

## **EXECUTIVE SUMMARY**

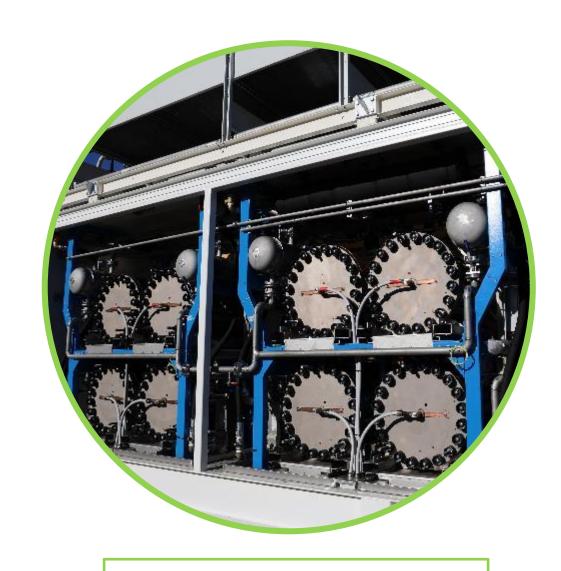
A high-tech industrial company in the gas generation sector worldwide (nitrogen, oxygen and hydrogen) using both alkaline and pem technology. Thanks to its extensive experience, scaling up to large electrolyzer for the energy transition

With over 20 years of experience and a track record of satisfied clients, ErreDue is a preferred partner in the large H2 plants that will develop over the next 5-10 years.

The company is building a new advanced plant that increases production capacity by 10 times, is signing commercial partnership outside Italy



## THREE BUSINESS UNITS, ONE GOAL



#### **ENERGY TRANSITION**

Transportation

Power Generation and Storage

Residential and Commercial Heating

Renewable Energy Integration



#### INDUSTRIAL APPLICATION

Agriculture and Fertilizers

Food and Beverage Industry

Pharmaceuticals and Healthcare

Electronics, Manufacturing, Laser cutting

Environmental and Waste Management



#### LABORATORY LINE

Gas Carrier
Laboratory instruments

### **HYDROGEN**



LAB



# SERVICE STATE OF THE STATE OF T



**ENERGY TRANSITION** 

### **OTHER GASES**











LAE









LAB









TRADITIONAL BUSINESS



#### TAYLOR MADE

COMPREHENSIVE
OFFERING OF
CUSTOMIZED SYSTEMS FOR
END-MARKET
APPLICATIONS

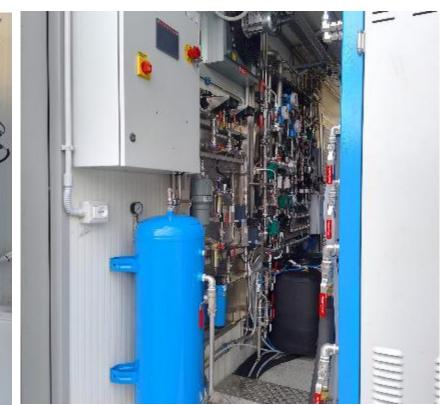


#### RELIABILITY

WHITE SPACE IN PILOT
PROJECTS FOR H2 PLANT
TO ACHIEVE NET-ZERO
EMISSIONS

## KEY SUCCESS FACTORS







#### **SCALABILITY**

SCALE ON-SITE GAS

GENERATION TO MULTIPLE

END MARKETS



#### VERTICALLY INTEGRATED

**BUSINESS MODEL** 

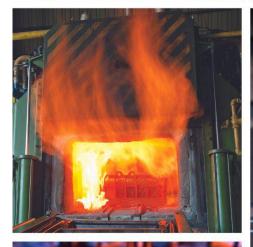
EACH TECHNOLOGICAL
COMPONENT IS STUDIED,
DESIGNED, PRODUCED
AND ASSEMBLED
INTERNALLY





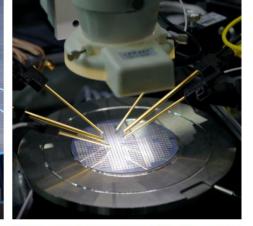


















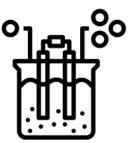


## AN INCOMPARABLE TRACK RECORD

EXTENSIVE EXPERIENCE

COVERING DECADES,

OVER 20 YEARS OF EXPERIENCE



#### **TECHNOLOGY LEADER**

AWE AND PEM TECH, RELIABLE
AND PROVEN PERFORMANCE
GUARANTEES REVOLUTIONARY
NEXT-GENERATION SOLUTIONS
LEADERSHIP IN COST AND SCALE



#### **INDUSTRY LEADER**

MARKET-LEADING

LARGE-SCALE MANUFACTURING

CAPABILITIES



#### COMMITMENT TO

#### SUSTAINABILITY

SOLUTIONS ALIGNED WITH
GLOBAL SUSTAINABILITY GOALS
DEDICATED TO REDUCING
CARBON FOOTPRINT ACROSS
OPERATIONS

## VERTICALLY INTEGRATED BUSINESS MODEL

All design and manufacturing know-how is in-house. ErreDue's production department is able to produce gas generators of different sizes and related accessories in a short time.

01

#### **Electrolytic Stacks**

The heart of the machine is made up of polymeric plastic components then stacked together, produced with proprietary modules 02

#### **Metal Shell**

Component without specific know-how, whose production is generally outsourced to customers in the metal cutting and treatment sector.

