



Project «LIFE GREEN VULCAN»

After LIFE Communication Plan



With the contribution of the LIFE Programme of the European Union
LIFE19 ENV/IT/000213 - LIFE GREEN VULCAN

Project Information

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
Project Acronym	LIFEGREEN VULCAN
Funding scheme	LIFE Environmental and Resource Efficiency
Total eligible budget	2.115.607 €
EU Life Contribution	1.163.583 €
Start date of the project	September 2020
Duration	42 months
End date of the project	February 2024
Project Coordinator	INNOVANDO SRL
Project Website	https://www.lifegreenvulcan.eu/
LinkedIn page	https://www.linkedin.com/company/lifegreenvulcan/?viewAsMember=true

Project Partners



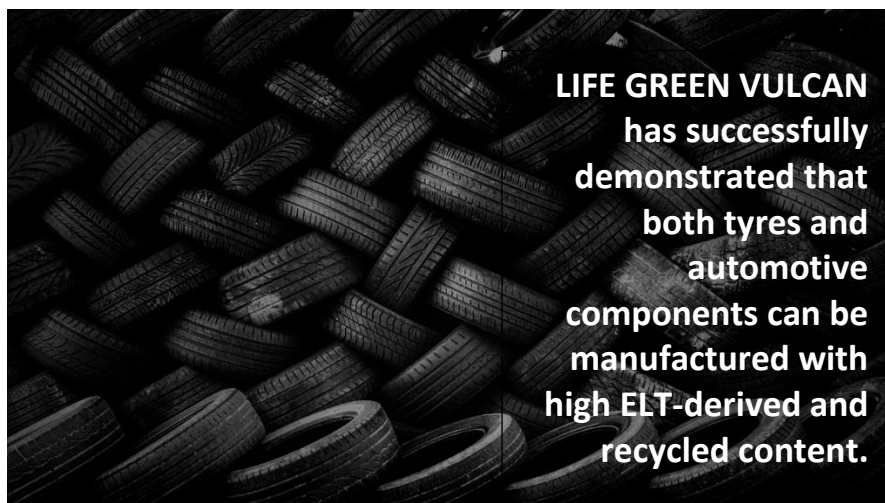
Summary

Being inserted on the European Commission's list of Critical Raw Materials (CRM) in two consecutive revisions (updates every 3 years), **natural rubber** has reconfirmed its economic importance and the need for supply diversification. Forming a strong industrial base and producing a broad range of goods and applications used in everyday life and modern technologies, this raw material is **crucial to Europe's economy**. Thus, the importance of having a reliable access to this material within the EU and across the globe represents a growing concern, as well as the risk associated with the material supply.

Vulcanized rubber is very difficult to recycle without compromising its quality-related and some other properties, which is why **the End-of-Life Tyres (ELTs) are used at very low concentrations in tyre manufacturing (below 3%), and no recycled rubber is being used to produce automotive-grade technical articles**. The automotive industry has placed significant focus on sustainability and circular practices, for instance, by reinserting implementing various recycled materials into cars. The rubber, however, despite being one of the major End-of-Life vehicle waste streams, hasn't been able to match the required automotive properties so far. This translates into the current inability of recycled rubber to meet the requirements of the automotive industry to be considered.

Replacing virgin rubber with recycled rubber for technical applications and without compromising its quality and performance

Rubber devulcanization is an extremely powerful method of rubber recycling that has an enormous potential for the development of quality raw materials from ELTs and post-production waste. **The Life Green Vulcan project has demonstrated that the resulting material can be used at high loading, as a substitute of virgin rubber, into technical products** such as in the production of new tyres (precisely for the production of the new PCR tyre tread), with a 10% weight concentration, as well as in the production of new technical components for the automotive sector (i.e., spring pads), with 20% weight concentration.



Low temperature devulcanization: safe, high-performance, sustainable material



SRC 450 HP

THE MATERIAL SRC 450 HP HAS BEEN SPECIFICALLY DEVELOPED FROM THE END-OF-LIFE TYRES AND ADJUSTED WITH THE NANOFILLERS (CONTRIBUTION OF ONE OF THE PARTNERS – UNIVERSITY OF TRENTO) AND CONSEQUENTLY INDUSTRIALIZED TO PRODUCE NEW SPRING PADS (PARTNER STELLANTIS) AND PCR TYRE TREADS (PARTNER BRIDGESTONE).

AFTER PERFORMING A SERIES OF TESTS ON MATERIALS AND FINISHED PRODUCTS TO ASSESS, PERFORMANCE, DURABILITY AND AGEING, BOTH PARTNERS BRIDGESTONE AND STELLANTIS HAVE CONFIRMED THAT THE MATERIAL DEVELOPED BY RUBBER CONVERSION HAS SUCCESSFULLY PASSED ALL THE TESTS AND PROCEDURES.

The Rubber Conversion's technology and material patent is covering nearly 40 countries worldwide (21 in the EU, and 18+ outside of the EU).

