



MID-TERM SEMINAR | Torino, 14 Sept. 2023

Towards zero-net mobility: Advancing rubber reuse in mobility applications through circular (open & closed-loop) scenarios

PROJECT LIFE GREEN VULCAN

Project identification number	LIFE19 ENV/IT/000213
Project Full Title	High performance devulcanized masterbatches for End-of-Life Tire reuse in high-volume technical compounding applications
Funding scheme	LIFE Environmental and Resource Efficiency
Project Website	https://www.lifegreenvulcan.eu/

Innovando is the coordinator of the **Life Green Vulcan** project in which a number of partner institutions participate, such as **Rubber Conversion**, **Bridgestone**, **Stellantis**, **Centro Ricerche Fiat**, **University of Trento**. The project objective is to industrialize high quality recycled compounds starting from end-of-life tires (ELT) thanks to the **innovative devulcanization technology of Rubber Conversion, to be used for the production of tires and technical articles for the automotive industry**. Precisely, within the project, the devulcanization technology was used for the production of two compounds using a high content of raw materials in rubber reworked from ELTs:

- a compound for manufacturing spring pads for cars and light trucks
- a compound for manufacturing Passenger Car Radial (PCR) tyre treads.

High-Level Seminar of the LIFE GREEN VULCAN Mid-Term Review

As part of this project, Innovando is organizing a **Mid-Term Seminar**, scheduled for **14 September 2023 in Turin**, Green Pea area. The high-level meeting will be structured as a **hybrid**, both face-to-face and with the possibility of remote connection to the event. **The purpose** of this seminar is to inform stakeholders about the project results, as well as discuss with participants about the **procurement policy for rubber substitutes for sustainable materials used for the production of new rubber materials** (e.g., automotive components, tyres, etc.), to evaluate the main **market drivers** leading to a revolutionary impact on the SDGs (Sustainable Development Goals) through new mindsets, business models and disruptive technologies, as well as on the **cross-sector scalability possibilities of the technology**.

An Overview of the Program

Aligned with the Green Deal industrial plan for the Net-Zero era, the event will be opened by representatives of the partner institutions participating in the implementation of the project, providing an overview of the **results achieved** and future prospects and opportunities. The participants will then be addressed by **high-level representatives of the competent European institutions** (Monitors of the European Commission, Representatives of the most relevant European Departments, Representatives of European projects working on the transformation of the natural rubber supply chain in a sustainable way) **and national institutions** (Ministry of Environment and Energy Security, ASSOGOMMA, UNIRIGOM), will present the **challenges of the European and national ecological transition**. One of the sessions of the program will be dedicated to the Push & Pull approach: **the levers to stimulate change**, as well as the analysis of the **megatrend of the "green" technology evolution of tires and the Digital Product Passport**.

An important segment of the event will be dedicated to discussing **environmental requirements when it comes to green procurement strategies**, the goal of which is to reduce negative impacts on the environment, while promoting more sustainable and circular models of production and procurement of materials. Finally, commercial strategies will be discussed in the form of **an open dialogue with rubber compounders active in the automotive sector**. This part of the event will be structured as a two-pronged focus group, one stimulating dialogue with policy makers and the other with different stakeholders aiming to identify issues.

Draft Agenda of the Program

8:30-9:00 | Registration and Welcome Coffee

9:00-9:10 | Introduction by the host of the event **Innovando Srl**

SESSION 1 | European Green Deal

The European and national challenges of the ecological transition

9:10-9:15 | Introduction by the moderator

9:15-9:30 | Brief introduction by each one of the speakers (5 min per speaker)

9:30-10:00 | Two questions for each one of the speakers

- Ministry of Environment and Energy Security (MASE) | **Laura D'Aprile, Chief of the Department for Ecological Transition and Green Investments*
- World Business Council for Sustainable Development (WBCSD) | *Elisa Pesce, Senior Associate of the Tyre Industry Project (TIP)*
- Ministry of Enterprises and Made in Italy (MIMIT) | *Francesco Andrea Giuseppe Virtuani, Administrative officer at the Division III – Circular Economy and Sustainable Development Policies General Directorate for Industrial Policy, Innovation and SMEs*

This first block aims to stimulate the dialogue on the topic of rubber decarbonization and ELT recovery worldwide, to look at all aspects of the new EU industrial strategy in this domain, as well as to analyze the most important circular aspects.

SESSION 2 | Presenting project results

10:00-10:05 | Introduction by the moderator - Massimo Rinaldi, Head of Technology Networks, Warrant Hub

10:05-11:05 | Presentation of the project results by each of the project partners

- RUBBER CONVERSION – Filippo Fochesato
- University of Trento – Nicola Pugno
- Centro Ricerche Fiat – Paolo Chiappero
- Stellantis – Michele Rabito Crescimanno
- Bridgestone – Mauro Patelli, Alessandra Calzetta
- Innovando Srl & Ambientitalia teams

The second block will bring together representatives of all partner institutions to present their contributions to the realization of the project goals and point out the perspective and replicability of the project and its future perspectives.

