### BONDALTI





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### BONDALTI INTEGRATED REPORT



## Prosperity and Business

- Evolution of the
- Focus on Innov
- Proposed appr
- 2023 Outlook



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### **BONDALTI** INTEGRATED REPORT



## Prosperity and Business

General Shutdown in the first quarter of the year

Tax benefit of € 326,131.75 (SIFIDE II)

**91** Colombo ideas (30 in 2021)

+ € 151 million (↑34%) in Turnover\*

+66% in EBITDA\*

+45% in Capital Expenditure\*



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\* As compared with the same period of the previous year

### 02. Prosperity and Business

## **Evolution of the Business**

2022 was marked by record turnover in all areas of both the organic and inorganic segments, as the Company gained new clients and entered into new markets in the organic segment and increased its market share in Spain, contributing to the consolidation of activity of Bondalti Cantabria. Sales prices rose as a result of a general rise in the benchmark prices of raw materials and utilities, namely energy and logistics costs.

### **Industrial Chemicals**

Bondalti Chemicals carried out the general maintenance shutdown at the beginning of the year, with very positive results. We highlight the non-occurrence of serious accidents and the resumption of operations within the planned schedule. In Spain, 2022 was marked by record production at Torrelavega, a unit where several operational improvements were made.

In the production of organic products, the main specific consumptions were historically lower, reflecting the operational improvements that were implemented, thus contributing to increase the competitiveness of the Estarreja site.

**Mononitrobenzene:** A large part of Bondalti's active production consists of mononitrobenzene, with sales above 60 kt. A new medium and long-term contract was also concluded with one of Bondalti's main clients, and an agreement was reached to increase storage capacity, which should lead to a reduction in logistics costs and carbon footprint.

Aniline: During 2022, Bondalti performed effectively in aniline production; there was, however, a marked slowdown in demand in the 4th quarter and the cancellation of a number of orders. At the end of the first quarter of 2022, Bondalti stopped selling to the Russian market, following the war situation in Ukraine.

In 2022, the main inorganic products units showed very high levels of reliability, efficiency and performance. By way of example, we highlight the Brine Electrolysis capacity utilisation rate, which stood at 75%, a rather high figure taking into account the general maintenance stoppage that covered part of January and February.

**Soda:** The year started with a downward trend in prices due to the increase in imports from outside Europe, mainly from the USA, however, at the beginning of the 2nd quarter, the War in Ukraine triggered a rise in the cost of energy and other raw materials, pushing soda prices to historic highs. This cycle started to be reversed in the 4th quarter, as demand fell and imports from abroad (USA, China, India and Indonesia) increased again.

**Hypochlorite:** In 2022 the company continued to supply the product to new partners, reaching a new sales record for this product.

**Hydrochloric acid:** Bondalti Chemicals managed to export this product to European countries, such as France and Germany, where hydrochloric acid is not available.

**Chlorine:** Chlorine production did not go as planned for 2023 due to internal logistics problems of Bondalti clients. However, Bondalti renegotiated its contracts for the medium term.



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### Water Treatment

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Bondalti Water Solutions S.A. was set up in 2022, with a view to aggregating Bondalti's holdings in the Water Treatment business, namely Enkrott and the Aquas Alfaro Group. This corporate reorganisation took place in parallel with the implementation of a single functional structure; the Water Treatment business is now run and operated in a more coordinated manner in the various geographies. In 2022 Bondalti acquired a further 27.52% of the share capital of Enkrott S.A., adding to the 68.49% it already held, the remaining 3.99% representing the company's treasury stock. Enkrott S.A. acquired 33.50% of the share capital of Enkrott Madeira, becoming the sole owner of that subsidiary. Net profit in 2022 totalled € 595.8 thousand.

Enkrott grew 10% compared to the previous year, recording a turnover of € 13.6 million, on the back of a favourable performance in the operation and maintenance area in Portugal. In 2022 consolidated net profit totalled € 284.8 thousand.

Aguas Alfaro Group increased its consolidated turnover by 59% compared to 2021, to € 22.6 million, driven by growth in works and also in operation and maintenance in Spain. In 2022 consolidated Net Profit totalled € 304.9 thousand.



### **Consolidated Results**

Turnover (T) Operational cash flow (EBITDA) Operational income (EBIT) Operational income / T Net financial costs Income before taxes Net income\* Equity Net assets Investments Financial debt Net financial debt Financial debt / EBITDA Net financial debt / EBITDA Gearing

\*Attributable to equity holders of the parent company

Bondalti achieved very favourable results in 2022, only possible thanks to the commitment of all the people and teams who worked hard to overcome the challenges; Results before taxes totalled € 67.7 million (+ € 43.1 million than in the previous year), reflecting historic record figures.

