

Wood Pellet Market: “Too Good to Fail”?

The Wood Pellet Market is currently growing at an exponential pace; however, will high demand prove to be enough to secure market stability over a longer period of time?

The European Union has the capacity to provide 50% of the world's wood pellet supply, yet, at the same time, the demand of the Member Countries equals 70% of the world production. This supply-demand discrepancy creates the need to import significant amounts of wood pellets especially from the US, Russia and Canada. And the importation is predicted to grow as **the demand for pellets in the EU is estimated to increase by 14% in 2014** while the supply only by mere 9%. However, due to the booming pellet production sector, mainly in North America, the EU, so far, does not have to worry about the supply shortages. But with new markets opening up to wood pellets, this feeling of supply security should not be taken for granted.

Reasons behind the pellets' success

In the light of the EU Renewable Energy Target of 20% of energy coming from renewable sources by 2020, wood pellets seem to be an ideal solution. The, so called, biomass is taking Europe by storm: already by now half of the Europe's renewable-energy consumption comes from burning wood, be it pellets, woodchips or logs. The original reason behind the introduction and popularization of the biomass in the EU is simple: carbon neutrality. If properly managed, the carbon produced while firing biomass can be easily offset by the carbon captured by newly planted trees. In this way, the final balance should equal zero.

With growing ecological consciousness, the advantages of pellets are easy to market. Not only do they contribute to the carbon emission reduction, but also are produced from waste and wood by-products making the wood biomass an unlimited energy source. In addition, they are easy to use and currently widely available: packed in small bags sold in supermarkets or petrol stations as well as in bulk delivered directly to one's home.

In Italy, high electricity and power prices seem to be the best encouragement for installing the pellet stoves at homes. Yet, the government, to further promote the use of biomass, introduced numerous incentives focusing on its popularization. As a result,



Italy is currently the biggest market for domestic grade pellets and is unlikely to give up its place in the lead. Yet, pellets are also extensively used for domestic heating in Germany and France.

But the growing popularity of pellets reaches far beyond individual households. **An increasing number of coal-fired power plants in Europe is being converted to wood biomass, with UK as the leader.** The conversion from coal to renewables is driven by public policy instruments such as Renewable Obligation Credits or Carbon Price Floor. However, the choice of pellets over solar or wind energy is mainly due to price; biomass is simply the cheapest option.

Denmark and Sweden primarily use pellets for district-level heating plants and for combined heat and power plants while Belgium and the Netherlands follow the UK's example in firing their large scale power plants with wood pellets.

US to EU: main export route

Due to the necessity to fulfill the renewable energy targets, **Europe is experiencing mass conversions from coal to biomass, as well as numerous incentives to turn to wood pellets firing.** The result is a booming market for wood pellets and an increasing need for imports from North America, South America, Africa or Australia. **Last year, the US alone exported to the EU 2.77 million tons of pellets, worth 374 million dollars.** According

to the US Department of Agriculture, the shipments should reach 1 billion dollars by 2020 and account for half of the EU demand. **The major buyers in Europe remain the UK, whose demand rose by 128% since 2012 and Denmark.** The import needs of Italy and Sweden are also growing significantly, by 46% and 45% respectively.

At the same time the production in Europe is also growing and the EU remains the biggest wood pellet producer in the world, however, it is closely followed by the US and Canada. It should be noted, though, that the European wood pellet production sector differs significantly from its counterpart in North America. The majority of plants in the EU are of small or medium size while the US and Canadian production sites are predominantly big.

In the EU, the leader, Germany, is expected to produce 2.35 million tons this year. Sweden's production should reach 1.35 million tons while France, Latvia and Austria collectively should produce 3.08 million tons of pellets. In 2014, the production capacity of the EU Member States is predicted to reach 76% of their demand, a 2% growth compared to 2013. Yet, it is still not enough to satiate Europe's ever growing interest in wood pellets. Therefore with the current demand and supply discrepancy, the EU needs to reach out to whoever and wherever can produce the new sought-after product in large quantities.

Biofuels vs. biomass markets

The market of wood pellets is not uniform but rather divided into two separate ones: industrial and residential pellets. And even though the product is, to a large extent, similar, the characteristics of these two markets differ.

