EPISODE 9

The questions nobody asks: Due diligence in hydrogen

WHEN THE PITCH SHOWS ONLY THE UPSIDE

THE GAP | THE CASES | THE HELP

Hydrogen pitches show the best case. The difficult questions are rarely answered — mostly because nobody with the right knowledge asks them. What has that cost investors, and how do you avoid it?

THE EPISODE IN THREE NUMBERS

The cost of the unasked question

$25m

SEC penalty agreed by fuel cell truck maker Hyzon, which reported 87 trucks sold in 2021 — the SEC says none were

4 of 14

hydrogen trains still running on the world's first hydrogen rail line at one point — replacement fuel cell modules not delivered

£11m

HydrogenOne Capital's holding in developer HH2E — 8% of the fund's net assets, written off when HH2E filed for insolvency

Hydrogen does not fail for lack of information. It fails for lack of the right questions.

Every one of these losses was preceded by a confident announcement. In each case, someone with specialist knowledge could have asked the question that changed the decision.

All cases in this episode are based on public sources only. SEC / Transport Topics (Hyzon); EVB via gasworld (iLint); AIC, Nov 2024 and HydrogenOne RNS, Feb 2025 (HH2E).

THE GAP · WHAT THE PITCH SAYS

What you hear — and what you don't

A few of the most obvious examples. The real list is much longer — and the less obvious questions are the ones that matter most.

WHAT YOU HEAR	THE QUESTION NOBODY ASKS
"80% efficient"	**Under which conditions?** Stack or system? New, or averaged over its life?
"1 GW factory"	**Capacity or output?** Nameplate is not output. How many units shipped last year?
"500 trucks ordered"	**Binding or a memorandum?** An MOU is not a sale. Is there a deposit?
"40,000 h lifetime"	**Measured or extrapolated?** How many real hours on a full-size product?
"€3/kg hydrogen"	**Where, and with what?** At the outlet or delivered? At what power price?
"Proven in demo"	**Proven for how long?** It can work. Does it keep working for years?

Illustrative examples of common claims — not taken from any single company.

THE CASES · THE MAP

Six cases — from fraud to hard lessons

Different technologies, different countries, different causes. In every one, the right questions could have exposed the risk early.

01

Nikola

Fuel cell trucks — founder convicted of fraud, later pardoned; bankrupt in 2025

02

Hyzon Motors

Fuel cell trucks — $25m SEC settlement; liquidated

03

Alstom iLint, Germany

Hydrogen trains — fuel cell spares and the single H_2 supplier failed

04

ITM Power

PEM electrolysers — scaled too early, admitted it, now recovering

05

Green Hydrogen Systems

Alkaline electrolysers — IPO in 2021, bankrupt in 2025

06

HH2E

GW-scale developer — no money to reach FID; insolvent

TECHNOLOGY & OPERATIONS COMMERCIAL CLAIMS & FINANCE PROVEN FRAUD

THE CASES · THE OBVIOUS QUESTION

One question could have changed the decision

NIKOLA · PROVEN FRAUD

The truck that rolled downhill

"Can I see it run on level ground, under its own power, with the data logged?"

HYZON MOTORS · COMMERCIAL CLAIMS

Orders that were not sales

"Which orders are binding, with deposits paid — and can I speak to the customer?"

ALSTOM iLINT · TECHNOLOGY & OPERATIONS

The first hydrogen trains

"What does this cost over its life against a battery train on this exact route?"

The common thread:
a factory, a listing or a gigawatt plan is not the same as a mature product or a funded project. The gap between them is where the money was lost.

THE PATTERN · WHAT THE CASES SHARE

Same story, four steps

1 **ONE-SIDED INFORMATION**
→ the upside is published

Efficiency, capacity, orders and partnerships make the headlines

2 **NOBODY ASKED**
→ no specialist in the room

Decision-makers had finance and legal reviews — not deep technical ones

3 **LATE DISCOVERY**
→ problems found in operation

Each one is far more expensive than a question asked before signing

4 **OTHERS PAID**
→ investors, taxpayers, passengers

Trust in hydrogen itself took the damage — even where the technology was sound

The flip side: the technologies that hold up share their data, show real field hours and welcome the hard questions.

THE HELP

What an independent technical review gives you

Before you invest, fund, buy or sign — the questions asked by someone who has worked with the technology, not just read about it.

1. **The questions nobody else asks**
   Specialist questions a generalist would not know to ask.
2. **Independence from the seller**
   A view that does not depend on the vendor's own data, slides or demo.
3. **Evidence, not slides**
   Claims checked against test data, operating hours and real projects.
4. **Hands-on technology experience**
   Electrolysers and fuel cells, including solid oxide — from the lab to the plant.
5. **A clear answer you can act on**
   Go, no-go, or go with conditions — with the risks that need to be fixed or priced in.

The cost of asking is small.
Every case in this episode shows the cost of not asking.

Chade Hydrogen

THE BEST TIME TO ASK IS BEFORE YOU SIGN.

Ask the hard questions. Then make the decision.

Facing an investment, a funding decision or a technology choice? Book a short introductory call at chadehydrogen.com — before you sign. And send in a technology claim you want tested: the best ones become live due diligence episodes.

Full episode: link in comments

chadehydrogen.com

May the Hydrogen be with you.

