

NPE Technology – Industrial and Financial Model

NPE Technology treats industrial combustion emissions

achieving up to 99.88% CO₂ reduction

while generating clean energy at €40/MWh



SGS



RETE ALTA TECNOLOGIA
HIGH TECHNOLOGY NETWORK



TECNOPOLO BOLOGNA CNR



Original certificates available upon request



Agriculture



Incinerators

NPE TECHNOLOGY APPLICATIONS



Automotive



Industrial chimneys



Shipping sector



The Industrial Challenge

The industrial sectors responsible for the majority of global emissions continue to rely on combustion-based infrastructure:

- Power plants
- Heavy industry
- Waste-to-energy plants (incinerators)
- Maritime sector
- Industrial chimneys
- Energy-intensive industries

The complete replacement of the existing infrastructure would require enormous capital investment, decades of implementation, and could pose significant risk to energy security and operational continuity.



NPE Technology

A retrofit decarbonisation system designed for existing combustion-based industrial infrastructure.

Reported Capabilities

- CO₂ reduction of up to 99.88%
- Neutralisation of NO_x, SO_x, HC, PM₁₀ and PM_{2.5}
- Additional clean energy generation: from 2 MW to 7 MW
- No permanent underground CO₂ storage
- No replacement of existing industrial systems
- Retrofit integration on existing infrastructure
- Potential applicability across approximately 98% of industrial sectors producing combustion-related emissions



Why NPE Technology Can Scale Rapidly

- Based on 8 industrial components already available on the global market and used for decades
- Existing global industrial supply chain
- No dependence on future scientific breakthroughs
- No need to create new manufacturing supply chains
- Assembly and industrial integration-based deployment model
- Independent validation activities conducted by Bureau Veritas, SGS and CNR



Why NPE Technology Represents a Significant Industrial Innovation (1/2)

NPE Technology was designed to abate industrial emissions through a continuous process capable of operating 24 hours per day, 365 days per year, while preserving existing industrial infrastructure.

According to reported testing results, the technology is capable of reducing CO₂ emissions by up to 99.88% while simultaneously neutralising NO_x, SO_x, HC, PM₁₀ and PM_{2.5} through the proprietary NPE reactor.

Unlike conventional Carbon Capture and Storage (CCS) systems, which generally require additional energy for CO₂ separation, compression, transportation and storage, the NPE process is based on a controlled chemical reaction, which occurs through direct contact between flue gases and the chemical components inside the reactor, without the use of external sources of energy. This represents a major innovation of NPE Technology which has been described by WIPO as era-defining.



Why NPE Technology Represents a Significant Industrial Innovation (2/2)

The system incorporates a circular industrial model in which the various chemical components inside the filter are replaced every six months. The waste of the filters is used to generate clean energy through an incinerator and a steam turbine. The flue gases from the incinerator are redirected into the NPE Technology in a closed-loop process (see video).

<https://youtu.be/BzVnAYOgSRI>

The various chemical components in the reactor are subsequently regenerated and reused in the NPE Kit process, or supplied to the chemical industry as industrial by-products.

By combining material recovery, by-product valorisation and clean energy generation, the system is designed to significantly reduce operating expenditure (OPEX) while supporting long-term industrial sustainability.

European ETS Economic Model

Example: Altbach Power Plant – Germany - 1,036 MW
Emissions: 3,130,000 t of CO₂ /year
EU ETS Carbon Price Assumption: € 80 /t of CO₂

Current Annual ETS Cost

€ 250,400,000

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NPE Implementation Model

Example: Altbach Power Plant – Germany - 1,036 MW
Emissions: 3,130,000 t of CO₂ /year
EU ETS Carbon Price Assumption: € 80 /t of CO₂

Estimated Annual ETS Savings for the Power Plant Owner After Installation

€ 125,200,000

2

Estimated NPE Kit Sale and Installation Cost

€ 125,200,000

3

Estimated Actual Industrial Cost of the NPE Kit

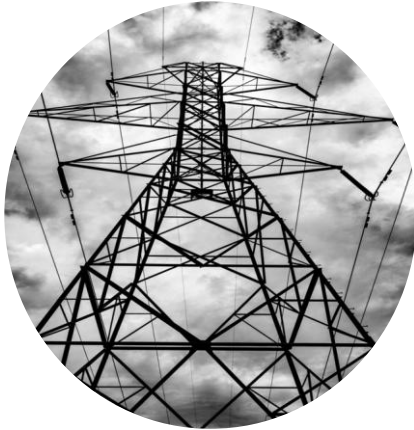
€ 56,340,000

Estimated Net Profit from the Sale of a Single NPE Kit

€ 68,860,000

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Energy Generation - Economic Benefits



- **Estimated Annual Energy Production**
175,200 MWh/year

Energy Market Value
€ 40/MWh

Estimated Annual Energy Revenue
€ 7,008,000

Global Expansion Strategy



- **Phase 1 – Europe**

Utilise European ETS markets to generate the initial cash flow through direct installation of NPE Kits.

