

CONGRES  
LAADINFRA '24

# INMOTION

CHARGING AHEAD







# Our Mission

Inspire students, organizations,  
and society with our unique  
racecars

Accelerate the energy  
transition in the automotive  
industry





1:48:371  
ZANDVOORT

1:43:059  
TT-ASSEN

**Fusion**

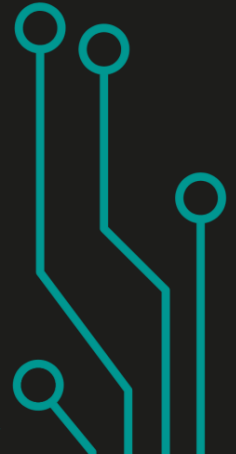
# CHALLENGES OF ELECTRIC MOBILITY



*EXTENDING  
ELECTRIC REACH*

*REDUCING  
CHARGING TIME*

*REDUCING  
CHARGING TIME*





**Revolution**



*FAST CHARGING  
= TOO SLOW!*



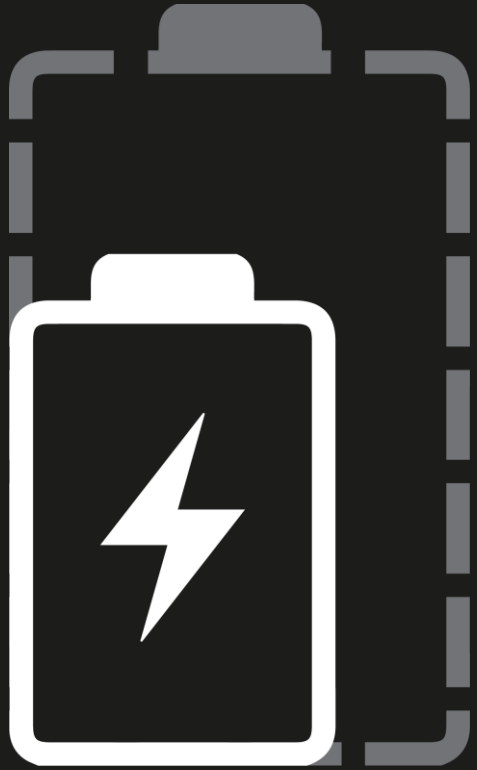
# Why?

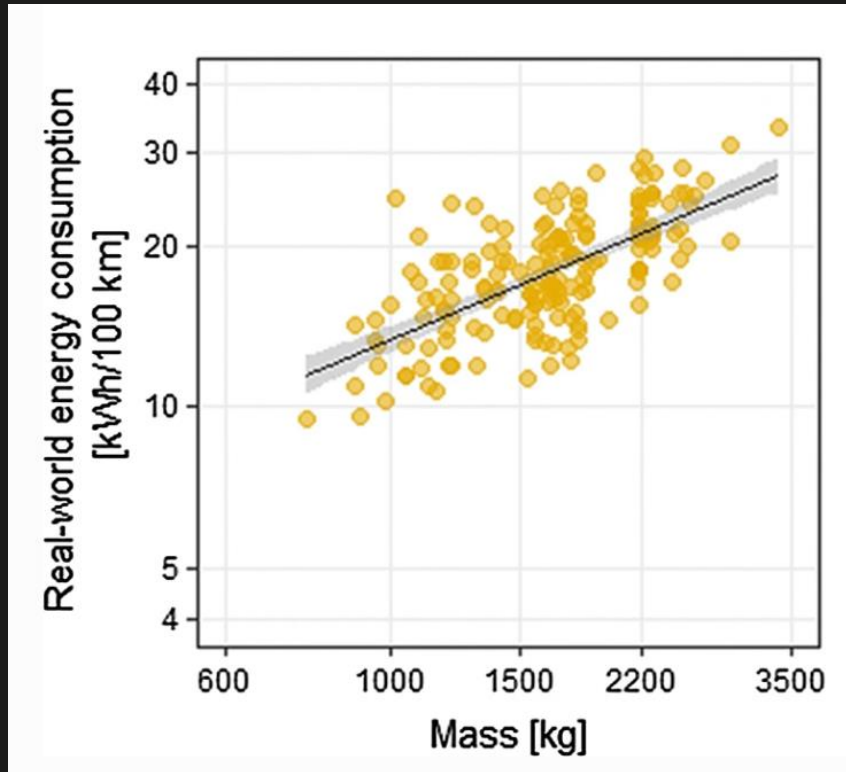




# *'ELECTRIC REFUELING'*







*“a **doubling of vehicle mass** leads to a **46% increase** in the real-world energy consumption of electric cars (power-law Model 6)”*  
Weiss et al., 2020



