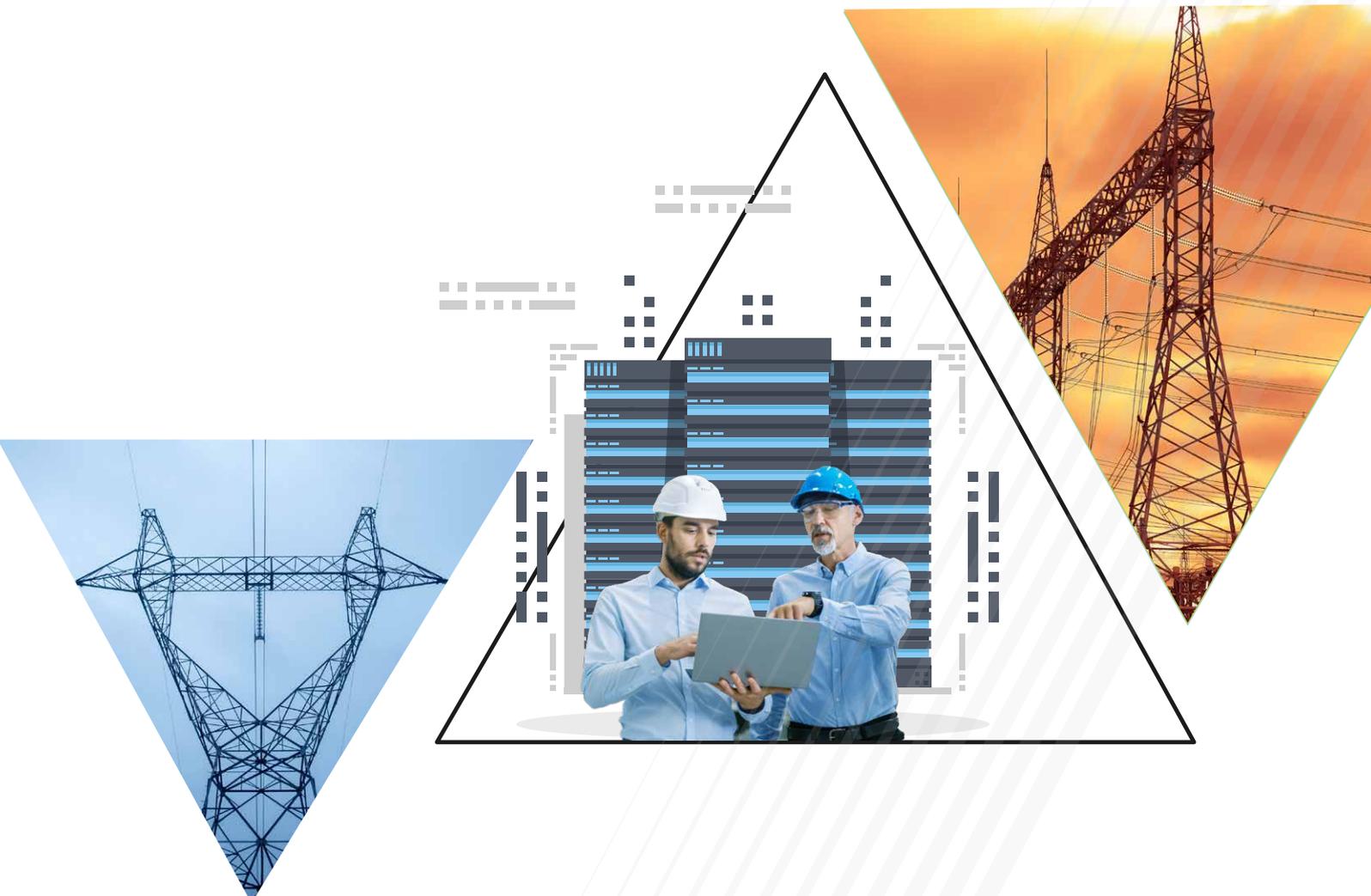


Zero Impact Platform

Connect business resilience
to sustainability



Business transformation must be rooted in sustainability

To thrive in a world where customer needs are constantly evolving, and they are closer to business than ever before, power and utility organizations must be responsive. The recent crisis, on the other hand underlined the need for adaptivity and business resilience - as companies, in their bid to ensure continued energy supply, transformed their business models. Now, with stricter global sustainability regulations in place, energy and utility businesses are beginning to adopt energy transition initiatives, while looking to reduce the energy intensity of their processes and field operations. This is reflected in the low 1.5% growth rate in energy usage, annually.

While current Energy Management (EM) systems allow organizations to measure operational and process energy intensity at a local level, they are largely inaccurate and ineffective while measuring and comparing data across multiple locations or sites - therefore denting utility companies' sustainability goals and objectives.

Powerful enterprise-level energy intensity measures necessitate accurate collection and inter-comparability of data across multiple locations - as companies must first measure, before they can begin to manage their energy footprint.

