



Net Zero North West Cluster Plan

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NZNW Cluster Plan Team

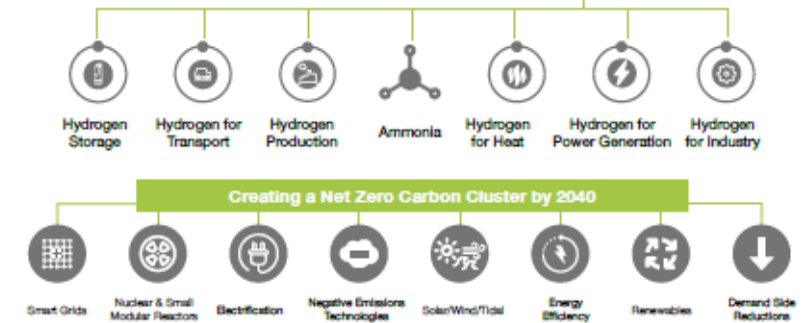
Net Zero North West Cluster Plan

- The Cluster Plan sets out the pathway to Net Zero for the NW of England and NE Wales
- Provides the next level of detail underneath the Investment Prospectus which was launched in 2021
- Project team is made up of partners across industry, academia and government
- Collaborated across a number of areas to develop a detailed understanding of energy consumers, energy decarbonisation systems, hydrogen production, large scale power generation, distribution networks, skills & supply chain and investment

NET ZERO NORTH WEST THE CLUSTER PLAN FOSTERING CLEAN GROWTH

Creating the UK's first Low Carbon Industrial Cluster by 2030

Carbon Capture Usage and Storage → H2



Setting out the transition to Net Zero Carbon for the North West of England & North East Wales.



The Cluster Plan will prepare the area for a cleaner future.

> 10 MILLION TONNES CARBON SAVED BY 2030

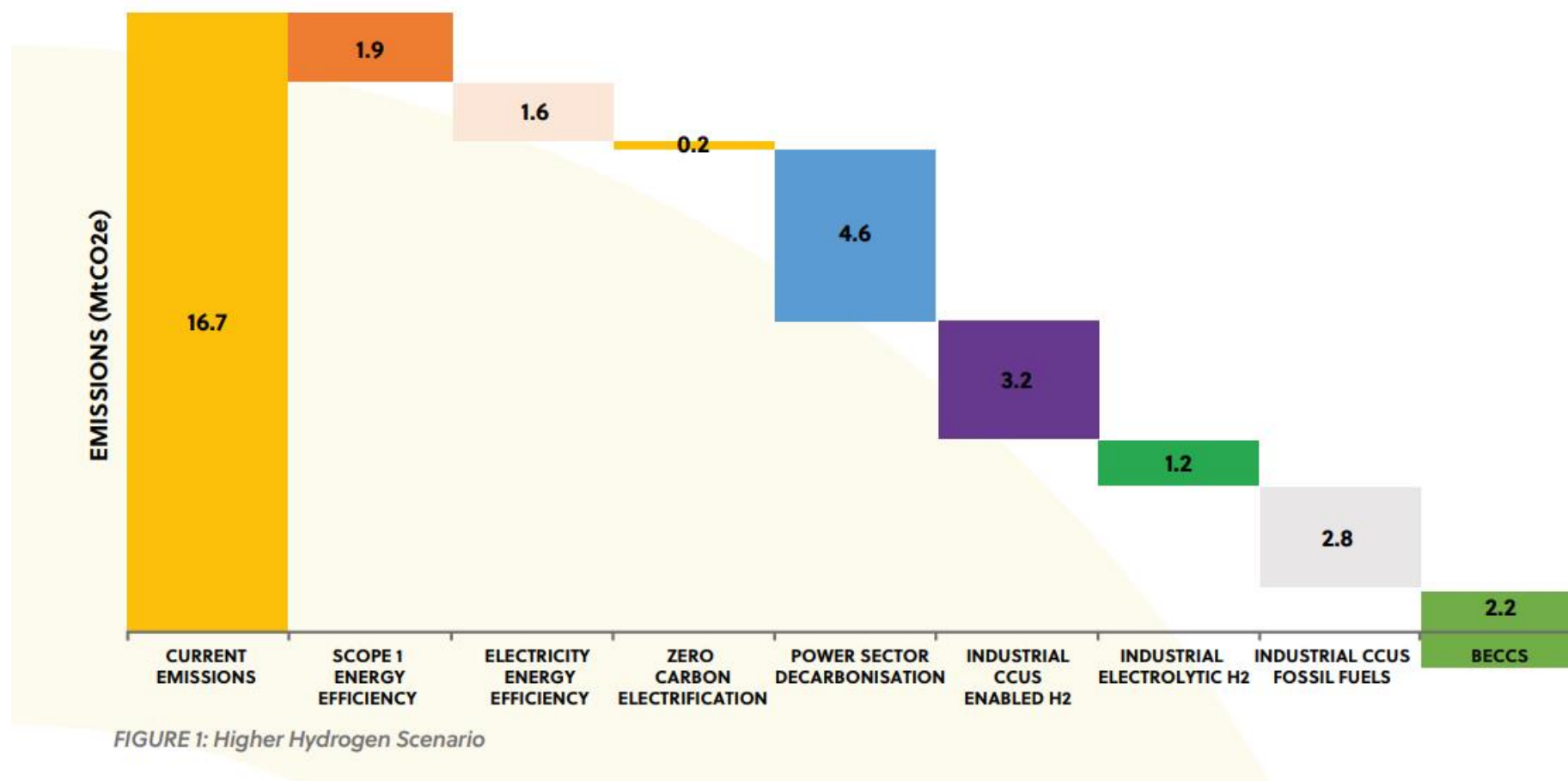
**ENSURING A
JUST TRANSITION
TO NET ZERO CARBON**

