



GROWING GREEN

CIRCULARITY IN VET

COMPENDIUM

Growing Green: Fostering green entrepreneurial mindsets
based on the circular economy and green capital concepts
in VET education

Acronym: Growing Green

2021-1-DK01-KA220-VET-000024955

October 2023



Co-funded by
the European Union

The compendium has been produced by the project partners in the scope of the Erasmus+ project **Growing Green: Fostering green entrepreneurial mindsets based on the circular economy and green capital concepts in VET education.**

Agreement number: 2021-1-DK01-KA220-VET-000024955

Copyright © 2024 Growing Green

Project coordinator: Erhvervsskolen Vestjylland, Denmark

May 2024

<https://growing-green.eu>

The content of this Framework is licensed under the Creative Commons Attribution 3.0

License (<http://creativecommons.org/licenses/by/3.0>).

Editor: Ilmiolavoro , Italy

Participating partners: all



Enjoy and play to create a beautiful and healthy world!

This compendium will be published under a Creative Commons licence, non-commercial share-alike.



Disclaimer: The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

INDEX

- 4- Introduction
- 5–Filabottle
- 26– Fix-N-Flip
- 47- GreenEdge Consulting
- 66- Refresh
- 86-Arouse
- 107- Ecoride
- 128- Gobibur
- 149- M-Tea Group
- 169- Mecanizada
- 191- Solar Tech
- 212- Green Wind
- 235- Dan Bolina
- 257- Futbet
- 275- Invernadoor
- 292- GF in the GreenEntreFuture
- 314- A slice of green
- 341- Brewery
- 360- Recycling materials

INTRODUCTION

In today's rapidly evolving global landscape, fostering entrepreneurial competences among European students has emerged as a priority. The European continent stands at the nexus of innovation, economic growth, and social progress, where the cultivation of entrepreneurial mindsets and skills is instrumental in navigating the complexities of the 21st century.

At the heart of this priority lies a fundamental understanding articulated in various official European documents on entrepreneurship: the imperative to equip students with the tools and mindset necessary to thrive in an increasingly competitive and dynamic world. From the European Commission's "Entrepreneurship 2020 Action Plan" to the European Union's "Strategic Framework for European Cooperation in Education and Training (ET 2020)", there is a resounding call to nurture a culture of entrepreneurship from an early age.

And this is not enough: students have to develop entrepreneurial skills with a focus on sustainability. New generations will be called upon to respond to new entrepreneurial challenges that take into account environmental needs. The paradigm of environmental sustainability must underpin new development concepts if we really want to change the way we live, taking better care of the planet and its resources.

The business ideas that you will see below, developed by the students involved in project activities, represent the final result of a long journey undertaken over two years ago, aimed at developing a green and sustainable entrepreneurial mindset among students, through an experiential approach to learning that included many moments of sharing and co-reflection both with peers and with teachers and companies. The students, after becoming aware of what is meant by concepts such as 'entrepreneurship', 'sustainability', 'sustainable business', 'natural capital', and 'circular economy', were able to come into contact with companies/organisations from the world of work, to understand their problems/needs related to the green transition, and to start to design small solutions that were then translated into business ideas with final prototypes.

Please note: in order to see the videos created by students during this journey, please check the official social media profiles of the project:

Instagram: <https://www.instagram.com/growinggreenerasmusplus/>

LinkedIn: <https://www.linkedin.com/company/erasmus-growing-green/?viewAsMember=true>

Matteo Paradisi

Ilmiolavoro srl, coordinator partner of project result n.3 "Growing Green Compendium of prototypes"



GROWING GREEN

CIRCULARITY IN VET

Filabottle

Growing Green: Fostering green entrepreneurial mindsets
based on the circular economy and green capital concepts
in VET education

Acronym: Growing Green

2021-1-DK01-KA220-VET-000024955

October 2023

Lead Result: No editors



Co-funded by
the European Union

The compendium has been produced by the project partners in the scope of the Erasmus+ project **Growing Green: Fostering green entrepreneurial mindsets based on the circular economy and green capital concepts in VET education.**

Coordinator of the PR: ilmiolavoro

Coordinator team members: Dejan Vodopija & Tina Kariž

Partner 1: Petar Đajip

Partner 2: Neven Bjelajac

Partner 3: Liam Harambašić

Partner 4: Nikolas Bojčić

Partner 5: Mirza Muminović



Enjoy and play to create a beautiful and healthy world!

This compendium will be published under a Creative Commons licence, non-commercial share-alike.



Disclaimer: The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

THE TEAM

- Our team includes Petar Đajip, Neven Bjelajac, Liam Harambašić, Nikolas Bojčić, and Mirza Muminović, all of us are 17 years old. We are all students of the electrotechnical program.
- Our mentors were Dejan Vodopija, a professor of technical subjects and class advisor, and AzureFilm, a company specialized in manufacturing filament for 3D printing.
- We had no previous experience in business ideas, but together with our mentors, we gained and learned some basic knowledge.
- Our role in developing the business idea was focused on reducing the amount of waste plastic both globally and in our local environment.



PETAR Đ. /17



NEVEN B. /17



MIRZA M. /18



LIAM H. / 17



NIKOLAS B.
/18

MENTOR

- Professor Dejan Vodopija is an experienced expert in the field of electrical engineering, programming, and the use of 3D printers. In addition to his pedagogical work and involvement in the Growing Green project, he is also a passionate user of 3D printers. His knowledge and experience in 3D printing have been invaluable to our team, as our project is aimed precisely at users of 3D printers.
- Profesor Vodopija provided invaluable support and guidance to us as a mentor in the implementation of the Growing Green project. He was particularly instrumental in directing our team towards recycling waste plastic bottles into 3D filament, which aligns perfectly with his commitment to sustainable and green solutions.
- His mentorship was crucial in shaping our business plan, which focuses on the sustainable use of 3D printers and the recycling of waste plastic. With his support, we successfully merged 3D printing technology and environmental responsibility, laying the foundation for our innovative business idea.

COMPANY

- AzureFilm is a recognized European manufacturer of 3D filaments. Commitment to sustainable recycling and environmentally friendly processes is at the core of the company's philosophy.
- With an expert team and modern technology, they offer top-quality 3D filaments. Their advantages lie in a comprehensive production process, which includes continuous optimization.
- Their mission is to promote innovation, creativity, and provide high-quality, environmentally responsible solutions to individuals and industries.



An illustration on the left side of the page shows a person from the waist down, wearing a light green shirt, red pants, and dark blue shoes. They are holding a large yellow circle with both hands. A blue line, resembling a path or a piece of string, is drawn across the yellow circle, starting from the bottom left and ending at the top right. The background is white.

SUMMARY OF THE PROJECT IDEA

•Our meeting with Azurefilm's presentation left a lasting impression, prompting us to adopt a more eco-friendly approach to filament production for our project. Leveraging the expertise of a team member with over a year of experience in 3D modeling and printing streamlined our efforts. Researching suitable materials led us to PET, commonly found in plastic bottles, inspiring our vision for a company that recycles these bottles into 3D printer filament. Our innovative concept involves utilizing specialized bottle collectors, where users receive QR codes upon depositing bottles. These codes unlock discounts, elevate their status, and enable participation in our environmental incentive program, showcasing their positive impact on the planet..



THE PROBLEM

- When we were introduced to Azurefilm, we discovered that the company's main challenge revolves around securing suitable partnerships for raw materials and recycling, as well as the complexities associated with developing new eco-friendly devices to support their sustainability goals.
- Sustainability is a primary focus for the company, although it faces considerable hurdles, particularly due to plastics being a major contributor to pollution.
- Given the difficulties and expenses associated with inventing new eco-materials, we opted to concentrate on readily available resources to address the issue.
- The bottled water industry alone produced approximately 600 billion plastic bottles and containers in 2021, resulting in approximately 25 million tons of plastic waste, much of which goes unrecycled and ends up in landfills.
- Recognizing a clear correlation, we identified an opportunity where one problem could effectively address another.

IDEAS & OPPORTUNITY

WHICH IDEAS CAME OUT?

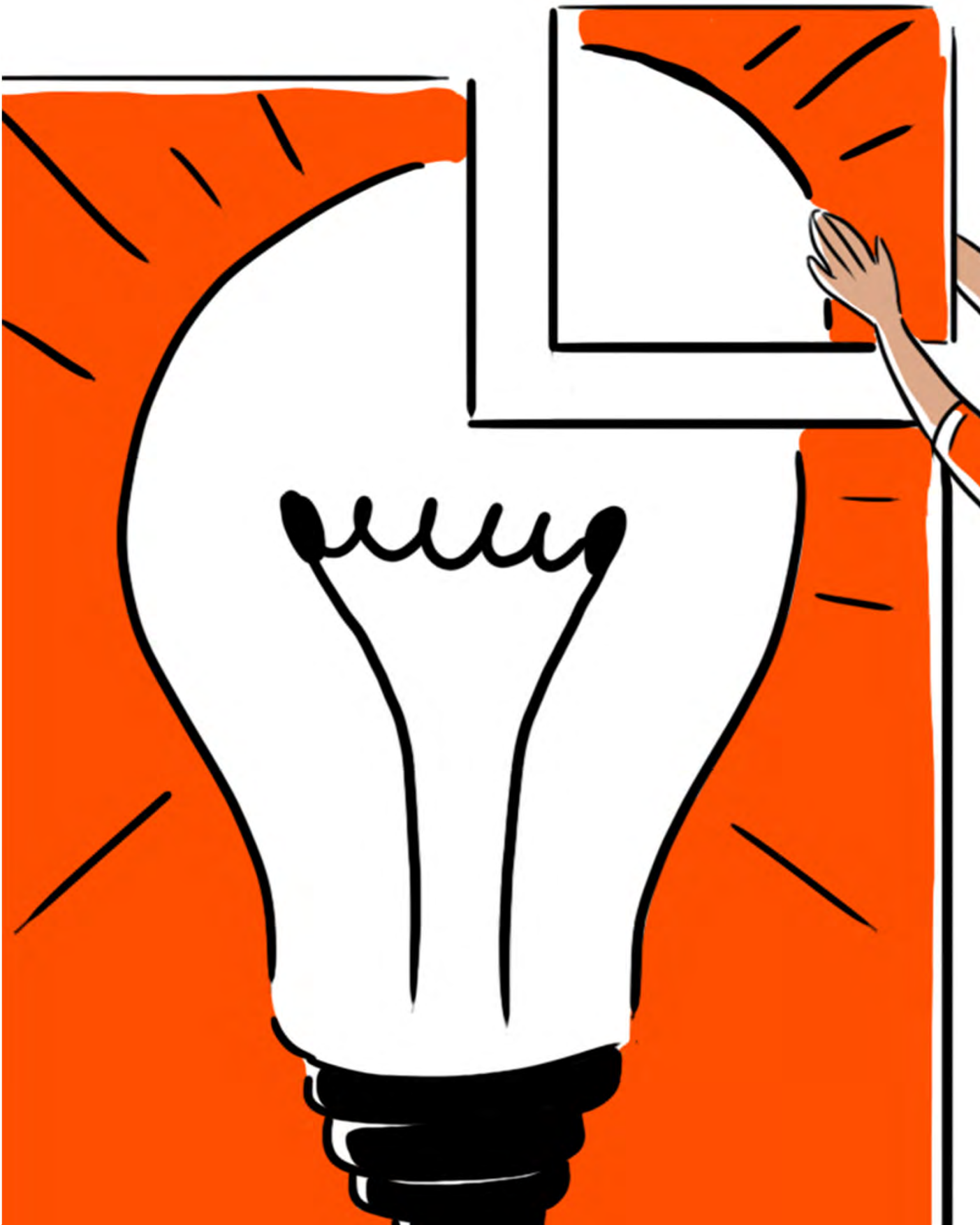


Collect used bottles and give them to the company as raw material



Build a company that collects used bottles with specialised interesting containers



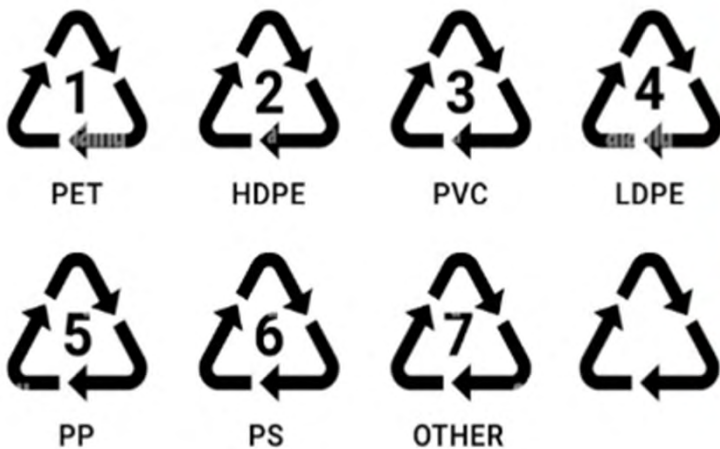


THE BEST IDEA

We decided to pursue the idea of collecting used plastic bottles using specially designed containers. Individuals who use these containers would receive a unique QR code. This code would direct them to our website, where they could see how their contribution is making a cleaner world. Additionally, they would receive discounts on our 3D printing filaments, which were made from the bottles they gave us, instead of ending up in a landfill.

THE ROADMAP

Finding the most common plastic used for making plastic bottles and look at how good is it as a 3D printing material

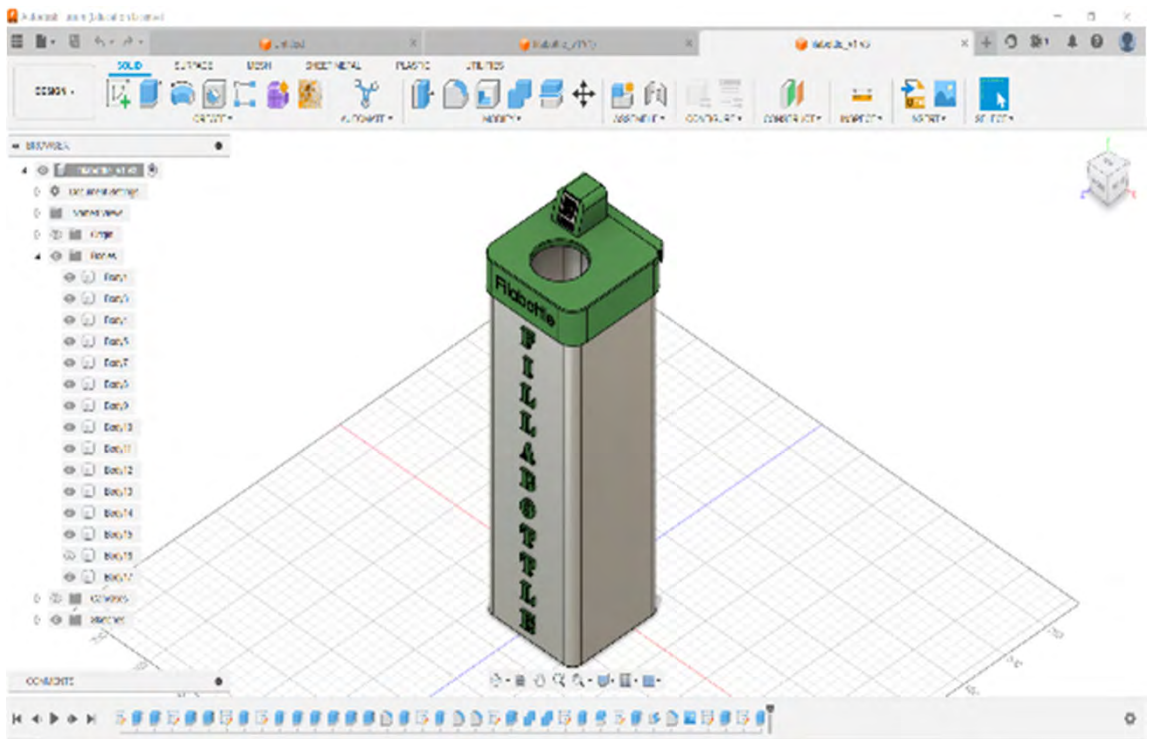


Look at ways to transform plastic bottles into filament using cheap and available components from the 3D printing industry

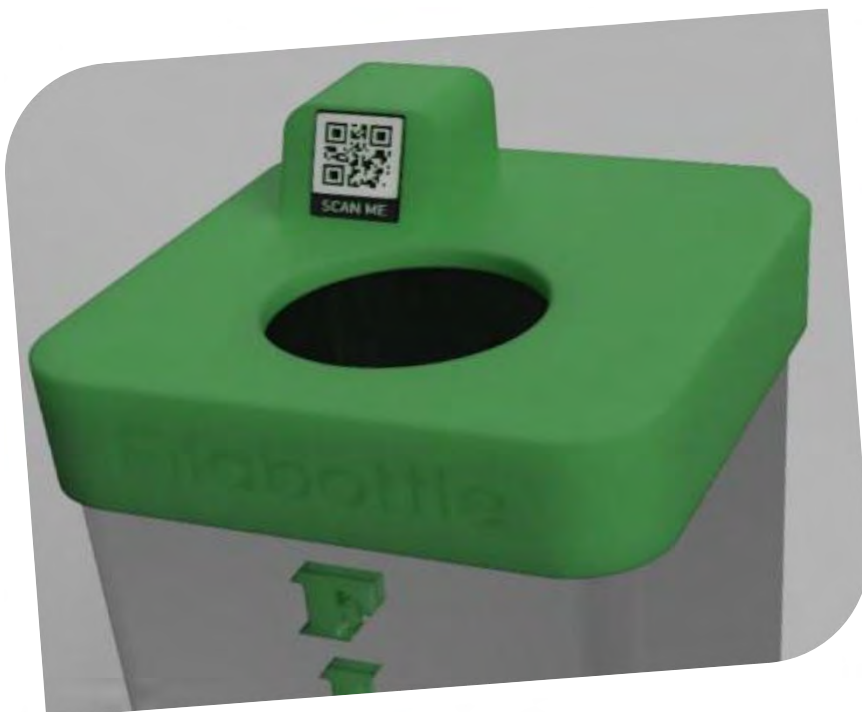


THE ROADMAP

Design a nice container to collect used plastic bottles in a 3D designing software



Find a way to make random QR codes



RESOURCES

- **Fusion 360:** We utilized this program for designing and modeling our product. Fusion 360 enabled us to create precise 3D models and visualizations that aided us in conceptualizing and testing our idea.
- **Excel:** For organizing and tracking data, we used Excel. We employed these tools to manage task lists, financial planning, project progress tracking, and data analysis.
- **Word:** We utilized Word for preparing documentation, reports, and communicating with the team. In this tool, we created and edited documents such as business plans, risk analyses, progress reports, and other important documentation.
- **Web browsing:** For gathering information, market research, seeking examples of best practices, and education, we regularly used web browsing. The internet provided us access to numerous sources of information that helped us in idea development and addressing potential challenges.



THE OBSTACLES

OBSTACLES	SOLUTION
FINDING PLACES THAT WOULD ALLOW TO LOCATE OUR CONTAINER	WE WOULD START WITH OUR SCHOOL AND DORMITORY
FIND A CHEAP WAY TO TRANSFORM BOTTLES INTO FILAMENT	USE OLD CHEAP 3D PRINTER'S PART O BUILD A FILAMENT MAKER
HOW TO LET PEOPLE KNOW WE ARE ON THE MARKET	SOCIAL MEDIA, FRIENDS
LOGISTICS OF EMPTYING THE CONTAINERS	BUY A SMALL VAN
MAKE A WEBSITE	USE SITE LIKE WIX.COM THAT DOESN'T REQUIRE ANY PROGRAMMING SKILLS



POTENTIAL...

HOW CAN YOUR IDEA BE BETTERED OR FURTHER DEVELOPED?

- **Customer Feedback:** Incorporate a section for customer feedback or reviews on your website and in the app to gather customer opinions and improve your products and services.
- **Education and Workshops:** Organize online workshops or guides on the use of your filament, 3D printing, and sustainable practices to educate your customers and promote the use of your products.
- In the future, we will enhance our offering by developing an application accessible to all users. The application will provide easier access to information, loyalty programs, and exclusive offers brought by Filabottle. With it, you will be able to more easily follow updates, collect points for discounts and rewards, and stay connected with us and our commitment to sustainable solutions.



FINAL PITCH

Hello!

At Filabottle, we are dedicated to creating high-quality filament from recycled bottles, perfect for your 3D printing projects.

Our innovative approach and sustainability focus allow you to create with peace of mind for the environment. We are committed to the highest quality standards, ensuring excellent results and customer satisfaction. Together, we are building a future that is environmentally responsible and promotes innovation in the world of 3D printing.

Would you like to become part of our community? Simply scan the QR code and join our loyalty program! For each scan, you'll receive points that can be redeemed for discounts, special offers, or rewards. Join us and be rewarded for supporting sustainable solutions with Filabottle! Together, we are building a better tomorrow.

~ Filabottle: From waste bottles to the future: 3D filaments with responsibility! ~

BUSINESS MODEL CANVAS

Key Partners

Logistics Partners:
Handle product distribution.

Technology Partners:
Assist in online platform development.

Marketing Partners:
Aid in product promotion.

Community Partners:
Collaborate for sustainability initiatives.

Key Activities

Filament Production: Transforming recycled materials into quality filament.

Online Store Management: Operating and updating the online platform for sales and customer engagement.

Logistics of Bottle Recovery: Coordinating the retrieval of used bottles from company containers for recycling.

Community Building: Organizing events and initiatives to promote sustainability and foster customer loyalty.

Key Resources

Used bottles: Sources of recycled bottles and plastic materials for filament production.

Manufacturing Facilities: Facilities equipped for filament production and packaging.

Online Platform: Web infrastructure for the online store, including security, payment systems, and logistics support.

Human Resources: Skilled personnel for production, logistics management, customer support, and community engagement.

Value proposition

Eco-Friendly Filament:
Quality filament from recycled bottles for green 3D printing.

Innovation and Sustainability: Innovative, sustainable approach for environmentally-conscious creators.

Quality Assurance:
Commitment to top quality ensures customer satisfaction.

Community Engagement:
Loyalty program rewards for supporting sustainability.

Customer relationship

Responsive Support: Timely assistance through various channels to address customer inquiries and concerns.

Personalized Interaction: Tailored communication to enhance customer experience and foster loyalty.

Feedback Collection: Regular solicitation and analysis of customer feedback to improve products and services.

Community Engagement: Facilitation of online community interactions, events, and initiatives to build rapport and encourage collaboration.

Channels

Online Store: Primary platform for product sales and customer engagement.

Social Media Platforms: Channels for brand promotion, interaction, and community building.

Logistics Partners: Distribution networks for delivering products to customers efficiently.

Retail Partnerships: Collaborations with retail outlets to expand reach and accessibility of Filabottle products.

BUSINESS MODEL CANVAS

Customer Segments

Individual Creators: Hobbyists and enthusiasts interested in eco-friendly filament for personal 3D printing projects.

Small Businesses: Small-scale enterprises seeking sustainable filament options for prototyping and production.

Educational Institutions: Schools, colleges, and universities requiring eco-conscious materials for educational 3D printing activities.

Corporate Clients: Companies and organizations integrating sustainability into their operations, seeking environmentally friendly filament solutions for various applications.

Cost Structure

Manufacturing: Costs associated with filament production, including equipment maintenance, labor, and utilities.

Online Operations: Expenses for maintaining the online store platform, including website hosting, security, and payment processing fees.

Marketing and Promotion: Budget for advertising, promotional

campaigns, and brand building activities to attract and retain customers.

Logistics: Costs for product distribution, including shipping, packaging materials, and logistics management.

Customer Support: Expenses for providing responsive customer service, including salaries for support staff and communication tools.

Research and Development: Investment in innovation and product development to maintain competitiveness and meet customer demands.

Administrative Overheads: General administrative expenses such as office rent, utilities, and administrative staff salaries.

Revenue Streams

Product Sales: Revenue generated from the sale of filament products through the online store and retail partnerships.

Loyalty Program: Income from membership fees or premium features within the loyalty program, as well as potential partnerships with businesses for reward redemption.

Bulk Sales and Partnerships: Revenue from bulk orders and partnerships with businesses, educational institutions, or other organizations requiring large quantities of filament.

Consulting Services: Additional revenue from consulting services offered to businesses or educational institutions seeking guidance on sustainable 3D printing practices.

Workshops and Training: Income from organizing paid workshops, training sessions, or educational programs related to 3D printing and sustainability.



Filabottle

PET

ENTRECOMP

- **Creativity:** Generating innovative solutions for sustainable filament production.
- **Spotting Opportunities:** Identifying the opportunity to address sustainability in the 3D printing industry.
- **Vision:** Having a clear vision of creating a more sustainable future through eco-friendly products.
- **Taking the initiative:** Organizing workshops to educate others on sustainable 3D printing practices.
- **Mobilising Resources:** Leveraging recycled materials efficiently to develop high-quality filament.
- **Motivation and Perseverance:** Overcoming challenges and setbacks with determination to achieve the vision.



Questa foto di Autore sconosciuto è concesso in licenza da CC BY

SUSTAINABLE DEVELOPMENT GOALS



Questa foto di Autore sconosciuto è concesso in licenza da CC BY

SDG GOALS

SDG 8: Decent Work and Economic Growth: By offering employment opportunities in the manufacturing and online sales sectors, Filabottle supports economic growth and strives to provide decent work for individuals involved in the production and distribution of its products.

SDG 9: Industry, Innovation, and Infrastructure: Filabottle's innovative approach to filament production from recycled materials contributes to advancements in sustainable manufacturing practices, aligning with the goal of promoting industry, innovation, and infrastructure development.

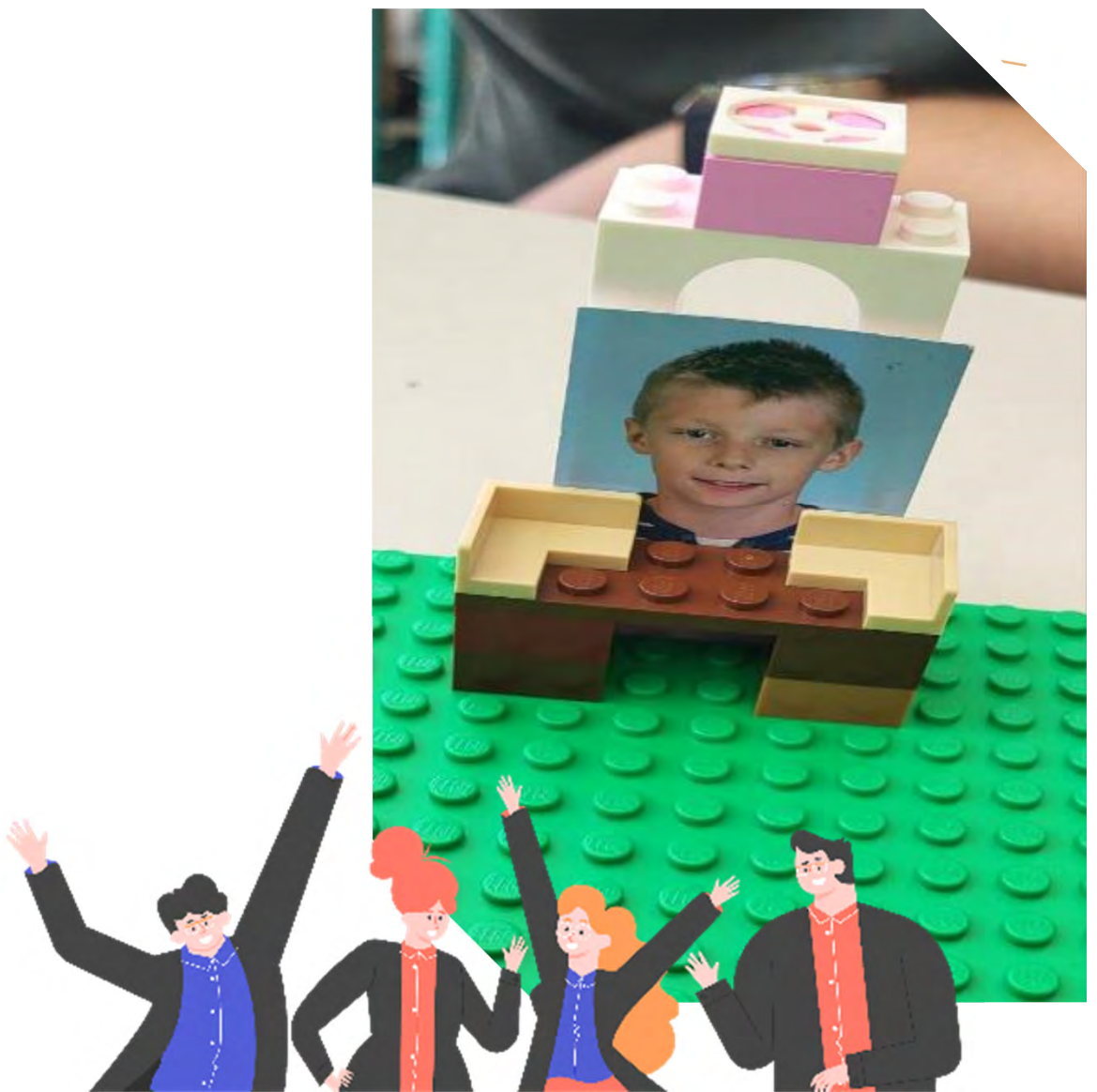
SDG 11: Sustainable Cities and Communities: Through its focus on sustainability and eco-friendly solutions for 3D printing, Filabottle contributes to building more sustainable communities by reducing environmental impact and promoting responsible consumption within urban areas.

SDG 12: Responsible Consumption and Production: Filabottle contributes to this goal by recycling plastic materials and promoting the use of eco-friendly filament for 3D printing, thus reducing waste and promoting sustainable production practices.

SDG 13: Climate Action: Filabottle contributes to climate action by recycling plastic materials, thereby reducing the carbon footprint associated with traditional plastic production. By promoting the use of eco-friendly filament for 3D printing, the company helps mitigate climate change impacts by reducing greenhouse gas emissions and fostering a more sustainable approach to manufacturing.

EXTRA CUT...

- One of the most interesting moments in our project happened during one of our work sessions. Liam Harambašič suddenly got the idea to place himself in our model, made out of LEGO bricks. Without hesitation, Liam positioned himself in the center of the model, which was a complete surprise and a real comedic moment for all of us. It was incredibly funny; the whole team had a great time and laughed, creating a truly relaxed atmosphere.
- Professor Dejan Vodopija, our mentor, was also surprised by this spontaneous move, but with a sense of humor, he supported Liam's idea. Instead of removing him, Dejan approved Liam's presence, further contributing to the relaxed atmosphere and team bonding. We all realized that such moments strengthen the team and add the right amount of creativity and fun to the working process.





GROWING GREEN

CIRCULARITY IN VET



FILABOTTLE

3.EE - GEPŠ



Co-funded by
the European Union



GROWING GREEN

CIRCULARITY IN VET

Fix-N-Flip

Growing Green: Fostering green entrepreneurial mindsets
based on the circular economy and green capital concepts
in VET education

Acronym: Growing Green

2021-1-DK01-KA220-VET-000024955

October 2023

Lead Result: No editors



Co-funded by
the European Union

The compendium has been produced by the project partners in the scope of the Erasmus+ project **Growing Green: Fostering green entrepreneurial mindsets based on the circular economy and green capital concepts in VET education.**

Coordinator of the PR: ilmiolavoro

Coordinator team members: Dejan Vodopija & Tina Kariž

Partner 1: Tadej Frančeski

Partner 2: Tai Filipčič Saule

Partner 3: Martin Frank

Partner 4: Nik Malikovič

Partner 5: Vili Šverko

Partner 6: Alain Zboržil



Enjoy and play to create a beautiful and healthy world!

This compendium will be published under a Creative Commons licence, non-commercial share-alike.



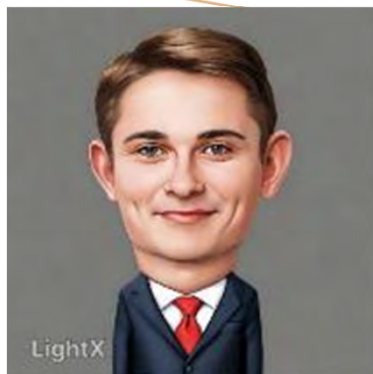
Disclaimer: The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

THE TEAM

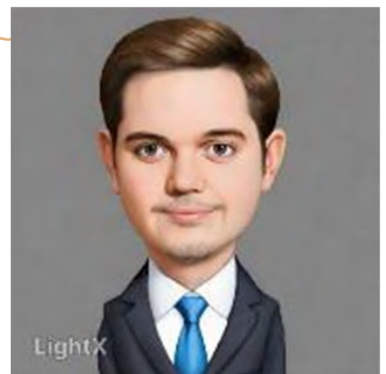
- Our team includes Tadej Fračeski, Tai Filipčič Saule, Vili Šverko, Nik Malikovič, Marin Frank and Alain Zboržil.
- We are between the ages of 17 and 18 and we are all students of the electrotechnical program.
- Before this project, we didn't have much knowledge about important aspects of entrepreneurship, but we were familiar with recycling and reusing materials and objects, as well as renewable energy sources.
- We were prepared to tackle a problem that was not directly linked to our field of study



Tadej / 18



Tai / 18



Vili / 17



Nik / 17



Martin / 17



Alain / 18

MENTOR

- Dejan, our professor and mentor, sparked our interest in this project and provided invaluable support. He equipped us with fundamental knowledge in entrepreneurship and green competences, which proved invaluable during the development of our idea. This was delivered through standard teaching classes as well as engaging, hands-on activities. Additionally, he assigned us tasks to complete as a team at home, promoting teamwork and brainstorming.

COMPANY

The High School Dormitory Portorož GEPŠ offers a unique living experience for high school and university students, as well as tourists. With 42 rooms available in various sizes, from singles to triples, and six bathrooms per floor, guests are guaranteed comfortable accommodations. From June to September, visitors can enjoy stunning sea views from air-conditioned rooms and apartments. During the school year, the dormitory hosts around 90 university students, transitioning to a hostel for tourists during the summer months.

The dormitory underwent renovations in the year 2016, serving as the primary inspiration for our final idea.



An illustration on the left side of the page shows a person from the waist down, wearing a light green shirt, red pants, and dark blue shoes. They are holding a large yellow circle with both hands. Inside the yellow circle, there are blue lines that form a stylized, abstract shape resembling a chair or a piece of furniture. The background is white.

SUMMARY OF THE PROJECT IDEA

We take pride in our sustainable approach to furniture management at Fix-N-Flip.

As part of our commitment to reducing waste and promoting environmental responsibility, we offer a unique service where we collect old, quality furniture free of charge.

Once collected, our dedicated team meticulously repairs and refurbishes each piece, breathing new life into them and extending their lifespan.

By then reselling these revitalized items to our customers and clients, we not only provide them with affordable, high-quality furnishings but also significantly decrease the amount of material waste that would otherwise end up in landfills.

Through this initiative, we aim to foster a culture of reuse and sustainability, contributing to a greener and more eco-friendly environment for everyone.



THE PROBLEM

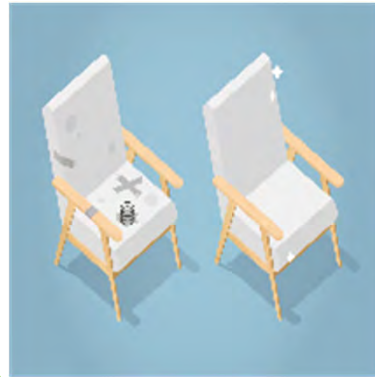
The problem at hand revolves around the significant environmental impact of furniture waste. As old furniture is disposed of, it often ends up in landfills, contributing to pollution and resource depletion. Additionally, the manufacturing process of new furniture requires substantial amounts of raw materials and energy, further exacerbating environmental degradation. By addressing this issue, our initiative aims to reduce the environmental footprint associated with furniture disposal and production, promoting a more sustainable and circular approach to resource management. Through refurbishing and reselling old furniture, we seek to minimize waste generation while extending the lifespan of these items, ultimately contributing to a healthier planet for future generations.

IDEAS & OPPORTUNITY

- WHICH IDEAS CAME OUT?

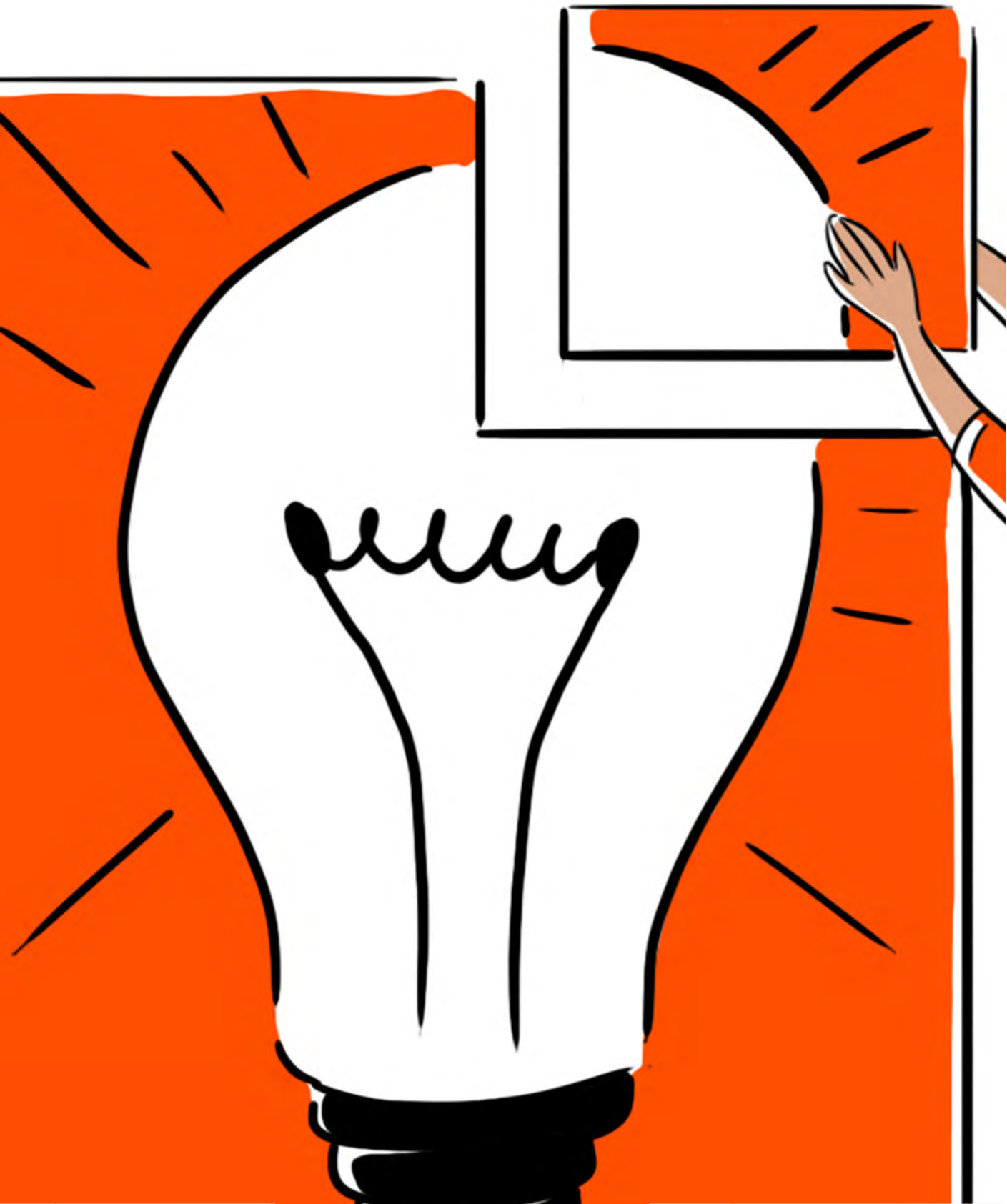


Repairing old
furniture and
reselling it



Gathering waste
glass and
recycling it into
new products





THE BEST IDEA

We opted to specialize in repairing and reselling old furniture due to its promising potential for success. This approach aligns with the increasing demand for sustainable products and allows us to extend the lifespan of furniture while reducing environmental impact. By focusing on refurbishing existing items, we contribute to the circular economy and offer eco-friendly alternatives to consumers.

