# TRANSACTIVE ENERGY

Transparent energy prices enable customers of all sizes to join traditional providers in producing, buying, and selling electricity — using automated control — to drive a reliable and cost-efficient electricity system

GRIDWISE® Architecture Council

*www.gridwiseac.org*

## WHY IT'S IMPORTANT:

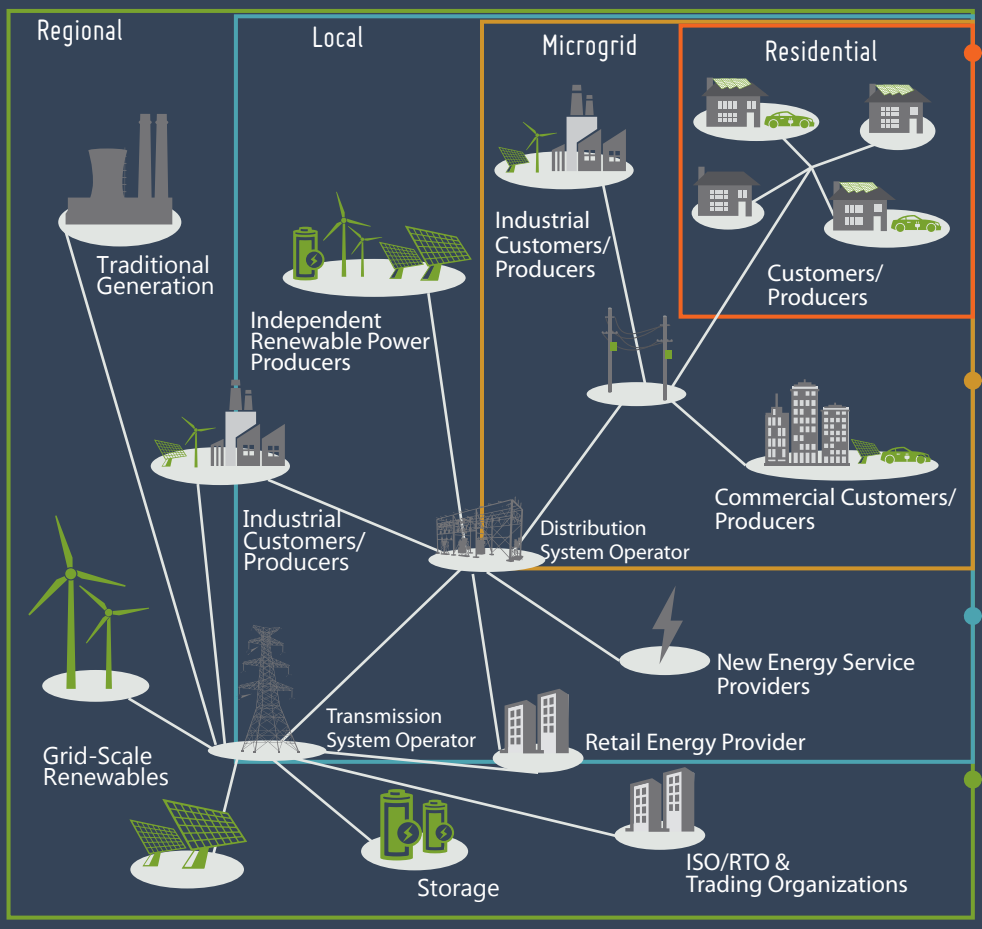
**Customers can choose to produce, buy, and sell**
energy while using dynamic prices and contracts to decide when to sell, when to buy, and when to adjust energy use for the most benefit

**Clean energy resources are here to stay**
on both small-scale customer sites and in large-scale production

**Customers can prioritize what matters to them**
–be it cost, reliability, profitability, or sustainability–using automated energy interactions

**Resilient microgrids speed recovery from outages**
in an increasingly complex and dynamic electric power system

## HOW IT WORKS:




### New customer choices

Customers can *choose* to:

- Participate in responsive demand to reduce overall energy costs
- Produce and sell excess energy and services
- Buy energy from multiple sources based on cost and value
- Take advantage of new energy services

### Resilient electric networks

Advanced automation and control–from substations and wires to homes, buildings, cars, and appliances–allow flexible microgrids that enhance local and regional resilience

### Expanded services

New and wider data exchange unlocks opportunities for new services to customers

### Improved regional integration

Increased interoperability between regional and local markets coordinates energy resource use to improve efficiency and reliability

## THE BENEFIT:

**Reliability**
Integrates smart control and automation to manage renewables and balance local energy requirements without disruption

**Affordability**
Customers can choose to buy and sell energy using price information to best manage cost and priorities

**Sustainability**
Permits incremental grid modernization with secure, interoperable technologies while integrating renewable resources

**Efficiency**
Economic signals for conventional and distributed energy encourage the most reliable, energy-efficient production and delivery of electricity

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