



**NIMEC LIMITED**

**Fast-Easy-Amazing**

Company No: 12798186

Founded: August 2020

Status: Active

# Magnetic Motion Reinvented



## Mission:

To be a leader in high-efficiency next-generation electromagnetic motor manufacturing, harnessing magnetic field energy for stable and continuous rotary and linear motion. Our solutions deliver clean energy with zero harmful emissions, combining simplicity, mobility, and the flexibility to supply power both on-grid and off-grid, enabling sustainable and versatile applications across industries.



## Vision:

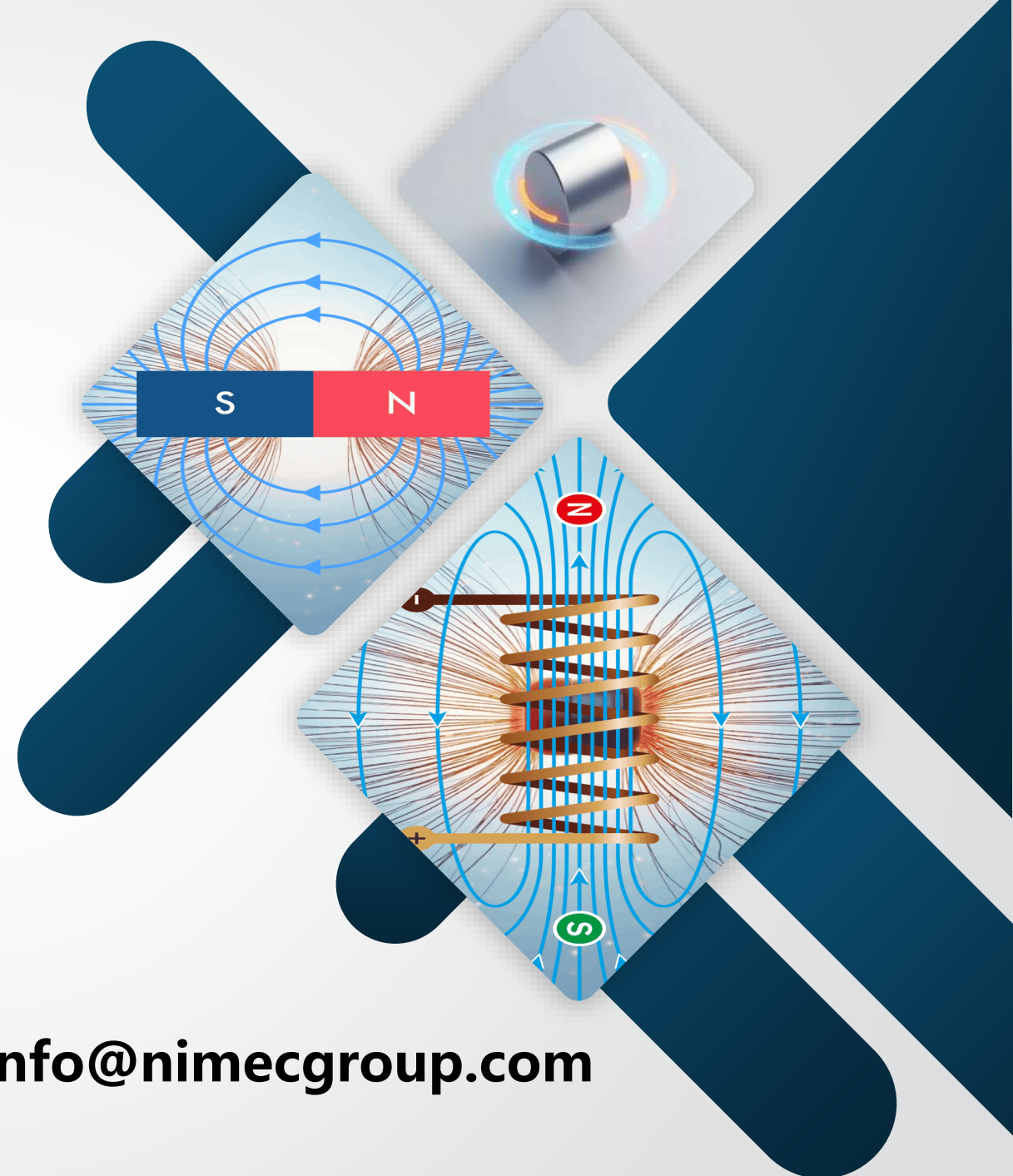
To revolutionise sustainable energy and motion technologies worldwide by providing versatile, eco-friendly, and easily deployable high-efficiency next-generation electromagnetic motor solutions that empower industries and communities alike.



