



DEVELOPING THE SUSTAINABLE MARKET OF RESIDENTIAL MEDITERRANEAN SOLID BIOFUELS

EUROPEAN BIOENERGY FUTURE
27th April 2018, Athens

**Spanish Biomass Association and the development of the biomass
market in Spain**
Pablo Rodero Masdemont, AVEBIOM



This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No. 691763



14 years promoting the biomass sector



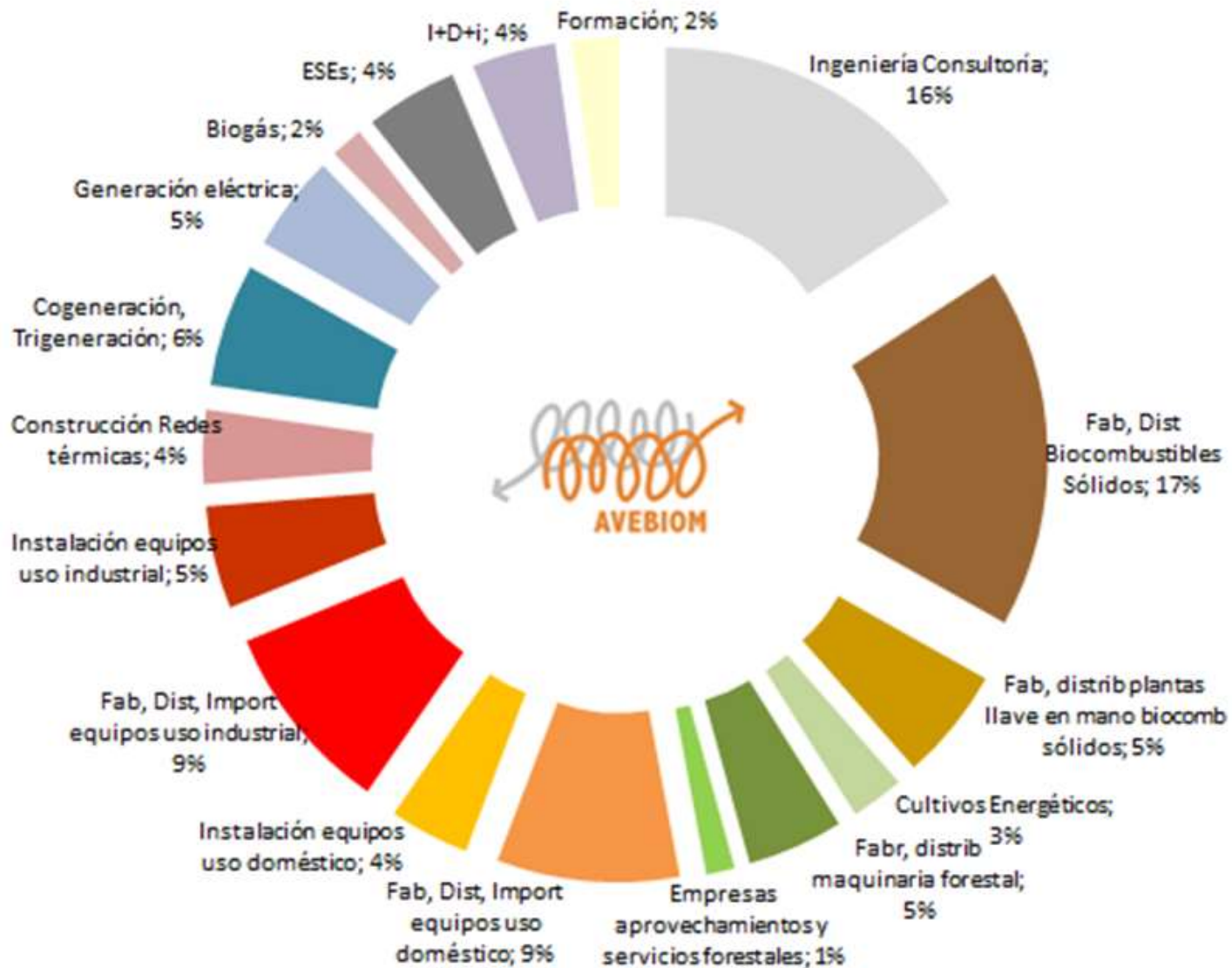
AVEBIOM represents
all the companies of
the **whole supply
chain** of the
bioenergy



The Spanish Biomass Association (AVEBIOM) was created in 2004 with the aim of **promoting the development of the bioenergy sector in Spain**