11:05-11:30 | Coffee Break

11:30 – 11:45 | Life Re-Shoes: presentation of the project - introduce Sofia Lanfranconi, Project Manager Economia Circolare, Innovando Srl

SESSION 3 | Push & Pull: The drivers to stimulate the change

11:45 – 11:50 | Introduction by the moderator

11:50-12:40 | Two questions for each one of the speakers

- European Commission DG for Energy | *Paolo Tosoratti, Policy Officer at European Commission - Efficiency of products, Ecodesign & labelling*
- Ministry of Environment and Energy Security (MASE) | *Sergio Saporetti, Government official (GPP – Green Public Procurement)*
- ASSOGOMMA – Plastic Rubber Federation | *Fabio Bertolotti, Director*
- The Italian Rubber Recovery Union - UNIRIGOM | *Renzo Maggiolo, The President*

The third block will cover the megatrends of the green technological evolution of tires, the drivers for the environmental considerations into the Green Public Procurement procedures aiming to stimulate such market demand for products containing recycled material content, while providing an overview of tire labeling and new perspectives for more sustainable mobility

12:40 – 14:00 | Lunch Break

14:00-14:15 | Closing Remarks

14:15 | Networking

Project Coordinator



Innovando Srl is an innovative SME that offers transversal solutions and technologies for different sectors, **intended for the complete management of industrial waste, both physical and digital monitoring of end-of-life products** (e.g., end-of-life tyres, textile products, mattresses, batteries, etc.) **and recycled material streams**. Innovando's approach is based on **competences in fulfilling the Extended Producer Responsibility (EPR) policy**, both in providing an authorized waste collection service and in identifying technologies and systems that guarantee quality and constancy in the supply chain that allows to industrialize and climb. The entire Innovando supplier network is perfectly integrated into the proprietary supply chain management system (iSystem), which guarantees **document and product traceability in real time throughout its life cycle**, from collection to reuse and recycling.

Project Partners



Bridgestone Europe was created in 1972 and is headquartered in Zaventem, Belgium. Today, Bridgestone Europe employs 12,500 people across Europe and total sales reached €3.4 billion in 2014.

The **company's tires** are primarily sold under the **Bridgestone, Firestone and Dayton** brand names for both consumer and commercial use. Whether our product is used in passenger cars, 4x4s, trucks and buses, construction and off-road vehicles, tractors and agricultural equipment, motorcycles and scooters, motorsports and aircraft, we develop products focused on the needs of our boss, the customer.

With its state-of-the-art tire technology, the company is a major original equipment supplier for all major vehicle manufacturers.



The **Research Center of Fiat**, founded in 1978, has the mission of **developing and transferring innovative products, processes and methodologies** in order to improve the competitiveness of the Fiat Group's products. Also, through cooperation with a pan-European and increasingly global network of **over 1700 partners from industry and academia**, **CRF conducts collaborative research initiatives at national and international level** in collaboration with all major public and private stakeholders interested in sustainable mobility, targeting in particular the industrial exploitation of research.



Stellantis is one of the **world's leading automobile manufacturers and a mobility provider**, driven by a clear vision: to offer **freedom of movement with distinctive, affordable and reliable mobility solutions**. In addition to the Group's rich heritage and broad geographical presence, its greatest strengths lie in its **sustainable performance**, deep experience and wide-ranging talents of employees working around the world. Stellantis will leverage its broad and iconic portfolio of brands, founded by visionaries who have instilled passion and a competitive spirit in brands that speak to both employees and customers.



Rubber Conversion's products and services are **helping rubber manufacturers reshape their business values by reusing scrap rubber and ELT-derived rubber materials** (End-of-Life Tyres) as renewable material and energy properties, while reducing risk for health, **committing to environmental sustainability** and consequently helping the economy. Rubber Conversion's sustainable rubber compounds are produced from post-production and post-consumer rubber. Therefore, by **reducing raw material costs and improving material and carbon footprints**, company's commitment to recycling and upcycling of materials is helping conscious companies to improve the sustainability and profitability of their products through Rubber Conversion's products ecological and innovative principles.



UNITN has extensive experience in managing EU projects funded under FP7 (119 projects), H2020 (97 projects so far), LIFE (3 projects) and DG Justice (15 projects). Concerning the topic of the present project, UNITN (in particular, Prof. Nicola Pugno) has **published about 440 papers in international journals in the field of mechanics of solids and materials** and has **received EU excellence grants** such as Erc StG, Erc Poc, Fet Open, Fet Proactive, Graphene Flagship (where he was Task leader of graphene composite modeling).