

Collecting data for electricity/CHP in Portugal

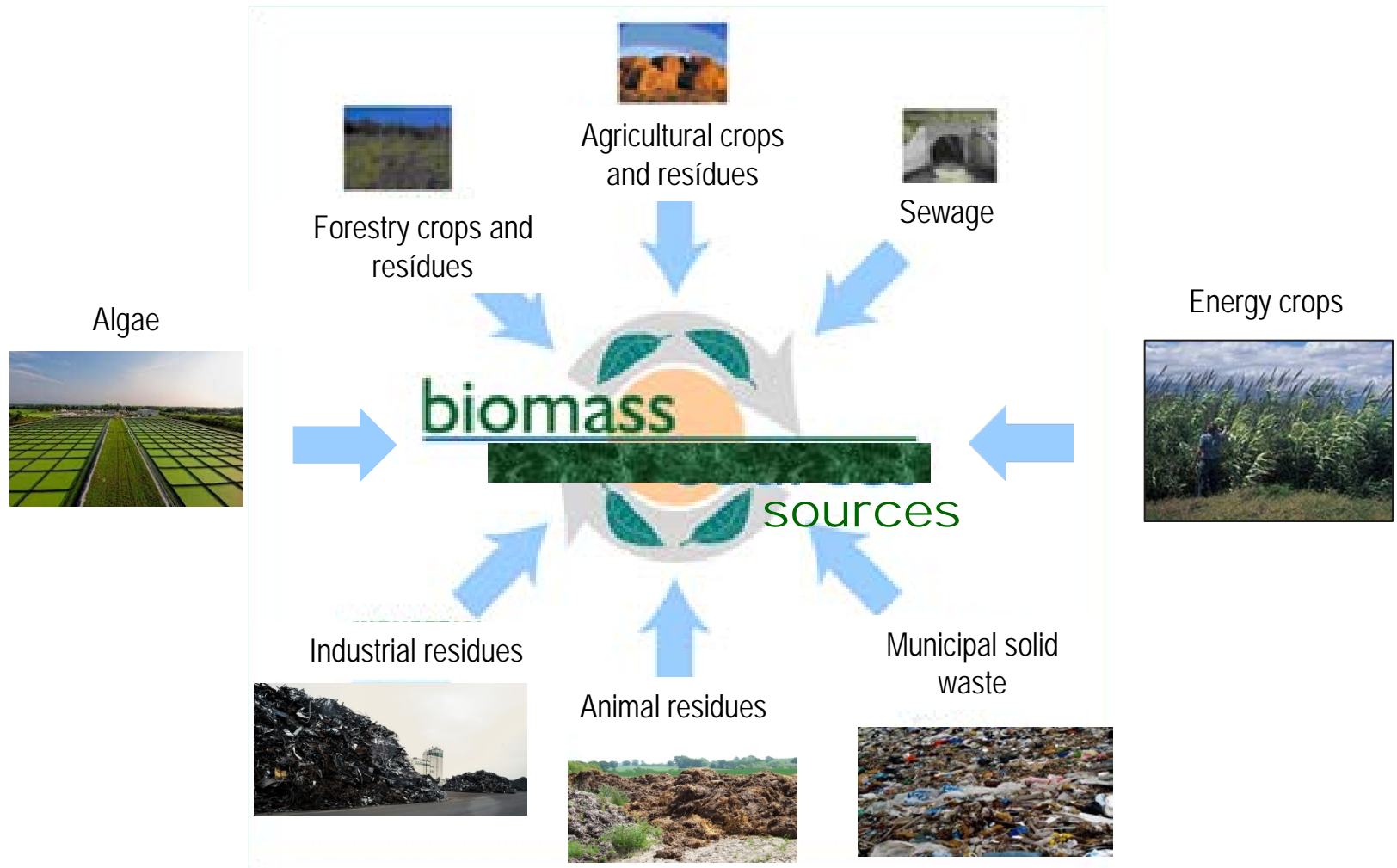
Carlota Duarte
&
Maria da Graça Torres

Directorate General of Energy and Geology

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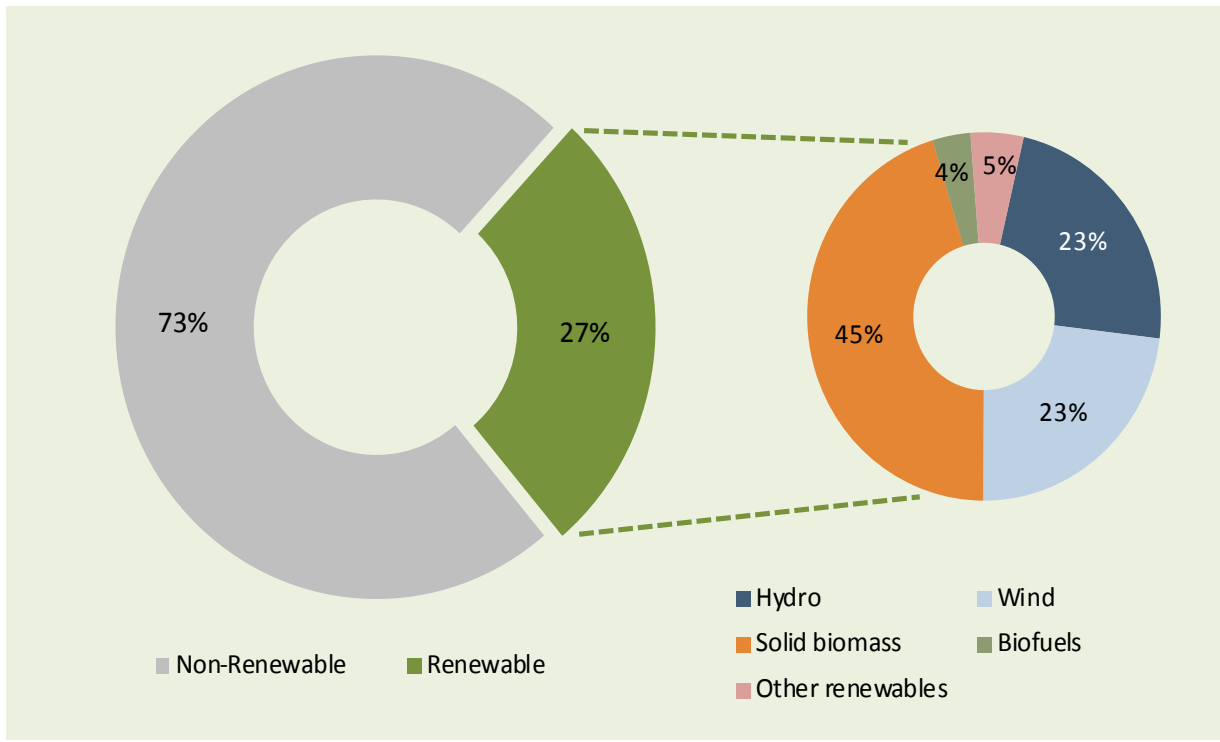




