Reimagining Our Electricity Future

The world is transitioning from an electricity system based primarily upon large, centralized generation, transmission and distribution technologies, to one that also embraces distributed, digitally-enhanced, and low-carbon technologies. This includes smaller “microgrid” systems that include solar panels, batteries and generators. It also contains large, intelligent power plants that use software to increase output and reduce downtime.

While this transformation is unfolding at varying speeds around the world, with it comes a new twenty-first century power network that will have a positive development for both people and the planet. That’s because reliable, efficient and economically competitive power has long been a driver of economic growth and rising living standards. Higher levels of energy use are associated with better health, higher education levels, and greater job opportunities.

As more sustainable, intelligent, and customizable energy solutions become available, economic opportunities and the quality of life will rise for millions.

This change is being driven by three trends:

1. The emergence of digital technologies
2. The arrival of increasingly affordable distributed power technologies
3. Decarbonization through the maturation of renewable energy and energy efficiency options

These drivers are also changing the composition of electricity customers as new customers are emerging with different needs and preferences. Creativity and flexibility will be the keys to successful adaptation in this new era, but this is how businesses have always thrived in uncertain times. Companies will need the right technologies, platforms, people, and mindset to succeed.
Decentralization, Digitization, and Decarbonization

Three primary drivers are transforming the global energy system: decentralization, digitization, and decarbonization. Together, these factors are shifting the world’s power mix toward smaller, cleaner, intelligent technologies. This is occurring against the backdrop of the long-standing need for electric utilities to provide affordable, reliable, and sustainable power options.

ENERGY SYSTEM TRANSFORMATION

Movement toward a digitally enhanced system with low-carbon centralized and distributed technologies.