- **Phase 2 – Global Expansion**

Utilise the cash flow generated in Europe to expand NPE Kit assembly operations and deploy the technology globally through:

- Industrial leasing
- Plant rental models
- Infrastructure-as-a-Service (IaaS) business models

Investment Recovery



Potential revenue streams may be generated from the very first industrial installations through:

- ETS Cost Savings
- NPE Kit Sales Margins
- Energy Generation Revenues
- Industrial Scalability Opportunities

CERTIFICATION OF THE OPERATING PROCESS

The know-how has been deposited with a notary public
as a trade secret



In terms of **CO₂ emissions** (key parameter for the commissioning company, in order to establish the performances of the NPE air filtration system), the following must be considered the **final data** of the experimental campaign:

FINAL DATA OF THE EXPERIMENTAL CAMPAIGN

CO₂ concentration upstream NPE technology (BEFORE THE NPE REACTOR), i.e. measured at the outlet of the LPG-fuelled combustion generator: **12.33% (123,300.00 ppm)**.

(Ref.: Test Report n° PD22-00604).

CO₂ concentration downstream NPE technology (AFTER THE NPE REACTOR), i.e. measured at the outlet of NPE air filtration system: **0.0149% (149.00 ppm)**.

(Ref.: Test Report n° PD22-00604).

THE DEGREE OF CO₂ REDUCTION MEASURED DOWNSTREAM THE NPE REACTOR IS THEREFORE 99.88%

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INVESTMENT OPPORTUNITY



New Power Energy is seeking **one or more investors or industrial partners** for the commercialisation of NPE Technology.



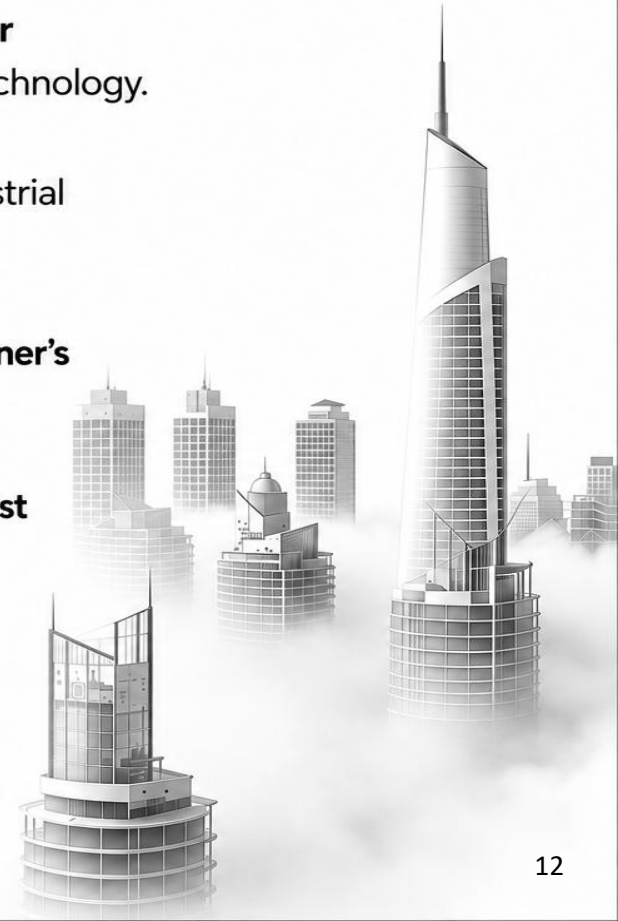
Thanks to a model based on the assembly of proven industrial components and the potential applicability to around 98% of sectors generating combustion-related emissions, the **investment structure will be defined according to the partner's objectives, target sectors and markets of interest.**



The industrial model allows for **returns starting from the first installations**, without the need to develop new production capacity.



New Power Energy requires **initial capital** and **provides for** potential investors or partners to **conduct the necessary verifications** on NPE Technology using their own **instruments** and their own **engineers; access to the related know-how will be granted upon economic agreement.**



CONCLUSIONS

NPE Technology is not presented as a future laboratory concept.

NPE Technology is presented as a rapidly deployable decarbonisation solution based on existing industrial components, established global supply chains, and industrial economics that can be assessed through dedicated technical, regulatory and financial due diligence activities.





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