



URBAN FOREST
INNOVATION LAB
CUENCA

NWFP businesses in Spain and portrait of the future Spanish entrepreneurs in forest bioeconomy

**Carmen Avilés – Pablo Macías
Universidad Politécnica de Madrid- Khora Urban Thinkers**

carmen.aviles@upm.es



@cavilesp



Bioeconomy opportunities

Missions Europe

Climate
change
adaptation

Smart and
neutral cities

Soil and
agrofood

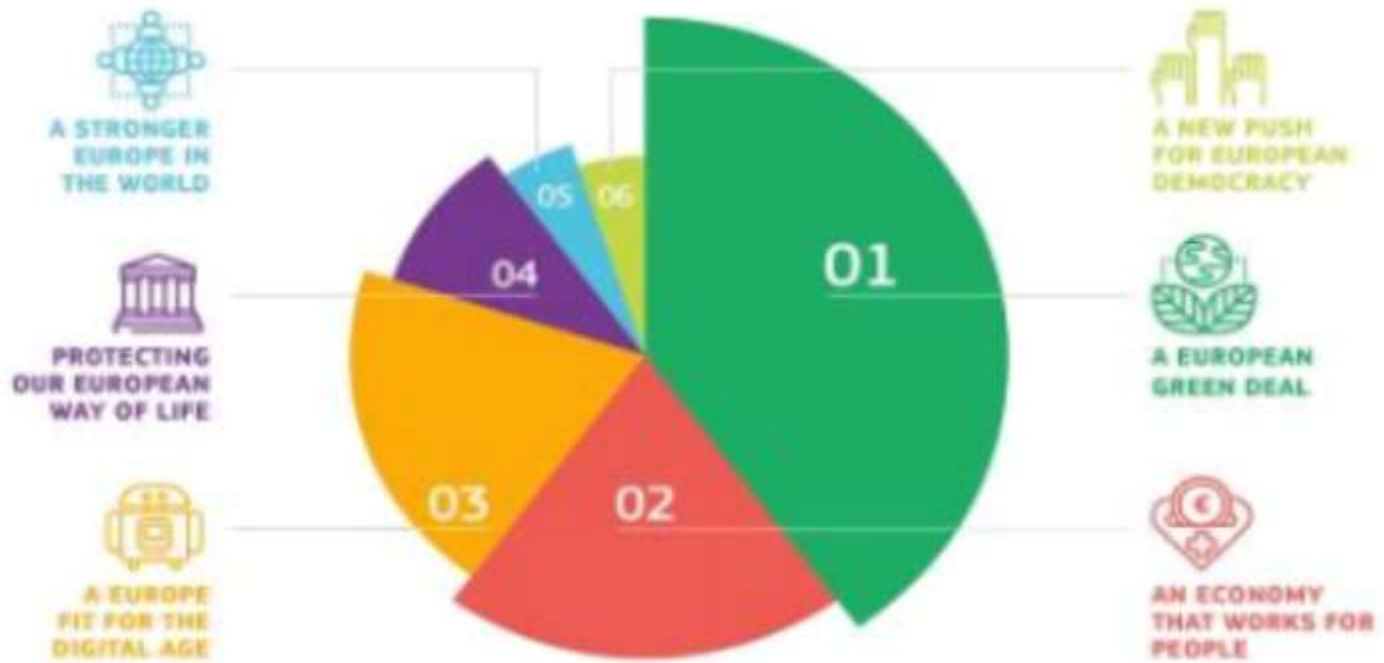
Oceans,
seas and
water

Health
(Cancer)

Bioeconomy opportunities

Targeted impacts by priority

Horizon Europe targeted impacts* supporting the Political guidelines of the Commission

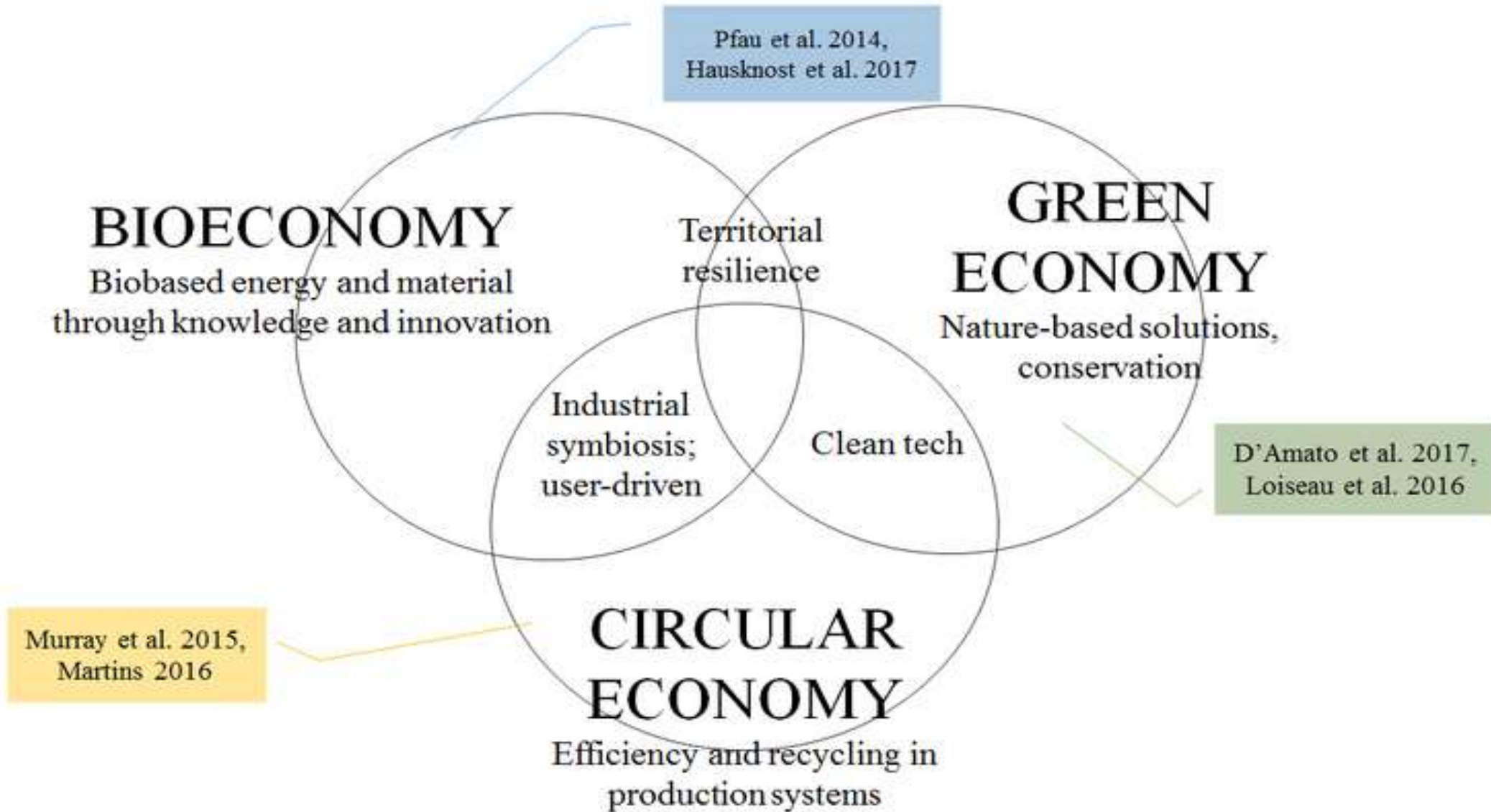


* Preliminary, as described in the General orientations towards first Strategic Plan implementing Horizon Europe