**OVER 33,000 JOBS
OVER £4BN INVESTMENT**

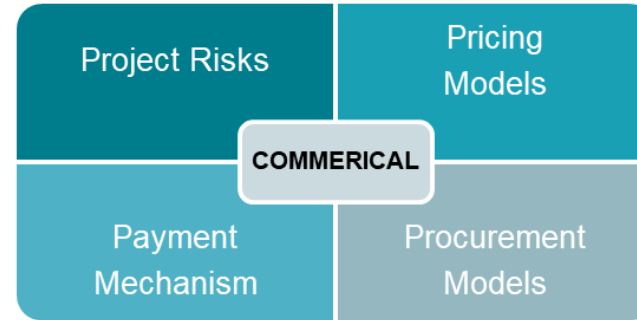
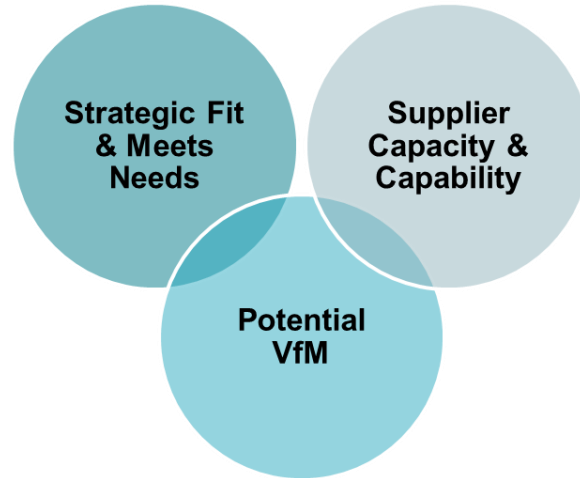
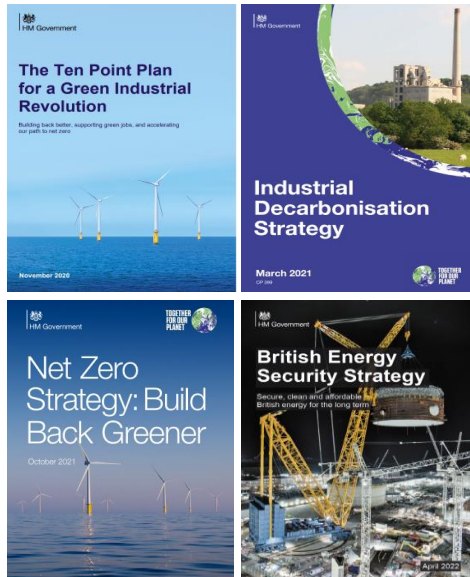
**CLUSTER
PLAN BY
2022** **FULFILLING THE
INDUSTRIAL
CLUSTERS
MISSION**

> 40 MILLION TONNES CARBON SAVED BY 2040

Industrial Decarbonisation Roadmap – “Waterfall to Net Zero”



Investment Case



The scale of the solution
 How much CAPEX is required to achieve net zero
 Where it best spent to gain value for money
 The value added to the region.



