

Limited Liability
Company



“Energy Storage Control
Systems”
 (“SUKHE” LLC)

We develop devices and algorithms to reduce battery weight and to improve its uptime.

Too heavy

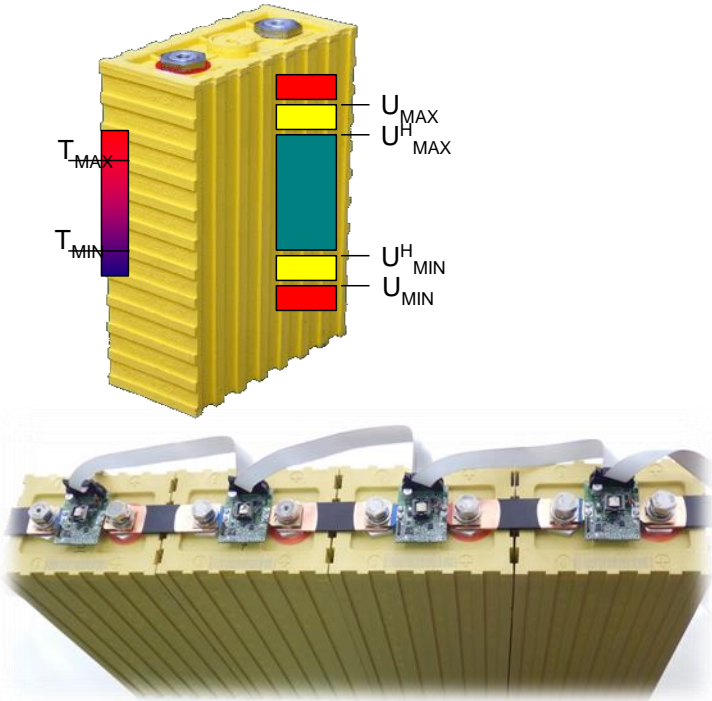
Too short battery life



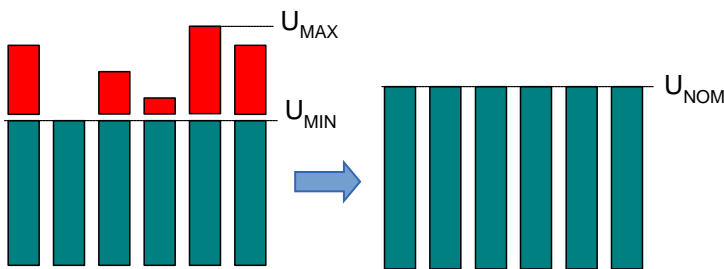
Energy grid and transportation applications go to extreme



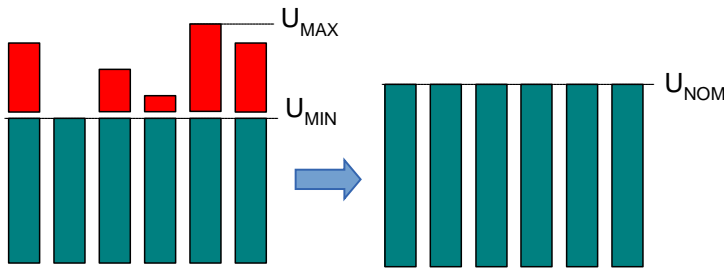
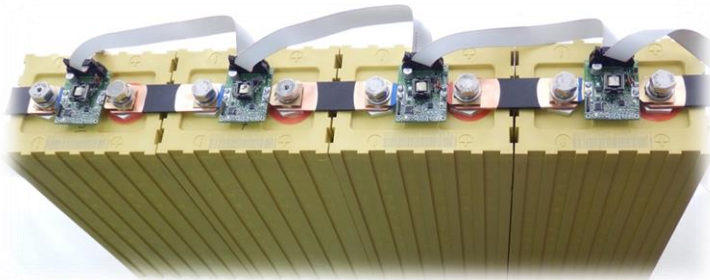
Breakthrough control method



- Increase battery capacity.
- Increase lifetime: no less than 15%.
- Reduce space and maintenance requirements.
- Total cost of ownership decrease for 15%.



Proprietary Tech

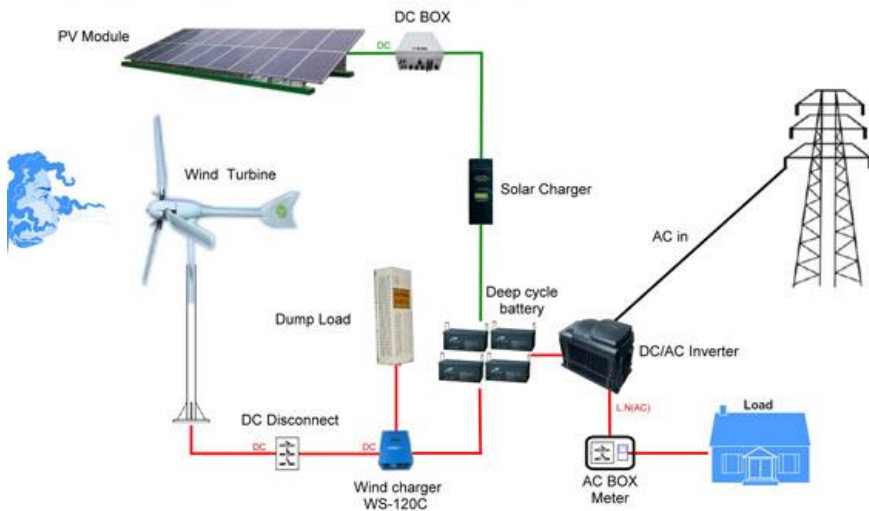


- Customized charge/discharge mode for individual cell.
- Proprietary rebalancing technology – 10 times less energy losses than nearest alternative.
- Flexibility to wide range of batteries.
- Patents: **11** (Russia, Germany)
- Applications for priority: **12**
- International applications for priority: **3**

