

HELLABIOM WEBINAR

European BIOHEAT
Overview & drivers for future development

Bienergy

EUROPE



About Us



Common voice of European bioenergy since 1990



Unites 40+ national associations and **125+ companies**



Hosting 2 networks

Bioenergy
EUROPE

Our Activities & Services



EU Policy Monitoring & Influence



Market Data



Visibility



Networking



Free & Discounted event



Quality & sustainability certifications

Companies



Associations



Academia



Our Greek members



Our Working Groups

Members Only

Domestic Heating

Next Date: 30.09.2021

Promotes biomass in the domestic heating sector and discusses building regulations, air emissions and stove & boilers certifications.

Pellets

Next Date: 24.11.2021

Discusses common issues and opportunities regarding the development of the European pellet market (residential, commercial, industrial) and proposes actions to overcome current barriers.

Agrobiomass & Energy Crops

Next Date: TBC

Promotes underutilized biomass feedstocks (e.g. residues from agriculture, dedicated perennial lignocellulosic crops) through ad hoc policies.

Competitiveness

Next Date: 25.11.2021

Provides updates on key existing and emerging policy topics determining the competitiveness of bioenergy sector within the EU (e.g. carbon tax, state aid)

Sustainability

Next Date: 14.10.2021

Monitors climate and energy legislation impacting the European bioenergy sector and advocates for an efficient EU sustainability policy for biomass for heating and electricity production.

Wood Chips

Next Date: 07.10.2021

Provides with active exchanges of data, market trends and news in legislation.

Biopower & CHP

Next Date: 14.10.2021

Provides with updates on key EU developments and allows for exchanges on policy & market intelligence relating to the role of bioenergy in power and heating sectors.

Bioenergy Europe's annual Statistical Reports – the leading sources of bioenergy statistics since 2007.

Enhanced Visibility & Sponsorship
Exclusively for Members

The full reports are free for all Bioenergy Europe members, while non-members can gain a sample version. For more information, please contact Cristina Calderon.

<https://bioenergyeurope.org/statistical-report.html>

Sponsored by:

AXIS Tech

 **Européenne
de Biomasse**



Every year, our members are provided with unique new statistics and findings on 7 specific sectors of bioenergy, namely:



Bioelectricity

Available Now



Biogas

Available Now



Biofuels for Transport

Available Now



Bioheat

Available Now



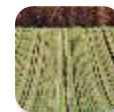
Pellets

Release Date: Oct 2021



Biomass Supply

Release Date: Nov 2021

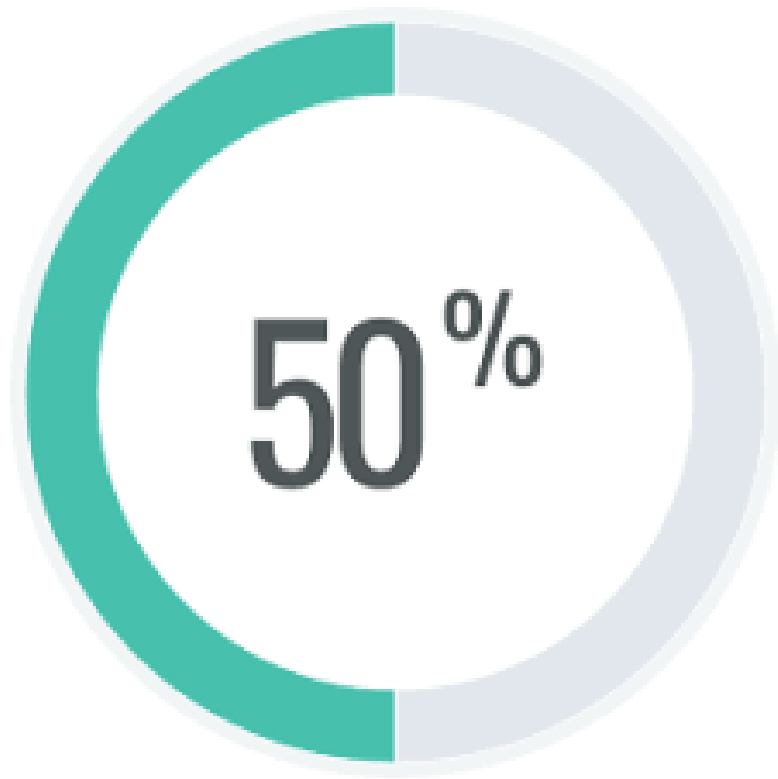


Bioenergy Landscape

Release Date: Dec 2021

BIOHEAT

Overview



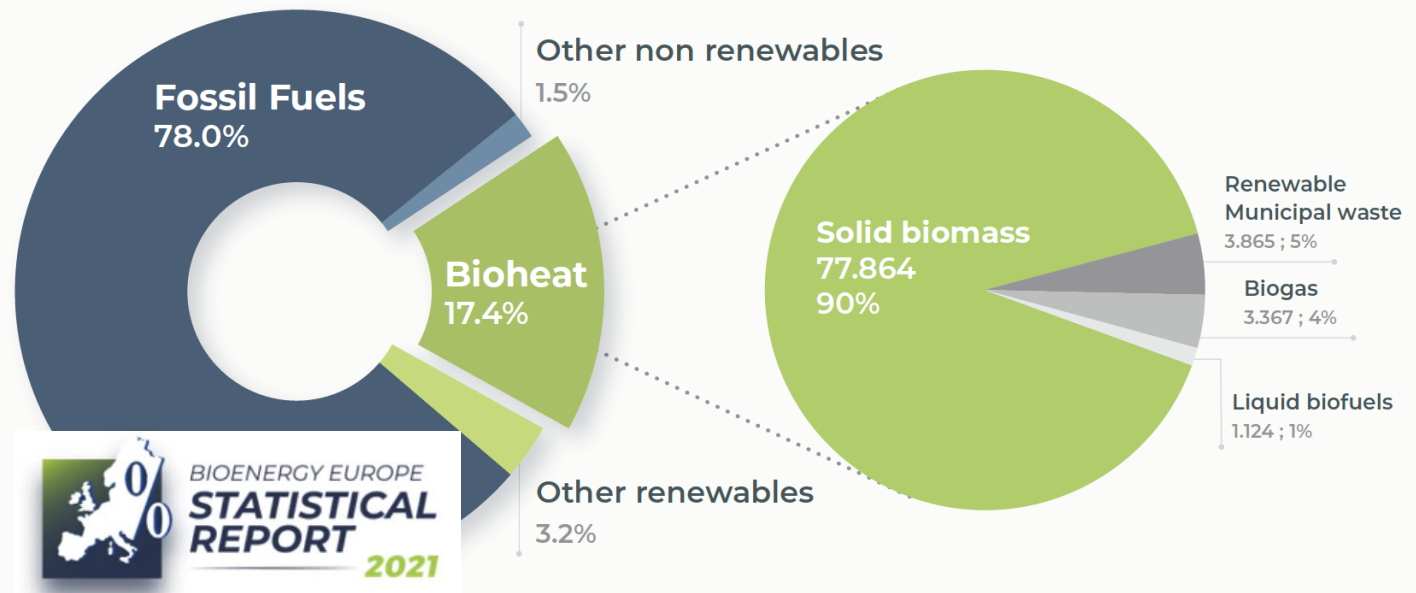
50%

Heating and cooling (H&C) represented nearly half of the final energy consumption in the EU27 in 2019

34%

Heat is the main contributor to air pollution and is responsible for 34% greenhouse gases (GHG) emissions.

