

zepp.solutions B.V.

Hydrogen Fuel Cell Systems

INVESTMENT MEMORANDUM – MAY 2022



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AT A GLANCE



- ❖ Manufactures zero-emission hydrogen fuel cell systems with industry leading power density and functional integration
- ❖ Proprietary control software enables optimum efficiency and operational robustness

Markets

- ❑ Addressable market of over US\$ 20 bn in 2030 for Global PEM fuel cell systems for mobility
- ❑ Go-to market: early adopter markets with large volume potential:
 - ✓ Special vehicles for material handling
 - ✓ On/off-road trucks & heavy machines
 - ✓ Public transport/service vehicles
 - ✓ Construction equipment and power generators
 - ✓ Large vessels and small craft

Products



50 kW FC-System Module

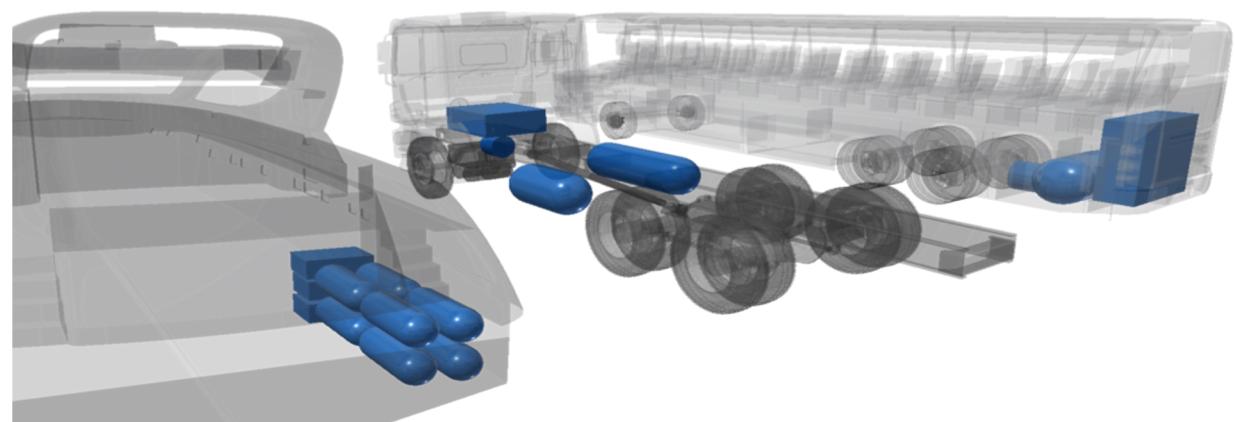


150 kW FC-System Module

About Zepp Solutions

- ❑ zepp.solutions B.V. ("Zepp") was established in 2017 by the 5 founders who have been working together in fuel cell (FC) technology since 2011
- ❑ Total addressable market forecast to be US\$150bn in 2050, implying 23% annual growth rate in next 30 years
- ❑ Proprietary control system and software architecture
- ❑ Unique hydrogen and system test facility
- ❑ Operational products deployed across different applications within a continuously growing client base

Fuel Cell System Application Illustration



- ❖ Potential for ca. € 1 billion in revenues in 2030

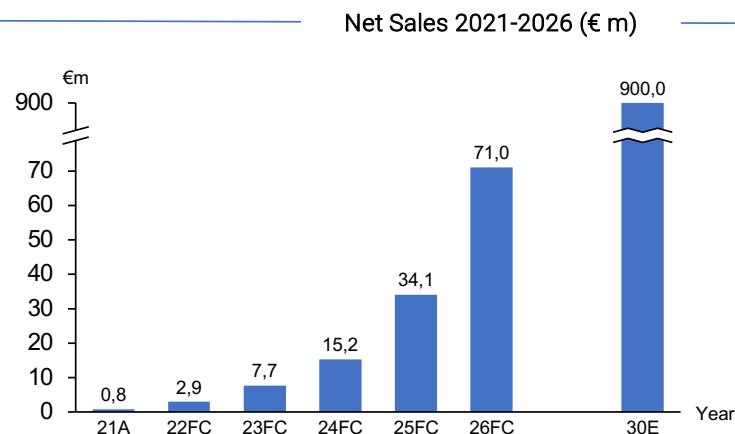
- ❖ 2025 annual production yields ~150,000-ton CO₂(*) savings per annum



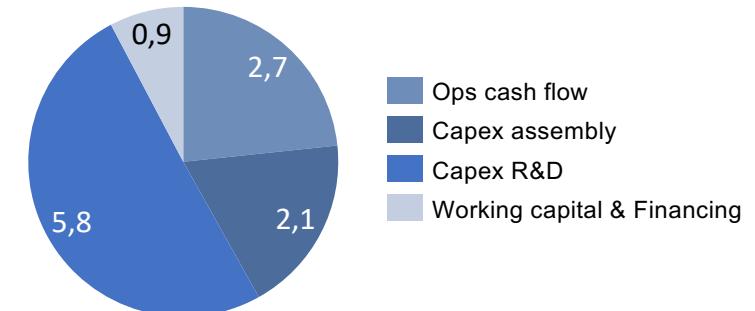
INVESTMENT SUMMARY

Investment Case

- ❑ Unique chance to invest in award-winning, fast growing European hydrogen company with proprietary technology
- ❑ Industry leader in the design and manufacturing of high power-density Proton-Exchange Membrane (PEM) fuel cell systems, focused on electrification of otherwise hard to decarbonize applications in the medium and heavy-duty markets
- ❑ Proprietary and state-of-the-art software control system and scalable technology create competitive edge
- ❑ Industry track record and strong reputation for compact and highly efficient turn-key FC systems with compelling Total Cost of Ownership ("TCO")
- ❑ Existing customers in key markets such as special equipment, transportation and marine
- ❑ Well-matched, multi-disciplinary team with deep industry knowledge and technical expertise
- ❑ Funding to scale up >1000 units in sales and annual revenues of ca. € 70 million by 2026



Funding Requirement: €10 – 12 million



Clients & Projects



WATERTAXI ROTTERDAM



Truck modification specialist

FUNDING TO REALIZE GROWTH:

- ❑ Zepp seeking € 10-12 million from strong shareholder partners to accelerate its expansion and capture market share in a rapidly growing market addressing big global challenges
- ❑ Investment in sales & marketing, assembly and continuous product portfolio expansion and R&D
- ❑ With the envisaged financing round Zepp will become cash flow positive beginning January 2026

BECOME A LEADING FUEL CELL SYSTEM SUPPLIER

MISSION

- ❑ We develop innovative hydrogen fuel cell system solutions
- ❑ We integrate these turn-key systems and enable our customers to create the best zero-emission products
- ❑ We strive to become a leading fuel cell system supplier and accelerate the European energy transition

VISION

- ❑ We realize zero-emission hydrogen fuel cell systems for a sustainable world

STRATEGY

- ❑ Develop turn-key integrated fuel cell solutions to provide best performance, efficiency and lowest TCO
- ❑ Target medium and heavy-duty markets with limited infrastructure dependencies
- ❑ Apply holistic design and integration approach for fully optimized end-product
- ❑ Expand in-house assembly to control speed of product development, supply chain resilience and bolster customer service
- ❑ Serve medium and heavy-duty markets with a modular product portfolio and create economies of scale
- ❑ Attract funding to advance internal technology development (R&D) and improve product performance
- ❑ Attract and retain experienced staff and talent to strengthen team with new capabilities and expertise

THE HYDROGEN OPPORTUNITY

A GLOBAL HYDROGEN-BASED ENERGY SYSTEM SOLVES THE INTERMITTENCY AND CURTAILMENT ISSUES OF RENEWABLE ENERGY SOURCES

HYDROGEN IS A TRANSPORTABLE AND STORABLE ENERGY CARRIER, IDEALLY SUITABLE FOR USE IN SECTORS WHICH ARE OTHERWISE HARD TO DECARBONIZE

Paris agreement and net-zero commitments

90₁

Countries announced their net-zero carbon target 2050.

>300bn₂

USD investments announced into hydrogen technologies.

Hydrogen momentum in industry and government

>130₃

Members of the Hydrogen Council.

10%₄

Energy supplied from hydrogen by 2050.

Continuously reducing prices for renewable energy and hydrogen fuel

80%₅

Decrease in renewable energy prices since 2010.

40x₆

Increase in EU electrolyzer capacity for green hydrogen production by 2030.

10x₇

Increase in fuel cell sales since 2015.

Increased adoption of hydrogen powered vehicles

250%₈

Increase in HRS worldwide in the past 5 years.

67%₉

CAGR global fuel cell vehicle market from 2019 to 2026.

1m₁₀

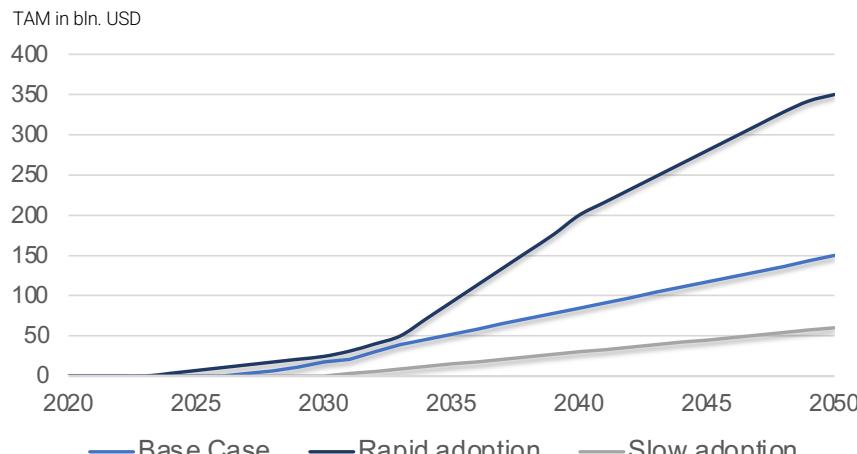
FCEV 2030 target by California Fuel Cell Partnership.

1. Net zero tracker, 2022
2. Hydrogen insights, McKinsey 2021 p.7
3. Hydrogen Council
4. Global Hydrogen Review 2021, IEA 2021
5. Renewable Power Generation Costs in 2020, IRENA 2021
6. Momentum for green hydrogen is growing in North-West Europe, Rabobank 2021
7. Deployment Status of Fuel Cells in Road Transport: 2021 Update, Julich 2021
8. Hydrogen fuel cell vehicle market, Allied market research 2020
9. Fuel Cell Vehicle Market Size, Share, Trends | Global Report 2026, Fortune 2026
10. A California Fuel Cell Revolution, CAFCP 2019

FUEL CELL MARKET DEVELOPMENT

US\$150 BLN GLOBAL FUEL CELL MARKET BY 2050

- Analysts expect the fuel cell TAM to reach US\$152bn by 2050, implying a 23% CAGR over the next three decades:

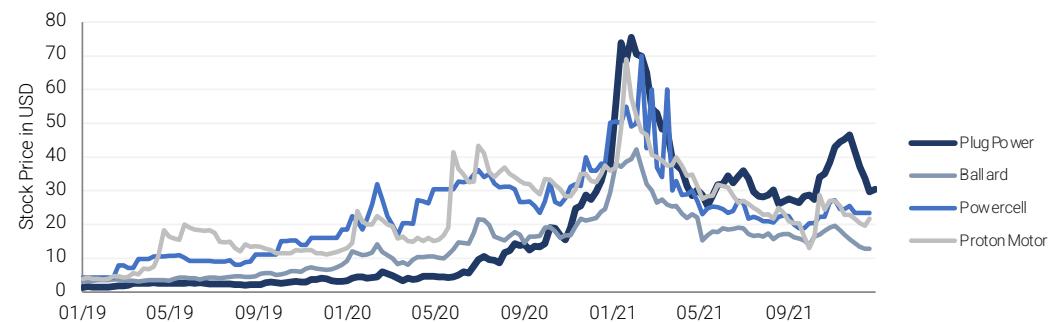


Source: Hydrogen Highway 2020, Bernstein 2020

- Global FC market will be dominated by PEM (Proton Exchange Membrane) technology
- 80% of FC market will be generated from transportation industries

