



PLANET GENIUS





*What a beautiful planet,  
what wonderful inventions ...*



## *Introduction*

*Wonderful inventions from the past ...*

### **SUN**

PHOTOVOLTAIC EFFECT, EDMOND BECQUEREL, 1839 | SOLAR CELL, CHARLES FRITTS, 1883

### **AIR**

ELECTRIC CAR, THOMAS PARKER, 1884 | WIND TURBINE, JAMES BLYTH, 1887

### **LOVE**

HUMAN RIGHTS, UNITED NATIONS, 1945 | FAIR TRADE, TEN THOUSAND VILLAGES, 1946

### **EARTH**

BIOFUEL, PATRICK DUFFY, 1853 | BIOPLASTIC, HYATT CELLULOID, 1869

### **WATER**

WAVE POWER, MONSIEUR GIRAD, 1799 | HYDROGEN CAR, FRANCOIS RIVAZ, 1807

*... followed by great innovations from the present!*



**SUN**



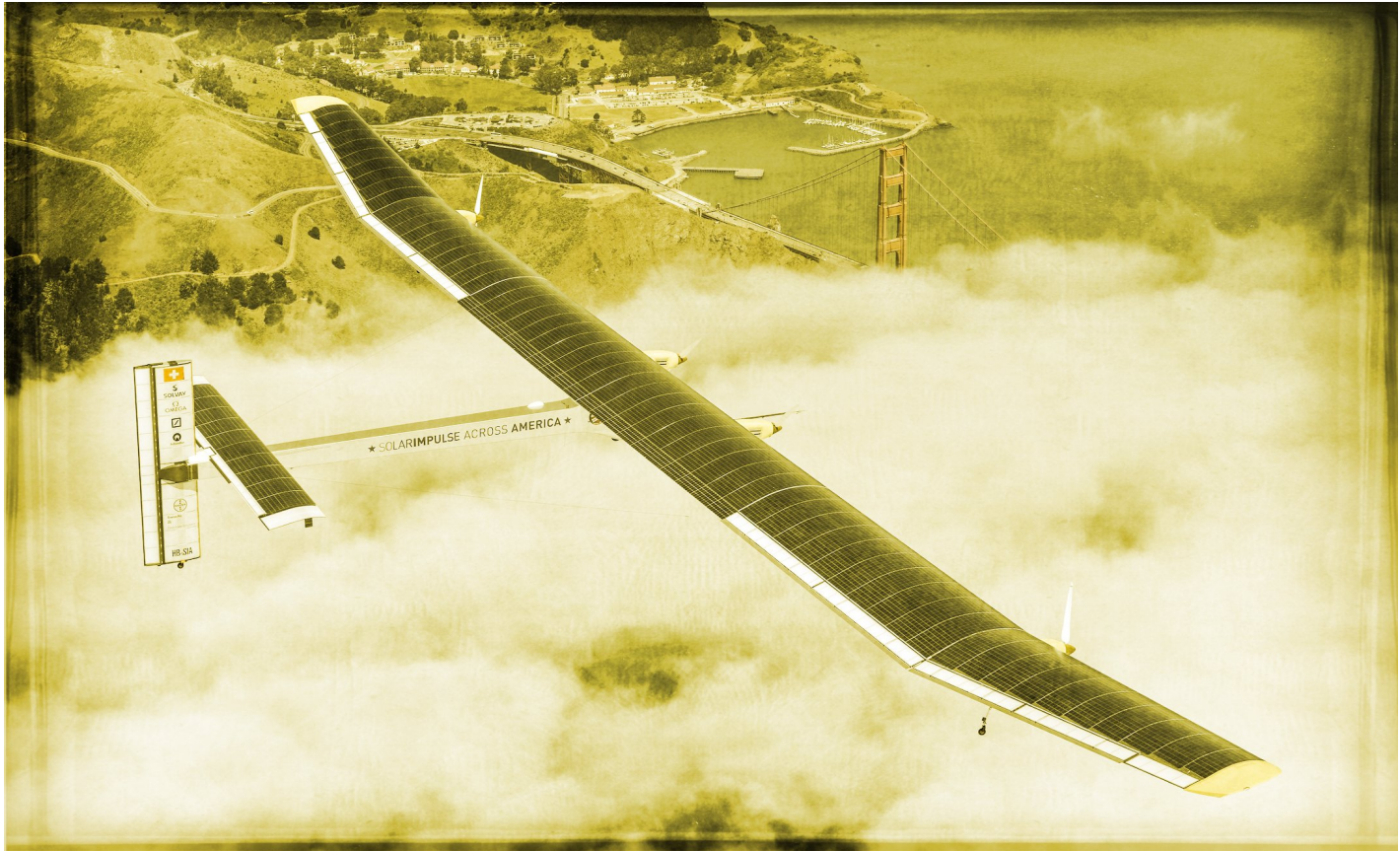




Every hour, the sun radiates more energy onto the earth  
than the entire human population uses in one whole year.



# SOLAR PLANE

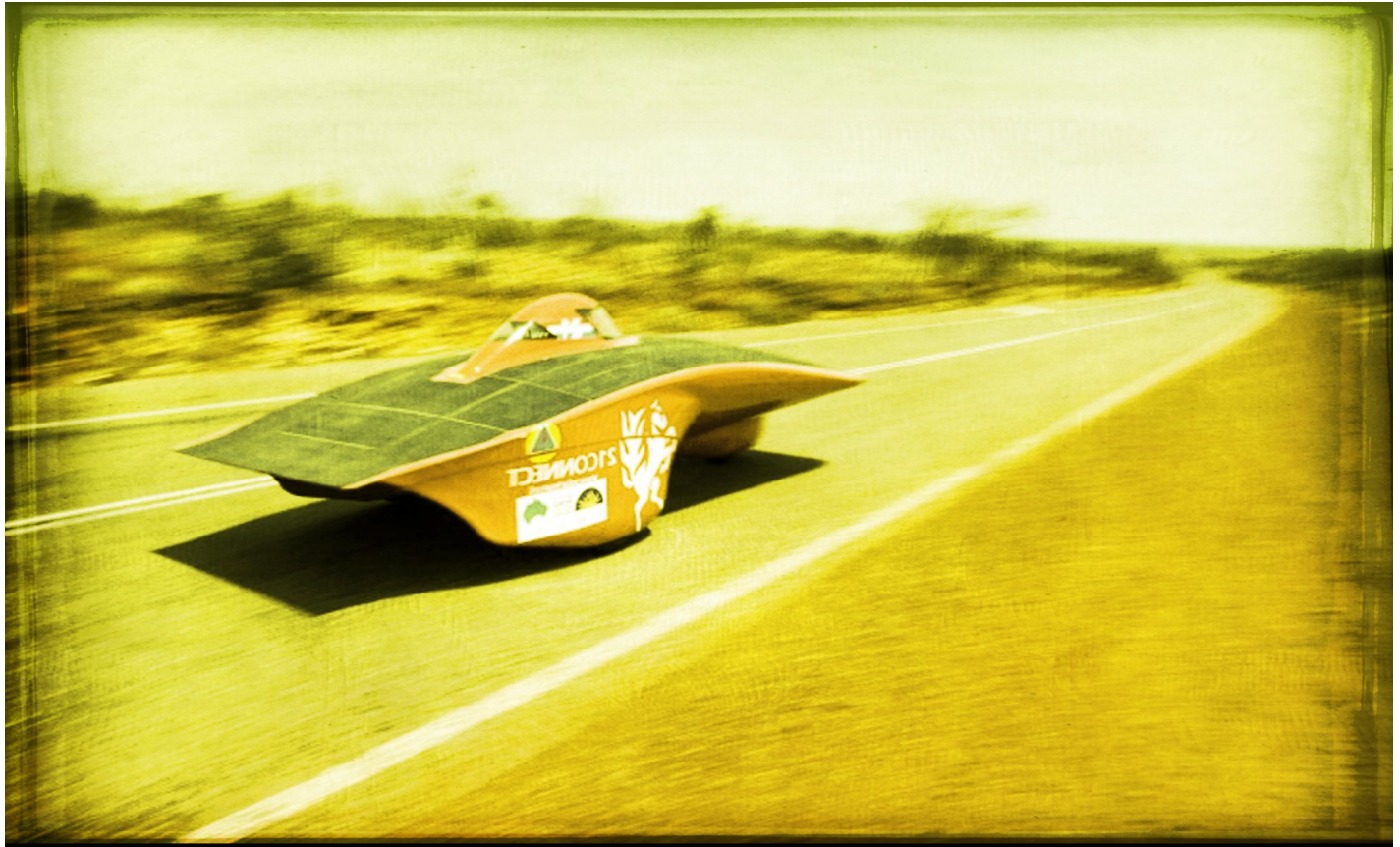


The solar plane Solar Impulse 2 was designed with the goal to fly around the world to demonstrate how clean technology can change the world. The ultra-lightweight airplane is capable of flying day and night without fuel.

[www.solar-impulse.com](http://www.solar-impulse.com)



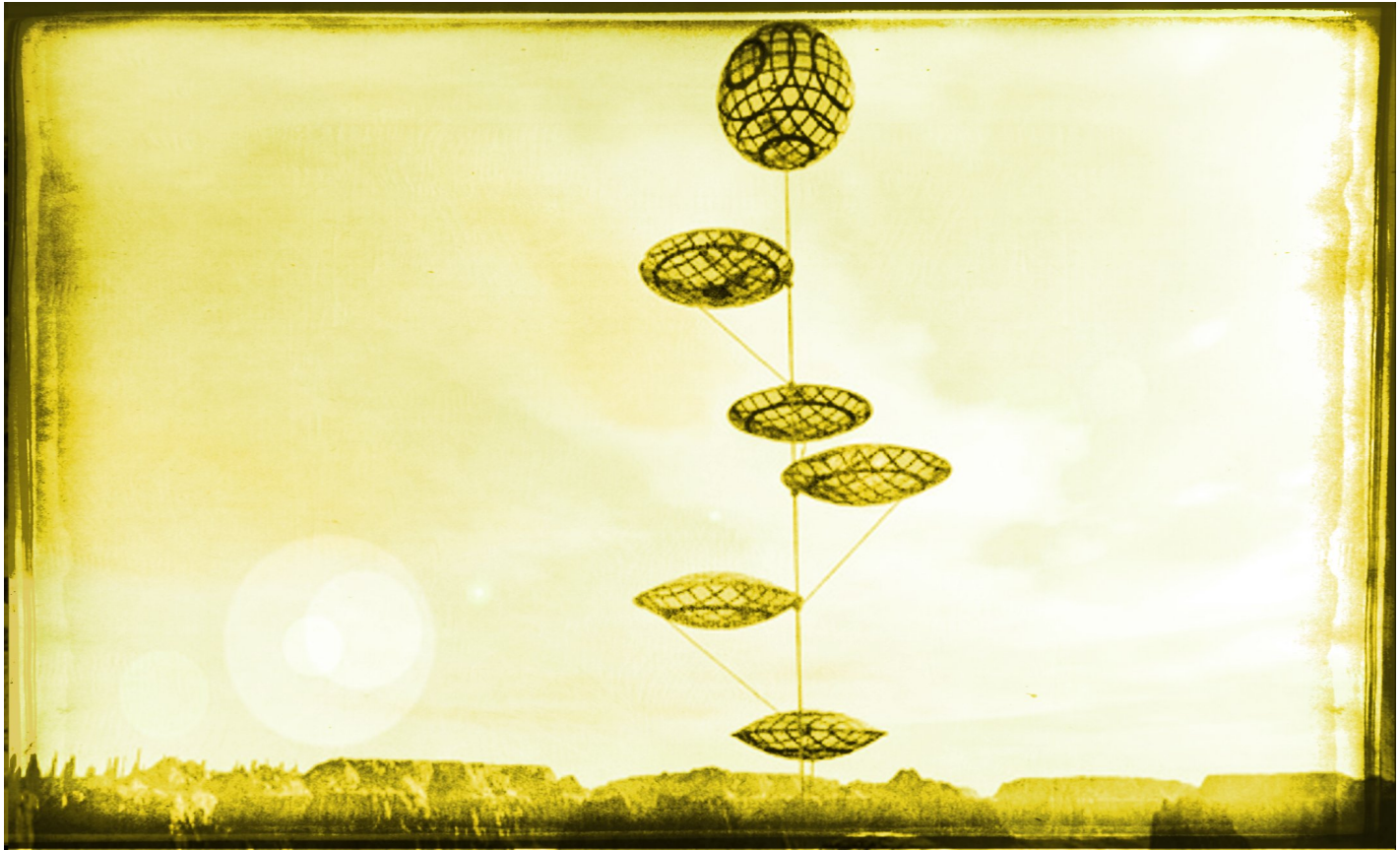
## SOLAR CAR RACE



The World Solar Challenge is a solar-powered car race which covers 3,021 km through Australia. The objective of this competition is to promote research on solar-powered cars. The race attracts teams from around the world.

[www.worldsolarchallenge.org](http://www.worldsolarchallenge.org)

# SOLAR BALLOONS



Solar balloons are an array of helium filled platforms constructed from a fabric coated with photovoltaic solar cells. The balloons are tied to the ground via one line to send helium up and another to pass the gathered solar power down.

[www.inhabitat.com/sunhope-solar-balloons](http://www.inhabitat.com/sunhope-solar-balloons)

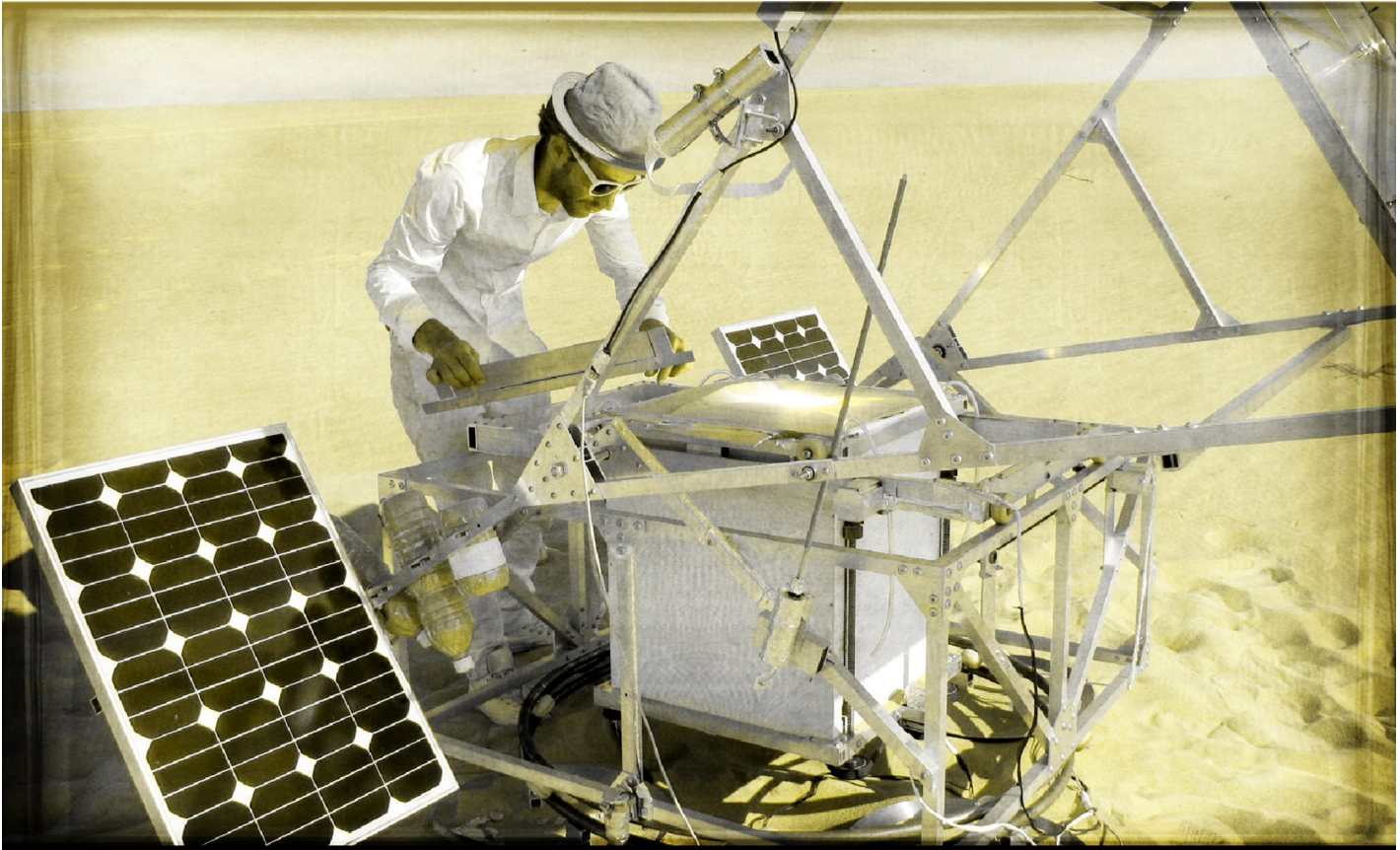


# SOLAROAD



The SolaRoad is the world's first bike path made from solar panels and was opened in Krommenie, Netherlands. The road surface consists of prefabricated panels with thick glass. Beneath the glass solar cells are installed.

## SOLAR 3D PRINTER



The solar 3D printer project explores the potential of desert manufacturing. Sunlight and sand are the raw material to produce glass objects using a 3D printing process. That combines natural energy and high-tech production technology.



## HIGH CONCENTRATED PHOTOVOLTAIC



The photovoltaic system can concentrate the sun's radiation 2,000 times. It converts 80 percent into useful energy to generate enough electricity to power several average homes.

## SOLAR BENCH



The solar bench charges smart phones and other small electronic devices day and night with the power of the sun. On-board sensors allow the bench to record location-based environmental information, such as air quality and noise-level data.

[www.soofa.com](http://www.soofa.com)



## SOLAR LOUNGE CHAIR



The solar lounge chair Soft Rocker are smart, clean energy-charging stations made by the Massachusetts Institute of Technology. The outdoor furniture uses the human power to create an interactive solar tracking system.

<http://arts.mit.edu/events/soft-rockers/>

## PORTABLE SOLAR TECHNIQUE



The portable solar technique Solartwister is a rollable solar panel, which is made for easy transport and outdoor activities. It is attachable to backpacks and is able to charge simultaneously two smartphones in up to two hours.



## SOLAR BAG



The Austrian company Sunny Bag produces bags with integrated solar panels. Those panels convert sunlight into electrical power to charge any mobile device such as mobile phones, digital cameras or tablets.

