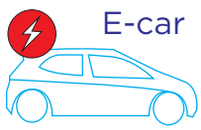
Electric Drive Battery vs Hydrogen[H2/FCEV]

Effeciency rates comparrison using eco-friendly energy

Electric VIA GRID (AU data):



Well-To-Tank

Energy

100%

Remote energy 'farm'
200KM from your home

Transportation
and Storage

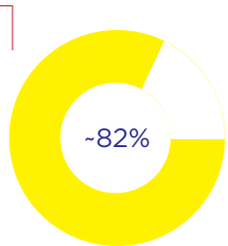
LOSS 15%
85% 'left'

Tank-To-Wheel

Electric Battery
(high capacity)

LOSS ~3%

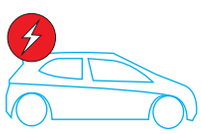
E-engine



Overall Efficiency Rate

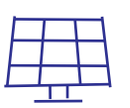
22KW - CAR
90KM/h

Electric via SOLAR @ HOME (with inverters in loop):



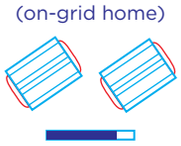
Well-To-Tank

Energy



100%
SOLAR ON YOUR ROOF@HOME

Inverters
(on-grid home)



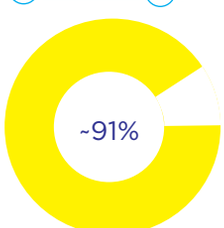
LOSS 6%
94% 'left'

Tank-To-Wheel

Electric Battery
(high capacity)

LOSS ~3%

E-engine



Overall Efficiency Rate

60KW - CAR
250KM/h

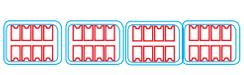
Electric via SOLAR/WIND-FARMS & ON-SITE MEGAPACK (Trucking):

Well-To-Tank

Energy

100%

7MWH+ MegaPack
on-site Storage



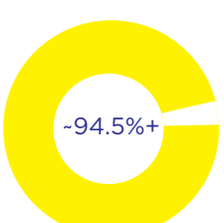
LOSS 2.5%
97.5% 'left'

Tank-To-Wheel

Electric Battery
(high capacity)

LOSS ~3%

E-engine



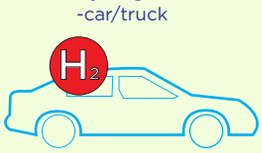
Overall Efficiency Rate

x25:
1,500KW - 1.5MW
6,250KM/h (car)
800KM/h (SEMI)

'think 10x car'

Electric via H2/FCEV:

Hydrogen
-car/truck



Energy

100%

Electrolysis

PT-LOSS 25%

Compression and
liquefaction

PT-LOSS 12%

Transportation and
filling

PT-LOSS 9%

Fuel cell and
power generation

PT-LOSS 27%

Electric battery
(low capacity)

PT-LOSS 5%

E-engine

Overall Efficiency Rate

PT-LOSS = Percentage points of the original total amount of energy lost at each stage/process

NOTE: This chart shows H2 Transportation as a liquid - when transported as a gas @ 200-BAR the compression loss is only 6%-PT at this stage, however, the total energy cost can be more as you need 10X as many trucks to move 5,000KG of H2 @ 200-BAR

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