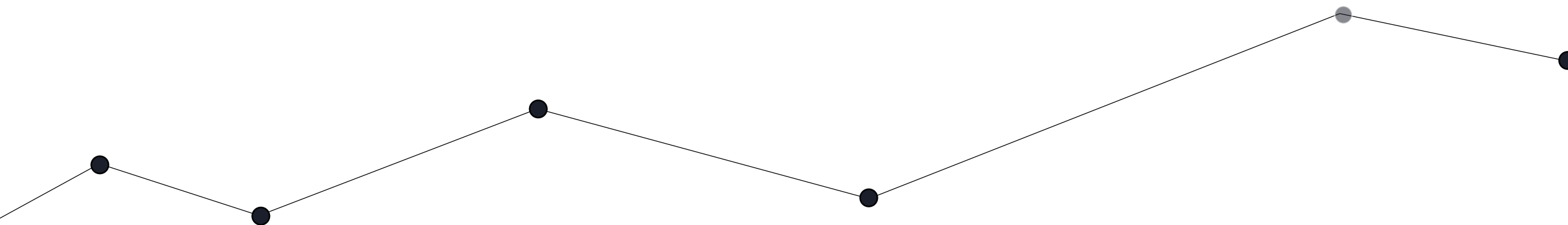


Exergy: The new energy data marketplace

September 2018



ENERGY SECTOR EVOLVING

Energy markets becoming increasingly decentralized

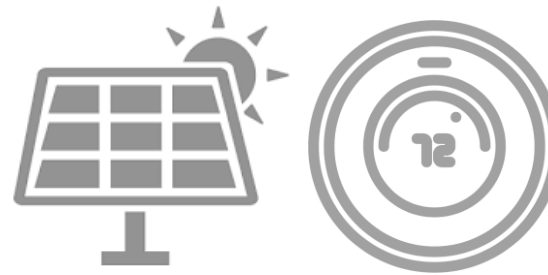
Yesterday



Fixed-price commodity
from large, centralized
generation



Today



Rise of distributed energy
resources, electric vehicles
and smart appliances



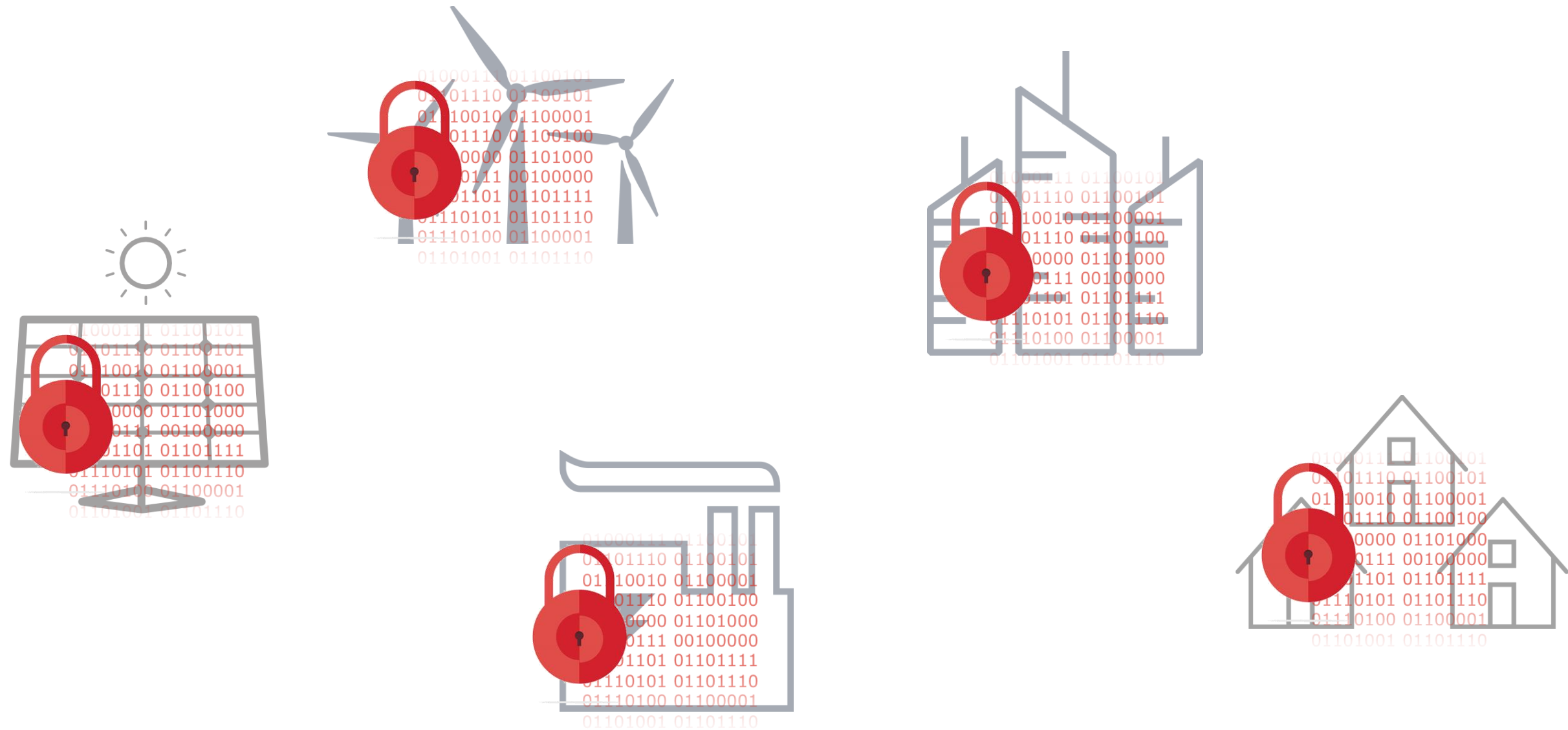
Tomorrow



Billions of households,
businesses and smart
appliances actively
participating in
interconnected electricity
systems

... BUT LIMITED BY STRANDED DATA

Constant streams of data generated, but stranded at grid edge;
Prior industry-led data initiatives yielded little results - no incumbent has aligned interest



EXERGY IS THE SOLUTION

A global platform for permissioning, standardizing and monetizing energy data, safely and securely



An energy data platform: We are building a marketplace for energy data to be transacted easily and securely among all stakeholders



A building block for local energy marketplaces: A data marketplace reduces the transaction costs and participation barriers for trading distributed energy resources



The fabric for an interconnected electricity network: The more we capture and store energy data, the more we drive efficiency and growth in decentralized energy markets

