

16 Top UAE Solar Companies and Startups of 2021

WIRED

Volts is taking solar energy to the next level, by allowing customers to store it for when the sun doesn't shine



ENERGY STORAGE AND

MANAGEMENT SOLUTIONS

As we move to an eco-friendlier future, solar energy is a key climate solution and Volts is making it more accessible.

Problems of the Energy Transition



From Demand Side



Users desire to have electricity that is currently unavailable

- Clean
- **Affordable**
- **Flexible and Customized**
- Reliable

From Supply Side



€0.35 per kWh is forecast for EU in 2022!

Conventional energy supply

- Is far from 100% green
- Getting more **expensive** facing energy crisises being pushed to reach Zero CO₂ targets
- Mostly non-client-oriented and slow regarding customer services



VOLTS REINVENTS ELECTRICITY

Energy supply solutions based on VOLTS technologies

- To any user on the planet
- Customized mobile / clean / affordable electricity
- From 2 days delivery

VOLTS – Smart Residential Storage Solution

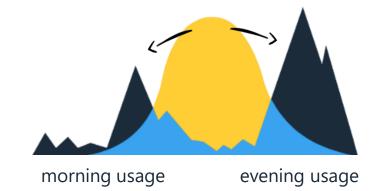
Makes up to 100% of solar self-supply possible

A smart storage in one box: 2-100kWh Lego-like/Plug&Play scalable solution





- 1. Store solar power in daytime
- 2. Use it in the night
- 3. Use up to 100% of self-supply and outages backup







VOLTS – Ecosystem of smart solutions



Makes the best use of solar electricity through interconnected features









Personal smart mobile app

- observe: statistics/economy
- manage: schedule electricity use depending on lifestyle
- forecast and advise*: push advice on optimization

VOLTS EV-booster*

- EV-charging boost plus 37% to speed of charging: from 11kW to 15kW
- Extra functions in mobile app — schedule and control when EV needs to be charged
- Use your EV to backup your house

VOLTS Mini* — 1,5kWh portable storage charged from VOLTS at home

- "Spare canister" for EV— extra 10km for EV in a trunk
- Outdoor using for camping, etc.

Connect VOLTS to your Smart Home and save more

Integration of VOLTS to another Smart Home Platforms via Open API

^{*}Under development

VOLTS-developed Mob App



Smart management in your hands

One App for full control and monitoring your electricity



Consumption statistics
Forecast and management
Power quality analysis



Schedule your EV when it needs to be charged (optimized by off-peak el.prices)*



Business model



AS IS: direct sales





Electric energy storage system from 4 to 12 kwh



Back-up, best use of PV, optimization



Users: households who can afford high equipment cost €10k+



Markets: Russia, UAE, Europe (point-of-sale in Switzerland, Sweden)

~\$8,000 per user

~40+% per user

Revenue per one user. ~15% lower price than Sonnen

(one of the market leaders in

Europe)

Gross margin per one user. Own sales

Microgrid Platform as a next step



Connects several houses through one exchange platform



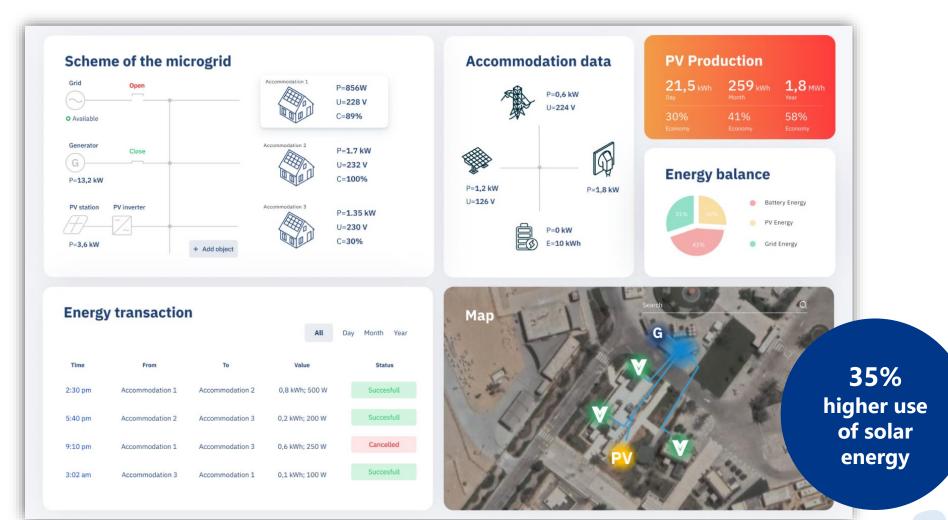
Energy p2p transactions (sharing electricity between users)



