

electreon

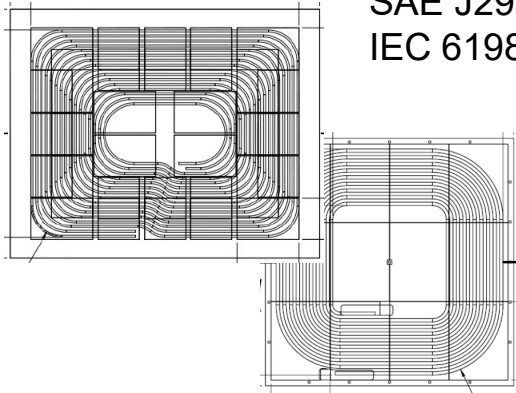
Charging the way forward

Standardization of WPT
- The Electric Road as the Grand Unification -

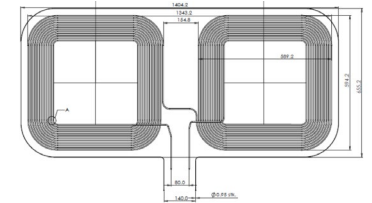
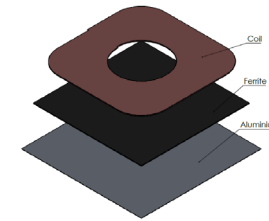
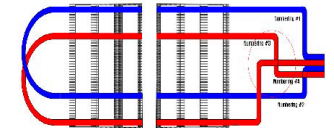
— anytime, anywhere

Progress of WPT Standardization

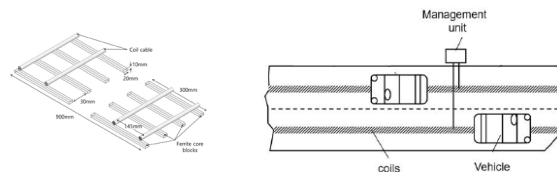
Light Duty WPT
 SAE J2954 (IS)
 IEC 61980-3 (FDIS)



Heavy Duty WPT
 SAE J2954-2 (IR)
 IEC 61980-4 (CD)



Electric Road System
 SAE J2954-2 (IR)
 IEC 61980-5 (WD)



SAE: IR->RP->Strd
 IEC: NP->WD->CD->CDV->FDIS->Strd

Status of WPT Standardization

Light Duty WPT

SAE J2954 (IS)

IEC 61980-3 (FDIS)



No common understanding, yet

Heavy Duty WPT

SAE J2954-2 (IR)

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Electric Road System

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Status of WPT Standardization

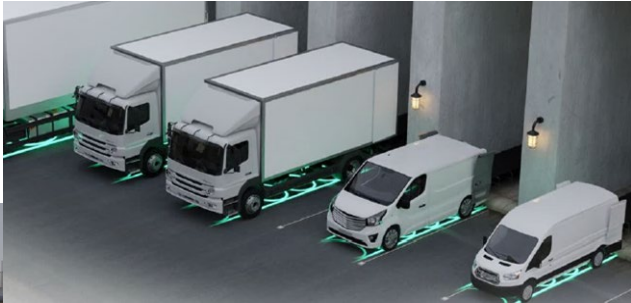
Light Duty WPT
SAE J2954 (IS)
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Heavy Duty WPT
SAE J2954-2 (IR)
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Fundamental Use Case

Electric Road System
SAE J2954-2 (IR)
IEC 61980-5 (WD)



Status of WPT Standardization

Light Duty WPT
SAE J2954 (IS)
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No common understanding, yet

Heavy Duty WPT
SAE J2954-2 (IR)
IEC 61980-4 (CD)

Common Sense / BC

Fundamental Use Case

Electric Road System
SAE J2954-2 (IR)
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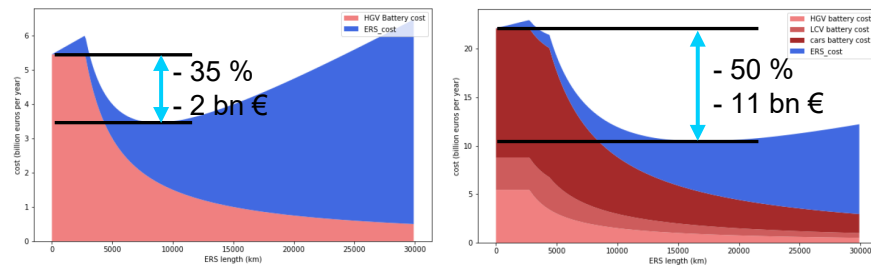
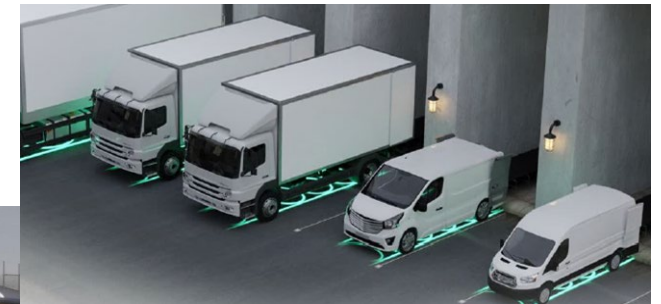


Figure 1. Total yearly investment cost including batteries and ERS as a function of the ERS length.

The electric road system: technical, economic and environmental study carried out in France, 2. Economic and environmental aspects, Fabien Perdu^a, Pierre Chanio^b, Marc Raynal^b, François Combes^c,

^aUniversité de Grenoble Alpes; CEA/LITEN-F-38402 Saint Martin d'Hères, France

^bCEREMA, 110 rue de Paris, 77171 Sourdun, France

^cUniversité Gustave Eiffel, Cité Descartes, F-77420 Champs-sur-Marne, France

Commercial B2G Project, Pilot B2G



Michigan, USA: Started

1 Mile

The first public electric road in the US, in collaboration with MDOT



Utah, USA: in operation

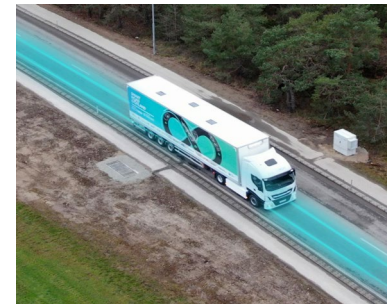
50m

Live demonstration facility at ASPIRE with an electric truck



Standards guarantees high TRL and secures healthy industry

TRL 9	System proven in operational environment
TRL 8	System complete and qualified
TRL 7	Integrated pilot system demonstrated
TRL 6	Prototype system verified
TRL 5	Laboratory testing of integrated system
TRL 4	Laboratory testing of prototype component or process
TRL 3	Critical function, proof of concept established
TRL 2	Technology concept and/or application formulated
TRL 1	Basic principles are observed and reported



Electreon, 2019



<https://www.press.bmwgroup.com/deutschland/article/detail/T0281369DE/laden-noch-einfacher-als-tanken>



University of Auckland, 1992



MIT, 2006



Thank You
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