

# UNLIMITED HYDROGEN

DESIGNER AND MANUFACTURER  
OF EQUIPMENT  
FOR THE PRODUCTION  
& DISTRIBUTION  
OF ZERO-CARBON HYDROGEN

BY **McPhy**

January 2023

# Agenda

- 2022 Sales & Activity
- Scale-up & Gigafactory investment
- Outlook



**Jean-Baptiste LUCAS**  
Chief Executive Officer

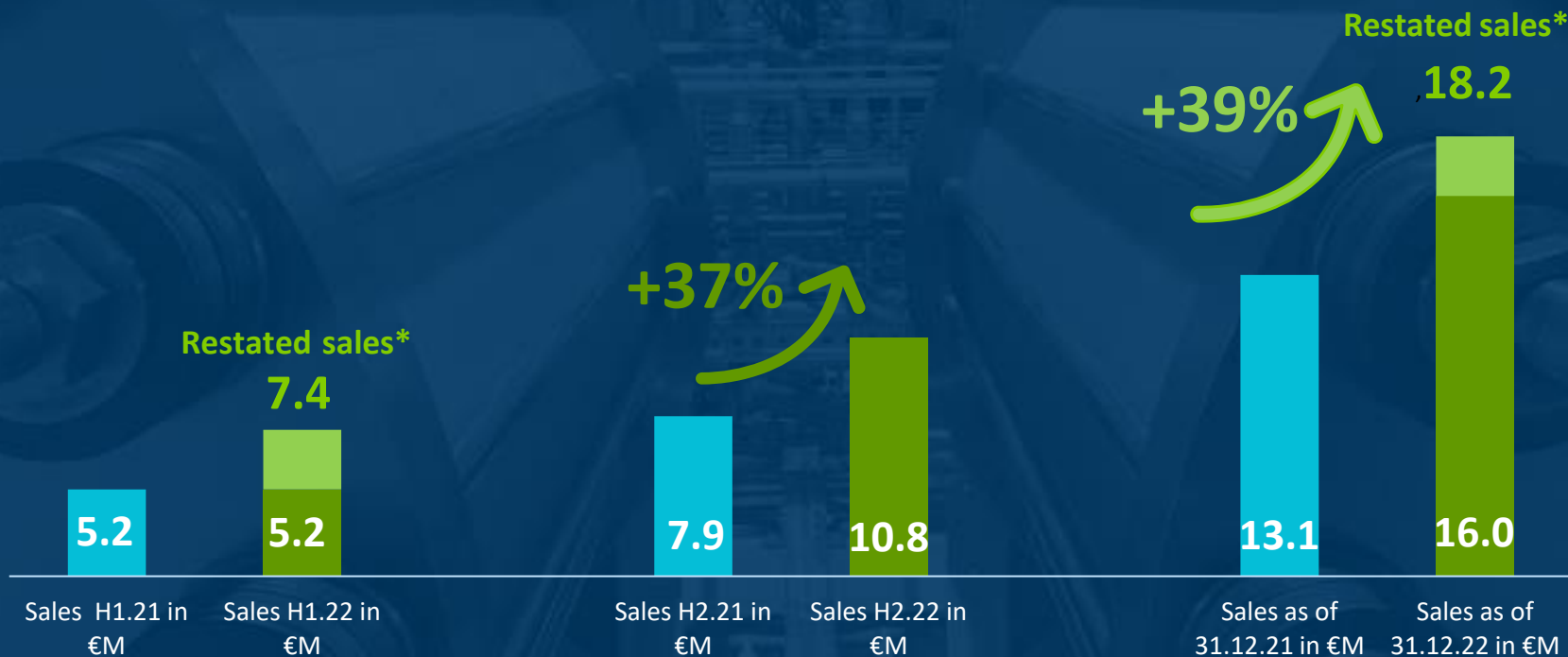


**Alexandre BRUNET**  
Chief Financial Officer

# 2022 Sales & Activity



## | A strong growth in Sales in 2022

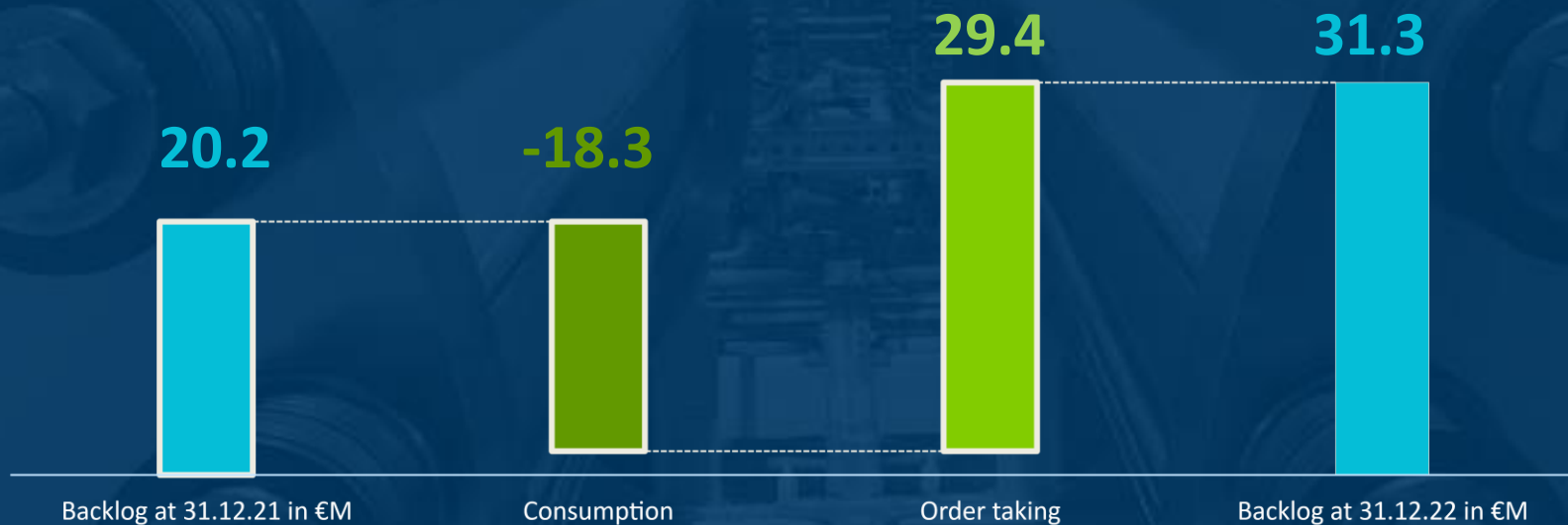


*\*Sales excluding the amount of the takeover of two old technology stations for commercial reasons*

| A sharp backlog increase of +56% in 2022



Fueled by a rise in firm orders (+53%)



# A landmark industrial contract



## McPhy registers a leading reference in the industrial field

- Contract with a joint venture controlled by one of the world's leading steel groups
- Equipment of an innovative **low-carbon steel production project** with first deliveries expected in the first half of 2024
- Supply of **two McLyzer electrolyzers** (1 MW capacity each) and a **Dual Pressure station** (350/700 bar)
- McPhy will also provide **Services and R&D**



# New orders from HYPE



## McPhy registers two order for Hype as part of their strategic partnership

- First order with the supply of a 2 MW alkaline electrolyzer and a Dual Pressure station with a capacity of 800 kg per day
- Second order for a 4 MW electrolyzer and a second large capacity station, Dual Pressure of 800 kg/day
- They will be installed in the Paris region





# Scale-up & Gigafactory investment





# Gigafactory: Final Investment Decision

| McPhys's Board gives its approval for the project



- The board has validated the project under the IPCEI scheme and the public aid contract has been signed with Bpifrance
- A financing up to €124 million (including Maugis subvention of €10 million)
- A first payment from Bpifrance of €28.5 million received end of 2022, the construction work has already started
- Commissioning of the future plant still planned from the first half of 2024
- A gradual production ramp-up to reach an annual full capacity of 1 GW



