

TDM	729.89	915.51	185.62	▲25.43%	FLR	660.27	745.28	85.01	▲12.88%
HUM	749.73	924.29	174.56	▲23.28%	UVD	155.59	181.57	25.98	▲16.70%
DMW	833.72	1004.01	170.29	▲20.43%	QUV	440.55	540.21	99.66	▲22.62%
YZJ	903.49	1127.46	223.97	▲24.79%	HZT	285.51	344.98	59.47	▲20.83%
GLY	982.07	1219.39	237.32	▲24.17%	PCW	811.44	1029.66	218.22	▲26.89%
VDA	113.74	143.41	29.67	▲26.09%	AIK	361.77	451.39	89.62	▲24.77%
UVV	468.08	535.41	67.33	▲14.38%	ZJJ	858.36	994.57	136.21	▲15.87%
HJS	545.49	659.05	113.56	▲20.82%	RHJ	894.79	1046.68	151.89	▲16.97%
EQC	566.96	664.89	97.93	▲17.24%	VGV	425.08	509.95	84.87	▲19.97%



PPJ	912.63	1038.36	125.73	▲13.78%	ZGK	391.59	491.48	99.89	▲25.51%
UAQ	1309.55	1655.62	346.07	▲26.43%	BNY	969.21	1130.65	161.44	▲16.86%
DAQ	1295.17	1641.66	346.49	▲26.75%	SOM	735.44	913.39	177.95	▲24.20%
PNR	654.33	775.84	121.51	▲18.57%	TQQ	1323.91	1646.42	322.51	▲24.36%
ZTM	161.00	194.42	33.42	▲20.76%	OIS	543.42	667.24	123.82	▲22.79%
					STU	1455.17	1723.56	268.39	▲18.44%

CARBON NEUTRAL BATTERIES_rSOEC/SOFC

Investing into a more sustainable and economical future

Company Information

NVH is a 5-year-old UK based Research & Development (R&D) commercialising small to medium scale high performance Solid Oxide Electrolyser Cell (5kW to 100kW) for green hydrogen production and storage .

Our mission is to embracing the circular economy , optimise resource efficiency in driving down carbon emission.

Our goal is to work as part of the supply chain to provide technology to produce and store carbon- zero, cost- effective off-grid energy .



Executive Investor Summary

NVH Team with industrial and research expertise working together for 5 years

NVH has invested over £1,000,000 in its sustainable water and carbon- neutral energy Know -How

Low- cost Phosphorus and Nitrogen recovery process developed via a £1m Newton Grant with University of Surrey

Close partner network with trusted partners in China, Nigeria and India

Open to collaboration with company with similar interests

Languages spoken in the company: English, German,Hindi, Nigerian , Chinese and Mandarin

INVESTMENT CALL

- 4% Equity for sale against £400,000
- To commercialise optimised Solid Oxide Electrolyser cell
- Laboratory cells were independently valued at £11m to £15m
- Experienced team to refabricate within six month for commercial accreditation
- Manufacturing agreement using NVH staff organised
- NVH has invested £400,000 in the research and optimisation
- Cost to source materials, fabrication £150,000
- Stack integration into four 5kW systems for industrial testing £250,000
- During optimisation develop manufacturing licencing agreements
- Selling stack 5kW for £2000 to 100kW system for £50,000

Problems /Opportunities

Problem to be solved with NVH SOECs:

- To produce safe carbon-neutral green hydrogen on-site
- To store excess energy from solar and wind to be released when required
- To support Micro- Combined Heat and Power (CHP) system to be designed for buildings to use excess heat to produce on-site electricity.
- Increase availability of efficient sustainable small to medium SOEC stacks for integration into the supply line for off-grid energy production.

Opportunities for NVH SOEC Stacks



Reversible SOEC /SOFC
offering Fuel Flexibility
operating on a variety of fuels.
Including hydrogen, natural
gas, biogas and some liquid
fuels



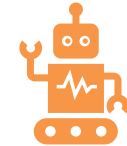
Remote and off grid Power



Microgrids and Distributed
generation

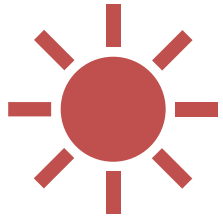


Backup and emergency Power



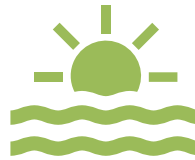
Specialised Applications for
micro –cogeneration systems

Identifying Early Adopters



Target

Target Solar Companies to integrate into the energy value chain



Start

Start with pilot-ready customers
(construction, solar farms, transport)



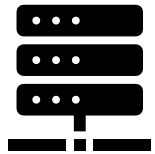
Focus on

Focus on long-duration and distributed projects with high diesel costs and intermittent energy supply