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# NO.01

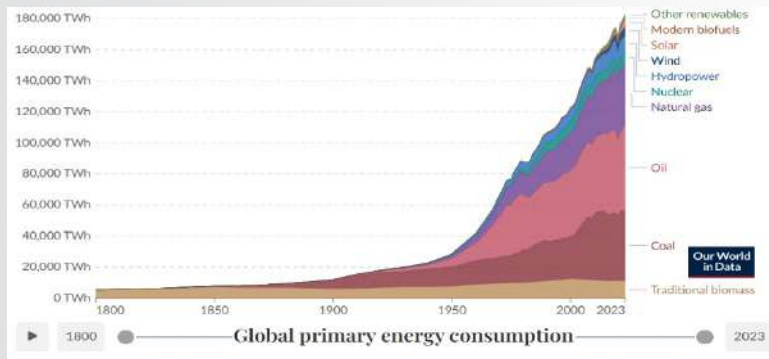
## Problem

The world faces an urgent need to shift from fossil fuels to clean, sustainable energy sources. Rising emissions drive climate change, threaten ecosystems, and endanger public health. Expanding renewables like wind, solar, and advanced storage is vital to secure energy independence and protect future generations.

# NO.01

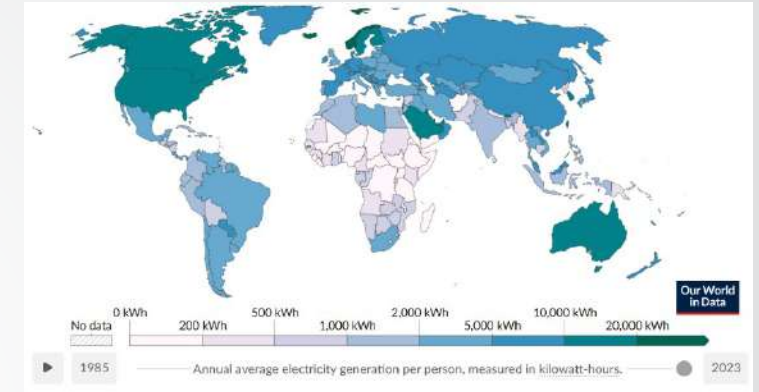
## Urgent need for non-fossil fuel energy sources

Today, there is an acute necessity for energy sources that do not rely on fossil fuels. This need is driven by a combination of political, environmental, and economic factors. Governments and industries worldwide are under pressure to reduce carbon emissions, comply with climate regulations, and ensure energy security, while the global demand for clean energy continues to grow. Traditional fossil-fuel-based systems are increasingly unsustainable, both environmentally and strategically.



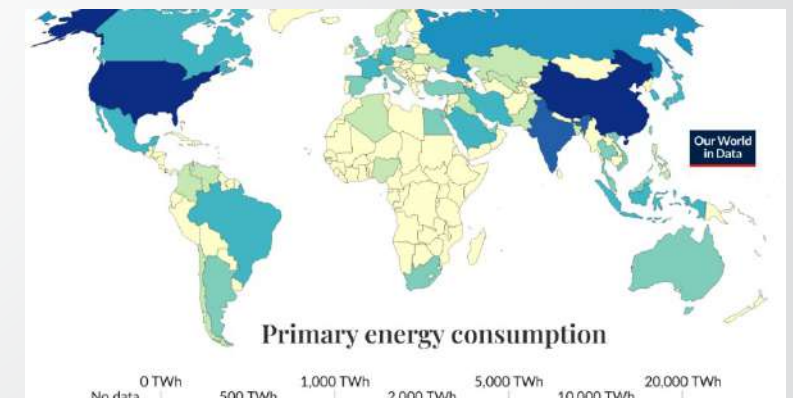
## Vulnerability of standard electricity generation systems

