

Development and promotion of a transparent European Pellets Market  
Creation of a European real-time Pellets Atlas

## Pellet market country report SPAIN



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Piazza Savonarola 10  
50132 Florence, Italy

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Prepared by      ETA Renewable Energies  
Filippo Vivarelli  
Lorenzo Ghezzi

Contact            [filippo.vivarelli@etaflorence.it](mailto:filippo.vivarelli@etaflorence.it)  
Tel. +39-055-500 2174

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# 1. Summary

The Spanish pellets market is quite new, since it started only in 2005. The production capacity has increased greatly from approx. 75,000 tons/year in 2006 to over 250,000 tons/year in 2008 and probably these numbers will continue to rise in the next years, as new pellet production plants are appearing in many regions.

This emerging production capacity did not result in an explosion of the national consumption so far. On the contrary this figure was very low, with less than 10,000 tons consumed in 2007 all over Spain. This quantity represents less than 5 % of the total annual production; the obvious consequence is that Spain exports large quantities of pellets.

The pellets price is lower than the average prices in Europe. It was quite steady during the last two years. It slightly decreased from € 125 in summer 2007 to € 122 euro/ton in the autumn of 2008.

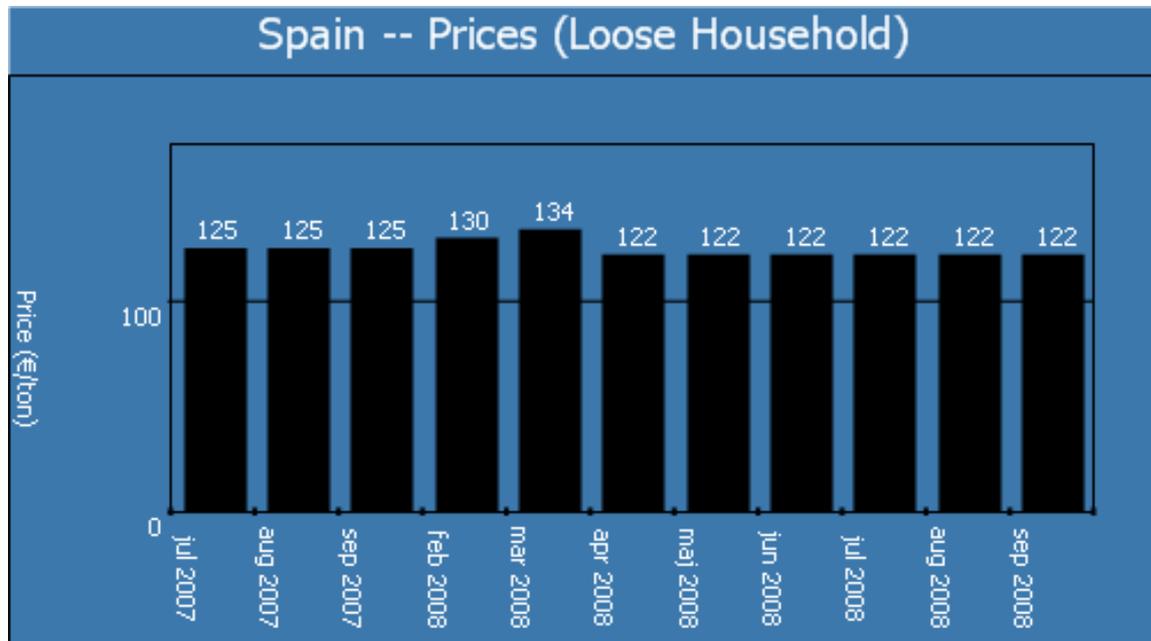


Figure 1: average prices' trend for loose household pellets (Source: [www.pelletsatlas.info](http://www.pelletsatlas.info) )

## 2. Introduction

We can state that the pellet market in Spain is in an initial stage, since it is not well structured. It lacks domestic consumption and almost the entire production is exported.

The Spanish pellets market started developing in 2005, especially after the results of the European project “propellets” that led to the creation of three new plants with a production capacity of approx. 30,000 tonnes/year.

