



GREENOMED NEWSLETTER

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FUNCTIONAL PLASTICS PILOT PLANT IN EURECAT, CATALUNIA, SPAIN

New added-value capacities and integration of functionalities, together with sustainable processes and products are increasingly demanded on polymer components for many different applications and markets. At the same time, several emerging technologies coming from the convergence of material science and nanotechnology (nano-coatings, nano-additivation, nano-texturing, integrated electronic circuitry...) are obtaining promising results in order to grant extra-functions or smart performances in plastic parts. However, these technologies need to be validated and overcome up-scaling and industrialization challenges to reach the manufacturing industry. To answer these challenges, EURECAT has conceived and implemented a "Functional Plastics" Pilot Plant for the industrialization of advanced polymer-based products (3D thermoplastic parts, films, fibres/fabrics...). The "Functional Plastics" Pilot Plant is an upgrading of a previously existing Plastic Processes Testing plant that started as an independent service provider industrial infrastructure for Catalan plastic sector as far back as 1990. These improvements were realised in the framework of the Vanguard Initiative – New Growth Through Smart Specialisation and Regional Smart Specialisation Strategies (RIS3) backed by European, national and regional administrations, as well as industry. Within the Pilot several activities are performed, mainly applied research projects to develop, up-scale and validate new technological solutions and final products using new materials, processes and hybrid/flexible combinations tailored to the specific final needs & specifications. But also, training and formative activities for operators, that will provide fully operational workers in new high-skilled jobs; and transferring and consultancy services for

industrial clusters and specific associations or enterprises. This consultancy services include new business models based upon functional products advanced sustainable technologies and/or added services associated.



The Functional Pilot Plant presents two main sections integrated in the same premises and under clean lab conditions: Plastic processing (including Injection Moulding, Extrusion, Thermoforming & Blow-Moulding), and Printed Electronics on flexible polymer surfaces. Other complementary technologies such as electronic circuitry hybridation through Pick&Place and control/measurements systems are also in place to provide a full value chain coverage, making it unique at European Level. Moreover, other installations and lines aimed at coatings, texturing, fibres and fabrics development are also networked in the territory to be collaboratively operated.

Altogether, the Catalan Pilot Plant through extended networks of cooperation with other Pilot Plants and European infrastructures can benefit the complementarity of the whole European plastic sector and transversal final industries (Transport, Medical, Energy, Electronics...), providing radical products and solutions to the market.

The Functional Plastics plant is an example of a pilot plant for efficient and sustainable manufacturing for GREENOMED partners, who are taking the first steps to design and implement pilot plants for green manufacturing in their regions.



1ST GREENOMED CONFERENCE: GREEN MANUFACTURING & CITIZENS

On **7th of March 2018**, GREENOMED held its first conference “Green manufacturing: Opportunities, challenges and impacts on citizens’ lives” in **Aristotle University Research Dissemination Centre**, Thessaloniki, Greece. Thanks to this event, GREENOMED project was able to raise awareness about green manufacturing and its opportunities and impacts on citizens’ lives through implementing green innovations in manufacturing industry. In particular, the first GREENOMED conference targeted general public aiming to make aware normal citizens on their role in enhancing sustainable innovations and green technologies. The conference hosted speakers at European, National and Regional levels and was organized into two parts: plenary morning sessions, and parallel workshop sessions in the afternoon.

The **first morning session** was focused on introduction of circular economy and green manufacturing and explaining how they could impact the everyday life of citizens. The **second morning session** was focused on the social and economic impacts that green manufacturing can bring to the society. In particular, the opportunities for job creation and local development, as well as the skills and competencies, were the main topics of discussion during the second plenary session.

In the **afternoon**, some **parallel workshops** were settled where citizens could directly interact with different stakeholders (NGOs, companies, other modular projects, etc.) discussing about green manufacturing from different perspectives including green entrepreneurship, urban waste management, innovation public procurement for green manufacturing, and reducing carbon footprint of food manufacturers.

The first GREENOMED conference provided also the opportunity for communication at horizontal and Programme levels by having speakers and participants from the MED Programme, Green Growth community and its modular projects (PEFMED, MADRE) as well as modular projects of other MED communities (Prominent MED).

