

# Electric vehicles given thumbs up

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The first trial of electric vehicles in North East England has been a major success, leaving hundreds of drivers ready to make the switch to low carbon transport.

Newcastle University in conjunction with Cenex, the UK's Centre of Excellence for low carbon and fuel cell technologies, and Regional Development Agency One North East, launched the trial of the electric two-seater Smart cars in September.

Since then, four cars - fitted with the latest in data capture technology designed by Newcastle University - have been driven by 264 different people to test the cars' performance and driver behaviour.

One of the most significant findings of the trial was that so-called 'range anxiety' meant drivers were over-cautious when planning journeys. The maximum journey length made by any driver was 17.8km - just 25% of the average range of the vehicles.

Newcastle University lead Professor Phil Blythe explained: "A lack of confidence in the battery was the biggest problem drivers had to overcome.

"In a standard car, when the red light comes on to say the fuel tank's low every driver knows they still have another 30 miles left before they grind to a halt.

"But [electric vehicles](#) are still a relative unknown and we found that at the start of the trial, drivers were over-cautious about the car's battery

life, charging the vehicles more often than they needed to.”

Other key findings from the trial include:

- Post-test drive, 72 per cent of people said they would use an electric vehicle as their regular car
- The car exceeded the public’s expectations on all monitored performance aspects
- Drivers found charging the vehicle was easy, safe and reliable

The Newcastle team also monitored cars’ efficiency under different conditions such as morning congestion, fast-moving motorway traffic and up and down hills.

They found the electric Smart cars emitted an average of 81.4g CO<sub>2</sub>/km. This represents almost half the average emissions from new cars in the UK, which last year was 149.5g CO<sub>2</sub>/km.

Prof Blythe added: “This trial has been extremely successful and has given us the opportunity to test this new technology in advance of the much larger trial which will start later this year.”

Chris Pywell, Head of Strategic Economic Change at One North East, said: “This trial has shown that there is real enthusiasm in North East England for electric vehicles, and that charging the car is not seen as an issue by drivers who use them.

It has however highlighted that range anxiety remains a major issue, and we will be seeking to address this through educational programmes and by making quick progress on the 1,300 charging points that we are installing in our region.”

Provided by Newcastle University

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