



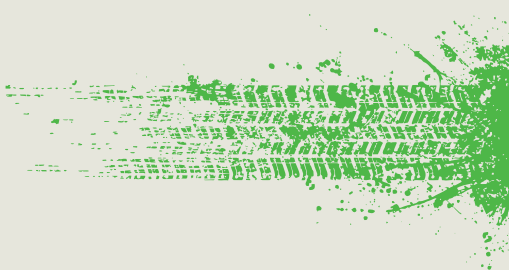
# ANNUAL REPORT 2021





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IOANNIS DOUKAS  
TSOLAKIS

President & CEO

2021. A year where we continued to have challenges. COVID-19 pandemic continued to concern us throughout the 12 months, taking measures that were required and that affected, to a large extent, our daily life.

The legislation on the alternative waste management changed, providing an integrated framework with the aim of protecting the environment. Thus, the need for spatial planning, urban planning, energy, and other urgent regulations was created by the authorized bodies at a nationwide level.

ECOELASTIKA, with professionalism, know-how and consistency, strengthened its operation even more, based on its goals regarding the principles of the circular economy for a sustainable future. With the main purpose of a green tomorrow, it managed over 44,000 tns of used tires of our country which was 90.22% of the estimated withdrawn amount.

2021. ECOELASTIKA, as a family, with a wide partners' network and with the use of new technologies, further strengthened its reward programs both to its partners and to citizens.

With the "ECOELASTIKA REWARDS" program, we achieved further facilitation of the coordination of the collection of used tires, rewarding the constructive cooperation with the ECOELASTIKA network, which are the cooperating green garages and tire repair shops - ecoelastikaspots, as well as the cooperating transporters to the licensed recovery units.

But we didn't stop there...

The ECOELASTIKA "Find the Sign" initiative motivated citizens who wanted to change tires to choose one of the cooperating ecoelastikaspots with the aim of utilizing the retired tires resulting from the change either as materials or as recovered energy.

2021. The RAP-ELT project, co-financed by Greece and the European Union, aimed to study the possibility of increasing the recycling rate of RAP (Reclaimed Asphalt Pavement) using modified asphalt with tire shred.

2021. ECOELASTIKA's social responsibility work was again remarkable. We carried out 3 actions in schools, creating free rubber safety floors from recycled vehicle tires and rehabilitating existing ones according to the REACH regulation and based on sampling and analysis.

Every day at ECOELASTIKA we are inspired by our vision for a development model based on the use of secondary materials from end-of-life tire processing. We work with love and passion for a future based on the principles of sustainable development. With the same passion, we continue in 2022.



GEORGE  
MAVRIAS

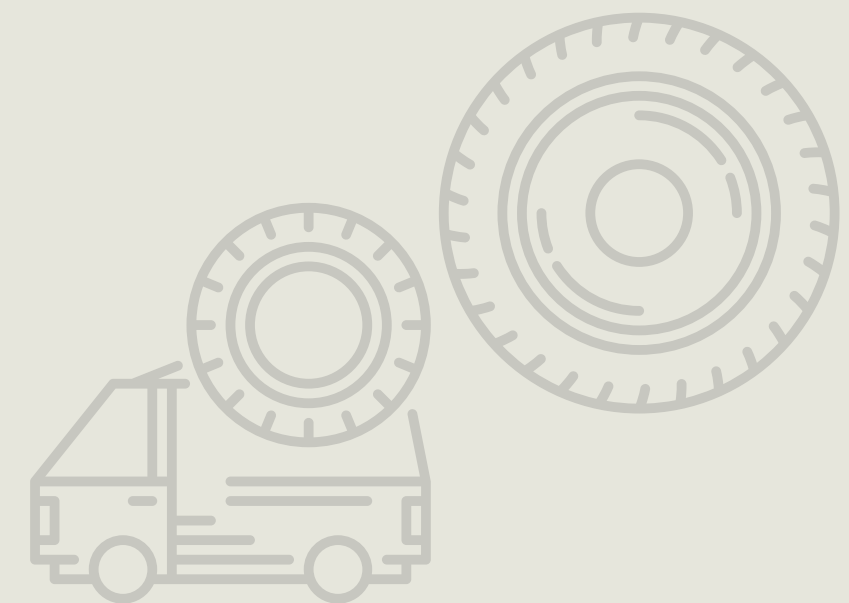
General Manager

2021 was the year we hoped would be the year we finally moved away from the negative effects of the coronavirus once and for all. Unfortunately, this transition to the pre-2020 state seems not to be such an easy task. From September 2021, it is becoming more and more apparent that humanity will continue to experience the consequences of the pandemic in the form of an energy and economic crisis for the next period.

The first signs were given by the sharp increase in electricity and fossil fuel prices that started at the end of 2021 and continues unabated into 2022, decisively affecting the operation of the whole recycling and especially the utilization of used tires.

The particularity of withdrawn tires is found in the large specific volume they occupy and lead to high transport costs and in their durable construction, which proportionally increases the energy requirements for their full mechanical processing. These two factors, due to the rapid increase in the prices of diesel and electricity, burden and complicate almost the entire management of end-of-life tires.

For 2022, the objective for ECOELASTIKA is, therefore, to maintain the management costs as low as possible, with a further improvement of its logistics services and with a view also to the reduction of the environmental footprint, covering part of the energy needs of the utilization of used tires from alternatives and renewable energy sources.



**ecoelastika**  
USED TIRES MANAGEMENT





# 1. Business Model ECOELASTIKA

ECOELASTIKA is a non-profit company, responsible for the ecological management of end-of-life tires (ELTs). **It is the only approved ELT co for used tires.**

ECOELASTIKA's **modern business model** forms the basis of its entire operation, while, at the same time, it creates the conditions for its processes to be carried out **with speed and efficiency**. Its vision, mission and business values are the cornerstone of every effort, focusing on **the environment, society, and the economy**.

## R&D - NEW TECHNOLOGIES' DEVELOPMENT - ADDED VALUE AVAILABLE RESOURCES

### A. Available resources

**Financial**

ECOELASTIKA's activity requires specific financial resources. The only source of revenue of ECOELASTIKA are the environmental fees destined to cover the total management cost of used tires as well as the actions to raise public awareness.

According to PD 109/2004 (articles 2, 3, 5) monetary contributions are charged on any imported new and/or used (retreaded or not) tires in the Greek market, and new or used imported vehicles which have tires of categories A, B, C, D1 & D2.

**Human**

Both the employees and the wider partner network of ECOELASTIKA add value to its entire business model through their knowledge, experience, professionalism, and know-how, having relations of cooperation and mutual trust between them.

**Intangible**

The know-how incorporated into the products resulting from alternative end-of-life tire management covers a wide range of intangible resources: Research & Development, Energy Saving, Efficient Project Management, Technological Innovations, etc.

**Natural**

ECOELASTIKA's partner network, with absolute respect for sustainable development, uses the necessary natural resources consistently and prudently so that the final products resulting from the utilization of end-of-life tires to add value to the natural environment.

**Social**

The social acceptance of ECOELASTIKA's activity is based on our good practices, our social work, the transparency, and the trust shown to us by the stakeholders, including governmental organizations and the entire population of our country.

### B. Mode of Operation

Vision - Mission - Corporate Values - Social Purpose

**Management**

- Code of Ethics
- Company Policies & Procedures
- Approved procedures of interaction with the partner network

**Central & Support Functions**

- Strategy
- Legal services
- Accounting & Financial Services
- Marketing, Communication & Corporate Social Responsibility Services

- Logistics & Supply Chain Services
- Customer Service Services
- Human Resources Services
- IT services (outsourced)

### Partner Network (Stakeholders)

ECOELASTIKA employees

Tire/Vehicle Importers

Collection Points - ecoelastikaspots

Collectors-Transporters

Recovery Units

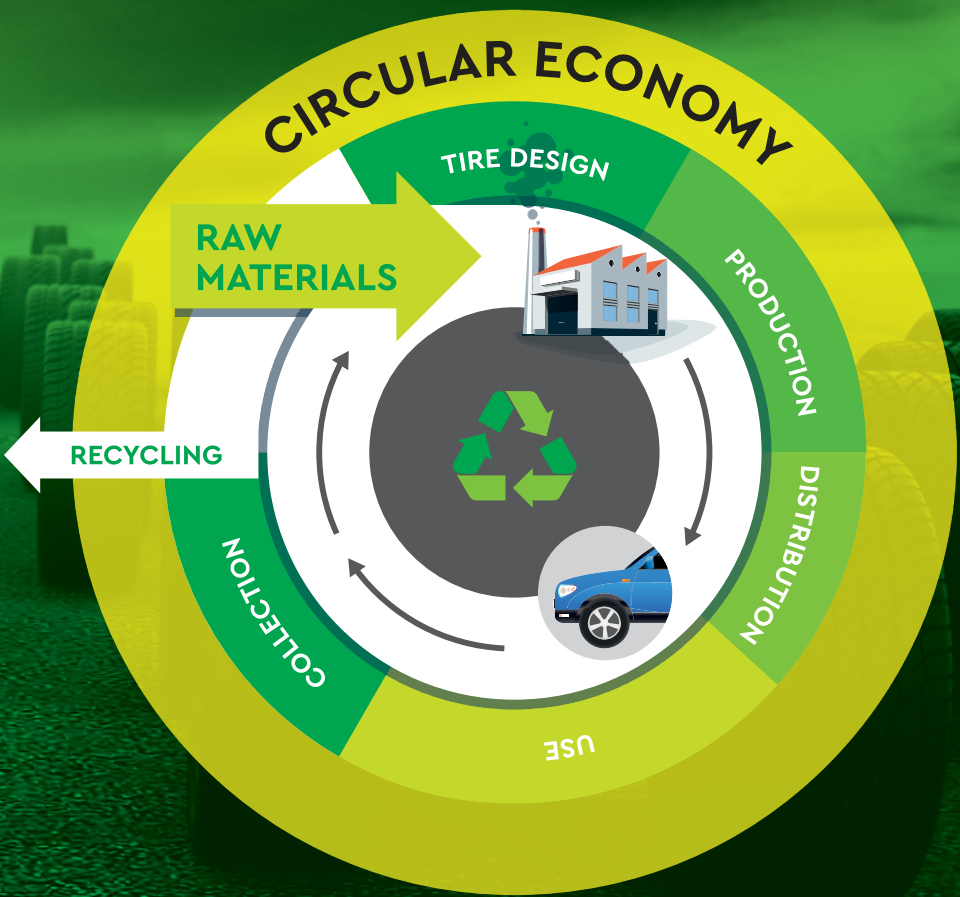
ELV Dismantling Facilities

Tire Owners

Private Citizen

**We seek our long-term growth alongside our commitment to be an integral link in the sustainable development of our country.**

- Sustainability principles are part of our corporate mission
- Every year, we achieve our goals that contribute to the sustainable development of our country
- We improve our performance through measurable results



### At one glance

ECOELASTIKA aims to be **the most trusted and reliable source of knowledge & action** on the environmental impact of end-of-life tires. For this reason, it promotes Research and Development guided by the principles of the Circular Economy so that end-of-life tires can **be used either as recovered energy, or as new alternative end products or as materials (by-products) resulting from their recycling.**



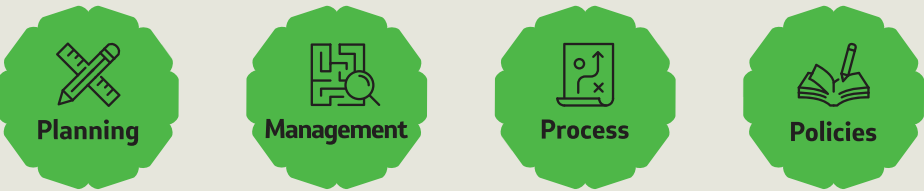
# 2. ECOELASTIKA INNOVATION

## Main Operation Stages

Corporate Identity

Every end of life tire can be useful!

