

**Required Report:** Required - Public Distribution

**Date:** November 04, 2024

**Report Number:** UK2024-0033

## **Report Name:** Wood Pellets Annual

**Country:** United Kingdom

**Post:** London

**Report Category:** Wood Pellets

**Prepared By:** Logan Clow

**Approved By:** Alexandra Baych

### **Report Highlights:**

The United Kingdom (UK) is the largest consumer of wood pellets, globally. UK wood pellet regulations have not significantly diverged from the European Union (EU) following Brexit. Consequently, any recent changes in UK regulations have not significantly impacted the stability of the global wood pellet market. Wood pellets in the UK are principally used as a feedstock for the biomass energy sector, which accounts for over 7 percent of total energy usage in the country. In 2024, the UK wood pellet market expanded with total wood pellet imports expected to reach historically high volumes.

## **Executive Summary**

The United Kingdom (UK) is the largest consumer of wood pellets, globally. UK wood pellet regulations have not significantly diverged from the European Union (EU) following Brexit. Consequently, any recent changes in UK regulations have not significantly impacted the stability of the global wood pellet market. Wood pellets in the UK are principally used as a feedstock for the biomass energy sector, which accounts for over 7 percent of total energy usage in the country.

In 2024, the UK wood pellet market expanded with total wood pellet imports expected to reach record volumes. This follows significant decreases in import volumes in 2022 and 2023, due to changes in global wood pellet prices and competition from other energy sources. Demand for wood pellets is heavily linked to government subsidies and policies aimed at reaching net zero emissions by 2030. Consequently, compliance with sustainability criteria and environmental standards is paramount for the sector. While policies aimed at reaching net zero emissions targets are unlikely to change under the newly elected Labour administration how the Labour administration prioritizes renewable energy sources such as wind and solar over biomass may impact future wood pellet demand.