[www.sunnybag.at](http://www.sunnybag.at)

## SMART FLOWER

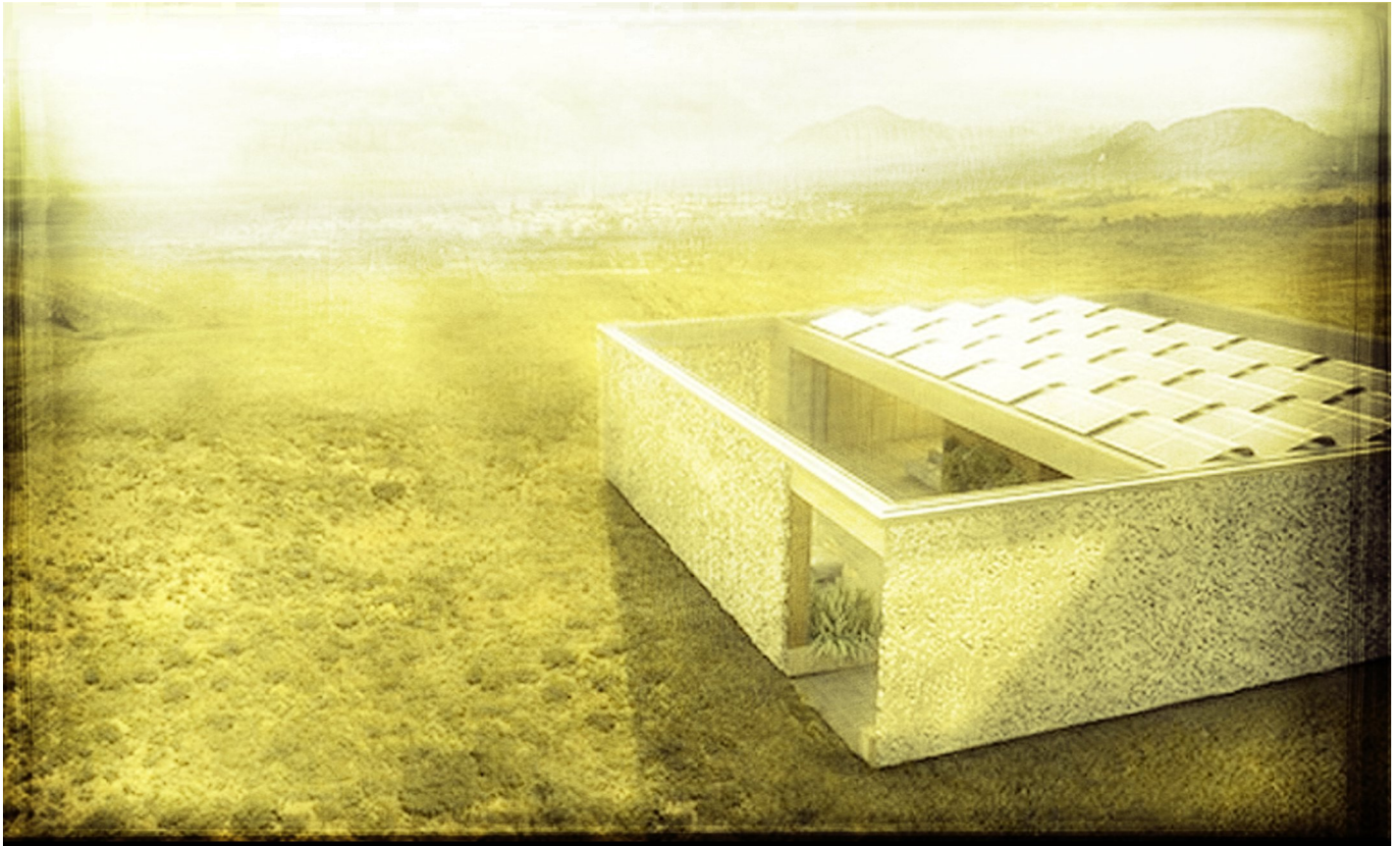


Smartflower is a portable solar array which unfolds automatically as the sun rises – tracking its path with a dual-axis tracking system and folding into the unit's housing when the sun sets.

[www.smartflower.com](http://www.smartflower.com)



## SOLAR HOUSE



The solar house LISI (Living Inspired by Sustainable Innovation) produces more energy from renewable energy sources than it needs. LISI was the winner of the annual solar house competition called Solar Decathlon in California.

[www.solardecathlon.com](http://www.solardecathlon.com)

## SOLAR E-BIKE

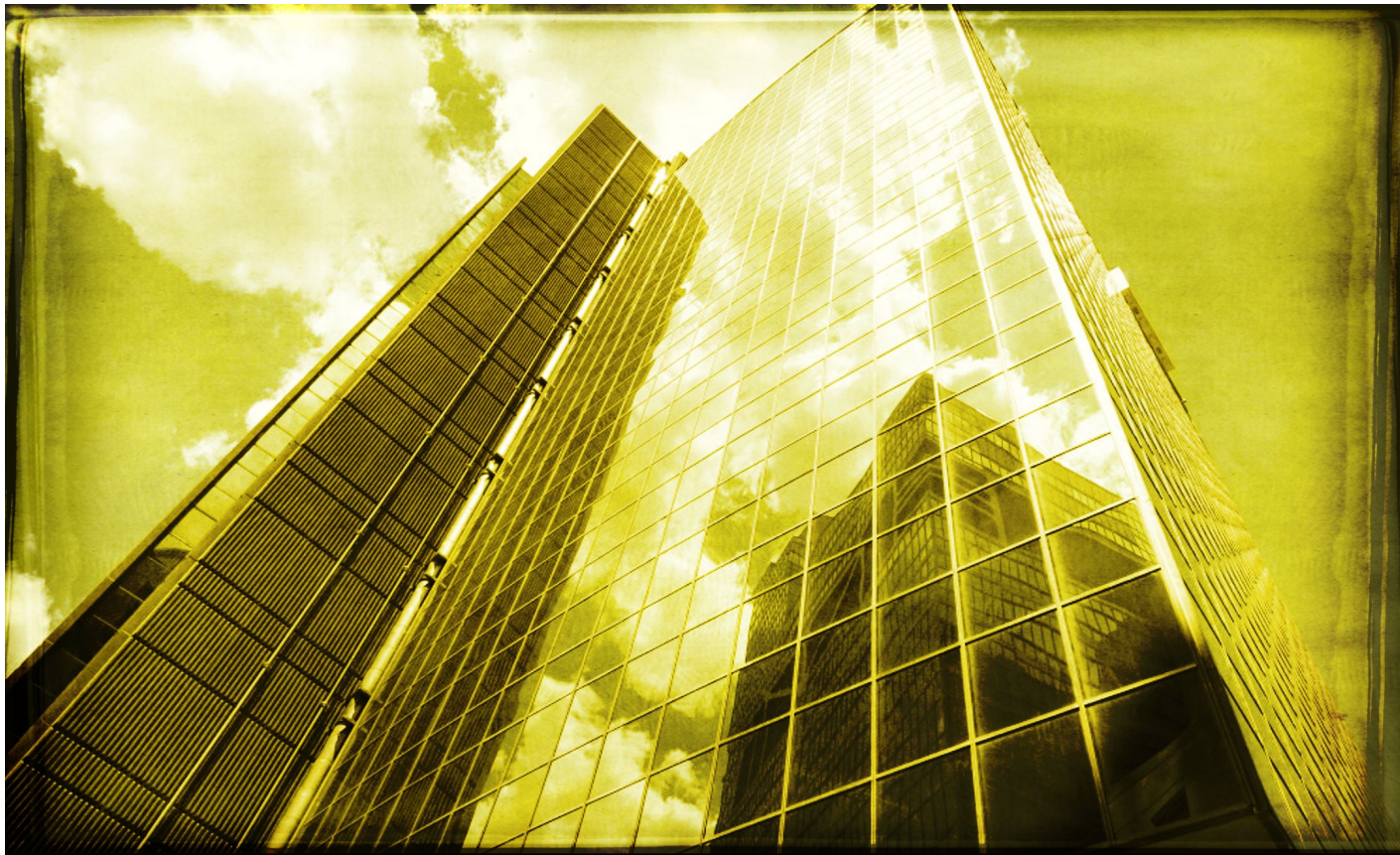


The solar bike is a self-sufficient E-Bike with fully integrated solar panels for charging. A solar film is the functional design element which is used to charge the battery. The bike is also charging while riding and when it is not in use.

[www.leaos.com](http://www.leaos.com)



## BUILDING-INTEGRATED PHOTOVOLTAICS



Building-integrated photovoltaics are produced according to the design objective and static requirements. The modules can be used in façades, roofs, carports, winter gardens, balustrades, shading devices or any other glass application.

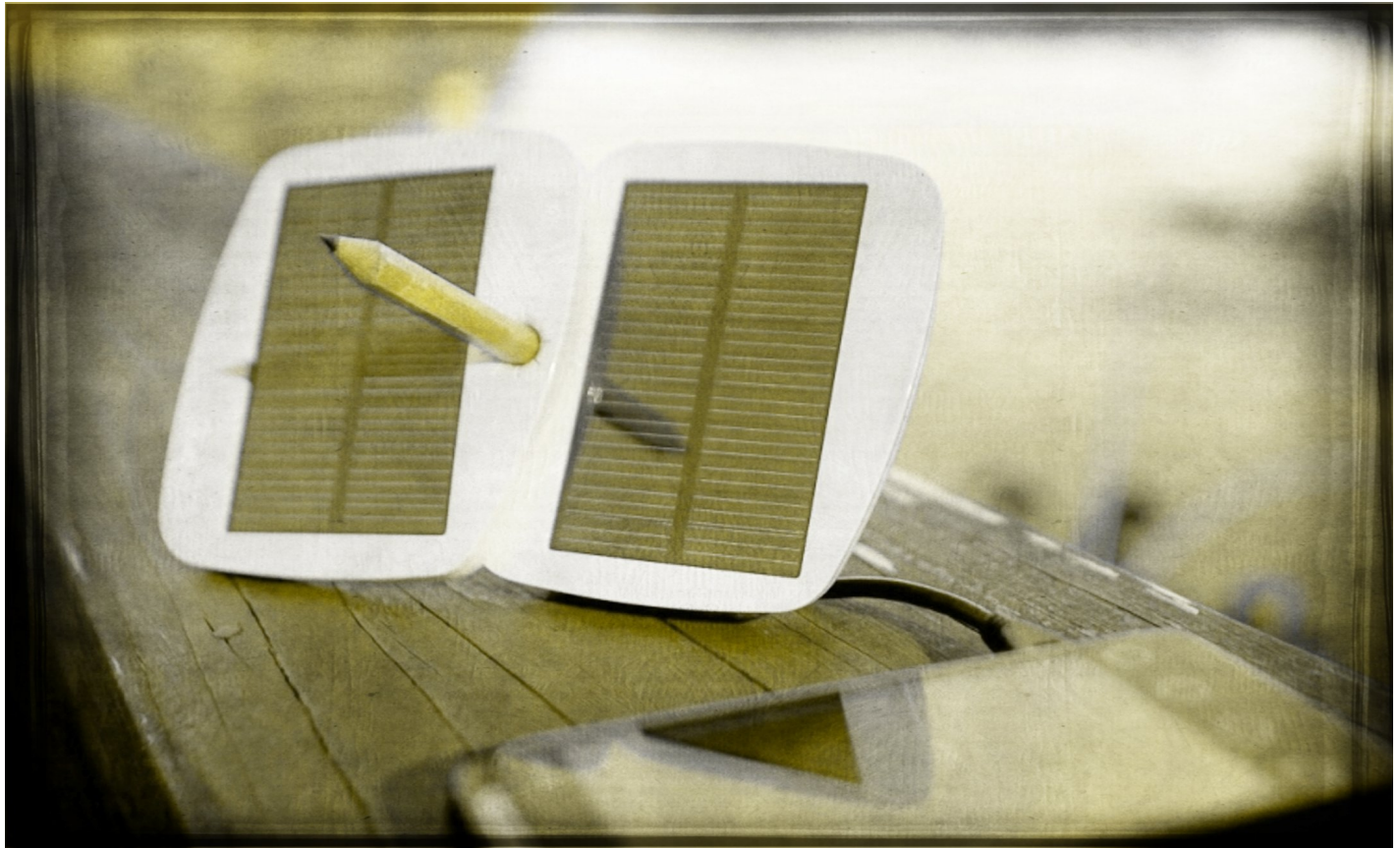
## WINDOW SOLAR SOCKET



The Window Solar Socket sticks to a window and draws solar power to an internal battery. It enables people to either plug small devices into the outlet or save the stored power for night-time usage.

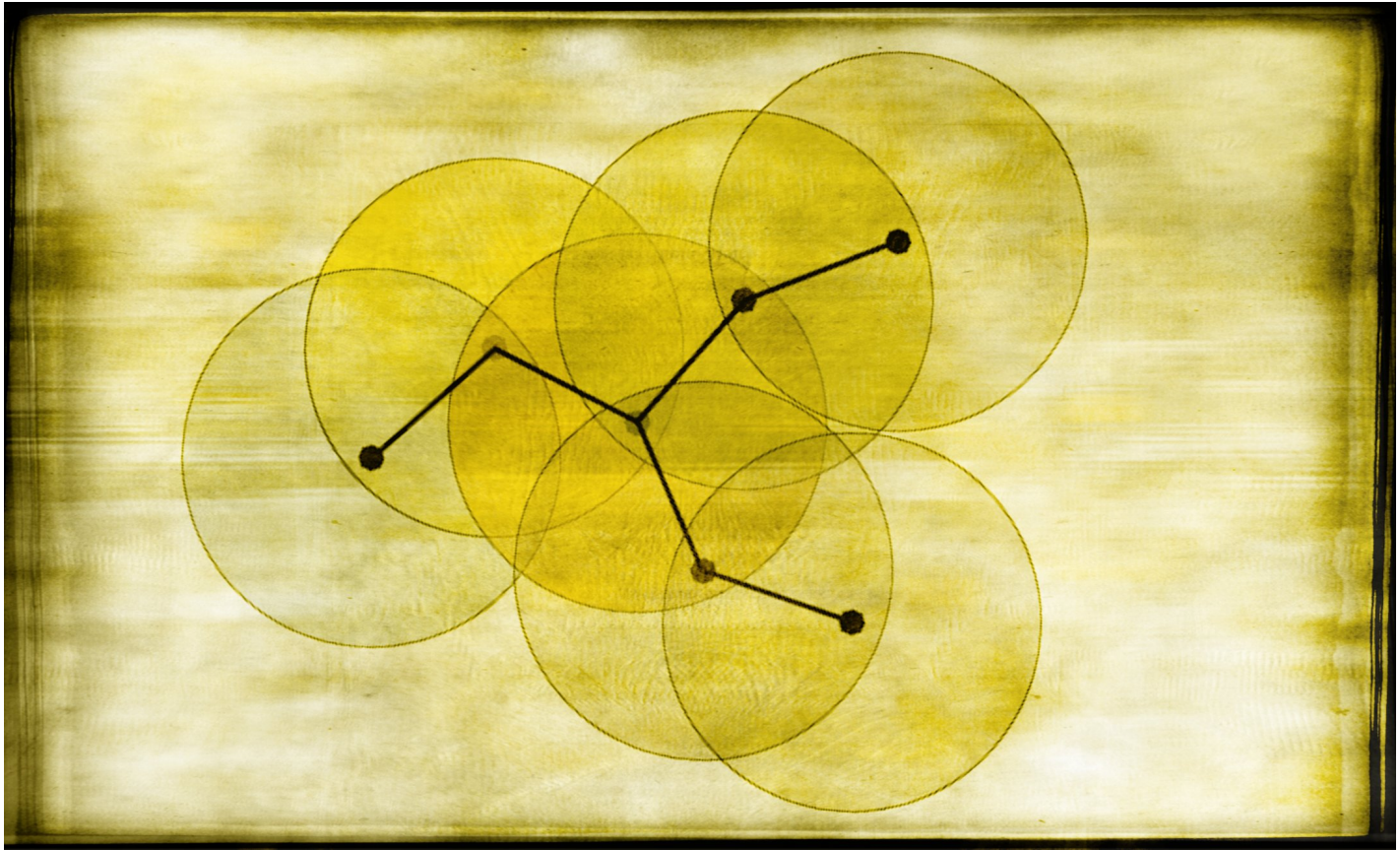


## PHONE CHARGER



The phone charger accepts charge from the sun via two high-efficiency solar panels, micro-USB power inport or wall outlet with optional adapter and holds charge for up to a year. It gives a dead cell phone a full charge in about three hours.

## SOLAR MESH



SolarMESH is a wireless LAN mesh network which provides outdoor wireless hotspot coverage for WiFi end stations. SolarMESH offers an energy-efficient, autonomous wireless network for development countries.

<http://owl.eng.mcmaster.ca/~todd/SolarMESH/>



## WEARABLE SOLAR



The wearable solar collection by Pauline van Dongen combines solar panels and flexible electronics into clothes that can charge a smartphone or any other USB compatible, portable device.

[www.wearablesolar.nl](http://www.wearablesolar.nl)

## GEMASOLAR POWER PLANT



The Gemasolar power plant can store heat to power turbines for 15 hours without exposure to sunlight. Therefore the plant can generate electricity also in the night. The plant is surrounded by 2,600 mirrors and is located in Seville, Spain.