GROWING MARKET VALUE OF FC INDUSTRY PLAYERS

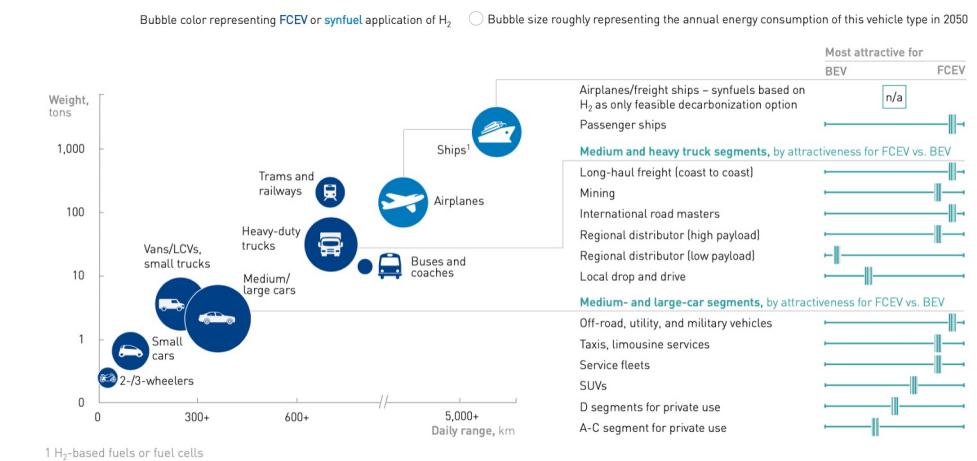
Source: <https://finance.yahoo.com/>



TECHNOLOGY ADOPTION PER MARKET SEGMENT

Source: [Hydrogen Roadmap Europe, FCH2JU 2019](https://www.hydrogen-roadmap-europe.eu/)

Comparison of range, payload and preferred technology:



PROBLEM AND SOLUTION

GLOBAL CHALLENGES:

Emission reduction

End fossil fuel dependency

Efficiency gains



Vehicle and machine manufacturers have to power their products with emission-free technology without compromising on usability and operation

Hydrogen fuel cell technology will be one of the key solutions to this need in medium and heavy-duty markets

PROBLEMS:

Many fuel cell projects fail due to excessive complexity and cost

- I. PEM fuel cell systems are expensive
- II. Systems require large installation space
- III. System application integration requires a large amount of technology-specific expertise and effort
- IV. Current control algorithms lack robustness over a larger field of operational conditions
- V. Insufficient availability of hydrogen refuelling infrastructure
- VI. Technology roll-out dependent on government policy and regulations

ZEPP SOLUTIONS:

Manufactures hydrogen fuel cell systems with best-in-class power density and usability

- I. Zepp FC systems are built for scalability and adaptability suitable for several heavy-duty markets. Additionally, our unique software approach enables fast implementation of new and cost-competitive components, accelerating system price reduction
- II. Very compact design with best in-class power density
- III. Completely integrated supply-scope of our FC systems make them an ideal drop-in solution with minimum engineering effort and lower cost of integration
- IV. Advanced control system with real-time monitoring and data-driven optimization for exceptional efficiency, operational robustness and prolonged system lifetime
- V. Go-to market approach targeting sectors with low initial infrastructure needs
- VI. International commitment and global action plans to reduce emissions conducive towards the role of hydrogen in the global energy transition

ZEPP PRODUCT OFFERING

ZEPP FUEL CELL SYSTEMS SOLVE CURRENT TECHNOLOGY BARRIERS.

Our technology enables our clients to launch their applications with highly efficient and compact zero-emission fuel cell technology, reducing OPEX and development cost.

MEDIUM DUTY **50 kW FC-System (Y50)**

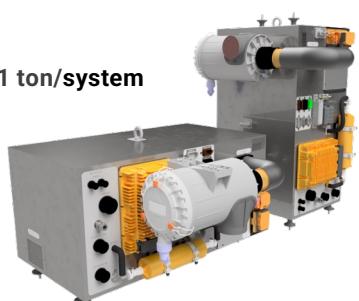
Platform power range 15-60 kW

Prototypes sold and deployed to several field applications

Suitable for i.e.:

- Typical REX applications such as public transport busses
- Material handling equipment (e.g., Yard tractors, heavy duty Forklifts and Reach stackers)
- Construction equipment
- Small vessels and ferries (e.g., Watertaxi)

Avg. annual CO₂ savings^(*): >111 ton/system



Note (*): internal calculations

* Comparison diesel engine vs fuel cell system, both producing net system power, 2500h/y.
CO₂ emission of 2.66 kgCO₂/L diesel (TTW), diesel energy of 10.0 kWh/L (LHV) 30% efficiency of diesel engine.
Zero emission by fuel cell system.

HEAVY DUTY **150 kW FC-System (X150)**

Platform power range 80-200 kW

Prototype on test bench (Q3 2022)

Suitable for i.e.:

- Heavy duty on/off-road Trucks and Machines
- Inland waterway vessels
- Fast vessels and ferries
- Stationary power generation
- Multi-module platform, scalable to megawatt main propulsion systems of large vessels

Avg. annual CO₂ savings^(*): >332 ton/system



SPECIALS

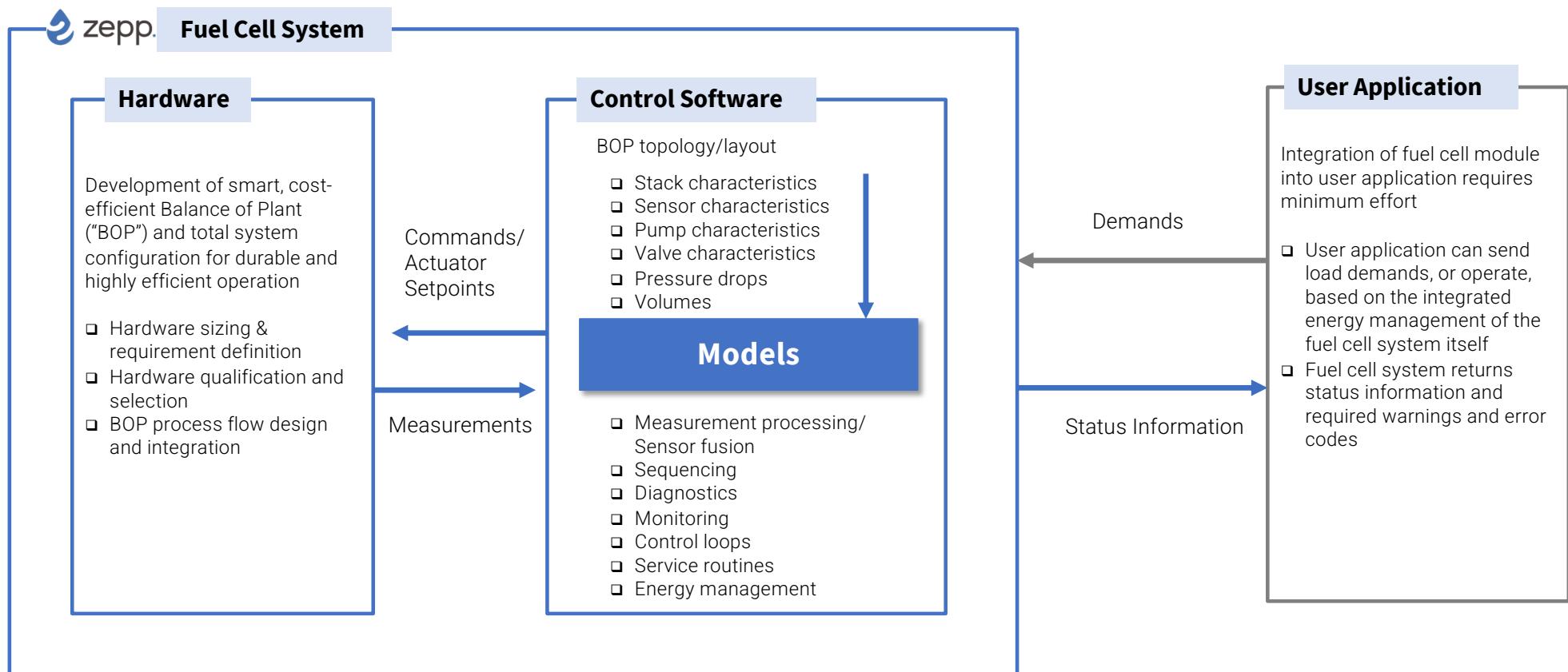
Possible direct product developments

Special projects, e.g.:

- Containerized FC power modules
- Systems for general aviation
- Mobile power generators