Thanks to the development of an innovative mix of Natural Rubber/Styrene-Butadiene Rubber (NR/SBR) devulcanized masterbatch, a new sustainable spring pad for the Alfa Romeo Tonale has been designed and manufactured with 20% weight concentration of recycled ELTs, as well as a PCR tyre tread with 10% weight concentration of recycled ELTs.

Spring Pads

20%



PCR treads

10%

The impact

Not only these compounds enable significant raw material savings, but they also bring about **significant CO2 emissions reductions**, with a cumulative long-term potential reduction estimated in the range of 500.000 to 1 million ton of equivalent CO2.

The technology developed by Rubber Conversion within the project Life Green Vulcan, significantly contributes to establishing a scalable supply of quality ELT derived sustainable materials for the European tyre and automotive industry, enabling them to achieve their decarbonization targets.

Prospects and applications in the future

The technology is also being successfully tested for the manufacturing of other automotive components and rubber-based products like gaskets and shoe soles, extending the market application and the overall potential positive impact on decarbonization.

The developed product SRC 450 HP, has therefore a huge potential to be used to produce other rubber components for cars and commercial vehicles, in even higher percentages and in other sectors, such as the footwear one.

Within the project Life Re-Shoes, this has been already demonstrated with the technology of Rubber Conversion.

Table of Content

Summary

A short introduction 6

1. Target Audience 6

2. Communication Messages 7

3. Channels of Dissemination and Actions 8

4. Events 11

5. Communication material 22

6. Budget overview 24

A short introduction

The European Commission's focus on the strategic nature protection projects related to the environment and climate within the Life Program intends to support the implementation of EU environmental and climate legislation and policies at regional, multi-regional, national or transnational level. In this sense and on a regulatory side, the policy on the recovery of the End-of-Life rubber in the automotive and General Rubber Goods sectors would contribute to the facilitation of additional expansion of this disruptive solution in markets. The performance of the material is evidently equal to that of virgin rubber; therefore, the solution is strategically harmonized with the goals of the EU Commission related to the threat from a supply chain dependence on raw rubber materials. The missing factor that would accelerate the sustainability and introduce a circular sector approach is the regulatory one.

The situation is similar in the sector towards which the technological and innovative rubber material solution started to spread – the textile industry, particularly in the footwear sector. The expansion of EPR¹ policies (already applied in the ELT sector) to producers of other products, like footwear ones, could contribute to a faster spread of this technology, with measurably significant sustainable and circular results.

The communication plan, inseparable from the business one, depends to a certain extent on the mentioned context. In general, sensitization of the defined stakeholders in the way it has been realized so far is possible and is part of the After-life communication plan. However, for a more efficient performance, we are certainly available for possible collaboration and targeted mass communication on this topic.

1. Target Audience

Within the dissemination and outreach plan created at the beginning of the project, all the communication-related activities were divided into three strategic focus areas, namely:

1. Dissemination and Communication
2. Networking with LIFE and no-LIFE projects
3. After LIFE Communication.

At the very beginning of the project implementation, the project-consortium identified the key stakeholders, divided into several groups, namely:

- **Stakeholder 1**
Automotive sector that is mapping the circular economy roads forward (i.e., Circular Cars Initiative, ECOPNEUS, EURiC and similar ones)
- **Stakeholder 2**

¹ Extended Producer Responsibility

Global End-of-Life Management initiatives and projects (i.e., Tyre Industry Project – TIP, FEAD - European Waste Management Association)

- **Stakeholder 3**
Policymakers from the automotive and rubber manufacturing ecosystem (i.e., ASSOGOMMA)
- **Stakeholder 4**
Scientific community (i.e., EIT Raw Materials, Universities, and relevant research centers)
- **Stakeholder 5**
General public.

At the end-stage of the project, we regrouped the categories in a following way:

1. Association product manufacturers (such as ETRMA) and circular projects initiatives (like the Circular Car Initiative)
2. Associations of ELT recyclers (i.e., UNIRIGOM, FEAD, EURIC) and PROs (ECOPNEUS)
3. Advocacy Groups and technical committees to support policymakers (identifying the most relevant groups within the Ministry of the Environment and Energy Security, so called “CAM” - Criteri Ambientali Minimi eng. Minimum Environmental Criteria)
4. EIT, Italian Circular Economy Platform)
5. General public.

For each stakeholder category, a framework plan for getting in touch was made, the most relevant communication channels were defined, and the most suitable messages were arranged during the project implementation period.

An effort was made to give equal attention to each of the groups, as well as to involve them as concretely as possible, for example, by inviting them to events organized mainly by the project coordinator Innovando.

The idea is to implement communication after the project in a similar way, with evidently **strong messages and the concrete contribution provided by the project - the industrialization of the material and its insertion into the new product “circular” design procedures** of large companies, such as the Bridgestone, for the new PCR tyre tread production, and Stellantis who used the SRC 450 HP to produce new spring pads.

Some of the actions have already been implemented, which is presented in the following paragraphs.

