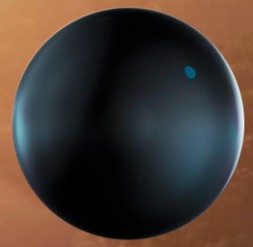
water stuff & sun

we move hydrogen – you move the world



CONFIDENTIAL teaser – for internal usage only –June 2024
Industrya.

SFEERS & the Hydrogen Battery

Reshaping the Way we Store, Transport & Use Renewable Energy

GLOBAL ENERGYTECH AWARDS 2023

World CleanTech StartUPs Awards 2023 EDITION

Executive summary

What we achieved and what we are working on

What we achieved

Technology
- 1st prototype under construction
- Pressure regulator (250 bar)
- Carbon fiber shell prototype
- Concepts for battery casing, charging & swapping

Business
- SEED funding rounds
- Technology & business partner network
- 2 Innovation awards

Next steps (2024/2025)

Technology
- 250 bar aluminum SFEER
- Battery casing prototype
- Carbon fiber shell incl prototype production plant

Business
- Go to market: stationary (250 bar aluminum)
- Partnering with fuel cell company to address Swedish telecom market

Long-term vision (2026-2028)

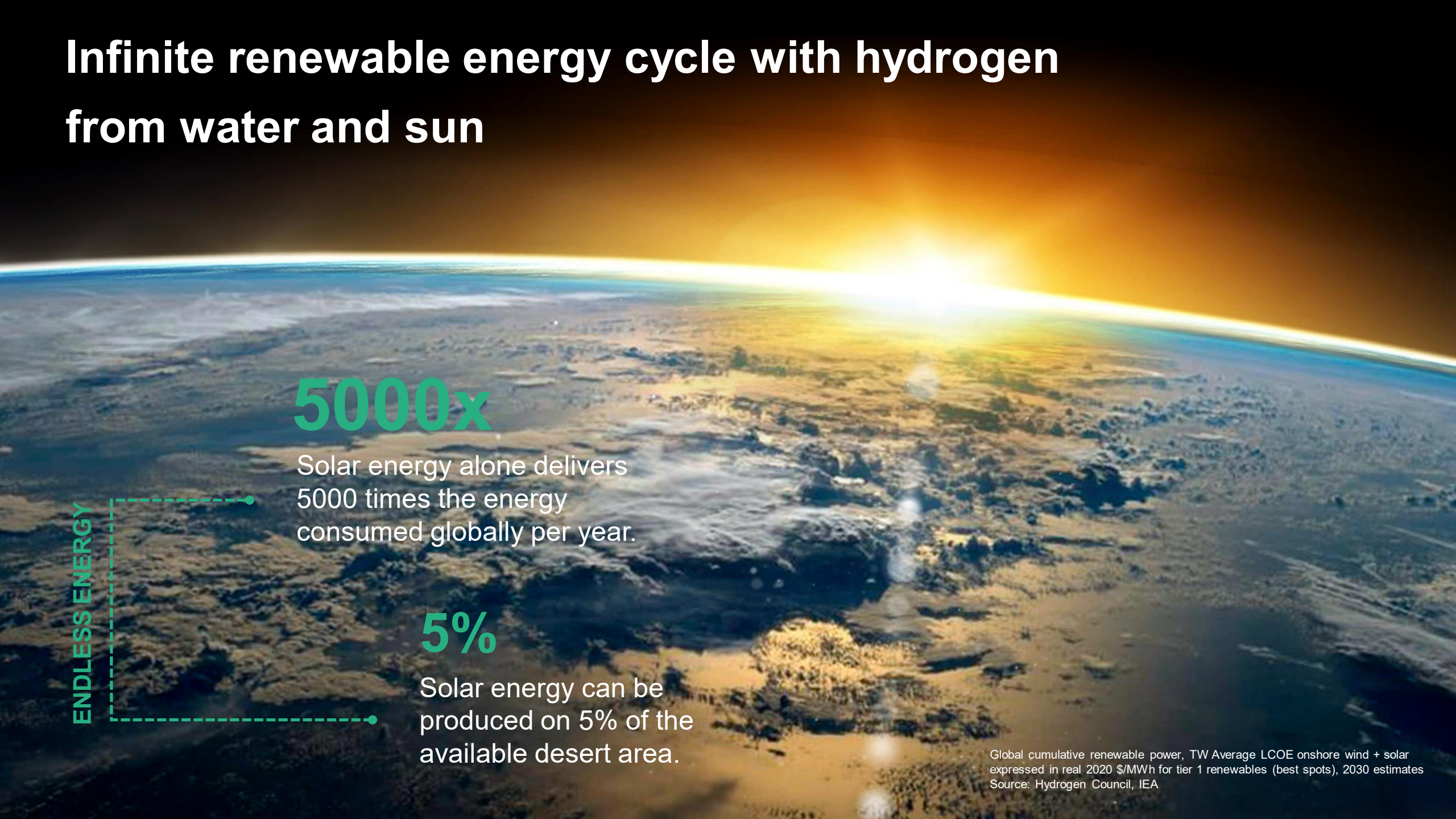
Technology
- 1000 bar carbon fiber version application specific battery (e.g., trucks)
- Charging & swapping technology

Business
- Go to market with 700 & 1000 bar version (mobility)
- 700 bar version for stationary

