

BIOENERGY

Status Update from Brussels

28.1.2021

Bioenergian Talvipäivä verkkoseminaari

Giulia Laura Cancian, Policy Director, Bioenergy Europe



Our members

Companies



Associations



Academia



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TODAY AND IN 10 YEARS

2

EU GREEN DEAL
GAME ON!

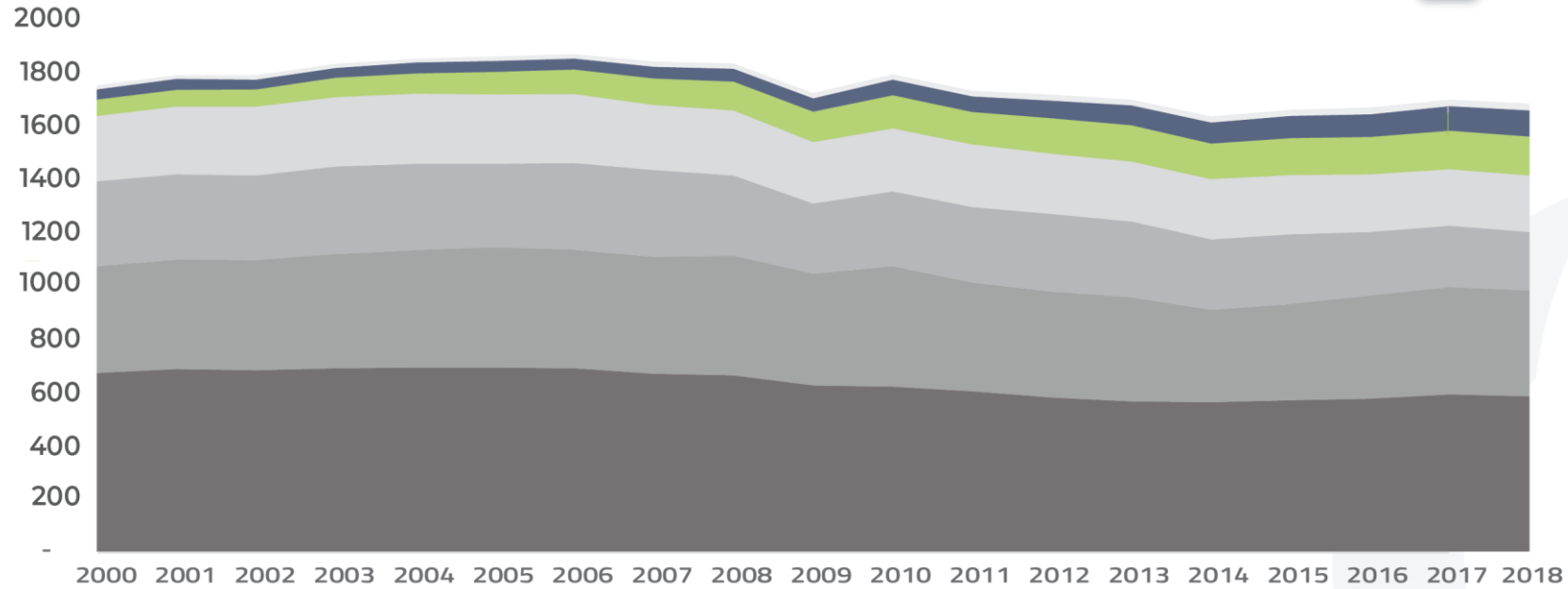
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GET HEARD IN A NOISY WORLD

1

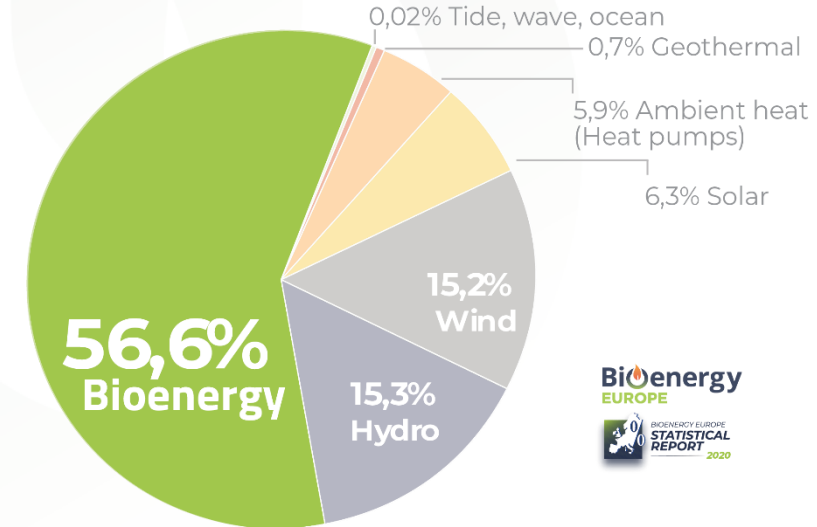
TODAY AND IN 10 YEARS

Evolution of the gross inland consumption by main fuel type in EU28 (Mtoe)
 (Source: Eurostat, Bioenergy Europe)



Distribution of renewable gross final energy consumption in the EU28 in 2018 (%)

(Source: SHARES 2018, Eurostat, Bioenergy Europe)