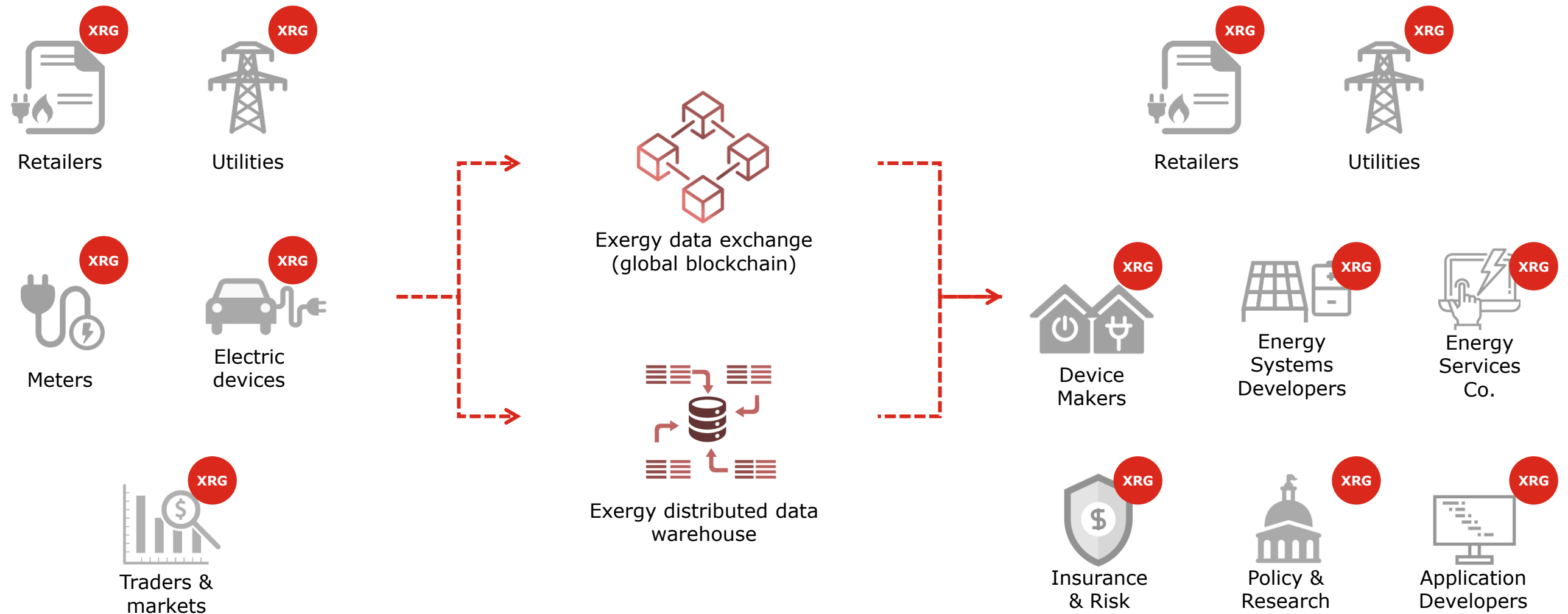
HOW EXERGY WORKS

Exergy is partnering with key actors on both sides of the marketplace

Supply of Energy Data



Demand for Energy Data



GROWING A GLOBAL NETWORK

20 industry-leading partners, **9** deployments underway

Our partners are the global leaders in each category of Exergy market participants

EPEXSPOT
EUROPEAN POWER EXCHANGE



Traders & markets

- Spot market exchange covering 50% of Europe's electricity markets
- Sponsoring and jointly developing 1 contracted project

SIEMENS



Device Maker



Energy Systems Integrator

- Largest industrial manufacturer in Europe with 83 billion EUR revenue
- Series A investor, and jointly deploying 2 contracted projects

centrica



Retailer



Utility

- Multinational energy and services company with 28 billion GBP revenue
- Series A investor, and sponsoring 2 contracted projects

energy web
FOUNDATION



Application Developers

- Global non-profit facilitating blockchain use in energy sector
- Jointly working towards standardizing data in the energy industry

peci



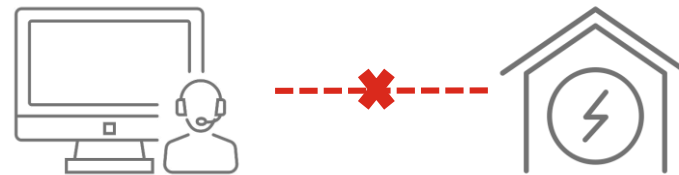
Energy Services Co.

