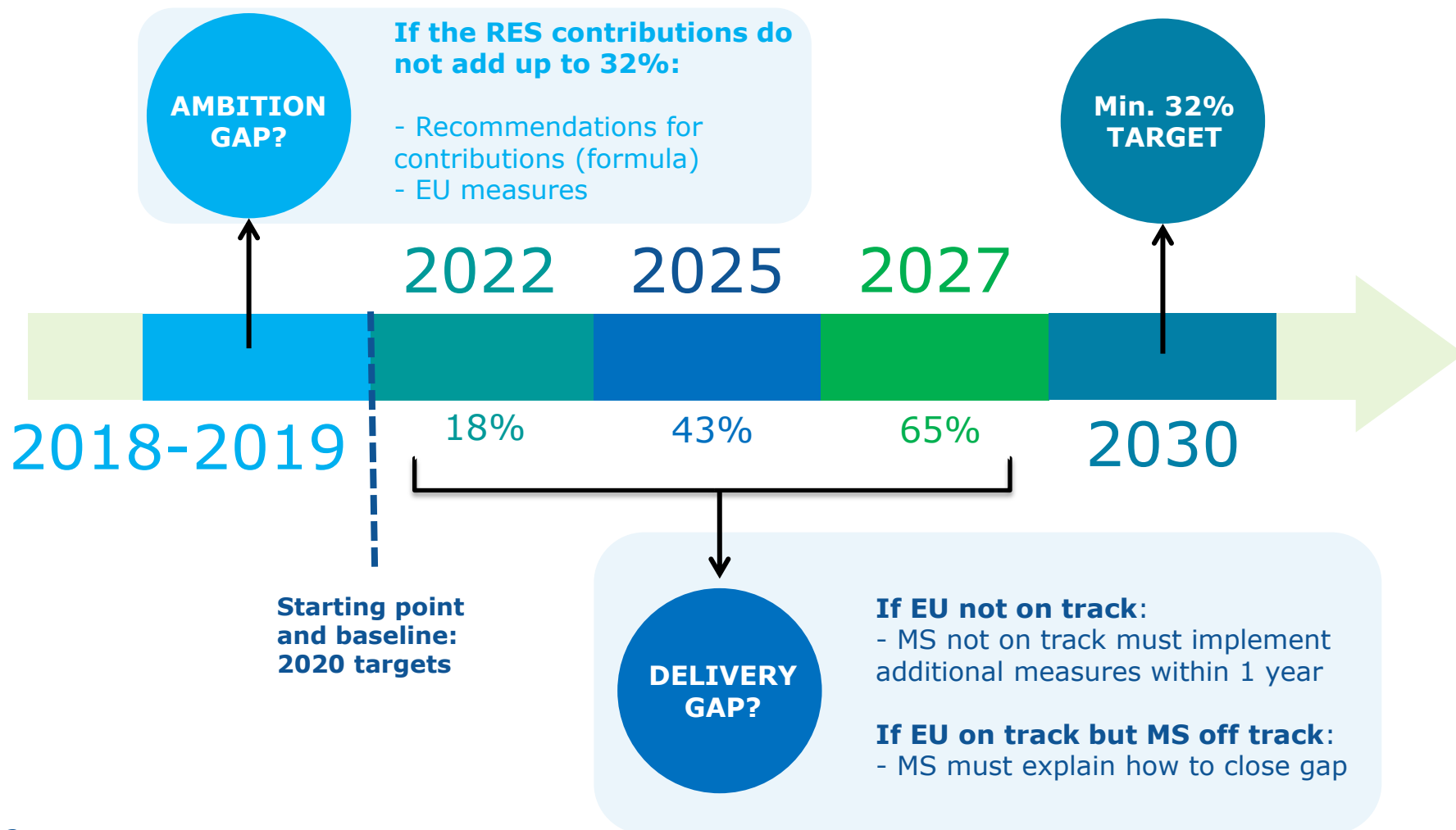


PLANNING AND REPORTING

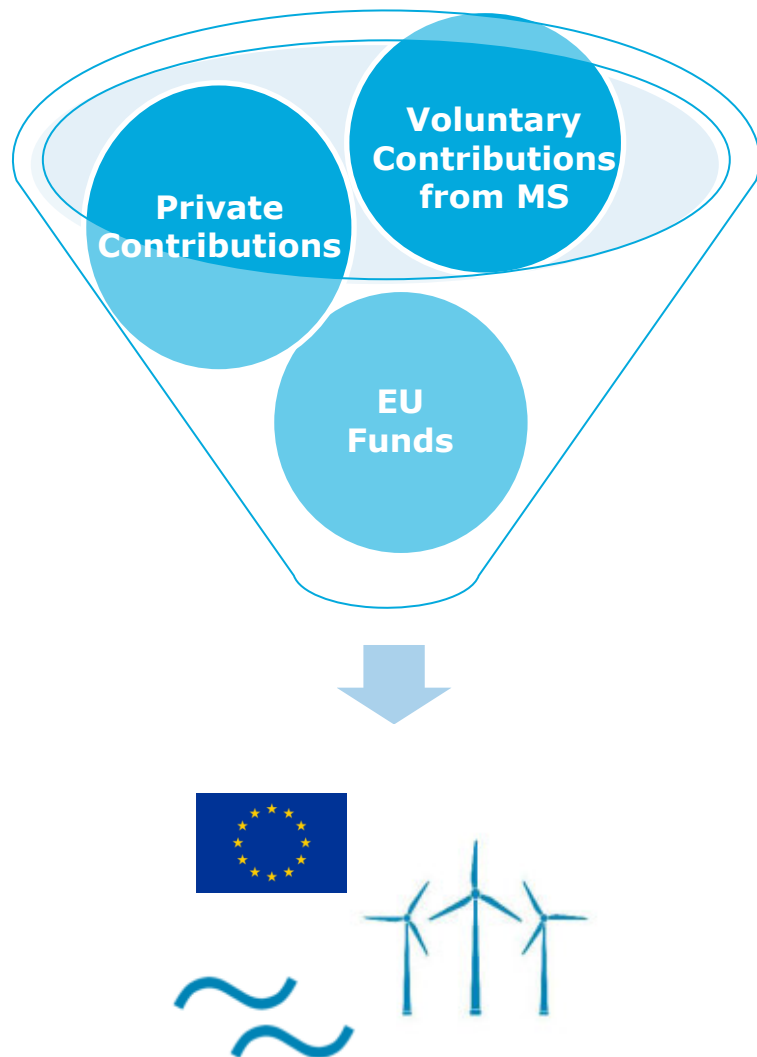


- Planning and reporting obligations on renewables are now integrated in **energy and climate plans and progress reports** (Governance Regulation)
- **Integrated national plans:**
 - **RES Objectives and trajectories** (e.g. overall and sectoral RES trajectories)
 - **Policies and measures** to promote renewables (e.g. in electricity, heating and cooling, transport)
- **Integrated national progress reports:**
 - Assessment of the implementation of the plans
- **Monitoring by the Commission**

ENSURING THE TARGET IS ACHIEVED – GOVERNANCE REGULATION



POOLING CONTRIBUTIONS FOR EUROPEAN PROJECTS



Financing mechanism to tender support for renewable energy projects in the EU to:

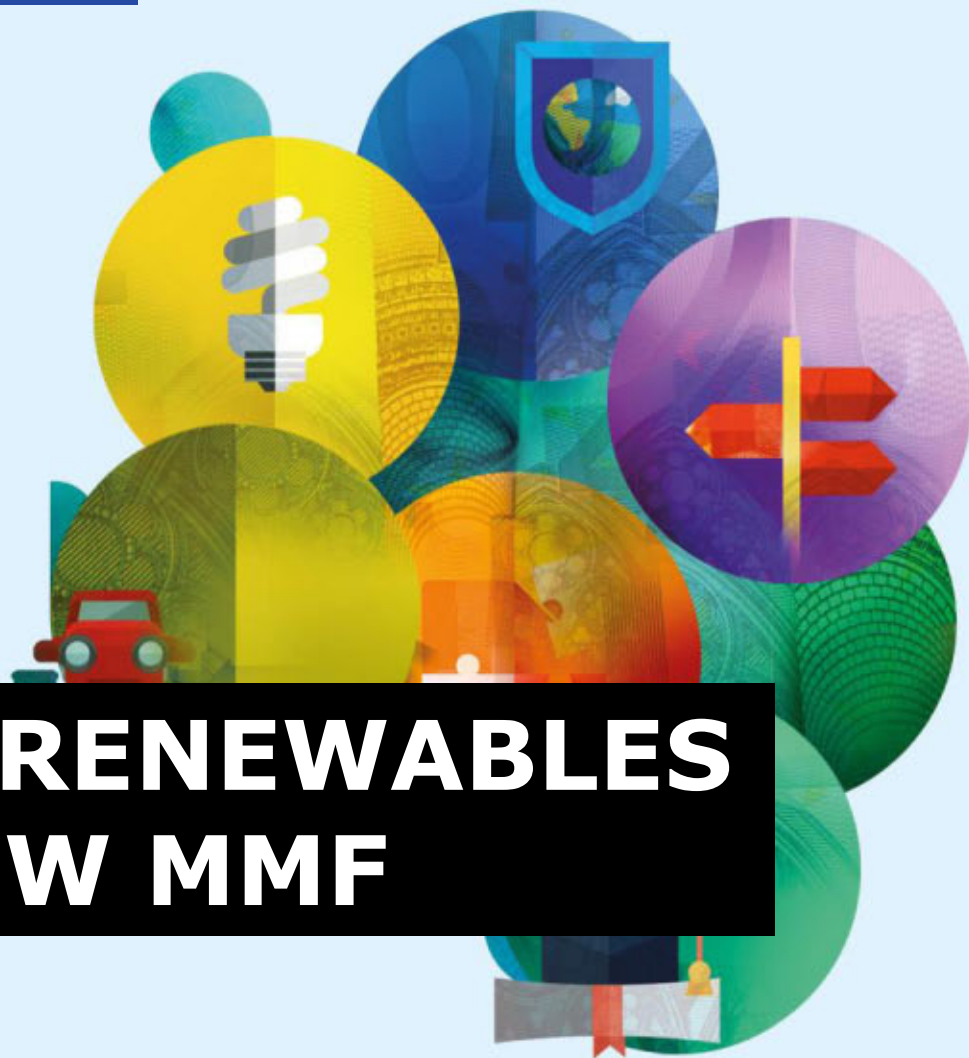
- **Cover deployment gaps**
- **Ensure a cost-effective deployment** in the absence of any gap



EU BUDGET FOR THE FUTURE

**SUPPORT FOR RENEWABLES
UNDER THE NEW MMF**

#EUBudget



ENHANCED FINANCING TOOLBOX TO SUPPORT RENEWABLES



EU Funding Instruments supporting
RES in the next MFF



INCREASED CLIMATE MAINSTREAMING ACROSS EU BUDGET (25%)