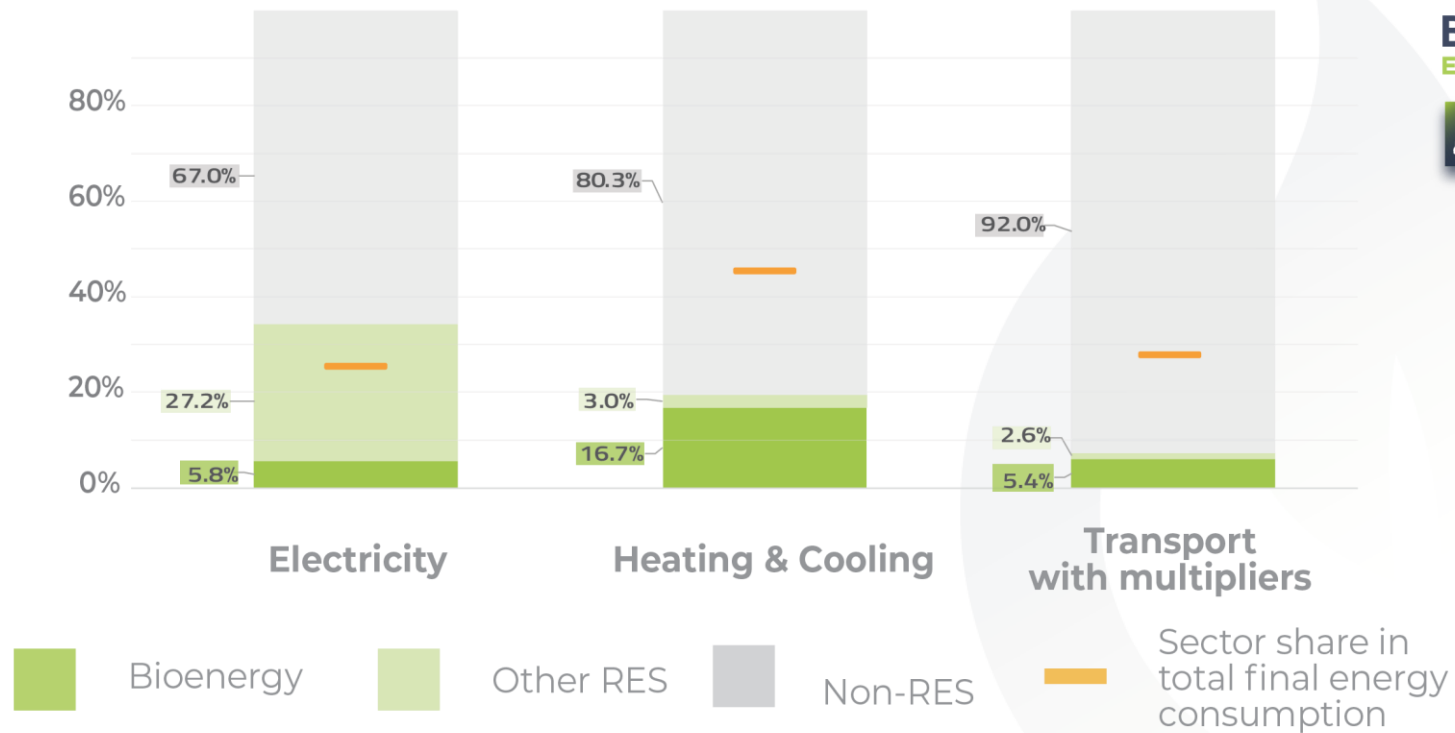
ESSENTIAL CONTRIBUTION IN ALL MS TO ACHIEVE THE EU CLIMATE AND ENERGY TARGETS



Contribution of biomass to the final renewable energy consumption in 2017 in EU28 Member States (%)

Repartition by energy source for the different final usages in the EU28 in 2018 and their relative importance in the total final energy consumption (%)

(Source: SHARES 2018, Eurostat, Bioenergy Europe)



Note: Calculated in accordance to the methodology established in Directive 2009/28/EC and Regulation (EC) No 1099/2008. For the energy source repartition in transport 'Other renewables' represents RES electricity used in transport which also counts towards the RES for electricity (not for the sector share in total final energy consumption). Multipliers included.

CONTRIBUTING TO SUSTAINABLE GROWTH AND GREEN JOBS



Bioenergy equipment suppliers* based in Europe

** Representing over 464 international suppliers of equipment to the bioenergy sector. This figure accounts only for companies engaged in export and/or have subsidiaries in other regions. It does not include small scale heating equipment suppliers.*

50.000 +
bioenergy businesses in the EU

49%
Of RES jobs in the EU are in bioenergy



703.200
jobs in bioenergy in the EU



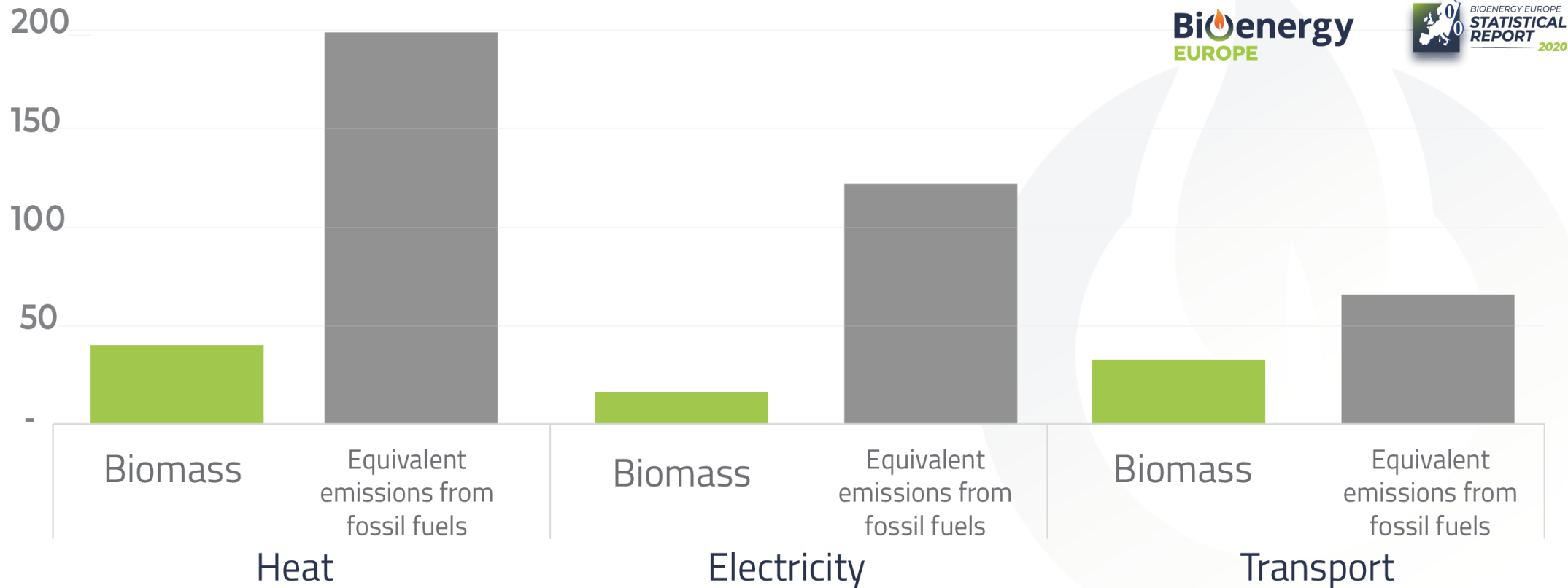
Bioenergy in total RES turnover

0,39%
of EU GDP in 2017

€ 5 bn
net exporter/year

€ 60,6 bn
annual turnover

Comparison of the GHG emissions from bioenergy and fossil fuel equivalent in the different sector in EU28 in 2018 (MtCO₂eq)
(Source: Bioenergy Europe calculations; RED II - biomass default values and fossil fuel comparator).