# Augmented McLyzer electrolyzer program roadmap

| The right balance between bankability & innovation to meet the market needs

## STEP 1 | 2022-2023

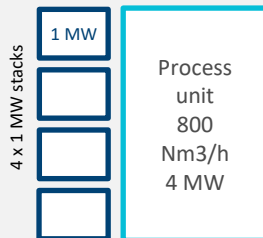
Current 4 MW solution McLyzer 800

McPhy

**4 to 20 MW Electrolyzer Platform**  
Container – Energy & Mobility markets



**16 MW**  
4 x ML800 outdoor



Standardization

## STEP 2 | 2023-2025

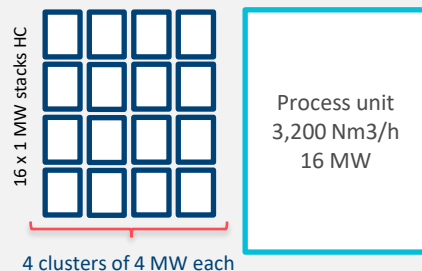
McLyzer 3,200 (v1) – XL module

McPhy

**100 to 200 MW Electrolyzer Platform**  
Building – Large Industry market



**96 MW**  
(19,200 Nm<sup>3</sup>/h)  
6 x ML3200 indoor

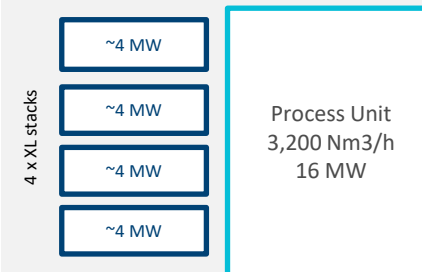


PHASE I of GIGA Project

## STEP 3 | 2025 & more

McLyzer 3,200 (v2) based on XL stack

McPhy



PHASE II of GIGA Project

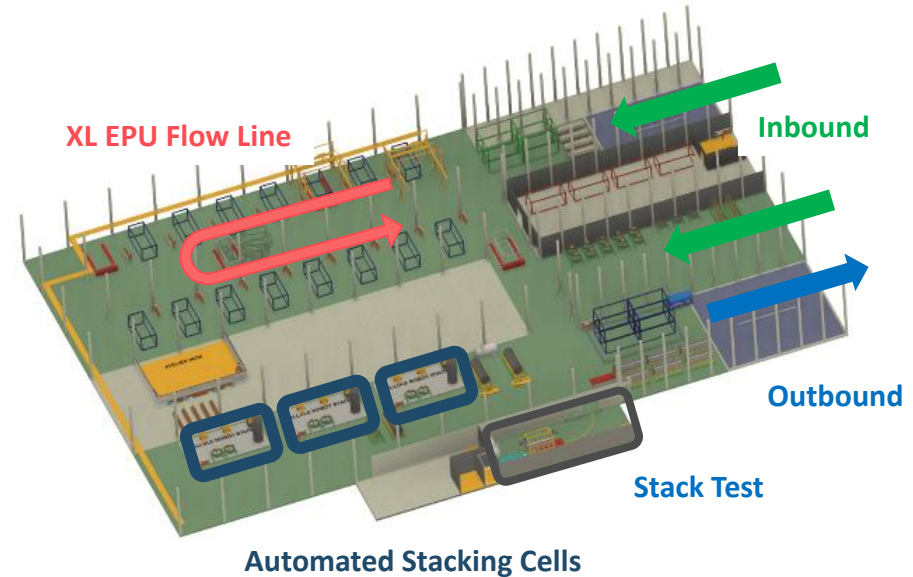
\*EPU – Electrolyzer Process Unit: skid with separation of electrolyte and gases, pumping & cooling of electrolyte, gas cooling...

# Gigafactory a competitive edge for McPhy

## | XL EPU & XL Stack Manufacturing Unit



- **Installed capacity (2 shifts)**
  - 50+ XL EPU
  - 200+ XL stacks
- **Innovative Process as a condition for competitiveness and IPCEI funding**
  - XL EPU flow line enhanced
  - XL stack fully automated
  - Full functional stack Test
  - Full electrical and leakage EPU Test
- **20.000 sqm on 8ha land in Belfort**
  - Potential extension
  - Flexible building for several product generations
- **Civil work started in September 2022**
  - Building ready by January 2024, start of operation in H1 2024



# New capacity investment in San Miniato

## | Large Stack Semi-Automatic Line



**Purpose of the project is to semi-robotize the stacking operation (operation currently totally manual) in order to achieve better results in terms of:**

- Quality and Repeatability
- Productivity
- Safety and Ergonomics

→ **Increase the production capacity from 100 to 300 MW**

### NEXT STEPS

- ✓ Manufacturing & Assembly @ FIRAC  
↳ End of October 2022
- ✓ Assembly @ McPhy  
↳ Beginning of December 2022
- ✓ Programming & Commissioning  
↳ End of December 2022
- ✓ Semi-Automatic Line fully operative from January 2023



# Outlook





**€-34m to €-37m**

estimated EBITDA  
as of 31.12.2022

**€135m**

estimated cash position  
as of 31.12.2022

Sustained growth  
expected in 2023 thanks  
to a solid backlog and the  
rise of the Hydrogen  
market



# Q&A

An abstract graphic in the bottom right corner of the slide. It consists of several overlapping, curved, leaf-like shapes. The colors transition from a dark blue on the left, through light blue, green, yellow, and orange, to a bright pink on the right. The shapes are layered, creating a sense of depth and movement.



Driving  
clean energy  
forward

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