

products

Clean Energy

The H-Racer and Hydrogen Station Set is a lot more than a toy car, its environmentally sustainable, renewable energy hydrogen fuel cell design provides consumers with a glimpse into the future of clean hydrogen power transportation. It is the working miniature version of what is being developed in real-size cars of the future. Named Time Magazine Best Invention 2006, the best selling H-Racer continues to win prestigious design and consumer awards. The H-Racer operates on 100% clean fuel produced by a miniature solar-powered hydrogen refueling station that converts water into hydrogen using energy captured from the sun. Hydrogen is non-toxic, renewable, clean to use, and the most abundant element in our universe. As no combustion occurs inside a fuel cell, the only exhaust resulting from such a car is pure water.

www.horizonfuelcell.com



Flying Low

Aer Arann the fastest growing regional airline, flying between the UK, Ireland and Northern France is upgrading its fleet with several new generation ATR 72-500 planes over the next five years. Aer Arann continues its allegiance to turboprops rather than to jet engines, as they operate at lower altitudes, do not affect the ozone layer and upper atmosphere, use less fuel and have a significantly smaller noise footprint. Fast facts: a turboprop such as an Aer Arann ATR-72-500 emits 20% less CO2 per passenger-km than newer jets; the ATR produces 3 times less Nox (Nitrous Oxides) per passenger than a car and 40% less than a train; and an ATR 72 uses as much fuel on a typical 370km sector as a Boeing 747 uses in 10 minutes taxiing

www.aerarran.com



Toyota Prius hybrids



Google and Pacific Gas & Electric have unveiled their vision of a future in which cars and trucks are partly powered by the country's electric grids, and vice versa. The companies displayed six Toyota Prius and Ford Escape hybrid vehicles in July that are modified to run partly on electricity from the power grid, allowing the vehicles to go up to 75 miles on a gallon of gas, nearly double the number of miles of a regular hybrid. They also modified one vehicle to give electricity back to the power company. The highly unusual test takes the hybrid, which is now familiar on American roads, a step further by using extra batteries to hold energy made and distributed by a power company. The technology is eagerly awaited by energy experts and environmentalists, but is not yet ready to go commercial because the additional batteries are not yet durable enough. A plug-in hybrid can lower emissions of carbon dioxide and smog-causing gases. It can go three to four miles on a kilowatt-hour, experts say.

Google's Energy Initiatives: www.google.com

Cut carbon

An exciting new piece of technology from universal remote control experts, One For All, means you can now switch off your audio visual devices via your remote without putting them into carbon-emitting standby mode. Operated together, the One For All Light Control system and Kameleon Generation III can also control the TV, stereo, DVD, set-top boxes and even your lights. Vice President of Product Development and Planning at One For All, Jacques Mathijsen, says 'The average UK household has up to 12 gadgets on standby or charging at any time, using around 2 power stations worth of electricity and 800,000 tonnes of carbon each year[1]. Despite increasing awareness of our own personal carbon footprint, many of us find the standby habit a hard one to break. This simple device will allow you to switch off all your devices at the wall at the press of a button on your remote – stopping any energy being wasted.'

www.oneforallkameleon.com



Relax

'Relax', the world's first solar powered, emission free, geothermal swimming pool complex, opened in June at the world beating eco-friendly water park, hotel and leisure complex at AquaCity Resort, Poprad in northern Slovakia. AquaCity's new luxurious pool centre is housed in a 12m high, architect designed steel, glass and wood structure, powered by electricity generated by photo-cells in the facade, with heating, pool water and showers supplied by geothermal water, in keeping with the entire AquaCity resort, to be ecologically and environmentally friendly. AquaCity resort saves up to 30,000 kg of carbon emissions per day, compared with a similar sized Alpine resort, being virtually self-powered, generating 80% of its electricity requirement and supplying its numerous pools and water park with geothermal water, drilled from a vast subterranean lake. In 2006, AquaCity saved 2.5 million euros on conventional energy costs.

www.aquacityresort.com



Floating Farm

The Science Barge is a sustainable urban farm. Growing food in the city can reduce pollution from conventional agriculture and transportation, and at the same time increase the spread of sustainable technologies like solar and wind power. At the heart of the Science Barge is a recirculating hydroponic greenhouse. Plants are irrigated with rainwater and desalinated river water. The Science Barge is carbon neutral and emits no waste stream. Vegetables are grown using 7 times less land and 4 times less water than conventional agriculture. Docked at the Hudson River Park's Pier 84, the purpose of the Science Barge is to encourage New Yorkers to think about sustainability in a new way. It demonstrates that it is possible to grow food locally with no net carbon emissions. Cities like New York could make use of unexploited roof top space to grow vegetables in the manner demonstrated on the Science Barge. In New York alone, approximately 5,000 hectares of unshaded rooftop space exists.

<http://nysunworks.org/>



Rooftop Gardens



Not enough green space in your town? How about a rooftop garden? Zinco of Germany has long been a world leader in roof landscape technology, now with its Zupermix growth media -- comprising recycled clay bricks or tiles, with a blend of volcanic materials -- there is a perfect planting surface which provides nutrients, sufficient aeration and water retention for a rooftop landscape in which to plant a garden of your choice. Apart from the attractive appearance of a green roof there are also economical and ecological benefits. Green roofs are worth it - from small surfaces on garages or car ports up to large industrial surfaces. Quite apart from the aesthetic value, a building's waterproofing life expectancy is increased, because it is better protected from UV-rays, hail and extreme temperature differences. Thermal insulation benefits can save on fuel bills and green roofs filter and bind dust and other harmful materials out of a city's air as well as improve the microclimate by cooling and humidifying the surrounding air.

www.zinco.com Email: admin@zinco.com.sg