Renewable share in final consumption in 2014

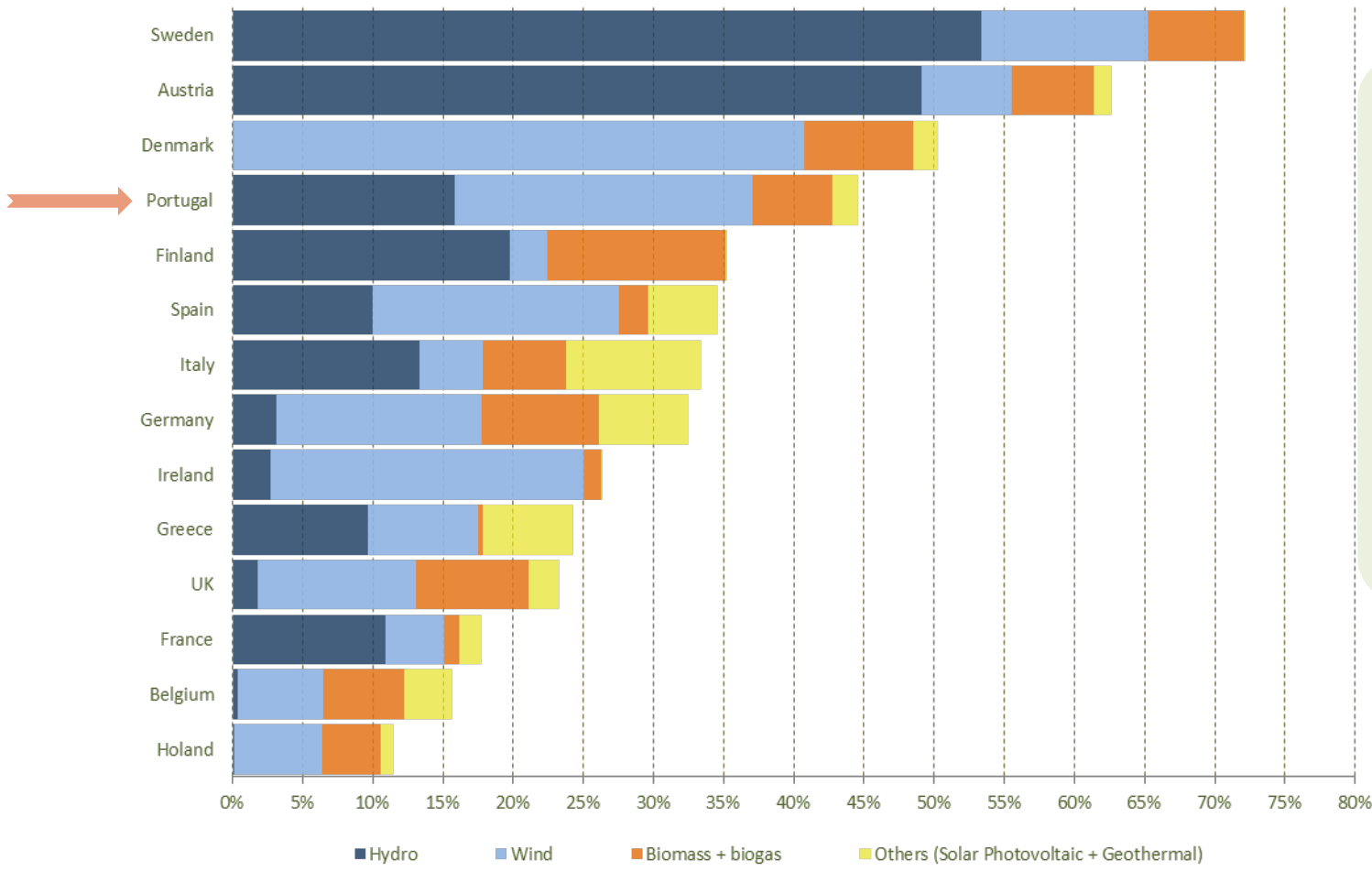
Biomass roughly accounts for 50% of renewable production, hydro 23% and wind power 23%. and 4% from biofuels. Biofuels represent 4%.

In 2014, 60% of biomass was used as fuel for thermal and CHP power plants.



Electricity production from RES in EU countries (%)

