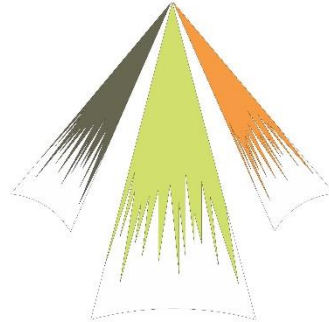


**BENCH VALUE**



# Bench Value

Benchmarking the sustainability  
performances of value chains

Diana Tuomasjukka

Vienna, Austria – 23/10/2019



MINISTRY OF AGRICULTURE AND FORESTRY

# How BenchValue project was inspired?

- I. Bioeconomy has huge potential for (new) renewable materials
- II. Renewable wood-based materials reduce GHG emissions in construction sector and are up to technological building standard requirements

However, limited uptake due to:

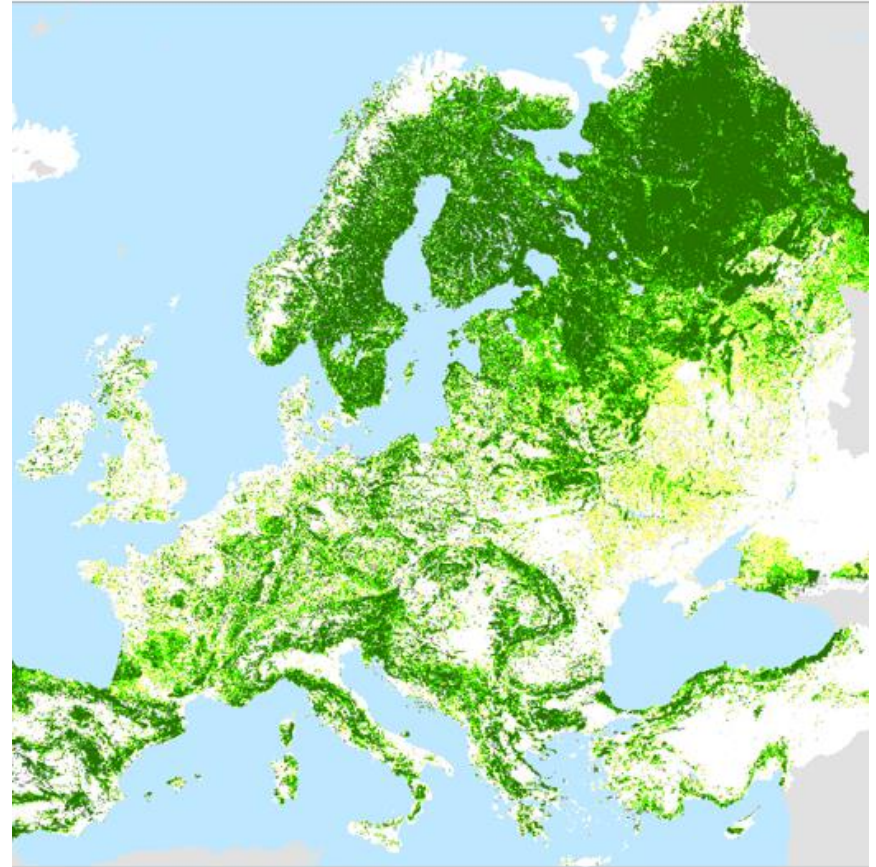
- Limited availability of suitable and comprehensive sustainability assessments
- Lack of benchmarking against non-renewable material use
- Fragmented and contradictory scientific answers are not useful for decision makers