Contribution of the different energy sources in heating and cooling in EU27 in 2019 (%)



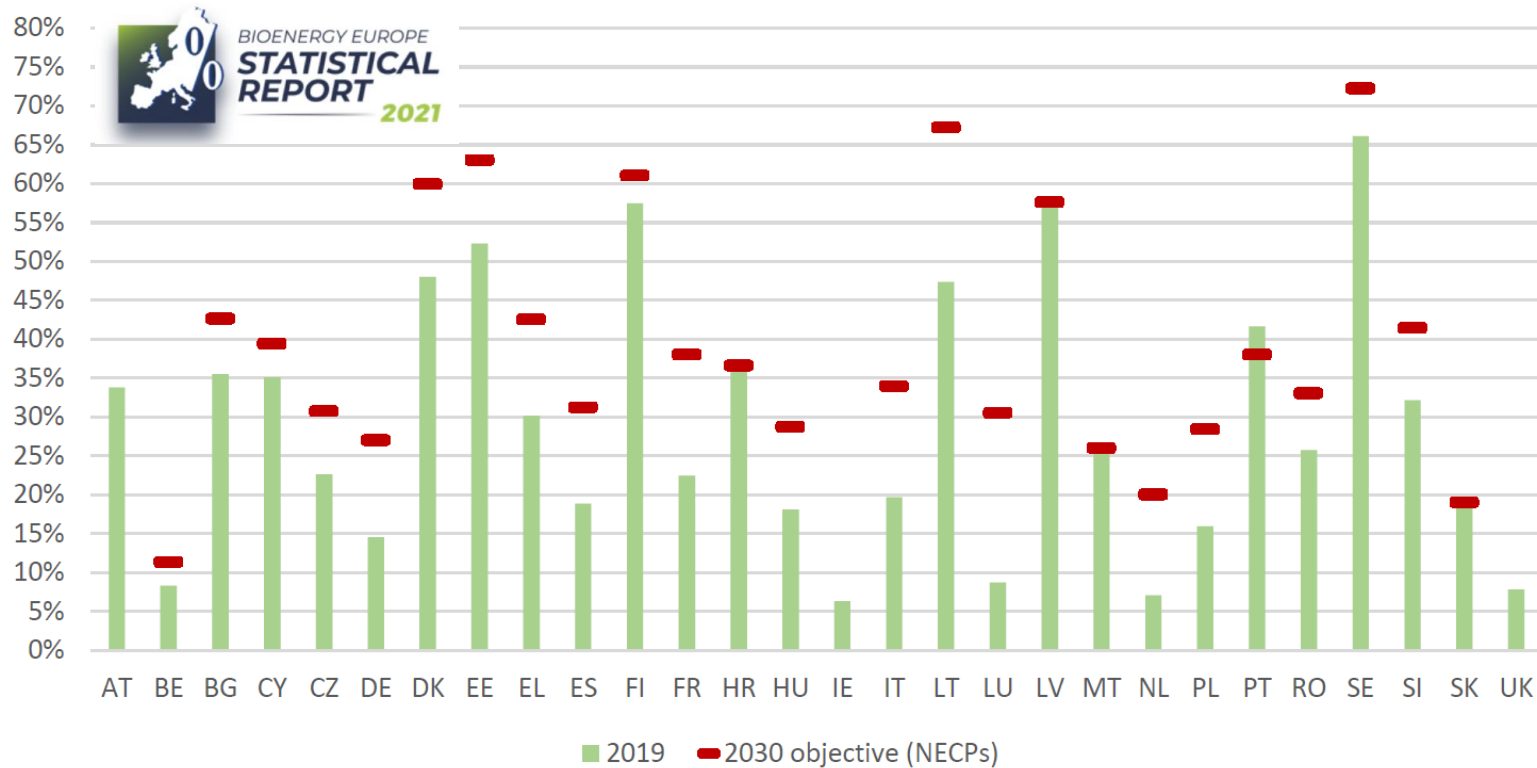
78%

of Heating and cooling (H&C)
covered by fossil fuel

=> Bioheat/Solid biomass is key
contributor to H&C decarbonisation

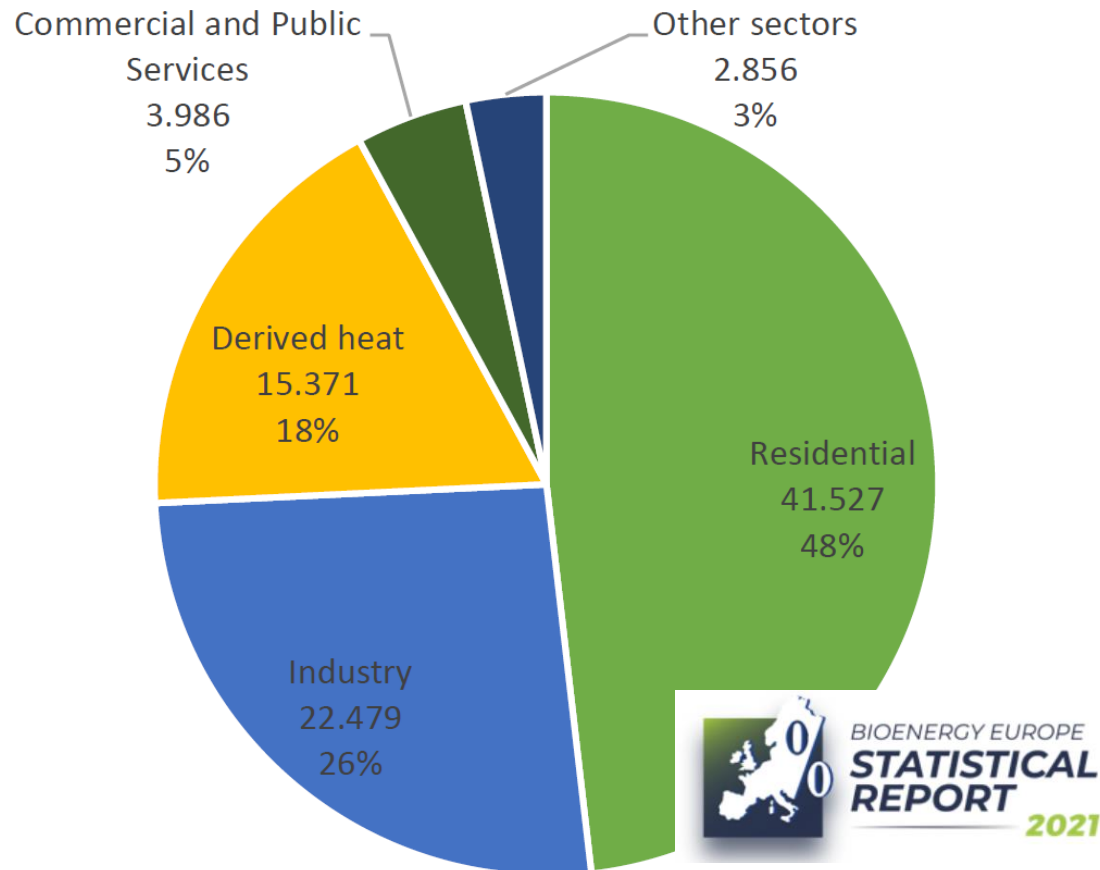
To ensure the new 2030 climate target of 55% is achieved, CO₂ emissions from buildings will need to be reduced by 60* by 2030 (compared to 2015 levels) => immediate actions needed