ECOELASTIKA operation is directly related to the principle of “**extended producer responsibility**”. This means that producer takes over, through ECOELASTIKA, the responsibility to organize the management of used tires and pay the corresponding costs, complying with the relevant legislation and applying the rules relative to environmental protection and circular economy.



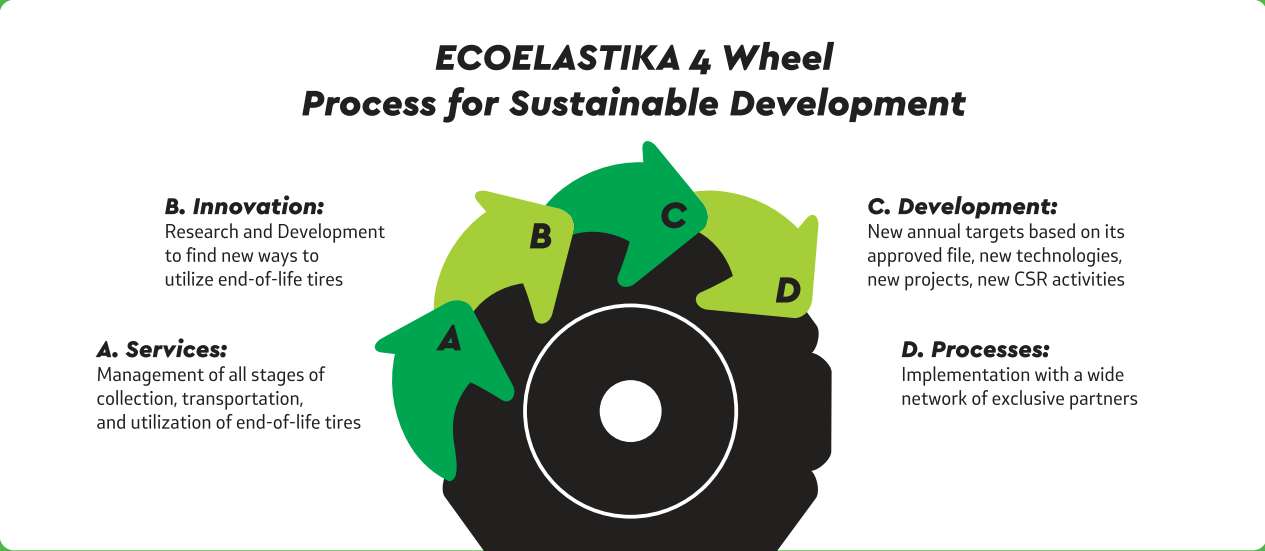
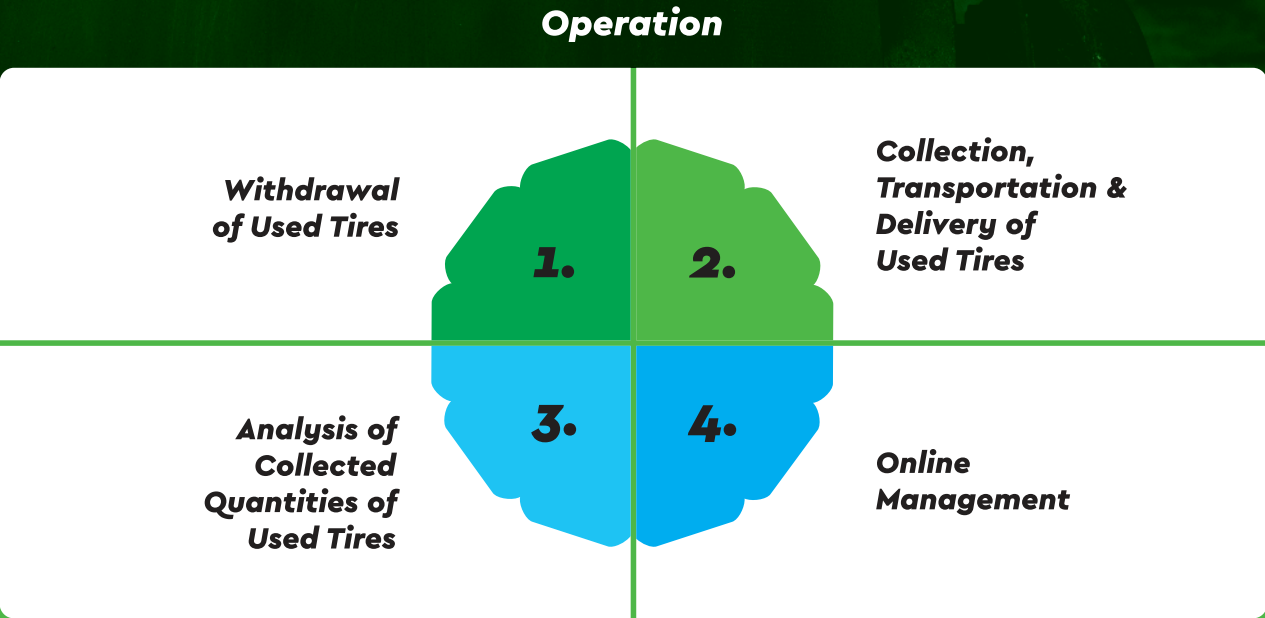
Corporate Operations:

We Organize. We Coordinate. We Collect. We Carry. We Use. We Develop.

- **Nationwide coordination of the collection** of withdrawn End of Life tires from their collection points (e.g., tire repair shops, garages), where the replacement of ELT tires with new ones takes place
- **Taking care of their transport and delivery to licensed recovery units**, assuming the management costs (cost of collection, transport, and recovery of used tires)



Tire management is ECOELASTIKA's core business. Given this fact, we further focus on the results with **end-uses and applications**, by penetrating new markets and creating new job positions. This process articulates the final CSR product, whose end recipients are ECOELASTIKA's stakeholders and the general population.





# Our vision: A sustainable future!

ECOELASTIKA envisages a new development model **based on the use of secondary materials from waste processing**. It acts based on the priorities that apply to the management of solid waste, applying the principles of **the circular economy and sustainable development**. Our vision encompasses our desire to grow into a model of **responsible institution that responds to social needs**.

**Our goal: To protect the environment through sustainable development**

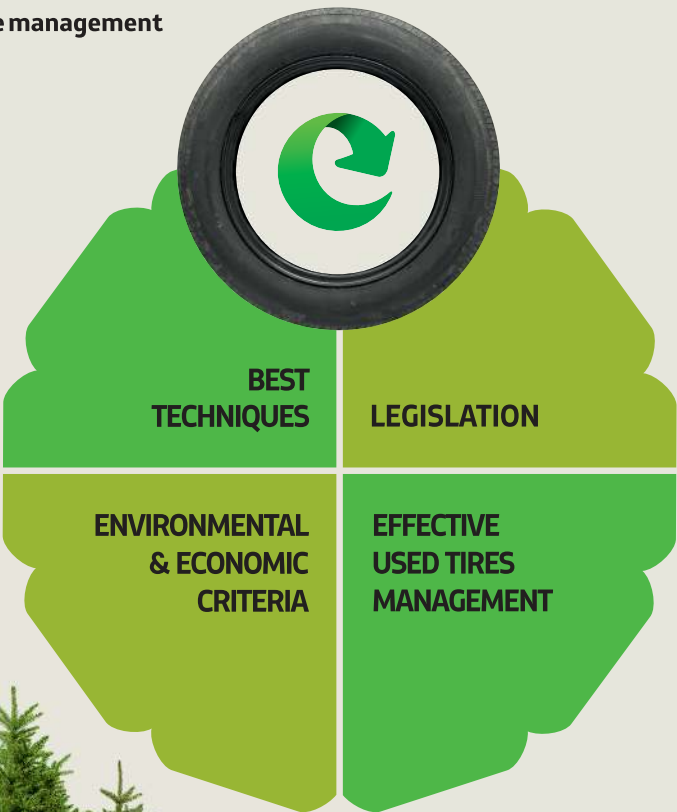
Our goal is to manage the funds as efficiently as possible, striving for environmental protection and safeguarding healthy competition.

**Our mission: The development of effective alternative ways to manage end-of-life tires**

Our mission is the management of used tires withdrawn in Greece, using state of the art techniques, considering environmental and economic criteria.

To succeed in its mission, the company places a high priority on:

- The quality of its services
- Respect for the human factor and the environment
- Cooperation with all stakeholders in the field of used tire management



# Our Values

## Cornerstones of success!

ECOELASTIKA operates respecting **classic and timeless values** concerning **people, society, and the environment**. These values are embedded in its business terminology, contributing daily to its **successful course**. In other words, it is an integral part of its **corporate culture**, shaping its high level of customer service and enhancing its innovation.





### 3. ECOELASTIKA CORE TEAM

#### Teamwork.

#### Team achievements.

**Good teams make the difference. And close-knit teams bring success.** At ECOELASTIKA both are valid, and we are proud of that. Operating under a flexible model, ECOELASTIKA's core team is small, but possessing all the skills, **abilities and talents** required for its smooth and **efficient operation**. Its employees are specialized in their area of expertise, having knowledge, experience, know-how and, above all, **passion for work**.



#### The 3 basic skill categories of the ECOELASTIKA Core team

- **Personal Skills:**  
Responsibility, Willingness, Confidence
- **Social Skills:**  
Team spirit, Good communication skills, Cooperation
- **Methodological Skills:**  
Analytical thinking, Organizational skills, Presentation skills, New Technologies handling skills



### 4. Stakeholders' Network Partners & Value to Society

#### A meaningful alliance!

#### All together for a common goal!

A wide partner network works **EXCLUSIVELY** in ECOELASTIKA's operating chain. This means, that although the core team of ECOELASTIKA is small, its entire network is large and specialized in different parts of the overall process. The task allocation creates the right conditions so **that all parties involved have clear responsibilities**, working according to a specific framework and schedule. This fact contributes to the **creation of job positions and innovation** through R&D and European programs. The team as the main unit of productivity!



**190 employees - Fully employed for the ECOELASTIKA network!**

#### DIRECT HUMAN RESOURCES

**8 ADMINISTRATIVE HUMAN RESOURCES**

#### INDIRECT

**120 COLLECTORS**  
**50 RECOVERY UNITS**  
**8 SUBCONTRACTORS**  
**4 CONTROLLERS**



#### TRIPLE TARGET:

1. ECOELASTIKA SUSTAINABLE OPERATION
2. ENVIRONMENTAL PROTECTION
3. LAW COMPLIANCE

Strengthening the **added value** of ECOELASTIKA is achieved through:

- Effective business activity/Clear business plan
- Transparency towards the shareholders and the stakeholders
- Careful selection of partners
- Constructive cooperation with governmental bodies and companies
- Reliability & Continuous improvement of multi activity structured processes
- Innovation Management

**We go beyond withdrawn tire management...**



# Engaging with our stakeholders



## Constructive Use of Resources

Combination of comprehensive know-how from ECOELASTIKA employees, tire producers, collection centers, transporters, recovery units, sorting centers for recyclable materials, recycling centers, waste management companies, governmental institutions, and local communities.