03

04

05

#### **Software**

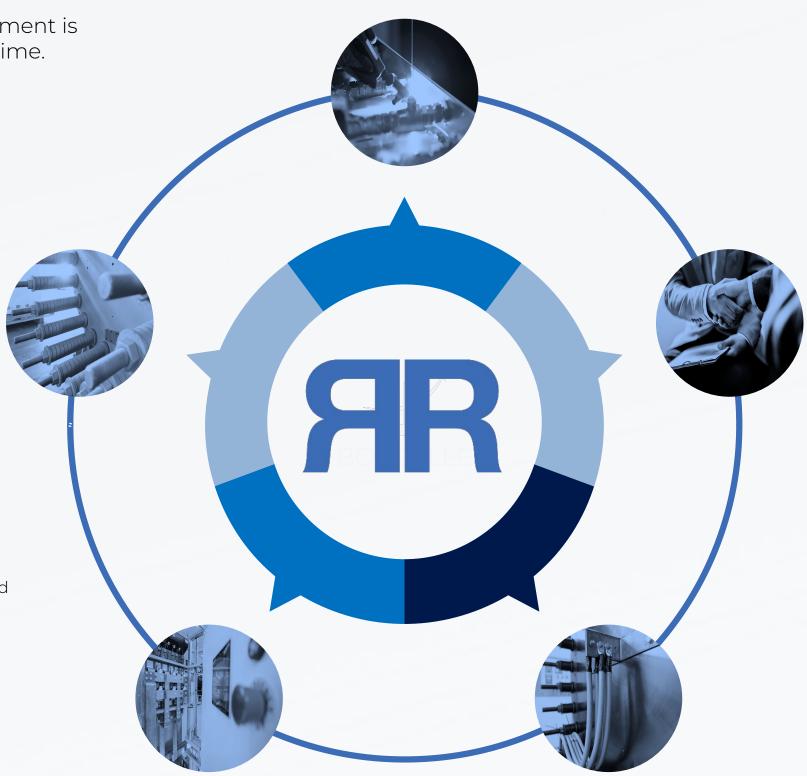
In-house developed and proprietary

#### **Process components**

Tanks, pipes, manifolds, generator sealing plates (both for H2 cells and for N2 generators); Manufactured in-house