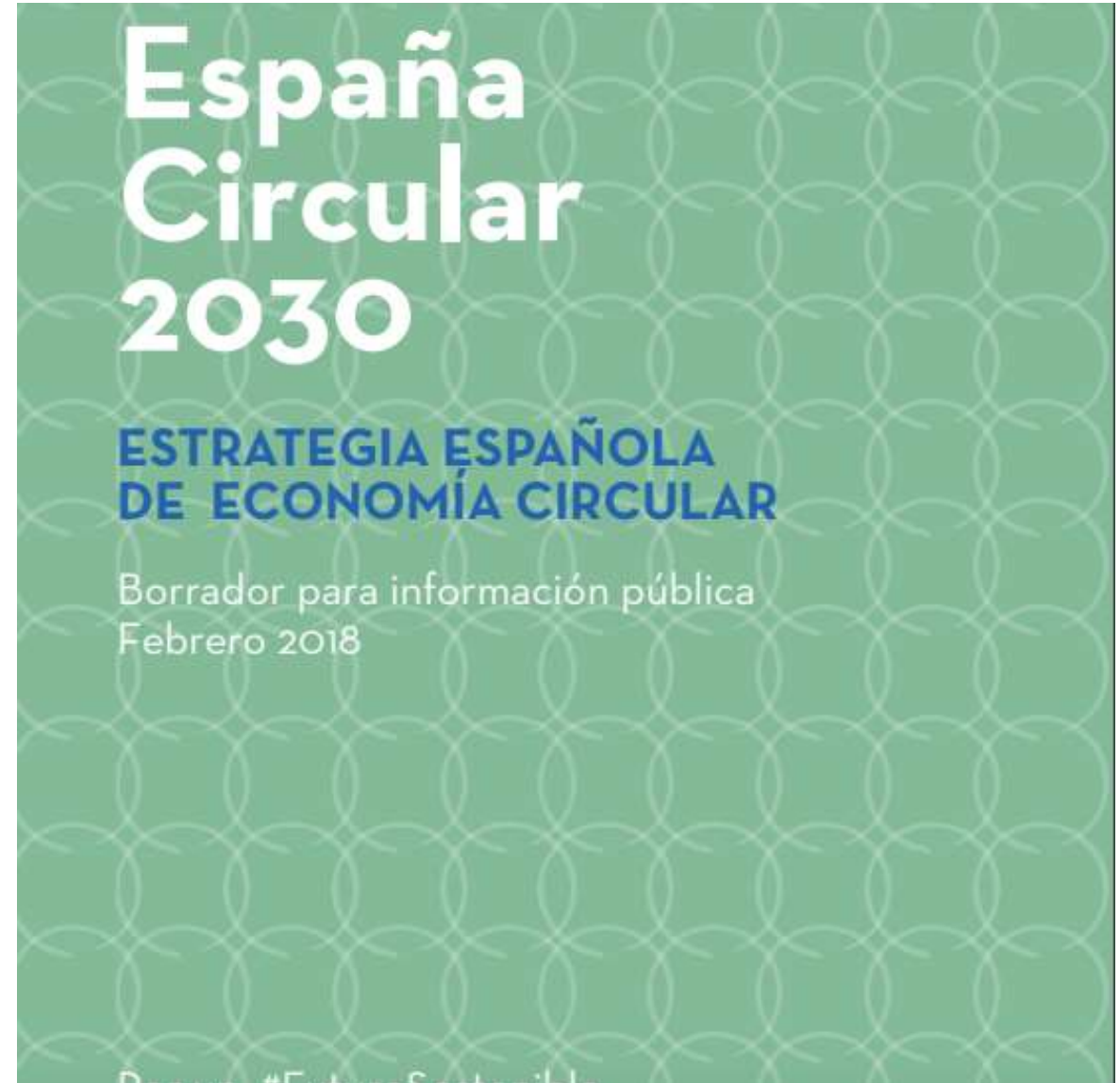




Bioeconomy opportunities



Forest bioeconomy Opportunities



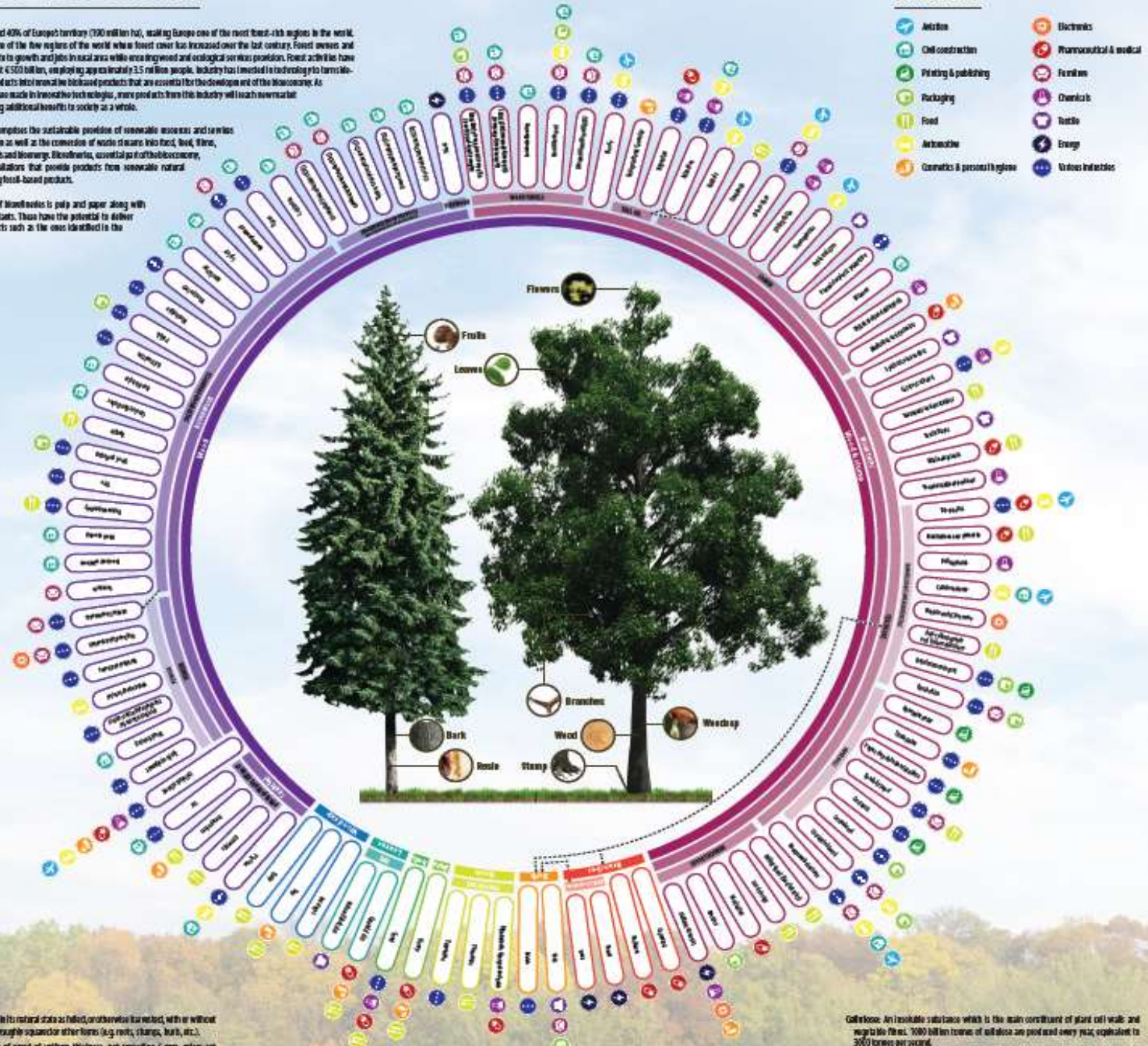
Forest bioeconomy

What a tree can do?