Recent blackouts and power outages have highlighted the vulnerability of standard electricity generation systems. Dependence on centralized grids and conventional generators exposes communities, businesses, and critical infrastructure to disruptions, with serious economic and operational consequences. The need for more resilient, decentralized energy solutions has become increasingly apparent.



## Demand for autonomous, long-lasting energy sources

There is a rising demand for autonomous power solutions capable of operating for extended periods without recharging. Many regions and industrial applications require reliable, off-grid energy systems that maintain consistent output, even in remote or mobile environments. Existing solutions often fall short in terms of endurance and operational stability, creating critical gaps in energy accessibility.

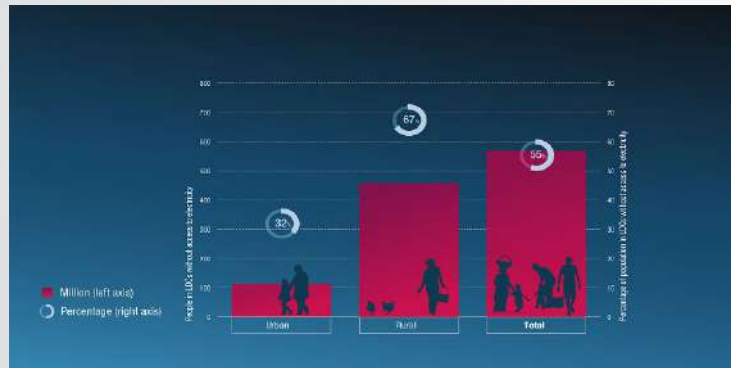
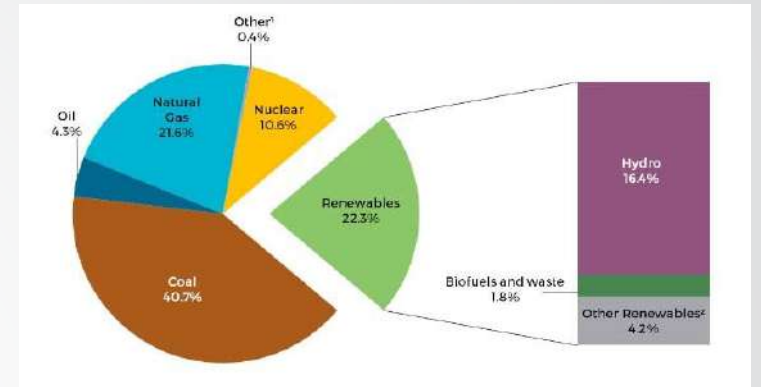




# NO.01

## Growing energy demand from technological development

The rapid expansion of the internet, mobile devices, and electric vehicles is driving a surge in energy demand. This growth cannot be met solely with existing standard generation methods. The challenge is not merely the cost of energy but the sheer inadequacy of current generation capacities to keep pace with modern technological requirements, creating bottlenecks in industrial and consumer energy supply.



## Regional development hindered by lack of stable energy

Many regions, particularly islands and remote areas, cannot achieve sustainable development without reliable and accessible energy. Mining operations, tourism infrastructure, and other key industries are constrained by the lack of stable electricity supply. Ensuring accessible, continuous power is essential for economic growth, infrastructure development, and community wellbeing.





