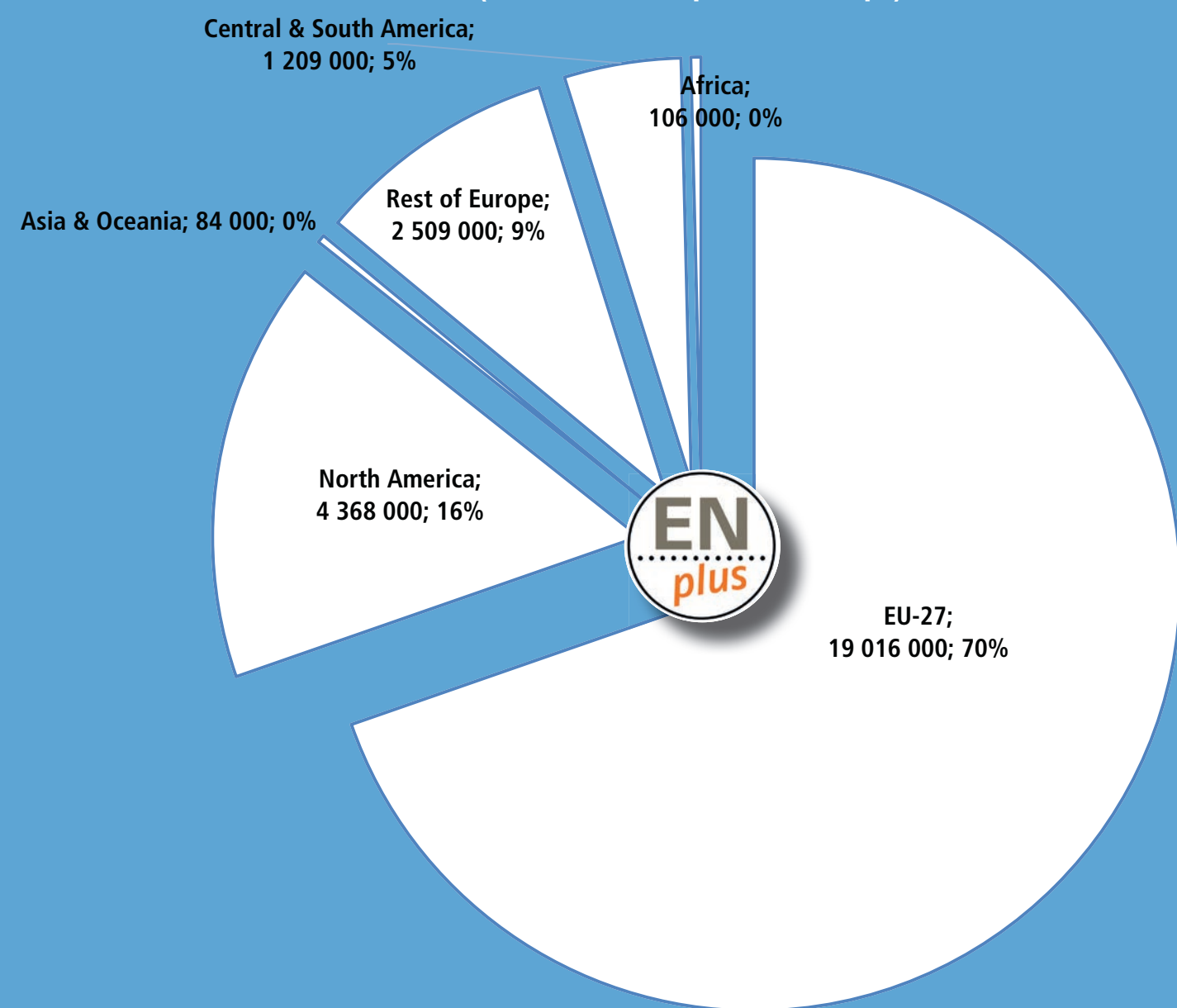


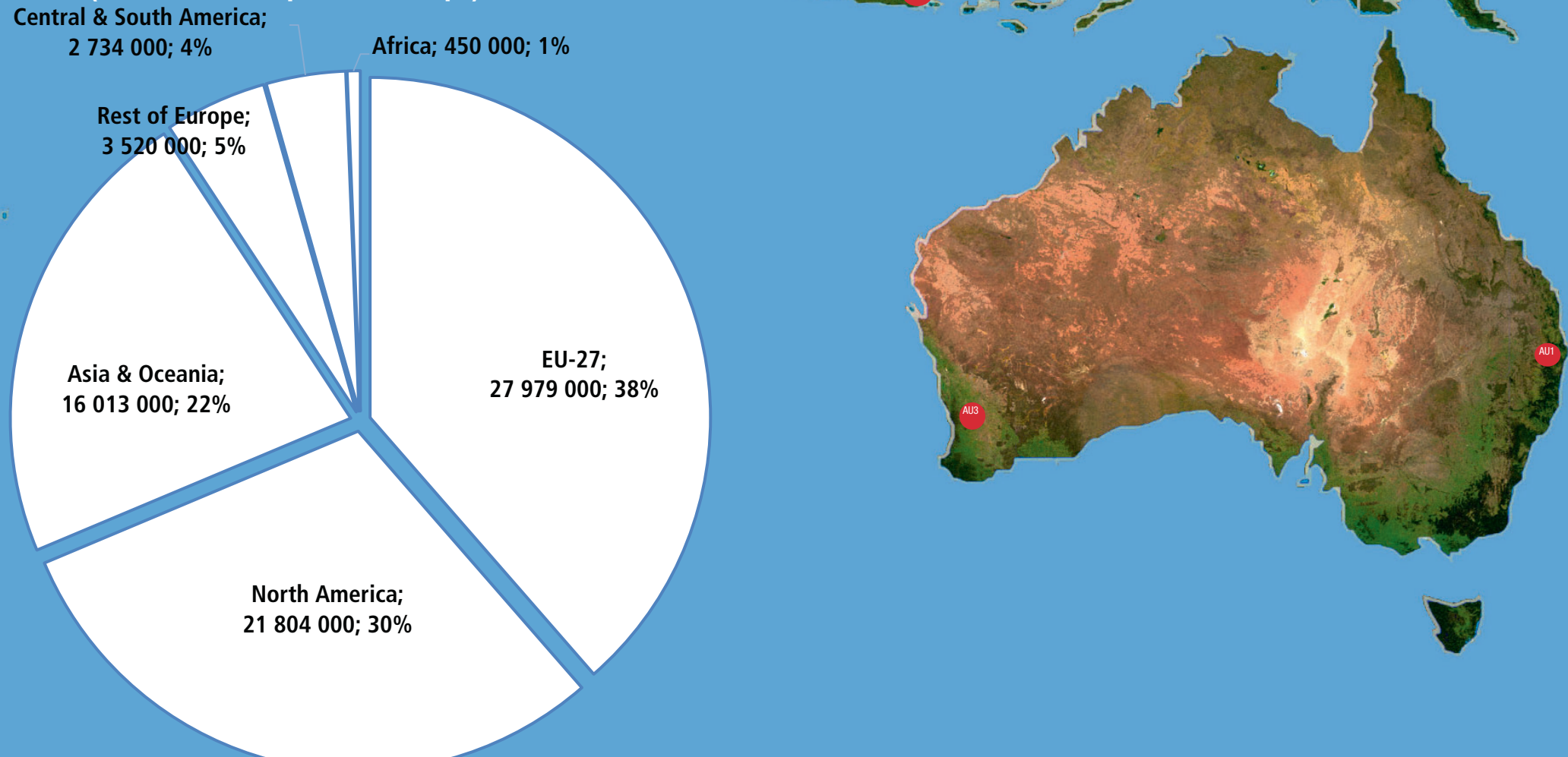


World of Pellets 2025

Global ENplus Certified Production Capacity 2024
(in metric tonnes per annum – tpa)



Global Installed Pellet Production Capacity 2024
(in metric tonnes per annum – tpa)



ABOUT WORLD OF PELLETS 2025

The data is for 2024 and was collected during August 2025. “P” denotes planned, “C” denotes under construction and “T” denotes advanced pellets with coal-like properties (aka torrefied, steam treated or hydrothermal carbonisation). Plants with an installed capacity of 10 000 metric tonnes per annum (tpa) or more, and that were in operation at some point during 2024 are listed. Plants with an annual installed capacity of 100 000 tonnes or more are also “marked” on the map itself. One or two have been marked as “closed”, the plant was idle during 2024 with little or no production but not permanently closed.

