

Voluntary Report – Voluntary - Public Distribution

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Report Name: Dutch Wood Pellet Imports Reach New High

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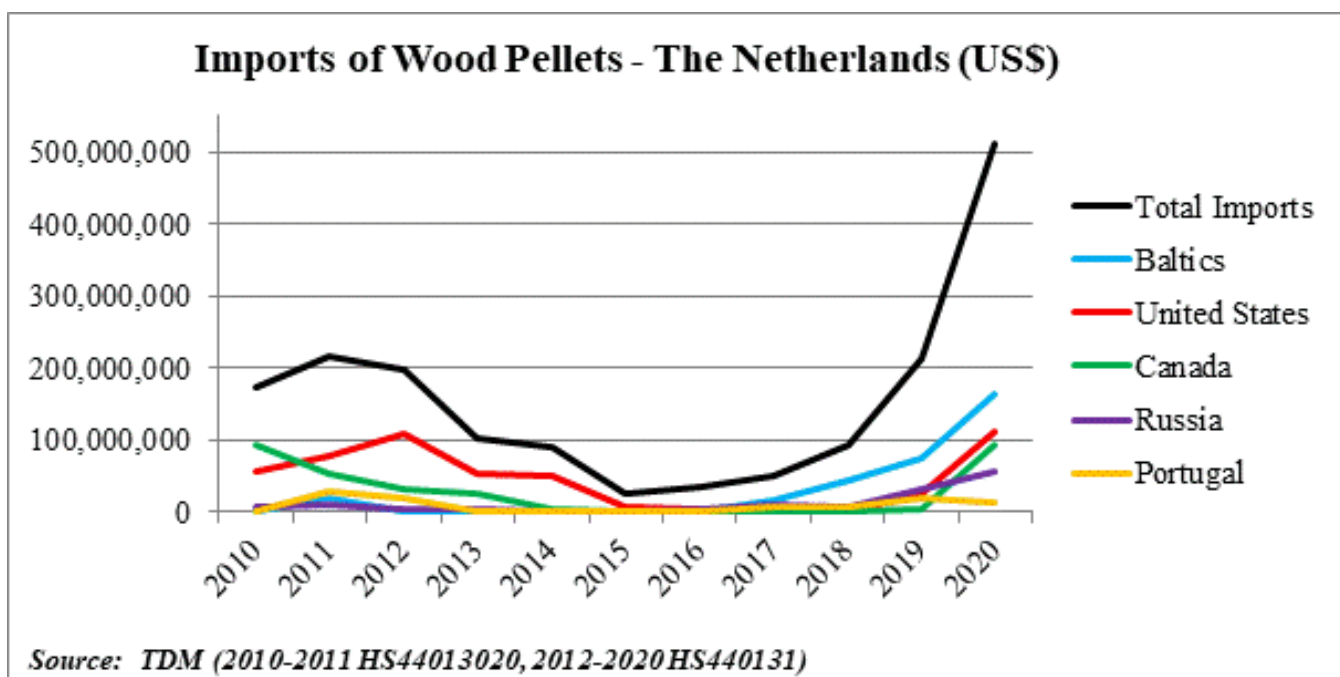
Report Highlights:

In 2020, Dutch wood pellet imports reached a new high, totaling \$511 million. The United States was the leading non-European Union (EU) supplier to the Netherlands. Wood pellet-generated energy is estimated to have accounted for approximately ten percent of total Dutch renewable energy use last year. In the future, the Dutch government will place more emphasis on the use of biomass for higher value applications. Currently the government is in the process of implementing the EU's second Renewable Energy Directive (REDII) in Dutch Law, and is planning to add socio-economic criteria to the sustainability criteria of the REDII.