Source:  
Fotolia

# Forests, our most important biological resource

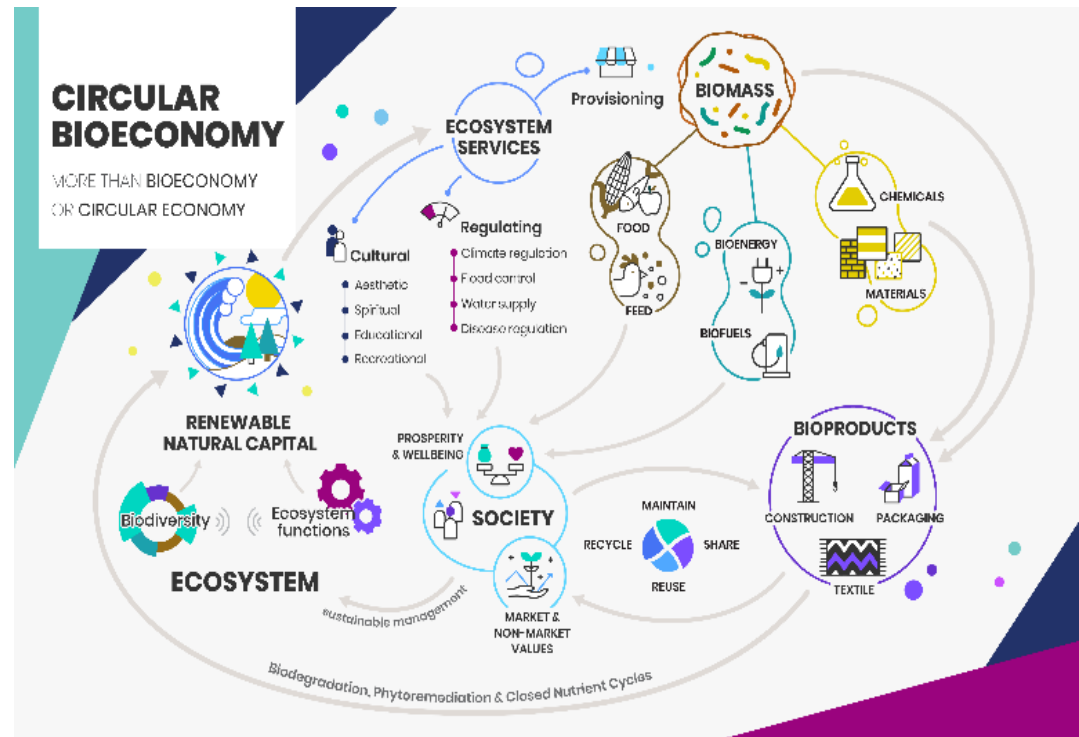
- Covering 43% of EU land, 33% of Europe (215 mio ha)
- Total growing stock 35 bio m<sup>3</sup>, 458 mio m<sup>3</sup> production (66% of increment)
- Key for biodiversity, water and soil
- Climate change mitigation effect equivalent to 13% of CO<sub>2</sub> emissions
- Main source of non-food, non-feed renewable biological resources
- Important role in circular bioeconomy **and national strategies**



