



## INNOVATION ECOSYSTEM TO ACCELERATE THE INDUSTRIAL UPTAKE OF ADVANCED SURFACE NANO-TECHNOLOGIES

### THE CHALLENGE

Nano-enabled surfaces and membranes have huge potential to increase the performance of materials used in numerous sectors, including energy, electronics, construction, transport, health, water and the environment. These Key Enabling Technologies (KETs) will be the driving force behind many of the goods and services that will be available to the market over the next decade. The main challenge is sustainable, cost-effective upscaling and deployment of these nanotechnologies, which would lead to more wide-spread adoption, reduced energy consumption, and economic gains throughout Europe. Advancing the performance and durability of materials will enhance many components including green technologies, addressing several Sustainable Development Goals (SDGs) and leading to positive impacts for society overall.

### PROJECT OBJECTIVES

The NewSkin project aims to create an Open Innovation Test Bed (OITB) to provide **access for Research labs, SMEs and Industry to a support structure providing up-scaling and testing facilities. NewSkin facilities will allow stakeholders to develop, validate and commercialise new advanced nano-enabled surfaces and membranes** (to TRL7 and higher). Uptake of NewSkin's OITB facilities and services is expected to result in the creation of cost-effective, game changing innovative processes in the manufacture of nano-enabled industrial and consumer products for a range of industries and provide the necessary route to market services to accelerate the uptake of these novel technologies.

**NewSkin Value Propositions** will be validated through the implementation of four initial case studies (55 nano-enabled products) with NewSkin partners, providing a first showcase of the NewSkin OITB facilities. External entities have the chance to apply for **free access to NewSkin OITB facilities** through four open calls, 2022-2024, and will also be able to access the NewSkin OITB through private contracts.

### AT A GLANCE

**PROGRAMME:** European Union Horizon 2020 – Open Innovation Test Beds

**TYPE OF ACTION:** Innovation Action (IA)

**DURATION:** April 2020 – March 2024 (48 months)

**CONSORTIUM:** 34 key industry and research players from across the innovation ecosystem, from 12 countries.

**COORDINATOR:** Convention Européenne de la Construction Métallique asbl (ECCS)

**TOTAL BUDGET:** €15.6 million





## Range of services available to external users

### Commercialisation of nano-enabled consumer products

New functionalities in:  
 Construction  
 Industrial components  
 Water treatments  
 Transport  
 Renewable energy  
 Prosthesis  
 Packaging  
 Optics & electronics

### Industrial uptake and route to market support

Value chains  
 Funding  
 Networking  
 Regulatory issues  
 Nanosafety and security

### Benefits quantification

LCA approach  
 Economic  
 Social  
 Environmental  
 Regulatory

### Performance evaluation

Replicating highly demanding end use conditions

### Prototyping

Enhanced, continuous mass production processes

### Design of solutions

Technology Transfer  
 High performance  
 Added value  
 Advanced features

**Construction**   **Industrial components**   **Water treatments**   **Transport**   **Renewable energy**   **Prosthesis**   **Packaging**   **Optics and electronics**

**Commercialisation of nano-enabled industry and consumer products with new functionalities**



### CONTACT US

Coordination: Véronique Dehan, ECCS, eccs@steelconstruct.com  
 Project Management: Carlos del Castillo, ECCS, carlos.delcastillo@steelconstruct.com  
 Communication & Press: Olga Ormond, AquaTT olga@aquatt.ie

NewSkin OITB

@NewSkinOITB

[newskin-oitb.eu](http://newskin-oitb.eu)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 862100 (NewSkin). The output reflects the views only of the author(s), and the European Commission cannot be held responsible for any use which may be made of the information contained therein.

Designed and developed by  
 AquaTT aquatt.ie