

**Andreja Kutnar**

InnoRenew CoE  
University of Primorska



**InnoRenew CoE Renewable  
Materials and Healthy Environment  
Research and Innovation Centre of  
Excellence**

Funded by the Horizon 2020 Framework Programme of the European Union  
**H2020 WIDESPREAD-2-Teaming; #739574**



## Spreading Excellence and Widening Participation

- significant internal disparities in R&I performance
- pathway to economic growth and competitiveness → R&I
- efficiency of the national research and innovation systems
- stronger participation in H2020 + commitment low-performing Member States

## Teaming

institution(s) + institution(s) → new or significant upgrade to a CoE

- European Commission + host country (region) government
- **improvement of their research and innovation systems and policies**
- alignment with host country (region) RIS3



## The Renewable Materials and Healthy Environments Research and Innovation Centre of Excellence (InnoRenew CoE) project

**InnoRenew Partnership**

The partnership includes the following organizations:

- InnoRenew CoE
- UNIVERSITA DEL TRIESTE UNIVERSZA NA PRIMORSKEM
- Fraunhofer WKI
- Univerza v Mariboru
- Zavod za varstvo kulturne dediščine Slovenije / Institute for the Protection of Cultural Heritage of Slovenia
- ZAG (Zavod za gradbeništvo Slovenije / Slovenian National Building and Civil Engineering Institute)
- ICP (Inštitut za celulozo in papir / Pulp and paper institute)
- EuroCloud SLOVENIA
- NIJZ (Nacionalni inštitut za javno zdravje)
- RRA LUR

**InnoRenew CoE - non-for-profit private institute**  
independent organisational, operational, and management structure  
***Funds of European Commission (15 million) and Slovenian co-funding of the project (30 million)***



**Biggest RDI project in Slovenia!**

# Registration of InnoRenew CoE



November 29<sup>th</sup>, 2016

Founders:



Zavod za varstvo  
kulture dediščine Slovenije  
*Institute for the Protection of  
Cultural Heritage of Slovenia*



ZAVOD ZA  
GRADNENIŠTVO  
SLOVENIJE

SLOVENIAN  
NATIONAL BUILDING  
AND CIVIL ENGINEERING  
INSTITUTE

February 15<sup>th</sup>, 2017

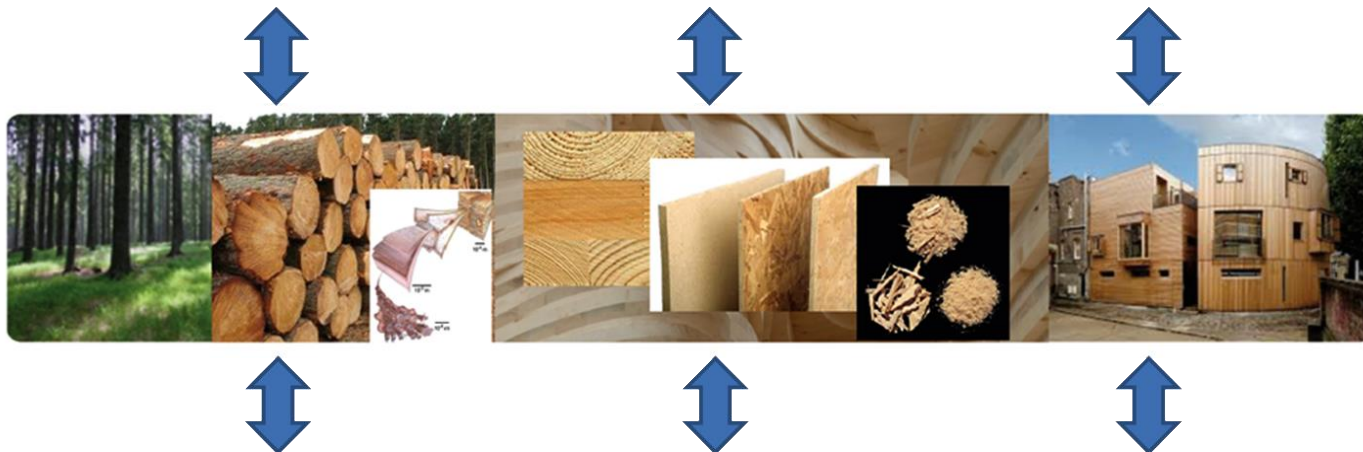


# InnoRenew CoE - Main Objective



**Develop, improve, and communicate** innovative products, processes, services, business models and systems **for smart, sustainable and modern built environments** for all generations **through its research into renewable materials use.**

