



SmartHub.ai

## ENERGY™: Reliable Energy Infrastructure Management AI/ML-driven Energy Infrastructure Management

Renewable Energy is our future - the Energy industry has been at the forefront in connecting far-flung operations and managing them from centralized locations striving to control everything from down-hole drilling to electricity production from remote wind farms, and given their importance, security is paramount.

SmartHub's ENERGY™ solution provides a single workspace, where teams can verify in seconds that every device is not only operating, but patched, secured and performing optimally. Every device can alert the team if a performance or security issue occurs, and in many cases "self-heal" the issue without manual intervention.

SmartHub's ENERGY™ with SmartHub NeuralEdge™ provides a robust management platform for all of the devices on the "Edge" of the Energy operations. Additionally, each time a camera, access control, or any edge device comes online, a new threat potential is born. SmartHub Infer™ enables every device is monitored and provides insights that enables operational and physical security team become more efficient as well as deliver a positive impact to the corporate bottom line.

### VISIBILITY & OPTIMIZATION



Collect data on solar irradiance, wind speed, and other environmental factors. Optimize energy generation by adjusting the positioning of solar panels or the pitch of wind turbine blades based on real-time conditions.



### SAFETY & EMERGENCY RESPONSE

Monitor equipment conditions, detect hazardous situations, and provide early warnings during emergencies to improve worker safety and reduce the risk of accidents.

Get notified when configurations are changed from their optimal settings or even set parameters remotely.

### PERFORMANCE & METRICS



Real-time monitoring of solar panels / wind turbines, allowing operators to detect and address issues promptly (like faulty inverters or damaged blades), enabling optimal performance, and minimized downtime.



### REMOTE MANAGEMENT

Access data and control devices from a centralized location, reducing the need for physical site visits and enabling more efficient operation.

### USAGE & PLANNING INSIGHTS

Energy generation patterns, equipment performance, and maintenance requirements. Predictive models to forecast energy output and optimize operations.



Analyze Health and vulnerability patterns across device models, firmware versions and locations. Planning Inputs for hardware/software refreshes, equipment purchases & maintenance

### SECURITY & PROTECTION



Protect solar farms and windmills from theft, vandalism, and unauthorized access. Sensors, cameras, and alarms provide real-time alerts and Notifications.



### ENVIRONMENTAL & RESOURCES MONITORING

Monitor air-quality, noise levels & bird activity around the plant. Monitor resource usage, such as water in solar thermal plants or lubrication in wind turbines to optimize resource consumption & reduce waste



Questions? [Contactus@smarthub.ai](mailto:Contactus@smarthub.ai)



[www.smarthub.ai](http://www.smarthub.ai)



SmartHub.ai

SmartHub.ai is a fast-growing, spin-off from VMware, headquartered in Bay Area, CA with offices in Seattle and Bangalore.

With strategic investments from leaders in infrastructure management & edge computing, SmartHub.ai is redefining the Enterprise Edge IoT space. SmartHub INFER™, SmartHub NeuralEdge™, & SmartHub ENERGY™, designed for the Edge/AI workloads is a set of AI-powered S/W products that accelerate edge endpoint management & intelligence.