THE ROADMAP

Thinking of an idea



Choosing the right idea



VS



THE ROADMAP

Looking for existing examples of our idea for inspiration



Forming the final presentation



RESOURCES

- The internet
- Our previous knowledge and experiences
- The help of our mentor



THE OBSTACLES

OBSTACLES	SOLUTION
Workshop needed	Buying or renting one
Needed expertise for repairing the furniture	Hiring experienced workers
Lack of customers	Advertisement



POTENTIAL...

- HOW CAN YOUR IDEA BE BETTERED OR FURTHER DEVELOPED?

As a potential enhancement for fix-and-flip ventures, we propose developing an app that simplifies the process of disposing of old furniture. Users can sign in and provide details such as their location, type of furniture, and preferred times for transportation, streamlining our free transport service. This would benefit both customers and us by making the disposal process more convenient. Additionally, the app could showcase restored furniture with images and prices, providing users with a convenient platform to browse available items.



FINAL PITCH

Introducing Fix-N-Flip: Your Destination for Restored Furniture!

Have old furniture lying around? Let Fix-N-Flip breathe new life into it! Our expert craftsmen specialize in restoring and reviving worn-out pieces to their former glory.

Why choose Fix-N-Flip?

1. **Quality Workmanship:** Our skilled artisans meticulously repair and refurbish furniture, ensuring every detail is perfect.
2. **Sustainable Solution:** By choosing Fix-N-Flip, you're contributing to a greener planet. We believe in reducing waste by giving old furniture a second chance.
3. **Unique Selection:** Explore our curated collection of restored furniture. Each piece tells a story and adds character to your space.
4. **Affordable Prices:** Enjoy high-quality furniture without breaking the bank. Fix-N-Flip offers competitive prices for beautifully restored pieces.

Whether you're furnishing your home or staging a property for sale, Fix-N-Flip has the perfect solution. Visit us today and discover the magic of refurbished furniture! Fix-N-Flip: Where Old Becomes Gold.

BUSINESS MODEL CANVAS

Key Partner

Suppliers: Partnerships with suppliers of materials and tools needed for furniture restoration.

Interior Designers: Collaboration with professionals for sourcing and customizing furniture for their projects.

Delivery Services: Partnerships with logistics companies for furniture delivery and transportation.

Key Activities

Furniture Restoration: Repairing, refinishing, and refurbishing old furniture to bring it back to life.

Product Curation: Selecting and curating a unique collection of restored furniture pieces.

Marketing and Sales: Promoting products through various channels and managing sales operations.

Key Resources

Skilled Craftsmen: Expertise in furniture repair, restoration, and refurbishment.

Workshop/Studio: Equipped with tools and materials necessary for furniture restoration.

Supply Chain: Access to quality materials for repairs and refurbishments.

Value proposition

Quality Restoration: Expert craftsmen ensure old furniture is repaired and refurbished to high standards.

Sustainable Solutions: Provide environmentally friendly alternatives by giving old furniture new life.

Unique Selection: Curated collection offers one-of-a-kind pieces with character and history.

Cost-Effective: Offer affordable prices for restored furniture compared to buying new items.

Customer relationship

Personalized Service: Tailor offerings to meet individual customer needs and preferences.

Customer Support: Provide assistance and guidance throughout the purchase process and after-sales service.

Community Engagement: Foster a sense of community through workshops, events, and online interactions.

Channels

Physical Store: A showroom where customers can browse and purchase refurbished furniture.

Online Platform: E-commerce website for showcasing products and facilitating online sales.

Social Media: Platforms like Instagram and Pinterest for marketing, showcasing before-and-after transformations, and engaging with customers.

BUSINESS MODEL CANVAS

Customer Segments

Homeowners: Individuals looking to refurbish their homes with sustainable and unique furniture pieces.

Interior Designers: Professionals seeking distinctive and customizable furniture options for their projects.

Real Estate Investors: Those staging properties for sale or rent, requiring cost-effective yet attractive furnishings.

Cost Structure

Labor Costs: Wages for skilled craftsmen involved in furniture restoration.

Material Costs: Expenses related to purchasing materials needed for repairs and refurbishments.

Overhead Costs: Rent, utilities, and other operational expenses associated with maintaining a showroom/studio and running the business.

Revenue Streams

Sales of Refurbished Furniture: Revenue generated from selling restored furniture pieces.

Customization Services: Additional income from offering customization options such as upholstery choices, finishes, etc.

Workshops and Classes: Offering paid workshops on furniture restoration techniques for enthusiasts.

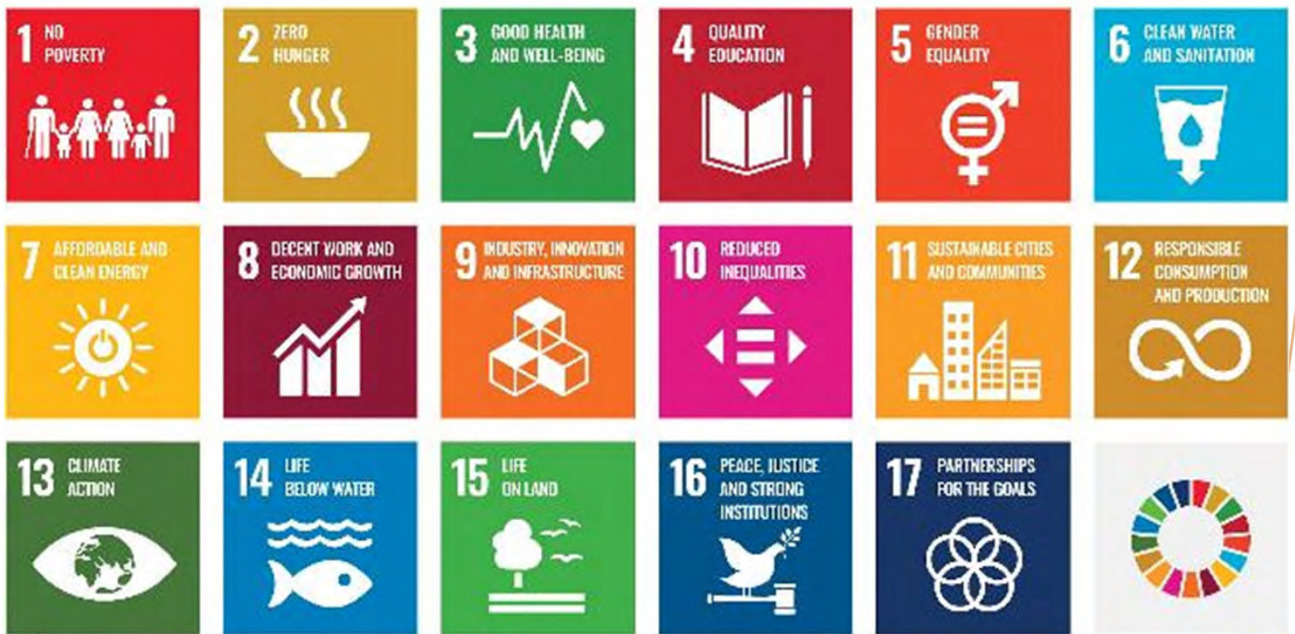


ENTRECOMP

- **Spotting opportunities.** We developed our ability to spot opportunities when we were looking for a business idea.
- **Vision.** We developed a vision while trying to realize the idea.
- **Planning and Management.** We learned planning and management while developing the idea.



SUSTAINABLE DEVELOPMENT GOALS



Questa foto di Autore sconosciuto è concesso in licenza da [CC BY](#)

SDG GOALS

11. Sustainable Cities and Communities: By facilitating the responsible disposal of old furniture and promoting the reuse of refurbished items, the app contributes to creating sustainable and resilient urban environments.

12. Responsible consumption and production: by repairing old furniture we decrease material waste

13 Climate action: less waste means less landfills being filled and decreases the need for the production of new furniture

EXTRA CUT...

Before forming our final teams, we engaged in a series of icebreaking activities, among which the most enjoyable was the "scissors, paper, rock" game. Participants paired up, and the loser of each round cheered for the winner, who advanced to the next round. As the game progressed, competitiveness and enthusiasm soared, resulting in a lively atmosphere filled with laughter and team unity.





GROWING GREEN

CIRCULARITY IN VET



Fix-N-Flip

3.EE, GEPŠ Piran



Co-funded by
the European Union



GROWING GREEN

CIRCULARITY IN VET

GreenEdge Consulting

Growing Green: Fostering green entrepreneurial mindsets
based on the circular economy and green capital concepts
in VET education

Acronym: Growing Green

2021-1-DK01-KA220-VET-000024955

October 2023

Lead Result: No editors



Co-funded by
the European Union

The compendium has been produced by the project partners in the scope of the Erasmus+ project **Growing Green: Fostering green entrepreneurial mindsets based on the circular economy and green capital concepts in VET education.**

Coordinator of the PR: ilmiolavoro

Coordinator team members: Dejan Vodopija & Tina Kariž

Partner 1: Matej Gec

Partner 2: Kristjan De Faveri

Partner 3: Mirjam Rei Kocy

Partner 4: Tilen Petrič

Partner 5: Teo Đekić



Enjoy and play to create a beautiful and healthy world!

This compendium will be published under a Creative Commons licence, non-commercial share-alike.



Disclaimer: The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

THE TEAM

The group is composed of five members, all falling within the age range of 17 to 18 years. Our collaboration within the group was particularly suitable for us; not only was it enjoyable, but it also provided valuable educational experiences in the entrepreneurial fields as well as the circular economy and eco-friendly practices.



Matej/17



Kristjan/17



Mirjam Rei/18



Tilen/17



Teo/17

MENTOR

Dejan, our professor and mentor, inspired us for this project and offered expert assistance, given its alignment with his field of expertise, namely the electrotechnical field. Additionally, he equipped us with fundamental knowledge in entrepreneurship and green competences, which came in handy during the development of our idea.

COMPANY

The High School Dormitory Portorož GEPŠ provides a distinctive living environment catering to high school students, university students, and tourists. Offering 42 rooms of varying sizes, from singles to triples, and featuring 6 bathrooms per floor, it ensures comfortable lodging. Guests can relish breathtaking sea views from air-conditioned rooms and apartments between June and September. Throughout the school year, approximately 90 university students reside here, while in the summer, it functions as a hostel. The High School Dormitory Portorož GEPŠ underwent both regular and energy renovations eight years ago, which served as the main inspiration for our final idea.



An illustration on the left side of the page shows a person from the waist down, wearing a light green shirt, a dark blue and black striped vest, and bright pink pants. They are holding a large yellow circle with both hands. Inside the yellow circle, there are several blue lines that form a stylized, abstract shape, possibly representing a leaf or a flame. A thin vertical orange line runs down the page, separating the illustration from the text.

SUMMARY OF THE PROJECT IDEA

GreenEdge Consulting is a specialized company that provides comprehensive consulting services to improve energy efficiency and promote sustainable development. Our team of experts combines knowledge and experience in energy, environmental engineering, and sustainable management to provide efficient and sustainable solutions to clients, such as businesses. With a focus on analysis, planning, and implementation of measures, our goal is to reduce environmental impact, optimize costs, and acquire subsidies for investments.



THE PROBLEM

Should you choose to install insulation, solar panels, and upgrade the heating system, you'll face numerous challenges. These include the necessity to consult with multiple providers and their subcontractors, a process that can be labor-intensive, time-consuming, and potentially result in making incorrect decisions. Therefore, we sought to take this problem and transform it into an opportunity.

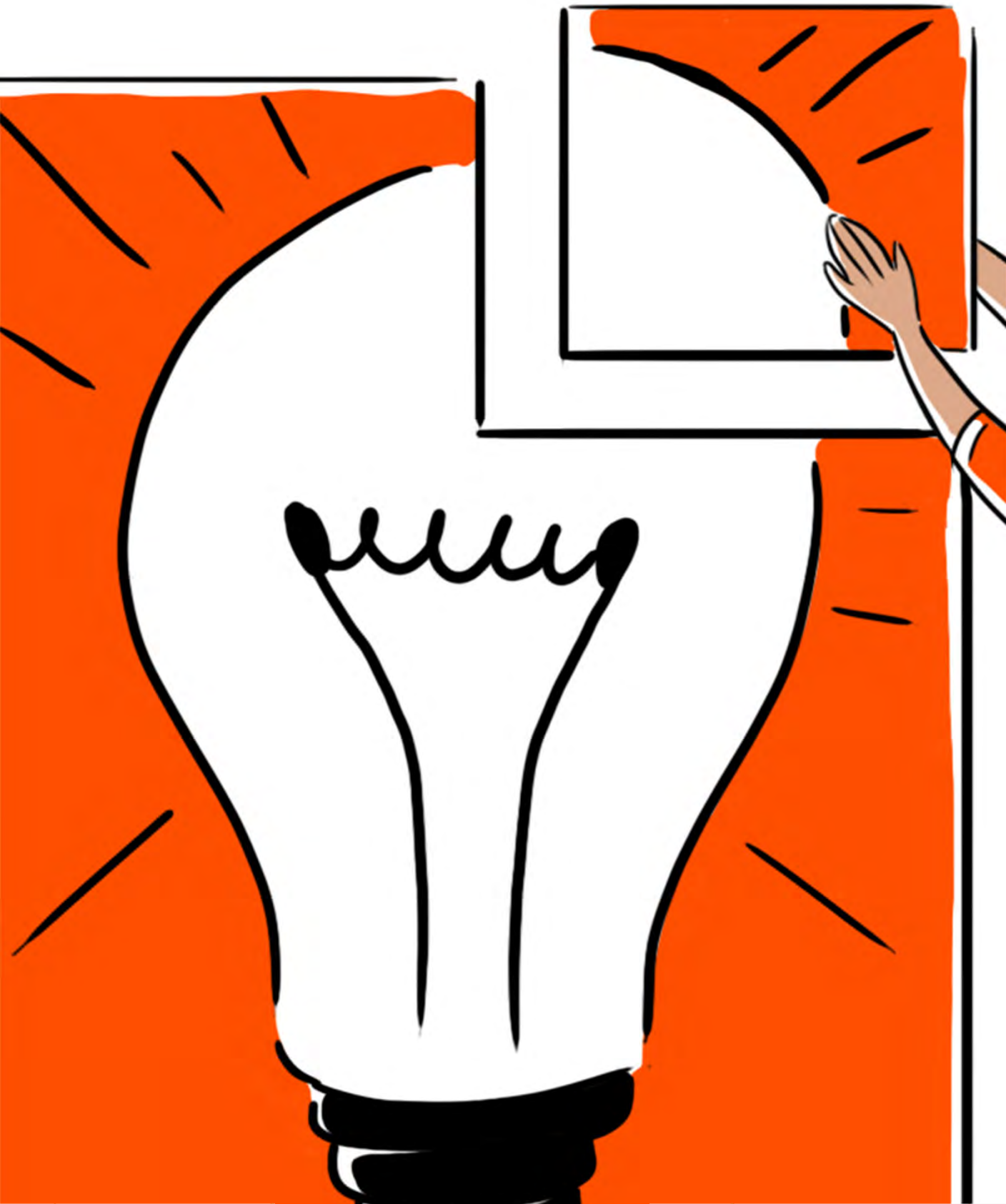
IDEAS & OPPORTUNITY

WHICH IDEAS CAME OUT?



All services in
one place





THE BEST IDEA

Comprehensive consulting all in one place.
Explanation: If you decide to install insulation, solar panels, and upgrade the heating system, you'll avoid to consult with various providers and, even more significantly, with their subcontractors, which is tiresome, time-consuming, and can also lead to making incorrect decisions.

THE ROADMAP

At first, we thought about how we could make existing services or companies more sustainable and environmentally and people-friendly



One of the more suitable ideas seemed to be the one we are presenting here; namely, consulting in the field of sustainable development and energy efficiency



We approached the task as a group. Each individual received their own part, which we ultimately combined into the final product.



RESOURCES



- **Web Research:** In our endeavor to gather information, conduct market research, seek examples of best practices, and educate ourselves, we extensively utilized web browsing. Leveraging the vast resources available on the internet, we accessed various sources of information to aid in idea development and to tackle potential challenges effectively, in line with the principles of GreenEdge Consulting
- **Our mentor:** He provided us with constructive feedback on our idea and encouraged us to pursue what we had begun. He offered valuable guidance, particularly in the entrepreneurial aspects of the business. Additionally, he recommended specific programs to use and websites to check, enhancing our knowledge and aiding in our progress.
- **Individuals' experiences:** Several of our team members possessed prior experience in renovations and selecting energy-saving appliances or building materials
- **YouTube:** YouTube was utilized for this project to access educational content, gather information on best practices, and seek examples relevant to sustainability and energy efficiency initiatives. Additionally, it served as a platform for entrepreneurial videos, such as tutorials on building a robust business model canvas.

THE OBSTACLES

OBSTACLES	SOLUTION
Choosing the topic	Voting within the group
Task allocation	We chose a leader



POTENTIAL...

HOW CAN YOUR IDEA BE BETTERED OR FURTHER DEVELOPED?

Our idea certainly has potential, as energy efficiency and sustainable operation are current issues, with their importance and the need for solutions increasing.

With our idea of providing free advice on energy efficiency and sustainable development, especially for buildings, we would contribute to addressing the global challenges of today.

In particular, the idea needs to be refined, especially in the financial aspect.

Financing consultants and maintaining the work environment.



FINAL PITCH

We live in a time when sustainable development and energy conservation are crucial for our future. At GreenEdge Consulting, we are committed to this challenge.

As a non-profit organization, we are dedicated to providing comprehensive advice on energy efficiency and sustainable development.

Our team of experts enables clients to access tailored solutions based on their needs, goals, and budget. Our unique advantages include easy selection of the best solutions from our list of verified providers, obtaining all possible subsidies and financial incentives, and sustainable partnership contributing to a better future for all.

With GreenEdge Consulting by your side, you will not only reduce costs and improve competitiveness but also contribute to the sustainable development of our society.

Together, we are building a sustainable future, one step at a time.

BUSINESS MODEL CANVAS

Key Partner

- Solar panel providers
- Government
- Europe
- Heating system providers
- Insulation system providers

Key Activities

- Obtaining subsidies for clients
- Consulting
- Analysis of customer needs

Key Resources

- Online platform
- Consultants

Value Proposition

- Comprehensive consulting
- Easy solution selection
- Subsidy acquisition

Customer Relationship

- Continuous support
- Live consulting
- Communication through online media

Channels

- Online platform
- Live consulting

BUSINESS MODEL CANVAS

Customer Segments:

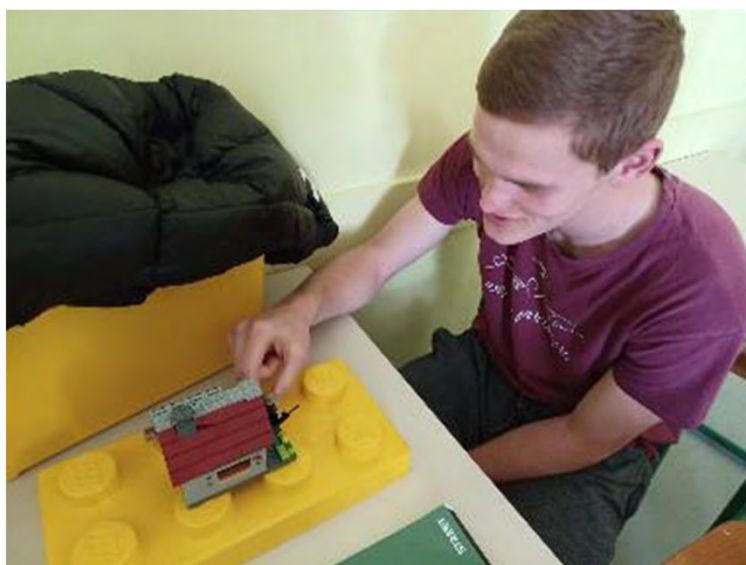
- Homeowners
- Business property owners
- Building planners
- Construction industry

Cost Structure:

- Employee salaries and training costs
- Costs of computer equipment and office supplies
- Marketing and promotional expenses

Revenue Streams:

- Offering paid premium services and support
- Voluntary customer contributions
- Funding from government and Europe



ENTRECOMP

- **Motivation and Perseverance:** Despite initial doubts about the project's scale and challenges in clarifying individual roles, our team's unwavering motivation and perseverance propelled us forward. As evidenced by our project's completion, we overcame obstacles and stayed committed to achieving our goals through persistent effort and determination.
- **Planning and Management:** Through our project, we discovered that a successful company requires more than just a product or service. Exploring tools like the Business Model Canvas enabled us to delve deeper into the organizational structure and strategic planning necessary for business success.
- **Ethical & Sustainable Thinking:** Our team's ethos revolves around ethical and sustainable practices. Opting to operate as a non-profit entity, we focus on green and circular initiatives. Upholding these values, we ensure that our actions align with our commitment to responsible and environmentally conscious practices.
- **Working with Others:** Collaborating in larger teams was a departure from our usual experience of working in pairs or small groups of up to two students at school. Although initially challenging, overcoming these obstacles has equipped us with valuable skills for our future careers.



Questa foto di Autore sconosciuto è concesso in licenza da CC BY

SUSTAINABLE DEVELOPMENT GOALS



Questa foto di Autore sconosciuto è concesso in licenza da CC BY

SDG GOALS

3. Health and Well-being: By reducing our impact on the climate, we ensure a healthy environment.

7. Affordable and Clean Energy: Offering solutions for home solar power systems.

13. Climate Action: Renewable materials and energy efficiency contribute to combating global warming.

17. Partnerships for the Goals: Collaborating with material and service providers, as well as with the government and Europe.



GROWING GREEN

CIRCULARITY IN VET



GreenEdge Consulting

3.EE GEPŠ



Co-funded by
the European Union



GROWING GREEN

CIRCULARITY IN VET

ReFresh

Growing Green: Fostering green entrepreneurial mindsets
based on the circular economy and green capital concepts
in VET education

Acronym: Growing Green

2021-1-DK01-KA220-VET-000024955

October 2023

Lead Result: No editors



Co-funded by
the European Union

The compendium has been produced by the project partners in the scope of the Erasmus+ project **Growing Green: Fostering green entrepreneurial mindsets based on the circular economy and green capital concepts in VET education.**

Coordinator of the PR: ilmiolavoro

Coordinator team members: Dejan Vodopija & Tina Kariž

Partner 1: Tian Subotič

Partner 2: Erik Vukelič

Partner 3: Robert Štibilj

Partner 4: Manuel Štrekelj

Partner 5: Nikola Bošnjakov

Partner 6: Enej Filipčič



Enjoy and play to create a beautiful and healthy world!

This compendium will be published under a Creative Commons licence, non-commercial share-alike.



Disclaimer: The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

THE TEAM

We are a team of determined teenagers striving to make a difference. Under the guidance of our mentor, Dejan Vodopija, we are embarking on an exciting journey with ReFresh.

While we may currently lack experience in business ventures, we are eager learners, committed to acquiring the necessary skills and knowledge.

Together with our mentor, we conceptualized the idea behind our project, driven by our passion for reducing waste and contributing to a more sustainable future.

Join us as we turn our vision into reality with ReFresh!



TIAN/18



ERIK/17



MANUEL/18



ROBERT/18



ENEJ/17



NIKOLA/18

MENTOR

- Dejan Vodopija, our dedicated mentor, is an experienced expert in technical subjects, particularly in the field of electrical engineering. His passion for sustainable solutions and commitment to environmental preservation have greatly influenced our approach with ReFresh. Professor Vodopija's guidance has been invaluable in shaping our project, as he has provided us with insights and direction to navigate the challenges of reducing food waste effectively.
- Moreover, Professor Vodopija emphasized the importance of adopting an entrepreneurial mindset in our daily tasks. He highlighted how cultivating this mindset enables us to identify opportunities and innovate solutions to pressing issues, such as food waste. Additionally, he shed light on the significant impact that a more efficient approach to food delivery and production can have in mitigating food waste. Through his mentorship, we have gained a deeper understanding of the complexities surrounding food waste and are now more equipped to tackle this issue head-on. With his support, we are confident in our ability to make a meaningful impact on both a local and global scale.

COMPANY

The High School Dormitory Portorož GEPŠ offers a unique living experience for high school students, university students, and tourists. With 42 rooms, including singles, doubles, and triples, and 6 bathrooms per floor, it provides comfortable accommodation. From June to September, guests can enjoy stunning sea views in air-conditioned rooms and apartments. During the school year, around 90 university students stay, and in summer, it operates as a hostel. Managed by Pomorščak d.o.o., the cafeteria practices waste separation for environmental sustainability.



An illustration on the left side of the page shows a person from the waist down, wearing a light green shirt, a dark blue and black striped vest, and bright pink pants. They are holding a large yellow circle with both hands. A blue line, resembling a path or a ribbon, starts from the bottom left, goes up and around the yellow circle, and ends with a loop at the top right. A thin vertical orange line runs down the page, separating the illustration from the text.

SUMMARY OF THE PROJECT IDEA

. At ReFresh, we're on a mission to tackle food waste head-on. Our project revolves around offering high-quality surplus food at affordable prices, all while championing environmental sustainability. Through strategic partnerships with households, eateries, and retailers, we rescue perfectly edible food that would otherwise go to waste. Then, utilizing our mobile van, we make this rescued food accessible to all, ensuring it finds its way to eager customers at discounted rates. But our commitment doesn't stop there. We're proud to collaborate with organizations serving vulnerable populations, ensuring that no one is left behind. Join us on our journey as we work towards a future where delicious solutions meet planet-saving initiatives.



THE PROBLEM

- In both the ReFresh initiative and the broader context of food waste, the problem is twofold: environmental and societal. Statistics reveal that among food waste, approximately 40 percent is still edible, indicating a substantial loss of resources. This highlights the urgent need for solutions such as ReFresh, which aims to rescue surplus yet quality food from households, restaurants, and stores, thereby mitigating waste and promoting sustainability.
- Moreover, beyond environmental concerns, there's a pressing social issue: many individuals lack access to sufficient and nutritious food. By addressing these interconnected challenges, initiatives like ReFresh not only contribute to environmental preservation but also alleviate food insecurity and foster a more equitable society.
- Additionally, the financial aspect of wasted food cannot be overlooked. Every discarded meal represents a triple cost: the initial purchase, the energy expended in preparation, and the expenses associated with waste disposal. Therefore, by preventing food waste, organizations like ReFresh not only save resources but also save money, making a compelling case for their mission.

IDEAS & OPPORTUNITY

WHICH IDEAS CAME OUT?

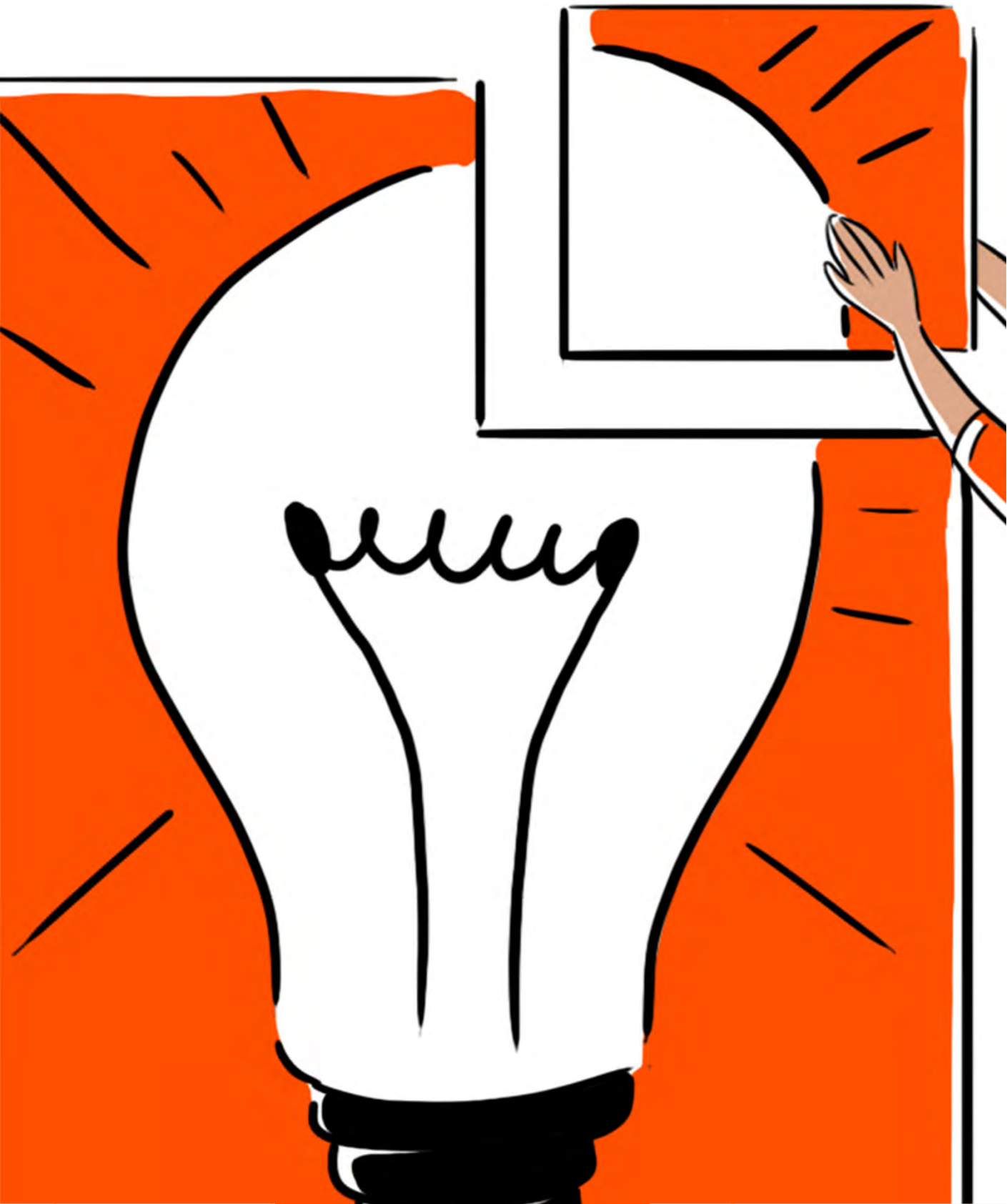


Take unused food and give it to charity organisations



Make a mobile restaurant with ethical and „refurbished“ food





THE BEST IDEA

We opted for a blend of both approaches to generate revenue through food sales while also contributing to charity, ensuring we aren't totally reliant on social or other forms of funding

THE ROADMAP

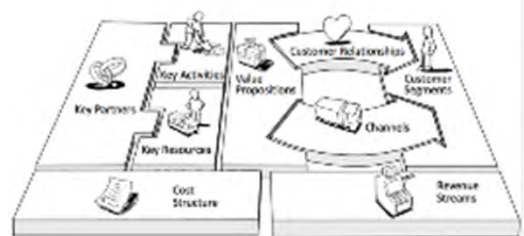
Have a look on how to select proper food for our project in the dormitory cafeteria and store it in convenient containers



Look at the legislation regarding using „refurbished“ food



Invent the company name, logo, slogan, pitch and model canvas



Look at how to get a food truck and how to work with charity companies



RESOURCES

- Food sourcing partnerships
- Transportation (e.g., delivery vehicles)
- Kitchen equipment and appliances
- Packaging materials
- Staffing (e.g., chefs, drivers)
- Permits and licenses
- Payment processing systems
- Waste management and recycling services



THE OBSTACLES

OBSTACLES	SOLUTION
CERTIFICATE	A REQUEST TO GOVERNMENT
OUR AGES	WAITING
NO DRIVING LICENCE	SOMEONE WOULD HAVE TO GET A TRUCK LICENCE, FOR NOW WE WOULD DRIVE A VAN
MONEY	WE WOULD ASK FOR MONEY SUPPORT
EQUIPMENT	WE HAVE TO BUY IT



POTENTIAL...

HOW CAN YOUR IDEA BE BETTERED OR FURTHER DEVELOPED?

- Advertisements and QR sign up bonus
- Mobile App Development: Enhance customer engagement and convenience with a dedicated mobile app for ordering and promotions.
- Expanded Food Offerings: Cater to a wider audience by introducing diverse cuisines and dietary options.
- Sustainable Packaging Solutions: Reduce environmental impact by switching to eco-friendly packaging materials.



FINAL PITCH

ReFresh is a company dedicated to reducing food waste and consequently preserving the environment by offering quality unused food at affordable prices.

Our mission is to create a more sustainable future by revitalizing food that would otherwise be discarded.

Join us in this important environmental effort, which will also save you money.

We are proud to announce that we will soon be available in your area! We collect untouched but unused food from homes, restaurants, and stores and resell it in our mobile van at highly competitive prices.

We also collaborate with organizations that provide meals to people who often cannot afford them.

So, join us because we **DELICIOUSLY SOLVE AND PROTECT THE PLANET!**

BUSINESS MODEL CANVAS

Key Partner

Restaurants

Club Alaya

Charity
organisations

Student's
dormitory
caffeteria

Key Activities

Collecting food

Making food

Selling food

Key Resources

Food truck

Food handling equipment

Workers

Value proposition

Environmental
impact

convenience

Corporate social
responsibility

Customer relationship

Building customer
relationship

Transparency

Feedback

Channels

Direct sales

Social networks

Partnership with
restaurantes

BUSINESS MODEL CANVAS

Customer Segments

Consumer and environmental awareness

Budget consumers

Charity supporters

Cost Structure

Transport cost

Staff cost

Packaging cost

Revenue Streams

Selling food

donations



ENTRECOMP

- Spotting opportunity: We identified an opportunity to address food waste and environmental preservation by creating a company dedicated to offering quality unused food at affordable prices.
- Taking the initiative: We took the initiative to launch our business, ReFresh, with the mission of creating a more sustainable future by revitalizing food that would otherwise be discarded.
- Creativity: We demonstrated creativity in our approach to solving the problem of food waste by repurposing unused food and reselling it at competitive prices through a mobile van.
- Building networks: We collaborated with organizations that provide meals to people in need, demonstrating our ability to build networks and partnerships to support our mission of reducing food waste and helping those who cannot afford meals.



Questa foto di Autore sconosciuto è concesso in licenza da CC BY

SUSTAINABLE DEVELOPMENT GOALS



Questa foto di Autore sconosciuto è concesso in licenza da CC BY

SDG GOALS

1. **No poverty** – assisting individuals who cannot afford daily food necessities.

2. **Zero hunger** - providing affordable food options.

10. **Reduced inequalities** – distributing food to those who could not afford it otherwise.

11. **Sustainable cities and communities** – collaborating with more companies to assist those in need and reduce their waste.

12. **Responsible consumption and production** – repurposing excess food.

13. **Climate action** - reducing waste, minimizing garbage, and decreasing CO2 emissions.

EXTRA CUT...

During a lesson, one of our team members teamed up with a member from another team to build the suite you see in the picture below, emphasizing the importance of recycling, by using a garbage bag.





GROWING GREEN

CIRCULARITY IN VET



ReFresh



ReFresh

3.EE, GEPS



Co-funded by
the European Union



GROWING GREEN

CIRCULARITY IN VET

Arouse

Growing Green: Fostering green entrepreneurial mindsets
based on the circular economy and green capital concepts
in VET education

Acronym: Growing Green

2021-1-DK01-KA220-VET-000024955

October 2023



Co-funded by
the European Union

THE TEAM

We are a group of young and enthusiastic VET school students, studying logistics technology.

Our ages range from seventeen to nineteen years old.

Our mentor is Tina Kariž.

The idea for Arouse came to us when considering all the young people who need and seek answers on topics that are more intimate and inaccessible to the youth in our world..



Noel Fortuna
19



Lan Mustafić
17



Marko
Mučić18



Nik Pobega
17

MENTOR

Tina Kariž is our mentor and friend for the past two years. Together with her, we have learned many things that we use in our everyday lives.

Every day she pushes us beyond our limits and shows us that the impossible is indeed possible. She has taught us communication, computer skills, and many other valuable things that will prepare us for the independent world of adulthood.

COMPANY

Arouse Real Case/Inspiration:

The inspiration for Arouse draws from the pressing societal need for accessible and reliable sex education resources. Many young people face barriers to accessing accurate information about sexual health and relationships, leading to misconceptions, stigma, and potential harm.



A stylized illustration of a person from the waist down, wearing a light green shirt, red pants, and dark blue shoes. They are holding a large yellow circle with blue lines that form a stylized figure or shape. The person is walking towards the right.

SUMMARY OF THE PROJECT IDEA

"Arouse" is a company that provides young people with answers to intimate questions.