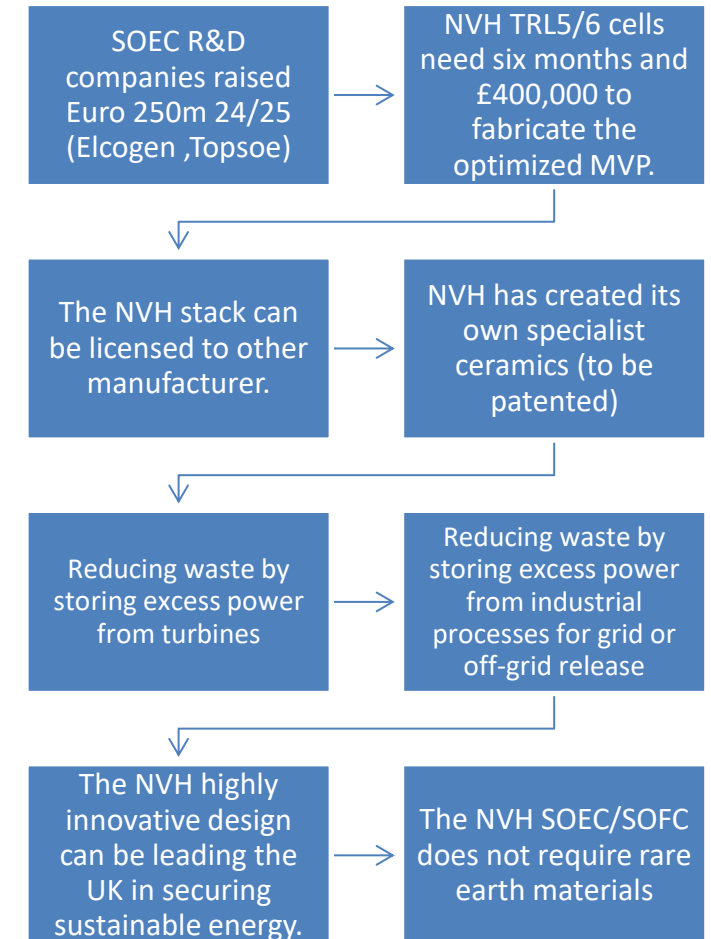
Our Value Proposition



Green energy goes to waste due to lack of storage. In 2023 58.7TWh lost to power 24 mn household FT Feb 2025



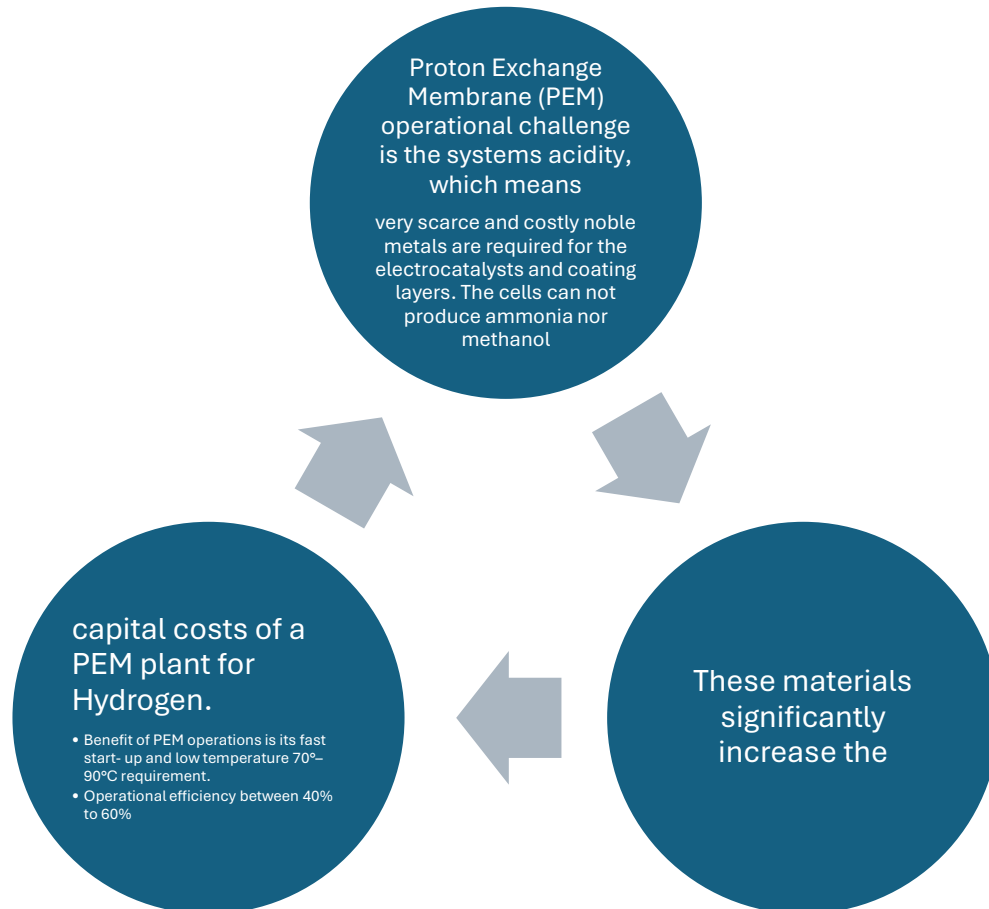
Local Impact of datacentres and growing consumption pose challenges at local level



