

# IPROMO



Bioeconomy in mountain areas – an opportunity for local development

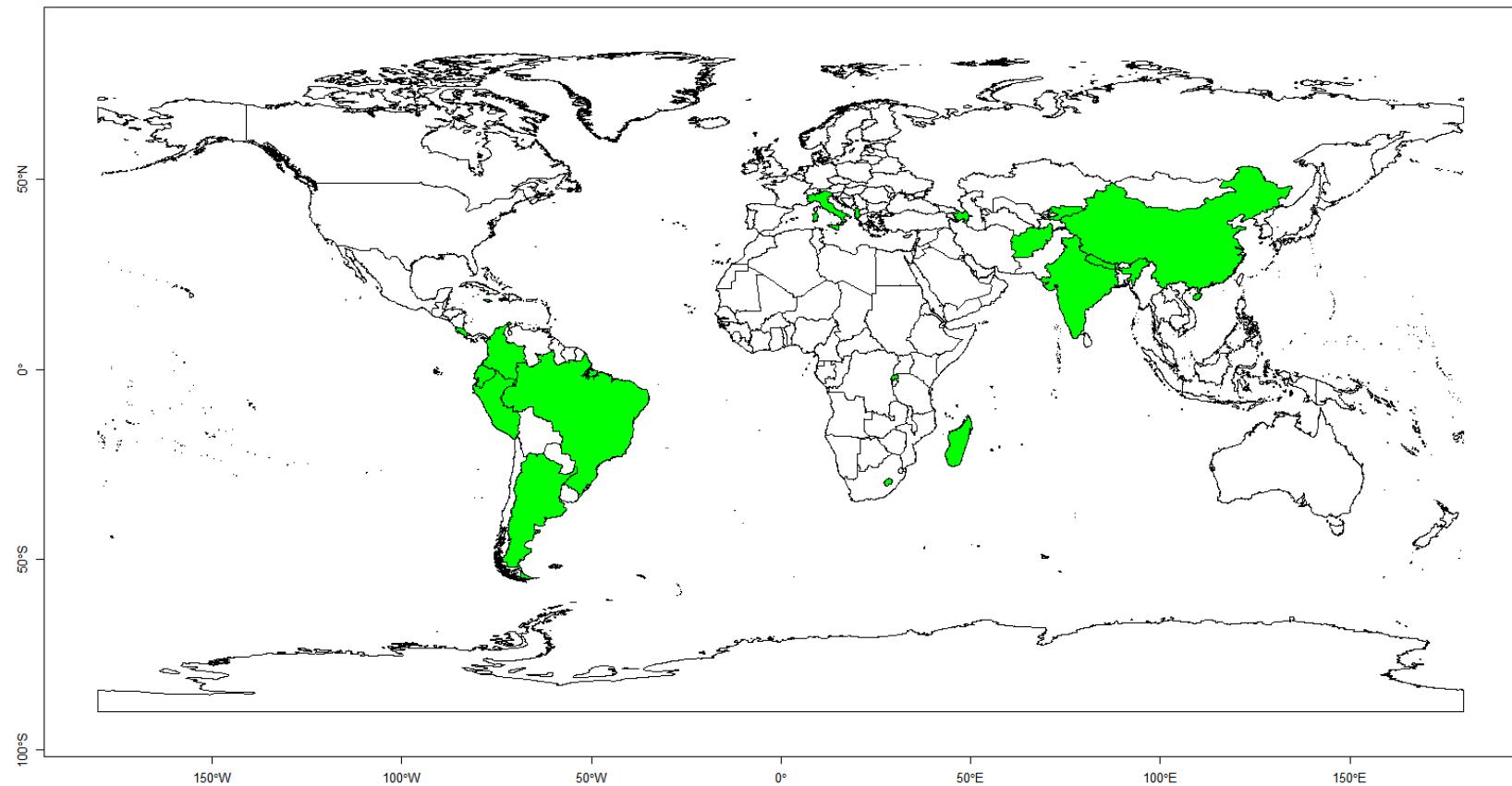
Pieve Tesino and Ormea (Italy) 18 June – 02 July 2018

