



# Industrial Internet of Things (IIoT) in the Energy Industry



## IIoT in Power & Utilities

Sensor technology, big data and analytics are now used to optimize operations, such as efficiently balancing supply and demand as customers connect to a smart grid. New business models are challenging the traditional industry players.

## IIoT in Oil & Gas

The convergence of big data, analytics and intelligent systems challenges the current silos of disparate technologies, from legacy SCADA to decision support systems. Emerging solutions are driving data and predictive analytics into the edge, the data center and the Cloud.

“Smart Grid may be viewed as IIoT for electric power 1.0. As sensor and equipment intelligence improve, energy balancing with solar, wind, storage, traditional generation, weather prediction and demand becomes more real time.”

Jeff Katz  
CTO, Energy, Environment and Utilities  
IBM  
Energy Task Group Co-chair  
Industrial Internet Consortium

## Key Benefits of IIoT in Energy

- Minimize unplanned downtime
- Balance supply and demand effectively, such as micro-grids
- Maximize operational efficiency
- Optimize business operations
- Enhance and protect systems

## IIoT Applications in Energy

- Predictive Maintenance
- Remote Monitoring
- Advanced, Distributed Control
- Worker Safety
- Cyber Security





# Energy Task Group

## Ecosystem of Experts

The Industrial Internet Consortium Energy Task Group brings together end user organizations, product vendors, service providers and research organizations to create new IIoT solutions, generate operational efficiencies and develop business model innovations.

## Mission of Energy Task Group

Bring together business and technology experts in the Energy sector from around the world to verify the feasibility of technology solutions and assess the viability of new business models emerging with the adoption of IIoT.

## Key Benefits

- Form collaborative relationships
- Access new knowledge and technologies
- Innovate through testbeds
- Influence future IIoT development
- Explore new business models
- Co-author publications
- Create market momentum

## Resources

- [White Paper](#): *Applying the Industrial Internet Reference Architecture to Smart Grid Testbed*
- [White Paper](#): *Beyond Digitization: The Convergence of Big Data, Analytics and Intelligent Systems in Oil & Gas*
- [Case Studies](#) & [Testbeds](#)

“Without a doubt, the adoption of advanced technologies derived from the Industrial Internet of Things is enabling the digital oilfield and increasing productivity in the oil & gas industry.”

Eddie Lee  
Director - Global Industry Marketing  
Moxa  
Energy Task Group Co-chair  
Industrial Internet Consortium