HCLTech | Supercharging Progress™

Net Zero Intelligent Operations

Keeping the promise of a brighter future with IoT powered intelligence

Overview

One of the key challenges in tackling climate change is that there are interdependencies in the Earth system, with co-benefits and trade-offs in pursuing different sustainable development goals. Data and digital technologies now offer tools to support a better-connected system, and to yield overall solutions that are better than the sum of its parts.

At HCLTech, we are committed to enable our clients to achieve their sustainable development and net-zero emission goals – critical to ensure the future of this planet.

About Our **Solution**

Net Zero Intelligent Operations (NIO) by IoT WoRKS™ is our foremost sustainability-focused offering that aims to help our customers monitor, normalize, compare and reduce energy consumption and GHG emissions in real-time.

It also enables calculating, reporting in Scope 1, 2, and 3 required which can be produced for validation in front of compliance organizations such as GHG, GRI, SBTi, TCFD, and other geography or industry-specific agencies. Its unique inter-comparability and normalization approach across multiple equipment, processes, and facilities helps in identifying emission optimization potential.

NIO gives unparalleled insights into an organization's energy consumption and carbon emission metrics. These metrics can be standard or customer-specific. This enables the solution to look at the total energy consumption across the organization and highlight facilities and assets basis energy efficacy that leads to reduced carbon emissions that contribute to net-zero goals. With NIO, you define your targets and monitor any deviations that can prevent you from achieving those targets.

Key **Features**

Organization to equipment level visibility

Inter-comparability between sites or equipment

Sustainability Scope 1, 2, and 3 reporting

Compliant with standards such as GHG, TCFD, GRI, etc

Saving potential identification and target management
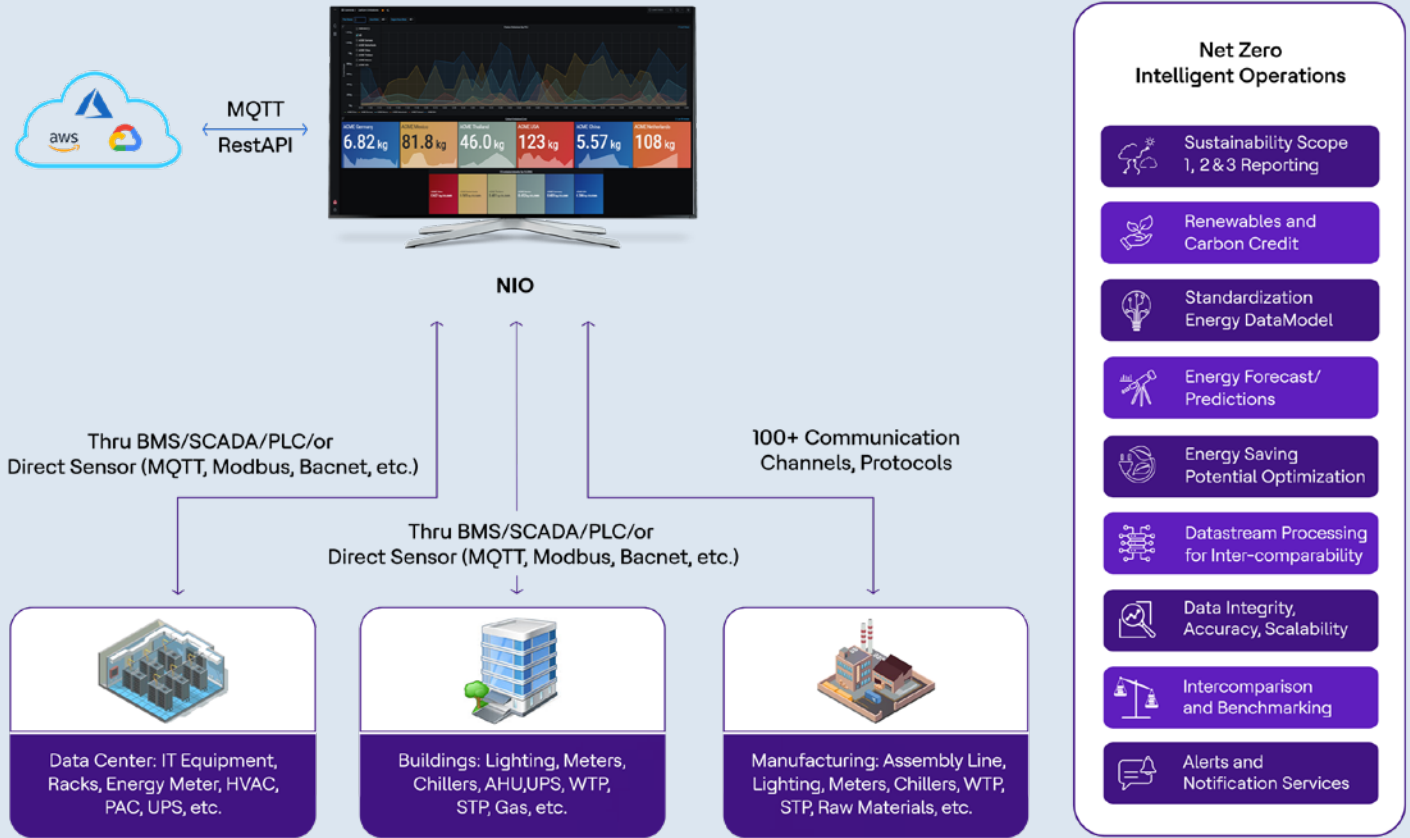
Persona-based views

