



Generalitat de Catalunya
**Departament de Territori
i Sostenibilitat**



Catalonia Ecodesign Award

2015

The inaugural Catalonia Ecodesign Award is being held this year. It is organised by the Ministry of Territory and Sustainability of the Government of Catalonia, with the Waste Agency of Catalonia serving as the technical secretary's office of the Award. Its main purpose is to reduce, by means of design, the environmental impact of products and services throughout their life cycle, and to foster the improved environmental performance of products, from the extraction of the raw materials necessary for their production to their manufacture, use and final processing as waste. Indeed, the definition of ecodesign takes into the account the incorporation of environmental criteria in the development of products and services, together with the other habitual criteria (quality, safety, ergonomics, aesthetics, price, etc.).

In addition to its implicit environmental benefits, ecodesign also has the potential to provide economic benefits in territories where it is implemented, since it helps to increase business competitiveness and to generate employment. That is why the Government of Catalonia has worked hard to establish its proven track record in promoting ecodesign in Catalonia.

This inaugural Award has evolved from the previous *Design for Recycling Award* which the Waste Agency of Catalonia had held since 2001. It recognised ecodesign strategies related to waste reduction and resource efficiency, specifically products which were manufactured with recycled materials, which were more easily recyclable than similar standard products or which incorporated some sort of waste prevention strategy. The new Catalonia Ecodesign Award has widened its scope in order to integrate all the aspects involved in the sustainability of products (resource saving, design of new consumption models, optimisation of end of life, etc.).

The Catalonia Ecodesign Award forms part of the *Catalan Ecodesign Strategy for a circular and eco-innovative economy-Ecodiscat*, which is being implemented by the Ministry of Territory and Sustainability of the Government of Catalonia with the goal of fostering the incorporation of ecodesign in the production process, encouraging a cross-cutting approach and knowledge transfer, and promoting the consumption of sustainable products and services in Catalonia.

The Catalonia Ecodesign Award is also in line with the internationalisation objectives of the 2013-2016 Government Plan of the Government of Catalonia. As such, the Award has also accepted entries from other countries, specifically from the Mediterranean region, thanks to its collaboration with the Regional Activity Centre for Sustainable Consumption (SCP-ARC), which operates within the framework of the Mediterranean Action Plan (MAP), an organisation attached to the United Nations Environment Programme (UNEP).

Index

Introduction

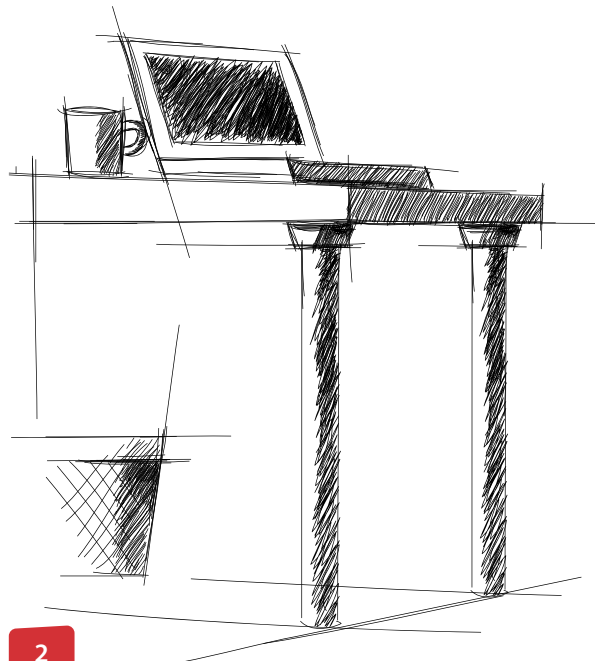
- 4. Purpose of the award
- 5. Categories
- 6. Evaluation criteria
- 7. Judging panel
- 10. Submitted entries

Product

- 16. Product. **Award**
- 18. Product. **Mentions**
- 24. Product. **Selected entries**

Product under development

- 26. Product under development. **Awards**
- 30. Product under development. **Mention**
- 32. Product under development. **Selected entries**



Strategy

- 34. Strategy. **Award**
- 36. Strategy. **Mentions**
- 40. Strategy. **Selected entries**

Young design

- 42. Young design. **Award**
- 44. Young design. **Mentions**
- 48. Young design. **Selected entries**

Euro-Mediterranean design

- 50. Euro-Mediterranean design. **Award**
- 52. Euro-Mediterranean design. **Mentions**
- 58. Euro-Mediterranean design. **Selected entries**

Purpose of the award

The Award recognises **products, products under development** and product-fostering **strategies** designed to improve the environmental performance of products and services throughout their life cycle.

The Award is open to **designers (including students) or manufacturers** of products, and to **promoters of strategies**, both from Catalonia and from countries in the Euro-Mediterranean region, depending on the category.

PUBLICATION IN THE DOGC (Official Journal of the Government of Catalonia)
ORDER TES/184/2014, of 6 June, by which the Catalonia Ecodesign Award is governed.

DECISION TES/2296/2014, of 13 October, by which the Catalonia Ecodesign Award is announced.



Categories

The award has five categories. Categories A, B, C and D are for participants from Catalonia, while category E is aimed at participants from the 21 neighbouring Mediterranean countries.



Category A: Product

A product in the market, designed or manufactured in Catalonia, which takes into account environmental criteria in its development process with the goal of minimising its impact on the environment throughout its life cycle.



Category B: Product under development

Project of a product not yet manufactured or marketed (but at the prototype stage) which has been designed taking into account environmental criteria, with the goal of minimising its impact on the environment throughout its life cycle.



Category C: Strategy

Initiative, policy, procedure or system, implemented or executed in Catalonia, which integrates the use or fostering of products whose design takes into account environmental criteria in the development process, with the goal of minimising their impact on the environment throughout their life cycle.



Category D: Young design

Product in the market, product under development or strategy developed by students or newly qualified professionals, taking into account environmental criteria in the development process with the goal of minimising its impact on the environment throughout its life cycle.



Category E: Euro-Mediterranean design

Product in the market, product under development or strategy developed in Euro-Mediterranean countries which takes into account environmental criteria in its development process with the goal of minimising its impact on the environment throughout its life cycle.

The **Euro-Mediterranean countries** in which entrants must have their corporate address in order to be eligible to submit an award entry in category E are: Albania, Algeria, Bosnia Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Montenegro, Morocco, Slovenia, Spain (excluding Catalonia), Syria, Tunisia and Turkey.

Evaluation criteria

The evaluation criteria are as follows:

a) Basic criteria:

- Incorporation of significant ecodesign strategies in the life cycle.
- Quality of the design.
- Innovation.
- In the case of products under development, the comprehensive study and development of proposals, their state of readiness and their economic and market feasibility are also taken into account.

b) Additional criteria:

- Application of environmental assessment methodologies.
- Potential environmental benefit.
- Possession of labels that accredit the environmental benefits of the product.
- Implementation of the environmental management system in the design and development process, Ecodesign (ISO 14006).
- Economic and social impact on the market and/or on its area of application.
- Start-up, quality and repercussion of the implemented communication and awareness-raising strategies.

Evaluation of submitted entries

The submitted entries were evaluated in two stages:

Stage 1: The initial selection was made by a team of experts appointed by the Waste Agency of Catalonia.

Stage 2: The entries that made the initial selection were evaluated by the judging panel, which then selected the winning entries in the five award categories.
This catalogue lists the entries that successfully passed the first stage (selected entries).

Judging panel

The judging panel is composed of international experts on design and sustainability.

Ministry of Territory and Sustainability of the Government of Catalonia

Mr Josep Enric Llebot i Rabagliati, Secretary for Environment and Sustainability



Ministry of the Government of Catalonia with responsibility for territorial planning, infrastructures, housing and the environment.

Directorate General for Environmental Quality of the Ministry of Territory and Sustainability of the Government of Catalonia

Ms María José Sarrias, Head of the Environmental Rating Service

Directorate General entrusted with safeguarding air quality, reducing the environmental risk of activities and promoting instruments for the environmental management, eco-labelling, ecodesign and life cycle assessment of organisations, products and services.

Waste Agency of Catalonia

Ms Pilar Chiva, Director of the Prevention and Recycling Promotion Area



Public company of the Government of Catalonia with competence over the waste generated in Catalonia and managed within its territorial area. It promotes a waste management model geared towards a more resource-efficient and circular economy.

Agency for Business Competitiveness (ACCIÓ)

Ms Mariona Sanz Ausàs, Director of the Business Innovation Unit

ACCIÓ



Agency for business competitiveness of the Government of Catalonia. It specialises in fostering business innovation and internationalisation and has a network of 31 offices around the world.

Judging panel



BCD Barcelona Design Centre

Ms Isabel Roig, Managing Director

Not-for-profit private foundation, created in 1973 with the mission of promoting design in the corporate environment as a key factor for innovation and competitiveness, and as a discipline that improves people's quality of life.

adi

fad

Industrial Design Association of the Arts and Design Promotion (ADI-FAD)

Mr Daniel Vila, board member

National not-for-profit cultural body founded in 1960. Operating through the contributions of its members, its main goal is to disseminate and promote industrial design in social, institutional and business areas.

ADP

Associació de Dissenyadors Professionals
Asociación de Diseñadores Profesionales
Professional Designers' Association
Full Member of BEDA

Association of Professional Designers (ADP)

Ms Anna Muni, member of the association

Association set up in Barcelona in 1978, composed of graphic, industrial and interior designers, along with companies, institutions and students interested in networking and collaborating in defence of the professional interests of the sector. It promotes the cultural and professional value of design, encourages its everyday use in the corporate world and guarantees its exercise through professionalism.



Technology, Industry and Economics Division of the United Nations Environment Programme (UNEP-DTIE)

Ms Elisa Tonda, Acting Head of the Responsible Industry and Value Chain Unit

UNEP unit provides solutions to decision-makers and helps change the business environment by offering platforms for dialogue and cooperation, innovative policy options, pilot projects and creative market mechanisms.



Union for the Mediterranean (UfM)

Ms Alessandra Sensi, Senior Programme Manager of the Water and Environment Division

Union for the Mediterranean
Union pour la Méditerranée
الإتحاد من أجل المتوسط

Multilateral association whose goal is to increase the potential of regional integration and cohesion between Euro-Mediterranean countries, inspired by the shared political will to revitalise efforts to transform the Mediterranean into an area of peace, democracy, cooperation and prosperity.

Judging panel

Mediterranean Action Plan of the United Nations Environment Programme (UNEP-MAP)

Mr Habib El Habr, Assistant Coordinator

UNEP unit whose goal is the protection and improvement of the environment and the development of the Mediterranean region, based on principles of sustainability.

