



Consiglio Nazionale
delle Ricerche
Istituto per la BioEconomia

BIOnergSTORE Workshop 5th-6th October 2022

Bio-based phase change materials in lignocellulose matrix
for energy store in buildings



CNR - IBE
5th / 6th October

Venue :
CNR
Research area of Firenze
Via Madonna del Piano 10
Sesto Fiorentino - Firenze

Project Consortium



Karadeniz Technical University



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CNR-IBE Sesto Fiorentino



FH Salzburg

Salzburg University of Applied Sciences



Swedish University of Agricultural Sciences

Program Overview

5th October

	Activities	Theme
09:00	Welcome	
10:00	Speakers: Hermann Huber - Thomas Schnabel Salzburg University of Applied Sciences Kuchl, Austria (SUAS)	Timber constructions in Austria and possible use cases for PCM
11:00	Speaker: Meysam Nazari Swedish University of Agricultural Sciences, Uppsala, Sweden (SLU)	Biological phase change materials (BPCMs) incorporated in wood as building envelopes
11:30	Speaker: Mohamed Jebrane Swedish University of Agricultural Sciences, Uppsala, Sweden (SLU)	Challenges of making wood composites containing biological phase change materials (BPCMs)
12:30	Lunch CNR Canteen	
14:00	Speaker: Andrea Atena Laboratorio Biodegradazione e Conservazione, Sesto Fiorentino, Italy (CNR-IBE)	Report on mechanical and physical tests performed on solid wood treated with BPCM
14:30	Speaker: Sabrina Palanti Laboratorio Biodegradazione e Conservazione Sesto Fiorentino, Italy (CNR-IBE)	Report on decay fungi, blu-stain fungi, termites and coleoptera tests performed on solid wood treated with BPCMs
15.00	Speaker: Ali Temiz Karadeniz Technical University Trabzon, Turkey (KTU)	<i>Remote presentation</i> Wood impregnated with bio-based PCMs for thermal energy storage
15.30	Speaker: Ali Temiz Karadeniz Technical University Trabzon, Turkey (KTU)	<i>Remote presentation</i> Wood/PCM composites for enhancing thermal properties
16:00	Visit to CNR IBE laboratory (Wood technology UNIT)	

Program Overview (only project participants)
6th October

	Activities	Theme
09:00	Welcome	
10:00	Speaker: Jakub Grzybek Salzburg University of Applied Sciences Kuchl, Austria (SUAS)	<i>Remote presentation</i> Box for thermal test
11:00	Speaker: KTU	<i>Remote presentation</i> Wood impregnated with bio-based PCMs for thermal energy storage
11:30	Speaker: KTU	<i>Remote presentation</i> Wood/PCM composites for enhancing thermal properties
12:30	Lunch CNR Canteen	