



Background

**Cleancarb Luxembourg SME
established Nov 2009**

**by Peter Dooley, BSc with 25 years of
automotive engineering experience**



Mission

Provide Best Quality energy storage systems and engineering for EV, hybrid vehicles, electric boats, ups, solar and wind energy storage etc



Services and systems

Provide engineering services in the following areas

- Energy storage system design using LiPo/Ultracapacitors
- Testing Services
- Project Management
- R+D projects e.g. EU FP7
- Technology transfer



Project References

- Saker cars
- Superbus TU delft
- Formula student electric
- Umicore solar car
- FP7 SOMABAT
- FP7 V-Feather etc



Saker cars

Design and delivery of 620 volt, 37 kWh battery packs for electric sports car

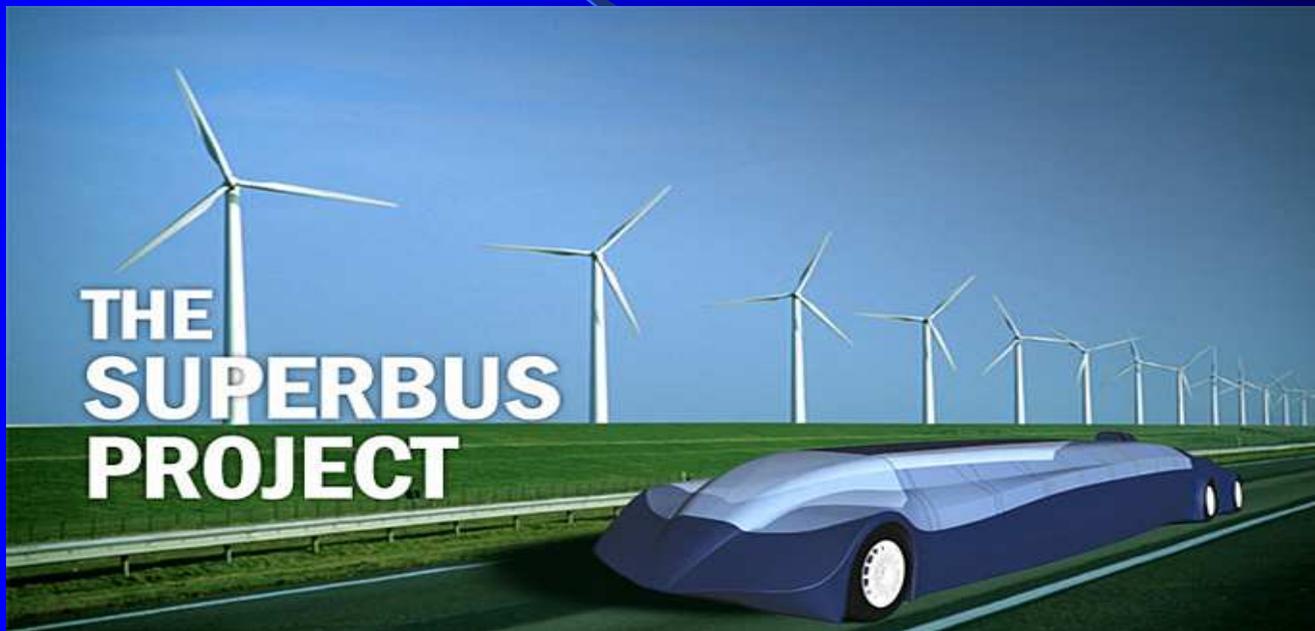


Superbus Project TU Delft

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Engineering design of 620 volt
battery packs for Superbus



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Solar cars

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160 volt Lithium battery packs
for world solar challenge in Australia



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Formula Student Electric

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400-600 volt Lithium battery packs



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Electric boats

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Battery packs and motors for solar
and electric powered boats



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Supercapacitor systems

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- Marketing partner for high voltage ultracapacitor systems
- NESSCAP Distributor for Benelux/France



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Electric planes

Battery packs for hybrid, solar and electric powered planes



Wind and solar storage

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Battery packs for solar and wind
energy storage



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IT and touch screens

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Batteries for touchscreens and medical applications



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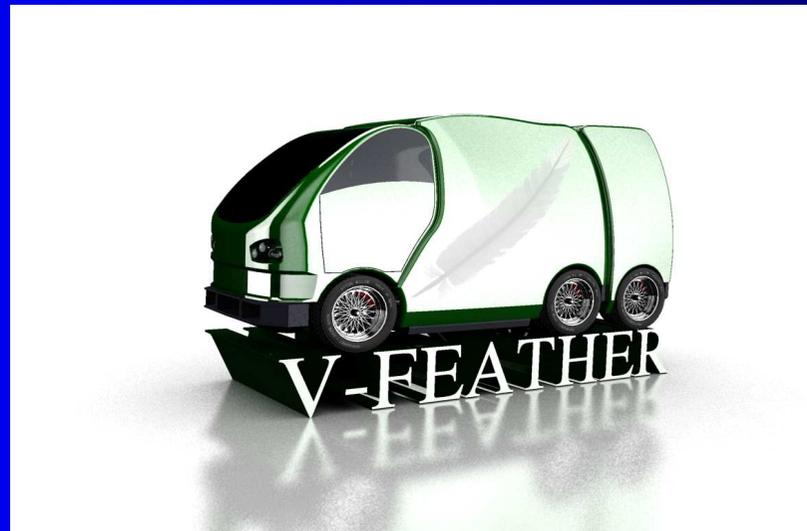
FP7 SOMABAT

- GC-NMP-2010: Development of novel Solid Materials for high power Li polymer BAtteries(SOMABAT)
- Recyclability of components
- 13 partner organisations
- 9 countries
- From Jan 2011-Jan 2014 www.somabat.eu



FP7 V-Feather

- InnoVative Flexible Electric Transport
- GC.SST.2011.7-10 Architectures of Light Duty Vehicles for urban freight transport
- Project timing July 2012 – July 2015



Other Projects



- FP7 research projects for energy efficient buildings and green cars
- Battery packs for forklift trucks and agvs
- Battery packs for medical applications
- Ultracap modules for trolley bus, tram and hybrid bus etc with partner
- Battery packs for electric, boats, scooters etc



Customer Experience

- TU Delft
- Fraunhofer, IFAM, Bremen
- TU Freiberg, Sachsen
- Saker cars, Netherlands
- KMD, Netherlands
- Groep-T Leuven
- Obrist Engineering, Lustenau, Austria
- Phoenix productions, Vienna



Possible cooperation areas

SST.2013.1-2. Towards the zero emission ship

SST.2013.3-1. Managing integrated multimodal urban transport network

GC.SST.2013-1. Feasibility analysis and technological development of on-road charging for long term electric vehicle range extension.

GC.SST.2013-3. Future light urban electric vehicles

GC.SST.2013-5. Configurable and adaptable truck.

GC.SST.2013-6. High efficiency energy conversion for future heavy duty transport.



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