Consumers' Association of the Province of Barcelona (ACPB)

Ms Matilde Torralba Navío, President

Catalan civic not-for-profit organisation devoted exclusively to informing, advising and defending consumers in Catalonia.

Mr Pere Fullana i Palmer

Director of the UNESCO Chair in Life Cycle and Climate Change (ESCI-UPF)

Expert on environmental and sustainability issues, specialising in the quantitative assessment of the environmental impact of products, services, processes and organisations. His areas of expertise include the methodology of Life Cycle Assessment (LCA), ecodesign and ecolabelling applied to different sectors.

Mr Alfredo Balmaceda

Director of ZICLA

Expert on environmental and sustainability issues; director and founder of Zicla, a company that innovates through the use of recycled products and waste management, turning waste management into a business opportunity committed to the environmental improvement of activity.

Mr Tomàs Molina

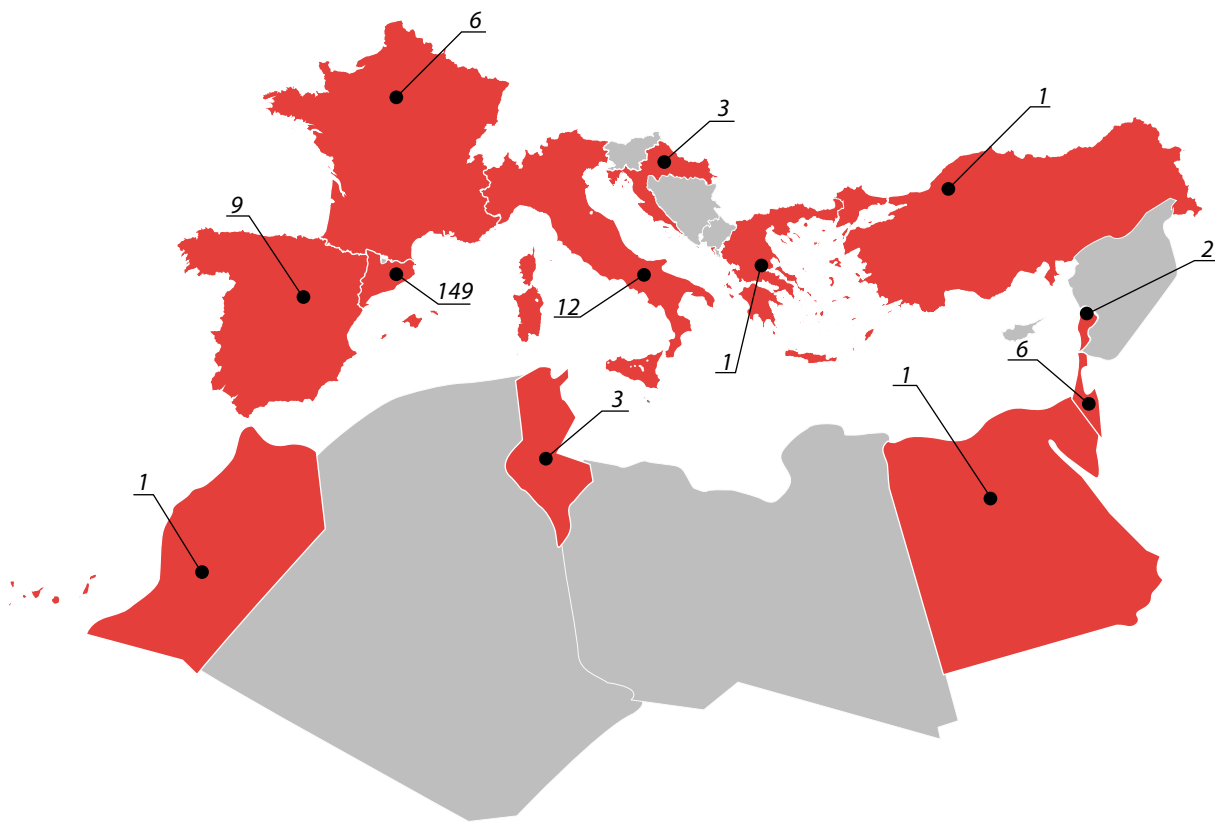
Head of Meteorology of Televisió de Catalunya

Expert in communication, specialising in meteorological and environmental issues and president of the Catalan Scientific Communication Council.



Submitted entries

A total of 194 candidatures have been submitted: 149 from Catalonia and 45 from the remaining Euro-Mediterranean countries. Of these, 56 were selected to go through to the second evaluation stage of the Award. These are the entries included in this catalogue.



Categories and Countries

The entries are spread across the various categories as follows:

Category	Country	Total	Selected
A. Product	CATALONIA	48	12
B. Product under development	CATALONIA	49	10
C. Strategy	CATALONIA	29	11
D. Young design	CATALONIA	23	11
E. Euro-Mediterranean design	CROATIA	3	1
	EGYPT	1	—
	SPAIN	9	3
	FRANCE	6	1
	GREECE	1	—
	ISRAEL	6	1
	ITALY	12	3
	LEBANON	2	1
	MOROCCO	1	1
	TUNISIA	3	—
	TURKEY	1	1
Euro-Mediterranean design Total		45	12
General total		194	56

Sectors

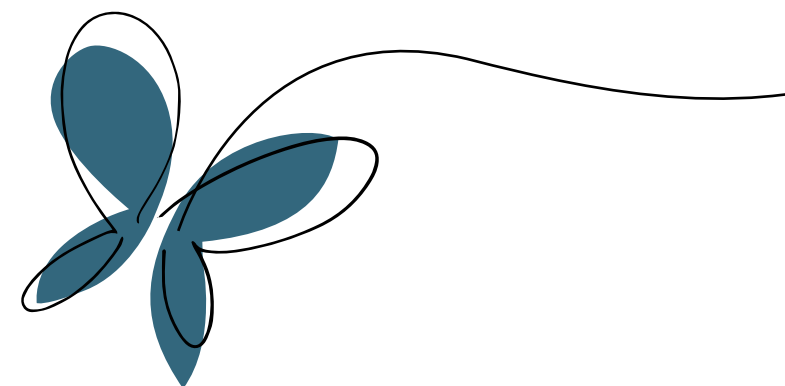
In terms of sectors, the most popular themes have been: Furniture, home furnishings and interior design; Textiles, fashion and accessories; Construction and building; Transport; Waste; and Water, energy and environment. The table below shows the entries submitted for each sector theme.



Schools and Colleges - Category D. Young Design

Category D (Young Design) is aimed exclusively at upper secondary school students, occupational training students or university students in Catalonia, or newly qualified professionals who have completed their studies in Catalonia within the last two years (until 17/10/2012, two years before the publication of the Award terms and conditions). In this category, entries have been submitted by students from:

Education centre	Total	Selected
BAU School of Design of Barcelona	1	1
School of Industrial Arts and Trades of Sabadell	1	--
Ondara Higher School of Design and Art of Tàrraga	1	--
Vallès Higher Technical School of Architecture (UPC)	1	1
CIM Foundation	1	1
IED Barcelona	3	-- ¹
INS Escola del Treball	2	1
UPC School Tech Talent Center	1	1
ELISAVA Higher School of Design and Engineering of Barcelona	5	3
Llotja Higher School of Design and Art (ESDAP, Llotja)	2	1
University of Barcelona, Faculty of Fine Arts	2	1
Engineering School of Terrassa (Polytechnic University of Catalonia, Terrassa Campus)	1	--
Higher Technical Engineering School of Vilanova i la Geltrú (Polytechnic University of Catalonia)	2	1
Total	23	11





Awards | Mentions | Selected entries



Category A



Product



Simon Design

www.simon.es | www.fluvia.com



Lighting

A new lighting concept for ceilings

Range of downlights with LED technology that combines superb lighting features with an excellent lm/W performance and a compact, elegant, efficient and comfortable design. There are several models (recessed and surface-mounted).

Designed by Simon Design and marketed by Fluvia Concept, the premium lighting company of the Simon group.

- High lighting efficiency of more than 80 lm/W thanks to their optics.
- Long luminaire service life (L70 of over 60,000 hours; that is, maintenance of at least 70% of the luminaire flux for approximately 27 years), achieved through optimal thermal management. The product has a five-year guarantee.
- High visual comfort: minimum glare and excellent lighting uniformity achieved by grouping together and combining micro-downlights of different diameters with several optics.
- Silhouette with a 30% smaller profile than traditional high-performance downlights, making it adaptable to any space.
- Unibody casing that minimises the use of material (aluminium), with a customisable front.
- Easy to assemble and dismantle.
- Innovative. It has industrial design protection, three utility models and an industrial patent.
- It is also the winner of an IF Design Award 2015, a Plus X Award 2015 and a Red Dot Award 2014.

The entry has received the Judging Panel's Award for its excellent lighting performance and maximum visual comfort, and for its integration of circular economy concepts such as the lengthening of useful life and preparation for dismantling, in a product that stands out for the simplicity of its forms and its compact design.



Category A



Product

Mention

Fliwer
Smart Gardening
Revolution

*Involve Newtech SL, in Collaboration with
Anima Barcelona and Irta-Mas Badia.*

www.fliwer.com



Gardening
and agriculture

Smart gardening and agriculture

Technological system aimed at the agricultural and gardening sector for the optimisation of irrigation. It enables users to know the conditions of the soil and area in order to give plants exactly the right amount of what they need, when they need it. Fliwer monitors, controls and takes into account meteorology. It knows the needs of plants, takes decisions and enables remote control by the user from a computer, smartphone or tablet computer. There are different versions available: for domestic use, for agriculture, for cities and for sports fields.

- "Plant and play" system. Wireless system that prevents the environmental impact of cable installation.
- It contains five sensors: atmospheric humidity, temperature, light, soil humidity, electrical conductivity (nutrients).
- It gains access to and analyses weather forecast information, which enables it to save between 50% and 80% more water than current irrigation timers.
- It contains a knowledge base with information on different plant species in order to optimise irrigation performance.
- Minimisation of radio communications in order to reduce electromagnetic wave pollution (overall broadcast time of two minutes per day).
- High-efficiency Li-Ion battery, designed to need recharging just once a year.
- Tough and weatherproof, with no joints or screws thanks to the vibration welding system used for its plastic.
- Created and manufactured entirely in Catalonia.
- It was nominated for The Internet of Things Award 2013, in the category of Connected Home Products and received the Iberflora Innovation Award 2013.

It has received a mention from the Judging Panel for being an innovative smart element with great potential for resource saving (water and fertilisers) in the agricultural and gardening sector.



Category A



Product

Mention

Ecoconpack
Ecodesign for the washing of
industrial clothing and uniforms

Proquimia

www.proquimia.com



Household
and cleaning

Efficient detergent for industrial laundries

A ground-breaking system for washing all kinds of industrial clothing and uniforms, capable of providing the OPL (On-Premises Laundry) sector with a solution that strikes a balance between profitability and sustainability, using highly efficient products. It consists of a range of four high-concentration products presented in bag-in-box format.