2. Communication Messages

During the period of project implementation, the content of the messages depended on the development phase of the project, therefore, in the initial phase, the goal was general information about the project's goals, and to sensitize the audience about the importance as well as the impact of the project through various aspects, while with the development of the project, the

communication message have taken a more concrete form, until its completion, resulting with measurable, as well as tangible results.

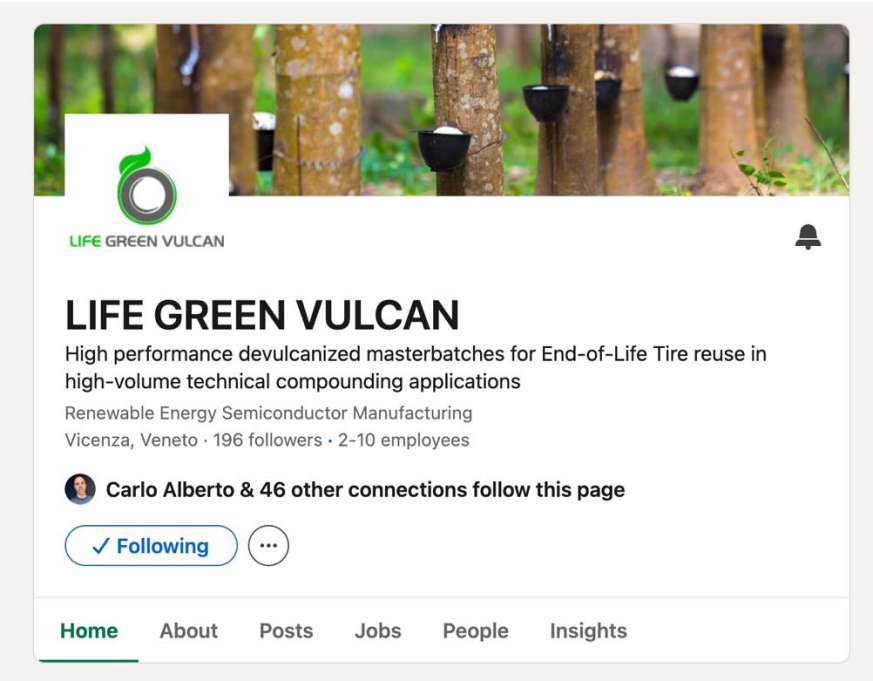
In this document, we will not go back to everything that has been implemented so far, but will concentrate only on the activities implemented after the end of the project (from February 2024 until now), as well as on all upcoming actions.

Since the completion of the project, messages are insisting on **the promotion of the achieved results**, as well as on the industrialization of the product aimed essentially at 2 sectors: automotive and tire production. However, when it is appropriate, the third sector - footwear production - is also introduced into the communication, through the example of the expansion of the tested technology into other domains and this is done through the promotion of the new Life Re-shoes project where both Innovando – the coordinator of the Life Green Vulcan project and Rubber Conversion participate.

In the following lines, we will present a panorama of the activities realized by Innovando and Rubber Conversion, underlining that to make a better impression and a stronger impact, it would be ideal to realize the continuation of activities with all the partners of the Life Green Vulcan project and to jointly approach these aspects of communication, as well as the further practical development.

3. Channels of Dissemination and Actions

The communication has been mainly structured either as written one, through the emails, Newsletters and LinkedIn posts, or a public communication – through the participation in the most relevant events or by organizing events. Moreover, the project website was used, as well as the related LinkedIn and Twitter/X platform pages to distribute the messages.



[LinkedIn page of the project Life Green Vulcan](#)



[Twitter page of the project Life Green Vulcan](#)



[Website of the project Life Green Vulcan](#)

In the coming months, communication will shift in a structured way to Innovando's web and LinkedIn pages, and to the technology provider's – Rubber Conversion's channels.

4. Events

We present some of the events realized in the previous months after the formal completion of the project, as well as the method of disseminating its results previously described.

