



## Final Conference

Sustainable Biomass Production from  
Marginal Lands: Potentialities and  
Challenges in the European Context  
20 November 2018 | Brussels



Sustainable exploitation of biomass for bioenergy from marginal lands in Europe

# Sustainable exploitation of biomass for bioenergy from marginal lands

Its contribution to mitigate the risk of competition between  
bio resources and food security

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Project coordinator

Partners



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# H2020 funded project SEEMLA

## Sustainable exploitation of biomass for bioenergy from marginal lands (MagL) in Europe

**Duration:** 01/2016 – 12/2018

**Partner countries:** Greece, Italy, Ukraine and Germany

Eight partners and four pilot case areas in Greece, Ukraine and Germany



### Main objectives:

- (i) the promotion of re-conversion of MagLs for the production of bioenergy through the direct involvement of farmers and forester
- (ii) the strengthening of local small-scale supply chains
- (iii) the promotion of plantations of bioenergy plants on MagLs

### OBJECTIVES

SEEMLA aims to assess the availability and suitability of MagL as alternative production sites for renewable resources in order to mitigate existing and potentially increasing conflicts between food production and nature conservation.

The identified MagL will be classified in order to develop specific land use options for different types of sites.

Political or administratively motivated restrictions to use MagL in the framework of an agri-environment scheme or as a mechanism to reduce food production, spatial planning or to safeguard socio-ecological developments (such as GHG savings, biodiversity etc.) will be assessed.

A set of specific indicators will be developed and implemented for assessing potentials for biomass production at MagL as well as ecosystem services provided like GHG savings or biodiversity by marginal sites and their valorisation due to land-use systems.

The project approach will be applied in 4 pilot areas, representing Mediterranean, Central and Eastern Europe, in order to test the effectiveness of the methodology.

Evaluating and testing the effectiveness of SEEMLA approach in four pilot areas, representing South, Central and Eastern Europe.

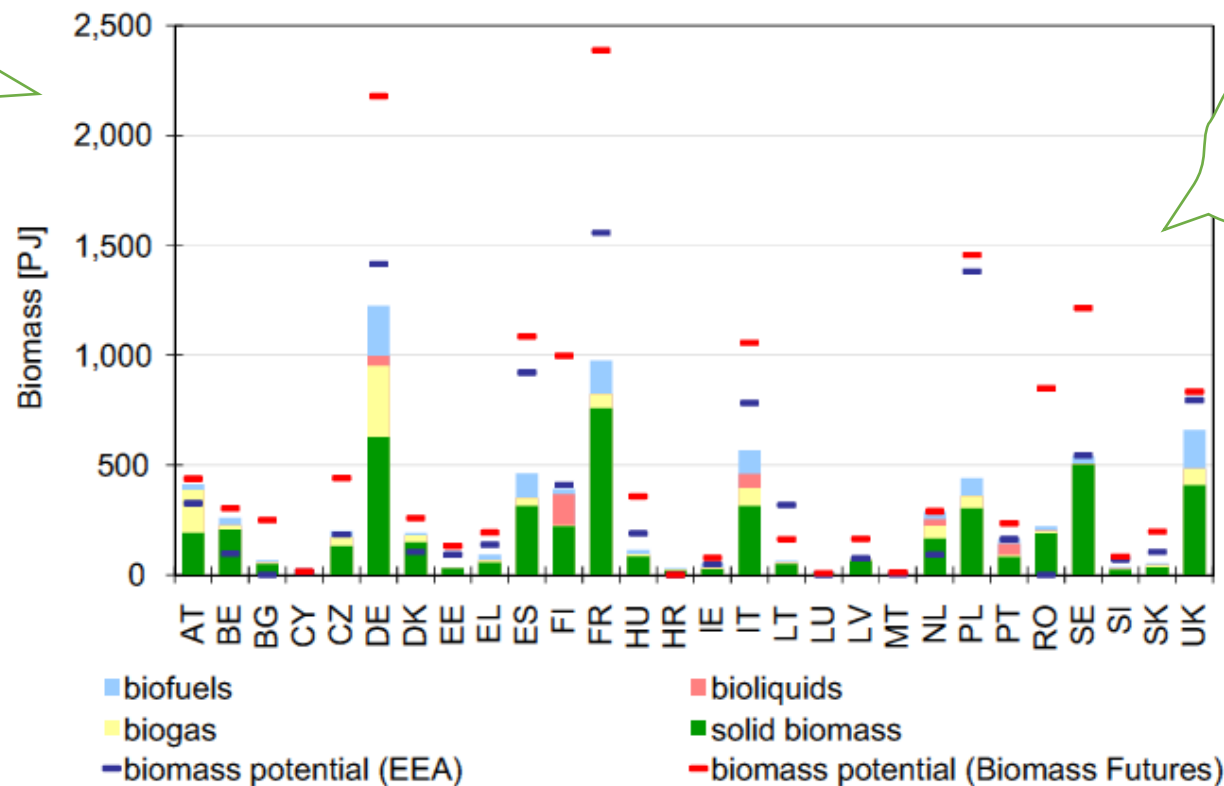
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## Primary biomass demand in 2020 and biomass potential in EU Member States (MS)