How we create value for society

Social Responsibility Activities



- ECOELASTIKA's priority is to create a value chain between itself and all involved parties (stakeholders) with the aim of operating efficiently and facing the challenges of sustainable development in a demanding business environment.
- Customer and partner oriented, ECOELASTIKA utilizes its available resources, acting towards ensuring a long-term development, while satisfying the demands of all stakeholders in a productive and balanced way. Thus, it succeeds in providing mutually beneficial relationships through high quality services and innovation.

Environmental Benefits	Social Benefits	Economic Benefits
<p>Contribution to the circular economy through a more efficient use of the natural resources associated with the manufacture of vehicle tires</p> <p>Extended producer responsibility to protect the environment through the alternative use of end-of-life tires made by ECOELASTIKA</p> <p>Compliance with the relevant legislation by implementing rules that promote environmental protection and the circular economy</p>	<p>Job positions creation in end-of-life tire management</p> <p>Avoiding the exposure of local communities to possible health risks if withdrawn tires were freely disposed of in waste bins, beaches, etc.</p> <p>Better coordination of stakeholders in the value chain having as objective the final tire utilization</p> <p>Informing, educating, and raising citizens' awareness through targeted communication campaigns</p>	<p>Cost savings resulting from the reduction of the import of raw materials</p> <p>Increased industrial activity waste collection, energy, products/by-products) and tire derived fuel (TDF)</p> <p>Improved infrastructure for cities and regions (withdraw, collection, transport, supply chains, energy supply)</p> <p>Better allocation of funds for end-of-life tires towards long-term planning and investment in infrastructure and technology</p>



# Recovery Units

A Green process with valuable benefits!  
Reduce - Reuse - Recycle

Used vehicle tires are not garbage.

- Instead, they can be used as:
- A) Recovered Energy
  - B) Materials (products & by-products)

ECOELASTIKA cooperates with **licensed recovery units**, which receive the collected quantities of end-of-life tires from the collectors - transporters, with the aim of their utilization.

- The cooperating units are funded by ECOELASTIKA according to:
- the quantities of recycled end-of-life tires available on the market
  - the type of these final products/materials
  - the final utilization of these final products/materials

➤ There are 6 mechanical processing units operating in Greece

NAME	AREA	UTILIZATION	WEBSITE	LICENCE	ELECTRONIC WASTE REGISTER	PROTOCOL NUMBER
AXEL LTD	MAGOULA ATTICA	SECONDARY FUEL AND TDA PRODUCTION UNIT	www.axel-ltd.eu	RESPONSIBLE STATEMENT OF CONTINUED OPERATION OF BUILDING AND MECHANICAL EQUIPMENT OF A LOW-DUTY UNIT	11777-1	NO. PROT. 4125/15-06-2016
ELVAN SA	ASPROPYRGOS ATTICA	COMPLETE MECHANICAL USED TIRES PROCESSING UNIT	www.elvan.com.gr	OPERATING LICENSE AEPO	4098-1	NO. PROT. 1712/Φ14 ASPR. 3183/19-05-2009 NO. FIRST Φ475/house 4729/ PERIB-9/16-10-2013 NO. PROT. 93961/5105/Φ12/14-11-2017
RETIRE SA	V.I.P.E. DRAMA	COMPLETE MECHANICAL USED TIRES PROCESSING UNIT	www.retire-recycle.com	OPERATING LICENSE AEPO	2493-1	2493-1 NO. PROT. D.A139/ 27-01-2010. NO. FAC. Φ14/1125 AR. PROT. 344/17-02-2014
TYRES HERCO SA	V.I.P.E. PATRAS	COMPLETE MECHANICAL USED TIRES PROCESSING UNIT	www.herco.gr	OPERATING LICENSE AEPO	17676-1	NO. PROT. D.A.F. 14.2/256343/9893/3180/ 16-10-2013AR. PROT. 1165/73915/15-06-2016
TITAN SA	KAMARI VIOTIA	USED TIRES ENERGY RECOVERY UNIT	www.titan.gr	AEPO	18-4	NO. PROT. 170166/25-1-2011
BIOTROHOS SA	LARISA	COMPLETE MECHANICAL USED TIRES PROCESSING UNIT	www.biotrohos.gr	OPERATING LICENSE AEPO	866-1	NO. PROT. DA/ Φ14.1353/1832/7-6-2007AR. PROT DA/F14. 1353/ 4832/18-12-2015
PERME HELLAS SA	LOCATION RITSONA EVIAS	SECONDARY FUEL AND TDA PRODUCTION UNIT	-	INSTALLATION PERMIT RESPONSIBLE DECLARATION OF COMMENCEMENT OF PROFESSIONAL LABORATORY/ WAREHOUSE OPERATION	210-2	NO. PROT. 8.631/ F14/2655/ 3-12-2015 NO. PROT 7076/Φ14/ 2655/21.08.2014

# 5. Sustainable Development

One of the highest percentages of tire recycling for 2021 at European level!

Environmental footprint reduction.  
Waste minimization.  
Facilitation to the end of the chain.  
This is ECOELASTIKA.

Sustainable development starts from the simplest things in our everyday life, for example, our ecological consciousness and the transformation of products that we consider to be useless again into something useful!

## Success List

- 1. Immediate action
- 2. Productive employment
- 3. Effective update
- 4. Reinforcement of application means

We want a better world for us and our children! That is why ECOELASTIKA's qualitative sustainable development goals focus on the entire Business-Economy-Environment-Society ecosystem.

### Business-Economy

- Development of applications for the absorption of used tires processing products
- Penetrating new markets and creating job positions for the commercialization of used tires processing products, contributing to the circular economy (through participation in research projects)
- Incentives to technical companies aiming to promote the use of rubber granulate in finished products (e.g., modified asphalt, safety floors, rubber tiles, etc.)
- System initiatives regarding the quality upgrade of the materials produced by the mechanical processing of used tires with the aim of complying with the limitations of the existing legislation

### Environment-Society

- Further development of the awareness program – informing the public
- Continuation of CSR activities (e.g., donations to schools, educational programs)

# «Βρες το Σήμα» ecoelastika spots

## Good to know for a tire:

The average passenger car tire contains useful materials:

7kg natural/synthetic rubber

0,5kg of textiles

1,5kg of steel

Average Lifespan of a tire:

40.000km

Oil required to produce modern tires:

🚗 26 liters / tire car

🚚 83 liters / tire truck

Source: <https://createdigital.org.au/infographic-tyres-entering-circular-economy/>

GREECE

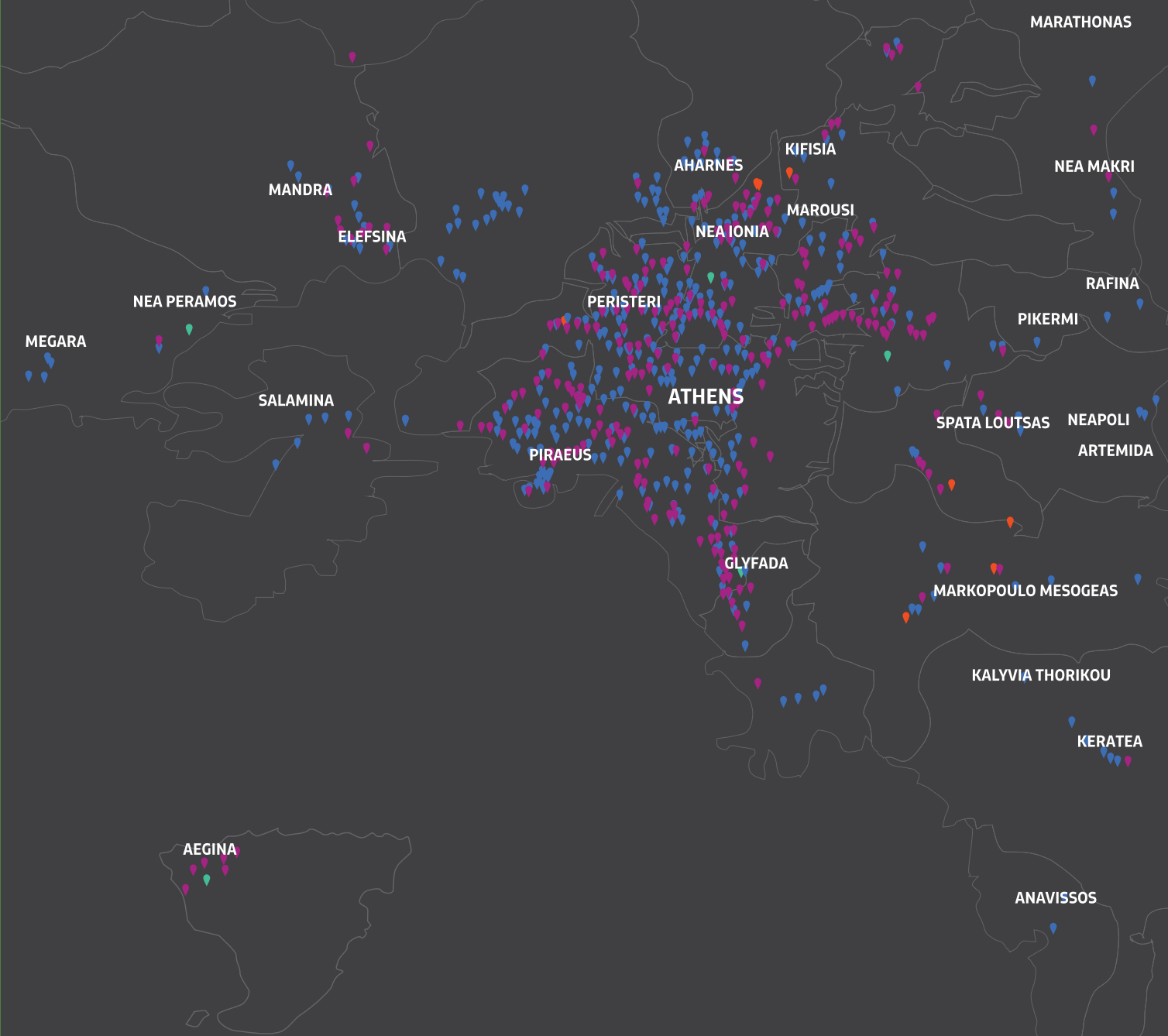
Collection points  
throughout Greece



Collection Points

- 55 Leasing Companies
- 1665 Tire Fitting Shops
- 247 Others
- 1455 Car Service Stations

ATTICA





# Collection Objective

3 days

from the registration date of the collection request, the used tires must be collected from the collection points.