## NO.02

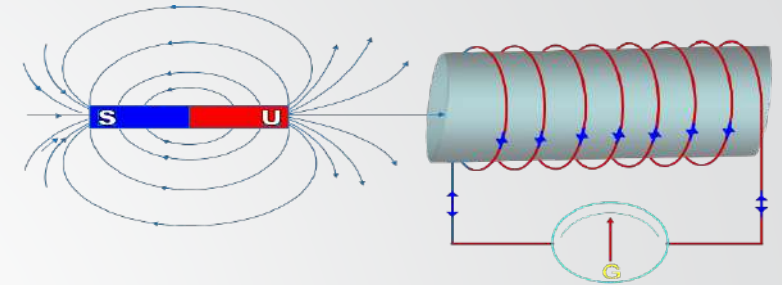
# Our Solution

NIMEC offers a clean, fossil-free energy solution using advanced permanent magnets. These systems deliver continuous, emission-free power, adapt quickly to grid demands, and operate autonomously. Their compact, scalable design enables cost-effective production and deployment anywhere, supporting growing global energy needs sustainably.

# NO.02

## Harnessing Magnetic Fields for Fuel-Free Energy

By utilising the energy inherent in magnetic fields, NIMEC systems operate without relying on fossil fuels. This approach provides a clean, sustainable, and environmentally friendly alternative to traditional power sources, eliminating harmful emissions while delivering reliable and continuous energy.

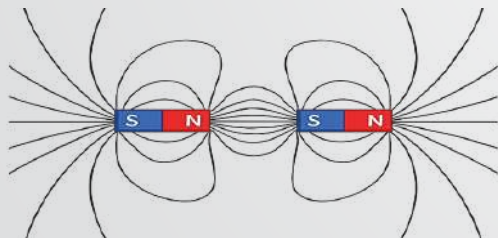
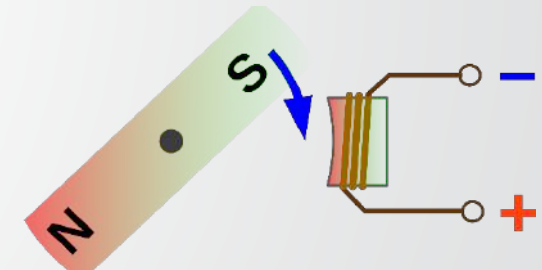


## Advanced Permanent Magnets for Long-Lasting Autonomy

The industry of permanent magnet production has developed new types with exceptionally strong and stable magnetic fields. These advancements enable devices to operate autonomously for extended periods, ensuring consistent performance and minimising the need for frequent recharging or maintenance.

## Flexible and Rapidly Responsive Power Systems

Magnetic field-based systems can respond swiftly and efficiently to changing grid loads. They can start and stop autonomously, monitor network status electronically, and operate in fully automatic mode, providing unmatched flexibility and reliability compared to conventional electricity generation solutions.





# NO.02

## Scalable, Cost-Effective Production for Growing Demand

The simplicity and cost-efficiency of NIMEC systems allow for mass production tailored to consumer needs. Whether for industrial, commercial, or personal use, sufficient units can be manufactured quickly and economically to meet escalating energy demands driven by technological development.

## Compact and Versatile Deployment for Any Location

NIMEC solutions require minimal space and do not necessitate complex buildings or infrastructure. They can be deployed as mobile, stationary above-ground, or underground systems, ensuring proximity to any consumer and enabling energy access even in remote or constrained locations.





## NO.03

# Next-Gen Motion

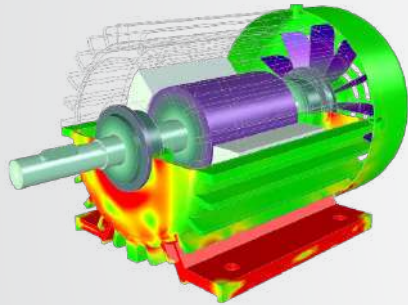
NIMEC introduces a next-generation axial flux motor and integrated power generation system using ultra-strong permanent magnets and pulsed electromagnets for maximum efficiency. The design minimises energy use, recovers power via supercapacitors, and adapts dynamically to loads. Its modular, compact, and emission-free architecture supports scalable deployment for grid, industrial, and mobile applications with minimal maintenance and infrastructure needs.