Renewable energy share in the H&C sector in 2019 and 2030 Member States objectives (%)



Bioheat key contributor to
H&C decarbonisation in many
Members States.

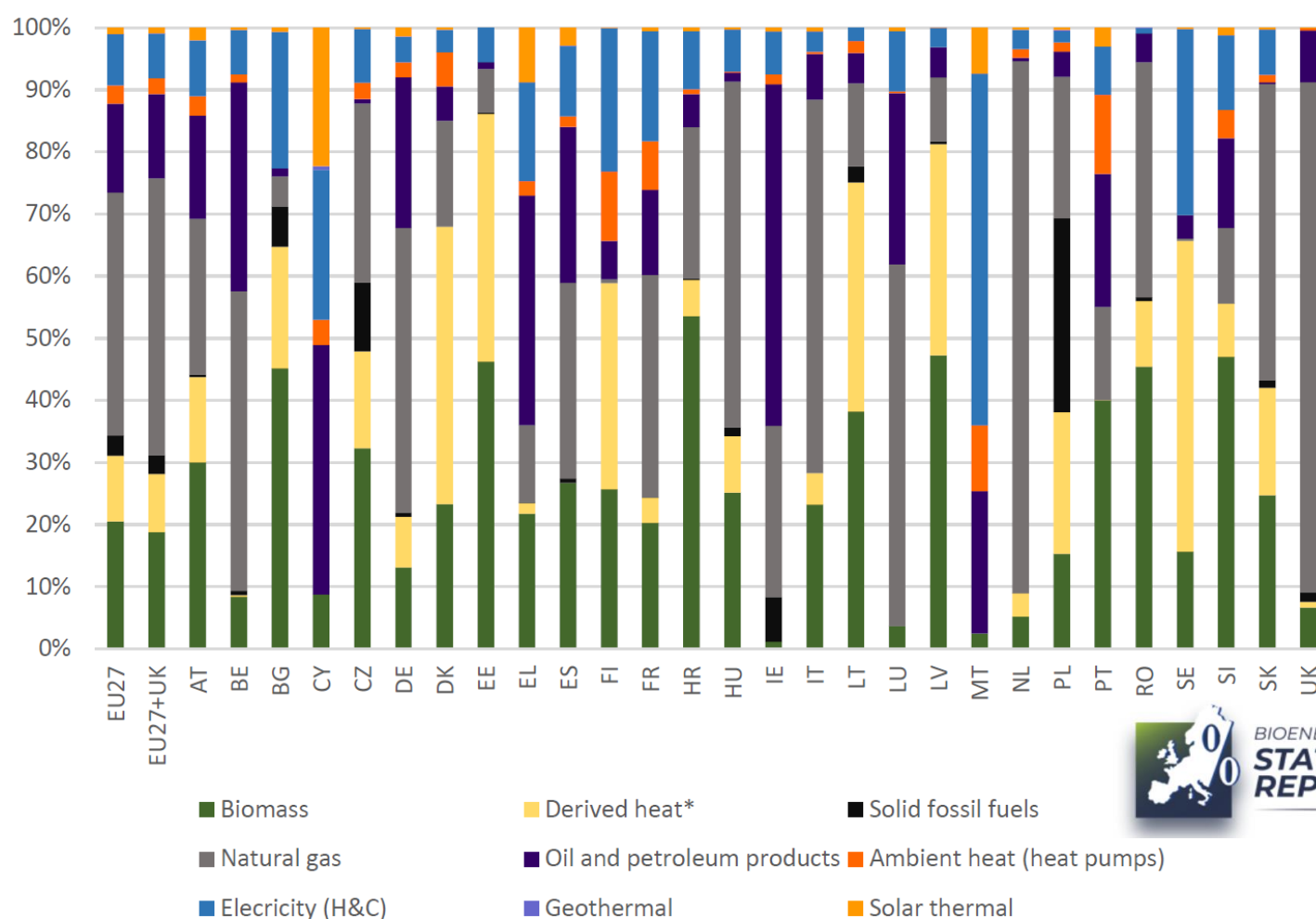
Total bioheat consumption in the different sectors in EU27 in 2019
(ktoe, %)



+/- 50%

of total H&C is coming from the residential sector

Shares of energy used for heating and cooling in the residential sector by EU27 Member States and UK in 2019 (%)



Main target

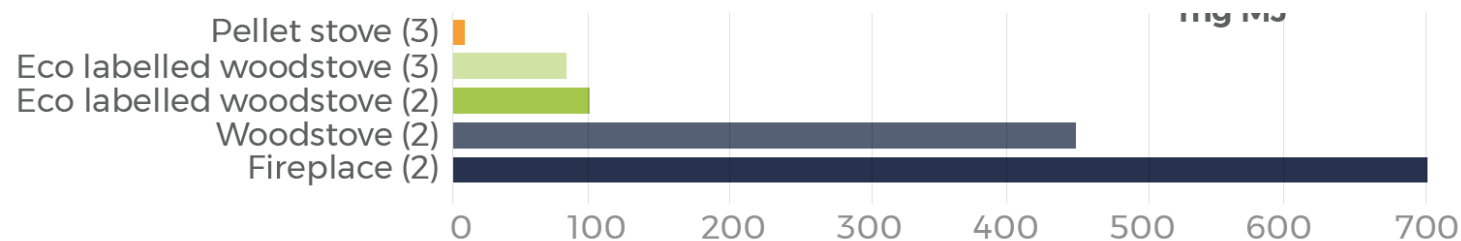
Solid fossil fuel, oil and natural gas systems

