



Battery Platform
for
e-Mobility & Smart Grid

Daisuke Suzuki
Founder & CEO

Company Overview



Name	RESC, Ltd.
Address	3-19-4 Kamata #701 Ota-ku Tokyo 144-0052 Japan
Founded	2011 January 27th
Capital	10,000,000JPY
Founder & CEO	Daisuke Suzuki Degrees: Mechanical Engineering from MIT & MBA from University of Michigan
Vision	Realization of the "next-generation smart city" that is resilient to natural disasters, is carbon-neutral, and has widespread electric mobility
Mission	Popularization of battery sharing

Our Mission

Realize **smart cities**
based on our **battery platform**
that enables **battery sharing** among users

e-Mobility



Battery



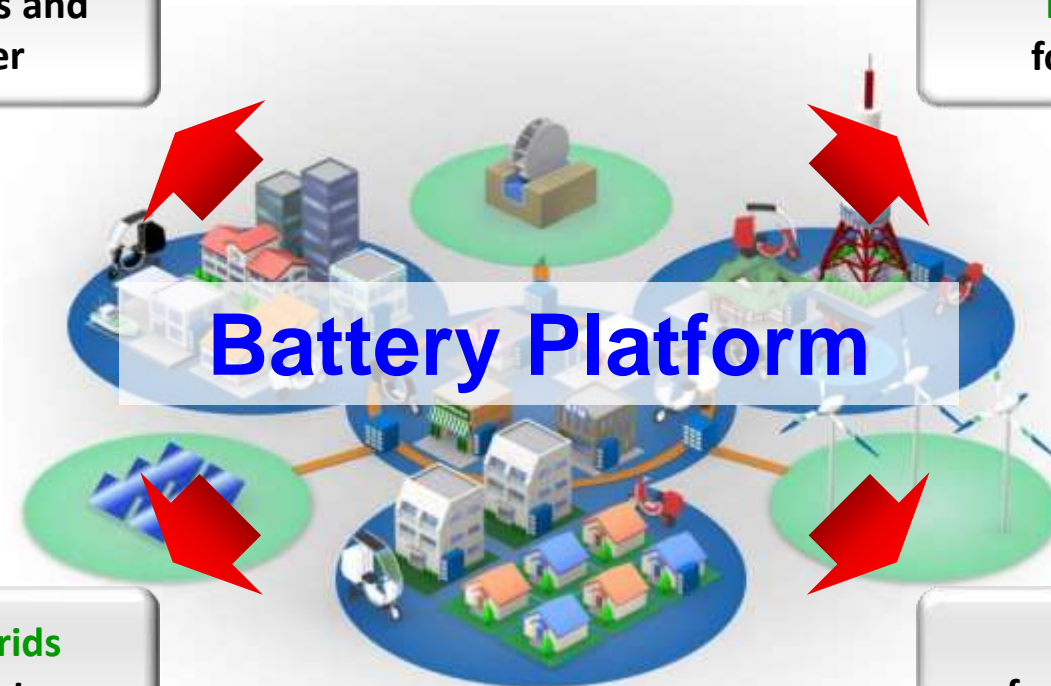
Smart Grid



Our Envisioning Smart City

Strengthen the resilience
against earthquakes and
extreme weather

Massively introduce
renewable energy
for decarbonization



Construct smart grids
for more efficient
energy use

Electrify vehicles
for environmental and
emission gas measures

Target Markets & Problems

e-Mobility

Segments:

- Delivery
- Sharing Service
- Retail



Global Market Size*

Year 2019: **200 GWh**
Year 2030: **3,300 GWh**
Year 2050: **7,500 GWh**

Energy Storage (Smart Grid)

Segments:

- Backup Power
- Portable Power
- Renewable Energy
- VPP, DR, Micro-Grid



Global Market Size*

Year 2019: **30 GWh**
Year 2030: **370 GWh**
Year 2050: **3,400 GWh**

Problems

High Cost of Batteries

Degradation of Batteries

High Reuse/Disposal Cost of Batteries → **Data tracing is critical for CFP and LCM**