Market Drivers for Small to Medium size SOEC

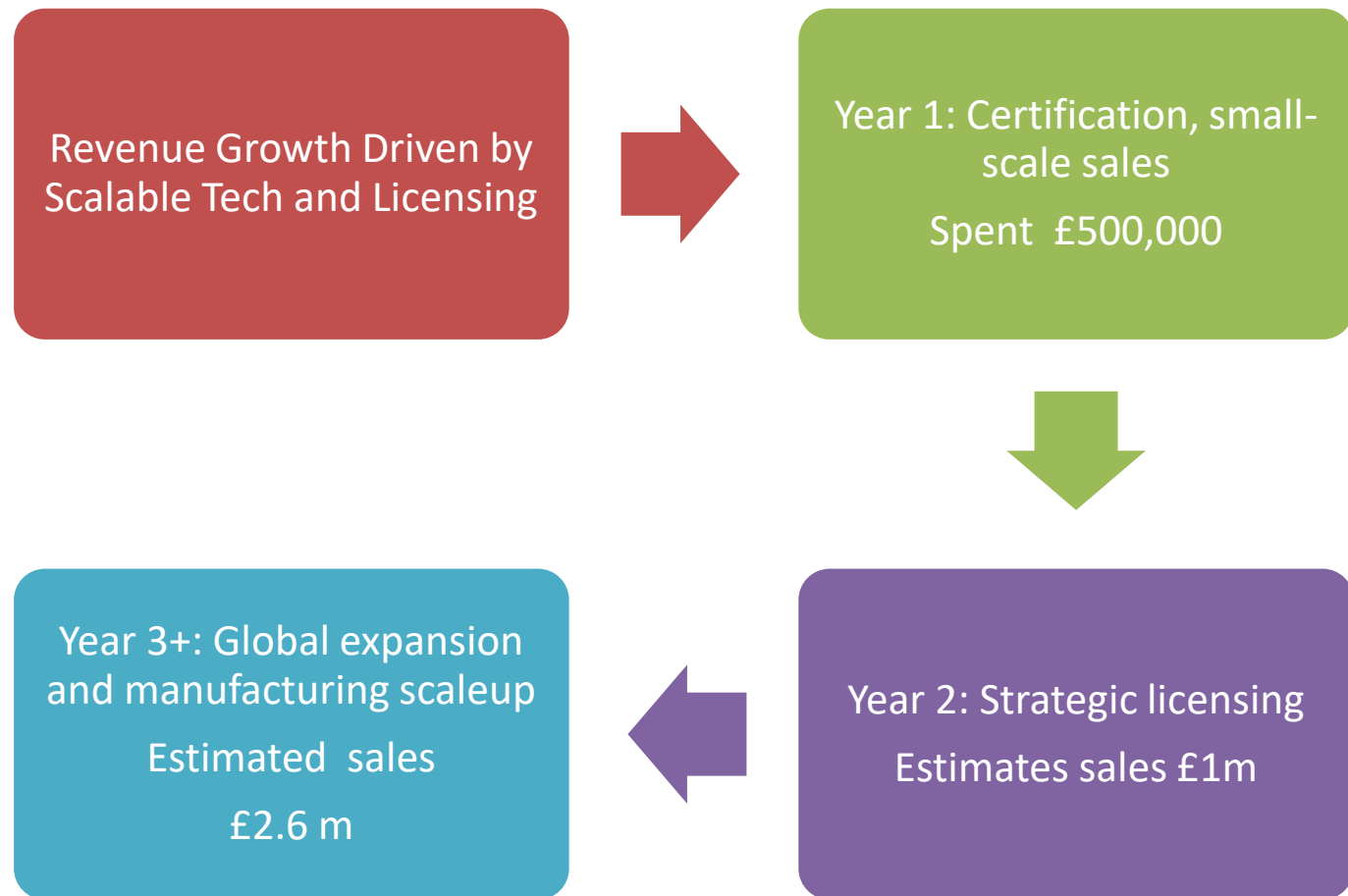
- The global green hydrogen market was valued at approximately \$4.1 billion in 2022 and is projected to grow at a CAGR of 39.5% to reach over \$100 billion by 2030 (Allied Market Research) 2025).
- This growth is driven by decarbonization targets, energy security initiatives, and rising renewable energy generation.
- Solid Oxide Electrolyser Cells (SOECs) are a next-gen technology segment within this market, gaining attention due to their high efficiency and ability to use waste heat in hydrogen production.
- India, the EU, China, and the US have all committed to hydrogen roadmaps, with billions earmarked for production, storage, and deployment infrastructure, including off-grid and mobility-based hydrogen use cases.