The InnoRenew CoE will produce innovative solutions to **fill the gap** between **tradition, skills and decreasing performance of the sector.**



# Basic Objectives

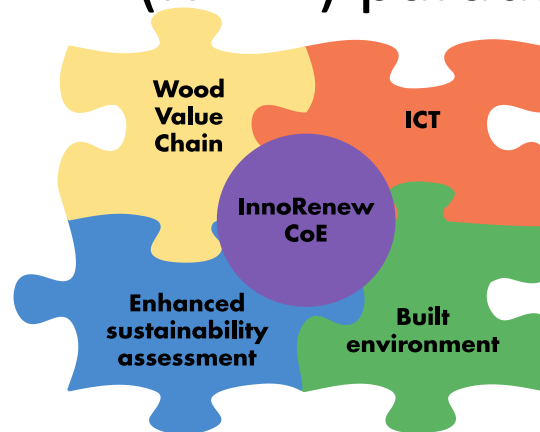


- Focus on improving the **quality and relevance** of scientific work related to *renewable materials*
- Work closely with **businesses and the public**
- Develop **new products, technologies, and services**
- Improve **industrial adoption of innovation**
- Improve the **acceptance and utilization** of fundamental and applied science in industry
- Provide **research, training**, and other support for professionals and the public
- Expand professional **expertise and public knowledge** about *renewable materials*
- Enhance **international cooperation and mobility**

