Manual of Best Practices

Content List

1. PROJECT PRESENTATION

1.1. Main features and objectives

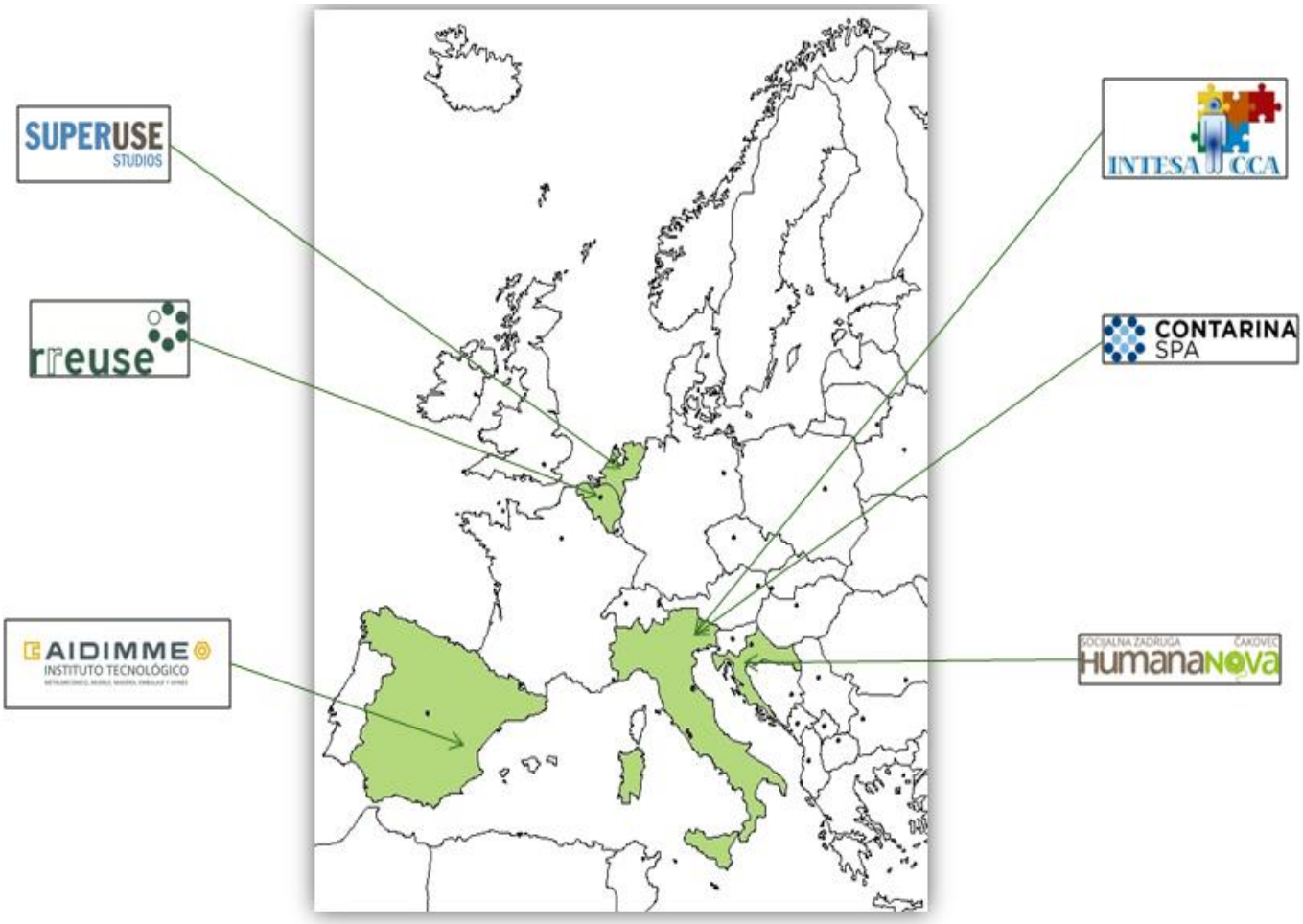
Under *Key Action 2 – Cooperation for innovation and the exchange of good practices* - of Erasmus+ Programme, *Renew2020* has promoted and supported the development of specific and professional skills of Youth in the Green Economy and Up-cycling sector, creating a strategic partnership between European organizations with specific expertise in the field of youth training, auto-entrepreneurship, design creativity and waste management.

Renew2020 principal aim was to train young participants to compete in an increasingly competitive international market, providing them with professional competences linked to the Up-cycling sector and fostering their creativity and soft skills necessary to create new form of entrepreneurship and to face youth unemployment crisis.

For this purpose, the project has involved 5 European Organizations (from Italy, Spain, Netherlands, Belgium and Croatia) and 25 young people, aged between 18 and 30. Young participants were mostly new graduates, unemployed, precarious employers, youth with social difficulties or from disadvantaged backgrounds, all interested in acquiring and strengthening auto-entrepreneurial skills and technical expertise to manage a product development process from concept to production.

Innovative ICT tools, non-formal educational activities and cooperative learning techniques allowed participants to acquire, update and develop both job-specific skills and key competences needed for their employability and to foster further learning, active citizenship and intercultural dialogue.

1.2. Strategic Partnership



CONSORZIO PROVINCIALE INTESA-CCA

Consorzio Provinciale Intesa-CCA is a cooperative consortium company founded in 1987 thanks to the initiative of seven social solidarity cooperatives working in Treviso area (north-east of Italy) in order to establish a coordination structure. It was founded as a territorial reality working to ensure citizens a fair role in the social sector responding to their needs and collaborating with institutions. Today Consorzio Provinciale Intesa-CCA is composed of 32 social cooperatives and it includes more than 2.200 associates, 1.500 working associates out of them. It represents the largest organization in social, but not only, cooperation sector in the province of Treviso, operating in the following areas:

a) lifelong learning process;
b) work services;
c) development of company systems.

Consorzio Provinciale Intesa-CCA is recognized by Veneto Region as a Training Organization for the lifelong learning and its training activities address both companies and people, especially young ones; its professional training is conducted through refresher courses, workshops, conferences and researches aimed at developing the specific skills required by the world of work.

Intesa-CCA is also an accredited body for work services, providing services and activities in the following areas:

- COMPANY MANAGEMENT:

• Business start-up: planning and development of new social enterprises, from business ideas to market research, from auto-entrepreneurship consulting to business plan, from the creation of companies group to the establishment of business enterprises;

• Company management: administrative services, accounting and budgeting, personnel administration, services in tax consultation, planning and control;

- COMPANY QUALIFICATION:

• Training and updating staff;

• Actions for continuous company improvement (quality - certification - accreditation card services, social balance);

• Health and safety in the workplace and hygiene and food safety.

- COMPANY DEVELOPMENT:

• Promotion and networking of business opportunities between member companies and public and private partners;

• Support of the social union in market research and participation in public procurement (general contractor);

CONTARINA SPA

Contarina is an in-house public company responsible for the waste management in 50 municipalities belonging to Consiglio di Bacino Priula, in Treviso province. It covers an area of approximately 1,300 square kilometres with about 554,000 inhabitants, through an integrated system involving waste from production to collection, treatment and recovery, generating a positive impact on the environment as well as on citizens lives.
Contarina daily objectives aim to increase the percentage of separate collection, to reduce the amount of waste produced (in particular the percentage of non-recyclable waste), to raise the quality of the collected recyclable material, and to improve the service offered, optimising the cost-benefit ratio. Contarina has reached levels of source separation of up to 85% and generates only 53kg of residual waste per inhabitant per year.
The company also manages processing plants that handle non-recyclable dry waste and organic and green waste.
In order to achieve the exceptional separate collection rates of 85% the system needs to be extremely efficient. This can only be achieved with the use of intensive and adapted curb side collection combined with Pay-As-You-Throw (PAYT) system.
Contarina is also involved in the education of citizens for a proper waste management, particularly through recycling, minimizing production of waste, to the issues of sustainable development. In order to raise awareness to greater responsibility and promoting individual and collective good practices, it is necessary that all stakeholders are properly trained and feel equally responsible for the effects of their behaviour on the environment.

HUMANA NOVA

Social Cooperative Humana Nova Čakovec is a Croatian company founded in 2011 with the aim of encouraging the employment of the disabled and other socially-excluded persons through the production and selling of quality and innovative textile products made from ecological and recycled fabrics for the needs of the domestic and the foreign markets. Its products are the response to the actual needs of users. Each fiber of a product embeds the satisfaction and benefit of workers, cooperatives, nature and community. In this way this Cooperative actively contributes to the sustainable development of the local community, diminishing of poverty and nature conservation.
Social Cooperative Humana Nova has collected 380.000,00 kg of clothing and footwear since 2012. Recycling has an impact! By sorting, reusing and recycling of clothing and footwear, donors of goods have directly impacted on the reduction of CO2 emissions into the atmosphere in the amount of 1.368.000,00 kg (generated by decomposition of textiles from landfill sites), they have reduced the use of 2.280.000.000,00 liters of drinking water, 114.000,00 kg fertilizers and 76.000,00 kg of pesticides in the production of raw materials for the manufacture of textiles.
Social Cooperative Humana Nova is a leader of the social entrepreneurship and has been recognized in the wider regional scope. The work of the cooperative has actively and directly contributed to the establishing of a tolerant society and has in turn helped the socially excluded persons and their families in enhancing their self-reliability and the quality of life.

AIDIMME

AIDIMME is the Technology Institute on Furniture, Wood, Packaging and related industries, a non-for-profit association with national and international scope that was founded in 1984 in Valencia. Its technical capacity and skills guarantee company development with one of the best European Technology Institutes. AIDIMME is in constant renovation and has the most modern equipment that can be found worldwide: a unique technology infrastructure with advanced laboratories performing more than 30.000 tests per year.
AIDIMME's mission consists in increasing the competitiveness of the furniture, wood, packaging and transport industries, primarily in those aspects related to innovation, research and development, quality, training, information, safety and, generally, management improvement, especially in design, manufacture, marketing and export strengthening.
AIDIMME has a solid base of knowledge, information and technology transfer skills provided by its long experience working, developing and researching on and for the wood, furniture and packaging industries.
AIDIMME performs very efficient and high level research, technological development and innovation work coordinating and participating in national and European projects.
Nowadays, AIDIMME is the scientific umbrella organization for more than 400 associated companies throughout Spain. Most of them are SMEs, so AIDIMME influences a significantly in this kind of companies trying to improve their competitiveness as they rely on AIDIMME.

RREUSE

RREUSE is a European association representing national and regional networks of social enterprises active in re-use, repair and recycling activities. RREUSE's 26 members in 23 European countries and one in the USA employ people at risk of socio-economic exclusion and help bring them back into work. In addition, they bring products back to the market at affordable prices providing essential household items to low income groups. In 2016 approximately 140.000 employees, volunteers and trainees were represented by the network.
The main activities of its members include:
- collection, sorting and redistribution of used textiles and clothing;
- collection, repair and reuse of electrical and electronic waste (WEEE), furniture and other bulky waste;
- home and community composting projects;
- charity and second hand shops;
- collection and recycling of paper, cardboard, wood, plastics, paints, metals, books and toys;
- awareness raising campaigns, international projects, exchange of best practice and business support.

RREUSE target is persuading the European Union and national governments to move from promoting just recycling and waste management to putting secondhand first.

SUPERUSE

Superuse Studios was founded in 1997 in Rotterdam and has become a pioneer in the field of sustainable design. The firm is renowned nationally and internationally for its innovative design approach as well as for providing 'open source' methods and tools to the design community. All with the aim to make effective use of frequently wasted resources and energy.
Superuse studios researches, designs, builds innovative products, interiors and buildings and develops strategies for smart urban transformations.
With their tools and methods, Superuse studios aim to transform the current society into a more sustainable one, and make more effective use of resources, energy and manpower.
Superuse Studios has 5 interlocking departments:

- Research: chemists, environmental scientists and analysts work together to help designers turn cities into a living web of connected material processes and flows.
- Materials: a team of scouts is open to any challenge in finding alternatives for burning, landfilling and traditional recycling processes, sourcing, harvesting and applying wasted materials.
- Design: the design-studio selects most suitable materials to be transformed into products or architectural components and spaces for public, private, collective and commercial clients.
- Architecture: by integrating the knowledge of solar, water and air cycles, Superuse invents highly robust sustainable concepts for urban planning and architecture
- Urbanism: developing strategies to transform monofunctional city districts to a symbiotic community for living and working.