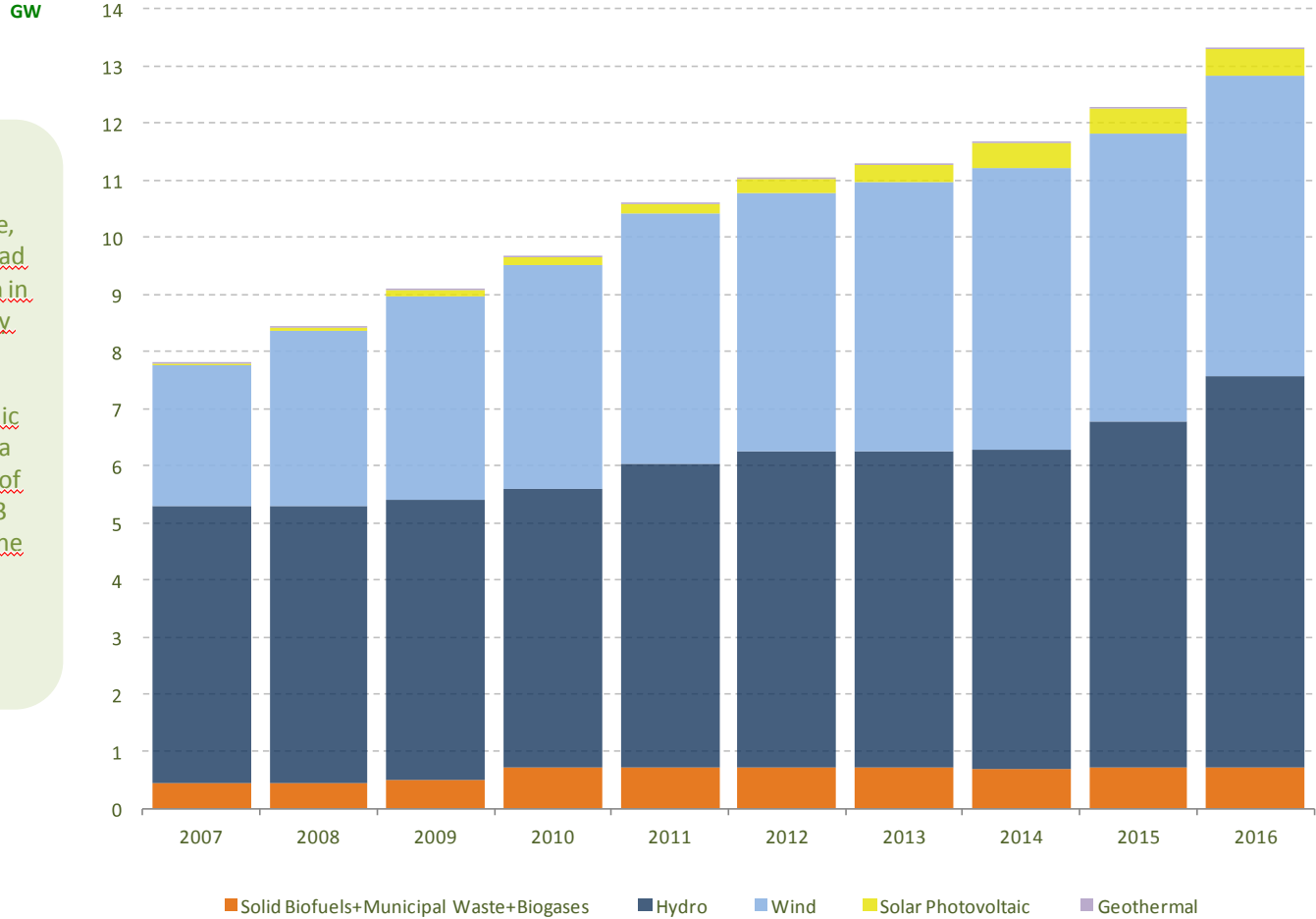
2015



In 2015 Portugal was the fourth country, in the EU, with the largest share of electricity production by RES.

This was due to the contribution of hydro and wind power representing 84% of RES production.

