IOTA

Smart Energy: IOTA Value Proposition

Simplified example use case

WIND		Energy sold data	Energy bought data
SOLAR	**PRODUCER**	**SERVICE PROVIDER**	**CONSUMER**

Energy production data → Energy production data → **PRODUCER** ←→ Energy sold data / **IOTA Payment** ← **SERVICE PROVIDER** ←→ Energy bought data / **IOTA Payment** ← **CONSUMER**

IOTA Secure Element   Chronicle   Value Transaction   IOTA Streams
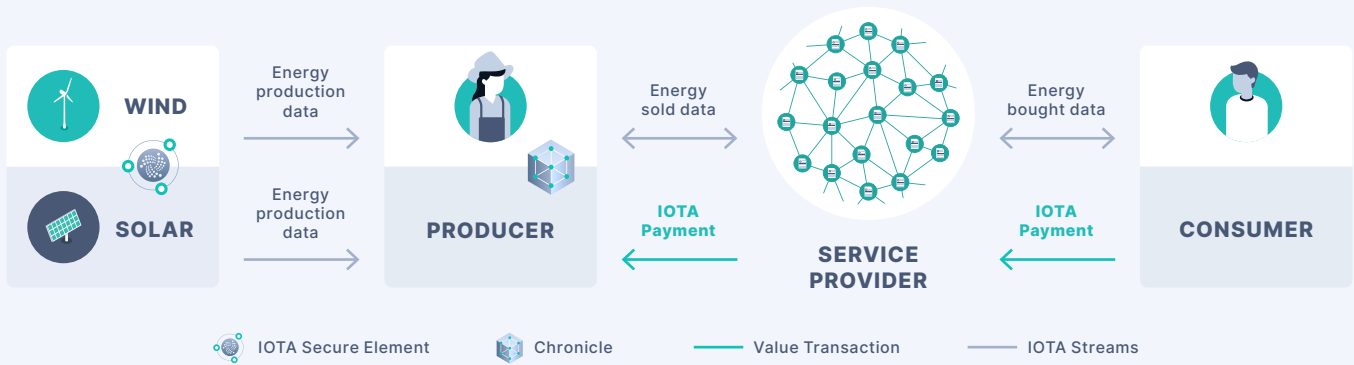
Value added

Data immutability/integrity

Why? Masses of small data packets need to be sent, unified identifications need to be issued and verified, people need to communicate, and all that data must be untampered with, IOTA can provide this service.
How? The IOTA ledger allows users to share any type of data without owning any crypto currency through 0-value transactions, and provides consensus within a distributed network that the data is in its original form.

P2P payments

Why? Utilizing IOTA's P2P payments removes the middleman from any system that requires payment infrastructure. IOTA P2P payments are fast with no fees and no single point of failure.
How? The IOTA ledger allows users to send IOTA payments and provides consensus within a distributed network that the payment has been made, how much and when.

Features

IOTA Streams

Why? Send confidential data to one or multiple people.
How? A second layer data communication protocol which adds functionality to grant or revoke access to an encrypted data stream.

Chronicle

Why? Store the Tangle's entire history and make that data easily accessible at scale.
How? Locally hosted storage running Chronicle software.

IOTA Secure Element

Why? Hardware connected to edge devices that issues data or value transactions to the IOTA network from as close to the source as possible.
How? The HW has a secure element that can store IOTA seeds thus giving its partner edge device its own IOTA wallet and computational power to send transactions to the tangle.

Unified Identity

Why? Unified Identity Protocol can prove real-world attributes of people, organization or things, online via a completely neutral platform.
How? IOTA implements the DID and Verifiable Credential standards for decentralized identity. These concepts are anchored into IOTA.