Superuse Studios collects and shares knowledge continuously. By building open source platforms that allow users to connect available flows, Superuse Studios are offering the tools to help build a more connected society and support the knowledge gathered in educational programs.

Some of the partners during the First Transnational Meeting

1.3. Project Activities

RENEW2020 offered young participants the opportunity to participate in a training path that has been developed through **on-line lessons** based on an e-learning platform and through **four mobility periods** across Europe.
The partner organizations planned and implemented lessons and workshops about the topic of auto-entrepreneurship in the Green Economy to increase the professional competences, skills, knowledge of direct participants.
Moreover, the exchange of good practices provided young participants with the theoretical knowledge and practical skills to evaluate the opportunity to design and start up a Smart Re-use project business, from the business plan analysis to its implementation, manufacturing techniques, production technologies and materials features.

1.3.1. Training on-line

The on-line lessons have been managed through a professional e-learning platform in which were uploaded training modules, focused on the following topics:

1. *Basics of auto-entrepreneurship*: in depth analysis about the process of starting an auto-entrepreneurship business (non profit or profit) and about theoretical knowledge and practical skills to design and implement a commercial project.
2. *Fundamentals of Green and Circular Economy:* introduction to Green and Circular Economy, demand and supply of green jobs and environmental skills, current trends in green skills profiles.
3. *European legislation on waste management:* introduction to the European and national laws and the lobbing on waste and recycling market.
4. *Entrepreneurship and employment in the re-use sector:* analysis of the best practices of successful enterprises and study of the types of business that is possible to improve in the reuse sector.
5. *Eco-design:* about sustainable design, environmentally conscious design with the philosophy of designing physical objects complying with principles of ecological sustainability.
6. *Product Design:* systematic approaches for product designers to conceptualize and evaluate ideas, turning them into tangible inventions and products.

1.3.2. Training Mobility Periods

Participants took part in **4 training mobility periods** representing the practical moments to set up personal connection, exchanges professional and cultural information and to reinforce the sense of cohesion among the European citizens.
The mobility periods took place respectively in:

- **Italy**, 23rd – 27th of January 2017, managed by CONSORZIO PROVINCIALE INTESA-CCA and CONTARINA
- **Croatia**, 9th – 13th of My 2017, managed by HUMANA NOVA
- **The Netherlands**, 3rd – 7th of July 2017, managed by SUPERUSE STUDIOS
- **Spain**, 16th – 20th of October 2017, managed by AIDIMME

1.4. Methodology

Renew2020 has adopted an innovative teaching methodology, based on the integration of solid theoretical notions with informal and non-formal educational techniques and new information and communication technologies.

An e-learning platform has been created in order to develop an online training course addressed both to direct participants and external public for the entire duration of the project and beyond it.
It has supported the exchange of knowledge and information between partner organizations, which have conceived and uploaded virtual lessons on the core topics of the project.
Webinars (web seminars) have implemented innovative approaches of cooperative learning, based on the interaction of the group and including:
- Brain Storming exercises: proposing freely all kinds of solutions to a given problem;
- Problem Networking: identifying relevant data for setting the problem by discarding those excessive through networking comparison;
- Story telling: narrative practices in order to promote ideas focusing on the dynamics of social influence;
- In-depth analysis: the clear definition of a problem allowing the solution to be identified;
- Tutorials: self-paced instructional program that provides step by step information related to a concept;
- Debriefing: self-critical reflection of what has been learned with respect to a particular topic.

This long-lasting ICT tool will remain accessible on-line even after the end of the project, allowing also indirect participants to acquire and develop their specific competences of auto-entrepreneurship in the field of circular economy and up-cycling.

Renew2020 training path went along during the 4 mobility periods, which have adopted non-formal and informal learning and teaching modes including team works and face-to-face activities with trainers. In particular, participants' learning process developed trough:
- Brain Storming exercises;
- Problem Setting: dealing with a confused problematic situation, to define what the problem is to be addressed, answering the question "what do you do?";
- Problem Solving: identifying, planning and implementing the necessary actions to solve a problem;
- Role Playing: putting in place an "accident" and giving participants, as "actors" and "observers", the opportunity to review their own behaviour, to emphasize different points of view and to receive feedback;

- Debriefing exercises.

Learners had also the concrete possibility to visit successful waste companies, social enterprises, professional and design studios related with the recycle and Re-use business, to collect directly other operator's testimonies and experiences. The mobility periods, finally, represented the concrete moments for establishing personal connection, exchanging cultural information and reinforcing the sense of cohesion among the European citizen.

Social networks such as Facebook, Twitter and Skype software helped Renew2020 partnership organize the teaching activities. By assuring fast and instant communication, they have been used to exchange documentary material, pictures, videos and opinions between partners and participants.
These informal tools have also granted the visibility of the project activities to the virtual community, which could get information and impressions on Renew2020 group's daily work and send or share its opinions and ideas.

The training activities on the virtual platform and during the mobility periods have permitted Renew2020 partnership to gain its objectives of intercultural and interdisciplinary learning in the European contest. Through these actions, developed by professional educators, managers, entrepreneurs and interior designers, young participants have improved soft skills, language and relational competences and established links with other professionals, youth workers, waste operators and successful European and extra European organizations.

2. BEST PRACTICES

During the whole project duration, partner organizations have shared their experiences and knowledge in order to lead young participants through a learning path in support of youth auto-entrepreneurship in the Green Economy and Up-cycling sectors.
The exchange of best practices has been possible thanks to the e-learning platform and to the training mobility periods.
In the former, all partners produced and uploaded specific lessons:

- Consorzio Provinciale Intesa – CCA provided participants with the basics of auto-entrepreneurship;
- Contarina Spa managed the module related to "Fundamentals of Green and Circular Economy";
- RREUSE implemented the online training program with basics on "Entrepreneurship and employment in the re-use sector" and "European legislation on waste management";
- Humana Nova dealt with the supervision of the online training module about "Product Design";
- SUPERUSE STUDIOS has supervised the training module on "Design and Creativity";
- AIDIMME contributed to participants' learning process thanks to the implementation of the module about "Eco-design".

On the other hand, training mobility periods represented the opportunity for young participants to put into practice the knowledge acquired on-line and to foster their sense of entrepreneurship by meeting European successful professionals and by getting in touch with real examples of up-cycling.
Partner organizations exchanged good practices applying non formal and informal education techniques, combining visits to creative workshops, group works and role-plays during each of the 4 mobilities.

In particular, Italian partners, **Consorzio Provinciale Intesa – CCA** and **Contarina**, hosted the **first mobility in Treviso**, in the north-east of Italy, from the 23rd to the 27th of January 2017.
The presentation of activities of each partner in the field of sustainable economy (INTESA-CCA, HUMANA NOVA, CONTARINA, RREUSE, SUPER-USE and AIDIMME) was completed with the transfer of knowledge during three intense days on the concept of circular economy and waste management carried out by CONTARINA. RREUSE partner trained students in the new Circular Economy package of the European Commission and key legislative aspects; AIDIMME provided them with the basic principles of eco-design, while INTESA-CCA explained the most important aspects of starting an entrepreneurial business.
The theoretical training component was perfectly combined with practical exercises that fostered participants' creativity and interaction.

Participants could exchange cultural values and specific national practices, establishing lively debates about various concepts related to the circular economy, environmental legislation, reuse, waste management, social business models and eco-design.
Moreover, dynamic exercises, in groups, proved participants' spirit of initiative, asking them to create a business space project associated with the concept of circular economy.

Finally, visits to Contarina facilities and to Alternativa Ambiente Social Cooperative, an organic farm in Treviso, allow participants to see how these two concrete examples of local companies with business models framed in the circular economy work.
On one hand, Contarina is a waste management company recognized at European level for its innovative and successful management model of urban waste. On the other, Alternativa Ambiente Social Cooperative represents a successful company combining social goals with environmental protection.

The **second mobility period** took place in Čakovec, in Croatia and it was hosted by Social Cooperative **Humana Nova** Čakovec from the 8th to the 13th of May 2017.
During this session the cultural exchange and the transfer of best practices in the Circular Economy sector went on between young participants, partner organizations and local community.
First of all, Croatian urban waste management model was introduced to the project group: they could visit Thenix, a leading eco/recycling industry in the region, producing equipment and vehicles for the collection, the management of solid urban waste and water treatment; the second step was represented by the visit of Čakovec landfill, together with the plastic waste classification plant and the composting plant; finally, in the city council participants were explained the local model of urban waste management, the percentages of separate waste collection, system costs, etc. and they had the chance to debate with the representative of the city hall in charge of the waste management sector.

Secondly, the exchange of best practices was accentuated by visiting Humana Nova facilities, a reuse company with a social profile in the textile sector. Here participants and partner organizations could see how this Cooperative contributes to the social

integration of disabled people through work opportunities and to the sustainable development of the local community reducing CO2 emissions thanks to textiles and fibers recycling.
In 6 years Humana Nova has collected 380.000,00 kg of clothing, avoiding 1.368.000,00 kg of CO2 emissions, 2.280.000.000,00 liters of water, 114.000,00 kg of fertilizers and 76.000,00 kg of pesticides in the production of raw materials for the manufacture of textiles.

Simultaneously, the learning activities of Renew2020 project focused on two main aspects: eco-design strategies and the development of participants' business model ideas in the circular economy, adopting an entrepreneurial perspective and applying the methodology of the business model canvas. Students had the opportunity to present sustainable business proposals linked to the circular economy, exchanging their ideas with those of their colleagues and counting on project partners' supervision.

The work was developed in a creative atmosphere, through practical workshops, presentations and dynamic group works, looking for international interaction in a relaxed framework and in harmony with the environment.

Superuse Studios and Rotterdam city hosted the **third mobility** period of project Renew 2020, from the 3rd to the 7th of July 2017.

The location of work sessions was Blue City, which is an example of restoring an abandoned building in a space for start-up whose interior elements (partitions, furniture, floors, etc.) are mostly reused parts coming from demolitions of other buildings or industrial.
The idea of the mobility was to create an immersion of the participants in an up-cycling and sustainability context were they could work, discuss and reflect on their projects, getting inspired on the good practices of the host and the locality Rotterdam. The second key was creating the best environment for high performance team dynamics.

In particular, non-formal educational activities and cooperative learning techniques allowed to exchange good practices in the eco-design and materials life-cycle sectors. Group workshops and practical exercises on up-cycling and on sustainable design have given young people the opportunity to work on their creativity and spirit of initiative; recycling advantages introduced by presentations, like "How do I change my design & production after doing a life cycle analysis", which focused on the analysis of the waste flow of a second-hand store, its impact on transport and its commitment to health and safety, have been demonstrated during visits to recycling companies around the city; finally, meetings with reuse industry experts and debates on the environmental impact of material reuse have been a source of inspiration for project beneficiaries.

During the mobility session, participants could also improve their personal projects in the circular economy sector, thanks to business model and business plan exercises as well as to marketing basics presentations. In particular, participants shared ideas and suggestions, in a peer learning context, useful to better know each other and to build trusty relationships.

Participants' immersion in a sustainability context has been possible thanks to a particular mobility organization: food was recovered from street market left-overs that otherwise would be thrown away and meals were mostly vegetarian. Moreover, according to the real Dutch experience, Renew2020 group was hosted in a boat in Rotterdam harbor and the bike was the main mean of transportation. Moving together in bike, as a team, and living all together in an inspiring space to reflect, chat and do team building, created not only a high performance team dynamics, but it also helped create long-lasting bounds between participants, based on fraternity, dream sharing (vision alignment) and trust, that could open up new opportunities, collaborations and mobility experiences, even after Renew2020 conclusion.

These days of work made it clear that everything has a sustainable significance.
Teamwork and mobility experiences allowed participants to get in contact with different cultures and different perspectives. In addition, they learnt the great value of team activities, their potential and to improve personal skills and to help create a predisposition to work in group dynamics.
Finally, Dutch mobility has contributed to strengthening principles such as transforming opportunities in value and promoting social entrepreneurship for a sustainable development, making young people aware of the chances they can find in a very innovative sector like the green growth and creative reuse industry.

Last mobility within Renew2020 project was organized by **AIDIMME** in Valencia (from 16th to 20th October 2017) and it corresponded to the closing of participants training path within Renew2020 project.
On this occasion, business models within the framework of the circular economy have been the main focus of the contents shared and the visits made. Seminars, non formal education activities and outdoor visits have been carried out in order to continue the exchange of best practices among young participants, partner organizations and local community.

