SUSTRAINY
Sustainable action Training for Youth

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SUSTRAINY PROJECT

ENVIRONMENTAL

BEST PRACTICES

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ACE recycling of beverage cartons

THE ALLIANCE FOR BEVERAGE CARTONS AND THE ENVIRONMENT

Category - Key Words	Circular economy, Cascading, Biomass, Wood
Who?	The Alliance for Beverage Cartons and the Environment (ACE) + members associate
Years of implementation	Ongoing
Place	Europe
Website	http://www.beveragecarton.eu/

Description

Beverage carton producers and their suppliers operate paper recycling processes which separate the paperboard from the carton's polymer and aluminium layers, enabling the high-quality fibre in the paperboard to be used for new products.

The polymer and aluminium contents are also in high demand for industrial applications, either separated or agglomerated (e.g. as roofing tiles, construction pan¬els). There are many recycling technologies available for this, and more technological alternatives are rapidly being developed.

The industry is determined to further develop recycling through innovation in recycling technologies and through quality improvements of recycling (including extracting polymers and aluminium). Given that collection is a pre-requisite to recycling, in some cases the beverage carton industry supports the separate collection of bever¬age cartons. The recycling rate of beverage cartons should increase thanks to new EU waste legislation and the require¬ment to collect separately all packaging materials.

The beverage carton industry's newly formed recycling platform will also contribute to this effort by better coordinating and sup¬porting the recycling of beverage cartons in Europe.

Major achievements

On top of being recyclable, the beverage carton has two additional environmental benefits:

- Its main raw material, wood fibre, is renewable, as it is sourced from responsibly managed forests, found mainly in the Nordic countries of Sweden and Finland

- As a form of packaging, cartons have one of the lowest carbon footprints in their core categories of milk and juice

MUD Jeans

Category - Key Words	Circular economy, recycling, waste management, sustainable business
Who?	MUD Jeans
Years of implementation	2013 - ongoing
Place	Netherland
Website	https://mudjeans.eu/

Description

MUD Jeans is a circular jeans brand from the Netherlands which has been applying a circular model to the production of jeans for a number of years. Customers can lease or buy MUD jeans, and return these to have them recycled into new denim products, thus saving water and resources.

As it is important for MUD customers to wear their jeans as long as possible, MUD also offers a free repair service. They have eliminated all toxic chemicals such as potassium permanganate from their production processes and replaced it with techniques such as laser, ozone and E-flow. The few chemicals still used throughout the production are entirely non-toxic and are Nordic Swan Ecolabel certified.

Major achievements

- 550 million litres of water saved until 2019

- 1,5 million kilos of CO2 avoided until 2019

- 20.000 jeans saved from landfill and incineration until 2019

VIESSMANN

Category - Key Words	Circular Economy, recycling, waste management
Who?	Viessman, member of EMAS register (Eco-Management and Audit Scheme)
Years of implementation	Since 1997
Place	Germany - International
Website	https://www.viessmann.com/com/en.html

Description

The company is an international producer of individual and industrial heating and cooling systems. Viessman eco-designs products: it uses recycled materials and marks each component so that it can be easily maintained and replaced. The company set up its own take-back system in 1995, inviting clients to bring back products at their end-of-life. More than 90 % of these returned products are recycled.

As early as 1997, the company carried out a study on how to implement a circular economy. The project looked at the potential of re-using components, but found that the innovation cycles in the industry were unfortunately too short for re- use to be a viable option.

Major achievements

By continuously improving its environmental performance, the company:

- increased its productivity by 20 % (lean production),

- reduced its steel consumption per boiler by 30 %,

- achieved a recycling rate above 99 % for all unavoidable waste.

Gujarat Canal Solar Power Project

Source: (The Economic Times, 2013)

Category - Key Words	Green Technologies, Innovation, renewable Energies
Who?	Gujarat State Electricity Corporation Limited (GSECL), Sun Edison Inc.
Years of implementation	2012 – Ongoing
Place	Gujarat, India - Narmada branch canal near Chandrasan village of Kadi taluka in Mehsana district
Website	-

Description

The average requirement of energy per capita in India is 1,010 kWh, being the lowest per capita energy demand in the world; but the need for increasing the capacity demand is due to the manufacturing capacity of the country. India recognized the need of a transition to renewable energies, and even if the 70% of the energy in 106 was from fossil fuels, but in the draft National Renewable Energy Act, the government has a target 175 GW through renewable resources by 2022.