Nearly 25% of Europe's energy consumption was accounted for by the E&U

Global EM system market size is est. to reach USD 42 Bn by 2027, at a 9.9% CAGR

Currently E&U and O&G industries account for 40% of EM systems end users

Sources: ScienceDirect, Our World in Data, Eurostat, ECIU, Fortune Business Insights

But introducing intercomparability of energy optimization measures at the enterprise level, remains a challenge

Classical EM systems are on-premise solutions that typically offer key functionalities to on-field employees. These functions include:



Collecting energy data from sensors in near real-time



Aggregating energy data according to asset hierarchy up to site-level



Measuring and reporting Scope 1,2,3 emissions



Providing local dashboard for local operations monitoring



Optimization of parameters by local operators

Current challenges include:



Lack of Intercomparability

Sites are not mutually comparable - leading to uncertainty about energy optimization potential at enterprise level

Lack of manageability

Enterprises rely on local efforts to gain energy optimizations

18% energy professionals have expressed difficulties in inaccurate data collected by current generation of EM systems

About the solution

Zero Impact Platform (ZIP) by IoT WoRKS™, delivers a set of functionalities to optimize energy intensity at the enterprise level – enabling energy and utility organizations to optimize ESG parameters, as well as energy intensity of assets and processes. This enables ZIP to transform enterprise business processes, and help them to achieve their organizational sustainability goals. AI powered ZIP begins by collecting real-time non aggregated data from multiple sites, normalizing the data and analyzing efficiency of the optimization measures. The Cloud-based solution then identifies global energy optimization potential across the value chain with reference to best-in-class standards, cross checking them against the efficiency measures and finally, applying the energy optimization measures to the assets/processes/sites. The key value of ZIP lies in the Digital Twin backed/intelligent enterprise level intercomparability it introduces while arriving at energy intensity optimization measures – helping energy and utility businesses become resilient, build sustainable business practices, and improve regulatory compliance.



Features:

- ◆ Real-time normalization
- ◆ Unified Smart Sustainability Data Model
- ◆ Measure Scope 1, 2, 3 emissions and KPIs like: air quality, wastage, GHG, carbon, water quality, employee health, asset energy usage
- ◆ Smart dashboards for KPIs and reports
- ◆ Digital Twin led-automation and calculation of CO₂ levels
- ◆ Real-time anomaly detection
- ◆ Predictive models for building efficiency measures

Introduce Flexibility:
Eliminate vendor lock-in – as ZIP is easily portable, cloud-agnostic and vendor-independent

KPIs available:

- ◆ Efficiency measures (abs [kwh], Rel [%], TOP lists)
- ◆ Energy transparency (%)
- ◆ Energy per unit and user
- ◆ Energy cost (\$/e)
- ◆ CO₂ output (kg/t)
- ◆ Optimization potential (abs [kwh], Rel [%])
- ◆ Industry Sustainability Indices
- ◆ Global & local policy compliance

Benefits:

Shift

from Local to Global:

Rapid shift in energy optimization measures
- enabling up to 10% energy savings

Reduce

Carbon Footprint:

Reduce CO₂ output by up to 10%

Leverage

Best-in-class practices:

Utilize real-time data for enterprise best practices

Optimize

Operational Costs:

Achieve up to 10% cost savings

Ensure

regulatory and ESG compliance:

Key standards like ISO 50.001/
regional policies

Identify

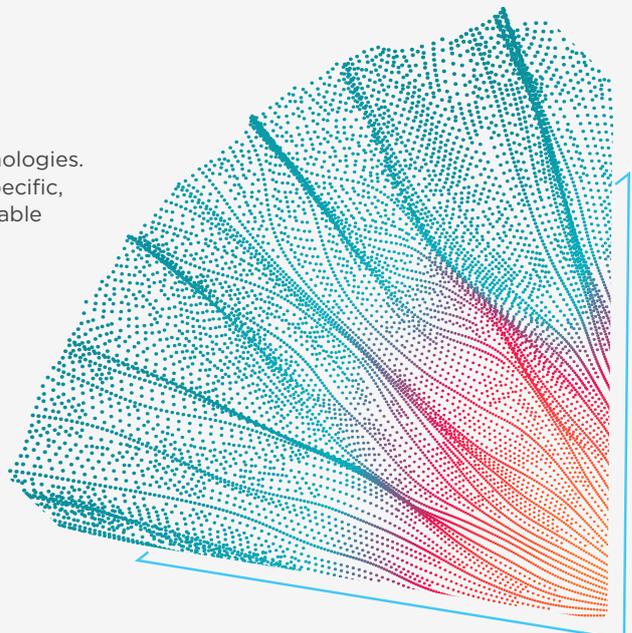
significant energy users and assets

Who we are

IoT WoRKs™ is a dedicated IoT business unit of HCL Technologies. 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 HCL we believe that the transformative impact of IoT is realized by IoTizing the 'things', connecting the assets to a data platform.



Analyst Recognitions

LEADER

IDC Marketscape,
IoT Consulting and Systems
Integration Services,
2020

IDC



LEADER

Zinnov Zones for
Connected Assets &
Connected Logistics,
2019

Zinnov



LEADER

ISG Provider Lens™
for IoT managed
services,
USA 2019

ISG



LEADER

ISG Provider Lens™
for IoT consulting
and services,
USA 2019

ISG



LEADER

ISG Provider Lens™ for
IoT in Manufacturing,
USA 2019

ISG