Bron: Weiss et al., 2020



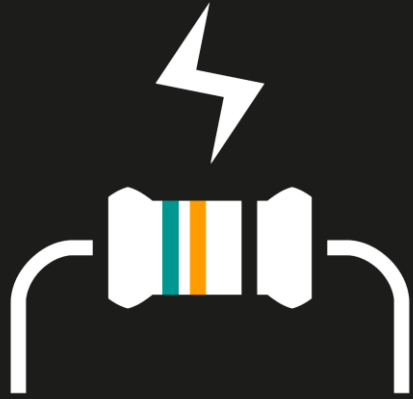


# Challenge

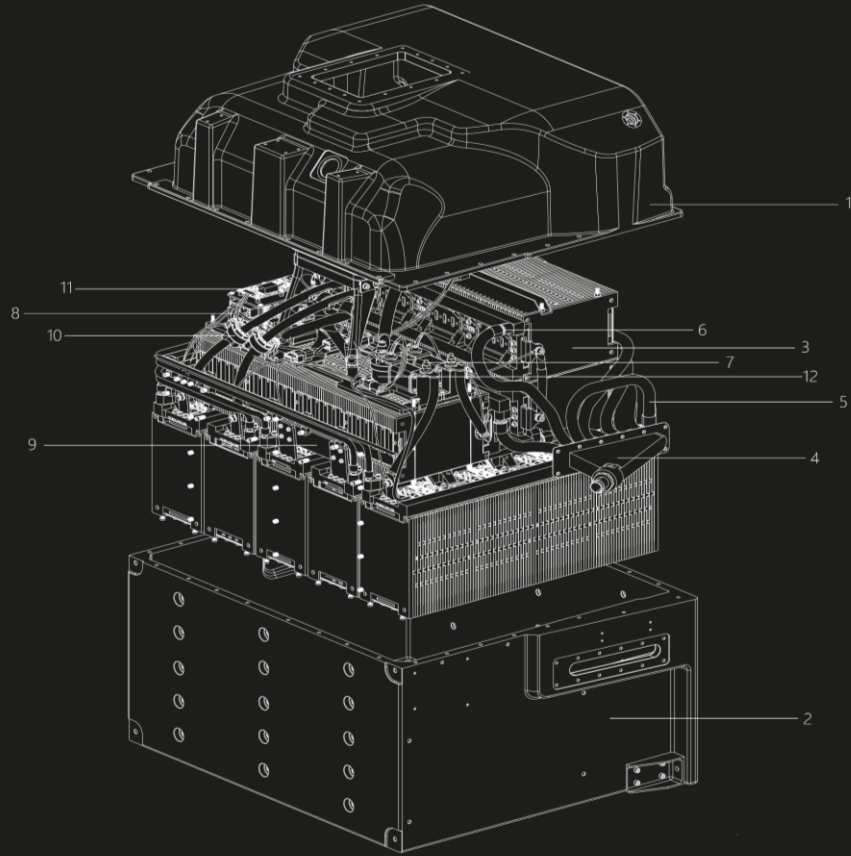




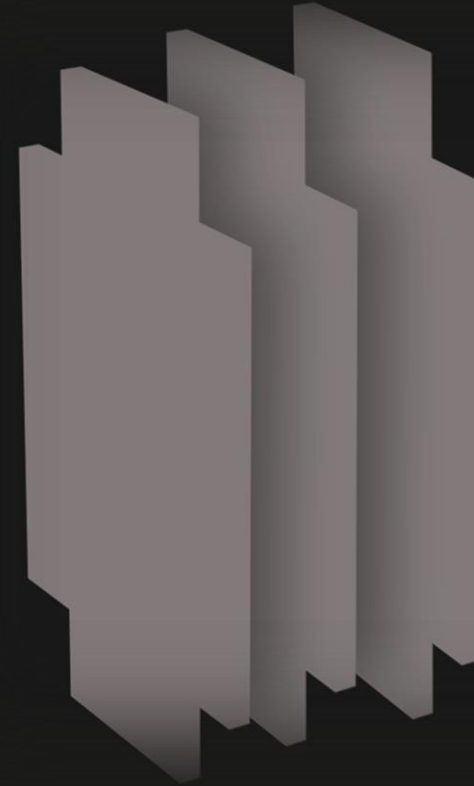
# Challenge



# Solution



*NGBP*



*CELL-LEVEL  
COOLING*





# 4 MIN

## CHARGING TIME









# Our Vision

"Showcasing Electric Refueling in the toughest racing conditions, thereby creating an attractive image for electric vehicles and dream to participate in the 24h of Le Mans"



DESTEN™

TU/e EINDHOVEN UNIVERSITY OF TECHNOLOGY

OMEXOM

AVIA VOLT

PRODRIVE TECHNOLOGIES

NXP

AUTOMOTIVE CAMPUS

SIEMENS



EMIXA



ICT GROUP TITech

Brabant ENGINEERING BY BEST



e-Quest

Deloitte.

Panasonic INDUSTRY

DEMCON

TaylorWessing



SANTINO

Primaned DELIVERING PROTECT INSIGHT

POWERFLEX

MAVOM SPECIALTY CHEMICALS

tableaux mediamakers

Altium

AMADA AMADA WELD TECH

SHAPEWAYS



OFFICE-INTERIOR

PROLEASE YOUR RIDE IS OUR DRIVE

marple

Etteplan

mst GROEP Art of mechanics



veeren • electronic • design • solutions



TNO innovation for life





## Contact

Wouter Brans  
+316 10 99 72 40  
info@inmotion.tue.nl



Coen Hiddink  
+316 30 60 77 85  
pr@inmotion.tue.nl

STAY IN THE FAST LANE OF INNOVATION!