It also allows anonymous communication among our clients who are seeking help and answers from each other.




THE PROBLEM

Arouse faces a pressing need to improve our environmental practices. As a company focused on providing answers to personal questions and enabling anonymous communication among youth, we understand the importance of reducing our environmental impact. Our heavy reliance on digital platforms and data management contributes to energy consumption and electronic waste.

Furthermore, as a youth-oriented organization, we recognize the rising concern among our demographic regarding environmental sustainability. Ignoring our ecological footprint not only goes against our values but also risks distancing ourselves from our target audience, who are increasingly mindful of environmental issues..

IDEAS & OPPORTUNITY

WHICH IDEAS CAME OUT?

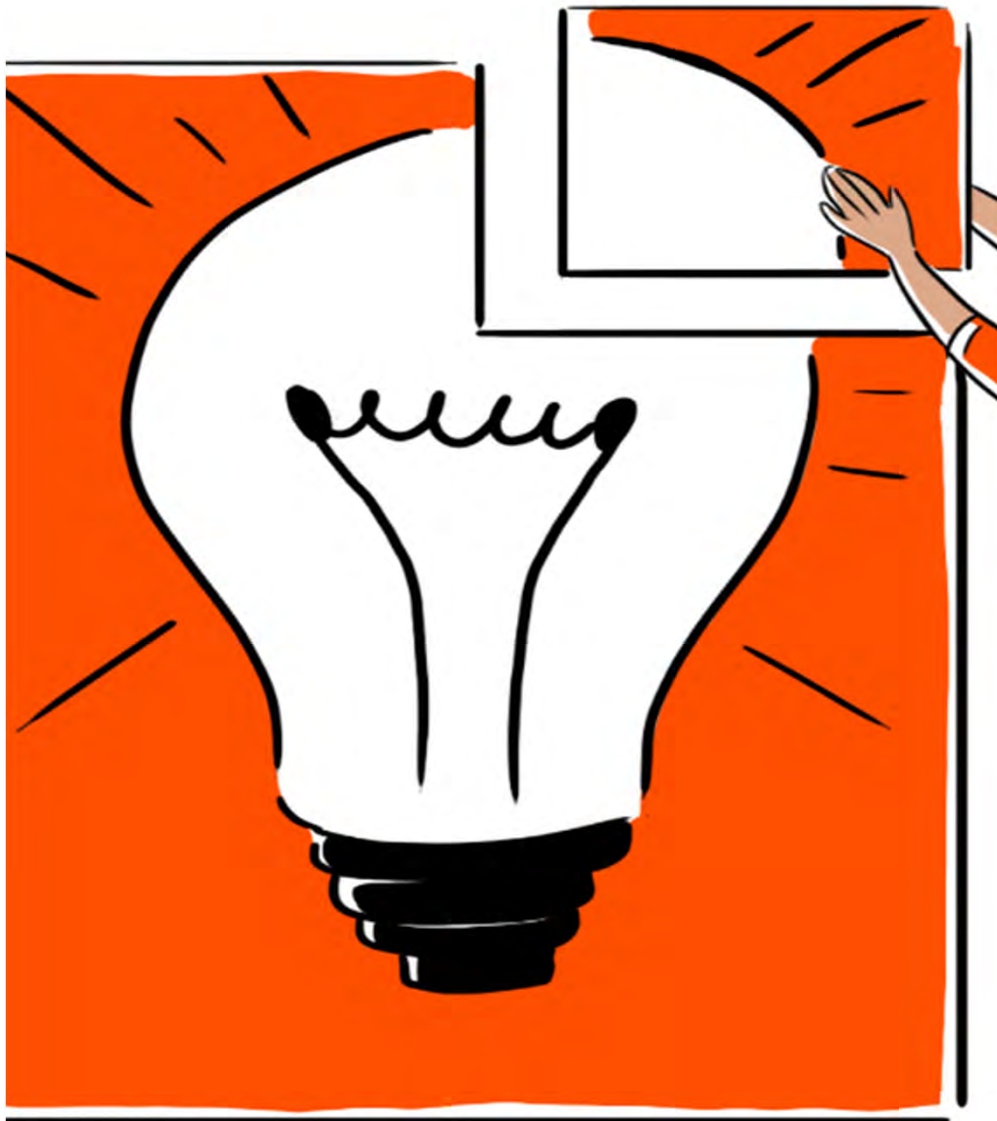


Interactive
Learning
Hub

Anonymous
Q&A
Platform

Community
Workshops





THE BEST IDEA

1: Create engaging online modules covering topics like consent, STI prevention, and healthy relationships, tailored for young users to learn at their own pace

2: Establish a confidential forum where users can anonymously ask intimate questions and receive expert guidance and peer support on sexual health and relationships.

3: Host events and workshops to foster open discussions and provide education on sexual health topics, creating a safe space for young individuals to connect and learn together.

THE ROADMAP

Conceptualization and Research:

Define the idea and target audience. Research market demand and competition.



Planning and Design:

Develop a business plan and project timeline. Create branding elements and design UI/UX.

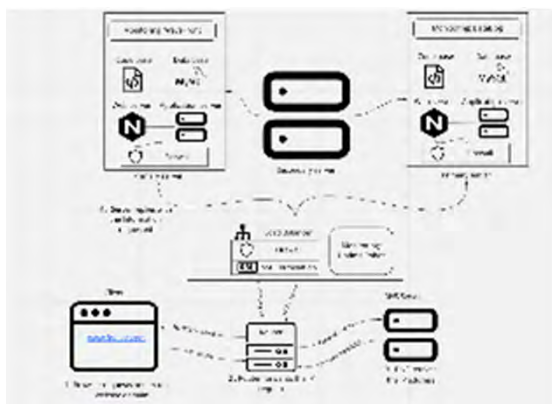


THE ROADMAP

Development and Content Creation

Build website infrastructure and front-end components.

Generate initial content and moderation guidelines.



Content Moderation Process



Testing and Launch:

Conduct thorough testing and gather user feedback.

Implement marketing strategy and launch the website.



RESOURCES

Budget for development, content creation, and marketing.

High-performance servers and hosting services to ensure website reliability and speed. Security measures such as SSL certificates, encryption software, and regular security audits to protect user data and privacy.



- Intellectual: Leveraged expertise in sexual health education, web development, and digital marketing.

- Human: Assembled a diverse team with skills in programming, content creation, and community management.

- Social: Cultivated relationships with stakeholders, including experts, educators, and potential users.

THE OBSTACLES

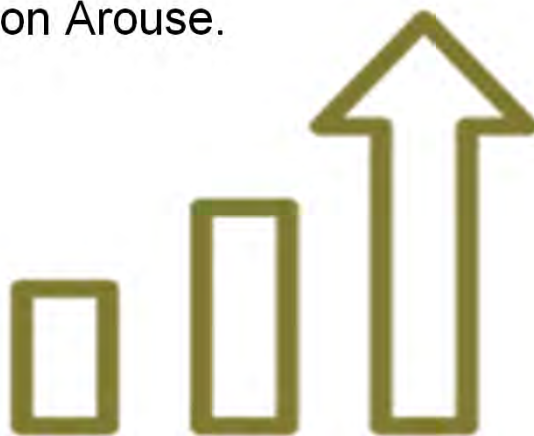
OBSTACLES	SOLUTION
Market competition: Entering a market with established competitors can make it difficult to gain traction and market share.	Constant innovation, improving of our services, improvement of our existing ones and the development of our branding and marketing strategies.
Product development challenges: Developing viable services that meet customer needs and expectations.	Ensure that the objectives and goals of the services development process are well-defined from the outset. This includes understanding the target market, customer needs, and desired outcomes.
Adapting to market changes: Markets are dynamic and constantly evolving. Adapting to changes in consumer preferences, technological advancements, and competitive landscapes.	Adapting our service offerings in response to evolving market demands and listening to our customers through surveys and social media.



POTENTIAL...

HOW COULD YOUR IDEA BE BETTER OR FURTHER DEVELOPED?

- The introduction of interactive features such as forums, live chats or virtual events.
- The implementation of algorithms or user preferences to personalize content recommendations.
- Invite experts in sexuality, psychology, and relationships to contribute authoritative answers and insights to questions.
- Ensuring the website is accessible to a diverse audience by providing multilingual support, text-to-speech options, and features for users with disabilities.
- Development of a mobile application for Arouse to cater to users who prefer accessing the platform on smartphones and tablets for convenience.
- Enhancing privacy and safety measures by implementing robust moderation tools, anonymous posting options, and resources for reporting inappropriate content or abusive behavior.
- Organize offline events, workshops, or support groups to facilitate in-person interactions among users and strengthen the sense of community built on the platform.
- Forge partnerships with relevant organizations, influencers, or educational institutions to expand reach, access resources, and enrich the content and services offered on Arouse.



FINAL PITCH

At Arouse, we're revolutionizing the way people approach sexual health and relationships. With our anonymous Q&A platform and confidential chat feature, users can ask questions, share experiences, and connect with others in a judgment-free environment.

But that's not all! We're excited to announce our latest addition: condom sales. Now, alongside seeking advice and support, users can access high-quality condoms conveniently through our platform. We're committed to promoting safe and healthy sexual practices while providing a seamless experience for our community.

Why Arouse?

- ✅ **Safe and Confidential:** Your privacy is our priority. Feel comfortable asking questions and exploring topics without fear of judgment.
- ✅ **Expert Advice:** Access valuable insights from sexual health professionals and experienced community members.
- ✅ **Convenient Condom Sales:** Shop for condoms discreetly and conveniently, directly through our platform.
- ✅ **Inclusive Community:** Join a diverse and supportive community of individuals committed to promoting sexual wellness for all.

Join us at Arouse and take control of your sexual health journey today. Let's spark conversations, share knowledge, and empower each other to live happier, healthier lives. Together, let's embrace the joy of sexual wellness! 🚀

#Arouse #SexualWellness #SafeSex #Community
#Empowerment

BUSINESS MODEL CANVAS

Condom Manufacturers:

Ensuring access to quality products.

Sexual Health

Organizations:

Providing expert advice and resources.

Online Retail Platforms:

Streamlining condom sales.

Healthcare Providers:

Facilitating professional referrals.

Nonprofit Organizations:

Amplifying outreach and awareness efforts.

Platform Development

Content Creation

Community Moderation

Condom Sales Management

Marketing and Promotion

User Support

Partnership Development

Data Security and Privacy

Key resources for Arouse:

Technology Infrastructure

Content

Community

Condom Inventory

Expertise

Partnerships

Financial Capital

Arouse offers a unique value proposition:

"Empowering Sexual Wellness: Arouse provides a safe and inclusive platform where individuals can seek advice, share experiences, and access high-quality condoms conveniently. With expert guidance, a supportive community, and confidential services, Arouse is your trusted partner in promoting healthy and fulfilling sexual relationships."

Personalized Support: Offering tailored assistance.

Community Engagement: Fostering connection.

Confidentiality: Upholding user privacy.

Feedback: Continuous improvement.

Empowerment: Providing resources.

Website and App

Social Media

Email

Partnerships

Word of Mouth

BUSINESS MODEL

Curious Individuals: Seekers of anonymous advice and information about sex and relationships.

Couples Seeking Advice: Couples looking to enhance their intimacy and address relationship challenges.

Young Adults: Explorers of sexuality and relationships seeking guidance in a safe environment.

Individuals in Long-Distance Relationships: Those seeking support and connection to maintain intimacy.

LGBTQ+ Community: Members looking for a safe space to discuss LGBTQ+ topics without judgment.

Sexual Health Professionals: Educators and counselors using Arouse as a resource for clients.

Anonymous Support Seekers: Individuals dealing with sensitive issues who seek confidential

Development Costs: Expenses related to website development, including hiring developers, purchasing software licenses, and hosting services.

Content Creation Costs: Budget for creating and curating content, such as paying writers, editors, and graphic designers, as well as acquiring licenses for images or multimedia content.

Marketing and Advertising Costs: Funds allocated for promoting the platform through digital marketing channels, advertising campaigns, and other promotional activities to attract users.

By integrating condom sales into Arouse's offerings, the platform can diversify its revenue streams and potentially offset other operational costs.

Additionally, offering condoms aligns with Arouse's focus on sexual health and well-being, providing added value to its users.



ENTRECOMP

Spotting opportunities:

Identifying an opportunity to expand the platform's offerings by integrating a new product line that aligns with its mission and user base.

Financial and economic literacy: Market Analysis; Product Development; Marketing and Promotion; Partnership and Collaboration

By effectively applying these competencies, Arouse can successfully integrate condom sales into its platform, offering added value to users while generating additional revenue.



Questa foto di Autore sconosciuto è concesso in licenza da CC BY

SUSTAINABLE DEVELOPMENT GOALS



SDG GOALS

SDG 3: Good Health and Well-being: By providing access to condoms, Arouse contributes to promoting sexual health and preventing sexually transmitted infections (STIs) and unintended pregnancies. This supports the goal of ensuring healthy lives and well-being for all.

SDG 5: Gender Equality: Access to condoms empowers individuals, especially women and girls, to make informed decisions about their sexual and reproductive health, contributing to gender equality by promoting reproductive rights and reducing the risk of gender-based violence and coercion.

SDG 10: Reduced Inequalities: Condom sales on Arouse help address inequalities in access to sexual health products and information by providing a safe and confidential platform for individuals of all backgrounds to access essential sexual health resources.

SDG 12: Responsible Consumption and Production: Arouse can promote responsible consumption and production by sourcing condoms from manufacturers committed to sustainable practices, reducing waste through efficient inventory management, and raising awareness about the environmental impact of sexual health products.

SDG 17: Partnerships for the Goals: Collaborating with condom manufacturers, distributors, and other stakeholders to integrate condom sales into Arouse fosters partnerships for sustainable development, supporting collective action to achieve the SDGs. By addressing these SDGs through its activities, Arouse demonstrates its commitment to contributing to global

EXTRA CUT...

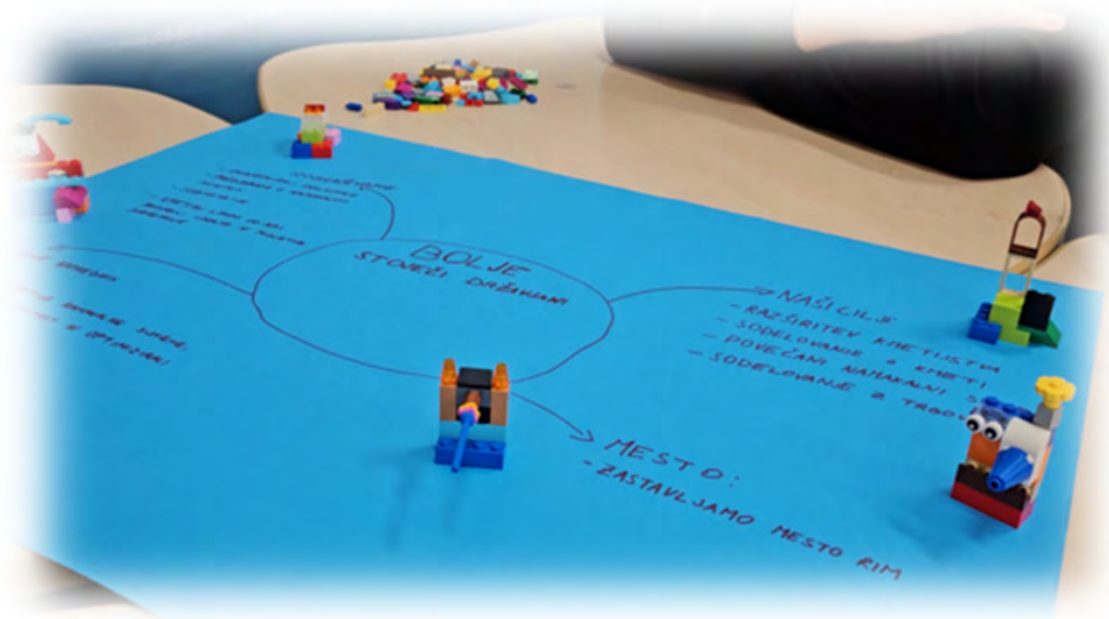
During a team brainstorming session for Arouse, we were discussing potential features to enhance user engagement and promote community interaction. As we delved into some more unconventional ideas, one team member jokingly suggested creating a virtual "Condom Olympics" where users could compete in humorous challenges related to sexual health and wellness.

While initially dismissed as a playful jest, the idea sparked a wave of laughter and creativity among the team. We ended up spending the next few minutes imagining ridiculous events like "Condom Catapult," "Trojan Toss," and "Safe Sex Relay Race." Although we ultimately decided that such a feature might not align with Arouse's overall mission, the lighthearted brainstorming session brought a sense of camaraderie and humor to the team.

To this day, whenever we reflect on our journey with Arouse, we fondly recall the "Condom Olympics" brainstorming session as a moment of levity and creative inspiration amidst our more serious discussions. It serves as a reminder of the importance of maintaining a sense of humor and perspective, even when tackling sensitive topics.



EXTRA CUT





GROWING GREEN

CIRCULARITY IN VET



Arouse

3.LT GEPŠ PIRAN, SLOVENIA



AROUSE

SAFE SEX SOLVES YOUR PROBLEMS



Co-funded by
the European Union



GROWING GREEN

CIRCULARITY IN VET

ECO RIDE

Growing Green: Fostering green entrepreneurial mindsets
based on the circular economy and green capital concepts
in VET education

Acronym: Growing Green

2021-1-DK01-KA220-VET-000024955

October 2023



Co-funded by
the European Union

THE TEAM

Our team consists of three members who are all around the ages of 17 and 18. Our mentor was miss Tina Kariž. The members include :

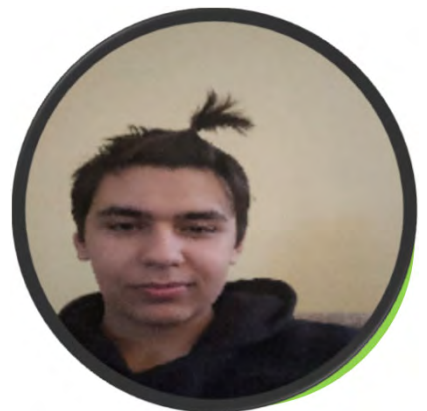
- . Luka Stojmenović (director)
- . Davud Porčić (production manager)
- . Benjamin Osmani (financier)



Luka
Stojmenović, 17



Davud Porčić,
17



Benjamin Osmani,
18

MENTOR

As mentioned previously our teacher/mentor was Tina Kariž, she was very kind and supportive throughout our journey.

COMPANY

Our company's name is EcoRide, which is a company that specialises in constructing and/or improving the older bikes into the new semi-powered electrical bikes, which makes the cycling easier for our clients.

We want to make sure to sell our products at a reasonable price.



An illustration on the left side of the page shows a person from the waist down, wearing a light green shirt, red pants, and dark shoes. They are holding a large yellow circle with both hands. Inside the yellow circle, there are blue lines that form a stylized path or map. The background is white with a thin vertical orange line separating the illustration from the text.

SUMMARY OF THE PROJECT IDEA

- We want to improve our clients/customers cycling journey through our high quality service.
- Create/recreate products of quality that people will use for a lot of time.
- Sell them at a reasonable price so that it's affordable to majority of the people.
- Make our brand well known.



THE PROBLEM

We identified several problems in the market that led us to think about and to develop this business idea:

Environmental concerns: We observed a growing concern for environmental sustainability and decided to think a more eco-friendly transportation option by repurposing old bikes with electric batteries, thereby reducing the carbon footprint associated with traditional vehicles.

Demand for alternative transportation: Recognizing the increasing demand for alternative modes of transportation in urban areas, we saw an opportunity to provide a convenient and cost-effective solution that aligns with modern lifestyles and values.

Desire for Innovation: They perceived a gap in the market for innovative solutions that combine traditional bicycles with modern technology, catering to consumers looking for unique and cutting-edge products.

Urban Mobility Challenges: With rising congestion and limited parking space in cities, we aim to address urban mobility challenges by offering electric bikes that are compact, maneuverable, and efficient for navigating through traffic and reaching destinations quickly.

Health and Wellness Trends: Observing the growing interest in health and wellness, we aim to promote active lifestyles by encouraging cycling as a form of exercise and transportation, thereby contributing to improved physical and mental well-being in our community.

IDEAS & OPPORTUNITY

WHICH IDEAS CAME OUT?

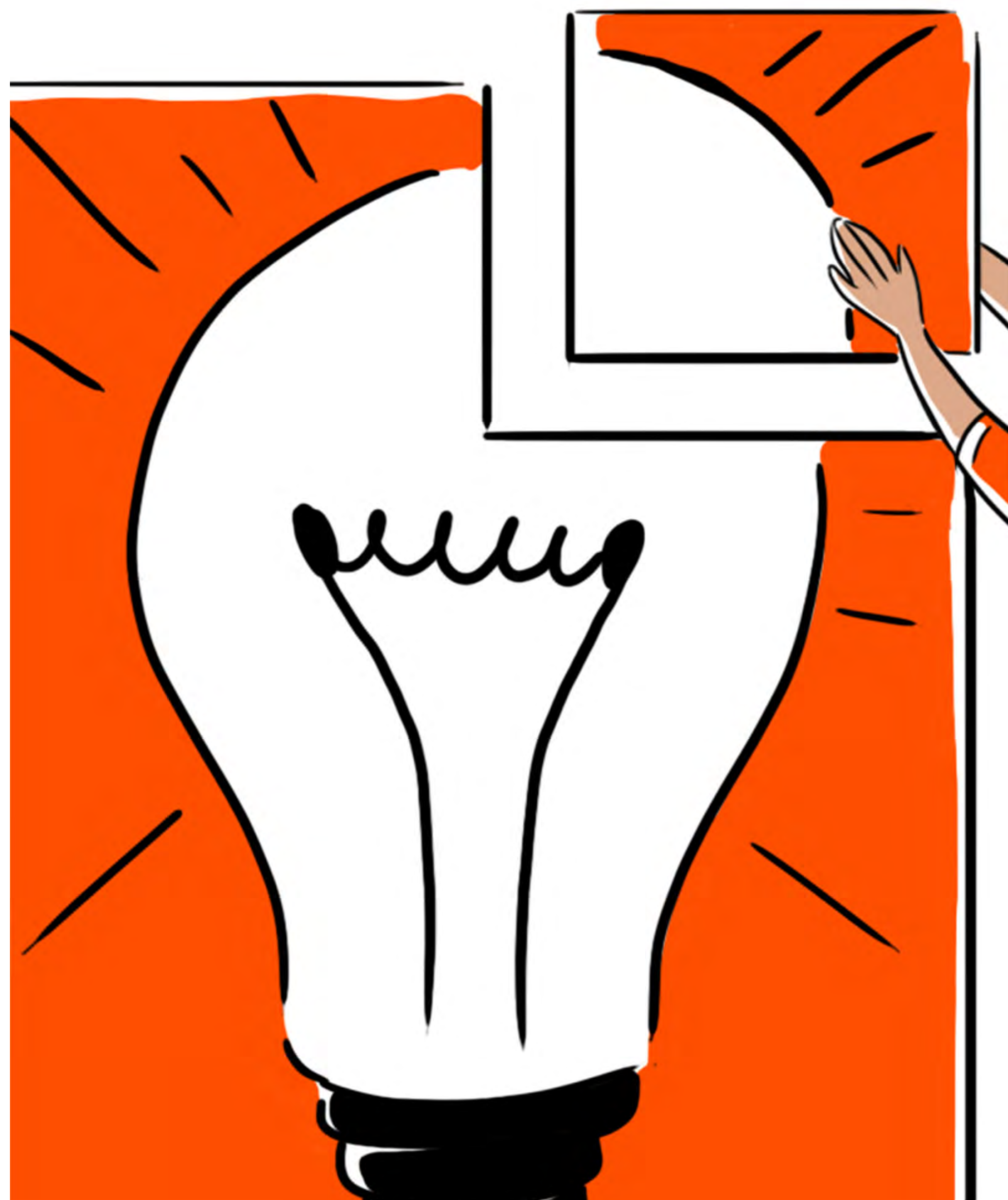


Luka: Let's make
electrical bikes

Davud: let's bake
delicious pastries

Benjamin: let's
sell and print
t'shirts





THE BEST IDEA

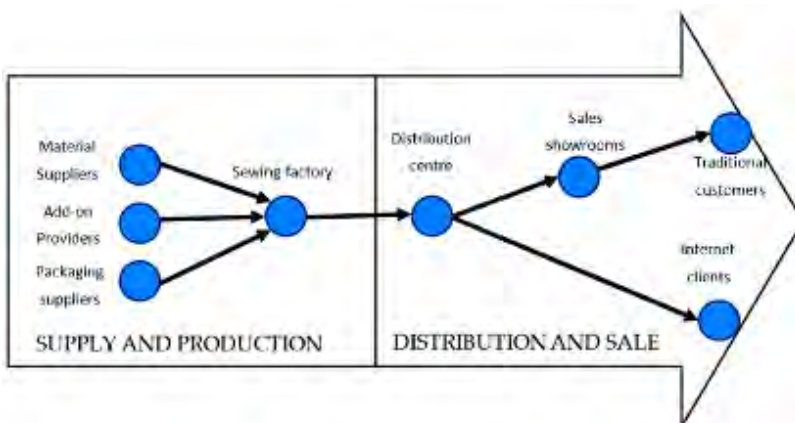
Then Luka had this great idea to refurbish old bikes and equip them with an electric battery. This way we would extend the lifespan of old bikes. The necessary parts could be obtained through online stores, allowing us to offer the service of e-restoring old bikes.

THE ROADMAP

- Market Research: to understand the demand for electrically refurbished bikes, identify potential customers.
- We prepared a survey questionnaire for younger students about cycling and the use of bicycles as a green mode of transportation. With the survey, we aimed to assess the potential demand among young people.



- Business Plan: to develop a comprehensive business plan outlining the objectives, target market, marketing strategy, operational plan, and financial projections.
- Considering that we also participated in the "My Company" program by JA Slovenia, we simultaneously developed a business plan with projections for production and sales.



THE ROADMAP

- **Prototype Development:** in order to create a prototype of the electrically refurbished bike to showcase the product's features and functionality, we researched possible suppliers of required bike pieces, battery, various material.
- **Supplier Network:** the goal is to establish partnerships with reliable suppliers to source quality components for the electric conversion kits.



- **Marketing and Promotion:** to raise awareness about the product, we thought to about online advertising, social media campaigns, and participation in local events. So firstly we designed our logo: and create an Instagram profile.



THE ROADMAP

Next steps would be:

- **Launch and Distribution:** Launch the product and establish distribution channels to make it accessible to customers. This may involve setting up an online store, partnering with bike shops, or attending trade shows.
- **Customer Feedback and Iteration:** Gather feedback from customers to identify areas for improvement and iterate on the product to meet their needs and preferences.
- **Scaling Up:** Once the business would gain traction and generates revenue, we would consider scaling up operations by expanding product offerings, entering new markets, or increasing production capacity.



RESOURCES

- **Microsoft Word & Google Docs** for writing business plans, proposals, and reports.
- **Microsoft Excel & Google Sheets** for creating spreadsheets for financial projections and data analysis.
- **Power Point & Canva** for designing visually appealing documents and presentations.
- **Online survey** by using Google Forms platform
- For **Internet research** we used the Google search engine to gather information about competitors, market trends, and customer preferences.
- **Social media platforms** such as Instagram, Facebook, TikTok to engage with target audiences and gather insights.
- **Online logo maker tools** like LogoMaker or Logojoy for generating logos based on specific preferences and styles.
- **Sketching and drawing tools** such as paper and pencil and 3D modeling software like SketchUp to create initial bike design concepts and a digital prototype.



THE OBSTACLES

OBSTACLES	SOLUTION
FIND A PLACE WHERE ASSEMBLE AND DESIGN THE PROTOTYPE	WE WOULD START WITH OUR SCHOOL CAPACITIES
LIMITED RESOURCES: WITHOUT ACCESS TO SUFFICIENT FUNDS AND EQUIPMENT	FRIENDS, PARENTS, SCHOOL FUNDS FOR PROJECTS
LACK OF EXPERIENCE AND TECHNICAL KNOWLEDGE	SCHOOL FRIENDS AND TEACHERS FROM THE ELECTROTECHNICAL SECTION
HOW TO LET PEOPLE KNOW WE ARE ON THE MARKET	SOCIAL MEDIA, FRIENDS
REGISTER A REAL LIVING COMPANY	PARENTS OR BUSINESS ANGELS
	?



POTENTIAL...

HOW COULD YOUR IDEA BE BETTER OR FURTHER DEVELOPED?

- Invest in lightweight, high-capacity batteries with fast charging for extended range.
- Incorporate GPS, smartphone connectivity, and integrated lighting for enhanced user experience.
- Upgrade to energy-efficient motors for better performance.
- Offer frame design, color, and accessory options for customizing the product.
- Use eco-friendly materials, optimize manufacturing, and promote bike-sharing.
- Collaborate with sustainability experts and implement green practices.
- Explore online, retail, and direct-to-consumer sales. Invest in e-commerce infrastructure and develop tailored marketing strategies.



FINAL PITCH

Hey there!

Are you ready to revolutionize your ride and contribute to a greener planet at the same time? Introducing our innovative solution: e-renewed bikes! We're passionate about sustainability and cycling, and we believe that every pedal stroke can make a difference. That's why we've embarked on a mission to breathe new life into old bikes by equipping them with electric batteries.

Imagine cruising through the city streets on a sleek, eco-friendly bike that not only reduces your carbon footprint but also saves you time and money on your daily commute. With our e-renewed bikes, you can enjoy the freedom of cycling without breaking a sweat, thanks to the added boost of electric power.

But our vision doesn't stop there. We're not just selling bikes; we're promoting a lifestyle. By choosing e-renewed bikes, you're joining a community of like-minded individuals who are committed to making sustainable choices and exploring the world on two wheels.

And the best part? Our e-renewed bikes are affordable, accessible, and easy to maintain. Whether you're a seasoned cyclist or a beginner looking to embrace a more sustainable mode of transportation, there's a perfect e-renewed bike for you.

So why wait? Join the e-renewed revolution today and pedal towards a cleaner, greener future!

Let's ride together, EcoRide

BUSINESS MODEL CANVAS

Key Partner

1. **Component Suppliers:**

Providers of electric motors, batteries, controllers, and other components.

2. **Distributors/Retailers:**

Partners who help distribute and sell our electric bicycle conversion kits.

3. **Regulatory Bodies:**

Collaborators who assist with compliance and certification for safety and legal standards.

Key Activities

1. **Research & Development:**

Designing and refining electric bicycle conversion kits.

2. Manufacturing: Production of conversion kits and assembly.

3. Marketing & Sales: Promoting products, establishing partnerships, and selling to customers.

Key Resources

1. Intellectual: Engineering expertise, design capabilities, and market research insights.

2. Physical: Manufacturing facilities, equipment, and workspace.

3. Financial: Funding for R&D, production, and marketing efforts.

Value proposition

1. e-Renewed bike: High-quality, easy-to-use bike transformed from traditional bicycles into electric bicycles.

2. Sustainability: Offering eco-friendly transportation solutions that reduce carbon emissions and promote green mobility.

3. Affordability: Providing cost-effective alternatives to purchasing new electric bicycles.

4. Convenience: Enabling individuals to upgrade their existing bicycles to electric power, enhancing their mobility options.

Customer relationship

1. Personalized Assistance: Providing guidance and support to customers throughout the conversion process.

2. Responsive Communication: Addressing inquiries, concerns, and feedback promptly and effectively.

3. Post-Sales Support: Offering maintenance tips, troubleshooting assistance, and warranty services.

Channels

1. Online Store: Direct sales through our website.

2. Retail Partners:

3. Marketing Campaigns: Utilizing social media, advertising, and content marketing to reach target audiences.

BUSINESS MODEL CANVAS

Customer Segments

- 1. Bicycle Enthusiasts:** Individuals passionate about cycling seeking to upgrade their bicycles.
- 2. Commuters:** Urban dwellers looking for eco-friendly and cost-effective transportation options.
- 3. Environmental Advocates:** Individuals and organizations committed to reducing carbon emissions and promoting sustainability.

Cost Structure

- 1. Research & Development Costs**
- 2. Manufacturing Expenses**
- 3. Marketing & Advertising Budget**
- 4. Regulatory Compliance Fees**
- 5. Operational Costs (e.g., utilities, salaries)**

Revenue Streams

- 1. Sales of e-Renewed bikes**
- 2. After-Sales Services (e.g., maintenance, spare parts)**
- 3. Potential Licensing or Royalty Agreements**

SPECIFICATIONS

Product	26"Front 1000W	Wheel Size	26"
Voltage	48V	Wattage	1000W
Wheel Type	Front Wheel	LCD Display	YES
Tire	26*1.95	Climbing Angle	8°
Recommended Battery Specification	48V13AH	Recommended Battery Capacity	13AH/18AH
Weight Capacity	220 Lbs (100kg)	Applicable Brake Type	DISC
Front Fork Spacing	100mm(3.93")	Motor Diameter	250mm(9.84")
Motor Speed	460rpm	Motor Torque	27NM
1-5 No-load Speed		18/29/38/46/58KM/H; 11/18/23 8/28 5/38MPH	



ENTRECOMP

Implementing our idea of converting regular bicycles into electric bicycles aligns with several key EntreComp competences:

1. Spotting Opportunities: We identified an opportunity to address growing demand for sustainable transportation solutions by repurposing existing bicycles into electric-powered vehicles.

2. Creativity: Developing electric bicycle requires creative problem-solving to design innovative solutions that effectively integrate electric components while maintaining the functionality and aesthetics of traditional bicycles.

3. Taking the Initiative: Our team took the initiative to research, develop, and prototype the electric bicycle.

4. Mobilizing Resources: Securing funding, accessing physical facilities and equipment, and building partnerships with suppliers and distributors are all examples of mobilizing resources to support the implementation of our idea.

6. Working with Others: Collaboration among team members, as well as engaging with partners, is essential for the success of our initiative. Effective teamwork and communication skills are crucial throughout the development and commercialization process.

7. Learning from Experience: Continuous evaluation, iteration, and learning from feedback and challenges encountered during the implementation process.



SUSTAINABLE DEVELOPMENT GOALS



Questa foto di Autore sconosciuto è concesso in licenza da [CC BY](#)

SDG GOALS

- 1. Affordable and Clean Energy (SDG 7):** By promoting the use of electric bicycles, we contribute to reducing reliance on fossil fuels for transportation. Electric bicycles offer a sustainable and energy-efficient alternative for commuting and short-distance travel, thus supporting the goal of ensuring access to affordable, reliable, sustainable, and modern energy for all.
- 2. Sustainable Cities and Communities (SDG 11):** Electric bicycles help alleviate traffic congestion and reduce air pollution in urban areas. By encouraging cycling as a mode of transportation, our initiative promotes sustainable mobility and contributes to creating more inclusive, safe, resilient, and sustainable cities.
- 3. Climate Action (SDG 13):** Electric bicycles produce fewer greenhouse gas emissions compared to traditional vehicles, thereby mitigating climate change impacts. By facilitating the adoption of electric bicycles, we support efforts to combat climate change and its effects, contributing to a more sustainable and resilient future.

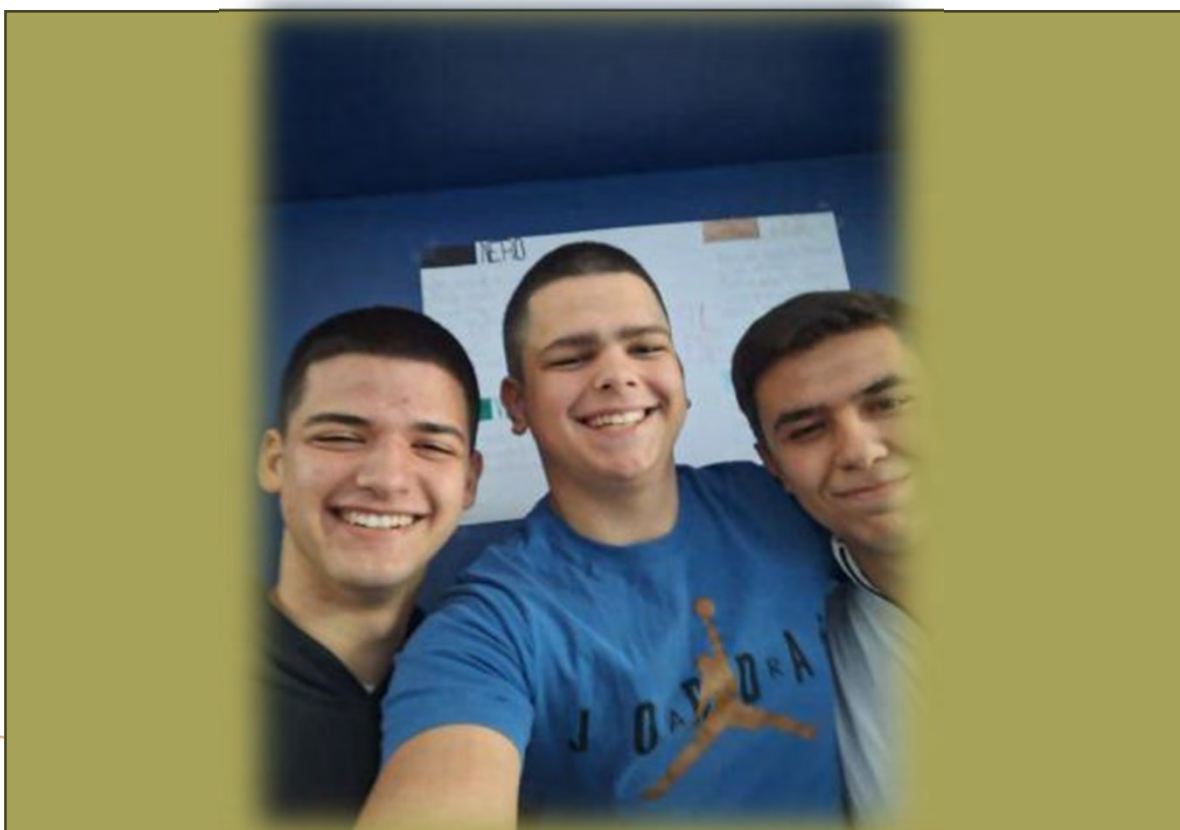
EXTRA CUT...