The **Canal Solar Power Project** is a project launched in Gujarat, India; in 2012 with the aim to crease a 19,000 kilometres long network of Narmada canals. The objective or the project is the creation a network along the canals in order to establish solar panels and generate energy from renewable energy sources.

Major achievements

- Generation of 1.6 million units of electricity per year.

- The panels built over the canals, ensure that around 9 million litres of water does not evaporate annually.

- Increase in the use of energy from renewable energy sources, transition to a sustainable development.

- Conservation of the ecosystems because land is not eliminated for the establishment of the solar panels.

L’Oréal Perso

Source: (L’Oréal, 2020)

Category - Key Words	Green Technologies, Innovation, revolutionary product, cosmetics
Who?	L’Oréal, its customers and public in general
Years of implementation	Launch 2021
Place	-
Website	https://www.loreal.es

Description

L'Oréal Cosmetics plans to launch **Perso** in 2021, a smart skincare system capable of providing personalized skincare solutions via a four-step process:

First, personal skin analysis, performed via the Perso mobile app using L'Oréal-owned ModiFace AI technology to assess the user's complexion.

Second, Perso assesses any local environmental conditions through the Breezometer geo-location data. The main objective is to analyse the environmental and weather conditions that might have effects on the skin.

Third, the customer includes preferences and concerns about skin care and products.

Finally, the Perso device the device dispenses a single dose of a personalized blend of product such as moisturizer, serum or under-eye cream. The device will adjusts the products for morning and evening use. Furthermore, adaptation will be constantly part of the device.

Major achievements

The major achievements of the products will be the personalization of the product in accordance to the final user and implementation of Artificial Intelligence in such a product.

Perso from L'Oréal is a revolutionary product, because hanks to AI is possible to create a more personalized and unique skin care device adjusted to the needs of every skin.

SOLMOVE - Smart Solar Streets

Source: (RESET, 2018)

Category - Key Words	Green Technologies, Sustainable Business, Environment, Sustainable Transition, Innovation
Who?	Cities, citizens
Years of implementation	2014 – ongoing
Place	Germany
Website	https://www.solmove.com/en/

Description

Solmove creates smart solar streets, building road surface that generates electricity from sunlight, absorbs noise, breaks down nitrogen oxides, defrosts ice in winter, and provides valuable data and supplies electric vehicles with electricity.

The founder of Solmove, Donald Müller-Judex, realized the luck of rooftops to install solar panels and decided to implement the solar panels idea, adapting it, for its installation to roads. The roads will generate energy and can recollect data information.

Solmove was created in alliance with with two Fraunhofer Institutes, two universities and other experts. The solar street has been developed as a multifunctional “solar carpet” containing photovoltaic cells, LEDs and sensors. The system is electrically connected and can then be glued to existing surfaces such as roads and paths. The road is turned into a power network.

The 3S (Smart Solar Street) platform will be used to connect utilities, charging infrastructure operators, big data applications, traffic control, fleet management, car park owners and payment service providers, among others.

Major achievements

The main **benefits** and achievements of the Solmove Company are the creation in an efficient and environmentally friendly manner to generate and obtain electricity, by considering and taking advantage of the existence or roads.

Main benefits:

- Clean electricity: Generation of clean and renewable source energy reduces costs for municipalities, and landowners, and supply electric cars.

- Cost-efficient: Solar street roads in a life cycle of around 25 years a solar street can earn a plus of up to €200 per square meter meanwhile conventional once cost money.

- Nature-friendly: Solar roads do not occupy addition large natural areas, but the solar roads are laid on already existing surfaces.

Toyota Woven City

Source: (elEconomista.es, 2020)

Category - Key Words	Green Technologies, Sustainable Development, Innovation, Science, Technology, R&D
Who?	Toyota, Japanese Government, scientists, researchers, etc.
Years of implementation	Ongoing
Place	At the foothills of Mount Fuji in Japan
Website	https://www.woven-city.global/

Description

The Woven City, meaning ‘’Interwoven City” will be located at the foot of the Mount Fuji is city designed by Toyota, a sustainable city with solar energy and hydrogen fuel cell power, in which will be tested in a real environment the coexistence between caring for the environment, autonomy, robotics, artificial intelligence and personal mobility.