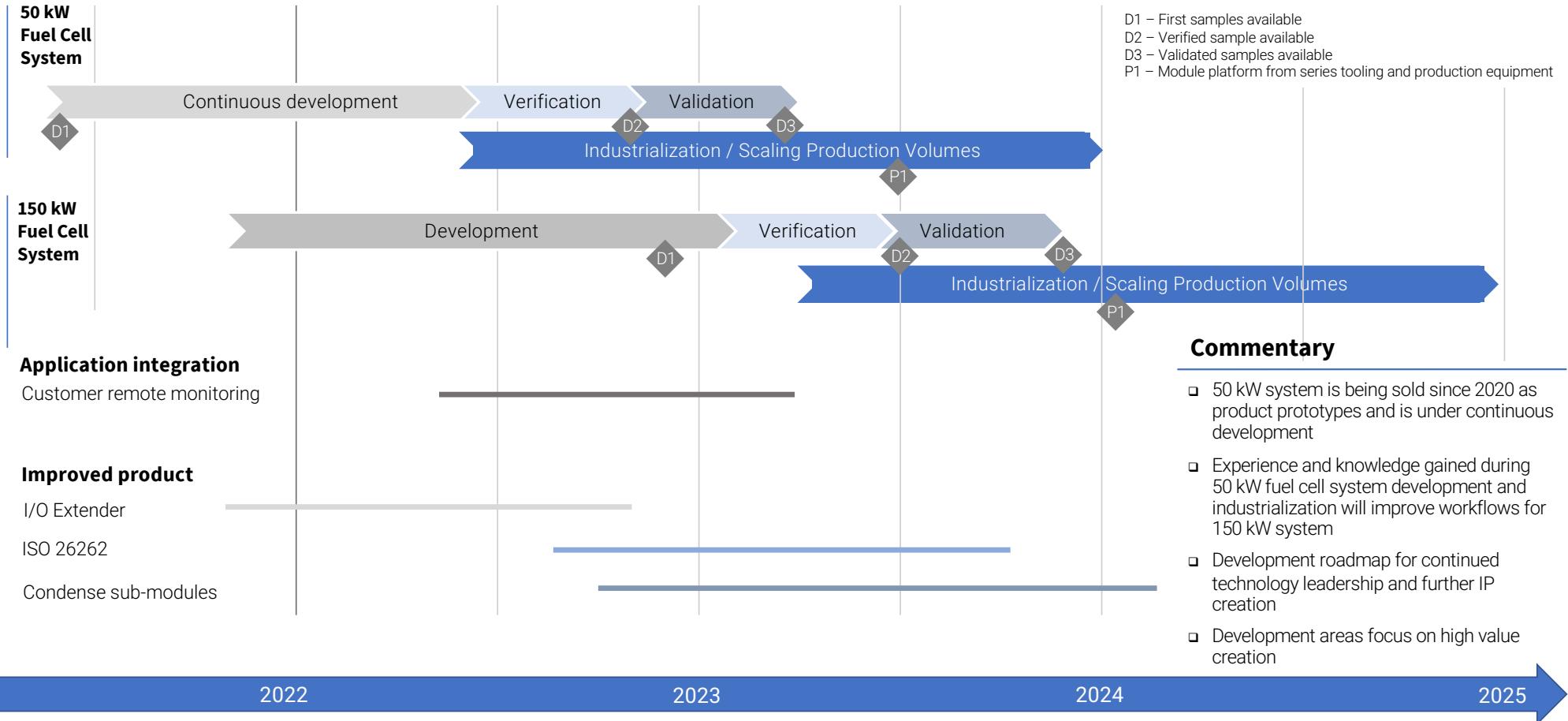


OPTIMAL INTERACTION BETWEEN HARDWARE AND SOFTWARE



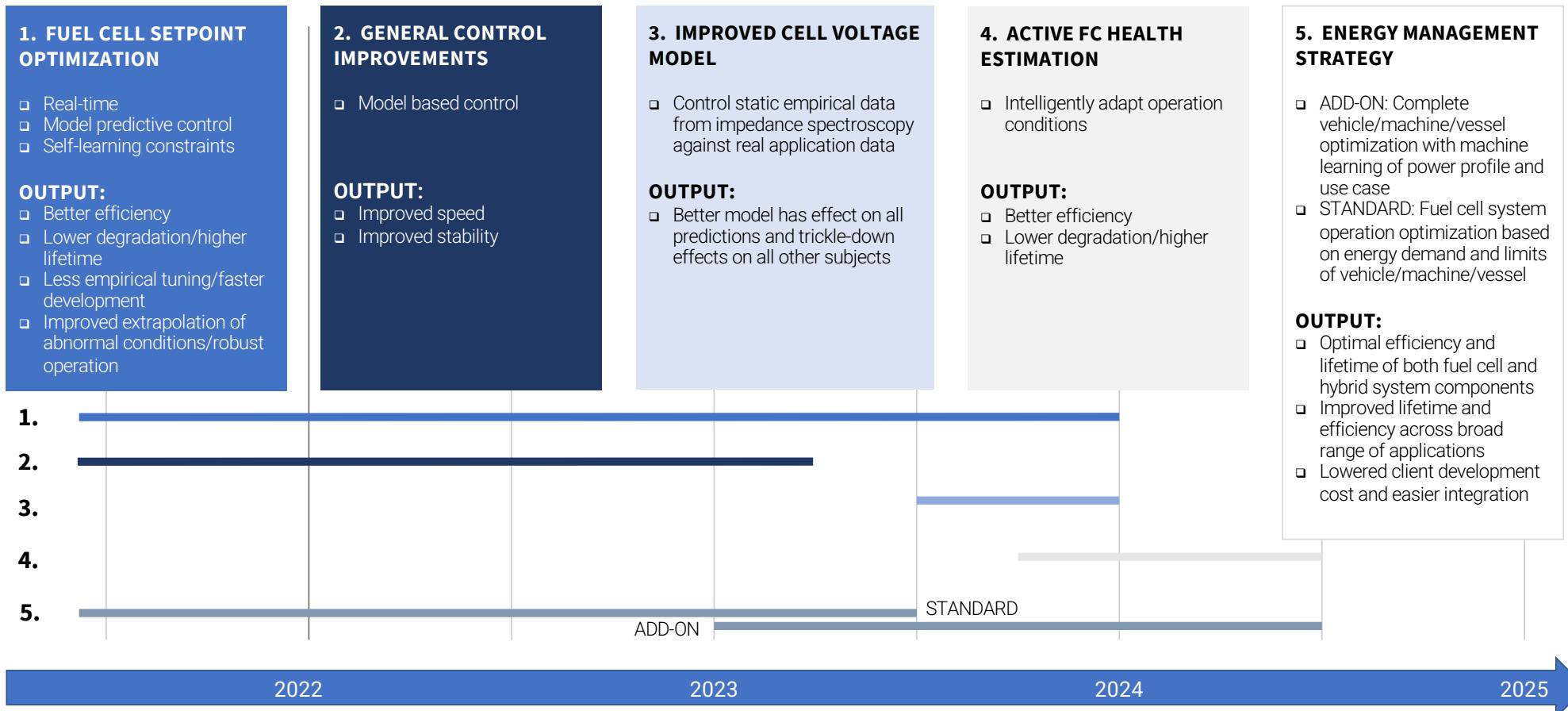
PRODUCT & TECHNOLOGY ROADMAP

Existing Products :



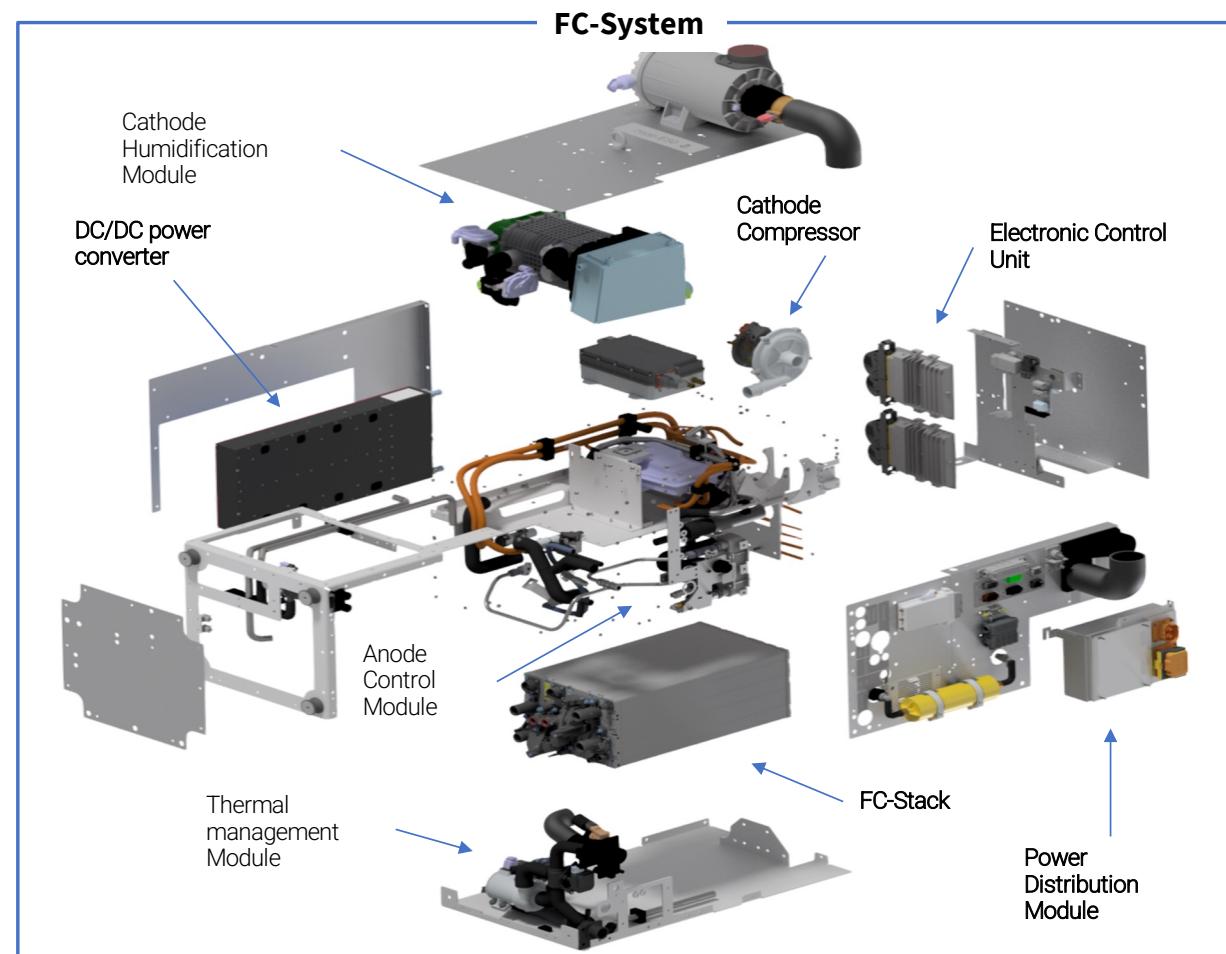
PRODUCT & TECHNOLOGY ROADMAP (continued)

SOFTWARE DEVELOPMENTS:



SUPPLIER AGNOSTIC SYSTEM DESIGN

- ❑ Supplier agnostic design and unique model-based engineering and control software allow for fast adoption and integration of components in the FC System package
- ❑ The **Power Distribution Module** is the unique electric link between all high-voltage components in the system. This is one of the first hardware components which has been fully developed in-house to improve overall system performance and system power density
- ❑ Most components that are being used have readily available product/supplier alternatives. Other components, like the **Cathode Compressor** and **DC/DC power converter**, that tend to be expensive, can be replaced by new and increasingly cheaper alternatives
- ❑ Supplier delivered parts that are most time critical (when the product is fundamentally changed or when supplier is switched) are the **FC-stack** itself and the **Electronic Control Unit** which runs the advanced system control algorithms. The estimated switch-over period for these two system parts is expected to be < 0,5 years



POSITION IN THE VALUE CHAIN

| TECHNOLOGY VALUE CHAIN | | EXAMPLE INDUSTRY PLAYERS (illustrative) | COMMENTARY |
|---|---|--|---|
|  | Inputs | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Raw Materials</p> <p>Refined Active Materials</p> </div> <div style="text-align: center;"> <p>BASF We create chemistry</p> <p>DUPONT</p> <p>TOYOTA TSUSHO</p> </div> </div> | <ul style="list-style-type: none"> □ This exhibit is meant to present the value chain. Some example industry players are operating in more than one segment |
| | Stack/System component MFG | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Continental</p> </div> <div style="text-align: center;"> <p>fumatech functional membranes for fuel cells BWT GROUP</p> </div> <div style="text-align: center;"> <p>EKPO FUEL CELL TECHNOLOGIES</p> </div> <div style="text-align: center;"> <p>LOOP</p> </div> </div> | <ul style="list-style-type: none"> □ Zepp's FC systems provide flexibility to use a wide range of components from global suppliers |
| | FC-System Development and Manufacturing | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>BALLARD</p> </div> <div style="text-align: center;"> <p>PM Fuel Cells - Power Systems</p> </div> <div style="text-align: center;"> <p>PLUG POWER P</p> </div> <div style="text-align: center;"> <p>TECO 2030</p> </div> </div> | <ul style="list-style-type: none"> □ Close cooperation with leading industry providers of materials, components and stacks |
| | Application Integration | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>FEV</p> </div> <div style="text-align: center;"> <p>ABB</p> </div> <div style="text-align: center;"> <p>HOLTHAUSEN CLEAN TECHNOLOGY</p> </div> </div> | <ul style="list-style-type: none"> □ Enables real focus on FC-system development |
| | End Products | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>DAMEN</p> </div> <div style="text-align: center;"> <p>TERBERG SPECIAL VEHICLES</p> </div> <div style="text-align: center;"> <p>HYZON</p> </div> <div style="text-align: center;"> <p>IVECO</p> </div> </div> | <ul style="list-style-type: none"> □ Zepp's fully integrated modules and integration team reduce the need for external application integrators |
| | Vehicles and Machines | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>LIEBHERR</p> </div> <div style="text-align: center;"> <p>TOYOTA</p> </div> <div style="text-align: center;"> <p>HYUNDAI</p> </div> </div> | <ul style="list-style-type: none"> □ Direct cooperation with clients such as shipyards, vehicle and machine manufacturers provide valuable feedback for Zepp's product development and improves the overall competitiveness of customer's end products |
| | | <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>FAUN KIRCHHOFF GRUPPE</p> </div> <div style="text-align: center;"> <p>GAUSSIN Be Faster... Safer & Cleaner</p> </div> <div style="text-align: center;"> <p>VAN HOOGL</p> </div> </div> | |

PARTNERSHIP MODEL

STRATEGIC PARTNERSHIPS & COOPERATION *non-exhaustive:*



- ❑ Preferred fuel cell stack supplier with close co-development and cooperation since 2017