Our innovative **H2 Battery** is a **2-in-1 solution** that not only ensures **safe** and **easy** hydrogen distribution but also seamlessly integrates into **various applications** at an unprecedented **cost efficiency.**

water stuff & sun
we move hydrogen – you move the world

Infinite renewable energy cycle with hydrogen from water and sun

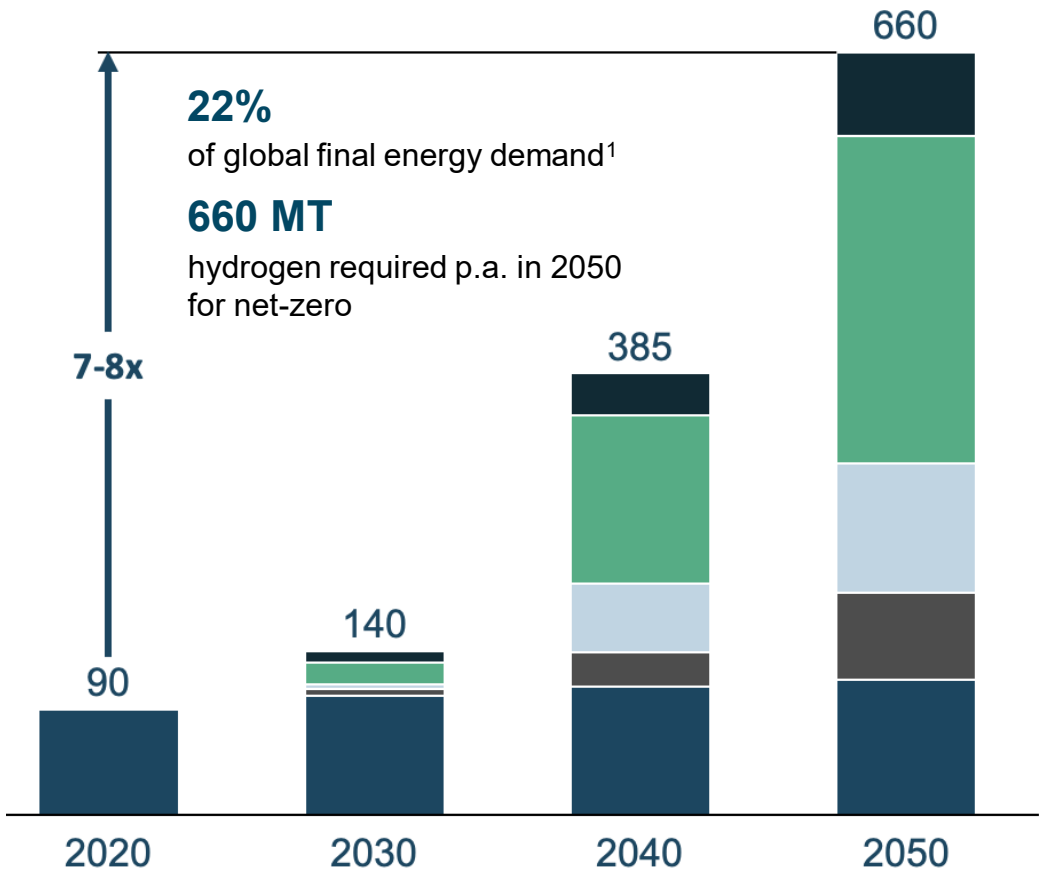


Global cumulative renewable power, TW Average LCOE onshore wind + solar expressed in real 2020 $/MWh for tier 1 renewables (best spots), 2030 estimates
Source: Hydrogen Council, IEA

Strong H2 market growth after 2030 with focus on mobility

But some challenges need to be solved to make this development come true

Hydrogen end-use demand by segment, MT H_2 p.a.



- Power generation
- Mobility
- Building and industry heat
- New industry feedstock
- Existing industry use

Challenges until 2030:

- **No efficient technology for H2 storage** and distribution available to decarbonize several sectors
- The **lack of hydrogen infrastructure** is still a major obstacle for mobile applications in particular

Source: Hydrogen Council, IEA Net Zero by 2050

water stuff & sun
we move hydrogen – you move the world

Unique business opportunity that breaks chicken & egg

Decarbonization in the heavy-duty mobility transition not successful so far

No competitive filling / Charging stations

No competitive vehicles

- **High Vehicle Purchase Prise**
- High H_2 / energy prices – **not competitive**
- **No Business Case** for End Customer & **Fleet Operator**
- **No Business Case for H_2 / Energy Provider**

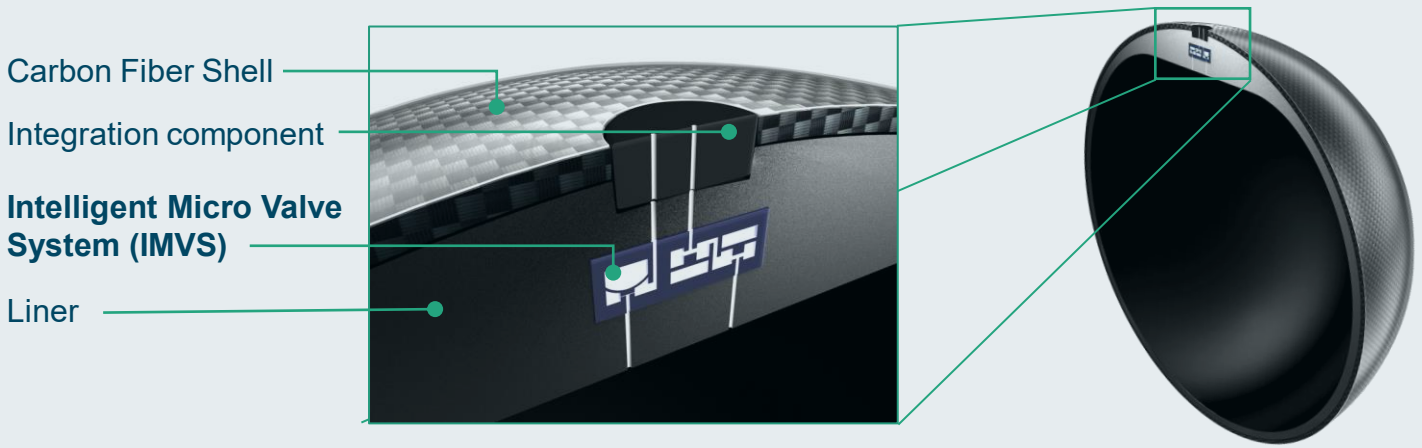
H2-Battery a 2 in 1 solution

Safe, simple and cost efficient hydrogen fuel and vehicle storage

H2-SFEER

Miniaturized high pressure cell (up to 1,000 bar)

