

# Break the **energy cost** barrier in hydrogen projects

## Core challenges in hydrogen project economics



#### ~60% OF HYDROGEN COSTS

Energy consumption is the largest cost driver for green hydrogen production



#### **HIGHER CAPEX**

Inefficient electrolyzers require larger MW capacity to meet output targets



#### **LOW COMPETITIVENESS**

Elevated energy demand keeps green hydrogen costs high and limits market adoption

BUSINESS IMPACT: Projects face reduced profitability and slower adoption due to high energy costs, larger systems, and limited competitiveness.

## Ohmium advantage



#### 48 KWH/KG SYSTEM EFFICIENCY\*

Industry-leading efficiency reduces total energy consumption



# REDUCED CAPEX

Efficient electrolyzers decrease

MW capacity needed to
achieve production goals



# HIGHER PROJECT COMPETITIVENESS

Improved economics make green hydrogen commercially viable

### Value Delivered

- LOWER LCOH Enhanced efficiency directly cuts operating expenses
- CAPEX SAVINGS Each 1 kWh/kg efficiency gain saves up to €40/kW in CapEx
- GREATER PROFITABILITY Improved margins strengthen project bankability and ROI

**RESULT:** Deliver cost-efficient hydrogen with high system efficiency that decreases energy consumption, CapEx, and total cost of ownership.

<sup>\*</sup> System efficiency calculations include stack, power electronics, H2 purification, cooling, water treatment, and DAS/control system losses.