Risk of Battery Emptying on Roads

Long Battery Charging Time



Solutions by Battery Sharing

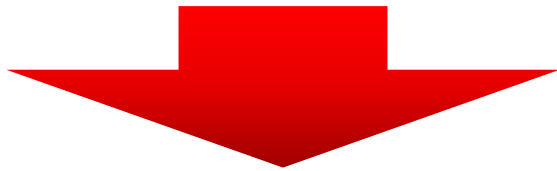
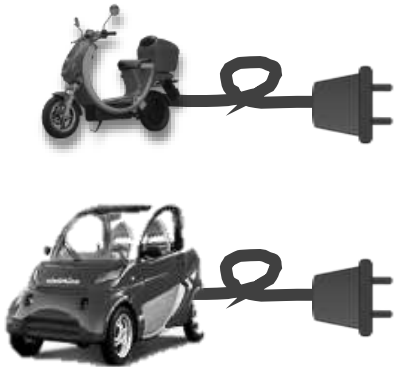
Click the below link to play the movie

English https://youtu.be/NJ_zKXZUm9Y

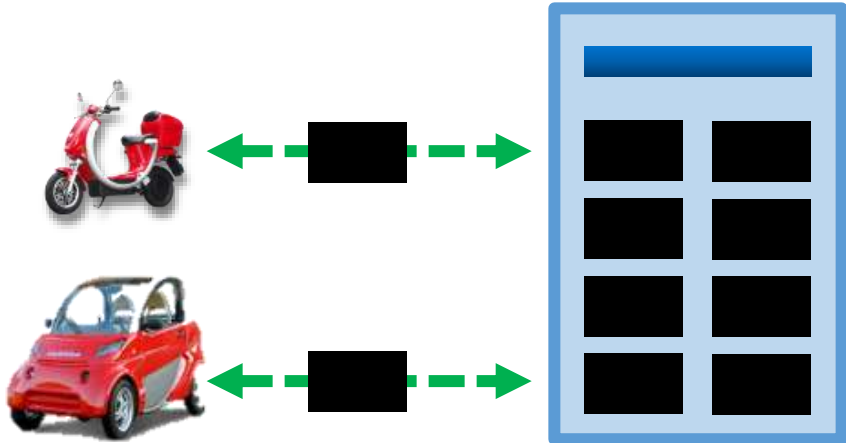


Solutions by Battery Sharing

Conventional
Battery Charging



Battery Swapping



EV Bus



EV Truck



EV Taxi



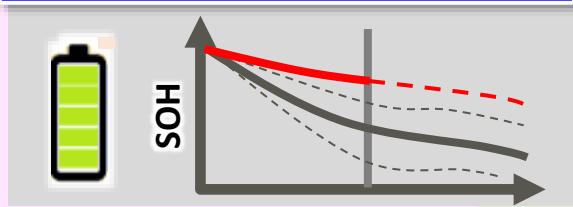
Personal EV

- No more** high ownership cost of battery
- No more** battery emptying risk on roads
- No more** self charging of battery

RESC's Core Competences

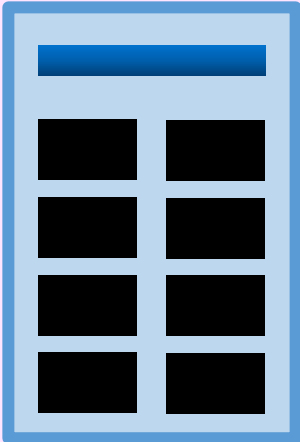
Network Effect between e-Mobility & Smart Grid