Residential BIOHEAT

Key drivers for success



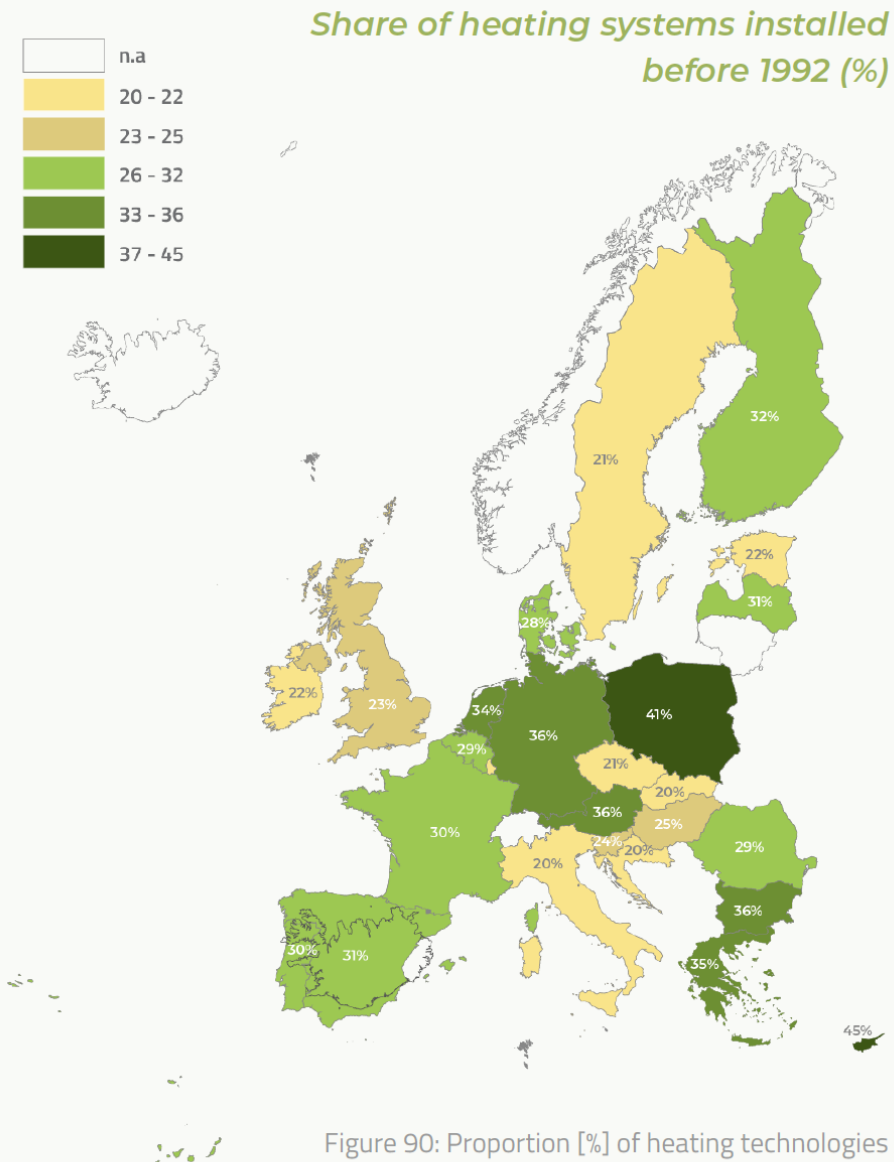
Particle emissions for various residential combustion appliances (mg/MJ)



Source: SLASHING EMISSIONS
FROM RESIDENTIAL
WOOD HEATING

25%

heating installations are older than 30 years and the slow rate of substitution needs to be tackled to reach net zero by 2050 as well as higher air quality objectives by 2030.



MODERN APPLIANCES

REPLACE OLD, INEFFICIENT
APPLIANCES



INSTALLATION

TRAIN INSTALLERS
& DO REGULAR
MAINTENANCE



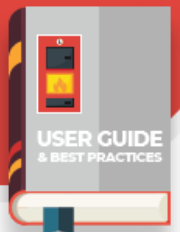
FUEL QUALITY

BURN ONLY
DRY WOOD



USERS

EDUCATE USERS &
RAISE AWARENESS
FOR BEST PRACTICES





Source: <https://www.contura.eu/english/news/blog-and-articles/ecodesign-ready-stoves-reduce-emissions-by-90/>

Rely on voluntary schemes to guarantee appliances performances

- Italy



- France



- EU scheme recommended



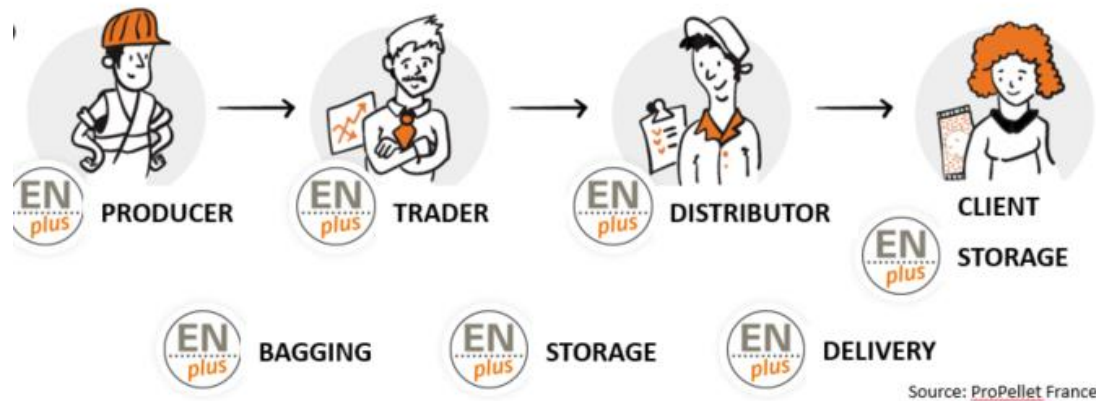


Rely on voluntary schemes to guarantee installers competence





PELLET SUPPLY CHAIN



Quality certification scheme for wood pellets covering the entire supply chain

- Based on an international standard (ISO 17225-2) but even stricter criteria
- Third-party certification scheme
- First introduced in Germany 2010 by DEPI
- *ENplus*® Handbook 3.0. - released on 1st of August 2015. Ongoing revision process planned to be finished by the end of 2020
- *ENplus*® is managed on an international level by EPC and in some countries by National Licensers