### Financial structure and evolution

The year stood out for the sharp growth in sales. Despite this strong resurgence in demand and the hindrances recorded in local and international supply chains, Bondalti managed to ensure the continuous supply to its clients, and also signed new supply contracts for the short, medium and long term.

In 2022 Bondalti's cash management continued to show the solidity and resilience that have characterised the company in recent years. Trade receivables and payments to suppliers were not affected by the continuation of the COVID-19 pandemic situation or the beginning of the war in Ukraine.

Unit	2020	2021	2022	Δ (abs)
€M	243	444	595	151
€M	40.1	61.8	102.6	41
€M	20.9	40.1	80.1	40
%	8.6	9.0	13.5	5
€M	3.1	15.5	12.4	-3
€M	17.9	24.6	67.7	43
€M	14.5	19.1	51.9	33
€M	106	113	160	47
€M	326	355	377	22
€M	10	11	16	5
€M	146	135	104	-31
€M	107	112	69	-43
Number of x	3.7	2.2	1.0	-1
Number of x	2.7	1.8	0.7	-1
%	32	32	42	10

### BONDALTI INTEGRATED REPORT

### Effective vs. 2022 Outlook

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As mentioned above, 2022 was particularly favourable for Bondalti, as shown in the surpassing of the various economic and financial indicators projected for the year, as Net Profit stood at € 51.9 million. The efficiency achieved in the operation of Bondalti's industrial units contributed greatly to this variation, namely the consolidation of the business at Bondalti Cantabria, as well as the activity of the new Water Treatment area.





#### **BONDALTI** INTEGRATED REPORT

### 02. Prosperity and **Business**

## **Focus on Innovation**

Innovation is considered one of the main drivers for sustainable development and increasing competitiveness in the markets where the company operates. Bondalti continuously invests in RDI activities, promoting technological capacity and the active involvement of all employees in continuous improvement.

Bondalti has promoted a dynamic entrepreneurial culture among its stakeholders, constantly searching for new solutions and opportunities that create value and impact. Innovation is essential and decisive for the company's future.

With a view to respond to future challenges, Bondalti has developed several innovation projects to implement solutions to achieve carbon neutrality in its industrial operations and disruptive projects in line with its business profile. In 2022 some of these projects led to 8 applications for funding opportunities, within the scope of the Environmental Fund, the Foundation for Science and Technology (FCT) and the Recovery and Resilience Plan (PRR).

### FUNDO

The project consists of reinforcing the cost-effectiveness of GHG emission reductions and investing in low-carbon technologies in the period 2021-2030 and the tender for the "Allocation of reserve injection capacity in the public utility grid " (production of energy exclusively from renewable sources, for injection into the public utility grid).

#### Fundação para a Ciência Tecnologia

### "H2ENABLE", "H2DRIVEN" and "NEW GENERATION STORAGE" Projects

These projects are the result of final proposals submitted under the 2nd phase of Component C5 - Capitalisation and Business Innovation within the "Resilience" dimension, which view to establish Agendas within the scope of the management and enhancement of a new green fuel value chain, specifically a segment with the capacity to produce hydrogen, ammonia and green methanol, and the construction of a factory to process lithium electrolysers in the chemical complex of Estarreja.

### "RePower Chemicals" Project

Also within the scope of the PRR, the "RePower Chemicals" project was submitted under Component C14 - Industry Decarbonisation, within the "Climate Transition" dimension, which aims to leverage the integration of advanced, intelligent and efficient technologies, and the integration of renewable energies in energy-intensive processes, in order to reduce the environmental impact of the production processes of the industrial complex of Estarreja, while promoting the reduction of fossil fuel consumption and GHG emissions in this industrial facility.





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#### Funding measures for indirect costs in facilities covered by the European Emission Trading Scheme (EETS)

#### SYNBIOANI Project

The project aims to develop a sustainable and efficient bioprocess capable of replacing, in part, the current chemical process for the production of aniline.

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In the 2nd year of the current Multiannual Financial Framework (MFF), Bondalti Chemicals planned an eligible capital expenditure of € 227 million. Additionally, as in previous years, Bondalti Chemicals' application to the R&D Tax Incentive System (SIFIDE II) relating to 2021 was internally developed and submitted, with a tax benefit of € 326,131.75. This system aims to assist companies in R&D activities, through a support mechanism for the deduction of eligible corporate income tax expenses.