## SYNOPSIS

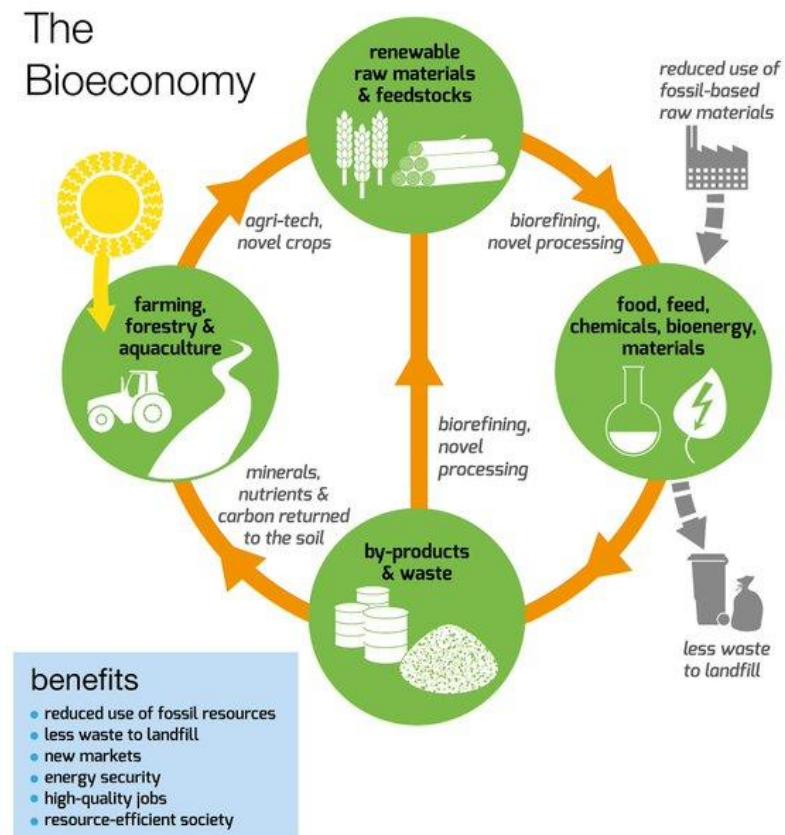
Danilo Godone, PhD

CNR-IRPI

# We came from different countries



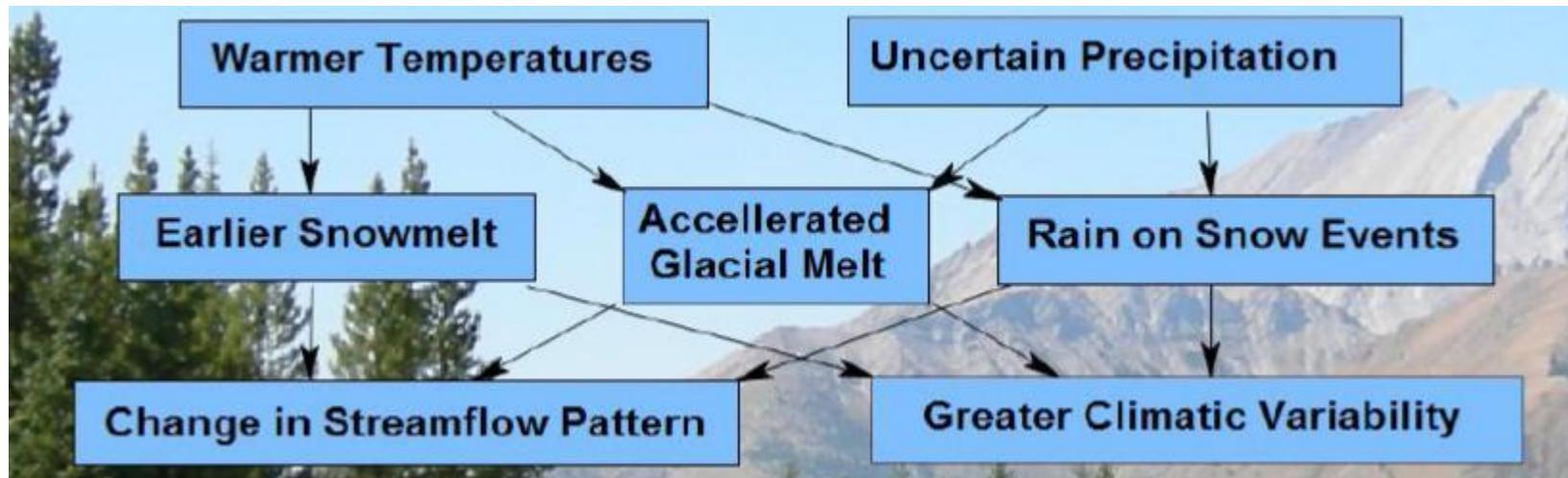
# to learn the “secrets” of *bioeconomy*