- ❑ Close cooperation and trusted client since 2017



- ❑ Strategic client with close communication



- ❑ Important industry connection with large amount of future FC business cases



- ❑ Partners for development of mid to large size hydrogen FC powered hydrofoil vessels



- ❑ Partners for development of mid to large size hydrogen FC powered hydrofoil vessels



Aviation ground support system integrator

- ❑ Development and deployment partners for hydrogen powered ground support equipment on airfields



HAPPS

- ❑ Consortium for potential separate business division for our high-performance FC system technology for aviation

INDUSTRY NETWORKS:



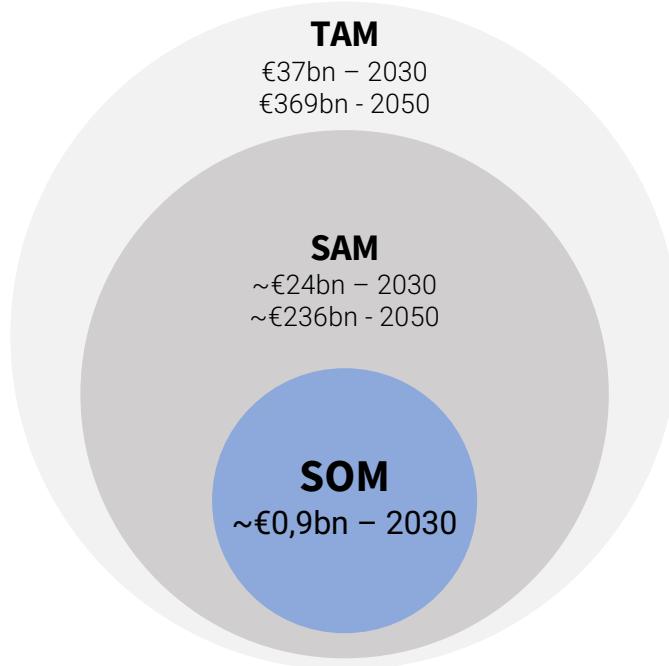
European Clean Hydrogen Alliance



INFRASTRUCTURE NETWORK:



ADDRESSABLE MARKET



2030 ZEPP TARGET REVENUE: € 915 MLN

LARGE TAM WITH PROVEN DEMAND AND STRONG GROWTH

TAM - Global fuel cell system market. Market size estimate based on Bernstein Hydrogen Highway "Base case" (€15bn global fuel cell stack market size in 2030). Fuel cell stack cost is a third of total system cost, hence fuel cell system global market size is 3 times higher

SAM - Global PEM fuel cell system market for mobility. 80% of the global fuel cell market is supposed to be for mobility. We assume 80% of that mobility market to be fuel cell systems based on PEM technology

SOM - 20% of the global fuel cell market will be in Europe. We target a market share of 15% of the European market by 2030. Resulting in a total global market share of 3% and €0,9bn in annual revenue from system sales

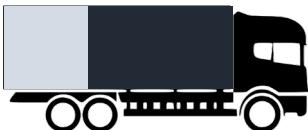
REVENUE GENERATION THROUGH SYSTEM SALES TO VEHICLE/MACHINE OEMS

- Target 2-4% market share in the mobility market implies annual revenue of €0,8 bn from system sales in 2030
- Additional +10% revenue will be generated by project engineering and aftersales services, over time

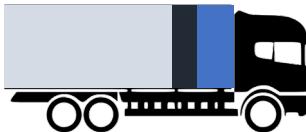
SUBSTITUTION ANALYSIS

ZERO-EMISSION ALTERNATIVES FOR MOBILE APPLICATIONS:

Battery-electric Vehicle:



BEV with Hydrogen Fuel Cell:



Payload Capacity

Battery Weight

Hydrogen and FC Weight

"The problem is that batteries are big and heavy. The more weight you're trying to move, the more batteries you need to power the vehicle. But the more batteries you use, the more weight you add—and the more power you need.

Even with big breakthroughs in battery technology, electric vehicles will probably never be a practical solution for things like 18-wheelers, cargo ships, and passenger jets. Electricity works when you need to cover short distances, but we need a different solution for heavy, long-haul vehicles."

Bill Gates Sept. 2020

HYDROGEN FUEL CELL:

- + Full zero-emission technology
- + Quick refueling capability of H₂
- + Cost and weight efficient energy storage
- + Silent and vibration free operation
- System complexity
- Infrastructure dependency

HYDROGEN COMBUSTION:

- + Well developed internal combustion engine basis
- + No CO₂ emissions
- Still has NOx emissions
- Less efficient energy conversion
- Higher OPEX
- Larger fuel storage requirement
- Infrastructure dependency

BATTERY (BEV):

- + No emissions
- + Ideal for light duty applications
- + Low system complexity
- + Simple low-cost infrastructure for single units
- Battery production requires rare earth resources
- Expensive charging infrastructure
- Linearly increasing system cost and mass for higher stored energy content
- Longer charging times

Note: other alternative fuels or energy carriers such as Biodiesel/kerosine, Ammonia, Methanol and Formic acid are not comparable as these are either carbon-based and/or used in high temperature energy conversion processes (e.g., combustion) with local CO₂ and/or NOx emissions. Alternative energy carriers that are not carbon-based and are used in a low temperature conversion process (e.g., Ammonia in a LT fuel cell) can be emission free and will be able to be used with a Zepp FC system (based on an intermittent transforming process)

COMPETITION ANALYSIS

ZEPP'S FC-SYSTEMS HAVE SUPERIOR POWER DENSITY AND HIGHEST LEVEL OF FUNCTIONAL INTEGRATION

SOFTWARE DRIVEN FUNCTIONAL EFFICIENCY AND ROBUSTNESS ARE USP's IN A MARKET THAT IS EXPECTED TO COMMODITISE OVER TIME

- Compared to Zepp, no competing system is as suitable for full drop-in solution
- Zepp's unique software approach allows faster adoption of new components and supplier technology, reducing cost and improving performance
- Competing systems lack in power density and functional integration, meaning higher development cost at vehicle/machine manufacturer
- Zepp system control technology offers significant benefits in terms of operational robustness and efficiency, especially under extreme operating conditions

High EV/Sales multiples indicate strong growth potential:

BALLARD

PLUG POWER P

PM

TECO

Market Cap.

US\$ 3.02 bn

US\$ 14.9 bn

GBP 240 mln

NOK 708 mln

Sales 2021

US\$ 103 mln

US\$ 397.5 mln

GBP 1.7 mln

NOK 12.7 mln

EV/Sales

18.4x

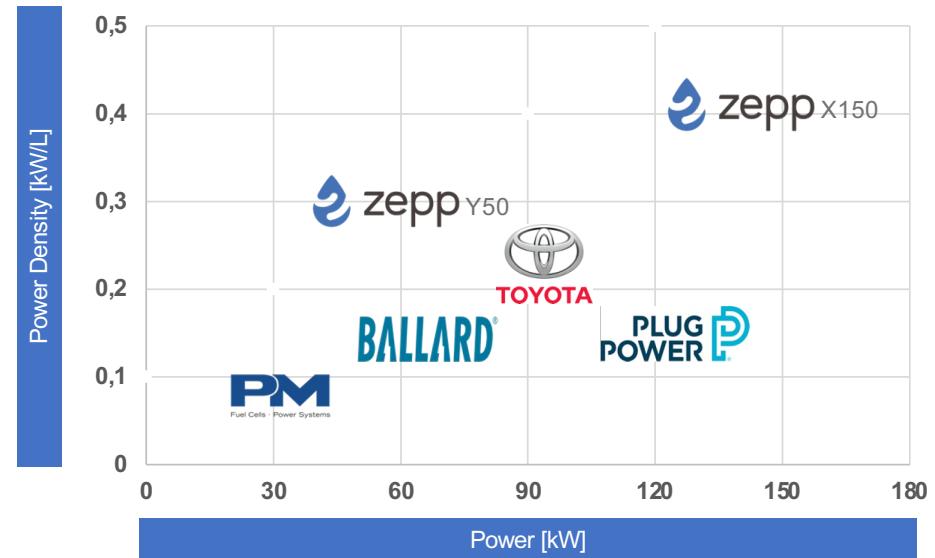
23.8x

190x

66.7x

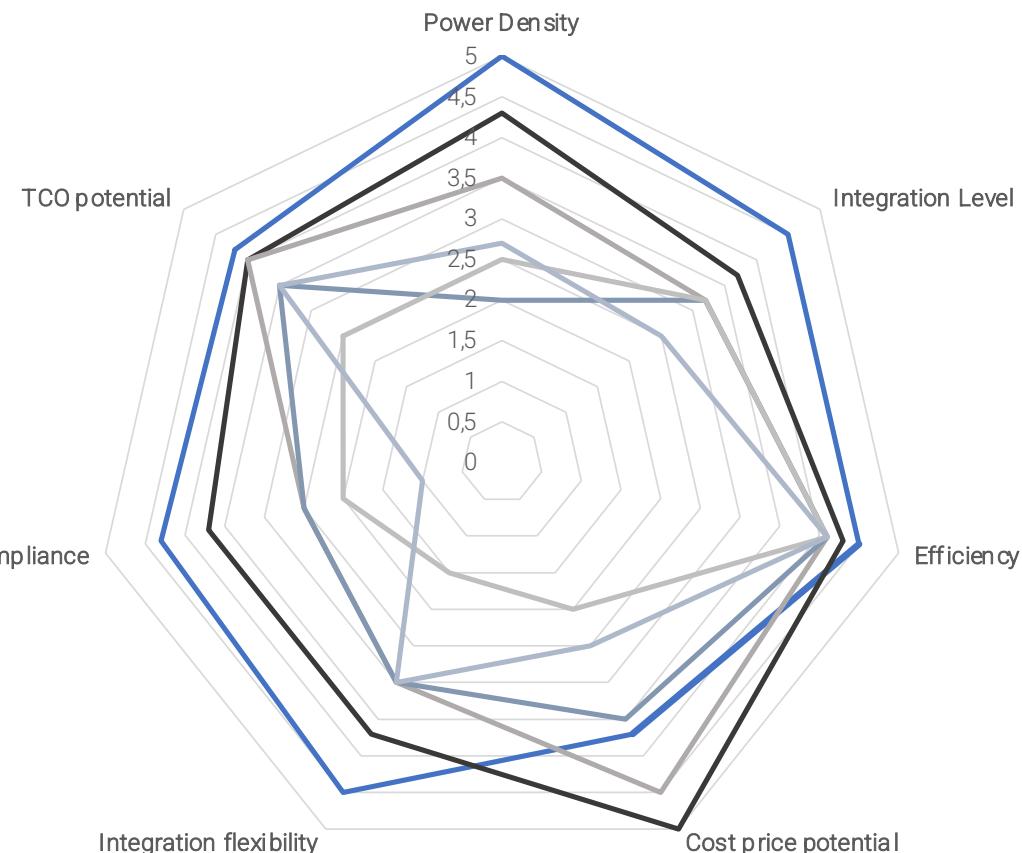
Sources: WSJ, Factset, per April 2022

COMPETITIVE POSITION & CORE IP (*)



(*) A limited selection of the competition was chosen to sketch all ends of current market situation.
Alternative competitors will show similar densities/system sizes e.g. Powercell Sweden Ab, Loop Energy, Symbio, Nedstack.

COMPETITION ANALYSIS



zepp.