4.1. Events held since the end of the project

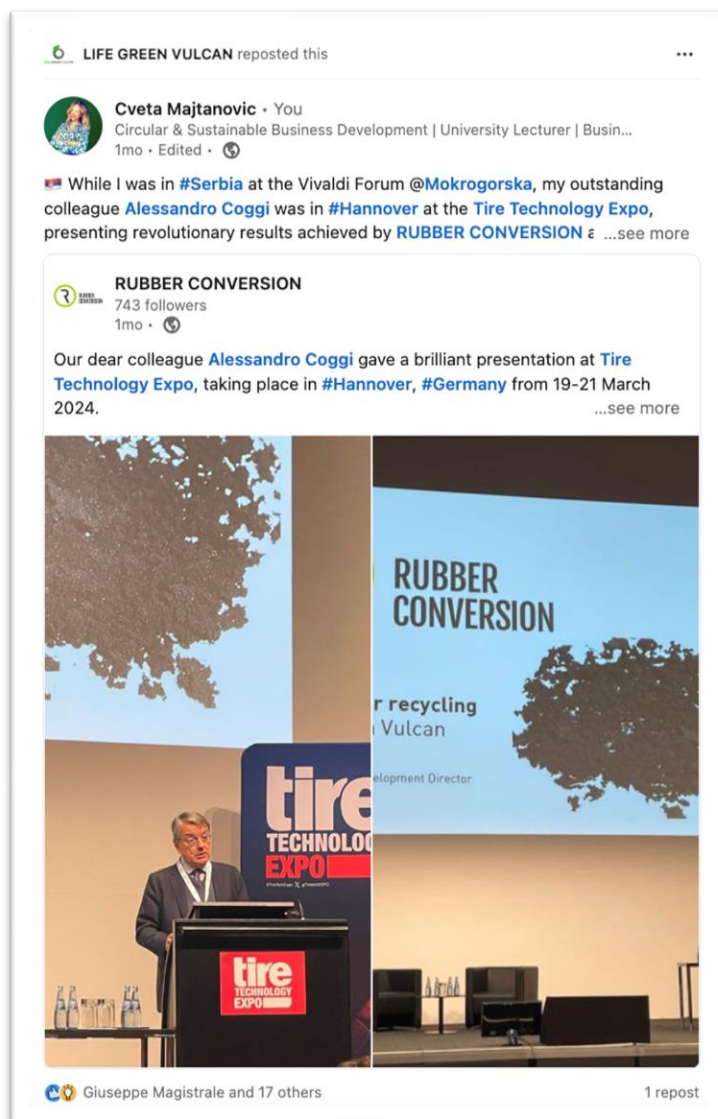
Tire Technology Expo, Hannover, Germany

Held between **19th and 21st of March 2024**, the most significant tyre event has demonstrated the companies and solutions that are pioneering the future of sustainable general rubber goods and tyre manufacturing.

On behalf of **Rubber Conversion**, **Alessandro Coggi – Business Developer** had an honour to present the eco-friendly and innovative solution of Rubber Conversion that, through the project Life Green Vulcan, has demonstrated the way to develop tyres from production offcuts and End-of-Life tyre materials, to reduce carbon emissions in an LCA manner (Life Cycle Assessment, an analysis performed within the Life Green Vulcan project) and to scale out significant advancements also in the automotive sector.



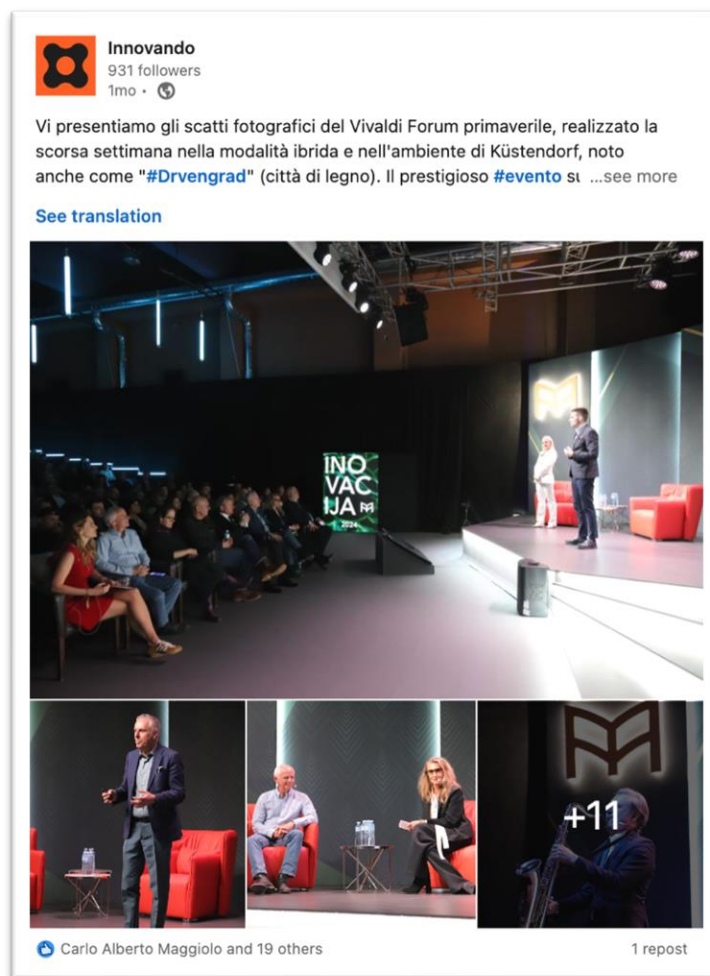
Visual messages were shared on the channels belonging to the company Rubber Conversion and they were reposted by the project coordinator Innovando as demonstrated in the screenshot below.



LinkedIn post about the Tire Technology Expo

Spring “Vivaldi Forum” for Innovation, Mokra Gora, Serbia

A prestigious business event that gathers entrepreneurs to bring the best examples of innovation from all over the world. Apart from Cveta Majtanovic, who presented both Innovando and Rubber Conversion companies and their projects, the participants included several directors of Microsoft, Tesla Motors company co-founders, people who structured the brand “Apple” while working closely with Steve Jobs at Apple for decades, and numerous prominent individuals from various sectors.