How to mobilize additional biomass?



How to minimize/avoid "food vs. fuel" conflict?



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Scarlat, N., Dallemand, J.-F., Monforti-Ferrario, F., Banja, M., Motola, V., 2015. Renew. Sustain. Energy Rev., 51:969-985



## European wood pellet production

(in 2015, tonnes, %)

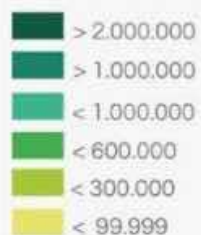
EU-28 production

14,1

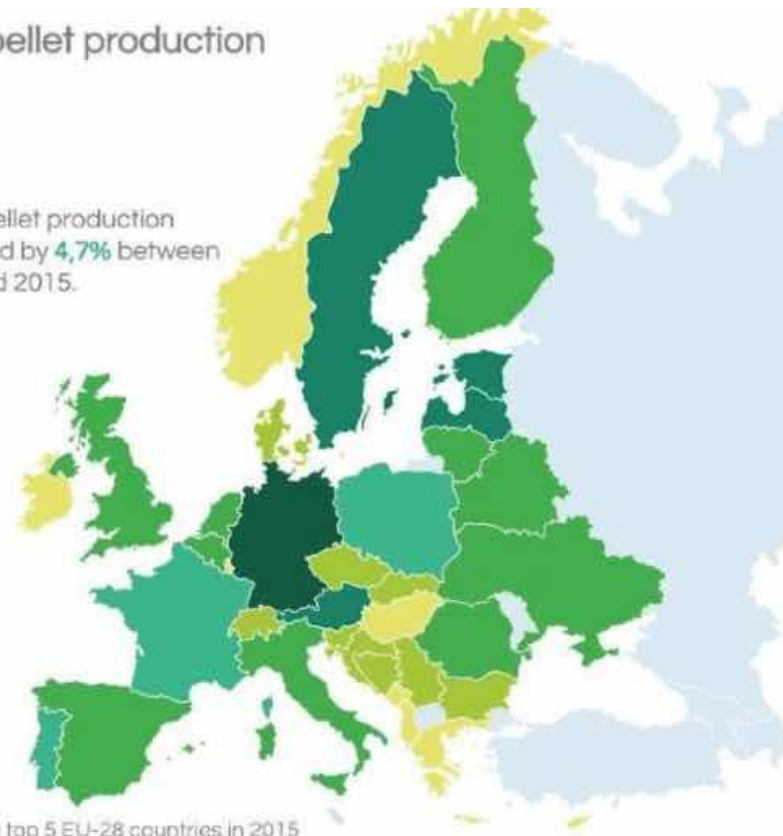
million tonnes in 2015

EU-28 pellet production increased by 4,7% between 2014 and 2015.

