ØNDER

Cryptoeconomic protocol and a set of common components for inter-operable decentralized applications that help others to build energy service functionality easily.

Commonwealth Platform and Ecosystem

We create a global independent open-source commonwealth environment to allow others to build, test and operate trusted open source digital energy services easily

Where to play

The energy industry of the future will be driven by fundamental changes in stakeholders interactions, deregulation of economic, richer user interfaces and novel mechanisms for fair distribution of the economic value.

Also, it becomes increasingly fragmented. Millions of flexible assets getting connected to the grid: distributed generation, storages, smart homes and electric vehicles and others. These assets are small and distributed geographically, but collectively their capacity is higher than anyone large single power plant. The falling cost of technologies incentivizes further growth of this assets base. However, there are limitations to unveil the value of this trend at its full potential:

> Business models and markets for transactive energy applications for this assets are just emerging.
>
> Suitable transacting and billing infrastructures capable of managing such hugely fragmented systems are still missing.
>
> Regulators are cautious to allow large-scale rollout of unproven solutions for the mission-critical power industry.

The ØNDER Blockchain environment helps to overcome this issues. We are creating the ecosystem suitable to launch digital energy services and monetize the value of already available and future distributed energy resources.

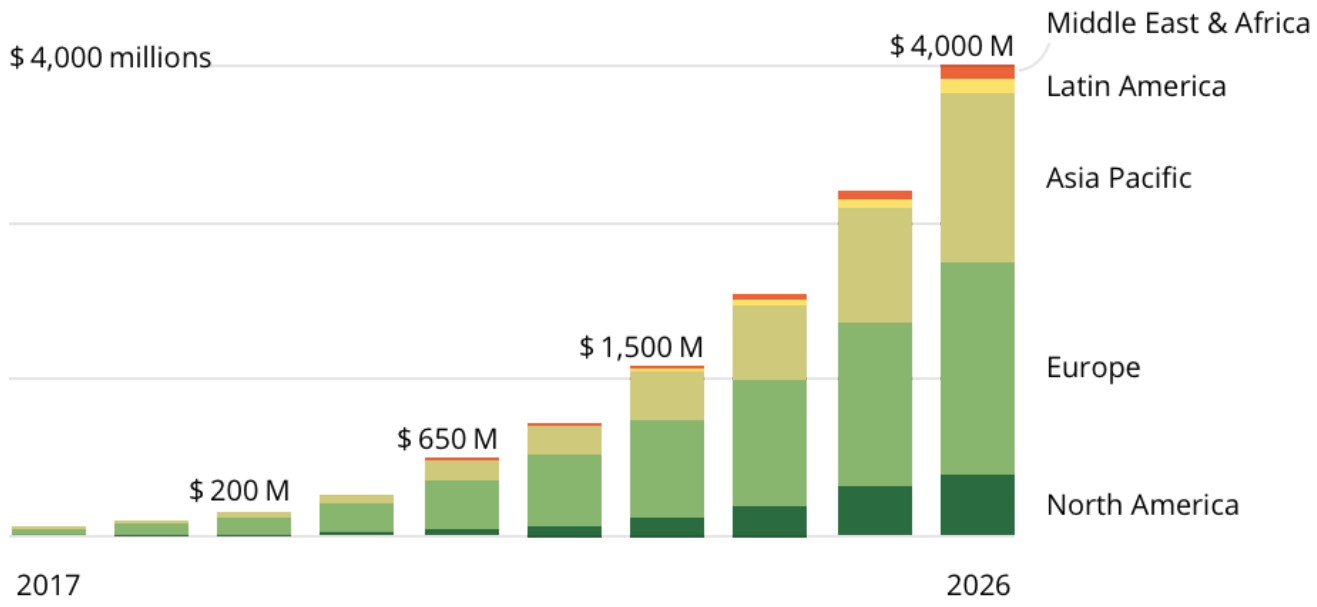
The energy sector is the first frontier where digital blockchain world could be connected to physics through meters. We consider that this changes could give opportunities for companies from IT, fintech and telecom sectors to bring their technologies into this huge market.

Research reports

First time when a new energy market model was described in details in top consulting agency report was in Navigant report in Jan 2018.

Transactive energy (TE) is a power/energy system in which economic- or market-based platforms are used to make decisions involving the generation, distribution, and consumption of power.

In the research report issued in May 2018 by Navigant, authors make a proposition about the volume of future transactive energy market where platforms will gain up to 10% of revenue.