Highly scalable

Flexible configuration

Vendor agnostic
· Onboard on any cloud
· Integrate any asset

Solution **Architecture**

MQTT
RestAPI

NIO

Thru BMS/SCADA/PLC/or
Direct Sensor (MQTT, Modbus, Bacnet, etc.)

100+ Communication
Channels, Protocols

Thru BMS/SCADA/PLC/or
Direct Sensor (MQTT, Modbus, Bacnet, etc.)

Data Center: IT Equipment, Racks, Energy Meter, HVAC, PAC, UPS, etc.

Buildings: Lighting, Meters, Chillers, AHU,UPS, WTP, STP, Gas, etc.

Manufacturing: Assembly Line, Lighting, Meters, Chillers, WTP, STP, Raw Materials, etc.

Net Zero Intelligent Operations

- Sustainability Scope 1, 2 & 3 Reporting
- Renewables and Carbon Credit
- Standardization Energy DataModel
- Energy Forecast/ Predictions
- Energy Saving Potential Optimization
- Datastream Processing for Inter-comparability
- Data Integrity, Accuracy, Scalability
- Intercomparison and Benchmarking
- Alerts and Notification Services

Benefits

Shift from Local to Global – Rapid shift in energy optimization measures – annualized energy savings of 7-9%

Reduced Carbon Footprint – Reduce CO_2 output between 8-10% per year

Optimize Operational Costs – Achieve nearly 6-8% annualized cost savings

Leverage Best-in-class practices – Utilize real-time data for enterprise best practices

Identify significant energy users (SEUs) – Ensure regulatory compliance: key standards like ISO 50.001

