

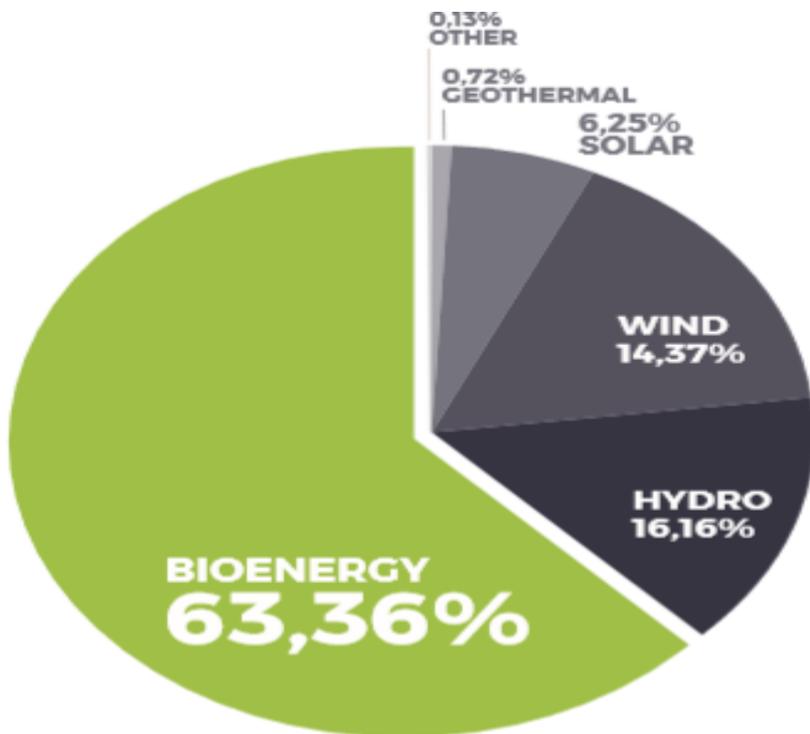


# EU sustainability criteria for bioenergy post-2020 (Directive 2008/2001)

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## BIOENERGY: LARGEST RENEWABLE ENERGY SOURCE

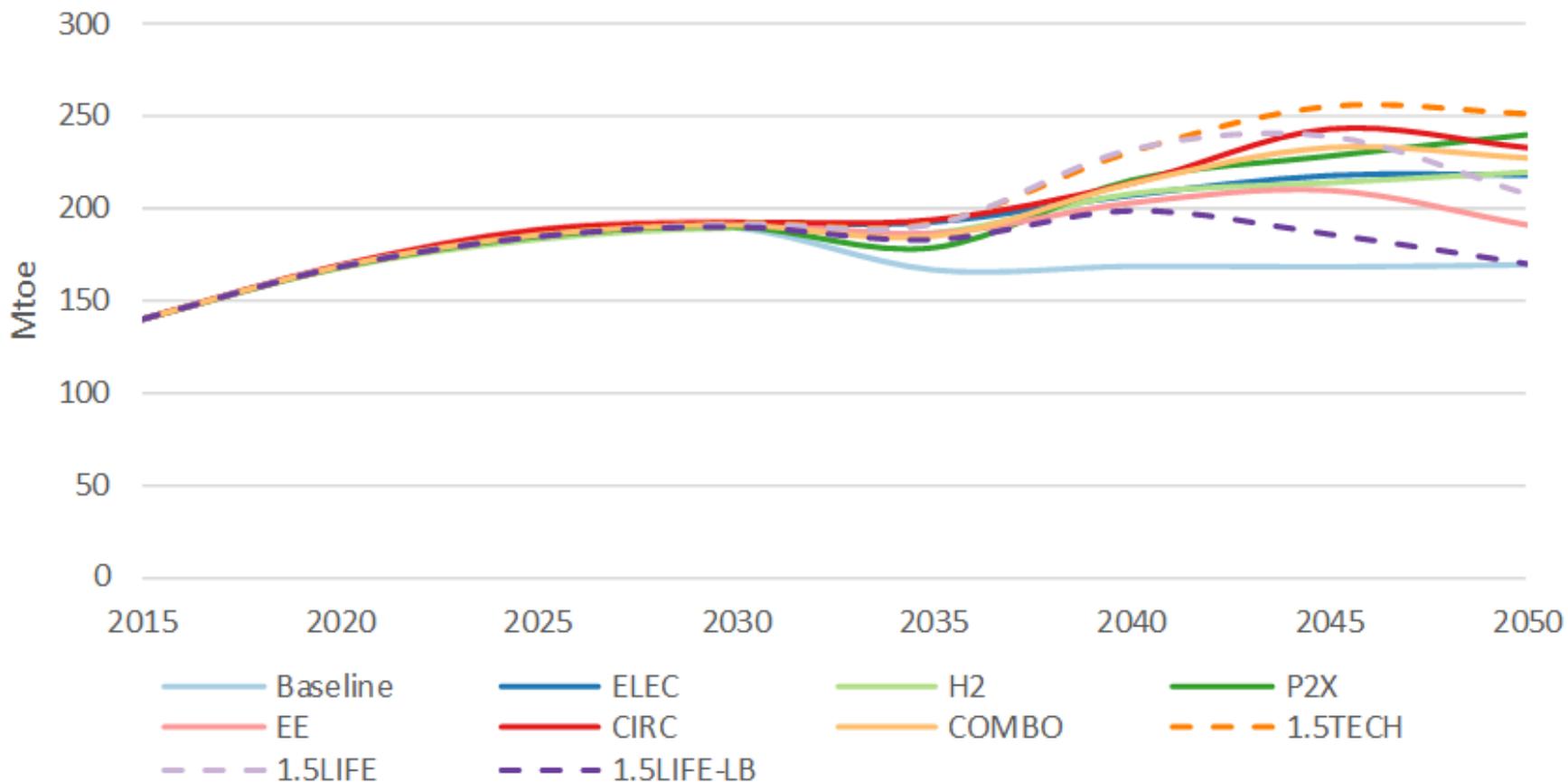
### Bioenergy share of EU renewables in 2018