Installed capacity - distribution by technology

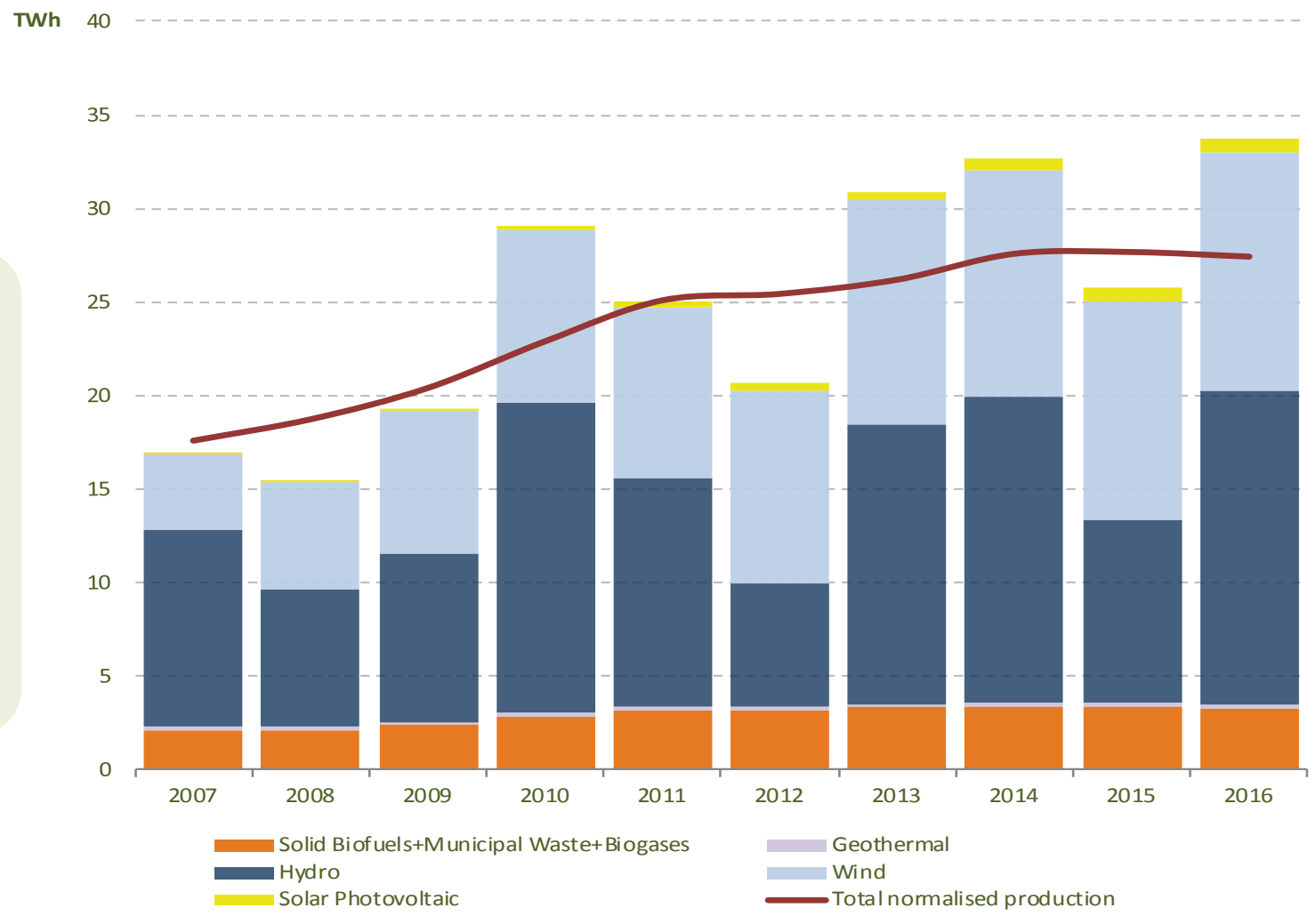


In the last decade, wind power has had the largest growth in installed capacity (2,8 GW).

Solar Photovoltaic has grown from a negligible source of electricity to 463 MW registering the largest relative growth rate.

Note: 2016 was estimated.

