



Scotland's centre of expertise connecting
climate change research and policy

A SWOT of the Net Zero and Climate Adaptation Economy of Scotland

Purpose, findings and application in the context of a Just Transition



Purpose

Purpose:

to support in policy making and identifying interventions needed now.

Objectives:

- Identify economic opportunities (and be clear on the nature of those opportunities) for Scotland in the context of the Net Zero and Climate Adaptation (NZ & CA) economy, both domestically and internationally.
- Provide comparability in assessment across a variety of sectors and products
- Pinpoint interdependencies and cross cutting themes

Results:

The desired result is an evidenced set of shared priorities.

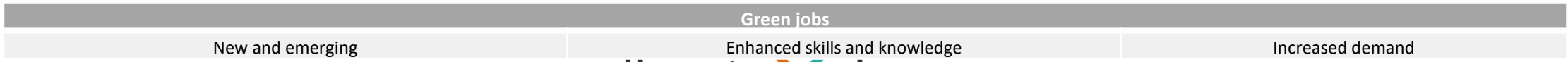
Key Findings

- It's a complex and a new question
- Data availability, format and accessibility is poor
- It is requiring us to challenge existing / standard assumptions in the policy base
- Stakeholder engagement is vital

What makes up the Net Zero and Climate Adaptation economy?

UK Standard Industry Classification (SIC)*	NSET opportunity areas	Climate Change Plan	Pre-analysis report	LCREE
Agriculture, forestry and fishing	Renewable energy	Electricity	Energy	Offshore wind
Mining and Quarrying Industries	The hydrogen economy	Buildings	Transport	Onshore wind
Manufacturing	The decarbonisation of transport	Transport	Land use and agriculture	Solar
Electricity & Gas Supply	Space	Industry	Natural capital	Hydropower
Water Supply & Waste Management	The "blue economy"	Waste and the circular economy	Buildings and construction	Other renewable electricity
Construction	Sustainable farming & forestry	Land use, land use change and forestry	Blue economy	Bioenergy
Distribution, Hotels and Catering	Financial services and fintech	Agriculture	Circular economy	Alternative fuels
Transport, Storage and Communication	Industrial biotechnology	Negative emissions technologies		Renewable heat
Business Services and Finance	Emerging technologies such as photonics and quantum technologies	CESAP** priority areas		Renewable combined heat and power
Government, and Other Services	Digital technology	Energy transition		Energy efficient lighting
	Life sciences	Construction		Energy efficient products
	Food and drink innovation	Transport		Energy monitoring, saving or control systems
	Creative industries and tourism	Manufacturing		Low carbon consultancy, advisory and offsetting services
		Agriculture and land use management		...
				Supply and use tables
				...

Products and services



*Quarterly volume GDP by industry tables (broad industry of output)
 **Climate Emergency Skills Action Plan (sector-based opportunities and skills implications)

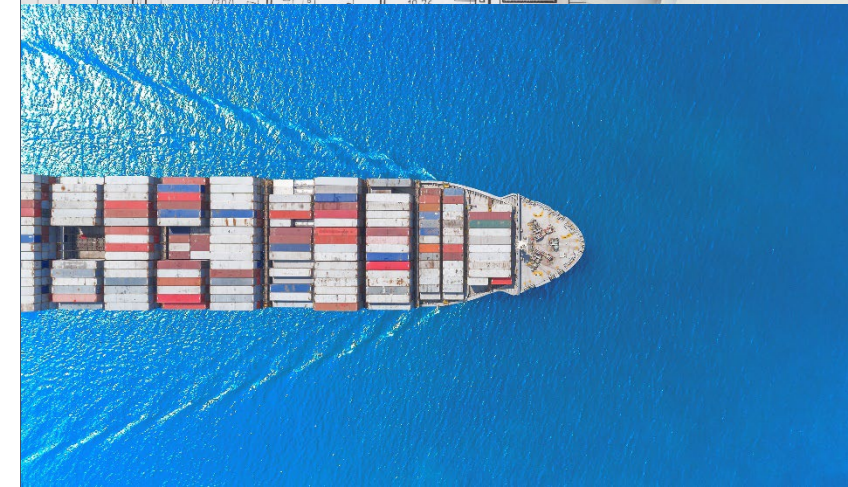
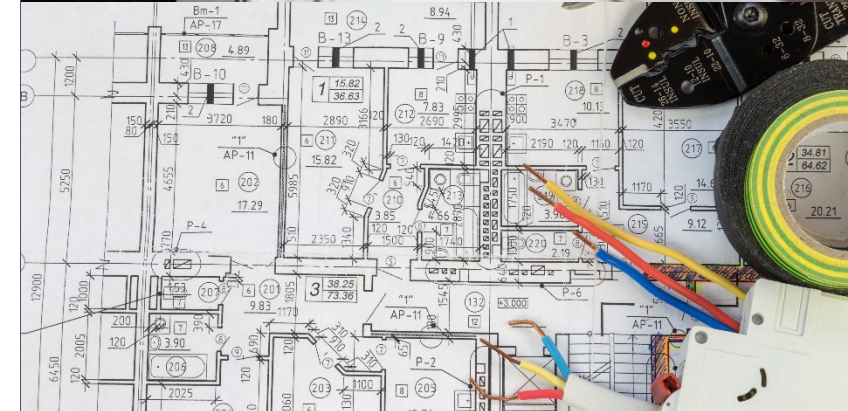
Peer Review Group