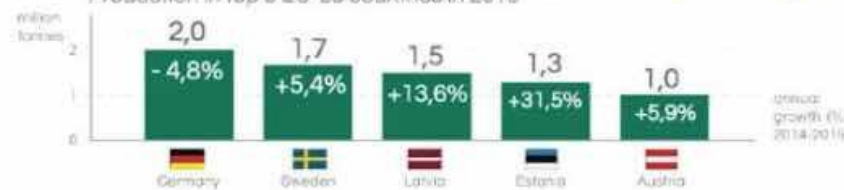
Actual production  
(in tonnes)



Source: EPC Survey



Production in top 5 EU-28 countries in 2015



Source: <https://biomass.exchange/eu-main-wood-pellet-production-and-consumption-figures-for-the-year-2015/>

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## European wood pellet consumption

(in 2015, tonnes, %)

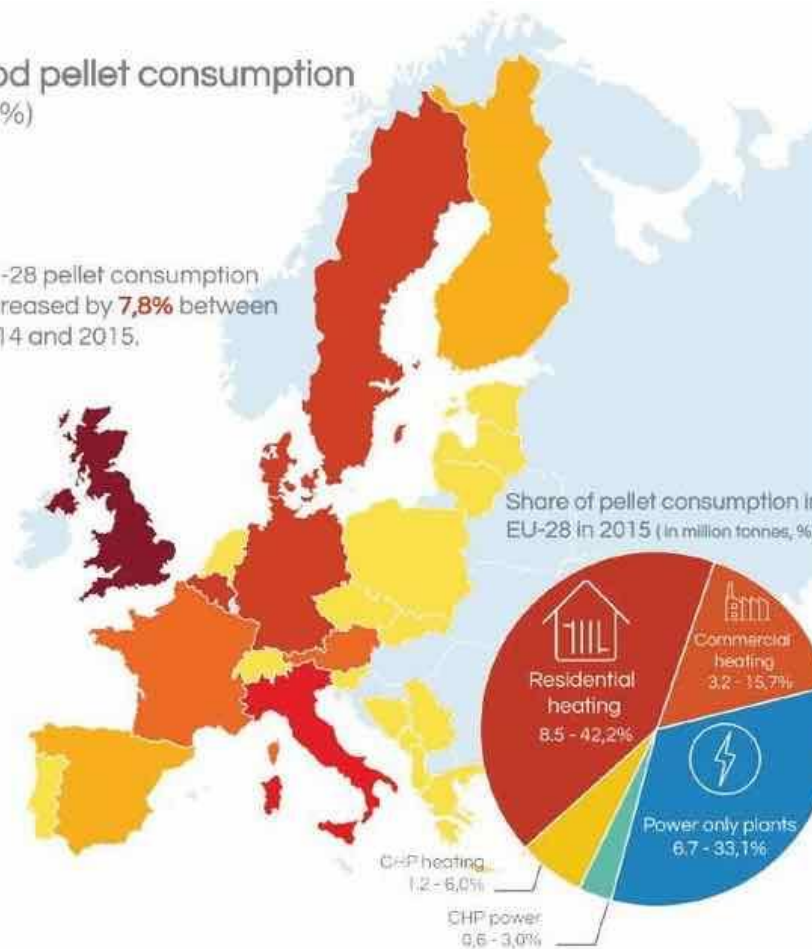
EU-28 consumption  
**20,3**  
million tonnes in 2015

EU-28 pellet consumption increased by **7,8%** between 2014 and 2015.

Actual consumption  
(in tonnes)