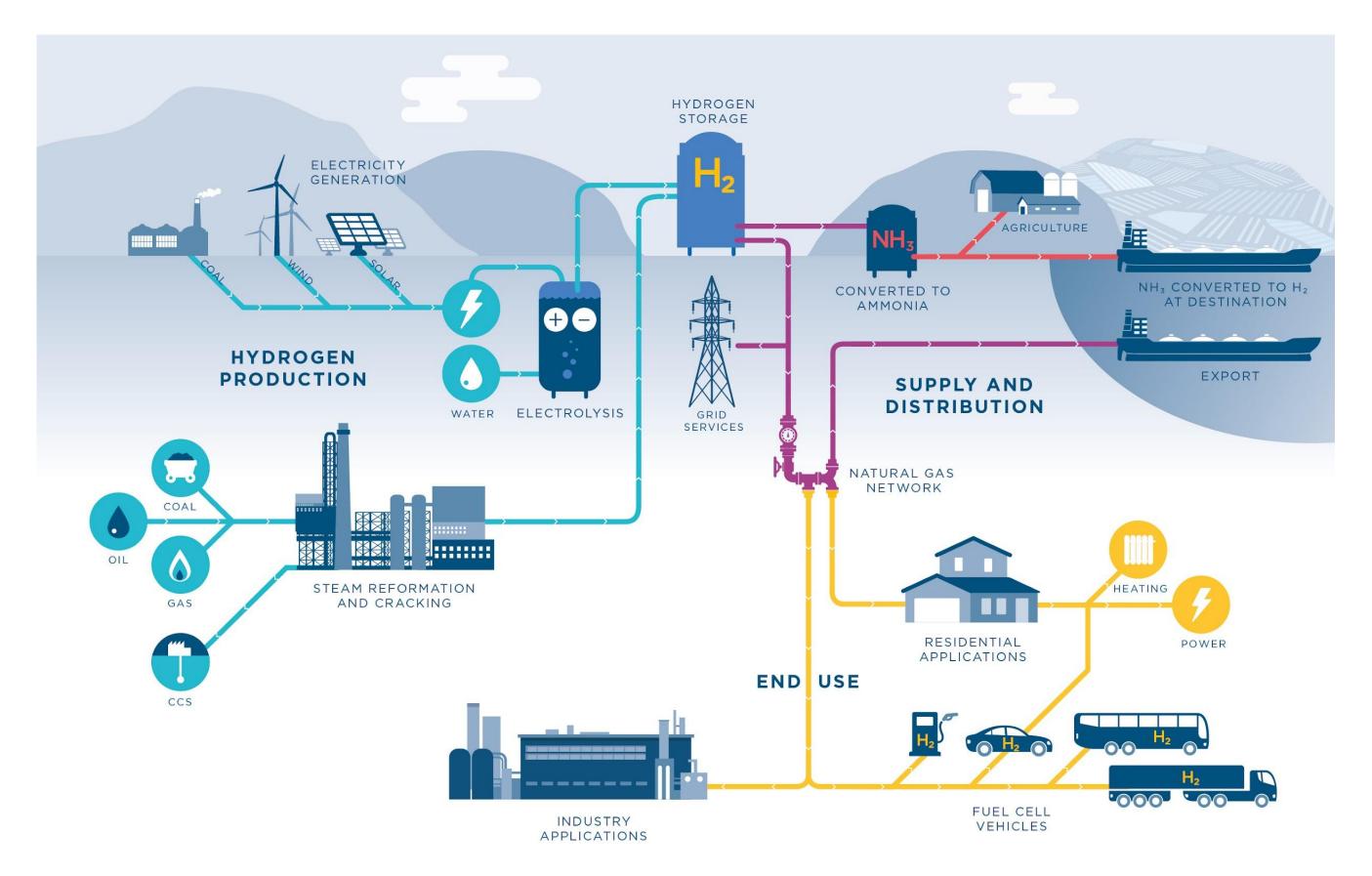
#### **Electric system**

Designed and assembled in-house



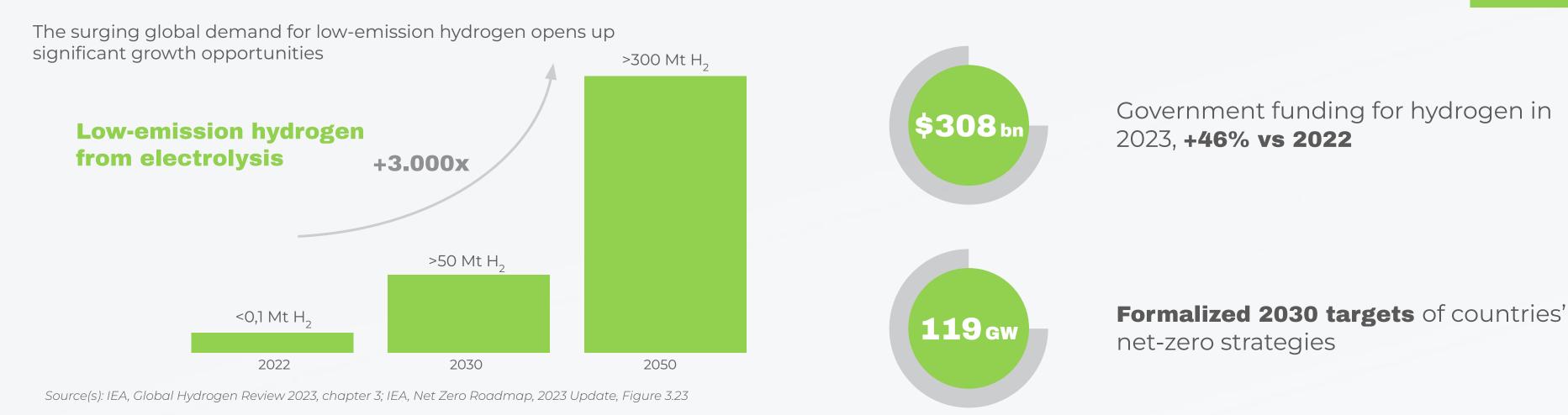
## MARKET OVERVIEW





# ENERGY TRANSITION

#### MARKET OVERVIEW ENERGY TRANSITION



#### **ERREDUE STRATEGIC POSITIONING**

- Broader vision of the hydrogen market, which extends beyond the energy transition to embrace industries' decarbonization
- By establishing itself in the niche of 1-5 MW plants within the broader electrolyzer market, ErreDue could benefit from the proliferation of larger facilities, which would drive growth across the entire market

## Comparison of hydrogen policy approaches adopted across selected hydrogen markets

Category	European Union	United States	China	Japan	<b>India</b>
Targets	2030: 40 GW of domestic electrolyser capacity	-	2025: 100-200 kt green hydrogen production	2030: 3 Mtpa of hydrogen consumption	2030: 5 Mtpa green hydrogen production
Supply	European H <sub>2</sub> Bank IPCEI Innovation Fund	Inflation Reduction Act (45V, 45Q, 45Z, 48C)	Provincial subsidies; roll-out through SOEs	CfD scheme	Financial support for electrolysis, ammonia, manufacturing
Infrastructure	H <sub>2</sub> and gas markets decarbonisation IPCEI; AFIR; CEF	Support for hydrogen refuelling stations	Support for new hydrogen pipelines	Clusters support scheme; CAPEX subsidy for storage	Hydrogen Valley Innovation Clusters
Demand	RED; ReFuel Aviation; FuelEU Maritime; CISAF; IPCEI	Loan guarantees, tax credits, ZEV mandates	Implementation plan for industry; FCEV tax exemptions/subsidies	Hub support; tax credits for industry; FCEV subsidies	Guaranteed offtake through SECI
Certification	Delegated Acts for renewable and low-carbon hydrogen	Clean Hydrogen Production Standard (CHPS)	Clean and Low-Carbon Hydrogen Energy Evaluation Standards	Hydrogen Society Promotion Act	Green Hydrogen Standard
R&D	Clean Hydrogen Partnership	Offices of Energy Efficiency, Renewable Energy, FECM	Demo programmes across the entire value chain	Green Innovation Fund	R&D scheme of National Green Hydrogen Mission

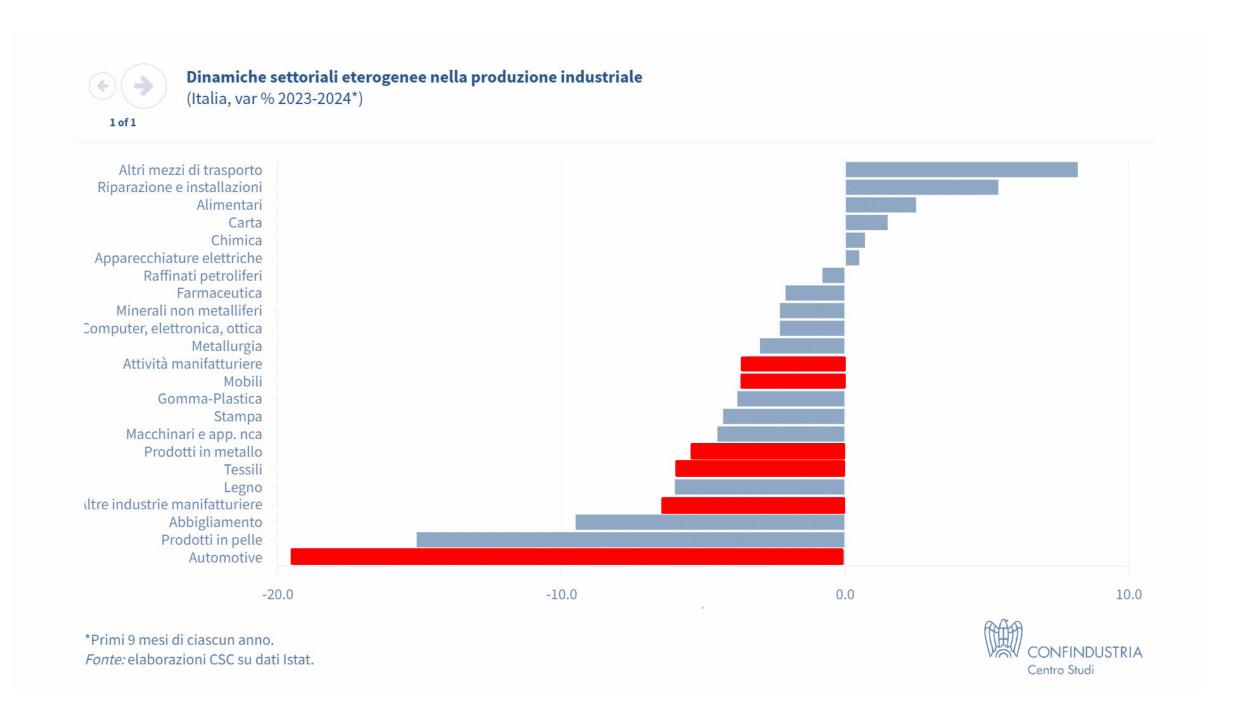
IEA. CC BY 4.0.