The growth rate of the production in the last two years is impressive, approx. 300 % in 2007 as compared to the previous year and 70 % in 2008. The trend of production capacity is similar, with a growth of 200 % in 2007 and 270 % in 2008. On the contrary, consumption is steady below 10,000 tons in 2007. As a consequence we can calculate that Spain exported approx. 90,000 tonnes in 2007.

## 3. History of market development

The start of the production of pellets in Spain is mainly due to the European “propellets” project. At its end in 2005 three new pellets mills were producing pellets with a production of approx. 30,000 tons/year and two feasibility projects in Asturias had been analysed. We can state that 2005 is the starting year for the Spanish pellets market. Spain was affected by a general lack of knowledge on biomass technology, but this situation is quickly changing, since the profitability of pellets systems is increasing when compared to electricity, oil and natural gas heating and the effort of private companies in developing the market. Due also to European projects like Propellets and Pellets@las public bodies are aware of biomass uses and the institutional behaviour is changing with the development of new funding lines.

**Table 1: Development of the Spanish pellets market over the past years**

Year	Total production capacity [tons/year]	Total production [tons/year]	Consumption [tons/year]
2008	250,000	100,000	10,000
2007	160,000	70,000	3,500
2006	75,000	30,000	

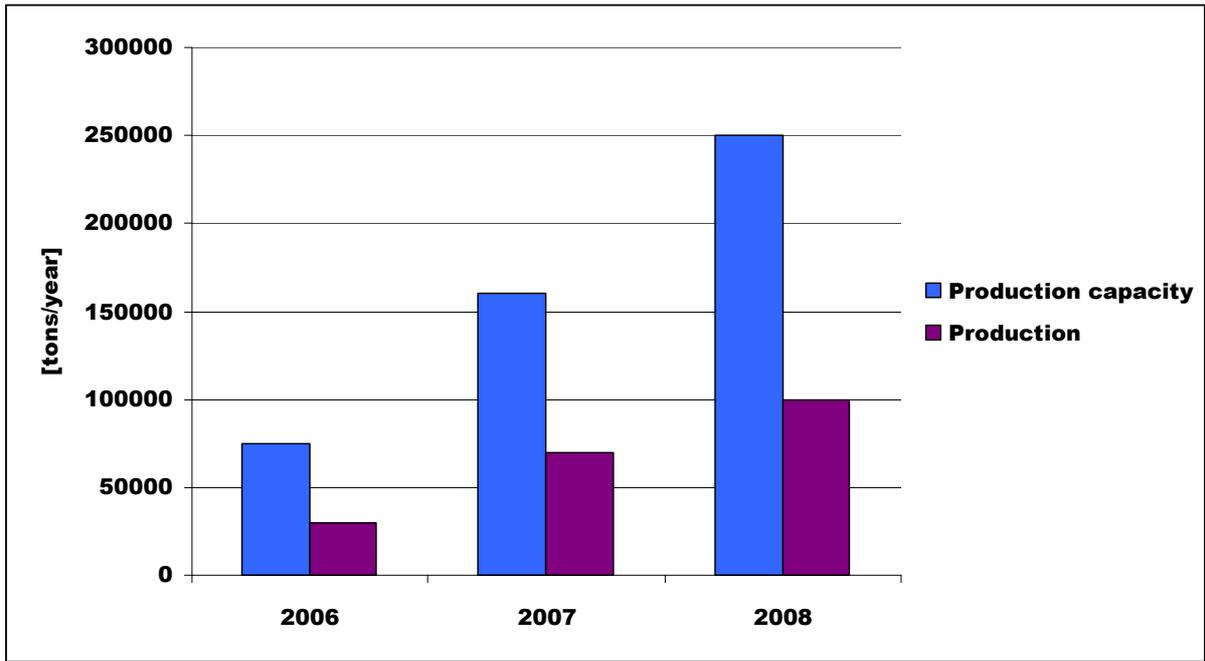


Figure 2: Spain – Pellet production capacities and annual production (Source: ETA Florence)

## 4. Pellet production

In 2008, the annual Spanish pellets production reached approx. 100,000 tons. Even if the growth compared to the previous years is large, the production capacity is much bigger, with approx. 250,000 tons in 2008. This means that Spain is ready for a further production increase in the next years. The production plants can be classified as:

- small scale (<30,000 tons/year),
- medium size (30,000–70,000 tons/year);
- large scale (>70,000 tons/year).