BALLARD

PLUG POWER

PM
Fuel Cells - Power Systems

TECO
2030

LOOP

COMMENTARY

- Performance evaluation is made according to available sources and industry feedback
- Power density criterial is clearly measurable and based on direct module comparison
- Cost price potential presents higher scores for competitors with currently larger scale and production capacity

COMPETITIVE EDGE

BECOME A LEADING FUEL CELL SYSTEM SUPPLIER

COMPANY:

TEAM EXPERTISE

- ❑ Deep technology understanding
- ❑ Front runners in high performance fuel cell system development since 2011
- ❑ Decade long hydrogen and fuel cell system development and field deployment expertise
- ❑ Passionate team with broad application knowledge and insights

STRATEGY

- ❑ Turn-key product range
- ❑ Holistic design and integration approach putting customers in market pole position
- ❑ Development roadmap for continued technology leadership and further IP creation
- ❑ In-house assembly and end-of-line testing for fast response to changing customer requirements and markets

PRODUCTS AND CORE IP:

KNOWLEDGE BASED PROPRIETARY FC CONTROL SYSTEM

- ❑ Real-time monitoring and data-driven operational optimization
- ❑ Abnormal behavior detection and flagging for preventive maintenance and reduced system downtime
- ❑ Reduced system development and validation effort
- ❑ Fully integrated functional safety concept
- ❑ Stable operation in extreme operational and environmental conditions
- ❑ Increased efficiency and minimized degradation
- ❑ Machine learning algorithms for energy management

BEST IN-CLASS POWER DENSITY

- ❑ In-house mechanical design, control and power electronics expertise
- ❑ Use of alternative production technologies and smart system architecture
- ❑ In-house developed essential subsystems (power distribution unit, IO extender) with potential for further vertical integration
- ❑ Close cooperation with industry leading supplier network

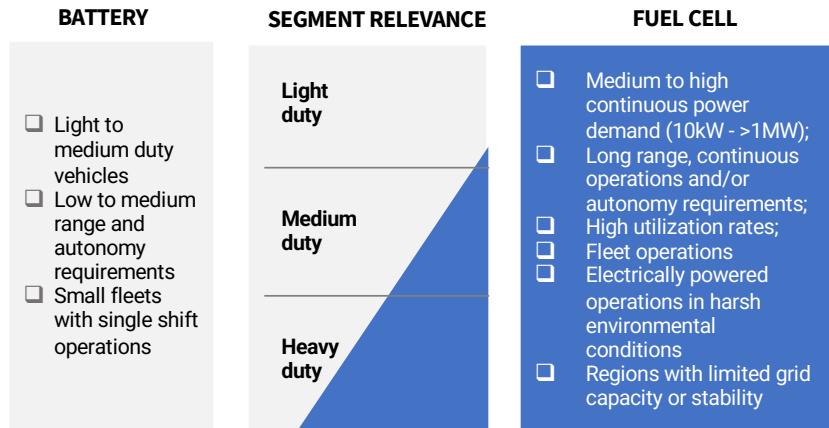
FULL FUNCTIONAL INTEGRATION

- ❑ Best-in class drop-in solution with minimized engineering effort
- ❑ Reduced TCO
- ❑ Ability for next-level optimization possibilities and fuel efficiency
- ❑ Architecture and development designed for scalable system platform

GO-TO MARKET STRATEGY

TARGET CUSTOMER:

- ❑ Vehicle/machine OEMs and Shipyards, leaders in European medium to heavy duty markets, which are currently procuring their engine technology from an external supplier
- ❑ Customers must be driven by either internal or external influences to adopt zero-emission technology
- ❑ We therefore target the following identified early adopter market segments:

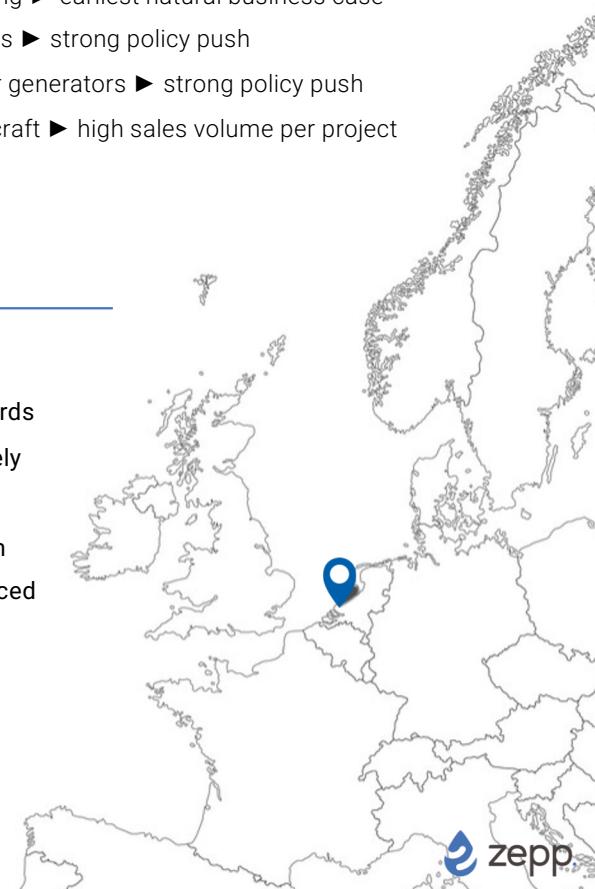


EARLY ADOPTER MARKETS WITH LARGE VOLUME POTENTIAL:

- ❑ Special vehicles for material handling ► earliest natural business case
- ❑ HD Public transport/service vehicles ► strong policy push
- ❑ Construction equipment and power generators ► strong policy push
- ❑ Inland shipping vessels and small craft ► high sales volume per project

SALES STRATEGY:

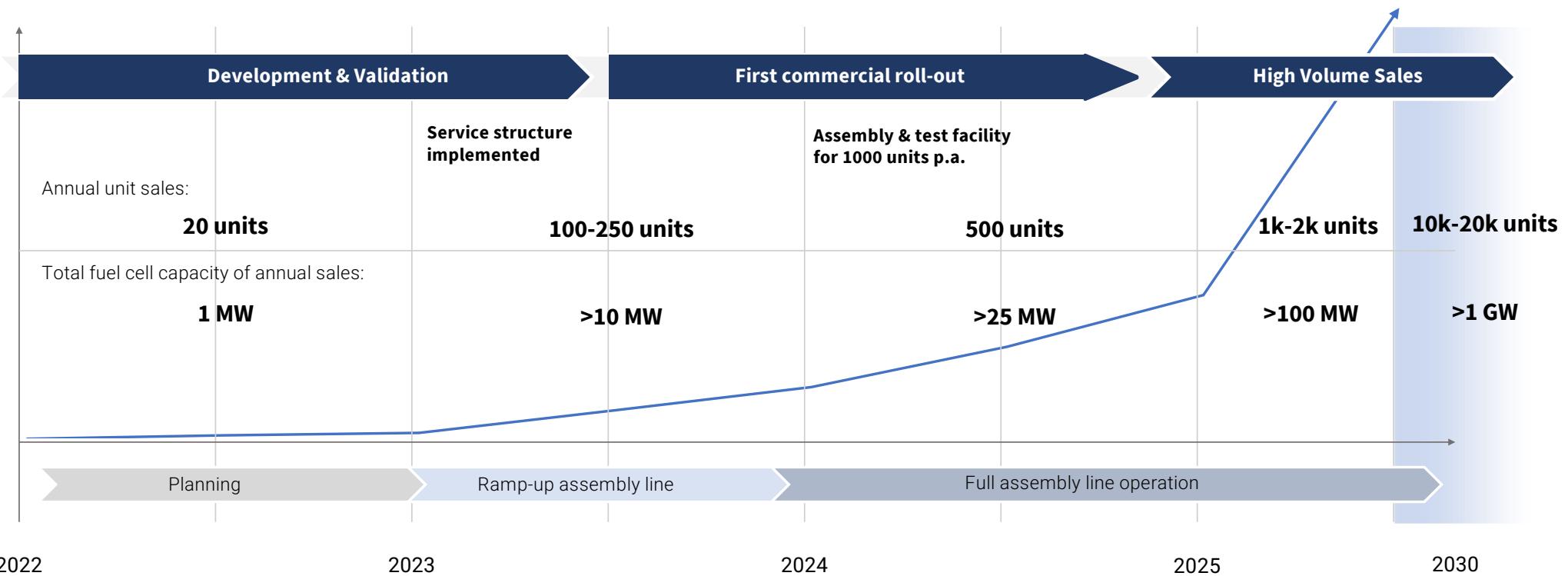
- ❑ Connect to industry leading machine/vehicle OEMs and shipyards
- ❑ Price fuel cell systems competitively and value based
- ❑ Drive gross margin expansion from increased sales volumes and reduced COGS



GO-TO MARKET STRATEGY

| SEGMENTS | EXISTING PROJECTS / CUSTOMERS | WINNING ELEMENTS |
|---|---|--|
| Special vehicles for material handling |  | <ul style="list-style-type: none"> □ Drop-in fuel cell solution connects seamlessly with existing electric vehicle platforms □ Extremely compact and reliable system technology □ Efficient operation and reduced OPEX |
| Heavy duty vehicles |  | <ul style="list-style-type: none"> □ Compact system technology allows increased continuous power and/or larger hydrogen storage system |
| Construction equipment and power generators |  Truck modification specialist | <ul style="list-style-type: none"> □ Drop-in fuel cell solution connects seamlessly with existing electric platforms □ Low integration complexity reduces end-product development time and enables quick return of investment even for lower series volumes □ Integrated hydrogen storage management delivers complete solution |
| Inland shipping vessels and small craft |   | <ul style="list-style-type: none"> □ Compact design enables simple retrofitting even for high power system installations □ Fully integrated system reduces need for technology expertise at shipyard □ Delivery of critical certification expertise for maritime hydrogen projects |

SALES PLAN & PRODUCTION TIMELINE

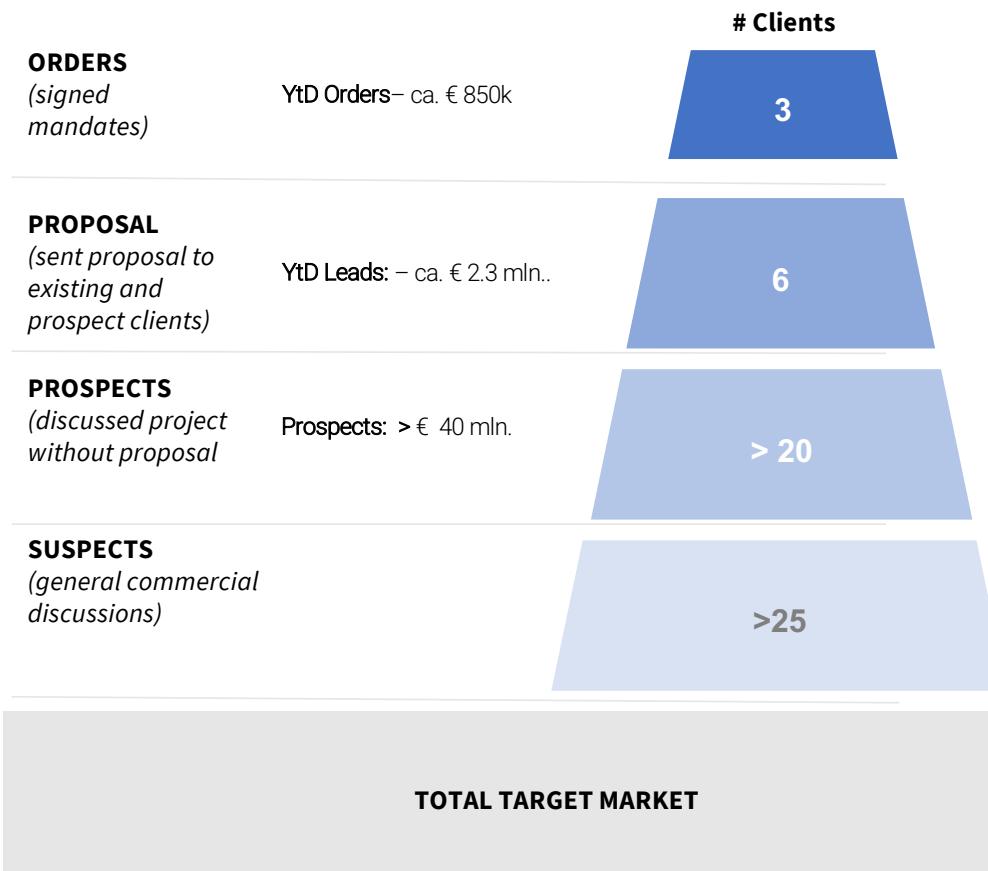


Commentary

- Existing capacity to assemble ~200 units p.a. with upscaled current facilities
- Assembly line operation planned to start 2023/2024 with capacity of up to 1,000 units p.a.