Forests cover around 40% of Europe's territory (190 million ha), making Europe one of the most forest-rich regions in the world. Europe is in fact one of the few regions of the world where forest cover has increased over the last century. Forest owners and managers contribute to growth and jobs in rural areas while ensuring environmental and ecological services provision. Forest activities have a turnover of almost 4.500 billion, employing approximately 3.5 million people. Industry has invested in technology to harvest, store and by-products (biomass) of the harvested products that are essential for the development of the bioeconomy. As more investments are made in innovative technologies, more products from this industry will reach new market segments, providing additional benefits to society as a whole.

The bioeconomy comprises the sustainable provision of renewable resources and services and their conversion as well as the conversion of waste of nature into food, feed, fibre, materials, chemicals and bioenergy. Bioeconomy, essential part of the bioeconomy, are industrial installations that provide products from renewable natural resources, replacing fossil-based products.

A great example of bioeconomy is pulp and paper along with wood processing plants. These have the potential to deliver a wealth of products such as the ones identified in the poster.



Roundwood: Wood in its natural state as felled, or otherwise harvested, with or without bark, round, split, roughly squared or other forms (e.g. roots, stumps, bark, etc.).

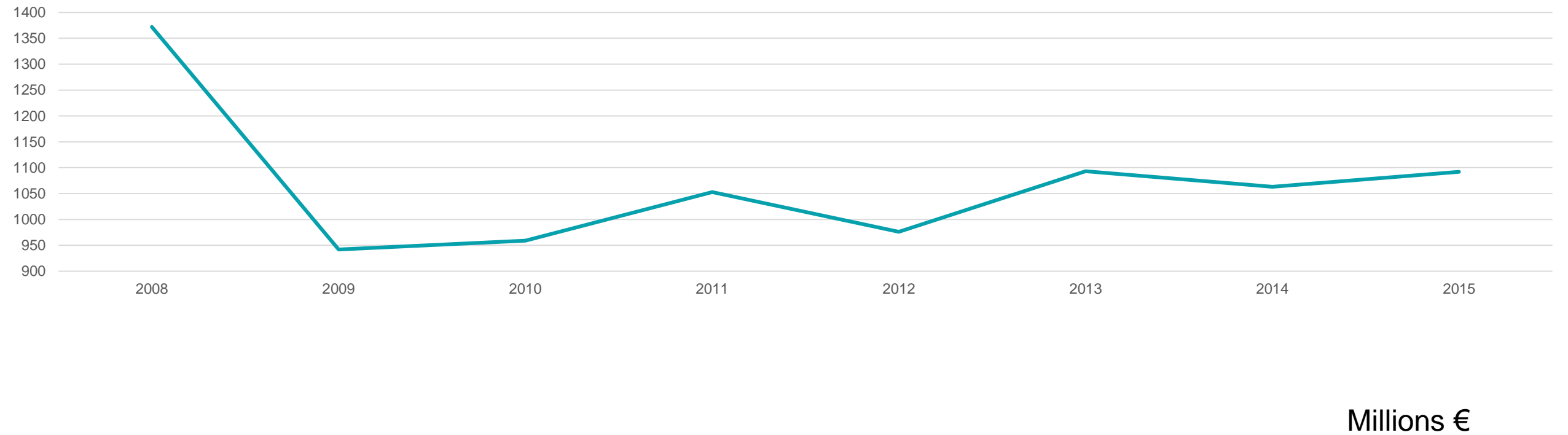
Wood: The sheets of wood of uniform thickness, not exceeding 6 mm, stay cut (i.e. peeled, sliced or sawn). It includes wood used for the manufacture of laminated

Cellulose: An insoluble substance which is the main constituent of plant cell walls and major in fibres. 3000 billion tonnes of cellulose are produced every year, equivalent to 3000 tonnes per second.

Hexose: Class of substances which occur as constituents of the cell walls of plants

Forest bioeconomy

Value added at factor cost: Forestry



Forest bioeconomy

Year Concept	Unit	Value	Productivity
2008 Turnover	Million euros	1173	4%
2008 Value added at factor cost	Million euros	1372	4%
2008 Employment	Number of people employed	32000	
2009 Turnover	Million euros	1173	4%
2009 Value added at factor cost	Million euros	942	3%
2009 Employment	Number of people employed	31600	
2010 Turnover	Million euros	1173	4%
2010 Value added at factor cost	Million euros	959	3%
2010 Employment	Number of people employed	32500	
2011 Turnover	Million euros	1173	4%
2011 Value added at factor cost	Million euros	1053	3%
2011 Employment	Number of people employed	31800	
2012 Turnover	Million euros	1173	5%
2012 Value added at factor cost	Million euros	976	4%
2012 Employment	Number of people employed	24900	
2013 Turnover	Million euros	1317	6%
2013 Value added at factor cost	Million euros	1093	5%
2013 Employment	Number of people employed	23300	
2014 Turnover	Million euros	1299	5%
2014 Value added at factor cost	Million euros	1063	4%
2014 Employment	Number of people employed	24600	
2015 Turnover	Million euros	1344	5%
2015 Value added at factor cost	Million euros	1092	4%
2015 Employment	Number of people employed	26100	



