

# A CIRCULAR STRATEGIC VISION FOR UK ENERGY SECURITY

Delivering Firm 24/7 Hydrogen  
via the '1+4' Nuclear Cluster Model.



A National Strategic Blueprint | Teesside and the Humber Pilot





# SECURING THE JUST TRANSITION

Retraining, Not Redundancy

- **The Ghost of the Past:** Preventing the social devastation of industrial closures.
- **The Opportunity:** Direct asset transfer of the North Sea skilled workforce.
- **The Mission:** Transitioning Oil & Gas jobs directly to Hydrogen & Nuclear sectors.

*"We save the oil and gas workers from the same fate... preventing the loss of the workforce and whole towns." — David Warren*



# THE "1+4" CLUSTER CONFIGURATION

## RIG 2: PRODUCTION SATELLITE

Desalination & Electrolysis

## RIG 3: PRODUCTION SATELLITE

Desalination & Electrolysis

## RIG 1: POWER HUB (SMR)

300-350 MWe Generation Only

## RIG 5: PRODUCTION SATELLITE

Desalination & Electrolysis

## RIG 4: PRODUCTION SATELLITE

Desalination & Electrolysis

A modular system built for maximum output and minimal interference.



# REGULATORY COMPLIANCE BY DESIGN: THE SAFETY FIREWALL



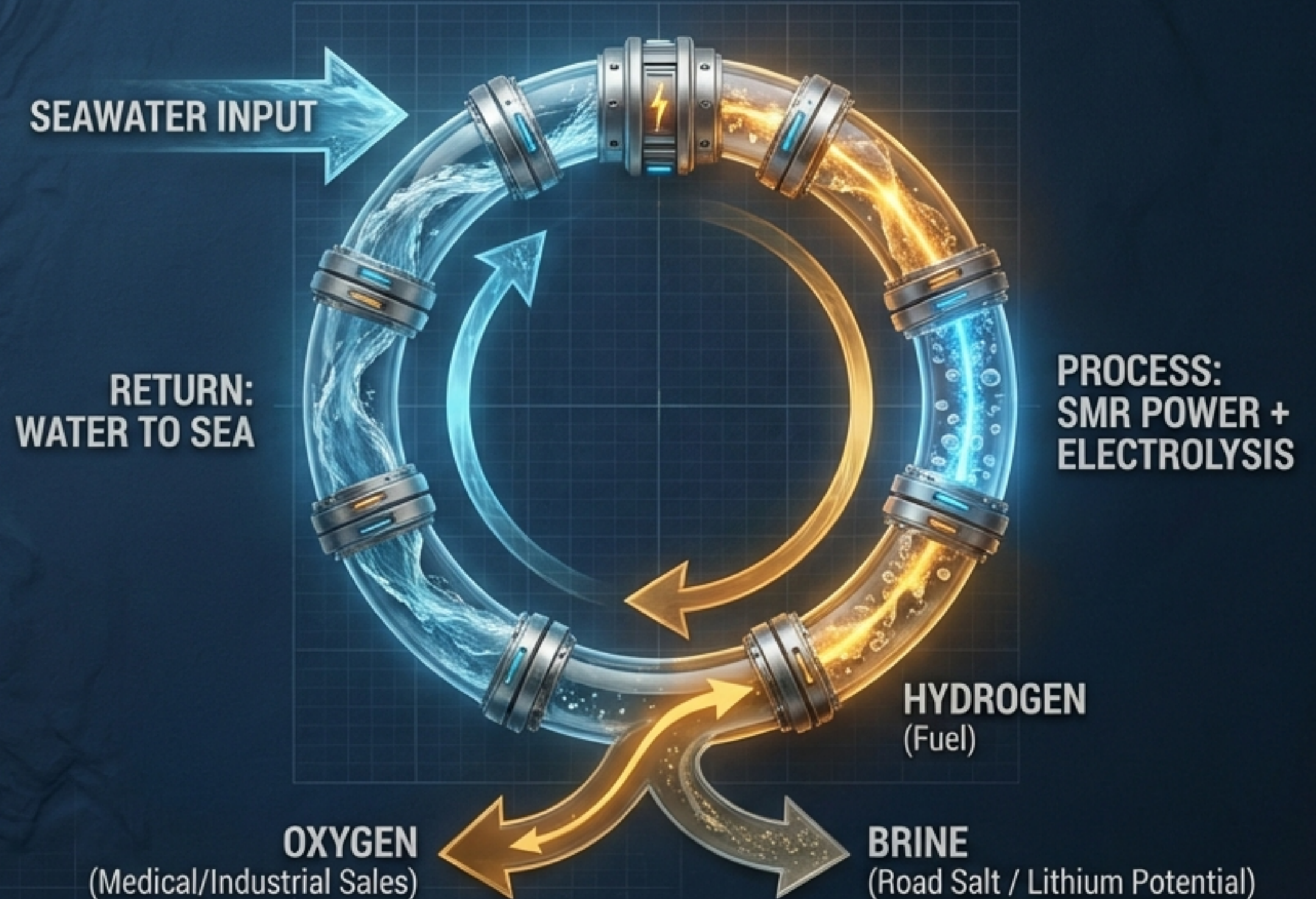
- HAZARD ISOLATION:**  
Decoupling removes high-pressure hydrogen explosion risks from the nuclear zone.
- CLEAN ZONE:**  
The SMR rig remains a purely electrical environment.
- STREAMLINED APPROVAL:**  
Simplified safety case for ONR and HSE.



# ZERO WASTE. INFINITE CYCLE.

We use nothing.  
We borrow molecules.  
Hydrogen is burned, turns  
back to water, and  
returns to the sea.

Monetising By-products:  
Oxygen and Brine become  
revenue streams, not  
disposal costs.





# FROM TEESSIDE TO THE NATION

**Phase 1:** Industrial Decarbonisation of the North East.

**Phase 2:** National Replication.

**Scalability:** The '1+4' model is a modular, copy-paste solution for firm 24/7 Green Energy.





# THE STRATEGIC CASE FOR THE STRATEGIC CASE FOR PROJECT BRITANNIA



**SAFETY:** Decoupled SMR/Hydrogen architecture satisfies ONR/HSE requirements.



**ECONOMIC:** Preserves the skilled North Sea workforce and generates revenue from by-products.



**STRATEGIC:** Delivers firm Net Zero energy security independent of weather.