## How much energy does it take for you to travel a mile?



Measuring energy in units of Mars Bars!..
Note, a Mars Bar contains about 1MJ (mega-joule) of energy or in nutrition terms 240 Calories. This is equivalent to 300 Watt-hours, or 0.3 kWh . So, a fully charged Renault Zoe battery is equivalent to 180 Mars Bars of energy.

|  |  | Energy needed to travel 1 mile (1 Mars bar = 1MJ) * |
| :---: | :---: | :---: |
| Battery electric |  |  |
| Self-charging hybrid |  |  |
| Diesel |  |  |
| Hydrogen fuel cell |  |  |
| Hydrogen engine |  | $1$ |
| Synthetic fuel | acter |  |

This analysis shows the fuel energy needed to travel one mile, including the energy used in fuel production and its transportation.

The analysis shows that battery electric cars are considerably more efficient in energy use.


Shout out for the cyclists: while the above is about cars, note that cycling beats even EV energy consumption by a factor of ten. You can cycle for 10 miles on the energy in a Mars bar!

