



REPUBLIC OF SLOVENIA
MINISTRY OF ECONOMIC DEVELOPMENT
AND TECHNOLOGY



Strategic research and innovation partnership (SRIP) –
Networks for the transition to circular economy

Sustainable Business Models in Circular Bioeconomy

Innovative **Circular Products** from diverse biomass resources



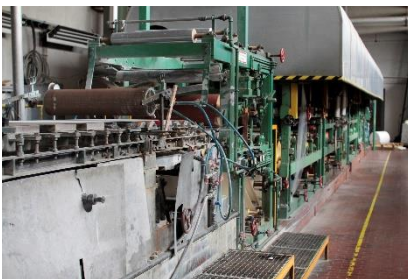
Bojan Borin

23 September 2019 | Brussels

Investment is co-financed by the Republic Slovenia and the EU under the European Regional Development Fund.

About ICP – Pulp and Paper Institute

- R&D
- Comprehensive knowledge on renewable natural fibrous materials
- Development of new, bio-based materials and bio-based products
- Interdisciplinary team of experts
- Accredited laboratory according to ISO 17025:2017 for mechanical, chemical and microbiological testing
- Comprehensive research infrastructure for laboratory and semi-industrial trials





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Main reasearch field

- Valorisation of diverse biomass resources for raw materials and efficient treatment processes
- Multifunctional cellulose materials
- Biocomposites and technologies in production of fibre webs



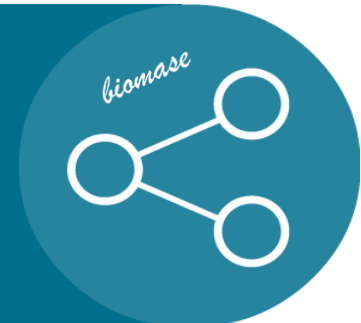
**SRIP CIRCULAR
ECONOMY**



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EUROPEAN UNION
EUROPEAN REGIONAL
DEVELOPMENT FUND
INVESTING IN YOUR FUTURE



- Database on lignocellulosic biomass



- Digestion of biomass & isolation of components (DES)



- New business models (collection and re-use of urban biomass residues - invasive plants)



- Advanced processes in (nano) cellulose production



- Green chemicals (coatings, adhesives, resins)



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- Paper/board with improved and new **FUNCTIONALITIES**
- Improved **BARRIER** and **SENSORY PROPERTIES**
- **SMART PACKAGING** with printed sensors
- **YARN** with functional cellulose fibers



- Bio-based filtering materials



- Insulating materials



- Thin/light polymer composites



- Battery separators



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Current Projects



CEL.CYCLE – Discarded potential of biomass

Potential of biomass for development of advanced materials and bio based products



InnoRenew CoE

Development of the Renewable Materials and Healthy Environments Research and Innovation Center of Excellence



APPLAUSE (Alien PLAnt SpEcies)

From harmful to useful invasive alien plant species citizens' led activities



J2-8182 - Catalytically-assisted high efficiency and low-cost nanostructured sensors based on modified screen printed electrodes for analytical chemistry



BRIDGE2BIO

BRIDGE2BIO

Bridging Gaps in Bioeconomy: from Forest and Agriculture Biomass to Innovative technological solutions



BIOEASTsUP

Advanced Sustainable Circular Bioeconomy in Central and Eastern European Countries

For more information about the projects, visit our website:
<http://icp-lj.si/1540-2/research-and-development/current-projects/?lang=en>

Coming together is a beginning;
keeping together is progress;
working together is success.

— *Henry Ford* —

Looking forward for future cooperation!

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Innovative Cellulose Products