[www.torresolenergy.com](http://www.torresolenergy.com)

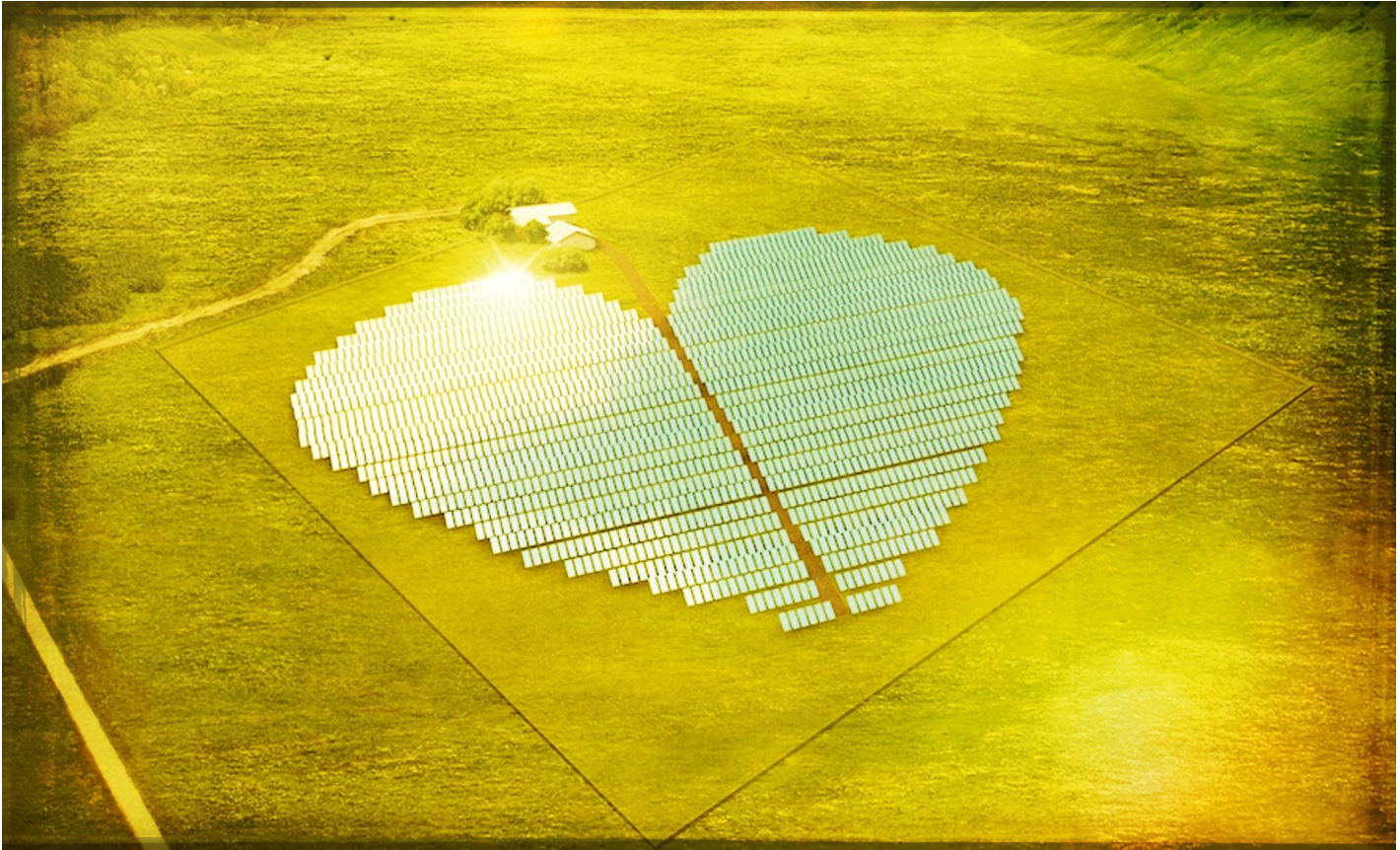


## SPHERICAL SOLAR



The spherical solar energy generator uses a ball lens to concentrate sunlight on a small photovoltaic panel and combines this with a dual-axis pivot that tracks the movement of the sun. It is more efficient than regular panel array.

## SOLAR FARM



The Heart of New Caledonia is a heart-shaped solar farm made out of 7,888 panels. It produces power for 750 homes on the Pacific island of New Caledonia.



## SOLAR POWER TOWER



The solar power tower technology involves capturing solar radiation using dual-axis mirrors that track the sun, and reflect sunlight onto the receivers. The solar power plant Planta Solar 20 can power about 10,000 homes.

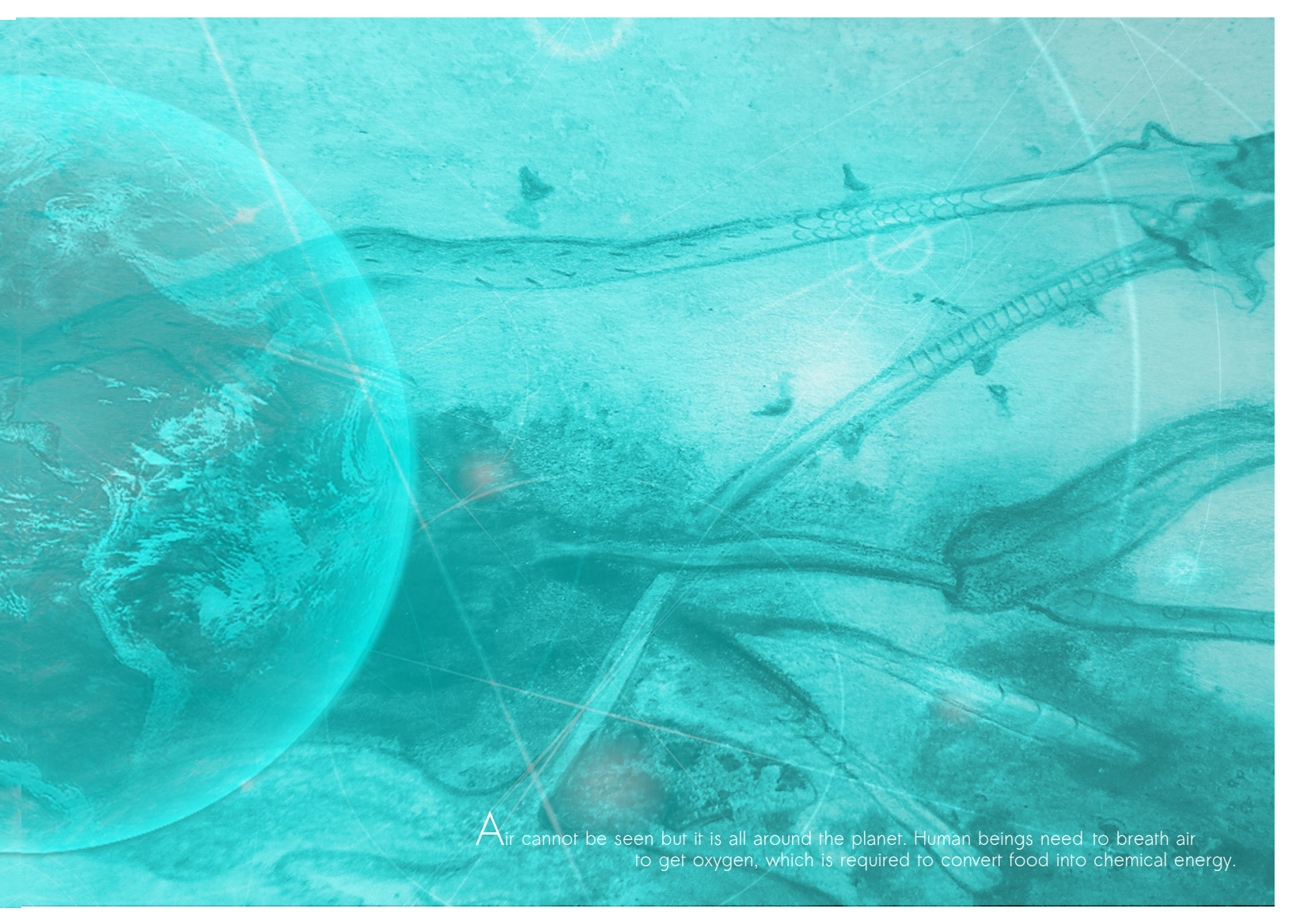
[www.abengoasolar.com](http://www.abengoasolar.com)



**AIR**

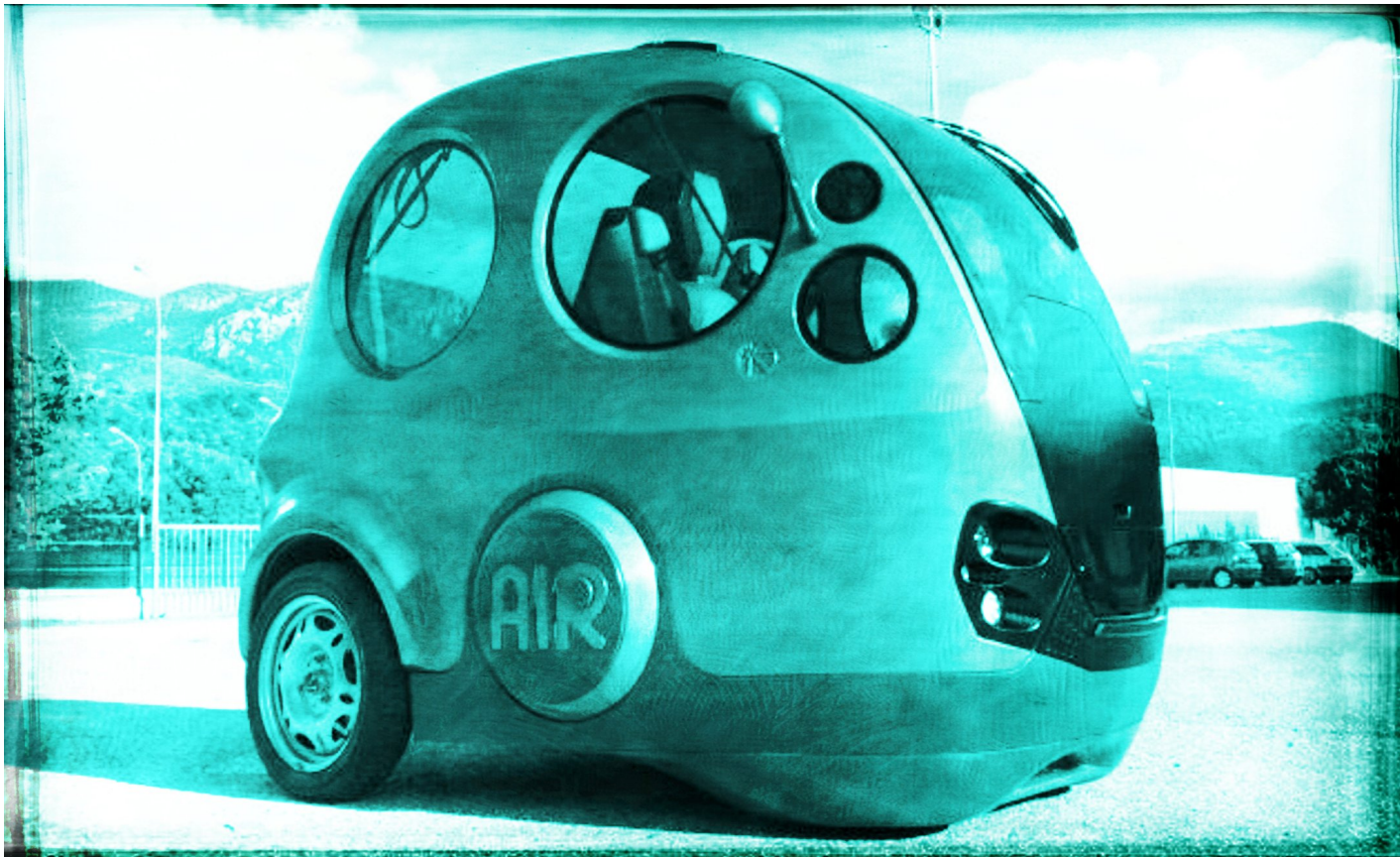
The image is a full-page artistic illustration in a teal or cyan color palette. It features a human spine, shown in profile, extending from the top left towards the center. The vertebrae are clearly defined. To the right, a portion of a globe is visible, showing continents and oceans. Overlaid on these elements is a complex network of thin, glowing lines that resemble a neural network or a data transmission system. These lines connect various points across the image, including the spine and the globe. The overall effect is one of a high-tech or scientific theme, possibly related to neuroscience, medicine, or global communication. The word "AIR" is printed in a bold, white, sans-serif font in the upper left corner.





Air cannot be seen but it is all around the planet. Human beings need to breathe air to get oxygen, which is required to convert food into chemical energy.

## AIR CAR



The air car is running on compressed air and is emission free. The air car Airpod was developed by Tata Motors in India. Top speed of the Airpod is about 80 km/h and its onboard tanks will hold enough compressed air for 200 km of range.

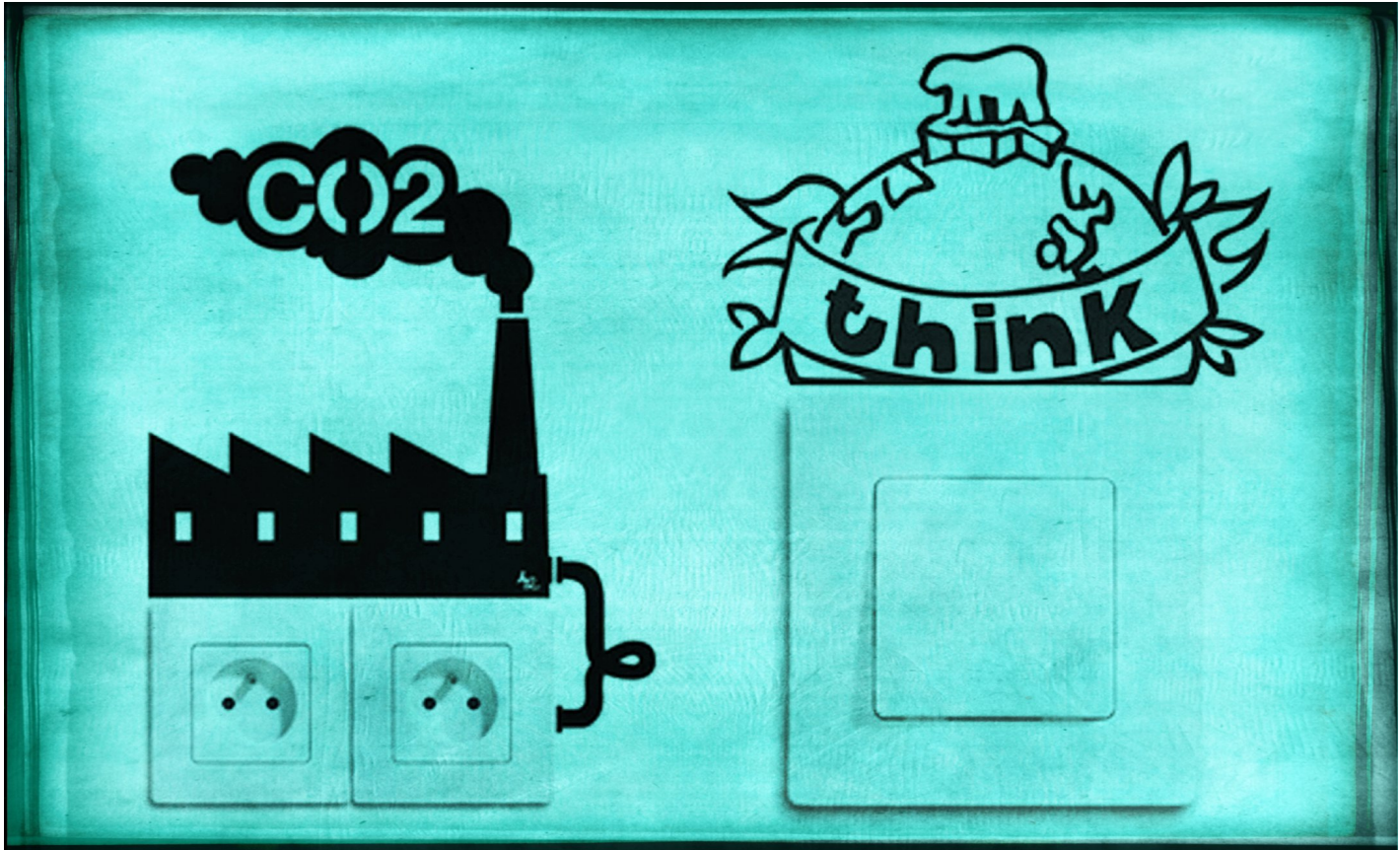


## AEROSPACE TURBINES



Compact wind acceleration turbines improve efficiency and power output with its aerospace technologies. They are a class of wind turbines that use structures to accelerate wind before it enters the wind-generating element.

## ECO WALL STICKERS



The eco-social brand Hu2 creates wall stickers with a poetic message. The stickers help to get rid of habits which are bad for the environment. Hu2 is using environmentally friendly adhesive and biodegradable packaging to produce the stickers.

[www.hu2.com](http://www.hu2.com)

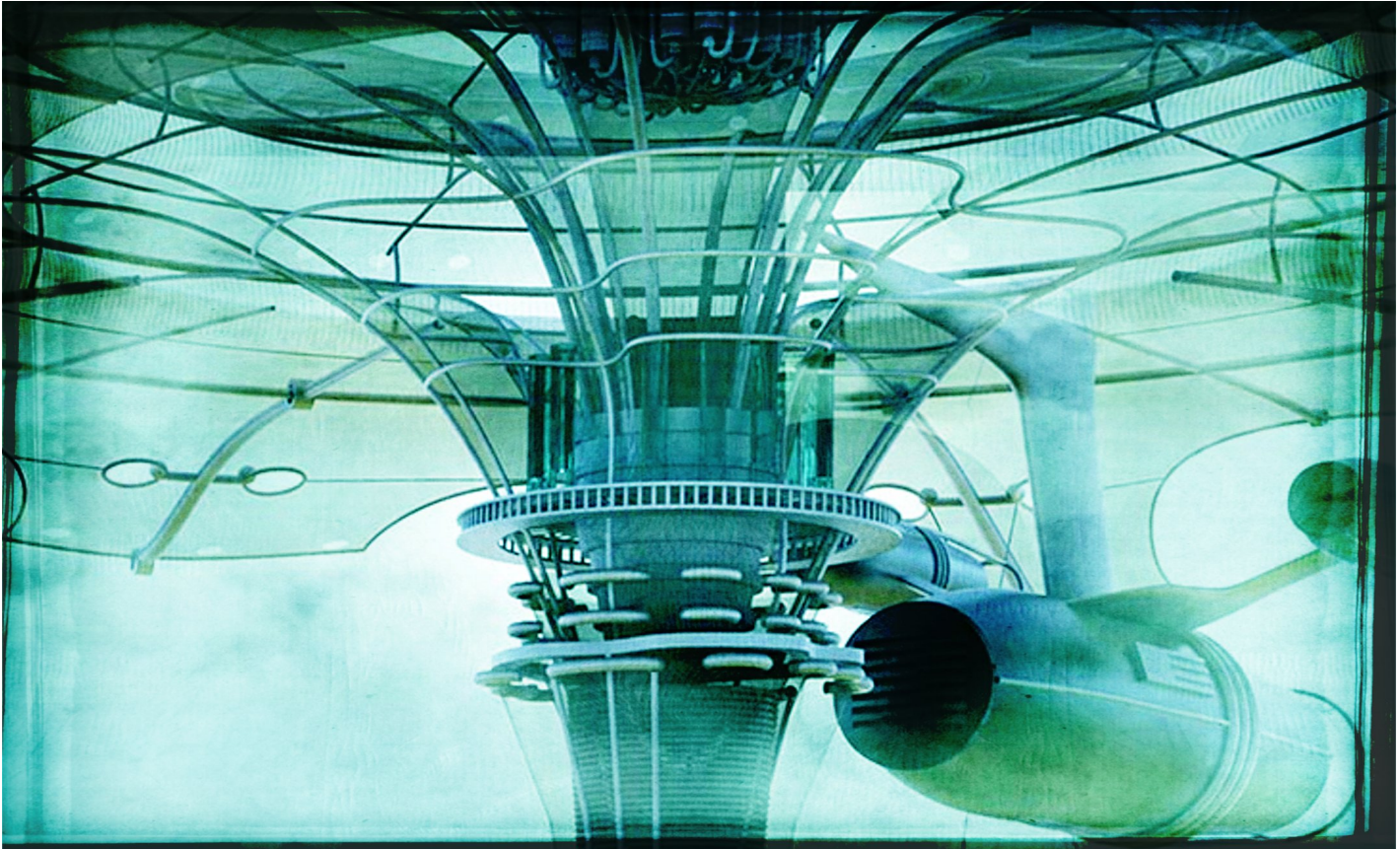


## PROJECTOR BIKE



The pedals of the projector bike are used to generate power which is stored in a large battery for a high powered projector and stereo system. The projections can be the size of buildings or as small as a TV set.

