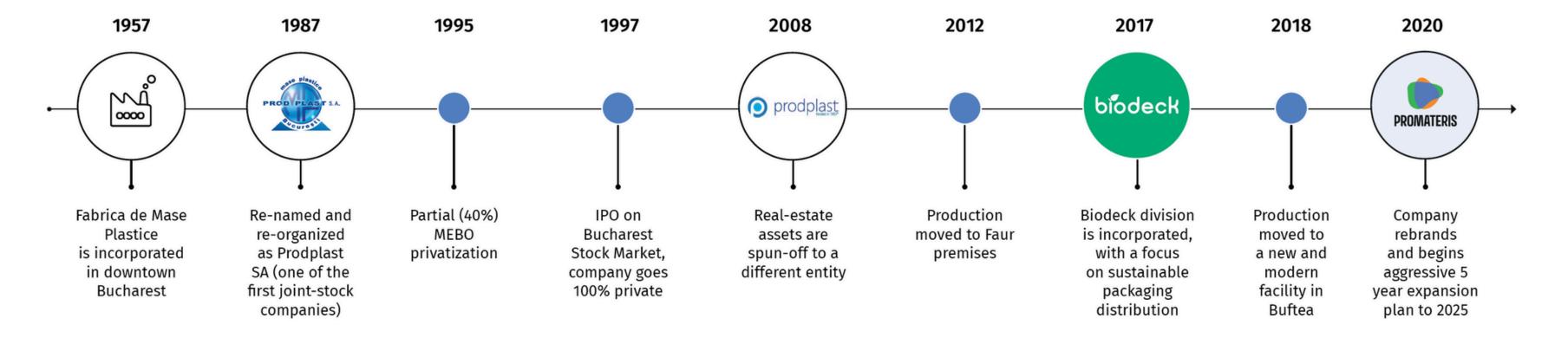


FUMBLED ED

Innovation & Sustainability

for Circular Economy Solutions

HISTORY



- → First group to start producing biodegradable and compostable packaging in Romania
- → First group to offer a wide portfolio of sustainable packaging on the Romanian market

PROMATERIS GROUP INNOVATIONS

- → Promateris develops solutions for marine biodegradable films
- → Promateris is the first company in Central and Eastern Europe to produce raw materials based on corn starch

OUR DIVISIONS



Bio-based & compostable

The new generation of bio-based compostable products are ideal for organic waste collection streams, together with the food waste, in order to be composted. This way, organic waste is diverted from landfill or incineration.



Bio-recycling

The bio-based compostable solutions are designed in order to enable circular supply chains rather than linear ones. We apply the same principle for our production process, and we are proud to say that we have a 100% recycling and re-use rate of our technological waste.



BIO Compounding

The bio-compounding division is specialised in the production of BioMateris, a bio-based raw material used in the production of biodegradable and compostable products. We are the first company in Central and Eastern Europe to develop such a product, enabling a series of competitive advantages for local and regional manufacturers.

OUR PRODUCTS

Biodegradable & compostable packaging



ENVIRONMENTAL STRATEGY

Progress doesn't show up big, but rather as an incremental, maybe unspectacular improvement. The "next best", the "better substitute" and "the more sustainable" material is the result of gradual tinkering. Breakthrough innovation and game-changing solutions do not come around too often in this field. What matters instead is a certain patience for steady growth, stamina to keep the search alive, and a diligent resilience in a step by step endeavor.

We are conducting our activity respecting the eco-design principles:

- reduce the quantity of raw material used in production while maintaining the same functional properties
- use materials that have lower environmental impact. In the past 3 years we reduced the virgin polyethylene consumption, replacing it with bio-based compostable raw materials
- ≥ 100% recycle and re-use of technological waste, thus achieving our target of running

- a production process where we use the resources to the maximum
- invest in machinery that is highly efficient from the energy consumption standpoint
- testing of new material formulations in order to help us create products that are environmentally and functionally performant

First company in the Eastern European packaging market to publish an ESG report.