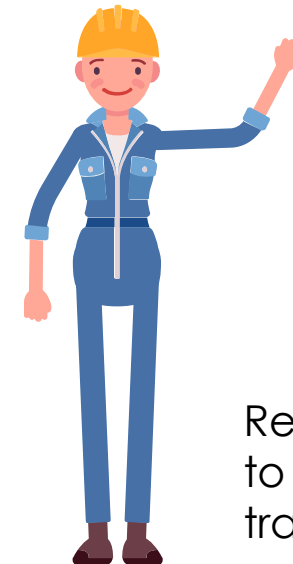
Set up
requirements

ENplus®
Managed by EPC



Check and
confirm
compliance

Independent
Conformity
Assessment Bodies



Receive the right
to use the
trademark

Certified companies

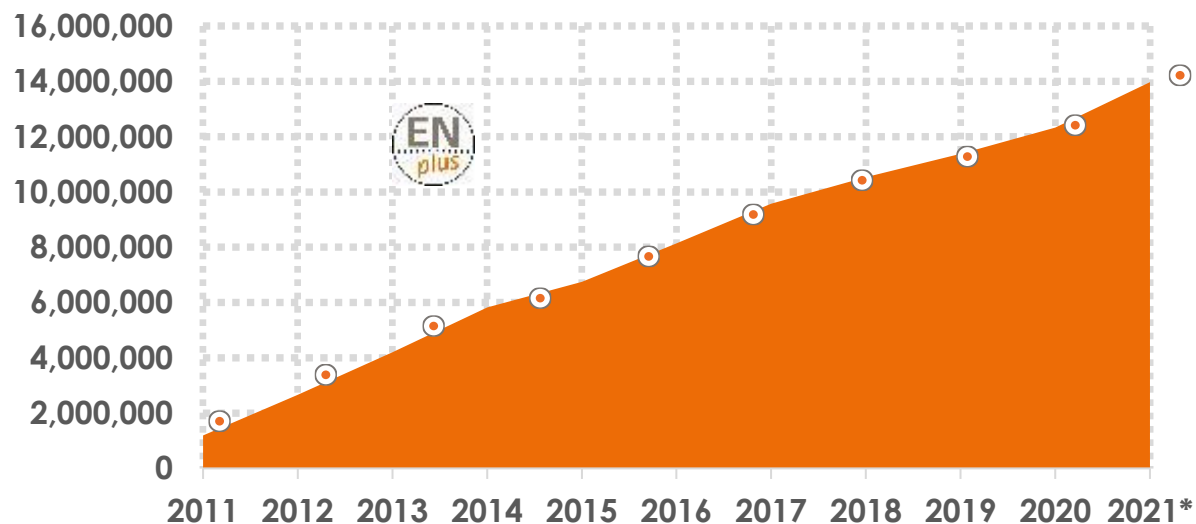


2010
2 COUNTRIES

Worldwide **ENplus**[®] certified pellet production plants

(from 2011 to 2021*)

Source: ENplus[®]



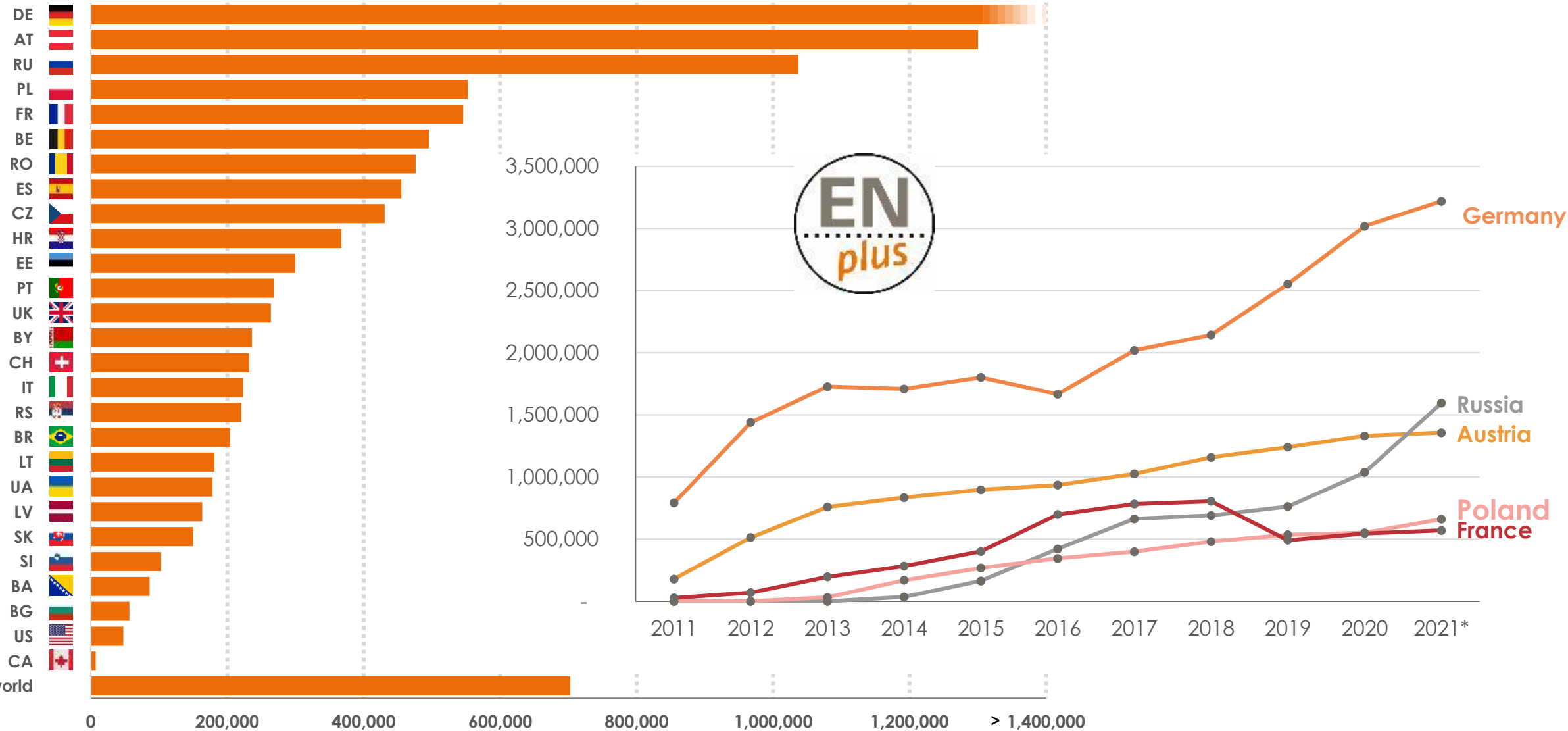
Worldwide **ENplus**[®] certified pellet production