## BLUE SKYSCRAPER



The architecture magazine Evolo is calling worldwide for proposals for the annual skyscraper design competition. The proposal Blue Skyscraper turns China's air pollution into green energy in the form of liquid methane.

[www.evolo.us](http://www.evolo.us)



## LIVING WALLS



Living walls are self sufficient vertical gardens that are attached to the exterior or interior of a building. The living installation works to draw pollutants and CO<sub>2</sub> from the air and returns fresh oxygen and moisture.

## FLYING WIND TURBINE



Since winds are much stronger and more consistent at high altitudes, flying wind turbines are more productive than ground-based turbines. In addition, flying wind turbines are less problematic with birds and the surrounding environment.

[www.altaaerosenergies.com](http://www.altaaerosenergies.com)



## PHOTOSYNTHESIS BIKE



This photosynthesis bike purifies the air using a reaction between water and electric power from a lithium-ion battery. The design, developed by Thai firm Lightfog Creative and Design, has already won a red dot award.

## RACER CYCLE



The Racer Cycle is a 3-wheel electric hybrid vehicle which allows cyclists to travel as fast as cars. The flywheel generator multiplies the pedal power of the driver so that the vehicle can hit a top speed of 160 km/h.



## ELECTRIC CAR



Electric cars are zero-emission, quiete and cheap to operate. Tesla Motors is an American company that designs, manufactures and sells electric cars for the worldwide. The commercialization of the electric car is the goal of Tesla Motors.

[www.teslamotors.com](http://www.teslamotors.com)

## MOTIONLESS WINDMILL



The electrostatic wind energy converter is a technology that converts wind energy with a framework of steel tubes into electricity without moving mechanical parts. This means no noise and much easier maintenance.

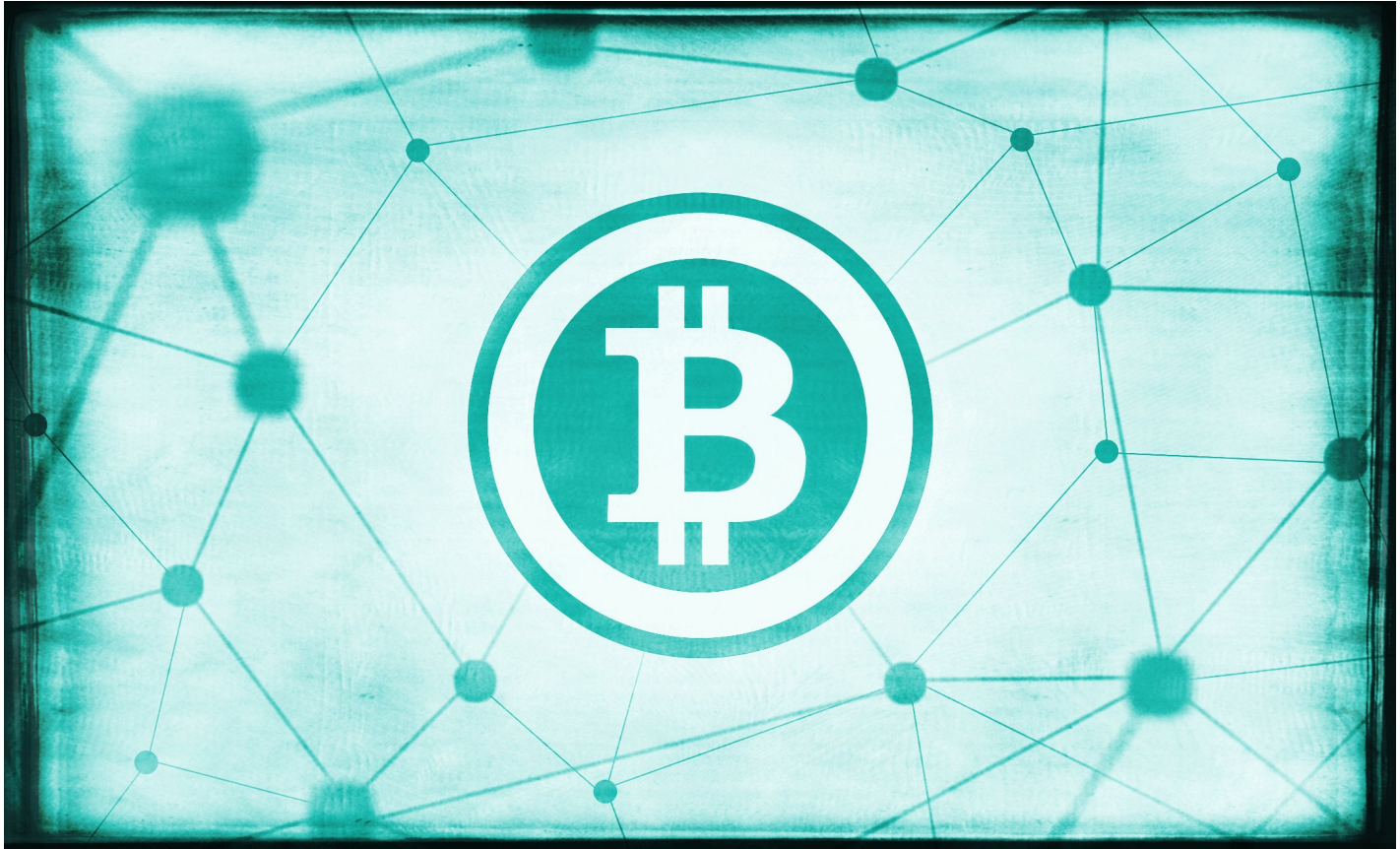


# SKY SAILS



The SkySails system tows the ship using large, dynamically flying towing kites, which generate up to 25 times more energy per square meter than conventional sails propulsion systems.

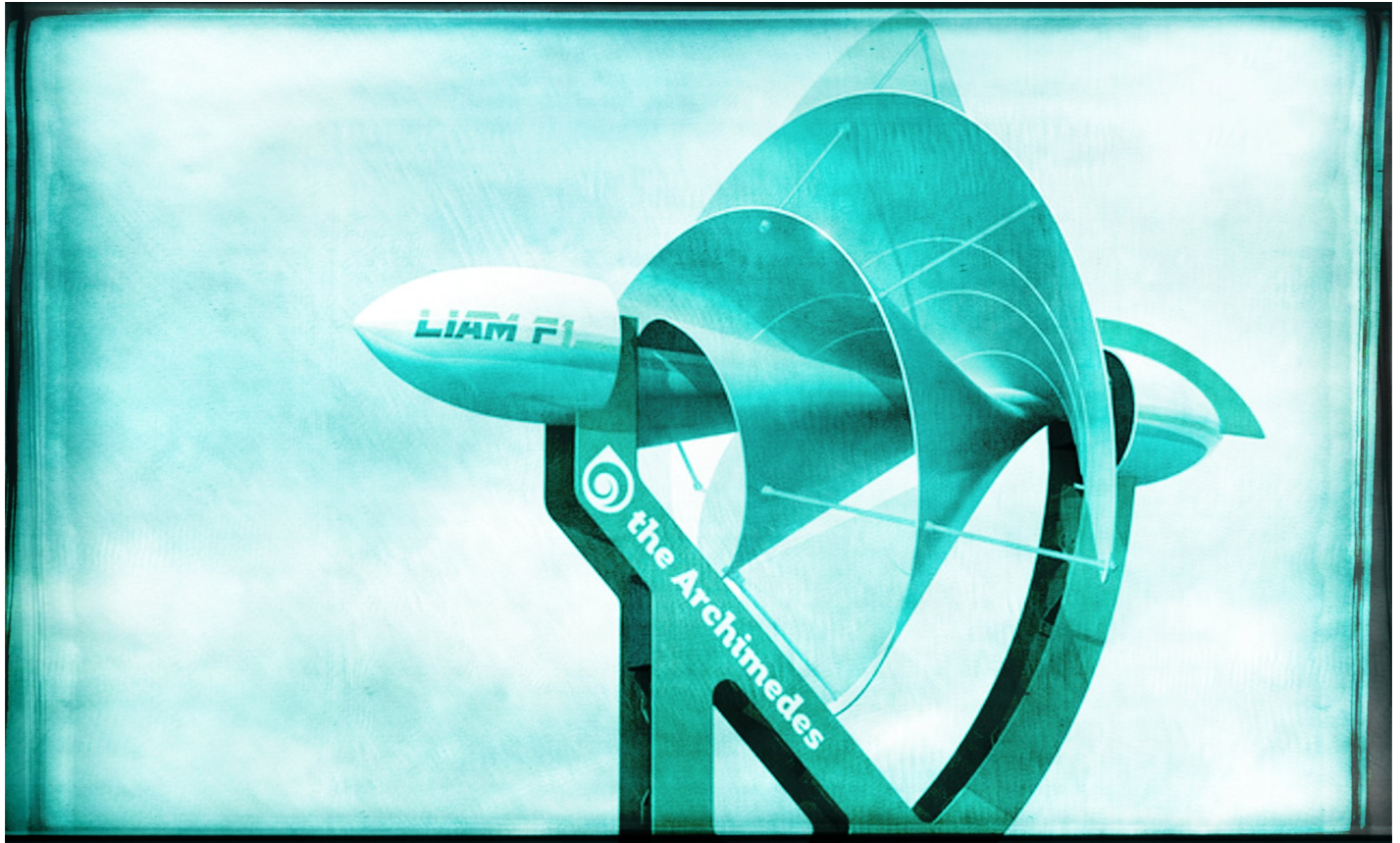
# BITCOIN



Bitcoin is the name for a digital money system which uses peer-to-peer technology to operate. It is based on an open-source software and its design is public. Nobody owns or controls Bitcoin and everyone can take part.



## URBAN WIND TURBINE



The urban wind turbine has the form of the nautilus shell and goes for the optimal position of the wind. It generates soundless, on average of 1,500 kilowatt-hour at a windspeed of 5 m/s.

## FLYING BICYCLE



The flying bicycle tows a lightweight trailer with a powerful fan. In order to fly, a flexible wing opens and an electric starter motor fires up the biofuel-powered fan. The bike can fly at a speed of 40 km/h for up to 3 hours.

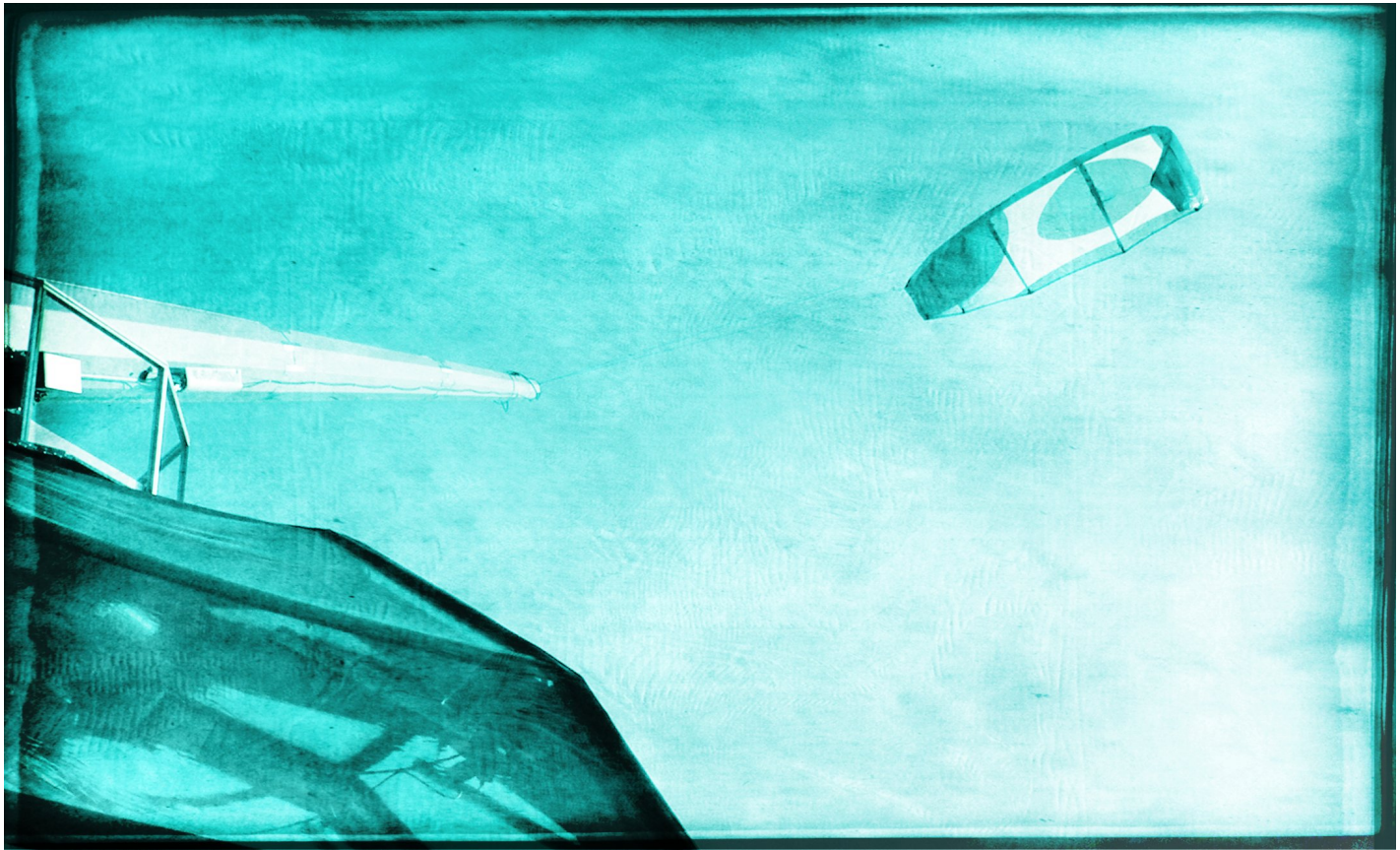


## CHARGEBOARD



Dutch designer Bjorn van den Hout created the Chargeboard, which is a longboard that charges smartphones. It generates its own electricity through two hidden dynamos, storing it right away into a power box.

# KITEGEN



Kitegen harvests the energy of wind by its large wings which are driven by a high-tech control system. Winds at high altitude are much faster and constant than those available to traditional wind mills.

[www.kitegen.com](http://www.kitegen.com)



## AIR PURIFYING TILES



The air purifying tiles eliminate contaminating gases through its surface. They contain titanium dioxide, an element which eliminates polluting gases. The tiles consume carbon dioxide and release oxygen back into the air, just like plants do.

## AIRCLEANING BILLBOARD



The University of Engineering and Technology of Peru has developed pollution-fighting billboards that can purify 100,000 cubic meters of air every day. The technology relies on the use of water, which filters bacteria and particles.



## AIR BATTERY



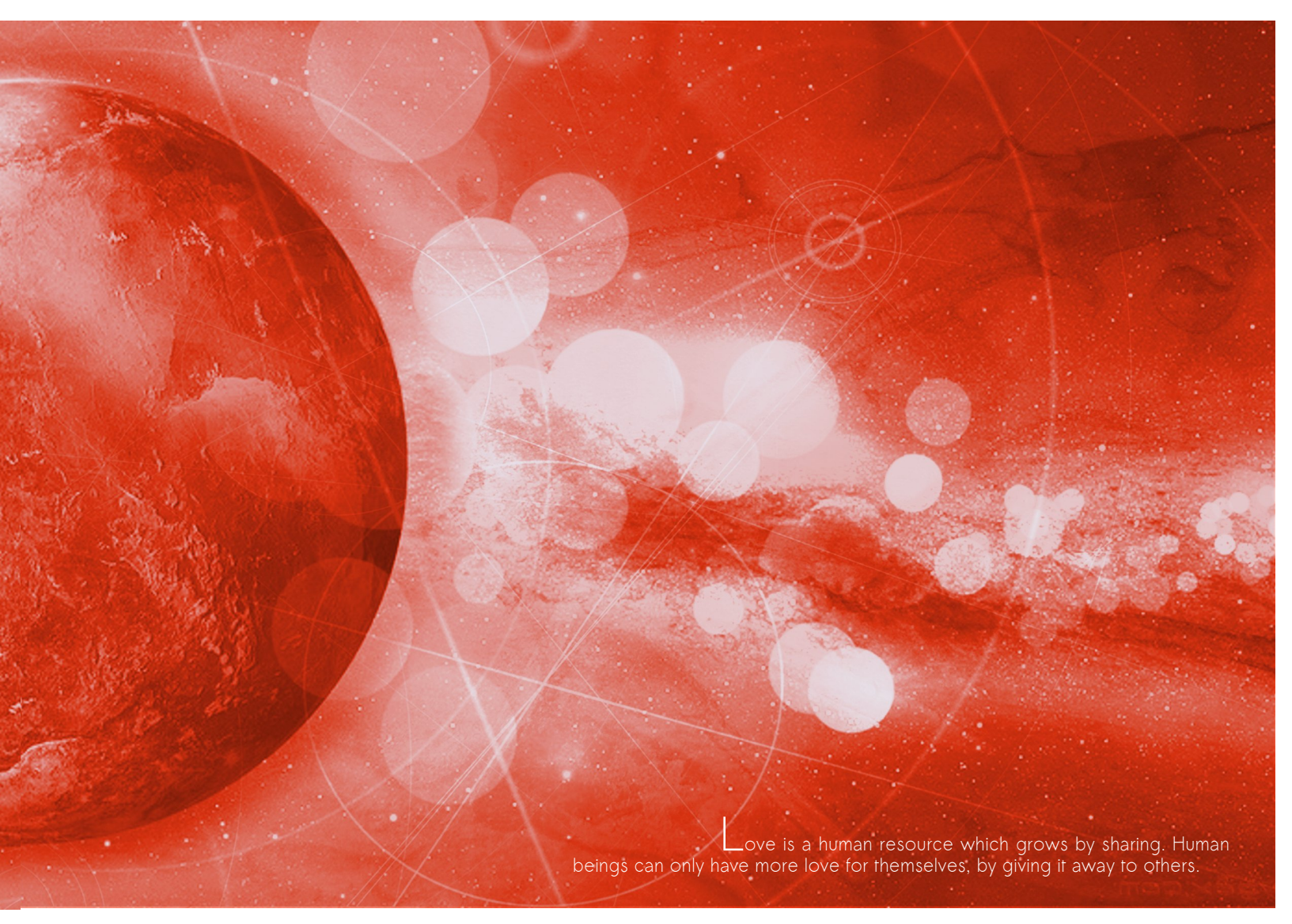
Unlike conventional batteries that carry oxygen, these batteries freely breathe oxygen from the ambient air to release the energy contained in metals. The air battery in electric vehicles release zero emissions.