Important speakers, like Mr. Francisco Álvarez Molina, General Director of Sustainable Economy, Entrepreneurship and Cooperativism, hold interactive presentations in which the foundations of the policy of social economy and entrepreneurship in the Valencian Community were presented; the legal requirements of the European Union on reuse has been explained by Mathieu Rama of RREUSE, which represents social companies active in reuse, repair and recycling throughout Europe and is part of the project consortium.

Both speakers involved the students and other speakers and partners in a lively debate about the policies and barriers to reuse and the new economic model proposed with a social approach, and how this can contribute to the circular economy.

The exchange continued with an in-depth analysis about the economy of the Common Good and the contents of the Common Good Matrix, which is a tool to assess and communicate the actions of companies and their contribution to this kind of economy.
As a counterpoint, company Las Tres Sillas showed a concrete example of up-cycling business, composed of two young designers focused on the reuse in the housing sector and who presented their design outputs from waste or recovered material and large doses of creativity and good work.

Experts presentations were integrated with interactive sessions given by other partners of the project on creativity techniques (Ivan Božić from Humana Nova), eco-design strategies and design thinking, complementary methodologies to design thinking about reducing the environmental impact of the products during their life cycle, and also doing it thinking of satisfying the real needs of the users (Patricia Boquera and Joan Pau Plaza from AIDIMME).
During the mobility young participants continued working on their personal projects for developing a business model based on reuse: they had the opportunity to interact and work in mixed groups, where different point of views highlighted weaknesses and strength points of each project; they could improve their ability to present ideas in public as well, training for introducing their projects to potential stakeholders.

The third component of the Spanish mobility has been represented by visits to real companies, working in the circular economy sector and, in some cases, paying significant attention to the social component.

KOOPERA is a cooperative dedicated to selecting and classifying textiles for reuse (sale in second-hand stores) or recycling. Its objective is the social-labor insertion of people in situation or risk of social exclusion, through activities of environmental services, reuse and recycling, sustainable consumption and training. Participants were explained Koopera's business model, its important social impact and the operation of the latest technology applied to the plant (such as voice recognition). Social value and technological Research and Development go hand in hand in the case of this exemplary company, to achieve a more circular model in the textile sector.

Recytech and Social Nest were the last two visits during the mobility. The first one is a manager of waste from electric and electronic equipments (WEEEs) whose facilities receive both products of the white range (refrigerators, washing machines, etc.) and the brown range (televisions, computers, telephony, etc.).
Participants could understand how this type of elements are decontaminated (from dangerous substances and refrigerant gases) and dismantled, prioritizing recycling.
At Social Nest, on the other hand, they saw how a collaborative context can contribute to the development of business ideas and social value. Social Nest is a foundation born with the aim of supporting social entrepreneurs who want to turn social problems into sustainable solutions. It is the first hub of innovation and social entrepreneurship in Valencia. Social Nest promotes collaborative work among entrepreneurs, investors, companies, mentors and public administration and provides aspiring entrepreneurs with training, connections with potential funders, advice, dissemination and a space where they can share, learn, connect, innovate and advance as a company and as a person.

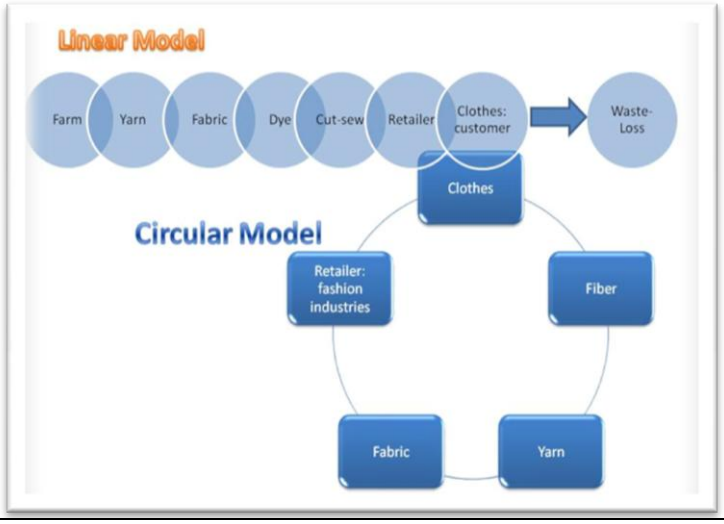
The exchange of best practices promoted during Renew2020 training activities allowed participants to improve transversal skills, language and relational competences and establish links with other professionals, youth workers, waste operators and successful European organizations. They also had the concrete opportunity to visit successful waste companies, social enterprises, professional and design studios related to the recycle and Re-use business, to collect directly other operator’s testimonies and experiences.
In conclusion, through these mobility periods, partner organizations brought together all young participants to encourage the exchange of different cultures, teaching methodologies, impressions, good practices, professional and personal features among the main stakeholders.

3. PARTICIPANTS' PROJECTS

Renew2020 training path has been developed with the aim of providing young participants with knowledge and skills necessary to conceive and design their own circular economy project.
During mobility periods they were given a task consisting in elaborating a concrete, feasible and sustainable business idea within the Green Economy sector. Projects should have followed the business model canvas guidelines analyzed in the second mobility and would have helped participants develop their creativity and auto-entrepreneurship spirit.
According to the chosen topic, participants got together in small groups or decided to work individually and, counting on group leaders assistance, they started drafting their own activity.
During each mobility, specific exercises, team works and presentations contributed to the development and examination of personal projects, which took shape step by step.
In the following pages, participants' projects are briefly described.

RENEW TEXTILES

"Make a change and give a second life to your used fashion clothes"



TEAM NAMES	Alessandro Putoto & Ilirjan Allgjata
SECTOR	Up-cycling and reuse of textiles
KEY SUPPLIERS AND RESOURCES	Our suppliers and partners will be: 1. *Caritas association* for the collection and distribution of textiles waste; 2. Clothing companies in local territories; 3. Local Institutions such as the Municipalities and the Regional Authority for financing and structural funds; 4. Social cooperatives active in the territory (for instance *Alternative Cooperative*) to involve workers with social needs;

	5. Company with expertise regarding the management of waste; 6. Insurance companies; 7. Banks for Loans; 8. Crowdfunding >> reward- based or mixed-based.
CUSTOMERS	1. Customer more sensitive to environmental issues; 2. Clothing companies which would like to enhance their operations, convert their activities and generate more valuable products adapting our yarns.
PROJECT DESCRIPTION	We want to implement a system to encourage the collection of waste textiles in order both to avoid the disposal in land fillings or the incineration and to promote reusing and recycling. Worldwide, more than ***150 million tones of textiles*** are produced per year and only in the *Treviso district* the fashion sector accounts about 3.9 billion euro of sales volume (Data from *Top500 Imprese* Treviso by PWC *top_500_tribuna_di_Treviso_2016.pdf p.2 et seq.*). The "**RENEW TEXTILES**" provides a way to turn used garments into new raw materials which can be offered to fashion industries in order to close the loop of their supply-chain. We would like to constitute a **social cooperative (non-profit organisation)** in order to involve people with physical, social and economical disadvantages and for this reason, we have to collaborate with other associations, cooperatives and local institutions to join people who can achieve benefits from these activities in terms of economical self-sufficiency and in improving their self-reliability. How do we implement this? Actually, most of the fashion industries produce garments with a linear process model. We want to encourage a circular model which can be achieved through the following pattern: 1. The first phase is the **procurement of yarns**: we will get it through the collection of used clothes and garments with defects or that remained unsold from fashion industries. *Caritas* is the main organization in the field of used-clothes collection in the Treviso district. It collects more than 2,500 tones of textiles per year (Data from *http://www.caritastarvisina.it/contribuisci/raccolta-indumenti/*). The organization of the collection is based on the deployment of "*yellow bins*" all over the municipalities of Treviso. People have the possibility to place their used-clothes in these bins without any cost. After some territorial cooperatives (like *Cooperative Alternativa*) retrieve the waste from the bins and transfer it into sorting centers. At this point, we would like to step in and to build partnerships with Caritas and the other cooperatives. Another channel is the collection of textile scraps coming from the industrial process of fashion industries or the defective and unsold garments;

2. The second phase and our main dream is to reach this long-term aim (which would constitute the **core of our productive system**): transforming the yarns into high-valuable fabric that can be used by local fashion entrepreneurs to produce high-quality clothes. There are several recycling technologies which are actually exploited.
   One of them, from the Swedish company *Re:newcell AB*, dissolves used-cotton and other natural fibers into a new, biodegradable raw material through an high-efficient chemical process (for more information about *Re:newcell AB* visit the following link *http://renewcell.se/)*. This material can be turned into textile fiber, be fed into the textile production cycle and meet industry specifications.
   At the moment, we would like to focus on lower-cost and more viable mechanical process which give lower quality raw material than the chemical one and need the addition of a certain quantity of virgin materials.

Actually, the process would be compounded by the following phases:

- *Selection*: we would like to concentrate specifically on the procurement of natural fibers (cotton, wool and viscose) separating them from the synthetic one. For a better result , we have to sort the textiles through a color - based selection in order to avoid the costs of dyeing and to save energy and pollutants;
- *Sanitization*: according to the *Italian Law 166/2016* and the *Legislative Decree* 152/2006;
- *Shredding*: the textiles are shredded by a specific shredding machine into "*shoddy*" fibers and, if we will have the economical possibility, blended with other selected fibers;
- *Carding*: separates the blended mixture in order to clean it from impurities and to intermix fibers. The carding is necessary to produce a continuous web suitable for subsequent processing;
- *Drawing and combing*: useful to eliminate knots, short fibers and remaining impurities;
- *Spinning*: is essential to impact strength to the fiber strand by twisting it and wind - up the resulting yarn in a suitable for storage, transportation and further processing.

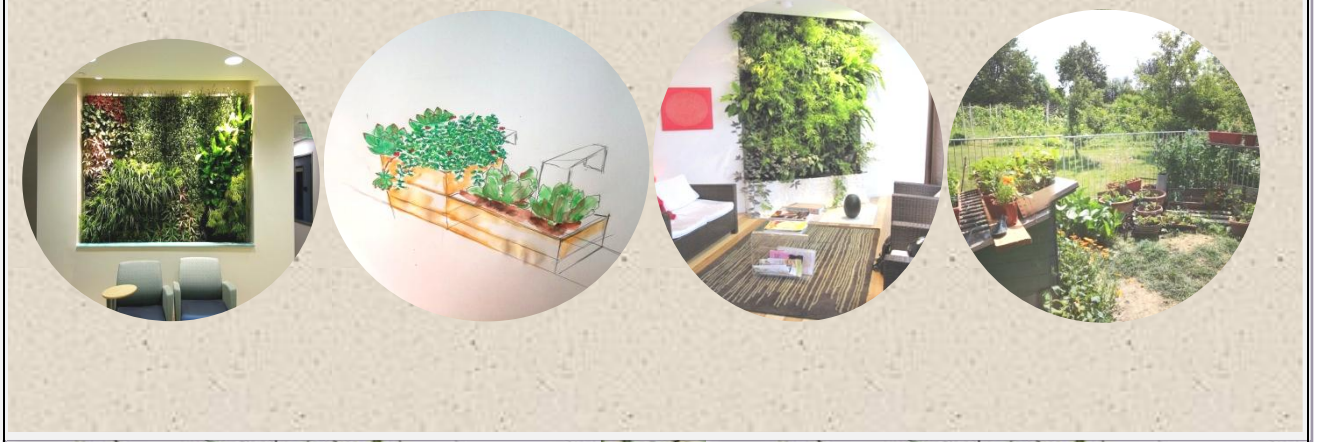
In order to supervise the entire technical aspects, we need at least one specialized-employer with technical background and able to convey his knowledge to the others. We have to reach an acceptable combination between expertise and social talent;

3. We would like to *incentivize the reuse of textiles* (second channel to close the loop of fashion industries) too . Therefore, after the selection, the treatment and the cleaning of used garments, we are thinking about the opening of **second - hand shop** where the re - usable clothes can be sold to customers. This can provide us further incomes to reach our aim;

4. Unfortunately, there are still textiles that cannot be treated and recycled. For this type of material, we will arrange an **interconnection with other sectors**, like the building and manufacturing one, which could use it to produce insulation materials.