Forest Bioeconomy NWFP

Resins

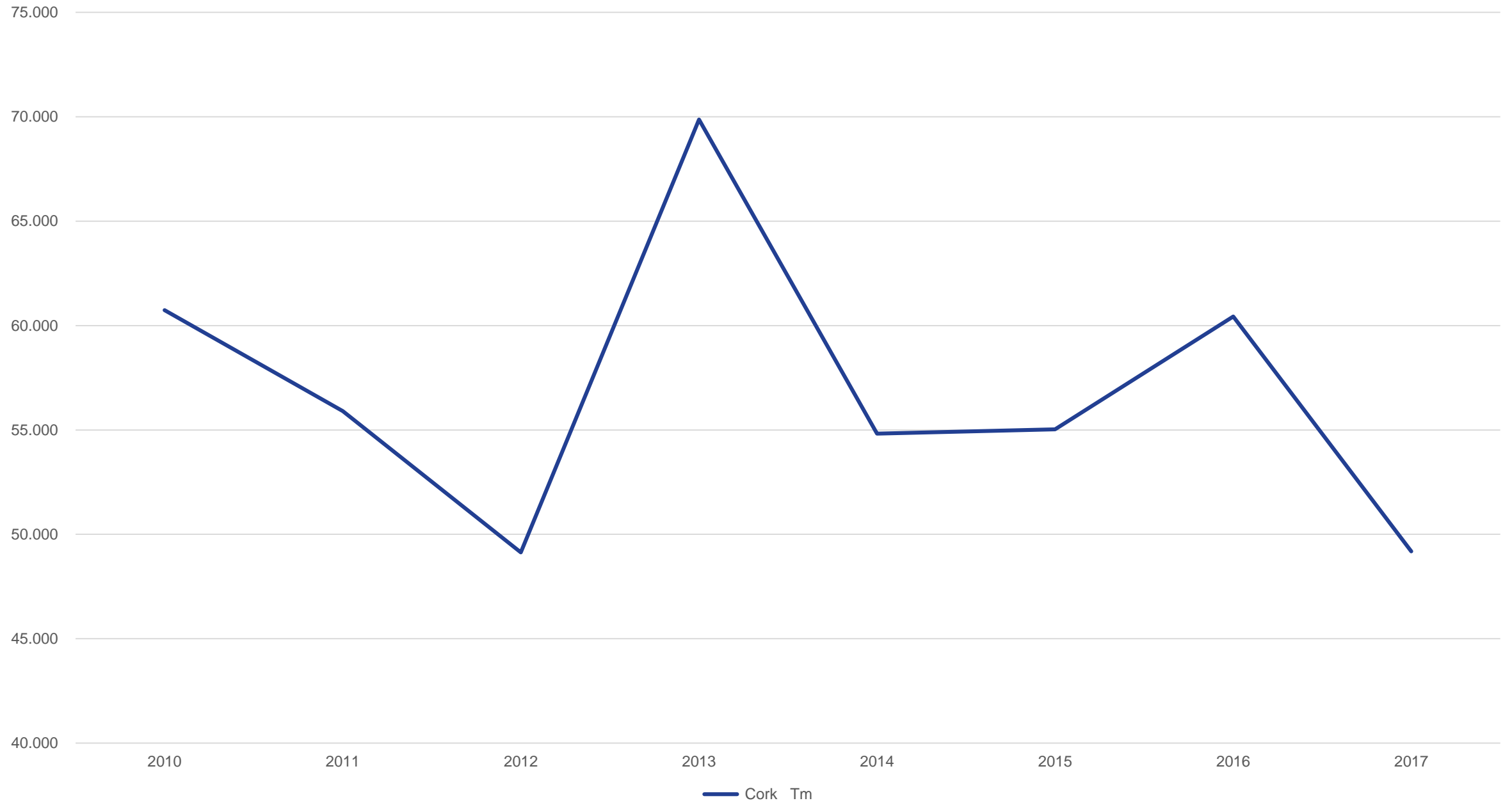
Pine
seeds

Chestnut
s

Fungui
and
Truffles

Cork

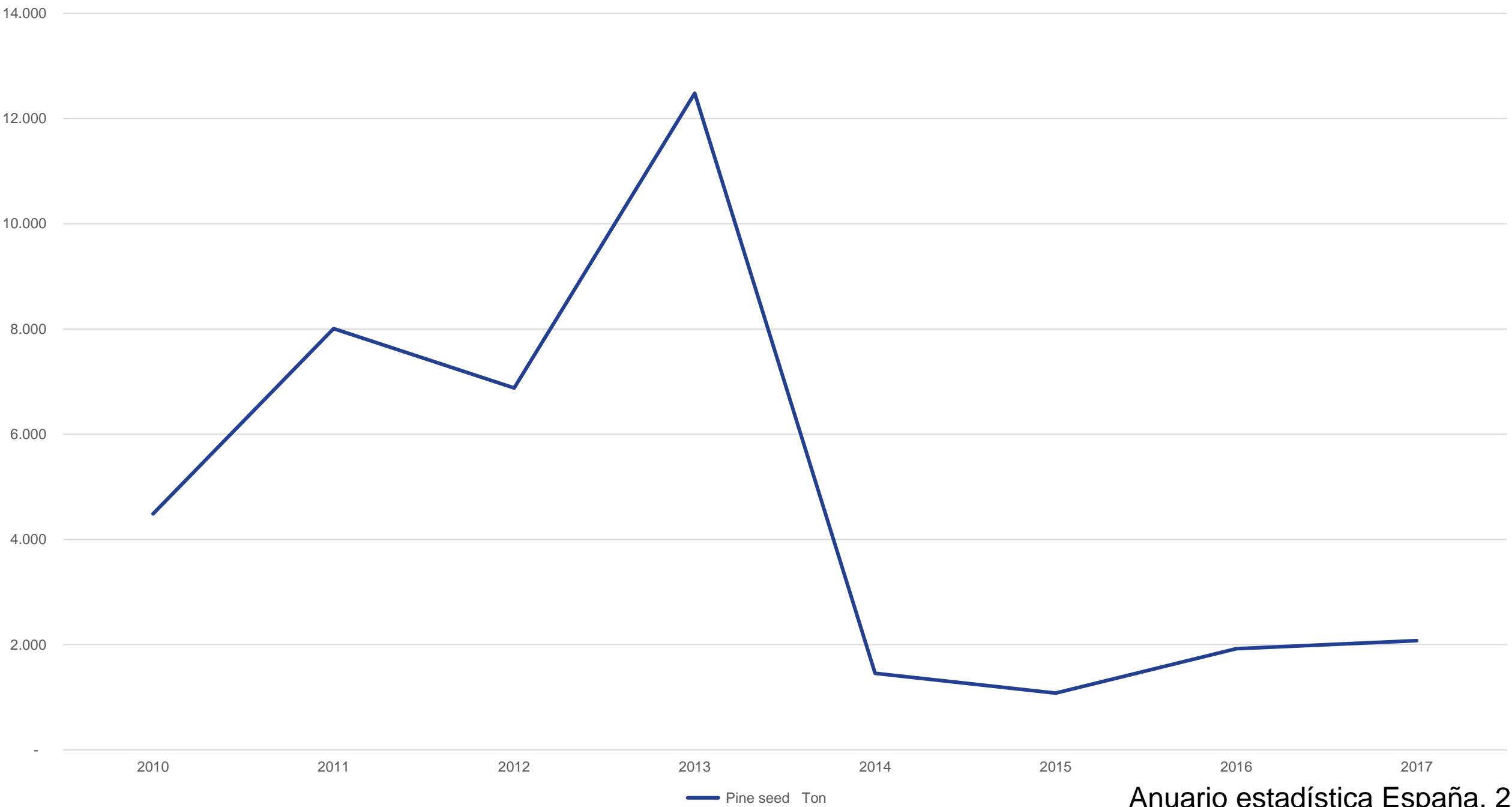
Annual production Cork Tm



Cork: production has strong oscillations but the tendency is to decline in recent decades. It is also important to highlight the loss of quality and the decrease in prices in the period 2000-2015; As a result we have the disappearance of companies in the sector and the concentration of the market in two large groups: Amorim (Portugal) and Diam (France). In the near future, production in Spain should increase as a result of the repopulations carried out with the support of the CAP; also in a market that does not present problems to absorb the increase in supply.