All the presentations and pictures of the event are available in the project website at the following link: <https://greenomed.interreg-med.eu/news-events/news/detail/actualites/first-greenomed-conference-photos-and-presentations/>.



AUVERGNE RHONE-ALPS AND GREEN MANUFACTURING

Auvergne Rhône-Alpes Region encompasses a regional strategy focusing on key aspects of Green Manufacturing topics, such as “industry of the future” or “energy”. Consequently, several initiatives to boost the development of the industry are organized. Among these initiatives a group of clusters dedicated to these topics was created in order to coordinate and orchestrate the development of the industry of the future. Among the events organized by the group, it is worth to name the connected factory workshop, on 24th of October 2017, in Lyon, or common booth on tradeshow, as on Global Industry, in Paris from 27th to 30th March 2017. The group activities are several and aimed at developing a sustainable idea of manufacturing. In addition, at regional level, different



companies are developing activities associated to Green Manufacturing, such as Group Pernoud, which are involved in the European project BEinCPPS, to develop a connected mould for injection moulding, in order to better control injection moulding process and thus to save energy and material. Other companies are associated with R&D center and cluster in group dedicated to composites recycling.

Plastipolis, within the frame of GREENOMED, is developing a pilot plant on Smart Plastics. In order to create a regional plan interested for many stakeholders, Plastipolis has involved ongoing working group on Smart Plastics to validate their interest and integrate their ideas. On the other hand, Plastipolis has identified potential targets that could support the pilot plant building. Indeed, the main aim of the GREENOMED WATIFY public event held on 30th of January, in Lyon, was to validate the interest in developing a regional pilot plant on Smart Plastics. Plastipolis foresees to associate the ongoing action, developed by the local authority, Haut Bugey Agglomeration, on the development of a sort of cluster dedicated to Smart Plastics. Currently, Plastipolis is working on the concept note of this pilot plant idea, and it will organize a second meeting, on May 4th 2018, with companies and stakeholders to continue the development of the pilot plant by the regional working group.

PROJECT PROGRESS

During February and March, project activities were on-going, mainly focusing on implementation of GREENOMED methodology. In particular, the main activities were as following:

- The 3rd project plenary meeting in Greece and the 3rd Steering Committee meeting were held respectively on the 8th and 9th March 2018. During both meetings the consortium partners have the opportunity to discuss about the progress of the activities, the main issues encountered at regional level and the next steps necessary to progress the project activities.
- Activities aimed at implementing the first steps of the GREENOMED methodology advanced. In particular, the Region of **Central Macedonia and the Continental Croatia** organised events in the respectively Region to raise awareness about Vanguard Initiative and network of pilot plants as well as identify key topics. Meanwhile, required support was provided to these regions by coaching partners including CNR-ITIA, AFIL and EURECAT;
- Activities related to organisation of the first GREENOMED conference were intensively in progress by CNR-ITIA, EURECAT and i-BEC;
- Interaction with SYNGGI (Green Growth Horizontal Project) was in progress and GREENOMED contributed to provide input for the Programme MED mid-term event "MADE IN MED".



WHAT'S HAPPENED IN GREENOMED? (FEB 2018 – MARCH 2018)

GREENOMED GREEK STAKEHOLDERS MEETING IN THESSALONIKI, GREECE

On the **20th of February 2018**, Interbalkan Environment Center (i-BEC) organized the first stakeholders meeting in the frame of the testing implementation activities of Greenomed project **in Thessaloniki**, Greece.

The main subject of the meeting was to raise awareness about GREENOMED, Vanguard Initiative and the concept of Pilot plants to regional stakeholders, to explore a common ground in understanding the potential of pilot plants as facilitators in introducing and further supporting innovative technologies in the manufacturing sector, aiming to strengthen and promote green manufacturing.

The meeting was attended by several regional stakeholders such as representatives and executives from the industry and manufacturing sector in the Region of Central Macedonia, research institutions and Academia, policy makers, as well as representatives from innovation clusters at the local and regional level.