	In addition, in order to make people aware of donated issues and to engage them in our activities, we will need to organize **initiatives** to promote and advertise the project such as, for instance, distribution of brochures to involve people, Facebook, website pages and social events (such as special lottery in which wins who has placed most garments on "yellow bins", preventing them from land filling and incineration).
VALUE PROPOSITION/ TARGETS	Our Social Cooperative will minimize the waste of textiles industries, promoting the re-use of materials, the maximization of their value, extending material life-cycle, spreading positive externalities and through these channels, safeguarding the environment (reduction of water and energy consumption). These are the combinations of our values: 1. *Customer value*: foster savings and value maximization (B2B); 2. *Sourcing value*: recovery and valorization of materials (closing the supply chain); 3. *Sustainability value*: benefits for society, avoidance of land filling and reduction of carbon dioxide emissions; 4. *Social Value*: involving people from difficult situations and make them self-reliable and economically self-sufficient. We are strongly convinced that *Sustainability* and *Circularity* are continuous process and constant efforts are required to keep the social, economic and environmental variables in equilibrium. Only if we proceed in these patterns we enable cooperatives and companies to produce value for their stakeholders and territories without damaging environment.
COST STRUCTURE	Salaries + Insurance Costs + Cost of capitals (interests, loans) + Cost of immobilisations and investments (machineries and equipments: estimate 125,000 €) + Current costs (Propellant, Transport, Raw material) + Transaction Costs (obtaining information, due diligence activities)
REVENUE STREAMS	The main output of our activity will be recycled yarns which would be sold to companies, fashion designers and other customers who would like to use a sustainable raw material for their projects. More than the physical product, our customers would pay for the service we offer them: giving a chance to contribute in reducing the environmental impact of the textile industry, one of the most polluting activity in our society.

Green Wall



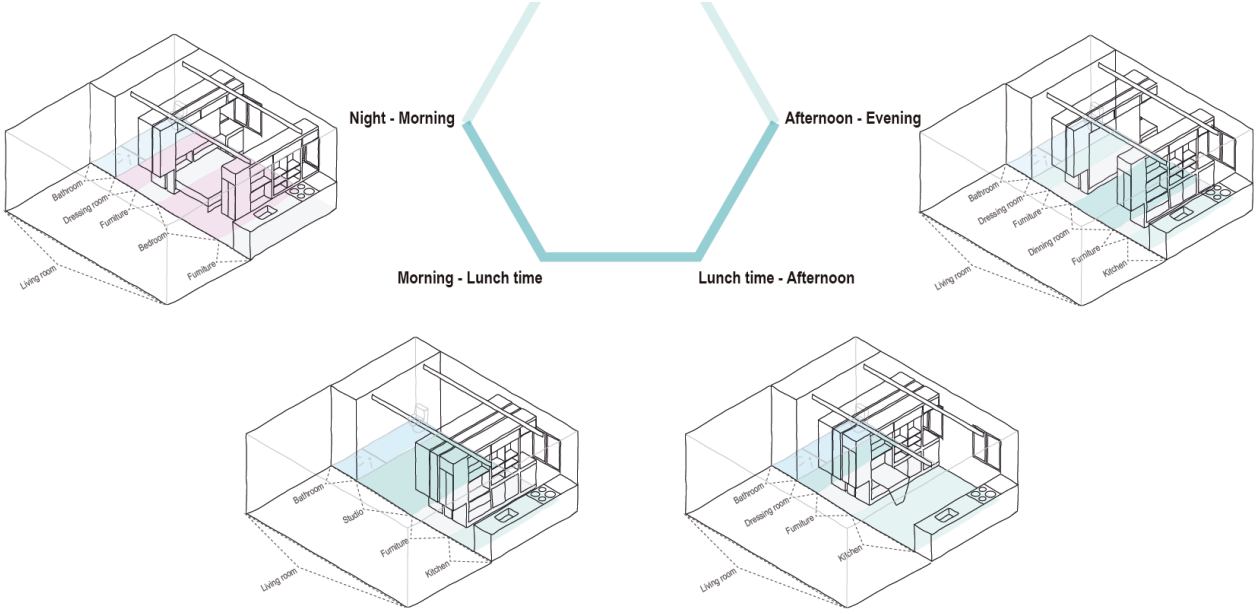
PARTICIPANT NAME	Janja Bedić
SECTOR	Up-cycling
KEY SUPPLIERS AND RESOURCES	Our service and products are sustainable and made of natural and biodegradable materials. We are smaller company willing to spend more time and ideas with clients in order to find perfect solution.
CUSTOMERS	People with small living spaces.
PROJECT DESCRIPTION	Our main goal is to improve air quality and offer people with small living spaces a place to grow their own food. Living in a small apartment often doesn't allow you to have much room for traditional gardening or a nice green space in the comfort of your home. As a result of that we came up with the idea of "Green Walls"; an eco-friendly and sustainable green space. In other words it is a vertical garden meaning it doesn't take a lot of space and above all is undoubtedly a great way to infuse greenery to interiors. By building green you invest in your health, reduce the impact of construction on the environment, improve the quality of your living space and reduce the costs associated with the using of the building. There are more and more people on our planet and

	less and less resources. We have to be more responsible when we build so the next generations don't end up left without necessary resources. In addition, vertical gardens are natural air- filters as well as a cooling source during the summer months. Alternatively they can reduce the noise coming from the streets but above all they provide you with a chance to grow your own organic food. To sum up our task is to build a green wall, find sustainable materials and perfect plants according to wishes and needs of our clients.
VALUE PROPOSITION/ TARGETS	Green architecture has many versatile advantages. Green Wall consume less power, last longer and it is healthier to live in them rather than conventional houses. Their construction requires less material and they are usually self-sustainable. Of course, they also have a smaller negative impact on the environment.
COST STRUCTURE	Clients will pay for service we provide, and from buying our products. We would cover the financial costs through city authorities for kindergartens and schools.
REVENUE STREAMS	Green Walls offers a complete range of design and plant services for interior family environments. Our services include live and artificial plant displays, a complete home plant service, ambient scenting for living environments. From the design concept to installation and ongoing maintenance we handle customer requests for any size apartment. Each project is distinctive in style to reflect your needs.

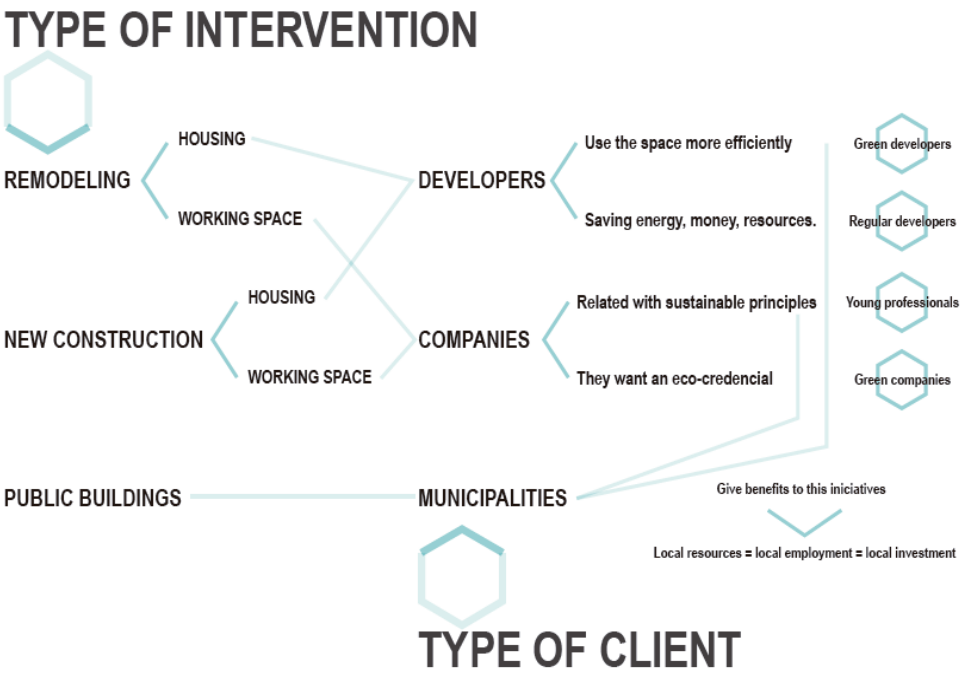
ADAMARQ

Smart - Spatial Efficient - Living Spaces

TRANSFORMABLE HOUSING



TEAM NAMES	Maria Martinez Moreno Ángela Montilla Fenollosa
SECTOR	Adamarq is an architects' studio which work has to do with up-cycling, energy efficiency, off grid housing…
KEY SUPPLIERS AND RESOURCES	Who are your suppliers? The materials used in the construction itself should come from local industries and should be as far as it is possible, reused. Therefore, the suppliers are local industries, construction sites and other craftsmen within a radius of 30 km. KEY RESOURCES: PHYSICAL, 2 laptops, a coworking space to set the studio which should also have a small workshop, and finally office furniture; INTELLECTUAL, structural engineers, craft workers and us (architects); HUMAN, all those key partners that will allow us to set up the mat map app which will allow us to have a network where to find reusable materials nearby.

CUSTOMERS	Adamarq offers to the clients customized and functional spaces using adaptable housing systems. Our niche markets are private promoters, companies and municipalities, who would like to add value to a property by remodelling or building up living spaces under our principles (working and housing). 
PROJECT DESCRIPTION	Adamarq offers to the clients customized and functional spaces using adaptable housing systems. Therefore, spaces will be able to change according to clients necessities. These, for instance, could be the amount of things they need to store or the activities they are going to develop in adaptable spaces. Those, will create overlapping dynamics throughout the day. It could be materialized in movable walls and pop up furniture or storage. Superposition of activities in the same area won't just mean to save space, but also to safe energy. As a result, the amount of features, technical installations and supplies will be dropped drastically. If only a space could be transformed in such a way that, you could have lunch with your friends at 12.30 and work out at 14.00, then just one space would need to be climatized By removing some tasks such as laundry or waste management, from the housing program, we could save space and energy. Creating a collaborative network of utilities could save resources and devices by centralizing this activities in buildings, neighborhoods and cities. WHAT? UNIQUE SPACES Overlapping dynamics will be created throughout the day, according to the number of things clients need to store or the activities they are going to develop in adaptable spaces. HOW? MATERIALIZATION Using adaptable housing systems spaces will be able to change, It could be materialized in movable walls and pop up furniture or storage.

VALUE PROPOSITION/ TARGETS	Adamarq meets the requirements of the regulation, and even improve them, giving our clients a high quality and customize design that satisfies their necessities. Bioclimatic principles together with cost saving, efficient spaces and saving energy, create a unique offer that doesn't exist in the current market. The main advantage of Adamarq's services is that we are able to combine different ways of saving resources with a suitable design, so clients get a customize solution and at the same time the cost is reduce. SAVING ENERGY. Superposition of activities in the same area won't just mean to save space, but also to safe energy. The number of features, technical installations and supplies will be dropped drastically. COST SAVING Due to reusing material, we can save money because we can get them between 20-30% cheaper than raw materials. Also, we will look for them in a local way, that's why transport will be cheaper too. CENTRALIZING By removing some tasks such as laundry or waste management, from the housing program, we could save space and energy. Creating a collaborative network of utilities could save resources and devices by centralizing this activities in buildings, neighborhoods and cities.	
COST STRUCTURE	Rent	450€/month
	Lighting and other services costs	100€/month
	Society foundation	3000€
	Architects fees	258€/month
	Project's costs (meetings, site visits…)	258€/month 0 to 200€/month
REVENUE STREAMS	For what value are your customers willing to pay? Our clients will be paying for a unique and sustainable that meets their necessities and that will have a low environmental impact and will maximize the used resources, ensuring that the energy efficiency maximizes its use. COST STRUCTURE OF AN STANDARD PROJECT Idea/necessities study …… 5-10%* Basic Project……20-25%* Technical Project ……40%* Building leadership ……30%* [*] From the set cost of each project	