- Energy saving: the high performance of the detergents and the use of enzyme technology enables clothing to be washed at low temperatures (30-50°C instead of the usual 60-80°C), obtaining an energy saving of 10-20%.

- It saves on water: the low alkalinity of the products has made it possible to reduce the number of rinses (washing in a single phase), saving 30-40% of water.

- It generates less waste thanks to the reduced packaging format.

- It saves on transportation costs due to being a concentrated product.

- It offers economic savings: the water, energy, waste and transportation savings add up to an economic saving for laundries of approximately 30%.

- It improves user safety: handling without entering into contact with the chemical product, reduction of loads (less than 15 kg), neutral

working conditions and no generation of vapours.

- Less hazardous formulation: lower alkalinity and free of phosphates and NTA (nitrilotriacetic acid).

- Bag-in-box packaging system consisting of 10-litre packs with water soluble film, offering easy dosage and a lower carbon footprint than conventional packaging.

- It lengthens the useful life of clothing.

- It holds the European Ecolabel in the category of detergents for industrial clothing and uniforms.

It has received a mention from the Judging Panel for providing the laundry sector with a solution that strikes a balance between profitability and sustainability in the form of an Ecolabel-accredited product with clear time-saving and environmental benefits (saving of water, energy, packaging).



Category A



Product

Mention



Sacopa, SA

www.igniagreen.com



Gardening
and agriculture

A garden on your terrace, straightforward, no installation works required

Modular system with integrated irrigation for the rapid landscaping of hard surfaces such as patios, terraces and balconies with no installation works required.

It is composed of two plastic modules, one for the substrate and plant and the other for the water, between which an irrigation system is housed.

- Reduction of resource consumption: the plastic modules are manufactured from 100% pre-consumer recycled industrial polypropylene (defective articles from the plastic company itself).
- Mono-material, unlike the multilayer systems offered by the competition.
- Easy transportation, stackable and with an optimised size for stacking on standard European pallets (40 x 40 x 14 cm).
- Easy to assemble and dismantle.
- Easily recyclable, being a mono-material.
- Ergonomic, can be transported by a single person.
- Long useful life (more than ten years).
- Green roofs on buildings serve as thermal insulators and therefore lead to lower energy consumption.
- Available in DIY kit format and in professional format.

It has received a mention from the Judging Panel for being a simple but highly powerful solution for the installation of urban green roofs, incorporating ecodesign strategies in all its life cycle stages, as well as for being a mono-material, modular product manufactured with recycled material which enables water saving during use and which is recyclable at the end of its useful life.



Personal Hoodie

www.elasticaworld.com

ALÍCIA MARTORELL

Functional and innovative children's jacket, designed with a zip system through which the size can be made bigger, which means it can be used for more years than a conventional jacket. Made from OEKO-TEX certified cotton.



Textiles, fashion and accessories



Paral·lel·Bcn column

<http://www.amb.cat>

METROPOLITAN AREA OF BARCELONA IN COLLABORATION WITH PHILIPS DESIGN/LIGHTING, MUNICIPAL COMPUTING INSTITUTE OF BARCELONA AND BARCELONA CITY COUNCIL

Urban element with a flexible and versatile design which in a single element integrates and supports different types of lighting and other technologies (Wi-Fi, sensors, traffic cameras, traffic lights, etc.) in order to minimise impact on urban space.



Urban furniture



Steripak

<http://www.axiomasoluciones.com>

AXIOMA SOLUCIONS

Packs of reusable sterile surgical drapes to protect healthcare professionals and patients. They have a duration of 75 cycles, significantly reducing waste and fulfilling the UNE-EN 13795 standard.



Socio-health services



"Ad Argentum" Collection AW14/15

<http://deltravesbcn.com>

FIONA CAPDEVILA, IN COLLABORATION WITH THE ENGRUNES FOUNDATION, ESTEL TÀPIA, MARTA HEREU, LENA VOGELE, CARLES LLULL, AMÈLIA QUIROGA, MODA 22, MINERVA ROSSI AND MARCELA G.

Del Través presents its "Ad Argentum" Collection AW14/15, made exclusively from carefully selected materials from the domestic waste fraction. The label lists the amount of raw fibres saved during the manufacturing process.



Textiles, fashion and accessories



Dec Ecocoffins

www.dec.cat

JORDI GARCIA VILAPLANA IN COLLABORATION WITH MIRIAM PONS AND JORDI MESTRES

A new coffin manufactured from cardboard and natural fabric that offers the possibility of a kinder and more environmentally friendly farewell, meeting the growing demand for innovation in the funeral sector and for new more personal, sustainable and economic solutions.



Socio-health services



Rim-Amb® Bike Parking Rack

<http://www.urbikes.com>

MODULAR BIKE SOLUTIONS SL IN COLLABORATION WITH THE METROPOLITAN AREA OF BARCELONA

Flexible, highly secure and well-designed bike parking rack. A single steel braided cable with a flexible core protect the bike from thieves and foster sustainable mobility through a highly versatile element. Winner of a Delta FAD Silver Award in 2013.



Urban furniture



Noem Basic Chair

<http://www.nutcreatives.com>

NUTCREATIVES

Chair that uses recycled plastic for the seat and backrest. A lightweight, tough product manufactured locally and sold unassembled in a flat pack.



Furniture, home furnishings and interior design



Weber Eco-Confort Range, Concentrated Adhesive Mortars With EPD Seal

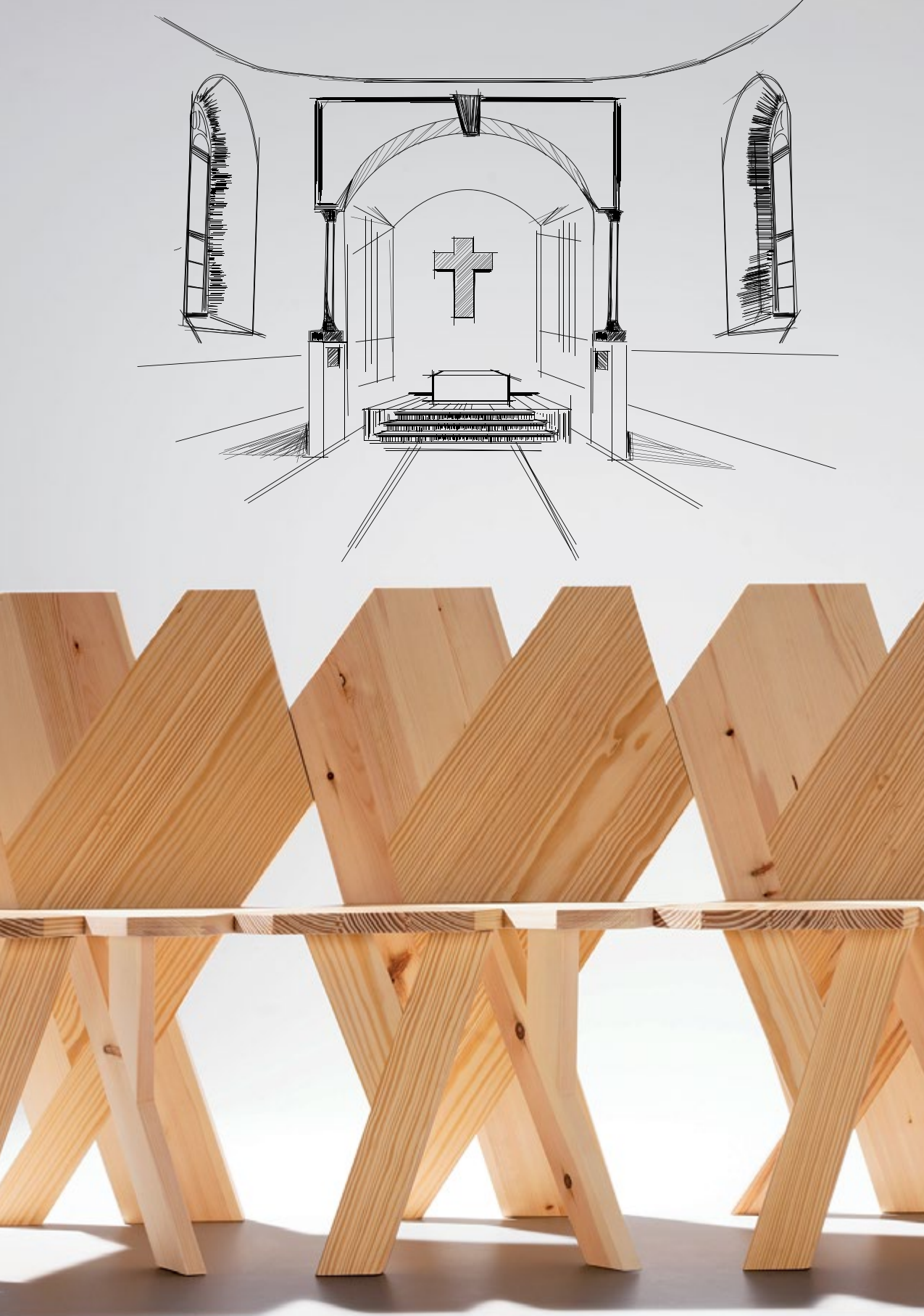
<http://www.weber.es>

SAINT-GOBAIN WEBER

Range of concentrated adhesive mortars for fixing ceramic, weighing 40% less than traditional adhesive mortars (15 kg sacks with ergonomic handle vs 25 kg sacks) with 37% lower CO₂ emissions on average and very low dust emissions.