SALES PIPELINE

SALES PIPELINE 2022:



COMMENTARY:

- Pipeline with potential 2022 revenue of >€ 3 million
- Sales currently restricted due to limited capacity in both business development and project engineering
- New investments will significantly accelerate commercialisation of Zepp's Sales Pipeline and boost its revenue potential
- Very healthy Prospect Pipeline driven by further commercialisation at scale with selected clients

| x € millions (rounded) | 2022E | 2026 | 2030 |
|------------------------|-------|------|-------|
| Revenue | € 2.9 | € 70 | € 900 |
| Client count | 6 | 40 | >100 |

Pipeline Examples (non-exhaustive):

KONECRANES®

Aerospace manufacturer

GINAF



DAMEN

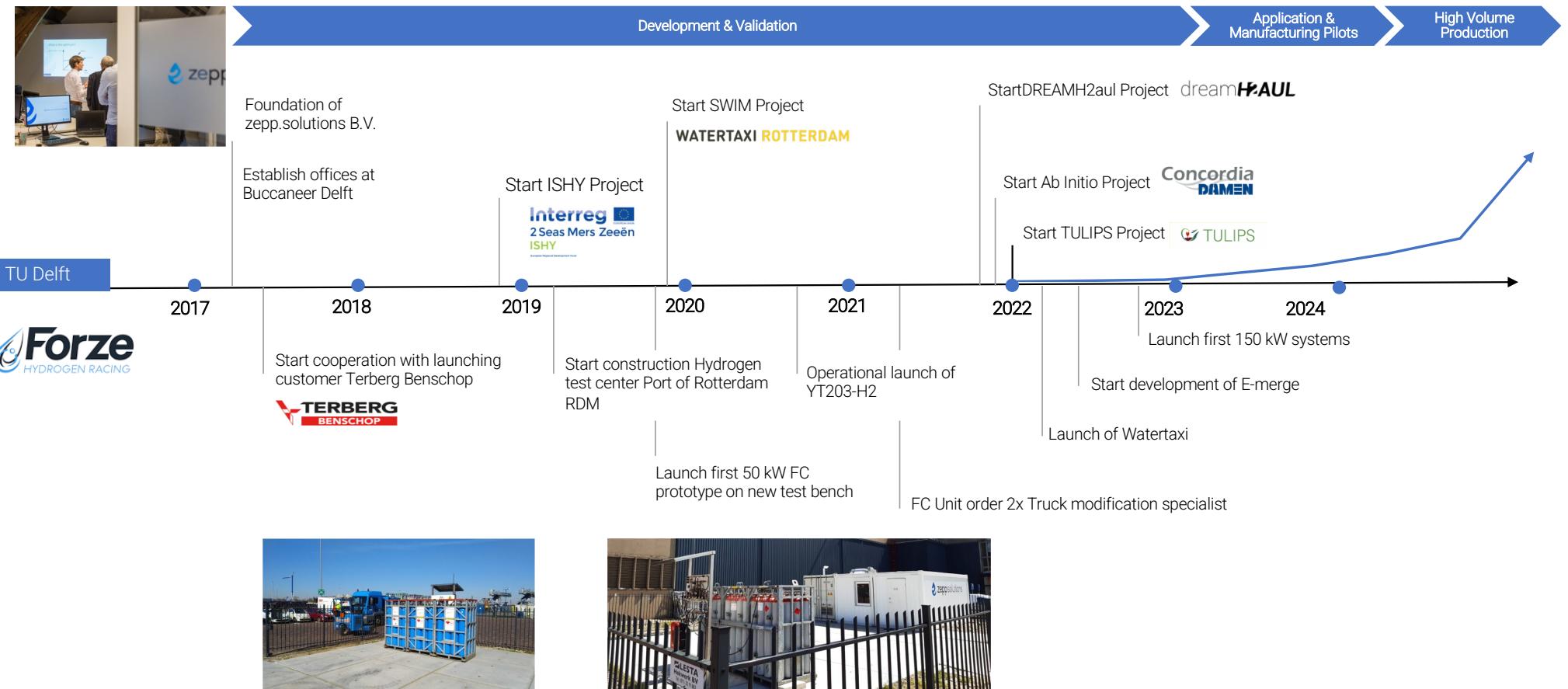
SALES COMPOSITION EVOLUTION

| MODULE | MARKET | UNIT SALES: | | | EXAMPLE CLIENTS | COMMENTARY |
|--------|--------------------|-------------|-------|-------|---|---|
| | | 2022E | 2023E | 2026E | | |
| 50 kW | Port Equipment | 2 | 7 | 250 | <input type="checkbox"/> Terberg Benschop | <input type="checkbox"/> Volume aligned with TB development timeline <input type="checkbox"/> Additional prospect: Konecranes (market leader) |
| | Off-road equipment | 9 | 15 | 300 | <input type="checkbox"/> Truck modification specialist <input type="checkbox"/> Aviation system integrator | <input type="checkbox"/> Requested pricing for 10 units in 2022 <input type="checkbox"/> Additional interest |
| | Marine | 3 | 8 | 50 | <input type="checkbox"/> Watertaxi Rotterdam, Concordia Damen | <input type="checkbox"/> Watertaxi volume > 30 vessels <input type="checkbox"/> Damen is also considering using Zepp for Amsterdam vessel conversion project |
| 150 kW | On-road vehicles | 2 | 10 | 75 | | |
| | N2/N3 Vehicles | 0 | 3 | 200 | <input type="checkbox"/> DreamH2aul trucks (Vos Transport, BCTN) | <input type="checkbox"/> Strong general market interest – expect to grow once product is launched |
| | Off-road equipment | 1 | 2 | 50 | | |
| | Marine | 1 | 5 | 75 | <input type="checkbox"/> ISHY module will be deployed in pilot vessel | <input type="checkbox"/> High interest from de Haas Maassluis and Concordia Damen for larger vessels |

SYSTEM PRICE BENCHMARKING:

- Systems are priced competitively to generate production volume and achieve scale economics
- Validation of current pricing against current competitors indicates that Zepp is already using competitive price levels
- Based on current internal assessments, the future system sales price of Zepp is expected to continue to be leading (validated against industry forecasts and targets)
- Value based pricing principle, considering scope and lifetime

CORPORATE DEVELOPMENT TIMELINE



TRACK RECORD (1)

50 kW

FCM Platform

Material handling equipment



50 kW

FCM Platform

Small crafts and ferries



| Contracted development of first hydrogen powered yard tractor YT203-H2 by partner Terberg Special Vehicles

- ❑ Supply and development of fuel cell system module (50 kW) & compressed hydrogen storage system
- ❑ Fully functional prototype in active operation since Q3/2020
- ❑ Defined common development timeline with SOP in 2023/2024
- ❑ Close cooperation since 2017
- ❑ Terberg Special Vehicles produces more than 2000 vehicles annually

Client Revenue Potential:
->€ 50mln.

Market Revenue Potential:
->€500mln.

TRACK RECORD (2)

150 kW

FCM Platform

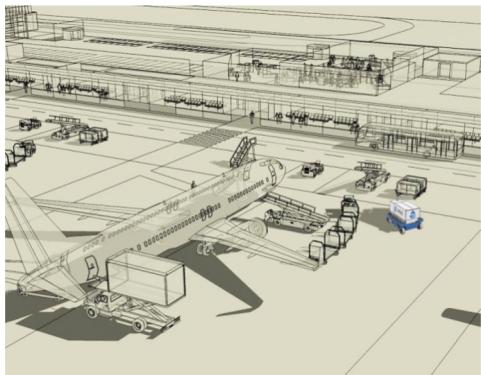
Large vessels



50 kW

FCM Platform

Gen-sets



| ISHY Project – Implementation of Ship Hybridisation

- Development of FC module (150 kW) for maritime applications
- Capable of multi module operation for larger MW installations
- Lloyd's Register Type Approval and class certification target



Client Revenue Potential:
- Development project-

Market Revenue Potential:
>1bn.

Client Revenue Potential:
>€ 10mln.

Market Revenue Potential:
>€500mln.

TRACK RECORD (3)

150 kW
FCM Platform

**HD on-road
Trucks**



50 kW
FCM Platform

**Construction
equipment**



| DREAMHAUL Project – Development of two FC powered 44-ton trucks

- ❑ Development and deployment of 150 kW fuel cell platform and hydrogen storage system
- ❑ First truck to be able to pull any trailer according to European road legislation
- ❑ >600km range, >500kW traction power
- ❑ Possibility to showcase front runner technology with huge market potential in on-road trucks

Client Revenue Potential:
- Development project-

Market Revenue Potential:
>1bn.

Client Revenue Potential:
>€ 10mln.

Market Revenue Potential:
>€1bn.

TRACK RECORD (4)

50 kW

FCM Platform

Inland shipping vessel



| STC AB INITIO

- ❑ Supply of fully integrated 50 kW fuel cell system including hydrogen storage system.
- ❑ Delivery Q3/2022
- ❑ Full Lloyd's register type approval for fc system and hydrogen storage system