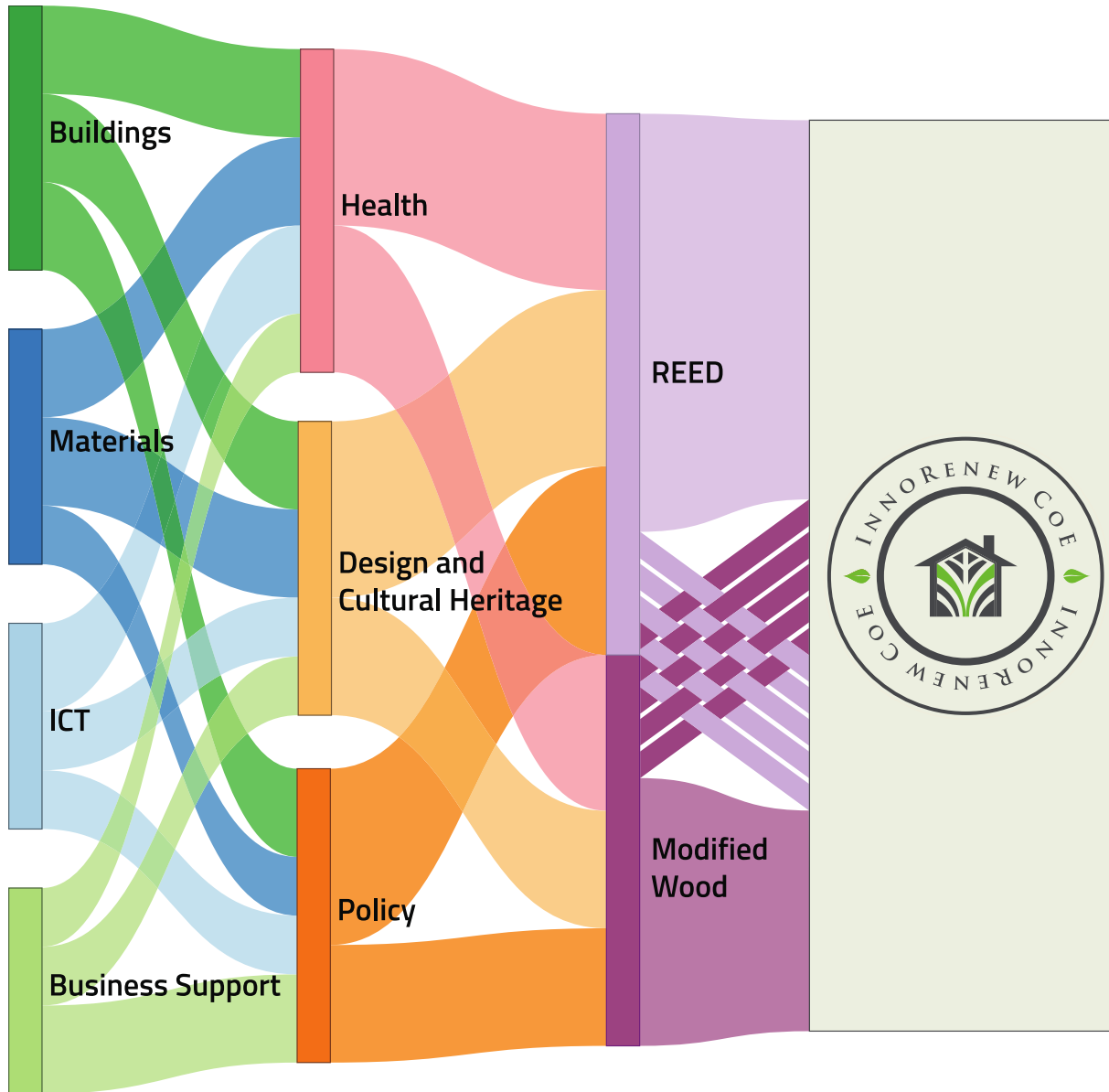
# Excellence of InnoRenew CoE



The **key distinguishing technologies** and activities of the InnoRenew CoE are the development of new **wood modification treatments** and optimization of existing treatments to create **new, efficient materials and products** for applications in buildings and products designed within the **restorative environmental and ergonomic design (REED)** paradigm



# InnoRenew CoE RDI Plan

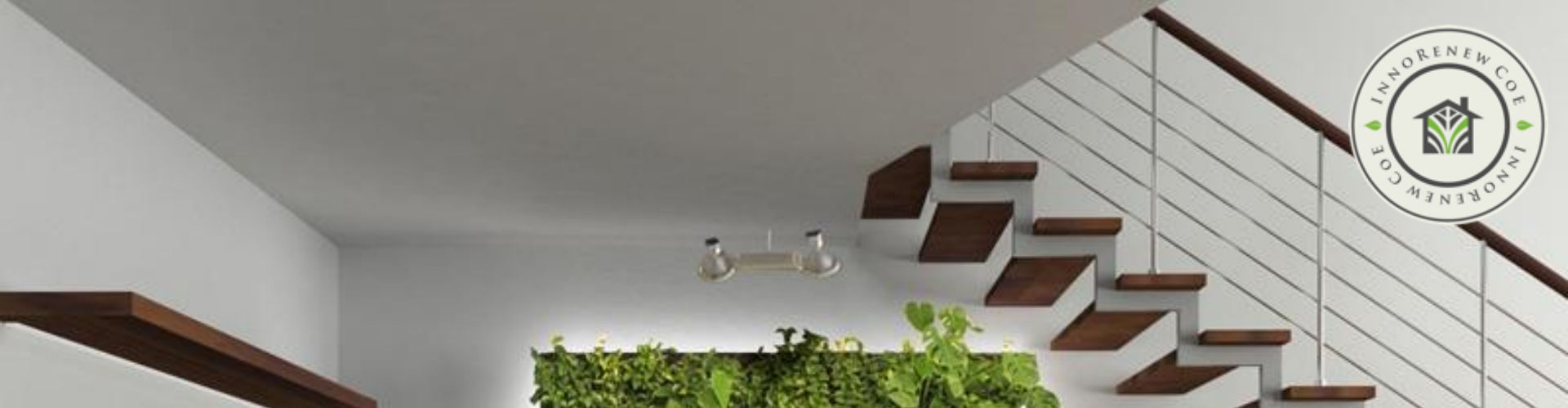


Interdependent research:  
renewable materials,  
sustainable building,  
business support, and ICT

**Core research themes**  
Health, Design and Cultural  
Heritage, and Policy

→ new, advanced  
knowledge in  
**REED** and  
**modified wood**





**REED** combines restorative environmental design (RED) with ergonomic interventions in buildings and products.

**RED** is a combination of expanded sustainable building methods with building practices that **benefit occupant health**.