WASTE 2 FUNCTION LAB

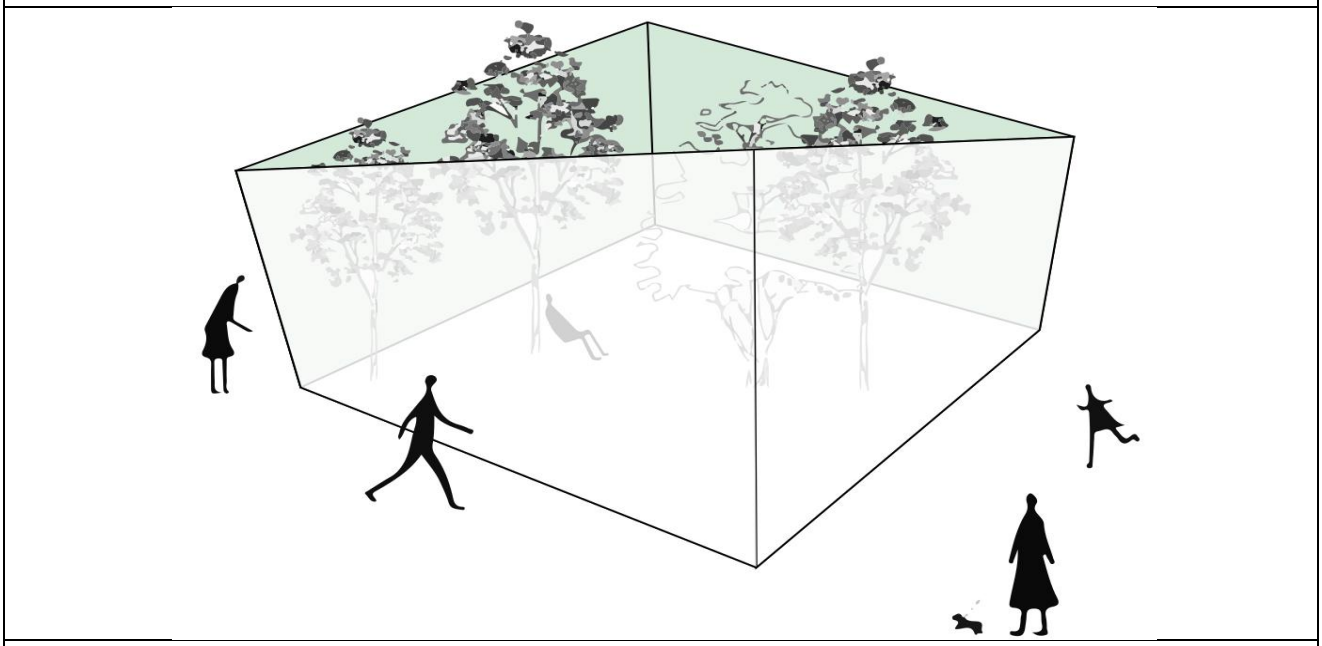
PARTICIPANT NAME	Lori Goff
SECTOR	Up Cycling - Using waste streams from food processing to create products
KEY SUPPLIERS AND RESOURCES	Supplier: Physical : Food Processing: Brewery- waste water with nutrients Unilever- waste streams with excess sugar Biofuel industry- waste stream glycerin Westland- Greenhouse growers-fruit and vegetable waste Supplier: World of Walas physical: Laboratory Intellectual/human: Partner projects under Farm2Future program Financial: laboratory funds and experience with grant writing
CUSTOMERS	Dietary Fiber Products: Niche market initially. Consumers concerned with health. Eventual marketing to wider market. Agriculture Sheets: Niche Market. Urban Farming projects
PROJECT DESCRIPTION	Waste 2 Function: Brewing cellulose from beer, side & and waste streams In the EU, roughly 25 million tonnes of food are wasted via production & processing each year. Instead of letting all of the water, nutrients, and

	energy that went into their production go to waste, We will reroute waste streams from the food processing industry which will be fermented into cellulose via microorganisms. The sugars, nitrates, phosphates, proteins, and low pH values of waste streams are considered environmental contaminants, however for microorganisms they are ideal growing conditions. Using fermentation, we can turn "waste" into a very nutritious and valuable resource. After fermentation is complete we will have sheets of pure cellulose, which can then be directed into various products. The first will be a line of high fiber dietary items; drinks, treats, snacks, desserts, and alternatives to pasta and rice. All of which will be little to zero added sugars, low calorie, and health promoting. I feel there exits a responsibility to design products that benefit our overall health. Helping people to increase their fiber intake will help alleviate issue with obesity, digestive disorders, decrease intestinal cancer risks, and reduce risks of diabetes. This will in turn help lower costs and burdens on our health care systems. As well as producing products, I will work together with local chefs to design new items and ways of preparing the fiber dishes. Another product will be Agriculture sheets for urban farming. BC is very durable, more resistant to microbial attack, has more tensile strength than traditional plant cellulose, and is more water absorbent. This leads to high potential to be used together with urban farming. The sheets may provide a stable growth medium on which the roots and can adhere. The water retention properties of bacterial cellulose (BC) may keep water accessible to the root systems making frequent watering less necessary. This will be beneficial in areas that are prone to drought, where constant access to clean water is difficult and in cities where urban farming can help reduce food deserts. The entirety of the system aims to break free of the outdated and wasteful linear model of production. We instead wish to design a loop of resources where the waste of one mode of food production continues on, adding to the health and quality of our lives.
VALUE PROPOSITION/ TARGETS	Value: Fiber Bites: To customers: Will be available in multiple options; Snacks/treats, Desserts, Rice & Pasta alternatives Increased daily fiber intake; Recommanded for women 25 g, men 38g daily, though the western diet is consuming only 15 g daily. • Higher fiber intake supports a healthy digestive system • Fiber is prebiotic, feeding good gut bacteria, thus increasing short chain fatty acid production in the large intestine • helps provide satiation when eating, feeling fuller while consuming less

	• aids in weight loss Little to Zero added sugars • Sugar is damaging to our health • instead utilizing low calorie natural sweeteners and fruit juices. Will use eco-friendly packaging Will operate with social sustainable workforce, employing refugees, women, new university graduates, people that have been unemployed long term and need experience to re-enter the work force. • Helps with social inclusion into Dutch society • Provides work experience to help people enter the work force. • Helps women gain financial independence. • People will feel proud to purchase products that are not only adding to their health but providing environmental and social value. They are then able to feel that via their purchasing power that they are helping in these same activities. Agriculture Sheets Value: The sheets will aid in seedling growth for urban farming beds. • Provides a strong fiber network for root growth. • Retains water so roots have water access without frequent watering schedules. • May be useful in drought prone areas-aiding in food/water security • natural and biodegradable. - will not need chemical interventions, has no negative effect on environment Value for companies that provide waste streams: They are able to reduce their carbon footprint • They will essentially produce less total waste as a portion will be rerouted as • a resource to my project. Can advertise sustainability/circular economy to their story. Increasing their marketability to " blue" conscious consumers. May build partnerships based on products. • Using their waste and in turn collaborating on product development/buying my products. May decrease spending on waste treatment. • By re-routing waste streams to me, they do not need to pay for waste treatment and they may also receive carbon credits due circular economy actions.

COST STRUCTURE	Lab: 2nd hand prices – 12,000 start-up Hood- 3,000 Incubator- 2,000 Fridge- 2,000 Microspcope-400 Small Equipment 1,000 Chemicals -1,000 Workbench- 1,000 Work tables- 500 Cultures/ media- 500 Upscale production- Design and construct fermentors- unknown cost Growth tanks- Packaging Product development Distribution Registration I will be paid a salary and given a space under my parent company.
REVENUE STREAMS	Consumers are paying currently 1-2 euros for 200g of cellulose in sugar water. This product is high sugar, produced/ shipped in/from Asia. I expect to charge 2-5 euros for products, price based on amount and type of product. Product ingredients will be highly focused on health and sustainability. Market research will need to be conducted to assess appropriate prices/product.

GREEN SOUND PAVILION



TEAM NAMES	Chiara Fornasa , Alessandra Zanatta, Monica Fontana, Ludovico Canale
SECTOR	Our country needs to be pushed to take environmental issues seriously. In 2016, the majority of the European countries had already presented their strategies towards the goals that the EU aims to reach in 2030, while Italy didn't even start to think about it. ASviS, the Italian Alliance for Sustainable Development, is in charge to solve the Italian delay and believes to overcome it through incentivizing circular economy, innovation, creation of jobs, sustainable urban development, renovation of degraded areas and creation of services for the communities. A very important step is being taken by supporting the development of urban gardens through the whole country, even though nowadays a big difference between North and South is still clear. Urban gardens aim to spread useful agriculture, customized on the different needs of the different communities, social aggregation and conscious education in urban centres and suburbs. Furthermore, local institutions can ask for State funding to realize this kind of projects. Green Sound Pavilion is a sort of urban garden that works especially in the recycling sector and meets three of the seventeen goals of sustainable development set by the EU: • Goal 4: Ensure inclusive and equitable quality education and promote life-long learning opportunities for all. We considered a social reactivation scenario in which promoting accessible

<table>
<tr><td></td><td colspan="5">activities to re-educate and raise awareness about the issues associated with eco-unfriendly behaviour.

• Goal 11: Make cities and human settlements inclusive, safe, resilient

Our main goal is renovating urban areas by improving the well-being of their inhabitants presenting them with a healthy choice, while lowering the pollution levels of their surroundings.

• Goal 12: Ensure sustainable consumption and production patterns.

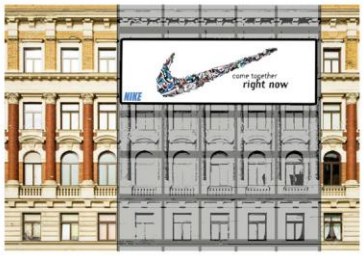
Finally, we promote sustainable consumption and production by directly involving the citizens and educating them in the recycling of their local waste resources in order to make the pavilion, which will become an important green source of healthy food, fresh air and contact with nature.</td></tr>
<tr><td rowspan="3">KEY SUPPLIERS AND RESOURCES</td><td colspan="2">Physical Resources</td><td>Intellectual Resources</td><td>Human Resources</td><td>Financial Resources</td></tr>
<tr><td>Recycled materials</td><td>Other materials</td><td rowspan="2">- Sound professionals
- Biology professionals
- Business consultants</td><td rowspan="2">- Employees
- Volunteers</td><td rowspan="2">- Public lenders
- Private lenders</td></tr>
<tr><td>- Wood
- Speakers
-Plasticized advertising billboards</td><td>- Electronic components
- Garden equipment
- Hardware</td></tr>
<tr><td>CUSTOMERS</td><td colspan="5">Public:
• Municipalities, regions and even public institutions could be interested in requalifying and adding value to abandoned and/or deteriorated areas.
• To sponsor and plan temporary events.

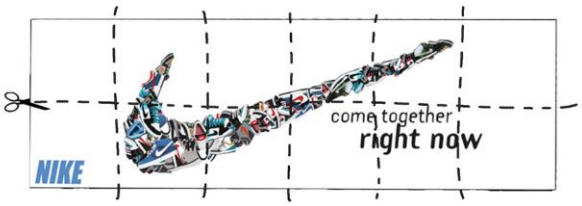
Private:
• Industries could install the pavilion between their buildings in order to improve workers’ well-being adding comfortable spaces that they can enjoy during their breaks.
• To sponsor and plan temporary events.

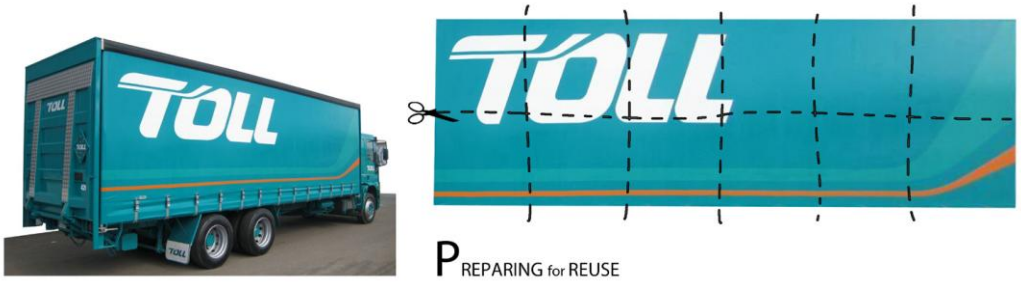
We are creating value for public institutions, privates and all those people who care about environmental issues.</td></tr>
<tr><td>PROJECT DESCRIPTION</td><td colspan="5">The project originates from the will of using waste materials to renovate another resource whose needs are often underrated: space. During the past decades, natural areas in cities have been rapidly substituted by concrete spaces even though there are many abandoned sites that could be reused. Heavy deteriorated areas need as much intervention and regeneration as waste materials. Our product, Green Sound Pavilion, aims to regenerate and reactivate abandoned, deteriorated areas or simply places where harmony between human beings and nature is very fragile. By an ephemeral structure, composed of discarded materials, we want to create a comfortable environment where enjoying different social activities surrounded by</td></tr>
</table>

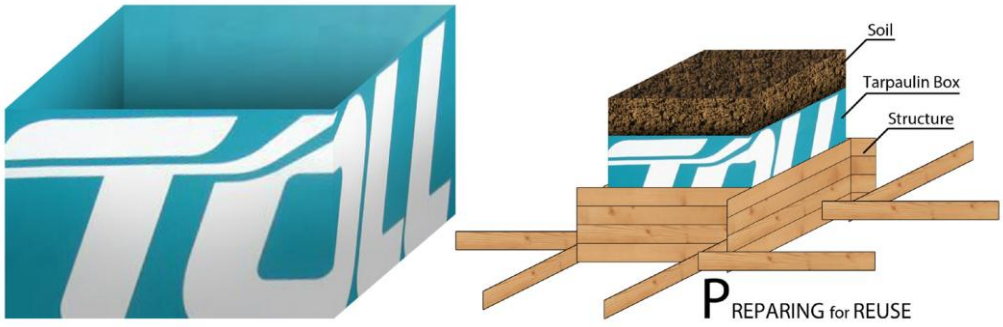
beautiful plants and sounds. In fact, sound will be an integral part of plants and humans' well-being improvement. At the end of its stay, Green Sound Pavilion will be disassembled and will leave a legacy of healthy greens that will give a new life to the previous abandoned space.