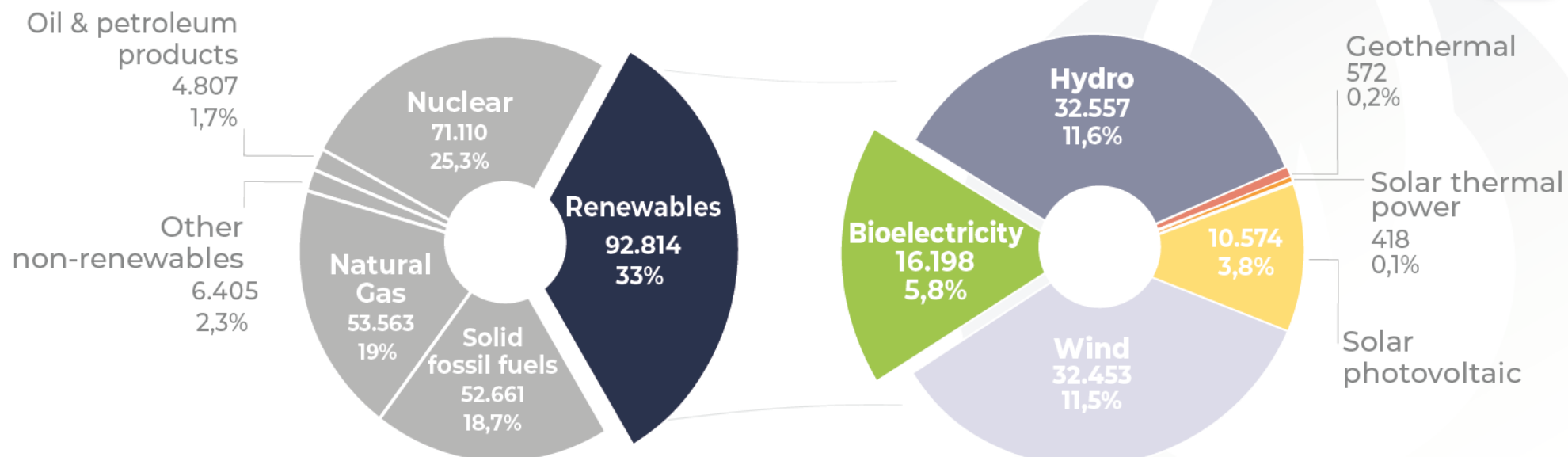


Bioenergy
EUROPE



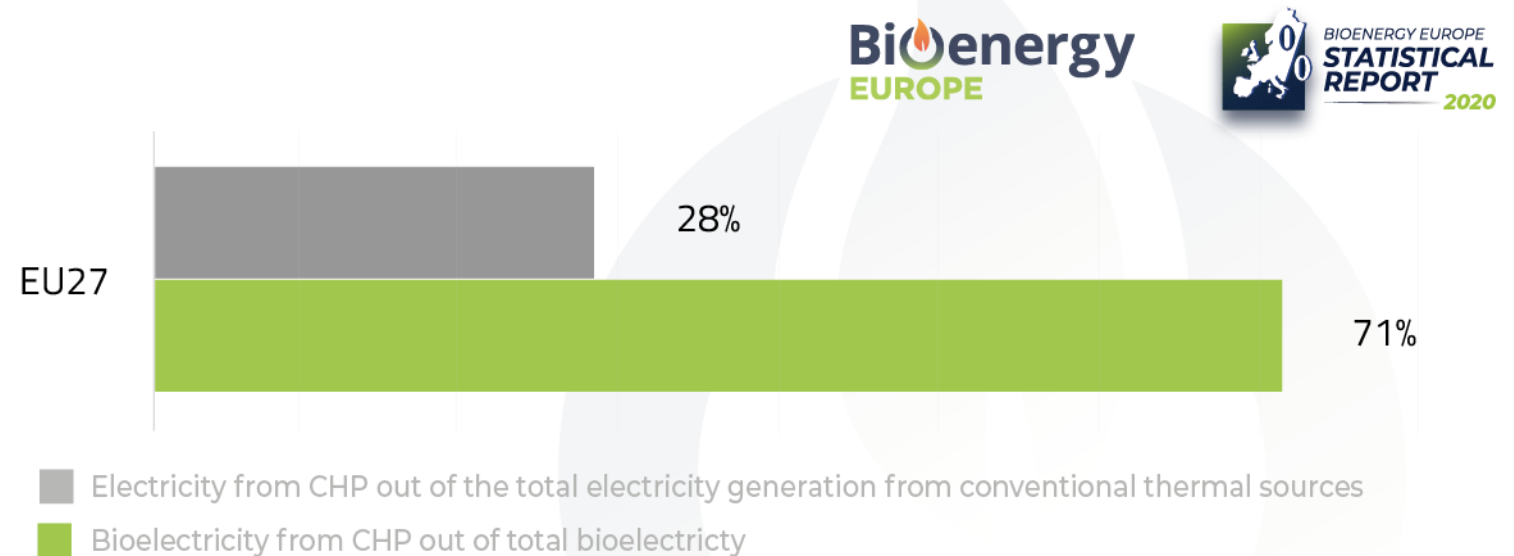
Gross electricity generation by product type in the EU28 in 2018 (ktoe, %)

(Source: Eurostat, Bioenergy Europe)