Observe that installed capacity does not necessarily reflect actual production of any given plant. Instead, it is the given nameplate capacity, permitting capacity, or approximate capacity. The latter is based on the pellet press (es) tonnes per hour (tpa) nominal capacity x 7 500 hours. The listing is by country and in alphabetical order. For space reasons, Russia (RU) has been excluded from the main table, its capacity figures and no. of plants, etc (from 2022) have also been excluded in the overall statistics. Likewise the figures for Belarus (BY) in the main table are from 2022 and are excluded from the overall statistics (stoves and boilers). There are other such technical standards, for instance, the Pellet Fuels Institute (PFI) standard for US domestic heating appliances, while other industry standards cover utility grade pellets typically used by power plants.

sometimes at the same plant and co-mingled with wood – bamboo dust, cereal straw, rice husk, coffee husk, sunflower husk, combustible waste, peanut hulls, sugarcane bagasse, empty fruit bunches (EFB), and oil palm trunk (OPT) to mention a few.

Plants marked in green denotes an **ENplus certified** facility. While the map has listed **59 ENplus certified facilities in 45 countries** (excl. BY and RU) above the 10 000 tpa threshold, this does not necessarily reflect actual **ENplus** certified output of the plant neither does the list include all **ENplus** certified plants – many are below the 10 000 tpa capacity threshold. More importantly, the certification status can change for any given company, facility, and/or country. As per April 15, 2022, **ENplus** certification was suspended for all producer, traders, and service providers based in Belarus and Russia on account of the invasion of Ukraine. This means that neither these companies will be able to sell **ENplus** certified pellets as long as the suspension remains, nor new applications for certification from these two countries will be accepted.

For current status always check with www.enplus-pellets.eu. For clarity it should be pointed out that **ENplus** is a quality standard covering the technical performance of pellets in (European) residential and commercial heating installations (stoves and boilers). There are other such technical standards, for instance, the Pellet Fuels Institute (PFI) standard for US domestic heating appliances, while other industry standards cover utility grade pellets typically used by power plants.

EU-27

With close to 28 million tpa installed capacity 2024, the European Union (EU-27) grew by almost 1 million tpa representing a 38 percent share of the global installed capacity, up 2 percent percent on 2023. With over 4.2 million tpa, Germany maintains its lead in the EU-27, followed by Sweden, 2.5 million tpa, Austria at over 2.4 million tpa, followed by France (2.2 million tpa), and Latvia (2 million tpa). Cyprus and Malta remain as the only two EU Member States without pellet production capacity, at least not larger than 10 000 tpa.

As can be expected the EU-27 has both the largest volume and share of ENplus certified production capacity – 19 million tpa, up 1.1 million tonnes compared to 2023. In global terms, the EU-27 accounted for 70 percent of global ENplus certified capacity, a 5 percent increase on 2023 as several facilities in North America and China discontinued certification during 2023.

NORTH AMERICA

With almost 22 million tpa in 2023, North America is the second largest region in terms of installed pellet production capacity accounting for 30 percent of global capacity. At a 16 percent share, the region continues with the second largest share of global ENplus certified capacity at just over 4.3 million tpa, a decrease of 0.5 million tpa compared to 2023. As a country,

the United States (US) continues to dominate as having the largest volume of known installed production capacity over 10 000 tpa – over 17 million tpa in 2024, a slight decrease on 2023. It is also home to the world’s largest pellet plants with several in the 750 000 tpa capacity range. It is also home top the world’s largest pellet producer (Enviva) that has emerged post-Chapter 11. The largest volume of known planned/proposed new capacity is also in the US. With over 4.7 million installed tpa, Canada is the world’s third largest producer. Despite both closures, and curtailments, British Columbia (BC) is the largest pellet producing province, Alberta (AB), Québec (QC) and New Brunswick (NB) are emerging.

ASIA PACIFIC & OCEANIA

The region had the third largest installed capacity share in 2024, over 16 million tpa or 22 percent of global capacity up 0.6 million tpa compared to 2023. Thailand and Vietnam continue with capacity build out, the latter emerging as the world’s second largest exporter of pellets, overtaking Canada. China stands out with over 7 million tpa or 43 percent of the region’s capacity, placing it as the world’s second in terms of installed capacity and (known) plant fleet. A caveat is that there is a high degree of uncertainty even within China – initiated experts suggest that there may be as many as 2 000 plants and 20 million

tpa. Little of China’s pellet production is exported, and unlike 2023, there is currently no ENplus certified production. Production is driven by domestic national and regional policies to replace coal in residential and local heating with densified biomass fuels made from local forest industry and agricultural residues. In addition, current policy remains restrictive on wood pellet imports.