(from 2011 to 2021*, tonnes)

Source: ENplus[®]

BIOHEAT

Fuel quality

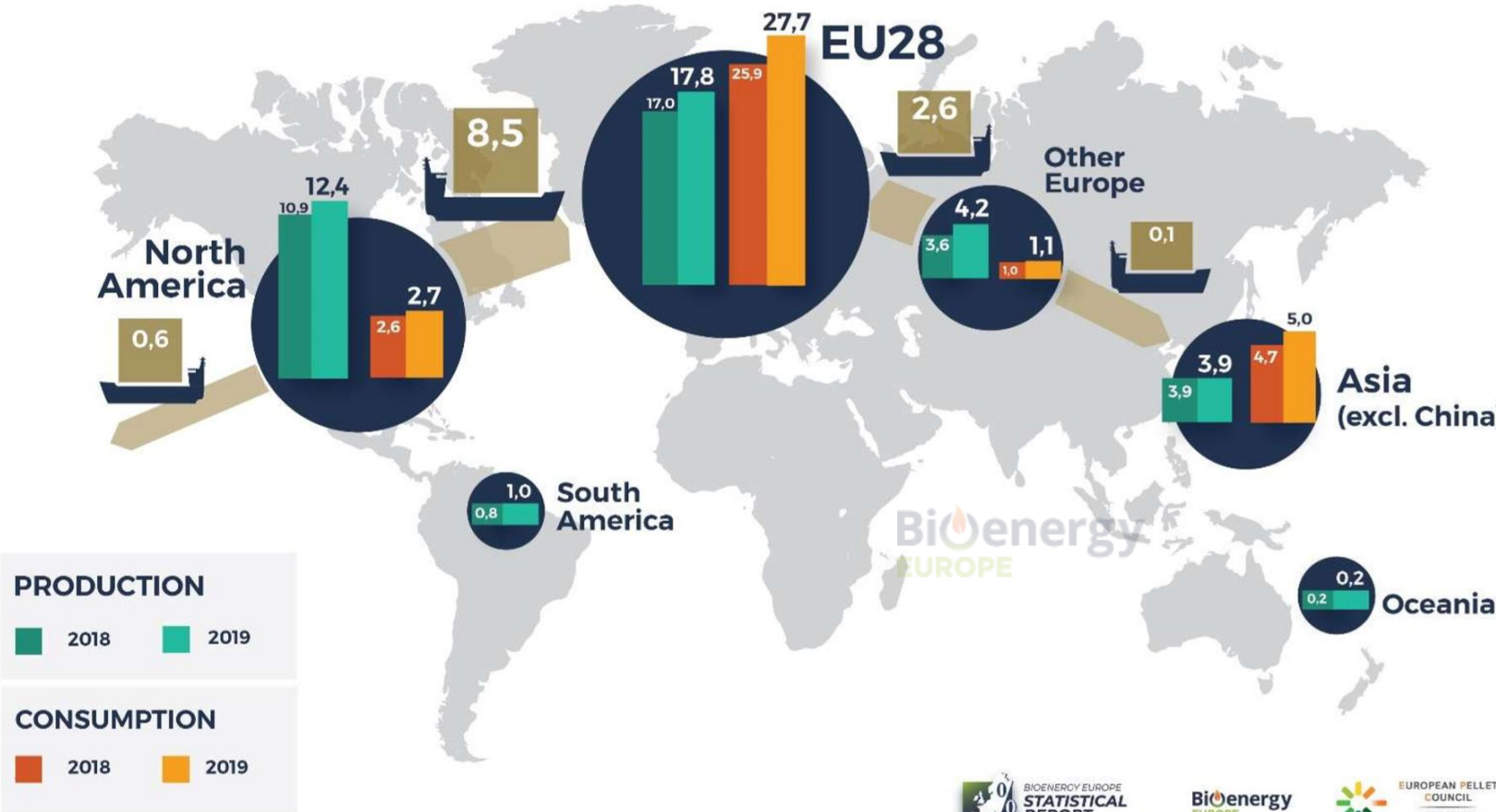


World pellet map and trade flow in 2018 & 2019 (million tonnes)

Market dynamics

Europe remains the leader both general pellet production and use (except China)

In the recent years, the more dynamic areas both for production and use is Asia.



