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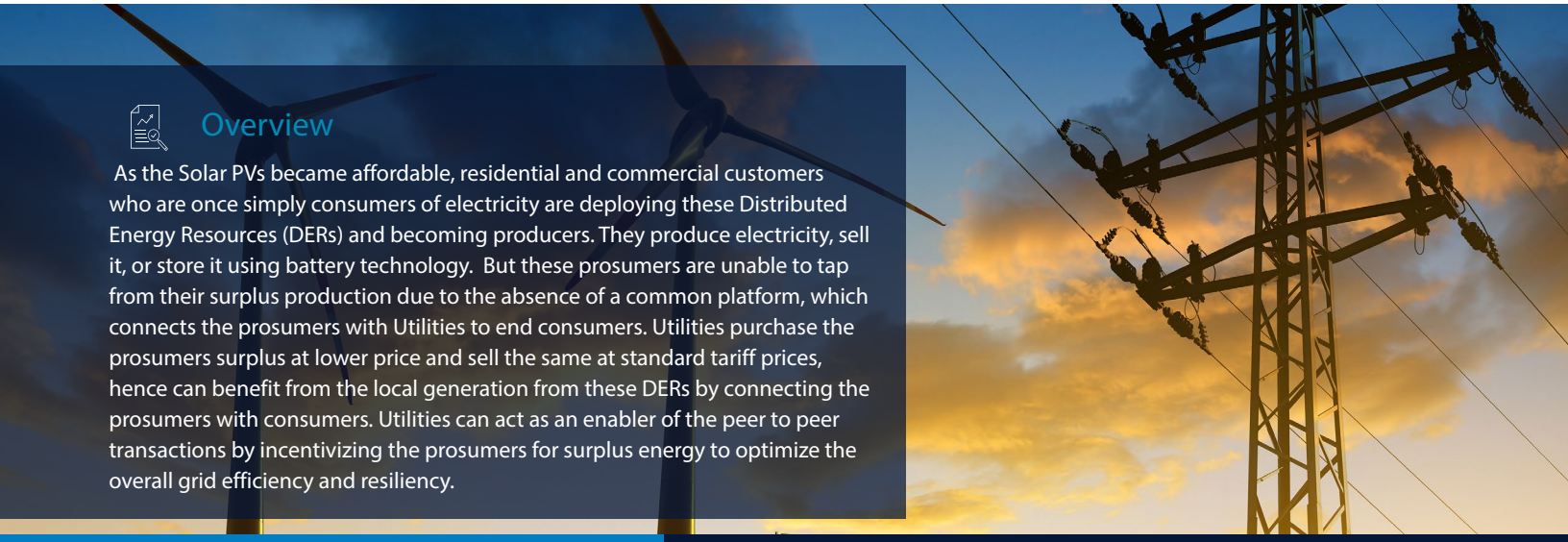
Navigate your next

INFOSYS BLOCKCHAIN LOCAL MARKETPLACE FOR PEER-TO-PEER ENERGY TRADING



Overview

As the Solar PVs became affordable, residential and commercial customers who are once simply consumers of electricity are deploying these Distributed Energy Resources (DERs) and becoming producers. They produce electricity, sell it, or store it using battery technology. But these prosumers are unable to tap from their surplus production due to the absence of a common platform, which connects the prosumers with Utilities to end consumers. Utilities purchase the prosumers surplus at lower price and sell the same at standard tariff prices, hence can benefit from the local generation from these DERs by connecting the prosumers with consumers. Utilities can act as an enabler of the peer to peer transactions by incentivizing the prosumers for surplus energy to optimize the overall grid efficiency and resiliency.

Solution Overview

Infosys Blockchain Local marketplace for Peer-to-Peer Energy Trading connects the prosumers to consumers, where consumers can place requests for their energy demand and smart contract picks the best offer available on the flex marketplace from prosumer listings. Utilities will enable seamless flow of energy using the grid infrastructure. Smart contract helps utilities in handling complex rate structure and settlements. Consumers can buy electricity at lower prices; prosumers can derive greater benefits from their investment and the utilities can charge transaction/ maintenance fees for providing the infrastructure and facilitating the energy trade.

Solution Key Benefits

- Single source of data for all grid connected DERs
- Complete knowledge of DER generation profile
- Decentralized marketplace enables trading between prosumers and consumers
- Increased utilization of the DERs
- Cost benefits to small scale prosumer from their surplus production

Case Study

Client Name	Problem Statement	Challenges	Benefits Delivered
Utilities company based out of US	The client was looking for a solution to capitalize on the local generation from DERs connected to the grid	• Lack of visibility on the DERs connected to grid and their generation profiles • Hight cost in balancing the grid due to intermittent increase in the demand • Transmission losses	• Complete knowledge of DER generation profile • Reduced energy costs by addressing the demand from the local generation • Cost benefits to the customers (consumers & prosumers)

To know more about Infosys Blockchain Local marketplace for Peer-to-Peer Energy Trading, please write to **blockchain@infosys.com**.

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