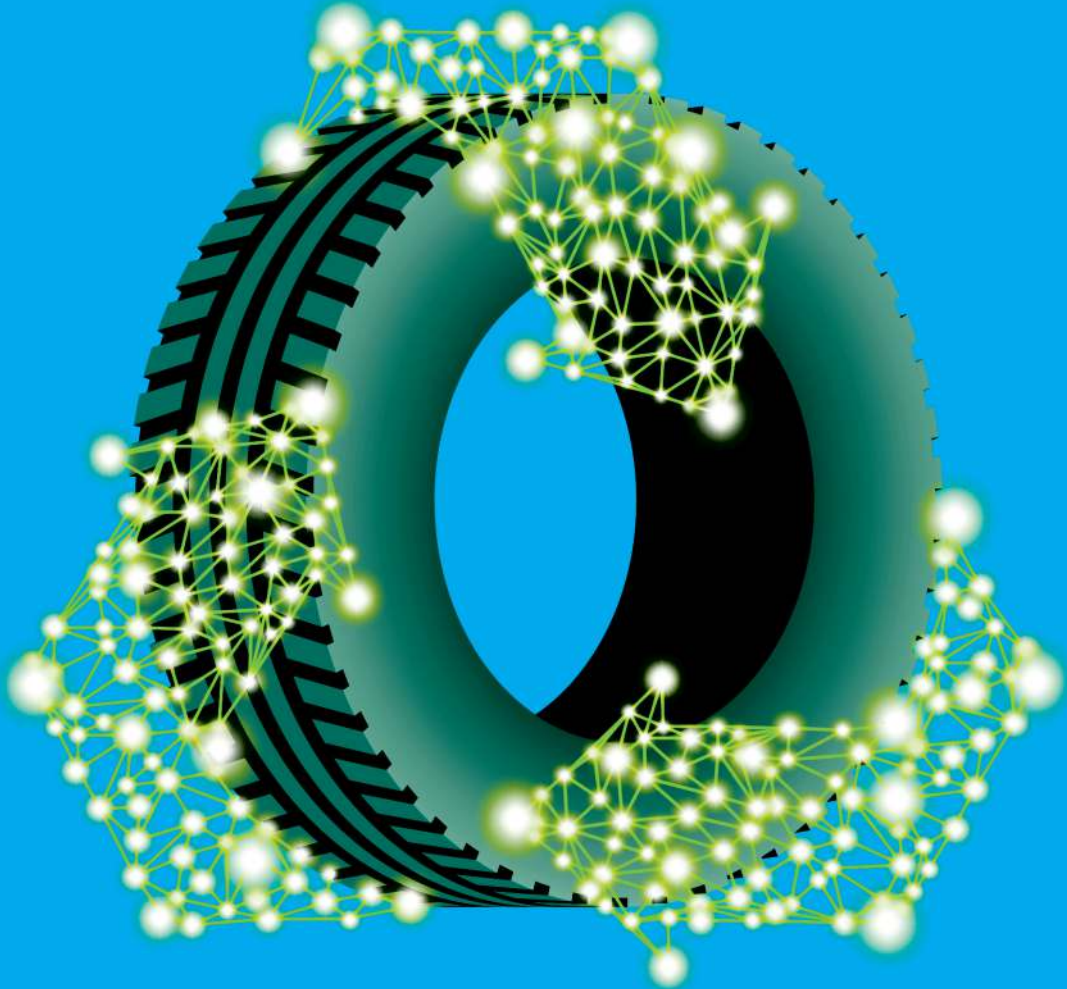
2021

56.86%

Recycling rate of withdrawn end-of-life tires in Greece

- 60 passenger tires and/or
- 10 truck tires and/or
- 45 moto tires

is the minimum number that an ecolastikaspot must collect and inform ECOELASTIKA for collection.



ecoelastika  
ΟΙΚΟΛΟΓΙΚΗ ΔΙΑΧΕΙΡΙΣΗ ΕΛΑΣΤΙΚΩΝ

# 1. New Legislative Framework

With the new Law 4819/2021 passed and valid **from July 2021, the waste management regulatory framework** is revised to keep up with the requirements of the European Circular Economy Action Plan. The new provisions adapt the national legislation to the provisions of Directive (EU) 2018/851 amending Directive 2008/98/EC on waste and Directive (EU) 2018/852 amending Directive 94/62/EC concerning in the management of packaging and packaging waste.

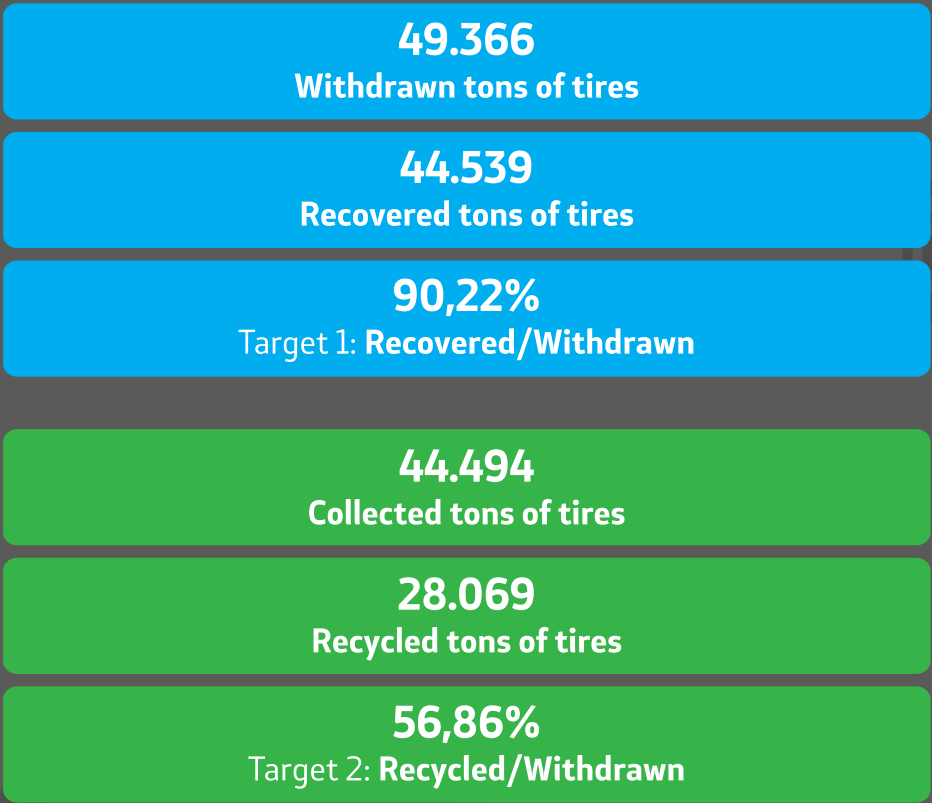


# 2. The ECOELASTIKA system - Objectives

**2021. We exceeded our goals; we achieved the maximum!**

2021 was a year when ECOELASTIKA's goals were achieved to the fullest, exceeding all expectations, despite all the special conditions that prevailed throughout the 12 months due to COVID-19 pandemic. **Compared to other European countries, Greece, through ECOELASTIKA, achieved for 2021 one of the highest percentages** in both its target for recovered withdrawn quantities and its target for recycled/retired quantities.

## In 2021





# ECOELASTIKA "FIND THE SIGN" Program

Every tire you withdraw in the right way is a win for the environment!

The "FIND THE SIGN" Program is a well-designed initiative by ECOELASTIKA to incentivize citizens to withdraw the end-of-life tires at authorized **ecoelastika**spot.

The aim is to protect the environment through their utilization either as materials or as recovered energy.

# "ECOELASTIKA REWARDS" Program

A win-win cooperation!

The "ECOELASTIKA REWARDS" Program was presented for the first time in 2020, and, since, then it has been continuously developing, helping to strengthen ECOELASTIKA's cooperation with authorized withdrawn tire collection points.

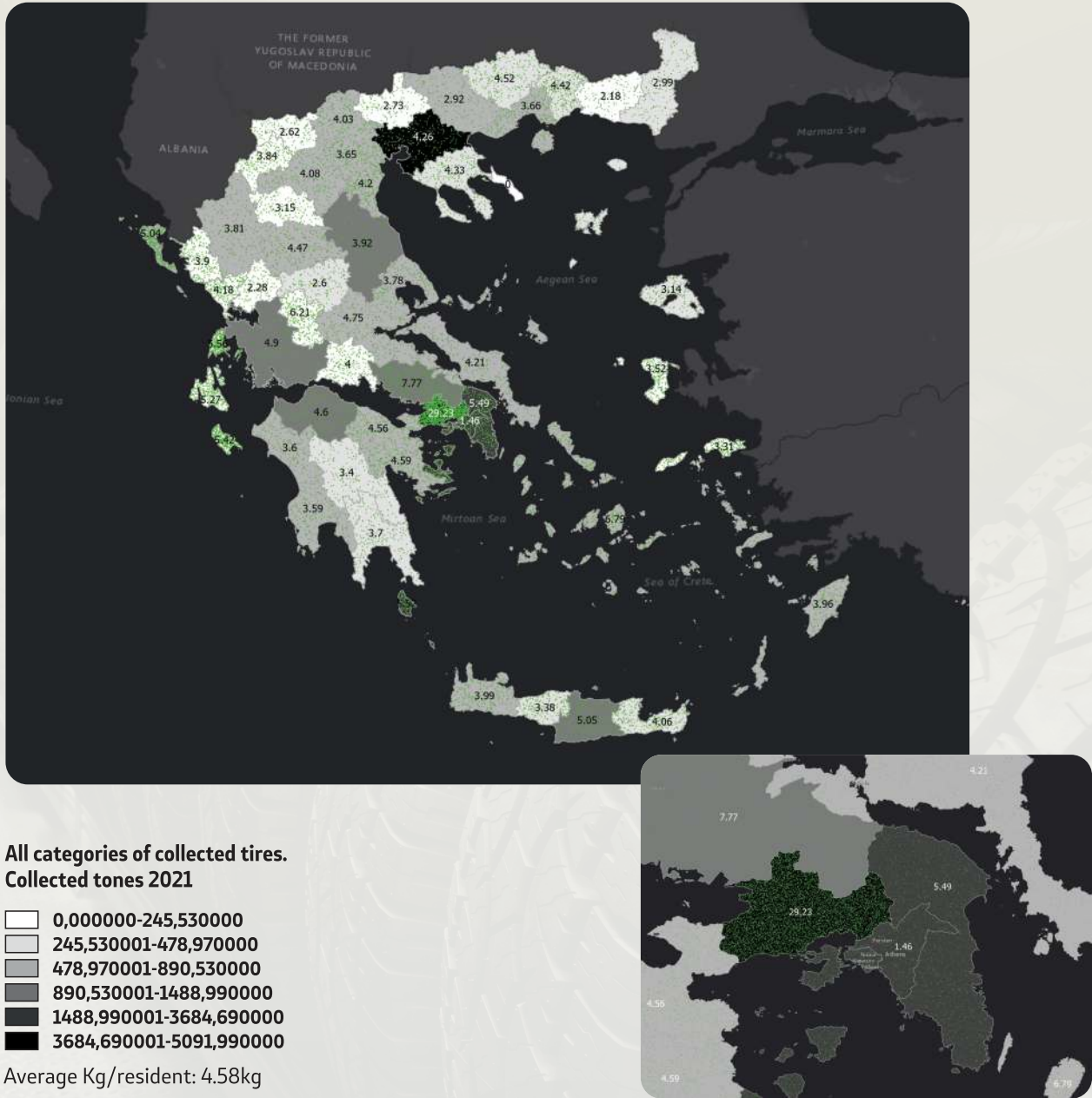
Rewarding **ecoelastika**spot for the continuous collection of used tires - which would otherwise have been discarded without the possibility of reusing their materials through recycling - creates more incentives for their owners, increasing effort and creating greater know-how.