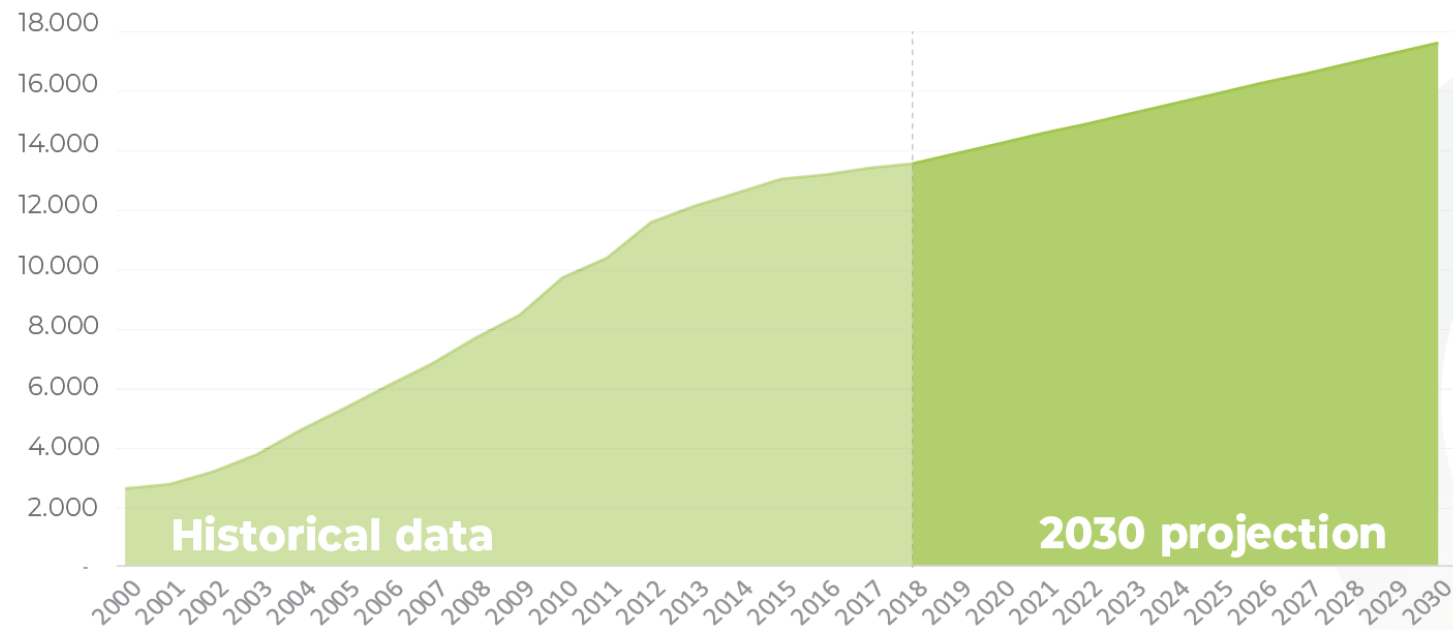
Share of gross electricity generation of conventional thermal power plants produced from CHP and share of bioelectricity produced from CHP in 2018 in EU Member States (%)

(Source: Eurostat, Bioenergy Europe)



EU27 projection for bioelectricity for 2030 based on the NECPs* (ktoe)

(Source: Eurostat, NECPs and Bioenergy Europe assumptions)



*Note: for the countries with no data available (NECPs not yet public or no details about bioelectricity), the average growth rate obtained with the data available was applied. A linear trend was applied for the visualization of the evolution to the 2030 objective according to NECPs, but this is not necessarily representative of the implementation plans of the Member States.

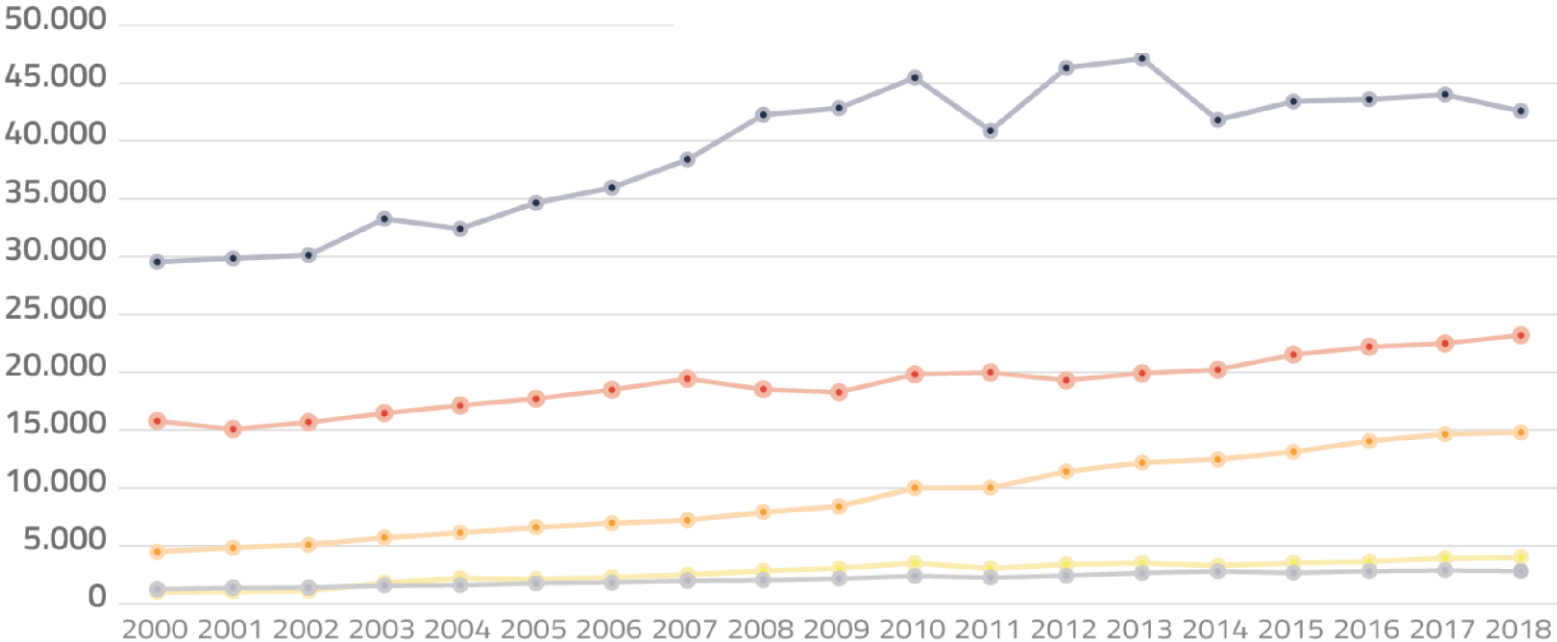
BIOMASS IN HEATING

+25% in 2030

Evolution of the final consumption of bioheat by sector in EU28 (in ktoe)

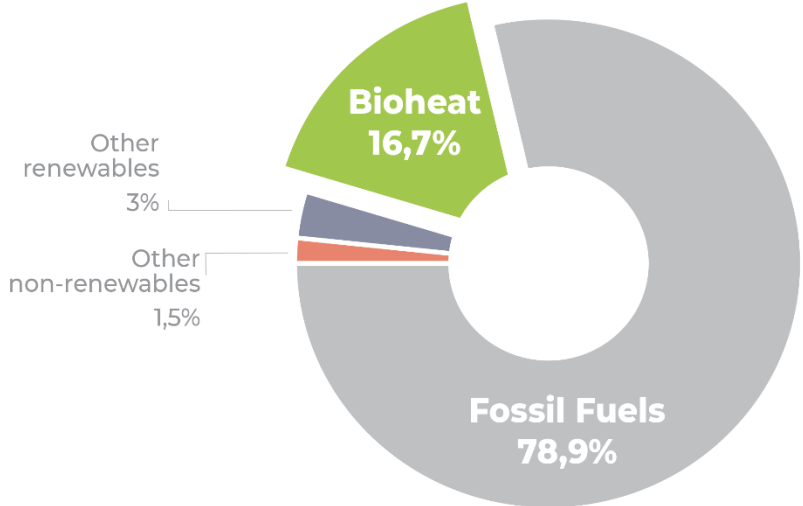
(Source: Eurostat, Bioenergy Europe)