GROWING GREEN

CIRCULARITY IN VET



ECO RIDE

3. LT, GEPŠ Piran, Slovenia



Co-funded by
the European Union



GROWING GREEN

CIRCULARITY IN VET

Gobibur

Growing Green: Fostering green entrepreneurial mindsets
based on the circular economy and green capital concepts
in VET education

Acronym: Growing Green

2021-1-DK01-KA220-VET-000024955

October 2023



Co-funded by
the European Union

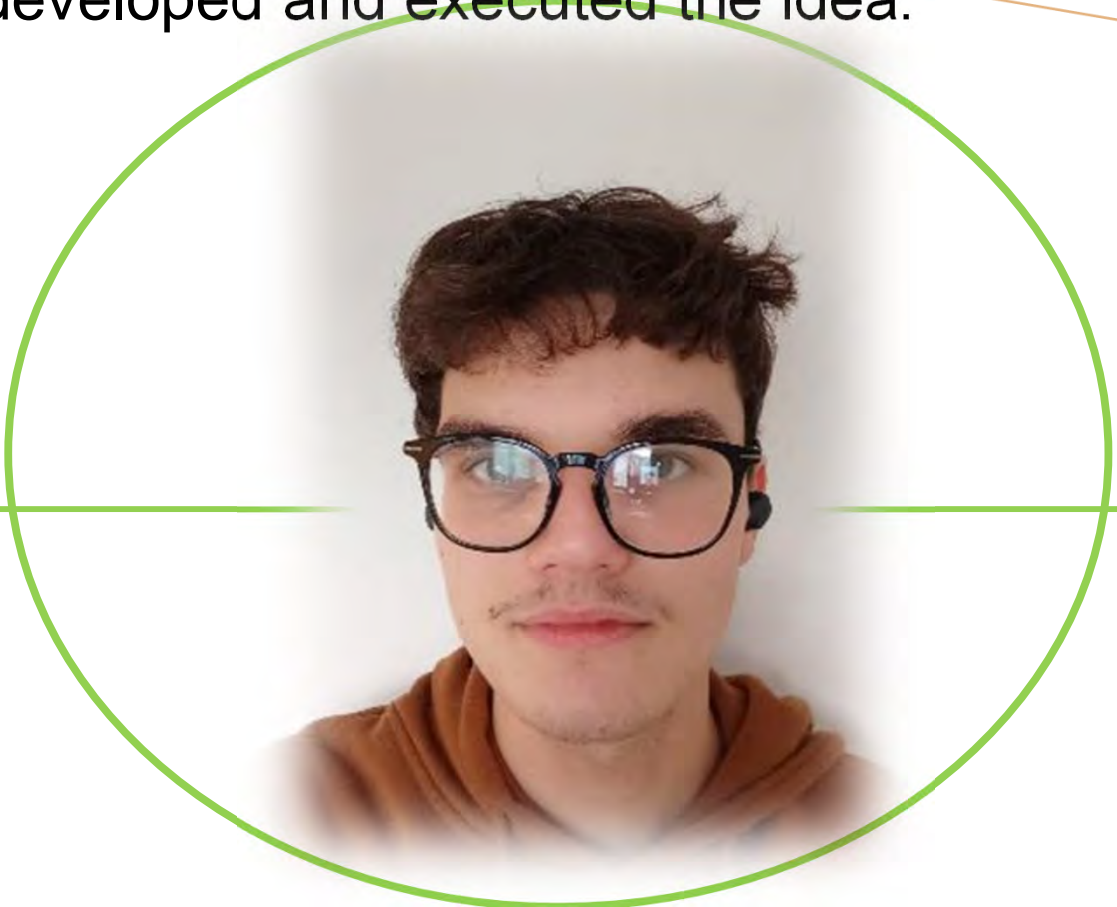
THE TEAM

My name is Maj, and I'm 18 years old. My project is individual and I am my team.

My mentor is professor Tina Kariz, who teaches Professional Communication and Entrepreneurship.

My experience was relatively good because getting a good grade from this project, which is assessed in the subject, is fine with me.

My role was comprehensive since I handled everything alone; I independently developed and executed the idea.



Maj
Pašalić/18 y

MENTOR

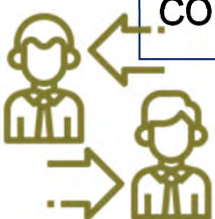
My mentor was Tina Kariz, who teaches Entrepreneurship and Communication subjects. She provided guidance for the entire project and also continuously monitored the progress of it.

COMPANY

My company specializes in baking mushroom bureks. Our primary goal was to ensure a delicious and healthy burek that would cater to vegans and vegetarians, allowing them to enjoy this type of dish.

The main idea behind our project was to produce everything locally, ensuring freshness and healthiness at every step.

Our inspiration came from observing the growing trend towards healthier eating options and the increasing demand for plant-based foods. We noticed a gap in the market for savory pastry options that were not only vegan but also made with locally sourced, fresh ingredients. We aimed to provide a solution that not only met dietary preferences but also aligned with the values of sustainability and supporting local communities.



A stylized illustration on the left side of the page shows a person from the waist down, wearing a light green shirt, red pants, and dark shoes. They are holding a large yellow circle with blue lines that resemble a stylized 'e' or a path. The background is white with a thin orange vertical line separating the illustration from the text.

"PROJECT IDEA SUMMARY"

The main idea of the entire project was to prepare burek in a healthy manner.

I aimed primarily to avoid having a product that is unhealthy and greasy.

Therefore, as an alternative to the traditional meat burek, I created a mushroom burek.

Its main advantage lies in its healthiness, ensuring that both vegetarians and vegans can enjoy a wonderful burek without any meat-based ingredients.

It was crucial to realize that the freshness of ingredients and preparation are of paramount importance for a quality product, particularly in this case, burek.



PROBLEMS

The problem identified within the company was the environmental impact associated with traditional meat burek production.

The process of producing meat involves higher emissions compared to the production of plant-based food. Recognizing the need to create an alternative to meat burek and to develop something environmentally friendly, I devised the idea of replacing meat with mushrooms.

Instead of raising livestock to obtain meat for burek, I proposed simply gathering local mushrooms from the forest and using them in the burek, thus solving the issue.

It was essential to find the right type of mushroom that could best replicate the taste of meat, and after several choices, we settled on using button mushrooms.

Through this innovative approach, I addressed the environmental concerns associated with traditional meat burek production.

IDEJE IN PRILOŽNOSTI

IDEJE KI SO PRIŠLE VEN



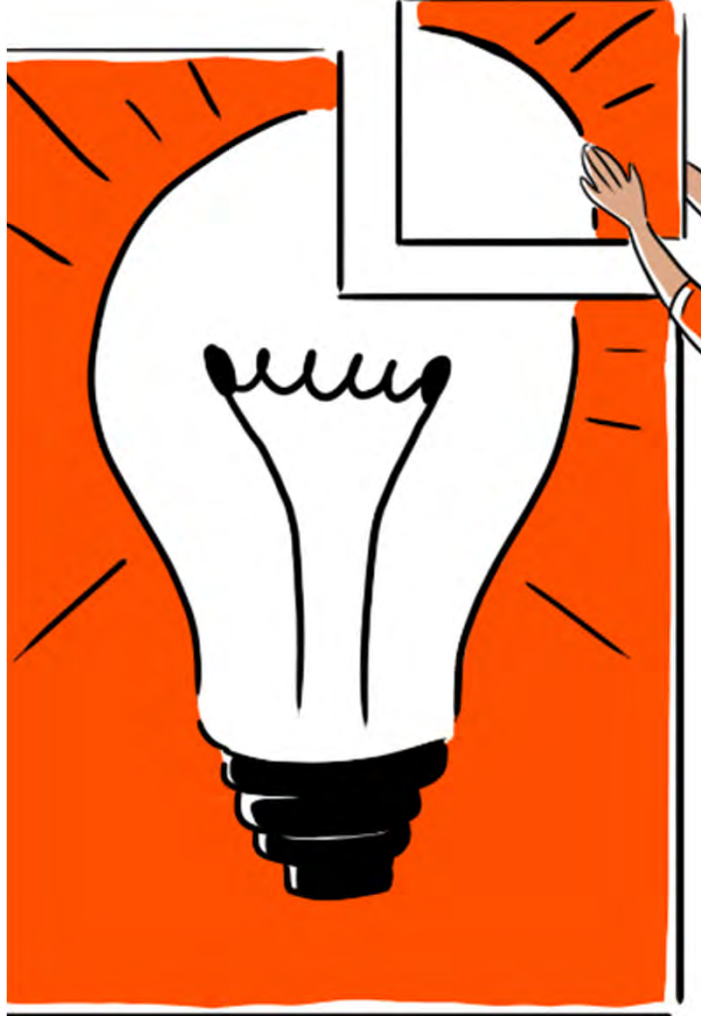
"To make burek without using meat."



"To prepare mushrooms in a delicious way."

"To optimize the preparation of mushroom burek."





THE BEST IDEA

The idea I decided to develop was creating a burek without using meat, specifically by using a mushroom-based filling. This was the only idea that came to mind, and I remembered it because I am personally fond of mushroom dishes and enjoy them myself.

As a lover of mushroom-based dishes, I recognized the potential to create a flavorful and satisfying burek using mushrooms as the main ingredient. Additionally, considering the rising demand for plant-based options and the environmental benefits of reducing meat consumption, developing a mushroom burek aligned well with current trends and my personal preferences.

Overall, my familiarity with and enjoyment of mushroom-based dishes, coupled with the desire to provide a tasty alternative to traditional meat burek, led me to choose this idea for development.

THE ROADMAP

Steps in developing the idea of creating a mushroom burek:

Idea Generation:

- Conceptualizing a meatless burek, opting for a mushroom-based filling to meet the demand for plant-based options and provide a healthier alternative.

Ingredient Acquisition:

- Sourcing high-quality ingredients, including fresh mushrooms and essential items like pastry dough, onions, garlic, and various herbs and spices.

Burek Preparation:

- Cooking the mushroom filling by sautéing mushrooms with onions, garlic, and herbs, then filling and shaping the pastry dough before baking to perfection.

Enhancement Evaluation:

- Assessing initial batches for taste, texture, appearance, and overall satisfaction. Gathering feedback from taste testers or potential customers to refine the recipe and make necessary adjustments.

Through these steps, the concept of mushroom burek evolved into a proposal and prototype, demonstrating creativity and commitment to delivering a delicious and innovative product to the market.

RESOURCES



In building up the idea of creating mushroom burek, various resources were implemented, aligning with the competences of the Resource area in EntreComp:

Material Resources:

- Flour, Yeast, Water, Oil, Mushrooms



Financial Resources:

- Funds were required to purchase the necessary ingredients, equipment, and utensils for making mushroom burek, such as flour, yeast, mushrooms, and baking trays.



Human Resources:

- Skills and expertise of individuals involved in the process, including chefs, bakers, and food enthusiasts, were essential for developing the recipe, preparing the ingredients, and baking the burek.



Intellectual Resources:

- Knowledge and information about traditional burek-making techniques and recipes were drawn upon to adapt the concept to create a mushroom-based alternative.
- Creativity and innovation were employed to experiment with different ingredients and flavor combinations to develop a unique and delicious mushroom burek recipe.

Network Resources:

Collaboration and communication with suppliers, farmers, and local producers were necessary to source high-quality ingredients, such as fresh mushrooms, flour, and oil.

- Feedback and input from taste testers, friends, family, and potential customers were valuable for refining the recipe and improving the final product.
- By leveraging these resources effectively, the idea of creating mushroom burek was developed and brought to fruition, resulting in a tasty and innovative culinary offering.

THE OBSTACLES

OBSTACLES	SOLUTION
"To find an alternative to meat."	"The use of mushrooms."
"To find the perfect mushroom for mushroom burek."	"Button mushroom"
„Marketing and promotion addressing meat and non-meat eaters. "	"Develop segmented customer oriented promotion"
Place and facilities to run the business.	Parents, friends, business angels, loan.



POTENTIAL...

HOW COULD YOUR IDEA BE BETTER OR FURTHER DEVELOPED?

Market Expansion:

- The idea could be further developed to cater to a wider audience by positioning it as a viable alternative to traditional meat burek. This could involve marketing efforts targeting not only vegetarians and vegans but also health-conscious consumers looking for flavorful and nutritious options.

Product Diversification:

- Expanding the range of mushroom burek varieties by experimenting with different types of mushrooms, fillings, and pastry options. This could include introducing variations such as spinach and mushroom burek, cheese and mushroom burek, or Mediterranean-inspired mushroom burek with olives and sun-dried tomatoes.

Distribution Channels:

- Exploring various distribution channels to make mushroom burek more accessible to consumers. This could involve partnering with local cafes, bakeries, or food delivery services to offer mushroom burek as part of their menu offerings. Additionally, setting up pop-up stalls at farmers' markets or food festivals could help reach a broader audience.



POTENTIAL...

HOW COULD YOUR IDEA BE BETTER OR FURTHER DEVELOPED?

Brand Building:

- Building a strong brand identity around the concept of mushroom burek as a delicious and sustainable food option. This could include creating engaging marketing materials, developing a cohesive brand image, and establishing a presence on social media platforms to connect with consumers and build brand loyalty.

Quality Assurance and Scalability:

- Ensuring consistency in product quality and scalability as demand grows. This may involve implementing standardized production processes, sourcing high-quality ingredients consistently, and investing in equipment and infrastructure to increase production capacity while maintaining product integrity.

To implement these developments successfully, resources such as financial investment for marketing and expansion, access to a reliable supply chain for ingredients, innovation in product development, and a dedicated team passionate about the concept are essential. Additionally, market research and consumer feedback should inform decision-making to adapt and refine strategies to meet evolving consumer preferences and market trends.



FINAL PITCH

In this project, I've come up with an excellent idea to replace meat in burek with mushrooms.

I immediately set out to create this alternative healthy burek.

Firstly, I sourced high-quality ingredients for this alternative. Once I gathered all the necessary components, I began preparing the dough and then the filling, which included mushrooms.

After completing the burek preparation, I simply baked it, resulting in the final product. I am extremely pleased with my idea and its implementation, believing it to be highly impressive.

By introducing the concept of mushroom burek, I address the issue of the unhealthy nature of meat burek and provide an alternative solution that is beneficial for vegetarians, vegans, and enthusiasts of both burek and mushroom dishes.

BUSINESS MODEL CANVAS

Key Partner

"Local suppliers for sourcing quality ingredients."

Key Activities

"Acquiring necessary ingredients"

Burek preparation

Optimization of the preparation process"

Key Resources

"Ingredients and resources for their processing and acquisition."

Value proposition

"For one burek, I would say 10 euros, as I believe it is an exceptionally healthy food."

Customer relationship

"And good customers are satisfied with what they get for such a low price and high quality that I offer them."

Channels

"I have created an Instagram profile named 'GobiBur'."

BUSINESS MODEL CANVAS

Customer Segments

"Mainly, to keep customers satisfied with the quality and excellence of your product."

Cost Structure

"The price is primarily composed of ingredient acquisition costs, preparation expenses, as well as sales, marketing, and labor costs."

Revenue Streams

"I estimate that after deducting the costs of labor and production, the profit margin is around ten percent."



ENTRECOMP

The main EntreComp competences covered by implementing my idea include:

Spotting opportunities: Identifying the need for healthier fast food alternatives, I recognized an opportunity to address this issue by creating a mushroom burek as a nutritious and flavorful option.

Creativity: Developing the concept of mushroom burek involved creativity in substituting meat with mushrooms while maintaining taste and texture, offering a unique twist to traditional burek.

Taking the Initiative: Taking the initiative to pursue the idea, I sourced high-quality ingredients and experimented with recipes to bring the concept of mushroom burek to life.

Planning and Management: Efficiently managing resources such as ingredients, time, and equipment was crucial in the successful implementation of the idea.

Overall, implementing the idea of mushroom burek demonstrates entrepreneurial competences in identifying opportunities, creatively developing solutions, taking initiative, managing resources effectively, and solving problems in the context of fast food consumption.



SUSTAINABLE DEVELOPMENT GOALS



SDG GOALS

The creation of mushroom burek aligns with several Sustainable Development Goals (SDGs):

SDG 2: Zero Hunger:

- Offering mushroom burek promotes food security and ensures access to healthy diets for everyone.

SDG 3: Good Health and Well-being:**

- Mushroom burek provides a healthier option, reducing intake of processed meats and unhealthy fats, thus improving overall well-being.

SDG 12: Responsible Consumption and Production:**

- Mushroom burek encourages responsible consumption and production by using locally sourced, sustainable ingredients, reducing environmental impact from meat production.

SDG 13: Climate Action:

- Substituting meat with mushrooms lowers greenhouse gas emissions, supporting efforts to mitigate climate change.

SDG 15: Life on Land:

- Utilizing mushrooms reduces demand for animal agriculture, preserving biodiversity and ecosystem health.

In summary, mushroom burek contributes significantly to advancing various SDGs by promoting healthier food choices, sustainable consumption and production practices, and aiding climate action efforts through reduced emissions associated with meat consumption.

EXTRA CUT...

One particularly enjoyable moment for me was the tasting session of the final mushroom burek product.

After diligently following instructions and crafting each burek, I gathered to sample my labor.

My schoolmates were the testing bunnies. As we bit into the warm, savory bureks, there was anticipation and excitement. The aroma of freshly baked pastry and earthy mushrooms filled the room, eliciting smiles from everyone. With each bite, we exchanged nods of approval, savoring the delicious flavors and textures.

This moment allowed us to appreciate the outcome of our collective effort during the GG trainings, finding joy in the simple pleasure of good food shared among friends.







GROWING GREEN

CIRCULARITY IN VET



GOBIBUR

3. LT, GEPŠ PIRAN, SLOVENIA



Co-funded by
the European Union



GROWING GREEN

CIRCULARITY IN VET

M-TEA GROUP

Growing Green: Fostering green entrepreneurial mindsets
based on the circular economy and green capital concepts
in VET education

Acronym: Growing Green

2021-1-DK01-KA220-VET-000024955

October 2023

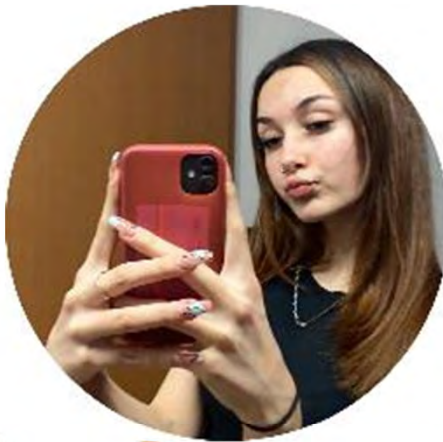


Co-funded by
the European Union

THE TEAM

Our team consists of five people. Two in the team are 18-years old and the other three are 17-years old.
Our tutor is Tina Kariž.

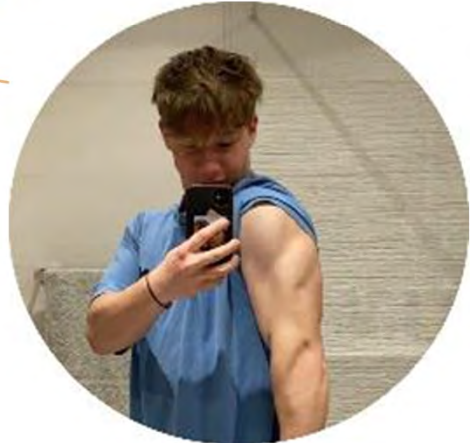
We love doing everything for our project and we love to work in teams.



Kim Kos, 17y



Filip Sluga, 18y



Matic Pobega, 17y



Martin Rutar, 17y



Žan Matija Šuligoj, 18y

MENTOR

Our mentor is Tina Kariž.
She gave us all the support we needed and
she gave us all the rules for everything how
to do it and when.
We loved working with her.

COMPANY

We are a company making CBD tea.
We got the inspiration from Kanabi cbd who
are also making CBD teas.

We want to help people who are in a lot of
stress or who have big problems falling
asleep.



An illustration of a person from the waist down, wearing a light green shirt, red pants, and dark blue shoes. They are holding a large yellow circle with blue lines that form a stylized figure or shape. The person is walking towards the right.

SUMMARY OF THE PROJECT IDEA

Our product idea is CBD teas who will have different scents and taste.

Its a tea that will make you sleep better and also to not have that much stress.



THE PROBLEM

- Raw material sourcing: Difficulty in obtaining high-quality and reliable raw materials necessary for producing CBD teas can affect product consistency and quality.
- Regulatory compliance: Since CBD products are often subject to strict regulations, changes in legislation or uncertainty about regulations can impact production, promotion, and sales of products.
- Promotion and awareness: Lack of awareness about the benefits of CBD teas among consumers can make it challenging to promote and market them, particularly due to stigma and ambiguity surrounding hemp products.
- Competition: In a continuously growing market for CBD products, the company may face competition from other CBD tea manufacturers. The challenge is to ensure that the product stands out and attracts consumer attention.

IDEAS & OPPORTUNITY

WHICH IDEAS CAME OUT?

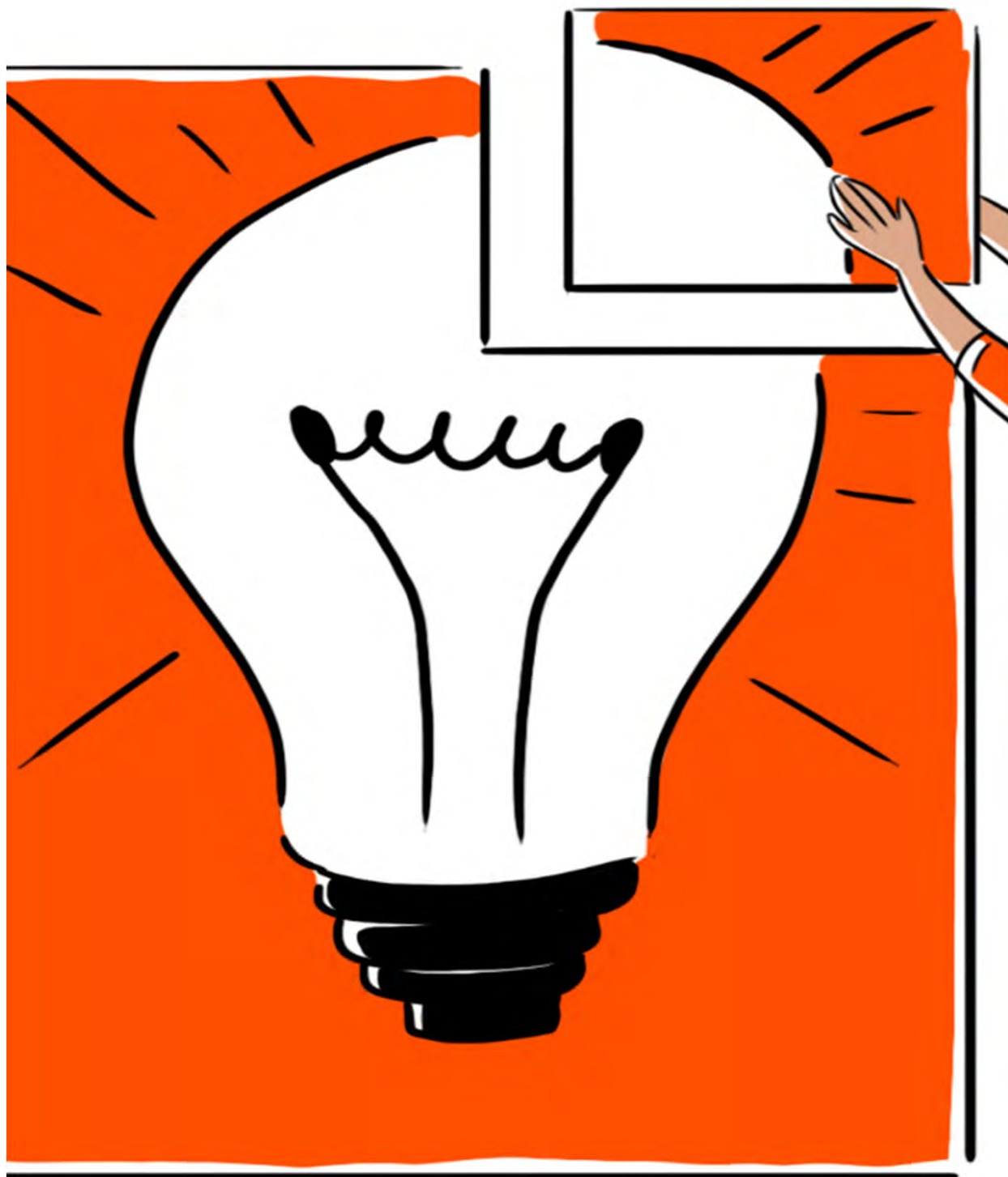


CBD teas

CBD creams with
scent

etheric oils from
CBD





THE BEST IDEA

We picked the cbd teas production because we have a strong interest in holistic health practices and natural remedies. CBD tea aligns with this interest as it is often perceived as a natural and herbal solution for various health issues.

We believe in the potential health benefits of CBD, such as its anti-inflammatory, analgesic, and calming properties. We see an opportunity to provide these benefits to consumers through a consumable product like CBD tea.

THE ROADMAP

First thing was to talk about everyone's desires, additional ideas around the common idea of cbd tea production.

When we checked that, all of our ideas about how develop our primary business idea, we reached the point, when everyone was willing to contribute and work on it..

The next step was to find where to get our CBD from. We were trying to get together with the company in our town.



Done that, we conducted a market research among students of our school to understand the demand for CBD products, especially CBD tea. We wanted to identify the target audience and their preferences, including flavor preferences, packaging preferences, and pricing sensitivity.



THE ROADMAP

Next step was to get the money, to invest in our idea. We made shares for people that want to help our business to grow.



Develop a range of CBD tea products, considering different flavors, CBD concentrations, and packaging options.



Our idea was to pack the tea in paper bags and label them with specification and our logo!



RESOURCES

High-quality CBD extracts sourced from reputable suppliers. This is the main ingredient in CBD tea products.

Premium-quality tea leaves, such as green tea, black tea, or herbal tea blends, depending on the product offerings.

Packaging materials such as tea bags, sachets, or loose-leaf packaging, along with outer packaging for branding and protection.

Equipment for blending, processing, and packaging tea products, including tea mixing machines, filling machines, and packaging equipment.

Resources for legal and regulatory compliance, including legal counsel, regulatory consultants, and compliance software/tools.


Resources for branding and marketing efforts, such as graphic designers, marketing agencies, content creators, and social media managers.

Resources for establishing distribution channels, including partnerships with distributors, wholesalers, retailers, or e-commerce platforms.

Skilled labor and staffing for various roles, including production, quality control, marketing, sales, customer service, and administrative tasks.



THE OBSTACLES

OBSTACLES	SOLUTION
<p>Lack of Innovation</p> 	<p>Encourage a culture of creativity and innovation within the team. This can involve implementing brainstorming sessions, creating cross-functional teams.</p>
<p>Poor Communication</p>	<p>Improve communication channels within the team by utilizing tools such as project management software, regular team meetings, clear documentation, and fostering open-door policies.</p>
<p>Financial Constraints</p>	<p>Explore alternative funding options such as loans, grants, or partnerships, prioritize revenue-generating activities, and maintain a strong focus on financial planning and budget management</p>
<p>Market Saturation or Decline</p>	<p>Diversify offerings by exploring new markets, developing innovative products or services, expanding into complementary industries, or</p>

POTENTIAL...

HOW COULD YOUR IDEA BE BETTER OR FURTHER DEVELOPED?

Product line expansion:

Add new flavors or CBD-infused products, requiring market research, ingredient sourcing, and product development.

Mobile app development:

Create an app for customer engagement with personalized recommendations and exclusive offers, working with app developers for design and maintenance.

Retail partnerships:

Form collaborations with retailers to expand distribution, involving relationship building, negotiation, and product availability.

International expansion:

Explore opportunities in new markets, conduct research, navigate regulations, and establish distribution networks.

Sustainability initiatives:

Implement eco-friendly packaging and sourcing practices, communicate efforts to customers, and track impact on the environment.



FINAL PITCH

M-TEA GROUP is a provider of high quality CBD teas. Our products are carefully formulated to deliver the benefits of CBD in a pleasant and effective way.

With a focus on innovation and well-being, we want to offer unique CBD-based solutions to improve the well-being of our customers.

BUSINESS MODEL CANVAS

Key Partner

CBD suppliers
Tea producers
Distribution partners
Retail partners
Research and development partners
Marketing and advertising partners

Key Activities

Product development
Quality control
Marketing and branding
Distribution and sales

Key Resources

Premium quality CBD
Experienced team
State-of-the-art production facilities
.Brand reputation and partnerships

Value proposition

Premium quality
Innovative formulations
Customer well-being
Trusted brand
Sustainable and ethical sourcing

Customer relationship

Personalized customer service
Customer feedback
Loyalty programs
Educational content
Community engagement

Channels

E-commerce website
Retail partnerships
Social media marketing
Influencer collaborations
Email marketing

BUSINESS MODEL CANVAS

Customer Segments

Health-conscious individuals
Stress and anxiety sufferers
Wellness enthusiasts
Tea lovers seeking new experiences
Athletes and fitness enthusiasts:

Cost Structure

Product manufacturing costs
Packaging and labeling
Distribution and logistics
Marketing and advertising expenses
Research and development

Revenue Streams

Direct sales to consumers
Wholesale partnerships
Subscription services
Corporate collaborations
Online marketplaces



ENTRECOMP

Some key competences covered by implementing the idea of M-TEA GROUP include:

Ethical and sustainable thinking
Valuing ideas
Mobilising resources
Planning and management

These competences are vital in ensuring the success and growth of our business in the competitive CBD tea market.



Questa foto di Autore sconosciuto è concesso in licenza da CC BY

SUSTAINABLE DEVELOPMENT GOALS



SDG GOALS

The idea of M-TEA GROUP aligns with several Sustainable Development Goals (SDGs), particularly:

Goal 3: Good Health and Well-being - By offering CBD teas formulated for well-being, the company contributes to promoting good health and supporting overall wellness among consumers.

Goal 9: Industry, Innovation, and Infrastructure - With a focus on innovation in CBD-based solutions, M-TEA GROUP contributes to advancements in the industry and encourages the development of new products that address consumer needs effectively.

EXTRA CUT...

With low Lego bricks, we had fun as we could visualize our entrepreneurial plan for the future with the bricks. In a fun way, we merged all the ideas and discussed how we see our company in the future.

This proved that we can also have fun while working and that work is still effective our work in the company proceeds in a fun way because we believe that a lot can be accomplished through fun.





GROWING GREEN

CIRCULARITY IN VET



M-TEA GROUP

3.LT GEPŠ PIRAN, SLOVENIA



Co-funded by
the European Union



GROWING GREEN

CIRCULARITY IN VET

MECANIZADA

Growing Green: Fostering green entrepreneurial mindsets
based on the circular economy and green capital concepts
in VET education

Acronym: Growing Green

2021-1-DK01-KA220-VET-000024955

October 2023

Lead Result: No editors



Co-funded by
the European Union

The compendium has been produced by the project partners in the scope of the Erasmus+ project **Growing Green: Fostering green entrepreneurial mindsets based on the circular economy and green capital concepts in VET education.**

Coordinator of the PR: ilmiolavoro

Coordinator team members: Gorka Azkarate and Julen Oskoz

Partner 1: XABAT EIZMENDI

Partner 2: XABIER IZAGIRRE

Partner 3: EKAITZ TABERNA

Partner 4: ENEKO INDO

Partner 5: HODEI GUERRA



Enjoy and play to create a beautiful and healthy world!

This compendium will be published under a Creative Commons licence, non-commercial share-alike.

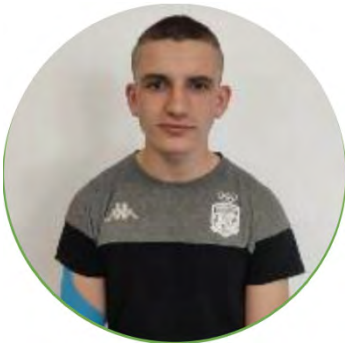


Disclaimer: The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

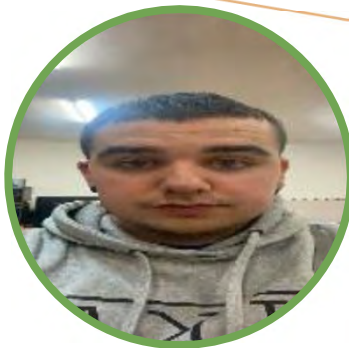
THE TEAM

We are a group of electromechanical maintenance students from Salesianos Urnieta. We are between 17-19 years old, our dear tutors are called GORKA AZKARATE and JULEN OSKOZ. Our experience doing this project has been rewarding because at the time of doing all the work we put to test our abilities.

- .
- .
- .
- .
- .
- .
- .



xabat- 17



ekaitz-17



xabier-18



eneko-17



hodei-19

MENTOR

JULEN: He has helped us in the mechanical and assembly part

NERE: He has helped us in the marketing and business part

IBAN eta PEIO: They have helped us in the electrical part.

- .
- .

COMPANY

We went to the company IRIZAR, which is a company that makes all kinds of buses and is part of the social economy since it is a cooperative, the workers are the owners of the company.



An illustration on the left side of the page shows a person from the waist down, wearing a light green shirt, red pants, and dark blue shoes. They are holding a large yellow circle with both hands. Blue lines, resembling a mechanical path or a drawing, are drawn across the yellow circle. A thin vertical orange line runs down the page, separating the illustration from the text.

SUMMARY OF THE PROJECT IDEA

Our product is aimed at school children, to train students mechanically, riding with pulleys, chains and gears. With good products we give students the opportunity to learn more easily and it will help them to improve their mechanical work.

With our product we want to introduce a new teaching style to teachers. Because our product would greatly facilitate the teaching of mechanical training classes for students.



THE PROBLEMS

Lack of technical knowledge: Many students may lack basic technical knowledge in mechanics. A trainer can provide a solid foundation of knowledge that allows them to understand the fundamental principles and theories behind mechanical systems.

Lack of practical skills: Often, students may have difficulty applying theoretical concepts in practical situations. A mechanical trainer can provide hands-on training and guidance to help students develop skills in working with tools, machinery and equipment.

Challenges in problem solving: Problem solving is a crucial skill in mechanics. Students may face complex problems that require a systematic and analytical approach. A trainer can teach them effective methods for identifying, analyzing and solving mechanical problems.

Workplace safety: Working with mechanical machinery and equipment carries potential safety hazards. A trainer can educate students about proper safety practices and how to prevent accidents in the workplace.

IDEAS & OPPORTUNITY

WHAT IDEAS CAME UP?

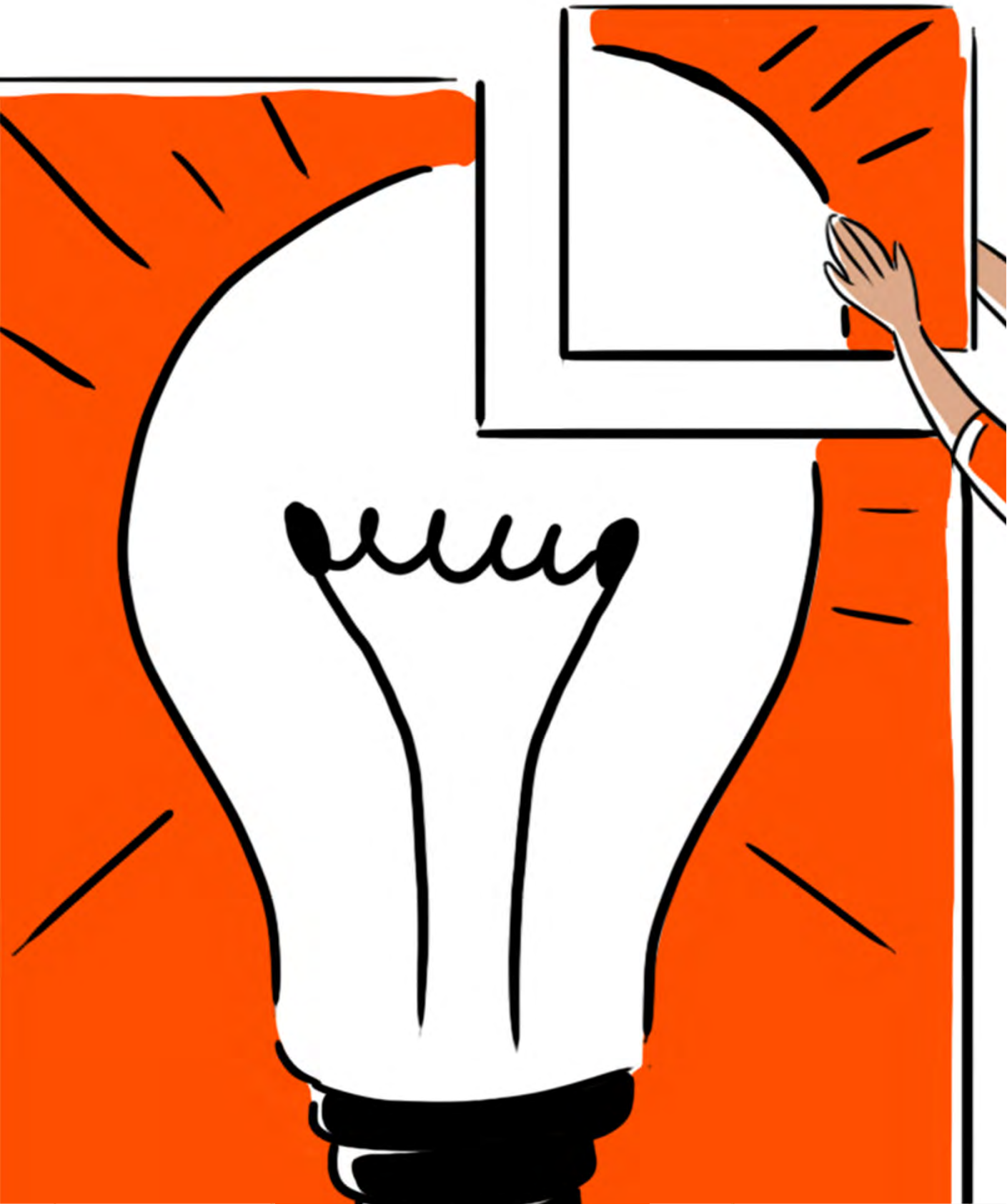


Use the machines that are out of order and reuse the parts.



Use renewable energies to power the engine.



