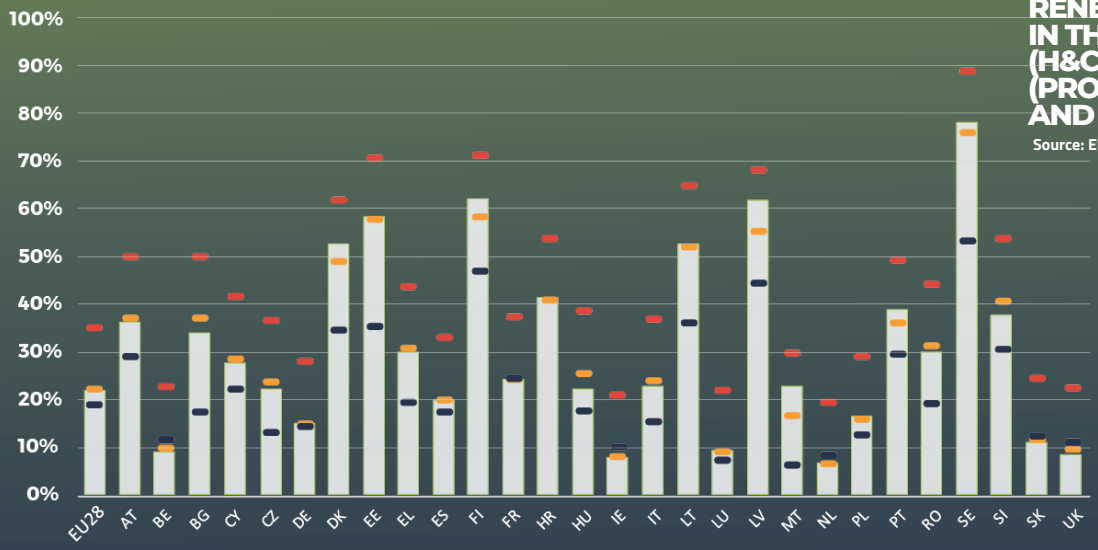
BIOENERGY EUROPE
STATISTICAL REPORT 2019

POLICY BRIEF

BIOMASS FOR HEAT

Supported by Valmet FORWARD

Accelerating the decarbonization of H&C



RENEWABLE ENERGY SHARE IN THE HEATING AND COOLING (H&C) SECTOR IN 2017 – 2020 (PROJECTIONS AND NREAP) AND 2030 TARGET (%)

Source: EUROSTAT, NREAPs, and Bioenergy Europe

- 2017
- 2020 projection
- 2020 target (NREAPs)
- 2030 objectives (calculated with 2020 projections - +1,3pp/year)

Note: 2030 objectives according to RED II art 23 (+1,3 pp): from the % of RE in H&C projected for 2020: + 1,3 percentage point per year from 2020-2030 (+13%).

According to Bioenergy Europe projections (based on current growth trends), in 2020 the EU will over-achieve the overall Member States National Renewable Energy Action Plans (NREAPs) objectives for H&C by 3,4 percentage point. This is not due to a fast growth of renewables in H&C but rather to an initial low ambition in national NREAPs.

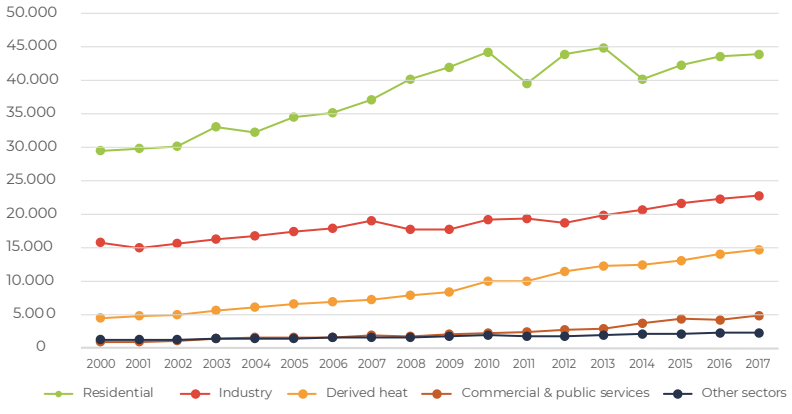
As for the 2030 objectives, should all Member States implement the newly introduced H&C obligation (Article 23 of RED II), the EU would only reach around a 35% share of renewables in H&C sector. This is not enough to reach our 2050 climate objectives. The EU and Member States should now focus on this sector and put in place the right framework to accelerate the deployment of renewable heat solutions.

Bioheat, a dynamic and growing market ...