Innovando has covered the hybrid event through its LinkedIn communication

Connecting Europe Days, Brussels, Belgium

In the period between the **2nd and 5th of April 2024**, **Innovando** was not only **presenting** but **also exhibiting in Brussels, at the Square-Brussels Convention Centre**. Within the event promoted by the European Commission and CINEA - European Climate, Infrastructure and Environment Executive Agency, Life Green Vulcan project received an opportunity to share concrete measures for the creation of a sustainable, intelligent, and resilient transport and mobility network in Europe.

Innovando's and Rubber Conversion's representatives have presented the approach of the two companies to the sustainable use of recycled rubber deriving from the End-of-Life tyres, to produce new automotive components and new tyres.

Visitors of the prestigious event had the opportunity to see video material presenting simulations of partners Stellantis, Centro Ricerche Fiat and University of Trento, to listen to the presentation held by **project Coordinator and Business Developer of Innovando Francesco Di Pierro**, as well as to experience visually and by touch the innovative materials produced by Rubber Conversion.



Visitors feeling the devulcanized rubber material

Moreover, visitors were given the opportunity to see what products like spring pads created from recycled material look like – spring pads, the samples were physically displayed on the stand, while a sample of the tyre created by Bridgestone with Rubber Conversion's material was displayed digitally.



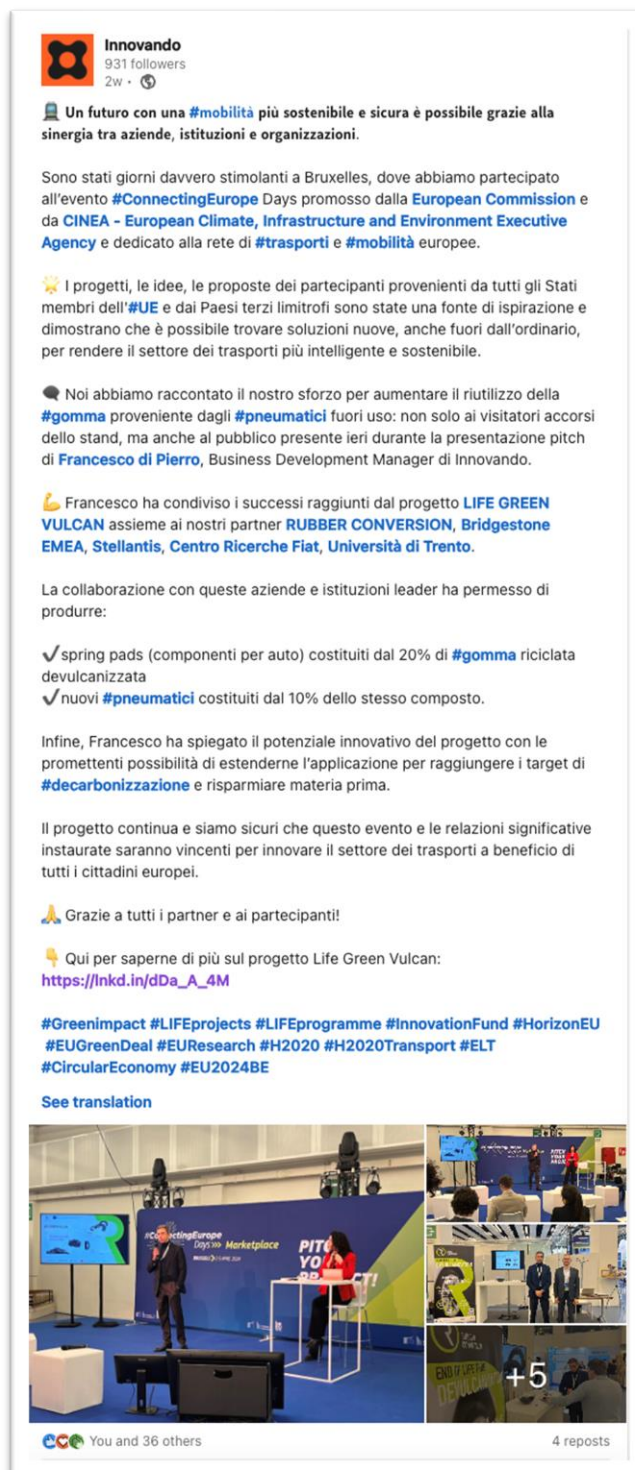
Spring pads created with 20% and tyre treads with 10% of the Rubber Conversion's material



