



Grant Agreement 823805 MAIL H2020 MSCA RISE 2018

Marginal Lands in the EU. Forest regulation and context



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Francisco Gallego, Cesefor



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Marginal Lands Workshop, 25 and 26 November 2021



Environmental policy in the EU

- Legal basis: Articles 11 and 191 to 193 of the Treaty on the Functioning of the European Union (TFEU).
- General principles: precaution, prevention and rectifying pollution at source, and on the 'polluter pays' principle.
- Basic framework:
 - Environment Action Programs: set out forthcoming legislative proposals and goals for EU environment policy. In 2020 was presented the 8th EAP (2021-2030). It builds on the environmental and climate objectives of the European Green Deal.
 - Horizontal strategies: includes the Biodiversity Strategy for 2030, Forest Strategy for 2030. Others: Sustainable Development Strategy, Towards a Sustainable Europe by 2030 or Farm to Fork Strategy
 - International environmental cooperation: party of 2030 Agenda for Sustainable Development, The Paris Agreement on Climate Change, Convention of Biological Diversity, the Sendai Framework for Disaster Risk Reduction or the CITIES convention
 - Environmental impact assessment and public participation: Aarhus Convention, for public participation, access to environmental information and the right to justice.
 - Implementation, enforcement and monitoring: minimum standards for environmental inspections, environmental implementation review or State of the Environmental Report.



Biodiversity, land use and forestry

- **Legal basis:** articles 3, 11 and 191-193 of TFEU
- **Milestones:** the EU has played an important role in seeking solutions to biodiversity loss, deforestation and climate change.
 - 1992: UN Conference on the Environment and Development: adoption of the Convention on Biological Diversity
 - 2011: EU committed itself to halting the loss of biodiversity and degradation of ecosystem services in the EU by 2020.
 - 2015: Paris Agreement on climate change indicating the importance in the protection of biodiversity
 - 2019 European Green Deal: new biodiversity strategy that aims to put Europe's biodiversity on the path to recovery by 2030



Biodiversity, land use and forestry

Objectives and achievements

- Biodiversity action plans: 2006 (halting the loss of biodiversity by 2010) and 2011 (EU biodiversity strategy to 2020)
- Conservation of natural habitats and of wild fauna and flora: The Habitats Directive (Council Directive 92/43/EEC amended by Directive 97/62/EC) established a European network, Natura 2000. It comprises 'Sites of community Interest/ Special Areas of Conservation' and 'Special Protection Areas'. (850,000 km²)
- Invasive alien species: Regulation (EU) N° 1143/2014 on the prevention and management of the introduction and spread of IAS
- Access and benefit-sharing: Regulation (EU) N° 511/2014. Establish requirements for access to genetic resources in the country of origin and ensuring that the benefits are fairly and equitably shared.
- Exploitation and trade of wild fauna and flora: The CITES convention regulates international trade. The basic regulation (EC) N° 338/97 on the protection of flora and wild fauna applies the objectives, principles and provision of the CITES convention.
- Biodiversity related to animal welfare: Action Plan on Protection and Welfare of Animals 2006-2010.
- Marine biodiversity: Biodiversity Action Plans for Natural Resources and Fisheries.



Biodiversity, land use and forestry

Objectives and achievements

- Forests:
 - 30% of surface area of Natura 2000 network are forests.
 - Timber regulation (EU) N° 995/2010 lays obligations of operators who place timber and timber products in EU market.
 - 2013/2021: Communication: a new EU Forest Strategy
- LULUCF: Regulation (EU) 2018/841. Under this regulation GHG emissions from LULUF should be offset by at least an equivalent removal of CO₂ during the period 2021-2030
- Financial instruments: LIFE programs. Other funding support: under agriculture and fisheries policies, Cohesion and Structural Funds, etc.
- The European Green Deal (2019): provides an action plan to transform the EU into a sustainable and competitive economy. Among the actions proposed is an EU Biodiversity Strategy for 2030



Forest policies in the EU

There is not a common forest policy in the EU and forest products are excluded from existing EU treaties (just cork and some forest-related fruits) .