14 years promoting the biomass sector



14 years promoting the biomass sector

International presence

- AVEBIOM is Full Member of AEBIOM and for several years is represented in the Board
- AVEBIOM is funding member of the EPC
- AVEBIOM is Full Member of the World Bioenergy Association (WBA)



14 years promoting the biomass sector

 <p>Canal CLIMA para empresas</p>	 <p>Certificación CALIDAD del PELLET</p>	 <p>Organiza FERIA PROFESIONAL DE BIOENERGÍA</p>	 <p>Revista PROFESIONAL</p>
 <p>CLÚSTER de la Bioenergía AEI de AVEBIOM</p>	 <p>Certificación CALIDAD biomasas</p>	 <p>Evento para GRANDES CONSUMIDORES</p>	 <p>Elabora ÍNDICE de PRECIOS de la biomasa</p>
 <p>Proyectos EUROPEOS</p>	 <p>OBSERVATORIO Nacional de CALDERAS de biomasa.</p>	 <p>Organiza CONGRESO INTERNACIONAL</p>	<p>www.avebiom.org</p>



la feria de los profesionales
the fair for professionals



14 years promoting the biomass sector

EXPO Biomasa

la feria de los profesionales
the fair for professionals

<https://www.expobiomasa.com/en>



4

EVENT DAYS
DÍAS de EVENTO



30

COUNTRIES
PAÍSES



600

BRANDS & COMPANIES
EMPRESAS y MARCAS



18.000

PROFESSIONALS
PROFESIONALES

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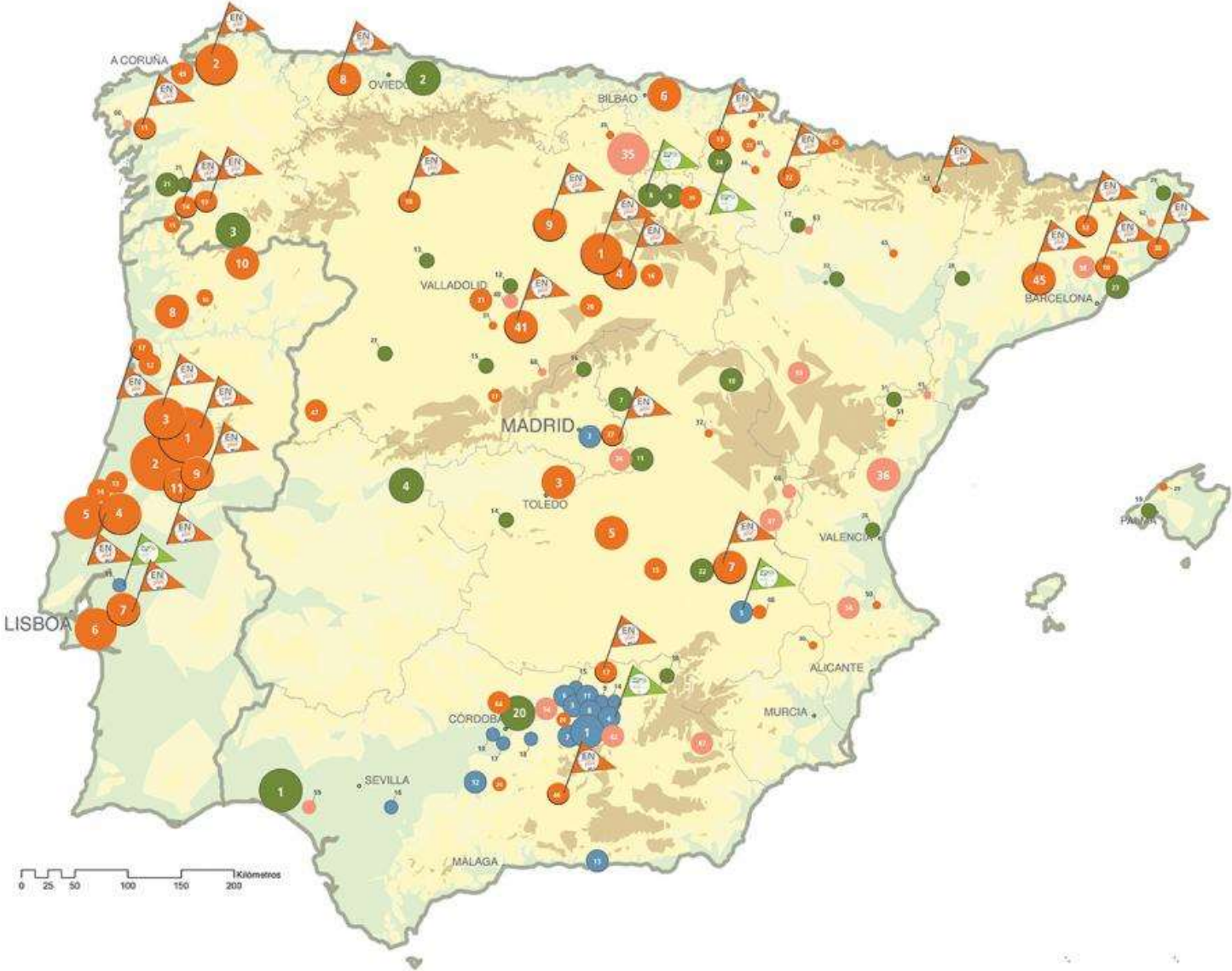