Why now



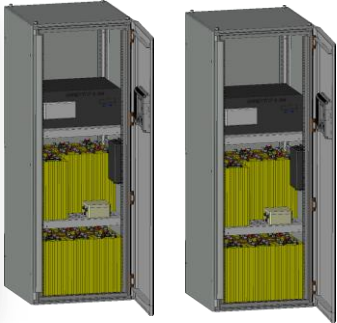
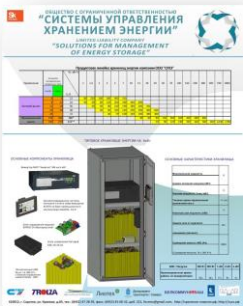
- High volatility in power generation with wide adoptions of renewable and hybrid power generation.
- Growth of electric power transport.
- Price drop of Li-Ion и Li-Pol cells and announcements of new mega factories worldwide.





Our Products

- Energy Storage
1- 1000 kWh

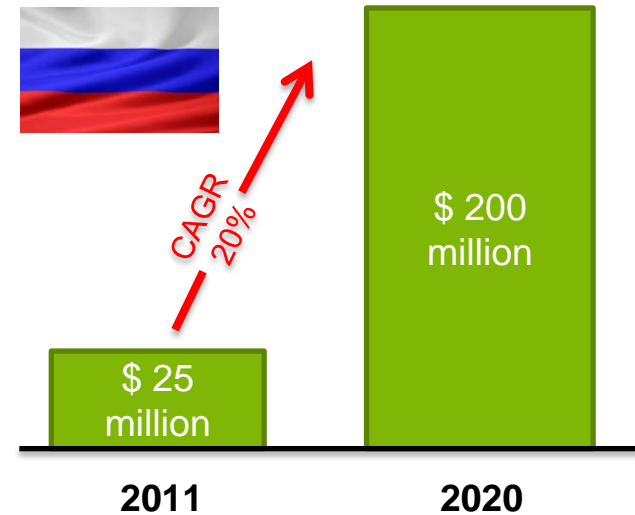
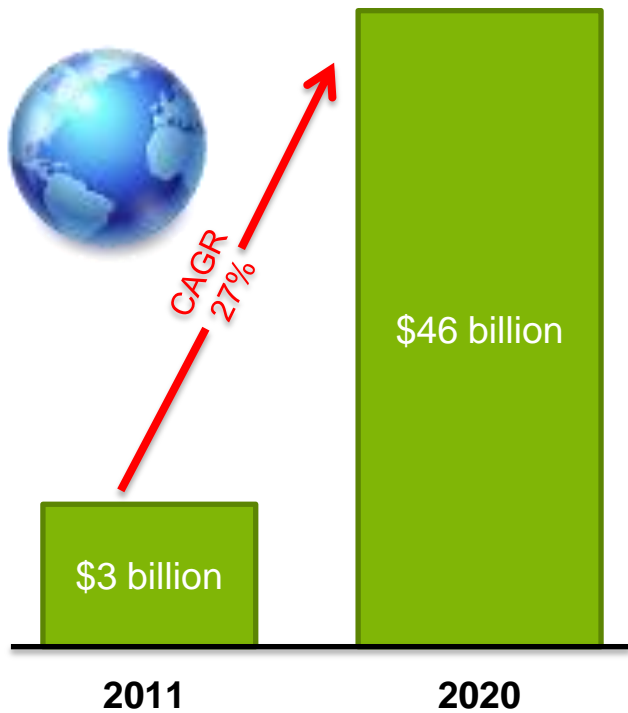


- Engineering services
for new applications





Li-Ion Storage Market



Source: Pike Research, Bain, industry experts

Competition



	Ewert Energy Systems	Electromotus	EISLAB	Our Products
Rebalancing	Dissipative	Dissipative	Crosscell transfer	Bidirectional bus
Rebalancing energy losses, %	100	100	Up to 50	10
Maximum rebalancing current, A	0.2	1.6	2	2
Maxim number of cells in battery, pcs.	5..180	2...255	10	4...500
Time to rebalance at 10 A*h, hours	~50	~6	~5	~2,5
Cell voltage measurement accuracy, mB	10	5	10	2

Team



Buzadzhi Svetlana
CEO

Industry expert in hi-tech
energy products



Podlipalin
Valdimir
PhD

Technology
Architecture



Sidorenko
Oleg
PhD

Algorithms
and IP



Distranov
Konstantin

Software
design



Krukova
Darya
PhD

Finance.

Industry knowledge and Technology Innovation

Traction



- High efficiency of technology was proved during extensive preproduction testing supported by Skolkovo grant.
- Preproduction test results gain attention of major Russian corporations – Rosatom, Kamaz, Trolza.
- New grant from Skolkovo in 2015 to start commercial production.
- RFQ and RFP received from new customers in energy and transport sectors.
- New products for B2C segment in roadmap.



Thank you!

Welcome to talk if you invest more
than just money:

Smart Money