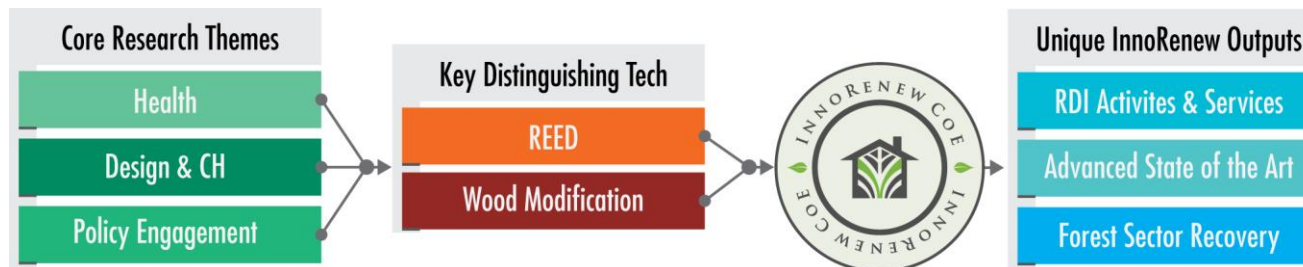
## WOOD MODIFICATION

Environmental impacts of modification processes need to be **balanced** against benefits such as: service life extension, functionalisation, reduced maintenance, suitability for upcycling, reuse, material cascading, and final disposal with recovery of the intrinsic solar energy stored in the material

# Start-up projects – lead by consortium partners



1. Advanced materials for cultural heritage storage
2. Evaluation of fire effluents with respect to toxicity
3. Development of formaldehyde-free fibreboards
4. Building Information Modelling (BIM)
5. Innovative Connections for CLT Buildings
6. Ergonomic, adaptable, and active office furniture
7. Revitalisation of traditional industry: An open innovation framework for Slovenia's furniture sector
8. Materials for Energy Efficient Buildings



# Differentiating features of InnoRenew CoE

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- ***Cross-innovation***: Performing cross-sector and interdisciplinary innovation activities with fundamental and industrial applications
- ***Customer orientation***: Living Lab as a “hub for market development” with international participants from many disciplines
- ***Grant management***: services for finding appropriate sources of funding and assistance in the application process
- ***Material, process, or pilot testing*** services for companies
- ***Internationalisation***: renowned scientists support Slovenian researchers and work with the industry on projects, international match-making for RDI activities and market expansion

# Differentiating features of InnoRenew CoE



- ***Business Services:*** integration of RDI activities, innovation management, and business development to support forest sector businesses and services.
- ***Sustainability:*** increase value creation by focusing on utilization of Slovenian raw materials/woods in both national and international markets
- ***Training and professional development:*** revitalize the labour market in this industry sector by providing training, internships, student worker programs, etc.
- ***Business modernisation:*** assist companies in modernising their business practices by adopting modern business models, using digital infrastructures, data sources and analysis, digital market strategies, adopting research, development, and innovation management strategies, etc.

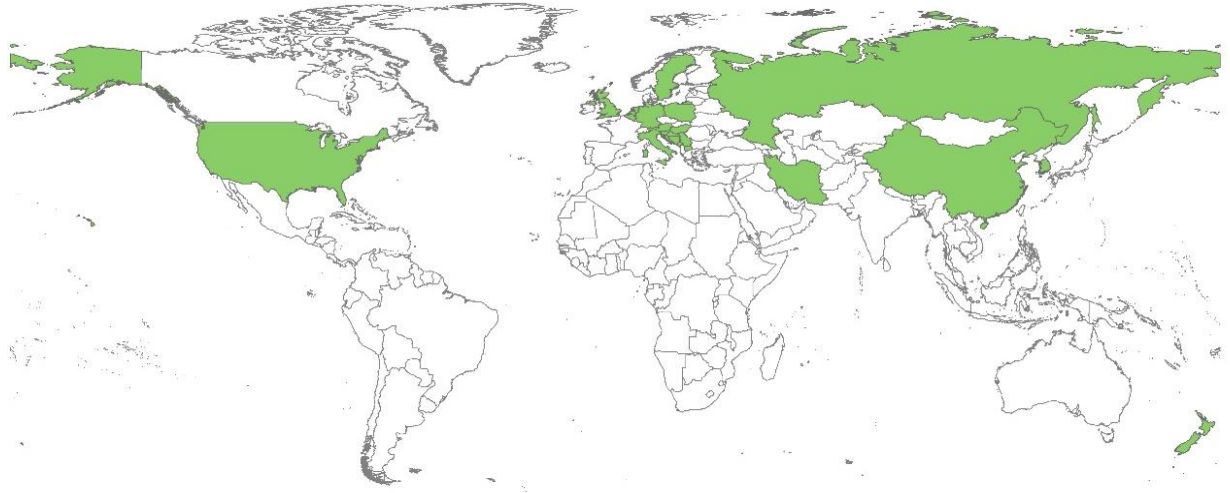
# Living laboratory Innovative Renewable Material Uses Living Laboratory