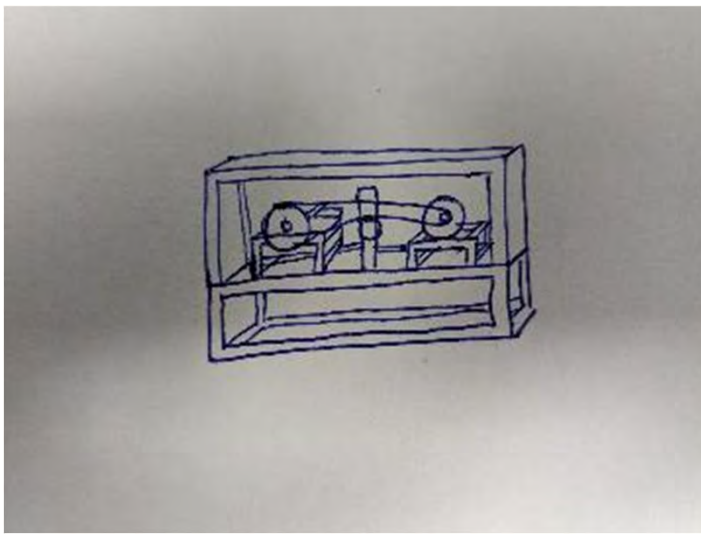


REUSED PARTS

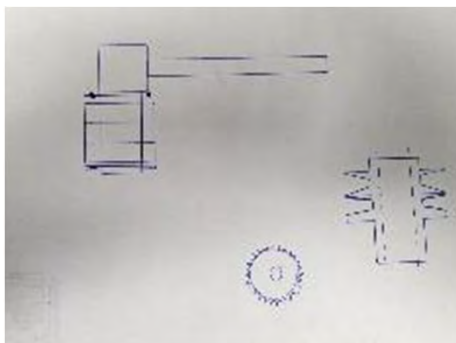
Most of the parts we use to build our project are going to be taken from other machines that are not going to run anymore, This way we save money and a lot of energy..

THE ROADMAP

The first thing we did was to make a design of the mechanized table.



Then we made a list of the parts we needed to make the project.

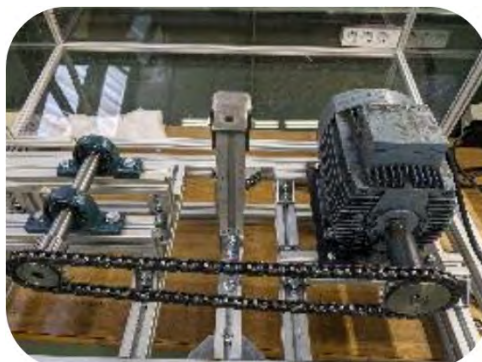


THE ROADMAP

Third, the parts we planned we got off the milling machine or we made them.



Finally, we set up the project.



RESOURCES

The parts that we extracted from the milling machine (shafts, gears, sprockets, chains, pulleys, the motor...).

To extract the parts we had to use many tools from the workshop (screwdrivers, wrenches, Allen key extractors...).

For the parts we didn't have we used the lathe and the milling machine and the welding machine to make them. The school paid us for the missing parts (bearings and couplings).



THE OBSTACLES

OBSTACLES	SOLUTION
On Mondays and Tuesdays we had to go to the company's.	The other days we work at 100 percent.
Lack of material.	We look for the parts in the workshop.
The motor was three-phase	We had to put a capacitor on the motor to convert it to single phase.
In the gear mode it was not possible to set the motor in the same direction as in the others.	We had to turn the motor to make it work.



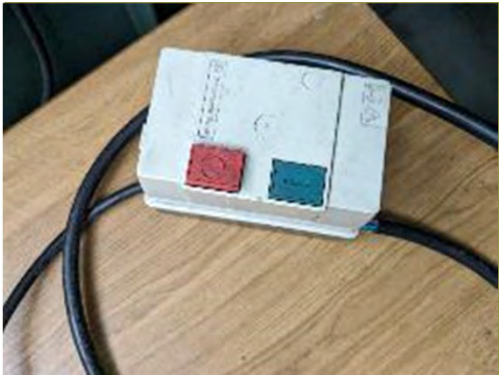
POTENTIAL...

¿HOW YOUR IDEA CAN BE IMPROVED OR DEVELOPED?

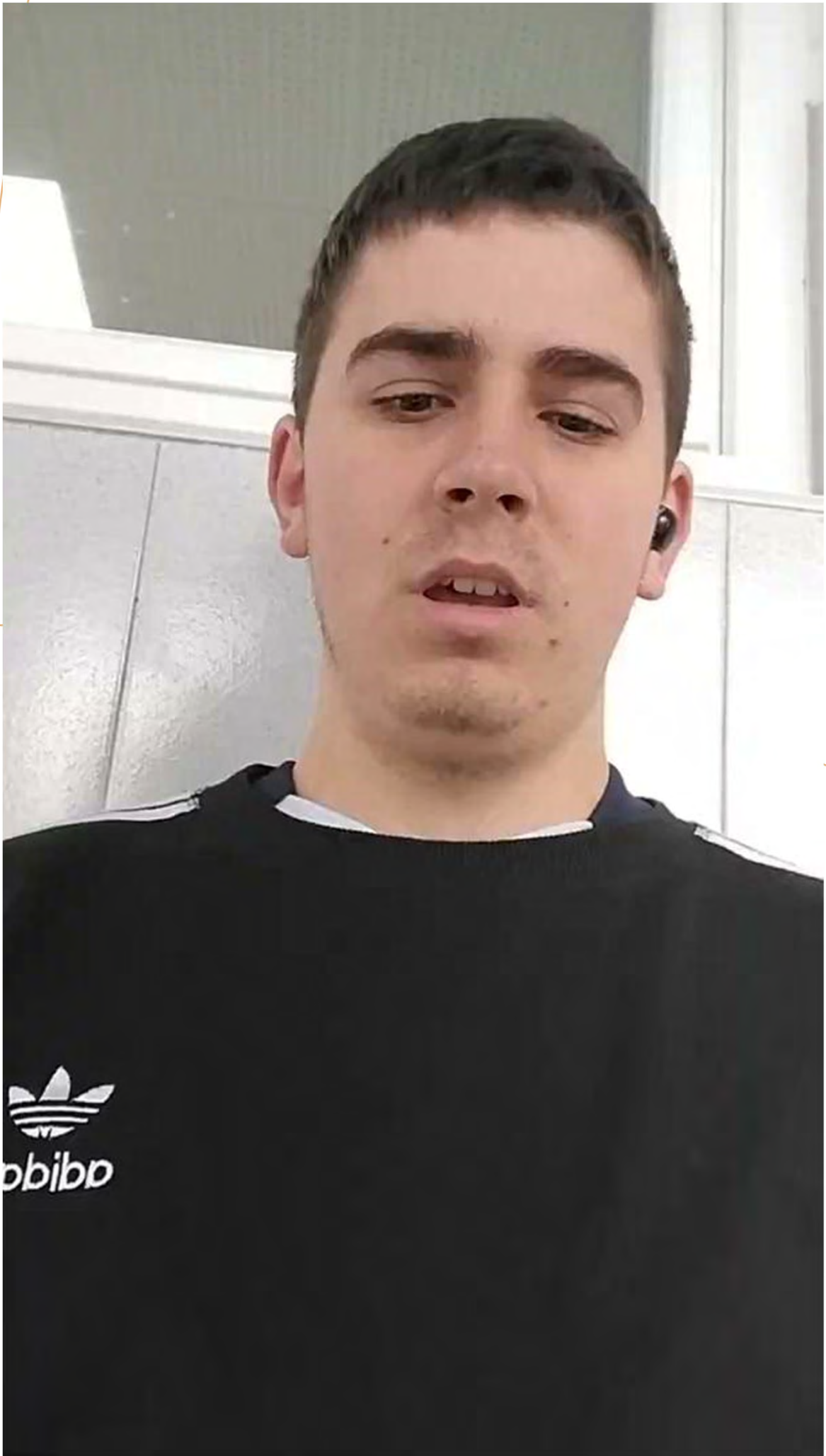
Ideas to improve our project

- Technology integration: Incorporating modern technology can enhance the training experience. This could include touch screens with customized training programs.
- High-quality, durable materials: Using high-quality, durable materials in the construction of the mechanical trainer will ensure longer life and reduced risk of breakdowns.
- Optimizing ergonomic design: Make sure the design of the mechanical trainer is ergonomic to provide maximum comfort during exercise. This involves considering the height, position of buttons, motor, adjustable pulleys and other features to suit a wide variety of users.





FINAL PITCH



BUSINESS MODEL CANVAS

Key Alliances:

Suppliers of recycled materials.

Educational institutions and training centers for collaborations in training programs.

Industry associations and environmental organizations to promote awareness of the circular economy.

Key Activities:

Design and manufacture of mechanical trainers.

Development of technical training programs.

Repair and maintenance service..

Key Resources:

Recycled materials for the manufacture of the mechanical trainer.

Design and engineering team for product creation and improvement.

Technical personnel for repair and maintenance.

Value Proposition:

Mechanical trainer designed for durability, repairability and manufactured from recycled materials.

Integrated training programs that teach technical skills and promote circular economy awareness.

Repair and maintenance service to extend the life of the mechanical trainer.

Customer Relations:

Customer service for inquiries and technical support.

Online community to share experiences and best practices in the use of the mechanical trainer.

Channels:

Direct sales to educational institutions and companies.

Distributors of technical training equipment.

Online platform for orders and inquiries.

BUSINESS MODEL CANVAS

Customer Segments:

Educational institutions (schools, universities) offering technical training programs.

Professional training centers.

Companies that offer training programs for employees.

Cost Structure:

Material costs for manufacturing the mechanical trainer.

Personnel costs for design, manufacturing, repair and maintenance.

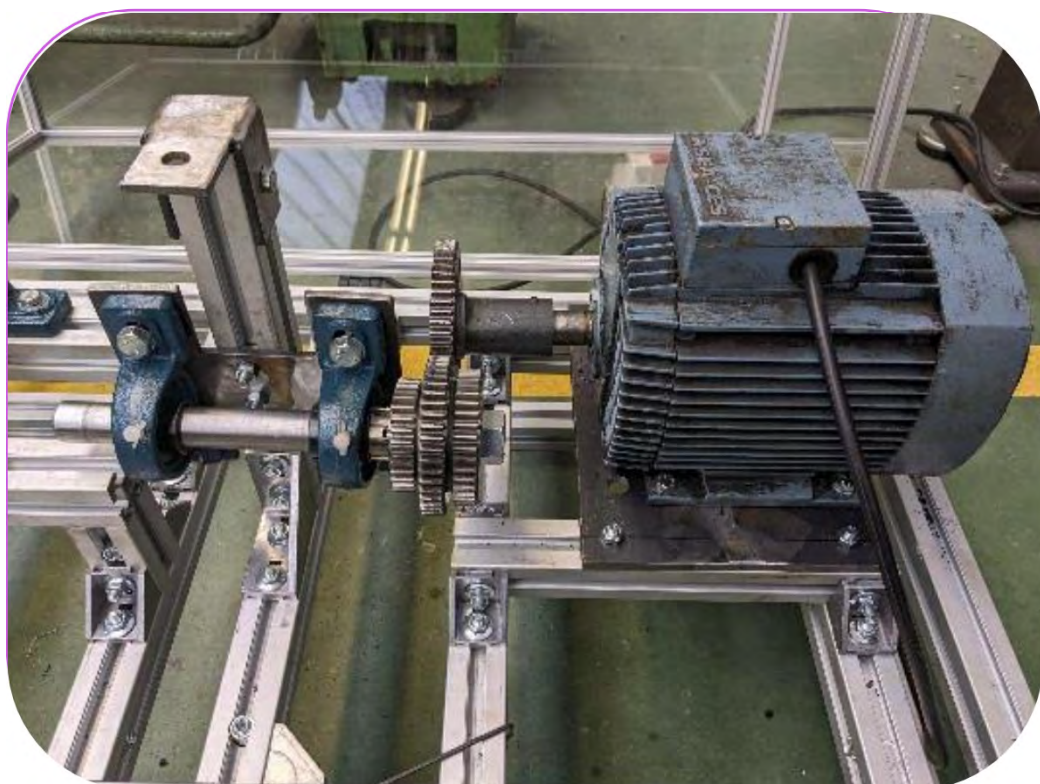
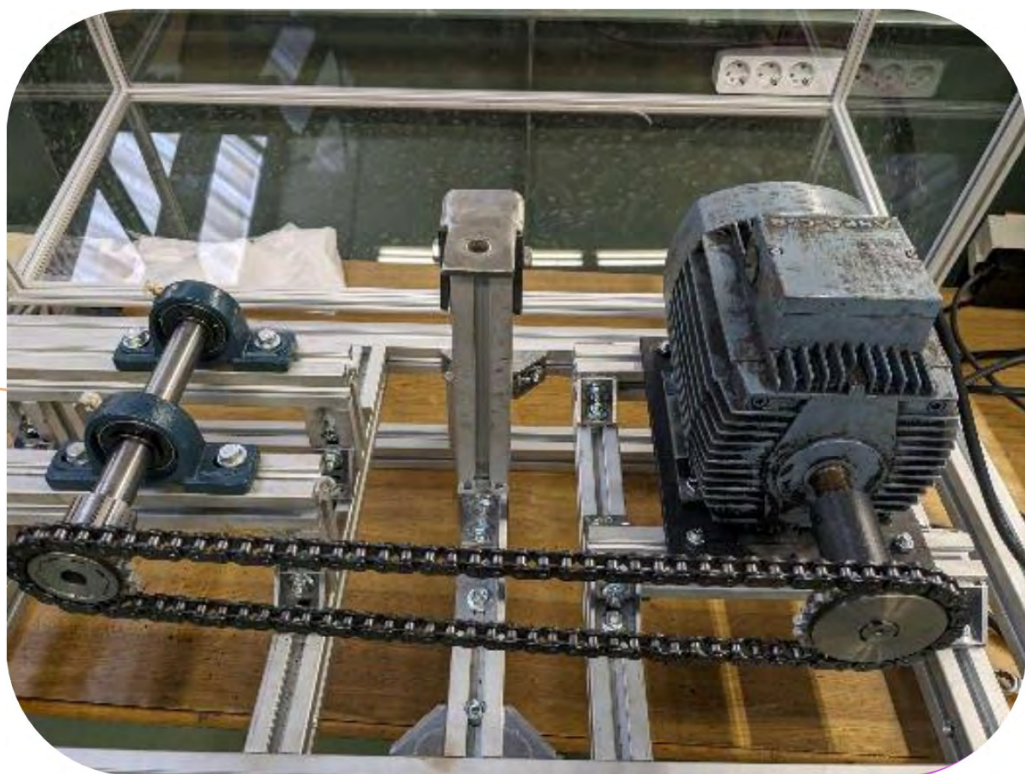
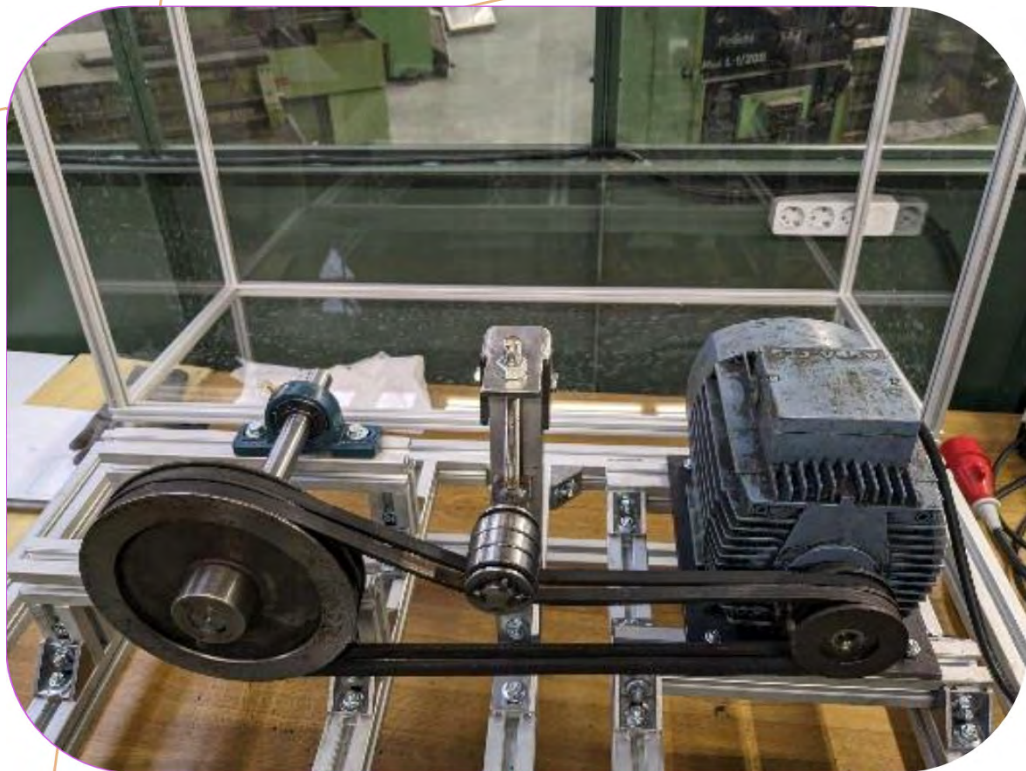
Marketing and promotion costs.

Revenue Sources:

Direct sales of mechanical trainers.

Repair and maintenance services.

License fees for the use of educational materials and training programs.



ENTRECOMP

In summary, the development and manufacture of a mechanical trainer can involve a variety of EntreComp competencies, from opportunity identification and creativity to planning, project management, market knowledge and quality management, among others.

We believe that the most important competencies involved in our project are creativity, planning and market management.



SUSTAINABLE DEVELOPMENT GOALS



Questa foto di Autore sconosciuto è concesso in licenza da CC BY

SDG GOALS

- **SDG 4: Quality Education:** The mechanical trainer can contribute to improving technical and vocational education by providing students with hands-on learning opportunities and skills in the mechanical field. This helps prepare students for employment and entrepreneurship in related industries.
- **SDG 9: Industry, Innovation and Infrastructure:** A mechanical trainer fosters innovation by providing an environment where students can learn and experiment with new technologies and methods in the mechanical field. It also contributes to the development of resilient and sustainable infrastructure by promoting efficient and safe manufacturing practices.
- **SDG 12: Responsible Production and Consumption:** By teaching students about maintenance, repair and optimization of mechanical systems, the mechanical trainer promotes resource efficiency and waste reduction. This encourages a more responsible approach to the production and consumption of mechanical goods.

EXTRA CUT...

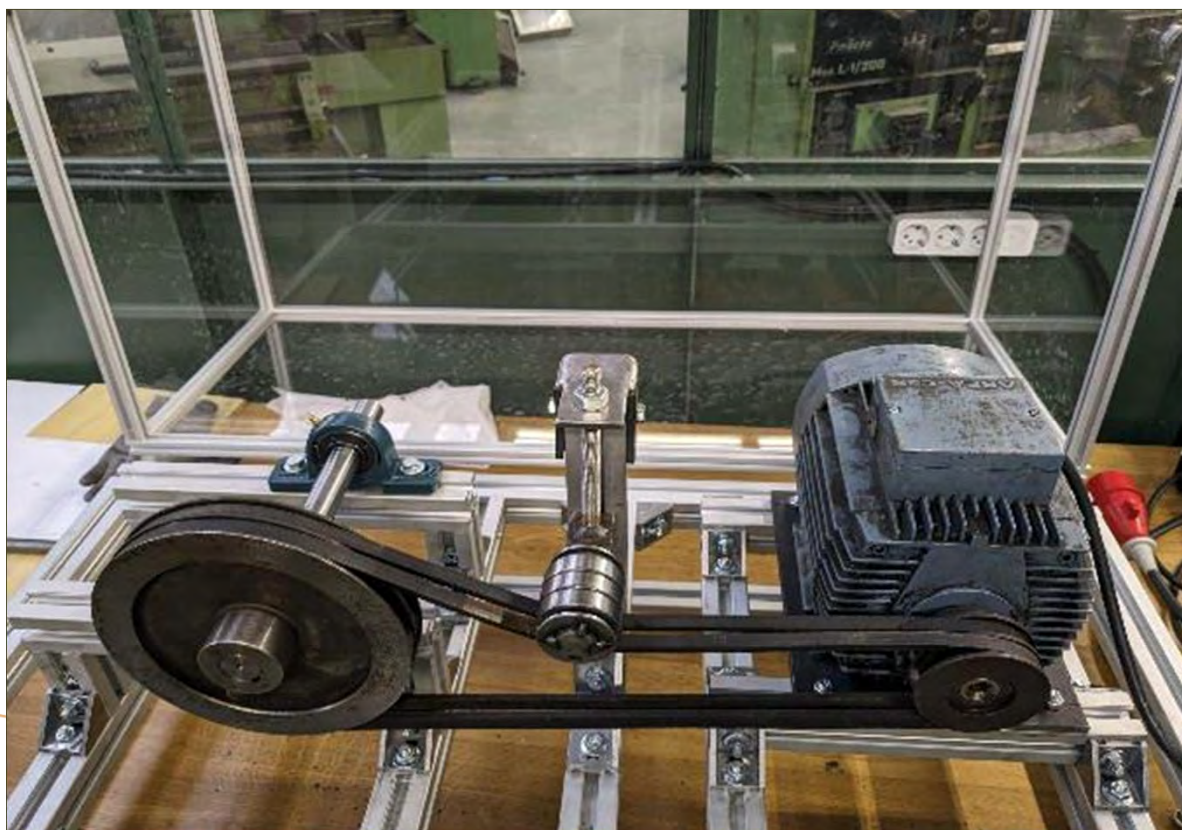
- Describe something fun that happened during the activities or something your team remembers fondly.
- The day we went to test the gear system we started it up and one gear rolled off.
- Then when we went to test the other chain system we started it up and the grease on the chain splashed out when it spun and stained a teammate's face.





GROWING GREEN

CIRCULARITY IN VET



MECHANIZED TABLE

ME-2 SALESIANOS



Co-funded by
the European Union



GROWING GREEN

CIRCULARITY IN VET

Solar Tech

Growing Green: Fostering green entrepreneurial mindsets
based on the circular economy and green capital concepts
in VET education

Acronym: Growing Green

2021-1-DK01-KA220-VET-000024955

October 2023

Lead Result: No editors



Co-funded by
the European Union

The compendium has been produced by the project partners in the scope of the Erasmus+ project **Growing Green: Fostering green entrepreneurial mindsets based on the circular economy and green capital concepts in VET education.**

Coordinator of the PR: ilmiolavoro

Coordinator team members: Ander Loyarte and Mari Jose Lasas

Partner 1...: Julen Redondo

Partner 2...: Unai Loyarte

Partner 3...: Ekaitz Gonzalez

Partner 4...: Gorka Pulido



Enjoy and play to create a beautiful and healthy world!

This compendium will be published under a Creative Commons licence, non-commercial share-alike.



Disclaimer: The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

THE TEAM

We are a team of students from Salesianos Urnieta studying second-year Automatic Electrical Installations. During the project process, our teachers helped us resolve some doubts about the prototype (Maria Jose with the photovoltaic panel, Txomin with the feeder, and Nere with the memories, the prototype, and other things).



Ekaitz
Gonzalez
18



Julen
Redondo
17



Gorka
Pulido
17



Unai
Loyarte
20

MENTOR

Nere Mendizabal = Helped us with the prototype idea and with the reports.

Maria Jose = Assisted us in choosing the appropriate photovoltaic panel for the prototype.

Txomin = Aided us with the feeders for the prototype.

COMPANY



An illustration of a person from the waist down, wearing a light green shirt, red pants, and dark blue shoes. They are holding a large yellow circle with blue lines that resemble a stylized 'S' or a path. The person is walking towards the right.

SUMMARY OF THE PROJECT IDEA

We are a company that builds tables with built-in power outlets powered by solar panels. The idea to generate revenue with our project would be to sell it to municipalities or companies that have open spaces suitable for our project, such as gardens, communal areas, squares, etc.



THE PROBLEM

The prototype, being made of Lego, was very easy to break, so we had to assemble it several times before presenting it in Eibar.

As we had to present and transport the prototype in Eibar, we couldn't make it the size we had planned. Therefore, we had to first create the electrical installation on some wooden boards and then use Lego pieces to create a model of how the tables and roof would look. Additionally, we chose to invest more time in the project installation rather than the model, so our idea wasn't fully clear.

Choosing the material. The boards were in poor condition, making it very difficult to work on them as they broke several times when trying to screw them, make holes, etc.

It was challenging to get the cardboard to stick to the wood because the wood was in poor condition, and the glues were not strong enough. We used several adhesives to stick it, and still, some parts did not adhere well.

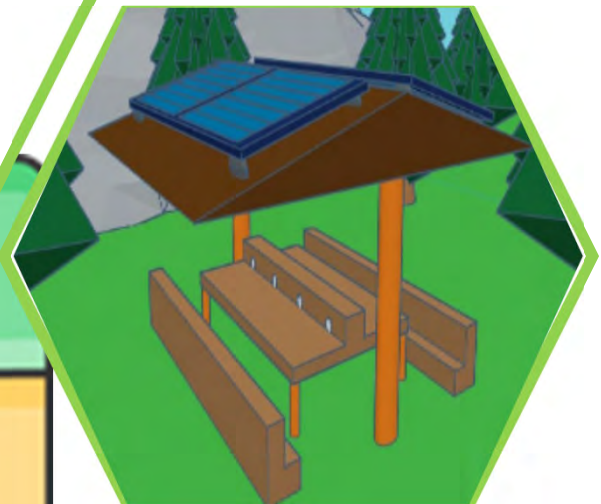
IDEAS & OPPORTUNITY

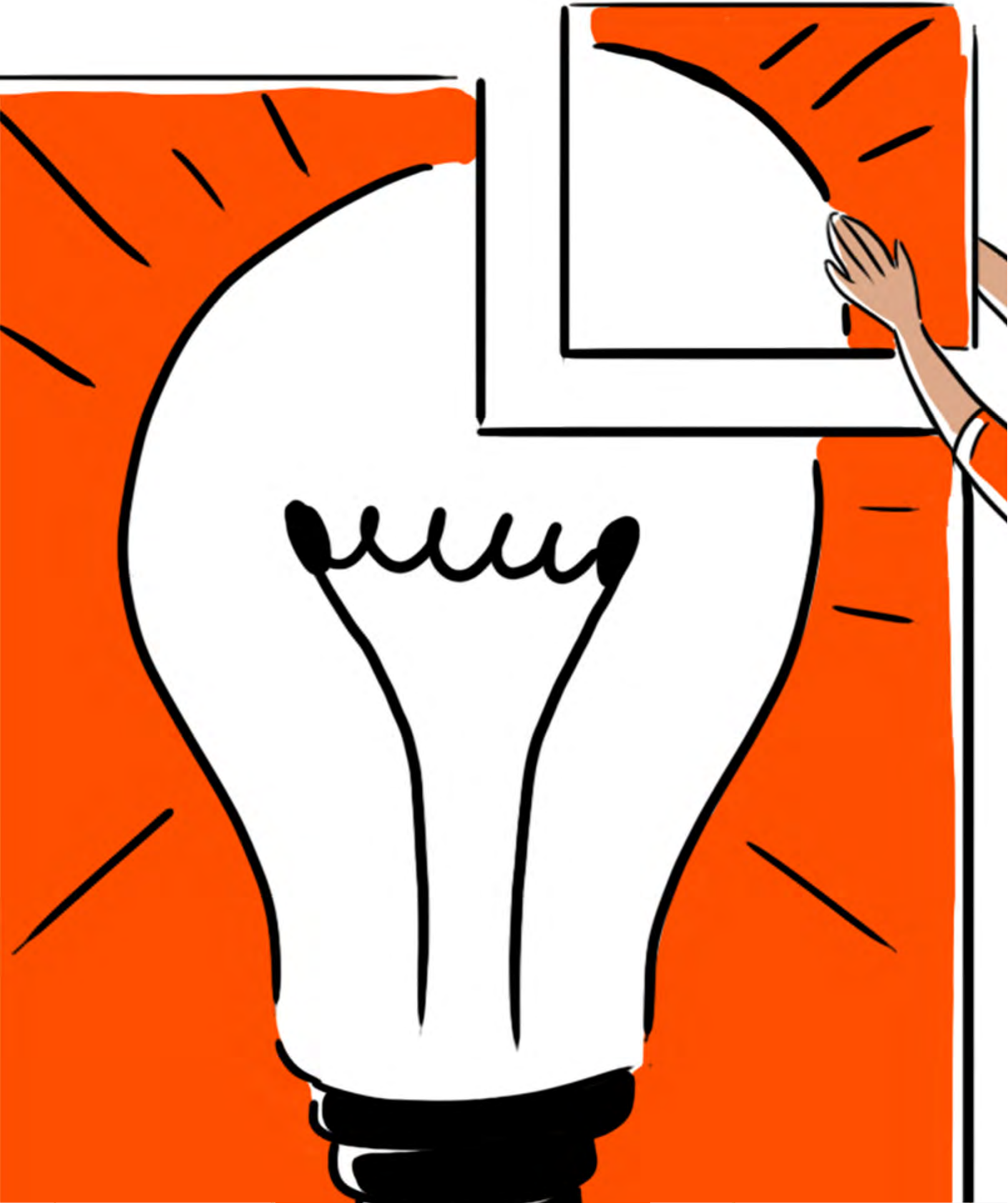
WHICH IDEAS CAME OUT?

Streetlights powered
by photovoltaic
panels.



A porch with tables,
where the roof has
solar panels that
power some power
outlets.



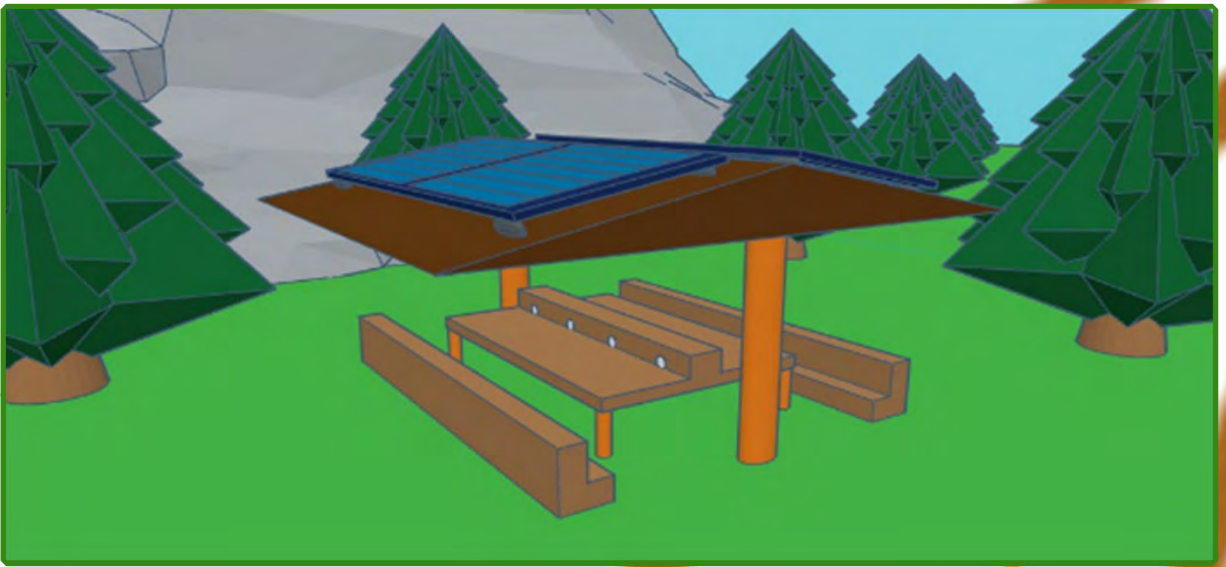


THE BEST IDEA

We chose the porch idea because it was a very innovative concept

THE ROADMAP

We made a prototype in Tinkercad to see how it would look in real life.



Then we decided to make the prototype out of Lego so that we could showcase our idea in Eibar and give people a rough idea of what the project would look like



RESOURCES

We have used various resources to move the project forward, such as:

- AI for some photos
- Legos
- Video games

Most of the materials were reused from last year's projects, except for the solar panel, regulator, and LEDs



THE OBSTACLES

OBSTACLES	SOLUTION
The Lego prototype kept falling apart.	We made the Lego prototype in Fortnite Lego.
The solar panels didn't receive solar energy when placed in a shaded area.	We added a battery to ensure functionality.
The paper wouldn't stick to the wood using spray adhesive.	We tried multiple types of glue.



POTENTIAL...

HOW CAN YOUR IDEA BE BETTERED OR
FURTHER DEVELOPED?

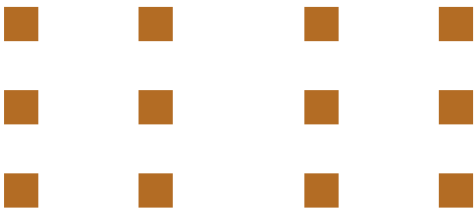
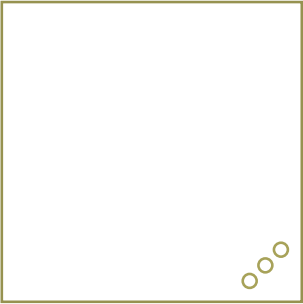
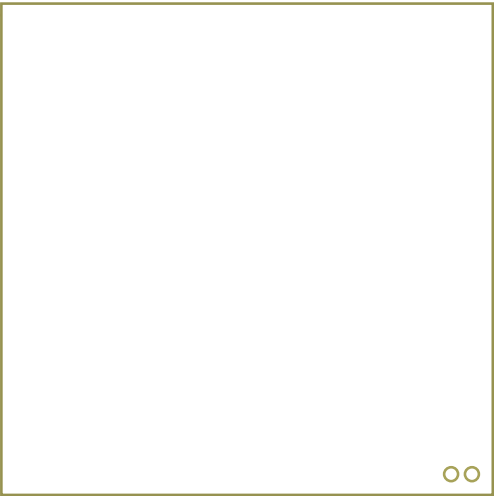
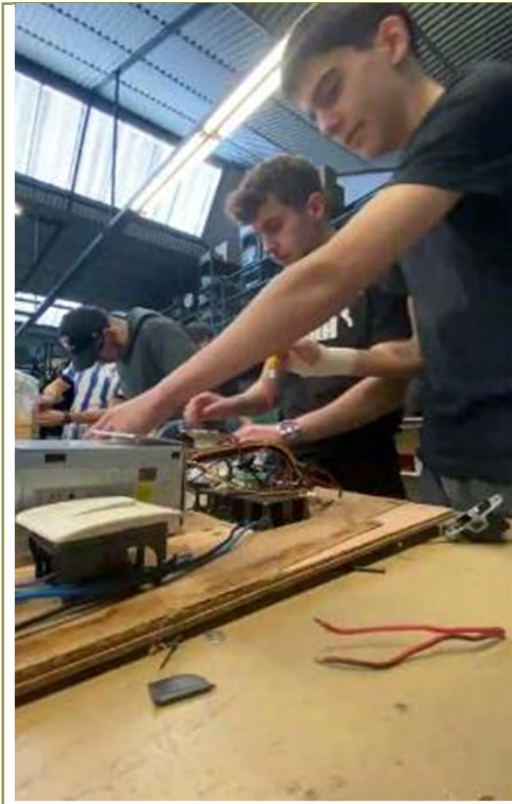
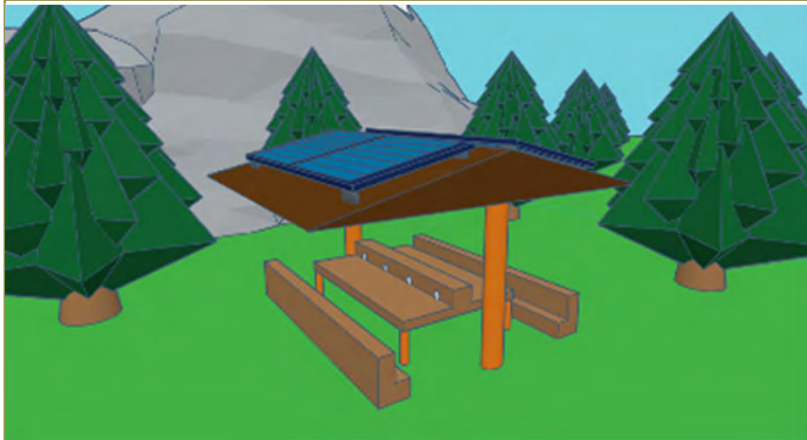
Universal assembly pieces.

Locally sourced wood.

Recycling bins on-site to keep the area clean.

Lighting and heating programmed to avoid
unnecessary electricity consumption.





FINAL PITCH

Imagine a study environment where students can immerse themselves in nature while working on important projects. At Solar Tech, we are transforming the learning experience with our desks equipped with electrical installations powered by solar panels. This not only provides a sustainable environment, but also allows students to connect with nature while charging their devices and harnessing solar energy. We are committed to student wellbeing and environmental sustainability. We are already transforming the study experience for students around the world. Would you like to know more about how Solar Tech is taking education to the next level of sustainability?

BUSINESS MODEL CANVAS

Key Partner

José Ramón
Abad

Lee Koo Yung

Key Activities

Study
Work
Read

Key Resources

Solar panels
Wood
Wiring

Value proposition

100% Renewable
Energy

Public Site

Customer relationship

Customer Service

Personal Profile

Channels

Pagina Web
Redes Sociales
Numero de Contacto

BUSINESS MODEL CANVAS

Customer Segments

Municipalities

Companies

Cost Structure

.Offices (Rent, water, gas...)

Staff salaries

Purchase of items (Solar panels, outlets...)