The city will be fully sustainable one including mobility such as autonomous vehicles; building built with wood and photovoltaic panels for the obtainment of solar energy.

Toyota will invite researchers, academics and scientists from around the world interested in carrying out their projects in a unique technological and social ecosystem in the world to participate.

Major achievements

The goal is for both residents and researchers to test, in a small-scale, controlled environment, how the combination of caring for the environment, autonomy- related technologies, artificial intelligence, or robotics would work. Therefore, the exchange of knowledge and knowhow thanks to the connection between people, buildings and vehicles will allow the development p future technologies and sustainable development.

EUPAP - An European Physical Activity on Prescription model

EU PHYSICAL ACTIVITY ON PRESCRIPTION

Category - Key Words	Quality of life; Healthy; physical activity; health care education
Who?	-FOLKHÄLSOMYNDIGHETEN [FoHM] Sweden; -MINISTERIO DA SAUDE - REPÚBLICA PORTUGUESA [DGS] LISBOA Portugal -INSTITUTUL NATIONAL DE SANATATE PUBLICA [INSP] -BUCUREȘTI România -VIESTOJI ISTAIGA CENTRO POLIKLINIKA [VIESTOJI ISTAIGA CENTRO -POLIKLINIKA] Vilnius Lithuania -INSTITUT NACIONAL D'EDUCACIO FISICA DE CATALUNYA [INEFC-ES] BARCELONA Spain -JOHANN WOLFGANG GOETHE-UNIVERSITÄT FRANKFURT AM MAIN [GUF-DE] FRANKFURT AM MAIN Germany -REGION MIDTJYLLAND [CFK] Denmark -VLAAMS INSTITUUT VOOR GEZONDHEIDSPROMOTIE EN ZIEKTEPREVENTIE VZW [VIGEZ-BE] Brussels Belgium -AZIENDA UNITA LOCALE SOCIO SANITARIA N 9 DI TREVISO [ULSS9] Treviso Italy -ministry for Health - Government of Malta [MEH] -Valletta Malta
Years of implementation	Started: 01/03/2019 Ends: 28/02/2022
Place	Malta; Italy, Germany; Romania; Sweden; Spain; Lituania; Portugal; Danimark; Belgium
Website	https://webgate.ec.europa.eu/chafea_pdb/health/projects/847174/summary https://www.eupap.org/

Description

Organisations from ten EU member states will be partners in this 3-year project for facilitating the transfer of the Swedish best practice model for physical activity on prescription (FaR). The overall objectives are to promote good health and to prevent of non-communicable disease through implementing country-based physical activity on prescription (PAP) programs in health services in several countries.

This proposal focus on this transfer of best practice acknowledging the need for collaboration between countries and added value of interdisciplinary and policy-practice-research collaboration. The health service is an excellent arena for health promotion due to its coverage and access for the whole population. The prescription of physical activity is a method that can reach and enable different population groups enhancing their physical activity for prevention and treatment of non-communicable diseases. Moreover, given access to health services this includes also socially disadvantaged groups leading to reduction in health inequalities. This means that the present proposal has the potential to contribute to meeting the objects and priorities in the work programme.

Target groups are organisations, stakeholders and end-users included in the local implementations. Target groups for dissemination will be health care educators and practitioners, physical activity suppliers, as well as patients and the general public.

Major achievements

- Involving policy and decision makers from authorities at national, regional and local level.
- Research points towards a social gradient in physical activity.
- Initiatives that have significant effect on social equity and equality are therefore crucial in this project.

LIFE WOLFALPS - WOLF IN THE ALPS: IMPLEMENTATION OF COORDINATED WOLF CONSERVATION ACTIONS IN CORE AREAS AND BEYOND

LIFE WOLFALPS

Category - Key Words	Nature and biodiversity; stable coexistence; coordinated management; counter poaching and control strategies of hybridization
Who?	● Parco Naturale Alpi Marittime (lead partner) ● Corpo Forestale dello Stato ● MUSE – Museo delle Scienze di Trento ● Ente di Gestione Aree Protette Alpi Cozie ● Ente di Gestione del Parco Naturale del Marguareis ● Ente di Gestione Aree Protette dell'Ossola ● Consorzio Parco Nazionale dello Stelvio ● Ente Parco Nazionale Val Grande ● Regione Lombardia ● Regione Veneto ● Triglavski Narodni Park ● University of Ljubljana
Years of implementation	Started: 01/09/2013 Ends: 31/05/2018
Place	Alps ecosystem, from West to East - 7 specific areas
Website	http://www.lifewolfalps.eu/en/progetto-life12-natit000807/

Description

Best life project 2018

Actions and means involved:
The main goal of the WOLFALPS project – to implement and coordinate wolf conservation actions in key core areas and beyond in the Alps ecosystem, from West to East, to further support the natural wolf alpine recolonization process – will be reached thanks to several coordinated conservation actions.