- Residential
- Industry
- Derived Heat
- Commercial & Public Services
- Other Sectors



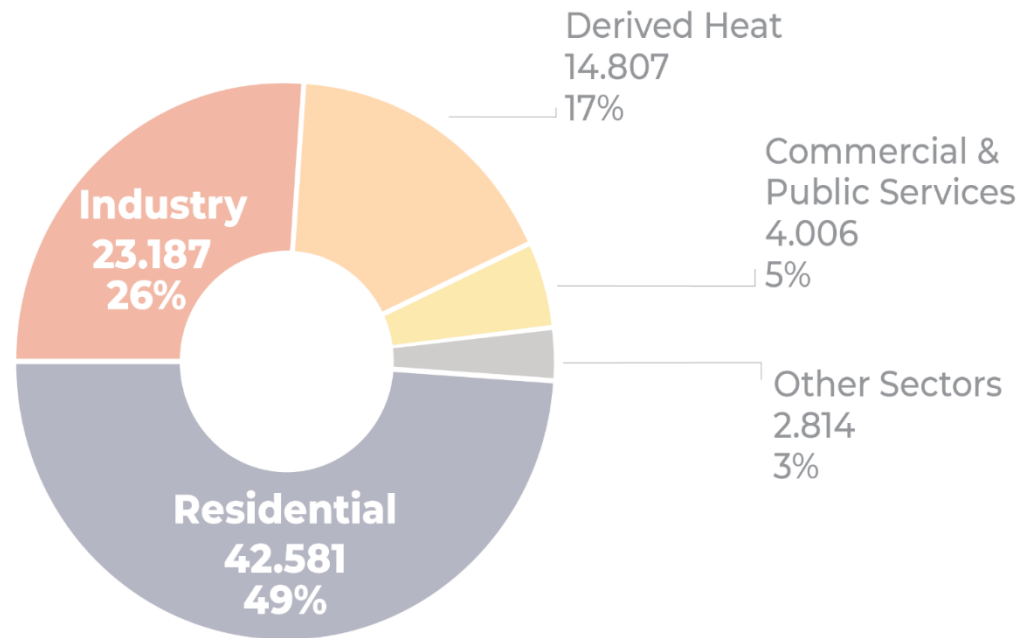
Contribution of the different energy sources in heating and cooling in EU28 in 2018* (in %)

(Source: Eurostat, SHARES 2018, Bioenergy Europe's calculation)



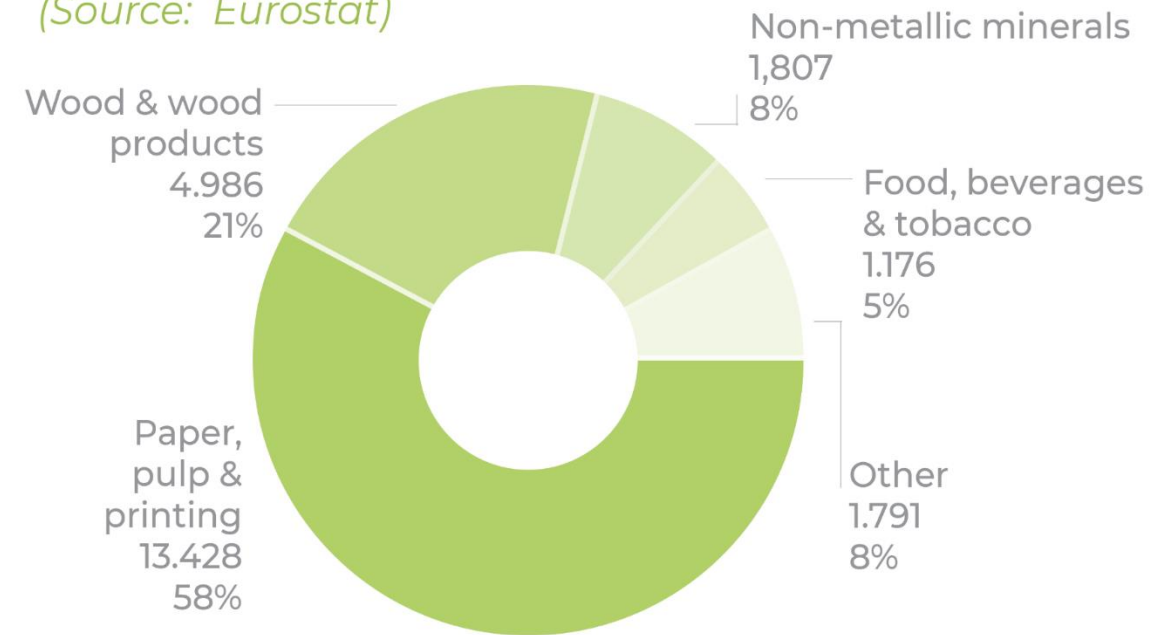
Final energy consumption of bioheat in the different sectors in EU28 in 2018 (in ktoe, %)

(Source: Eurostat, Bioenergy Europe)