Formulation and implementation of forest-relevant policy is under the competence of EU Member States (principle of subsidiarity).

Policies ranging from climate to energy or agriculture, where the EU has competences, affects forest services and goods.

Forest-relevant legislation:

- EU Timber Regulation
- Common Agricultural Policy
- Habitats Directive

It is estimated that more than 570 policy documents, including legislation have direct or indirect effects on the EU forest-based sector



Forest policies in the EU

Concerns:

- Lack of legal authority or access to EU financial instruments had hindered multilevel forest governance
- EU forest strategy is not relevant at the level of EU Member States and therefore it has had a limited impact on the forest policies at national level.
- Fragmentation and contradictory policy objectives characterizes the EU forest-relevant policy (e.g. targets for renewable energy-biomass and conservation)
- EU forest-related policies from forestry, rural development, conservation and other sectors are focused primarily on the own policy objectives.

Conclusions:

- EU Forest-relevant policies lack cohesion or coordination , as most measures remain voluntarily and there is not a explicit EU competence on forest policy.
- It is needed a policy integration since most forest-related policies push for different sectorial priorities.
- Different socioeconomic interests keeps priority setting uncoordinated at EU level.
- The European Green Deal can bring a change in forest policies as it potentially shifts the focus on how forest resources are considered.



European Green Deal

Objective: transform the EU into a modern, resource-efficient and competitive economy, ensuring:

- No net emissions of GHG by 2050
- Economic growth decoupled from resource use
- No person and place left behind

Funding: 1/3 of 1,8 trillion euro investment from the NextGenerationEU Recovery Plan and the EU's seven-year budget

Actions:

Actions



[Climate](#)



[Environment and oceans](#)



[Energy](#)



[Transport](#)



[Agriculture](#)



[Finance and regional development](#)



[Industry](#)



[Research and innovation](#)

European Green Deal

- **Environment and oceans**

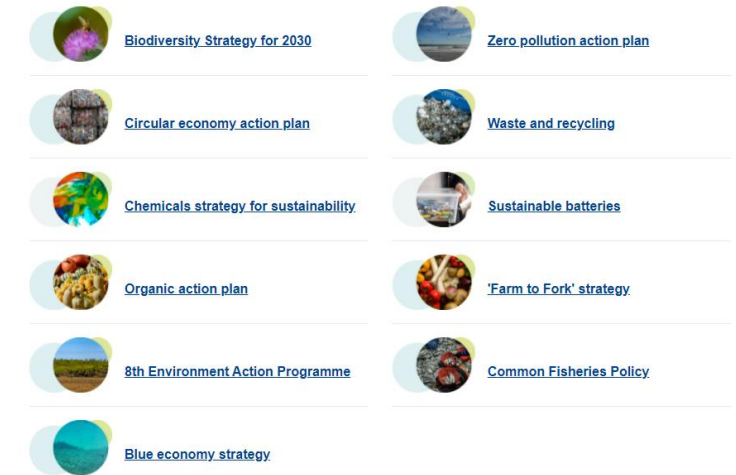
- Priorities:

- Protecting our diversity and ecosystems
 - Reducing air, water and soil pollution
 - Moving towards a circular economy
 - Improving waste management
 - Ensuring the sustainability of blue economy and fisheries sectors

- Actions

- Biodiversity Strategy for 2030: comprehensive ambitious and long-term plan to protect nature and reverse degradation of ecosystems.
 - The new EU forest strategy for 2030 is one of the flagship initiatives of the EGD and builds on the EU biodiversity strategy for 2030
 - Re-and afforestation of biodiverse forests, including planting 3 million additional trees by 2030

Actions





Marginal land restoration

Contribution to EU initiatives:

- It contributes directly to the fulfilment of the **European Green Deal** through *the enhancement of carbon sinks to achieve climate neutrality by 2050*
- It contributes positively to the achievement of the **EU biodiversity strategy for 2030** (and **EU forest strategy**), *specifically to the EU nature restoration plan as increasing the quantity of forests and improving their health and resilience (2.2.4)*. It includes a roadmap for planting at least 3 billion additional trees in the EU by 2030.
 - It also includes urban and peri-urban areas and agricultural area (abandoned areas, establishment of ecological corridors, etc.)
- **EU adaptation strategy** will be reinforced through restoration activities as part of nature-based solutions for adaptation, *since it will boost the supply of clean, fresh water and reduce risk of flooding. It will also provide benefits such as carbon sequestration.*
- Different national and regional climate, energy, biodiversity, etc. plans and strategies.