Notes: AFIR = Alternative Fuels Infrastructure Regulation; CEF = Connecting Europe Facility; CfD = Contract for difference; CISAF = Clean Industrial State Aid Framework; FCEV = Fuel cell electric vehicle; FECM = Fossil Energy and Carbon Management; IPCEI = Important Projects of Common European Interest; RED = Renewable Energy Directive; SECI = Solar Energy Corporation of India; SOE = State-owned enterprise; ZEV = Zero Emission Vehicles.

## H2 POLICY APPROACHES



### MARKET OVERVIEW TRADITIONAL BUSINESS



In the first nine months of 2024, Italian industrial production saw a decline of -3.3% compared to the same period in 2023. This downturn was primarily driven by a significant drop in Q1 (-1.4% on a cyclically adjusted basis), with a gradual easing through late spring (-0.9% in Q2). Despite some improvement, Q3 data still showed negative growth, registering an additional decline of -0.6%.

## 2H POSITIVE TRENDS – METALLURGY & MANUFACTURING

## METALLURGY / STEEL

- RECOVERY IN PRODUCTION: +11.2% (May 2025 vs Feb), +6% YoY
- CUMULATIVE JAN-JUN 2025: +3.8% YoY growth
- FLAT PRODUCTS: double-digit growth in key months
- RESILIENT EXPORTS: solid demand from infrastructure & renewables

## MANUFACTURING

- SUSTAINABLE TRANSITION: push from 'Industry 5.0' incentives
- METAL-FORMING / SHEET METAL: Italy remains global leader in production & exports
- EXPORT ORIENTATION: machinery & tooling supported by foreign demand
- INNOVATION & AUTOMATION: key driver for resilience despite weak domestic demand