## **Policy and Programs**

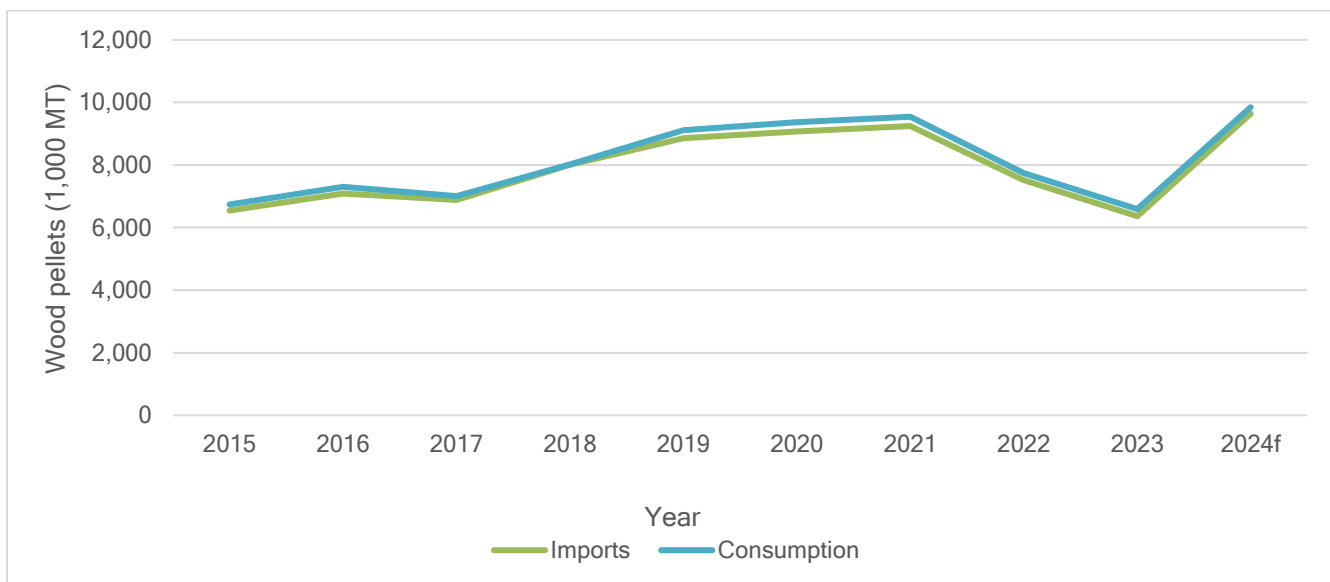
### **Changes since Brexit**

Following Brexit, the UK wood pellet sector continues to undergo significant changes but has remained generally aligned with EU regulations. UK regulatory changes are being driven by UK's energy transition towards renewable energy production to meet its net zero emissions targets. The UK has committed to achieving net-zero greenhouse gas emissions by 2050. In 2021, the UK established regulations including sustainably criteria, environmental standards, and certification requirements for wood pellet production and importation. Other post-Brexit changes including the renegotiation and negotiation of several new trade agreements, implementation of changes to customs procedures (including the adoption of new import certificates and checks), and the imposition of 35 percent tariffs on goods coming from Belarus and Russia. These changes do not appear to have not significantly affected wood pellets trade with the exception of small but notable trade-flows of wood pellets from Russia having dissipated since tariffs were raised.

### **Market Size and Demand**

The demand for wood pellets in the UK is largely influenced by energy policy and demand, particularly policies specific to renewable energy. The UK government has set a target for renewable energy to account for 50% of the country's electricity generation by 2030. The newly elected Labour government continues to support renewable energy sources, including biomass. In 2022 and 2023, demand for wood pellets by volume in the UK declined dramatically due in part to global wood pellet prices and competition from other energy sources. In 2024, demand for wood pellets rebounded due to declines in wood pellet prices, among other factors (see Chart 1).

**CHART 1: UK Wood Pellet Imports & Consumption**



Sources: His Majesty's Revenue and Customs (HMRC), Trade Data Monitor, and FAS Post Estimates.  
Note: f=forecast.

## **Renewable Energy Directive**

The [Renewable Energy Directive \(RED\)](#) is a policy framework established by the EU to promote the use of renewable energy sources with the goal of significantly lowering dependence on fossil fuels and thereby lowering GHG emissions. It sets binding targets for all EU member states to achieve a certain percentage of their energy consumption from renewable sources. The UK is no longer bound by RED but has committed to maintaining similarly high environmental criteria and goals. As a prior EU member, UK supply chains have become accustomed to these criteria and are expected to continue to broadly align with RED goals. The absence of significant policy divergence since Brexit, has avoided causing significant interruptions to the wood pellet industry in the UK. See FAS 2024 [EU Wood Pellets Annual](#) for more details on EU policy.

RED sets strict sustainability criteria for all biomass, including wood pellets. Wood pellets criteria ensure that biomass used for energy production is sourced from sustainably managed forests and does not lead to deforestation or other negative environmental impacts including lower GHG emissions (compared with the use of fossil fuels) and loss of biodiversity. Wood pellets must meet these criteria to be eligible for commercial subsidies and to count towards renewable energy targets. The directive requires that the greenhouse gas emissions savings from using biomass, including wood pellets, must be at least 70 percent compared to fossil fuels (see [here](#) for more details). This means that the entire supply chain, from production to transportation, must be efficient and low in emissions.

Stringent certification requirements and reporting continues to be essential for access to the UK wood pellet market. Producers and suppliers of wood pellets must obtain certification from recognized certification schemes (e.g., Forest Stewardship Council (FSC) and the Program for the Endorsement of Forest Certification (PEFC)) to prove compliance with sustainability criteria. Producers and suppliers must also report on the sustainability and greenhouse gas emissions of their biomass to the UK regulatory authorities.

### **Sustainability Criteria**

The UK's wood pellet and biomass sector is governed by stringent sustainability criteria to ensure that biomass is sourced responsibly and contributes to reducing Greenhouse Gas (GHG) emissions. Regulatory oversight and certification schemes play crucial roles in maintaining these standards. UK sustainability criteria remain close to those of the EU, and wood pellets compliant with EU standards will tend to be compliant for import into the UK.