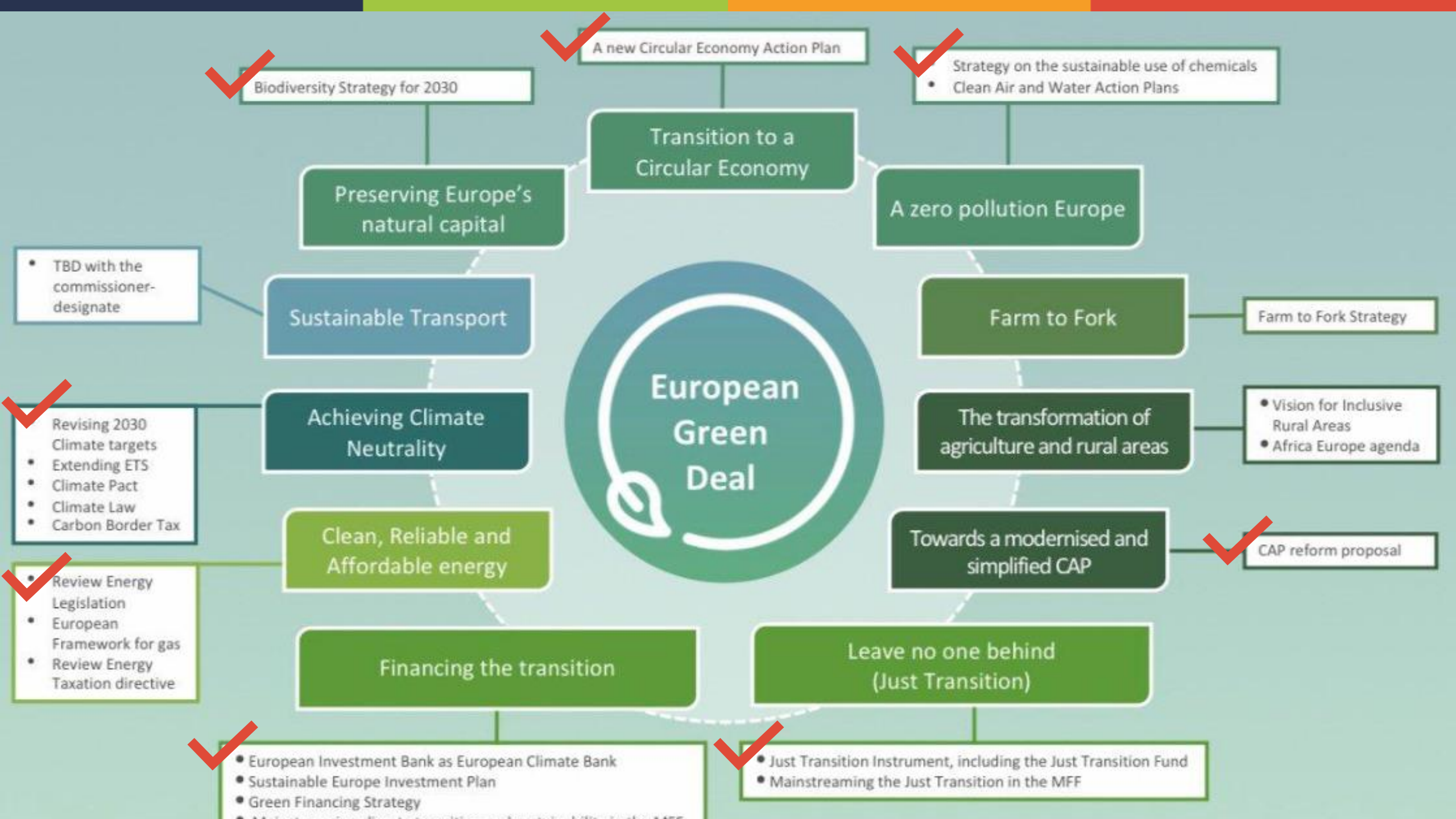
Share of biomass usage in the different industries in 2018 – EU28 (in ktoe, %)

(Source: Eurostat)



2

EU GREEN DEAL
GAME ON!



2030 CLIMATE TARGET PLAN

ENERGY
SYSTEM
INTEGRATION



RENOVATION
WAVE



BIODIVERSITY
STRATEGY



HYDROGEN
STRATEGY



RENEWABLE
ENERGY DIRECTIVE

AMBITIONS



SUSTAINABILITY CRITERIA

2030 CLIMATE TARGET PLAN: BIOENERGY

Projected increases in bioenergy use by 2030 are limited compared to today. To ensure the land use sink can continue to strengthen and improve, biomass for energy use in the EU should be produced sustainably, and environmental impacts should be minimised. To limit impact on biodiversity, the use of whole trees and food and feed crops for energy production – produced in the EU or imported – should be minimised. Any unsustainable intensification of forest harvesting for bioenergy purposes should be avoided. Instead, bioenergy production should come from better use of biomass wastes and residues and a sustainable cultivation of energy crops, rather replacing the production of first generation food-crop-based biofuels and be in line with the sustainability criteria of the Renewable Energy Directive. The promotion of sustainable forest management, a strong enforcement of the existing legislation and a quicker implementation of the sustainability criteria in the Renewable Energy Directive can play a key role in this regard alongside the foreseen review and potential revision of the latter Directive.

1. Limited Projected increase
2. Minimise use of whole trees and food and feed crops
3. No unsustainable intensification of forest harvesting for bioenergy purposes
4. Better use of waste and residues and sustainable cultivation of energy crops (SRC? Fast growing ligno cellulosic?) + and be in line with sust criteria
5. Promotion of SFM, Enforcement of existing legislation, quicker implementation

https://ec.europa.eu/clima/sites/clima/files/eu-climate-action/docs/com_2030_ctp_en.pdf

IMPACT ASSESSMENT: LIMITED GROWTH FOR BIOENERGY?

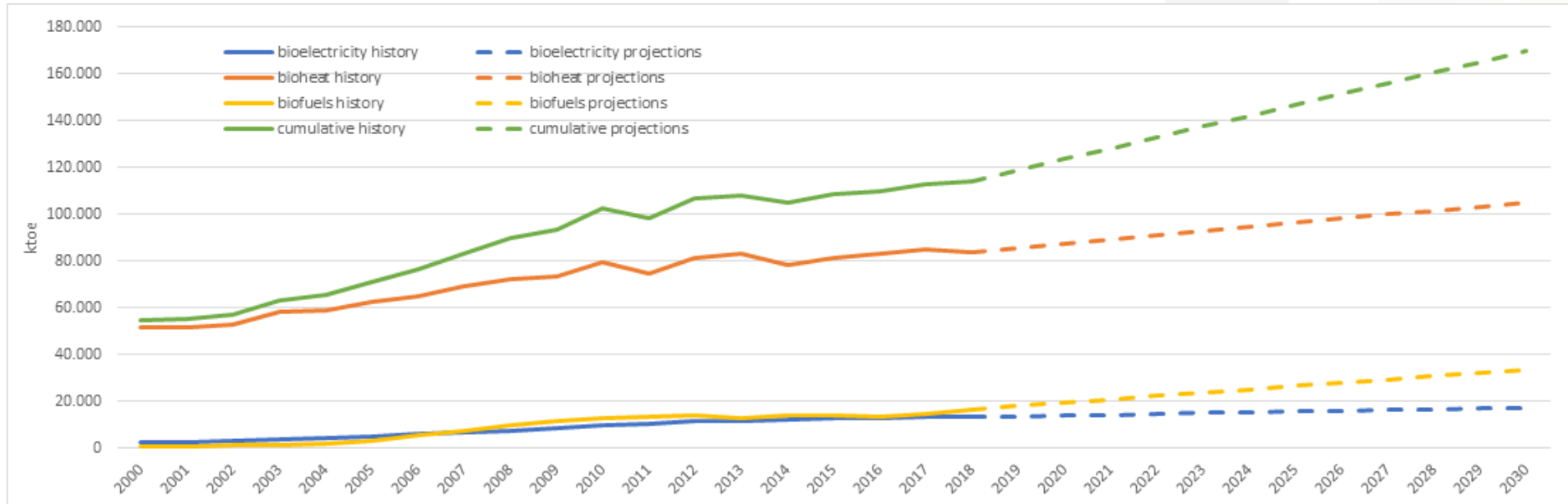
IMPACT ASSESSMENT

150 Mtoe

NECPs

156.16 Mtoe

	2018	2030 (*)	Growth 2006-2018	Growth 2018-2030
Heat	84.002	105.053	29%	25%
Electricity	13.371	17.360	123%	30%
Transport	16.803	33.751	213%	101%
Total	114.175	156.163	50%	49%