Speech during the event – project Coordinator Francesco Di Pierro



Slider that was announcing the event on LinkedIn page of Innovando

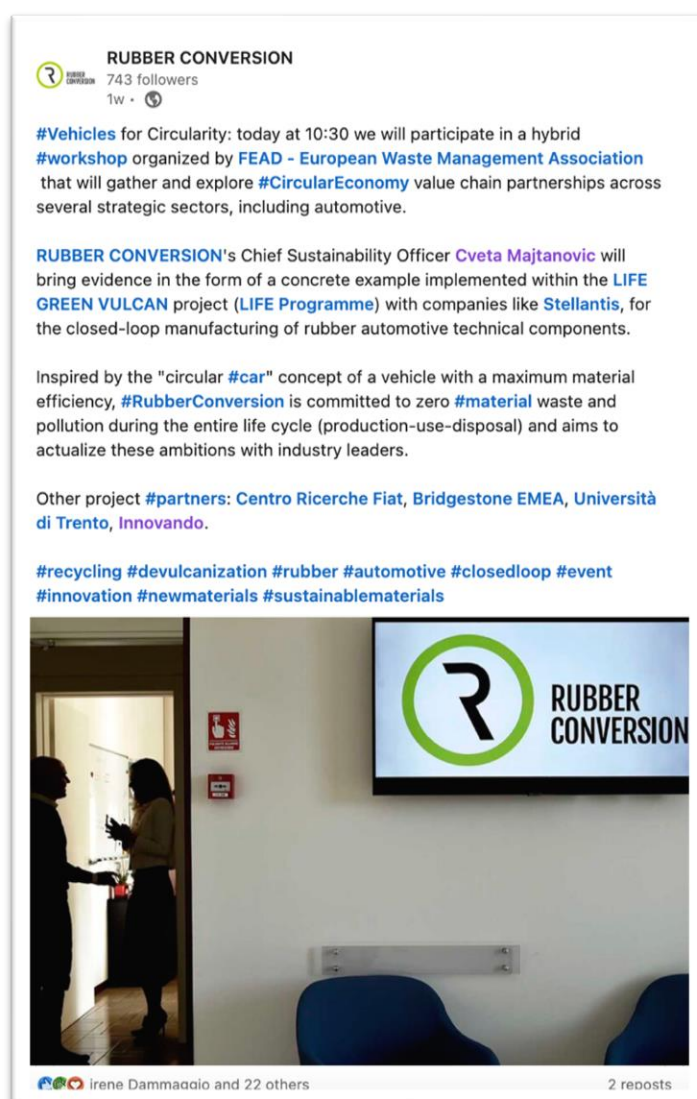


Post-event wrap-up post shared on LinkedIn

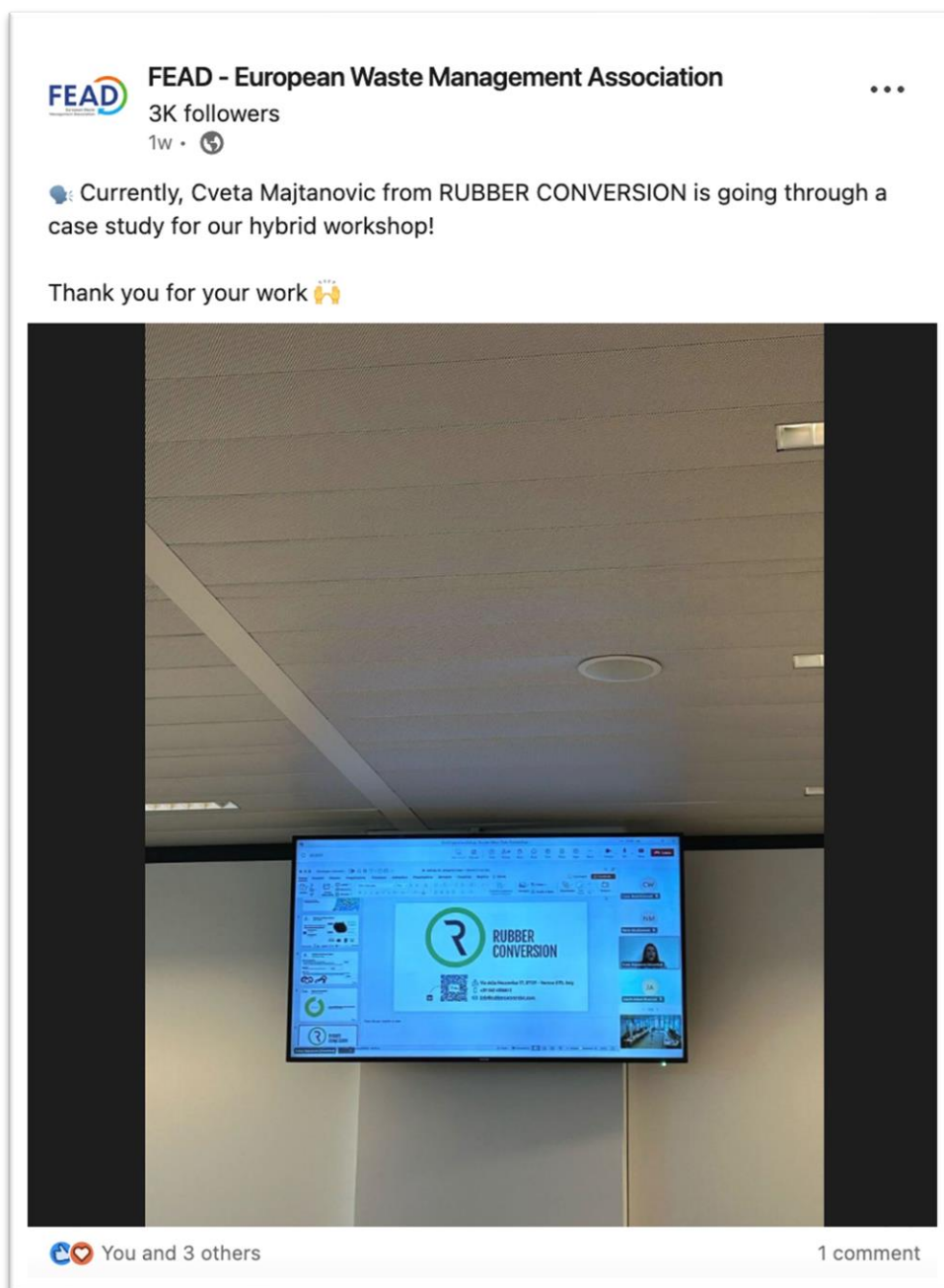
Circular Economy Value Chain Partnerships