#### ERREDUE COMPETITIVE ADVANTAGE AND VISION









#### **LOW POWER CONSUPTION\***

**COMPETITOR** 

**ERREDUE** 

 $\approx 1.2 \text{ kW/m}$ 3 **VS**  $\approx 0.50 \text{kW/m}$ 3

**THANKS TO** 

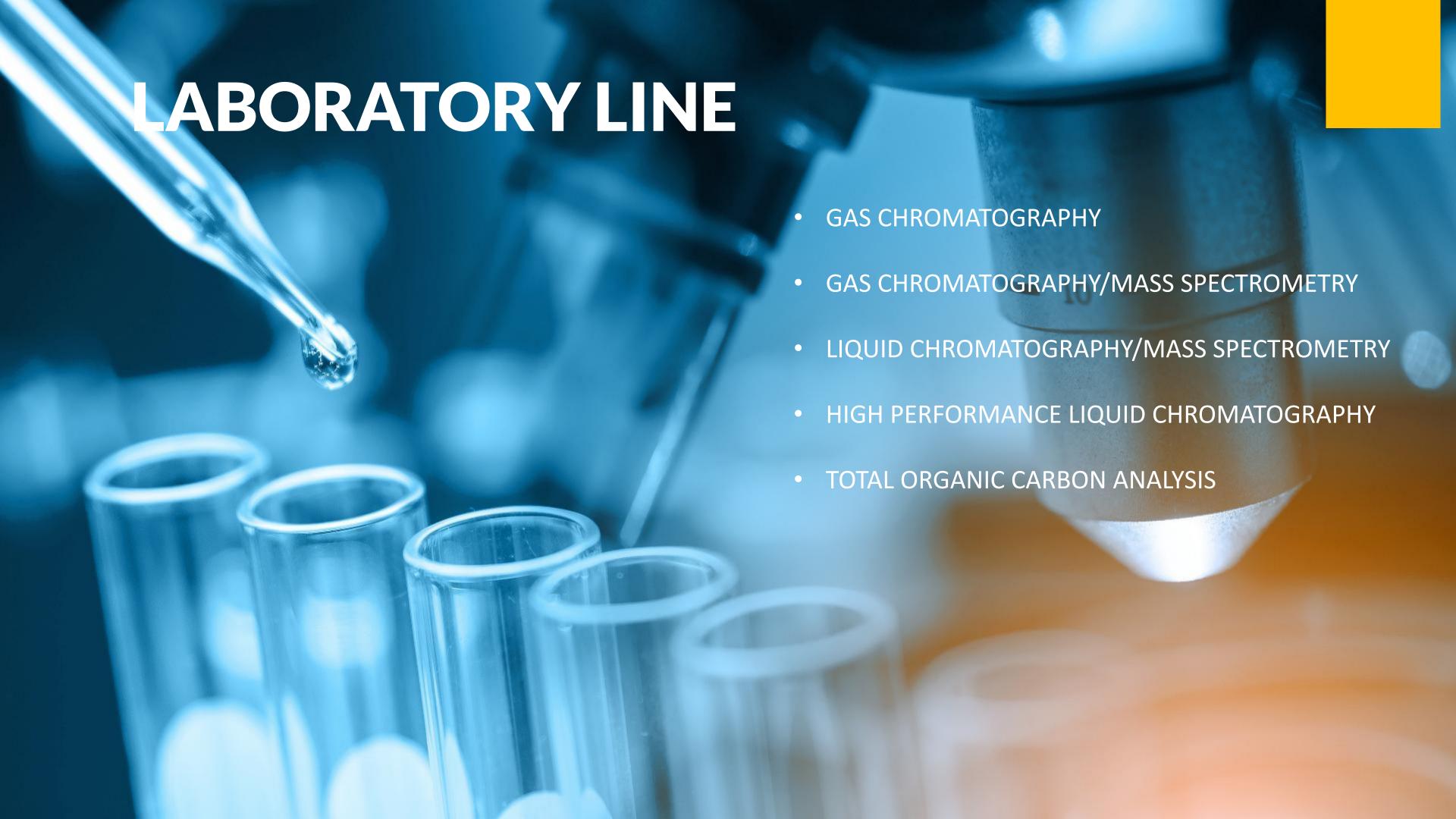
The air/nitrogen ratio of 3:1

**MAXIMUM BRILLIANCE WITH ONLY ONE PROCESSING** 

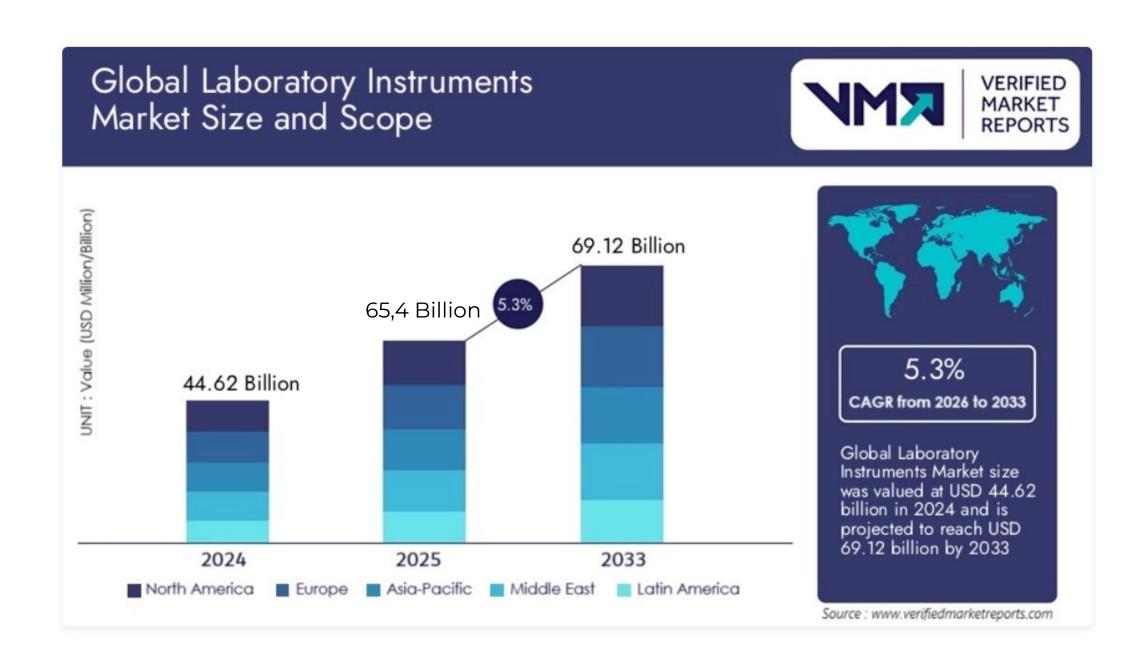


In order to have a stronger presence in our traditional business, we have a number of initiatives in place, which are as follows:

- Recruitment of a new business developer to promote ErreDue's presence in foreign markets
- Strategic partnership with complementary company
- Expansion of our product portfolio with the addition of a new technology



#### MARKET OVERVIEW LABORATORY LINE



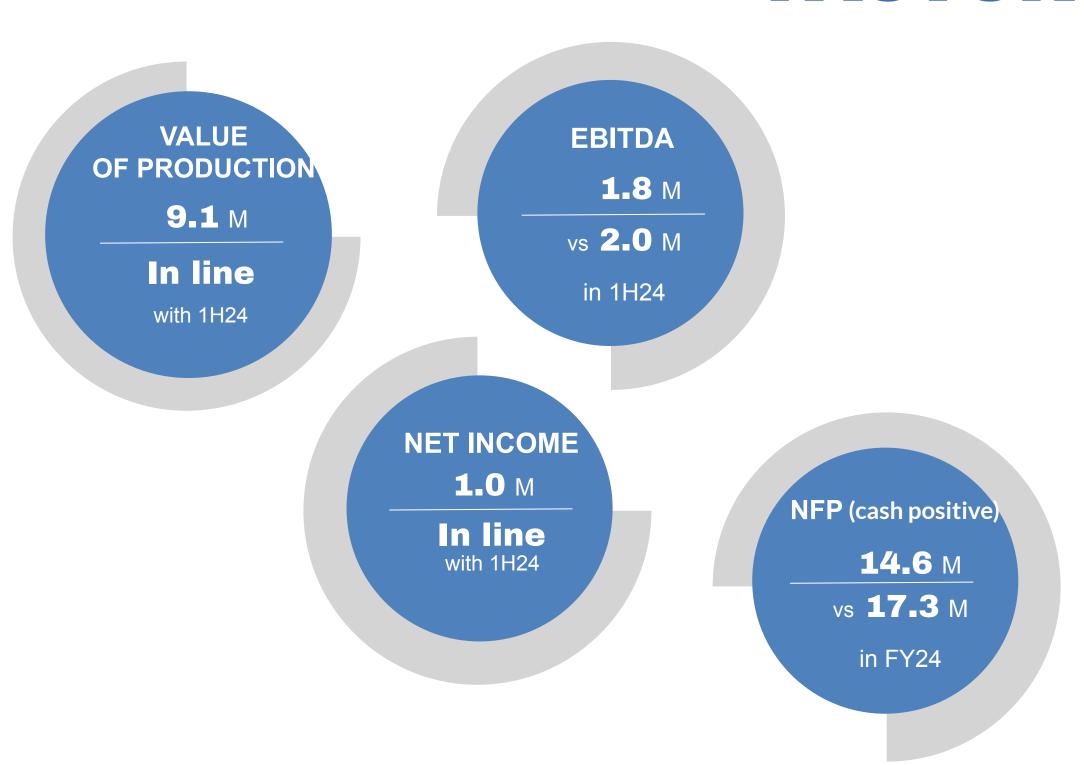
Emerging Markets: Developing countries are investing in healthcare infrastructure, creating a demand for laboratory instruments. For example, the Indian medical devices market grew from \$2.02 billion in 2009 to \$3.9 billion in 2015, with a CAGR of 15.8%.Point-of-Care Testing: There is a growing trend towards decentralized testing, which requires portable and intuitive instruments, opening new avenues for market expansion.