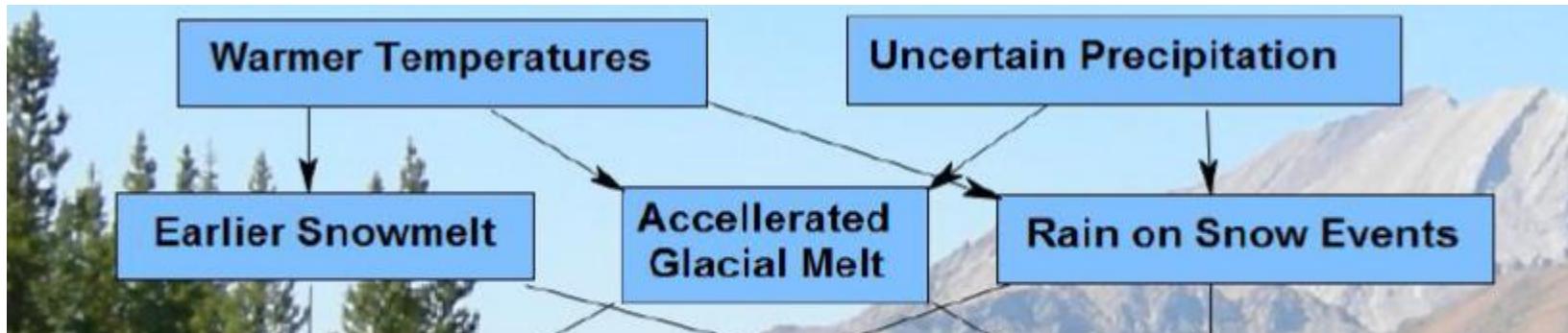
# We want to apply it to our mountains



# a vulnerable environment



# a vulnerable environment



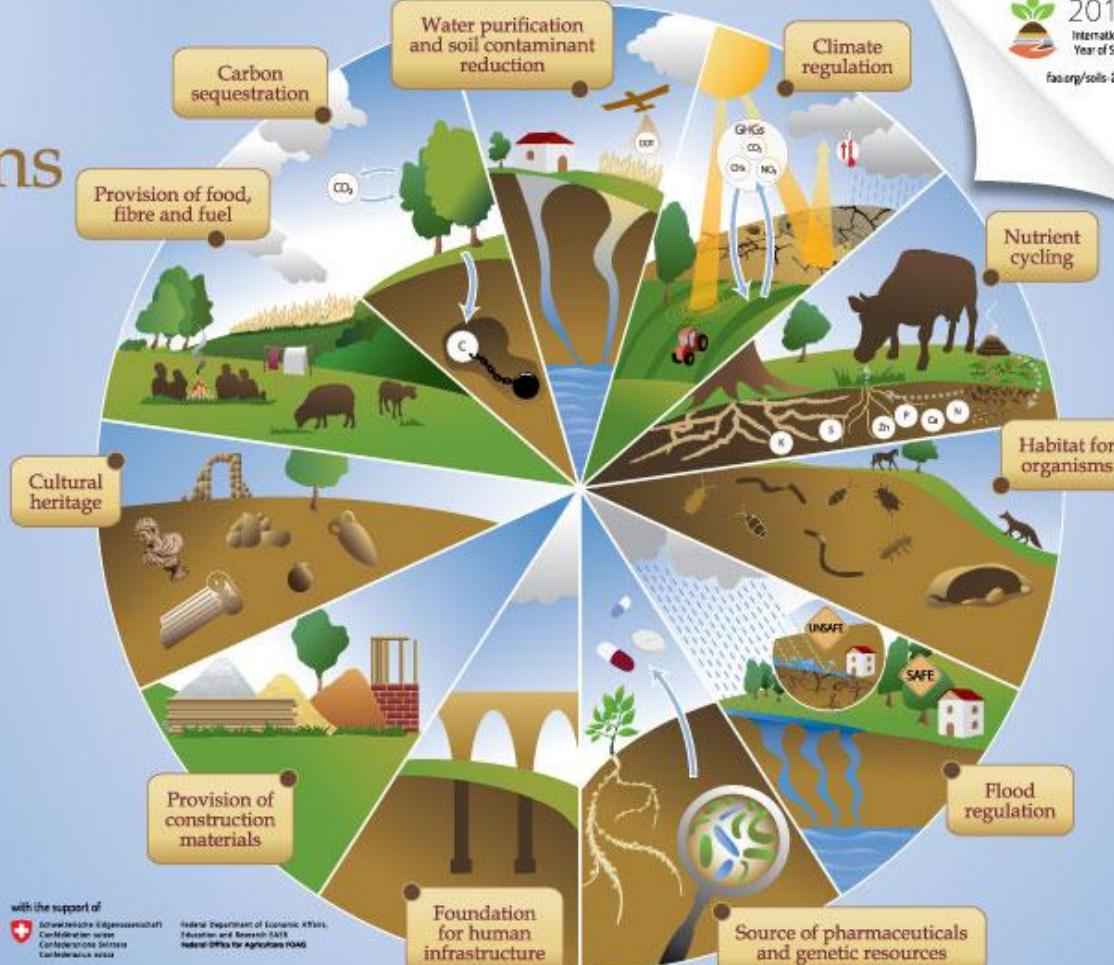
that needs...