La Estructura Económica del sector Forestal en España en el periodo 2000-2015 (Ortuño y González, 2019)

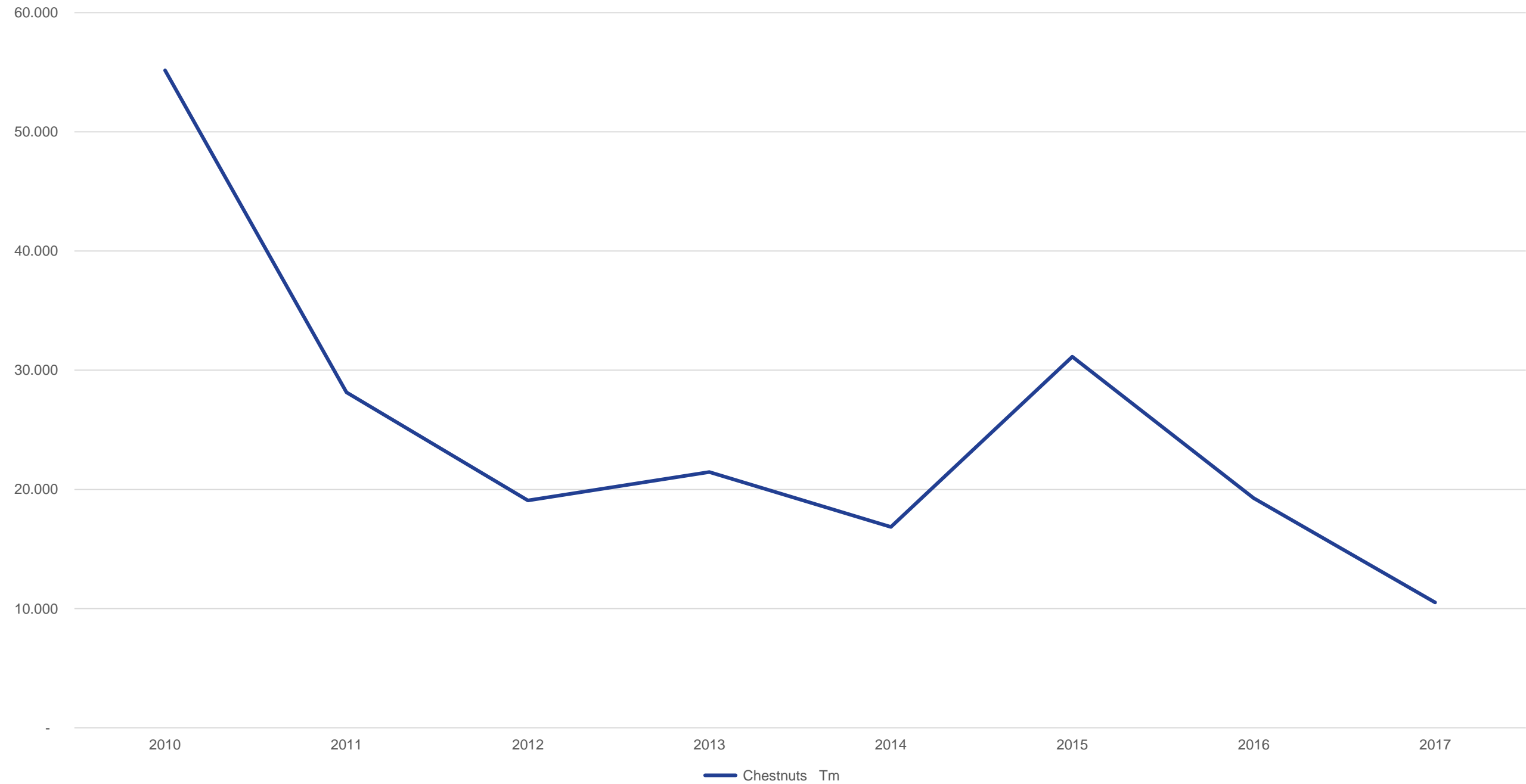
Annual production Pine seed Ton



Forest Fruits: o Pine seed: production has declined significantly in recent years, as a result of diseases ("leptoglossus") that, currently, are the most important limitation for this sector and what has caused the disappearance of the most important company, moving to Italy control of international product markets. The business sector is concentrated in the province of Valladolid and to a lesser extent in the provinces of Huelva and Córdoba.

La Estructura Económica del sector Forestal en España en el periodo 2000-2015 (Ortuño y González, 2019)