BIOENERGY
INTERNATIONAL

www.bioenergyinternational.es

- Internationalization ?
- The future is digital ?

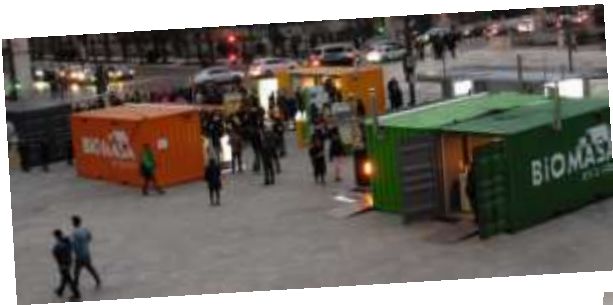
Solid Biofuels Map for the Iberian peninsula



We contribute to the PROFESSIONALIZATION and VISIBILITY of the sector



We contribute to the DIFUSION to society of the advantages of the use of BIOMASS



www.biomasaentucasa.com

Observatorio **N**acional **C**alderas de **B**iomasa

AVEBIOM has been carrying out the Observatory (ONCB) since November 2009 collecting information on biomass facilities.

These references have led to establish estimated figures, accumulated until the end of 2015, of around 160,000 devices, with an installed capacity of 7,275 MW.

www.observatoriobiomasa.es

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Stop inefficient technologies

Biomass is not a return to the past



Benefits of modern biomass technologies

- Boilers with advanced technologies and automated functions
- Easy control and maintenance. I.E. Turning on boilers with SMS
- High energy yields between 75 and 95% efficiency
- Standardized fuels (pellets, olives stones, etc.)

14 years promoting the biomass sector



EUROPEAN PELLET
COUNCIL
AN AEBIOM NETWORK



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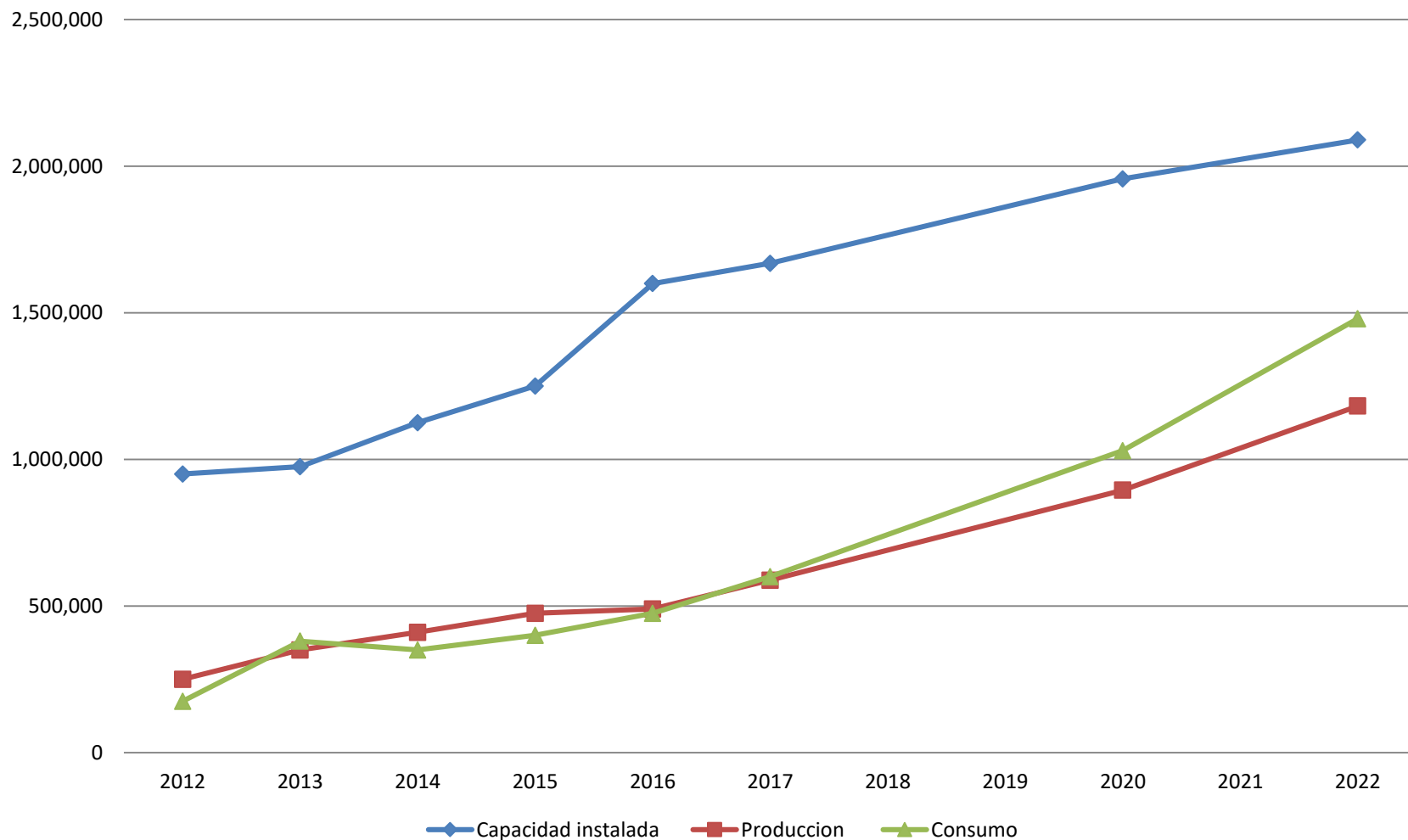
Pellet market evolution