During 2022, other projects were underway with the aim of promoting the development of solutions arising from the Company's requirements:

- Implementation of Project Cleópatra 4.0;
- Development of the new employee portal for internal use;
- System implementation of the delivery and validity management process of PPE to employees;
- Transformation to SAPFiori in Radio Frequency processes for warehouse management;
- Improvements in administrative processes in the Human Resources area, with several developments in the Interoperability Platform/Web Services - SAP versus Social Security in Portugal and Spain;
- Application support to external companies within the scope of the provision of outsourcing services.

In the Water Treatment segment, some RDI initiatives are underway, with respective funding applications submitted within the scope of the 2nd phase of component 5 of the PRR.

Based on the reactivation of the José de Mello Group Innovation Committee (GJdM), whose mission is to reinforce the culture of innovation through the sharing of knowledge between companies and the joint organisation of cross-company initiatives, Bondalti actively participated in all initiatives arising therefrom, and led the project entitled "RDI investment indicators". This project consisted of creating and consolidating a procedure for quantifying and reporting key RDI investment indicators to be implemented by all Group companies.

In recent months, the Innovation area has focused on identifying the ideal partner tol support Bondalti in the development of an Innovation Vision and Strategy, and in redefining and implementing an adequate Innovation Model aligned with the corporate strategy and business characteristics.

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### **GIATEX** Project

The GIATEX project is co-promoted by the Enkrott Group and its objective is to reduce the specific consumption of water, using membrane separation processes.

### **MULTI AD Project**

The MULTI AD project is led by the AEMA Group and focuses on improving energy efficiency and sludge management.

### **ULTRACLEAN** Project

In line with the MULTI AD project developed by the AEMA Group, the ULTRACLEAN project aims to improve the MBR membrane cleaning process.

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RDI Key results at Bondalti	2020	2021	2022	Δ (abs)
Expenses and investment in RDI	3.3 M€	2.7 M€	3.2 M€	0.5 M€
Employees involved in RDI activities	22%	10%	9%	
PhD/Post-doc grant holders	3	3	2	_^
Ongoing RDI projects	52	36	39	Э
RDI partnerships	24	41	68	27
Patent families (Bondalti Chemicals)	3	4	4	C
Scientific papers/presentations	1	3	13	10
Scientific papers/presentations	1	3	13	

During the course of the year, all submitted ideas, approved ideas, ideas under implementation, implemented and even those retrieved (ideas from previous years that were only implemented later) are assessed by the evaluation committee. Each implemented idea is assessed for its investment and financial return over time.

Each employee can submit as many ideas as they wish without any obligation and throughout the year. The Colombo OpenDay is held once a year, to present all the ideas submitted during the previous year and award the prizes to respective winners of the most innovative and sustainable ideas. All employees of the Organisation are invited to vote for the most innovative and sustainable ideas.

Summing up, in 2022 Bondalti invested around € 3.2 million in RDI initiatives, of which approximately 59% correspond to Innovation activities and the 41% to R&D activities.



Bondalti considers its people as the key element for the success In Innovation, both through the development of RDI activities and through the innovative ideas and solutions that they annually present to the Organisation. At Bondalti chemistry the management of these ideas is carried out through the Colombo Programme, which began in 2006 aimed at encouraging creativity, as well as the generation and implementation of employees' ideas, in the respective Group companies in a comprehensive, cross-cutting and systematic way.

To this end, Bondalti has an internal platform where it is possible to submit ideas and to view the current status of each submitted idea. Each idea is assessed firstly by a multidisciplinary team and subsequently, by each area directly involved.

In this way, Bondalti promotes the creativity of its employees, involving them directly in the organisation's activity and rewarding their work with monetary prizes. Employees can choose between the cash prize or equivalent amount in training. The amount of the prize awarded varies according to the classification of each idea. Awards are ranked 1st, 2nd and 3rd and as the most sustainable idea

Until this date, 633 ideas were submitted, of which 198 (31%) were approved and 137 (69%) were implemented. Bondalti has a total of 247 creators and the programme has an overall financial return up to end-2022, of  $\leq$  1.7 million.

As a result of the organisational and functional restructuring of the Colombo Programme, namely with the creation in the last quarter of 2021 of the Evaluation Committee and of a new version of the Platform made available for submitting and monitoring the status of submitted ideas, as well as the extension of the Programme to Bondalti Cantabria, a total of 91 new ideas were submitted in 2022, which is 3x the figure of 2021, while decision time was reduced by at least half.