#### **VISION**

Erredue has signed a partnership agreement with a specialist sales consultant to develop the laboratory market. The growth strategy began with the rebranding of the division and will continue with a deep analysis of the benchmark target following the goal to become one of the keyplayer of the laboratory sector

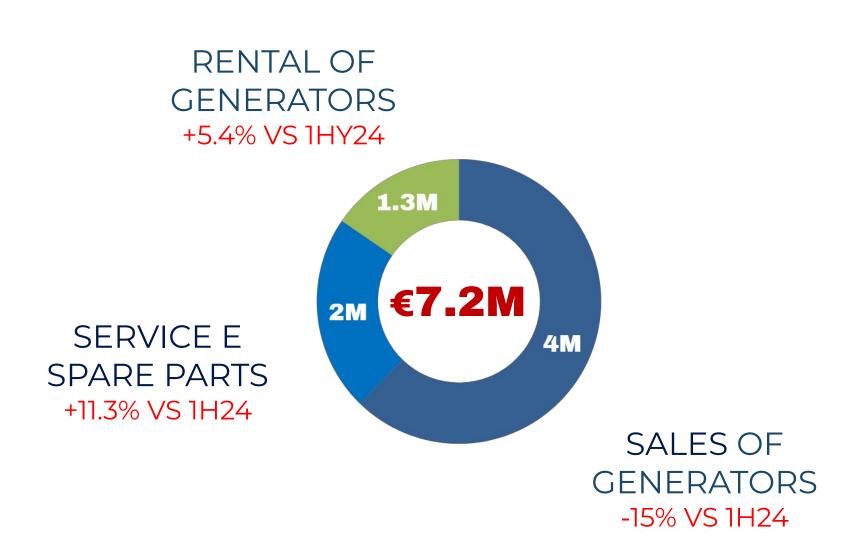


## FINANCIAL KEY FACTORS

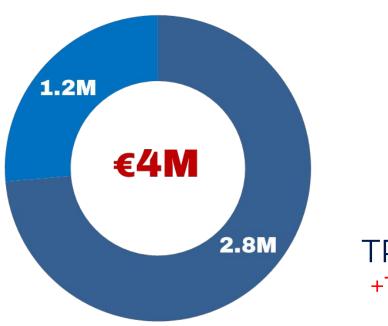


The half-year closed with revenues at €9.1 million, broadly in line with the previous year. EBITDA came in at €1.8 million, showing a slight decline versus 2024, while net income remained stable at around €1 million, confirming solid earnings resilience. Cash stood at €14.6 million, down from €17.3 million, mainly due to advance payments for the new facility—thus reflecting growth investments rather than negative operating dynamics. Overall, the company maintains a strong financial position, with margins to be monitored and upside potential linked to production expansion.

## **REVENUES BREAKDOWN 1H2025**



TRADITIONAL
BUSINESS
-64% VS 1H24



ENERGY
TRANSITION
+118% VS 1H24

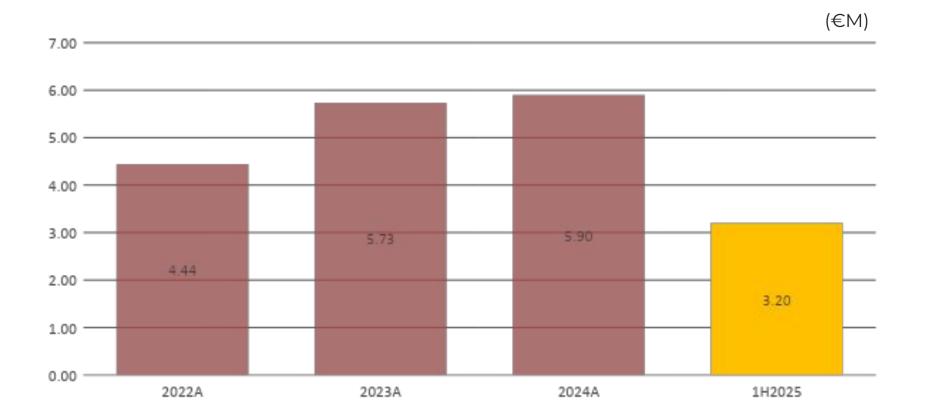
SALES OF GENERATORS BREAKDOWN BY BUSINESS 1H2025

REVENUES
BREAKDOWN BY
CONTRACTS
1H2025

## RECURRING REVENUES

#### **Long Term Rental**

- The rental of the plant breaks down the wall of diffidence regarding new technology and its introduction in a production line
- Rental contracts often have an average term of 65 months and are indexed to inflation
- At the end of the contract, the generators still have a value (even if fully depreciated); they can be bought back or rented again by the same customer or sold to a third party with a capital gain.



