# Energy Consumption Calculations with FBS

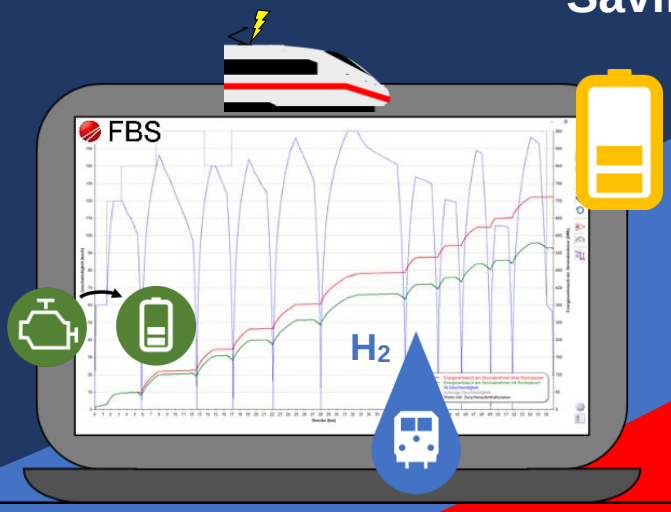
Energy Demand

Fuel Cell Vehicles

Charging Status

Saving Potential

Heating




Energy Efficient Driving

Recuperation

Time-Weighted Stress Curve

Driving Resistance

Efficiency Levels

Hybrid Railcar

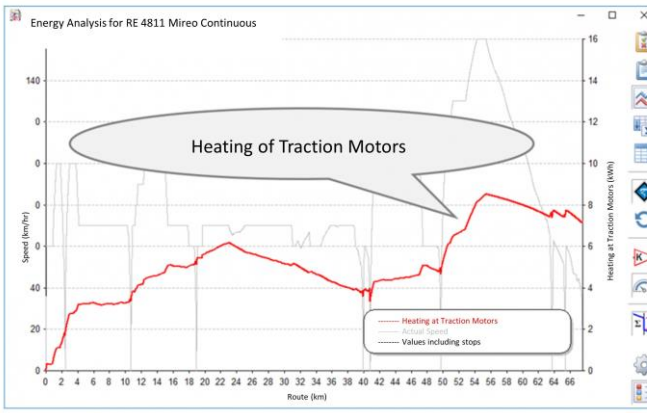
FBS

So macht man Fahrpläne!

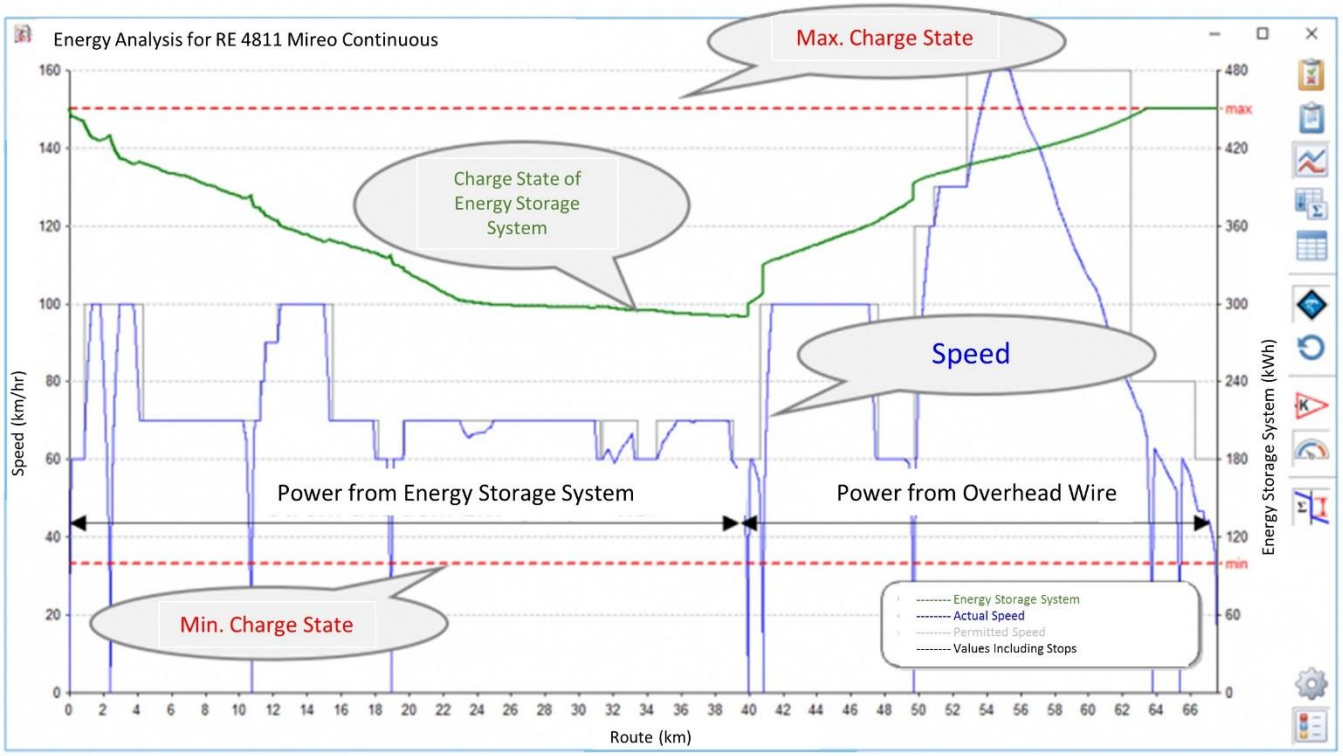
## Aspects of Energy Calculations with FBS

The energy calculation integrated in FBS covers a wide range of aspects, e.g.:

- energy demand over the course of journey / of the operating program
- savings through energy saving driving
- heating of the power components
- time-weighted stress curve
- recuperation
- circulation based evaluation
- efficiency levels
- different driving regimes
- graphical and tabular analysis
- and many more




## Alternative Fuel Traction Vehicles




The electrification of a route that is still operated with diesel vehicles today is not economically practicable in every case. Alternative fuel traction vehicles offer new possibilities that can now also be modelled with FBS, e.g.:

- proof of concept
- sizing of energy storage unit
- charging state of energy storage unit over the course of journey
- additional charging possibilities, e.g. at turnaround station
- and many more

Would you like further information on studies about energy calculation or alternative fuel traction?

**Get in touch!**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