Electricity Production from RES

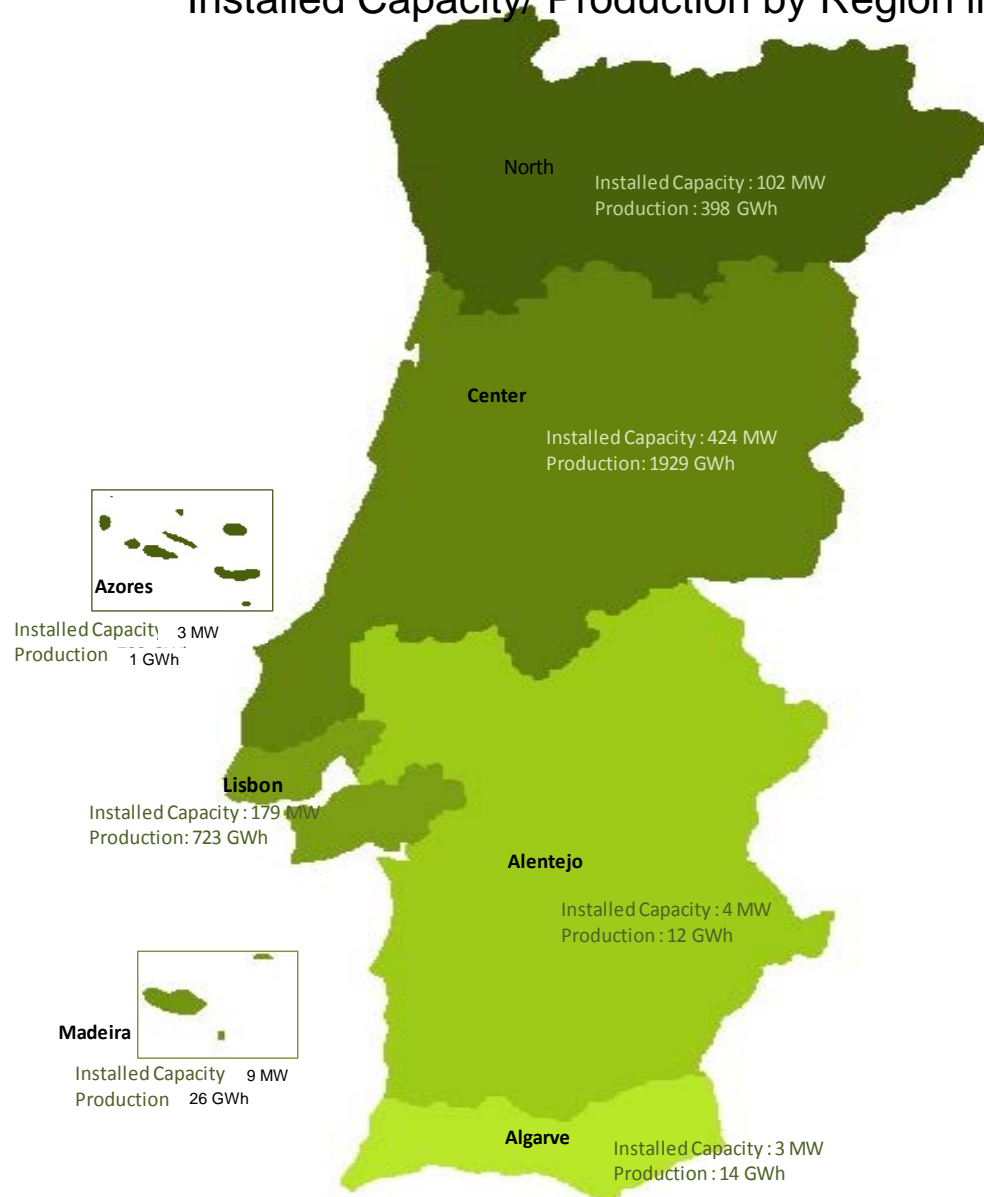


In 2016, the 30,2% growth in RES production is due to the 70% rise in hydro production.