- Created in 1979 to implement the country's 1st energy conservation policy
- Seed investor

EXERGY IN THE REAL WORLD

Cornwall local energy market: delivering new consumer choices

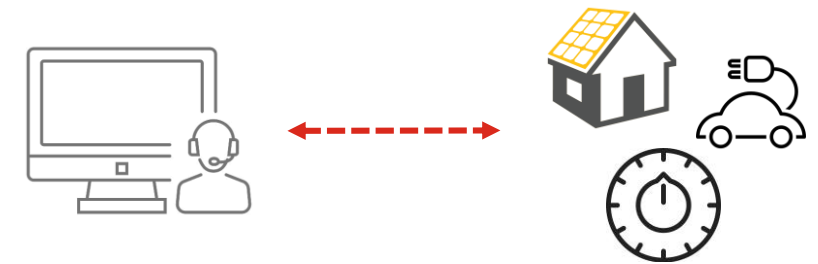
Before: distributed resources limited to self-generation



No incentives for local flexible resources to act in the interest of neighbors or system operators

Excess capacity from rooftop solar, smart thermostats, and intelligent switches goes to waste

Future: a local energy market bidding distributed resources



Piloting a blockchain-enabled feature to integrate with a local energy marketplace (LEM)

- System operators placing bids to procure from retailers and local distributed resources
- This improves system flexibility, unlocks new revenue sources for the owners of distributed assets
- ... and helps avoid costly transmission and distribution upgrades

- **Partner:** Centrica, U.K.-based multinational energy and services company 21.8 million customers
- **Started:** Q2 2018

Sponsored by: **centrica**

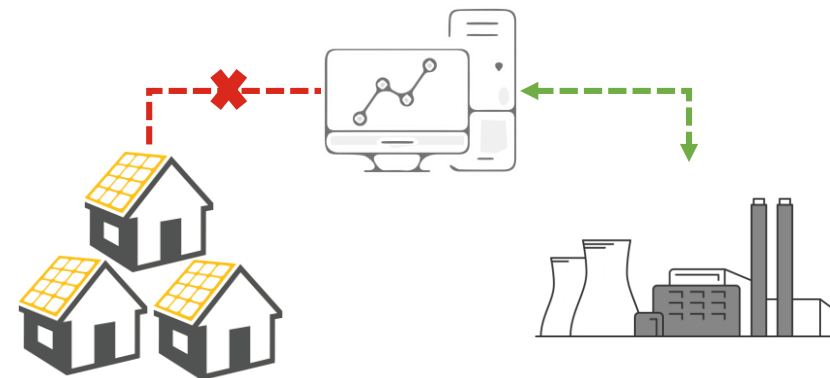
EXERGY IN THE REAL WORLD

Enabling local to wholesale energy market connection

- **Partner:** EPEXSpot, #1 power spot market exchange in Europe 529 TWh of trading volume
- **Started:** Q1 2018

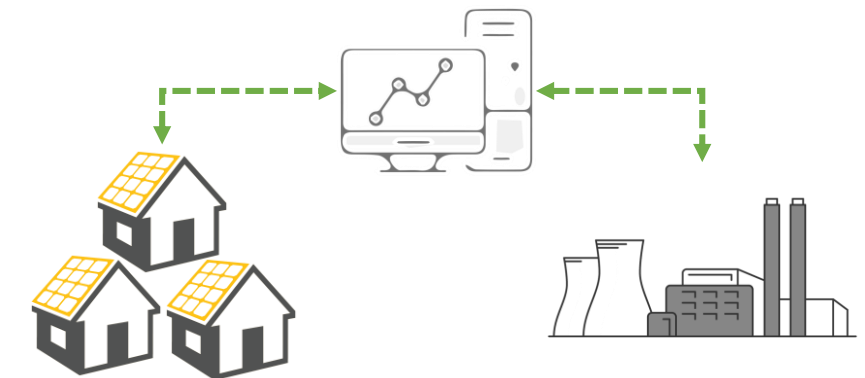
Sponsored by: **EPEXSPOT**

Before: power trading limited to centralized grid assets



Cost-prohibitive to transact, coordinate and use market pricing to control local distributed assets

Future: bi-directional trading between wholesale and distributed assets



- Exergy data platform permissions the necessary information flow
- API under development to allow automated trading between local and wholesale markets