3.422 **ecoelastika**spot

Reward  
=  
Strengthen Collaboration  
=  
Satisfaction of all members

# 3. ECOELASTIKA in one page

The green dots show the kilograms of tires per resident for all tire categories collected in 2021. The background (gray colored prefectures) shows the tons collected per prefecture in 2021.



## 4. Utilization

**Tires include materials that can be reused, recycled and repurposed.**

There are many ways you can "extend" the life of withdrawn tires by making use of the materials they contain. This "dismantling" takes place in special recycling units.



### The perfect circle

There are specific ways in which a tire can be "disassembled" based on the desired result. This is done through a mechanical, thermal and/or chemical process. **Mechanical processing granulates and separates** the products and by-products for use in recycling applications. **Used tires during their energy recovery (co-incineration)** function as a **source of energy** and material in the Greek cement industry.

At the same time, there is the possibility for exports aimed at energy utilization in **energy-intensive industries** as well as for exports aimed at **reuse**.

Granulated Rubber/  
Powder

Steel

Textiles

Shredded Tires/  
Alternative Fuels

**Energy-intensive Industries that utilize energy derived from the alternative use of end-of-life tires**



Cement industries



Steel industries



Lime industries

### Granulated Tires

- Whole Tires
- Pieces / Tiles / Grains / Rubber Granulate / Powders (0.5-300mm)
- Fine Powder (0-5,0mm)
- Reprocessed Powder (0-50 µm)

### Common end uses of recycled tires

**Materials produced from the processing of used tires and their uses**

**End products from the recycling of used tires**

Recycling of tire granules and powder into finished products

Wheels for wheelbarrows, buckets, grass cutters  
Road Equipment and signage, footpaths, squares (e.g., dividers, bollards, bollards, etc.)  
Rubber floors for playgrounds, sports areas  
Safety tiles for schools and playgrounds  
Elastic plinths for walkways, swimming pools and building roofs  
Filling material in artificial lawns for athletic fields

Recycling of tire powder in road constructions

Production of modified asphalt using recycled used tires powder

Use of shredded tires in Steel Industries

Substitution of anthracite and scrap steel in electric arc furnaces of steelworks

Use of shredded tires in pyrolysis / thermolysis / gasification units

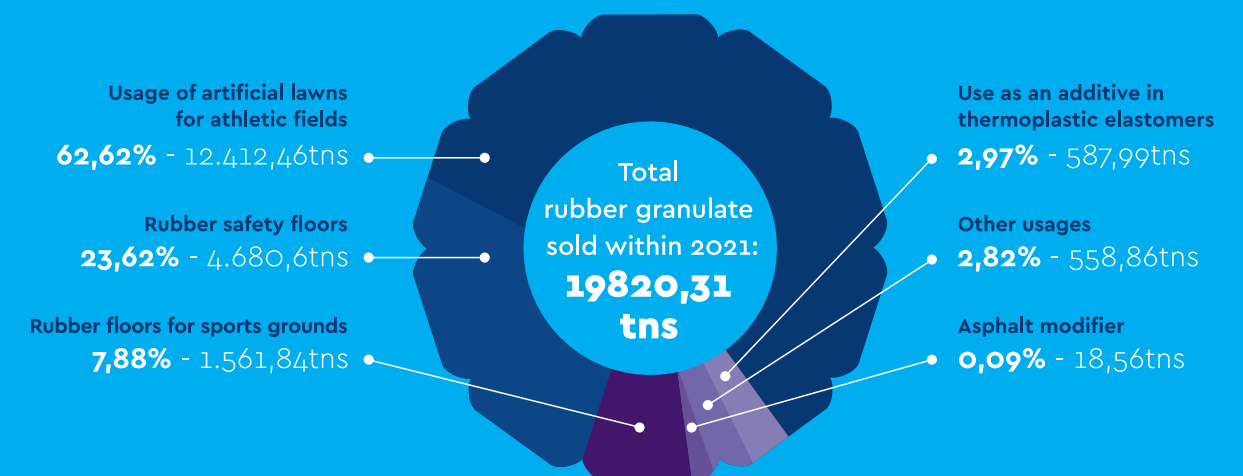
Recovery of regenerated Carbon Black and pyrolytic oil as raw materials for production of petrochemical industry products

Use of whole or shredded tires in civil engineering projects

Construction of protective dykes/embankments for anti-corrosion protection on coasts, jetties, etc.  
Stabilization of slopes, underpassing of roads and railways  
Landfill drainage works and landfill rehabilitation  
Soundproofing panels  
Retaining wall  
Thermal insulation protection for road construction  
Filling material in tunnel constructions with the "cut and cover" method

### Recycled Rubber Market

**This is broken down into the following uses-applications:**





## 5. Control & Monitoring. 3 alternative ways to put an order!

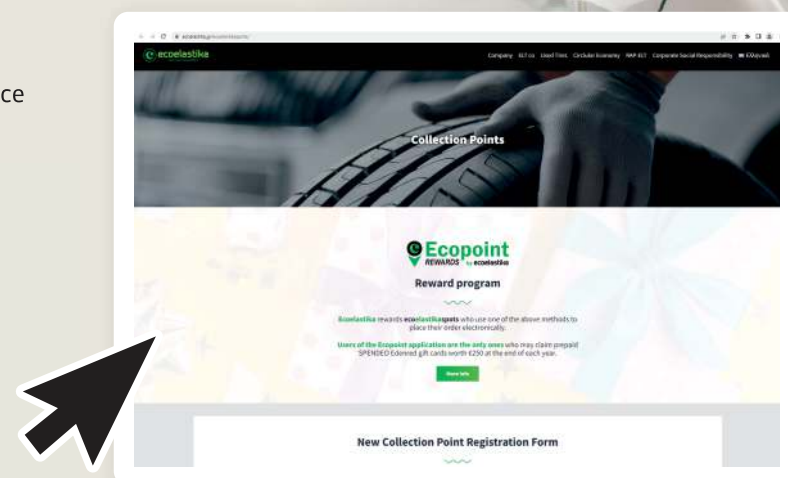
**Easily. Contemporary. Flexible.**

Through the installed modern electronic control system, the monitoring and control of all stages of collection and management of used tires is carried out efficiently and reliably, without problems.

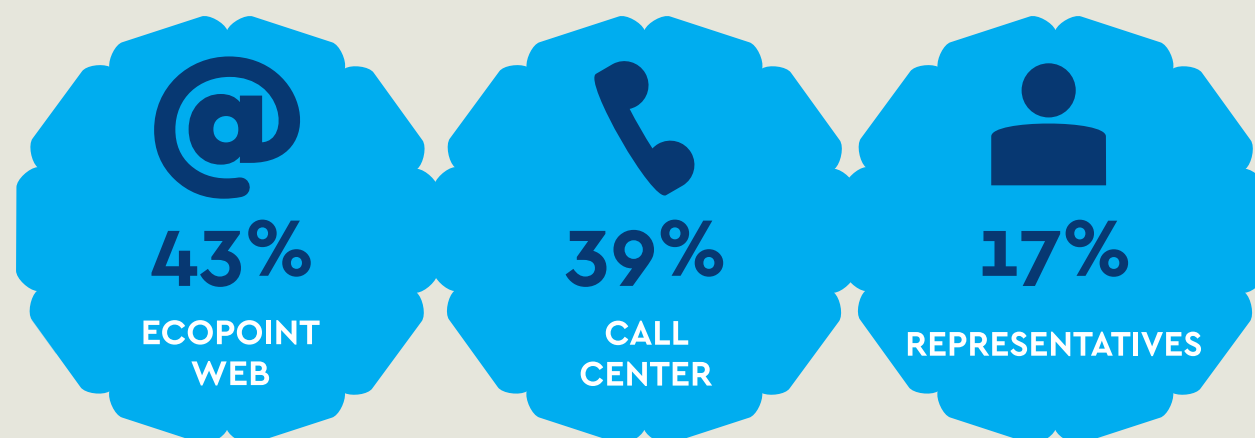
**It is worth noting that electronic order entry increased by 18p within 2021 compared to 2020, reaching 43% of the total of 24,097 applications.**

**The benefits of choosing the digital way of registering the order (via the internet) are many:**

- Instant registration 24/7 in time and space via computer, mobile phone or tablet
- Traceability
- Immediate Order Knowledge
- Data Collection
- Convenience
- Speed
- Practicality
- Flexibility
- Modernization
- Familiarity with Digital Media