- Bioenergy covers currently over 60% of the EU renewable energy mix
- Main use is in the heating sector, but increasing in electricity/transport
- Many advantages: energy security, dispatchability, competitiveness, rural development and GHG reduction in hard-to-decarbonize sectors
- Ensuring sustainability is key:
  - Avoiding direct/indirect land use change impacts
  - Ensuring optimal GHG emission savings along the supply chain
  - Promoting resource efficiency

# HOW MUCH BIOMASS DO WE NEED BY 2050?

Scenarios on EU consumption of biomass and waste (Mtoe, 2020-2050)



Source: EC Long Term Strategy

## DIRECTIVE 2008/2001 ON RENEWABLE ENERGY (REDII)



### Building blocs of the Directive



Support  
Schemes

Permitting  
procedures

Self-  
consumption/  
communities

Renewables  
in Transport

Renewables  
in Heating &  
Cooling

Sustainable  
Bioenergy  
Criteria

### KEY GOALS

- ✓ *Achieve a minimum renewables amount of **32% by 2030***
- ✓ *Help make the EU the **global leader** in renewables*

## CURRENT EU SUSTAINABILITY FRAMEWORK FOR BIOFUELS (RED I)

- *Biofuels cannot come from land with:*
  - High biodiversity (primary forest, protected areas etc.)
  - High carbon stock (peatland etc.)
- *Biofuels need to save at least 35% compared to fossil fuels, increasing to 50% in 2018*



- *ILUC: 7% cap on food & feed crop-based biofuels (ILUC Directive)*
- *No EU sustainability criteria for biomass and biogas in heat & power*

## EU SUSTAINABILITY FRAMEWORK FOR BIOENERGY POST-2020

- Covering all biofuels and biomass/biogas for heat & power (20 MW, 2 MW)
- Land criteria for agricultural and forest biomass independently of final use

### Land criteria

#### 1. AGRICULTURE BIOMASS CRITERIA



- ✓ No go areas: carbon & biodiversity rich land, including highly biodiverse forests
- ✓ Agricultural waste & residues: avoidance of soil carbon and quality impacts

#### 2. FOREST BIOMASS CRITERIA



- ✓ Minimizing unsustainability harvesting
- ✓ Addressing LULUCF emissions

### End-use criteria

#### 3. GHG EMISSION SAVINGS CRITERIA



- ✓ At least -65% for new biofuels/biogas for transport plants
- ✓ At least -70% for biomass/biogas for new heat & power plants (-80% in 2026)