General Information

In 2020, Dutch wood pellet imports set a record by value (see graph below), after having initially set a record by volume in 2019 (see FAS GAIN Report - [Dutch Wood Pellet Imports Surge to a New Record in 2019](#)). In 2020, the Netherlands imported 2.76 million metric tons (MMT) of wood pellets valued at \$511 million. In terms of both volume and value, nearly half was imported from other European Union (EU) Member States, predominately from the Baltics and Portugal. The United States was the largest third country (non-EU) supplier to the Netherlands, with a volume of 591,000 MT valued at nearly \$112 million, surpassing both Canada and Russia. As a result, the Netherlands rose to be the second largest destination for U.S. wood pellets, after the United Kingdom (surpassing Belgium and Denmark).

The current share of bioenergy generated by wood pellets is estimated at roughly ten percent of total renewable energy consumption in the Netherlands, and roughly thirty percent for all solid biomass (e.g., waste wood, wood chips, and wood pellets -- municipal waste is not included). All the imported wood pellets that are used for renewable energy generation, funded by the Dutch government, are subject to stringent sustainability requirements.



Introduction

In 2013, the [Dutch Energy Accord](#) (the Accord) was completed, which included funds for the generation of renewable energy. Since the agreement, the Dutch government has allocated €3.63 billion (\$4 billion) in [Stimulation of Sustainable Energy Production \(SDE+\)](#) funds for the co-firing of wood pellets with coal. Each power company's SDE+ allocation for co-firing is eligible for a period of eight years.

The Accord capped Dutch co-firing at 25 Petajoule per year, equivalent to roughly 3.5 MMT of wood pellets per year. It was also decided in the Accord that the use of solid biomass for energy would be subject to specific sustainability criteria laid down by the Dutch government. In addition, the Dutch power sector agreed upon a covenant with NGOs to add socio-economic criteria to the sustainability criteria. For more information about the sustainability requirements see:

<https://english.rvo.nl/subsidies-programmes/sde/sustainability-criteria>.

Forecast for 2021

In 2020, the RWE power plant in Geertruidenberg (see table 1 below) increased its co-firing from fifty to eighty percent and, in the same year, its plant in Eemshaven began co-firing to replace fifteen percent of its coal input. In the fall of 2019, Uniper began to utilize its assigned SDE+ funds for co-firing, with an annual volume of roughly 500,000 MT. The Onyx power plant in Rotterdam had operational challenges in 2020 but is seemingly online again. NOTE: Onyx is reportedly in negotiation with the Dutch government to accept a buy-out fund to close the plant. In 2021, the RWE and Uniper plants are anticipated to increase their biomass co-firing to close to the maximal level.

Table 1. Solid Biomass for Co-Firing

Company	Location	Start	Heat (MW)	Power (MW)	Maximum Volume of Biomass (MT)	Type of Biomass
RWE	Geertruidenberg	2018	NA	600	1,600,000	Wood pellets
RWE	Eemshaven	2020	-	1,560	800,000	Wood pellets
Uniper	Rotterdam	2019	-	272	550,000	Wood pellets
Onyx	Rotterdam	2020	-	730	240,000	Wood pellets

Based on domestic pellet production of roughly 350,000 MT, and recent trade statistics, the total Dutch wood pellet consumption is estimated at nearly 2.9 MMT in 2020 (see table 2) -- of which roughly 2 MMT was destined for co-firing. Based on co-firing expansion plans, Dutch pellet use is estimated to increase to approximately 3.1 MMT in 2021. After 2021, the Dutch market for pellets depends on the Dutch government plans (for more information see the paragraph *Developments Related to the Future Use of Biomass*).

Table 2. Supply and Demand of Wood Pellets – The Netherlands (1,000 MT)

	2015	2016	2017	2018	2019	2020	2021
Production	100	200	264	290	320	350	350
Imports	141	208	329	598	1,237	2,758	3,000
-United States	38	22	1	7	130	591	750
Exports	147	208	232	274	316	231	250
Consumption	94	200	361	614	1,241	2,877	3,100
-Cofiring	0	0	100	350	800	2,000	2,500
-Residential	50	60	60	70	75	80	85
-Other large scale	44	140	201	194	366	797	915

Sources: TDM (trade figures), Platform Bio-Energie and Bioenergy Europe, and FAS Post (2020 and 2021).