EXERGY IN THE REAL WORLD

New data-driven product to optimize market efficiency

Before: long-term contracts

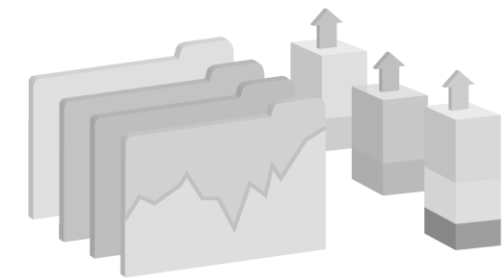


C&I customers historically manage electricity cost risk through:

- Long-term fixed contracts
- Long-term power purchase from renewable assets

This approach is less precise and imposes higher customer risk premiums

Future: hourly hedges for best rates in real-time



Trialing a new way to manage electricity costs using blockchain:

- Allows customers to automatically place orders for customized power hedges, down to hourly
- The marketplace matches orders with most attractive offer from suppliers

- **Partner:** Direct Energy, leading Texas-based electricity retailer with 4 million customers

- **Started:** Q2 2018

Sponsored by:  Direct Energy.

WHAT WE HAVE ACHIEVED

Laying the foundation for network launch

42 projects in the pipeline

9 projects contracted and underway on **4** continents

40 e-meters deployed and **275** e-meters contracted for installation

20 industry-leading partners giving us immediate access to **150** million potential customers



WHAT WE HAVE BUILT

Industry building blocks for transactive energy



e-Meter hardware:

the hardware hub for distributed data communications and storage



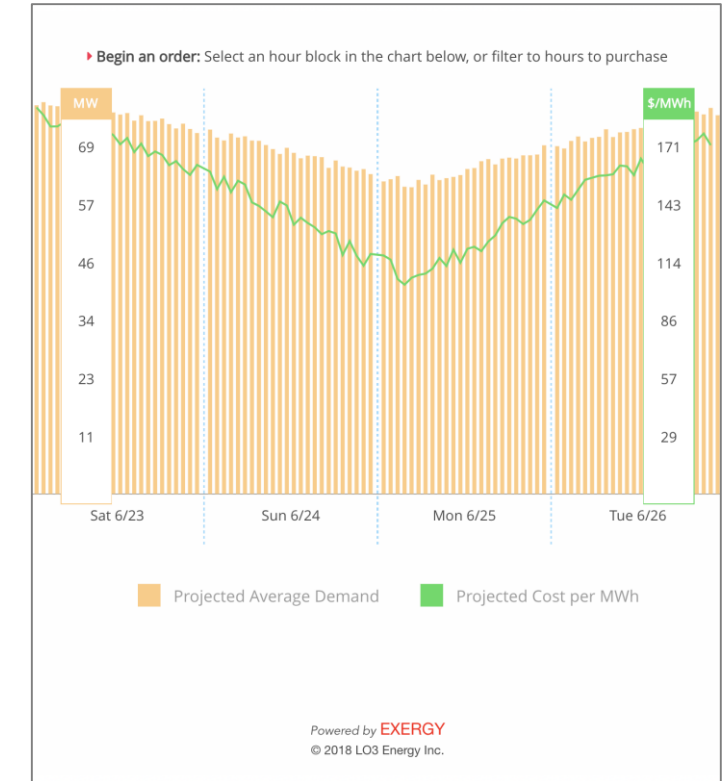
Exergy mobile app:

where homes and businesses interact with the local energy marketplace

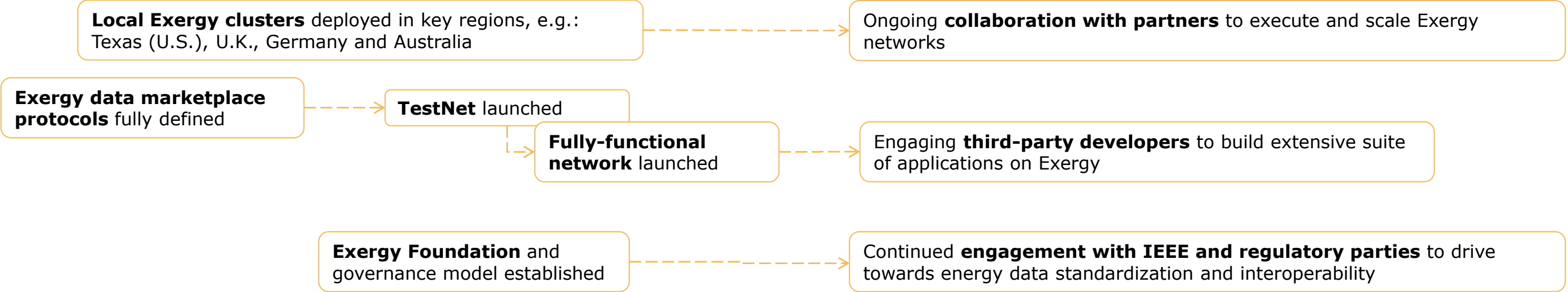
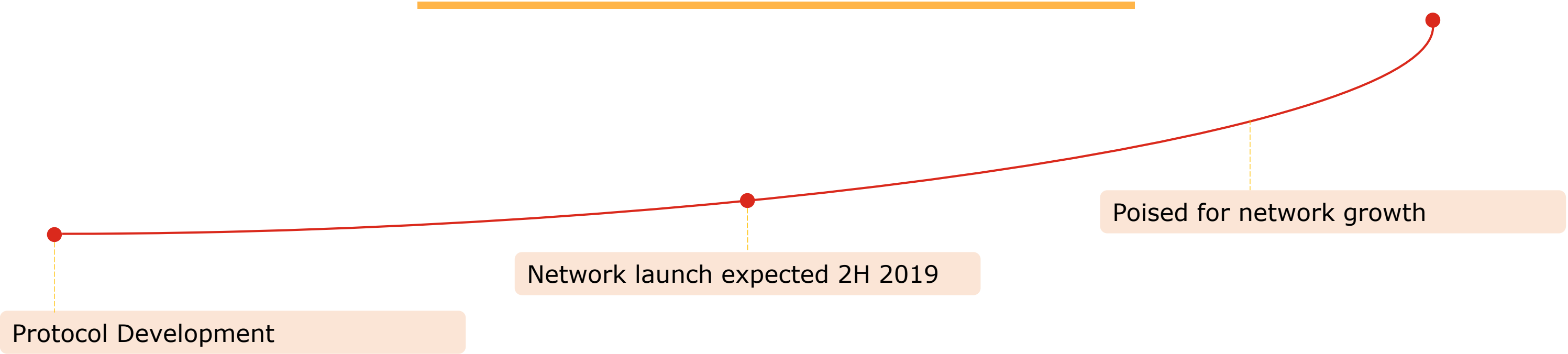


Exergy data marketplace:

the portal for placing energy trades and monitoring market signals



OUR ROADMAP AHEAD



LEADERSHIP TEAM



Lawrence Orsini,
CEO

CLEAResult®



Bill Collins,
COO

ECO SECURITIES **AIG**



Cian Montgomery,
Dir. of Technology

intel



Andrew Dresner,
Hardware Lead

Trossen Robotics



Chris Foster,
Cloud Architect

AUTODESK



Ben Conte,
Commercialization

B **BRIDGEWELL**
RESOURCES™ **SIG**
SUSQUEHANNA
INTERNATIONAL GROUP, LLP



Matt Brown,
Strategy & Ops

CREO



Stephanie Hilliker,
Product Manager

CHROMEDATA™ **MIT**



Aaron Ten Clay,
Sr. Software Engineer

GE



Donald Welch,
Sr. Software Engineer

hp **ebay**

EXERGY

Join the Revolution