Green Sound Pavilion is made of disposal materials. We aim to collect everything in the surroundings and to embroil citizens in the making of the pavilion, in order to incentivize active participation. The structure is composed of wood planks coming from disassembled pallets (EPAL). We will buy pallets if discarded ones are not available. Speakers are taken from demolished vehicles and electronic waste. Once ready, speakers are integrated in the structure. Rainwater collection system and part of the envelope are obtained from used PVC billboards, collected from shops or trucks that no longer need them. Soil is mixed with 50% compost coming from food waste collected nearby (e.g. from restaurants, bars, etc…) and then composted by us.

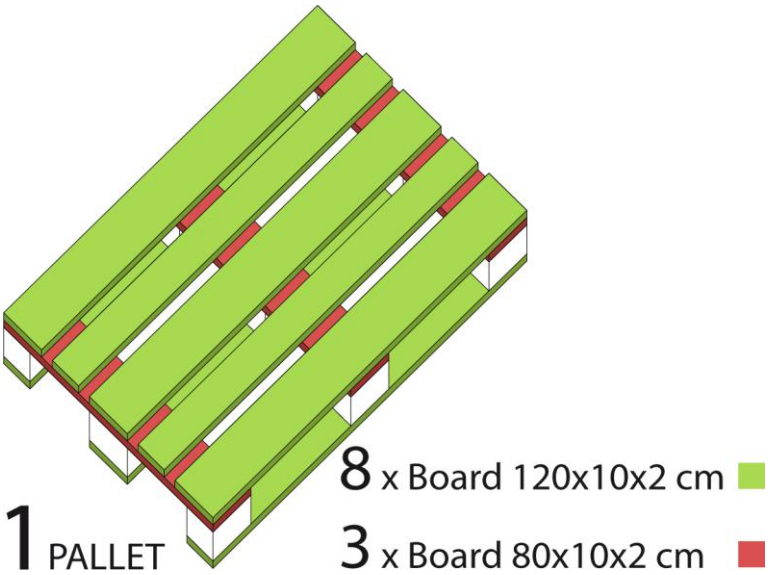




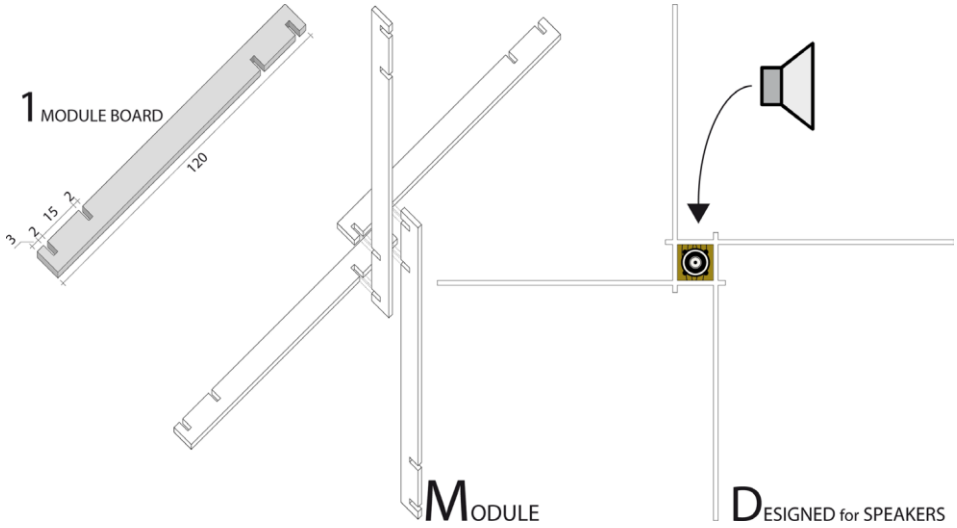


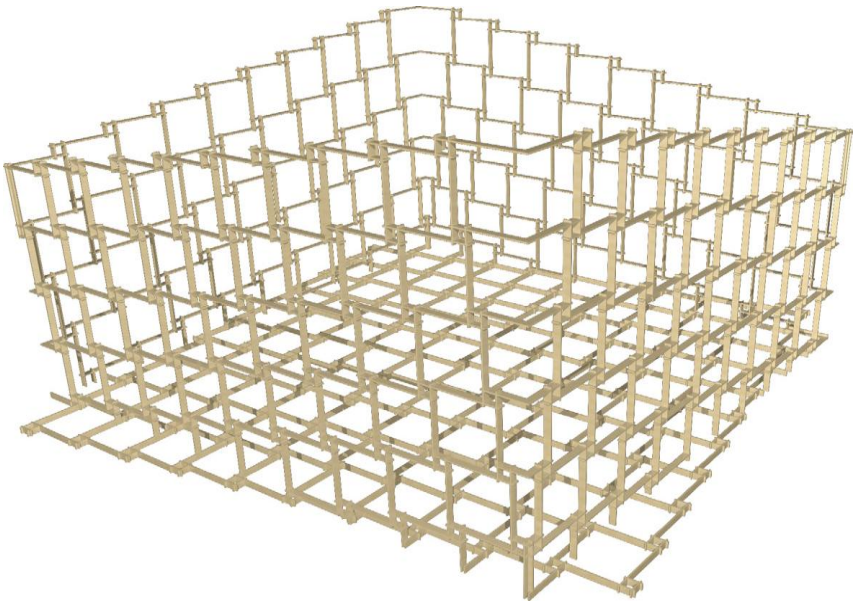


We chose EPAL pallets because widely used and they have standard dimensions. A pallet is composed of eight 120x10x2cm planks, three 80x10x2cm planks and nine solid wood cubes.



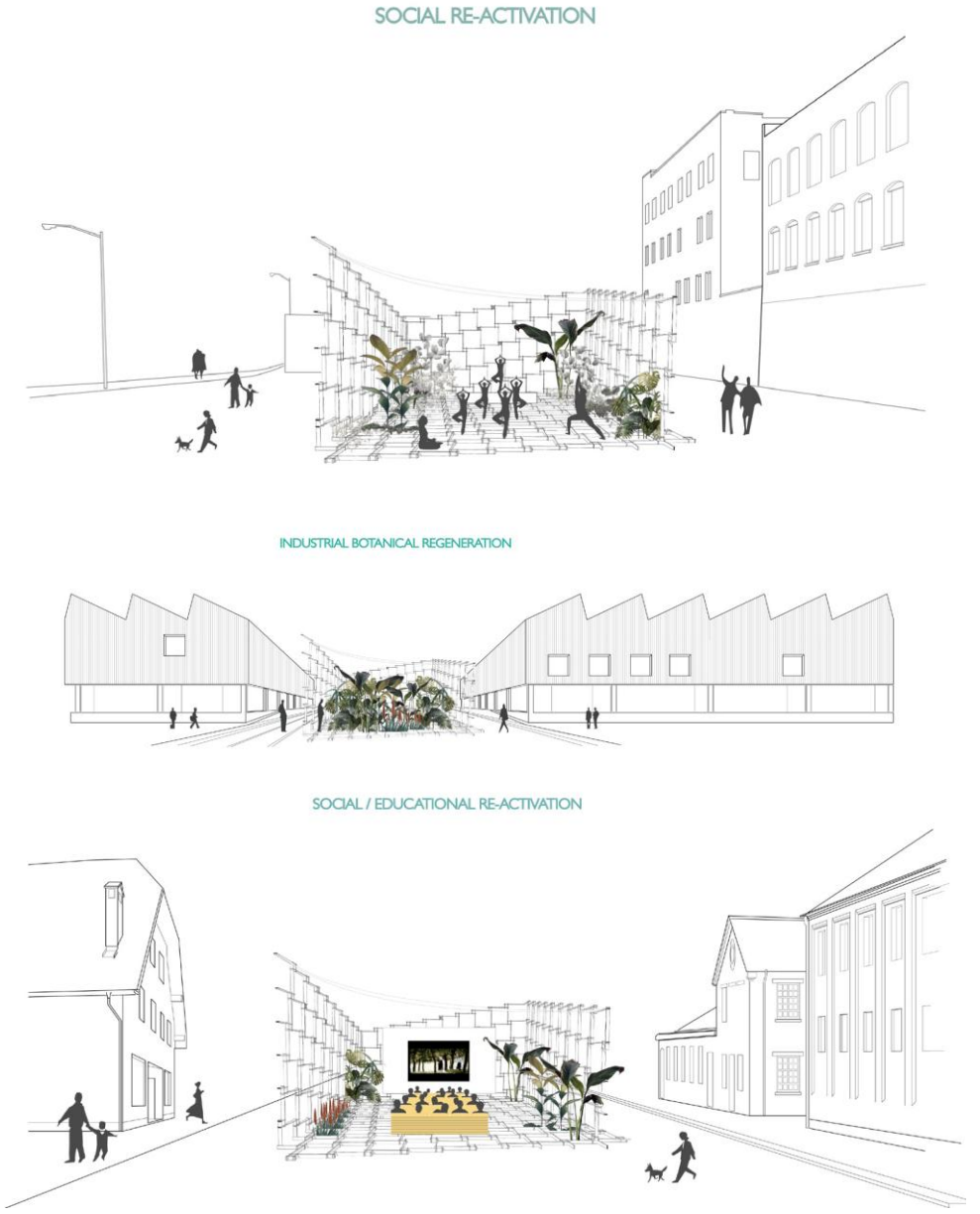
This allowed us to build a modular structure able to host the speakers in a 20x20cm square.





Furthermore, by joining the modules we obtained 80x80cm squares that can be used as a basement for the plants.

Plants will be chosen depending on the situation. On one hand, we will provide seeds or very young plants to pavilions that are expected to stay for a long time, in order to let citizens experience the joyful feeling that results from seeing the growth of something that they are taking care of. On the other hand, we will give grown up plants to structures that will linger for just a short term.