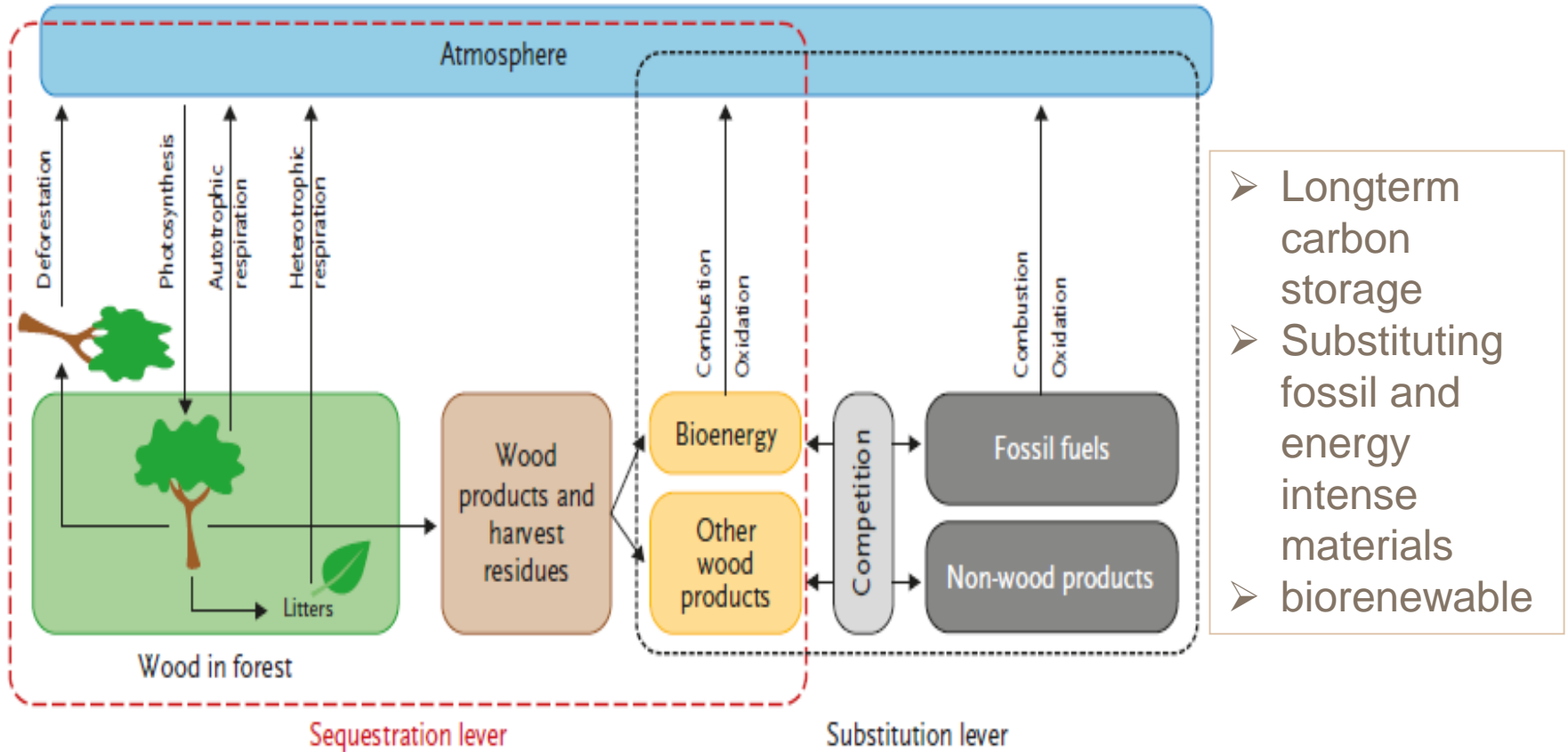
# What is a Circular Bioeconomy?

- A fossil-free economy based on integrated, truly cross-sectoral, responsible use of biobased virgin and circulated materials
- Wholistic from natural resource management, services and product design including reuse
- Ecosystem Service and Natural Capital as the basis for products and services of a sustainable and circular bioeconomy

Bioeconomy Strategy (2012, review 2017 and 2018)  
 Circular Economy Action Plan (2015)  
 National Bioeconomy Strategies (under development)



# How do Carbon stocks work?



- Longterm carbon storage
- Substituting fossil and energy intense materials
- biorenewable



# Wood in Construction

- Carbon storage 50-100 years
- For each ton of wood products used instead concrete, there could be an **emission reduction** of 2 tons of CO<sub>2</sub>.
- National differences in use, legislation and practices



*BenchValue expanded and used ToSIA with a method for benchmarking wood material value chains against mineral and non-renewable value chains*



Project duration: 1/12/2016 and 1/1/2017 – 30/11/2019

Budget: 1.322.663 EUR funded (1.536.106 EUR total)

Partners: 10 partners from 6 countries

Coordination: Diana Tuomasjukka, European Forest Institute (EFI)