Construction and building



Category B



Product
under development

Award

**Biennale
Chair**

*Figueras International Seating in
collaboration with Josep Ferrando Bramona*

www.figueras.com



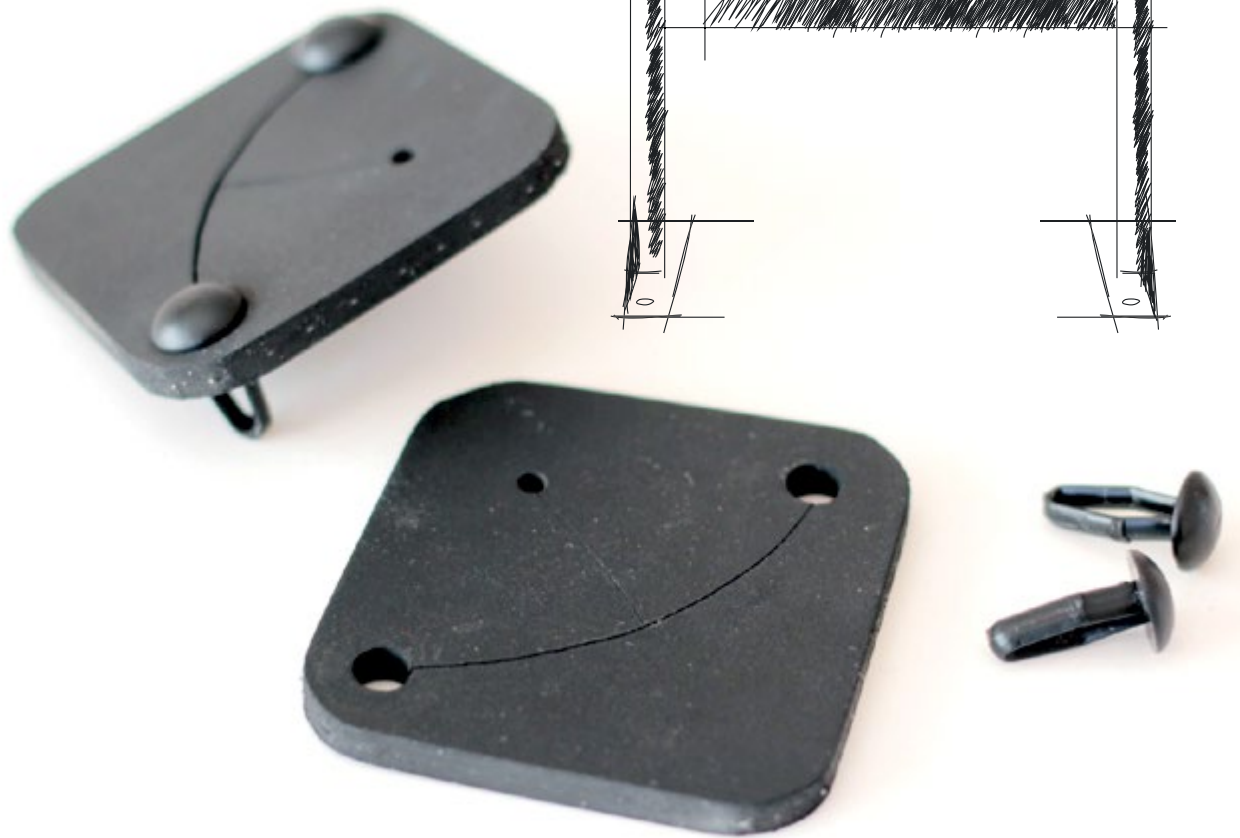
Furniture, home furnishings
and interior design

Mono-material chair designed for collective spaces

System of mono-material chairs with a fractal design to be used individually or in collective spaces.

The product has already been approved by the company and is pending optimisation for its sale (marketing, packaging).

- Mono-material: manufactured exclusively with wood. Two varieties of pine wood have been used (Flanders and Melis) originating from sustainable forests with a certified planting and harvesting programme.
- It can be distributed unassembled, optimising transportation.
- As a mono-material product it is easily recyclable.
- Use of zig-zag finger joints (no screws). The chair is supported by gravity. It also uses water-soluble glues.
- Highly sophisticated design assistance software has been employed for its design (3D software and printing, simulators of static and dynamic forces) in order to achieve optimal comfort and ergonomics. They are apparently simple geometrical forms which conceal a complex design process.
- The design uses fractal geometries, where a repeated form generates a new one. It enables different compositions to be formed, adaptable to collective spaces.
- The simple forms ensure less wastage of raw material: It is composed of 20 flat strips of wood measuring 8 cm wide x 2.5 cm thick with different heights, generating 4 simple pieces (seat, backrest and supports).
- It has received the Judging Panel's Award for being a highly attractive, iconic and poetic chair with simple forms that is mono-material (manufactured exclusively from certified wood from controlled sources), modular, recyclable and with a fractal design of apparently simple geometrical forms thanks to a great design effort with advanced tools.
- Straightforward production with a low economic and energy cost.



Category B


Product
under development

Antivolabossa

Urbaser, Salva Fàbregas Studio
and Xarxa Ambiental

www.urbaser.es | salvafabregas.com



Urban furniture

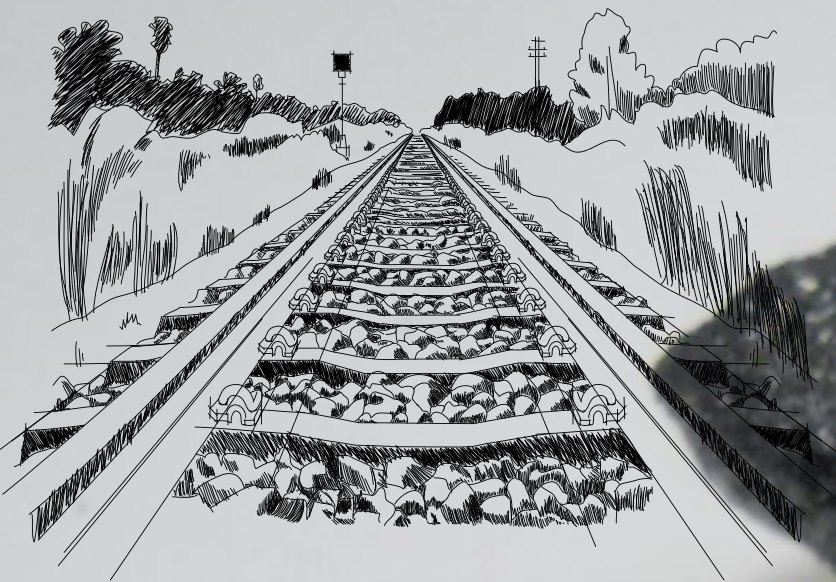
Safer bins for cleaner cities

Element to prevent rubbish bags in bins from blowing away and their contents being emptied on the street. It is manufactured from a piece of rubber used for the maintenance of selective collection containers and serves to prevent the wastage of thousands of rubbish bags and the dirtying of streets.

Product under development, at the final stage of verification involving a functional test of around 50 units.

- Manufactured from recycled materials: reinforced, vulcanised rubber taken from the flaps of rubbish containers no longer in use. Forty-seven devices can be obtained from a single container flap.
- Simple manufacturing process: moulded cold (unlike the small plastic clip currently used, which is injection moulded).
- It has a longer life than the element currently used for the same function (clip that is thrown away with each bag), enabling a reduction in waste generation. For example, in the city of Barcelona, which has 28,000 bins whose bags are changed between one and three times per week, it represents a saving of 3 tonnes of rubber waste per year.
- Resource-saving element. Its use enables savings to be made on the consumption of bags that would otherwise be blown away.
- Social aspects: it is planned for its manufacture to be carried out locally by a registered Special Work Centre, in order to foster the social integration of deprived communities.
- Simple appearance that conceals a complex and thorough research study and analysis.

It has received the Judging Panel's Award for providing a solution to a pressing problem in the Mediterranean, namely the accumulation of marine litter, in the form of an ingenious idea which looks simple but which has been brought to fruition by an elaborate and thorough research and analysis process, and which uses a waste element from the sector as its raw material.



Category B



Product
under development

Mention

Neoballast
Searching for the track
ballast of the future

Comsa SAIU, Polytechnic University Of Catalonia,
Ibermapei and Gestió Mediambiental
de Pneumàtics

www.comsaemte.com



Transport

Improving train tracks with recycled tyre material

Research project to find an alternative solution to the traditional ballast used on most railway tracks. The new ballast coats siliceous rocks with a film of material manufactured from recycled rubber from old tyres, improving its performance in terms of wear and tear, lengthening its useful life and reducing the maintenance costs of railway tracks.

The product has successfully passed laboratory tests and is now awaiting the first test on a real scale.

- It lengthens the useful life of the track ballast (between 30% and 70%).

- It improves the maintenance of railway lines, which is a critical factor from an economic and technical perspective. It reduces the frequency of track tamping activities.

- Lower impact on resource consumption: a) It uses recycled material, since the film used to coat the rocks is composed of a mixture of rubber powder from old tyres and high-performance polyurethane; b) It enables siliceous rocks to be reused (recoated), thus reducing the amount of material required from quarries.

- It improves the performance of the ballast: less noise and vibrations, less dust due to wear and tear, improvement of the permeability of tracks.

- A life cycle assessment (LCA) study has been carried out that endorses the environmental

improvement of Neoballast in respect of traditional ballast in several impact categories. The improvement is achieved by lengthening the useful life of the product, despite the associated increase in resources (for the 1% of polyurethane binder it requires).

- Overall economic saving in the manufacture and maintenance of railway tracks in comparison with the use of traditional ballast, since it saves on maintenance costs, sound barriers, sub-ballast mats, etc.

- Innovative product, fruit of a company-university research project.

It has received a mention from the Judging Panel for offering innovation in a material never before subjected to innovation, improving its performance and lengthening its useful life, fostering the saving of natural resources and using a waste product (tyre rubber) which is difficult to recycle.

**Piloedre**<http://piloedre.es>**2PE PILOTES SL**

Precast foundation solution for lightweight structures. Installation is straightforward and requires standard manual means, with minimal environmental impact and with the possibility of being removed and/or reused.

**Triiki**<http://grisverd.com>**GRISVERD IN COLLABORATION WITH NUTCREATIVES
AND BICISPORTS AUBANELL**

Group-cycling vehicle that replaces up to four conventional bikes, manufactured from tough, lightweight materials. Brings people together, ideal for rural and nature routes.

**All In One Stick****ARNAU FIGUERAS TORTRAS**

Multi-purpose cleaning tool that enables old cloths to be used for cleaning the floor. It has a series of accessories that multiply its uses and provide the user with an effortless and efficient cleaning experience.

**Sardines**www.estelalcaraz.com**ESTEL ALCARAZ SANCERNI**

A new concept of foldable rain boots that occupy very little space, manufactured from a flexible bioplastic mono-material. Their reduced volume (one fifth of conventional rain boots) makes it possible to reduce their impact in terms of distribution and logistics.

**Hortcleanleach**<http://www.irta.cat>**INSTITUTE FOR AGRI-FOOD RESEARCH AND
TECHNOLOGY (IRTA) AND BURESINNOVA**

Modular design for the installation of out-of-soil urban or peri-urban allotments on any surface. It filters, treats and purifies the generated leachates, enabling their recovery for irrigation, establishing a recirculation system.