	2012	2013	2014	2015	2016	2017	2020	2022
Capacity	950.000	975.000	1.125.000	1.250.000	1.600.000	1.668.800	1.957.000	2.090.000
Production	250.000	350.000	410.000	475.000	490.000	588.000	895.000	1.182.000
Consumption	175.000	380.000	350.000	400.000	475.000	600.000	1.030.000	1.480.000
Nº plantas	40	42	45	79	82	83	90	100

- The average factory in Spain has a production capacity 17,500 tons → domestic market
- Real average production in Spain 8,200 tons / year
- 85% of the spanish production is certified Enplus A1 (403.000 tons – 2016)
- Very high quality of the pellets (surprise inspections)

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Pellet market evolution



Quality & Sustainability Certification of Mediterranean biomass fuels

Mediterranean Biomasses Certification System



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BIOMASS TRADE CENTRE 2

<http://www.biomasstradecentre2.eu/>



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5 **Logistic Centers** in 2011. 16 in 2014

Production: **240.000 tn/y wood chips** for the domestic market



Hard to estimate industrial wood chip: estimación **3.000.000 tn/y**

Exports 100 – 150ktons/y de 100 – 150.000 for electric generation

No imports

Solid Biofuels Price Index



Publication on the AVEBIOM's website of the Biomass Price Index (IPB) in Spain.

<http://www.avebiom.org/es/indice-precios-pellet>

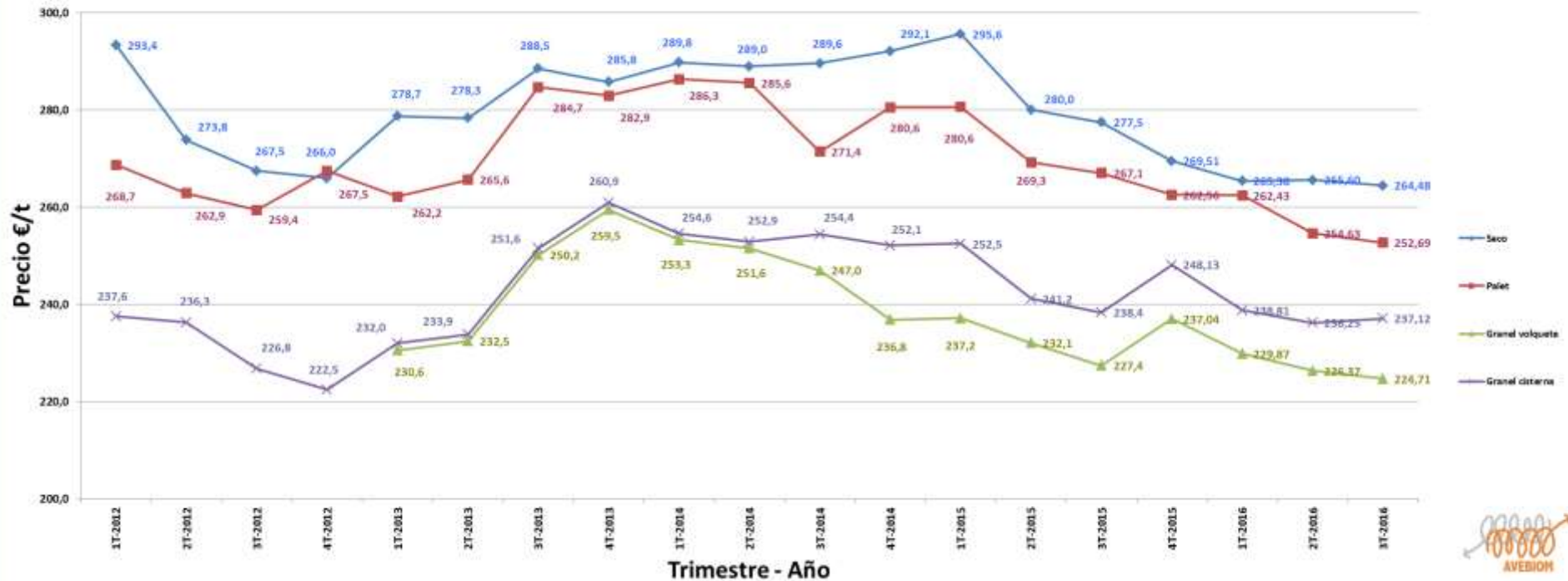
Since January de 2012, every 3 months AVEBIOM's published the **Domestic Pellet Price index** for 3 formats (bag, pallet and bulk)