#### 4. ENERGY EFFICIENCY CRITERIA FOR BIOPOWER PLANTS (50 MW)

- ✓ 50-100 MW: highly efficient CHP or Best Available Technique standards
- ✓ Above 100 MW: highly efficient CHP or at least 36% electrical efficiency
- ✓ Bio- CCS (Carbon Capture and Storage)



**Other relevant policies: LULUCF Regulation, Ecodesign Regulation, Air Quality legislation, Common Agriculture Policy**



## NEW LAND CRITERIA FOR AGRICULTURAL BIOMASS (REDII - Article 29.2-3)

### *Land criteria for agricultural waste and residues*

- ✓ Agricultural waste and residues shall be obtained only where operators or national authorities have **management or monitoring plans** in place in order to address the **impacts on soil quality and soil carbon impacts**
- ✓ Information about how those impacts are monitored and managed shall be reported pursuant to article 30(3), (i.e. by economic operators and audited by a third-party)

### *Land criteria (i.e. no-go areas) for agricultural biomass*

- a) Primary forest & other wooded land, where no visible human activity/ biodiversity disturbed
- b) (NEW) Highly biodiverse forest** and other wooded land which is species-rich and not degraded, or has been identified as being highly biodiverse by the relevant competent authority, unless evidence is provided that the production of that raw material did not interfere with those nature protection purposes
- c) Designated nature protection areas, unless evidence of no impacts
- d) Highly biodiverse grassland (above 1ha) –criteria and ranges defined in COM Regulation 1307/2014

## NEW LAND CRITERIA FOR FOREST BIOMASS (REDII - Article 29.6-7)



### ***Forest biomass shall meet the following land criteria:***

#### Criteria on forest harvesting

- Legality of harvesting
- Forest regeneration
- Protected areas
- Maintenance of soil quality and biodiversity
- Maintenance of long-term production capacity of the forest

#### Criteria on forest carbon

- Paris Agreement membership
- NDC accounting for forest carbon stocks changes, or
- Legislation to conserve/ enhance carbon stocks/sinks & reported LULUCF emissions do not exceed removals

### ***Compliance can be demonstrated by showing evidence that:***

- a) The criteria are met through national or sub-national legislation & enforcement mechanisms applying to area of harvest; or
- b) If evidence a) is not available, the criteria are met through management systems in place at the forest sourcing area level

## CHECKING COMPLIANCE AND CONSEQUENCES

### ***Checking compliance (REDII – Article 30)***

- Member States require economic operators to submit reliable and third-party audited information of compliance. Economic operators can participate into:
  - ❑ *National (governmental) schemes* set up by Member States, or
  - ❑ *Voluntary (market-based) schemes* recognised by the Commission
- EC Communication 2010/C 160/01 on [Voluntary schemes and GHG emission default values in the EU biofuels and bioliquids sustainability scheme](#) .
- Updated rules for voluntary schemes to be adopted by June 2021

### ***Consequences of compliance (REDII – Article 29.1)***

Sustainability compliance is need for bioenergy consumed in the EU to:

- a) Be counted towards the EU renewables target and the Member States' renewable energy contributions and sectorial targets
- b) Be used for compliance with sectorial renewables targets & obligations
- c) Be eligible for financial support by Member States (tax exemption, blending obligations etc.)

## NEXT STEPS

- RED II empowers the Commission to adopt a number of **implementing acts** to ensure uniform implementation of the EU bioenergy sustainability criteria by July 2021
- Before adopting these acts, the Commission will consult the **Committee on the Sustainability of Biofuels, Bioliquids and Biomass**, established under REDII
- As part of the Commission's better regulation agenda, **citizens and other stakeholders** will also be officially consulted
- Ongoing **REDIIBIO technical assistance project** to support the implementation of the new REDII sustainability criteria for biomass

Implementing acts	Deadline
Operational guidance on forest biomass criteria Art 29 (8) REDII	31 January 2021
Update rules for voluntary schemes Art 30 (8) REDII	30 June 2021
Recognition of voluntary schemes Art 30 (4) REDII	1 July 2021



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## Thank you!

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