Can operate fully off-grid



Increased Flexibility and Reliability



VOLTS competitors (equipment)



Producer

Model

Country

Competitive entry price

Per 1 kWh retail price

All in one customized solution

VOLTS is easy to install plug-n-play system: inverter and solar socket already inside

Expandable capacity

Battery capacity can be easily adjusted to meet all household energy needs

On and Off grid solution

VOLTS hardware technology allows to connect users even in remote areas

One Platform with many products

Personal Mob.app, smart home, EV Charger, Portable VOLTS Mini

Microgrid with Energy optimization algorithms

Cloud Server with connecting all services together, forecasting, dynamic tariffs, smart home management

VOLTS	Tesla	LG Chem	BYD	Sonnen
Energy Storage	Powerwall 2	RESU 13	B Box Pro 13.8	Eco 9.43
UAE	USA	Korea	China	Germany
\$850	\$815	\$879	\$790	\$1,135

VOLTS as is – Sales and Investments



\$0,5M INVESTED

By Founders & Catalyst





Seed-round investment from Catalyst (BP and Masdar initiative)



135+ PROJECTS







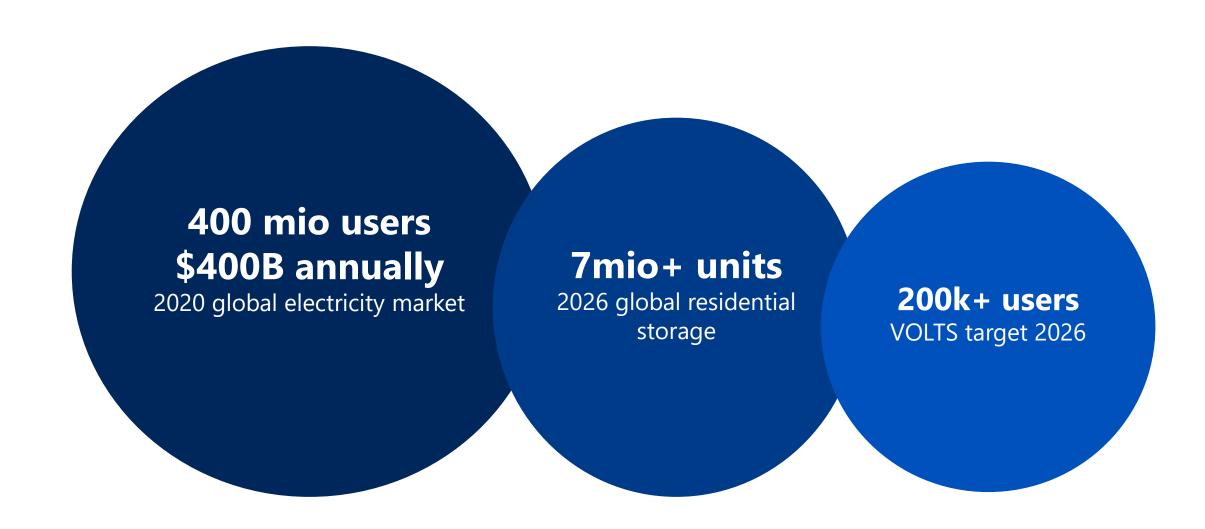






Market potential globally









The most attractive regions by key indicators with **30%+ CAGR**

	Germany	UK	Scandinavia
Electricity Price	Very High (\$0.35+/kWh)	High (\$0.25+/kWh)	High (\$0.20/kWh)
Market Size by 2026	Very High (1.0 mio users)	High (0.6 mio users)	Average (0.15 mio users)
Green Energy penetration	High	High	High
Competition Level	Average	Average	Low

Up to 15% of buildings are already with ongrid solar. Just need to add storage Up to 70% of equipment costs are subsidized from local government (Sweden, Germany)

Up to 1 mio already installed PV systems ≤ 4 kW can be supported by storage (UK)

Customer's mindset is already focused on going greener

Business models



From a traditional model to a more disruptive one

AS IS: direct sales



Electric energy storage system from 4 to 12 kwh



Back-up, best use of PV, optimization



Users: households who can afford high equipment cost €10k+



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TO BE: VOLTS Bonus subscription model

FREE installment of PV+VOLTS storage

A customer gets up to 100% green electricity from PV and storage without increasing e/e bill

VOLTS sells surplus e/e to the grid and buys from them when needed

Customer gets **VOLTS BONUS each year** (several hundreds euros)