In each core area, depending on local priorities, the main actions are:
● establishment of Wolf Alpine Conservation and Communication Groups, increasing coordination in conservation measures and amplification of positive results;
● development of reliable wolf surveys for the evaluation of the wolf conservation status considered as an ex-ante and ex-post action, and characterization of conditions of conflicts which will allows optimal
● implementation of concrete actions;
● exchange and transfer of experiences from West to East, training of local actors involved in anti-poaching actions, assessment of wolf population parameters, as well as identification of local scale and alpine scale good practices;
● control poaching events, especially poisoning, by enforcement of new coordinated strategies;
● preventive measures adoption in recent recolonized areas;
● develop, test, and implement new ad hoc preventive measure strategies in the Alps context to decrease wolf attacks on livestock;
● develop local land management plans to protect the species and its reproductive sites from habitat loss, in coexistence with human activities. Implement plans and develop effective wolf eco-tourism;
● detection and control of wolf-dog hybridization events and coordinate wolf captive facilities over the Alps and Italy;
● evaluate the genetic status of this new alpine population and support genetically important wolves with eco-tourism campaigns;
● awareness campaigns for the general public, locals, hunters, and livestock owners on the ways of coexistence between wolf and human activities: educational programs with schools, web site, conferences;
● development of wolf alpine population level guidelines for optimal management and increase of technical knowledge at the management level through thematic workshops.

Major achievements

● coordinated actions for the long-term conservation of the Alpine wolf population.
● identification of functional strategies to ensure stable coexistence between the wolf and traditional economic activities, both in areas where the wolf has already been present for some time and in areas where the process of natural recolonization is currently underway.

Plastic Odyssey

Category - Key Words	Plastic reuse, recycling
Who?	Merchant Marine Officer, engineers, environmental specialists
Years of implementation	2019 - ongoing
Place	More than 30 stopovers on the 3 continents most affected by plastic pollution (with the departure from Marseille, France)
Website	https://plasticodyssey.org/

Description

19 tons of plastic enter the ocean every minute. To sustainably combat ocean pollution, we must not only improve our waste treatment capacities, but also and above all reduce our dependence on plastics.

Plastic Odyssey is the first boat that succeeded to turn plastic from the oceans into boat fuel. Plastic Odyssey aims to combat plastic pollution around the world, particularly that which affects the ocean. To contribute to this goal, Plastic Odyssey seeks to recover existing plastic waste to make a resource out of it and to limit the amount of plastic waste that has not yet been produced. To promote its project and accelerate the dissemination of its knowledge and technologies, Plastic Odyssey is currently carrying out a three-year expedition around the world on a recycling ambassador ship that is making progress thanks to the energy generated by plastic waste

Financial sponsoring partners: L'Occitaine en Province, Clarins, Matmut, Credit Agricol.

Major achievements

- Using plastic thrown in the oceans as a fuel

- Study cultures, relationships to plastics and local needs on three continents most affected by plastic pollution

- Initiating the creation of small recycling plants and waste reduction initiatives during the stopovers and develop local sustainable infrastructures.

TIBBER

Category - Key Words	Energy recovery, alternative energy, safe electricity, smart solutions
Who?	Energy consuming companies, sustainable electricity business, B2C, customers
Years of implementation	2016 - ongoing
Place	Norway, Sweden and Germany
Website	https://tibber.com/en

Description

The innovative Norwegian company, Tibber, has recognized a need to find smarter solutions for purchasing energy. Founded in 2015 by Daniel Lindén and CEO Edgeir Aksnes, developed an energy consumer service for house owners that works as an intelligent assistant that can buy, control and save energy.