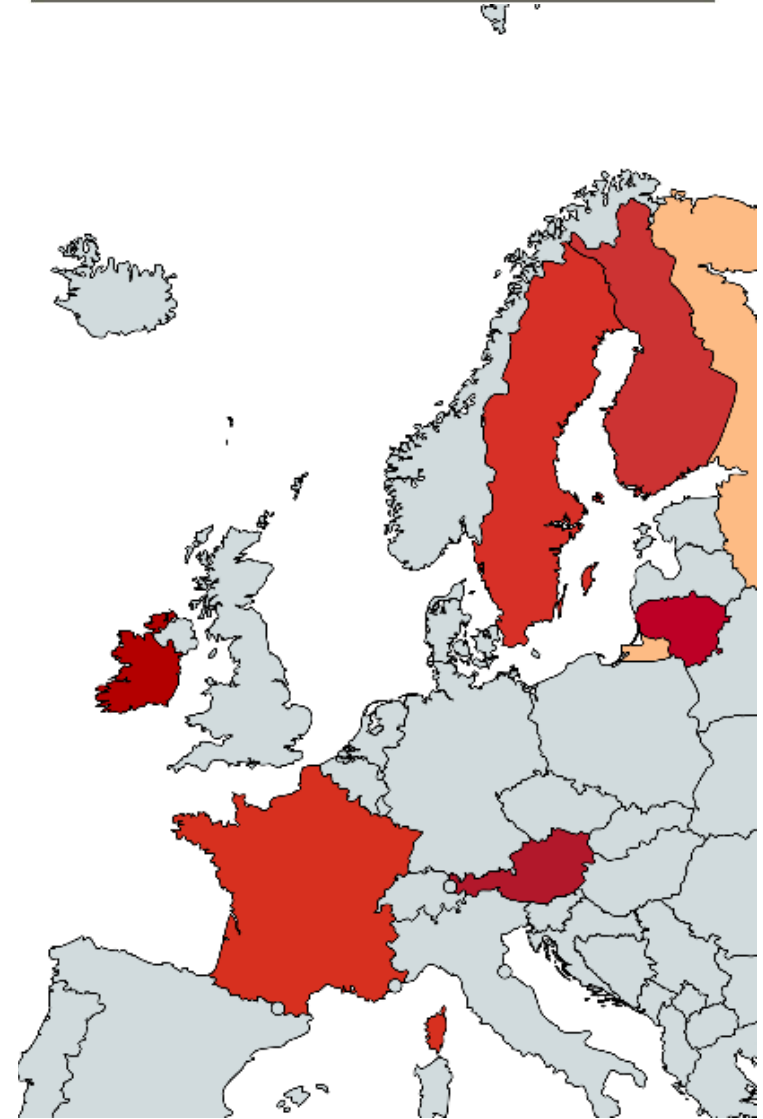
# Benchmarking

**BenchValue partners**

- EFI
- IVL
- HOKU
- FCBA, UNLIM, EFIATL

Generic method for future assessments:

- a. Build generic non-renewable reference value chains and compare to wood-based chains in ToSIA.
- b. Develop a set of universal indicators (for all value chains)
- c. Test the benchmarking method in 4 case studies in Europe
- d. Intense stakeholder interaction and capacity building in partner countries.
- e. European wide projection on the substitution potential in the construction sector and its effects on the bioeconomy, with national recommendations based on national stakeholder interactions





# All materials can be found online:

**BenchValue website:** <http://benchvalue.efi.int>

- [D3.2 Benchmarking report on the method, synthesis of results, and policy analysis](#), including indicator specifications, national recommendations and guidelines for use of the method both in the construction sector and for other value chains
- **Country-specific brochures** presenting each case study, its findings and national recommendations:
  - Case study flyers under each case: <http://benchvalue.efi.int/work-packages/case-studies.html>
  - National recommendations: Upcoming November 2019!
- **Report on the realistic potential contribution of wood construction** to the bioeconomy extrapolating from the cases to a national level.

For decision makers:

[D5.2 Policy brief on the main findings and suggestions of the project](#)

# Exchanging knowledge and finding solutions across Europe

FRANCE – Roastery; sourced  
from ALPC Region



IRELAND – Timber frame housing  
and material substitution

LITHUANIA – CLT and glulam  
production as a house construction  
element



AUSTRIA – HoHo high-rise  
wooden building (in  
Vienna)

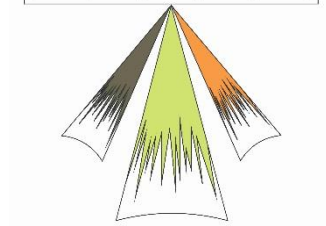


# Stakeholder interaction:

**BenchValue aims to target the needs of the involved countries with regard to house construction**



- **Local and national stakeholders in case studies.**
  - Opportunity to be **actively involved throughout the project** in raising issues of practical importance
  - Frequency of meetings will be at least 3 per case, more if needed/wished for.
- **International experience exchange**
  - Through bi-annual BenchValue Project Meetings that take place in project countries and include field visits to the case studies



Please visit us on  
<http://benchvalue.efi.int>



**SCAN ME**

Or contact me at  
[Diana.tuomasjukka@efi.int](mailto:Diana.tuomasjukka@efi.int)