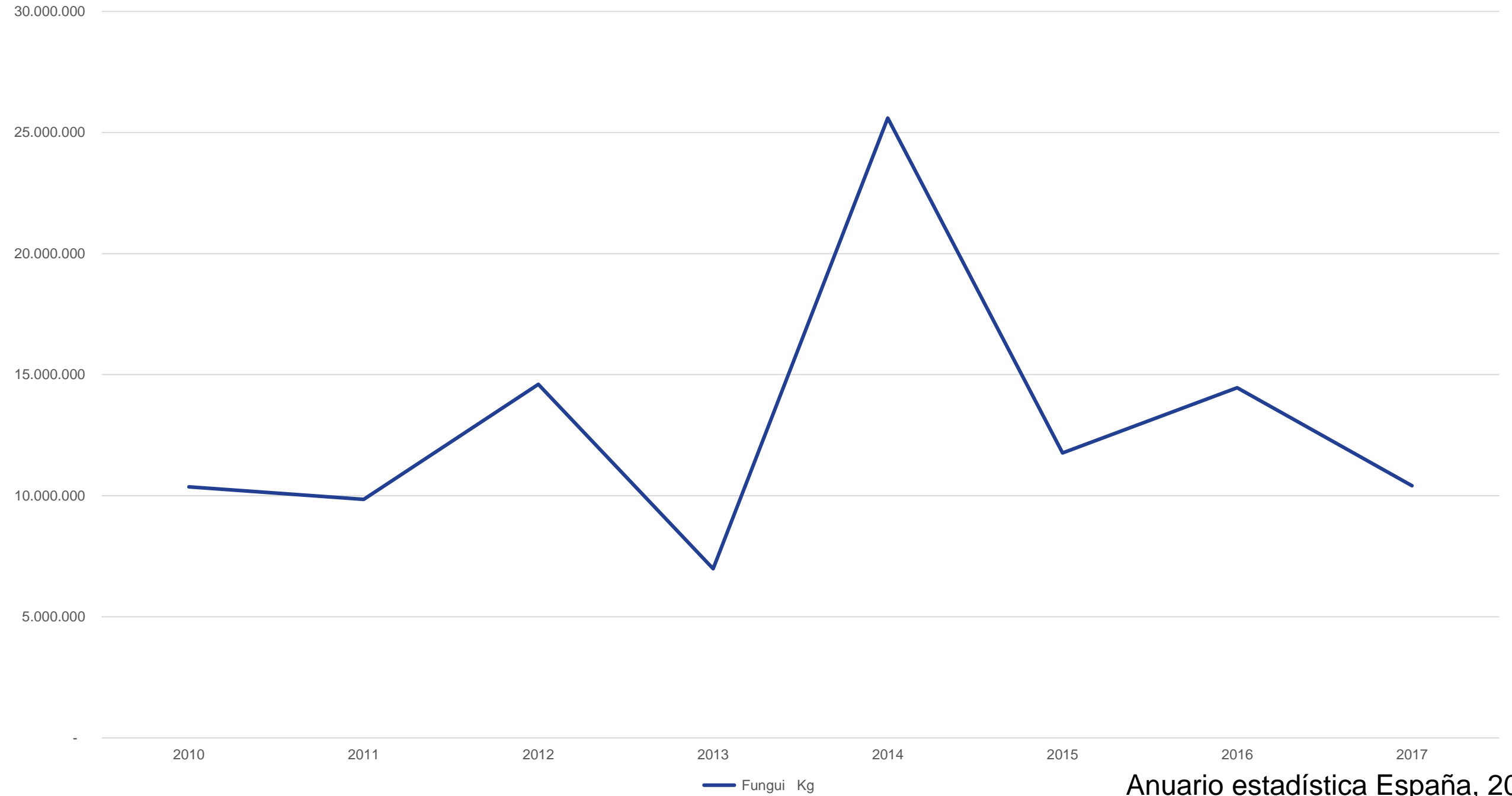
Annual production Chestnuts Tm



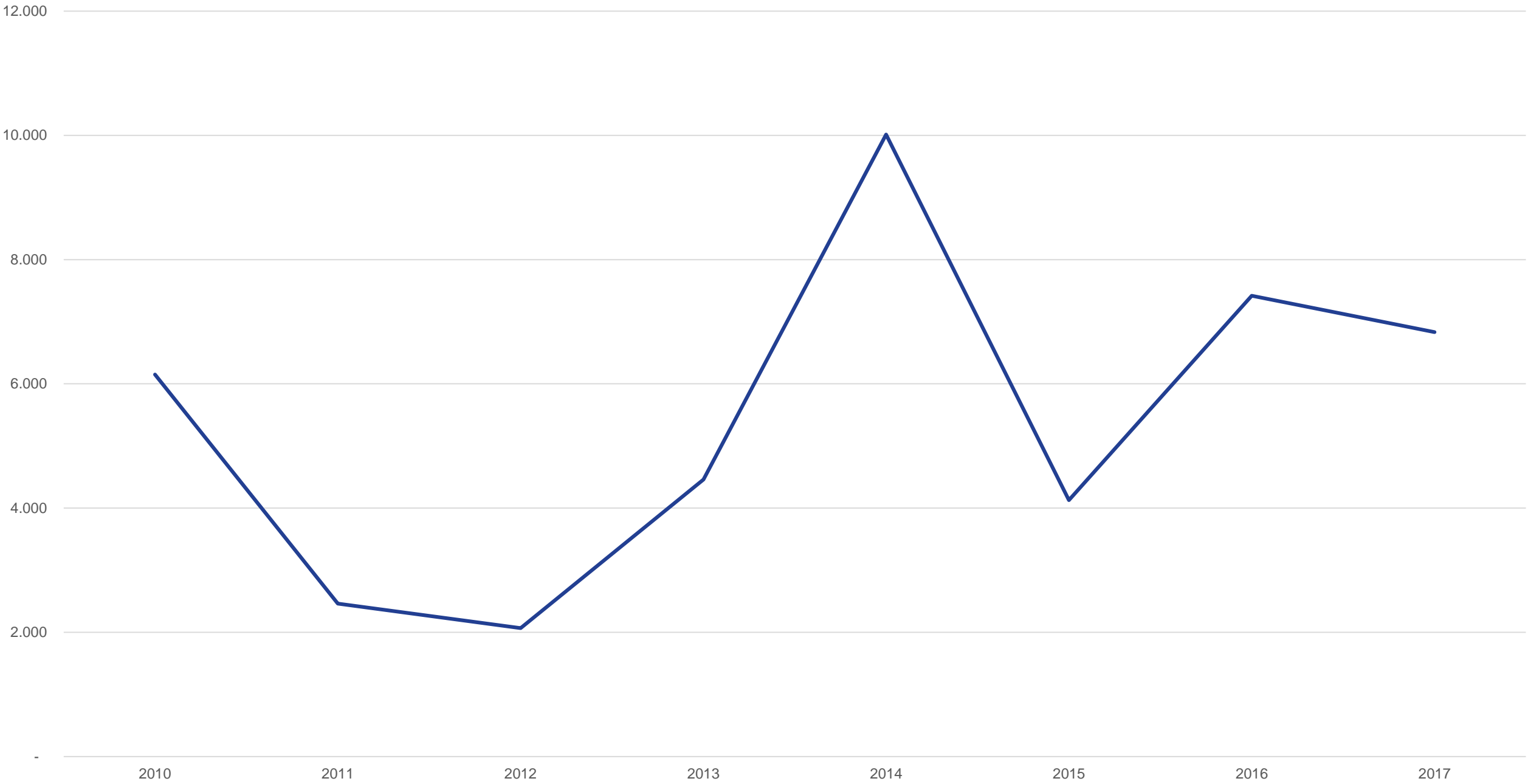
Chestnut: production is affected by diseases (chancre, ink and more recently the "wasp").
Production and the main processing companies are concentrated in Galicia (Lugo and Orense) and León, although there are also significant nuclei in Extremadura and Andalusia.
Farm minifundismo is the biggest problem in the sector. The demand for the product is growing and the market price is stable.

La Estructura Económica del sector Forestal en España en el periodo 2000-2015 (Ortuño y González, 2019)

