



INTEGRATED ZERO-EMISSION POWER
Turnkey, field-ready solutions
for reliable energy supply.



SUSTAINABLE ENERGY PRODUCTION & STORAGE SOLUTION

Zero-emission solutions for on-site power generation

Reliable, scalable, and immediately
deployable systems for critical operations
worldwide, powered by hydrogen

Towards the phased end of diesel generators

For your infrastructures and critical operations, energy is no longer a simple resource: it has become a strategic challenge.

IN THIS CONTEXT, EXISTING SOLUTIONS ARE REACHING THEIR LIMITS:

- ⊗ **Diesel is a major emitter of CO₂ and particulate matter**
- ⊗ **The gradual implementation of taxes and bans** related to greenhouse gas emissions
- ⊗ **Diesel costs are becoming increasingly volatile** due to strong dependence on fossil fuels, exposing economies to price fluctuations and geopolitical tensions, and undermining long-term energy sovereignty
- ⊗ **Batteries are not suitable** for continuous high-power applications
- ⊗ **Electrical grids may be saturated, not resilient, and increasingly destabilised** by rising demand and the intermittency of renewable energy sources



A new standard is emerging

 Clean

 Reliable

 Flexible

 Scalable

Far more than just equipment, it is a fully integrated zero-emission energy solution, designed for operational performance in real-world conditions.

A complete energy-as-a-service solution

INOCEL delivers a fully integrated solution that goes beyond equipment, covering the entire operational lifecycle.

Power generation

Emission-free industrial generators designed for:

- Continuous operation
- High efficiency
- Fast start-up
- Operational reliability



+ Turnkey deployment

- Site assessment & system design
- Delivery, installation & commissioning
- Certified hydrogen safety procedures & site safety requirements

+ Hydrogen supply (optional)

- Flexible supply and storage solutions
- Adapted to site and project duration
- Reliable and consistent energy delivery

+ Operations & support

- Preventive maintenance
- Remote monitoring
- Technical support
- Performance optimisation
- CO₂, ESG & monthly reporting (hydrogen, energy)

INOCEL, a complete energy-as-a-service solution delivering end-to-end supply, deployment, and management of zero-emission generators.

INOCEL provides a comprehensive solution to:

- **Decarbonise** your operations while enhancing your brand image
- **Reduce and sustainably control** your energy costs
- **Adapt** to increasingly stringent regulatory requirements
- **Position** your organisation as a pioneer in carbon-free energy
- **Secure your energy autonomy** and **regain control** over your supply chain
- **Accelerate** the integration of sustainable energy production and storage solutions

✓ Reliability

Continuous, high-performance power supply ensuring operational stability and real-time performance monitoring, with constant customer support to guarantee service continuity.

🔄 Rapid deployment

Ready-to-use solutions enabling fast on-site commissioning, combined with accelerated execution across the entire project lifecycle (installation, integration, commissioning).

♻️ Decarbonisation

Immediate reduction of carbon emissions through hydrogen-based energy solutions, delivering zero on-site emissions.

📈 Efficiency

Optimised energy performance ensuring maximum output and cost-effectiveness.

Take control of your energy

Energy choices have a direct impact on your operations, your costs, and your sustainability goals.



A new approach to energy

HOWEVER, TRADITIONAL MODELS IMPOSE:

- ⊗ **A persistent dependence on fossil fuels**, leading to a loss of control over cost structure, with diesel structurally exposed to volatility and sustained price increases, while alternatives such as hydrogen offer a long-term path toward competitiveness
- ⊗ **Direct exposure to energy price volatility**, making financial planning uncertain
- ⊗ **Growing ESG (Environmental, Social and Governance) pressure**, accelerating the transformation of energy models
- ⊗ **Limited flexibility in current solutions**, restricting their ability to adapt to real demand variations and modular use cases

WITH INOCEL, ENERGY BECOMES:

Flexible

Scale capacity to your needs, from a few kW to MW-scale systems, thanks to a modular and scalable architecture

Operational

Turnkey power supply with minimal operational burden

Predictable

Gain control over long-term energy costs and reduce exposure to market fluctuations

Sustainable

Immediately reduce emissions and accelerate your decarbonization journey



From constraint...

...to advantage



Global energy provider

THE NEW STANDARD

EXISTING MODELS

⊗ **Limited energy flexibility:** oversized generators often run at partial load, leading to inefficient fuel consumption and energy losses

⊗ **Fuel-based energy systems,** with risks related to combustion, storage, and handling

⊗ **Diesel systems,** whose installation and logistics are proven but heavily dependent on infrastructure

⊗ **Outsourced system integration:** multiple suppliers requiring separate contracts for generator rental, fuel supply, and maintenance

⊗ **Diesel emissions** (NOx, CO₂, particulates) **and noise pollution**

⊗ **Limited operational visibility:** basic metering and average consumption data, with little real-time insight