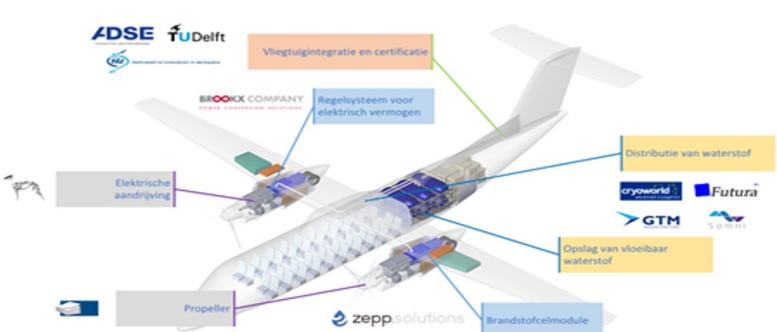
Concordia
DAMEN

STC

Client Revenue Potential:
- Development project-

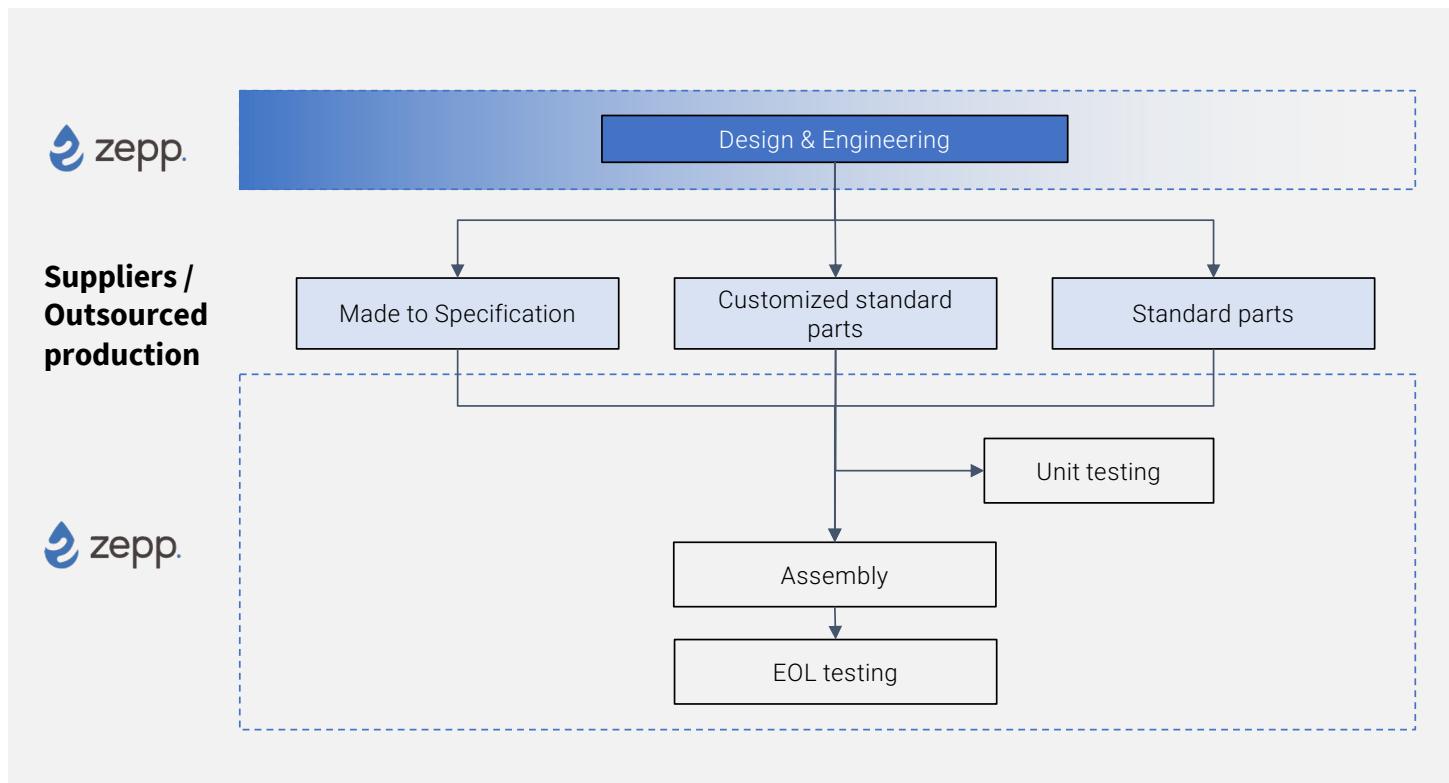
Market Revenue Potential:
>1bn.

HAPPS PROJECT:



- ❑ HAPPS is an Industry consortium developing a Hydrogen FC electric powertrain for retrofit and new-build aircraft. Zepp is responsible for the development and construction of the Hydrogen FC System
- ❑ HAPPS is part of a consortium called "Luchtvaart in Transisitie", which is supported by the Dutch National Growthfund
- ❑ Zepp proposed a € 30 mln. development budget for the Hydrogen FC System of which € 15 mln is expected to be granted/subsidised
- ❑ This entails an exciting opportunity for Zepp to expand their compact high performance system technology into new products and markets
- ❑ The project timing is 2024-2029, whereby Zepp is currently assessing the opportunity to participate in this project

PRODUCTION SCOPE



PLAN FOR IN-HOUSE ASSEMBLY

FACILITY SETUP (up to 1,000 UNITS p.a.):

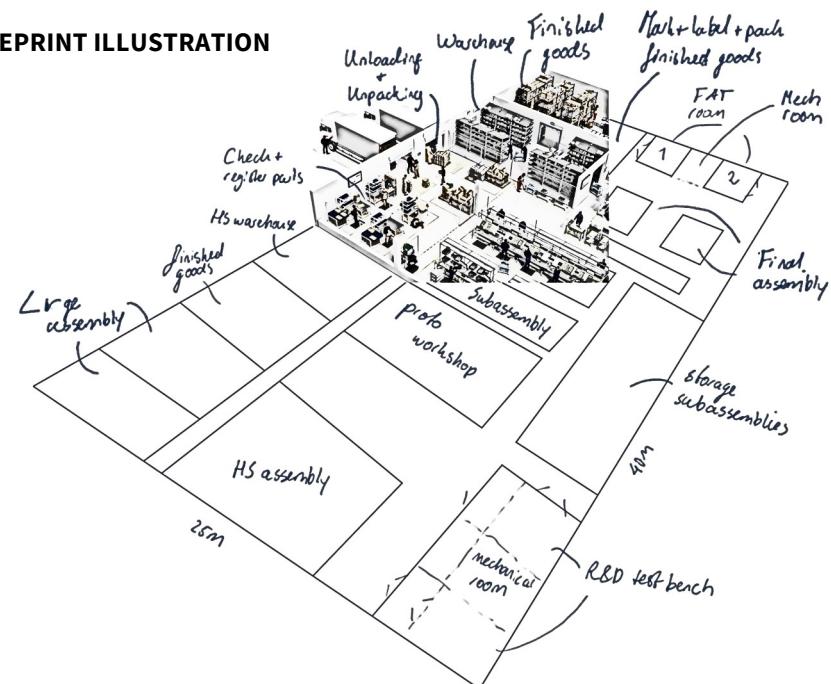
- ❑ Location: Zuid-Holland (Rotterdam, Delft, the Hague area)
- ❑ Footprint/Facility size: 1000m² indoor area, 500m² outdoor
- ❑ Outside hydrogen storage facility and distribution network
- ❑ Fuel cell system R&D test stands with capacity up to 100 kW & 200 kW
- ❑ Short stack test stand for cell comparison and analysis
- ❑ Component stock and spare part storage
- ❑ Prototype & application assembly area
- ❑ Assembly area for series production of fuel cell systems
- ❑ End-of-line (EOL) test benches
- ❑ Planned timeline: Q3/2022 – start detailed facility planning with Q2/2023 first modules launched out of new assembly facility

BENEFITS OF OWN ASSEMBLY:

- ❑ In-house assembly to maintain adoption momentum of new system parts and maximize benefits from software design
- ❑ Easier communication and faster implementation of product evolutions
- ❑ Unit and EOL test results, combined with assembly workflows enable fast and direct feedback loop to Design and Engineering to improve products and further reduce cost
- ❑ Ability for quick response to changing market demands
- ❑ Easier implementation of customization for client projects
- ❑ Better IP and physical property protection
- ❑ Costly hydrogen facilities required for EOL-testing are already in place (R&D infrastructure)

| INFRASTRUCTURE | ESTIMATED COST 2022-2026 |
|--|--------------------------|
| R&D: test units, external testing, certification | € 2.1 mln |
| Assembly line + EOL | € 2.0 mln |
| R&D test stands | € 1.3 mln |
| General facility installations (excl. rent) | € 1.0 mln |

BLUEPRINT ILLUSTRATION



COMPLIANT FOR CERTIFICATION

AUTOMOTIVE

50 kW fuel cell system Y50 as well as X150 are compliant to the standards and regulations set out for the use of hydrogen and fuel cell systems in the automotive industry:

- Ingress protected IP67
 - ISO 6469-2 : 2018
 - ISO 6469-3 : 2018
 - ISO 23273 : 2013
 - IEC 62282-2-100 : 2020
 - IEC 62282-4-101: 2014
 - IEC 62282-4-102: 2017
-
- UN ECE R100 Rev2
 - UN ECE R10
 - UN ECE R134
 - UN EC79/2009
 - Implementing measures 406/2010/EC



SHIPPING

Regulatory framework for hydrogen and fuel cells in shipping is still under development. Currently all approval processes are based on risk-based design. Zepp is actively involved in shaping the future regulatory framework through cooperation and discussion with the Port of Rotterdam, participating in the ISHY project, as well as the European working group via FME

The E50 module is currently suitable for application in CE approved vessels. A risk-based certification process for the module type approval has been started with Lloyd's register.

The L150 module will be fully type approved by Lloyd's Register within the framework of the ISHY project and hence also fulfill all certification requirements needed for the sector



STATIONARY

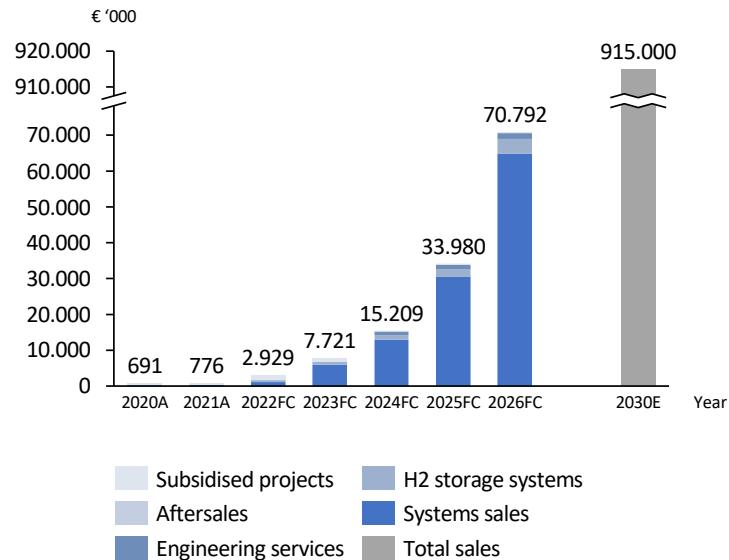
The modules can also be used for stationary applications. Requirements, regulations and type approvals are set out much stricter in mobile applications than in stationary ones.

The installation is also compliant with the requirements set out in:

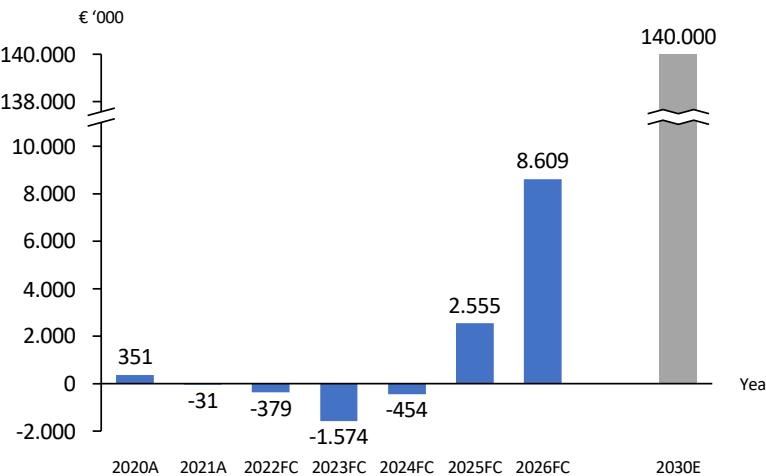
- Machine directive
- Low voltage directive
- Pressure equipment directive
- Functional safety acc. to ISO 13849

PROFIT & LOSS

NET SALES - 2020-2026 (€ '000)*



EBITDA - 2020-2026 (€ '000)*



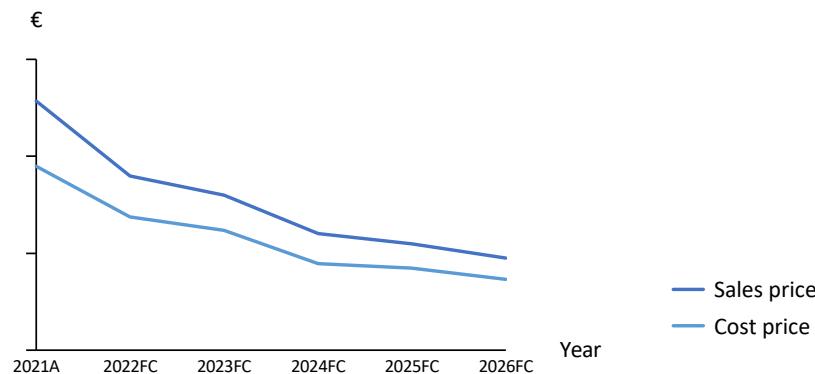
COMMENTARY

- Significant growth towards ca. € 70 million in revenues in 2026, eyeing more than € 900 million in 2030
- Revenues are primarily driven by system sales (~ 90%)
- System sales revenues are recognized for 40% during assembly/WIP and 60% at delivery
- Additional revenues from selling H2 storage systems, after sales and engineering services
- Subsidized projects revenues will gradually disappear in the next years
- R&D is either subsidized or activated