Annual production Fungui Kg



Annual production Truffles Tm

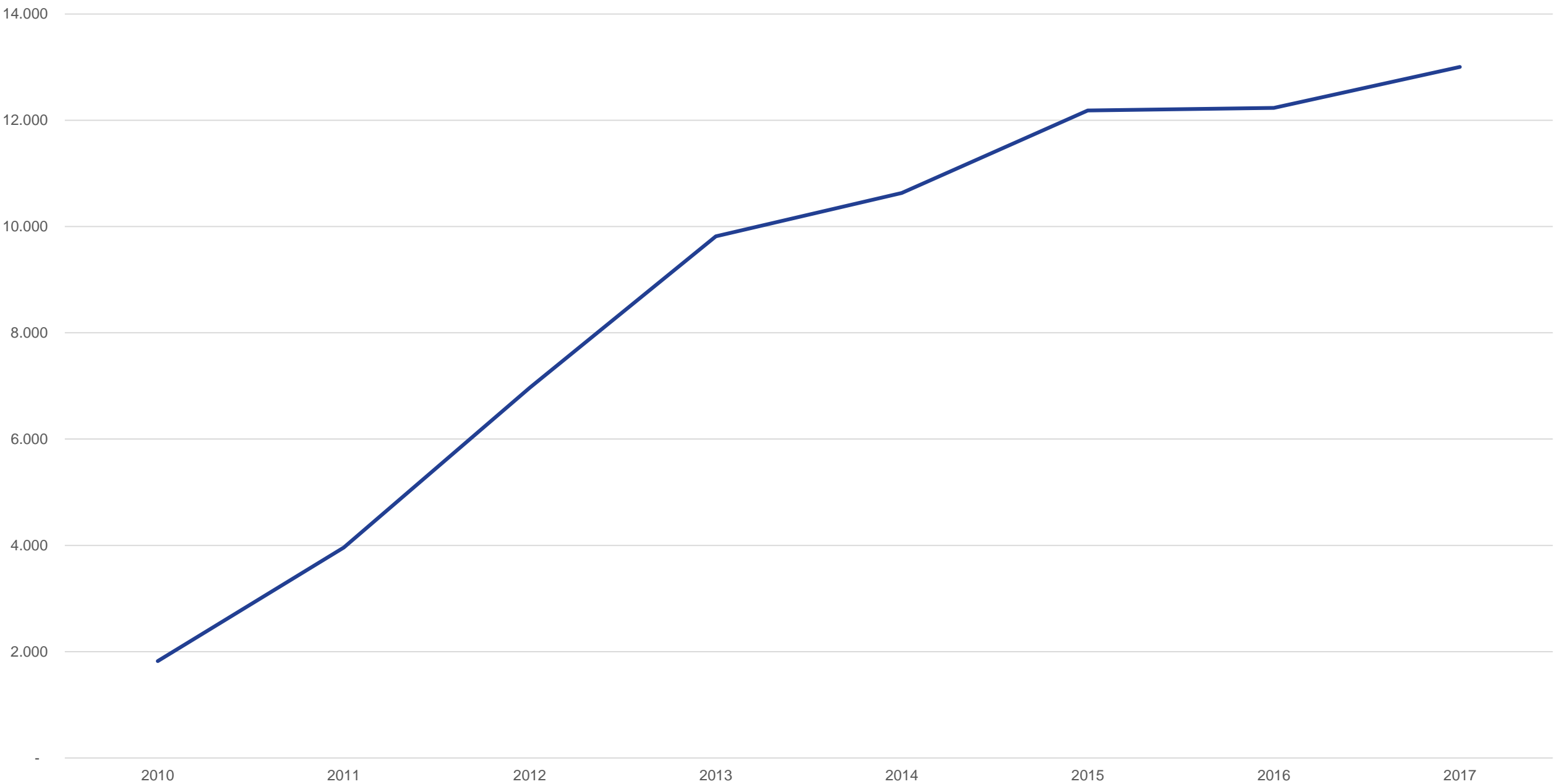


Truffles Tm

Fungi and truffles: the mycology sector has grown significantly and has great potential to continue doing so if its use is regulated. The estimated turnover of the mushroom sector amounts to € 200 million per year, although the real amount will be higher, since there are no transparent marketing channels and there is also a high percentage of self-consumption and local consumption. As for truffles, wild production is currently very small and what has developed exponentially is the cultivation of truffles, the surface has doubled and is concentrated in some regions of the Iberian System.

La Estructura Económica del sector Forestal en España en el periodo 2000-2015 (Ortuño y González, 2019)

Annual production Resine Tm



Resine Tm

Resin: more than 80% of the production in Spain was concentrated in Castilla y León, it has also grown exponentially in recent years, from just 2,000 tons in 2010 to more than 12,000 tons in 2016. The decrease in exports China and the rise in prices for the producer are the main causes of this trend change. On the other hand, the deficit of raw material and derivatives is very important in the EU, so there is ample scope to expand its development to new areas of resin. Large Portuguese and Brazilian companies have entered the Spanish market in recent years.

La Estructura Económica del sector Forestal en España en el periodo 2000-2015 (Ortuño y González, 2019)

Spanish forest/green entrepreneurs: who are they?

Male

- 78%

Not young

- 38 year old

Experienced

- More than one entrepreneurial experience

High Education

- 80%

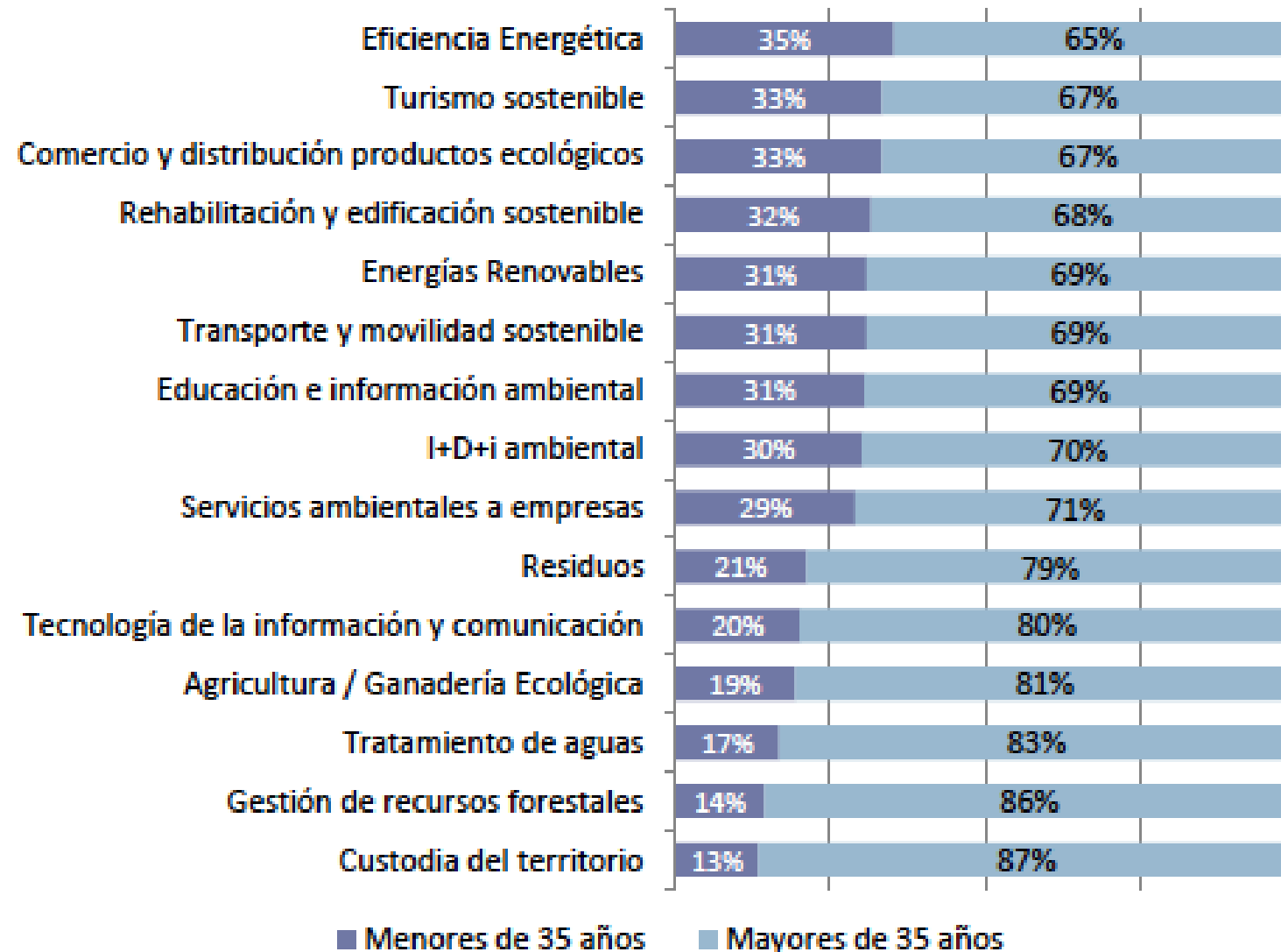
With no entrepreneurial training

- 65%

Urban

- 70%

Spanish forest/green entrepreneurs: Green sector and age



Spanish forest/green entrepreneurs: motivation



(*) En los resultados del Informe GEM 2012 esta serie se refiere a otro tipo de motivaciones no clasificables en ninguna de las demás opciones planteadas, mientras que para las otras dos categorías se refiere a "No sabe / No contesta"

Fuente: elaboración propia a partir de Informe GEM 2012 y Estudio sobre Opinión Pública y Política Fiscal (Módulo PYMES y emprendedores) CIS, Julio 2012