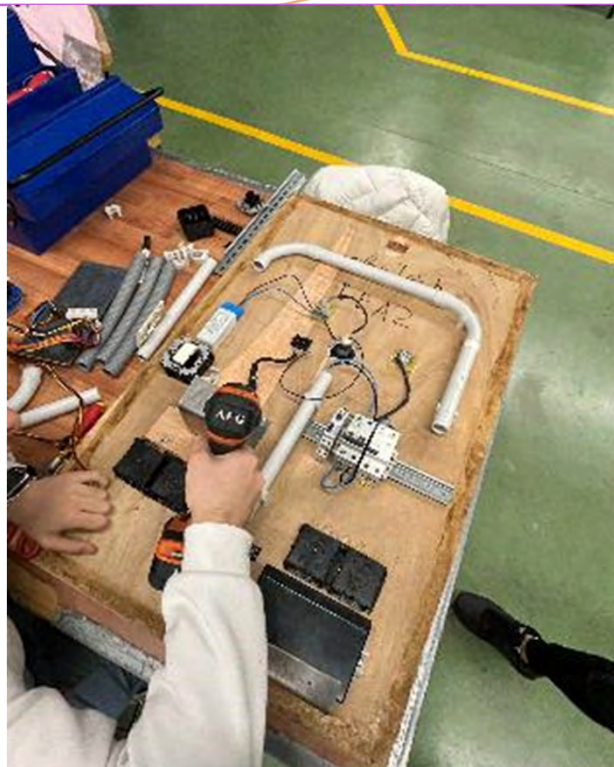
Revenue Streams

·
·

Sale of Solar Tech

Maintenance

Sale of Idea



ENTRECOMP

Opportunity recognition and creation: Identifying the market need for sustainable outdoor furniture with built-in power outlets and solar panels.

Initiative and self-awareness: Taking the initiative to develop and implement a project that addresses environmental sustainability and meets the needs of potential customers.

Mobilizing resources: Utilizing various resources, such as solar panels, to create innovative products that contribute to clean energy solutions.

Financial and economic literacy: Developing a business model to generate revenue by selling the solar-powered tables to municipalities and companies with suitable outdoor spaces.



Questa foto di Autore sconosciuto è concesso in licenza da CC BY

SUSTAINABLE DEVELOPMENT GOALS



Questa foto di Autore sconosciuto è concesso in licenza da CC BY

SDG GOALS

Did you covered with your idea some of the SDG goals?

Affordable and Clean Energy and 13. Climate Action: We have utilized these goals with solar energy and solar panels.

Sustainable Cities and Communities: We chose this goal because the project would be sold to municipalities, companies with available space, etc.

EXTRA CUT...

When we went to present our project in Eibar, most of the people who approached us ended up taking a photo with us wearing unicorn hats. The first person who wanted to take a picture with us was a man around 60 years old, and he wanted to do it with the unicorn hat on his head.

- .
- .
- .





GROWING GREEN

CIRCULARITY IN VET



SOLAR TECH

IEA 2 - Salesianos Urnieta



Co-funded by
the European Union



GROWING GREEN

CIRCULARITY IN VET

Green Wind

Growing Green: Fostering green entrepreneurial mindsets
based on the circular economy and green capital concepts
in VET education

Acronym: Growing Green

2021-1-DK01-KA220-VET-000024955

October 2023

Lead Result: No editors



Co-funded by
the European Union

The compendium has been produced by the project partners in the scope of the Erasmus+ project **Growing Green: Fostering green entrepreneurial mindsets based on the circular economy and green capital concepts in VET education.**

Coordinator of the PR: ilmiolavoro

Coordinator team members: Gorka Azkarate

Partner 1...: Borja Seco

Partner 2...: Lander Perez

Partner 3...: Alain Cid



Enjoy and play to create a beautiful and healthy world!

This compendium will be published under a Creative Commons licence, non-commercial share-alike.



Disclaimer: The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

THE TEAM

We are electromechanical maintenance students aged 17-18. Our tutor is Gorka Azkarate. Our experience has been very rewarding as we have done work that has pushed us to our limits and made the most of our time and abilities. Our role is that of partners, as our business idea is a cooperative.



Borja/18



Lander/17



Alain/17

MENTOR

Our mentors were the teachers of the program itself, who helped us in different areas:

Peio: Electrical circuits

Jesús: Electrical circuits and components

Iñigo: Additive manufacturing

Nere: Marketing and management

Gorka: Mechanics and infrastructure

Julen: Mechanics and infrastructure

COMPANY

In search of creating the best possible company, we visited Irizar to see from the inside how a cooperative company operates. We observed their work methods and methodologies



An illustration on the left side of the page shows a person from the waist down, wearing a light green shirt, red pants, and dark shoes. They are holding a large yellow circle with both hands. Blue lines, resembling a stylized path or a circuit, start from the bottom left and curve upwards and to the right, ending near the top of the yellow circle.

SUMMARY OF THE PROJECT IDEA

- Our project consists of a solar-powered fan utilizing a photovoltaic panel. The characteristics are the following:
- Lightweight for portability
- Durable materials to prevent damage
- Recyclable materials
- Renewable energy
- This idea arose after some time of contemplation and searching for a project that would help us to consume less electricity and fewer polluting energies. It also aligns with the concept of circular economy.



THE PROBLEM

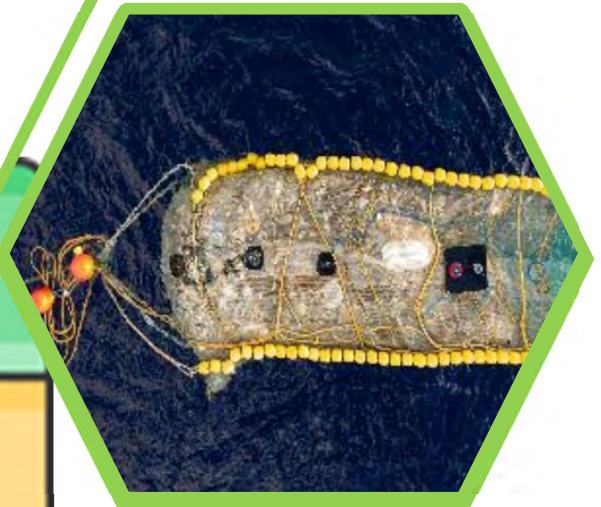
- **Access to Energy in Remote or Off-Grid Areas:** In regions where electrical infrastructure is limited or nonexistent, your fan provides a solar-powered cooling solution, which can be especially useful in warm or tropical climates.
- **Reduction of Energy Costs:** By relying on solar energy, users can decrease their electricity bills, which is beneficial for households, businesses, or communities seeking to save money on their operating expenses.
- **Resilience to Power Outages:** In areas prone to power outages or emergency situations, having a solar-powered fan can provide crucial relief during periods of extreme heat, improving the quality of life and safety of individuals.
- **Energy Sustainability:** By using solar energy, your fan contributes to reducing dependence on non-renewable energy sources such as fossil fuels, thereby helping to mitigate climate change and conserve natural resources.

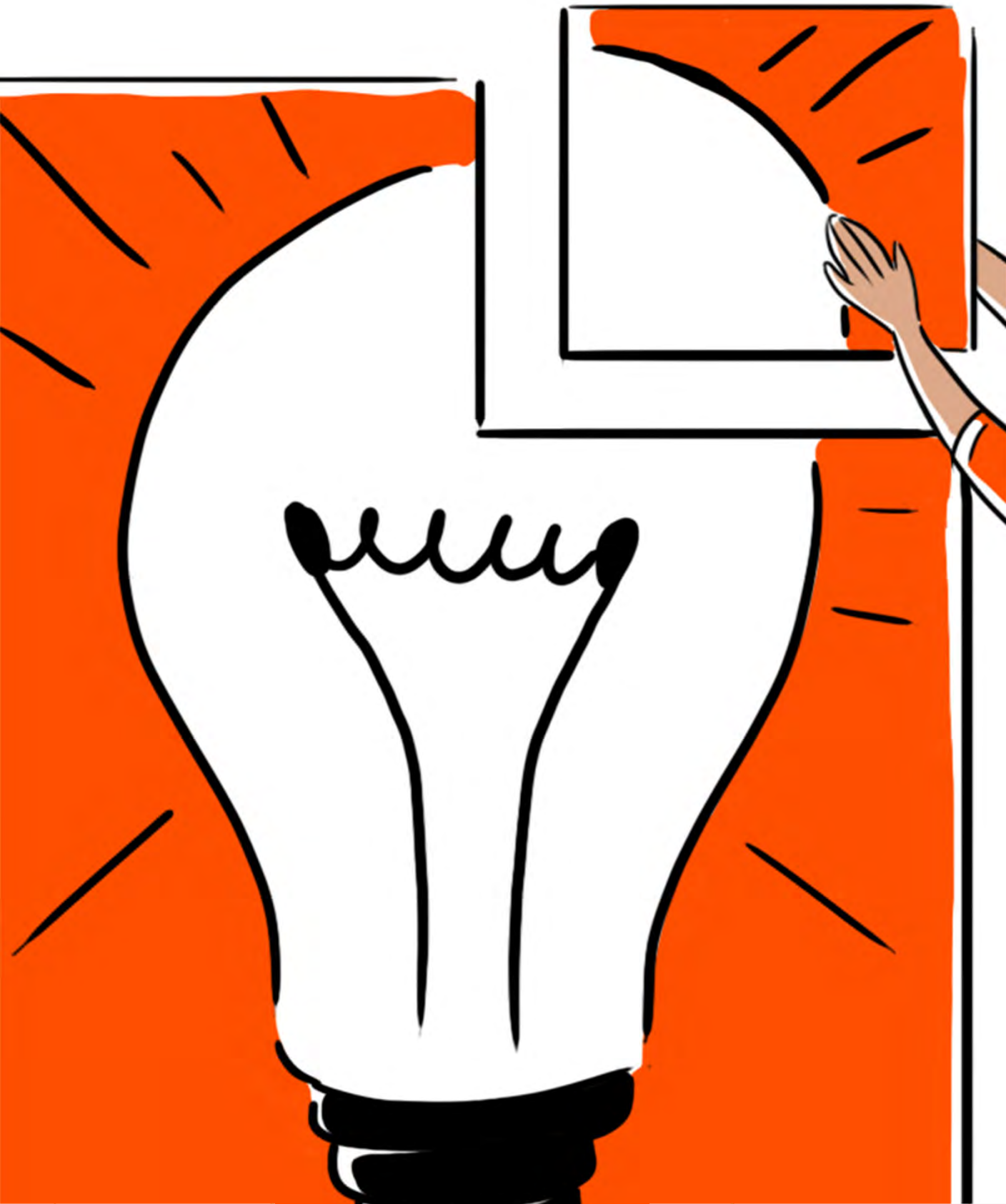
IDEAS & OPPORTUNITY

WHICH IDEAS CAME OUT?

Generating electricity with the wind energy produced by the fan

Collecting plastic material from the sea to later manufacture the fan's propeller.



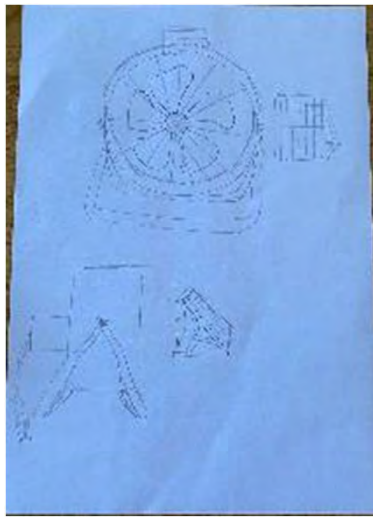


THE BEST IDEA

Our idea is to conduct clean-up operations to collect marine debris and then use that waste to manufacture the propellers of our fans. Additionally, we plan to utilize wind energy to power a generator, which will turn in provide electricity for the boat.

THE ROADMAP

The first step was to design the fan along with the solar panel.

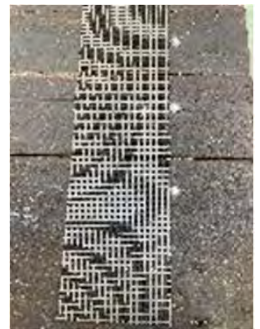


We began the manufacturing process by gathering all the materials we were going to use.



THE ROADMAP

Then, we divided the tasks among ourselves and began shaping the fan.



Finally, we completed the project.



RESOURCE S

We built the fan's structure using materials available in the workshop to make the most of the available resources. We used a 3D printer to create the propeller to minimize weight on the motor. The motor and the photovoltaic panel were purchased online to ensure their functionality at 100%



THE OBSTACLES

OBSTACLES	SOLUTION
The existing propeller was unsuitable due to its aerodynamics and weight	Ultimately, we decided to 3D print the propeller.
Difficulty in mounting the propeller, leading to prolonged problem-solving.	Eventually, we used washers, bearings, and a metal tube to support the propeller.
Motor burned out when connected to a 230V power line.	We had to purchase another motor and assemble it at the last minute.
Forgot to bring project brochures to the presentation in Eibar.	We had to print additional brochures at a stationery store in Eibar.



POTENTIAL...

HOW CAN YOUR IDEA BE BETTERED OR FURTHER DEVELOPED?

The project idea could be significantly enhanced by changing the material used to create the structure. To achieve this, we have considered collecting plastics discarded in the sea and then reusing these materials for manufacturing various parts of the fan, such as the propeller or the structure itself.

This is a bold idea that could contribute significantly to the environment by eliminating chemical processes in factories and thus avoiding pollution emissions.





FINAL PITCH

Did you know that solar energy is one of the cleanest and most abundant sources on the planet? And now you can harness it to keep your space cool and comfortable with our innovative solar fan!

Our fan utilizes photovoltaic technology to convert sunlight into energy, meaning it operates completely independently and sustainably. But that's not all; our lightweight and portable design make it perfect for any location, from your home to outdoor areas where access to the electrical grid is limited.

Furthermore, we are committed to environmental sustainability, so our fan is made with recyclable materials and contributes to the circular economy.

Join us in this energy revolution and make the sun your ally in maintaining a fresh and clean environment! Thank you for your attention!

BUSINESS MODEL CANVAS

Key Partner

- Grupo CMA CGM
- Town Hall
- Enerco
- Photovoltaic panel company
- Iron and steel metallurgy company
- Communication company

Key Activities

.Marine debris collection

- Production and manufacturing of recyclable products
- Marketing and advertising of products or services

Key Resources

- Ships
- Generators
- Solar panels
- Batteries
- Motor
- Infrastructure
- Cables

Value proposition

- Recyclable materials
- Renewable energy
- Ease of use

Customer relationship

- Social media
- website
- Environmental contribution websites
- Interlocutor advertising
- Newspaper and magazine publications

Channels

- Websites
- Social media
- Physical store

BUSINESS MODEL CANVAS

Customer Segments

People who enjoy being outdoors, whether camping or going to the pool...

Cost Structure

- Fan production
- Navigation expenses
- Salaries
- Advertising
- Utility expenses (electricity, water, gas)
- Machinery

Revenue Streams

The income will come from municipal grants, fan sales, and repairs.



ENTRECOMP

Creativity and Innovation:
Thinking creatively about how to harness solar energy to create a sustainable and efficient fan.

Decision-making and Risk-taking: Evaluating and assuming the risks associated with investing in technology and market uncertainty.

Teamwork Skills: Collaborating with a multidisciplinary team to develop and implement the project.

Communication and Empathy Skills: Effectively communicating with the team, investors, and customers, and understanding the needs and expectations of end users.

Achievement Orientation and Perseverance: Overcoming challenges and obstacles that may arise during the product development process.

Continuous Learning Ability: Adapting to technological changes and market needs to maintain the product's relevance and competitiveness.

We have thoroughly analyzed our project, and these are the key insights we have derived.



Questa foto di Autore sconosciuto è concesso in licenza da CC BY

SUSTAINABLE DEVELOPMENT GOALS



Questa foto di Autore sconosciuto è concesso in licenza da CC BY

SDG GOALS

Did you covered with your idea some of the SDG goals?

.SDG 7: Affordable and Clean Energy: By using solar energy to power the fan, you are directly contributing to this goal by providing a source of clean and renewable energy.

SDG 11: Sustainable Cities and Communities: Solar fans can be especially useful in areas where electricity is scarce or expensive. Contributing to the availability of clean energy solutions helps build more sustainable communities.

SDG 13: Climate Action: By using solar energy instead of fossil fuels to power the fan, you are reducing greenhouse gas emissions and helping mitigate climate change.

SDG 12: Responsible Production and Consumption: Promoting the use of solar energy and solar-powered products is a way to encourage more sustainable production and consumption practices.

EXTRA CUT...

Describe something funny that happened during the activities or something that your team remember with pleasure

The funniest experience during the assembly process happened two days before we had to present our project at a project fair in school. One of our classmates had the brilliant idea to connect a 12V motor to a wall socket, which supplies 230V. As a result, the motor sparked and burned out completely, rendering it totally useless.



**Insert a video recored during the
session**





GROWING GREEN

CIRCULARITY IN VET



GREEN WIND

ME-2 SALESIANOS URNIETA



Co-funded by
the European Union



GROWING GREEN

CIRCULARITY IN VET

Danbolina

Growing Green: Fostering green entrepreneurial mindsets
based on the circular economy and green capital concepts
in VET education

Acronym: Growing Green

2021-1-DK01-KA220-VET-000024955

October 2023

Lead Result: No editors



Co-funded by
the European Union

The compendium has been produced by the project partners in the scope of the Erasmus+ project **Growing Green: Fostering green entrepreneurial mindsets based on the circular economy and green capital concepts in VET education.**

Coordinator of the PR: ilmiolavoro

Coordinator team members: Julen Oskoz

Partner 1: Iker Barriola

Partner 2: Aimar Vilchez



Enjoy and play to create a beautiful and healthy world!

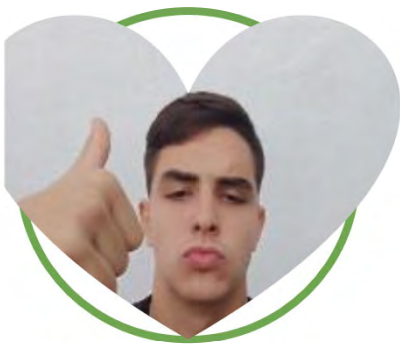
This compendium will be published under a Creative Commons licence, non-commercial share-alike.



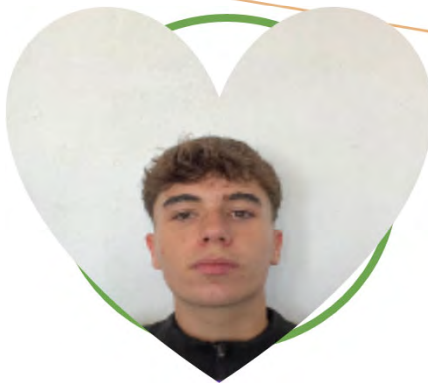
Disclaimer: The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

THE TEAM

We are Aimar and Iker, we are 18 years old and we are second year maintenance students, we have had to do a project for several subjects.



Iker Barriola
18



Aimar Vilchez
17



Mario Justin
20

MENTOR

The mentor of this project is Eneko Indo, a classmate of mine, and the creators of the company are Aimar Vilchez and Iker Barriola..

COMPANY

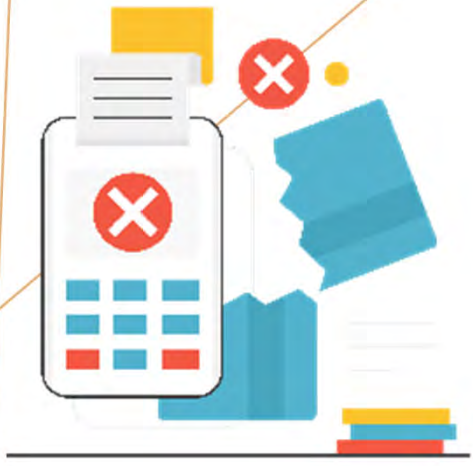
We went to visit the Irizar company, which is part of the social economy as it is a cooperative and has all kinds of buses.



An illustration of a person from the waist down, wearing a light green shirt, red pants, and dark blue shoes. They are holding a large yellow circle with blue lines that form a stylized figure or shape. The person is standing on a thin vertical line.

SUMMARY OF THE PROJECT IDEA

Our project is an automated danbolin for roasting chestnuts that works with a motor from a reused windscreen and reusable materials.



THE PROBLEM

Many people roasting chestnuts with a normal danbolin get very tired of turning them manually, so we have created a new automatic one so that your back and arms don't get tired.

When manufacturing normal danbolines, there are a lot of costs and a lot of pollution because they are not usually made of reusable materials compared to ours, our project can be easily reused and it is easy to fix the faults that the engine may have.

IDEAS & OPPORTUNITY

WHICH IDEAS CAME OUT?

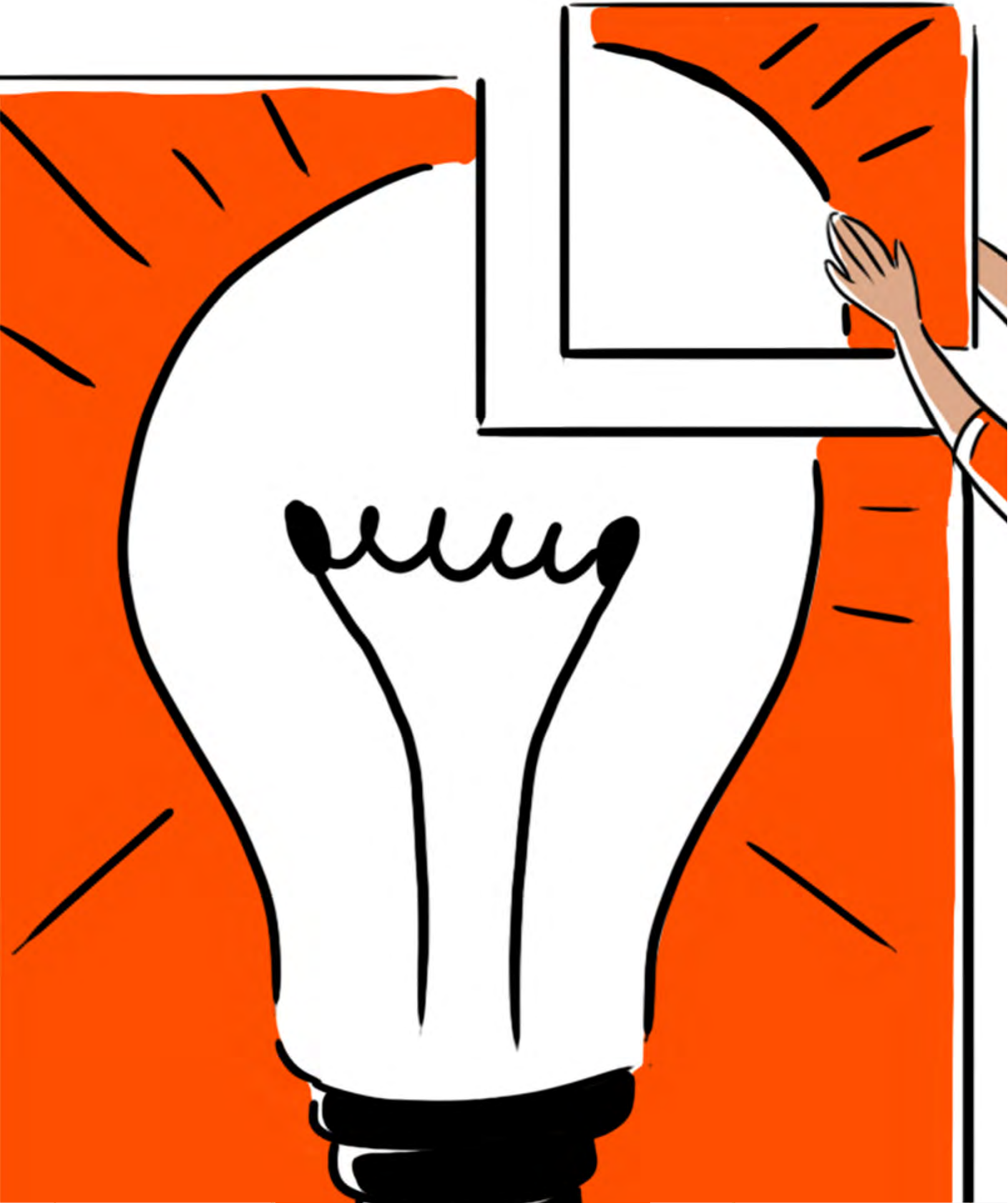


We had the idea
to make the
project with a
microwave
engine.



We had the idea
to do the project
with the engine of
a windscreen.





THE BEST IDEA

Our best idea has been to cover all the electrical part and put a push button to have everything safer and more organised, we put a push button more protected from fire

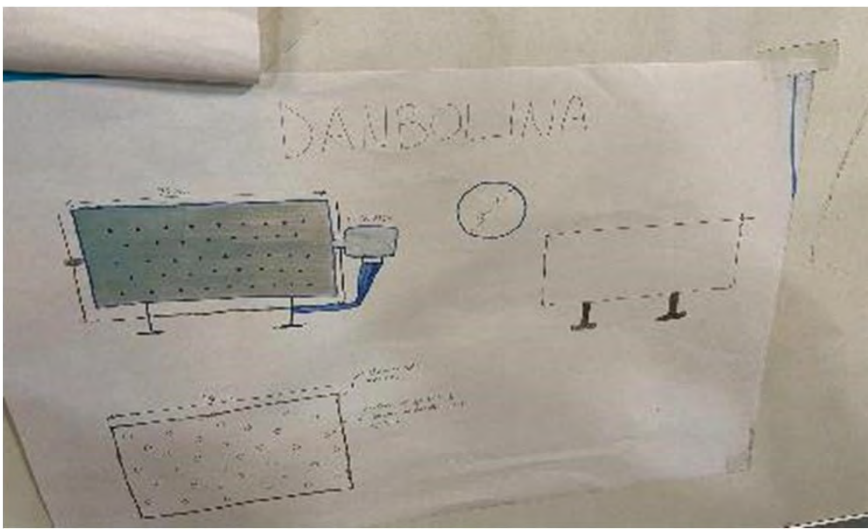
.

THE ROADMAP

The first thing we did when we found out about our project.

The first step was to talk to each other about how to do the project.

Then we started to draw up the plans



After finishing the plans we started to make the danbolin box.



THE ROADMAP

After making the box we started to make the danbolin.



Finally we put everything together and put the motor on the project so that the danbolin would turn automatically.



RESOURCE

- All the materials we have used, both the engine and the rest, are reusable and we have taken them from scrap.



THE OBSTACLES

OBSTACLES	SOLUTION
The engine power was not enough to make the danbolin turn.	Think of another new motor and go for it again.
The welding of the project was wrong	Re-welding everything to make it grip better
We were 3 people on the project but 1 of them has been out for 1 month and couldn't do anything.	Divide the work between the other 2 people
1 day before presenting the project we cut a motor cable and it was not working.	We reconnected all the cables as well as we could and it worked again.



POTENTIAL...

HOW CAN YOUR IDEA BE BETTERED OR FURTHER DEVELOPED?

We could set up a remote control to turn on the danbolin.

. We could put in some way of automatically recharging power.

We could move the engine a little further away from the fire to make sure there are no problems.





FINAL PITCH

Imagine a tantalising aroma wafting through the air, chestnuts roasted to perfection ready to be enjoyed anytime, anywhere. With our automated chestnut roaster, we've taken the tradition of roasting chestnuts to new heights of convenience and quality. Our innovative technology ensures that every chestnut is cooked evenly and deliciously, no matter the location or time. From street festivals to private events, our automated roastery offers an authentic and memorable experience for lovers of roasted chestnuts. Join us on this culinary adventure, where flavour and convenience are in every bite.

BUSINESS MODEL CANVAS

Key Partner

- Scrap yards in the surrounding area

- Landfill sites

- Scrap yards

Key Activities

- Collecting unused materials

- Collect car engines that do not work

Key Resources

- Recycled materials from the scrap yard

Value proposition

- Reusable materials

- Renewable energy

Customer relationship

- Advertising in the village

- Websites

- Teleshop

- Milanuncion

- Radio

Channels

- Web pages

- Teleshop

- Milanuncios

BUSINESS MODEL CANVAS

Customer Segments

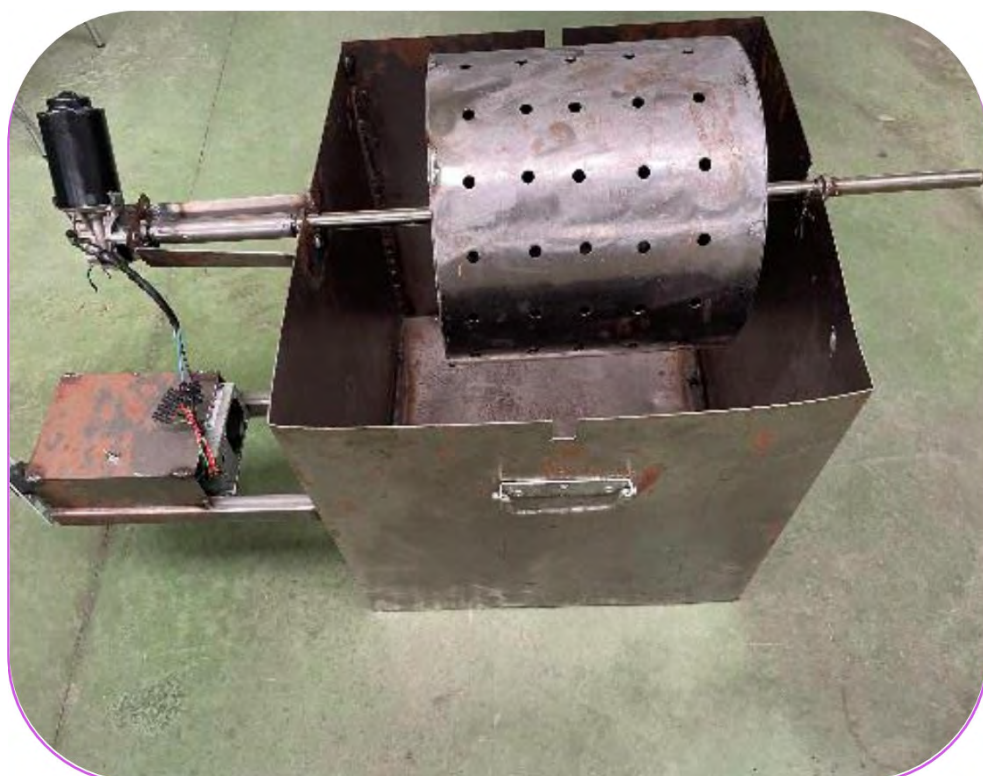
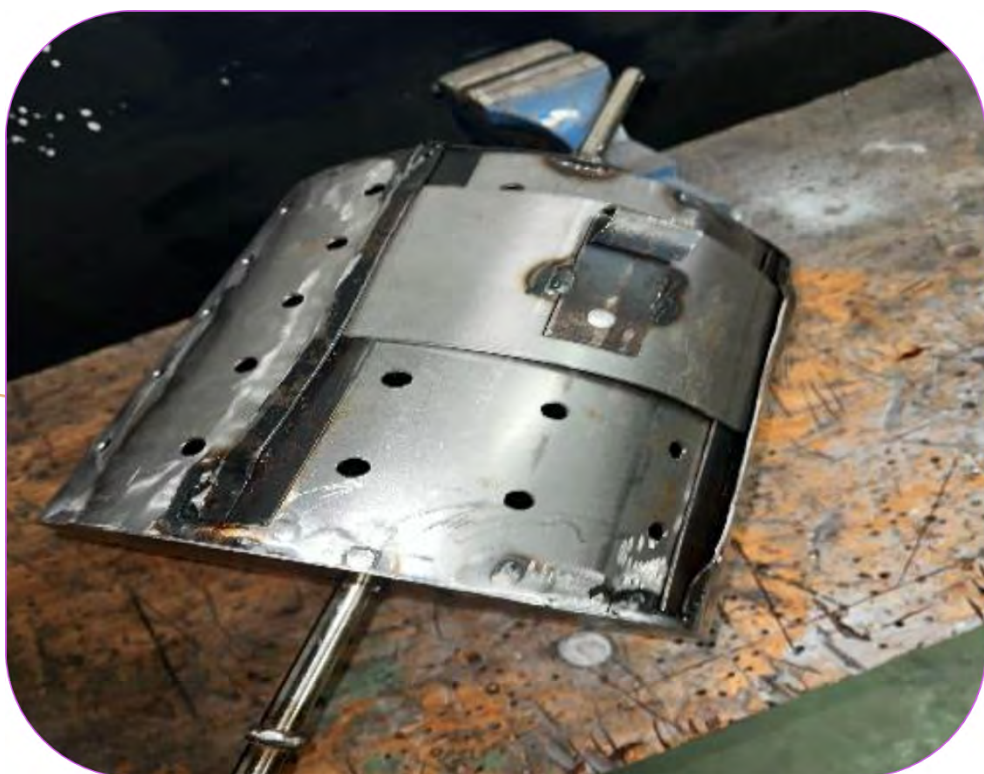
Our project is aimed mostly at older people who like to follow Christmas traditions and who like chestnuts.

Cost Structure

Gastos en materiales
En fabricas
Motores

Revenue Streams

Nuestros ingresos vendran de los danbolines automatizados que vendamos y de el dinero que consigan los puestos de castañas



ENTRECOMP

Our project is quite creative as we have never seen anything like it before and we have been able to carry it through.

Economically it is also quite good as all the materials are reused.

- [illegible]



Questa foto di Autore sconosciuto è concesso in
licenza da CC BY

SUSTAINABLE DEVELOPMENT GOALS



Questa foto di Autore sconosciuto è concesso in licenza da CC BY

SDG GOALS

We can see that this project is good for the climate as all materials are reusable SDG 13

It is an innovative project for the industry and has many advantages SDG 9

EXTRA CUT...

2 of the participants had to walk to the garbigune for more than 20 minutes while it was raining so that when they arrived it was closed and they could not take anything, the next day we had to go to the garbigune with Nere and they gave us the microwave but it was no good for us because it did not have enough power.

.

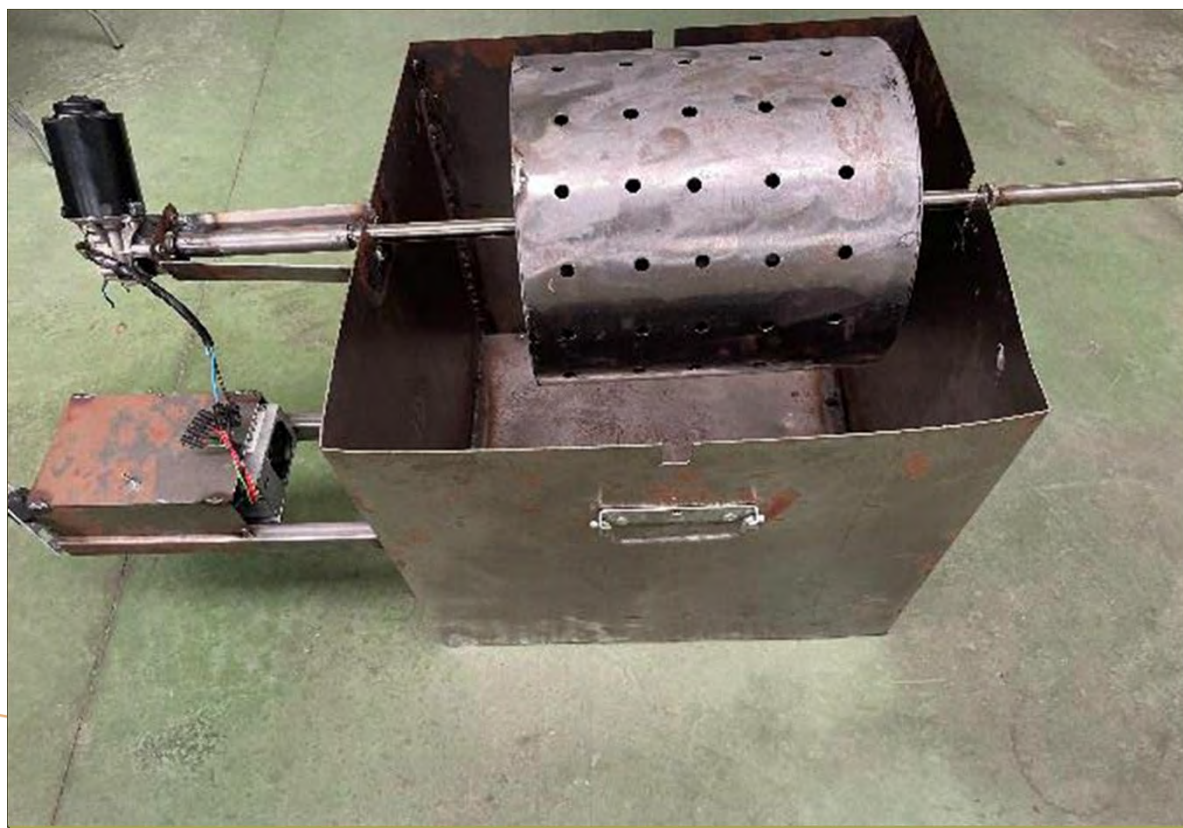
.





GROWING GREEN

CIRCULARITY IN VET



DANBOLIN



Co-funded by
the European Union



GROWING GREEN

CIRCULARITY IN VET

FUTBET

Growing Green: Fostering green entrepreneurial mindsets
based on the circular economy and green capital concepts
in VET education

Acronym: Growing Green

2021-1-DK01-KA220-VET-000024955

October 2023

Lead Result: No editors



Co-funded by
the European Union

The compendium has been produced by the project partners in the scope of the Erasmus+ project **Growing Green: Fostering green entrepreneurial mindsets based on the circular economy and green capital concepts in VET education.**

Coordinator of the PR: ilmiolavoro

Coordinator team members: Nere Mendizabal

Partner 1: Denis

Partner 2: Markel

Partner 3: Gorka



Enjoy and play to create a beautiful and healthy world!

This compendium will be published under a Creative Commons licence, non-commercial share-alike.



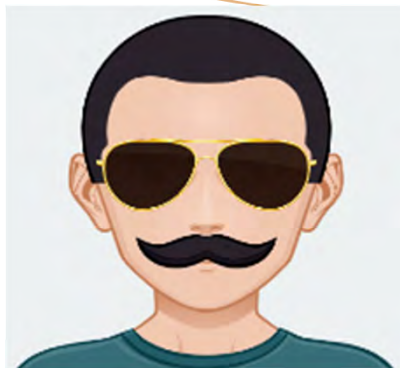
Disclaimer: The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

EL EQUIPO

We are Denis and Markel students of electromechanical maintenance, we are 18 years old, our tutor is Gorka Azkarate. Our experience was not entirely good because it did not go as we wanted but we were able to present something workable and that could be used without problems. We are partners in the project.



Denis/18



Markel/18



Gorka/45

MENTOR

Gorka: Project drawings.