Since October 2014, AVEBIOM is publishing every 3 months:

- **Heating Wood-Chips Price Index** in Bulk format
- **Olive Stones Price Index** for domestic use in 3 formats (bag, pallet and bulk)

Solid Biofuels Price Index

Histórico evolución precio medio pellet doméstico en distintos formatos
1T 2012 - 3T 2016



<http://www.avebiom.org/es/ind-precios-biomasa>



Solid Biofuels Price Index



Índice de precio del Pellet doméstico en España 2014

PELLET	Índice Precio Biomasa	2012	2013	2014		2014
				3T	4T	
Saco 15 Kg	Precio medio (€/saco)	4.13	4.24	4.34	4.38	4.35
	€/kWh			6.08	6.13	
	IPB trimestral			2.8%	0.2%	
Palet	Precio medio (€/ton)	264.61	273.86	271.42	280.57	280.98
	€/kWh			5.70	5.89	
	IPB trimestral			3.5%	-5.0%	
Granel (volquete)	Precio medio (€/ton)	229.29	243.19	247.00	236.84	247.18
	€/kWh			5.06	4.85	
	IPB trimestral			6.1%	-1.8%	
Granel (cisterna)	Precio medio (€/ton)	230.79	244.59	254.39	252.11	253.50
	€/kWh			5.34	5.29	
	IPB trimestral			6.0%	0.6%	

(IVA y transporte incluidos)

elaboración: AVEBIOM. Publicado en www.bioenergyinternational.es (diciembre 2014)



Índice de precio del Pellet doméstico en España 2014



elaboración: AVEBIOM. Publicado en www.bioenergyinternational.es (diciembre 2014)

ASTILLA	Índice Precio Biomasa	2014			2015	
		3T	4T	Anual	1T	Anual
Granel	Precio medio (€/ton)	108.76	104.4	106.58	108.01	108.01
	IPB trimestral		-4.0%		3.5%	

HUESO

Saco 15 kg	Precio medio (€/ton)	200.54	194.17	197.35	196.12	196.12
	IPB trimestral		-3.0%		1.0%	
Palet	Precio medio (€/ton)	200.64	194.17	197.40	194.92	194.92
	IPB trimestral		-3.0%		0.4%	
Volquete	Precio medio (€/ton)	178.12	171.19	174.91	172.66	172.66
	IPB trimestral		-4.0%		0.6%	
Cisterna	Precio medio (€/ton)	183.74	181.48	182.61	186.86	186.86
	IPB trimestral		-1.0%		3.0%	

elaboración: AVEBIOM



Public Policies to Establish the Development of Biomass for Thermal Uses



BIOMCASA

Desde el año 2009 financiando a Empresas de Servicios Energéticos para la realización de instalaciones de biomasa térmica para producción de agua caliente y/o calefacción y/o refrigeración.

Resultados:

Biomcasa

64 empresas habilitadas
71 proyectos
23 MW
9,7 millones € de inversión
Agotado presupuesto

Biomcasa II

41 empresas habilitadas
32 proyectos
12 MW
5,4 millones € de inversión
Con fondos disponibles



Thank you for your attention





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www.facebook.com/AVEBIOM/

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