**LOVE**

The image is a full-page background with a deep red color scheme. On the right side, a large, detailed planet with visible craters and surface features is partially shown. In the center-left area, there is a target symbol consisting of concentric circles and intersecting lines. The background is filled with faint, glowing geometric shapes, including circles and lines, and a field of small, distant stars. The word "LOVE" is printed in a bold, white, sans-serif font in the upper left corner.





Love is a human resource which grows by sharing. Human beings can only have more love for themselves, by giving it away to others.



## START SOME GOOD



StartSomeGood is a crowdfunding platform for non-profits, social entrepreneurs and changemakers to raise funds and grow a community of supporters. It was founded by entrepreneurs who want to change the world for the better.

[www.startsomegood.com](http://www.startsomegood.com)



## CARITAS HOTEL



The Magdas Hotel in Vienna employs refugees and asylum seekers. People from 14 different nations with very different biographies work at Magdas. It offers 80 rooms, bicycle rental and a home theater, among other services.

[www.magdas-hotel.at](http://www.magdas-hotel.at)

## FREE HUGS



The Free Hugs Campaign is a social movement involving individuals who offer hugs to strangers in public places. The hugs are meant to be random acts of kindness performed just to make others feel better.

[www.freehugscampaign.org](http://www.freehugscampaign.org)



## SHARING COMMUNITY



A Switzerland-based project called Pumpipumpe encourages neighbourhoods to build a greater sense of community by placing stickers on their mailboxes to indicate what goods they have to loan to their neighbours.

[www.pumpipumpe.ch](http://www.pumpipumpe.ch)

## MENTAL ENVIRONMENTALISM



Mental environmentalism refers to the psychological toxin of the society. Adbusters, an organisation for a healthy mental environment, has launched international campaigns, including Buy Nothing Day, TV Turnoff Week & Occupy Wall Street.

[www.adbusters.org](http://www.adbusters.org)



## POSITIVE NEWS



The not-for-profit newspaper takes a solution-focused perspective on the challenges facing society and presents news in a way that empowers people to respond constructively to issues.

[www.positivenews.org.uk](http://www.positivenews.org.uk)

## FAN ACTIVISM



The Harry Potter Alliance turns fans into heroes. They are changing the world by making activism accessible through the power of story. Since 2005, they have engaged millions of fans through their work for equality, human rights and literacy.

[www.thehpalliance.org](http://www.thehpalliance.org)



## SELF-PUBLISHING

# Booktype



Self-publishing is the publication of any book or other media by the author. Sourcefabric is a nonprofit organisation that promotes freedom of speech by sharing open-source technology for self-publishing.

[www.sourcefabric.org](http://www.sourcefabric.org)

## PRACTICAL ACTION



The NGO Practical Action uses technology to challenge poverty in developing countries. Through technology they enable poor communities to build on their skills and knowledge to produce sustainable and practical solutions.

[www.practicalaction.org](http://www.practicalaction.org)



## ALTERNATIVE NOBEL PRIZE



The Right Livelihood Award, also known as Alternative Nobel Prize, honours and supports those offering practical and exemplary answers to the most urgent challenges facing us today.

[www.rightlivelihood.org](http://www.rightlivelihood.org)

## MICRO CREDIT



Micro credit is an extremely small loan given to impoverished people to help them become self employed. It is designed not only to alleviate poverty, but also to empower women and uplift entire communities by extension.



# UBUNTU



Ubuntu is an age-old African term for the belief in a universal bond of sharing that connects all humanity. Ubuntu is also the name for a Linux-based free operating system, where users are able to study, modify and share it.

[www.ubuntu.com](http://www.ubuntu.com)

## ONLINE ACTIVIST NETWORK



The NGO Avaaz is an online activist network promoting activism on issues such as climate change, human rights, animal rights, corruption, poverty and conflict. Avaaz is signing petitions, funding media campaigns and organising direct actions.

[www.avaaz.org](http://www.avaaz.org)



## FAIR WEAR SHOPPING



Fair Wear Foundation (FWF) is an independent, nonprofit organisation that works to improve labour conditions for garment workers. Each year they publish a list with rated brands which helps buy fair clothes.

[www.fairwear.org](http://www.fairwear.org)

## SOFTWARE AGAINST CYBERBULLYING



The 13-year-old student Trisha Prabhu has created a software called Rethink against cyber-bullying. It will provide a pop-up warning whenever someone attempts to post a potentially harmful or offensive message on social media.



## BAREFOOT COLLEGE



The Barefoot College say that uneducated poor have also the right to use technologies to improve their life. They teach women from poor villages skills such as installing, and repairing solar lamps, without requiring them to read or write.

[www.barefootcollege.org](http://www.barefootcollege.org)



## THE RECYCLED ORCHESTRA



The Recycled Orchestra is a youth orchestra in Paraguay, whose instruments are made out of the very trash that the town is built on. It started by a music teacher, who began using the trash in the landfill to make instruments for the children.

[www.landfillharmonicmovie.com](http://www.landfillharmonicmovie.com)



# POSITIVE PSYCHOLOGY



Positive Psychology is the scientific study of strengths, values and talents. It is founded on the belief that people want to cultivate what is best within themselves, and to enhance their experiences of love, work and play.

## AMIGOS NA CULTURA



The NGO Amigo Na Cultura is using culture & art to empower youngsters from poor socio-cultural background. Their goal is to create a new vision of their lives through cultural activities.

[www.amigosnacultura.org.br](http://www.amigosnacultura.org.br)



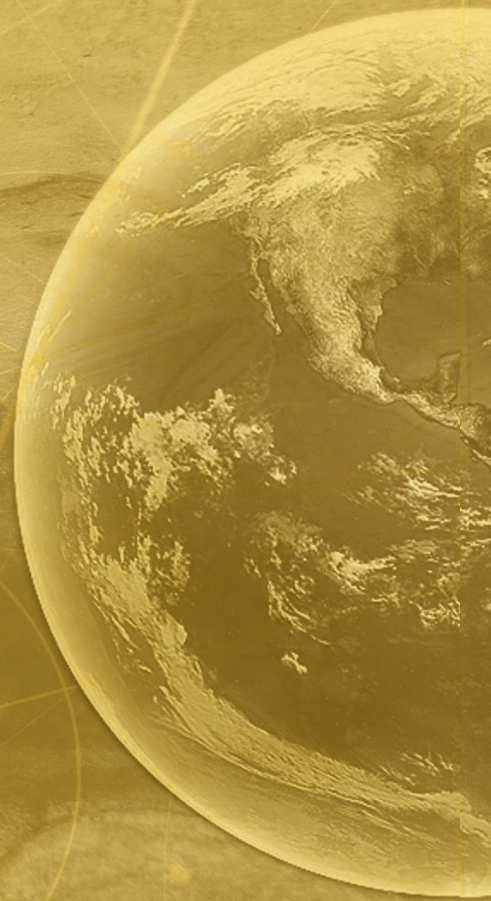
# GROSS NATIONAL HAPPINESS



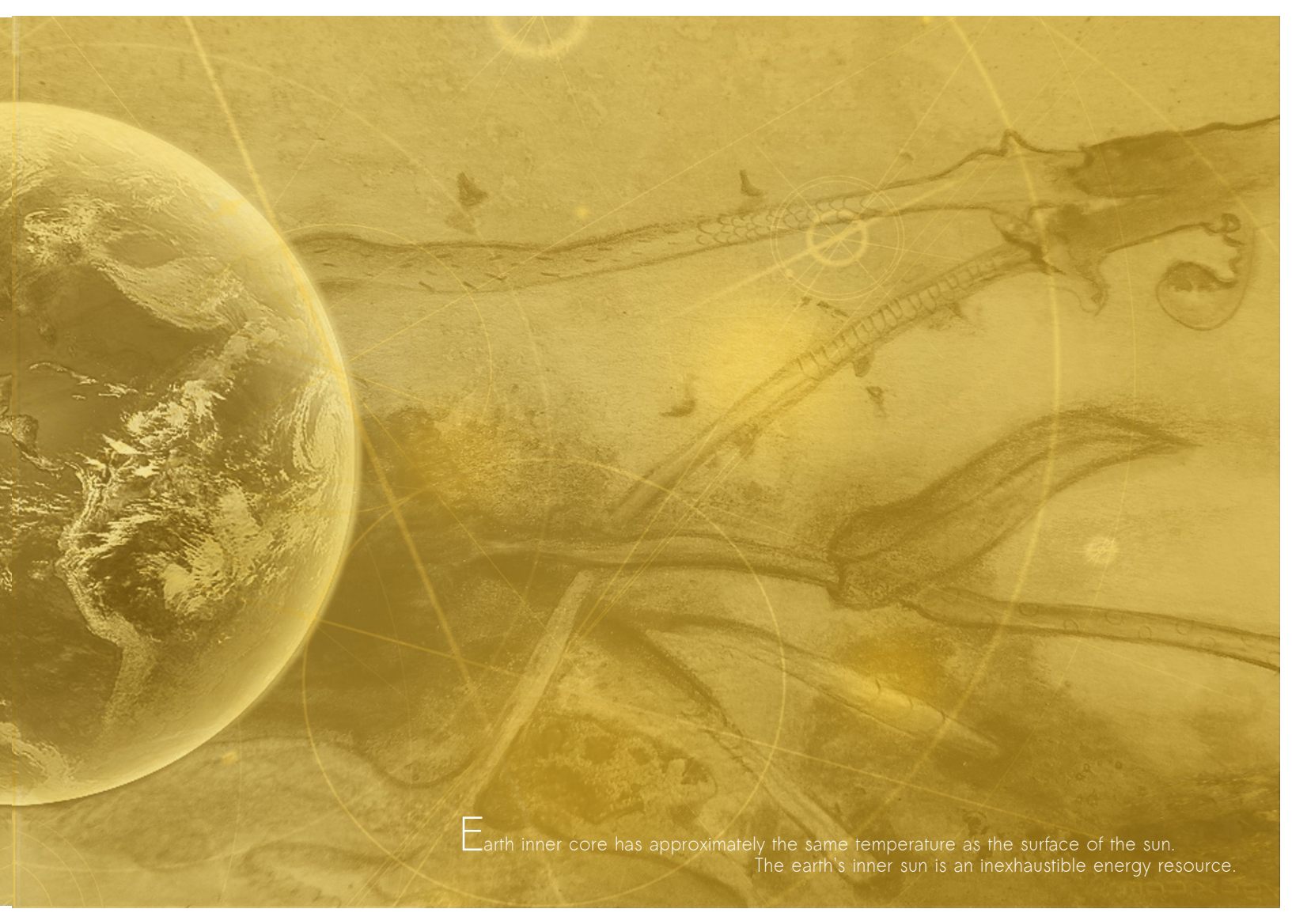
The Asian country Bhutan has developed the Gross National Happiness to scale prosperity instead of using the GNP (Gross National Product). The Gross National Happiness is the bridge between prosperity and happiness.

[www.grossnationalhappiness.com](http://www.grossnationalhappiness.com)

**EARTH**







Earth inner core has approximately the same temperature as the surface of the sun.  
The earth's inner sun is an inexhaustible energy resource.

## PLANT POWER



The Dutch company Plant-e produces products in which living plants generate electricity. It harnesses electricity from living plants, and then uses it to power cell phone chargers, Wi-Fi hotspots or LED streetlights.

[www.plant-e.com](http://www.plant-e.com)



## FOREST BATHING



Forest Bathing, also called Shinrin Yoku, has become a cornerstone in Japanese medicine. Researchers have established a robust body of scientific literature on the health benefits of spending time in the forrests.



## ALGAE BIOFUEL



Scientists have been successful in converting algae into biodiesel. Algae grows naturally all over the world in almost limitless amounts. Half of algae's composition is lipid oil.



## PLANTABLE COFFEE CUP



Using recycled materials, the company called Reduce. Reuse. Grow. has created a biodegradable coffee cup embedded with native seeds. Consumers can help reduce trash while at the same time growing new trees and flowers.

## BAMBOO BIKE



Bamboo bikes are lighter than steel framed bikes, do not rust and offer a smooth ride. The eco-friendly bikes can be hand-crafted locally and customized for the individual rider.

[www.bambooride.com](http://www.bambooride.com)



## ECO CAR



Lotus' car Elise has evolved from eco-engineering. Featuring a body made of hemp, Lotus overhauled its entire manufacturing process to reduce energy, boost recycling and provide dash instrumentation to encourage greener driving habits.

[www.lotuscar.com](http://www.lotuscar.com)

## PLASTIC FROM BANANA



The 16-year-old Turkish student Elif Bilgin developed a chemical process that turns the peels into a non-decaying bioplastic and won the Scientific American Science in Action competition in 2013.



## ENERGY HARVESTING TILES



Pavegen Systems has developed paving slabs to convert energy from people's footsteps into electrical power. A typical tile is made of recycled polymer, with the top surface made from recycled truck tires.

## BIO COMPUTER



The company Supla & Kuender from Taiwan invented a PC by using a new grade of durable PLA blend for mass production of electronics. Polylactide is a biodegradable thermoplastic aliphatic polyester derived from renewable resources.



## EARTHSHIP



An Earthship is a type of passive solar house that is made of both natural and recycled materials such as earth-filled tires. Earthships are intended to be off-the-grid ready homes with minimal reliance on both public utilities and fossil fuels.



The aim of the project Fruitcity in Wiener Neustadt is to provide the population with fresh and organic fruits. Fruit trees have been planted in the common areas of the city. The fruits are free for the citizens to harvest.



## ZERO-ENERGY HOTEL



The eco-friendly house Hotel Stadthalle is a zero-energy building. Through a solar power plant and ground water heat pump, the Hotel Stadthalle produces the same amount of energy that it consumes per year.



## BIKE TUBE



The London Underline regenerates the disused metro tunnels. These spaces are turned into a network of pedestrian and cycle paths with cultural and retail spaces, all powered by Pavegen. This kinetic energy system converts footsteps into electricity.

[www.gensler.com](http://www.gensler.com)



## CLOUD & HEAT



The company Cloud & Heat offers free heating. They place servers in offices where they process cloud data for internet users. Meanwhile, the heat generated by the servers is used to heat the building and water.

## SLOW FOOD



Slow Food is an international movement promoted as an alternative to fast food. It strives to preserve traditional and regional cuisine. They encourage farming of plants, seeds and livestock, which are characteristic of the local ecosystem.

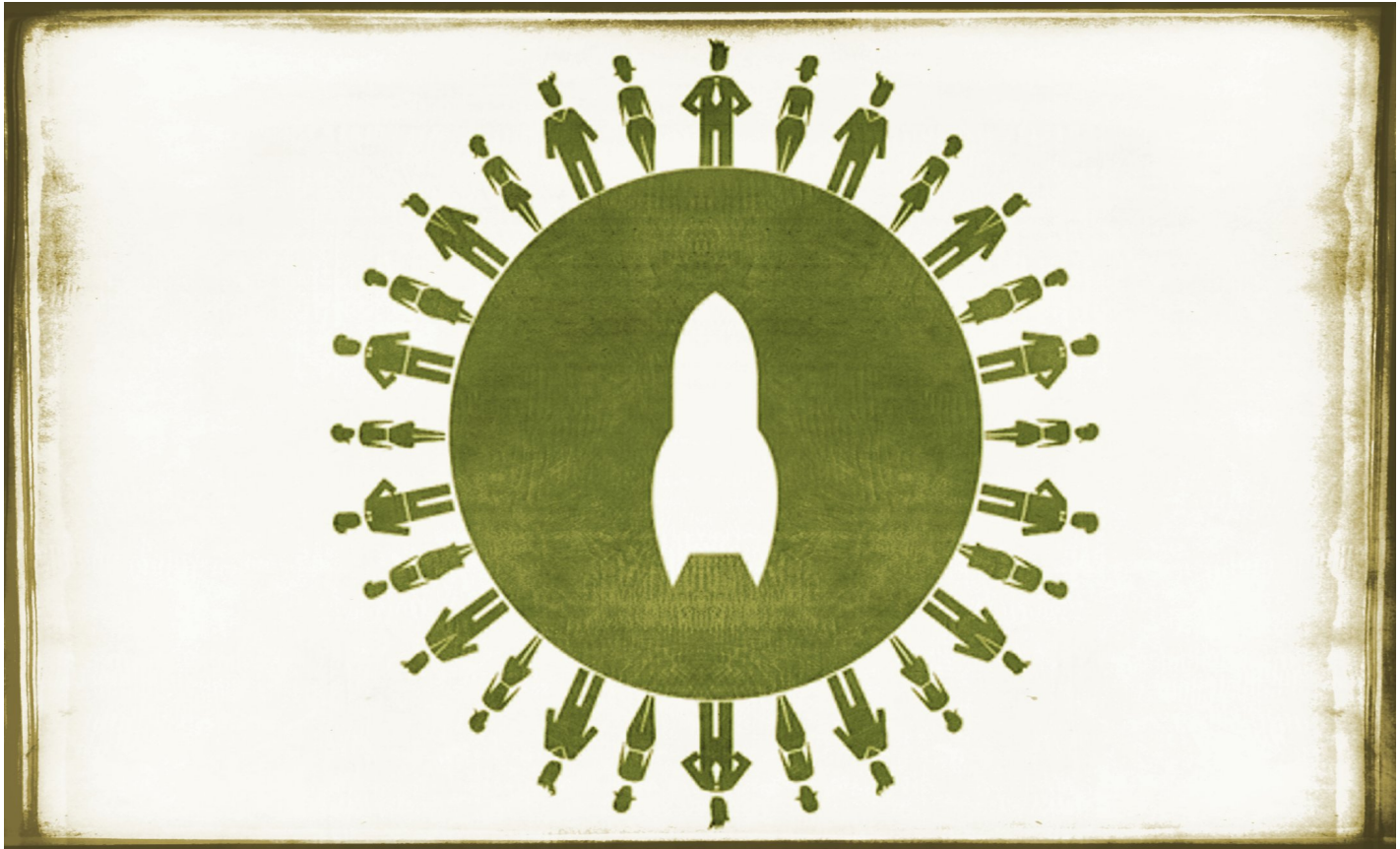


## ARCHE NOAH



Arche Noah is a seed network that preserves biodiversity. Members of Arche Noah act as private “seed savers” by cultivating endangered varieties. They provide seeds to others, study and develop their varieties carefully.