Volts for B2B clients creates additional revenue stream

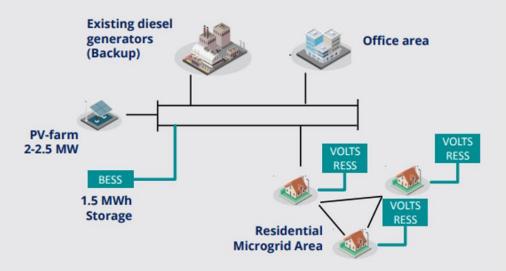
Covering energy consumption by integrating solar power plant and energy storage systems (industrial high-power storage + local storage for low-power distributed load)

Decarbonization of existing diesel-powered remote areas. Benefits:

- 1. Reduced CO₂ emissions **due to reducing** diesel consumption
- 2.The payback period is **4-8 years** due to savings on diesel fuel (at a price of \$ 0.7 per liter) and the economy on carbon futures (\$ 100 per ton of CO₂)



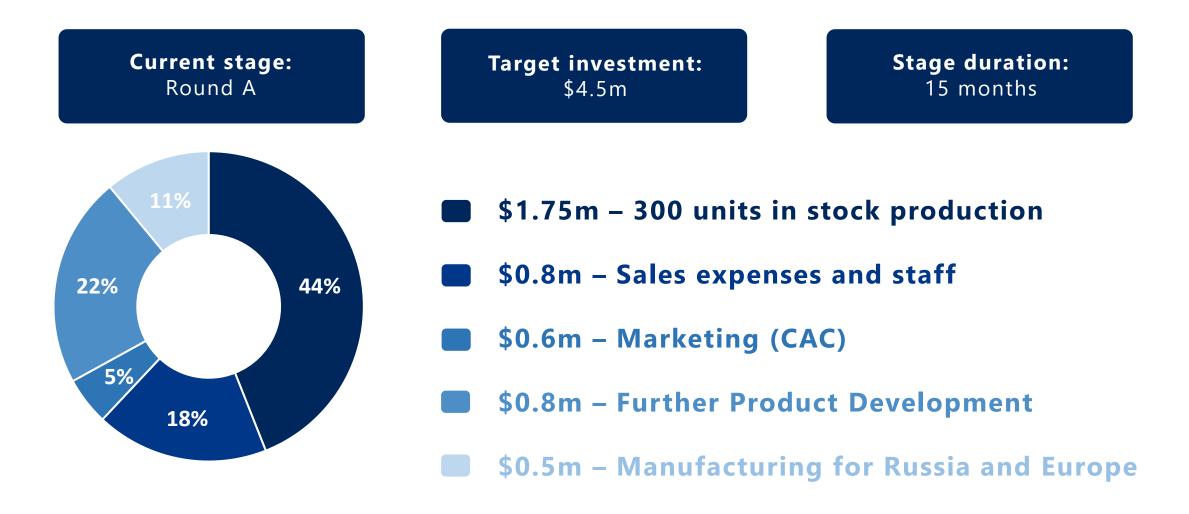
Pilot project in Midle East in 2022 is planned and estimated \$5mio+







Sales boost and expansion to European market, product development



VOLTS Team



Highly qualified Team uniquely capable to take on the challenge



Alexandr Kiyanitsa Co-Founder & CEO

Masters in Electricity and Business Education, Young Chief of the year, Falling Walls



Vladimir Mlynchik Co-Founder

Electricity Education, MBA, 10 years of electrical business, Entrepreneur of the year 2017 - Ernst&Young



Artem Denisov Co-Founder

Electricity Education, MBA, 10 years of electrical business, Global **Entrepreneur Award 2011**

SALES

DEPARTMENT



Aleksandr Ochkov Co-Founder

Master's in Finance/Economics, MBA



Natalia Ismagilova **CBO**

Master of law 12 years of energy business.

TECHNICAL DEPARTMENT



Vitaly Mlynchik Co-Founder & Head of Technical Department

Electricity Education. 30+ years in energy. Several



electrical inventions



Artem Budakov Programmer





Alexandr Shabalin Electronic Engineer



Alexandr **Shlyapnikov Product Designer**



Dmitriy Karasev Programmer



Konstantin Solovyev Lead Programmer



Alexandr Shneider Head of Sales



Tatiana Baturina Head of PR



Anna Gilfanova Marketing director



Anna **Babicheva** Marketing Manager



Asludin Magomedov Chief Business **Development Officer**



Ahmed Al Tam BD Middle East



BUSINESS

DEPARTMENT

Gleb **Kirpikov Financial Analyst**



Roman **Sdobnikov** Project Manager