➔ High safety redundancy

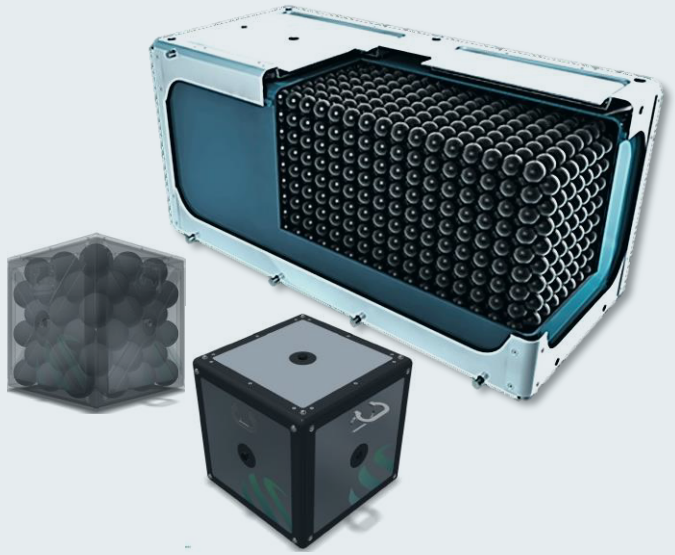


- Spherical shape: 50% less carbon fiber than for cylinders
- Passive **micro-mechanical** flow and pressure control

BATTERY

Low pressure tank (4-15 bar)

➔ Easy handling, low-cost, high-energy capacity



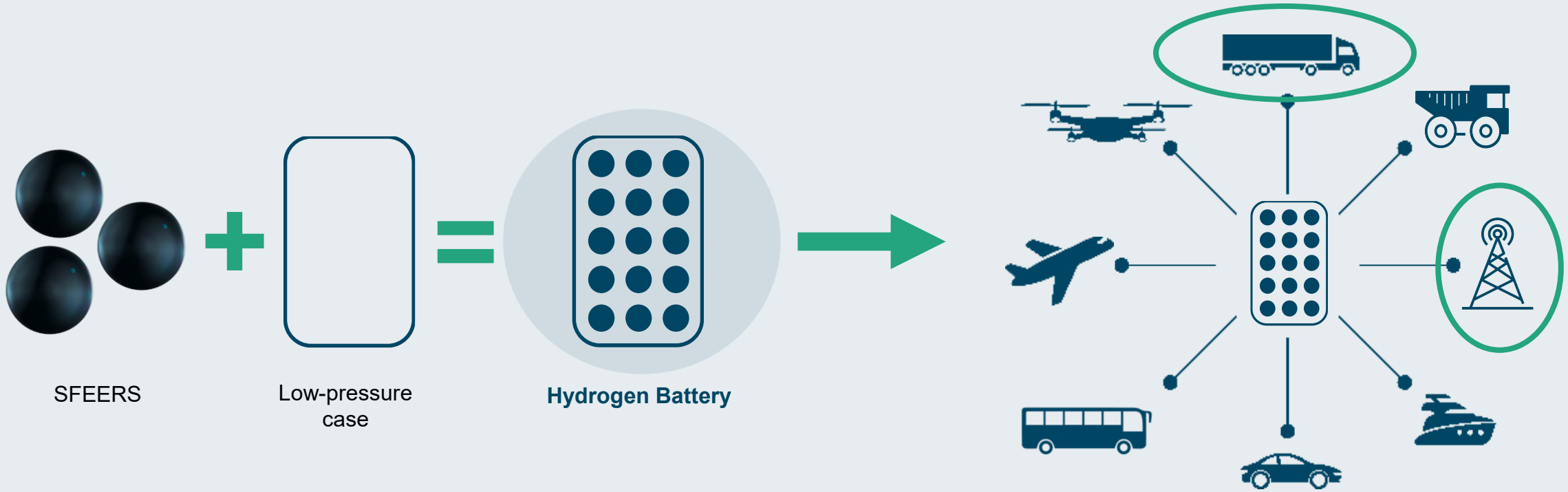
- **Size and shape adapted** to available spaces
- **Swappable** for fast & economic fuel refill of the vehicle

* The SFEERS/H_2-battery enabling technologies are WSS-proprietary and protected through a number of global patents, the IMVS is being developed by experienced engineers and scientists with a proven track record of developing space rocket micro propulsion systems

water stuff & sun
we move hydrogen – you move the world

SFEERS are assembled to modular hydrogen batteries

The hydrogen battery: a sustainable swap system that drives the energy transition



The hydrogen battery is a **highly modular system** that enables a variety of **mobile as well as stationary applications** to switch to renewables.