	Secondly, we suggest to grow edible vegetables in areas that face fresh food scarcity but low rates of pollution, and "pollutants killers", such as tillandsias, in industrial quarters or city centers. "Pollutants killers", especially in industrial areas, will help to overcome stressed workers' health problems, providing them with a sort of Eden outside the buildings where they can enjoy fresh air and relaxing music while re-establishing their contact with nature.  To sum up, we obtained the walls and the pavement using just standard EPAL planks and we incentivized the recycling of billboards, speakers and food waste, while improving people and plants well-being.
VALUE PROPOSITION/ TARGETS	Our value proposition is recovering waste materials such as discarded pallets, speakers and billboards and reducing energy needs. Green Sound Pavilion comes with an added value because of its double purpose: renewing deteriorated areas and incentivizing social aggregation in exhibitions and events.
	MATERIAL RESOURCES

COST STRUCTURE	Wood	Discarded material. If all the needed material is not available for free, we will buy used pallets.	100 pallets/structure 50 new 10€/pallet 50 used 4€/pallet **IC tot. 700€**
	Speakers	Recovered from junkyards.	10 speakers/structure 3€/speaker **IC tot. 30€**
	Electronic parts	Amplifier Transformer Cables	25€ 10€ 15€ **IC tot. 50€**
	Billboards	Taken from shops that no longer need them.	x/structure 25€/billboard **IC tot. € 25x**
	Garden Centre	Soil Mix: 64 lt/square 25 square/structure tot. 1600 lt composed of 50% composted organic waste 50% soil Plants: Ficus Benjamin 5 Dracaena 5 Ivy 4 Spathiphyllum 10 Azalea 10 Chlorophytum 15 Tillandsia 20 Sansevieria 5 Aloe Vera 10 Grass 3 Seeds mix:	 7€/1000 lt 50€/1000 lt **IC tot. 46€** 60€ 50€ 28€ 50€ 50€ 60€ 60€ 40€ 60€ 24€ **IC tot. 482€** 20€ **IC2 tot. 20€**
	Garden Equipment	Shears Shovel Hoe Watering can Gloves 5	8€ 3€ 5€ 5€ 35€ **IC tot. 56€**
	Hardware	Hammer Stick	15€ 20€

		Crowbar Welding apparatus Screws Tin Screwdriver Drill Drill bits	25€ 10€ 20€ 10€ 150€ 150€ 10€ **IC tot. 410€**
	HUMAN RESOURCES		
	Consultants	Sound professionals Biology professionals Business consultant	35€/h 5h 50€/h 2h 35€/h 5h **MC tot. 450€/structure**
	Emplyoees	4 employees (us) 1-2 week custom design project 3-4 week building Volunteers	tot. 10000€/month tot. building time= one month 0€ **MC tot. 10000€**
	SPACE RESOURCES		
	Office/Lab	Rent Electricity Gas Water Internet	500€ 50€ 100€ 10€ 30€ **MC tot. = 690€**
	OTHER RESOURCES		
	Transport	Van renting for 4 days Fuel max	300€ 300€ max **FC tot. = 600€**
	Total initial costs (plants): 1774€ Total initial costs (seeds): 1312€ Total fixed costs: 600€ Total monthly costs: 11.140€ Total cost of the first “Green Sound Pavilion”(plants): 12.514€ Total cost of the first “Green Sound Pavilion”(seeds): 12.052€		
LIFE CYCLE	Wood planks will last a maximum of four years in the outdoor and then they will need to be substituted, while billboards and speakers will be reused more times.		
REVENUE STREAMS	Customers pay to rent a structure where they can enjoy several activities and, once the structure is dismantled, they will gain a completely renewed area. The pavilion can be sold directly to privates or public institutions, but also rented for hosting special events (e.g. concerts) or displayed during urban renovation competitions, etc. It would need an initial investment of around 13.000€, and then it could be rented for 11.500€ per month, for a maximum of four years (then the wood planks would be substituted). This		

	would profit around 400€ per month. As we are a social organization, the earned money will be re-invested in the project or used to fund other initiatives with a similar philosophy.

RE-DO

PARTICIPANT NAME	Nemanja Kantar
SECTOR	Up-cycling
KEY SUPPLIERS AND RESOURCES	Donation from people Reusable waste
CUSTOMERS	Niche market – designers, environmentally sensibilised customers Mass market – IKEA etc
PROJECT DESCRIPTION	1. General information RE-DO: Reuse, Recycle, Upcycle, Design and Education Company Reuse, Recycle, Upcycle, Design and Education Company is an enterprise with environmental, economic and community goals. Our aim is to reduce waste through reuse, recycle and upcycle, educate citizens about usefulness

	of waste and employ unemployed local youth in motivating environment.
	Our products are premium designed reused furniture and accessorizes and reused furniture.
	Our services are repair, education and waste management.
	
	Founders of company will be unemployed youth gathered through innovative way of looking for employees, workshops etc.
	
	Where did the idea come from?
	When I first saw a TV-aquarium, it triggered my mind to think what other products we can produce from such waste and which price can we put on them when we acquire quality? Then all of the sudden ideas for other products started to go through my mind and I thought to myself, this is great idea to start innovative company which through organizing DIY workshops with locally collected waste materials, lobbying for reuse, organizing public actions and sale of certified Re-Do products does an impact in local community.
	
	Added value:
	Social aspect of company is in employment policies that are oriented towards youth employment and social entrepreneurship values (people, planet, profit).
	Company will be registered as social company and all profit is going to be reinvested in company and/or projects that are oriented around youth.
	
	2. Location:
	Re-Do is a company created to work in all sorts of environment, but as main goal is to employ youth and prevent their emigration, we want Re-Do to be positioned in smaller city where emigration of youth has become bigger problem.
	
	3. Structure and employees:
	Waste Collecting Team (WCT) :
	- WCT is collecting waste/donations and while they are collection they are also making an initial evaluation of item
	- upon arrival in warehouse they unload collected items in 2 piles, First pile for production and Second pile for disassembly and recycling
	- WCT also drives waste to other companies
	
	Production Team (PT) :
	- PT is taking care of every item that is gathered
	  ○ First pile – determination of quality and function, disassembly, clean, sort waste, properly manage waste and storage usable parts/items
	  ○ Second pile – disassembly, sort and properly manage waste
	- Production process: use stored parts/items to create new products
	- Storage of product: testing phase, quality check, marking with serial number, photographing and storage in safe, dry storage

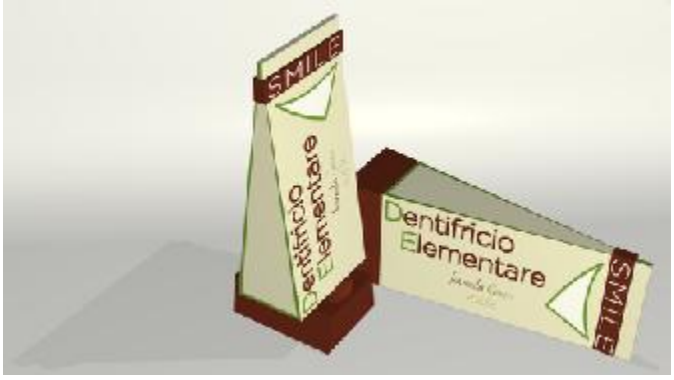
	- Repair process - Production team will lead DIY workshops in our warehouse Sales Team (ST): - ST is taking care of sale and buying, compensating, making contacts and PR - Making orders and arranging repairs - ST will educate people about social economy and usefulness of waste Administration is taking care of finances and employees. In first six months only founders will work, what means that cost of employees is going to be smaller. Presumption is that cost of these workers will be three average paychecks monthly. In next period, we can employ new workers after know-how has been established and there is more work. Number of employees per sector in first six months: WCT – 2 PT – 2 ST – 1 Administration – 1 4. Market chains: Collection of waste/donations: - in our warehouse - through call to donate - through actions for collecting - through collaboration with local waste management company and other companies Materials that we cannot find, reuse or recycle we will buy from local companies. Sale of products/services: 1. contact designers and invite them to see our video or come directly to us and make collaborations with them 2. Start to spread the word and contact people from institutions or going directly to them to get initial funding so we can start developing. 3. develop sale channels: a. online (webshop, Facebook, BuzzFeed, Instagram etc…): we will need to make a promo video and webpage b. media coverage c. public actions d. shop Sale channels are online (Facebook, blogs, BuzzFeed, forums, media), public actions with stands, attending fairs and, in time, small showplace shop. In addition, sale includes sale of our sorted waste to waste management

	companies. First products: TV-aquarium, scanner lamp Plan is to gather waste, electric and other like old TV's, construction sites waste, old scanners… and produce prototypes of products. Then, make a short video with introduction to our first product through social media and web page, media, we can promote our story and do a little research on our market and whom are we aiming as a Target Group. Sale Will be first just online, but over time, we can rent small showplace store. Store will also make orders for what people want repaired/designed and in there people will have opportunity to sign up for our workshops. Warehouse is first space that we need to have. Production and education workshops are going to be there so it has to be presentable and well equipped. Our employees have to go through accredited education for their position in company so they can work more confidently. In partnership with employment centre, we are going to employ at least half of our employees through their co-financing programs. We as a ReUse company are going to self-evaluate our environment impact and present our data public. Re-Do will have quite an environmental and community impact. In addition, we are going to actively lobby for improvement in waste management sector locally and nationally. Finances: First investment is through grant from Croatian employment centre. Later finances are going to Lean mostly on organizational power, education and Sale of branded Re-Do products, while money from eventual grants are going to be used for expansions. Action plan for first 12 months: 1st-3rd month: - find people who are willing to start a business - make all needed papers (business plan, investment brochure, marketing plan) and register company - establish good relationship with institutions and get initial funding - start networking and making connections to our peers - rent and adapt space for warehouse, get needed appliances and tools - educate employees/founders - establish waste collection - produce prototypes and make promo video and photos - develop education workshop - create web page, web shop and Facebook page 4th-6th month: - start marketing campaign - beginning of sales - buy a transporting vehicle - make first public action - organize first education workshop

	7th-9th month: - develop new products - development of Re-Do brand - steping up with marketing - include volunteers in company 10th-12th month: - employing new people - opening a shop - further education of existing and new workers
VALUE PROPOSITION/ TARGETS	We offer designed, reused, environmentally acceptable products. We are satisfying customer needs for nicely designed products which are making them feel good because they are good for environment.

COST STRUCTURE	**REVENUE STREAMS**
Estimated cost structure: Renting space for 1 year: ~15.000 € Adaptation of space: 8.000 € Appliances, tools etc: 7.000 € Transporting vehicle: 5.000 € IT equipment: 1.000 € Accounting for 1 year: 4.000 € Paychecks for 1 year: 25.000 € **Total: ~65.000 €**	Estimated revenue streams: Reused furniture: ~1.000 € monthly: 12.000 € TV aquarium: 300 € * 5 monthly: 18.000 € Scanner lamp: 150 € * 10 monthly: 18.000 € Repair services: 20-50 € per repair * 10 monthly: ~4.200 € Educational workshop: 30 € per person * twice a month, 10 persons for 6 months: 3.600 € **Total: ~55.800 €**

Dentifricio Elementare



PARTICIPANT NAME	Ludovico Dejak
SECTOR	Cosmetic packaging, particularly the Toothpaste one. Using the three principles of: ReCycle, ReDuse, ReUse; and creating a proper Brand imagine, Marketing Campaign and Business Model Innovation.
KEY SUPPLIERS AND RESOURCES	The keys that are inevitable in the supply chain, are the materials, the production line and the distribution. Basically, as I have not a cosmetic company, I need one with whom I want to work on this project, as a main partner.
CUSTOMERS	At the beginning the niche market of those who are aware of their environmental footprint, and who want to reduce it; those who want natural and transparent products; those who are pay attention to innovative products, brands and business model. When the brand will conquer an outstanding positioning in this niche, it'll be the right moment to open a "mass attack".
PROJECT DESCRIPTION	It all began when I choose to apply the eco-design-led-innovation approach with the attitude held by the quote: "to start the revolution from the little things we use every day." The road I choose to cover was through the toothpastes, a consumerist product with a high level of impact on environment in a oligopolistic market ruled only by multinationals. I've worked on the idea of applying the 3 main principles of a circular design: to recycle, reduce and reuse. Recycle: I've designed a better functionality and consumer experience thanks to the triangular shape and the addition of the squeezer element that helps you use the paste "'till the very last drop". Moreover, the squeezer element will have a logo that communicate the importance of

	recycling or reusing when you finish it, an important message as I've understood thought my market research that almost nobody recycles his toothpaste: sometimes just because he doesn't think about it, sometimes because it is difficult to wash it properly as a part of the paste remain inside. I've already found a biodegradable material that can be used for toothpaste packaging and that is perfect for this project. In this way the impact on environment will be minimized. Reduce: Less is more. I eliminate the external packaging, usually done with cardboard and colored plastic. The only real need of it is to communicate the brand message because the internal plastic tube has not a good shape for it. My packaging instead has two sides that could be used to communicate the brand message on the front and the eco and transparent principles on the retro. The shape of the packaging gives a big logistic advantage: it needs 2/3 less space to store it. It will need one camion instead of three to move the same quantity of product. An important feature of my packaging is the top: as there won't be an external protection as the cardboard-plastic packaging, it will be large as the entire packaging giving a sense of security. It will be visually linked to the squeezer element thanks to the colour and material. Moreover, it will be used as a base to support two toothbrushes and the tube, creating a unique and unite object at the side of your washbasin. Reuse: thanks to a distribution through shops or to a proper website platform to organize the shipping, the consumer can give back the packaging for free, and we will manage to clean it and reuse it. This is based on different companies around the world that are using successfully this business model. There are several business models that can be successful depending from the resources and structure of the partner. From a subscribe form based on a dedicated website and a powerful content creation for the consumers, to a marketing strategy based on local shops. I'm in the phase of starting the first negotiations with a possible partner. So there are two possible ways, one can lead to start the project a see how it can be deployed in reality. The second one, brings the project on internet with an awareness campaign - through websites on design, eco-ideas and social impact and maybe a crowdfunding campaign- to spread the idea of applying the principles of the Circular Economy and see the feedbacks of such a campaign. To follow the project: https://ludovicodejak.wixsite.com/ilmiosito
VALUE PROPOSITION/ TARGETS	There are two value propositions: one for the toothpaste company I will work with, one for the consumers. For the company, I'm giving a new brand imagine with a great differentiation in the shapes of the product related to the competitors, an eco-design-led-innovation, a new consumer experience: a new positioning in the marketplace. For the consumers, the value takes in consideration: eco-friendly,