Source: EPC Survey



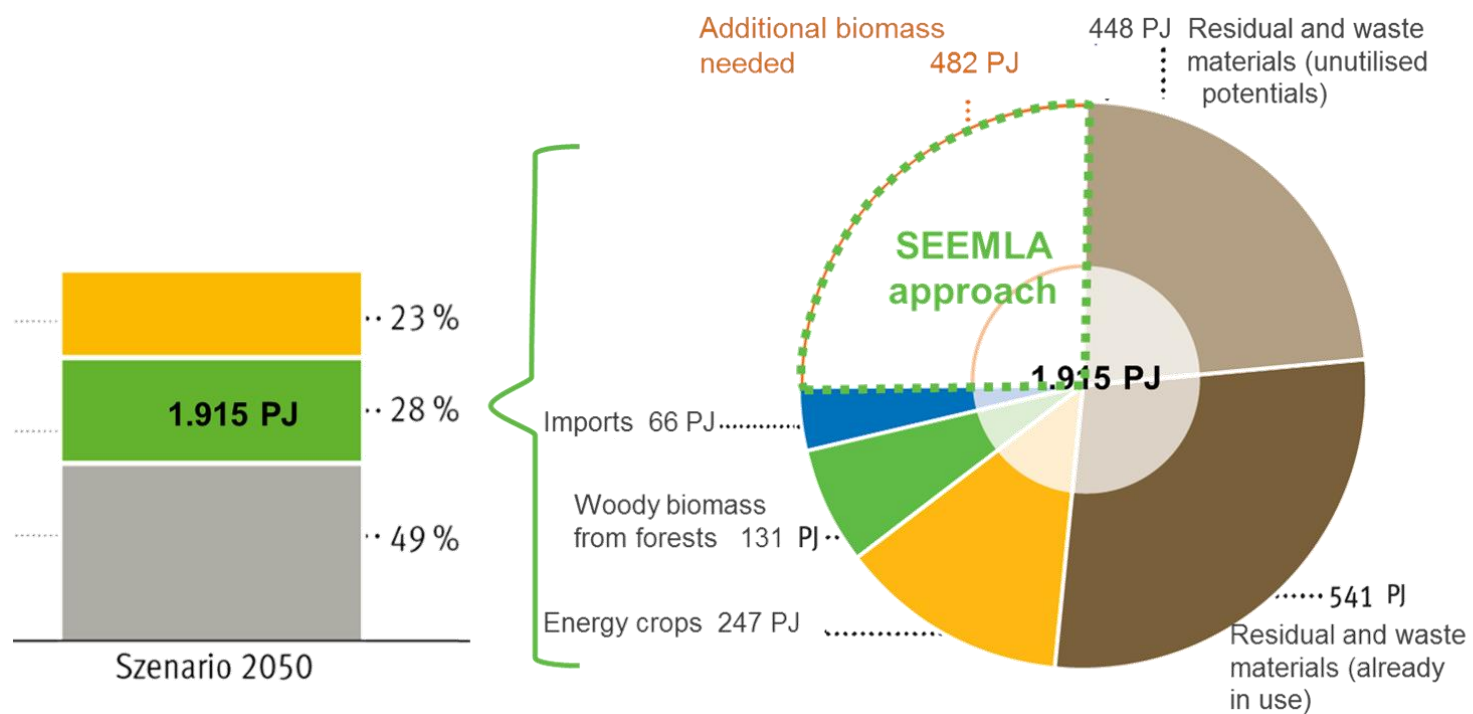
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<https://biomass.exchange/eu-main-wood-pellet-production-and-consumption-figures-for-the-year-2015/>