The consumption of bioheat is growing steadily across all sectors. In 2017, bioheat represented 86,6% of the total renewable heat consumption, making bioenergy a key driver in the decarbonization of the heating sector.

More and more households, industries, district heating networks and buildings are relying on biomass, which is not an old, traditional fuel but a very innovative and dynamic market that has been growing by an average of 3,2% every year since 2000. With political support, bioheat could provide decarbonized heat and allow Member States to meet their long-term climate objectives.

EVOLUTION OF THE FINAL CONSUMPTION OF BIOHEAT BY SECTOR IN EU28 (ktoe)

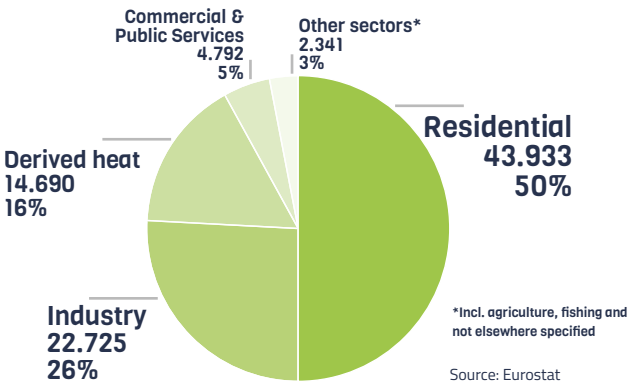


Source: Eurostat

... in residential heating and industrial heat processes

In 2017, the residential sector represented 21% of the total final energy consumption in the EU (excluding electricity consumption) and only 23% of the energy consumption of households (excluding electricity) was from renewables, mainly bioenergy at 87%. There is an urgent need to decarbonise the residential sector in order to keep the temperature rise levels under 1.5°c.

FINAL BIOHEAT ENERGY CONSUMPTION IN DIFFERENT SECTORS IN EU28 IN 2017 (ktoe, %)



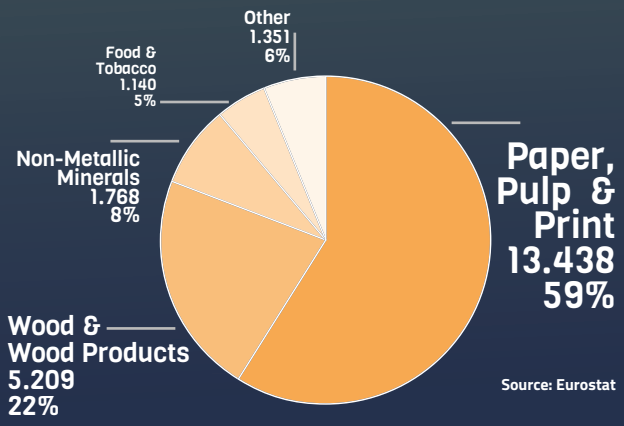
District heating and individual biomass heating systems are an important part of the solution, alongside with energy efficiency, offering an affordable and renewable source. Long-term strategies to decarbonise the building sector are needed to foster a switch from fossil to renewable solutions but also to promote the replacement of old biomass appliances with highly efficient biomass stoves and boilers, therefore minimising the impact of biomass residential heat on air quality.

In 2017 industries represented 16% of the final energy consumption in the EU (excluding electricity consumption), and only 13% of this was from renewables, almost entirely bioenergy (99%). **Bioenergy, due to its competitiveness and non-intermittency is one of the best solutions for industrial requirements.**

In 2017, biomass contributed to a significant share (>39%) of the total energy consumption in the paper, pulp and print and in the wood and wood product industries alone. The symbiosis of industrial processes, such as a sawmill or a pulp mill combined with bioenergy production, can increase resource efficiency as residues are used instead of ending up as waste. The non-metallic minerals industry is the third on the podium where biomass represented 5% of its total energy consumption in 2017.

Bioenergy should not be overlooked for decarbonizing industrial heat processes as it represents one of the few available decarbonized solutions for baseload processes.

REPARTITION OF BIOMASS USAGE IN THE DIFFERENT INDUSTRIES IN 2017 – EU28 (ktoe , %)



our messages

1. Decarbonizing the H&C sector should be a priority for EU, national and local authorities.
2. A strategy to phase out fossil fuels should be developed, starting with a halt to fossil fuels subsidies and the introduction of market incentives to foster a switch to renewables (e.g. a carbon tax).
3. Biomass district heating should be promoted, as well as a fuel switch in existing district heating.
4. Bioheat is a suitable decarbonized solution in sectors difficult to decarbonize such as rural areas or high temperature industrial heat processes.
5. Old and inefficient residential biomass installations should be replaced by new, modern ones, to improve air quality.

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