water stuff & sun
we move hydrogen – you move the world

Stationary: H_2 battery CUUBs much lighter with same capacity

Comparison of H2 battery CUUBs with standard Typ 1 bottle bundles

System Net-Weight

Type I
200 bar
15
cylinder

1079 kg

0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1

H_2 Capacity 11,2 kg

CUUB
250 bar
10 cubes

408 kg

0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1

H_2 Capacity 11,5

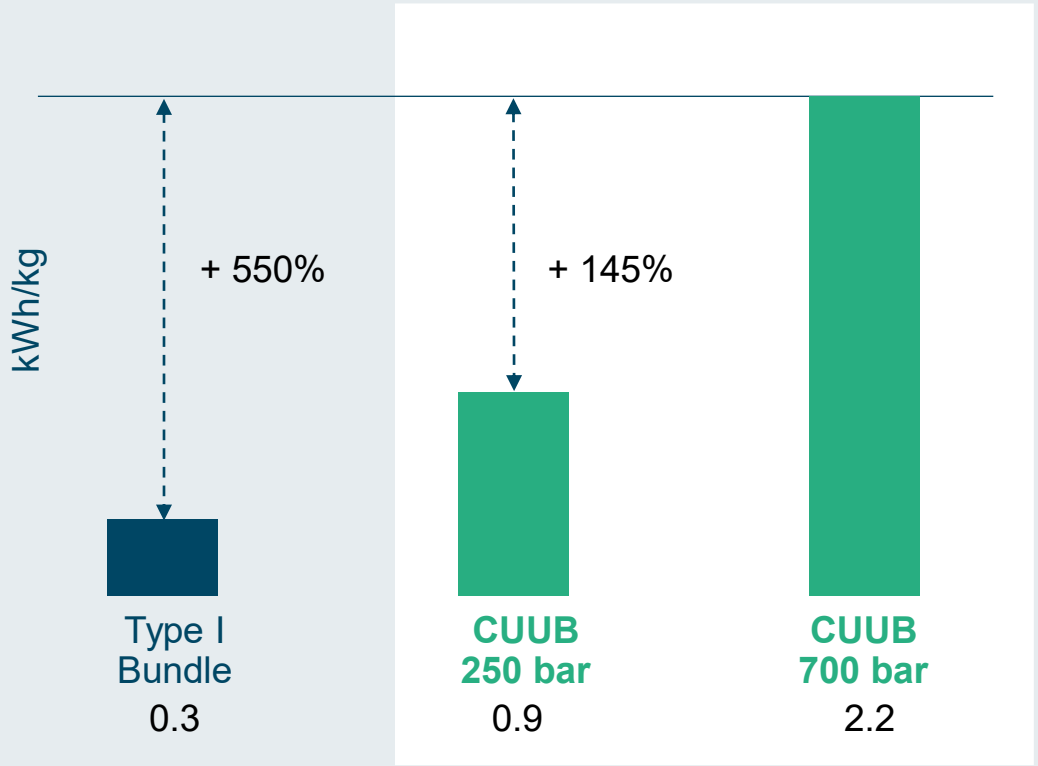
CUUB
700 bar
5 cubes

175 kg

0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1

H2 Capacity 12,5 kg

Energy density (GED kWh per kg)

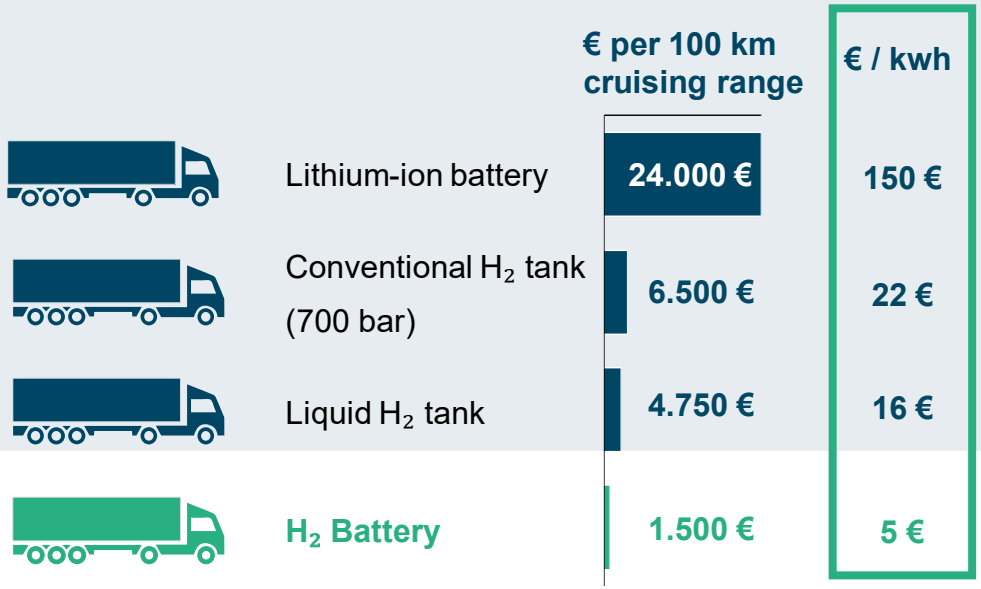


water stuff & sun
we move hydrogen – you move the world

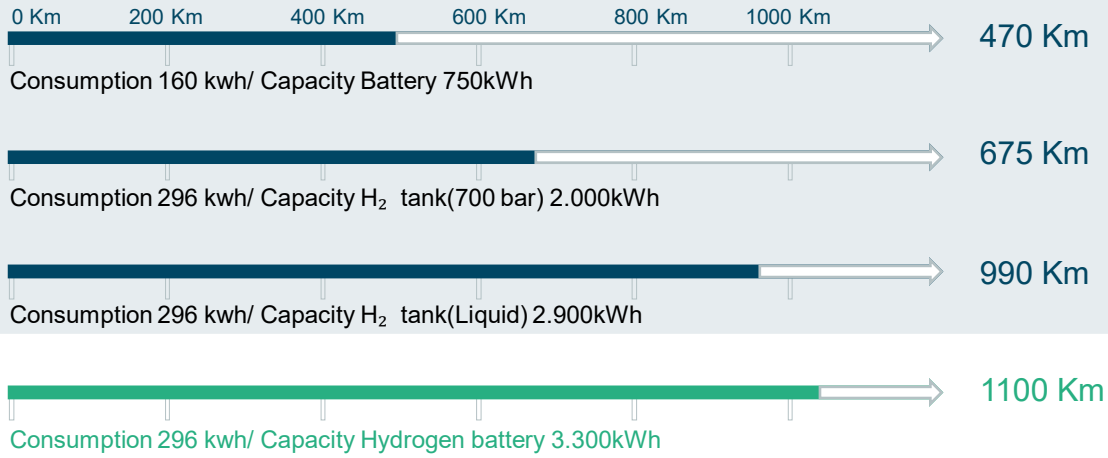
Mobility : H_2 battery with considerable advantages

Lower costs and higher performance compared to competitive energy storage

Energy storage costs (long haul truck)



Cruising range (long haul truck)



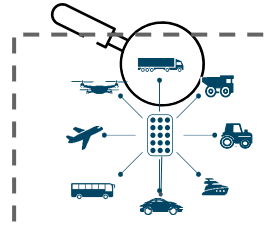
The hydrogen battery: high performance & cost-efficient energy storage technology