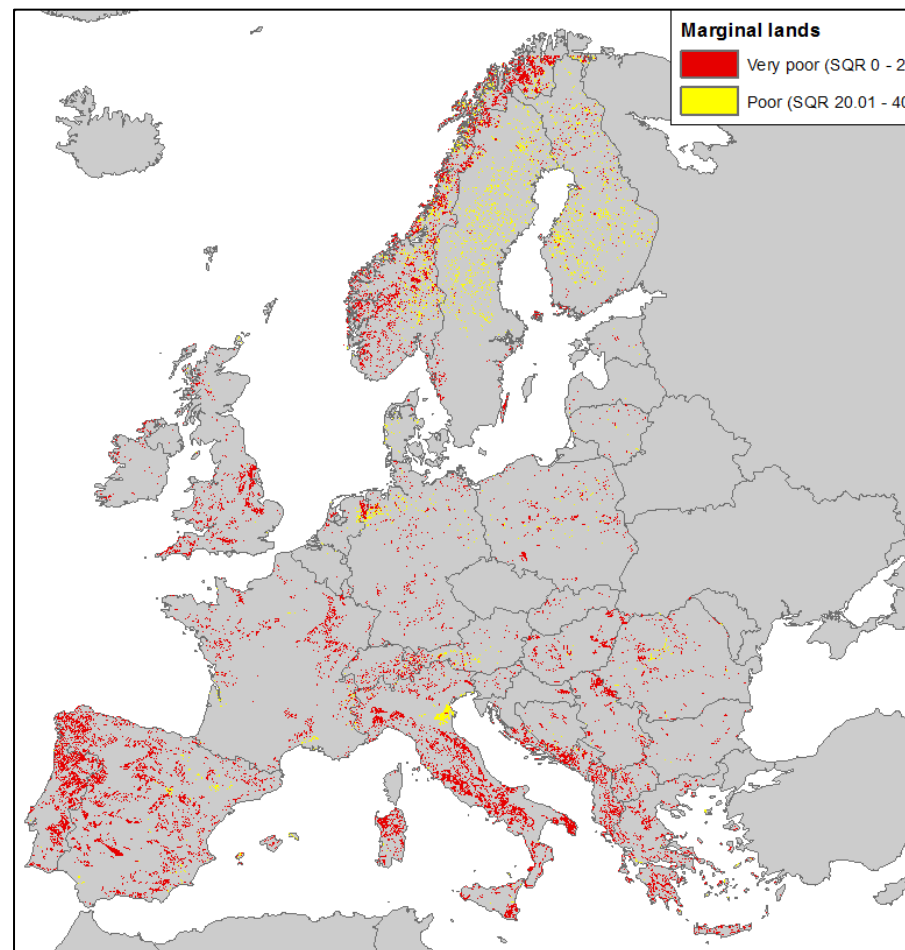
## Energy scenario for Germany 2050



Source: FNR, 2016 based on and modified after AGEB 2015, BMWi (forecast) 2014

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Identified marginal land available for biomass production for bioenergy purposes, based on the SEEMLA GIS tool.

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# Thank you very much for attention!



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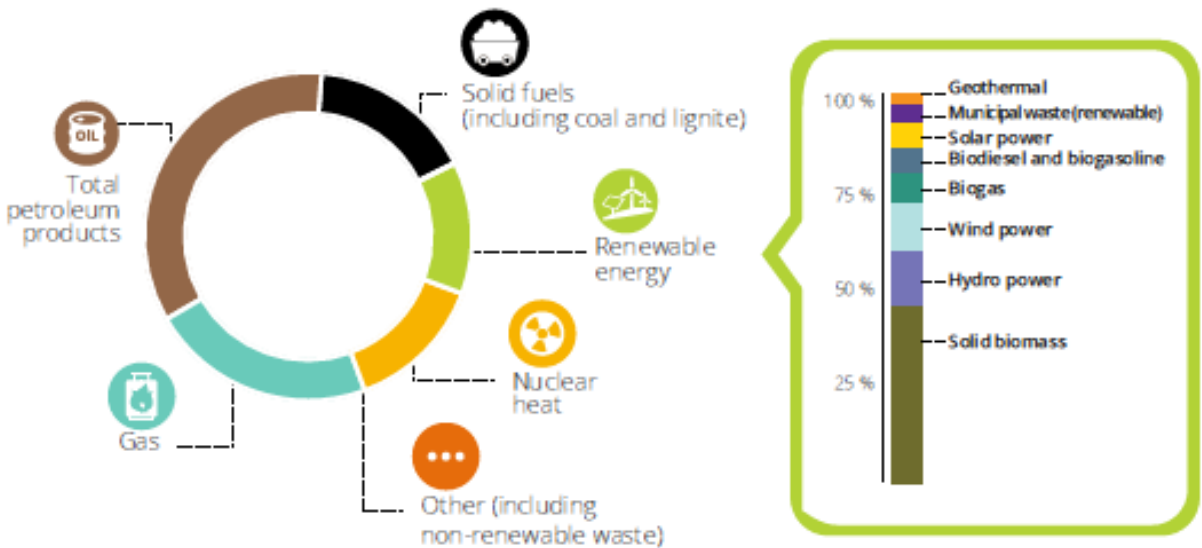