Another plant with a capacity production of approx. 150,000 tons/year is getting operative in 2009. There is no data about its real production yet.

The magazine “Bioenergy International” declares that 18 production plants are operative, but at least six of them are still in a start up phase.

In our database file for Spain we mention a very similar number (20 producers) but contact and communication with these companies is difficult and their web profiles are often missing.

The following numbers (Table 2) are assumption based on literature, our experience and technical sources<sup>1</sup>. Moreover we will not consider the 150,000 tons of potential production of the company named Caryse in Villaseca de la Sagra, as the high number could false the overall calculation.

**Table 2: Production of wood pellets 2008 based on the size of the pellets plants.**

Size of pellets plants	Production capacity 2008 [tons/year]	Total production 2008 [tons/year]	Number of pellets plants 2008	Utilisation rate 2008 [%]
small-scale (<30,000 tons/year)	100,000	40,000	11	40 %
medium-scale (30,000–70,000 tons/year)	0	0	0	0
large-scale (>70,000 tons/year)	150,000	60,000	6	40 %

<sup>1</sup> [www.escansa.com](http://www.escansa.com); [www.propellets.com](http://www.propellets.com)



**Figure 3: The biggest Spanish pellets producers (> 5000 tons/year) (Source: [www.pelletsatlas.info](http://www.pelletsatlas.info))**

## 5. Pellet trade and logistics

As previously mentioned the domestic pellet market in Spain is hardly existent and lacks established distribution networks. Over 95 % of the national pellet production is exported. The main countries to whom wood pellets are exported are Portugal, Ireland, United Kingdom, Italy and France. Based on total statistics, the amount of Spanish export is approx. 90,000 tons/year. It is foreseen that wood pellets export will be important also in the next years in Spain. A key issue will be to identify markets able to receive the increasing production. Regarding this, examples could be Italy and northern countries, where pellets could be cheaply delivered by ships.

## 6. Pellet consumption

Pellet consumption in Spain is almost negligible compared to other European countries where the market is fully developed. We calculated approx. 10,000 tons in 2008. It is mainly developed in small scale, with pellets used as fuel for small heating plants. The quality of Spanish pellets is generally good, but only one large company with an international certification (DINplus) was identified.

Some factors that are currently hampering a wider use of pellets in Spain are a general lack of knowledge on biomass technology (also on boiler manufacturing) and a lack of national incentives which are necessary for the start of a generalized diffusion of the new fuel.

At the end of 2007 the number of pellet heating systems installed in Spain was about 600-700 units. These generally are small and medium scale boilers for a total power of 25-35 MW. As previously mentioned the national consumption in Spain is really low compared to the production, it represented no more than 5-10% in 2008.

Pellet end-consumer prices vary from 140 to 180 euro/ton depending on the region and the season. It is a quite low price, lower than the average in Europe, probably due to a lack of domestic demand.

## 7. Legal framework & Policy

There are no national incentives for pellets use in Spain, but Regional Governments, through their energy branches or energy agencies, provide various support:

- Funding of installations, typically 20-30% of the eligible costs.
- Besides, in several regions there are other forms of financial helps:
  - specific soft loans for companies,
  - taxes reduction in the investment for companies in the “Companies Tax”;
- The National Energy Agency (IDAE) provides variable incentives every year to renewable energies,
- Some Energy Services Companies (ESCOs) provide credits for investments.

The number of installed heating units in 2007 was around 600-700 units, during these last years the mentioned financial initiatives surely achieved good results. This fact is also confirmed by the development of the domestic consumption in Spain (10,000 tons per year) that tripled last year.