Source: FEV Consulting, KEYOU, WSS

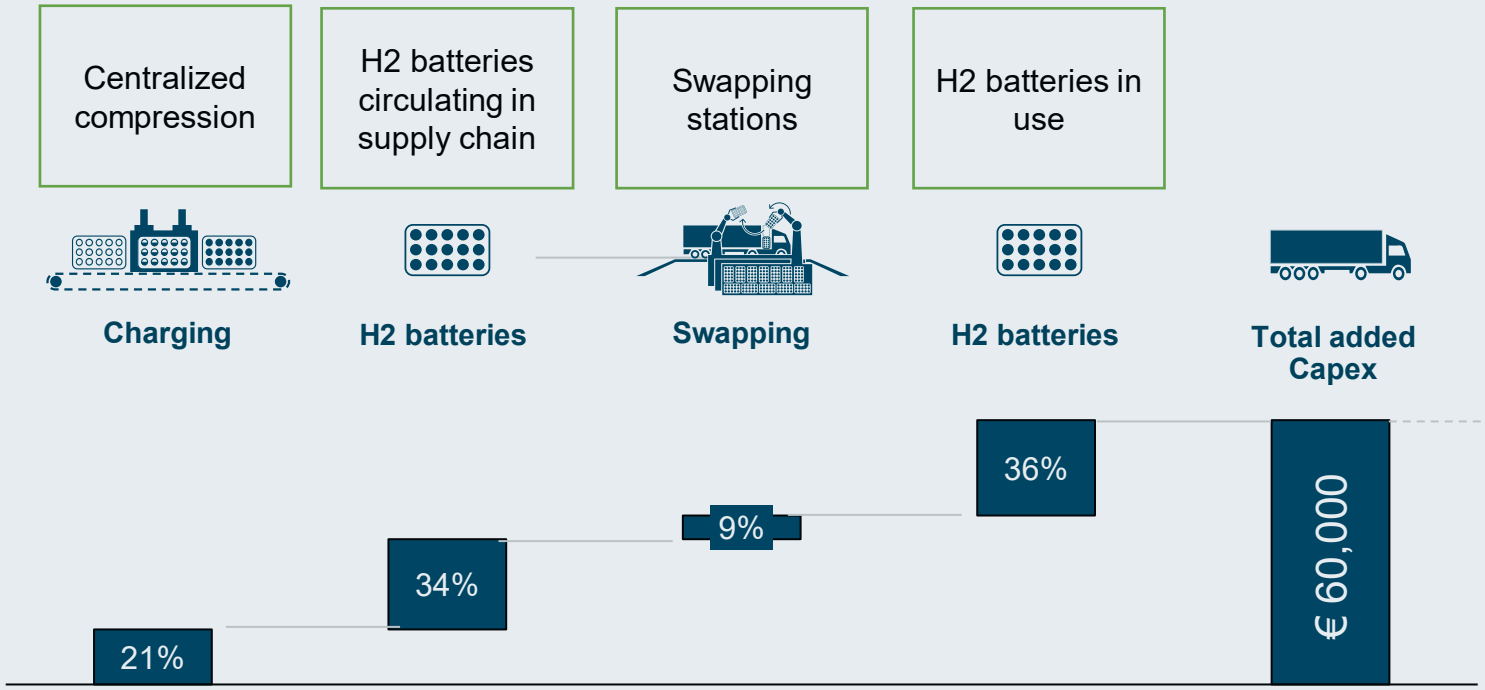
water stuff & sun
we move hydrogen – you move the world

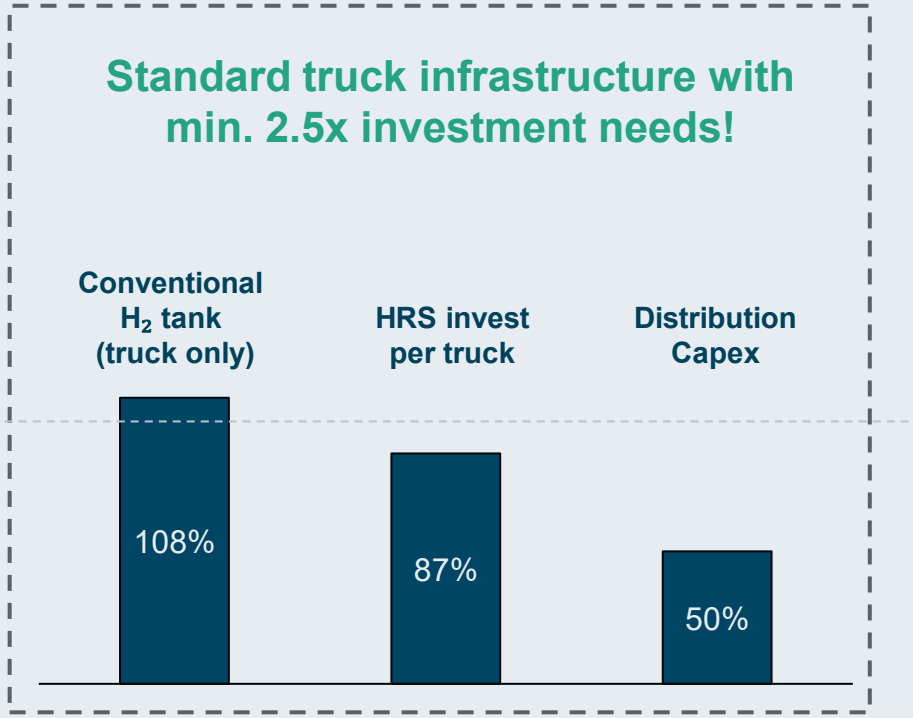
No infrastructure? Build it at low costs!

H2 battery infrastructure: lower capex needs than conventional in-truck tanks only



Exemplary case





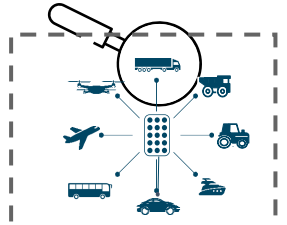
Complete H2 infrastructure saves at least 60% capex compared to standard H2 infrastructure!

