

# ENV FACTS



## ENV – the world's first purpose designed fuel cell-powered motorbike from Intelligent Energy.

Powered by a 1kW Intelligent Energy fuel cell, the bike has a top speed of 50mph and range of 100 miles on its refillable tank of compressed hydrogen.

Since the concept was first presented the ENV has captured the imagination of a global audience of over 340 million. (And growing by the day.)

There are currently two prototype ENVs – one black, one white – and they've been shown in London, Monaco, Norway, Japan, Korea, Los Angeles, San Francisco and New York; attracting as diverse an audience as you could imagine: from the British Chancellor of the Exchequer to design aficionados and scientists to hardened bike journo's; in fact all kinds of people, young and old, bikers and non-bikers alike, from all corners of the planet...

The reaction has been as overwhelmingly positive as it has been unprecedented. Along the way there have been many questions about the ENV and its fuel cell CORE.

Here we cover the main FAQs, but for more background information log onto [www.envbike.com](http://www.envbike.com) and for up to date news see [www.intelligent-energy.com](http://www.intelligent-energy.com) and join the silent revolution! Science fact: not science fiction...

- The ENV bike is currently a working prototype that is under further research and design development
- There are two bikes; one black, one white
- ENV has a top speed of 50mph
- ENV is powered by a 1kW fuel cell called the CORE, which in turn powers a near-silent 6kW, electric motor
- The range is 100 miles on the CORE's tank of compressed hydrogen
- We're developing fuel reformers to create hydrogen and working on establishing fuel supply infrastructures
- The CORE is removable and could power other things around the home
- We've also developed fuel cell systems up to 70kW (100hp) for the automotive market
- Further news is available on the main Intelligent Energy web site.





### How environmentally friendly is the ENV?

The only by-product is water vapour, the engine is virtually silent and most parts are recyclable.

### What's it like to ride?

It's simplicity itself - and exhilarating - a totally different sensation to a conventional bike; more like skiing or sailing.

### Are you going to add noise to the ENV?

One of the ENV's unique characteristics is its near silence and we believe that's very appealing. Just imagine how pleasant the streets would be with silent, non-polluting vehicles such as ENV.

### What will you be doing to make ENV road-legal?

Legislation differs from country to country - and even from state-to-state

- but we will ensure that ENV fulfills all the requisite safety legislation and road-going criteria.

### Is hydrogen safe?

Yes - just like other fuels - when handled with respect. We also have built-in safety mechanisms and cut-outs.

### What about repair and maintenance costs?

With significantly fewer moving parts to wear out, these should be comparatively minimal.

### Who designed the ENV?

The design concept was carried out in conjunction with world-leading designers Seymourpowell.

### Can I invest in the ENV?

Please see ENV's web site.

### How can I find out more?

[www.envbike.com](http://www.envbike.com)  
[www.intelligent-energy.com](http://www.intelligent-energy.com)

#### Key components of the bike power system

Motor	6kW, 48 VDC Brushed motor (model LEM-170, supplied by LMC Ltd)
Motor controller	Brusa Direct Current (model MD 206)
Fuel cell	1kW Intelligent Energy air-cooled (2 x AC32-48)
Hydrogen storage	High pressure composite cylinder (Luxfer L65)
Hydrogen energy	2.4kWh
Storage battery	4 x 12V Lead Acid (15Ahr) connected in series

#### Performance data

Acceleration	0 - 20 mph in 4.3s (32kph)
	0 - 30 mph in 7.3s (48 kph)
	0 - 50 mph in 12.1s (80kph)

Top speed	50mph (80kph)
Range	At least 100 miles (160km)

#### Physical

Bike mass	80 kg (Total mass including Core)
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#### Fuel

Hydrogen	99.9% purity
Oxygen	Taken from air
Hydrogen refuel time	Less than 5 minutes

#### Interface

Electrical connection	Multi-core (Intelligent Energy specific)
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