# specific knowledges

# Soil functions

Soils deliver ecosystem services that enable life on Earth



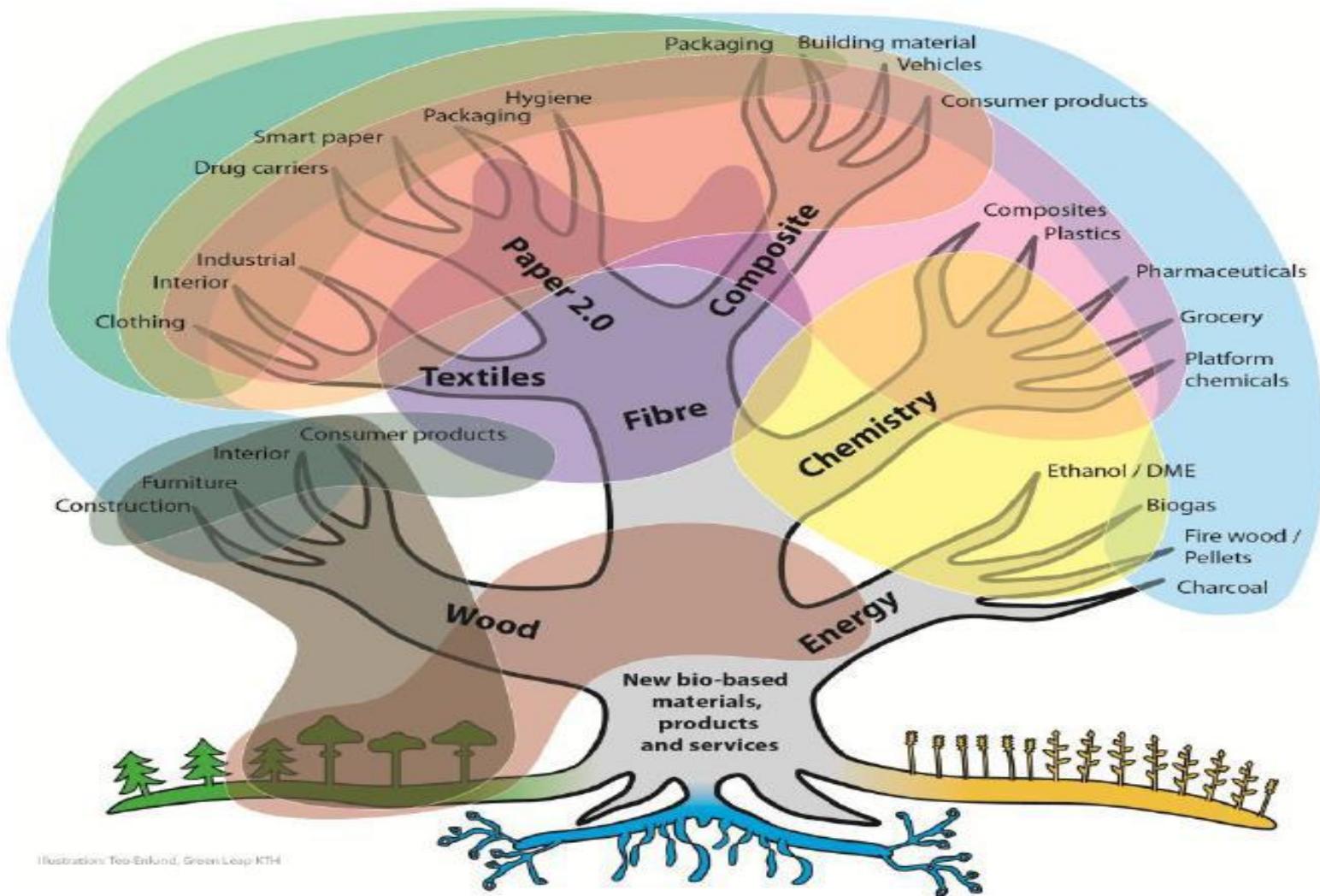
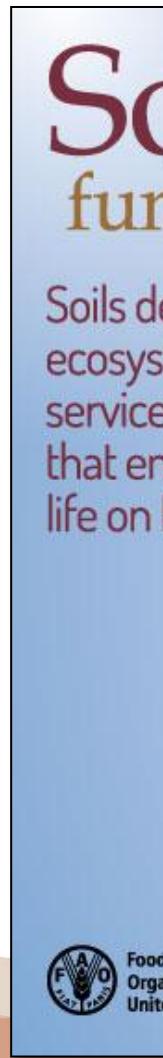
**2015 International Year of Soils**  
[fao.org/soils-2015](http://fao.org/soils-2015)