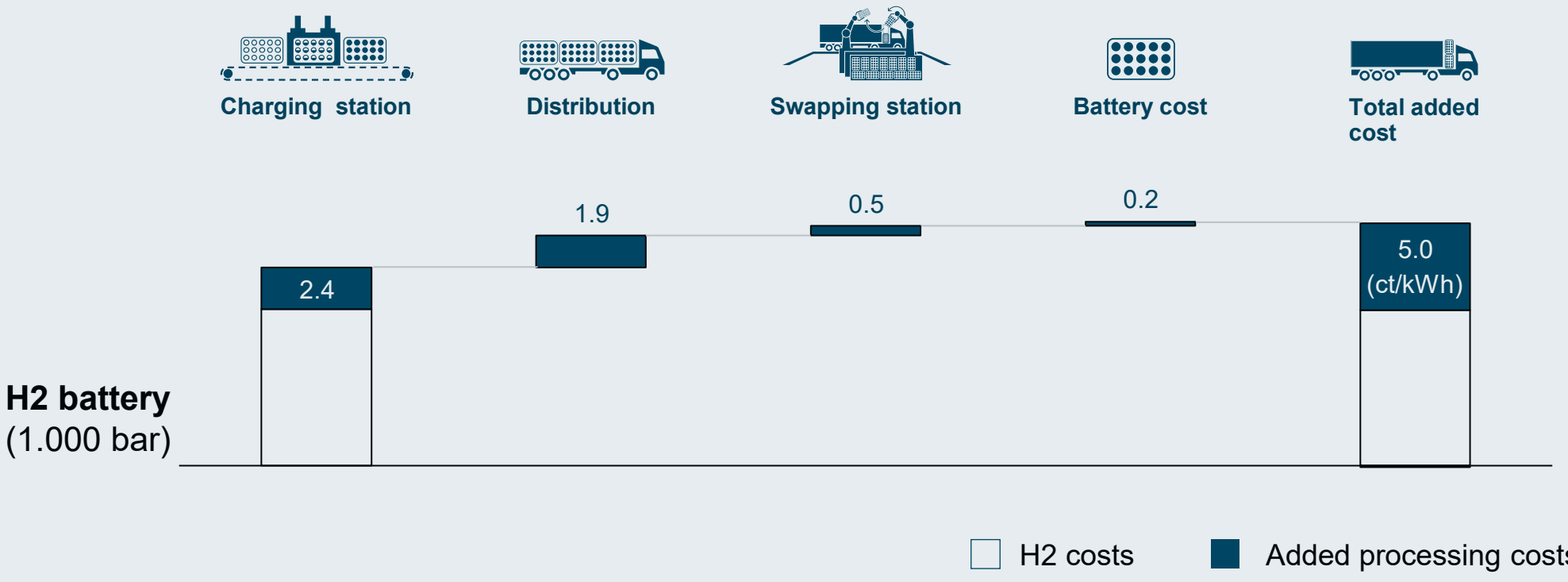
Note: based on ramp up of business case (6 years) with finally ~80,000 trucks (100kg H2 per car), 500 swapping station, 100 charging stations

water stuff & sun
we move hydrogen – you move the world

Truck market: strong cost advantage

SFEER used for regional distribution (300km) – truck case





H2 Battery with low costs due to **simplified cargo distribution,** "refueling" by **battery swapping** and **tank cost**

water stuff & sun
we move hydrogen – you move the world

Multi-step go-to-market approach

Early market entry with competitive 250-bar bus system followed by truck markets

2025: 250 bar version

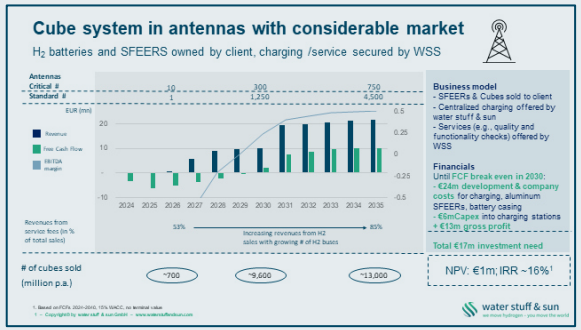
Stationary applications

Business model

- H2 batteries sold to client
- WSS ensures H2 battery charging (H2 supply) & service

Clients

- Telecom companies in Sweden



2027: 700 bar version

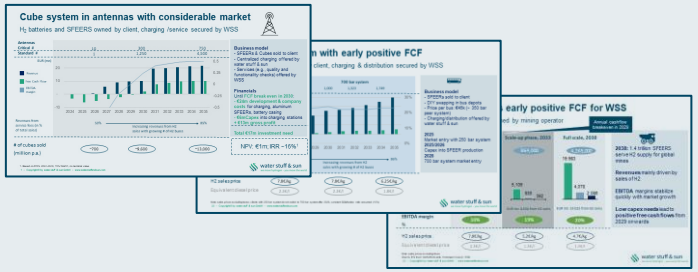
700/1000 bar version

Business model/clients (stationary)

- Equal to 250 bar system

New

- 700 bar carbon fiber SFEER with higher capacity
- For first mobility applications (e.g., bus) possible



2028: 1000 bar version

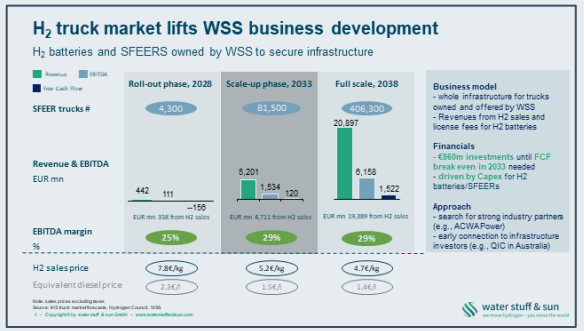
1000 bar version

Business model

- Infrastructure owned by WSS/partners
- WSS ensures H2 supply

Clients

- Truck OEMs (H2 battery)
- Truck operators (H2)



water stuff & sun
we move hydrogen – you move the world

Our Investors

What some of our investors say about our technology

“With our investment in water stuff & sun (WSS), we are supporting a start-up that brings enormous opportunities and disruptive potential to shape the energy transition.