SOEC'S COMPETITIVE ADVANTAGE OVER OTHER ELECTROLYSER CELLS

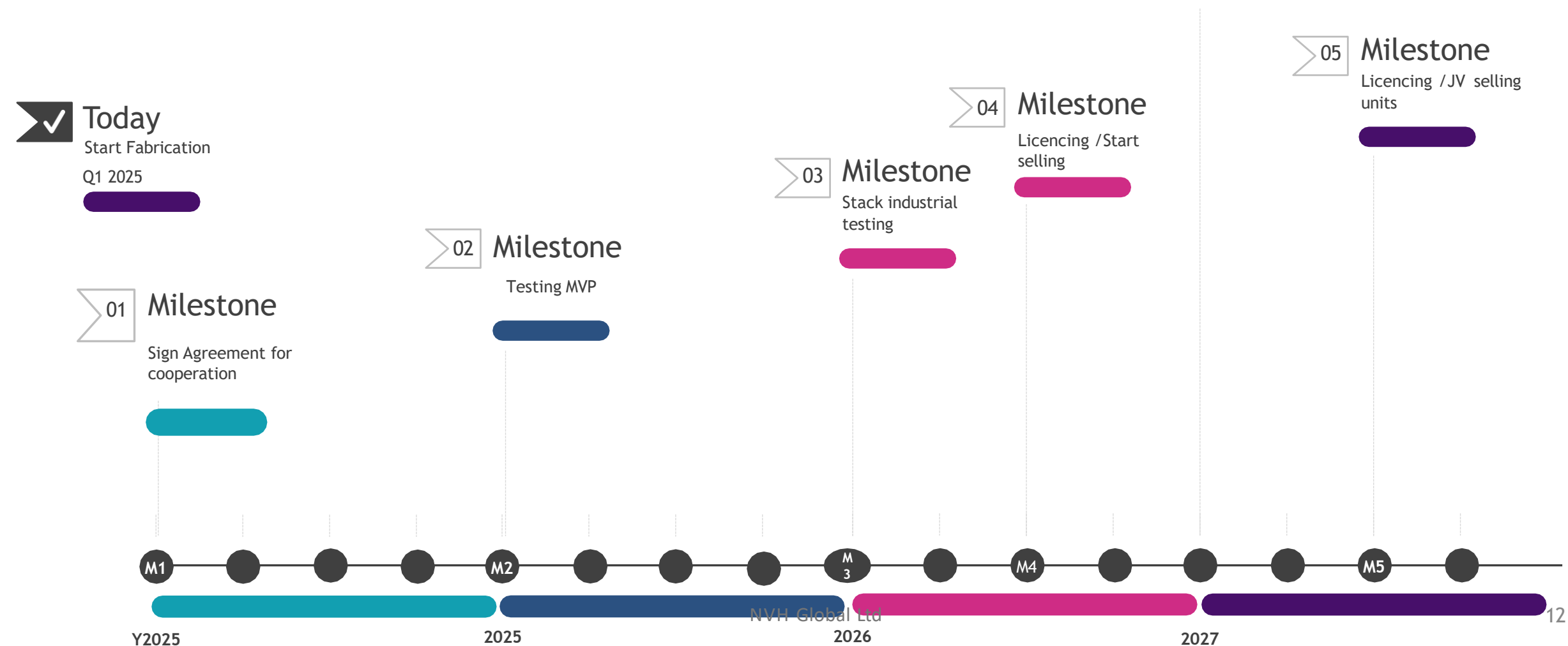


- Solid Oxide Electrolysis (SOEC) operational challenge is the systems high temperature start-up of 600°–800°C. NVH SOEC operate at less than 500°C .
- NVH SOEC uses less electricity to produce hydrogen , ammonia, methanol or syngas. Its high operating temperature , taking in waste heat makes the process commercial.
- NVH SOEC produces hydrogen at nearly 90 percent electrical efficiency without excess heat and can reach 100 percent efficiency when using waste heat from industry.
- NVH SOEC does not require noble metals or rare earths.

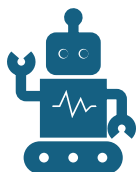
Financial Projections



NVH SOEC roadmap



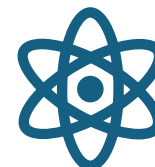
Why This Team Wins



Deep domain expertise in energy tech, commercialization, and policy.