Bringing together representatives of five strategic sectors, namely Automotive, Construction and Landscaping, Plastic packaging, Renewable energy and Batteries, Voluminous objects, the European Waste Management Association – FEAD has hosted a hybrid workshop, with an aim of providing an overview of the vision and partnership projects.

FEAD has invited Rubber Conversion to talk about its breakthrough technology implemented in the automotive sector in the most promising way ever seen. Under the topic “Vehicles for Circularity”, by sharing the results achieved through the Life Green Vulcan project, Cveta Majtanovic has tried to inspire the “circular car” concept of a vehicle with a maximum material efficiency.



LinkedIn Post shared on Rubber Conversion's page, announcing the event



FEAD's LinkedIn post talking about Rubber Conversion's presentation

Life Day Event, Bologna, Italy

An event organized by Warrant Hub who provided the project management support for Innovando and other project partners within the entire duration of the Life Green Vulcan project, gathered all the Italian Life projects in a one-day event held on the **19th of April 2024**.

On behalf of Innovando, Cveta Majtanovic – Director of Sustainability, held a presentation, demonstrating the results achieved, the role of each of the project partners, the experience of

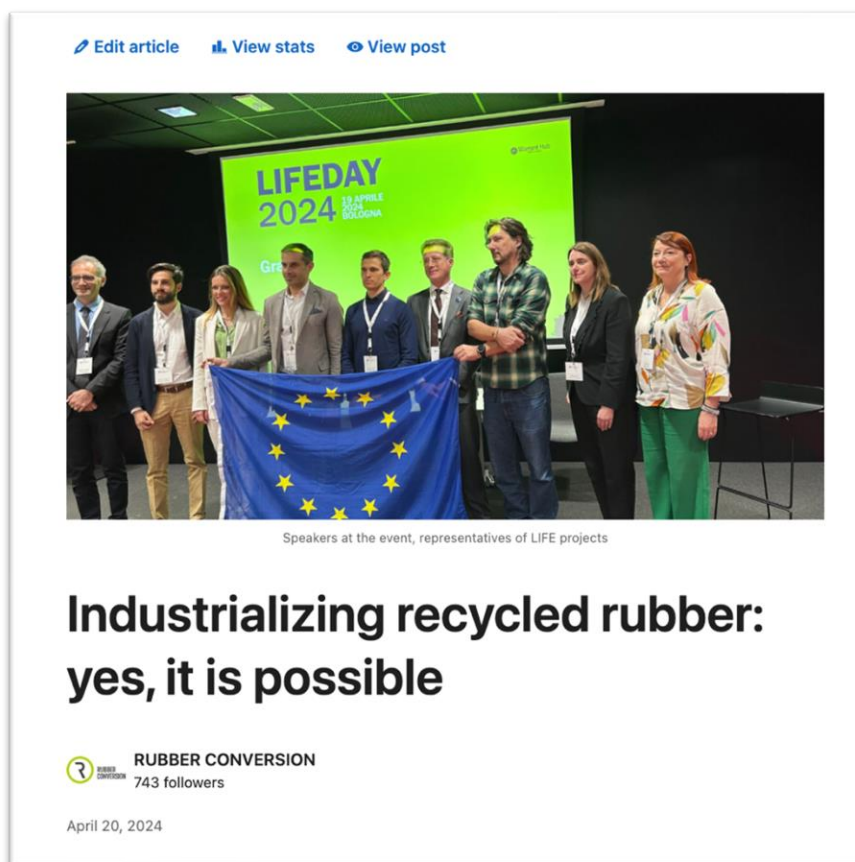
coordinating one Life project and the way these companies have contributed in a concrete way to the European challenges of continuous supply of raw materials in a sustainable and circular manner.