Total value of power traded on transactive energy markets
Transactive Energy Platform revenue up to 10% of this market

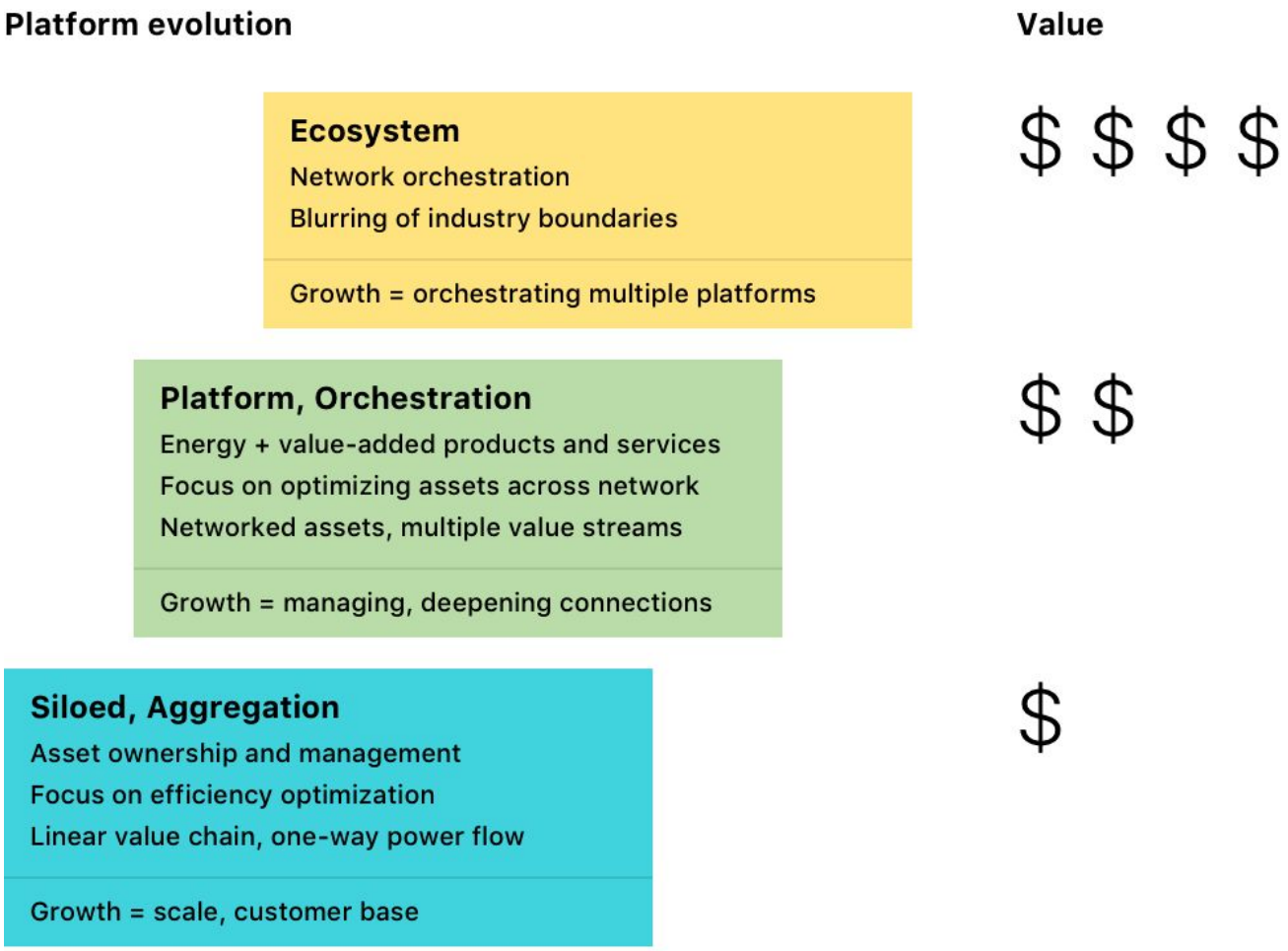
Also, we need to take into account that this describes only new emerged market of TE. Current energy business players are preparing for changes. According to Zprype report 2018

> 94% of utilities consider the conjunction of demand response and renewable generation a priority in the next 1 to 3 years.
>
> 68% of utilities expect DERs to impact their operations within the next 5 years significantly.
>
> AMI meters, line sensors, and smart thermostats are the most critical devices for utilities managing DERs.