BIOENERGY EUROPE
STATISTICAL
REPORT
2020

Bioenergy EUROPE



EUROPEAN PELLET
COUNCIL
A NETWORK OF
BIOENERGY EUROPE

Residential market update

DEMAND

PREMIUM PELLET DEMAND

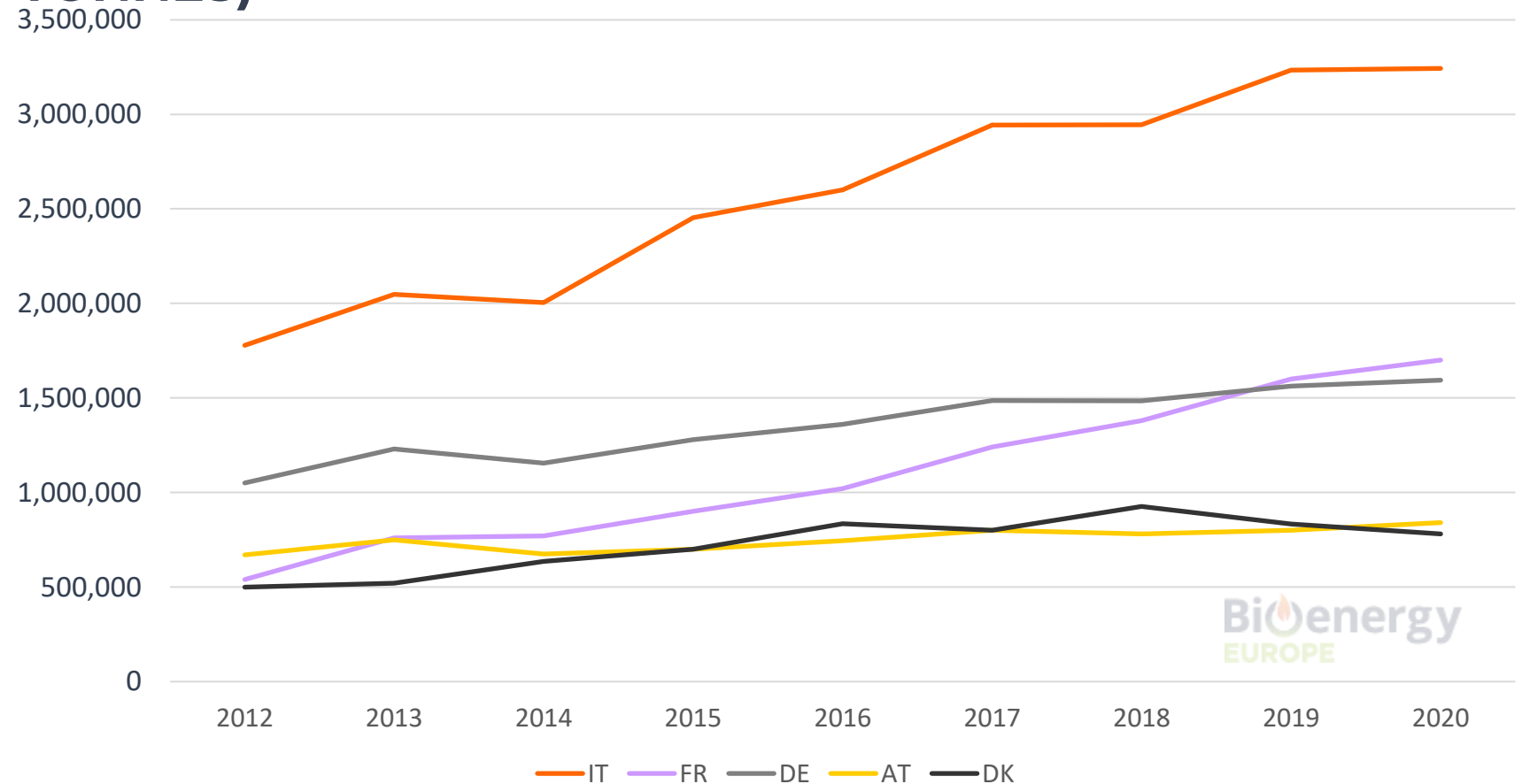
Ok demand European level

No impressive increase in 2020 but very likely in 2021 (if ok winter)

2020 in a selection of countries

- Increase - in FR
- Stable - in many countries IT, AT, DE
- Decrease - in DK

PREMIUM PELLET DEMAND IN LEADING COUNTRIES (IN TONNES)



Residential market update

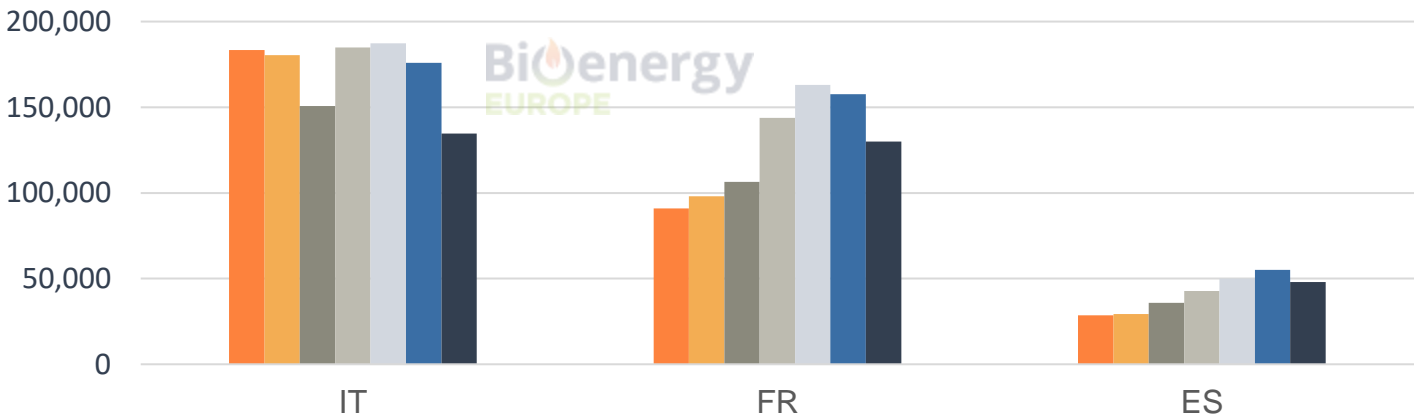
APPLIANCES SALES - STOVES

PELLET STOVES

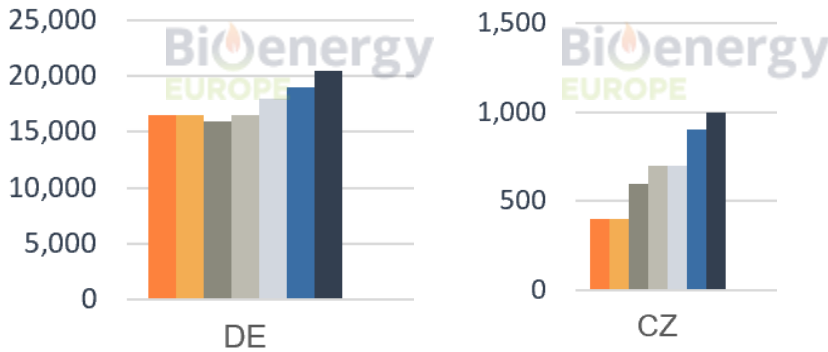
PELLET STOVES - annual sales in a selection of countries (units)

- **Disappointing sales** in leading countries
- **Sign of growth** in some other countries

Are the sales of pellet stoves to plateau in Europe?