Promateris continued to grow its bio-based & compostable bioplastics production, providing packaging that is home compostable, in compliance with the Energy Transition for Green Growth Act.

< CLICK HERE >

for a short company presentation video

COMPANY DECARBONIZATION

2018

Promateris stops polyethylene packaging production and replaces it with a new generation of packaging: bio-based, biodegradable and compostable

Product eco design

100% industrial waste recycling

R&D investments & formulations

2022

Promateris starts producing raw material (BioMateris pellet) for the production of bio-based packaging

2023

Solar panels installation: 1 mWp (covering 19% of Promateris' need)



GREEN EUROPE

Efficient technologies for manufacturing innovative and environmentally friendly products

2018

PROJECT PROMOTER



PROJECT PARTNER



GRANT AWARDED BY



PROJECT PARTNERS

PROJECT PROMOTER: Promateris
PROJECT PARTNER: Bio Bag International

BBIAS has for the last 20 years been in the forefront of innovation and development within the bioplastics industry. They have built a multinational group with presence in more than 15 countries and with manufacturing in four countries (both own and contract manufacturing). BBIAS holds ample experience at both project and business development.



The project's aim: business cooperation development between Romania and Norway in order to offer solutions for both land and marine single use plastic littering and pollution



aim to develop innovative environmentally friendly and sustainable packaging:

1. Biodegradable and compostable range of products (light carrier bags, compostable films, mulching films)
2. Marine biodegradable products (PHA bags)

PRODUCTS MANUFACTURED

RAW MATERIAL



INNOVATION

• 4 innovative products (new-to the market):

bio-based & compostable: bags, F&V bags, bin-liners, mulching film

• 3 innovative technologies (new-to-the-enterprise)

bio-based & compostable: extrusion, converting, recycling

• 2 innovative technologies/ solutions

ultra-thin compostable film, marine biodegradable film



RESULTS

2018 vs 2021

- 50 new employees
- 297% increase in turnover to EUR 33.8
- Aquamateris registration of a trademark for marine biodegradable products
- 100% industrial waste recycling (1707 tons in 2021)
- **De-carbonization** of Promateris' product offering 5258 tons of bio-based and compostable products (2021)
- 4800 liters reduction in fuel consumption
- 682 megawatt hours reduction of electricity consumption for installed equipment

TARGET GROUPS

- retailers
- farmers

In 2021 we recycled 1.707 tones of industrial waste, of which we reintroduced in production 1.516 tones during the same year.



BUDGET OVERVIEW



PROJECT BUDGET EUR 2,567,968

PROMOTER CONTRIBUTION EUR 1,617,968

GRANT EUR 950,000

GRANT % 36,99%

BIO-BASED CIRCULAR SOLUTIONS TO DECARBONISE THE LOCAL ECONOMY 2021

PROJECT PROMOTER



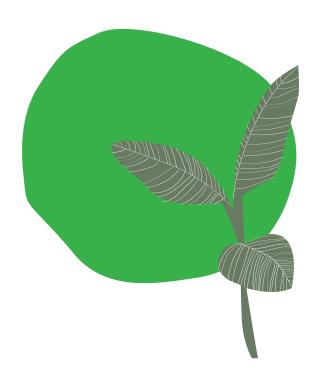
PROJECT PARTNER



GRANT AWARDED BY



THE PROJECT AIMS TO DEVELOP A NEW DIVISION WITHIN PROMATERIS COMPANY: BIO COMPOUNDS



This new division will be specialised in the production of BioMateris, a biodegradable and compostable raw material used in the production of biodegradable and compostable products.

How do the products differentiate from the ones in the previous project?