Case Study

Business Challenge

The client was looking to monitor its GHG emissions and energy consumption across its global production network Sharing of best practice examples within this network was a major driver for improvement
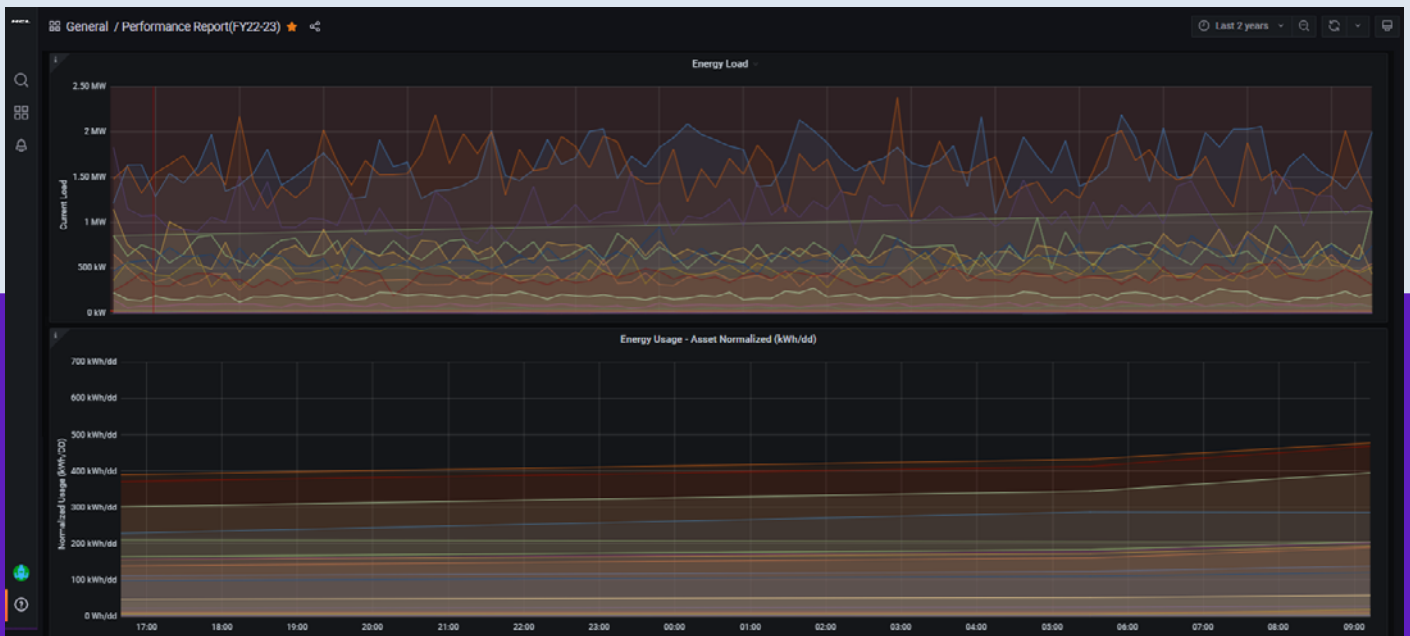
Solution Delivered

- Build a real-time solution interfacing to PLC/Scada and building automation systems

- Capture and normalization of energy consumption data and energy source data in order to find drivers for energy consumption and best practices for operations across the network

Business Outcomes Delivered

Based on the solution, the client committed for **7-10%** of energy consumption across its production network

About Us

IoT WoRKS™ at HCLTech

IoT WoRKS™ is a dedicated IoT business unit of HCLTech Our award winning, best-in-class, customer and industry specific, deployment ready solutions co-created with customers, enable them to maximize effectiveness and returns on their asset investments. Rated as a global leader in IoT consulting & services by top analysts, our solutions, enable IoT-led business transformation through creation of more efficient business processes, new revenue streams and business models that deliver measurable business outcomes. At HCLTech, we believe that the transformative impact of IoT is realized by IoTizing the 'things', connecting the assets to a data platform and then using the data to derive business insights and taking business decisions which ultimately lead to change in enterprise's processes and people practices.

🌐 hcltech.com/Internet-of-Things-IoT

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HCLTech is a global technology company, home to 211,000+ people across 52 countries, delivering industry-leading capabilities centered around Digital, Engineering and Cloud powered by a broad portfolio of technology services and software. The company generated consolidated revenues of $11.79 billion over the 12 months ended June 30, 2022. To learn how we can supercharge progress for you, visit hcltech.com.