There are additional plants operating, and projects in various stages of development in Malaysia, India, Indonesia, Thailand, the Philippines (though none listed yet), and Vietnam meaning there is significantly more production and capacity in these countries than accounted for on this map. In most cases, public details remain sketchy, and several are under NDA’s (which this publication respects). In India, the biomass co-firing mandate would seem to be generating some investment as evidenced by new pellet plants. However, the development of micro-scale biomass pellet production for cooking on a village-scale self-production for self-consumption model could prove to be a successful and replicable model across tiers of thousands of villages, not just in India.

REST OF EUROPE (excl. BELARUS & RUSSIA)

The region had the fourth largest installed capacity share in 2024, just over 3.5 million tpa or 5 percent of the global share. In ENplus terms, the third largest with 9 percent of certified capacity or 2.5 million tonnes. If production (2022) from Belarus and Russia were included, another 4.4 million tpa of installed capacity. Much of the installed capacity in both Belarus and Russia had been ENplus certified with production destined for European premium pellet markets. However, following Russia’s invasion of Ukraine in February 2022, trade embargoes, economic sanctions, and the suspension of ENplus and SBP certifications in both countries have locked these volumes out of the EU pellet markets. While some of these volumes have found their way into Asian power utilities in countries that have not imposed trade sanctions, the current unverified understanding is that many of these pellet plants have been idled or closed given that the domestic market for pellets in Belarus and Russia is at best very limited.

CENTRAL & SOUTH AMERICA

The five countries had a combined installed capacity of just over 2.7 million tpa in 2024, about 4 percent of global capacity. Countries like Argentina, Chile, Colombia, and Uruguay are developing small to medium sized domestic pellet production for local residential heating markets whereas Brazil, the largest producer in the region with over 1.8 million tpa, is developing capacity primarily for export including pellets made from sugarcane bagasse. Over 1.2 million tpa of the region’s installed capacity was ENplus certified or five percent of global ENplus capacity 2024.

AFRICA & REST OF THE WORLD

In terms of potential growth, the region is showing signs of positive development with close to 0.5 million tpa of production some of which is ENplus certified. Moreover, based on the current project pipeline, installed capacity could reach 0.8 million tpa soon as, there are several projects in the 10 000 – 100 000 tpa size range in sub-Saharan Africa (SSA). It should also be pointed out that several countries have small-scale production (less than 10 000 tpa) using a multitude of biomass feedstock serving local markets, in particular for cooking. It is also this sector that local small-scale production of densified biomass fuels has an enormous potential to address several social and environmental issues such as deforestation, illegal logging, indoor air pollution, invasive species, and bush encroachment.

ALBANIA (AL)	CAPACITY
Enplus certified plants (1), 47% of total capacity	16 000
Total number of plants (2)	34 000

ARGENTINA (AR)	CAPACITY
Enplus certified plants (2), 40% of total capacity	150 000
Total number of plants (7)	329 000

AUSTRALIA (AU)	CAPACITY
Enplus certified plants (0), 0% of total capacity	0
Total number of plants (3)	395 000

AUSTRIA (AT)	CAPACITY
Enplus certified plants (48), 93% of total capacity	2 267 000
Total number of plants (55)	2 444 000

BELGIUM (BE)	CAPACITY
Enplus certified plants (1), 100% of total capacity	10 000
Total number of plants (1)	10 000

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BELGIUM (BE)	CAPACITY
Enplus certified plants (1), 100% of total capacity	10 000
Total number of plants (1)	10 000

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In 2024, there were 1 292 operational biomass pellet plants in 72 countries (excl. Belarus & Russia) that combined had a total installed capacity of 72 500 000* metric tonnes per annum (tpa).

* incl. 725 000 tpa that consisted of “black pellet” (T) capacity (12 plants).
* incl. 27 288 000 tpa that was ENplus certified capacity in 587 plants located in 45 countries.