## GREEN ROCKET



Green Rocket is a crowdfunding platform with the focus on supporting financially sustainable business ideas. People can invest in enterprises and start-ups with an ecological business content.

[www.greenrocket.com](http://www.greenrocket.com)



## BIO-BUS



The Bio-Bus runs on gas generated through the treatment of sewage and food waste. It produces fewer emissions than traditional diesel engines and helps to improve urban air quality in Great Britain.

## GREEN COAL



Green coal is made from compressed loose plants. This way, agricultural byproducts, which otherwise would be rotting waste, are turned into high quality fuel. Green coals are used for cooking or in industrial production.



## TREE OF LIFE

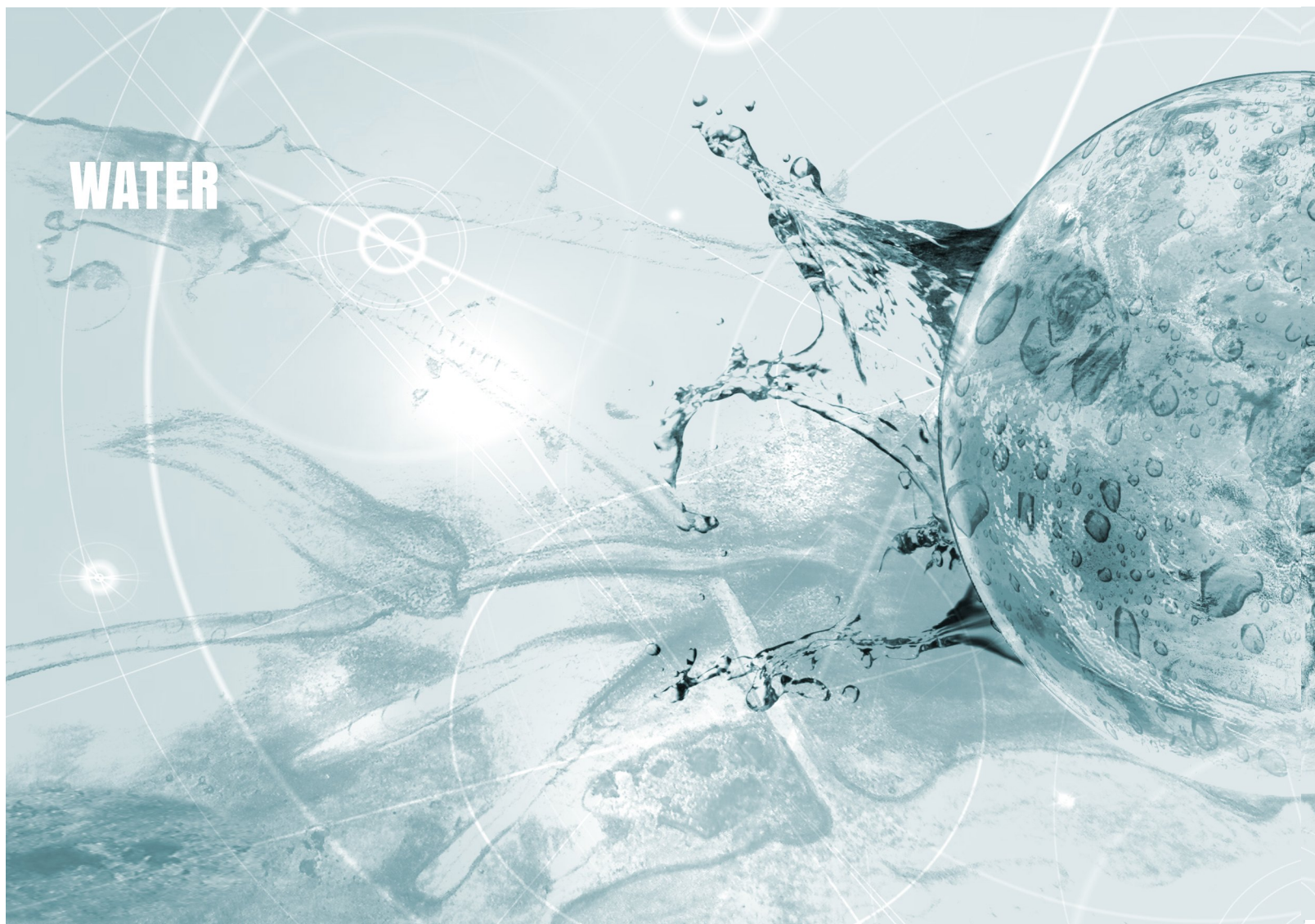


The Open Tree of Life project is gathering all 1,8 million named species into one gigantic online open-source database, letting scientists across the world share their knowledge and construct a grand picture of diversity.

[www.blog.opentreeoflife.org](http://www.blog.opentreeoflife.org)



**WATER**

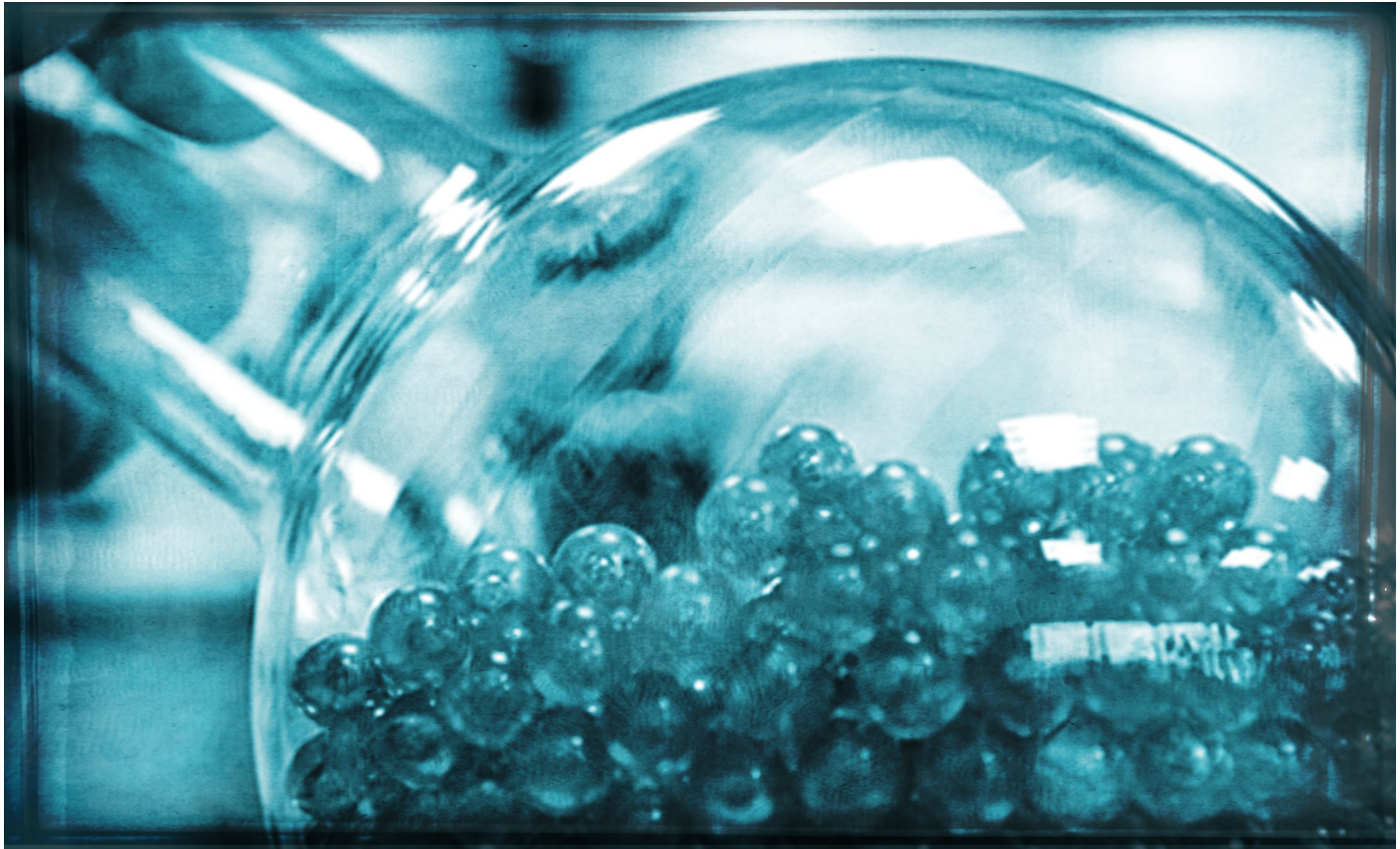






Water covers 71% of the earth's surface and consists of oxygen and hydrogen. Hydrogen is considered as an alternative fuel because it does not pollute the air. The only byproduct is heat and water.

## HYDROGEN STORAGE MATERIAL

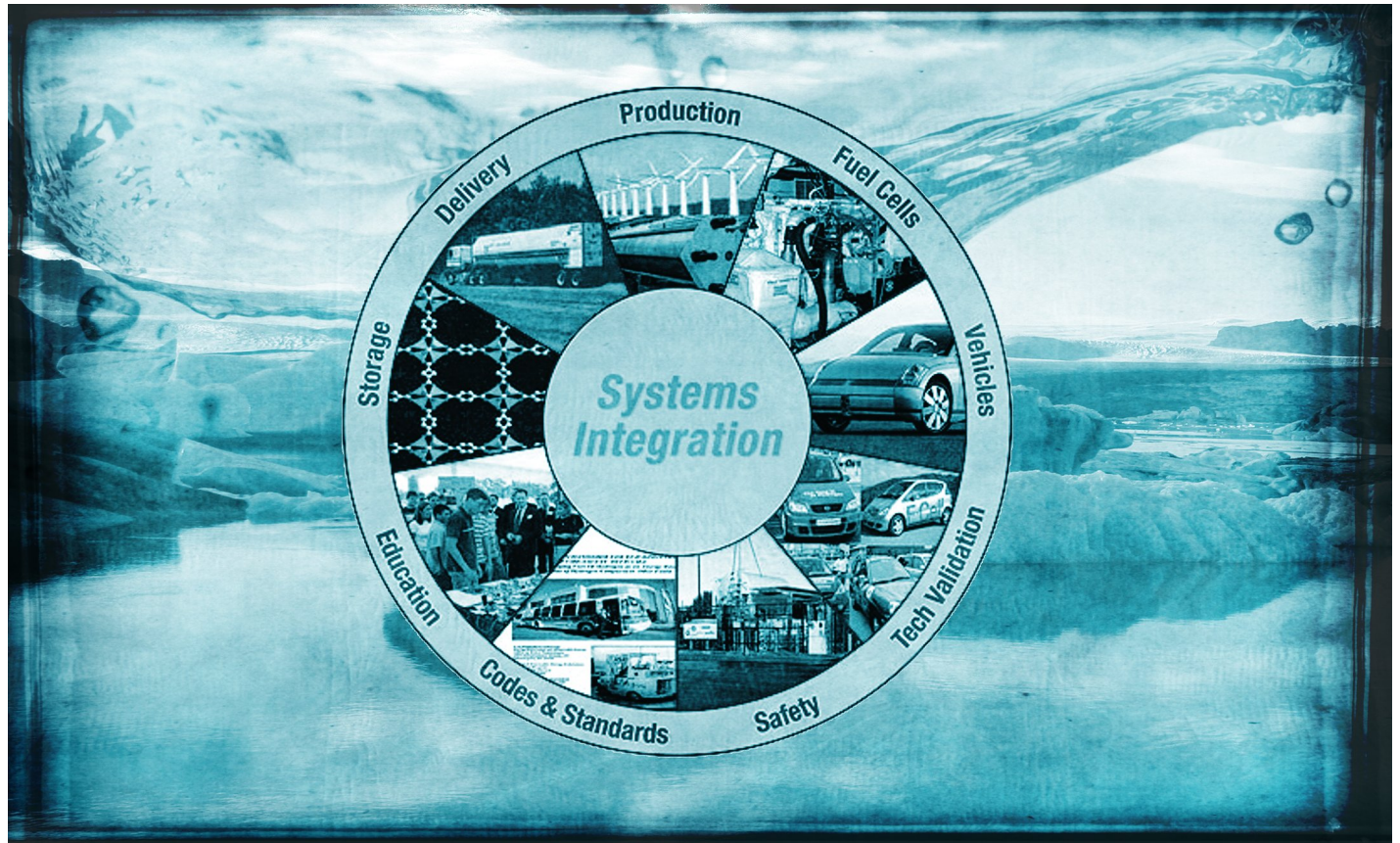


The British company Cella has developed a new hydrogen storage material which makes the storage and transportation of hydrogen at room temperature possible. It can be produced at low cost in volume production.

[www.cellaenergy.com](http://www.cellaenergy.com)



# HYDROGEN ECONOMY



The term hydrogen economy refers to a system of delivering energy through the use of hydrogen. This means hydrogen replaces fossil fuels. Iceland has committed to becoming the world's first hydrogen economy by the year 2050.

# TIDAL TURBINES



Tidal turbines are like „underwater windmills“ except the rotors are driven by consistent, fast-moving currents. The submerged rotors harness the power of the marine currents to drive generators, which in turn produce electricity.

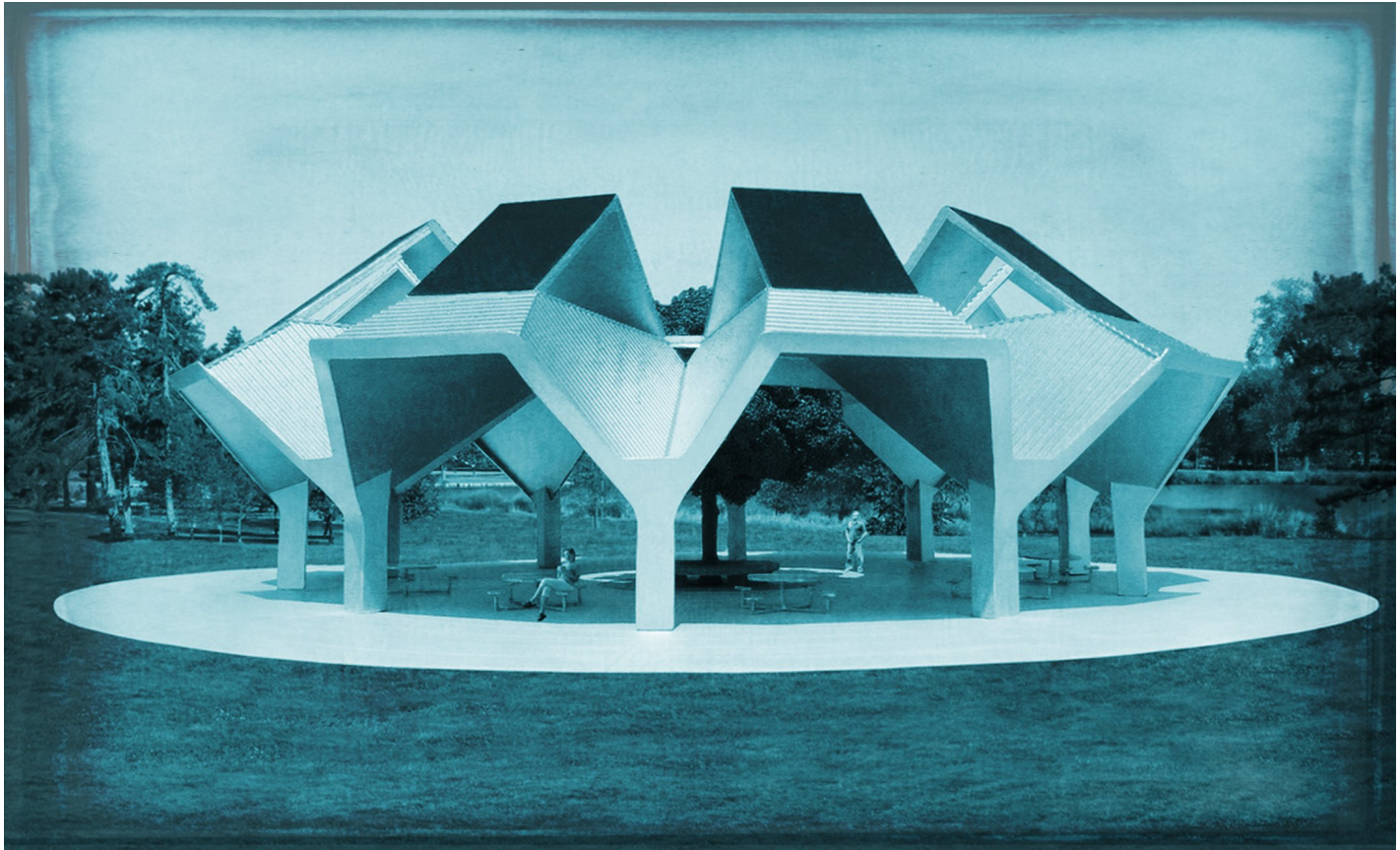


## WATER CONE



The water cone purification is based on evaporation. It requires sunlight and time. The water cone can purify 1.5 liters of water per day, not only killing all waterborne pathogens but also removing particulates, many chemicals and heavy metals.