The immense versatility of the technology is impressive, and we look forward to accompanying WSS in the further development phases.“

– Ralf Sonnenwald
Managing Director ES Kapital

“The climate crisis needs comprehensive decarbonization in various areas to ensure that our society remains fit for the future. We firmly believe that the hydrogen battery can make a decisive contribution to this."

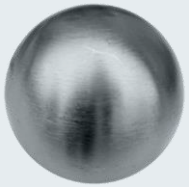
– Thomas Beyer & Curt Stoll
Managing Partners BESTO GmbH

“WSS combines two proven technologies in a unique way so that the problem of storage and application of renewables can be solved in a fundamentally simpler and more cost-effective way than it has been done so far. This presents an opportunity to fundamentally change the way green energy is handled for the better - and for us, that's true innovation.”

– Bernd Nagel
Managing Director NAGEL Maschinen- und Werkzeugfabrik GmbH

Development roadmap

250 bar version will soon be on the market

Q2 2024	2024	2025	2026	2027
TRL 4	**TRL 5**	**TRL 5**	**TRL 6**	**TRL 7**
First functional prototype Operating Pressure: 80 bar	**H2 Battery Design Completed**	**H2 Battery Prototypes** Operating Pressure: ~700 bar	**H2-Battery A Sample** SFEER & H2 Battery 1000 bar SFEER production line design freeze	**Validation in Operational Environment**
1000 bar 	High Performance Solution			
 **250 bar**	First Market Entry			water stuff & sun we move hydrogen - you move the world KEYOU emission-free technology.
First functional prototype Operating Pressure: 80 bar	**H2 Battery Design Completed incl. Prototype** Operating Pressure: >250 bar	**H2 Battery First Market Development** Operating Pressure: ~250 bar	**H2-Battery in Customer Operation** SFEER production line design freeze	**Validation in Operational Environment**
TRL 4	**TRL 5**	**TRL 6/7**	**TRL 8**	**TRL 8**

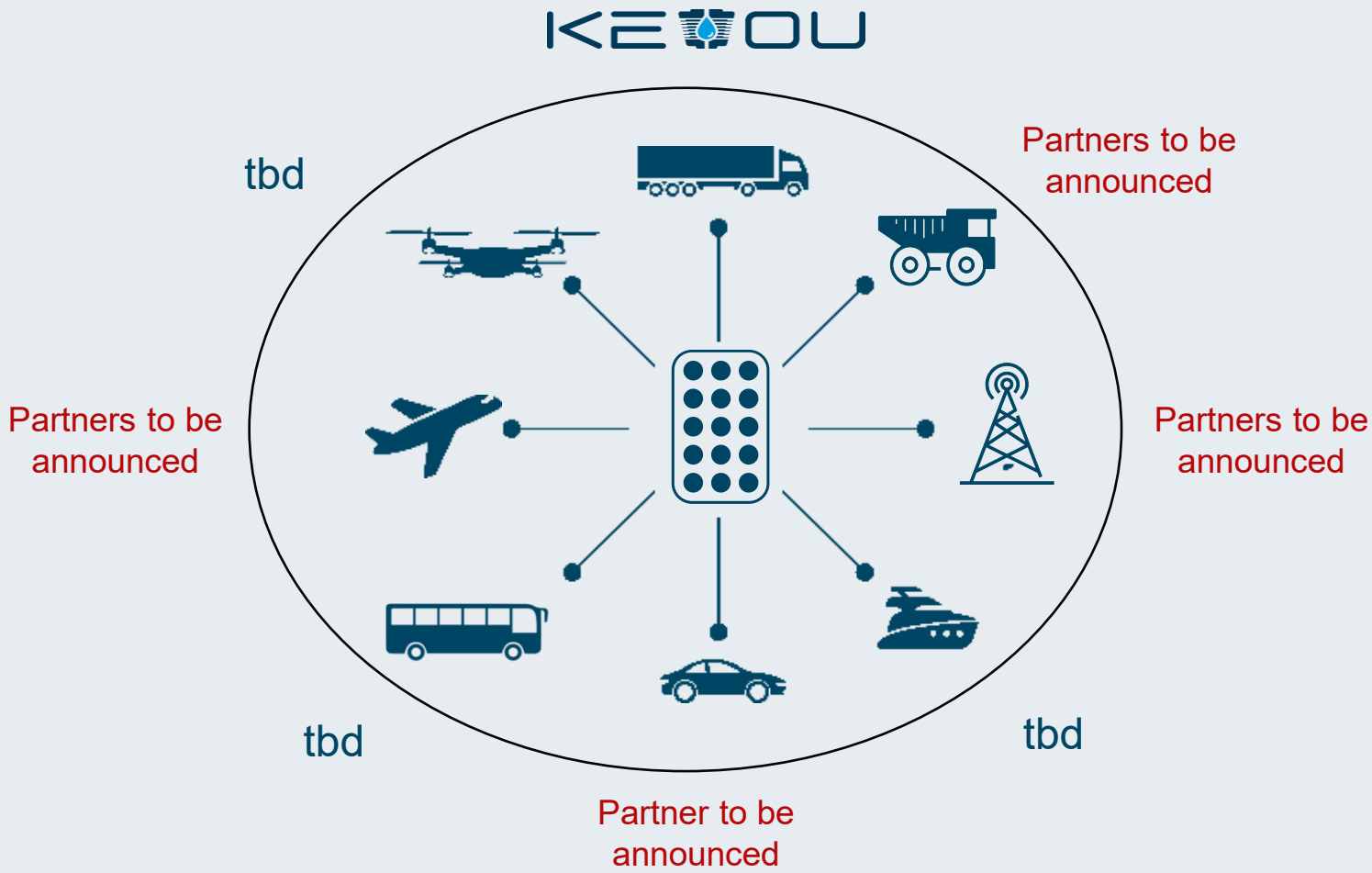
H_2 battery generates high interest for different applications