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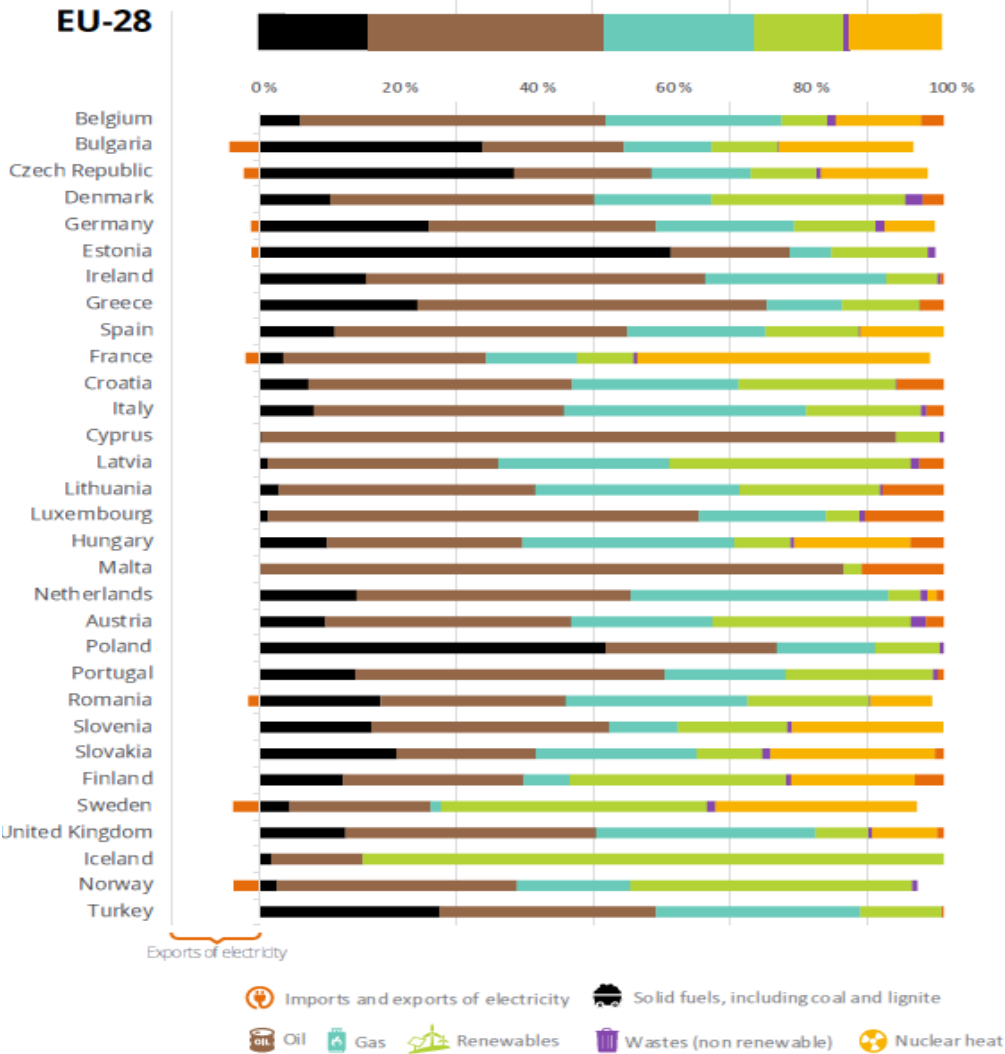
### Gross inland energy consumption by fuel in the EU (2015)

Gross inland energy consumption represents the quantity of energy necessary to satisfy the inland consumption of a country. A small fraction is used for purposes other than producing useful energy (non-energy uses), such as petrochemical products.



Source: EEA Report , Signal 11/2017

### Gross inland energy consumption by country and by fuel type (2015)



Source: EEA Report , Signal 11/2017

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