

# Dyson aims to clean up electric car market

Author: Gareth Chadwick, MindsinMotion.net<gareth.chadwick@mindsinmotion.net>

Britain's most high profile inventor and engineer, Sir James Dyson, is throwing his expertise behind electric vehicles, according to an interview in *The Independent on Sunday* newspaper in the UK this month.

Dyson, who is credited with re-inventing the vacuum cleaner, and the four hundred-strong R&D team at his company's headquarters in south west England, are working on a project to create solar-charged electric cars with much faster and stronger engines than current models. His plans are based on a powerful lightweight motor that could give electric cars a range of hundreds rather than tens of miles and which would could be charged up via solar panels on their roofs or in garages.

"An electric car doesn't go far enough. It could do. Electric motors can do that," Dyson said. "At the moment, electric cars are seen as city cars and to go 30mph is quite enough, but in the future that will change. An electric motor can go to very high speeds."

[N138 Image 1](#)

## **Extra-strong**

Dyson's team have developed an extra-strong digital motor, called the Dyson Digital Motor, which is half the weight of normal motors. It features turbo-charger compressor technology and with more than 100,000 revolutions per minute, it operates five times faster than a Formula 1 engine. The lack of carbon brushes in the motor also make it more reliable, durable and lighter than conventional electric motors.

The motor has already been used in several products, such as vacuum cleaners and a hand-drier, but Dyson is confident that the greatest potential of the Dyson Digital Motor and its successors could be in powering electric cars.

## **Climate**

Defending his ideas from criticism over the practicality of solar-charged cars – particularly in a country with a climate like the UK and most of northern Europe – he said that, "most of the time a car isn't being used, so a photo voltaic [solar] charge over a long period of time is an absolutely suitable way of charging a car."