Spanish forest/green entrepreneurs: supporters and obstacles



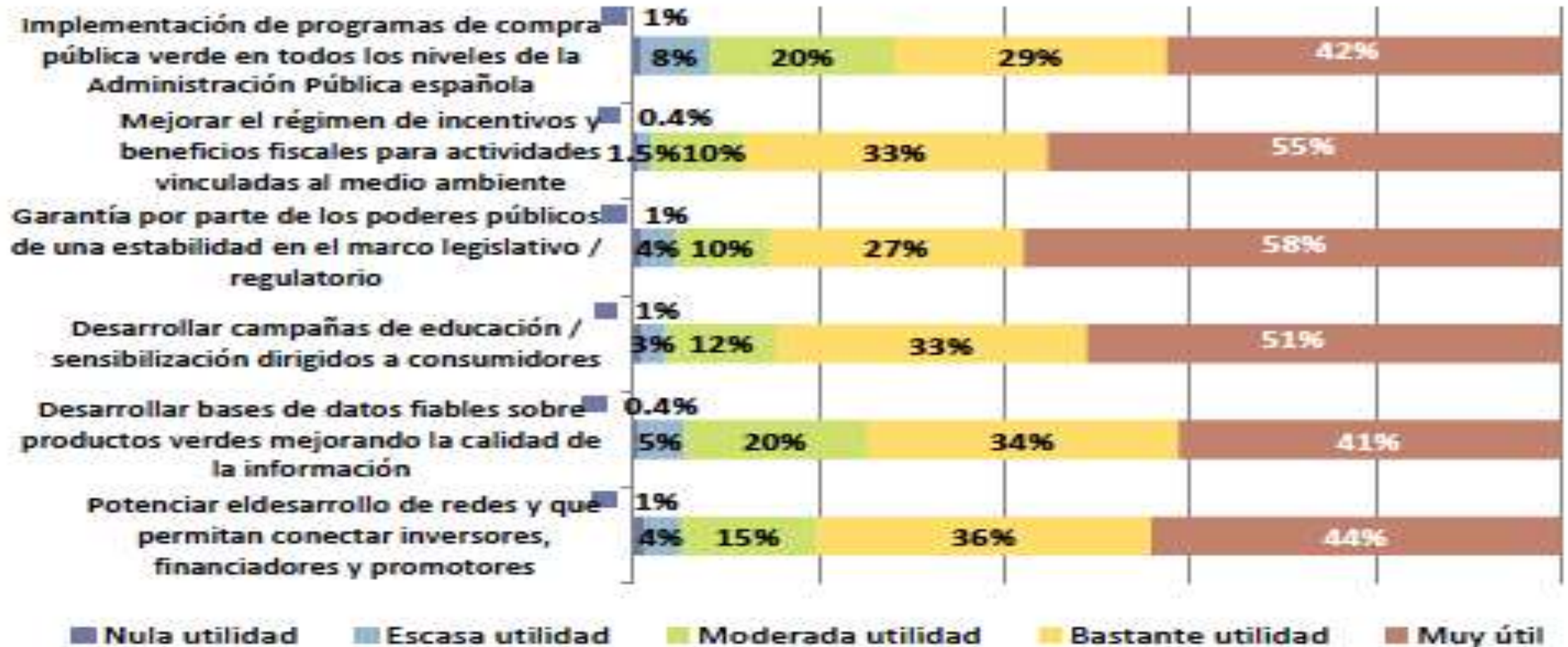
Supporters

- Family, friends
- Entrepreneur networks
- Cámaras de Comercio

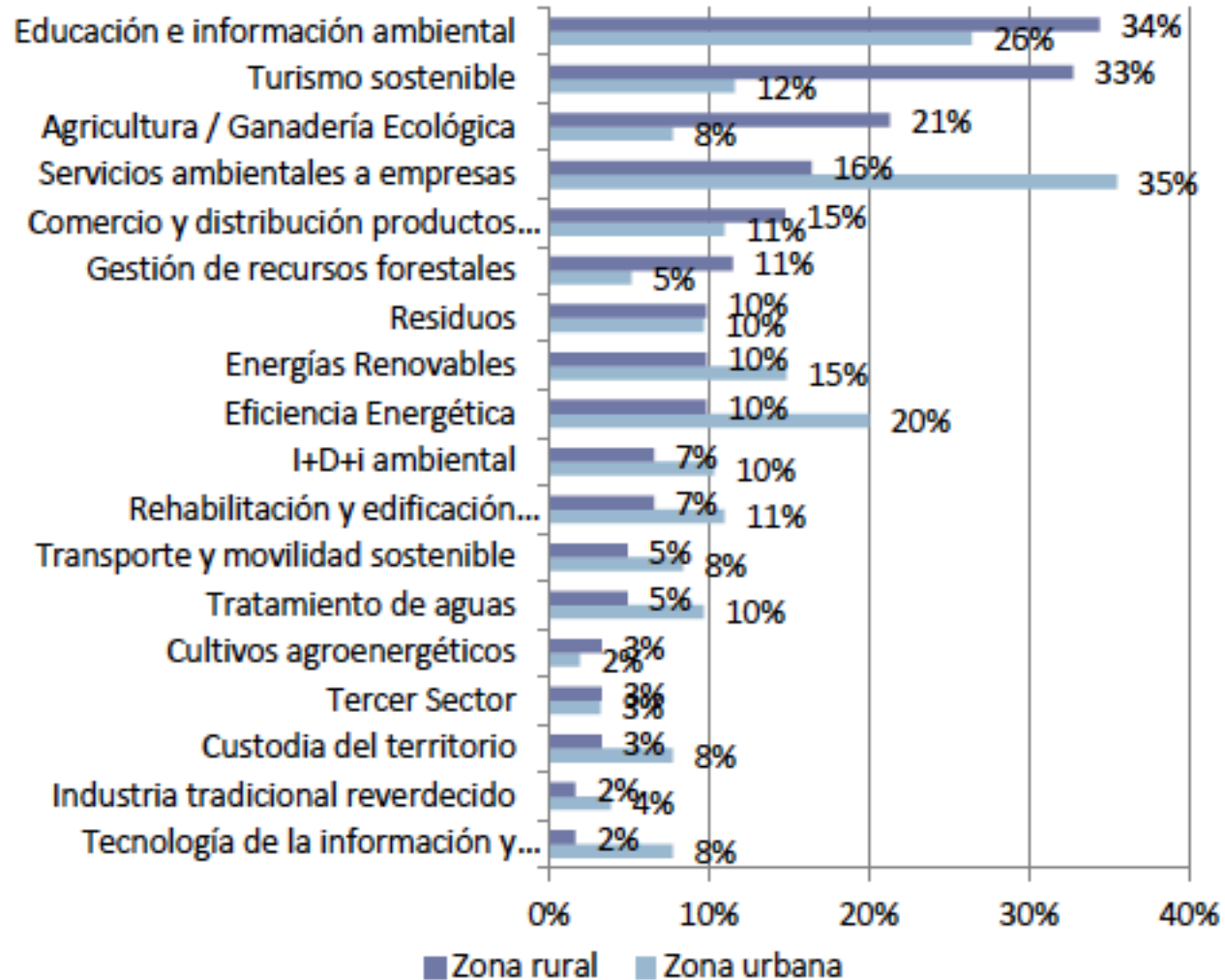
Obstacles

- Context of uncertainty
- Regulatory framework
- Education System
- Subsidies
- “freelance” fee, doesn’t depend on incomes

Spanish forest/green entrepreneurs: supporters and obstacles



Spanish forest/green entrepreneurs: differences rural/urban



You'll go far if your pillars are...

Innovation as value
proposal

Networks
Associations

Accelerator,
incubator and other
initiatives - UFIL,
Treennova,
ECOSTAR,
INCREDIBLE, SUS
Forest

Bioeconomy based
Solutions

Synergies



uia.cuenca.es

Thank so much!
We want you!



@UFIL_Cuenca



UFIL Cuenca