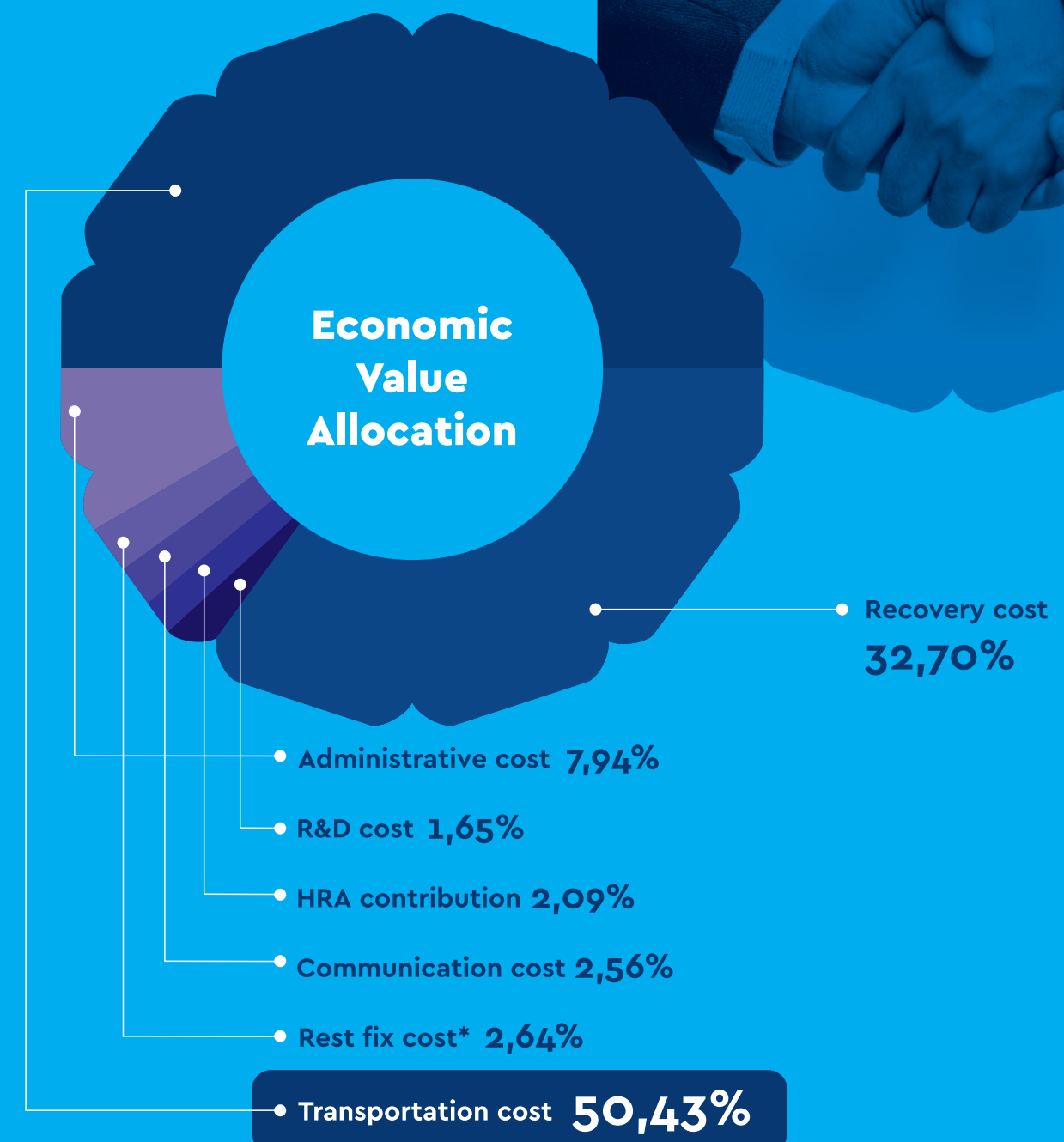
**ORDERS  
2021**



## 6. Financial Data

**Economic Benefits  
through cost savings**

The benefits of alternative used tire management **are not only environmental and social but also economical.** Cost transparency is ensured through the clear distribution of economic value.



\*Controls, monitoring systems, legal fees



## R&D

### RAP-ELT: PRODUCTION OF MODIFIED ASPHALT AND INCREASE THE RECYCLING RATE OF ASPHALT CONCRETE USING RECYCLED TIRE

PROJECT CODE: T1EDK-01656

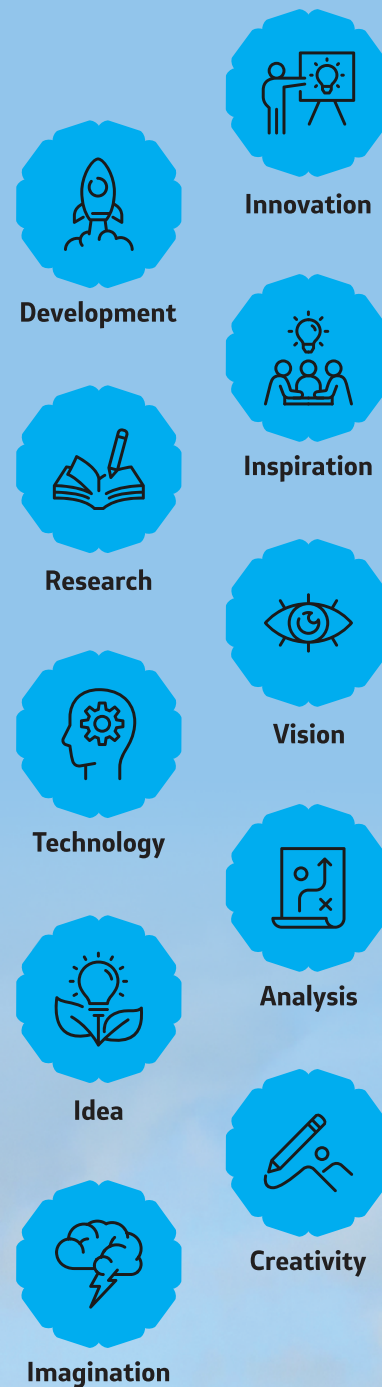
ECOELASTIKA undertook the coordination of an important project, the **RAP-ELT** project, which aimed to study the possibility of increasing the recycling rate of **RAP (Reclaimed Asphalt Pavement)**, using **modified asphalt with rubber granulate**, to achieve the production pavement with improved properties as well as the utilization of two waste streams (ELT & RAP).

One of the less common end-of-life tire (ELT) utilization applications is the modification of asphalt with rubber granulate, which results from their mechanical processing. With this application, a significant contribution to the circular economy and 100% recycling of the tire is achieved.

The project started in July 2018 and was completed at the end of 2021. In the RAP-ELT project the optimal percentage of rubber granulate that can be used as an asphalt modifier was studied and a **pilot application of a heavy traffic road was carried out in the Municipality of Aspropyrgos**. After the laying of the road was completed, its technically correct construction was checked and the improvement of its properties was measured in terms of environmental noise reduction, rutting resistance and skid resistance.

The objectives of the program were:

- The environmental and economic evaluation of the investigated practice for the utilization of rubber granulate.
- Viewing the method as capable of absorbing a significant amount of rubber granulate.
- Proposal for the introduction of national specifications regarding the utilization of rubber granulate for asphalt modification.



Based on the results, the conclusions are:

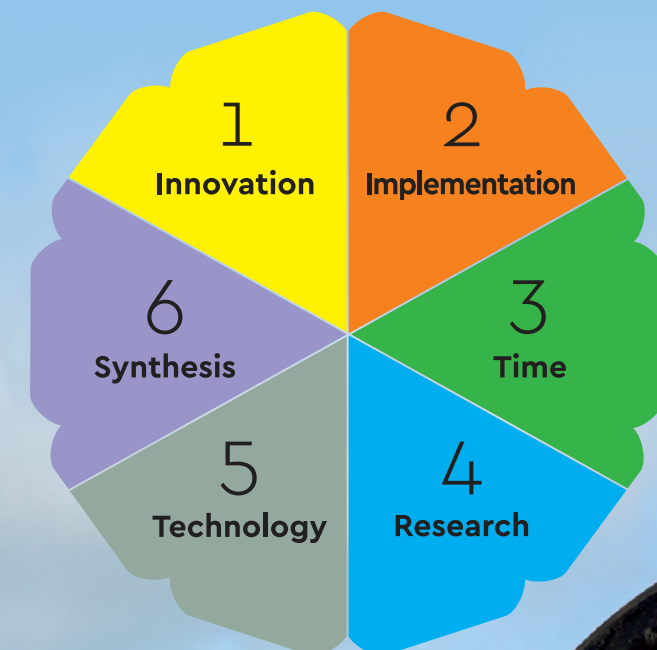
- First, the correct construction of the asphalt carpet, based on the National Technical Specifications.
- Also, the section constructed with only modified asphalt showed **optimal performances** regarding noise, rutting resistance and skid resistance, while in the remaining three sections of the road, the performances were similar, indicating that RAP can be recycled at high rates of the order of 50.

The RAP-ELT project studied the possibility of increasing the recycling rate of RAP (Reclaimed Asphalt Pavement), without the use of expensive regenerators, but by using modified asphalt with rubber granulate.



Με τη συγχρηματοδότηση της Ελλάδας και της Ευρωπαϊκής Ένωσης

6 wheels  
of Innovation &  
Technological  
Research





# Corporate Social Responsibility (CSR)

Shelf Commitment to continuous contribution to sustainable development  
ECOELASTIKA 2021 Social Activities

In addition to the adoption of procedures, practices and policies that are directly linked to the circular economy, ECOELASTIKA demonstrated in 2021, an important Corporate Social Responsibility activity that aimed to contribute to addressing environmental and social issues. **ECOELASTIKA's CSR activity is permanent and integrated into its business model, demonstrating a self-commitment for a continuous effort to contribute to the 3 pillars of sustainable development: Environment/Society/Economy.**

## A) Program for Free Construction of Safety Floors from recycled tires in schools

From tire recycling to... "love recycling"

With the aim of increasing the ecological awareness of children in terms of the use of recycled products and being always close to local communities, ECOELASTIKA carried out, within 2021, **3 free constructions of safety floors made of recycled vehicle tires in public primary schools throughout the country (Kindergartens, Primary Schools and Special Schools) and Public Kindergartens).**



Rubber safety floors for schoolyards is a useful application, resulting from the recycling of end-of-life tires.

These floors are:

- Safe and soft
- Functional and practical
- High Aesthetics



## Corporate Social Responsibility (CSR)

The program runs every year through its Facebook page facebook.com /ecoelastika, entitled **"SUBMIT YOUR SCHOOL - FREE SAFE RUBBER FLOOR CONSTRUCTION"**. This successful activity has demonstrated, through the messages received by ECOELASTIKA, consumers' interest for safety rubber floors resulting from the recycling of used tires (circular economy) which protect children from falling.

For 2021, floor construction from recycled tires has become:

- Kindergarten of Korifasi - Pylos  
Nestoros, Messinia
- 2nd Special Primary School  
Piraeus, Attica
- Primary School & Kindergarten  
Askyfos, Asfykos Sfakia, Chania, Crete

64 actions in schools in 7 years!

Schools in Attica



Schools in rest of Greece



## B) Certification of the contracted collection points (tire repair shops) with the ECOELASTIKA sign for 2021-2022.

Strengthening the authorized network of Collection Points.  
A valuable link in the chain of ECOELASTIKA's business model

New sign for the period 2021-2022 (it is renewed every two years)



ECOELASTIKA delivered to all tire repair shops that have accepted the terms of cooperation the new **ecoelastika spot** for the years 2021-2022, which confirms that they belong to its list of contracted collection points' network.

The sticker is renewed every two years and is distributed at all the authorized collection points.

Incentives for **ecoelastikaspots**





### C) "SEE THE SIGN & ENTER". "FIND THE SIGN & WIN".

Empowering the citizen's awareness for the beneficial management of used tires.

For the fourth consecutive year, ECOELASTIKA maximized its actions related to empower the relationship between citizens and tire repair shops.

Through these actions, ECOELASTIKA encourages citizens to always **select one of the 3,422 contracted tire repair shops ecoelastika spots, to replace their useless tires.** With this choice, citizens contribute to the recycling of tires through ECOELASTIKA and to the protection of the environment.

**ECOELASTIKA rewards all citizens who think and act ecologically through the "SEE THE SIGN & ENTER" "FIND THE SIGN & WIN" actions.**



#### Incentives for citizens

### D) Extra Actions. More information.

ECOELASTIKA was multifaceted and multidimensionally active in 2021 as well. More specifically, it designed and implemented **an integrated omnichannel communication plan**, using a mix of offline & online activities.

**Having as main communication goal the information and engagement of all stakeholders**, each activity contributed to further strengthening the update of governmental bodies and the ECOELASTIKA network. Also, a main objective was to educate the general population and specifically of citizens who own end-of-life tires.