The industrial wood pellet market was born as a market dominated by a limited number of large players who ruled the European scene and stood behind the majority of the trading activities: RWE, Drax, E.ON, Vattenfall, to name a few. Over the years the industrial pellets sector did not change much, it is still true that the main players very often are both traders and final buyers. This, however, significantly shortens the biomass supply chain and leaves no place for brokers, for example. The situation is slightly different in the case of high-quality residential pellets where the way to the final customer is much longer and includes, apart from the producer, also brokers, traders, wholesalers and final sellers. However, it can be observed that the market for industrial pellets is changing too and starts to resemble more the fragmented market of residential grade biomass and biofuels in general.

The contracts in the biomass sector, however, are in majority negotiated for longer terms, which distinguishes the pellet market from the biofuels market where trading operations are carried out mostly on monthly basis. The volumes contracted are also incomparable as in the EU only, the total amount of pellets sold in 2013 reached 20 million tons while the biodiesel market came to 10.5 million MT.

In spite of the changes, it may still seem that the big absentee of the pellet market, especially when it comes to the industrial grade product, is the intermediary, be it trader or broker. Yet, it is not entirely true, the third-parties are making their way to the market and become especially visible in the spot transactions, their work here resembling the day-to-day job of the biofuels traders. In the end, it is very often the case that the biofuels brokerage and trading companies add pellets to their

products portfolio as, technically, biomass can be defined as solid biofuels.

What lies ahead?

The outlook for the wood pellet market is nothing but positive: the growth should continue, followed by the creation of numerous new jobs along the whole supply chain. The growth potential is especially high in the US, Russia and Canada where resources are abundant and new investments are flowing. Yet, the questions remain: when will the market achieve its maturity stage and what will it look like?

With demand significantly increasing in Asia, mainly in South Korea, China and Japan, the EU will have a fierce competition on the market and will have to put more effort into securing its pellet needs. Already today, there is a regular biomass trade between Western Canada, US and South-East Asian countries and this trend is here to stay as the demand in Asia continues to grow.

Looking at the advantages of pellets, market growth forecasts, increasing production and number of people employed in the sector, it is easy to conclude that this business is simply "too good to fail". Nothing more misleading: the European and global markets of biomass have an unmet potential to really make a difference but there is an urgent need for a widespread sustainability standard in order to secure all the benefits of the product.

But what does the sustainability really stand for in the pellet world, apart from being a fashionable and catchy phrase? The aim of establishing a sustainability standard is to guarantee that the biomass sector does not negatively influence the environment and the lives of people from the regions in which the pellets are produced by, for example, deforestation, limiting the living space of inhabitants, reducing the availability of food or water, etc. It would be unacceptable if producers were to put pressure on forests, arable or inhabited land and in this way contribute to displacement of farmers or irreversible environmental changes. It does not go well with what the renewable energy business should stand for. So as the

phenomenon of this sector lies strongly in its sustainability, it is the responsibility of all: producers, traders and final users to make sure that it is not the price but rather the environmental consciousness that wins.

Apart from the drive towards the common sustainability scheme, there are three more market trends that, according to Michele Rebiere, the CFO of Viridis Energy, will shape the wood pellet market in the near future.

Firstly it will be heat and not power production that will drive the pellet demand in the developed countries. Already today Italy, Denmark, France and Austria use biomass predominantly for heating and this trend is expected to grow supported by the low cost of wood pellets as compared to its alternatives and by numerous subsidies.

As the US remains the biggest supplier of the European market, the American wood pellet sector will most probably see a number of consolidations among producers in order to achieve economies of scale and remain competitive. Freight costs are a key issue in the trade between the US and the EU, therefore bigger volumes will allow for lower transport rates.

Finally, there should be more space for intermediaries in the pellet market who will be seen as an alternative for costly storage. Traders are increasingly managing the flows of pellets on the spot basis and therefore can significantly reduce the power plants' needs for costly storage space.

So it seems that the wood pellet sector has still a long way to go: new markets are opening up, the supply chain is changing rapidly and market players are fighting for their share of the market. Yet, all these alternations make the wood pellet sector an even more interesting business for all the people involved.

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