Note (*): 2020 and 2021 financials are preliminary and unaudited

VOLUME, SALES AND COGS DEVELOPMENT

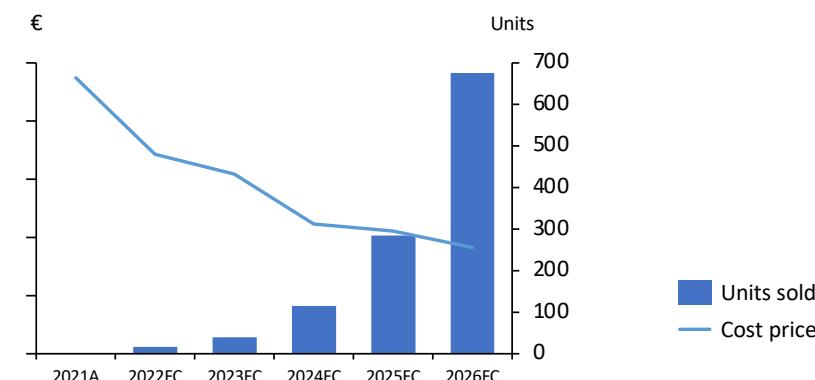
50kW - SALES & COST PRICE 2021-2026 (€) *



COMMENTARY:

- Systems sold at market conform prices to create a substantial market position
- Sales prices will gradually reduce due to market and cost prices evolving and maturing
- Disproportional and exponential reduction of COGS and assembly cost with increase in production volumes
- Reduction of costs are based on expert estimations and internal cost models
- These percentage remain relatively roughly constant with increasing production volumes
- Clear advantage for Zepp in optimizing (Bill of Material (BOM) and cost price due to the flexibility in fitting different (standard) components and having access to multiple sources and suppliers for components

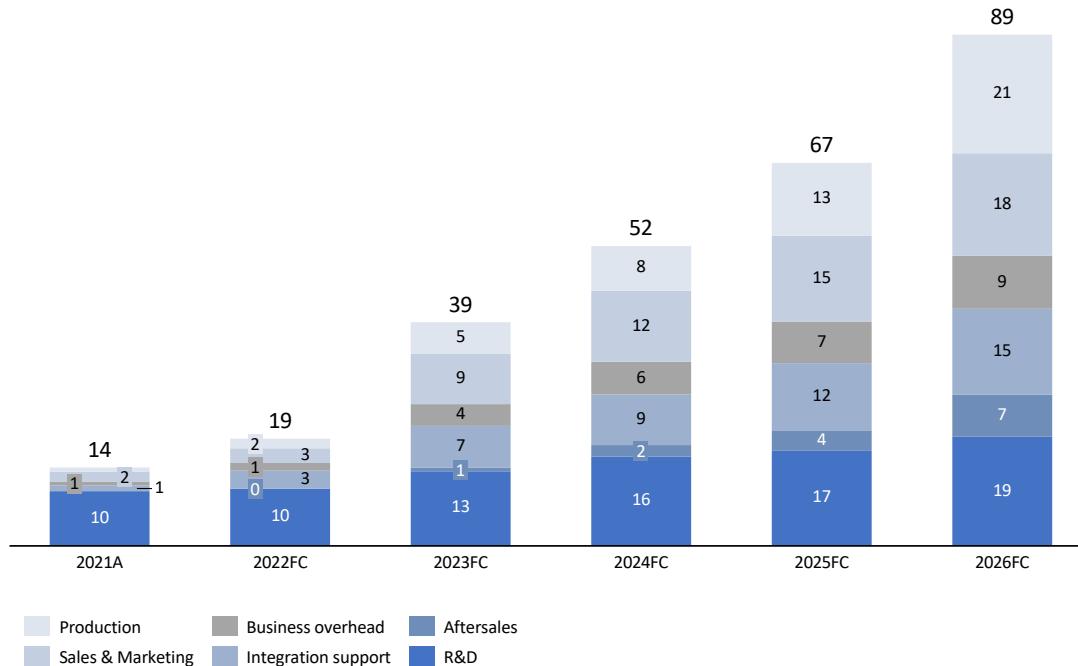
50kW - UNITS SOLD VS. COST PRICE (€) *



Note (*): Euro amounts not shown for reason of confidentiality

DEVELOPMENT OF TEAM

AVERAGE STAFF DEVELOPMENT 2021-2026 (IN FTE)

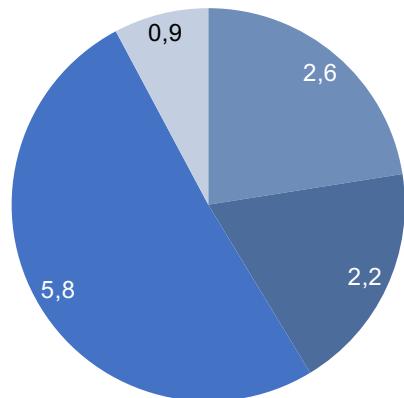


COMMENTARY

- ❑ Zepp will significantly invest in each functional area to enable and accommodate the anticipated growth
- ❑ Total FTE to grow from 14 (in 2021) to 89 in 2026
- ❑ Right time to set up dedicated sales & marketing team, initially in the Dutch market
- ❑ Recruit dedicated production team in conjunction in investing and setting assembly site
- ❑ Set up separate integration support team that has knowledge about final products and take care of custom developments, customer integrations and implementations
- ❑ Dedicated R&D team to execute core product and technology road map

ALLOCATION OF FUNDS

USE OF PROCEEDS (€ m)



RAISING €10-12M FOR THE NEXT 36 MONTHS

1. IMPLEMENT SALES & MARKETING AND ASSEMBLY TEAM (OPERATIONS CASH FLOW)

- Deploy active marketing strategy to increase brand awareness and “passive” business development
- Expand marketing and sales team to increase business development and sales efforts
- Develop account management and application engineering team to improve client retention and support
- Put in place assembly
- Backend team and other Opex growing with sizing of Company
- Increase system component and spare part stock
- Limited working capital requirements due to customer prepayments

2.. INDUSTRIALIZE ASSEMBLY AND EXPAND FACILITIES (CAPEX ASSEMBLY)

- Industrialize product manufacturing and set up assembly line for increased annual production volumes

3. ADVANCE DEVELOPMENT OF TECHNOLOGY (CAPEX R&D)

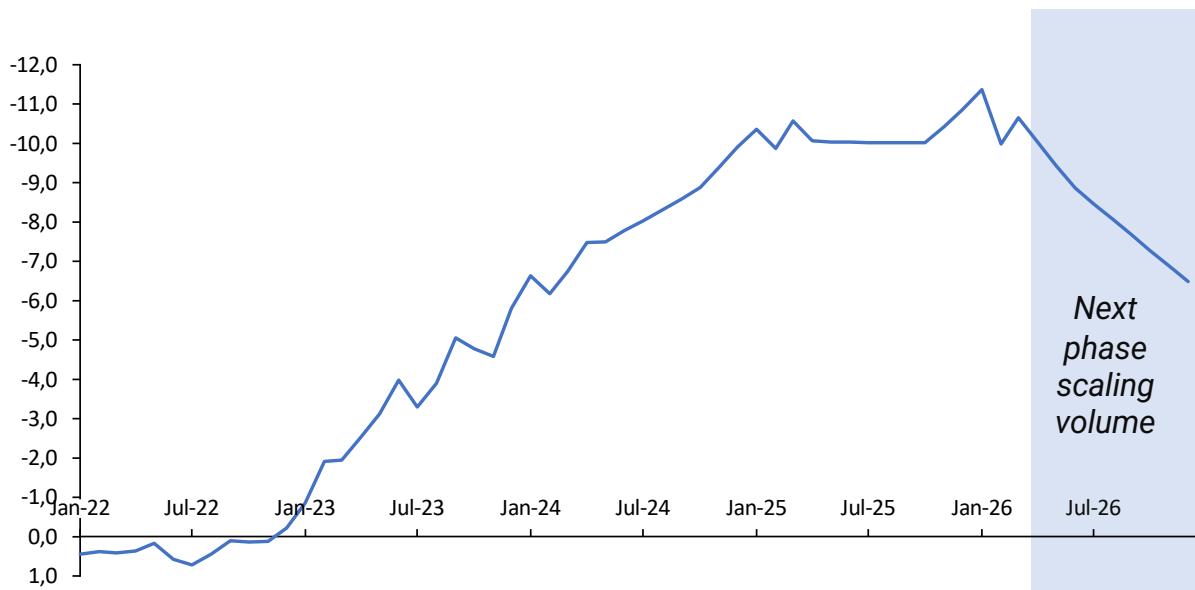
- Expand R&D and testing facilities
- Ensure continued technology leadership of next-gen fuel cell modules by increasing R&D team and accelerate development
- Further product development and product validation
- Adopt vertical integration strategy to increase added value of systems at client and for further IP creation

4. BALANCE SHEET (FINANCING CASH FLOW)

- Financing cost and repayment of loans
- Aim to keep strong balance sheet and contingency for delay and/or acceleration

REQUIRED FUNDING 2022-2026

FORECASTED CASH REQUIREMENT (€ M)



COMMENTARY:

- ❑ Ramp of sales and marketing, assembly and support integration together with increasing R&D will require up to €11.5 million in the next 3 years
- ❑ Start expanding team and accelerated investments post-closing, in Q4 2022
- ❑ Bridge and COL loans to be repaid, post-funding
- ❑ Cash projections are excluding any additional debt or new subsidy
- ❑ Excluding possible investments for preparing higher volume (outsourced) production
- ❑ Cash required is front-loaded with ca. € 10.0 million in the first 24 months

TEAM

MULTIDISCIPLINARY FOUNDING TEAM STRONG TRACK RECORD AND EXPERIENCE IN PEM FUEL CELL MARKET SINCE 2011

Jan Bot

Finance & Business development
CV: [LinkedIn](#)



Jonas Brendelberger

Business development &
Safety/Certification
CV: [LinkedIn](#)



Kevin Schreiber

System mechanical design & integration &
Business development
CV: [LinkedIn](#)



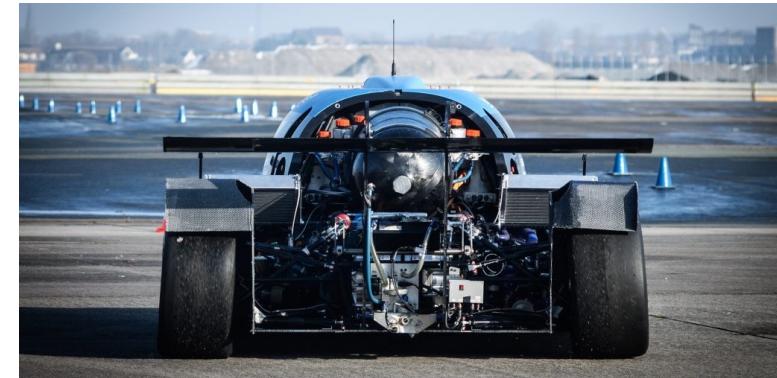
Remco Duba

Software & Electronics
CV: [LinkedIn](#)

Joost Kortleve

System Design & Integration
CV: [LinkedIn](#)

- The management team are front runners in high performance FC system development since 2011
- Successfully managed the Forze Hydrogen Racing Team of the TU Delft for several years (since 2011)
- Pioneering cutting-edge hydrogen and fuel cell technology in motorsport combined with decade long hydrogen and fuel cell system development and field deployment expertise
- Zepp is currently a passionate multidisciplinary team of 14 FTE and combining their skills to bring their next generation FC technology to the market
- Established a solid track record and strong application insight and are supported by an international industry network and connections within and beyond the FC sector
- Working with national and international industry stakeholders shaping current and future hydrogen and FC standards and regulations



Forze Hydrogen Racing Team

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hydrogen fuel cell systems
Deck 2022



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