Visuals created to announce and distribute information about the event

Being a Member of the Board of Directors of the United Nations Global Compact – Network Italy, Cveta Majtanovic has also underlined the scopes of the SDG 12 (Sustainable Development Goal) created to stimulate the responsible consumption and production patterns. Reducing the use of natural rubber in the production of new automotive components or tyres, this project is helping the companies achieve the objectives of the Goal.

As a summary of impressions brought from the one-day event, Rubber Conversion created an article available on the link: [LinkedIn article](#).



An article published on Rubber Conversion's LinkedIn page

4.2. Some of the events that are planned

Expo 2024: Startup Autobahn, Stuttgart, Germany

Aiming to “Innovate, inspire and change” and powered by Plug and Play, this year’s Expo represents the ultimate matchmaker for top-notch startups and corporate partners from the automotive industry that co-develop innovative solutions in mobility, production, enterprise, sustainability and beyond.

The 13th edition is packed with keynotes and panel discussions from the leading voices of the automotive industry, among which Rubber Conversion representatives who will showcase the project Life Green Vulcan and the achievements, while exploring the networking opportunities.

Ecomondo 5-8 Novembre 2024, Rimini, Italy

This one is the reference event in Europe and the Mediterranean basin for the ecological transition and new models of circular economy and sustainable development. Innovando has been presenting in the last year’s Ecomondo exhibition, both as an exhibitor and as the conference speaker.

This year, he confirmed his presentation in an even larger space, within which he intends to continue the promotion of dissemination activities.

The 4-day event registers approximately 100.000 visitors.

Open facilities/plants, November 2024, Verona, Italy

Coordinated by AssoAmbiente, *the Association of Environmental Services Companies and Circular Economy and* with the aim of making citizens aware of the innovative technologies present in Italy, on World Environment Day, FISE AssoAmbiente has proposed a day of "Open Plants" involving the various plants of excellence in the country. The event was registered in the Sustainable Development Festival organized by ASviS, and Rubber Conversion was selected to participate in the upcoming event which will be held right after the Ecomondo event.

Page for more information:

<https://assoambiente.org/impianti-aperti>

5. Communication material

Flyers

Considering the list of events realized so far from February 2024 to the end of April 2024, the project coordinator has invested not only in travel and rental of advertising space, but also in the realization of graphic and video material for promotion purposes.



An example of a promotional flyer that conveys the main message of the project results and contains the logos of all partners (project name, project logo, its number, life logo, etc.)

Roll-up



A roll-up created for the event (with the same visuals used for the flyer)



Another picture of a big roll-up created for the future communication purposes

Video material

The video, lasting several minutes, was created for the purposes of visual explanation and presentation of the simulations accessed during the project. The video was displayed on the monitors during the event in Brussels.

Website continuous updates

Partner Innovando has changed its visual identity last year and created a page dedicated to the project for the new website, under the section Innovation.

<https://innovandotech.com/innovazione/life-green-vulcan/>

The site should be bilingual soon, and therefore translated into English in the coming months. Also, this will be the dominant platform for the after-life communication of the project, with the corresponding LinkedIn company page.

The situation is similar with partner Rubber Conversion, which is currently creating a new website.

PR/Press Activities

For upcoming events, it is planned to allocate funds for communication and public relations both in mainstream and specialized media, magazines, online portals etc.

6. Budget overview

	COMMUNICATION ACTIVITY	DESCRIPTION	PERIOD	COSTS in EUR
Feb 2024-May 2024 *Activities already implemented; financial resources already invested by the coordinator of the project Innovando Srl	Tire Technology Expo in Germany	Presentation of the project	March 2024	1.000
	Vivaldi Forum, Serbia	PR/Press activities, presentation of the project	March 2024	1.000
	Trade show and conference "Connecting Europe Days"	Exhibiting and presenting in a conference during the networking event on sustainable mobility (Brussels).	April 2024	4.000
	FEAD hybrid event	Project presentation	April 2024	300
	LIFE Day event	Presentation (Bologna)	April 2024	1.000
	Website	Creation of a dedicated page of the project on Innovando's website, coordinator of the project	April 2024	1.500
	Print material (i.e., roll-ups, flyers)	Creation of a roll ups and flyers with a summary description of the project to be used at events and conferences to illustrate the results.	April 2024	300
	COMMUNICATION ACTIVITY	DESCRIPTION	PERIOD	EXPECTED COSTS (in EUR)
Activities planned to start from May 2024	Plug & Play			2000
	Trade show and conferences ECOMONDO	Exhibiting, organizing specialized thematic conferences, participating in workshops and discussion panels	November 2024	5.000
	Open plant event	Promotion and an open day at Rubber Conversion's plant in Verona	November 2024	10.000
	LinkedIn campaign	Before the main events		5.000
	Press/PR Campaign	Annual cost, approximately		10.000
	Structured networking activities (local level – Italy, EU-level), updates of the website and promo materials etc.			5.000