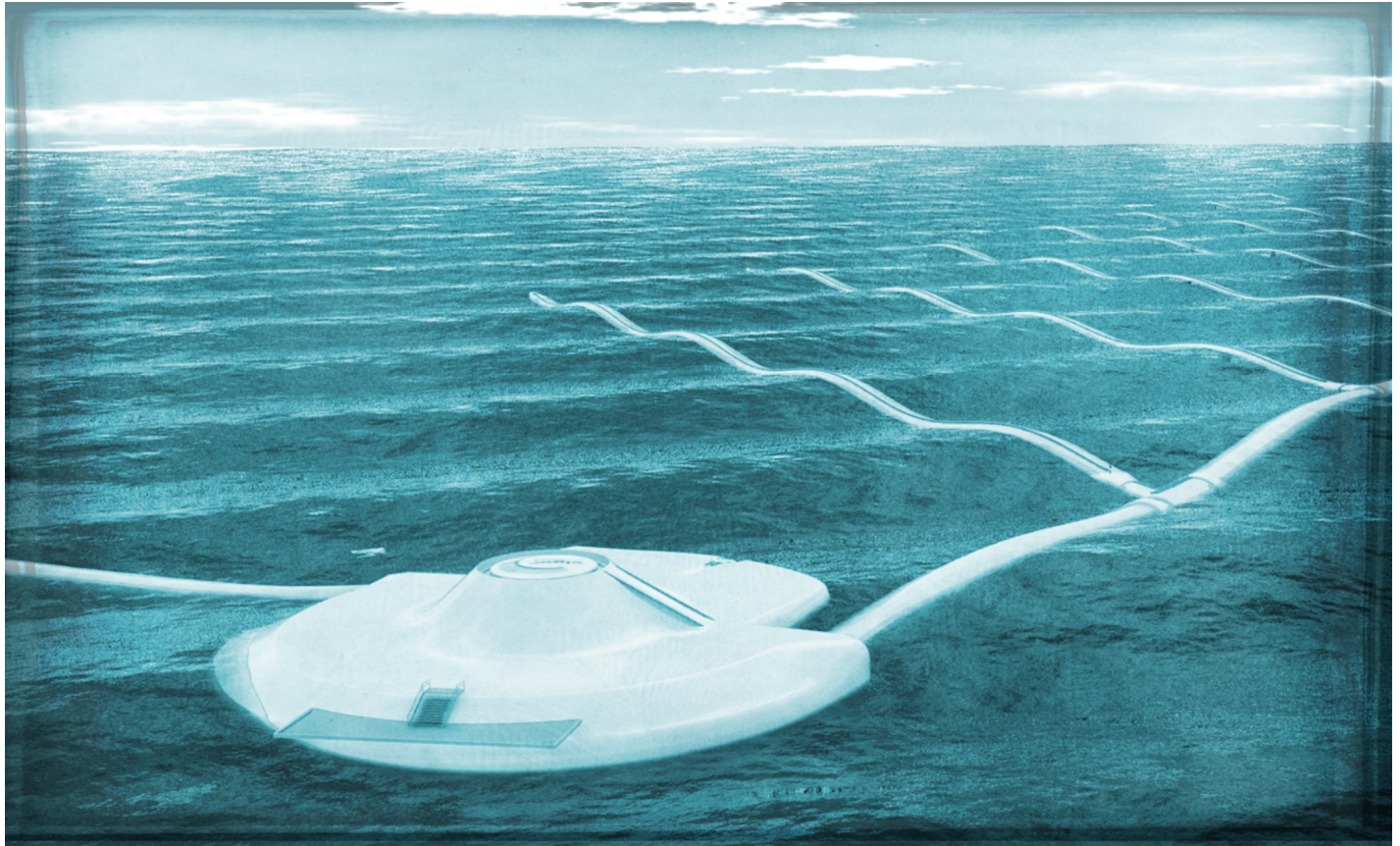
## SOLAR RAIN TREE OASIS



All of the structures are designed to support ten large solar cell arrays that collect energy from the sun and convert it into electricity. Each of the structures are formed into a circular shape which collects rain water.

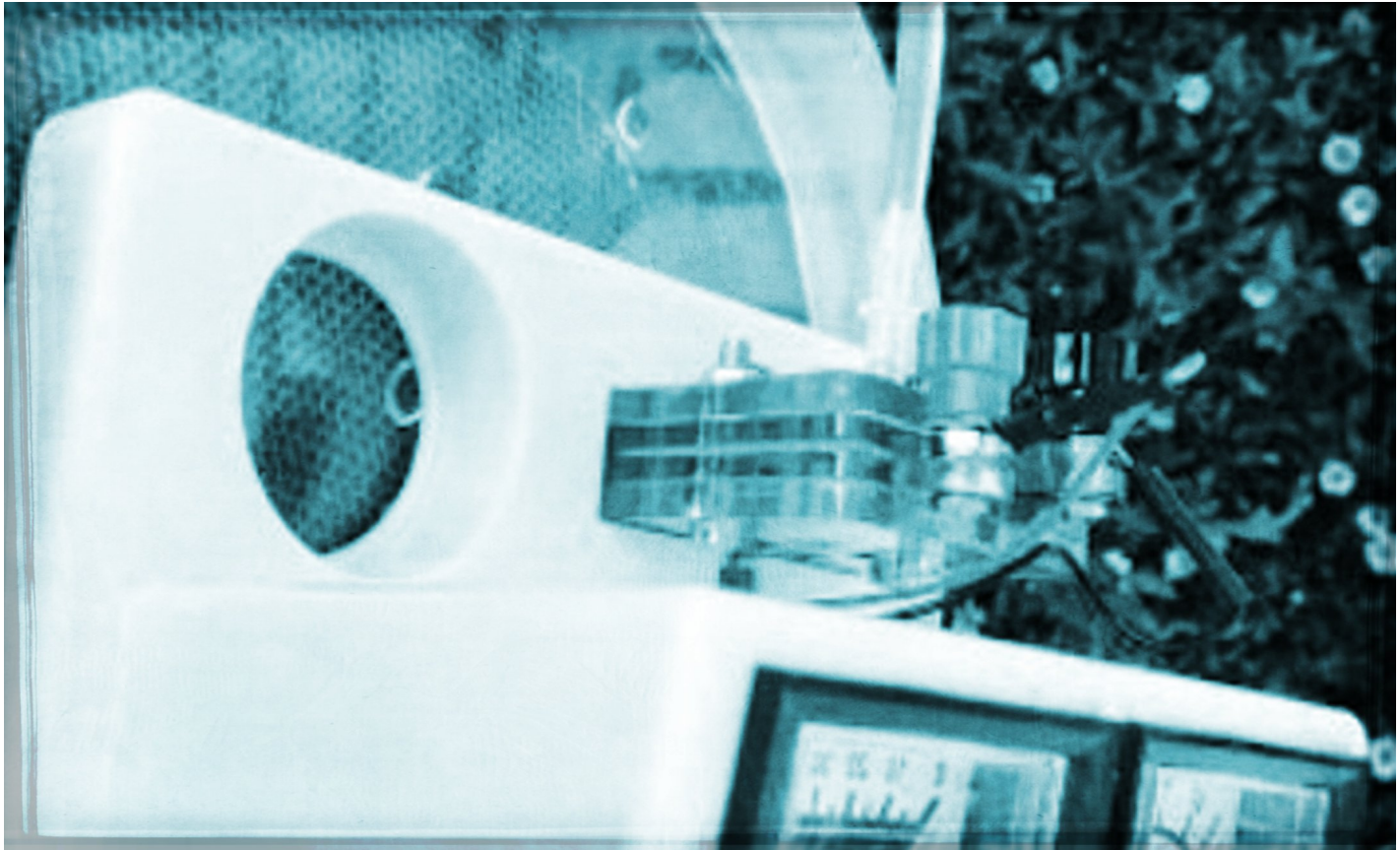


## WAVE POWER



Wave power is produced when electricity generators are placed on the surface of the ocean. The energy provided is often used in desalination plants, power plants and water pumps. They are located at the shoreline, nearshore and offshore.

## FRESH WATER & CLEAN ENERGY



The 17-year-old student Cynthia Sin Nga Lam created the device H2PRO which purifies waste water, while simultaneously generating electricity. The process needs titanium dioxide and light. It is made to be used in developing countries.



## WATER BILLBOARD



Peru's University of Engineering & Technology has created a billboard that generates drinking water from humidity. It harvests moisture directly from the air, which is processed through a filter. The billboard can produce 96 liters of water per day.

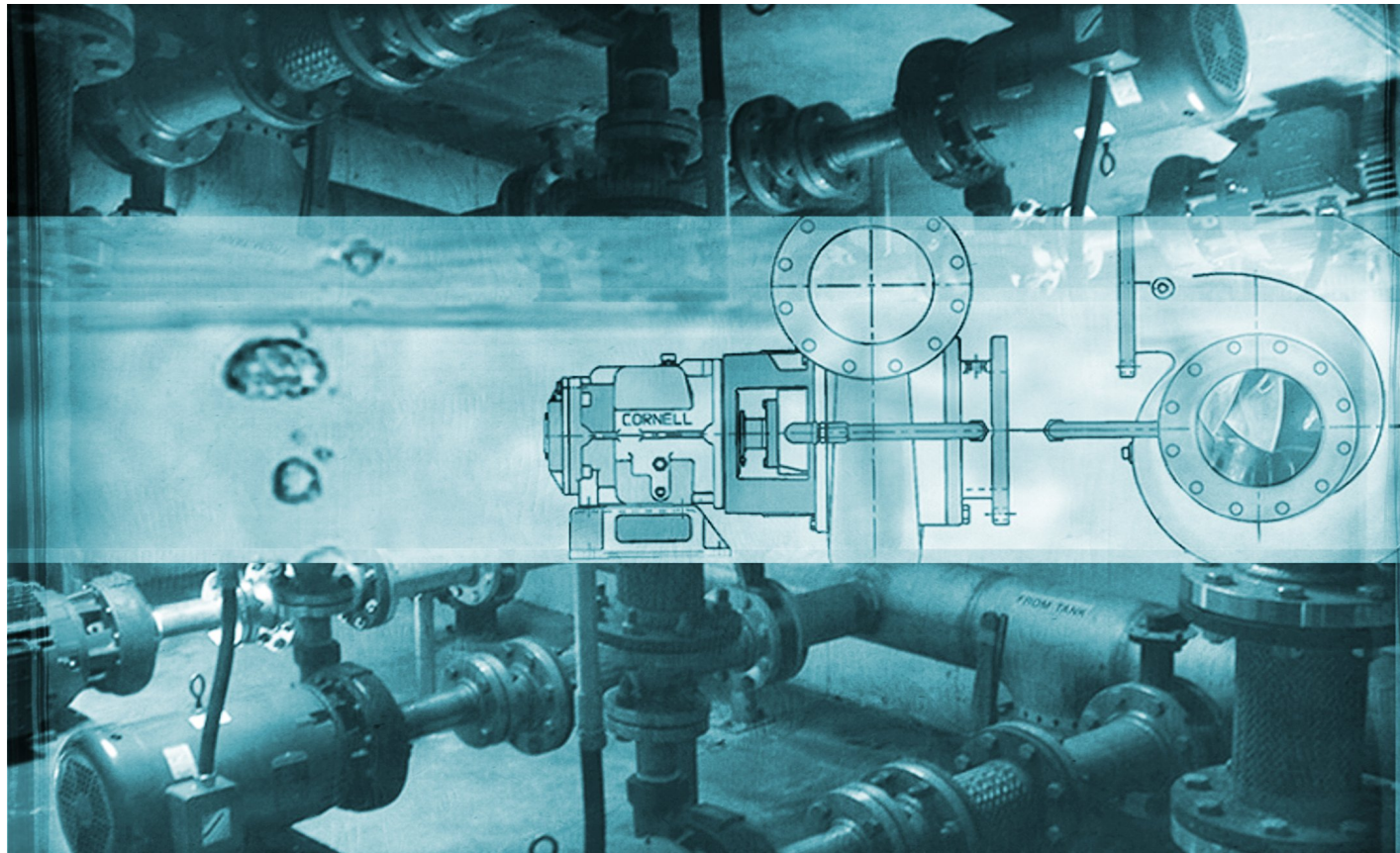
## FOG CATCHER



Fog catcher is a system of suspended mesh structures, placed on hilltops in areas with persistent fog and prevailing westerly winds. Local Chilean communities collect fog water for drinking and agricultural use.

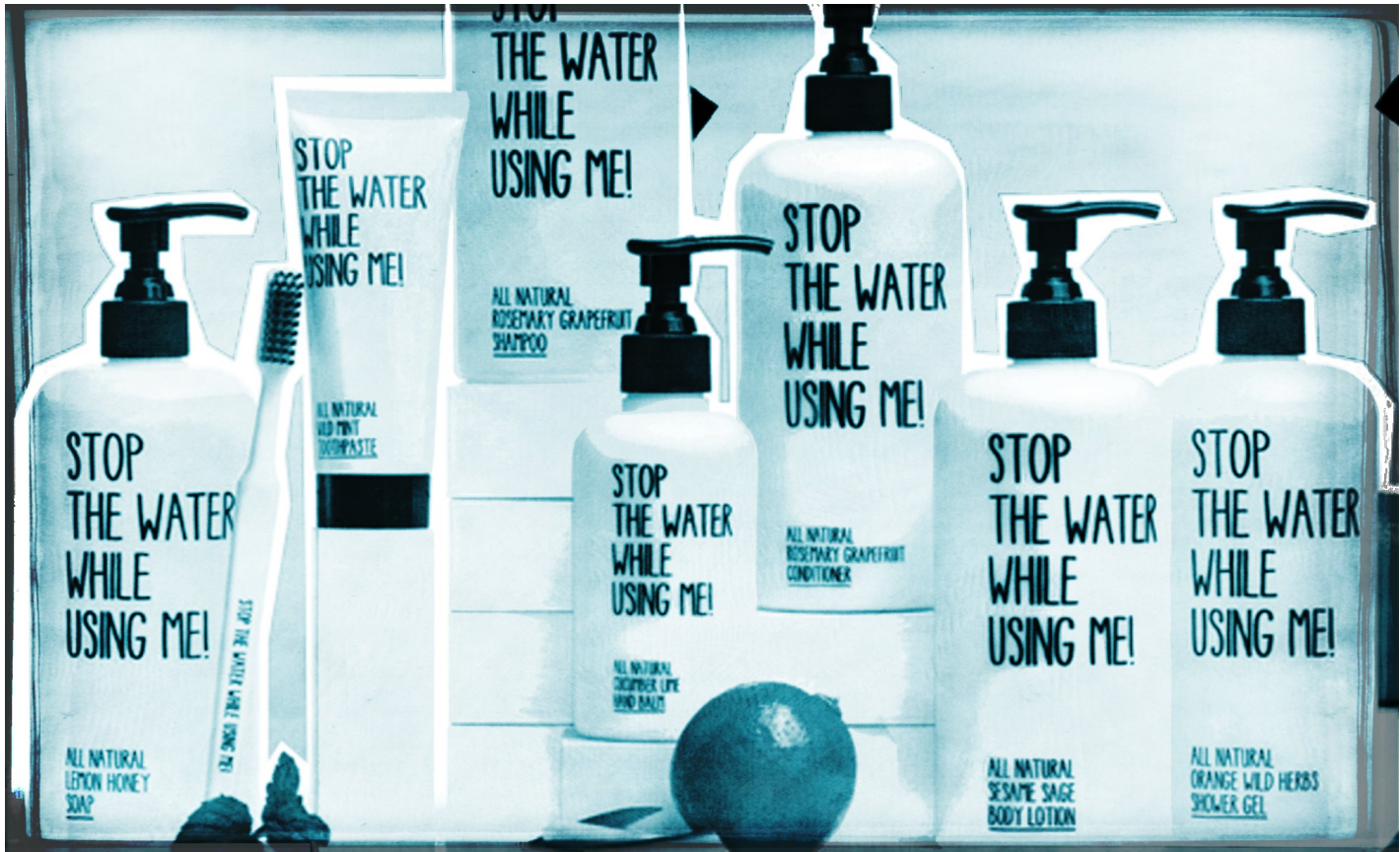


## IN-PIPE HYDRO ENERGY



Rentricity recovers energy from excess water pressure in pipes to produce clean, renewable electricity. Produced electricity can either be used or sold to electric grid.

## STOP THE WATER

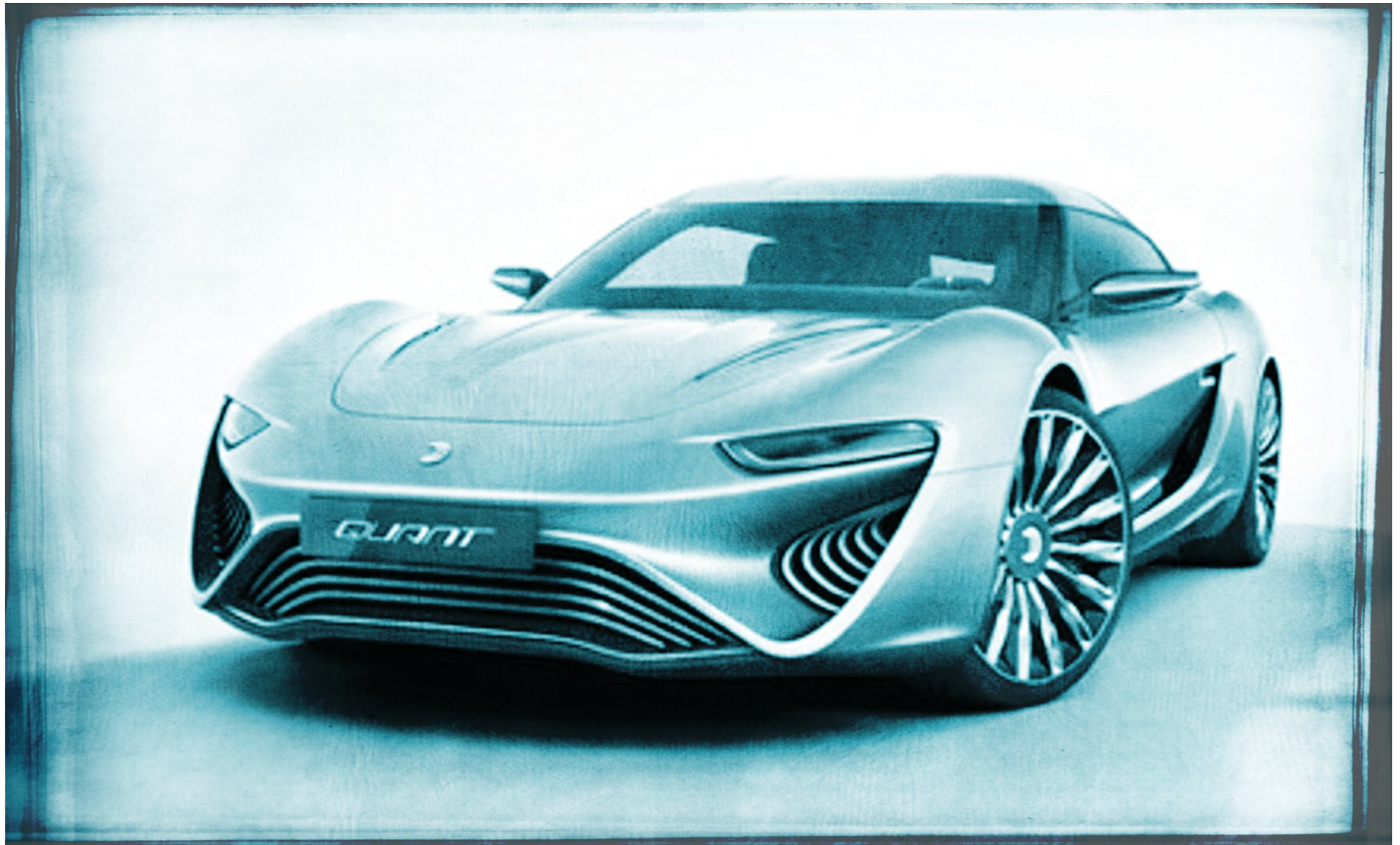


The German company Stop the water while using me! encourages people to save water. The cosmetic line uses only natural ingredients and the products are fully biodegradable. The packaging is also recyclable and refillable.