Concept studies for H_2 battery integration in different applications running

Concept studies

CS show **performance upgrade through H_2 battery storage technology** in different applications and products

- **Technical due diligence** by OEMs potentially using H2 battery technology in their products
- **Integration concept of H_2 battery** in applications (e.g., package space, H2 usage, pressure needs)
- **Prototype planning**
- Potential **strategic investments**



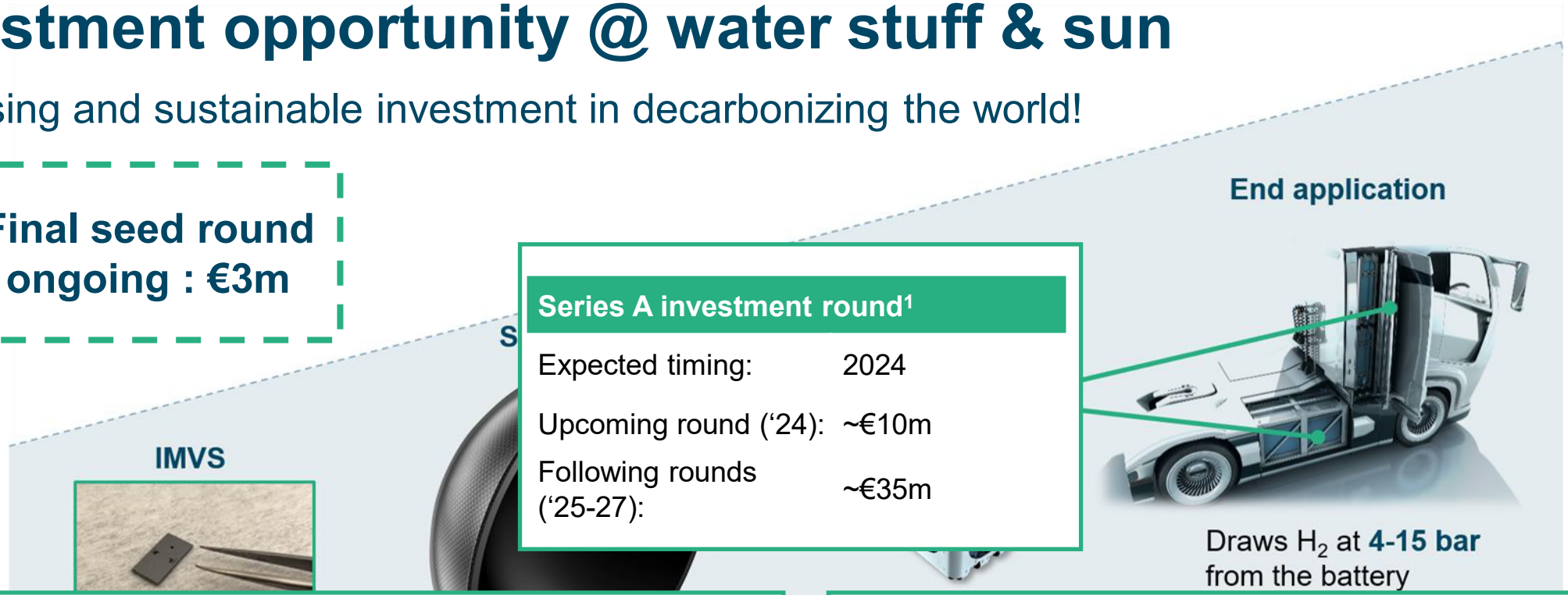
Note: concept study partners not announced yet for confidentiality reasons

water stuff & sun
we move hydrogen – you move the world

Investment opportunity @ water stuff & sun

Promising and sustainable investment in decarbonizing the world!

Final seed round ongoing : €3m



Series A investment round[1]	
Expected timing:	2024
Upcoming round (‘24):	~€10m
Following rounds (‘25-27):	~€35m

Uses of funds

Research & development:

- H2 storage in SFEERs with innovative microvalves - TRL 6/7
- H2 battery (low pressure tank) – TRL 6/7
- Charging and swapping station infrastructure concepts

Organizational development

- Strengthening current engineering team to speed up R&D timeline
- Growth of business development team fostering cooperations with partners along the H2 value chain

Why to invest?

- Innovative low-risk and low-cost solution for H2 storage and transport
- Scalable and cost efficient H2 infrastructure system – applicable in many further markets
- Profitable business generating early on high and stable EBITDA margins as well as cash flows
- Highly experienced founding / management team and deep expertise of R&D teams

1. Following rounds excl. industrialization

water stuff & sun
we move hydrogen – you move the world

Water stuff & sun – a team to revolutionize hydrogen economy

Experts and long-standing experience from various industries shape our team

Thomas Korn
CEO & founder
H_2 expert since 1990ies, former R&D lead for fuel cells at **BMW**; entrepreneur of rewarded and established H_2 engine start-up **KEYOU**.

Alvaro Sousa
CSO & founder
Passioned **H_2 engineer**, lead of the technical team of the 1st developed H_2 fleet series at **BMW**, developer of the 1st time ever produced H_2 racing car for **Aston Martin**, university lecturer on clean vehicle technologies, co-founder of KEYOU.

Uppsala, Sweden
Microsystem Technology

Munich, Germany
System Development & Validation

Jonas Flädjemark
COO & founder
Swedish **racing car driver**, **serial inventor** and innovator with numerous patents, as well as several products succeeding in a variety of markets.

Lukas Kalt
Head of Technology
Expert for type IV pressure vessel development and hydrogen vehicle system design. Former Segment-Leader for hydrogen transportation and infrastructure of a world-leading vessel manufacturer.

Dr. Dirk Schilder
Head of Corporate Finance
15 years of experience in corporate finance and strategy at the Boston Consulting Group, served international clients with corporate finance, capital market and strategy related projects.







For further information, contact us at: investorrelations@waterstuffsun.com

water stuff & sun
we move hydrogen – you move the world