**Objective:** discuss the project, develop creative and innovative new ideas, provide critical feedback, value chain development, user-led innovation

A **public-private-people** relationship with stakeholders:

- *R&D institutions*
- *Associations*
- *SMEs & Large companies*
- *Municipalities*
- *Government bodies*
- *Citizens*



65 from 22 countries

# InnoRenew CoE - hiring

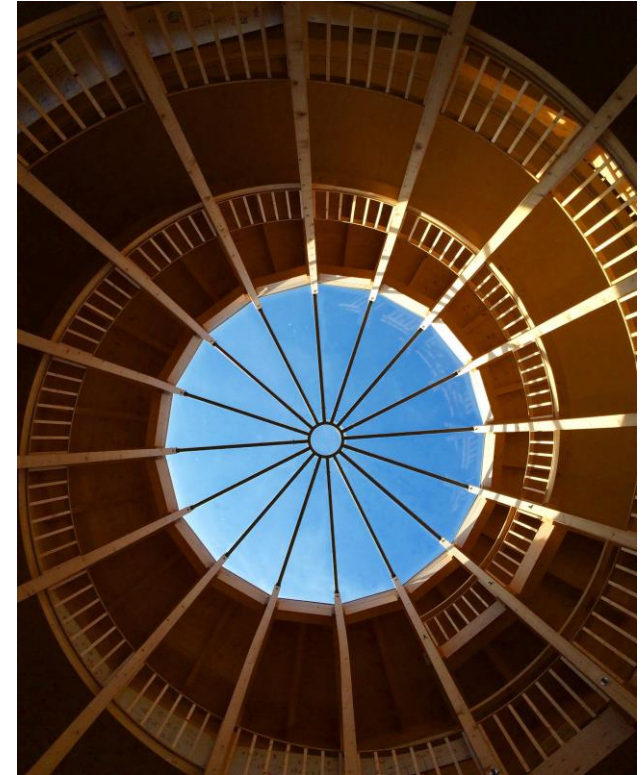


## Job openings in the fields:

- wood science,
- civil engineering,
- computer science,
- chemistry,
- health,
- business, and beyond

### 5 research groups:

- 1. Human Health in the Built Environment**
- 2. Wood modification**
- 3. Sustainable building with renewable materials**
- 4. Renewable materials composites**
- 5. Information and computer technologies**
  - Research group leader
  - Researchers,
  - Assistant researchers, and
  - Technicians



# Why InnoRenew CoE?



## 1. Work with global experts in the fields of:

- *Wood modification*
- *Environmental impact assessment*
- *Human health*
- *Information technology*
- *Business innovation*

## 2. The option for permanent positions

## 3. Great location - The location and connections to other cities

## 4. Excellent support with administrative tasks related to moving to Slovenia

## 5. Support with transfer of retirement benefits from previous employments

## 6. Procedural language of InnoRenew CoE – English

## 7. Family-friendly work environment





# InnoRenew CoE on Social Media



- Communicate with partners, stakeholders, public
- Disseminate
- Promote



Facebook – 660

Twitter – 611

LinkedIn - 416

**Join us, follow us, and like us on social media!**



# Thank you!

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*Photo: Mike Burnard*

## You are welcome to get in touch!

Contact us: [CoE@innorenew.eu](mailto:CoE@innorenew.eu); [andreja.kutnar@innorenew.eu](mailto:andreja.kutnar@innorenew.eu)

[WWW.INNORENEW.EU](http://WWW.INNORENEW.EU)