Julen: Fabrication of the project (mechanical part).

Nere: Project idea

Ivan🔥: Programming of the electrical part of the project.

Peio: Performance of the electrical part.

COMPANY

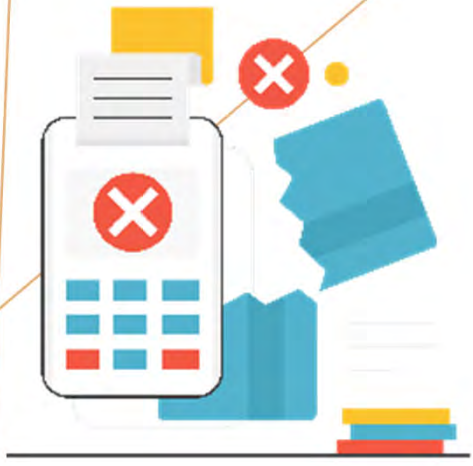
We went to a company called Irizar that makes all kinds of buses. It is part of the social economy since it is a cooperative.



An illustration of a person from the waist down, wearing a light green shirt, red pants, and dark blue shoes. They are holding a large yellow circle with blue lines that form a stylized figure or shape. The person is standing on a thin vertical line.

SUMMARY OF THE PROJECT IDEA

The idea of the project is to make an automated foosball table with goal-counting detectors that works using batteries that can be recycled and recharged with wind or water power.



THE PROBLEM

The problem with this process is that hydraulic dams and windmills would have to be built on the river and in the bush, and this would damage natural areas.

IDEAS & OPPORTUNITY

WHAT IDEAS CAME UP?

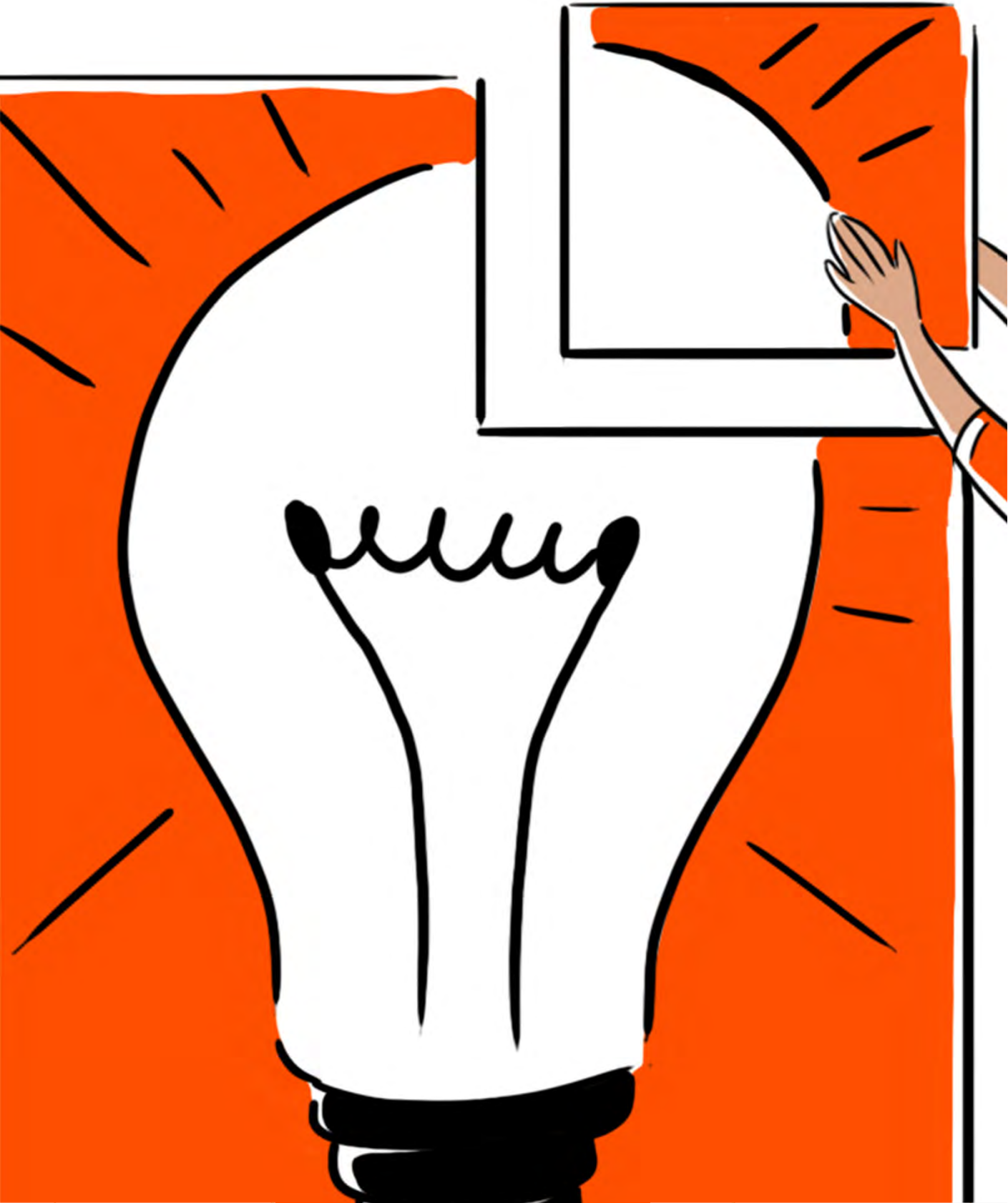


Using wind
energy



Using
hydropower





THE BEST IDEA

Describe which of the above ideas you decided to develop and why?

. We have only had one idea and we have developed that one.

.
. .
. .
. .

THE ROADMAP

Our mentor, Nere, gave us each X pieces of Legos and from there we had to build something that would bring our project into the circular economy. First, individually we built what we came up with and then in groups and in the end we came up with the ideas mentioned above.

At the beginning the project was an automated foosball table that counts the goals.

Then we had to think of a way to bring our project into the circular economy.

In the end we decided to design the project to run on renewable energy.



Describe the different steps taken to develop the idea from scratch to the final proposal and its prototype....

RESOURCES

- Legos
- Canvas
- Wooden boards
- Metal bars
- Metal rods
- Players
- Rod stops
- Rod handles
- Welding
- Threaded rod
- Nuts
- Detectors
- Pin Plates
- Relays
- Power supply
- Automata Onrom
- CX Programmer



THE OBSTACLES

OBSTACLES	SOLUTION
We were missing some materials	We talked to Gorka and Julen and bought the materials we were missing on the internet.
Emaitz was less hours in the workshop because of the dual	Denis and Markel had to work harder
Markel was injured and could not work during the last week.	Emaitz and Denis had to increase the pace of work to finish on time.
We didn't have a soccer ball to play with because the players couldn't touch it.	Emaitz brought a golf ball which worked perfectly

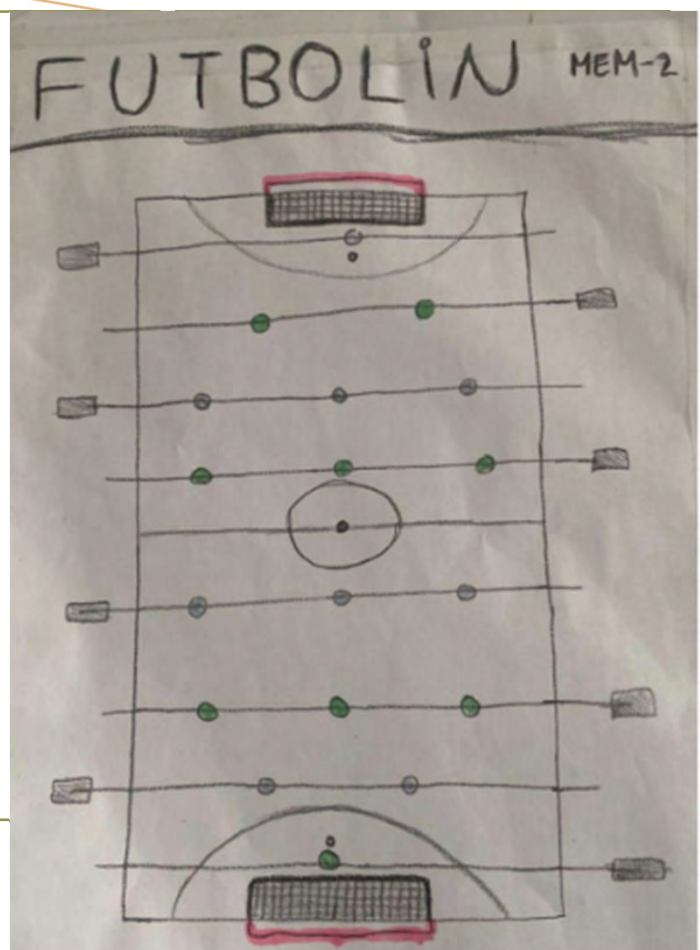
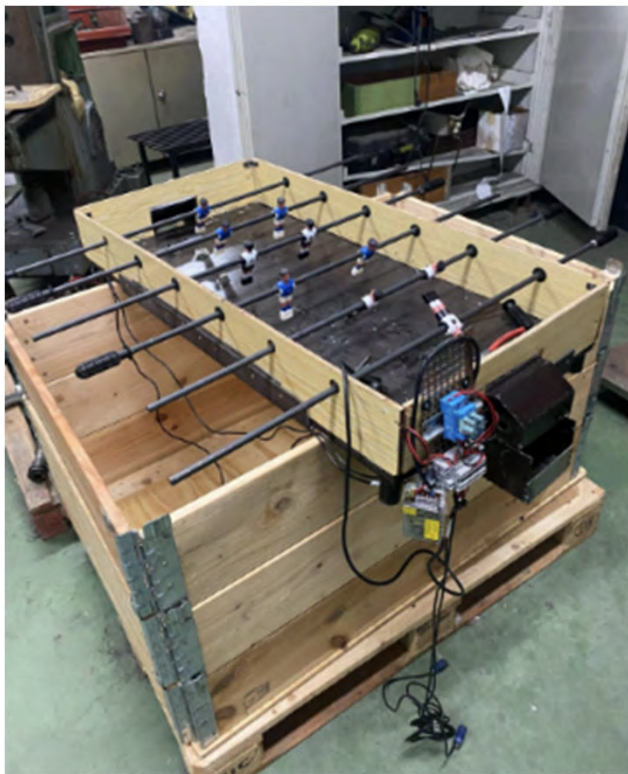


POTENTIAL...

HOW CAN YOUR IDEA BE IMPROVED OR DEVELOPED?

The idea could be improved by giving more portability to the foosball table. To do this we could add batteries instead of having to plug it in, make it foldable and put some wheels on it for easy transport.





FINAL PITCH

Our final launch is a foosball table, which has sensors in the two goals to detect the ball in each goal that enters, and thus count it in the digital scoreboard that we will put. This foosball table will not have to be plugged in to work, because it will work through a battery that will be recharged using renewable energy, such as wind power or hydropower. In addition to that, we are going to facilitate its transport, adapting it to be able to fold it and putting some wheels to move it from one side to another without problems.

BUSINESS MODEL CANVAS

Key Partner

- Game rooms
- Bars
- Companies
- Electrical companies

.

.

Key Activities

Explain through advertisements or other means the circular economy and how we have applied it in our project.

Key Resources

.

Value proposition

Customer relationship

- .-Instagram
- Twitter
- TikTok
- TV commercials

Channels

- Shop Web site

BUSINESS MODEL CANVAS

Customer Segments:

.For people who are committed to the work of changing the environment.

For those who need batteries for anything.

For locals who need a modern and innovative table soccer.

.

Cost Structure:

Construction of wind and hydraulic generators.

Manufacture of batteries.

Manufacture of foosball tables.

.

Revenue Streams:

Sale of foosball tables.

Sale of batteries of our own brand.

.

SUSTAINABLE DEVELOPMENT GOALS



Questa foto di Autore sconosciuto è concesso in licenza da CC BY

OBJETIVOS ODS

Has your idea covered any of the SDG targets?

If yes, please describe how.

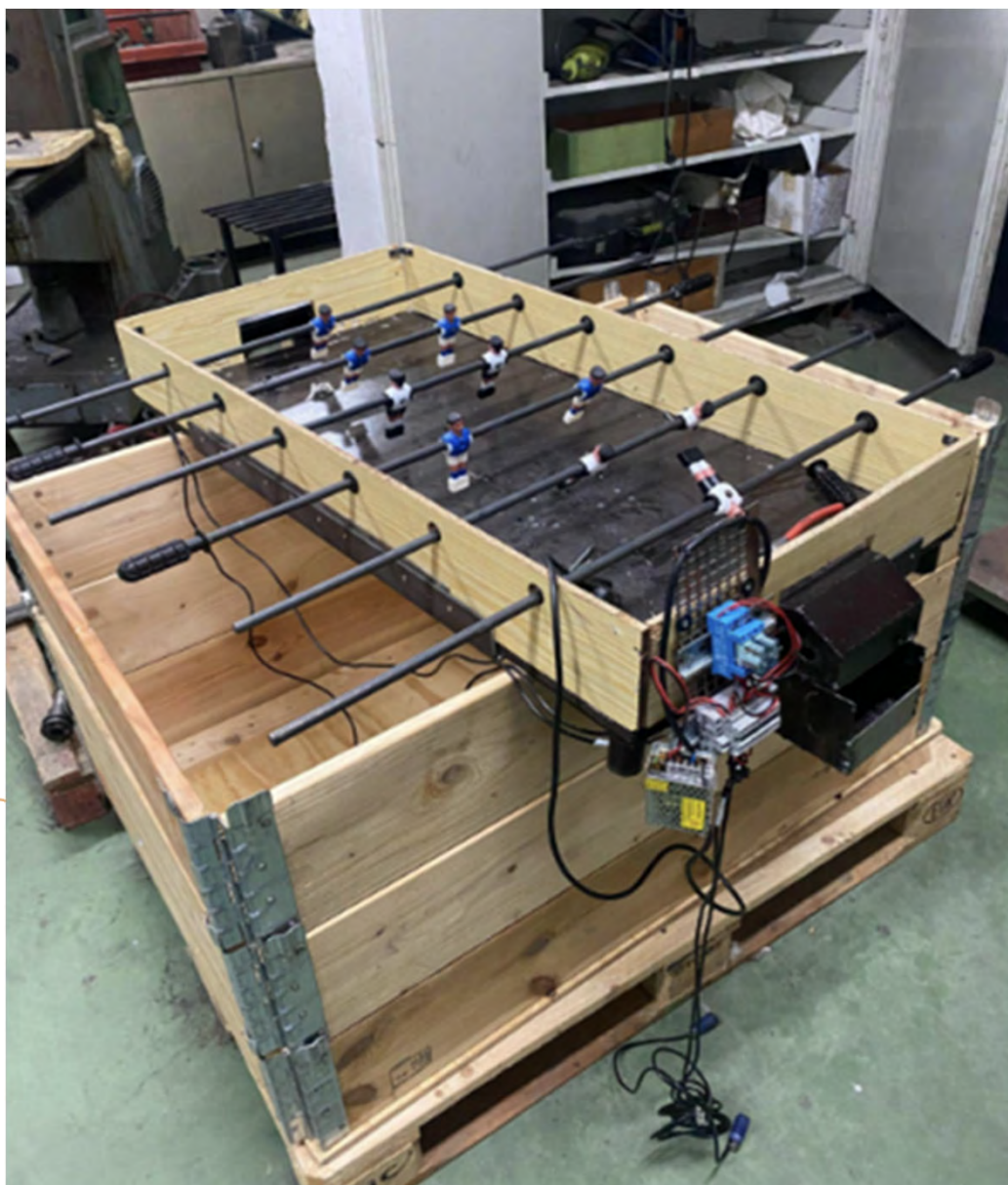
9: because an automated foosball table is an innovative project.

13: because the final idea is that the foosball table will run on renewable energy.



GROWING GREEN

CIRCULARITY IN VET



FUTBET



Co-funded by
the European Union



GROWING GREEN

CIRCULARITY IN VET

Invernadoor

Growing Green: Fostering green entrepreneurial mindsets
based on the circular economy and green capital concepts
in VET education

Acronym: Growing Green

2021-1-DK01-KA220-VET-000024955

October 2023

Lead Result: No editors



Co-funded by
the European Union

The compendium has been produced by the project partners in the scope of the Erasmus+ project **Growing Green: Fostering green entrepreneurial mindsets based on the circular economy and green capital concepts in VET education.**

Coordinator of the PR: ilmiolavoro

Coordinator team members: Ander Loyarte and Mari Jose Lasas

Partner 1: Javier

Partner 2: Erik

Partner 3: Iker

Partner 4: Didaka

Partner 5: Unax



Enjoy and play to create a beautiful and healthy world!

This compendium will be published under a Creative Commons licence, non-commercial share-alike.



Disclaimer: The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

THE TEAM

Our team consists of five members who study IEA 2. We are quite young but we have very good ideas and the desire to implement them. We especially enjoy working on electrical topics and we have good skills in this area.

In this case, we are going to create an automated greenhouse with many functions."

.
.

JAVIER 17

Erik 17

Iker 24

Didaka 17

Unax 18

MENTOR

Our mentor was Nere, Iñigo, and Txomin. Nere helped us with all aspects of brainstorming ideas and how to organize the work and maintain order. Iñigo assisted us with the wiring of the Arduino and programming, as it was quite a complex task to execute. Lastly, Txomin helped us in finding good materials to build the greenhouse.

COMPANY

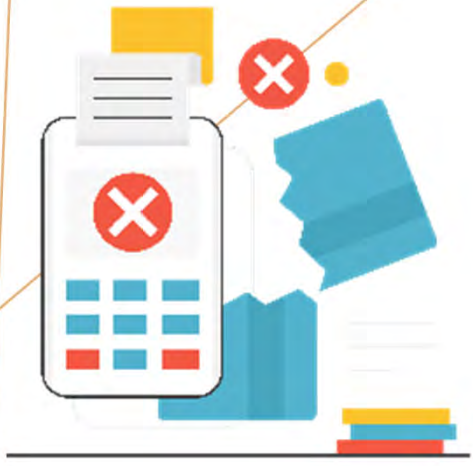
We have conceived the idea of an automatic greenhouse that operates on solar power and is fully automated using an Arduino. It is equipped with various sensors inside that detect soil moisture to determine if watering is needed. It also includes a temperature sensor to activate fans, ensuring the optimal temperature for whatever crop is being grown inside. Additionally, we have a spectral light that accelerates the growth and enhances the health of the crops. All materials used are recyclable.



An illustration on the left side of the page shows a person from the waist down, wearing a light green shirt, red pants, and dark blue shoes. They are holding a large yellow circle with both hands. Inside the yellow circle, there are blue lines that resemble a stylized plant or a circuit board. A thin vertical orange line runs down the page, separating the illustration from the text.

SUMMARY OF THE PROJECT IDEA

We have planned to build an automatic greenhouse that operates on solar power and is fully automated using an Arduino. It features several sensors inside that detect the soil's moisture level to determine if watering is necessary. There is also a temperature sensor that activates fans to maintain the optimal temperature for the specific crops grown inside. Additionally, we have incorporated a spectral light that encourages faster and healthier crop growth. All materials used are recyclable.



THE PROBLEM

- One of the issues we see is that maintaining a greenhouse requires a lot of staff who need to constantly monitor the crops. Another problem we observe is the time it takes to water, plant, and properly care for the crops, which is quite time-consuming.

IDEAS & OPPORTUNITY

WHICH IDEAS CAME OUT?

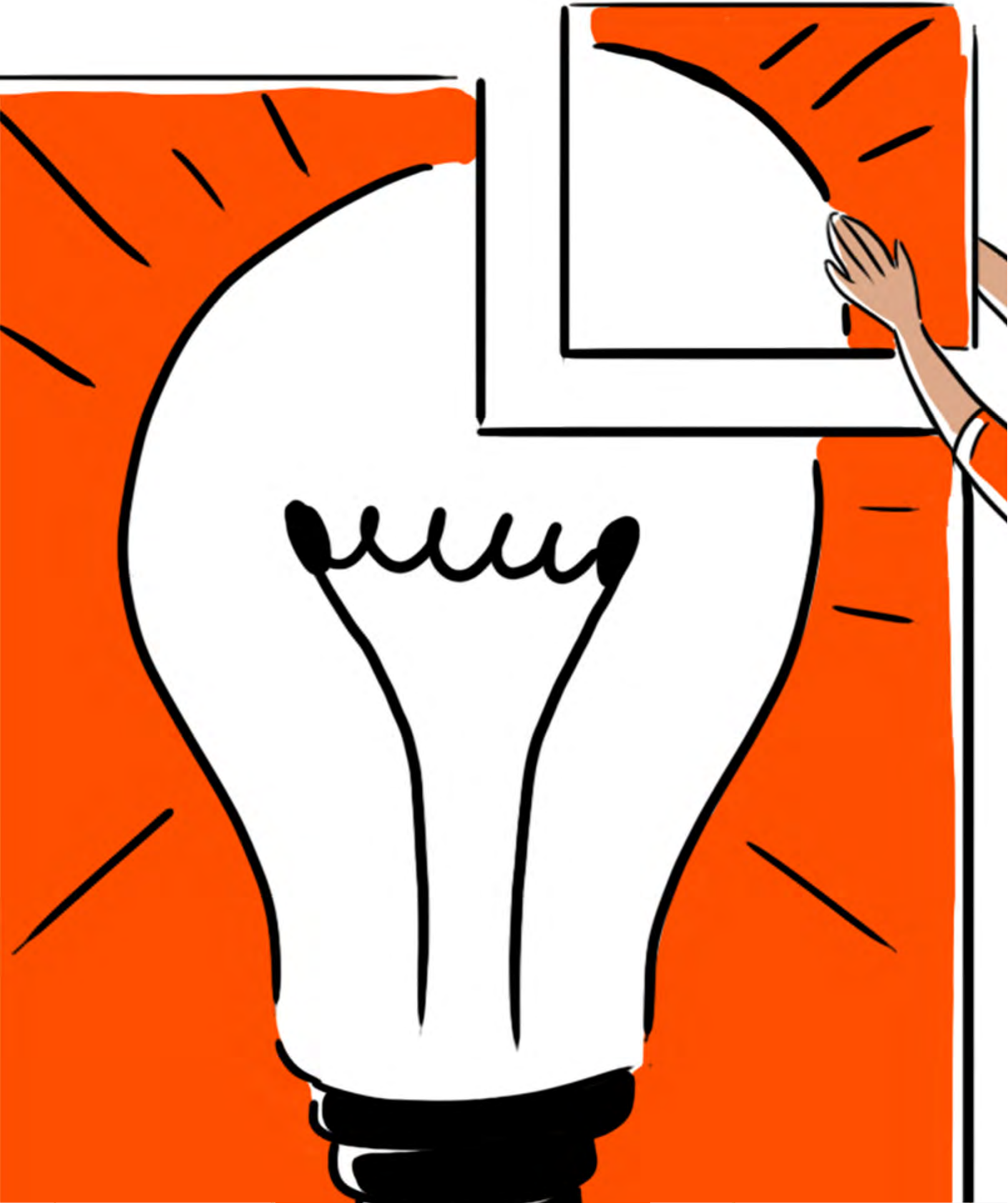


A charging parking lot.



Fully automated greenhouse.





THE BEST IDEA

.We decided to create 'invernatico' because it was a more realistic idea and we saw that we could apply our knowledge and learn in order to complete it.

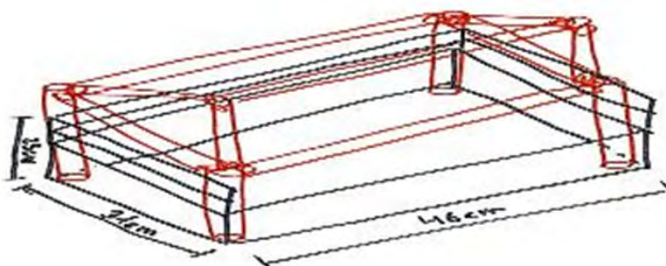
.

THE ROADMAP

.We used the EntreComp flower model and brainstorming to generate ideas, and we saw that this was the best one.



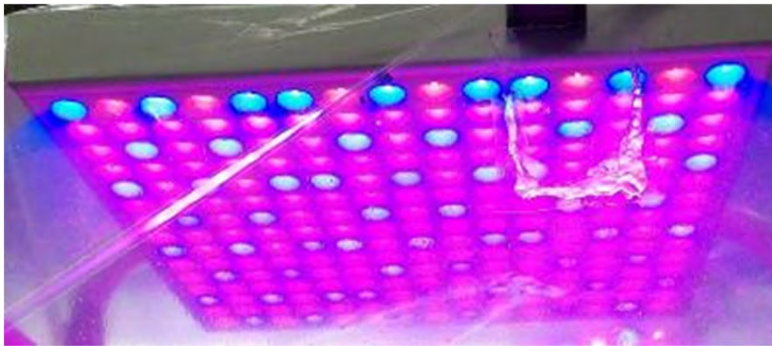
Once we decided to build the greenhouse, we started considering materials and how to construct it.



Tubes = 40cm ↑
46cm ↔
34cm ↗
40cm ↓

THE ROADMAP

The first idea we considered was to create it from scratch with an iron structure that we would weld ourselves. After realizing the limited time we had, we decided to take advantage of a greenhouse that had been built by former students (the structure). Once we brought it into the classroom, in order to adapt it, we thought about cutting the roof and making it removable so that the dimensions would be manageable for transportation on the bus.



When we were about to get started, Nere mentioned that we could not make modifications to it because it was needed by the DBH students. After discarding this option, we began to think about new ideas and possible alternatives. Then, Txomin took a moment to show us another greenhouse option that he had stored in the attic. However, we ended up building a box from scratch.



THE OBSTACLES

OBSTACLES	SOLUTION
Lack of materials	<ul style="list-style-type: none">• Assistance from teachers and external purchasing
<ul style="list-style-type: none">• Lack of coordination	<ul style="list-style-type: none">• Improve communication within the group and clarify ideas
<ul style="list-style-type: none">• Complicated assembly and lack of knowledge	<ul style="list-style-type: none">• Consult with teachers and simplify the assembly to something more feasible



POTENTIAL...

HOW CAN YOUR IDEA BE BETTERED OR FURTHER DEVELOPED?

A good idea would be to enable controlling the system from home using a mobile phone, allowing you to check the temperature and other data from the greenhouse whenever you want. For this, it would be necessary to program the Arduino and add some additional components. It would also be beneficial if it could read the soil's pH level.



FINAL PITCH

Imagine this scenario: you are on a farm or in your own garden, surrounded by healthy vegetation and fresh fruits growing in a greenhouse that seems like something out of a science fiction movie. But here's the magic: everything operates without you having to lift a finger.

This prototype of a fully automated and self-sufficient greenhouse is a feat of modern technology and innovation. What makes it so special? Let us share some features:

Precise Environmental Control: This greenhouse uses advanced sensors to monitor and control environmental factors such as temperature, humidity, and light. This ensures that the plants receive exactly what they need to thrive, regardless of external conditions.

Automated Watering System: Say goodbye to worrying about watering your plants. This greenhouse is equipped with an automatic watering system that delivers the right amount of water at the right time, based on the specific needs of each plant.

Optimal Lighting: Need to grow plants in an environment with little natural light? No problem. This greenhouse uses full-spectrum LED lights that mimic sunlight, ensuring healthy and consistent growth, even indoors.

BUSINESS MODEL CANVAS

Key Partner

- Vegetable suppliers
- IKEA
- Emmits

Key Activities

- Research and Development
- Assembly
- Putting what we've learned to the test

Key Resources

- Solar panels
- Irrigation system
- Spectral lights

Value proposition

- Independent
- Savings in consumption

Customer relationship

- Understanding the needs
- Demonstrations and tests

Channels

- Website
- Contact number

..

BUSINESS MODEL CANVAS

Customer Segments

- Traditional farmers
- Educational institutions
- Food and beverage companies

Cost Structure

- .. Material costs (structure, lights, irrigation system...?)
 - . Wages and Benefits
 - . Transport
- . Permits and regulations

SUSTAINABLE DEVELOPMENT GOALS



Questa foto di Autore sconosciuto è concesso in licenza da CC BY

SDG GOALS

Did you covered with your idea some of the SDG goals?

.13 Climate action

.15 Life on land



GROWING GREEN
CIRCULARITY IN VET

Invernadoor



Co-funded by
the European Union



GROWING GREEN

CIRCULARITY IN VET

GF in the GreenEntreFuture

Growing Green: Fostering green entrepreneurial mindsets
based on the circular economy and green capital concepts
in VET education

Acronym: Growing Green

2021-1-DK01-KA220-VET-000024955

October 2023



Co-funded by
the European Union

THE TEAM

The team was made of 26 students from two classes, who are 16-17 years old and they were engaged in developing a business idea.

They attend the third year of high school and they are very motivated about this project.

Initially the tutor gave them information about Green and Enterprise skills. After that, the team decided to focus on the real potential of a local company and on how to improve its Green competences.

ANDRENACCI FRANCESCA

APPICCIUTOLI ALESSANDRO

CHIN A LOY SANS SASHA V

D'ADDARIO CLARA

CINAGLIA ELENA

DI FRANCESCO MATTIA

DEL POETA MARTINA

FANI' LORENZO

DI CARLO VALERIA

FIORAVANTI AURORA

DI FELICE VALERIO

FORESTIERI LORENZO

FUINA MATTEO

FRANCHI ALESSANDRO

PACE DAVIDE

GONZALEZ FILIPPO

RUFFINI SARA

GRANATA ALESSIO

VIOLA MARTA DORA

IMPERATORE ANTONUCCI
EDOARDO

ZUCCONI VIRGINIA

KASUMOVIC ANDREA

PETRELLA LEONE

QUARTIGLIA NINO

RASICCI ALESSANDRO

VANNI FILIPPO

MENTOR

The Mentors were Ms Bellachioma, Science teacher, who supported us in the research activities and in the mediation with the local partners, and Ms Faustino, English teacher, who guided us in the creation of the final project results.

COMPANY

The company we collaborated with is located in the industrial area of Mosciano S.A. and it has been in business for over thirty years.

It has a founder and owner of the company, Fabrizio Giorgini, and the company also employs an Engineer, a Quality Manager and 15 workers. It is one of the most important metallurgical company of our region.

They held a couple of meetings with our students, guiding them into the world of metallurgy and sharing their needs in term of business, renewable energy and circular economy.



An illustration on the left side of the page shows a person from the waist down, wearing a light green shirt, red pants, and a blue and black striped scarf. They are holding a large yellow circle with blue lines that resemble a stylized 'E' or a path. The background is white with a thin vertical orange line separating the illustration from the text.

SUMMARY OF THE PROJECT IDEA

. The idea came out of a meeting held with a metallurgical company, one of the most important companies of our region.

During the meeting, the students started thinking about how the green strategies could improve the company's business.

We introduced and brainstormed ideas studying European Green Comp and EntreComp.



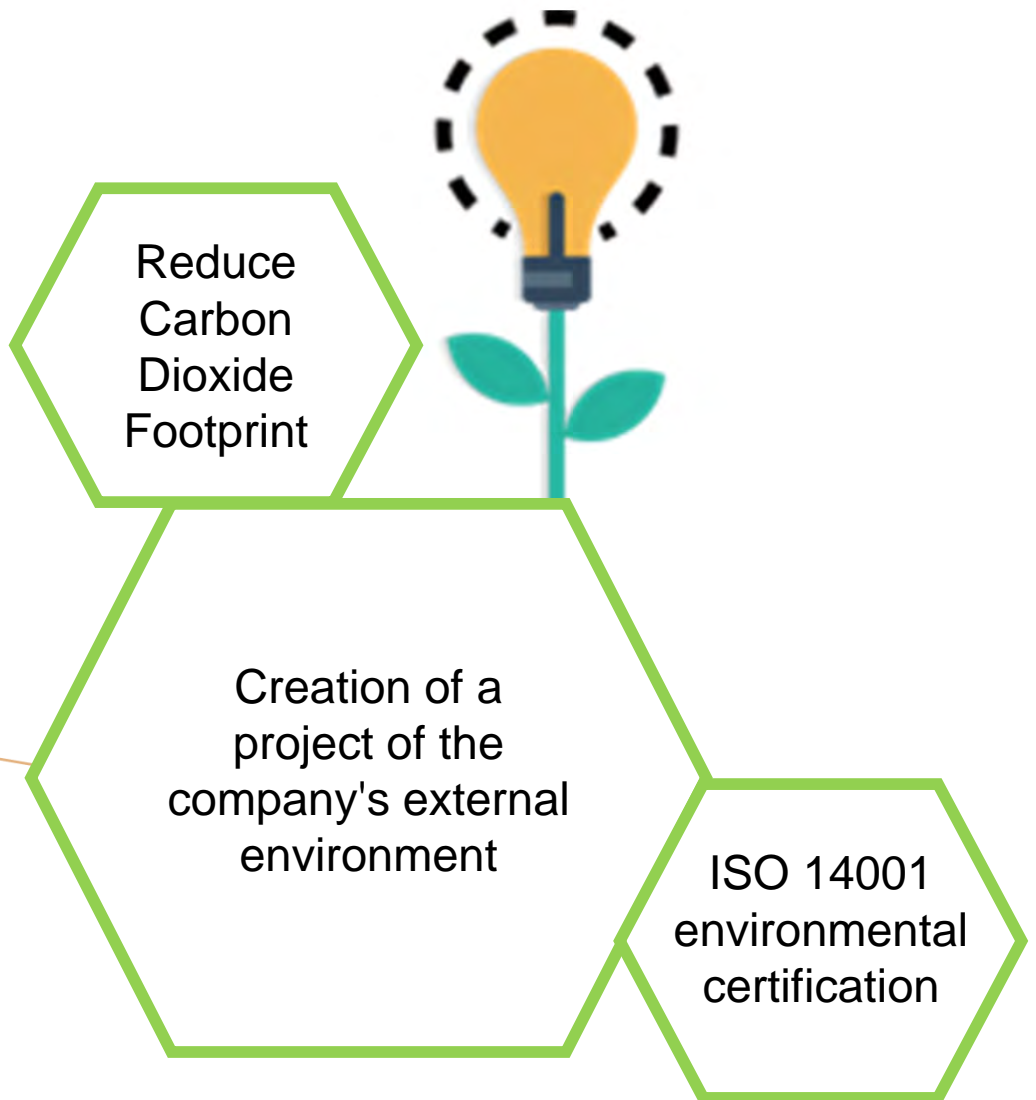
THE PROBLEM

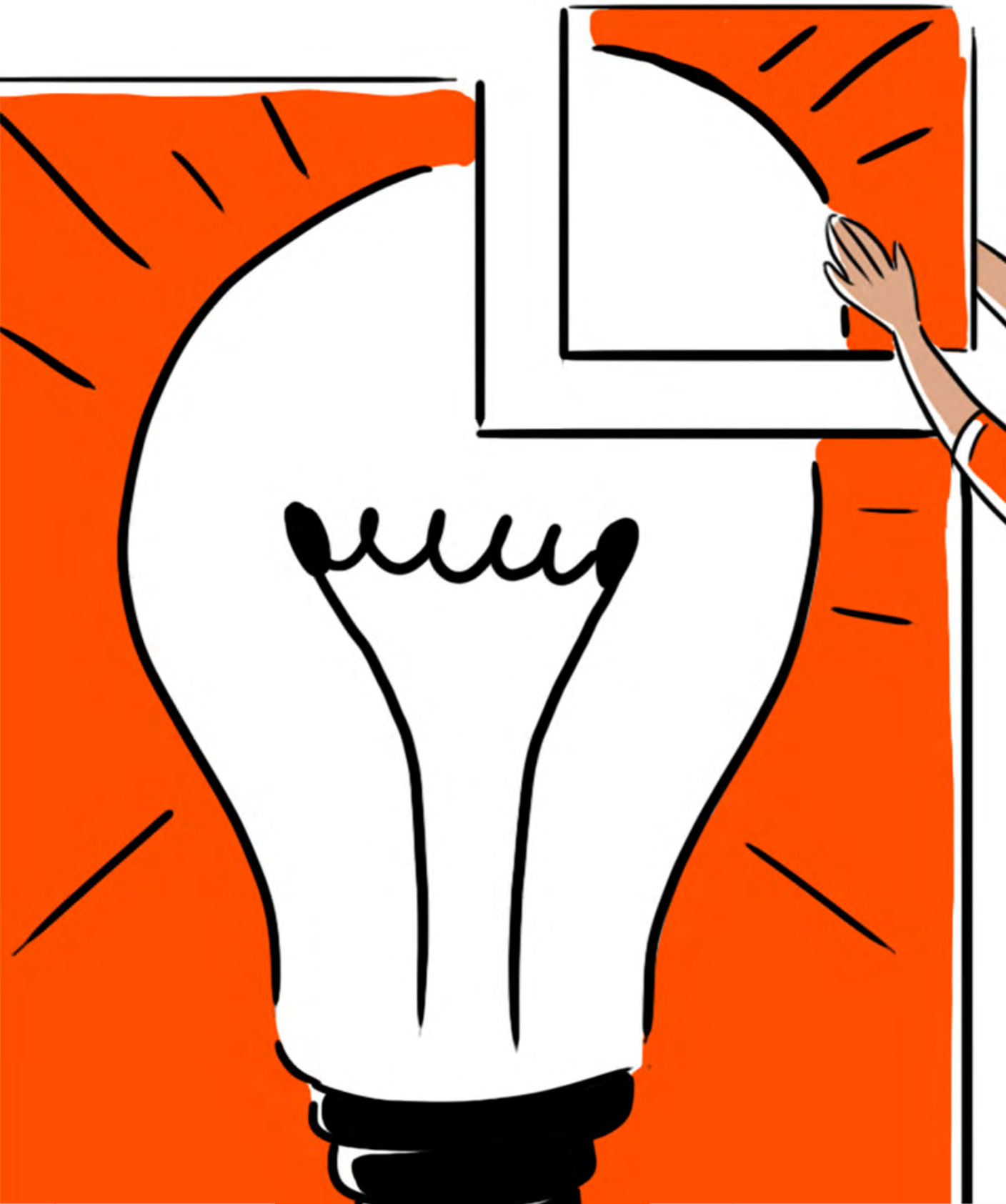
During the meeting the owner and the engineer of the company explained that the machinery consumes a lot of energy and over the years the company has improved renewable energy, especially solar energy, but it still isn't enough.