DERs offer significant opportunities for utilities to transform their operations but maintaining power quality, balancing supply and demand in real time, and ensuring adequate distribution infrastructure capacity with their legacy systems are all operational challenges that come along with DERs.

That means that the current IT systems will be changed. We think that in the moment when top management of incumbents will decide what software to use most of them choose to switch to one or another platform so that platforms could win not only on the new market but also on markets of traditional energy trading.

Platforms that involve end users in creating value already changed landscape in other industries. Platforms for transactive energy will do the same.



Evolution of flexibility integration pathways (source: Navigant, 2018)

Technology

We offer open-source components for energy services providers and device producers with clear API's or Visual Constructor to implement and run their business models in the blockchain.

ØNDER implements the latest blockchain developments to bring the best experience to end users. We spice state channels technology with Plasma approach to provide unprecedented capability to enable instant many-to-many transactions. Each transaction is unbundled, so that service fees are extracted automatically. Secured by blockchain smart contracts give an opportunity to reward all the market participants fairly.

How to win

Our strategy is structured in three steps:

1. We provide ØNDER protocol benefits to energy market players. Each case is launched as a separate project with the specific value proposition for the partner. We create cases with service providers, devices producers, regulators, utilities, and consumers.
2. We connect different players on the same test site territories. We expect to increase value that each participant gets from using ØNDER platform through cooperation.
3. We connect all cases within one platform to grant access to new markets worldwide. Also, we expect that new services will appear above API's of other services.

To succeed we are creating clear user interfaces for all platform users and we call it “The Game”. It is the separate project inside ØNDER ecosystem. It has several layers of technology and purposes:

User Interfaces for all our users (consumers, service providers, utility, regulation operator).

Simple constructor, translator, the search engine for smart contracts inside the ecosystem.

Special sandbox regime of work serves to agile and safe sandbox for service testing, allowing service providers and regulators to make data-supported decisions at national markets.

To boost The Game we have reserved a number of tokens we will distribute between participants.

Roadmap

There are three tracks in our development plan:

Technical track—what technologies we will develop to run the platform. There are several kits we are developing for all type of participants.

Organization track—what actions we do or what principles we develop inside community to run ØNDER platform most effectively.

Implementation track—the platform exists to solve real business cases, we will find ground to rollout our devices and run first services; also we will support our first service developers.

Since our work on ØNDER began in Q1 2018, we have managed to reach some goals:

Technologies:

Metering Kit v0.1 (will be upgraded to version 1.0 in Aug 2018)

Special wallet for our state device

Testing stand (7 devices exchange energy inside test microgrid; all transaction are processed with ØNDER platform)

Implementation:

”ØNDER Alpha Device”—the First device that meter producer made especially for our mutual project in University Campus. This device is a fully functional ØNDER network Node.

Energy management case in University Campus (100 Nodes). We have installed devices in Aug 2018. We will show the demo of this business case in Sept 2018.

Organization:

- Now we have the perfect development team, advisory board, media and legal support
- Whitepaper v1.1. was published (based on feedback we got from the market and our advisors)

Our closest big goals are

- develop the implementation of Plazma for our platform (4Q 2018). It let us to decrease the price per transaction on two periods;
- implement two business cases in Singapore and Germany (1Q 2019) (details of trials are discussed with customers).

More information about roadmap you could find on here.

Token model

We are working on details in cooperation with our partners and first contributors to build the right business model that suits well for every participant of the ecosystem.

Advisors

We are forming our advisory board with experts in energy, crypto-economic, investments and legal issues. We are welcome for more advisors to have different views and methods to reach goals and solve problems of the new digital energy world.

Main Team

Sergey Ukustov
CTO

Co-founder of the company. Developed the backbone of our technology stack.

Rustam Gabitov
CEO

Co-founder of the company. For 10 years he has experience in technology consulting in the field of organizational development, investment modeling and digital financial technologies in power engineering.

Grigory Melekhov
CBDO

Co-founder of the company. He has 10 years experience in one of most innovative fintech companies in Russia (Qiwi) as IT, project and product manager. For the last two years, he investigates opportunities how to disrupt conservative energy industry with new technologies that already have changed finance companies.

Sergey Rozhenko
Chief Energy Applications

Sergey heads power market foresight and energy application resort and leads communications with power market incumbent and newcomers. He is an experienced technical advisor with over 10 years of power market experience in Russia and Germany and the strong background in power system engineering and market regulations.

Whitelist sign in:
onder.tech/whitelist/

Have questions? Contact us:
hello@onder.tech
onder.tech