

# TRANSACTIONAL 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



Architecture Council

[www.gridwiseac.org](http://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

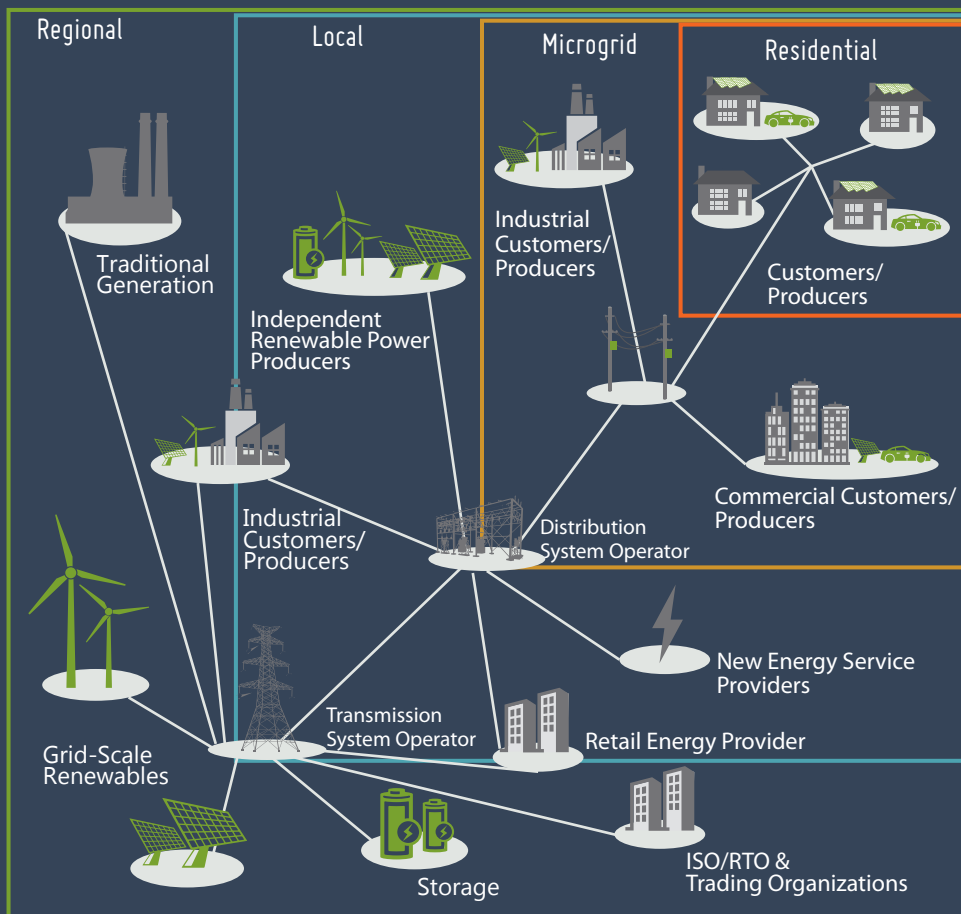
### Customers can prioritize what matters to them

—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