



NOVUM PROJECT

Novel solutions for cellulose-based materials and advanced manufacturing technologies



Funded by the Horizon 2020 Framework Programme of the European Union



EUROPEAN COMMISSION
DIRECTORATE-GENERAL RESEARCH & INNOVATION
Advanced Manufacturing Systems and Biotechnologies

NOVUM – background & concept

- EU H2020 project (2017-2021) targeting to find novel and effective solutions for the production of electrical insulation components from cellulose-based materials.
- The aim is to apply improved technology and material know-how with design thinking
- Target is to develop and demonstrate pilot concept based on novel technologies: 3d printing, foam forming and thermoforming.
- The manufacturing techniques are combined with cellulose material development to generate sustainable products from more efficient processes that fit the end-use requirements.
- The project has 8 industrial partners (5 SMEs), 1 RTO and 1 University: VTT, FI (Coordinator); ABB, PL; ecoXPac, DK; Vertech, FR; 3DTech, FI; ABIS, PL; Exergy, UK; AGH University Science and Technology, PL; JRS, DE; Ahlström-Munksjö, FR.

Stakeholders wanted

- Besides the electrical insulation components studied in NOVUM, we aim to innovate novel application areas both for various cellulose-based materials and the processing technologies under development in NOVUM.
- Examples of potential stakeholders: Processing and production of natural polymers; equipment manufacturers involved in additive manufacturing or forming technologies; application areas looking for replacement of fossil-based materials with bio-based ones (e.g. packaging, construction)
- Interested stakeholders will be invited to **NOVUM open technology platform** to be established in M24 (September 2019)

Calls of VTT interest

- DT-NMBP-04-2020: Open Innovation Test Beds for nano-enabled bio-based materials and solutions (IA) (possible coordination)
- NMBP-16-2020: Safe by design, from science to regulation: behaviour of multi-component nanomaterials (RIA) (as a partner)
- BIOTEC-xx-2020: Recyclable Bio Plastics (RIA)
- *NMBP-21-2020: Custom-made biological scaffolds for specific tissue regeneration and repair (RIA) (as a partner)*
- NMBP-xx-2020: Materials lifecycle analysis methodology for the circular economy (RIA)
- Mineral waste, by-products and recycled material as feed for high volume production (IA)
- CE-SC5-07-2020 b,c: Raw materials innovation for the circular economy
- CE-SC5-24-2020: Improving the sorting, separation and recycling and multi-layer materials (RIA) (as a partner)

THANK YOU

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