⊗ **Unpredictable fuel costs:** strong exposure to oil and gas price volatility

⊗ **Intensive and recurring maintenance of diesel generators,** leading to high operating costs and frequent downtime. Mechanical complexity, many wear parts, and regular interventions reduce overall equipment availability

⊗ **Diesel architectures rely on unit-based or redundant generators,** requiring full duplication of machines to ensure continuity of service. This leads to permanent overcapacity, low flexibility, and overall energy inefficiency



Flexible, scalable, on-demand energy production: power is adapted to actual demand, optimising hydrogen consumption without oversizing



Security-first hydrogen energy systems, designed with an integrated, multi-layered, continuously monitored safety architecture, ensuring constant risk control and secure operations



Integrated hydrogen solutions, designed for simplified and rapid deployment



Fully integrated turnkey solution: a single point of contact for power generation, hydrogen supply, deployment, and lifecycle management



Zero-emission hydrogen energy: no CO₂, NOx, or particulate emissions, only water vapor



Real-time supervision and control: performance tracking, availability, hydrogen consumption, and emissions monitoring, with automated alerts and continuous operational management. Reduced maintenance through predictive maintenance capabilities, enabling anticipation of interventions, optimised usage, and rethinking of energy operations



Predictable energy costs: improved control over expenditures through a stable and scalable hydrogen cost structure, offering long-term visibility and potential short- to mid-term cost reduction



Significantly reduced maintenance thanks to simplified architecture, fewer moving parts, and a design optimised for reliability. This approach increases system uptime while reducing operating costs and service interruptions



Modular architecture based on 300 kVA building blocks, with native redundancy. Power is dynamically shared and distributed, ensuring high service continuity without oversizing, while optimising investment and energy performance

Designed for your operational realities



Short-term or long-term projects



Remote or constrained environments



Variable energy demand



CAPEX or OPEX strategy (purchase or rental models)

Designed for demanding environments



**CONSTRUCTION
& BUILT ENVIRONMENT**
*Construction, Government & Public
Facilities, Commercial Real Estate,
Large Campuses*



**MEDIA, EVENTS
& PRODUCTION**
Events, Media & Location Production



**INDUSTRY
& NATURAL RESOURCES**
Manufacturing, Mining, Agriculture



**DIGITAL
& DATA INFRASTRUCTURE**
*Data Centers, Telecom & Remote
Communications*



**ENERGY
& ELECTRIFICATION SYSTEMS**
*Energy & Utilities, Microgrids, Hybrid
Systems, EV Charging, Hydrogen
Infrastructure, Rural Electrification*



**TRANSPORT
& MOBILITY INFRASTRUCTURE**
*Rail, Airports, Ports, Marine, Heavy
Mobility Electrification*



**CRITICAL
& PUBLIC SERVICES**
*Healthcare Infrastructure, Emergency &
Disaster Relief*



**TOURISM
& HOSPITALITY**
Hotels, Resorts, Tourism

Energy adapted to your financial strategy

PURCHASE model

- One-time investment
- Full ownership of equipment
- Optional maintenance, with guaranteed performance optimisation service
- 2-year warranty (parts & services)

RENTAL model

- Flexible contracts (days to years)
- Predictable cost
- Maintenance & support included
- No upfront investment

Built for industrial performance

At the core of INOCEL systems is a next-generation hydrogen fuel cell technology, developed over more than 25 years of R&D in collaboration with the CEA and protected by more than 18 patents, recognised as one of the highest-performing solutions on the market, designed to deliver performance, energy efficiency, durability, and robustness.

High electrical efficiency: 54% (BoL)

Continuous 24/7 operation

Fast response to load variations

Reduced maintenance requirements

Designed for deployment

CONTAINERISED SYSTEMS

ON-DEMAND SCALABLE POWER
(regardless of power requirements)

PLUG-AND-PLAY INTEGRATION

LOW NOISE, ZERO EMISSIONS



⚙️ Performance:

Electrical efficiency	54% (BoL)
Total efficiency (CHP)	>80%
Heat recovery	>30%
Lifetime	20 years

☀️ Operating conditions:

Temperature	-20°C to +40°C
Humidity	10–90%
Noise	<70 dBA

⚡ Voltage:
400 VAC (50/60 Hz)



⚡ Power Output*:

*Cos phi = 0.8

GEN-Z 300

Nominal	240 kVA / 200 kW
Peak 1H	300 kVA / 240 kW

GEN-Z 600

Nominal	480 kVA / 400 kW
Peak 1H	600 kVA / 480kW

🔱 Hydrogen:

ISO 14687:2019	Grade D
Pressure	20–380 bar(g)

🏠 Configuration:

ISO containerised systems (13' / 20' / 2 x 40')
Modular & scalable architecture
Integrated monitoring system

🛡️ Compliance:

IEC 62282-3-100
IEC 13849
CE certification



Emission-free energy.

Power you need.

With INOCEL, turn energy into a competitive advantage:

 Zero-emission  Flexible  Reliable

Let's talk



sales@inocel.com
www.inocel.com