Over the 17 years of the Colombo Programme, the main objective has been the direct involvement of employees in the Organisation's activities. The recognition of creative minds on an annual basis should increasingly involve employees in problem identification and improvement suggestion, resulting in more ideas that will serve everyone.

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### **GREENH2ATLANTIC** Green Hydrogen for Europe

### **Objective**

To leverage the link between renewable energies and commercial/ industrial applications - Building a low-carbon future that is resilient to climate change by actively contributing to the acceleration of the implementation of the European Green Deal.

### Methodology

Development and operation of a groundbreaking 100 MW alkaline electrolyser (ALK), to enhance scalability, standardization and manufacturing automation using flexible green hydrogen production process. This includes an innovative interface system composed of advanced power electronics. In addition, an innovative advanced Hydrogen management system, improved by Artificial Intelligence, will allow the reduction of OPEX, load factor, real-time production management, analysis of system behaviour, among other things.

### Aim and expected results

Global operation and replication is expected to reach 1GW production as from 2030, in Sines. With this project, Bondalti will contribute to:

- 1. reduce greenhouse gas (GHG) emissions
- 2. deploy additional renewable energy capacity
- 3. replace grey Hydrogen and Natural Gas with Green Hydrogen
- 4. achieve an affordable green hydrogen price

5. unlock investments in the green hydrogen value chain at European level

6. create more than 1000 direct and more than 2700 indirect jobs

7. achieve European and national energy and carbon targets

8. test new technology to support the network and to service industrial clients

9. facilitate market preparedness and response for green hydrogen in Europe

10. provide relevant data for harmonization in the European sector and for regulation on renewable energy sources



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## NEW GENERATION **STORAGE**

### **Objective**

Creation of a new Technological and Industrial Platform, with application in the sectors of mining and refining, production of components and cells, assembly of packs and integration and application of batteries, with a view to developing new models of material recycling and reuse, contributing to the increasing the sustainability of the respective value chains.

### Methodology

To develop a new Technological and Industrial Platform in symbiosis with semi-industrial lines, covering 5 pillars of action:

**Pillar I** – Act in refining activities with a view to valuing materials for sustainable metallurgy and refining

**Pillar II** – Act in terms of structural batteries, viewing the production of flexible thin film battery cells (new generation cells)

Pillar III - Act in terms of stationary, automotive industry, soft mobility with a view to developing tailor-made solutions

**Pillar IV** – Act in terms of intelligent mobility for integration and optimisation of the use of batteries in systems and networks from kW to MW

**Pillar V** – Transversal action to define 2nd life models and material recycling

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### Aim and expected results

The aim of this project is to achieve an international positioning; Bondalti is part of a consortium gathering several companies and academic institutions. The implementation of this project in the Refining-Manufacturing-Reuse and Recycling value chain views to:

1. reduce greenhouse gas (GHG) emissions in refining processes by 50%

2. create 200 new technical-scientific jobs

3. increase production of advanced lithium-based batteries

4. set up 8 pilot industrial production lines

5. leverage the entrepreneurship ecosystem and promote higher education

6. involve 25 municipalities in achieving the objectives

7. develop new applications for stationary systems

8. develop new end-of-life processes to reuse resources





### BIOHYCO Sustainability in the agri-food sector

### **Objective**

The project aims to advance the scientific and technological knowledge previously generated within the scope of the R&D project, BioHigh – High-performance synthetic fuels from biogas, with a view to the production and separation of hydrogen and pure and dry carbon monoxide.

### Methodology

The project is based on several research and development activities in a laboratory environment involving the synthesis of materials, the production of membranes for cell constitution, electrochemical testing and promotion of the work developed according to a dissemination, communication and exploration plan.