Battery Life Prediction/Control



Battery LCM Issues

- Battery Degradation
- Battery Data Tracing for Reuse/Recycle/CFP



Own Patented ICT System

- ✓ Big Data-Driven
- ✓ Flexible-Control of Battery
- ✓ Holistic Optimization

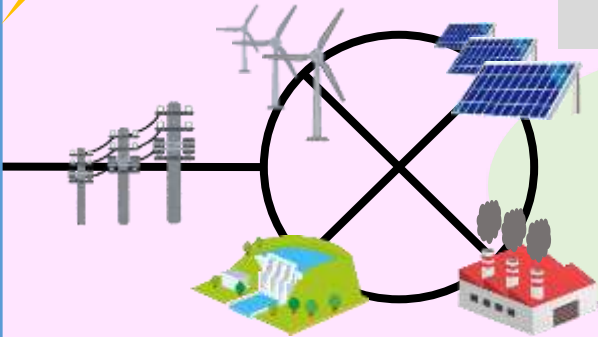


Weather Forecast Charging

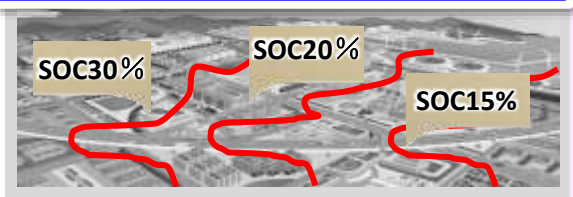


Power Grid Issues

- Demand Response
- Unstable Renewable Energy Power

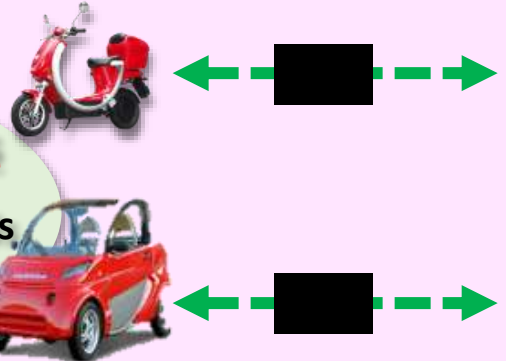


Prediction Charging



Battery Swapping Issues

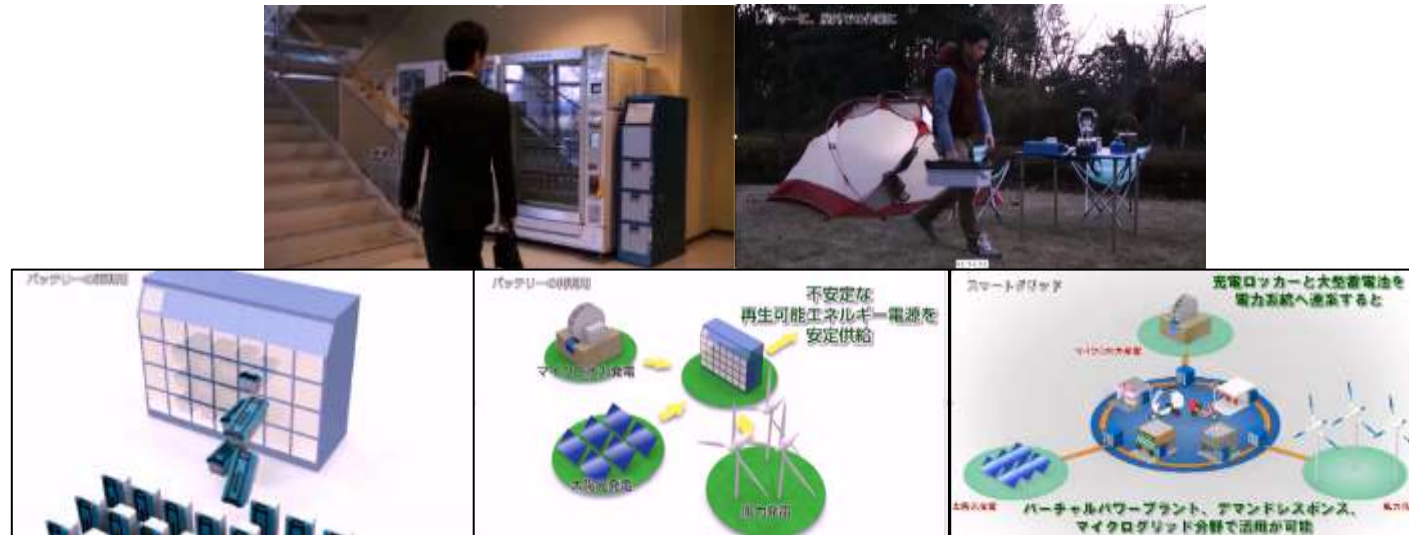
- High/Low Swapping Demands
- Fast/Slow Charging









Energy Services

Click the below link to play the movie

English https://youtu.be/3b8KFM3_qq4



Business Traction

Types		Facts		
1	Hardware Development & Demonstration in Japan	<p>Japan Post</p> 	<p>Pizza Hut Japan</p> 	<p>Lawson CVS</p> 
2	ICT System Development & Demonstration in Japan	<p>Fujitsu</p> 	<p>Kawasaki City</p> 	<p>Chubu Electric Power</p> 
3	ICT System Patents Applied and Registered in over 20 Countries & Regions	<p>Japan & China: 5 Patented USA, Australia & Taiwan: 2 Patented India, Korea, Vietnam, Mexico & Argentina: 1 Patented Other Pending: EU, Canada, New Zealand, Indonesia, Thailand, Singapore, Malaysia, Philippine, and others</p>		



RESC, LTD.
レスク株式会社



Battery Platform

THANK YOU

Daisuke Suzuki, Founder & CEO
Email: d_suzuki1@rescgroup.com
WeChat ID & Skype ID: daisuzuki