#### **After Market**

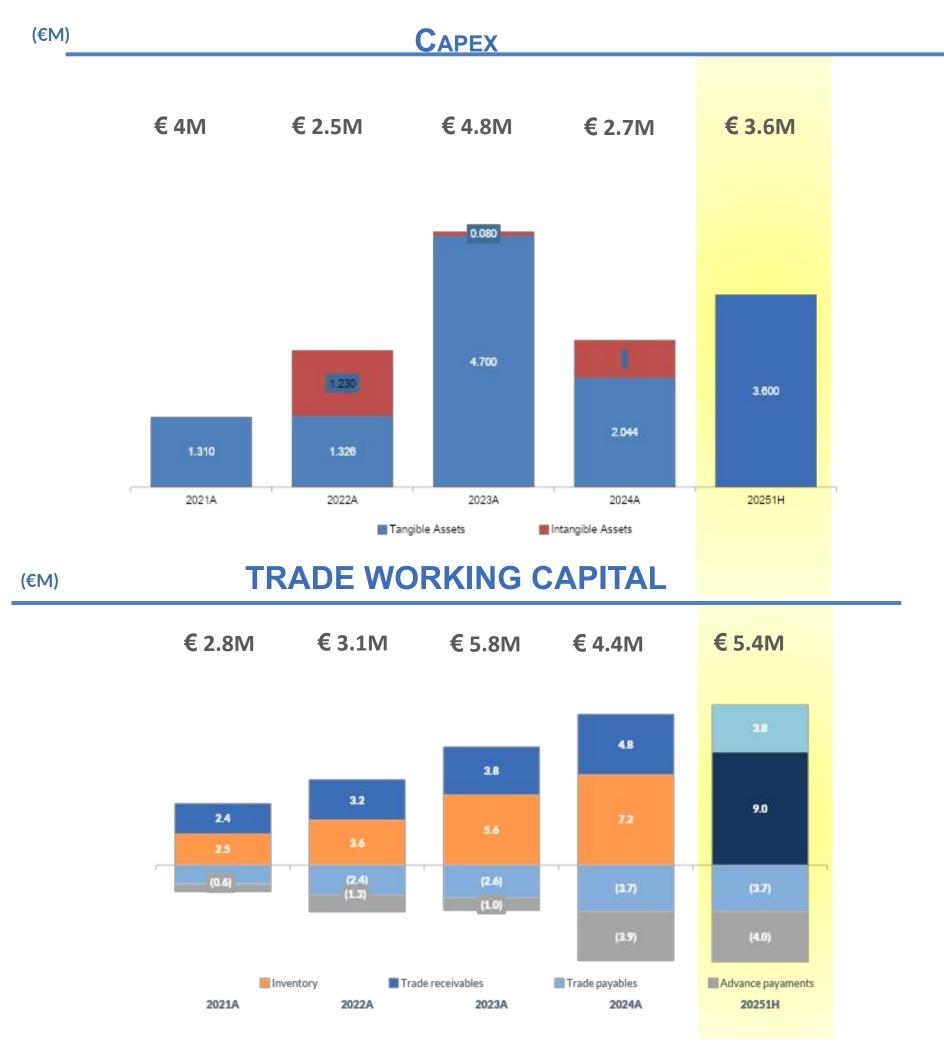
- Highly specialised Technical Department takes care of clients along all the journey, from plant design to installation, and keeps following it in the after marke.
- Generators can only and exclusively be maintained by ErreDue technicians, using only and exclusively components developed in-house.
- Erredue, in addition to revenues linked to sales, guarantees recurring revenues linked to maintenance contracts, both ordinary and extraordinary.

# 2.6 YEARS AVERAGE PAYBACK TIME

On the investment on internal construction cost (capitalized)

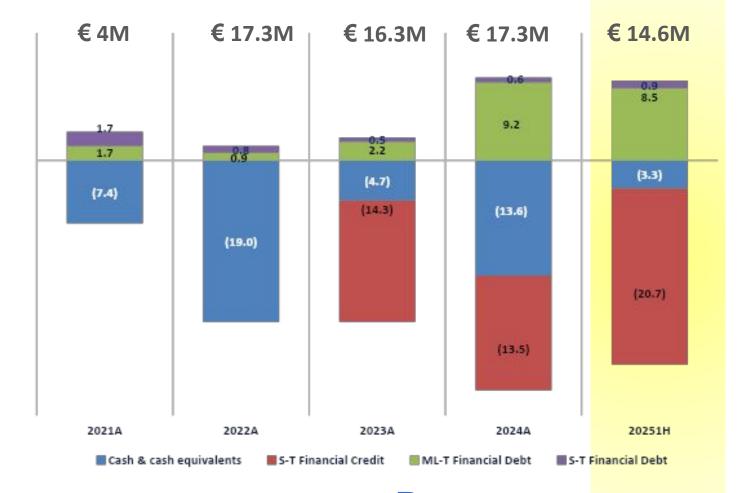
# 60% OF INITIAL VALUE RESIDUAL AT EXPIRY

On the generators'
Rental contract
(often up to 72
months, 65 months
on average)

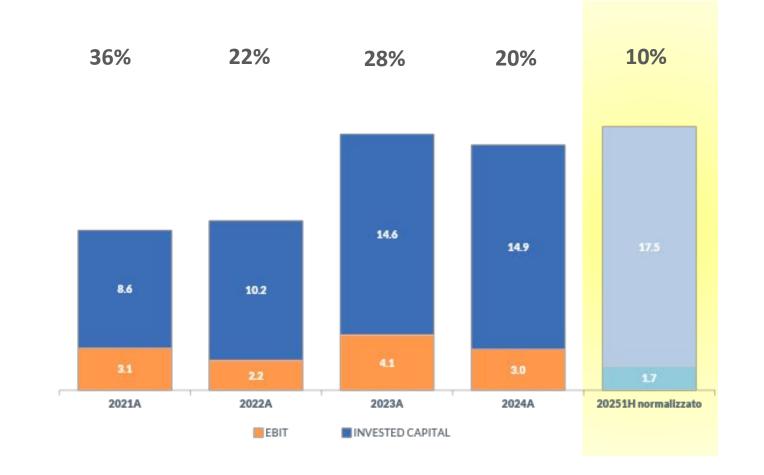


#### **NET FINANCIAL POSITION (CASH)**

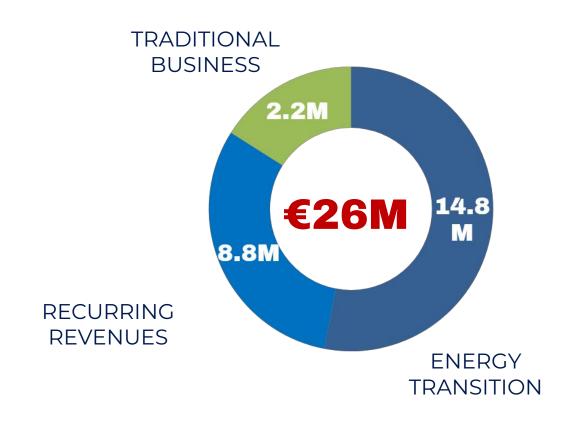
(€M)



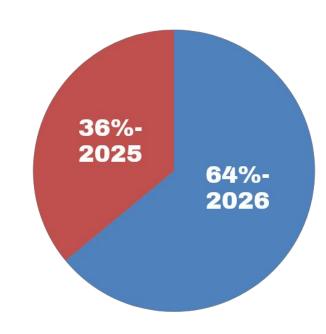
#### Roic



### BACKLOG & OUTLOOK



As at 31 August 2025, the Company has a **total backlog of approximately €26 million**, of which 36% relates to the current year and **64% relates to next year, confirming the significant growth expected for the 2026 financial year**. In addition to the backlog, approximately €1.8 million was already invoiced in July and August.