- **Sending an "e-Newsletter"** on a quarterly basis to inform contracted tire and vehicle importers.
- **Continuous updating of the website** where ECOELASTIKA's activities are presented <https://www.ecoelastika.gr/etairiki-koinoniki-eythyni/>.
- Sending via **email infographics to municipalities** with qualitative and quantitative data on tire recycling per Municipality



#### Newsletter



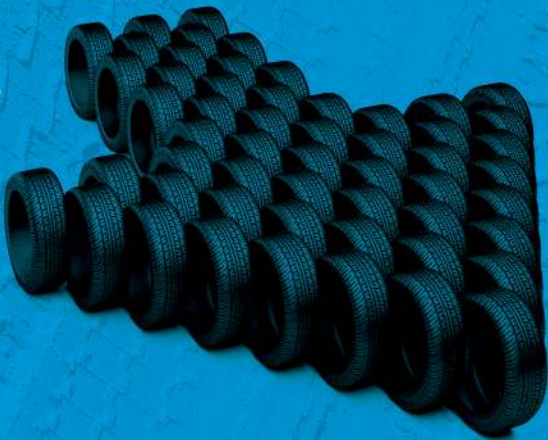
#### Website update



#### Social media



#### E-mail infographics





# Science first!

We share Ideas. We exchange experiences. We are progressing.

In 2021, ECOELASTIKA participated in **scientific conferences** for the development of **green innovation**.

**GreenTech Symposium 5-6/10** under the scientific supervision of the Economic Environmental and Sustainable Development Unit of NTUA. On the topic of supporting green innovation, ECOELASTIKA presented the important areas in waste management where green innovation can offer modernization and optimization solutions in both supply chains and utilization methods.

## GreenTech Symposium 2021



We Modernize. We Improve. We Innovate.

# ISWA World Conference 04-07/10.

ECOELASTIKA presented the RAP-ELT (RAP: Reclaimed Asphalt Pavement) project which aimed to study the possibility of increasing RAP's participation in the production of asphalt mixtures by virtue of the inclusion of rubber granulate, without the use of expensive regenerators with targets:

- The environmental and economic evaluation of the investigated practice for the **utilization of rubber granulate and powder**.
- The promotion of the method as capable of absorbing a significant amount from tire recycling, **promoting even more environmentally friendly techniques** compared to energy recovery.
- The proposal for the introduction of **national specifications** regarding the utilization of rubber granulate for asphalt modification.

New Ways. New Methods. New Perspectives.

- Participation of ECOELASTIKA in the European Week (20-28/11/2021) for Waste Reduction (European Week for Waste Reduction, EWWR) at the invitation of HRA.

ECOELASTIKA, with the common goal of contributing to the further awareness of the general population, implemented an informative campaign on social media, during this time.

In addition, it created on its website exclusively for the hosting of EWWR a landing page <https://www.ecoelastika.gr/draseis/eyropaiki-evdomada-meiosis-apovlition-koinotites-kyklikis-oikonomias/> to fully inform the visitors of the page about reducing waste in their daily lives.

The results of the campaign he ran for this purpose were:

REACH:  
48.964



IMPRESSIONS:  
80.559



ENGAGEMENT:  
19.089



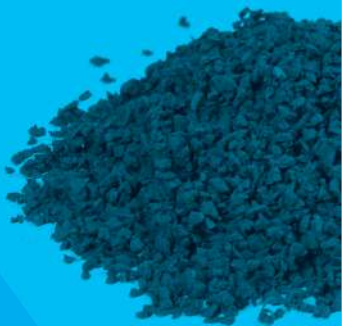
CLICKS TO PLAY:  
17.840



LINK CLICKS:  
1.140



1 Experts 2 Good Practices 3 Innovation 4 Networking





# Go Social with constant information, social profile & incentives for the citizen and the ECOELASTIKA network!

Social Media 2021. The creation of enriched and engaging content on Social Media was a communication priority for ECOELASTIKA.

The reach with a large number of users as well as the interaction (engagement) with them was important in order to increase the **awareness of ECOELASTIKA's work as well as to inform and educate** the general population on circular economy issues (benefits for the environment, society and development).

## Social Media Campaigns 2021

Social media campaigns	30	
Engaged users	189,3	Thousand
Post impressions	5,9	Million
Reactions	29	Thousand
Reach	8	Million
Post	63	
Post Reach	5,6	Million
Link clicks	169,2	Thousand
Daily avg clicks	596	Thousand
Engagement Rate	3,95	



Contemporary.  
Interactively.  
Uniquely.



ECOELASTIKA's Social Media Campaigns' Objectives 2021

Increase Facebook friends by **8%** compared to 2021

Strengthening the recognition of the ECOELASTIKA brand name as a non-profit organization that actively contributes to the protection of the environment, **the improvement of people's quality of life as well as the development of the economy through active action and social responsibility**

Further strengthening of its relationship with **its wide exclusive partner network and all stakeholders (B2B)**

Informing the general population about the tire repair shops that have the ECOELASTIKA sign, what it means and why it is necessary to select the cooperating **ecoelastika spot** ECOELASTIKA achieved this through the thematic campaign **"FIND THE SIGN AND WIN"** where on a monthly basis it rewards the consumer for selecting the **ecoelastika spot**

Communication and promotion of new applications, products and by-products resulting from the recycling of waste tires, (such as the use in road surfaces, rubber safety floors in schoolyards, playgrounds, sports grounds, etc.) to **improve the recycling rate with benefits for the environment, society, and the economy. In this way, the understanding of the benefits of end-of-life tire recycling is effective, "building" the knowledge in the new generation as well**

Informative knowledge with selected scientific articles and **RAP-ELT research actions that add long-term value**



## Awareness - Engagement - Action - Advocacy





## An exciting website!

www.ecoelastika.gr: Click on the green world of ECOELASTIKA!

ECOELASTIKA's website is constantly updated with new information regarding both the remarkable work and the integrated activities of ECOELASTIKA as well as general issues about the Circular Economy and end-of-life tires (e.g. new legislation).

In simple and understandable words, each section of the website is an excellent source of information so that everything is clear and easily accessible, giving the user a **high level and aesthetic navigation experience**.

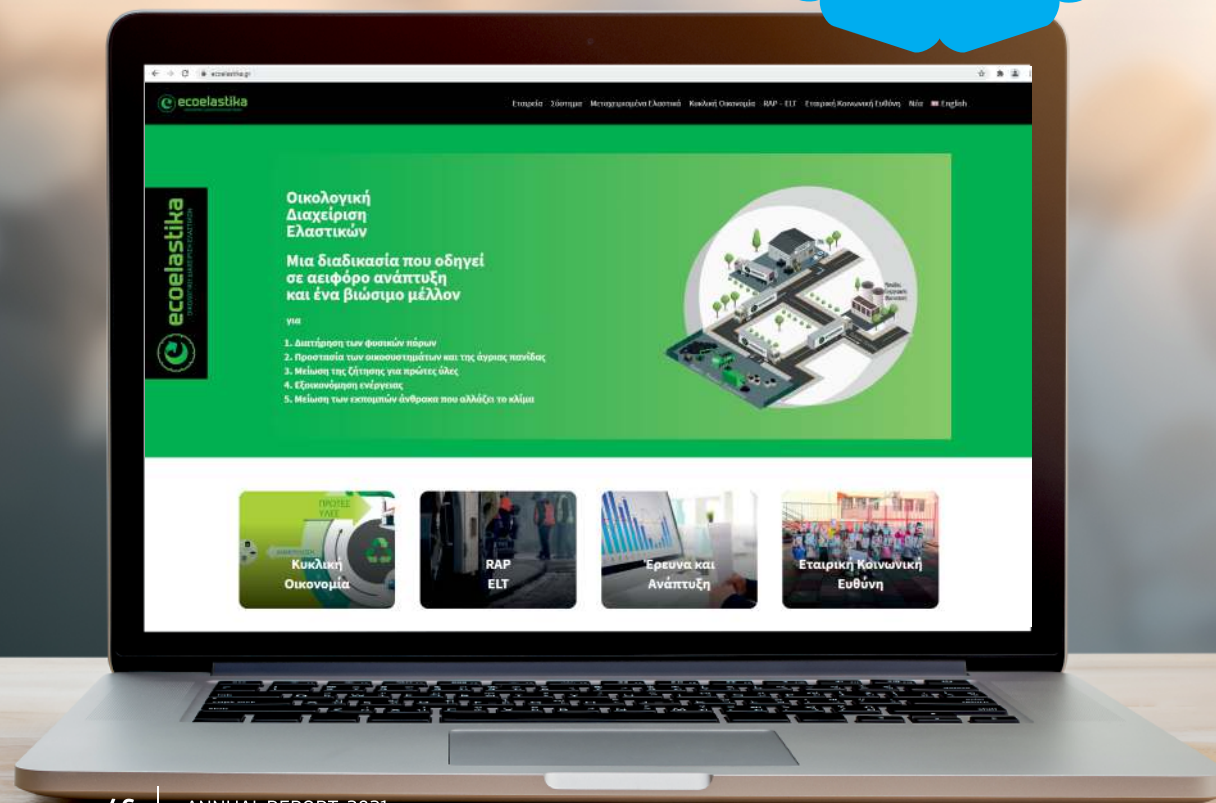
Languages:  Greek  English

### Content:

- Definitions
- Images
- Articles
- Maps
- Explanations
- Tables
- PDF
- Infographics
- Videos

Unique Visits	59.511
Total Visits	80.931
Total Visits via Social Media	32.901
Total Direct Visits	26.597
Time spent on website	1.97
Average Number of Page Visits per User	1.26'

ecoelastika.gr  
statistics  
2021



## Annex





Tire Importing Companies

AFOI KIOUTSOUKOYSTA GP
AFOI MAGGOLI GP
AFOI N. PIREIDI GP
AFOI NTAKOUDI SA
AFOI PETALA GP
AFOI SARACAKI SA
AFOI SIAKAVELI GP
AFOI ZGOUROMALI GP
AFTOKINISI SA
AGGELIDIS B. SA AUTOSTRATA
AGORA D C IMP EXP PC
AGROELASTIKI PC
AIBAZIDIS DIMITRIOS
AKRITAS SINGLE MEMBER PC
ALEXANDRAKIS HARALAMBOS
ANAGNOSTOULIS P. & CO GP
ANATOLITIS SINGLE MEMBER SA
ANDREADAKIS SA
ARINA PC
AUTOMOTIVE SOLUTIONS SA
AXIOTIS PLOUTARHOS
BEST CHOICE TYRES
BMW HELLAS SA
CAR PART EXPERTS PC
DELIGIANNIDOU DIM. VALENTINA
DELTICOM GP SRL
DERMITZOGLOU SPYRIDON
DIMITRA SA
DIMITRIADIS CHR. STAVROS - MOTO LOCO
DODOURAGAS DIMITRIOS
DRIMEA LTD
ELASTIKA MICHELIN SINGLE MEMBER SA
ELASTIKA ASPROPYRGOU LTD
ELASTIKA BASILEIADIS SA
ELASTIKA GROUP LTD
ELASTIKA PAPADOPOULOS SA
ELASTIKA PIRELLI SA
ELASTIKOEMPORIKI SA
ELASTRAK SA
ELEFTHERIOU SA
ELMA SA
ELVE ELASTIKA SA
EMA SA
EMVOLIADI AFOI GP
ERGON TZANIDAKIS LTD
EUROTYPA LTD
FALIERIS & CO GP
FDN MARATHON TIRES SA
FILIS ANDREAS SA
FOTIOS ZAHARIOUDAKIS SA
FRAGOULOPOULOS D. LTD
GANT MOTO LTD