Cohesion
Funds

Invest EU

Horizon
Europe

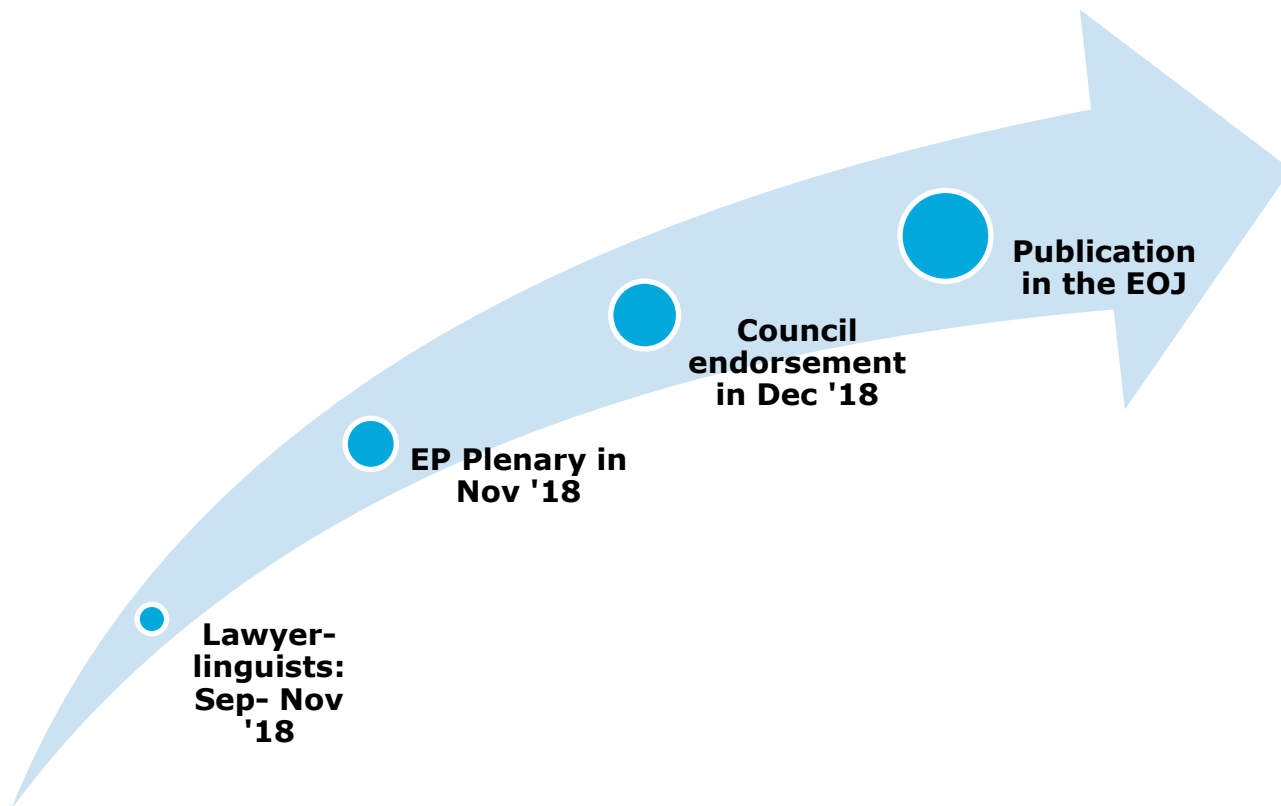
Connecting
Europe
Facility

LIFE
Clean Energy
Transition
Program

Innovation
Fund*

- + Low Carbon Investments kept as priority for Member States under **Cohesion funds** with **higher ring fencing** (30%)
- + **New Invest EU Fund** with a € 11.5 bln Sustainable Infrastructure window to unlock private investment through financial instruments and **tailor made products**
- + **Increased Funds** under **Horizon Europe** for R&I in climate, energy and mobility (€15 bln)
- + **New Window under CEF to support cross border RES Projects (€ 865 mln)**
- + **New Programme** (CEPE) under LIFE for RES & Energy efficiency capacity building and policy implementation
- + **New Innovation Fund** targeting market uptake of innovative RES, CCS and solutions for Energy Intensive Industries (€ 2bln-€12 bln)

NEXT STEPS REDII



Transposition by June 2021

Follow Up: Delegated Acts, Implementing Acts, Reports etc.

**THANKS A LOT FOR YOUR
ATTENTION!**



Back-up slides

EU'S RENEWABLE ENERGY HISTORY

2001

Renewable Electricity Directive

Indicative 22.1% share of renewable **power** in 2010

National **indicative** targets for renewable **electricity**

2009

Renewable Energy Directive - 1

EU-binding target of 20% share of renewable **energy** in 2020

National **binding** targets for renewable **energy** by 2020

2018

Renewable Energy Directive - 2

EU- binding target of 32% share of renewable **energy** in 2030

National energy and climate plans with **contribution** in **renewable energy share** to achieve EU- wide target

Indicative formula to assess national contributions

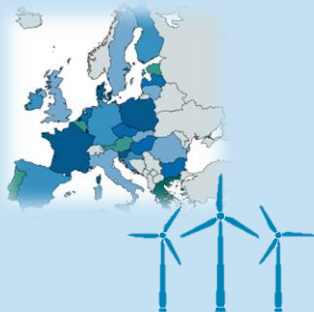
CROSS-BORDER PROJECTS IN THE FIELD OF RENEWABLE ENERGY

WHY?



- **New political context for 2030 renewables objectives: EU target and regional cooperation**
- **55 % share of RES in EU electricity in 2030**
- **Cost-effective RES deployment**

WHAT?



- **Facilitate RES projects under a cooperation agreement between 2 or more MS**
- **Support uptake of strategic RES technologies**

HOW?



- **Technical assistance, blending**
- **Financial support to limited number of projects with clear EU-added value**
- **As part of synergy projects €**