In addition to co-firing, wood pellets are used by plants which solely use biomass, often to produce heat or combined heat and power. The Netherlands Enterprise Agency (known by its Dutch acronym of RVO), granted funds for more than 60 projects for industrial power generation and for roughly 150 solid biomass projects which produce heat. This industrial market is estimated at nearly 800,000 MT per year. For more information, see the GAIN Report – [The Dutch Industrial Market for Biomass](#), dated February 20, 2019.

Another market for wood pellets is the residential market, which is estimated at roughly 80,000 MT per year. In 2019, 58.5 percent of the renewable energy consumed in the Netherlands was generated by biomass (27.5% solid, 15.7% liquid, 8.6% municipal waste, and 6.9% gaseous, per the Dutch Bureau of Statistics). Based on the energy content of pellets, the share of pellets was nearly five percent in 2019, but is estimated to increase to roughly ten percent in 2020 and 2021 (NOTE: This is an FAS/The Hague estimate).

Developments Related to the Future Use of Biomass

Under the [Dutch Climate Law \(Dutch language\)](#), enforced on July 2, 2019, the Netherlands has set its goal to reduce emissions by 49 percent by 2030 and by 95 percent by 2050. The Netherlands has the ambition to further raise the bar to a reduction of 55 percent at the EU level by 2030, and to reach a neutral and fully circular economy by 2050. In the national [Climate Plan](#), setting the policy priorities from 2021 to 2030, the Dutch Cabinet indicated biomass is an important tool to achieve a climate neutral and circular economy. The Dutch government asked the SER (Dutch Social Economic Council) and PBL (Netherlands Environmental Assessment Agency) to investigate the available supply and economically viable applications of biomass for the Dutch economy. For more information see the FAS GAIN Report: [Dutch Government Advised to Cascade Biomass](#). Based on the advice of the SER and PBL the Dutch government plans to:

- Phase out biomass for power, low temperature heat (for houses), and light road transport. The Dutch government plans to end the subsidies for biomass generated power in 2027, in accordance with the termination of the SDE+ subsidies. This sanction will not be enforced on combined heat and power generated from biomass. Currently, the government is also preparing legislation to phase out coal for power generation. In December 2020, the PBL finished its [advice](#) (Dutch language) for the government on the timeline for phasing out biomass for generating heat. The report states that until 2030 there are, apart from biomass, not enough renewable alternatives for residential heating.
- Support medium-term use of biofuels for air, marine, and heavy road transport, and high temperature purposes (for industry). The government will support these applications because alternatives are not expected to be available before 2030. The Dutch government also anticipates alternatives for industrial heat will be limited until 2030.
- Support long-term use of biomass for materials and chemicals, including subsidies for innovation, commercialization, and market introduction.

Developments on Sustainability Requirements for Biomass

On February 24, 2021, based on the advice of the SER, the Dutch government sent the [Sustainability Framework for Bio-feedstocks](#) (Dutch language) to the Dutch Parliament. The framework outlines the government's plans for utilizing biomass in a circular economy, as summarized in the paragraph above. In addition, the framework adopted the EU's [second Renewable Energy Directive](#) (RED II) sustainability criteria for all bio-based raw materials, flows and applications, insofar as these are financially supported or regulated. The framework supplements the REDII criteria with socio-economic criteria, which the Dutch government wants to establish in a covenant with all parties in 2021.

At the moment, the RVO is in the process of developing new verification protocols for the demonstration sustainability of solid, liquid, and gaseous biomass, as well as a revision of the existing verification protocol for installations on wood pellets. Because the criteria for subsidized solid woody biomass in coal-fired power stations are already fleshed out and include socio-economic criteria (in a Covenant), the criteria for this purpose reportedly remain unchanged.

The REDII must be implemented in national law by June 30, 2021. Currently the REDII is harmonized with the EU [Green Deal](#) and [Climate Law](#). A [study](#) of the European Commission's Joint Research Center judged the sustainability requirements as robust. The EC further adopted the [Taxonomy Regulation](#) to steer private investments towards environmentally sustainable activities. For more information see the [EU Biofuels Annual 2020](#).

Attachments:

No Attachments.