### Aim and expected results

The chemicals that will result from this process form the basis of a wide range of chemicals, from fertilizers, medicines to liquid fuels. Thus, this project allows the conversion of sustainable biogas product into valuable chemical precursors. With this project, Bondalti jointly with its partners, will contribute to:

- 1. increase the efficiency used resources in value chains
- 2. promote projects for the development and application of innovative and precision technologies in the agri-food, forestry and fisheries sectors

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- 3. improve food quality and safety
- 4. Recover waste such as manure or sewage, municipal waste or green waste
- 5. reduce the electrical demand necessary for the production of green hydrogen
- 6. create new value-added products
- 7. increase the intrinsic market value of biogas
- 8. decarbonise chemical production of key products



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## E-NOx

### Recovery of materials and circular models

### **Objective**

Given its importance in the manufacturing of fertilizers, nitric acid is one of the most important chemical commodities on an international scale, with an annual production volume of around 55 million tons (2014) and a market value close to 13 thousand million USD (2016). The E-NOx project aims to develop an innovative technology that will allow the recovery of materials that are currently unwanted by-products of nitric acid production, as well as their conversion into raw materials for that same process. This technology will also allow the recovery of greenhouse gases N<sub>2</sub>O and NO<sub>2</sub>, through their electrochemical processing.

### Methodology

The project is based on several research and development activities in a laboratory environment involving the preparation, characterisation and testing of reduction electrocatalysts, oxidation electrocatalysts and oxygen ion conductive electrolytic membranes. Subsequently, the design, construction and testing of a pilot-scale reactor will be developed and the work carried out will be promoted according to a dissemination, communication and exploration plan.

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### Aim and expected results

With this project, Bondalti jointly with its partners, will contribute to:

1. Development of sustainable processes, materials and systems with greater added value

2. Efficient use of resources and reduced environmental impact in production processes

3. Industrial modernisation through the Circular Economy

4. Eliminate the release of greenhouse gases N<sub>2</sub>O and NO<sub>2</sub>, promoting their re-integration into the production process generating electrical and thermal energy

5. Reduction and reuse of industrial waste in the set of industries that produce and use nitric acid in their processes



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### **Repower Chemicals** Energy Efficiency and Renewable Sources

### **Objective**

RePower Chemicals' main objective is to carry out a set of structural investments that include the following objectives: production and storage of electricity from a renewable source (solar); improvement of the energy efficiency of the brine electrolysis process and electrification of steam generation in industrial boilers.

### Methodology

The project includes the implementation of a photovoltaic park at the industrial facility for its exclusive use. In circumstances where the level of consumption is not sufficient to absorb all of the photovoltaic production, the remaining electrical energy will be stored in new batteries to be installed, for later use in the facilities. In addition, the investment in increasing energy efficiency includes a technological conversion through the replacement of equipment with more advanced technology. Additionally, an existing electrical substation is planned to be renovated, to make it more efficient and reliable, and the existing steam production system using natural gas is also expected to be replaced with an electric boiler.

- 4. reduction of greenhouse gas emissions (scopes 1 and 2) by more than 75% compared to 2005 figures at the Estarreja plant



### Aim and expected results

This project will bring several advantages in terms of operations at the Estarreja site, as well as in terms of the development of green products and support for other associated decarbonisation projects. We point out the following major advantages:

1. reduction of dependence on electricity from the grid

- 2. integration of renewable energy sources into total energy consumption
- 3. improvement of the energy efficiency of one of the production units at the Estarreja plant
- 5. Contribute to reduce Portugal's dependency on natural gas

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### H2Enable New green hydrogen sources

### Objective

H2Enable is a gas energy project: it foresees the use of renewable electricity to produce green hydrogen through the electrolysis of water that will be used as chemical raw material, fuel for heat generation in place of natural gas, and as fuel for vehicles powered by hydrogen replacing other fossil fuels (mainly diesel).

### Methodology

The H2Enable project aims to install a green H<sub>2</sub> production unit, based on a water electrolysis system. The electrolysis facility will be powered by renewable electricity through renewable solar and wind farms. As part of the R&D Work Packages, the project foresees the implementation of a production management system that will integrate the supply of renewable electricity (hydrogen plant), a monitoring system for each electrolyser cell, based on IoT, which will allow monitoring ageing and anticipating failures, thus increasing operating time and reducing energy costs and a chemical production assessment tool that allows tracking the carbon footprint of products produced, with the aim of facilitating the certification of ecological chemicals.

### Aim and expected results

With this project, Bondalti jointly with its partners, will contribute to:

1. the decarbonisation of an important and broad value chain that currently uses grey hydrogen

2. the decarbonisation of the European gas network

3. the creation of 5,600 direct and 14,088 indirect jobs along the entire value chain and generation of wealth for families

4. the promotion of social inclusion whilst encouraging the population to stay local and away from major cities

 the National Hydrogen Strategy and the 2050 Carbon Neutrality Roadmap

6. a more resilient electrical network through the provision of electrical network services, since the Portuguese electrical network is interconnected with the Spanish system (thus forming the Iberian electrical system)



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## GIATEX

Smart Water Management in the Textile and Clothing Industry

### **Objective**

The GIATEX project aims to implement the sustainable and rational use of a scarce natural resource - water, in textile finishing processes known for their intensive consumption. This project will provide the national textile and clothing sector, in particular finishing companies, with the highest water management and recycling technologies, finishing technologies with reduced water consumption and effective technologies for wastewater treatment. This will contribute to their positioning as leaders in the development of green and sustainable technologies and to their national and international market recognition as manufacturers of textile products with reduced water and carbon footprints.