International network across Europe, Asia, and Africa.



Built around a shared mission: scaling sustainable hydrogen solutions with unique IP in SOEC and microbial electrolysis.



The team is already global, already building, and already plugged into public and private capital flows.

Detail Team Structure



Dr Hannah Simcoe-Read
(Founder and CEO)

Has successfully taken spin outs
to market over 20 years in
Germany , UK and India

Dr Junbin Huang has 4 year
industrial experience in the China
and UK working in water industry.

His expertise is CO2
sequestration and water
treatment and microbial
electrolysis .

Dr Aastha Sahai has 10 years
project leading experience as
grant funded genetic biologist.

However her commercial
experience is in the biotech
sector.

Dr Jing Li has just completed her
PhD is SOEC s at University of
Surrey ,but worked previously in
the industry in China. She will
supervise the development and
fabrication of the SOEC in Beijing

Dr Yuheng Lui has 3 years
industrial experience in cell
design working in the foremost
Fuel cell company in China and
now completing his PhD. He is
working 20 hours with NVH

FCO: Mayur Sanchet FCA

Thomas Hergenbahn , has taken
several companies to
commercialisation and sale .
Investment banker

NVH Adviser s

Prof Nigel Brendon OBE FREng
FRS, Dean of Faculty of
Engineering Imperial College and
Professor of Sustainable Energy
Dr Paul Boldrin of the School of
Mining , Imperial College

NVH has an MOU with a team of
26 highly qualified engineers in
India (Jesvid Cryo technical
Services) as part of development
and

Leadership Team Overview

Our team

Dr. Hannah S.R. – Founder & CEO: 30+ yrs in development & policy	Junbin H. – Technical Officer: CO ₂ sequestration expert	Dr. Aastha S. – COO: Business development
Dr. Jing L. – Materials Lead: SOEC PhD, industrial exp.	Dr. Yuheng L.– Fuel Cell Design: Industrial + academic fuel cell expertise	Mayur S. – FCO: FCA- qualified, financial controller
Thomas H. CCO / Go-to-Market Lead	Prof Nigel B. & Dr Paul B. NVH Advisor	Policy / Regulatory Lead

Strategic Roles

CEO Visionary

CTO / Technical Depth

COO / Operations

Product Lead for Materials

Product Lead for Fuel Cell Design

CFO / Finance

CCO / Go-to-Market and Head of Market Development.

Policy/Regulatory Lead: Optional but Strategic as it helps shape the market and remove policy risks

Lean Rollout Strategy for Accreditations

Build

- - Build: Deliver pilot units with monitoring tools

Measure

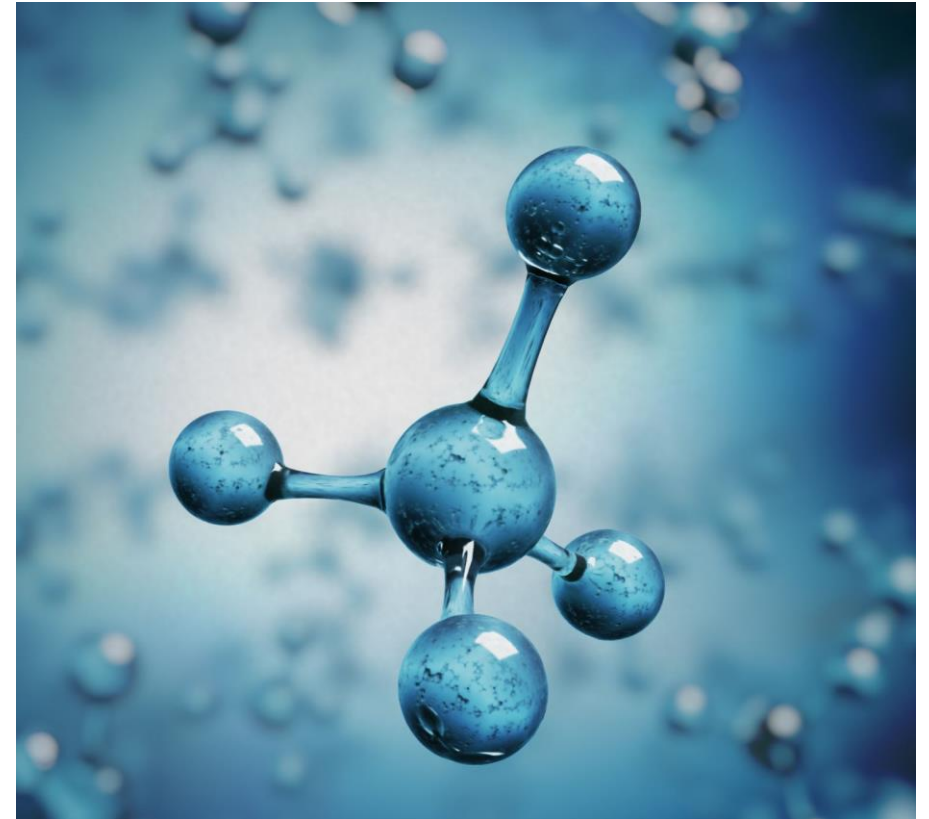
- - Measure: Track cost, uptime, emissions, customer feedback