EU BIODIVERSITY STRATEGY PUBLICATION

WIN – WIN SOLUTIONS FOR ENERGY GENERATION

1. Sustainable bioenergy made the list of win-win solutions
2. A transformative approach minimise use of whole trees is introduced
3. The Annex lists follow up actions on biomass sustainability

Assessment of the EU and global biomass supply and demand and related sustainability	ongoing
Study on the sustainability of the use of forest biomass for energy production	2020
Operational guidance on the new sustainability criteria on forest biomass for	2021

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Brussels, 20.5.2020
COM(2020) 380 final

**COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN
PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL
COMMITTEE AND THE COMMITTEE OF THE REGIONS**

EU Biodiversity Strategy for 2030

Bringing nature back into our lives

**THE EU BIODIVERSITY STRATEGY IS A NON BINDNG DOCUMENT.
YET, LEGISLATIVE INITIATIVES WILL STEM FROM THIS STRATEGY**



Climate change – updating the EU emissions trading system (ETS)

42

Have your say



National emissions reduction targets (Effort Sharing Regulation) – review based on 2030 climate target plan

1627

Have your say



Log in English

Law

Land use, land use change & forestry – review of EU rules

Have your say > Published initiatives > Land use, land use change & forestry – review of EU rules

About this initiative



Log in English

Law

Forests - new EU strategy

Have your say > Published initiatives > Forests - new EU strategy



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Law

EU renewable energy rules – review

Have your say > Published initiatives > EU renewable energy rules – review



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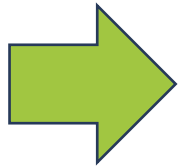
Law

Protecting biodiversity: nature restoration targets under EU biodiversity strategy

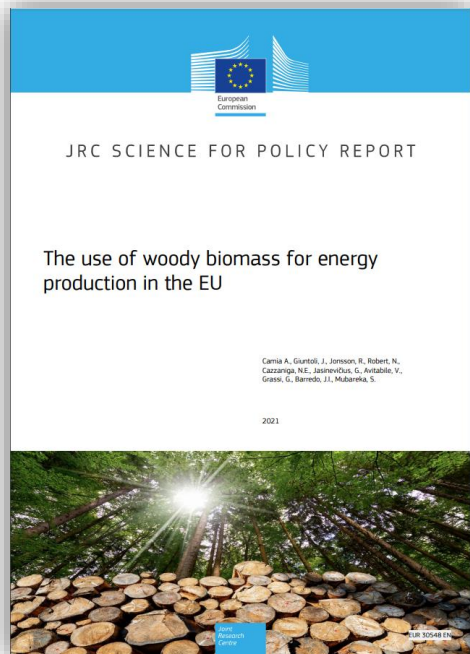
Have your say > Published initiatives > Protecting biodiversity: nature restoration targets under EU biodiversity strategy

About this initiative

JRC STUDY :USE OF WOODY BIOMASS FOR ENERGY PRODUCTION IN THE EU

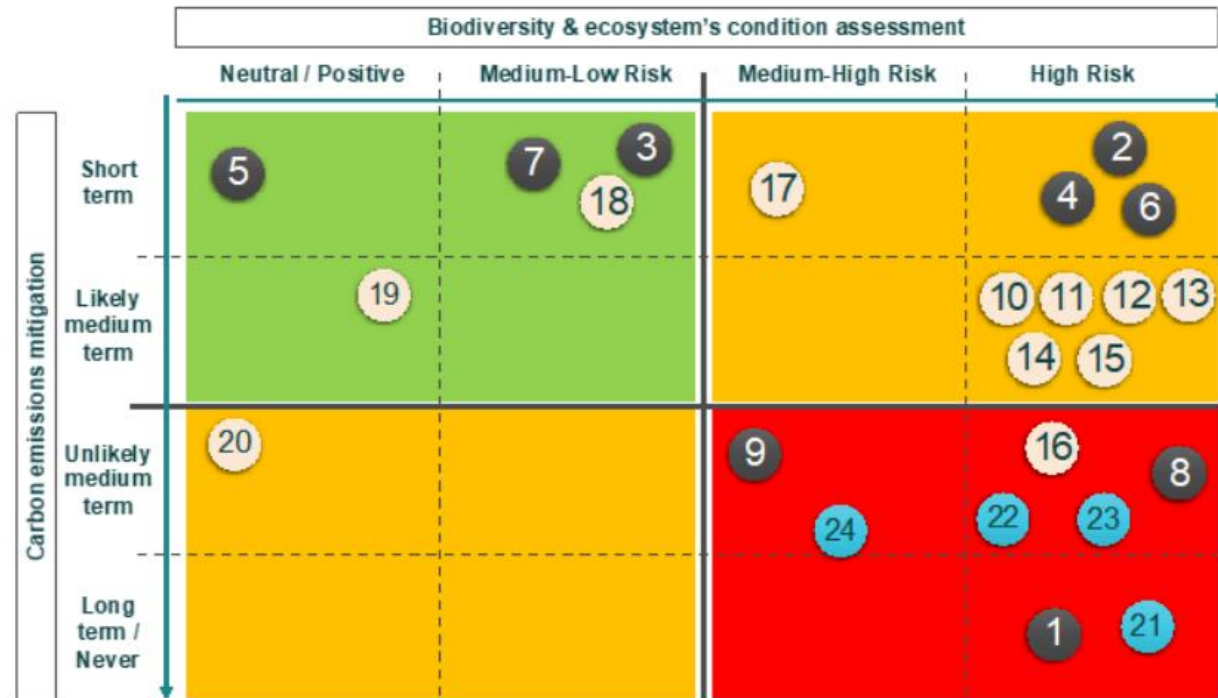


Swift and robust implementation of REDII sustainability criteria will effectively minimise negative impacts associated with the use of woody biomass for energy. For the implementation to be optimal, forest legislation and guidelines must be fit-for-purpose, properly enforced and monitored.