Strategic Case

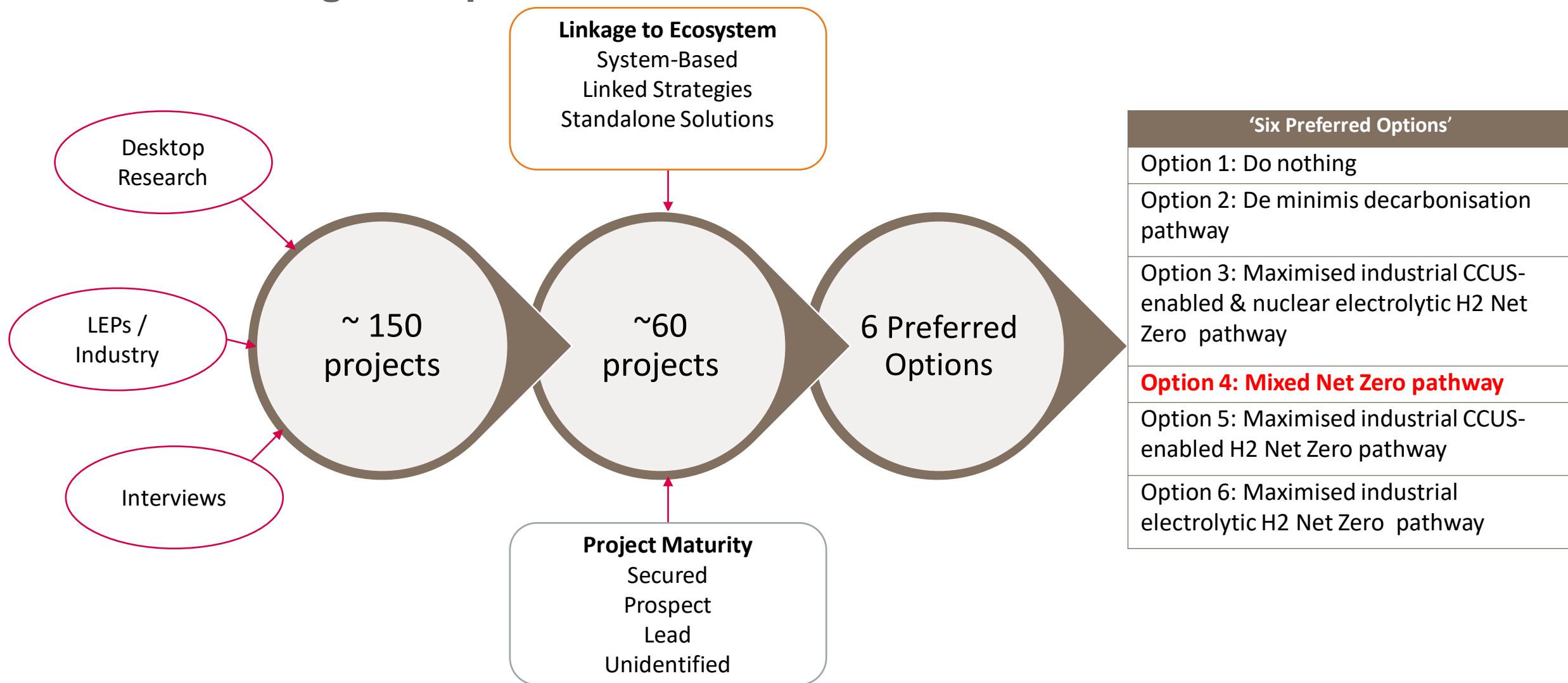
Economic Case

Financial Case

Commercial Case

Mgmt Case

Understanding the Pipeline



Preferred Option – Mixed Net Zero Pathway

		Option 2 – De minimis decarbonisation pathway	Option 3 - Maximised industrial CCUS-enabled & nuclear electrolytic H2 NZ pathway	Option 4 – Mixed Net Zero pathway
Economics (in £ billions)	CAPEX	£6.7	£32.4	£34.0
	OPEX / 30 yrs	£4.7	£22.6	£24.5
	TOTAL	£11.5	£55.0	£58.5
Financial (in £ billions)	CAPEX	£5.0	£26	£29.6
	OPEX / 30 yrs	£5.9	£33.1	£35.8
	TOTAL	£10.9	£35.8	£65.5
Additional CO2 reductions Including do nothing MtCO2 p.a., all (industrial only)		23.5 (8.4)	45.0 (16.7)	46.5 (17.1)
Additional CO2 reductions, over and above do nothing, MtCO2 p.a., all (industrial only)		5.5 (3.3)	27.0 (11.6)	28.5 (12.0)
In £ Billion	Cost (CAPEX & OPEX)	£11.5	£55.0	£58.5
	Benefit (GHG reduction)	£33.7	£157.6	£167.0
	Net benefit	£22.2	£102.6	£108.5
	Initial Benefit Cost Ratio (BCR)	1.9	1.9	1.9

Key Challenges

Planning Process

System-Wide Thinking & Enabling
Infrastructure

Project Scale for Funding &
Financing

Supply Chains

Workforce & Skills

Inward Investment

What Next?

- “Investment Readiness” tool developed to allow appraisal of projects by sector and individually in preparation for securing investment.
- Work underway to compare NZNW outputs with other industrial clusters globally in Germany, Holland and the US
- Funding secured for a study on next steps for the cluster plan investment case
- Funding secured for an industrial decarbonisation coordination role for the North West – with potential to be matched by industry
- Targeted campaign of engagement with DESNZ
- Establishment of a regional public communications group to ensure “industry speak” can be translated into what this means for everyone living and working in the North West

Thanks for listening!