Learn

- - Learn: Iterate product design & GYM based on real usage



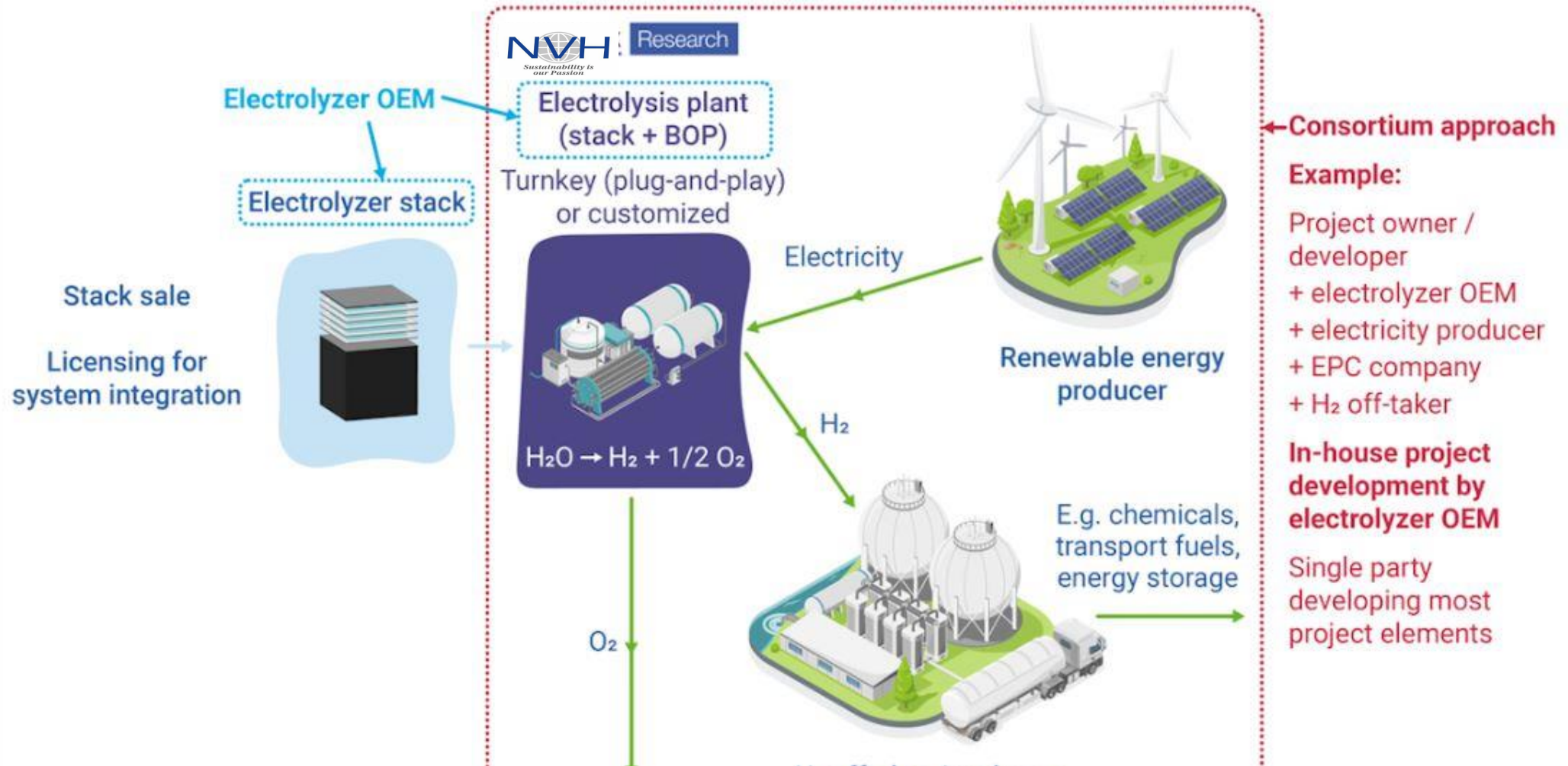
*Sustainability is
our Passion*



THANK YOU

APPENDIX Slides to follow

Overview of Business Models for Electrolyzer Companies