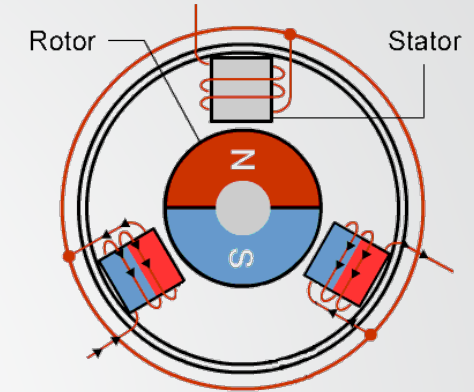
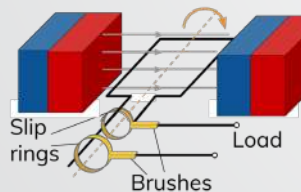
# NO.03

## Time-Tested Design

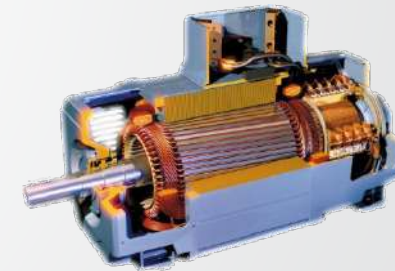
Today, all electric motors operate based on the interaction of magnetic fields. The stator electromagnet generates a magnetic field when an electric current flows through it, which interacts with the rotor's closed circuit to induce its own magnetic field, producing rotational or linear motion. This principle underpins every electric machine and enables the efficient conversion of electrical energy into mechanical energy.



More recently, motors with a different orientation of rotor and stator have emerged — Axial Flux Electric Motors, where the magnetic field is generated in the axial direction relative to the rotor and stator. This arrangement significantly increases power density, reduces weight and size, and improves overall efficiency.



Standard brushless motors are designed so that the rotor contains permanent magnets, reducing energy losses during excitation, while the stator comprises electromagnets controlled electronically. This configuration has become widely adopted across consumer, industrial, and technological applications, delivering high efficiency, stable rotation, and precise control.

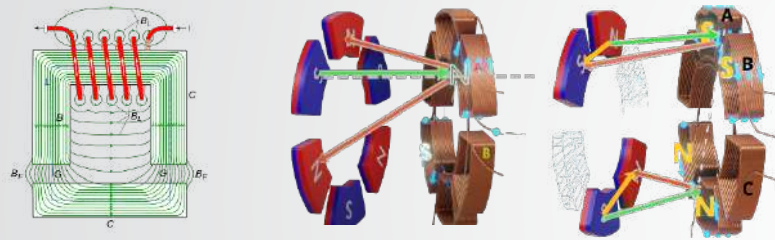


It follows that, despite relying on standard physical principles and proven components, there remains ample scope for novel motor configurations capable of achieving maximum efficiency and distinctive performance characteristics.