During the event, Professor G. Zalidis, Scientific Director of the Interbalkan Environment Center, highlighted the opportunity that GREENOMED project brings by transferring know-how towards the creation of living labs in the Region of Central Macedonia and emphasised important role of stakeholders to actively engage in a common path towards the development of the needed synergies and collaboration structures.

At the institutional level, the Head of the Department for the Support of Innovation of the Region of Central Macedonia Mrs. Maria Goulaptsi raised the point about Strategy for Smart Specialisation in terms of policies, translating the core pillars of Smart

Specialisation into concrete activities and projects to be implemented.

During the last part of the event, a roundtable was settled to let the stakeholders exploring potential initiatives and ideas that could constitute the building blocks of pilot plants in the Region of Central Macedonia. Challenges, communication gaps, strengths, weaknesses and opportunities were identified and discussed, paving the way towards the development of the first regional working group orchestrated by Interbalkan Environment Center (i-BEC).



GREENOMED CROATIAN STAKEHOLDERS MEETING IN VARAZDIN, CROATIA

The first stakeholders meeting in Croatia was held on **the 20th of March 2018** in the Croatian Chamber of Economy - **Varaždin** County Chamber. The aim was to inform companies and other regional stakeholders about the possibility of joining the pilot initiative of the project and the opportunities and benefits of involvement the business sector into existing European innovation chains. As Ms. Renata Papec from Varaždin County Chamber reported, the meeting was intended primary for entrepreneurs since the pilot plants must derive from entrepreneurial needs. She also remarked the importance to engage Croatian entrepreneurs among the innovation chains that exist throughout the European Union.



Moreover, the Cluster Intelligentna Energija manager, Mr. Mladen Perkov, emphasised the necessity to attract stakeholders to introduce and develop a pilot plant that provides the opportunity for efficient production with the ultimate goal of reducing raw material needs.

"We can take an example from the Varaždin County, company Solvis, which manufactures photovoltaic panels. After 20-25 years use of panels, instead of depositing or throwing them, they can be reused" - Perkov said.

What an entrepreneur can concrete expect from participating in this project was explained by Mr. Jordi Romero from EURECAT who presented the Demo Case "Advanced and Sustainable Technology for Functional Polymers".

The meeting was also attended by the president of Varaždin County Chamber Mr. Dragutin Gložinić, who stated that the Varaždin Chamber is currently implementing six projects.



WHAT'S NEXT?

PROGRAMME MED: MADE IN MED EVENT

18-19 APR 18	 PROGRAMME MED Interreg MED Community: "Made in MED" event in Rome, Italy
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The mid-event of Programme MED "MADE IN MED" will be held on the **18-19th of April 2018** in **Rome**, Italy. The event aims to demonstrate, through the concrete results of Modular, Horizontal and Governance projects, how the Interreg MED Programme architecture has become a "living" integrated process with tangible results, where thematic communities share a uniform approach. The overall ambition is to deliver focused messages to policy level, therefore influencing future perspectives and planning actions, both at transnational and national levels. Along with other modular and horizontal projects, GREENOMED will be in Rome to present the results of the project.

GREENOMED WATIFY MATCHMAKING EVENT: "AUTOMATION & ROBOTICS IN GREEN MANUFACTURING" IN CROATIA

27 APR 18	 GREENOMED WATIFY matchmaking event on automation & robotics in green manufacturing in Varaždin, Croatia
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CCE - Varaždin County Chamber is organizing a GREENOMED event on **27th April 2018** in **Varaždin** in the frame of testing implementation activities of the project. The event is co-organized with Watify and aims at facilitating the cooperation between different national and regional stakeholders at focusing on area of business interests and regional excellence in

innovation. The event will help to identify complementary opportunities and to connect different actors internationally in pre-arranged B2B meetings.

SECOND STAKEHOLDERS MEETING IN FRANCE

4 MAY 18	 GREENOMED Second stakeholders meeting in Auvergne Rhone-Alps, France
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Plastipolis is organizing a second GREENOMED event on **4 May 2018** in **Auvergne Rhône-Alpes Region**. The event is the following step of the first event which was held in January 2018 aiming at consolidation of the regional working group by identification of potential stakeholders interested and aligned with the Smart Plastic pilot plant idea and take next steps to design the concept note of the regional pilot plant.



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