Source: Bioenergy Europe



2014 2015 2016 2017 2018 2019 2020

Source: Bioenergy Europe

Residential market update

APPLIANCES SALES - RESIDENTIAL BOILERS

PELLET RESIDENTIAL BOILERS

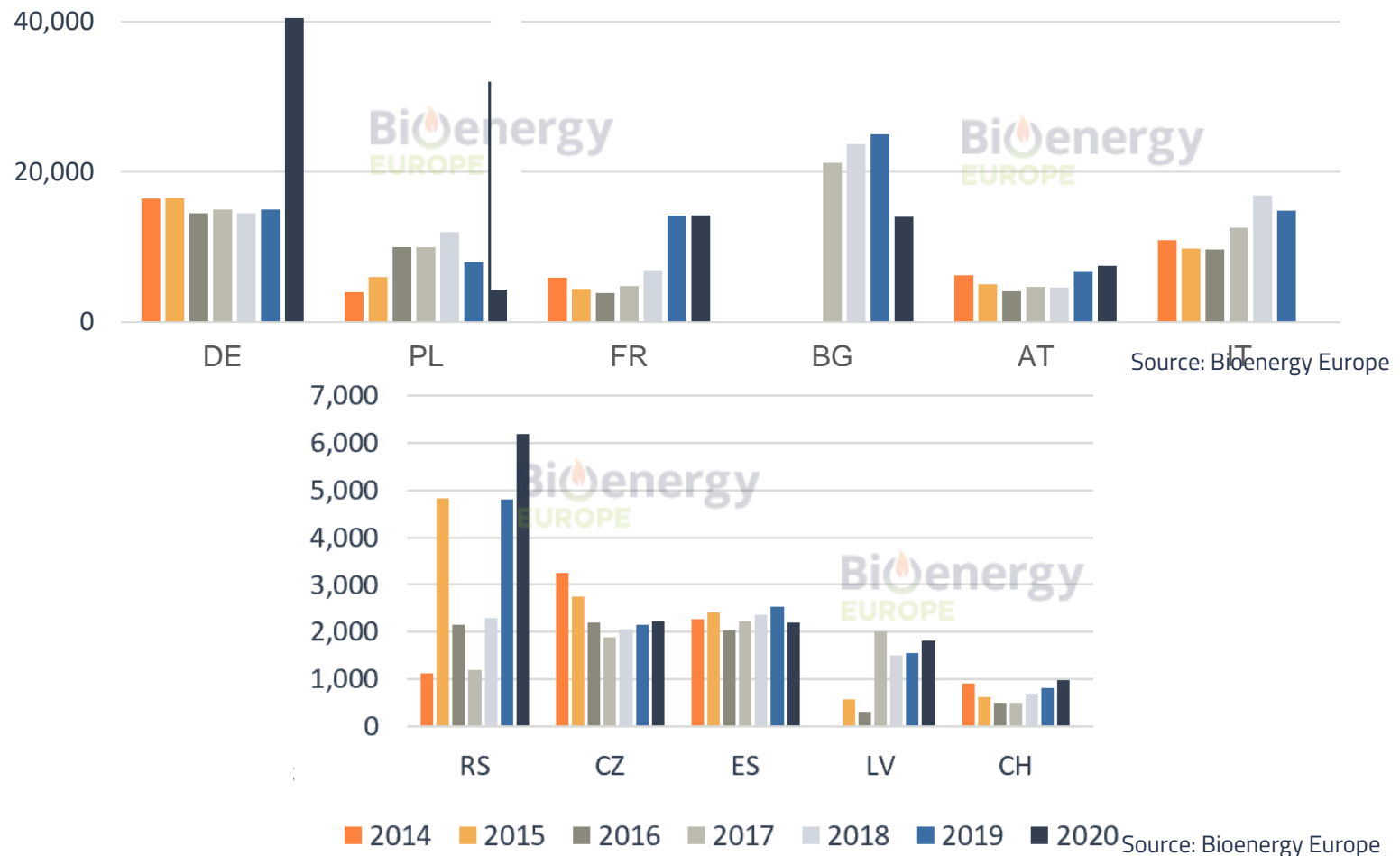
- **Superb sales** in Germany and Austria
- **Nice sales** in France (much better to come in 2021!)

Some European boilers manufacturers have **doubled** (if not more) their **turnover** in a few years! Some are currently **doubling** their **production capacity**.

Seems all in all that the boilers sales is increasing faster than the stoves (European level, relative growth).

PELLET RESIDENTIAL BOILERS

Annual sales in a selection of countries (units)



Residential market update

APPLIANCES SALES - INCENTIVES

KEY DRIVER - FOSSIL FUEL PHASING OUT!

AUSTRIA

- Phasing out plan for fossil fuels in the heating sector (heating oil and maybe natural gas)
- Renewable heat law to be voted mid-2021
- Subsidies up to 5.000€ (federal) + 3.000 - 6.000€ (provincial subsidies) for systems replacement

FRANCE

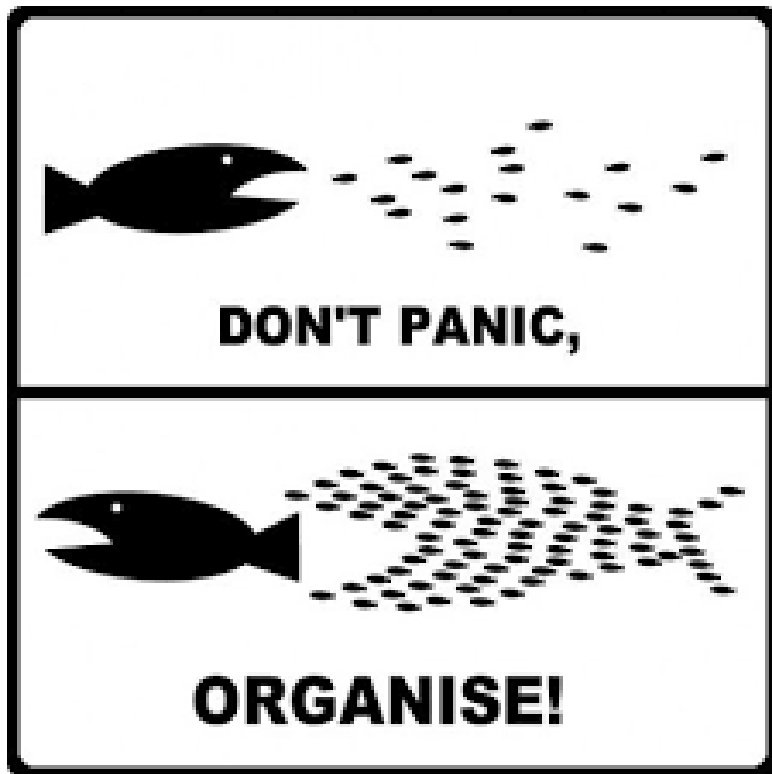
- No more incentives are available for heating oil systems (since 2018)
- 2030 ban of heating oil systems (since 2019, 3 million units to replace)
- From January 2022, no equipment running of fuel emitting more than 250gCO₂eq/kWh in new buildings (residential and commercial)

GERMANY

- 2026 ban of heating oil only systems (hybrid system accepted)
- Obligation of old heating oil systems (above 30 years)
- Subsidy up to 45% the replacement of heating oil system

Join forces!

Join national and international associations!




HellaBiom
Hellenic Biomass Association
Ελληνική Εταιρεία Ανάπτυξης Βιομάζας

BiOenergy
EUROPE

Want more?

Follow us and connect!



Thank You!