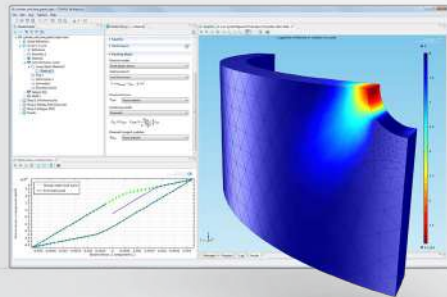
# NO.03

## Unique NIMEC Motor Design

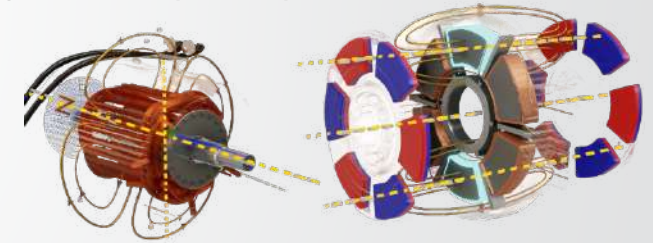
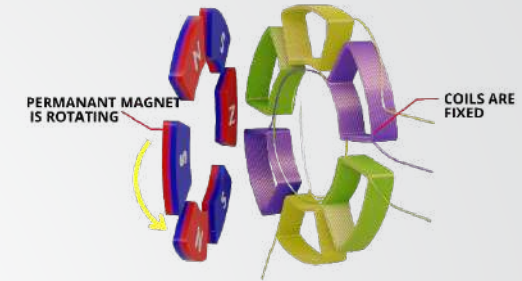
It should be noted that the electrical power consumption of an electromagnet is significantly lower than the mechanical force it can generate. The ratio between the input electrical energy and the resulting mechanical output is extremely high, making this principle particularly efficient for energy conversion..



The axial flux configuration minimises the distance between the magnets, optimising magnetic interaction while consuming minimal external energy. The electromagnets operate in a pulsed mode, further reducing energy expenditure and enhancing overall system efficiency.



Unlike conventional motors, which employ relatively weak permanent magnets, NIMEC utilises the strongest available permanent magnets. This ensures maximal force generation through the interaction between the electromagnet's ferromagnetic core and the permanent magnet, substantially increasing both the efficiency and the specific power of the motor.



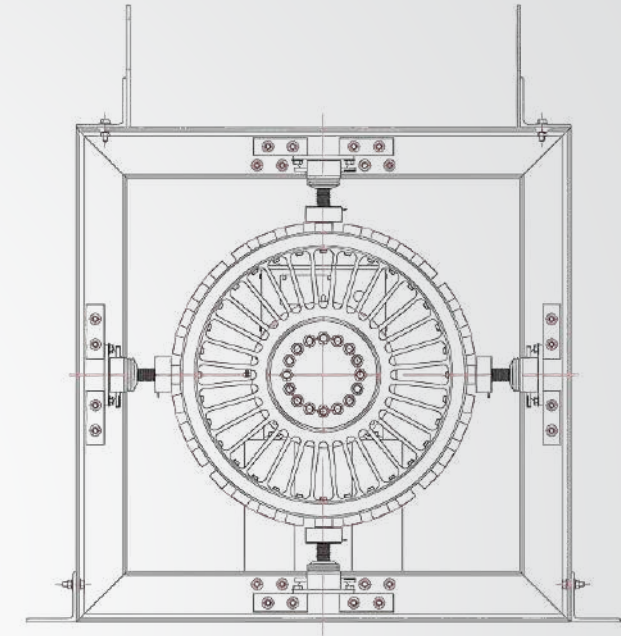
The electromagnets are connected to energy storage systems, such as supercapacitors, employing a switching principle analogous to Tesla's switch. This arrangement enables the recovery of energy generated by the interaction of the electromagnet's inductive coil with the permanent magnet, minimising the portion of generator-produced energy required to sustain electromagnet operation and thereby maximising the overall efficiency of the system.

# NO.03

## Integrated Power Generation System

The NIMEC system is not merely an electric motor; it constitutes a fully integrated solution for electricity generation. It combines a unique motor with high-strength permanent magnets and advanced control electronics, enabling the direct conversion of mechanical energy into electrical energy with high efficiency.

The system can automatically adapt to varying loads, including autonomous start and stop capabilities, as well as dynamic power regulation according to grid demands or local consumption. The use of energy storage devices, such as supercapacitors, allows partial recovery of energy from magnetic field interactions, minimising the external energy required to sustain the electromagnets' operation.



Its modular design enables scalable deployment for a wide range of applications, from individual mobile units to stationary arrays for industrial or regional power supply. Compact dimensions and flexible installation options make it suitable for ground, underground, or mobile platforms, providing a versatile solution for diverse operational environments..