GARDANOS ASTERIOS & SONS GP
GATZIOULIS ATHANASIOS & CO LP
GAVALEKAS CONSTANTINOS
GKIOULE GEORGIA - MALAKASA TYRES
GOLIAS D. VASILEIOS
GONTOSIDIS A. & D. SA
GOODYEAR HELLAS SINGLE MEMBER SA
GORGOLIS SA
GOUTZAS VAS. ATHANASIOS
HAMPOUDANIDIS CON. ANASTASIOS - PETRANA
HARALAMPIDIS HARALAMPOS
HATZIGIANNAKIDIS GEORGIOS
HRISTOFORIDIS TH. HRISTOFORIDIS D. GP
HRISTOPOULOS K. ILIAS
ILIOPOULOS K. LTD
IMC GROUP SINGLE MEMBER PC
INFO QUEST TECHNOLOGIES SINGLE MEMBER SA
INTERCARS GREECE SINGLE MEMBER LTD
INTRAMOTO SA
HOT WHEELS
KALOGERIDIS GEORGIOS LTD
KALOPOULOS DIMITRIOS
KALOSAKAS HARALAMPOS SINGLE MEMBER LTD
KALPAKIS ATH. FOTIS
KALPAKIS F. & SON GP
KAMPRANIS GEORGIOS SA - MOTOWAY
KAPETANIOS GEORGIOS SA
KAPITALI CHRISTOU SONS SA
KAPSALIS PANAGIOTIS
KARANIKOS TH. & CO GP
KARANTONI A. & CO GP
KARAVASILIS CHR. GEORGIOS
KAVOUKIS N. MICHALIS & CP LP
KEHIDIS K. PC
KESISOGLOU N. SA
KESTEKIDIS TRIANTAFYLLOSΚΕΣΤΕΚΙΔΗΣ ΤΡΙΑΝΤΑΦΥΛΛΟΣ
KIOUPIS A. & CO GP
KOKKALIS LEONIDAS & DIMITRIOS GP
KOKKALIS DIMITRIOS
KOSMOCAR SA
KOUFIDIS P. - HAMPOUDANIDIS A. LP
KOUKOUGIANNIS D. NIKOLAOS & CO GP
KOUKOULAS ALEX. A.
KOUKOUFINOS DIM. ASTERIOS
KOUSIDIS DIMITRIOS
KOUTELIDOU B. AIKATERINI
KOUTOUSIS P. & TH. GP
KOUTSIMANIS GEORGIOS
KOYTSONIKOLA SPYRIDOULA & CO LP
KYKLOPODILATIKI SA
KYPRAIOS SOT. GEORGIOS «TROHOKINISI»
KYROY CONSTANTINOS

LALAOUNIS NIKOLAOS
LAMPOUDIS P. ANTONIOS
LAMPROPOULOS ELASTIKA SA
MAGGANARIS MICH. ANASTASIOS
MANIATOPOULOS NIKOS SA
MARGARITIDIS PAN. NIKOLAOS
MARTIDOU ELISAVET SINGLE MEMBER PC -
PAUL DYNAMIC SINGLE MEMBER PC
MARTSOPOULOS EM. ALEXANDROS
MAXIM KALTSIDIS ELASTIKA SA
MAXXIS INTERNATIONAL HELLAS SA
MEIDANI E. & CO GP
MEIDANIS IOANNIS SA
MEIDANIS SOFOS ELASTIKA SA
MEMETOGLOY AMET
MEMETSIK EKREM
MERCEDES-BENZ HELLAS SINGLE MEMBER SA
MERESENTZI K. & D. GP
MICHOGLOU CHR. & CO LP
MILANOS SA
MITSI LAZ. ANASTASIA
MMT TYRES TSAKONA MARIA-MIRANTA
MODENA ENGINEERING PC
MORAGLIS SA
MOTO TREND SA
MOTODIKTIO SINGLE MEMBER SA
MOUKOU D. KALIOPI
MPAIRAKTARIS ATHAN. DIMITRIOS
MPALOGIANNIS CHR. ANTONIOS
MPAZIOS & CO GP
MPEZAS S. - LEON M. PC
MPOURAS NIK. PANAGIOTIS
MPOURLIS I. SA
NASOPOULOS NIKOLAOS
NIKOU CHR. DIMITRIOS SINGLE MEMBER LTD
NOUSIS N. IOANNIS
NTELIS AGG. DIONISIOS
PAGALIDOU PAVLINA
PAHIDOU GEOR. EVAGELIA
PANELASTIKI ELASTIKA SINGLE MEMBER LTD
PAPADIAMANTIIS SINGLE MEMBER PC
PAPAGEORGIOU KONSTANTINOS
PAPASPYROU TH. & CO GP
PASHALIDIS CON. STYLIANOS
PATMANIDI MARIA SA
PELMA SA
PEPPAS MILT. EPAMEINONDAS
PERIFEREIAKI ELASTIKA SA
PETOUSIS B. SA
PETRINTZIKLI N. PANAGIOTA - TYRE MONKEY
PETROPOULOS PETROS SA
PIAGGIO HELLAS SINGLE MEMBER SA

POUTAKIDIS ILIAS & CO GP
PRASSOS PANAGIOTIS & CO GP
PROMETEON TYRE GROUP SRL
PYRRIS D. SINGLE MEMBER LTD
RAFAILIDIS S. ANASTASIOS
RAFAILIDIS STEFANOS
RODA SA
RODA SINGLE MEMBER LTD
RODA SINGLE MEMBER PC
SAGAIKA FOTOVOLTAIKO PARKO LTD
SEMERTZIDOU STYLIANI
SIOHAS VAS. ANTONIOS
SKAMA SA
SPATHARAS ALEXANDROS PC
STATHOPOULOS B. - KAFKAS I. GP
STAVRAKIS SA
STERGIOU SONS NTALOU GP
SUPER TIRE SERVICE SA
SYMEONIDIS THEOFANIS & CO GP
SYRKELIDIS PASHALIS
TAFAKIS ANAST. DIMITRIOS
TENORA TACNHIKI SA
THEMELIS MANOLIS
THEOCHARAKIS SA
THEODORIDIS I. & CO ELASTIKA PC
TIRES-PRO PC
TOPALIDIS TH. SA
TRAXION ELASTIKA SINGLE MEMBER PC
TRIANTAFYLIDIS STYLIANOS
TROHOEPIDOSI LTD
TSAKIRIDIS KYR. EFTHYMIOS
TSEKOULIAS SA
TSERKEZOS PANAGIOTIS & CO GP
TSETIS DIM. VASILEIOS
TSETIS PASHALIS
TSIAKALOS M. IOANNIS SINGLE MEMBER LTD
TSIANTOULIS SA
TSIGELIDOU HARAL. EFTHYMIA
TSIOUTSIOULI CHR. MARIA
TSITOURAS G. NIKOLAOS
TSITSIKLIS B. & CO LP
TSOULKA ELENI SINGLE MEMBER PC
TZOULKAS IOANNIS
VARDAKOSTAS K. GEORGIOS
VAVATSIS EVRISTHENIS
XANTHOPOULOS DIMITRIOS
XENAKIS CRISTOS
XOURAS SPYR. EVAGELOS
YIAMPANIS A. - MASTOROUDIS P. GP
YIANNLOUDIS AST. GEORGIOS KING TIRES
ZONKE ALEXANDRA "PIT STOP"
ZOTAS ARISTEIDIS



## Vehicle Importing Companies

A. ISMAILOS SA
AFOI KOLYMPIOTI & SONS GP
AFOI LIAPI SA
AFOI SARACAKI SA
AFOI SIBRI GP
AIGLON SA
ALEXANDRIDIS S. & B. GP
ANTONITSIS GEORGIUO PANAGIOTIS
APOSTOLOPOULOS ILIAS & CO GP
ARGYRIOU PANAGIOTIS
AUTOMOTIVE SOLUTIONS SA
AUTOONE SINGLE MEMBER SA
BMW HELLAS SA
CAR CENTER - ELITE CAR GP
CHEVELLAS SA
DIMCO SA
DIMITRIADIS CHR. STAVROS - MOTO LOCO
DIMITROULIAS ARIS
ECOSUN LTD
ELIOFIL SA
ERGON TZANIDAKHΣ LTD
ERGOPOLIS 3A PC
ERGOTRAK
FCA GREECE SINGLE MEMBER SA
FILIS ANDREAS SA
FLAMMATOS GERASIMOS SA
FORD MOTOR HELLAS SA
GENESIS SA
GORGOLIS SA
HRISTODOULOU G. TZANIDAKI B. GP - DOMICAT
HYUNDAI HELLAS SA
INTERTRAK LTD
IOANNIDIS A. & F. SA
KAMPRANIS GEORGIOS SA - MOTOWAY
KATSAROS PANAGIOTIS SA

KIA HELLAS SA
K-MOTORS SOUTH EAST EUROPE SA
KONTELIS PAVLOS I. SA
KOSMOCAR SA
MALAMIDIS ATHANASIOS
MAN HELLAS SA
MERCEDES-BENZ HELLAS SINGLE MEMBER SA
MICHOPOULOS G. - SEITARIDIS G. GP - M&S LADA GROUP
MIETSEL SA
MIHALATOS A. & CO GP
MOTODYNAMIKI SA
MOTO TREND SA
NOYLIKA N. SONS GP
OPEL HELLAS SA
PETROPOULOS PETROS SA
PIAGGIO HELLAS SINGLE MEMBER SA
PLEIADES MOTORS SA
POLIS INCHAPE ATHENS SA
SFAKIANAKIS SA
SIDIROPOULOS AHILLEAS SA
SIOPIS ANT. - TRYFFINOPOULOS POL. GP - JOHN DEERE
SY.DIAP. SINGLE MEMBER LTD
TEHNOKAR SINGLE MEMBER SA
TEOMOTO SA
TEOREN MOTORS LTD
TESLA GREECE SINGLE MEMBER PC
THEOHARAKIS NIK. I. SA
TOYOTA HELLAS SA
TRIDENT CARS SA
TSEKOURAS SA
UNITRACK SA
VOLVO CAR HELLAS SA
VOURDOUNAS SA
ZISIS D. ZIOGAS
ZONKE ALEXANDRA "PIT STOP"

## Collectors - Transporters

ECO TRANS LTD	MOUZAKIS TRANS SA
GO GREEN RECYCLING PC	NTOULIS MATTHAIOS & NIKOS GP
AGGELOS SOTIRIOU & CO GP	P. GIOTIS PC
ANAKYKLOSI AIGAIΟΥ HYTIRIA SA	PAPPA EVGENIA & CO LP
ATSAS SA	PETSAS B. DIMITRIOS
AFOI SIAKANDARI LTD	SAITIS ANAKYKLOSI PC
DOGAKIS I. ANTONIOS	STATHAKIS B. & CO LP
GNOSI SINGLE MEMBER PC	SYLMEΤΑΝ PC
KAPSALAKIS SA	YPSILON PERIVALLON PC
KYKLOS SA	CHRISTOFOROS KERIDIS SA
MARATHOS G. - DRAGANIS ST. GP	

## Recovery Units

AXEL LTD
BIOTROHOS SA
ELVAN SA
PERME HELLAS SA
RETIRE SA
TYRES HERCO SA
TITAN SA
TITAN BULGARIA





# ANNUAL REPORT 2021