Group Membership

- Academia
- Banking and Finance
- Enterprise Agencies
- Just Transition Commission
- SCA
- SCDI
- Scottish Enterprise
- Sectoral Representatives
- SFT
- SNIFFER

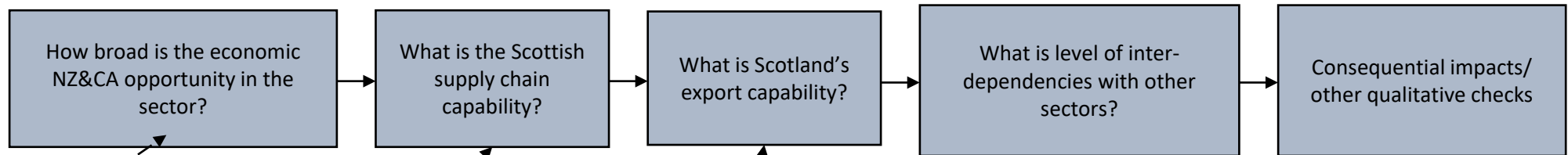
Group Expectations

- Act as a strategic level sounding board
- Support wider engagement on the project outcomes past the end of the project.
- Support the direction of the analysis and the overall conclusions but not the detail.



Decision making process

- data driven where possible
- includes qualitative information
- cannot be viewed as providing clear In or Out categorisation
- support and document the shortlisting process,
- includes professional judgement.



This step is to ensure a broad range of opportunities are considered- for instance those that may not have high GVA creation but are crucial to the NZ transition or create a range of jobs across Scotland. The assessment results in “High” or “Low/Uncertain considering:

- GVA
- Jobs
- Turnover
- Business count
- Salaries
- Exports/imports

This step uses SE analysis for available sectors, as well as a qualitative check of the depth of the roots in the Scottish supply chain (existing professional knowledge). For sectors with no SE metric (0-10), qualitative professional judgement is applied.

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This step ensures interdependencies with other sectors is included in the decision-making process- is the sector/subsector a key enabler for another?

This final step in the decision tree considers any additional qualitative information that might be relevant to the decision. For instance, grid balancing impacts, energy security, innovation.

Initial selection of sectors for detailed analysis

1. Onshore Wind
 2. Offshore Wind
 3. Hydrogen - Production, End Use, Storage and Distribution
 4. Low Carbon Vehicles - Heavy Duty Vehicles
 5. Renewable Heat
 6. *Wave and Tidal*
 7. CCS/CCUS – Storage, Transport and Utilisation
 8. Forestry and land use
 9. *Professional Services - Engineering, Planning and Env, and Digital and data*
 10. Low Carbon - Synthetic Fuels (including SAF)
 11. Sustainable building materials
 12. Sustainable Financial Services
- Cross cutting:** Adaptation, Circular Economy,

Policy Implications for a Just Transition

- Informing prioritisation and targeting of economic policy development for **draft sectoral Just Transition Plans** (including through co-design)
- Informing prioritisation and targeting for the **Green Industrial Strategy** – key opportunity areas for Scotland and priority cross cutting opportunities
- Informing **policy impact assessment** and monitoring & evaluation – how can we baseline and compare potential impact



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