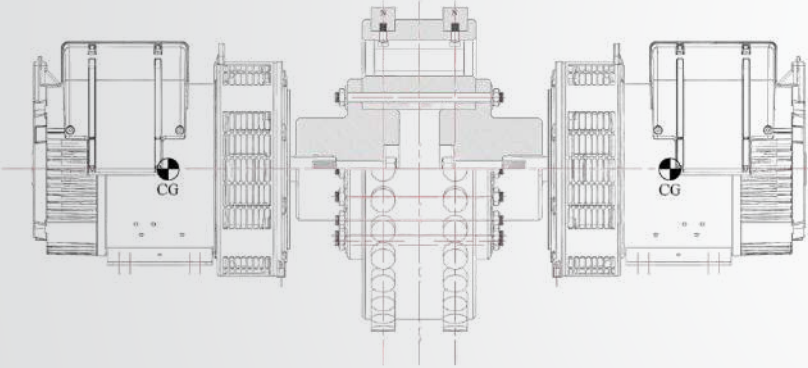
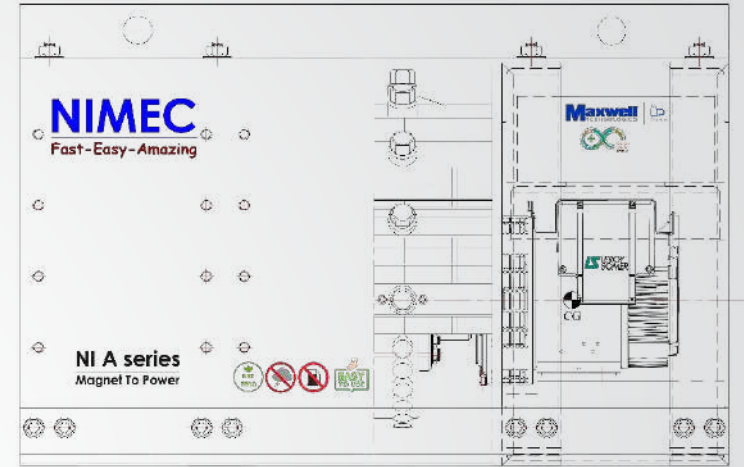




# NO.03

## Key Benefits

The NIMEC technology offers a range of key advantages that make it highly attractive for diverse applications. Its high efficiency and minimal energy consumption enable economical electricity generation for both grid-connected and autonomous systems. The compact and modular design provides flexible deployment, including ground, underground, mobile, and containerised platforms. Containerised deployment entirely eliminates capital expenditure on building infrastructure and complex system design.



Reliability and low maintenance requirements make the system suitable for long-term operation, including in remote and hard-to-reach locations. Furthermore, the technology is fully environmentally friendly, producing no harmful emissions and operating silently, which opens up opportunities for use in residential, commercial, and industrial settings.





# NO.04

## Financials

NIMEC combines innovative magnetic technology with a scalable modular design, generating revenue from module sales, electricity production, and maintenance services. Its high-margin, easily scalable model enables fast market expansion, short payback periods, and strong investor returns, supported by manufacturing growth, R&D, and international marketing efforts.

# NO.04

The NIMEC system possesses significant commercial potential due to the combination of innovative technology and a scalable modular design. The primary sources of revenue are the sale of energy generation modules — mobile, stationary, and containerised — as well as the sale of the electricity produced and the provision of maintenance services.

A detailed cash-flow projection will be provided upon request to allow for in-depth financial evaluation.

The cost structure includes manufacturing and assembly of the modules, logistics, and research and development aimed at optimising magnetic configurations and electronics. Marketing and administrative expenses support the promotion of the technology to new markets and ensure long-term client engagement.

Projected revenue is based on gradual expansion within the autonomous and mobile energy generation markets. The high margin of the modular design and the ability to scale production offer attractive profitability and a relatively short payback period. Investment will be directed towards increasing manufacturing capacity, marketing, and international expansion, with an anticipated high return for investors.

