

# Australian, e-Day Electric Hatch

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## eDay Life!

Able to travel up to 160km between charges, it has a top speed of just 80km/h and a weight of 450kg it will be the slowest and lightest new car on the market - and the cheapest, something sure to cement its appeal for city driving.

The top secret project is being run by eDay Life, a small Australian company run by former Holden director of innovation and advanced engineering Laurie Sparke and car dealer Robert Lane. The pair have formed a team of 20 designers and engineers and are finalising plans to sell the cars in countries as diverse as Malaysia, Hong Kong, UK and France. The eDay is set to debut at July's Melbourne motor show.

## e-Day- G'day

**It will be made in China but this Australian-developed plug-in city car will cost less than \$10,000.**

The world could soon have another Chinese-made car - with an Australian twist.

Twenty local designers and engineers have been slaving away on a hatchback that plans to take on the world with next-generation electric-car technology and will sell from \$9990 (plus on-road costs).

Early prototypes of the EDay Life - being developed with input from the CSIRO and Clipsal - will be on Australian roads next year as part of a lease program that is designed to act as a validation of electric-vehicle technology. (Whatever that means?)

## VW's Golf - Buggy

Powering the Golf is a lithium-ion battery (26.5 kilowatt-hours) that is made up of 30 battery modules each with six lithium-ion cells. The technology allows for a 150km driving range which according to Volkswagen is sufficient enough for most people's daily driving needs. Nonetheless, the German company says the production version which goes on sale in 2014, will have a 'significantly improved' driving range over the prototype. The Golf blue-e-motion electric car will initially be available as a five-door, five-seater driven by a single electric motor housed in the usual front engine compartment. The electric drive will produce a maximum 85 kW (continuous power output of 50 kW) and a healthy 270 Nm of torque. Charging takes place via a standard plug cleverly hidden behind the VW logo on the radiator grille. Weight wise the 180Li-ion cells weigh 315kg, adding 200kg to the standard five-door, five-seater Golf at (1,545kg).

## VW Blue-E-Motion EV



**Volkswagen has confirmed it will build an all electric version of its most popular car, the Golf.**

The car, which will be on the road by 2014, will be driven by an 85kW electric motor powered by lithium-ion batteries. Volkswagen claims the Golf blue-e-motion will be able to run for up to 150 kilometers, depending on driving style and other variables, including air-conditioning usage. But the German giant says the range of the car could improve by the time it comes to market. It says the range should be adequate for most commuters, claiming research shows that of the 60 per cent of Germans who travel to work by car, almost half travel fewer than 10 kilometers and another third fewer than 25 kilometers. The company also says the car will offer performance similar to a petrol-powered vehicle, completing the sprint from 0-100km/h in 11.8 seconds on its way to a top speed of 135km/h.

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ALTERNATIVE TECHNOLOGY ASSOCIATION : Promoting energy saving & conservation to households

## TTXGP Bike

With the revised Isle of Man TTXGP electric superbike rules coming into force this year, the Mission-R is possibly the most powerful of the compliant bikes left in the field.

And an impressive piece of machinery it is too.

### Motor:

141 hp liquid cooled 3 phase AC induction motor.

### Torque:

155Nm from 0 to 6400 RPM

### Battery Pack:

MissionEVT battery modules with integrated BMS – Carbon Fibre casing with dielectric liner, providing a swappable structure providing 14.0 kWh of energy storage.

### Speed Controller:

MissionEVT 100kW controller with integrated Vehicle Management that incorporates adjustable throttle mapping – regenerative braking and datalogging via WiFi and 3G connections.

### Transmission:

Single speed primary gear reduction, with chain final drive.

### Braking:

Front 2 Brembo 320mm stainless rotors combined with 2 Brembo 4 piston calipers.

Rear single Brembo 254mm stainless rotor and 2 piston Brembo caliper.

### Top Speed:

In excess of 256kmh (160mph)

Hopefully the 100 mph average speed for the electric TT course will be broken at this year's event.

## Mission Motors Mission-R Superbike



Introducing the Mission R, the new factory race bike from Mission Motors. The Mission R is the most advanced electric racing motorcycle in the world. With components and software from MissionEVT, a revolutionary chassis design by James Parker, and cutting edge industrial design by Tim Prentice of Motonium Design, the Mission R is powerful, intelligent and downright fierce. MotoGP-spec components from Öhlins, Brembo, and Marchesini round out this built-for-racing package.

The heart of the Mission R is an advanced MissionEVT power train that packs 141hp (106kW) and 14.4 kWh of energy storage in a package smaller than a 600cc sportbike. The liquid-cooled AC Induction motor produces 155Nm of torque the moment the rider cracks the throttle, rocketing the bike from a standstill to over 256 kmh in one gear. Power is managed by the MissionEVT 100kW motor controller, with customizable regenerative braking maps, throttle maps and more. All vehicle and ride data is accessible via WiFi or 3G connections.

## The Shape of Things to Come??



## Morgan LIFeCar2

### British sports car brand Morgan from joining the electric-car revolution.

Dubbed LIFeCar 2, the new Morgan will feature a hybrid diesel-electric drive train that will, theoretically, give it a range of 1600 kilometers per tank. Weight will be kept to a minimum, with the car set to tip the scales at 800 kilograms thanks to sustainable lightweight materials used in its production that can even be recycled at the end of its long life.

LIFeCar2 has a 15 mile EV range, a rather large fuel tank of 20 gallons (90 liters), and a 50mpg (5.6l/100km) average consumption. It gets a sprint from 0-100kmh in 7 seconds, not too impressive but with a mileage of 50 mpg isn't too bad for any vehicle with quirky retro style and "entertaining" driving dynamics. Morgan is known for building its prototypes into limited-run models in near-unchanged form, and the LIFeCar2 is envisaged to be available to the public from 2013 – you can order yours now; before the rush!

## This Month's Q&A Technology Tip

Q: I need to connect a heater to my EV but the dash is impossible to remove as it needs special tools for the job, is there an alternative?



A: Just so happens that EVSource in Utah has a coolant based two stage heater that simply plumbs into the existing ICE cabin heater so you just need to find space under the hood for the package at left, run the heater hose and you're done. Price not cheap \$609

[http://www.evsource.com/tls\\_heaters.php](http://www.evsource.com/tls_heaters.php)