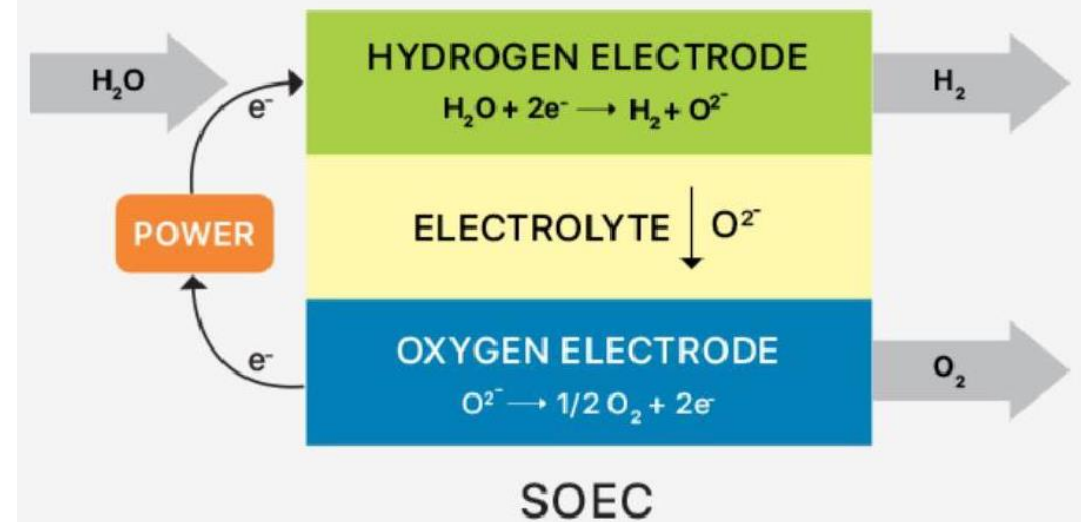
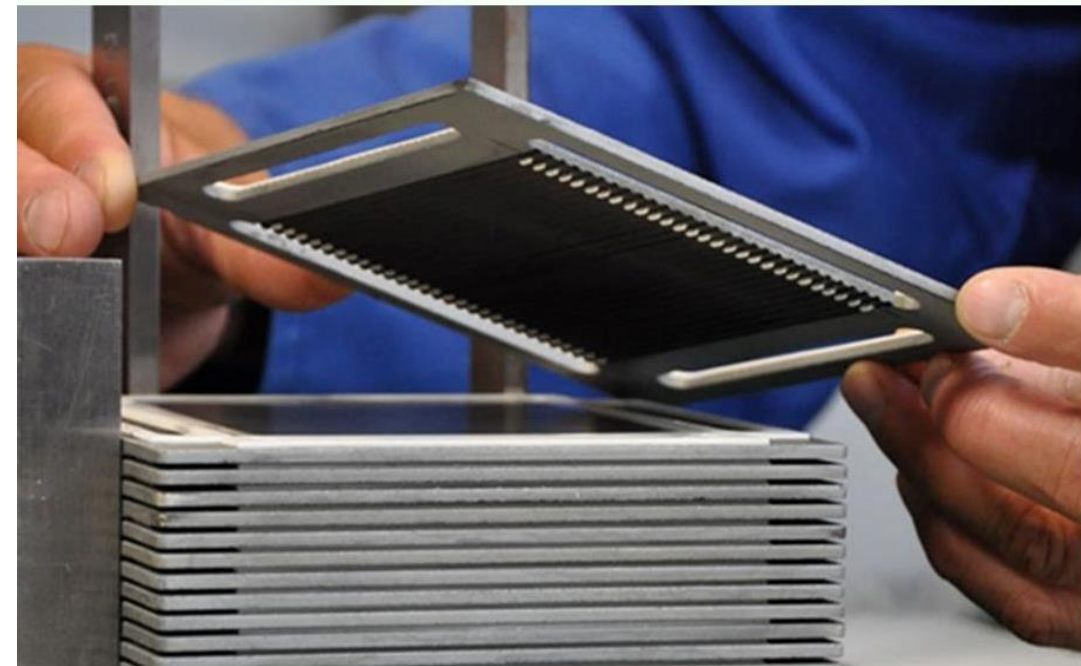




The NVH SOEC/SOFC

The surplus energy from renewable sources can be effectively stored in the form of chemical energy using our Solid Oxide Electrolyser Cells (SOEC).

