# A people-based perspective on energy Professor Karen Turner

Presentation to the APSE Energy Summit 2025 - Delivering Change

21 October 2025



www.strath.ac.uk/humanities/centreforenergypolicy/

# **About the Centre for Energy Policy**





#### CEP works across the energy and net zero transition space

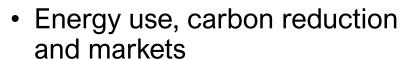
CEP research addresses a range of **public policy facing questions** on:



Research evidence and policy evaluation



Green jobs and skills





Prices, affordability and competitiveness



Economy-wide impacts



- Industrial, residential and transport decarbonisation and the just transition: seeking to identify fair and sustainable pathways for the required transformation in how we live, work and do business.
- Labour markets and skills: addressing workforce shortages and training needs in transition sectors.
- Economy-wide impacts: understanding how action in any sector may trigger impacts and potentially unanticipated consequences.
- Public policy challenges for delivering net zero: equity, affordability, economic value, growth, competitiveness, effective planning and delivery



#### Who we collaborate and engage with





























The Manufacturers' Organisation















Department for



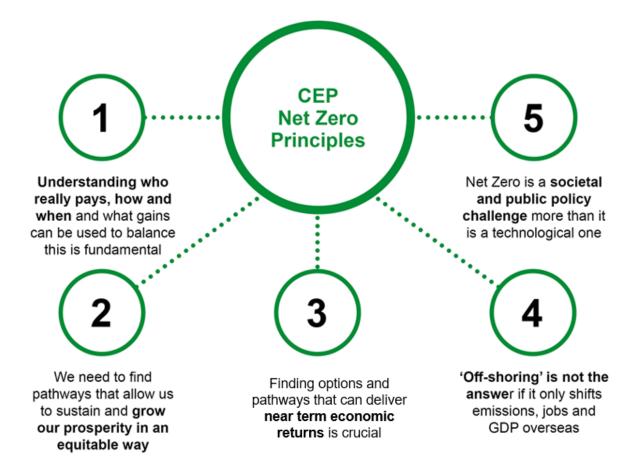








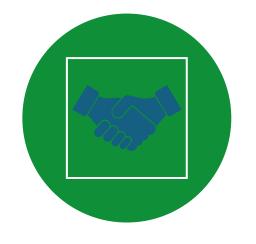
#### **CEP Net zero principles framework**



Establishing a Net Zero Principles Framework to Support Public Policy Making: <a href="https://strathprints.strath.ac.uk/78032/">https://strathprints.strath.ac.uk/78032/</a>



# A people-based perspective on energy







ACHIEVING A JUST TRANSITION

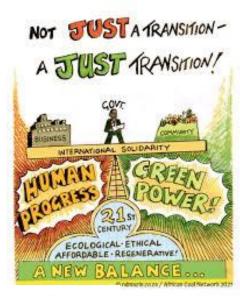
SKILLS, UNDERSTANDING, INTERACTION AND BEHAVIOUR CHANGE

LEARNING FROM CASE STUDIES



# Achieving a just transition?



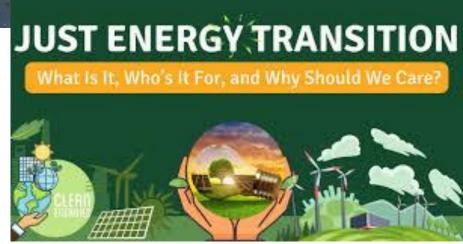














#### More than all of that?





- Rising energy bills.
- Energy poverty, fuel poverty, transport poverty – incomebased, access-based, multidimensional.
- Community benefits for those living where power can be generated.
- 'Leaving no-one behind'?



## CEP research focus on sustainable economic prosperity

 Economic performance, growing prosperity and both sustaining existing and creating new jobs (and other sources of income generation) is central to all aspects of the energy and climate transition.













- As is clean and AFFORDABLE energy.
- People need to be able to afford to spend to support economic growth.
- Businesses need to be able to sell at competitive prices.
- Public finances rely on our ability to earn and spend in a prosperous economic environment.

#### But how do we improve the equity and justice of outcomes?

What multi-level governance structures are required for delivery?



## Skills, understanding, interaction and behaviour change



- How can we build on, and avoid eroding, the skills and capacity we've already invested so heavily in?
- Understanding dynamics, timing and the need for coordination.
- How do we reduce the absolute and relative costs and increase the actual and perceived benefits of switching to low carbon heating solutions?
- Electricity vs gas prices, energy efficiency, competitive domestic production and local supply chains, networks, INFORMATION!!



#### **CEP research for the UK Energy Research Centre**



#### Unlocking the Economy Wide Benefits of Heat Pumps

The Role of Electricity and Gas Prices

#### Policy brief

Karen Turner, Antonios Katris, Christian Calvillo, Jamie Stewart and Long Zhou Centre of Energy Policy, University of Strathchyde



- Heat pump deployment can reduce energy demand across the residential building stock by up to 40%.
- Unlocking the efficiency gains of heat pumps could lead to a range of economic benefits.
- Under existing market arrangements, heat pumps can be more expensive to run than gas boilers.

#### Further research showed:

- Installation cost reductions are essential to maximise sustained benefits across the wider economy.
- More domestic supply chain activity can help improve outcomes for households and the wider economy.



Key findings: https://ukerc.ac.uk/publications/benefits-heat-pumps-role-electricity-gas-prices/



### Learning from case studies - Shetland





- A microcosm of the UK energy transition
- Can Shetland successfully transition from the established export base of oil industry activity at its Sullom Voe Terminal to low carbon fuel production that supports local decarbonisation?
- Sustaining high value jobs and a complex skills base across the local economy while reducing reliance on imported energy and reducing relatively high levels of fuel poverty?
- Can renewable energy developments like the Viking windfarm and new interconnectors with the UK be made to work for Shetland's people and businesses?



#### Learning from case studies - Shetland

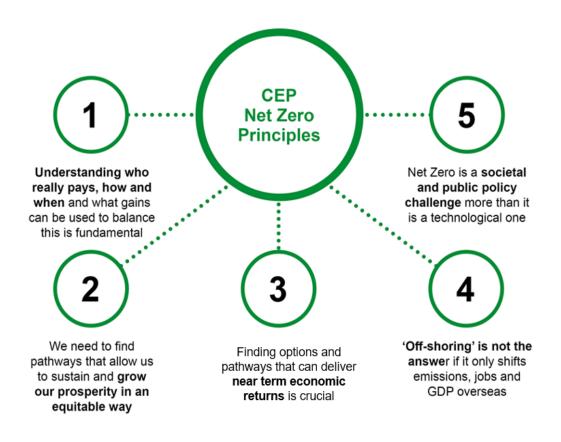




- District heating seems to be working well in Shetland for domestic and commercial buildings.
- Lerwick's district heating scheme has become the first in the UK to be recognised for its performance under European Ecoheat4cities.
- Heat from waste, delivering lower bills and community benefits (Shetland Charitable Trust).
- Efficiencies delivered through a centralised system households don't need boilers.
- But initial investment infrastructure can be costly.
- However, shifting from high-cost oil boilers and storage heating systems.
- Further roll-out is planned.



# Closing thoughts – we need more focus on people, policy, communities, economy and society



- Engineering efficient and feasible technical solutions remains a priority.
- But we're talking about transitioning how PEOPLE live and work
- Within communities and affected by what happens in local, regional, national and international economies
- People must be able to earn a good and affordable living for as long as and where they can, and be supported where they need it.
- That's not politics it's economics!