**with the support of:**

- Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Swiss Confederation
- Federal Department of Economic Affairs,  
Education and Research EEA  
Federal Office for Agriculture FOAG

**Food and Agriculture Organization of the United Nations**

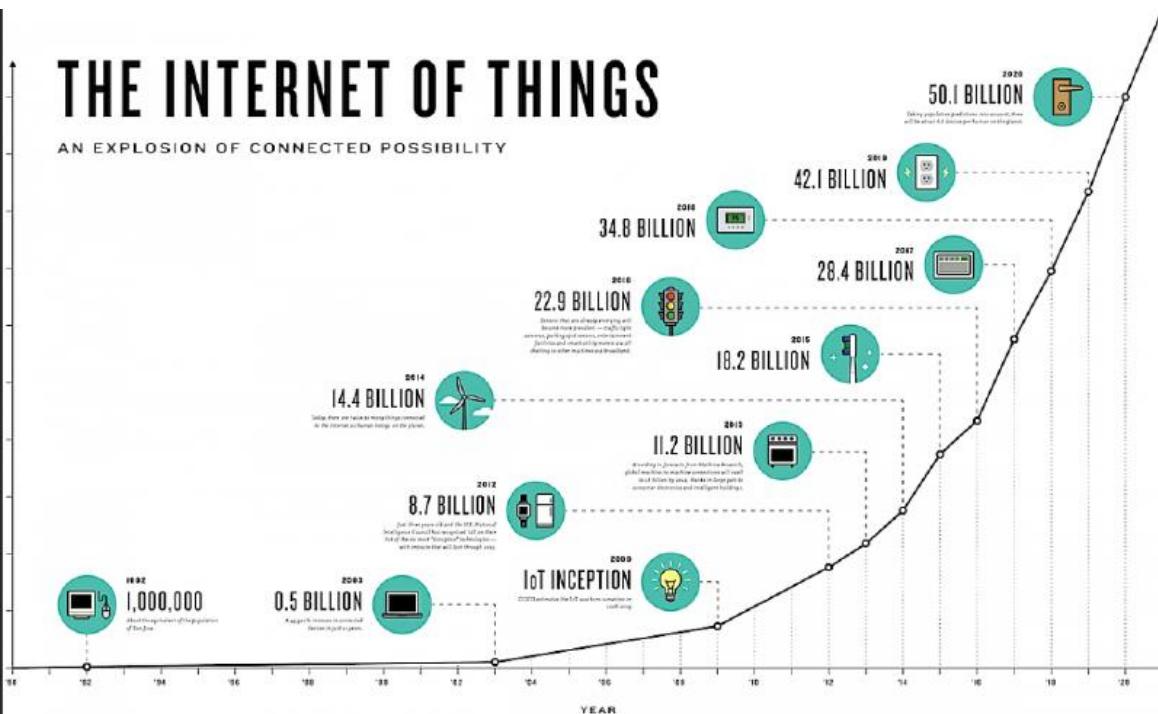
# specific knowledges



# management tools

## THE INTERNET OF THINGS

AN EXPLOSION OF CONNECTED POSSIBILITY



<https://www.mesh-net.co.uk/what-is-the-internet-of-things-iot/>



# management tools

## Wheat (*Triticum aestivum, T. durum, T. monococcum*)

- world annual production: 650 Mio. tons (A: 1.5 Mio t)
- 3rd most-produced cereal after maize and rice  
(2016, FAOSTAT)