[www.stop-the-water-while-using-me.com](http://www.stop-the-water-while-using-me.com)



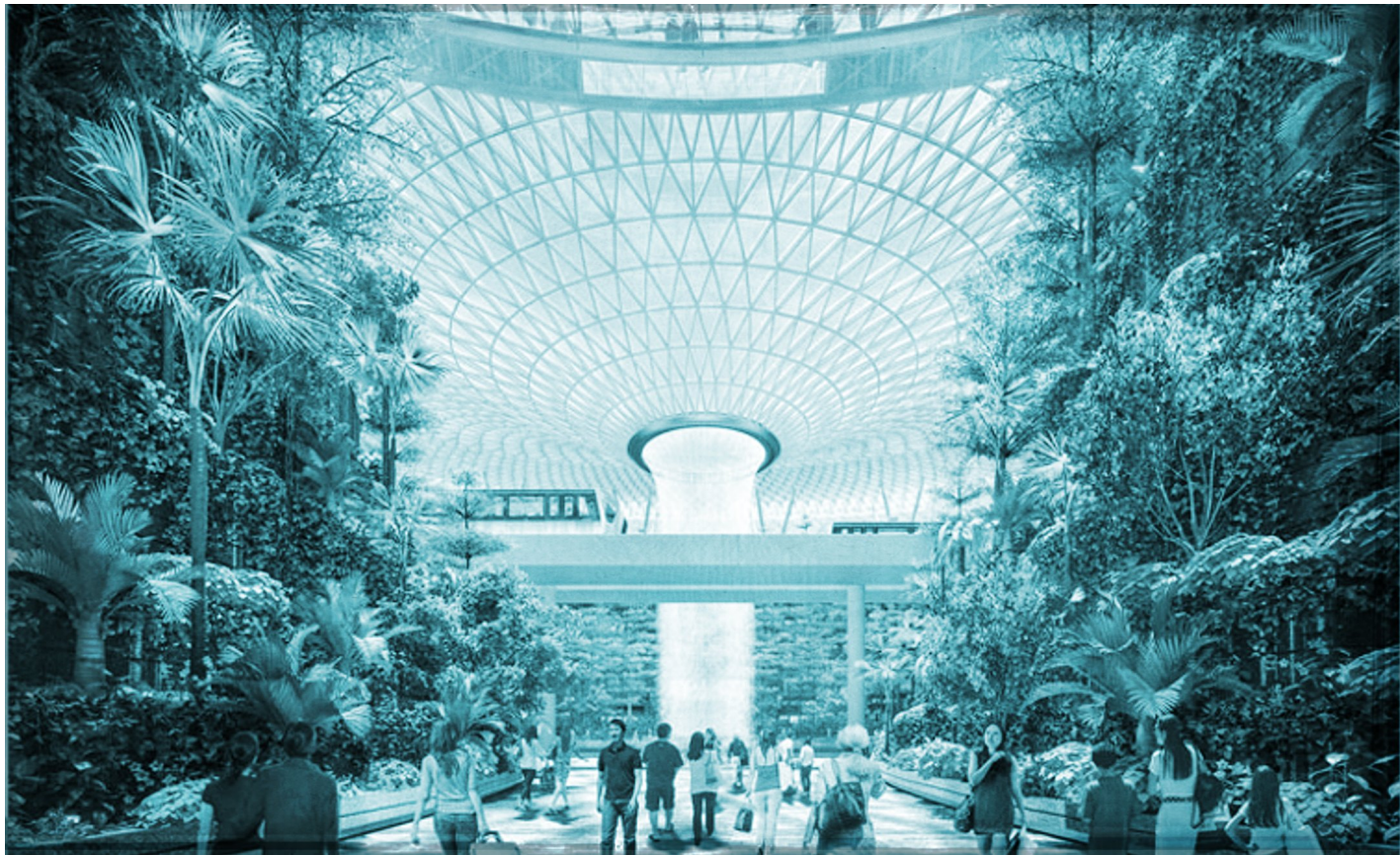
## SALTWATER-POWERED CAR



The salt water powered electric car from Nanoflowcell runs on a special type of gasoline that is made from salt water. The car has 912 horsepower, can accelerate from 0-100 km/h in 2.8 seconds and has a driving range of up to 600 km.

[www.nanoflowcell.com](http://www.nanoflowcell.com)

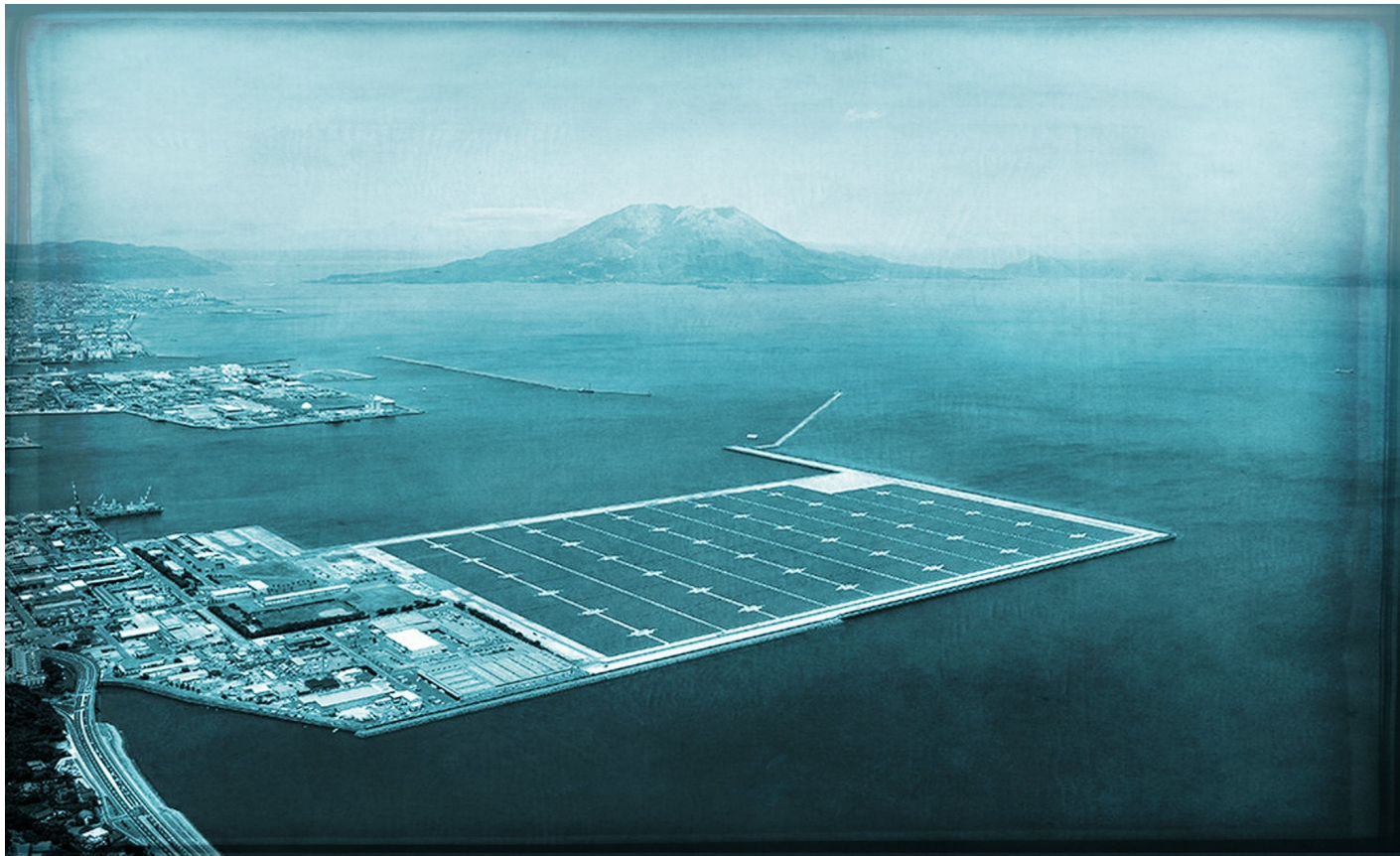
## AIRPORT BIODOME



The new airport in Singapore will be embedded in an ecosystem nestled underneath a giant glass dome. The Airport Biodome will be filled with plants and will feature a huge waterfall. The project is expected to be completed in 2018.

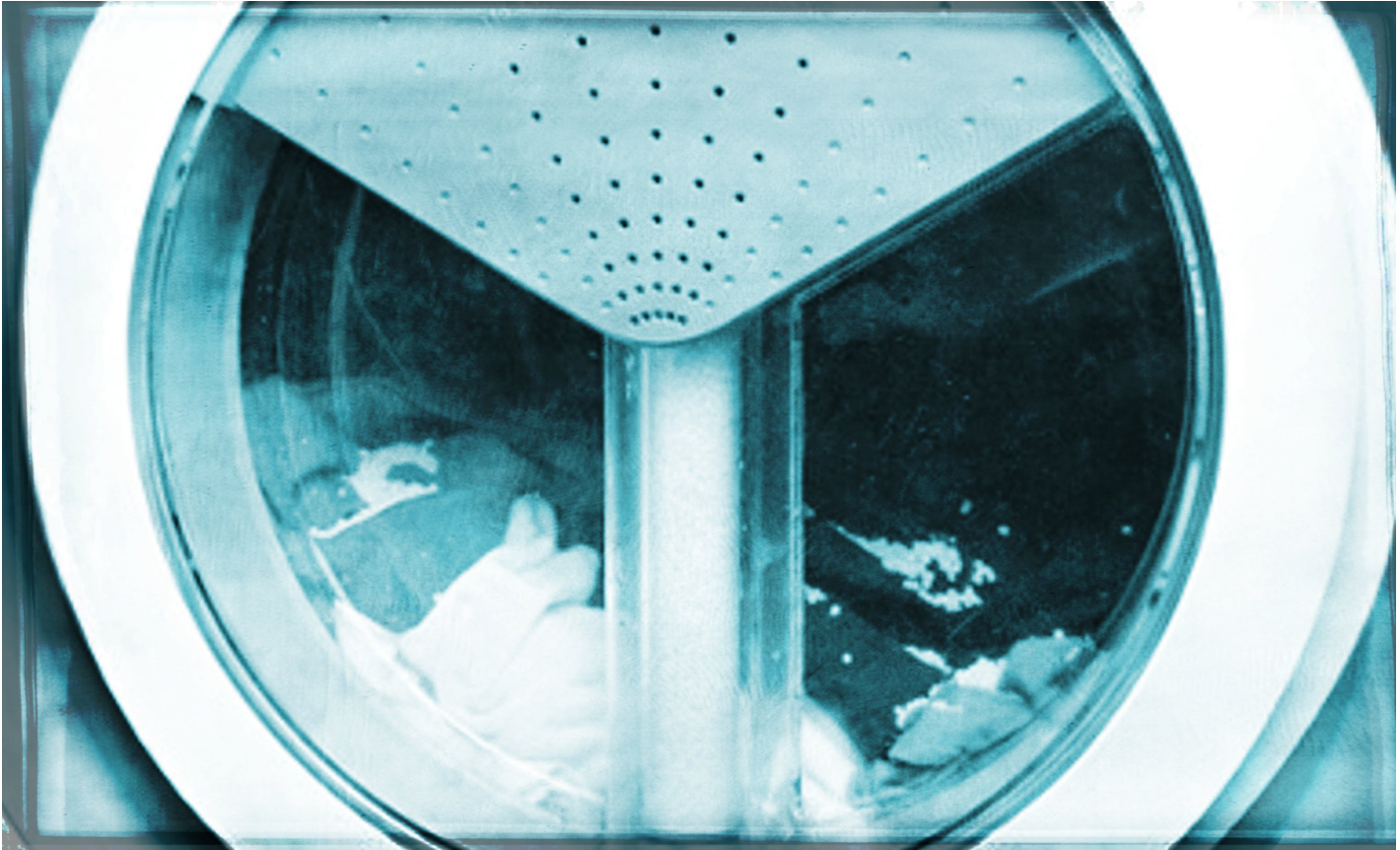


## FLOATING SOLAR FARM



The 70 MW floating power plant is operating since 2013. It is a part of a national effort to invest in renewable energy after the Fukushima nuclear disaster. The solar power plant generates enough electricity to power 22,000 households.

## BEAD WASHING MACHINE



The bead washing machine uses nylon beads to tumble wash clothes with 90% less water than conventional washers. It also uses significantly less detergent, eliminates the need for tumble drying and requires less energy.



## WARKA WATER



Warka Water is an alternative water source for rural populations that face challenges in accessing drinkable water. It is inexpensive, easily assembled structure that extracts gallons of fresh water from the air.

## HYDRO-POWERED CHARGING STATION



Citizens are now able to recharge their electric devices through a hydropower-generation station at Cheonggyecheon Stream in Seoul. Each turbine generator produces 15 to 20 watts, sufficient for recharging smartphones and tablets.



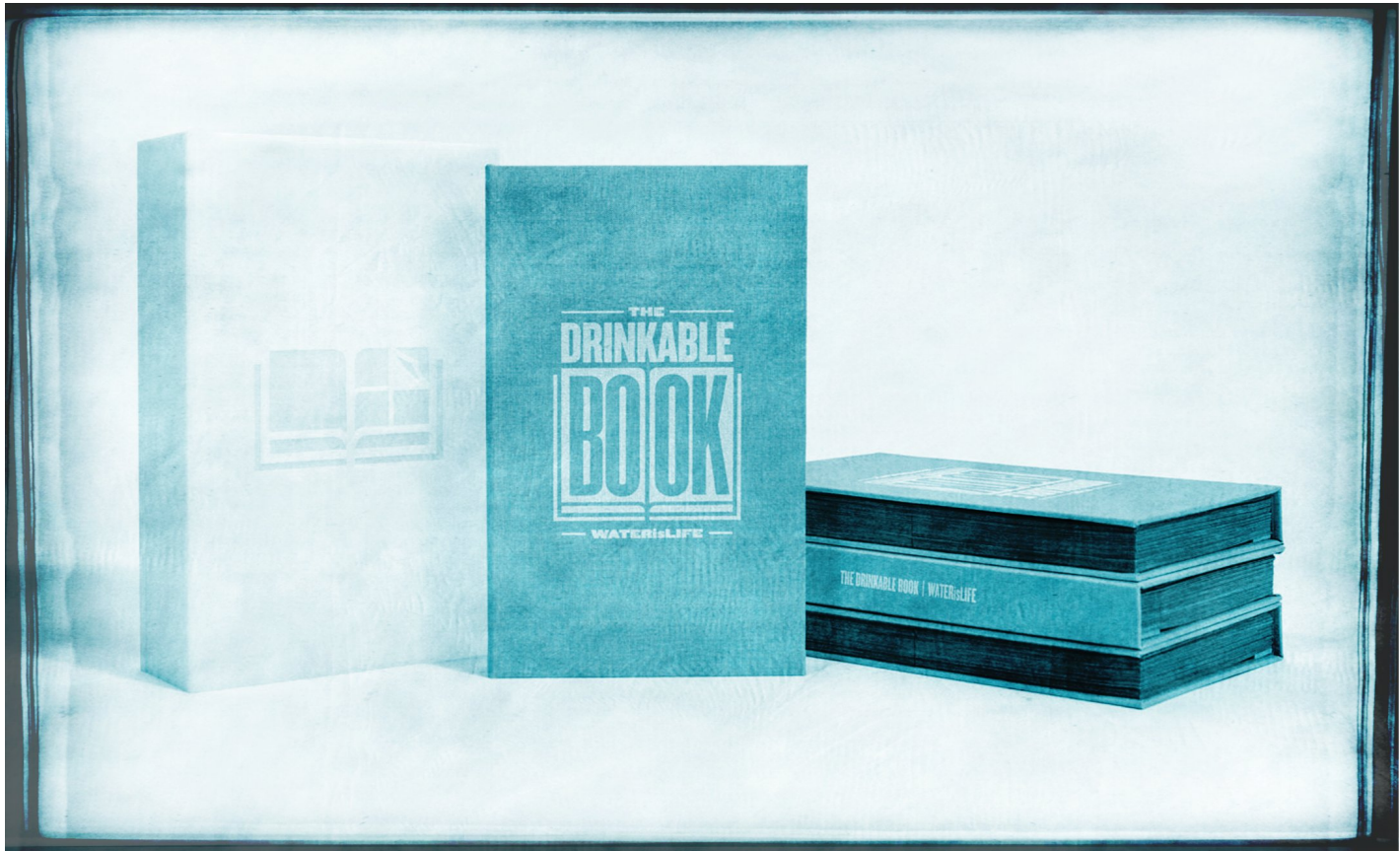
## SEWAGE FUEL POWER



Hyundai's Tucson Hydrogen Fuel Cell Version enables drivers to power their cars using processed sewage. A new process in Southern California converts human waste into a fuel that can power hydrogen fueled cell vehicles.

[www.hyundaiusa.com/tucsonfuelcell](http://www.hyundaiusa.com/tucsonfuelcell)

# THE DRINKABLE BOOK



The Drinkable Book is both a water filter and a manual for how to clean drinking water. The technology of page drinking paper is based on a thick, sturdy sheet of paper embedded with silver nanoparticles, which are lethal for microbes.



## OCEAN CLEANUP



The 20-year-old Boyan Slat invented a concept that passively cleans oceans of plastic. The invented system of floating barriers and platforms extracts the plastic from the ocean without harming the sea life.

## SEARCHING FOR PLANET GENIUS



Music has guided the search for Planet Genius. Let music inspire you and feel free to continue this collection ...

TO BE CONTINUED





Sources:

[www.inhabitat.com](http://www.inhabitat.com)  
[www.treehugger.com](http://www.treehugger.com)  
[www.land-der-erfinder.at](http://www.land-der-erfinder.at)  
[www.phys.org](http://www.phys.org)  
[www.fm4.at](http://www.fm4.at)  
[www.oe1.orf.at](http://www.oe1.orf.at)  
[www.biorama.eu](http://www.biorama.eu)  
[www.rightlivelikelihood.org](http://www.rightlivelikelihood.org)  
[www.newsoffice.mit.edu](http://www.newsoffice.mit.edu)  
[www.googlesciencefair.com](http://www.googlesciencefair.com)  
[www.theinnovationdiaries.com](http://www.theinnovationdiaries.com)  
[www.alternative-energy-news.info](http://www.alternative-energy-news.info)

Search engine:

[www.startpage.com](http://www.startpage.com)

Encyclopedia:

[www.wikipedia.org](http://www.wikipedia.org)

Operation system:

Linux/Ubuntu

Production:

2ManyBirds - Made to Inspire!  
[2manybirds@lavoko.org](mailto:2manybirds@lavoko.org)  
[www.lavoko.org](http://www.lavoko.org)