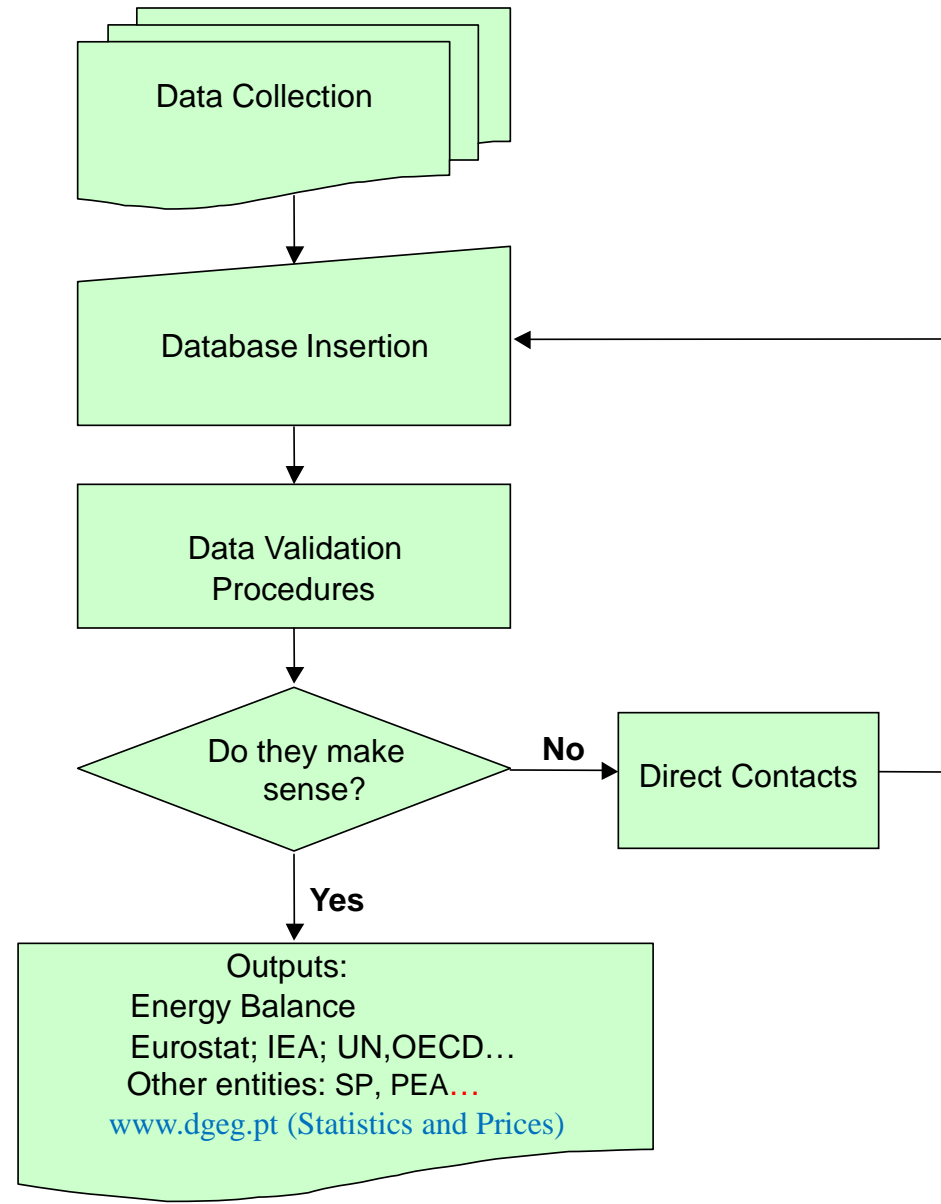
Electricity production from biomass changed very little in the last decade with a slight growth, remaining steady since 2010.

