

**The biggest lie in energy today:
“We need new technology.”**

**We don't have a technology problem.
We have a system integration problem.**

Hydrogen is NOT new

Electrolysis: 100+ years

Industrial hydrogen: decades

Used at scale (e.g. Dalda)

What changed?

Materials evolved

Liquid → Solid electrolytes

Example: Nafion membrane

Nafion didn't invent hydrogen

It enabled:

Efficiency

Compact design

Scalability

The real breakthrough:

Integration

Materials + Engineering + Systems

The mistake today:

**Re-proving known processes
Instead of integrating systems**

The real bottleneck:

Institutional hesitation

Risk perception

Waiting for precedent

CRT today:

Known chemistry

Proven building blocks

Waiting for integration confidence

**The barrier is no longer chemistry.
It is confidence in system integration.**