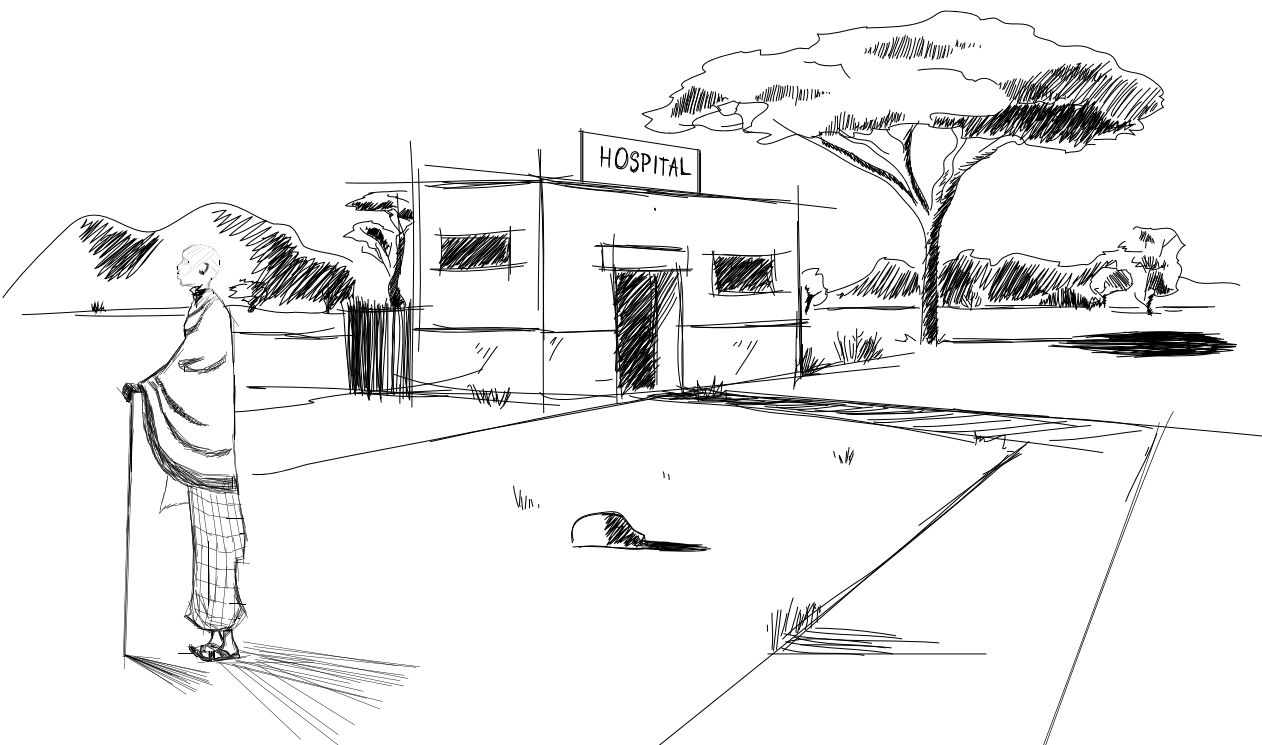
**Wireless parking sensor for vehicles**<http://www.parkhelp.com>**PARKHELP**

Wireless parking sensor for vehicles based on magnetic field variation detection technology. The product is designed to facilitate drivers' experience in finding parking spaces in urban areas.

**Biologic Concrete**<http://dec.upc.edu>**POLYTECHNIC UNIVERSITY OF CATALONIA, DEPARTMENT OF CONSTRUCTION ENGINEERING**

New concept of vertical gardens integrated within construction elements and nature, consisting of the modification of cementing material in order to enable its colonisation by indigenous organisms.





Kigali Chair Project

Clara Romani and Josep Mora

www.clararomani.com



Socio-health services

Wheelchairs with local resources

This initiative has been implemented in Rwanda. It consists of organising workshops in which people are shown how to build a wheelchair from locally available resources through a simple construction system that can be adapted to users' needs.

- It saves on resources since it reuses components from other products no longer in use in order to manufacture the wheelchairs. It uses locally available elements (wood, bicycle components, cart wheels, plastic chairs, etc.). Each chair contains approximately 85% recovered material.
- Straightforward, manual manufacturing process, with low energy consumption.
- Lengthening of the useful life of wheelchairs. The workshops also teach how to repair these wheelchairs, unlike the wheelchairs received through donations, whose repair is impossible due to the lack of availability of spare parts and the necessary specialised skills.
- DIY production. Workshops for wheelchair users, in collaboration with healthcare personnel. Manufactured in the hospitals themselves or in nearby workshops.
- Social commitment. It facilitates access to wheelchairs for people in developing countries with a lack of resources, improving the lives of many people (it is calculated that in Rwanda alone some 300,000 people need wheelchairs). Furthermore, it offers an alternative to feeling dependent on the arrival of wheelchairs from wealthier countries.
- Feasibility and response to the strategy. The initiative got under way in Gatagara, Rwanda, in 2012, and is still operating today.

It has received the Judging Panel's Award for its sensitive ecodesign approach, reusing locally available commonplace elements through simple manufacturing processes, for the significant added social value of the proposal and for being easily replicable in developing countries.

Espigoladors
Turning im-perfect
products into opportunities

*Associació Espigoladors with the
Mentoring of Tandem Social*

www.espigoladors.cat



Food and
beverages

Turning food waste into opportunities

This association collects fruit and vegetables that are fit for consumption but discarded for aesthetic or market-related reasons. Some of the collected fruit and vegetables are turned into jams, juices, etc. and marketed under the “es im-perfect” brand; another part is channelled as food for groups at risk of social exclusion.

Furthermore, it is a social company that combats food waste by empowering groups at risk of social exclusion through a transformational, innovative and inclusive strategy.

- Saving of resources. Fruit and vegetables are used that would have been discarded and turned into waste. All “es im-perfect” brand products are manufactured 100% from surplus or damaged food. The food that goes into these products is gleaned in fields through agreements with owners (that is, the fruit and vegetables left behind in fields after the general harvest) and also collected from companies (food transformation companies, food distribution companies and food cooperatives). The distribution channels of “es im-perfect” products are charcuteries, chains of fruit and vegetable stores, gourmet stores, restaurants and catering companies.

- Use of reusable and returnable packaging (glass).

- Social commitment: the initiative combats food waste, the food poverty of some groups and the risk of social exclusion of certain groups.

a) It is implemented by a social company set

up as a not-for-profit organisation, generating employment for people at risk of social exclusion.

b) It combats food poverty: part of the collected produce goes to social canteens and organisations.

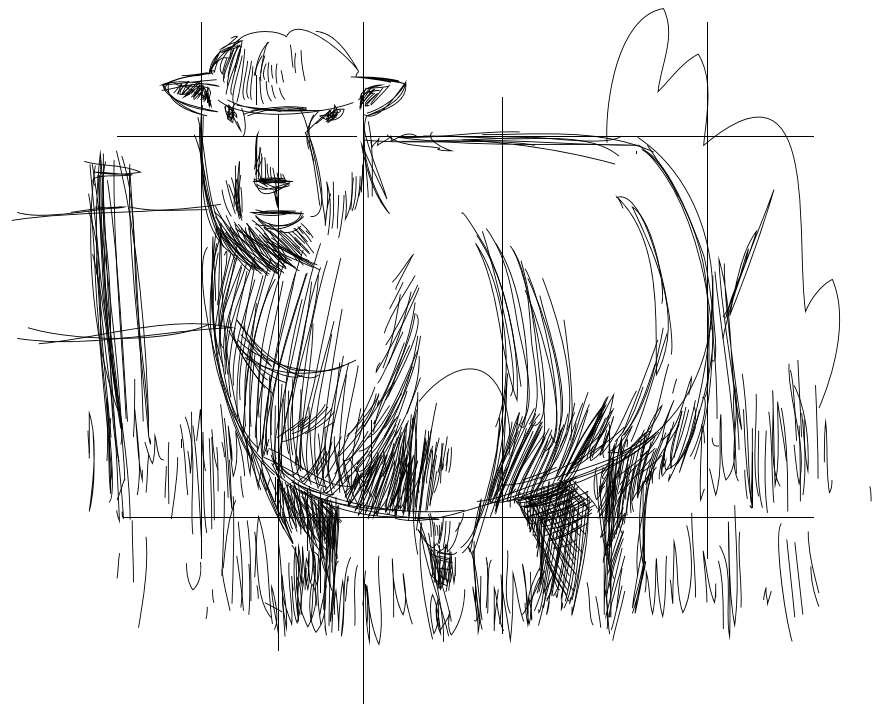
- Great symbolic value. It generates second opportunities for food and people.

- Significant communication effort of the project.

- Following a pilot scheme implemented in 2014, the project is now fully up and running.

It has received a mention from the Judging Panel for offering a solution to one of the most topical and pressing environmental problems currently facing society, namely food waste, giving a second opportunity to discarded food that is still fit for consumption, and for the social component of its strategy, which also gives second opportunities to people.





Category C



Strategy

Mention



Associació Obrador Xisqueta

www.xisqueta.cat



Textiles, fashion and accessories

Wool at a fair price. 100% Local, 100% artisanal

Initiative to help preserve the Xisqueta breed of sheep (an indigenous species in danger of extinction) while at the same time revitalising the social and economic fabric of Pallars Sobirà, sustaining the population in this area. The association pays a fair price for Xisqueta lamb's wool, transforms it and directly sells pure lamb's wool items. They're 100% local, 100% artisanal.

- Positive impact on biodiversity: helps sustain the Xisqueta sheep breed, declared in danger of extinction. Furthermore, the breeding of sheep has a positive impact on the local environment: they help maintain woodland and mountain paths clear, reducing the risk of fire.

- Low impact manufacturing: natural dyes are employed, mostly obtained from local plants.

- The wool washing waste is used as a natural fertiliser in organic farming.

- The association manufactures its own wool garments and also sells wool in bulk to small artisan workshops (clean wool for mattresses, as flock for stuffing, as picker lap for felt, spun wool, etc.).

- Revitalisation of the social and economic fabric of Pallars Sobirà, generating jobs for people in a mountainous area: They buy the wool directly from local shepherds. They keep traditional trades alive. Nevertheless, some specific manufacturing processes take place outside the area due to a lack of local availability (the wool is washed in Palencia and spun in Alicante).

It has received a mention from the Judging Panel for protecting biodiversity and boosting the local social and economic fabric in a mountain area (Pallars Sobirà).



Quincalla

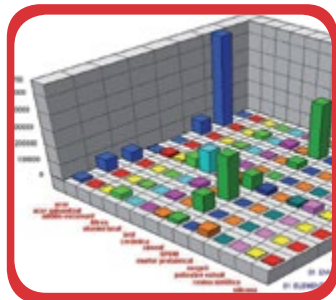
www.quincalla.org



Communication

ANA VILLAGORDO VEGARA

Blog about sustainable and social design, aimed at both the general public and professionals specialised in the design, communication and environmental sectors.



Ecodesign In Construction

<http://itec.cat>



Construction and building

ITEC INSTITUTE OF CONSTRUCTION TECHNOLOGY OF CATALONIA

Database of construction products that contains information on the environmental impacts associated with the materials and products, enabling the application of ecodesign strategies in the creation of new products and buildings.