RECOMMENDATIONS:

- ✓ Strengthen the Sustainability Criteria
- ✓ No-Go Areas
- ✓ Lower the exemption threshold
- ✓ Avoid Lose-Lose pathways
- ✓ Make sure imported biomass does not have negative impacts (proposal 2021)
- ✓ Holistic sustainability governance of bioeconomy value chains

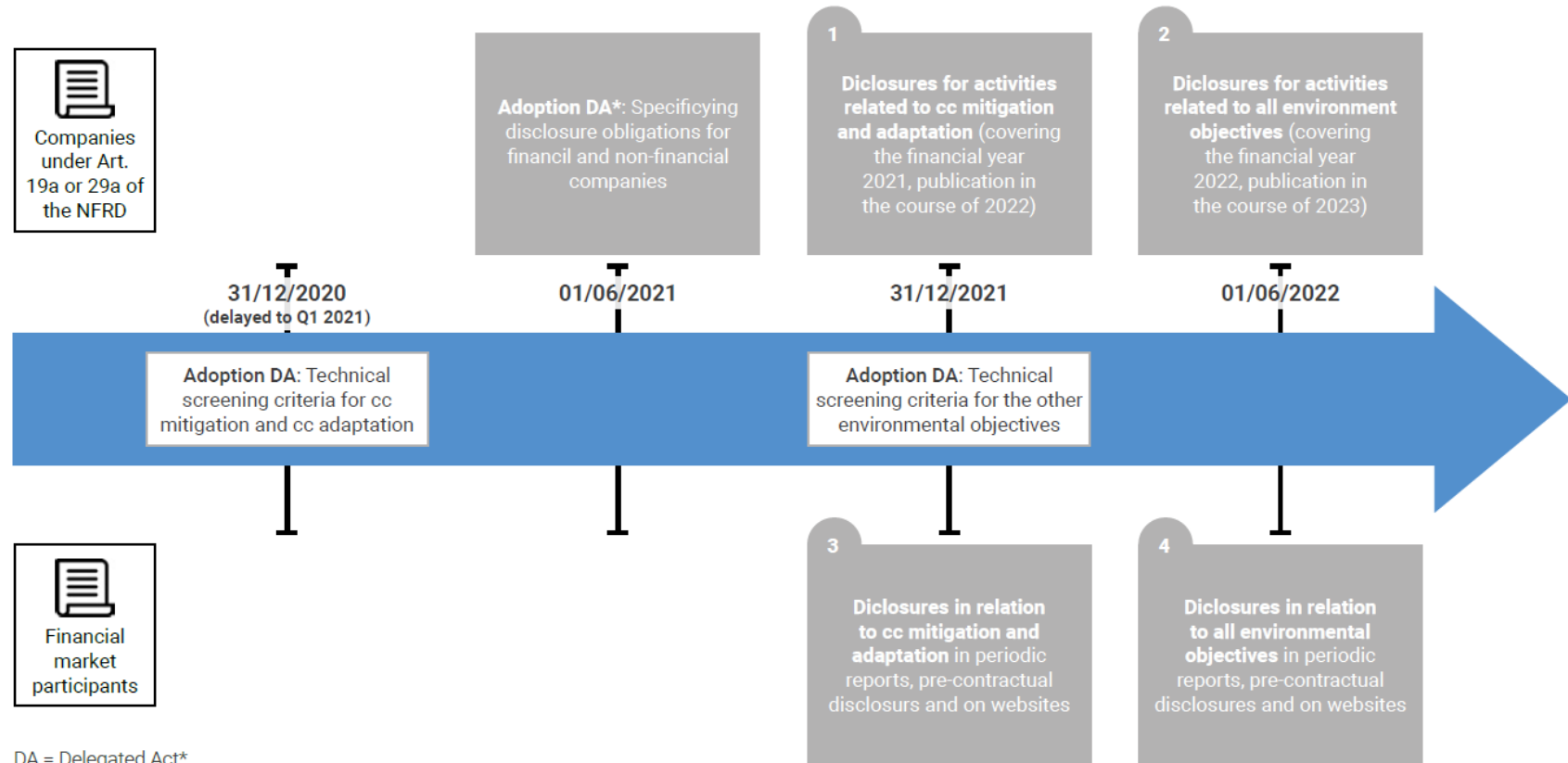


	ID	Pathway description
Logging residues removals	1	Coarse Woody Debris removal
	2	Fine Woody Debris (Slash + foliage/needles) removal above landscape threshold
	3	Fine Woody Debris (Slash + foliage/needles) removal below landscape threshold
	4	Fine Woody Debris (Slash - Coniferous) removal above landscape threshold
	5	Fine Woody Debris (Slash - Coniferous) removal below landscape threshold
	6	Fine Woody Debris (Slash - Deciduous) removal above landscape threshold
	7	Fine Woody Debris (Slash - Deciduous) removal below landscape threshold
	8	Low stumps removal above landscape threshold
	9	Low stumps removal below landscape threshold

Afforestation	10	Natural grassland afforestation with monoculture plantation
	11	Natural grassland afforestation with polyculture plantation
	12	Natural grassland afforestation with other planted forest
	13	Anthropogenic heathland afforestation with monoculture plantation
	14	Anthropogenic heathland afforestation with polyculture plantation
	15	Anthropogenic heathland afforestation with other planted forest
Conversion to plantation	16	Natural forest expansion on anthropogenic heathland
	17	Former agricultural land afforestation with monoculture plantation
	18	Former agricultural land afforestation with polyculture plantation
	19	Former agricultural land afforestation with other planted land managed with low intensity
	20	Natural forest expansion on former agricultural land
	21	Conversion of primary, old-growth forest, to plantation
	22	Conversion of native naturally regenerating forest to monoculture plantation
	23	Conversion of native naturally regenerating forest to polyculture plantation
24	Conversion of native naturally regenerating forest to other planted forest managed with low intensity	

TAXONOMY REGULATION

Classification system, establishing a list of environmentally sustainable economic activities. The EU taxonomy is an important enabler to scale up sustainable investment and to implement the European Green Deal.



DA = Delegated Act*

Source: UNEP Finance Initiative, Testing application of EU Taxonomy to core banking products

PRIVATE FINANCE WILL BE KEY TO SCALE UP BIOENERGY PROJECTS AND R&D



THREATS:

- Bioenergy as “**transitional activity**”, discriminated against other renewables
- Access to R&D private funding
- Eligibility for maintenance activities
- Requirements on forestry de facto excluding small forest holders



SIMPLIFIED COMPLIANCE AND COHERENCE WITH EXISTING SUSTAINABILITY CRITERIA



3

GET HEARD IN A NOISY WORLD

1.

Speak up!



2.

It is a
question of
perspectives





3.
Join Forces
with other
companies
and
associations

THANK YOU!

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