SOFCs are reversible solid oxide fuel cells that use ceramic electrolytes and are also referred to as Regenerative Solid Oxide Fuel Cells (R-SOFCs)



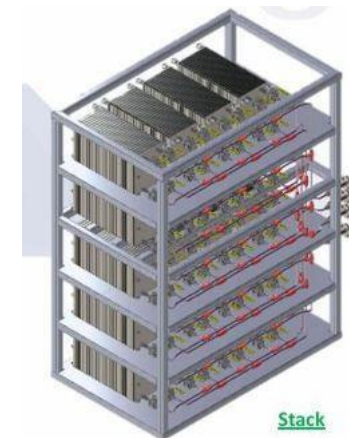
Cost for next 12 month to complete MVP and testing

Cost and Tiem schedule for MVP

Activities	February to May 2025 develop test cell		June to December 2025	
R&D	Material To build Cell	£ 15,000.00	Building materials industrial size 3 plants 5KW	£50,000.00
	Fluor Ltd	£ 10,000.00	Staff cost	£182,000.00
	Staff cost China and UK	£ 130,000.00	Laboratory	£30,000.00
	Subsistance	£ 16,000.00	Travel & Subsistance	£25,000.00
		£ 171,000.00	Accrediation	£35,000.00
			Optimisation of cells	£30,000.00
				£352,000.00

Decision time October 2025

- 1) To sell IP Unit to Chinese company
- 2) Do JV with Chinese compnay



Sales region	Clients NVH Global in discussions with trials and sales							
India	HCL re datacentres and offices , direct contact with CEO							
India	Basic Sanitation pyt Ltd selling to Government clients and Automobile contacts charging point/ close partnership with TATA							
India	Corrtech Pvt Ltd selling high tech equipment to Defence Sector							
India	Anant Design University Mr Dhaval Monani Director & Mc Kinsey , Director of REALL UK needs for off-grid housing development support by Habiart for Humanity UK							
Malaysia	H2 Energy Sdn Bhd provision of moving away from PEM Alkaline units to SOEC for distributed energy							
Malaysia	Ms Sandra Hon, Merk Life Science and elected to driving green innovation in Singapore							
Nigeria	EKTI Government Nigeria has asked for an initial 6 100k for trialling , to ramp up to 10 units 1MW							
Nigeria	Niphu Ltd contacts working with Oil and Gas industry in Nigeria , will road show							
Wales	Welsh Centre of Printing and Coating with direct contacts to TATA and Welsh Government - Distributed energy hubs to store hydropower							
Iraq	Prof Adel Sharif (previously Head of Department UOS now adviser to Iraq PM re Green Energy.							
Germany	NVH Director -family owns many Crematoria . Heat has to be wasted and can not be used to heat housing, but can be used to produce energy using electrolyser							
Philippines	PCC and Ministry of Agriculture in Science City seeking safe uninterrupted power source							
UK	NVH Adviser Prof Nigel Brandon Imperial using his contacts once the fabricated cell is available							
UK	Phil Morris Crawley County Council responsible for green hydrogen distributed green energy to trail at Manor Royal ;							

NVH sales enquiries

Profit & Loss and Balance Sheet (Summary)



Year	1	2	3	4	5
	2024	2025	2026	2027	2028
Revenue					
Total revenue	£0	£136,000	£1,730,000	£3,600,000	£4,070,000
Cost of sales					
Total cost of sales	£0	(£68,000)	(£865,000)	(£1,800,000)	(£2,035,000)
Gross margin					
Total gross margin	£0	£68,000	£865,000	£1,800,000	£2,035,000
Other operating income					
R&D tax credits	£21,889	£36,000	£40,000	£40,000	£40,000
Grant income	£0	£0	£0	£0	£0
EIS Income	£400,000	£0	£0	£0	£0
Total	£421,889	£36,000	£40,000	£40,000	£40,000
Operating expenses					
Total operating expenses	(£258,419)	(£634,100)	(£600,600)	(£632,500)	(£634,000)
EBITDA	£163,470	(£530,100)	£304,400	£1,207,500	£1,441,000
Total amortisation and depreciation	£0	(£2,500)	(£7,333)	(£9,583)	(£13,833)
EBIT	£163,470	(£532,600)	£297,067	£1,197,917	£1,427,167
Interest	£0	£0	£0	£0	£0
Retained profit	£163,470	(£532,600)	£297,067	£1,197,917	£1,427,167
Balance Sheet					
Cash at bank	£163,470	£1,130,870	£1,427,937	£2,625,853	£4,053,020
Total assets	£163,470	£1,130,870	£1,427,937	£2,625,853	£4,053,020
Represented by					
Equity	£0	£1,500,000	£1,500,000	£1,500,000	£1,500,000
Loans	£0	£0	£0	£0	£0
Retained Profits	£163,470	(£369,130)	(£72,063)	£1,125,853	£2,553,020
Total Shareholders' Funds	£163,470	£1,130,870	£1,427,937	£2,625,853	£4,053,020

NVH is looking for £500,000 to fabricate and start selling the 5kW SOEC

The Balance Sheet shows the intention to raise £1.5m once the MVP is accredited for manufacturing.

On Accreditation NVH can licence manufacturing or start fabricating in China.

The Profit and Loss is only showing the development of the SOEC, not other income.