It is the app that learns to buy, save and control electricity for your home. Tibber learns your home´s behaviour by analysing consumption, weather, and temperature and by asking you questions about your home. Tibber is on a mission to change the way we buy and consume electricity. In this regard, the company offers customers the ability to lower their energy bills using a simple app, where the purchasing of power is automatically done by its bots. Tibber has a highly unique technology where smart algorithms buy electricity for you automatically.

Major achievements

- Helped tens of thousands of new customers each month to lower their energy bill and consumption.

- Using digital technology to make electricity consumption smarter

- Tibber has raised €12 million since inception.

- Has 20 employees in offices in Førde, Helsinki and Stockholm.

- The company had revenues of approximately €10 million in 2018.

TOO GOOD TO GO

Too Good To Go

Category - Key Words	Recycling, antiwastage, food waste, fight against food wastage
Who?	Restaurants, customers, communities, food industries
Years of implementation	2015- ongoing
Place	Started in Denmark, now covers major European cities
Website	https://toogoodtogo.fr/fr

Description

Millions of tonnes of foods are thrown away in the worlds, tones each hour. This waste costs several milliards of euro yearly. The founders of the idea Brian Christensen, Thomas Bjørn Momsen, Stian Olesen, Klaus Bagge Pedersen, and Adam Sigbrand decided that an App that can bring together restaurants and customers will solve this issue. Eg, in France 14 326 540 rescued baskets of food helps to save 35 816 tonnes of CO2.

Too Good To Go is a free mobile application that connects customers to restaurants and stores that have unsold, surplus food.

It is an application that allows everyone to get involved in the fight against food wastage on their own scale, by enjoying themselves and forging close ties. Shopkeepers no longer throw away; customers eat while reducing wastage, the environment is better off.

How it works? Download an App on Apple Store or Google Play – Find your favourite food – Go and rescue your food!

Major achievements

- In February 2019, the company raised an additional 6 million euro in a new round investment.

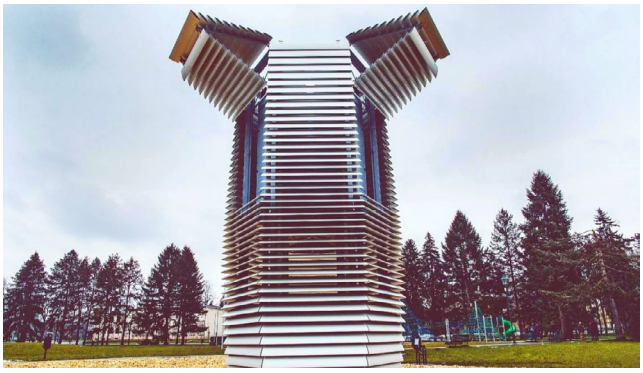
- Donated 60K euros to the French charity Restaurants du Cœur

- Too Good To Go has 350 employees in Europe (as per 2019)

- Challenge forToo Good to Go France: save 400 000 foods and plant 4 000 trees

- 9000 of shop and restaurant keepers are using this App currently in France.

SMOG FREE TOWER - Winner of the Ethics Ethical Award 2019



Category - Key Words	Nature; Clear Energy; reduction of pollution; circular economy;
Who?	studio roosegaarde
Years of implementation	2018
Place	South Korea, China, the Netherlands, Mexico, and Poland permanent art collection of: Stedelijk Museum Amsterdam, National Museum Zurich and The Biosphere Environment Museum in Montreal
Website	https://www.studioroosegaarde.net/project/smog-free-tower

Description

SMOG FREE PROJECT is a campaign for clean air led by Daan Roosegaarde to reduce air pollution and provide an inspirational experience of a clean future, including a series of urban innovations such as the SMOG FREE TOWER which provide a local solution of clean air in public spaces. It is combined with workshops with governments, students and the clean-tech industry to work together and make a whole city smog free. Recent SMOG FREE PROJECTS campaigns have been launched in South Korea, China, the Netherlands, Mexico, and Poland. Daan Roosegaarde: “We are on a mission for clean air”. SMOG FREE PROJECT is a series of urban innovations led by Daan Roosegaarde to show the beauty of clean air. As a tangible souvenir, Roosegaarde creates SMOG FREE RINGS made from the compressed smog particles collected from the SMOG FREE TOWER. By sharing the SMOG FREE RING you donate 1000 m3 of clean air to the city.

Major achievements

- clear air
- reduction of pollution
- recycling
- urban innovation