### Methodology

The project, which involves several partners in the business sector but also in terms of the national academic and scientific system, includes the following main lines of activity:

- 1. Modulation of processes and strategies for water recycling
- 2. Process intelligence (Development of online sensing and monitoring systems, logical systems to support decisionmaking activities)
- 3. Finishing technologies with reduced water consumption
- 4. Textile wastewater treatment technologies

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to:



- 5. Industrial pilot (including Sustainability LCA and economic viability assessment)
- 6. Water management support software
- 7. Outreach and communication activities
- 8. Training activities

### Aim and expected results

With this project, Bondalti jointly with its partners, will contribute

1. Increased competitiveness and productivity of the sector or cluster with great impact on the Portuguese economy and reduced dependence on external markets

2. Increased qualification of human resources, generation of knowledge and dissemination

3. Contribution to national targets for carbon neutrality and increased use of renewable energy sources

4. Increase in the proportion of reused or recycled materials in the textile sector's production processes

5. Direct job creation with the creation of over 110 new jobs

6. Over 40% reduction of water consumption in the targeted processes



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## Multi AD

Innovation and automation for SMEs in the Food and Beverage sector

### **Objective**

The main objective of the LIFE Multi-AD 4 AgroSMEs project is to develop and industrialise an innovative fully automated system for the treatment of wastewater generated by small and medium-sized companies in the Food and Beverage sector. This technology is based on the design of patented high performance multiphase anaerobic reactors and its production will be customised according to the specific needs of each customer.

### Methodology

The project, which involves several partners in the business sector but also in the innovation and technological development ecosystem, will comprise the following steps:

- 1. Design and dimensioning at an industrial level of the new multiphase anaerobic reactor based on the prototype patented by AEMA
- 2. Development of a new process control and automation system to maximise the stability of the anaerobic treatment in the face of changes in wastewater composition or operating conditions.
- 3. Development of design software for dimensioning this technology according to the needs of each client

to:

1. reduce the environmental impact in the Food and Beverage sector

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4. Construction of the new multiphase reactor with a capacity of 100m<sup>3</sup> and validation of the system in a Spanish winery

5. Dissemination of project results and dissemination throughout the sector

### Aim and expected results

With this project, Bondalti jointly with its partners, will contribute

- 2. reduce operating costs of SMEs in this sector
- 3. Reduce energy consumption in the sector
- 4. Reduce the amount of waste produced and improve their management

5. the implementation of the European Union Water Framework Directive (2000/60/EC) and the objectives established by the European Innovation Partnership on Water - EIP Water, in line with the global objectives established for the Europe 2020 Strategy



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# Proposed appropriation of results

The Board of Directors proposes to appropriate the Net Profit generated in the year in the amount of € 51,822,711.48 as follows:

Retained earnings



## 2023 Outlook

For 2023, the uncertainty associated with the evolution of inflation, the war in Ukraine and context costs, continues to be a factor of concern for Bondalti. The effects of the current situation, namely the invasion of Ukraine and the end of the pandemic, continue to have an impact on the price of raw materials, with special incidence on the price of electricity, natural gas and fuels, although in the last quarter of 2022 the situation was not as negative as was expected. Despite this uncertain background, production and distribution chains continue to function with great reliability, and we do not anticipate any circumstance likely to jeopardise Bondalti's ability to operate in its markets.

Additionally, besides the cost of electricity, which saw a very relevant increase in 2022 – requiring urgent measures –, there is also a concern with the evolution of the prices of other raw materials (salt, for example) and other services, such as transport, which will be factors with a relevant impact on activity in 2023. Bondalti will follow the matter closely, as the technological changes which will be introduced during the 2023 general shut-down are expected to optimise the specific consumption of the units.

Production units in Estarreja, namely in the production of chlorine and its by-products, are expected to continue seeing significant investment. Bondalti's priority will always be the safety of people and facilities, as well as ensuring the normal operation of production units, in Portugal and Spain.

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