Eco-Pop-Up, New Sustainable Shop Design Policies

www.studioanimal.es



Construction and building

JAVIER JIMÉNEZ AND ELI CAYUELA

Initiative that explores the use of cardboard for the interior design of pop-up stores. The project has been applied to the pop-up stores opened by the Munich firm prior to the opening of its standard stores, with the goal of evaluating their feasibility.



The Greatest Candle

<http://thegreatestcandle.com>



Waste

JIMMY WAN AND ESTEL DE L'ALBA

Strategy to encourage the selective collection of used kitchen oil and its home recycling by turning it into candles. They sell DIY kits to manufacture the candles and encourage a change in habits through eco-workshops aimed at schools, companies and the third sector. "The greatest candle is the one you make to keep the planet's water clean".



Igloo Temporary Shop

www.igludevent.cat



Textiles, fashion and accessories

JORDI ENRICH, RAMON ENRICH, ÀNGELS CHACÓN, JOSEP MARIA LLADÓ, CARLES LLADÓ, ORIOL SOLÀ, MARINA LLANSANA, ÀNGEL AGUIRRE AND GASPAR CAMPS MUNICIPAL ART SCHOOL

Pop-up stores-workshops to create and sell products made from the fabric of hot air balloons no longer fit for flights. The store-workshop can be set up at any large event, in particular hot air balloon festivals, where event-goers may be keen to purchase souvenirs made from this material.



La Page Original

<http://lapageoriginal.com>



Communication

LA PAGE ORIGINAL

Strategy for the ecodesign of graphic communication products. They have developed a methodology to minimise the environmental impact of their products, a tool for evaluating their environmental impact and a publishing seal for these eco-designed products (Màcula Collection).



Yök Home + Culture

<http://helloyok.com>



Hotel and catering/ tourism/leisure

NO SOM HOTEL SL

Accommodation offering in Barcelona that consists of three tourist apartments refurbished in line with ecodesign criteria, offering guests the chance to experience a sustainable and local lifestyle.



Edtool new tool for ecoinnovation

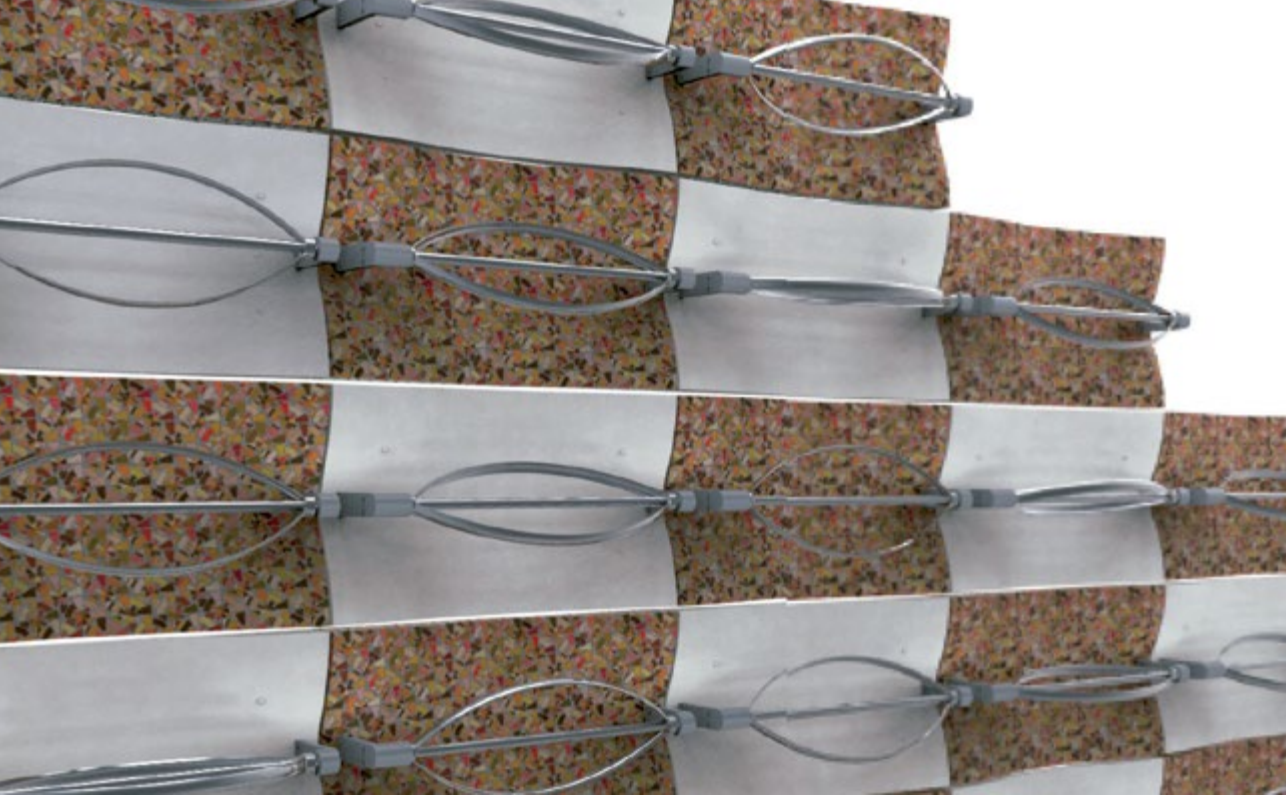
<http://edtool.sostenipra.cat>



Communication

XAVIER GABARRELL DURANY, JOAN RIERADEVALL I PONS, PERE LLORACH MASSANA, RAMÓN FARRENY GAYA, CARLES MARTÍNEZ GASOL AND RAÚL GARCIA

Free web tool that provides support to public institutions and companies in the ecodesign process of products and services.



Invento
Design of a mini
aerogenerator

*Andrea Artero, Albert Bercero and Joel Plana of the
Higher Polytechnic School of Engineering of Vilanova i
la Geltrú (Polytechnic University of Catalonia)*

www.epsevg.upc.edu



Water, energy
and environment

Wind energy adapted to buildings

Mini-aerogenerator for domestic use, which consists of a mini wind turbine to be placed on the façades of houses or buildings. It incorporates a module based on aerodynamic geometries.

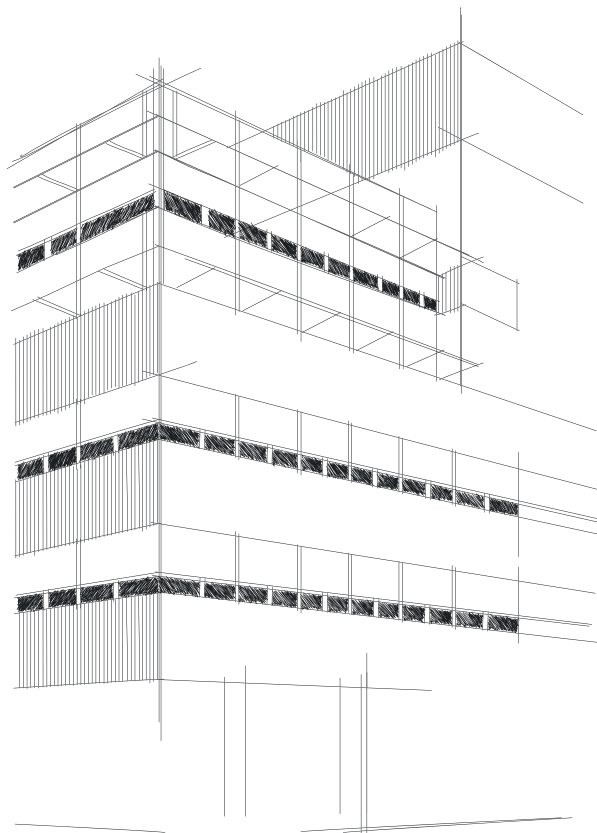
Product under development.

- It uses renewable energy on a domestic level. It saves on the consumption of resources and helps combat climate change.

- The product is easy to install.

- Wide application potential (any type of façade).

It has received the Judging Panel's Award for innovating in the renewable energy sector with an element easily incorporated in buildings, paving the way for decentralised energy generation and direct consumption by the end user.



Category D



Young Design

Mention

Nestreams

*Javier del Toro and Jose F. López, of the Elisava
Higher School of Design and Engineering of Barcelona*

www.elisava.net



Waste

Facilitating the recycling of coffee pods

System to be integrated in coffee makers that function with coffee capsules, in order to separate the components of the pod waste (used coffee grounds and aluminium container), facilitating their processing as waste.

Product under development.

- It facilitates the recycling of a mass-market waste that is difficult to process. As things stand, pods must be separated from the standard domestic waste collection circuit and taken to specific points (stores or waste recycling centres).

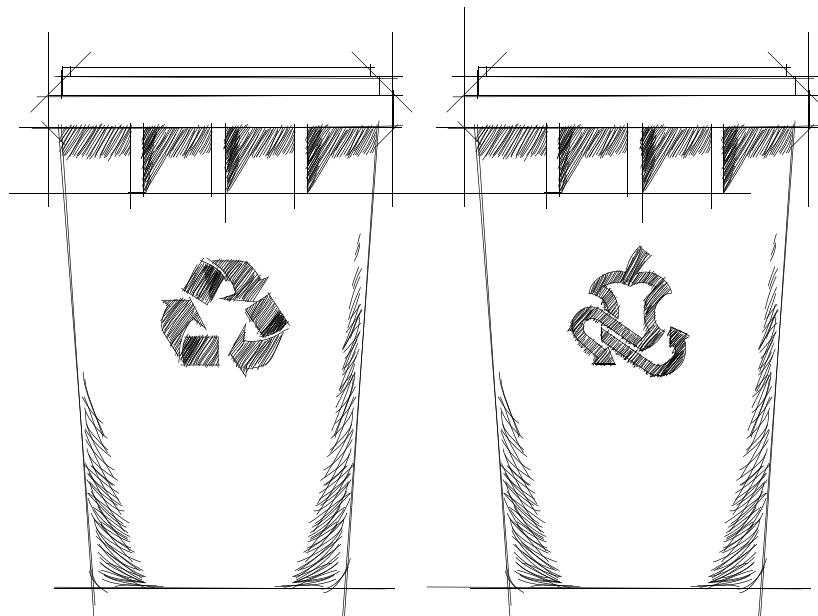
- The recycling of pods reduces the impact on the end-of-life stage of the pods themselves and helps to save on resources by supplying recycled materials. In Spain 1.3 billion coffee pods are consumed per year. Their total recycling would generate 1,500 tonnes of recycled aluminium per year.

- It takes dematerialisation criteria into account. It uses the minimum amount of material to ensure the necessary resistance.

- It also takes into account that the coffee maker is potentially recyclable and the system is manufactured with the same plastic as the rest of the device (PA66GF nylon fibre).