Note: 2016 was estimated.

Installed Capacity/ Production by Region in 2015



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Methodology- Data Collection

The need to conduct such questionnaires results not only from national and Community legal obligations, but also from commitments to international organizations, notably IEA, United Nations and OCDE, and to answer to requests from national public bodies.

Survey Universe: All electricity and cogenerators producers located in Portugal, as well as all electric energy retailers and distributors operating in Portugal during the reference year are included.

Data are collected through an annual questionnaire set at the beginning of the year N, referring to the previous year N-1, to all electricity and cogenerators producers. They are mandatory and must be answered till the end of March.

The collection, processing and dissemination of statistical data are done according to the principal of statistical confidentiality (Law n.º 22/2008 of 13 May): no individualized data are disclosed.

Methodology- Data Collection- Producers

The annual questionnaire include information about:

- Gross electricity and net production
- Gross heat production and net heat consumption
- Electricity and heat sales
- Fuels consumption by equipment (biomass, natural gas or fuel).
 - In the case of biomass, its type (black liquors, florest residues, wood waste, bagasse, etc) is questioned and whether it is national or imported.

Methodology- Data Collection- Producers

- Detailed equipment, namely:
 - Capacity (Installed, maximum, thermal)
 - Type of equipment (boilers, steam turbines, motors, gas turbines)
 - Year of the assembly
 - Operation hours (for the reference year)
 - Manufacturer
- Electricity and Heat provided and acquired by customer/supplier (with NACE)
- Main activity (NACE)
- Main fuels suppliers

Methodology- Data Validation

The data obtained is entered into a computer application, being housed at DGEG SQL-Server.

Subsequently the information is verified using an excel file (previously made) that feed automatically from the respective database.

The information obtained is treated and analyzed by producer and marketer according to rules of coherence, mastery and structure. Whenever there are mistakes in filling files, values that are no reasonable, serial breaks or any other reason that jeopardizes the quality of the statistical information, the producer is always questioned.

Methodology- Data Validation

Treatment of non-responses

The producer is contacted (via e-mail and telephone) in order to obtain the missing information (total or partial).

If no response is obtained :

- ❖ If the plant already exists, a estimated is made based on the historical information provided by the plant;
- ❖ If new power plant, values are allocated using other sources related to the sector (ex:ISO)

The situations resulting from imputations are reviewed and replaced in the next year N+1.

Methodology- Outputs

- **Prevision of information** : the global information for the year N is made available in October of the next year N+1.
- **Review policies**: regular current revisions are mainly due to the incorporation of new information or replacement of information previously declared by the producer/retailers.
Extraordinary revisions are necessary only when new (or changed) information causes a relevant change (ex: the changing on NACE classifications)
- **Frequency of revisions**: The current revisions of the year N occur at the analysis and disclosure of the year N+1.
Extraordinary revisions are not scheduled.

Thank you very much,
for your attention.