### **Regulatory Framework**

[The UK's sustainability criteria for biomass](#) are largely based on EU criteria to which it previously adhered. Biomass power plants generating at least 1 megawatt (MW) are required to report against and meet specific sustainability criteria to be eligible for Renewable Obligation Certificates (ROCs). These criteria are themed around land use and GHG emissions which echo the European Commission's criteria under RED. These criteria are designed to ensure that biomass used for energy production is sourced sustainably and contributes to GHG emissions reductions

Woody biomass, including wood pellets, must be sourced from sustainably managed forests. This means that the harvesting of such biomass should not lead to deforestation, degradation of ecosystems, or loss of biodiversity. Forest management practices must ensure the long-term health and productivity of forest ecosystems. The land requirement necessitates that biomass production must not result from conversion of high-carbon stock areas such as wetlands and forests. It should also not lead to significant changes in land use that would increase carbon emissions.

The GHG requirement necessitates that the entire supply chain of biomass, from production to transportation, must achieve significant GHG emissions savings compared to fossil fuels. The UK requires that biomass used for energy must deliver at least 70 percent GHG emissions savings.

In order to be eligible for support, biomass power plants must report land use and GHG emissions information and submit these on a monthly basis. Both land and GHG criteria must be met in these reports in order to receive government support payments. Additionally, annual profiling data is required by Ofgem, from the operator outlining the sustainability characteristics of their fuel, such as feedstock type, biomass form, mass, country of origin, and classification of the fuel e.g. whether is a by-product, derived from waste, an energy crop etc.

### Certification and Compliance

Further to these requirements there are certification schemes that must be adhered to demonstrate compliance with the [Woodfuel Advice Note](#), verifying the sustainability credentials of woody biomass. Producers and suppliers of wood pellets and other biomass must obtain certification from recognized schemes such as the FSC or PEFC. This is considered “category A evidence” by Ofgem. Alternatively, “category B evidence” can be provided which involves the collection of bespoke evidence that demonstrates compliance with the criteria, which can include a risk-based regional approach. This bespoke evidence should be traceable to a specific forest management unit but must be traceable to a specific supply base. Ofgem necessitates annual declarations for these obligations.

### Monitoring and Enforcement

The UK government, through agencies such as the Department for Energy Security and Net Zero (DESNZ) and Ofgem, monitors compliance with sustainability criteria. This includes regular audits and inspections of biomass producers and suppliers. Companies that fail to meet the sustainability criteria or provide false information may face penalties, including fines and the loss of eligibility for subsidies and incentives.

### UK Timber Regulations and the Forest Law Enforcement, Governance and Trade initiative

The UK Timber Regulations (UKTR) and the Forest Law Enforcement, Governance and Trade (FLEGT) set the rules for the UK’s trade in wood products. The UKTR aims to prevent the trade of illegally harvested timber and timber products, including wood pellets, in the UK market. Businesses must certify that the timber and timber products they place on the market are legally harvested. Companies must conduct due diligence to assess and mitigate the risk of illegal timber entering their supply chain. Documentation and records must be maintained to demonstrate compliance.

The FLEGT initiative is an EU action plan to combat illegal logging and promote sustainable forest management which the UK has inherited. Countries that have signed Voluntary Partnership Agreements (VPAs) with the EU issue FLEGT licenses for legally harvested timber products, including wood pellets. Importers of timber products from VPA countries with FLEGT licenses are considered to have met the due diligence requirements under the UKTR.

Wood pellet traders must ensure that their products comply with the UKTR by conducting due diligence and verifying the legality of the timber used in production. Importers of wood pellets from VPA countries with FLEGT licenses benefit from simplified due diligence processes, as the FLEGT license serves as proof of legality. These regulations help promote sustainable forest management and reduce the risk of illegal timber entering the UK market, enhancing the credibility and market access of compliant wood pellet producers. Compliance with these regulations requires additional documentation, verification

processes, among other costs for businesses supplying wood pellets to the UK. However, these requirements have not impacted the volume of UK imports of wood pellets.

### Forest Risk Commodities

Wood pellets are soon to be subject to a [new EU deforestation-free supply chain measure](#), they are not currently deemed to be in scope of the UK's deforestation policy. [The UK Forest Risk Commodities](#) policy was expected to be announced in May 2024. This announcement is on hold pending the new Labour administration's decision on how to proceed with the policy. The previous draft policy for the UK did not include wood products. This may be subject to change, as the primary legislation of the Environment Act 2021 could allow further commodities to be considered. However, the UK government, to date, has not indicated that wood products, including wood pellets, will be included in this policy. This may be due to UKTR and FLEGT regulations being sufficient evidence of the sustainability of the UK's wood pellet supply.