- Designed to be used with any coffee maker model.

It has received a mention from the Judging Panel for proposing an improvement to a mass-market product used by many people in their everyday lives, and for offering a solution to an existing waste element that is difficult to process, namely coffee pods.



Sant Cugat

ROUNDBABOUTS

Waste to resource

Raquel Pérez de Amo of the Vallès Higher Technical School of Architecture (Polytechnic University of Catalonia)

etsav.upc.edu



Construction and building

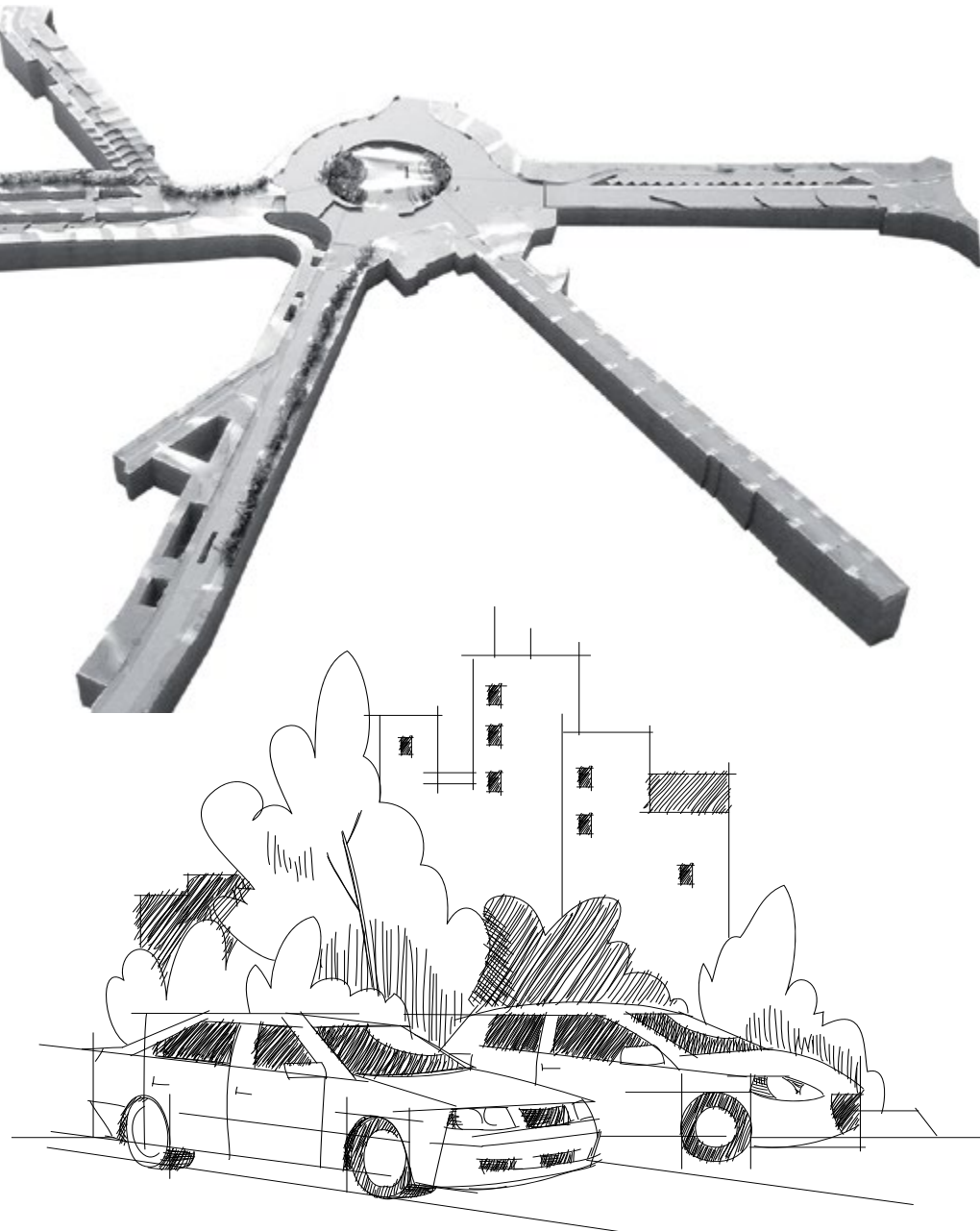
Roundabouts that collect rainwater

Strategy to turn roundabouts into productive spaces as rainwater collectors in order to meet the watering needs of nearby landscaped areas. Project developed for the roundabouts of the city of Sant Cugat del Vallès.

Strategy under development.

- Multifunctionality: roundabout + rainwater collection.
- Optimisation of urban planning, making the most of resources. The stored rainwater can be used to meet the watering needs of nearby parks and gardens.
- It uses low impact materials: waterproofed tank with activated clays (clay, lime and water), lined with coconut fibre bio-rolls.
- It raises citizen awareness.
- Evaluation of the economic feasibility of the project with data provided by Sant Cugat del Vallès City Council.
- Feasibility of the project. Sant Cugat City Council is currently studying the project and hopes to implement a pilot scheme in the near future.

It has received a mention from the Judging Panel for the involvement of a student in town planning, for making use of a dead space and for giving multifunctionality to roundabouts and optimising the management of water, a precious resource in the Mediterranean basin.





Eco-efficient study and bio-base laminate for freshlines kustoms

<http://www.elisava.net>

ADRIÀ PEDROSA, of the ELISAVA HIGHER SCHOOL OF DESIGN AND ENGINEERING OF BARCELONA

Snowboard manufactured using a new laminate made from biological base materials and recycled woods, increasing the impact absorption capacity and durability of the product. Product already in the market.



Transport



Collage chair

<http://www.ub.edu/bellesarts>

JENIFER GIL MERINO of the UNIVERSITY OF BARCELONA, FACULTY OF FINE ARTS

Chair selected from urban waste collected by Formació i Treball, a foundation that collaborates with the faculty as part of the FIT Storming project. The chair has been restored and improved, incorporating a practical storage drawer.



Furniture, home furnishings and interior design



Pocket Cup

<http://ariadnas9.wix.com/pocketcup> | <http://www.elisava.net>

ARIADNA SOTO, MARIA EUGENIA GONZALEZ, FANNY GONZALEZ, MARIA DOLORES COLOMER AND SAMUEL ALONSO, of the ELISAVA HIGHER SCHOOL OF DESIGN AND ENGINEERING OF BARCELONA

Multifunctional, foldable and portable cup that serves as a ticket, identification bracelet and drinking cup for music festivals or other events. Manufactured from silicone.

Product under development.



Hotel and catering/ tourism/leisure



Cuisine

EDUARD PLA MESTRAS, of the INS ESCOLA DEL TREBALL, LLEIDA

Lightweight, portable and collapsible solar kitchen to be used anywhere, powered by solar radiation. It uses laminated cotton as its thermal insulation material.

Product under development.



Water, energy and environment



Oli3

<http://cargocollective.com/georginatomas>
<http://www.esdap.cat>

GEORGINA TOMÁS IN COLLABORATION WITH GUILLEM FERRAN, of the LLOTJA HIGHER SCHOOL OF DESIGN AND ART (ESDAP LLOTJA)

Kitchen gadget for the proper processing of used oils in the home. The adaptable gadget can be fitted to jam jars, enabling the reuse, recycling and reduction of the consumption of oil.

Product under development.



Waste



Beautiful & Wild

<http://www.baueed.es>

ISABEL PACHO, of the BAU SCHOOL OF DESIGN OF BARCELONA

Collection of handbags made from 100% biodegradable vegetable materials.

Product under development.



Textiles, fashion and accessories



Flowing - Sustainable urban transport system with kick scooter

<http://www.talent.upc.edu/> | <http://www.ied.es>

JACOBO ALEJANDRO MORALES ROJO DEL RIO AND JAVIER ORLANDO BENAVIDES, of the UPC SCHOOL TECH TALENT CENTER and IED BARCELONA HIGHER SCHOOL OF DESIGN

Electric kick scooter for an urban public transport system complementary to the Bicing public bike hire service. It is useful for short journeys, cheaper and has a lower environmental impact than the current system.

Product under development.



Transport



Print & join

lucasrabuffetti.wix.com/portfolio
<http://www.fundaciocim.org>

LUCAS NICOLAS RABUFFETTI, of the CIM FOUNDATION (POLYTECHNIC SCHOOL OF CATALONIA)

Design of connecting pieces that can be downloaded and printed on 3D printers for the purpose of joining together used elements such as cardboard boxes, bottles, etc., and turning them into toys.

Product under development.



Toys

Category E



Euro-Mediterranean
Design
Award

Pep Lemon

*Lemon factory S.L. in collaboration with the
Amadip.Esment Foundation, Agroilla, La Paduana
and Comercial Bordoy, of Mallorca (Spain)*

www.peplemon.com



Food and
beverages

Socially committed soft drink project that uses discarded citrus fruits

Initiative implemented in Mallorca that uses discarded citrus fruits, turning them into a local, natural soft drink as a socially committed project.

Strategy.

- It harnesses resources and helps combat food waste. It is a product manufactured 90% from discarded citrus fruits and 10% from citrus fruits of abandoned farms. It creates a value chain for discarded citrus fruits. One hundred and fifty tonnes of citrus fruits were thrown away in Mallorca in 2012.
- Reusable packaging used in several stages of the process (boxes, buckets, the glass bottles of the soft drink).
- Natural product with no artificial sweeteners.
- Distinctive business strategy. The synergies already established with local companies are harnessed, along with underused resources, in order to minimise investment and risk: Agroilla, for fruit separation; Amadip to produce the juice; Bordoy for distribution.
- Revitalisation of the local economy. Manufactured and marketed locally.
- Social commitment: Employment of disabled personnel for juice production.
- Strategy already implemented. It entered the market in 2014 with a production of 100,000 bottles.
- Significant communication effort.

It has received a mention from the Judging Panel for addressing food waste, a highly topical and pressing environmental problem, and for establishing a value chain for a product that had no value in the market; for the social commitment of its strategy, for the generation of synergies between the local entities of the islands, for its replicability in the Mediterranean area and for its excellent presentation and communication strategy.



Category E



Euro-Mediterranean
Design

Mention



Buiani Clima SRL of Italy

www.buianiclima.com | watly.co



Water, energy
and environment

High technology to facilitate access to water, electricity and internet

Multifunctional self-powering central unit that purifies water and generates electricity and internet connectivity through photovoltaic and solar thermal energy. A complete unit supplies water for 2000 W-tank personal containers and electricity for 1000 LED lamps with portable W-light batteries.

The W-tank is a personal and reusable 5-litre water container, designed for storing water in situations where it is difficult to preserve its biological integrity. Useful life of more than 5 years.