They have measured the company's carbon dioxide footprint and they need to reduce it and to also reduce their partners carbon dioxide footprint.

IDEAS & OPPORTUNITY

WHICH IDEAS CAME OUT?





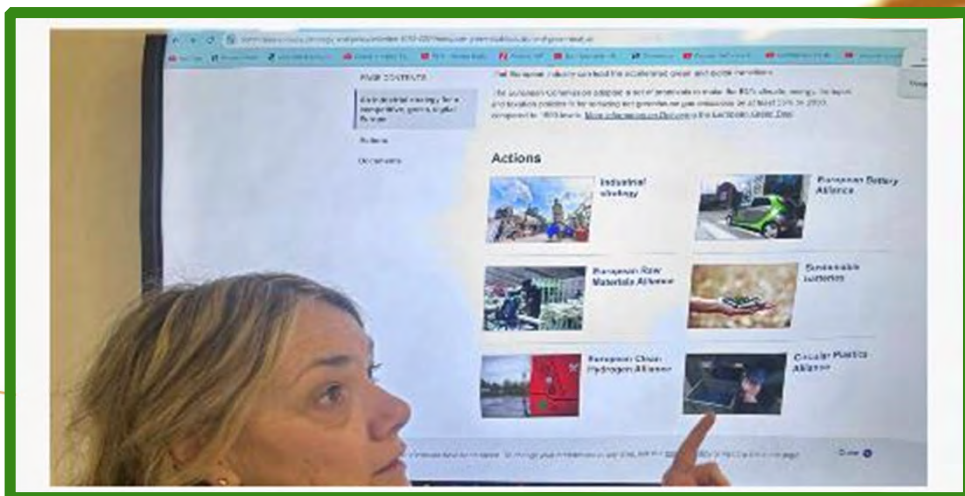
THE BEST IDEA

The first idea was the creation of a project of the external environment of the company, in which the strategies to reduce the carbon dioxide footprint would be improved.

THE ROADMAP

Describe the different steps made to develop the idea from scratch to the final proposal and its prototype.

- 1) The Science teacher introduces the Groups to the Green Competences and Entre Competences
- 2) Group meeting to detect the business to cooperate with.
- 3) First contacts with the owner of the company
- 4) Meeting with the owner and the engineer of the company to know the work involved and to detect their needs
- 5) Students meet to propose business ideas
- 6) Students work to improve their Green and Enterprise Competences
- 7) Students develop the ideas to reduce carbon dioxide footprint
- 8) Students create the project regarding the external environment of the company



First students found out more about the Green Deal, Renewable energy and Circular Economy (the EU website offers an in-depth insight).



THE ROADMAP

Students meet the owner of the company and his engineer to discuss about the business, the green strategies and the future developments



Focus on the company's problem:
Reduce carbon dioxide footprint to increase the business

Come possiamo affrontare il problema?

• Carbon footprint

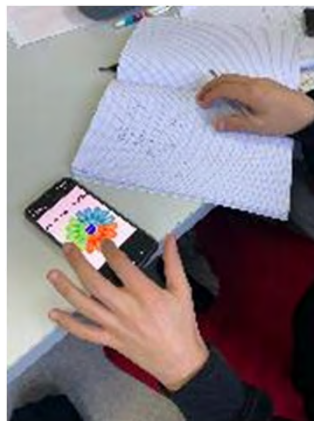


• Scope 1, Scope 2 e Scope 3



THE ROADMAP

Students improve their green and enterprise competences



Students work on the ideas



THE ROADMAP

Before



Students work to improve the strategies to reduce carbon dioxide levels of the company :

- photovoltaic panels
- small wind turbine
- electric charging stations
- trees

After



RESOURCES

- Research
- Digital devices
- PC dedicated software



THE OBSTACLES

OBSTACLES	SOLUTION
Finding a suitable time when students and stakeholders could meet.	We found a solution in meeting online, during the morning, while students and owner are working. We had 2 meetings before starting working on the innovating ideas.
Lack of time	Reduce hours dedicated to Science in order to use the time for the project



POTENTIAL...

HOW CAN YOUR IDEA BE BETTERED OR
FURTHER DEVELOPED?

Our idea is very simple but could be an example for any industry interested in lowering their carbon dioxide emissions while saving energy and money.



FINAL PITCH

After meeting the company owner, we understood that the main problem was energy consumption and the release of large quantities of carbon dioxide into the air. To increase its business, the company must obtain an environmental certification that involves both proper waste management and a reduction in its carbon dioxide footprint. The company has good waste management, but needs to improve in renewable energy production, so we focused on this latter part.

The students proposed two ideas which the company could implement to improve its renewable energy production by covering the roof in photovoltaic panels and implementing mini eolic turbines, and proposed the idea to reduce carbon dioxide values by planting trees which would in turn absorb the carbon dioxide and release oxygen.

Finally, to further reduce the general carbon dioxide emissions, all cars used on location have to be electric, including all cars involved in deliveries and/or meetings.

- .
- .
- .
- .

BUSINESS MODEL CANVAS

Key Partner
GF torneria

Key Activities
formation workers
Information clients
Selection solar panels
Selection mini eolic turbine
Electric charging station

Key Resources

National, regional and
European funding

Owner funding

Value proposition

Green
CO₂ reduction
Certification

Customer relationship
Personal assistance
Call center
Meeting

.

Channels

Radio advertising
Website
Exhibitions

BUSINESS MODEL CANVAS

Customer Segments

Certifying bodies

Cost Structure

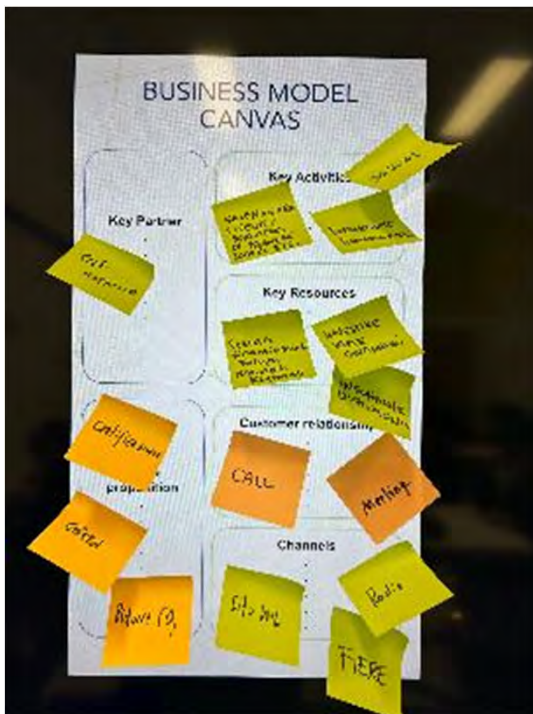
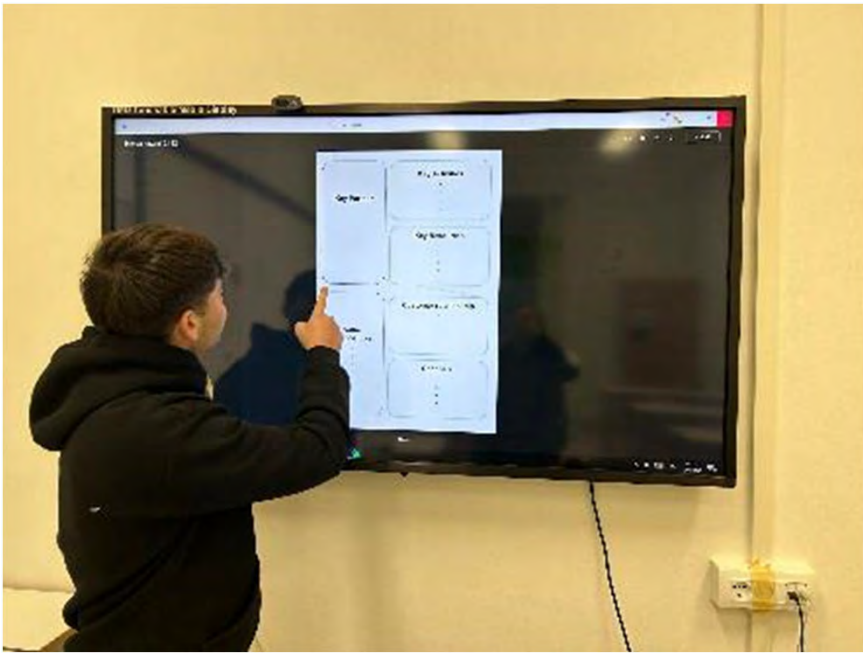
Reduction in energy costs

High cost solar panels

Revenue Streams

ISO14001 certification

.



ENTRECOMP

Describe which area of the Entrecomp your team trained and developed and how.

- .Vision
- .Creativity
- .Ethical and sustainable thinking
- .Valuing ideas
- .Motivation and perseverance
- .Spotting opportunities
- .Self awareness and self efficacy
- .Working with others
- .Learning through experience
- .Taking the initiative
- .Planning and management



SUSTAINABLE DEVELOPMENT GOALS



Questa foto di Autore sconosciuto è concesso in licenza da [CC BY](#)

SDG GOALS

- 13 Climate Action
- 9 Industry, innovation, infrastructure
- 12 Responsible, consumption and production
- 7 affordable and clean energy

EXTRA CUT...

.Students enjoyed playing with LEGO!





GROWING GREEN

CIRCULARITY IN VET



GF in the GreenEntreFuture

3C e 3I Liceo Statale Marie Curie
Giulianova- Italy



Co-funded by
the European Union



GROWING GREEN

CIRCULARITY IN VET

A slice of green

Growing Green: Fostering green entrepreneurial mindsets
based on the circular economy and green capital concepts
in VET education

Acronym: Growing Green

2021-1-DK01-KA220-VET-000024955

December 2023 /February 2024



Co-funded by
the European Union

The compendium has been produced by the project partners in the scope of the Erasmus+ project **Growing Green: Fostering green entrepreneurial mindsets based on the circular economy and green capital concepts in VET education.**

Coordinator of the PR: ilmiolavoro

Coordinator team members: Vanessa Ridolfi - Gabriele De Santo

Partner 1: Pizzeria Lo Spicchio, Alba Adriatica



Enjoy and play to create a beautiful and healthy world!

This compendium will be published under a Creative Commons licence, non-commercial share-alike.



Disclaimer: The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

THE TEAM

Briefly describe your team, your age, who was your tutor, your experience in general and what your role was in the business idea development

The team was made up of 15 fifth-year students from one fifth-year class, who were engaged in developing a business idea.

Initially, we had very grand ideas, but then we decided to focus on real life, and on how to improve small, local businesses.

BARLAFANTE PIERPAOLO

BECCACECI MARIA

CAPRIONI LORENZO

CICHETTI MARTINA

CIRIBE' LAURA

COLLEVECCHIO ARTUR

D'ANGELO ANNA

D'ANTONIO BENEDETTA

DEL TORO MATTEO

DI LORENZO ALESSANDRO LUCIANO

DI PANCRAZIO MANUEL

IACONI FILIPPO

MASTRILLI EMANUELE ERMANNO

NARDI MARTINA

ZENOBI ALESSANDRO

MENTOR

The Mentors were Mrs Ridolfi, English teacher, who supported the students in the research activities and in the mediation with the local partners, and Mr De Santo, science teacher, who guided students in the creation of the final project results.

.

COMPANY

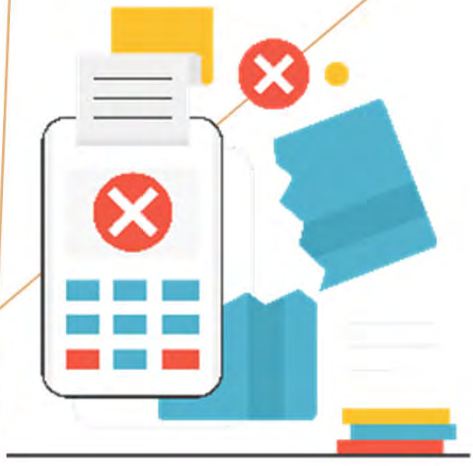
The company chosen was a local pizzeria and the owners were very involved in the process. They ran a couple of meetings with students, guiding them into the world of restoration and sharing their needs in terms of business and circular economy.

.



A stylized illustration of a person from the waist up, wearing a light green shirt and red pants. They are holding a large yellow circle with blue lines that resemble a stylized 'e' or a path. The person's hands are visible, holding the circle. The background is white with a thin gold vertical line on the right side.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
84



THE PROBLEM

During the meetings held with the owners of the pizzeria, they told us that one of their main concerns was the waste of paper used in promoting their products

IDEAS & OPPORTUNITY

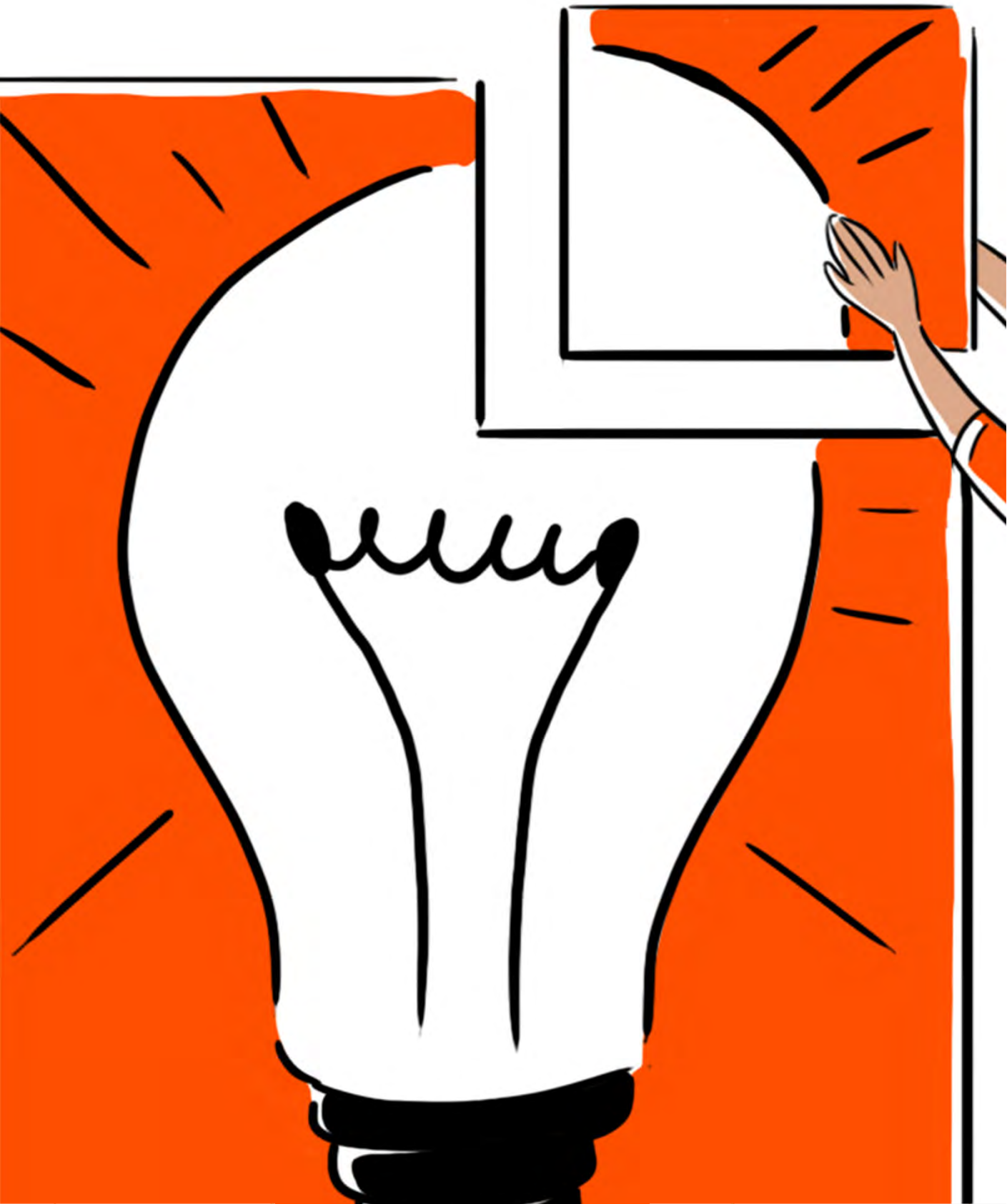
WHICH IDEAS CAME OUT?

Creation of a wooden tablet with the QR menu on it.



An Instagram account to replace paper promotion





THE BEST IDEA

The first idea, the creation of wooden tablets with the QR menu printed on it, seemed the most feasible, both since our school has got a laser-cut printer, and because it was the most interesting and creative solution.

Even the owners agreed upon the first idea to be developed.

.

THE ROADMAP

Describe the different steps made to develop the idea from scratch to the final proposal and its prototype.

- 1) Group meeting to detect the business to cooperate with.
- 2) Detection of the business and first contacts with the owners
- 3) meeting with the owners to detect their needs
- 4) students meeting to propose business ideas



First students found out more about the Green Deal and Circular Economy (the EU website offers an in-depth insight), and after that they started thinking about green business ideas.



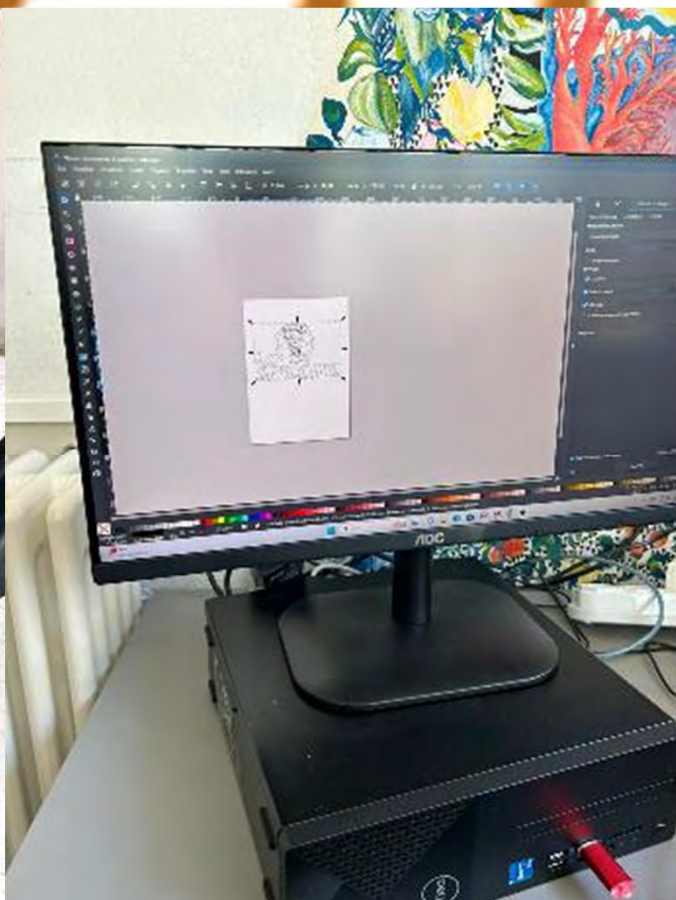
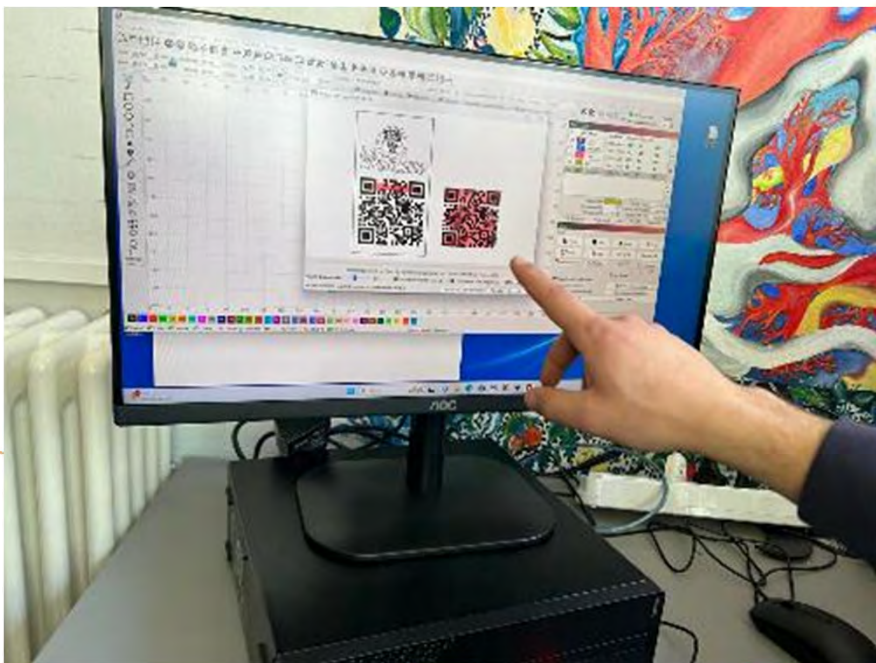
THE ROADMAP

Students had the chance to go onsite and visit the pizzeria, and the final step was to produce the wooden tablets.



THE ROADMAP

First step: uploading logo and QR code on the central PC



THE ROADMAP

Second step: preparing the wooden tablets and starting printing



THE ROADMAP

Third step: the business idea ready to be handed out to customers!



RESOURCES

Describe the resources you use to implement the idea

- laser cut Printer
- Recycled wood panels
- QR creation online application
- PC dedicated software



THE OBSTACLES

OBSTACLES	SOLUTION
Finding a suitable time when students and stakeholders could meet.	We found a solution in meeting online, soon after school ended and just an hour before the pizzeria opened. We held 3 meetings before starting working on the innovating ideas.
laser cut Printer	Just when needed the school laser cut printer broke, so it took us more time to create the wooden tablets.



POTENTIAL...

HOW CAN YOUR IDEA BE BETTERED OR FURTHER DEVELOPED?

Our idea is very simple but could be an example for any activity where a list of services needs to be offered to customers.

By using a small wooden tablet, a lot of paper can be saved, as well as the pollution due to the use of colors during the printing process.

The idea could be further developed by connecting the laser cut printer to a clean energy source such as a photovoltaic system.

.

.

.

.

.





FINAL PITCH

We started from detecting the students to be involved, and 15 students from one class were chosen to be engaged in developing a business idea (the GG Teacher Manual's "Homework Reflections and Exercise" was useful as a starting point).

Before starting the training sessions, students were asked to complete the Checklists (see the GG Manual for "pre-assessment") in order to measure their knowledge and expertise in terms of green business.

Initially, students started thinking of great things, but then we decided to focus on real, local problems, and on how to improve small local businesses.

A meeting with the owners was fixed: they told students that one of their main concern was the waste of paper for promotional reasons (brochures and leaflets).

Once detected the problems, students ran a couple of meetings during which several business ideas began to circulate. Some of them were quite expensive or not feasible (see the use of photovoltaic panels to power the ovens as main energy supply, or the use of recyclable wood containers to be given to customers instead of the traditional cardboard containers). At the end, a feasible idea came up: the creation of small wooden tablets to print the menus QR code on, and to be handed out to customers.

A very simple but at the same time a repeatable model being it an example for any activity where a list of services needs to be offered to customers.

By using small wooden tablets, a lot of paper will be saved, as well as the pollution due to the use of colors during the printing process.

At the same time, costs are reduced (students made a forecast of long-term costs, and their business idea resulted cheaper).

At the end of the activities, students were asked to complete the Checklist again, in order to measure the acquired knowledge, improved skills, and any changed attitudes after training.

BUSINESS MODEL CANVAS

Key Partner

Optimization and
economy

Key Activities

Problem-solving
Production

Key Resources

Intellectual
Financial

Value proposition

Newness
Performance
Customization
Design
Brand/Status
Cost Reduction
Convenience/Usability

Customer relationship

Personal assistance
Self-Service

Channels

Face to face meeting
Online meeting

BUSINESS MODEL CANVAS

Customer Segments

Diversified

Cost Structure

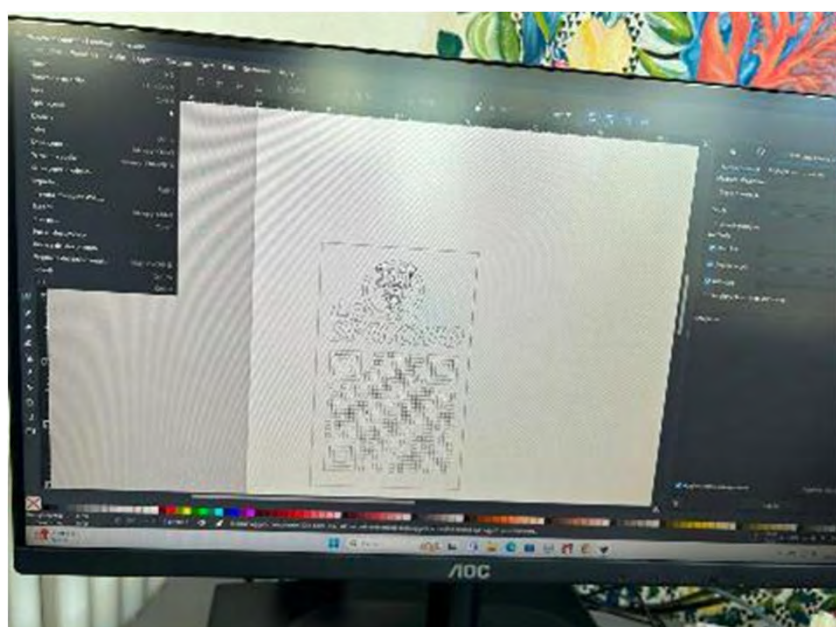
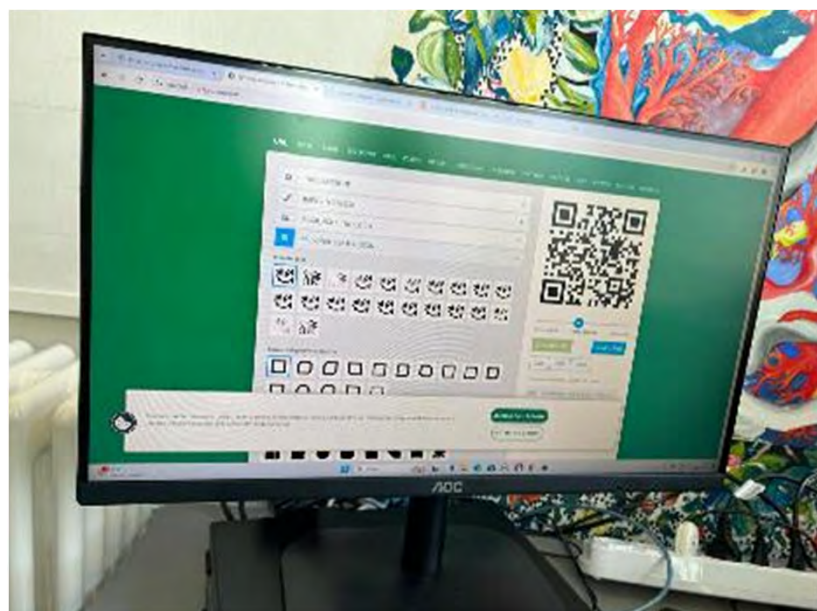
Recycled wood pieces
laser cut printer / printing costs

Revenue Streams

Selling goods







ENTRECOMP

Describe which area of the Entrecomp your team trained and developed, and how.

Creativity

Sustainable thinking

Motivation and perseverance

Taking the initiative

Learning through experience

Working with others

Planning and managing



[Questa foto](#) di Autore sconosciuto è concesso in licenza da [CC BY](#)

SUSTAINABLE DEVELOPMENT GOALS



[Questa foto](#) di Autore sconosciuto è concesso in licenza da [CC BY](#)

SDG GOALS

Goal 7: Clean and affordable energy

Goal 13: Climate action

EXTRA CUT...

When using the Lego, students where sometimes distracted and started playing instead of working on task.

During the meeting at the pizzeria, the most appreciated moment was when pizza was offered to all participants.





GROWING GREEN

CIRCULARITY IN VET



A slice of green

5E

LICEO STATALE MARIE CURIE



Co-funded by
the European Union



GROWING GREEN

CIRCULARITY IN VET

Brewery

Growing Green: Fostering green entrepreneurial mindsets
based on the circular economy and green capital concepts
in VET education

Acronym: Growing Green

2021-1-DK01-KA220-VET-000024955

October 2023



Co-funded by
the European Union

The compendium has been produced by the project partners in the scope of the Erasmus+ project **Growing Green: Fostering green entrepreneurial mindsets based on the circular economy and green capital concepts in VET education.**

Coordinator of the PR: ilmiolavoro

Coordinator team members: Claus Tobler

Partner 1: Rækker Mølle Brewery



Enjoy and play to create a beautiful and healthy world!

This compendium will be published under a Creative Commons licence, non-commercial share-alike.



Disclaimer: The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

THE TEAM

The team consisted of 8 students and a teacher. the students are aged 17-22 and are undertaking a specially organized education for young people with special needs. This idea arose through a discussion between the teacher and students and with a local brewery as the key for developing the idea.

Joakim Olesen
Mathias Madsen
Trine Thulstrup
Julie TP
Julie Viese
Benjamin Kristensen
Casper Førrislev
Carl Thomsen

MENTOR

The mentor is Enok Linde, a teacher with a background in farming and deveoping farming industry. Also with skills in working with students with special needs.

COMPANY

Rækker Mølle Brewery has its home in the old mill building with roots dating back to the 17th century. In the previous years up to the year 2007, I came to a production stop in the mill, and something had to be found to fill the hole in the middle of the small village, but what was to be done.

All in all, it was about utilizing the beautiful old building to blend in with nature and the surroundings around it, creating something that would be a meeting point for the locals, as well as a place where coziness and quality of life could flow. So why not a brewery with a restaurant.



An illustration on the left side of the page shows a person from the waist up, wearing a light green shirt and red pants. They are holding a large yellow circle with blue lines that form a stylized 'e' or 'c' shape. The person's hands are visible, holding the bottom of the circle. The background is white with a thin vertical orange line separating the illustration from the text.

SUMMARY OF THE PROJECT IDEA

Together with the brewery, we want to look at their residual products from beer production and investigate whether we can use these at the school. it is the residual product mash in particular that has been our focus area



THE PROBLEM

In general, a many companies have residual products or waste from production which may have value, but which it does not pay to extract. In this case we are dealing with large quantities of mash which still has a feeding value, but which missed a taker and therefore ended up being thrown out.

THE ROADMAP

1. Group meeting to make clear the foundations of the project.
2. Investigating where to use the mash and which benefits the animals
3. Investigating how to start the value chain from brewery to farm



1. Looking how to gather the mash to be able to transport
2. Looking at how to do the transportation of mash
3. Making a calculation on the transportation
4. Agreement with the company on the value of the mash and how to deal with the cooperation



RESOURCES

- We looked into tools how to handle the mash
- We created a transportation agreement from brewery to farm / school
- We made a solution on how to gather / extract the mash in the production
- man-hours in relation to harvesting and making calculations on costs in relation to the return on the product



THE OBSTACLES

OBSTACLES	SOLUTION
Making it work how to get the mash out of the production	Agreement with company how to handle the process by gathering mash in containers
Return of the containers and how to transport	Using the machinery at both the school and the brewery and transport by minivan.
Regulations and rules in using the mash as food	Agreement with local food authority



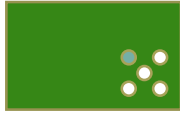
POTENTIAL...

HOW CAN YOUR IDEA BE BETTERED OR FURTHER DEVELOPED?

We have a big local whiskey distillery where the amount of mash is really big. There is a big potential in doing the same agreement with this company and spread the idea of using mash as food.

Bigger amounts will also make it less expensive and making the transport more green as we can take bigger loads at one time.





FINAL PITCH

The agreement with Rækker Mølle Brewhouse means that we can reduce the costs of feeding the animals at Erhvervsskolen Vestjylland. The agreement means that we see an improved utilization of resources as we manage to use residual products from other production as animal feed. It has a positive climate and environmental significance and also means that we can teach the students ways in which we can improve the use of the natural resources we have.

BUSINESS MODEL CANVAS

Key Partner

Rækker Mølle
brewery

-
-
-
-
-

Key Activities

Recycling of residual
materials from beer
production.

-
-

Key Resources

Handling materials
Man power.

-

Value proposition

Reuse of
materials in a
circular and
sustainable way.

-
-
-
-

Customer relationship

•
BtB.

-
-
-

Channels

•
Face to face.

-
-
-

BUSINESS MODEL CANVAS

Customer Segments

-
- BtB.
- .farming industry
-
-

Cost Structure

-
- Transportation
- Assorting of material
-
-
-
-

Revenue Streams

-
- Value earned on residual materials
- Money saved in farming industry.
-
-
-



BÆKKER MØLLE

Insert Image

BRYGHUS



ENTRECOMP

- Ethical and sustainable thinking
- Learning through experience
- Working with others
- Creativity



Questa foto di Autore sconosciuto è concesso in licenza da [CC BY](#)

SUSTAINABLE DEVELOPMENT GOALS



Questa foto di Autore sconosciuto è concesso in licenza da [CC BY](#)

SDG GOALS

12 Responsible consumption and production.
By reuse of already used materials

EXTRA CUT...

When visiting the brewery we got a tasting of the beer and a nice tour around the facilities.





GROWING GREEN

CIRCULARITY IN VET



Turning mash into value

Erhvervsskolen Vestjylland
Work shop students



Co-funded by
the European Union



GROWING GREEN

CIRCULARITY IN VET

Recycling of materials

Growing Green: Fostering green entrepreneurial mindsets
based on the circular economy and green capital concepts
in VET education

Acronym: Growing Green

2021-1-DK01-KA220-VET-000024955

October 2023



Co-funded by
the European Union

The compendium has been produced by the project partners in the scope of the Erasmus+ project **Growing Green: Fostering green entrepreneurial mindsets based on the circular economy and green capital concepts in VET education.**

Coordinator of the PR: ilmiolavoro

Coordinator team members: Claus Tobler

Partner 1: Ringkøbing-Skjern Forsyning



Enjoy and play to create a beautiful and healthy world!

This compendium will be published under a Creative Commons licence, non-commercial share-alike.



Disclaimer: The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

THE TEAM

The team was made from 6 students together with a teacher in our workshop. The students are all having special needs which is important in understanding that we have to work differently with these kind of projects.

Our role in the idea was to be the carry out link in disassembling and sorting the different materials.

The group worked together with their teacher in understanding the task.

Sofia Jørgensen
Jeppe Larsen
Lasse Kristensen
Jens Ole Thomsen
Gustav Quist
Mads Vester

MENTOR

The mentor is Arne Jørgensen, a teacher with a background in mechanical engineering and carpentering. Also with skills in working with students with special needs.

COMPANY

Ringkøbing-Skjern Forsyning who is Ringkøbing-Skjern Municipality's multi-supply company. The business covers area: water, waste water and street lighting.

They participated with the knowledge about the project and the goals for working in circularity in this field.



An illustration on the left side of the page shows a person from the waist up, wearing a light green shirt and red pants. They are holding a large yellow circle with blue lines that resemble a stylized lightning bolt or a circuit. The person's hands are visible, holding the circle. The background is white.

SUMMARY OF THE PROJECT IDEA

The project was focusing on street lightning and we had the carry out role in disassembling and sorting the street lights into iron, electrics, cables and plastic. This for it to be reused creating a circular environment.



THE PROBLEM

Until now we have not been able to sort and reuse materials from worn out streetlights. The problem is to make it worthwhile to focus in this process. While working around a school as Erhvervsskolen Vestjylland, we had the chance to make a testing the project's economic foundations and the possibilities of scaling it on a larger scale to other municipalities

THE ROADMAP

1. Group meeting to make clear the foundations of the project.
2. Gathering ideas how to carry out



3. Testing possible solutions to disassembling and sorting.
4. Making af final plan to carry out the project and make it profitable



RESOURCES

- Disassembling tools
- Containers and a hands on system to sort the materials.
- Freight solutions between company and school



THE OBSTACLES

OBSTACLES	SOLUTION
Hos to dissemble the parts	Finding the right tools to make it possible
Making a sustainable economy in carrying out the tasks	Trying differnet ways to speed the dissemblbing and sorting process until the right price was found
Freight of streetlights and making it susatinable	Solution was that the business found out a cheaper freight methid



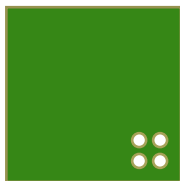
POTENTIAL...

HOW CAN YOUR IDEA BE BETTERED OR FURTHER DEVELOPED?

Making the process even smoother and adding some AI technology. Bigger amounts of material can make the different steps more efficient through new ways of carrying out.

Looking at other residual material such as flamingos.





FINAL PITCH

We made an arrangement in the class where the students discussed different ideas on the basis of the growing green game and decided to work with a company on focussing on residual material and the possibilities of creating a business plan based on the reuse or recycling of residual materials. We decided to contact one of our good partners, the local utility company that works with water, water drainage and street lights. here we discovered that the municipality was faced with having to replace 9,000 street lamps and that a plan was missing for what should happen to the old street lamps. together we made a plan to see how we could reuse the street lamps by taking them apart after they were taken down and recycling the individual materials. it turned into an agreement that we receive the street lamps, separate and sort them, after which the materials can be reused, partly for new street lamps or for other purposes

BUSINESS MODEL CANVAS

Key Partner

local utility
company
Municipality of
Ringkøbing
Skjern

Key Activities

Processing, disassembling and
sorting materials.

Key Resources

Man power
School – business relation.

Value proposition

Reuse of
materials in a
circular and
sustainable way.

Customer relationship

BtB.

Channels

Face to face.

BUSINESS MODEL CANVAS

Customer Segments

BtB.

Cost Structure

·
Freight
Manpower .

Revenue Streams

·
Materials to be reused.



RINGKØBING-SKJERN
FØRSYNING



ENTRECOMP

- Ethical and sustainable thinking
- Planning and management
- Learning through experience
- Working with others
- Creativity



Questa foto di Autore sconosciuto è concesso in licenza da [CC BY](#)

SUSTAINABLE DEVELOPMENT GOALS



Questa foto di Autore sconosciuto è concesso in licenza da [CC BY](#)

SDG GOALS

12 Responsible consumption and production.
By reuse of already used materials



GROWING GREEN

CIRCULARITY IN VET



Recycling of materials

Erhvervsskolen Vestjylland
Work shop students



Co-funded by
the European Union