### Financial Supports and Incentives

#### **1. Industrial biomass**

##### Renewable Obligation and Contracts for Difference

The UK biomass energy sector is particularly dependent on subsidies from the UK government to stay competitive with other sources of energy production. The most significant of these is currently the [Renewable Obligation \(RO\)](#). This is a UK government policy mechanism designed to support the generation of electricity from renewable sources, including biomass. This obligates energy suppliers to increase the proportion of energy supplied from renewable sources. Renewable Obligation Certificates (ROCs) are given to producers based on renewable electricity generated, have market value, and are sold to electricity suppliers, providing an additional revenue stream. This is in addition to the price received for energy generation and is typically seen as necessary to make biomass projects financially viable. Electricity suppliers are required to present a certain number of ROCs to the UK energy regulator, Ofgem, to show they are meeting their renewable energy obligations. There are financial penalties in place (known as the "buy-out price") should they fail to meet these targets. Overall, this provides a relatively stable and predictable revenue stream for the sector, encouraging longer-term investment.

The RO remain one of the most significant financial incentives for the UK biomass sector, however the format of financial support to the industry is expected to change, as new energy generation typically receives alternative government support, in the form of Contracts for Difference (CfD). The balance of support between ROCs and CfD is expected to change from 2027, as outlined below, through the Transitional Support Mechanism. Longer term, the industry is expected to make more use of financial incentives for Carbon Capture and Storage (CCS) from 2030 onwards.

There have been investigations into the sustainability credentials of the UK wood pellet supply, in recent years. The UK energy regulator, Ofgem, has also recently [concluded an investigation](#) into a biomass power station operator. The investigation highlights the governments interest for recipients of renewable energy incentives to comply with sustainability criteria and reporting obligations.

##### Transitional Support Mechanism

Another of UK government's key policies affecting biomass energy production is the Transitional Support Mechanism. This is in place to support the transition to renewable energy sources, including

biomass. The policy is designed in such a way to ensure that biomass production is sustainable and reduces greenhouse gas emissions. At an industrial level, this supports large-scale renewable energy projects, including biomass, through the CfD program. This provides long-term contracts that guarantee a fixed price for the electricity generated, helping to reduce financial risks for investors, and is increasingly used commercially.

The Transitional Support Mechanism will pivot existing projects supported under the ROs to CfDs. Under this change, the scheme provides stability for energy producers with a guaranteed price for electrical energy generated, in turn reducing investment risks with these long-term contracts. This encourages the expansion of current biomass energy projects, and the development of new projects, as seen by the construction of the Tees Renewable Energy Plant, which could consume up to 1.2 million tons of wood pellets annually.

Although these mechanisms generally provide long-term certainty for industry, there has been delays to the decision on the future of the policy from 2027 onwards. This may be in part due to the change of government in the UK following the General Election on July 4. The matter went through a public consultation and there is expected to be an announcement on the outcome of this, following formal negotiations with industry by the end of 2024. The uncertainty caused by this delay may soon have ramifications for supply chains, as contracts will be signed by the end of 2024 for wood pellet orders in 2027.

## **2. Domestic biomass**

### **Domestic Renewable Heating Incentive (DRHI)**

The Domestic Renewable Heating Incentive (DRHI), used to promote the residential use of renewable heat, to reduce carbon emissions, is being wound down. This scheme provides financial incentives to households which install specified renewable heating systems. However, as of March 2022, the scheme is no longer open to new applicants. Upon joining the scheme, applicants receive quarterly payments for a set number of years, based on the renewable energy they produce. The termination of this program will gradually dampen UK residential demand for wood pellets. Demonstrating the sustainable sourcing of biomass products is a prerequisite to receiving these payments. To ensure this, biomass fuel must be sourced from the UK's Biomass Supplier list (BSL).