Polysaccharides

Lignin

## Wheat straw

- A: ca. 720.000 tons avail.
- ca. 180.000 tons for industrial utilization (theoretically)

# and developing strategies



DEFRA - UK. Source: Payments for Ecosystem Services: A Best Practice Guide . 2015

# and developing strategies

## Options for mitigating climate change through forest management



Option		current offset of total EU emissions (%)	Short-term relative impact of > harvest	Reported/accounted in:
Increase in C stock	in existing forests (CO <sub>2</sub> sink or "removal")	≈ 10% <small>(only 1% "accounted" under KP in 2008-2012)</small>	<<	LULUCF
	in wood products	≈ 1%	>	
Substitution effects by wood (approximate figures)	Material	≈ 1-2%	>	Other GHG sectors
	Fossil-fuel energy	≈ 4-5%	*	

\* While the emission saving by material substitution are immediate, when wood replaces fossil fuels the emissions saving highly depends on the context, assumptions and time frame.

# and developing strategies

## Options for mitigating climate change through forest management

Option	current offset of total EU emissions (%)	Short-term relative impact of > harvest	Reported/accounted in:
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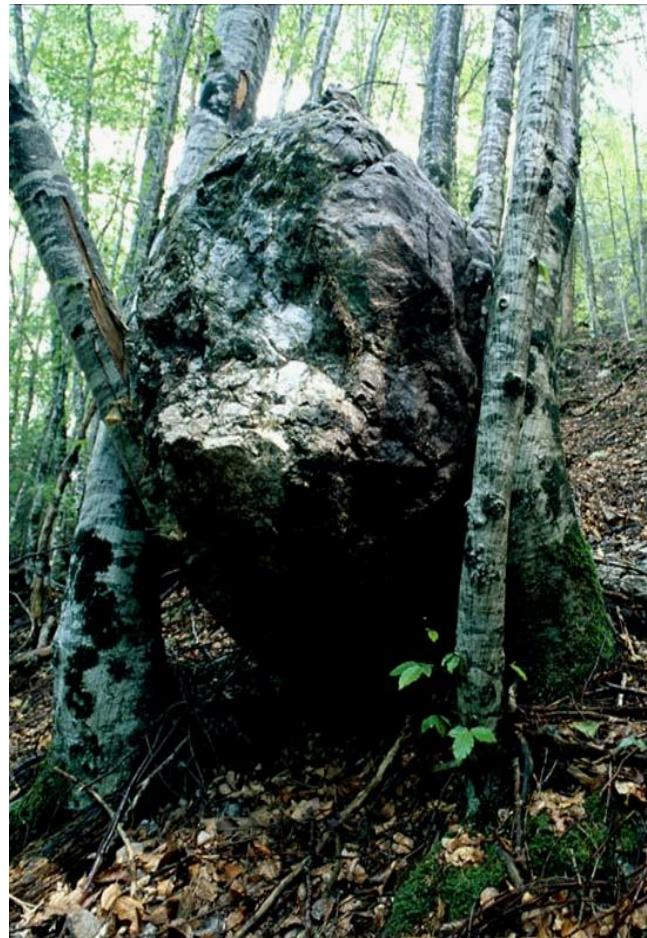
## to provide...

 <b>Substitution effects by wood (approximate figures)</b>	<b>Material</b>  → 	≈ 1-2%	>	 <b>Other GHG sectors</b>
	<b>Fossil-fuel energy</b>  → 	≈ 4-5%	*	

\* While the emission saving by material substitution are immediate, when wood replaces fossil fuels the emissions saving highly depends on the context, assumptions and time frame.

DEFRA - UK. Source: Payments for Ecosystem Services: A Best Practice Guide . 2015

# various services/functions



# innovative/traditional products



# & clothes!!!



# Working groups

## Task

**Prepare a presentation showing how the bioeconomy principles could be used to improve the local development.**

# Thank for your attention!

- Alberto Dotta
- Annalisa Romani
- Borut Vrscaj
- Davide Murgese
- Dorothea Palenberg
- Emanuele Blasi
- Filippo Brun
- Florian Zikeli,
- Giorgio Vacchiano
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- Maria de Cristofaro
- Mauro Bassignana
- Michele Freppaz
- Riccardo Beltramo
- Silvia Stanchi
- Tommaso Chiti

Danilo Godone, PhD – [danilo.godone@irpi.cnr.it](mailto:danilo.godone@irpi.cnr.it) – [d.godone@gmail.com](mailto:d.godone@gmail.com)