Marginal land restoration

Benefits

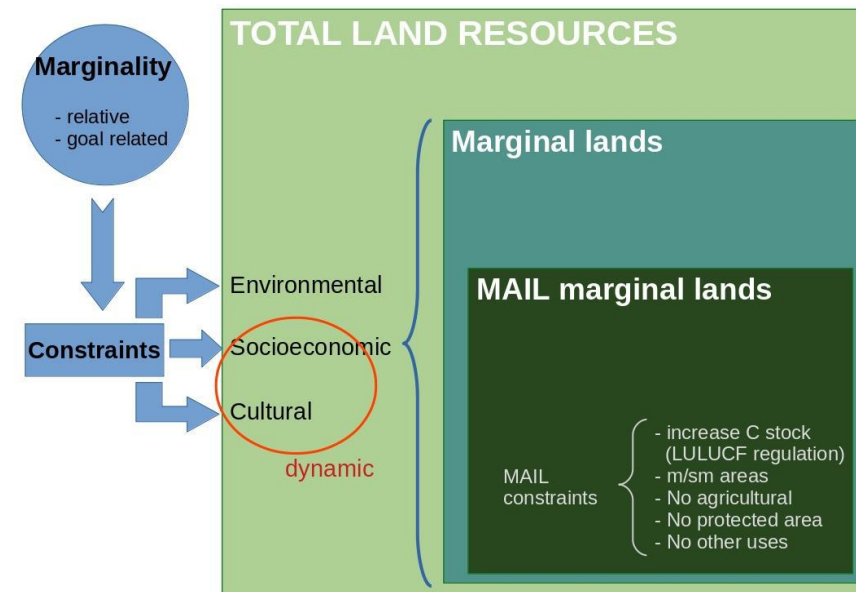
- Creation of new opportunities for the future under the frame of bio-economy
 - Hub of socio-economic activities: reforestation and management activities, wood (especially for construction), non-wood products (mushrooms, chestnuts, pine nuts, resins, etc.), hunting, social recreation, tourism, etc.
- Situated in rural areas => fight against depopulation. Establishment of forest-based industries.
- Climate change mitigation. Stock of carbon in the new forests.
- Climate change adaptation with the adoption of Smart Climate Forestry principles
- Increase of biodiversity in areas with low richness



The Mail project perspective

Marginal land definition:

- Dynamic concept
- 30 different definitions found
- Goal-oriented (e.g. Mail project):
 - Agricultural lands
 - Protected areas
 - LULUF accounting
 - Definition:

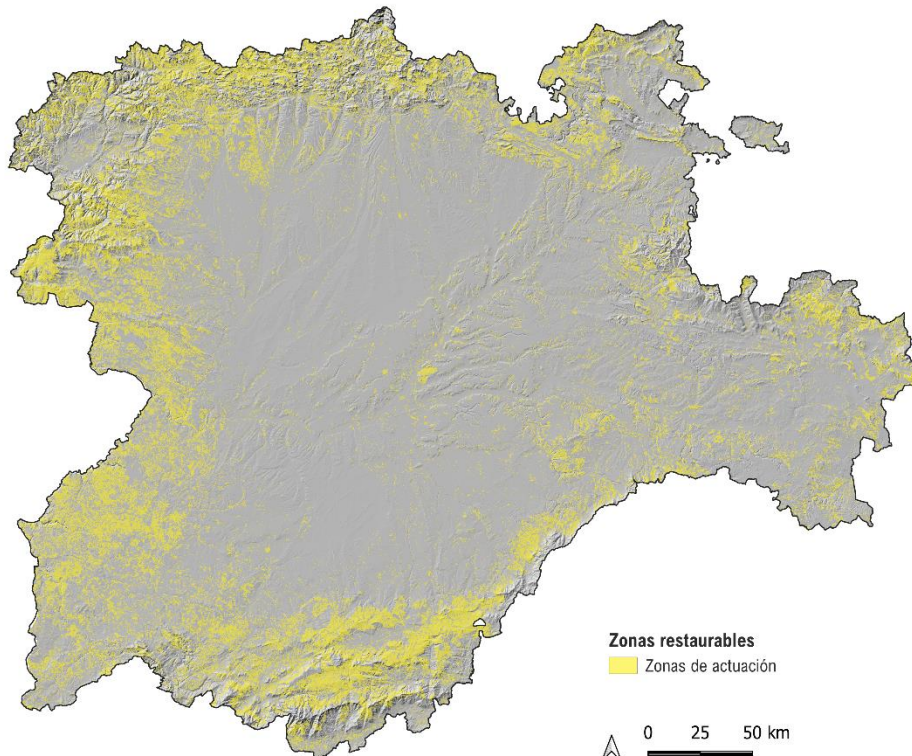


- *In a complement approach, fully consistent with the MAIL project objectives, **we will consider Marginal Land those whose land use allows**, according to accounting rules referred in the EU commitment and the regulation developed (European Parliament. Regulation (EU) 2018/841) and land use categories proposed by the 2006 IPCC guidelines (IPCC. (2006)), **to maximize the increase of carbon stock**. That is, MAIL project **will focus on areas in which it is possible to convert them to forest lands** (Land Converted to Forest Land: afforested lands).*

Marginal lands in Castilla y León

Identification of suitable lands for reforestation/afforestation

Zonas potencialmente restaurables en Castilla y León



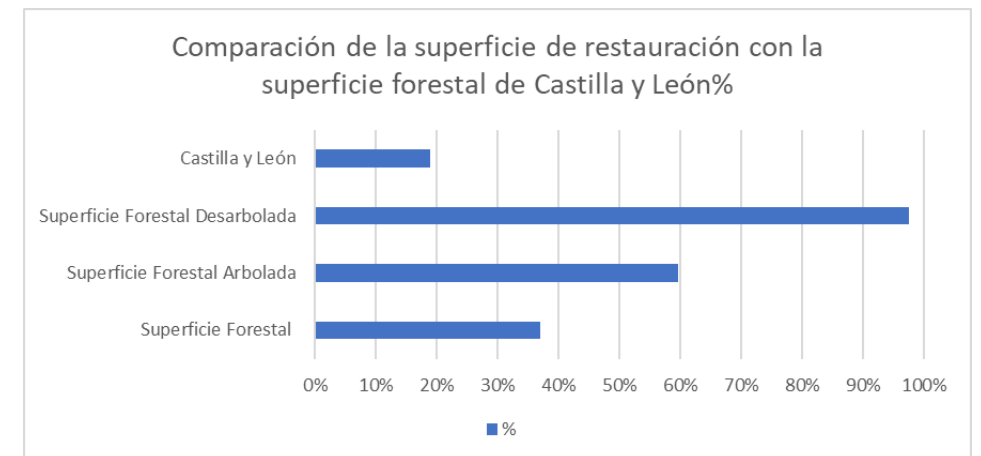
Objective: simplified quantification of CO₂ absorption potential in CyL

Remarks:

- From an ecological point of view
 - Not socio-economic interest criteria or feasibility
- Not legal constraints considered
- Use of different vegetation types for restoration

Results:

- Total area:
1.779.835 ha

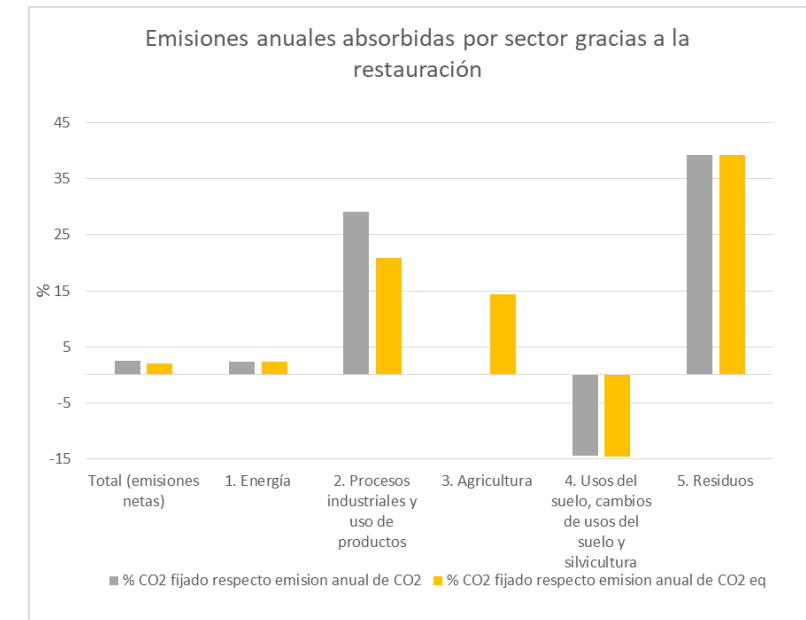




Marginal lands in Castilla y León

Methodology and values: MITECO (30 years)

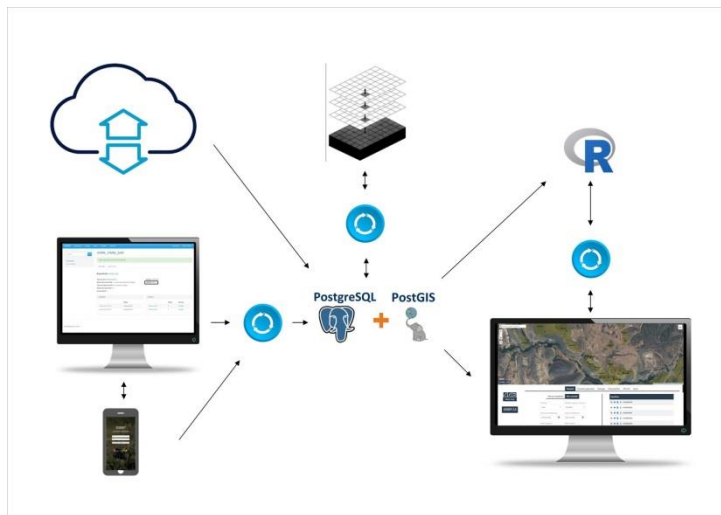
- Assuming:
 - All area planted in year 0
 - No losses (forest fires, disturbances)
 - No decrease of density for forestry practises
 - No carbon stocked in wood products
 - Mortality of 30%
- Results
 - Total = 163.641.822 t (**1,73% Spain's overall gross emissions of CO2Eq in 2019**)
 - > 2.000.000 trees (different plantation density) => **77% EU biodiversity strategy**
 - Over 10 years: 179.000 ha/year



Restoration best practices

Monitoring

- **SISREP:** An information system to assist decision-making in forest management for the Castilla y León regional government



- Real-time data synchronisation
- Centralization of information from different data sources
- Automatic geoprocessing

Database



- Web based application
- Access and visualization of all information
- Spatial analysis
- Data export

Spatial data analysis



Digitalization of field data collection

- App for android and web based application system
- Communication: sending and receiving information
- Synchronisation with database
- Data standardization



AI for predictions

- Web based application
- Advanced model for predicting the survival of future afforestation.
- Different type of analysis: optimal case, individual case, all cases.



Restoration best practices

New business model

- Attracting private investment and public-private partnerships. Sale of carbon credits in the voluntary market.



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Press Releases

Zalando and Land Life Company join forces to plant over 300,000 trees

Press Releases

A total of 1.6 million trees planted in Spain

Latest news

275.000 árboles para reforestar bosques en más de 300 hectáreas

Banco Santander se suma al proyecto Motor Verde, que compensará la emisión de más de 82.000 toneladas de CO2 en tres años

• Examples:

- Land Life Company: Restoring degrading land in Spain. 1.750 ha
- Grupo Sylvestris: 926 ha



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Thank you for your attention!



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