#### **OUTLOOK**

The Company highlights divergences between its internal projections and analysts' consensus (April 2025). Despite market slowdown and delays in the new Gigafactory, performance in the core business remains solid. 2025 is regarded as a transition year, with stable revenues and margins, while growth prospects are postponed to 2026.

# STRATEGIC INITIATIVE



## STRATEGIC GROWING

## NEW PRODUCTION SITE

• ErreDue will be able to produce up to 60 plants per year in a single shift; production will be doubled in the case of two shifts

#### **FOREIGN EXPANSION**

• It's scouting opportunity in Europe and discussing partnership agreement with company in Spain, Portugal and France

## STRATEGIC POSITIONING

## Strategic Vision of the Hydrogen Market:

market as a long-term
opportunity for both energy
transition and
decarbonization across
high-emission industries. This
broad vision positions the
company to serve a diverse
range of applications.

## Opportunities in Large-Scale Projects:

ErreDue sees the hydrogen
market as a long-term
opportunity for energy
transition and industrial
decarbonization, allowing it to
target a wide range of
applications.

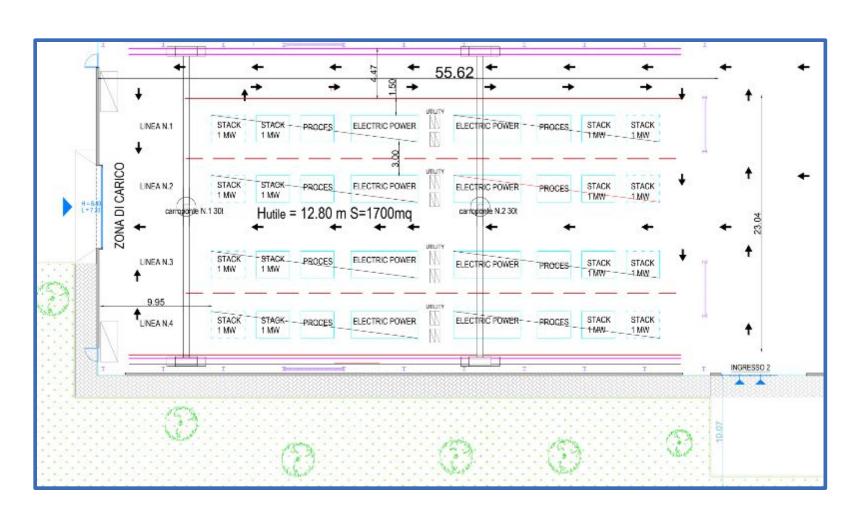
## Proven Technological Quality and Reliability:

With over 30 years of experience, ErreDue has developed reliable, high-quality technology through a fully integrated business model. This expertise has been key to building a strong reputation and a loyal customer base.

Leadership in the
Small to Medium-Scale
Electrolyzer Niche:
By focusing on the 1 to 5

By focusing on the 1 to 5
mw electrolyzer niche,
erredue establishes a strong
foundation for growth. the
demand for larger plants
will boost the overall
market, benefiting
providers of smaller,
modular solutions like
erredue.





#### **NEW PRODUCTION SITE**

60
plants per year on one shift

4 production lines

17,000 sqm new area

## increasing to

**27,000** sqm total area





## APPENDIX

## **ESG AGENDA 2030**

ErreDue pays a lot of attention to ESG policy and has therefore started a path towards obtaining the major certifications in this area

#### Environment

The intrinsic nature of ErreDue's business is centred on respect, protection and improvement of the environment in which operates.



#### Social

ErreDue 's success is thanks to the invaluable contribution of its people. Erredue invests in learning, promoting and rewarding proactive behaviour at all levels of the organisation.





ErreDue is actively engaged in implementing governance, ethics and compliance best practices, aligning interests between stakeholders, supporting growth and long-term strategies



## ENVIROMENTAL ACHIEVEMENTS





## RENEWABLE ENERGY

Installation of 650 Kw of solar panels on the roof.

In addition, a hydrogen refuelling station will be located in the external area to serve its mobile transport and the gas produced during testing will be used to increase the efficiency of the plant. With the new factory, erredue begins the path to becoming a promoter of sustainability.



#### CARBON FOOTPRINT

Measurement of emissions (direct and indirect) of greenhouse gases (CO2, CH4, N2O, CFCs, etc.) due to company activities. Standard: ISO 14064:2019.Locations: Livorno and Lavaiano.Reference year: 2022. Certification: by the first half of 2024



#### SUSTAINABILITY REPORT

The Company will produce and publish the Sustainability Report according to the European Sustainability Reporting Standards (ESRS) defined by EFRAG and the European Commission.By I half of 2024

## SOCIAL ACHIEVEMENTS





#### GENDER EQUALITY

Women make up 25 per cent of the employees, a great achievement for an industry specialising in manufacturing. Entire departments of the company are managed by women, such as the cell production department and the plant management. In addition, the the company CEO is a woman, Francesca Barontini.



#### **EDUCATION**

The valorization of human capital has always been fundamental for ErreDue. The company continually invests in the personal and professional development of its employees. New employees' education includes both practical skills and physical and chemical concepts.

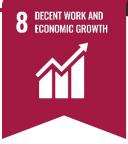


#### WELFARE &BONUS

The valorisation of human capital has always been fundamental for Erredue: every employee can benefit from a well-defined Corporate Welfare Plan. The range of services offered to workers include babysitting vouchers, purchase of text books, gym memberships, travel vouchers, reimbursements for school and canteen expenses. In addition, at the beginning of each year the board of directors decides to offer a meritocratic production bonus of up to € 2,000.

## **GOVERNANCE ACHIEVEMENTS**





## MICRO PUBLIC COMPANY

Erredue's focus on people is an integral part of the company's DNA.

The founders' philosophy was to share the benefit of the company with the key workers that proved to be of added value to the organization so the company turned into a micro public company with 22 worker members of Green Holding which holds the 54% of the share capital.



# ENVIROMENTAL MANAGEMENT SYSTEM

The part conforming to the ISO 14001 environmental standard will be added to the certified Integrated Quality and Safety Management System (ISO 9001 and 45001).Standard: UNI EN ISO 14001:2015.

By April 2024





# Thank you