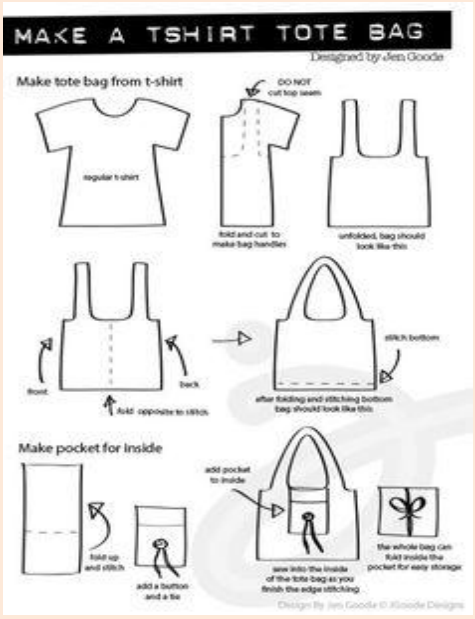
	functionality.
COST STRUCTURE	Compared to the normal toothpaste production, my cost structure are similar, with the difference that you give a higher value to the packaging with a relative higher cost that is amortized by a possible reuse of it, and a lowering of the logistic costs for the transport thanks to a reduction of space needed by around 66%.
REVENUE STREAMS	There are different business models that could be applied on this project: if it's based on interest and delivering the subscription business model would be the right one, with a powerful focus on content creation. If it's based on local shop, a traditional selling strategy would be good as well. The mixed strategy is probably the best solution.

POCKET BOTTLES KIT: always prepared for no-packaging shop!

PARTICIPANT NAME	Giorgia Vertieri
SECTOR	Reduction of waste production, up-cycling
KEY SUPPLIERS AND RESOURCES	Bottles from recycled plastic producer (Physical resource) No packaging shops (financial and marketing suppliers)
CUSTOMERS	First people going to no pack-shops, then anybody
PROJECT DESCRIPTION	The project is born from a question: why no-packaging shops don't work? I thought that maybe is because people forget to bring with them the bottles: we do shopping when we have time, when we, for some reasons, pass in the neighbourhood of a shop. Usually we don't organize anymore a big shopping for several days, but we go often to buy just the things we need. It's difficult to remember to bring with us the bottles, and the result is that we choose the easier way: we go to the normal supermarkets. So that, to improve the no-packaging shop business I've focused on soap products, and I've designed a bag to be kept in the car, which contains empty bottles we need to fill. More in detail it is a suitcase to collect flexible containers, with different colours for different kind of soap, like shampoo, shower gel, hair conditioner, dish washer soap, washing machine soap...any not comestible thing. In this way, with a quick view, I'm able to understand what I need, and so the urgency, because if the container is in the suitcase means I need to buy it, otherwise it is full at home. The bag has an enough narrow gap to keep containers sorted, but still easy to fill, and it can be closed with buttons to make it simple to manage.

	Containers will have a double stopper: a thin one to fill the small containers we use at home; a big one to make it simple to fill it at the shop and to wash (this it is not in the prototype yet). Dimensions of the bag are near to a page format A4.
VALUE PROPOSITION/ TARGETS	Waste saving, performance, design, energy saving. Will help to do more convenient and “clean” shopping
COST STRUCTURE	Bottles production
REVENUE STREAMS	Organization and feeling of doing a good action to the world

T-SHIRT BAG



PARTICIPANT NAME	Paula Horvat
SECTOR	Recycling sector
KEY SUPPLIERS AND RESOURCES	Our suppliers are the citizens of every local community. They primarily give us physical and material resources, but through workshops we also work on their human values.
CUSTOMERS	Our target customers are civil society associations, students, and people who support our work, and jobs similar to ours. We plan to focus on kindergartens, where we also intend to organize workshops so that children from the earliest age show how recycling can be fun and useful. Their bags could then be used for toys, slippers and books.
PROJECT DESCRIPTION	In order to reduce the throwing of unused items, we appeal to the creative use of clothing. First of all, our mission was to arrange a workshop to make bags from old T-shirts, but also, in the future, how to use other clothing materials in an environmentally friendly way. Our activity focuses on the local community. We try to make people aware of the importance of recycling in order to reduce the pollution of the

	environment. We plan to promote our activity on social networks on the internet, at fairs, leaflets, posters, advertising on radio stations, newspapers. So we will also open web-shops to get closer to the younger generation, and enable everyone to deliver our products. Each of us has at home at least one old shirt he no longer uses, and does not want to throw it. Perhaps there is some of our favorite band, or some nice memories of travel, maybe a gift we want to keep and do not separate from it. I want people to give an idea how to make these things useful, and give them their souls. So I appeal to organize a workshop for making t-shirt bags, but also, if possible, other garment items. We will show you how to use different materials in an environmentally friendly way. The workshop is voluntary and free, and creativity will come out of you. All of our bags will be placed on a web site with the option to buy, and to make people aware of the recycling of clothing. Even though your clothing is not on you, let it be with you!
VALUE PROPOSITION/ TARGETS	For our customers we offer unique and original bags made in an environmentally friendly way. We use In our production we use only verifiable resources. Customer satisfaction is important to us. Throughout our workshop, the customers themselves can express their creativity.
COST STRUCTURE	Costs of the project are: employee's pay, production costs, delivery to our customers, pay to computer technician for our Web-site. Of course, the biggest costs are our production costs and employees.
REVENUE STREAMS	Our customers are willing to pay our products because they know they are quality and unique, versus the competitors, which products are equal and workers are not paid enough for them work.

EFFICIENT SOLUTIONS

TEAM NAMES	Sara Inglés Mascarós and José Manuel Martí Fenollosa
SECTOR	Industrial sector
KEY SUPPLIERS AND RESOURCES	Subcontracted companies (construction industry, up-cycled materials supplier, construction manager, …)
CUSTOMERS	Industrial companies
PROJECT DESCRIPTION	Firstly, our aim to make a general analysis of the company. Secondly, a broader analysis of the processes. After completion of the analysis, data collection and analysis of data (thinking design manufacturing) will be perform. Nextly, we will present different options to improve the efficiency, reducing wastages (time consuming, material wastages, improve manufacturing process, implement standardization, ...). Finally, we will provide help/services to the company to implement the selected option and we will follow-up the process.
VALUE PROPOSITION/ TARGETS	Prevention, reduce, reuse and recycle. Waste saving, performance, design, energy saving.
COST STRUCTURE	Work space office, office furniture, PC + specialized software, salaries.
REVENUE STREAMS	Fixed tax (depending on the project) + Royalties (depending on the project success)

LIBRARY OF THINGS

PARTICIPANT NAME	Ilijana Ljubic
SECTOR	Circular economy
KEY SUPPLIERS AND RESOURCES	Anyone who has good quality items and who don't need it any more.
CUSTOMERS	Customer segment are mainly people who live in apartments - people with limited space, whose hobby or social needs could be met by membership in the library, also ecologically and economically conscious people, who rationally access resources. Tourists who want to travel more pleasantly but still experience all that the new city offers (excursion, recreational range). And all the others who will need something from the library.
PROJECT DESCRIPTION	In order to minimize differences between people (buying power), create unity, restore trust and increase quality of life, we came to the idea of opening a Library of things in Croatia. Why to buy an item which we need few times in a year, when we can borrow it? This concept is economically and ecologically sustainable (e.g. members have more money to buy better quality food).

VALUE PROPOSITION/ TARGETS	The goal of this enterprise is to create an environment which can increase the quality of life of the members – by borrowing and not buying, meet people's needs and enable financial savings.
COST STRUCTURE	Quality items, rents, salaries.
REVENUE STREAMS	Borrowing and membership fees.

4. EVALUATION

Renew2020 project evaluation took place after the end of the last mobility period and it consisted of anonymous written questionnaires and interviews, both face-to-face and group interviews.
Evaluation outcomes show participants' overall positive judgment about the project implementation. They all agree with judging this experience as interesting, positive and useful.
Most of them already had a basic knowledge of Renew2020 topics, but, since they wanted to go deeper, they decided to take part in this kind of project.
Instruments and material (both online and tangible) provided during the entire project have been adequate to complete the learning path and to carry out the activities.

The e-learning platform proved to be a useful tool for learning purposes: it was well prepared and accessible also to those who had a basic preparation in circular economy; however, some participants consider that there was not enough time to analyze its contents during the mobility periods and that it could have been better implemented with more in-depth exercises.
Moreover, they highlight that the most efficient ways for communication, due to participants' distance conditions, have been social networks like Facebook or WhatsApp, followed by the email channel. These tools made the group more cohesive as well.

Mobility periods abroad have been the most appreciated activities and the most effective in the learning process. They have increased participants' theoretical and empiric knowledge about entrepreneurship in the Green economy sector and built a collaborative group.
A good balance between theory and practice helped young beneficiaries improve their existing knowledge and gain new competences during every mobility.
Although some of them considered mobilities duration too short to analyze all topics in depth, they all agree with the fact that mobility periods provided them with a wider knowledge about Green Economy, Reuse and Upcycling. Practical activities such as group works, problem solving exercises and debates improved their interpersonal skills, their creativity and problem solving capacity, as well as encouraged the exchange of best practices both between participants and with partner organizations. Visits to different European companies represented the opportunity to see concrete examples of circular economy and to listen to auto-entrepreneurship success stories. Participants found very useful the chance to speak with different entrepreneurs and actors working in this sector and to confront their personal path with other European professional careers.

Methodology adopted during Renew2020 learning activities has been considered appropriate and coordinators provided adequate support in carrying out the activities. Informal and non formal learning proved to be the most suitable technique for the planned activities, because transferring theory through dynamic exercises makes the learning process easier. It allows to acquire new points of view faster than through a book or text and working in groups gives new insights.
This kind of methodology encouraged participants' debate and the strengthening of knowledge acquired online.

At the end of the project everybody recognizes the utility of mobility periods, which helped them spread their knowledge on recycling, upcycling and waste management.
Moreover, most of participants consider Renew2020 project as a useful experience with whom enriching their personal Curriculum Vitae and building a European network of contacts.

Their participation in the project has not only fueled their general interest in sustainability and steered their career in a certain direction, but also sharpened their competences so that it would be easier to find or change job.
They started striking up new relationships with European peers and organizations, which will last even after the end of the project. As a matter of fact, young people will stay in touch not only for friendship reasons but also for future consultation and to share job opportunities.

As far as suggestions, proposals, criticisms advanced by participants, most of them referred to the necessity of better defining, since the beginning, the objectives and outputs the project wants to achieve; on the other hand, more practical activities, such as workshops, team works and brainstorming exercises are to be implemented for better final results. They also suggested longer mobilities in order to go deeper in the topics analysis; in fact, because of the limited time, some participants think some topics have not been deepened enough.
In general, all young beneficiaries are satisfied with the project implementation, because it represented an opportunity of personal and professional enrichment. On one hand, they strengthened their intercultural knowledge and their sense of European citizenship based on respect for the others and open dialogue; on the other hand, they are now more competitive in the labour market thanks to a wider knowledge and specific competences related to circular economy and upcycling.
In conclusion, Renew2020 project has succeeded in creating a strategic partnership between European organizations working in the field of youth training, auto-entrepreneurship, design creativity and waste management, providing a group of young European people with professional knowledge and skills to increase their auto-entrepreneurship spirit in the Upcycling sector.

More info @

www.renew2020.eu

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