THIS PROJECT





PREVIOUS PROJECT



PRODUCTS READY TO BE USED

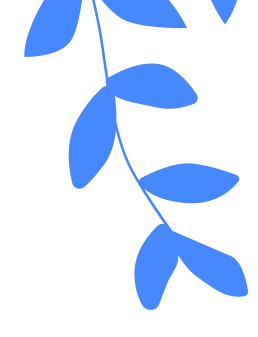
THE NEED FOR THE PROJECT



- no local or regional manufacturers of bio-based (corn starch) raw materials
- increased dependency of local and regional manufacturers on imports
- decreased competitiveness on the market for manufacturers compared to big corporations
- local sourcing of corn starch (Romania is the biggest producer of corn in EU)
- increased demand for products as an alternative to plastic
- favorable legislation and anti-plastic laws

GREEN EFFECT

- Improved material efficiency in order to replace single use plastic
- Company and local economy defosilisation, decreasing the CO2 emissions by 3.435.120 kg until 2022
- For the production of BioMateris we use up to 40% local renewable corn-starch, which enables an annual reduction on fuel consumption of 17.539 litters
- We estimated a 4% (80 tonnes) waste generated in the production process for the 2000 tonnes produced at the end of 2022. By the end of 2022, we had a rate of 100% recycling and waste re-use from production processes.
- We estimated a **49 Megawatt reduction** for a production of 2300 tons of raw materials, which was achieved in 2023.



BUDGET OVERVIEW



PROJECT BUDGET EUR 1.648.240

PROMOTER CONTRIBUTION EUR 904.240

GRANT EUR 744.000

GRANT % 45%



GREEN ENERGY

for bio-based and compostable packaging production

2022

PROJECT PROMOTER



PROJECT PARTNER



GRANT AWARDED BY

Iceland Liechtenstein
Norway grants

THE PROJECT

Installed capacity:

1 mWp. Used for Promateris' own consumption (packaging manufacturing)

Location:

Promateris HQ, Buftea, Ilfov. Promateris owns the land on which the project will be developed.

Project necessity:

Increased competitiveness and improved product offering. Promateris and Romania implicitly, will be at the forefront of innovation in the CEE region, being able to manufacture a new generation of packaging, with the lowest carbon footprint available on the market.

CO2 reduction of 341.053 tones/year

Significant cost savings of EUR 95.440/year

510 Mw monthly consumption

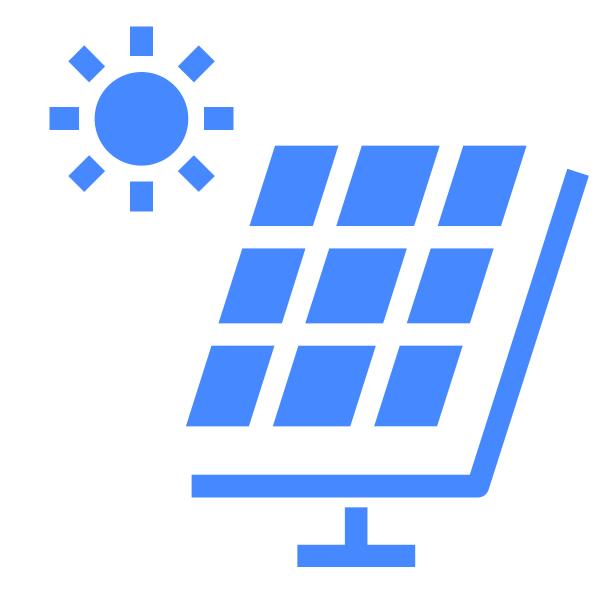
Protection from changing electricity rates and reduced dependency on external sources of energy

PROJECT PARTNER



Norsk Energi was founded in 1916 and is organized as an association.

They are actively engaged in a range of projects focusing on energy efficiency and greenhouse gas reductions and assist both Norwegian and international partners with solution design, assessment, engineering, technology development and training





ENVIRONMENTAL BENEFITS - 5 YEARS PLAN

- reduction of **5.703.240 kWh** fossil fuel-based energy
- company and local decarbonisation through a reduction of 1.705.265 tones CO2
- Promateris' product portfolio will have the **lowest carbon footprint existing on the market** (made of locally sourced bio-based materials, biodegradable and compostable & produced from renewable energy)



BUDGET OVERVIEW



PROJECT BUDGET EUR 1.004.070

PROMOTER CONTRIBUTION EUR 407.070

GRANT EUR 597.000

GRANT % 59%





THANK YOU!

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