### **Quality criteria suspension**

To mitigate against wood pellet shortages, the predecessor to DESNZ (BEIS, Department for Business, Energy and Industrial Strategy) updated Renewable Heat Initiative (RHI) scheme regulations on November 22, 2022 to temporarily suspend fuel wood quality criteria (the EN Plus A1 standard) for wood pellets only. This requirement was suspended for 12 months, from November 23, 2022, to November 22, 2023. During the suspension period, wood pellets did not need to be certified on the Woodsure Certification scheme. Following the termination of the suspension period, quality criteria requirements have been reinstated. The requirement for all other wood fuels (i.e. woodchip, logs and wood briquettes) to meet the wood fuel quality standards was continued. Further details [here](#).

## **Markets**

**Table 1. UK Wood Pellets Market Balance and Production Capacity  
(1,000 MT)**

Calendar Year	2015	2016	2017	2018	2019	2020	2021	2022	2023 <sup>e</sup>	2024 <sup>f</sup>
---------------	------	------	------	------	------	------	------	------	-------------------	-------------------

<b>Beginning Stocks</b>	453	453	519	558	558	558	741	741	741	741
<b>Production</b>	280	310	287	259	290	300	300	248	239	219
<b>Imports</b>	6,548	7,086	6,884	8,011	8,857	9,078	9,250	7,516	6,364	9,641
<b>Exports</b>	87	22	124	63	33	4	5	23	11	13
<b>Consumption</b>	6,741	7,308	7,008	8,024	9,114	9,374	9,545	7,741	6,592	9,848
<b>Ending Stocks</b>	453	519	558	558	558	741	741	741	741	741
<b>Biomass Use Capacity</b>										
Number of Plants	1	1	1	2	2	2	2	2	2	2
Capacity	6,900	6,900	7,900	10,200	10,200	10,200	10,200	10,200	10,200	10,200
Capacity Use (%)	88.3	97.4	81.0	74.1	83.0	85.5	87.2	69.5	58.3	90.2

Sources: His Majesty's Revenue and Customs (HMRC), Trade Data Monitor, Drax Group, and FAS Post Estimates. Note: e=estimate f=forecast. NA=not available.

### Consumption

The vast majority of wood pellets in the UK are used for industrial energy production, and is expected to make up over 93 percent of UK wood pellet demand in 2024, with the rest made up of domestic and commercial use. The two industrial biomass power plants at Lynemouth and Selby are core to the UK's wood pellet demand. Significantly lower demand from these power stations in 2022 and 2023, resulted in a slump in trade by volume of wood pellets. This may be due to several factors including the pricing from the UK's CfD scheme, and interactions with other renewable energy sources, which can be produced at lower prices compared to biomass. However, consumption supported by exports significantly rebounded in 2024.

Residential use of wood pellets remains low and will likely decrease given the winding down of the Domestic Renewable Heat Incentive. Residential usage tends to be supplied by a relatively even mix of imports and domestic production. These imports previously came from Russia, Eastern Europe and Portugal, and have all seen declines in their volumes traded with the UK., with zero imports coming from Russia in 2023 or 2024. This is likely due to the implementation of a 35 percent on goods exported from Russia since March 25, 2022.

### Production

UK wood pellets account for a small proportion of total biomass used in energy production in the UK. Industrial energy dominates the UK market compared to commercial and domestic sectors. UK wood pellets account for nearly half of wood pellets used for commercial and domestic energy production, but only 2 percent of the wood pellets used for industrial energy production. For this reason, industrial biomass is heavily reliant on imports to meet this gap.

### Trade

After a period of sustained growth in UK wood pellet imports to 2021, there has been a period of volatility. In 2022 and 2023, there was a significant dip in wood pellet imports by volume. Although the value of the UK's imports has been comparatively stable, import volume decreased to a low of 6.4 mmt in 2023. This is rebounding in 2024, and is expected to reach around 9.6 mmt for the year. The United States is the largest supplier of wood pellets to the United Kingdom, accounting for 73 percent of



imports in 2023, by volume. Other sources include Canada, Latvia, Netherlands, Estonia and Brazil. As the United Kingdom continues to maintain sustainability criteria for imports akin to those used for EU supply chains, wood pellets exported to the EU tend to be compliant with UK standards.

**Attachments:**

No Attachments