The W-lights are battery-powered portable LED lights that provide people with light, as well as offering the possibility of recharging electrical devices.

The central unit generates three million litres of water and 25 MWh of electricity per year. Product in the market.

- Multifunctional and modular.

- Highly efficient advanced technology. It uses vapour compression distillation technology to purify water. Hybrid technology combining highly efficient solar thermal and photovoltaic panels (45-50% more efficient than standard panels due to the innovative management of the panel temperature).

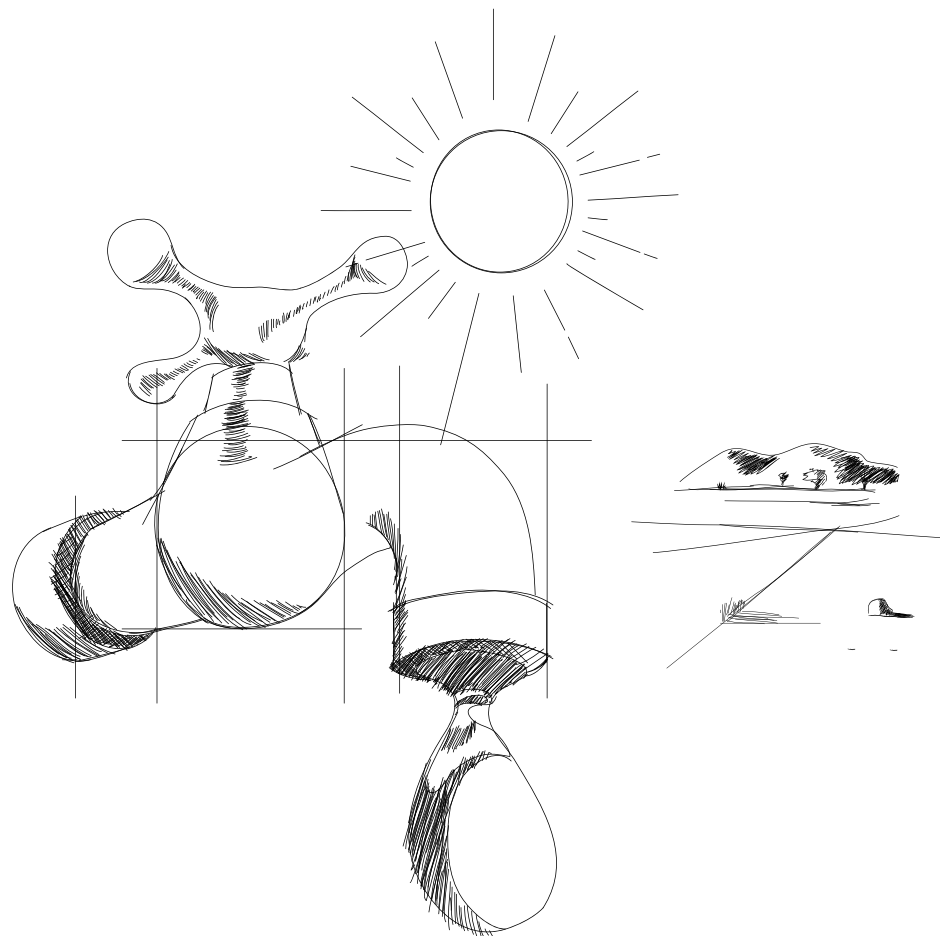
- Innovative technology which holds two international patents.

- Social function. Part of the business system is based on a donation programme ("Lively water" and "Lively light") to provide access to drinking water, electricity and internet connectivity in developing countries.

- Low maintenance costs, self-powering and remote-controlled.

- Estimated useful life of the unit: 15 years. It can service 5,000 people per year.

It has received a mention from the Judging Panel for addressing the issue of water, a scarce resource in the Mediterranean, through a multifunctional product incorporating innovative technology, capable of supplying clean water, electricity and an internet connection in isolated areas using just solar energy.





Category E  Euro-Mediterranean Design
Mention

Eliodomestico
Open source solar still

Gabriele Diamanti, of Italy

www.gabrielediamanti.com



Water, energy
and environment

Domestic solar still to obtain drinking water

Straightforward solar-powered water still with an open-source design in order to provide drinking water to people in developing countries. It is designed to be produced by local artisans using basic materials and simple traditional technologies.

Product under development.

- Designed for domestic use, easy to understand and use.
- Simple composition with cheap and commonly available materials which are easily acceptable since they form part of local traditions.
- Simple manufacturing techniques. Designed to be manufactured by artisans in small batches, for example by a network of local artisans.
- Additional possibility of being repaired locally.
- Social impact. It facilitates access to drinking water in developing countries. It is estimated that in 2015 two thirds of the world's population do not have sufficient access to drinking water.
- Economic impact. Revitalisation of the local economy through a network of artisans.
- Open design. Design registered with a Creative Commons licence, freely available to anybody who wishes to reproduce it.
- Low production cost.

It has received a mention from the Judging Panel for addressing the issue of water, a scarce resource in the Mediterranean, offering a product with an open and simple design which is powered exclusively by solar energy and which is designed to be locally manufactured in developing territories.



Alinfini
Recyclage Éco-Chic

Sandrine Dole, of Morocco

www.alinfini.info



Textiles, fashion
and accessories

Fashion items made from car seatbelts

Collection of fashion accessories (bags, belts, key rings, purses, necklaces, etc.) manufactured from seatbelt cut-offs from the car industry.

Product in the market.

- Use of pre-consumer recycled materials (seatbelt cut-offs from the car industry, sourced from a circuit of local distribution and local vehicle manufacturers). Use of recycled materials, contributes to saving resources.
- Tough material that preserves the excellent mechanical properties of the source material (unbreakable, machine-washable), lighter than leather.
- Artisanal manufacturing process using traditional leather work techniques.
- Internationalisation effort. Production began in Morocco in 2012 and items went on sale in stores in Morocco in the same year (currently 12 stores). Two years later it was already being exported to Europe (Spain, France, Belgium and Switzerland) and Asia (Japan and China).
- Reasonable retail prices.

It has received a mention from the Judging Panel for its effort in incorporating recycled materials in territories with less experience in ecodesign, for the simplicity of its forms and for managing to make its mark in advanced international markets.





X

<http://www.era.com.hr>

ERA GRUPA D.O.O.
CROATIA

Range of FSC-certified solid hornbeam wood furniture, manufactured without using hazardous products, with natural oil finishes, easily dismantled, and offering an after-sales repair service.
Product in the market.



Furniture, home furnishings and interior design



Recycla Smart System

<http://www.contenur.com>

CONTENUR
SPAIN

Smart container system that uses new technologies such as identification labels for bags and users, card readers and management software with the goal of raising citizen awareness and achieving more efficient waste management, lowering costs and generating benefits for all those involved.
Strategy.



Waste



Dvelas Upcycled Sail Design

<http://www.dvelas.com>

DVELAS
SPAIN

Collection of items made from sails no longer fit for sailing, turning them into contemporary design objects.
Product in the market.



Furniture, home furnishings and interior design



Shroom

<http://www.ralstonbau.com>

RALSTON & BAU
FRANCE

Exterior lighting device that prevents lighting pollution and saves energy by using just 10% of its lighting intensity when on standby and up to 100% when it detects nearby movement.
Product in the market.



Urban furniture



Zeoze Modular Shoes

www.danielabekerman.com

DANIELA BEKERMAN
ISRAEL

Modular shoes whose rear section, heel and accessories can be changed, thanks to which they serve as five shoes in one.
Product under development.



Textiles, fashion and accessories



Leaos Carbon Solar E-Bike

<http://www.leaos.com>

LEAOS
ITALY

Self-powering solar electric bike with fully integrated solar panels for charging the battery.
Product under development



Transport



Pneumatic Bike For Hilly Areas

<https://www.facebook.com/emilio.sassine>

EMILIO SASSINE AND ELIE NAJEM
LEBANON

Bicycle for hilly areas that incorporates pneumatic assistance in the form of a compressed air pump, as an alternative to the electric assistance used by most bicycles of this sort.
Product under development



Transport



Transforming rubbish to alleviate poverty and raise gender equality

<http://www.switchmed.eu/en/innovation/Copmadam%20in%20Turkey>

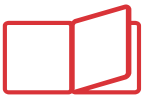
COPMADAM COMMUNITY (TARA HOPKINS, SIDIKA ZINCIR AND ZERRIN GÜLDIKEN)
TURKEY

Collection of bags and purses manufactured from waste such as packaging, bottle tops, fabric offcuts, etc., hand-crafted by women, thus fostering the employment of women in the country.
Product in the market.



Textiles, fashion and accessories

October 2015
Editing
Waste Agency of Catalonia
Design
Focus
Production
LA PAGE Visual communication



Paper characteristics:
Cyclus Offset 100% recycled paper.



Printing characteristics:
Printed with H-UV inks
The printing company has ISO 9001, ISO 14001 and FSC certification

Ecological rucksack

Calculation of the ecological rucksack of one copy of the publication.
The calculation has been made using the environmental data on the material used and the printing process (excluding transportation).

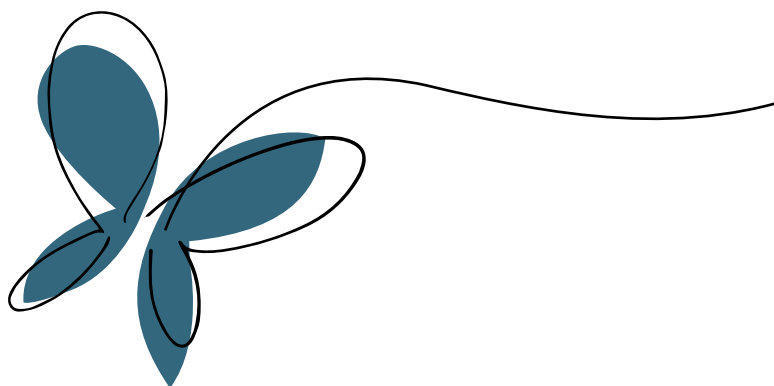
	Waste generated (g)	204,6
	Water consumption (l)	0,40
	Electricity consumption (kWh)	0,19
	CO ₂ emissions (kg CO ₂ eq.)	39,3
	Raw materials (kg)	225,66

	Catalogue weight (g)	161,4
	Recycled fibres	100%

The manufacture and use of recycled paper enables a lower consumption of energy, water and wood, as well as a reduction in the emission of pollutants into rivers and the atmosphere.



Products with the FSC label are independently certified to ensure that the forests from which they are sourced are managed in compliance with the rights and the social, economic and ecological needs of present generations without harming future ones.



Organised by:



Generalitat de Catalunya
**Departament de Territori
i Sostenibilitat**

With the collaboration of:



switchmed

Programme funded by the European Union



United Nations Environment Programme

