

# Global Context for Community Energy in Scotland

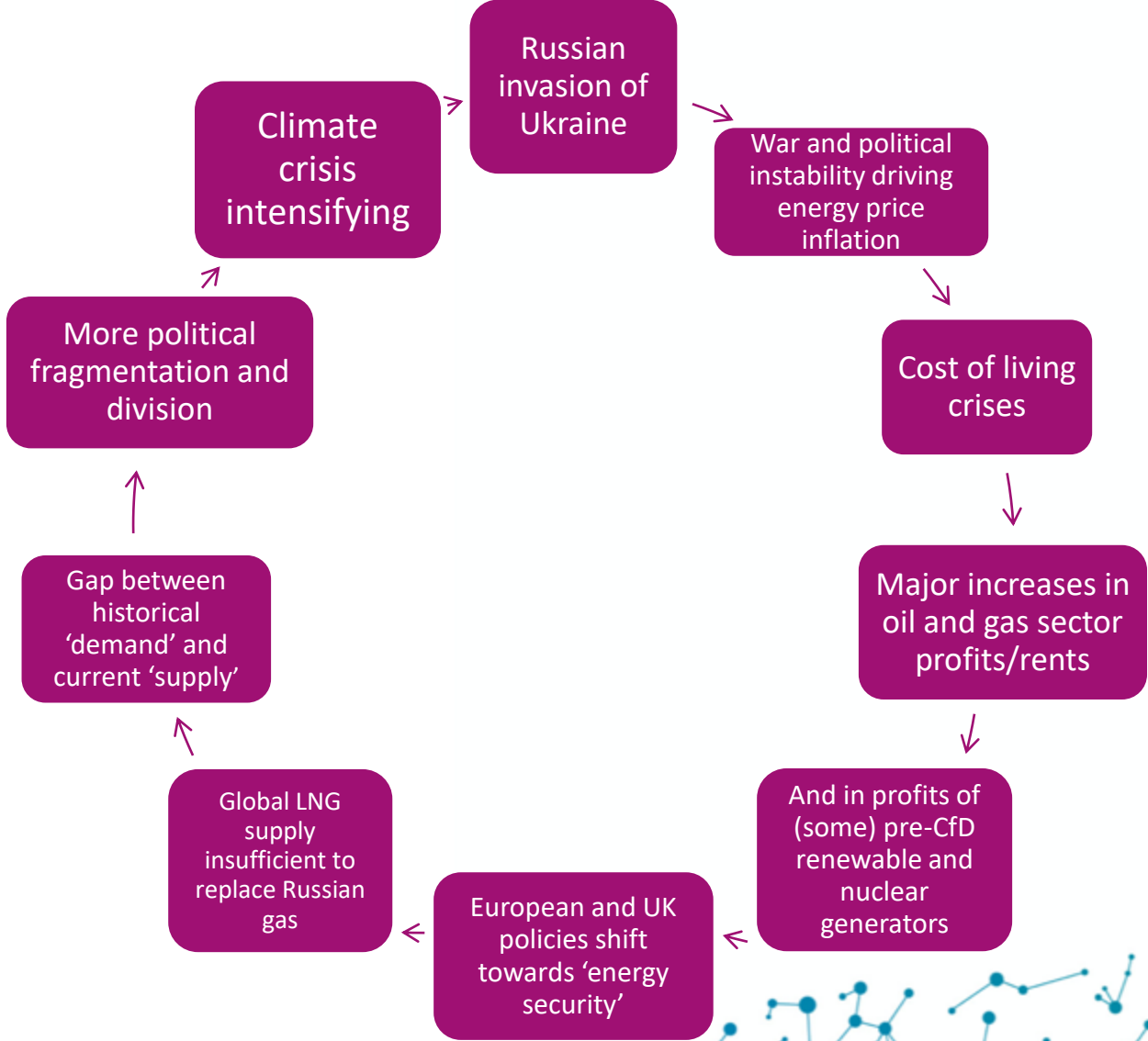
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CARES Conference 2022

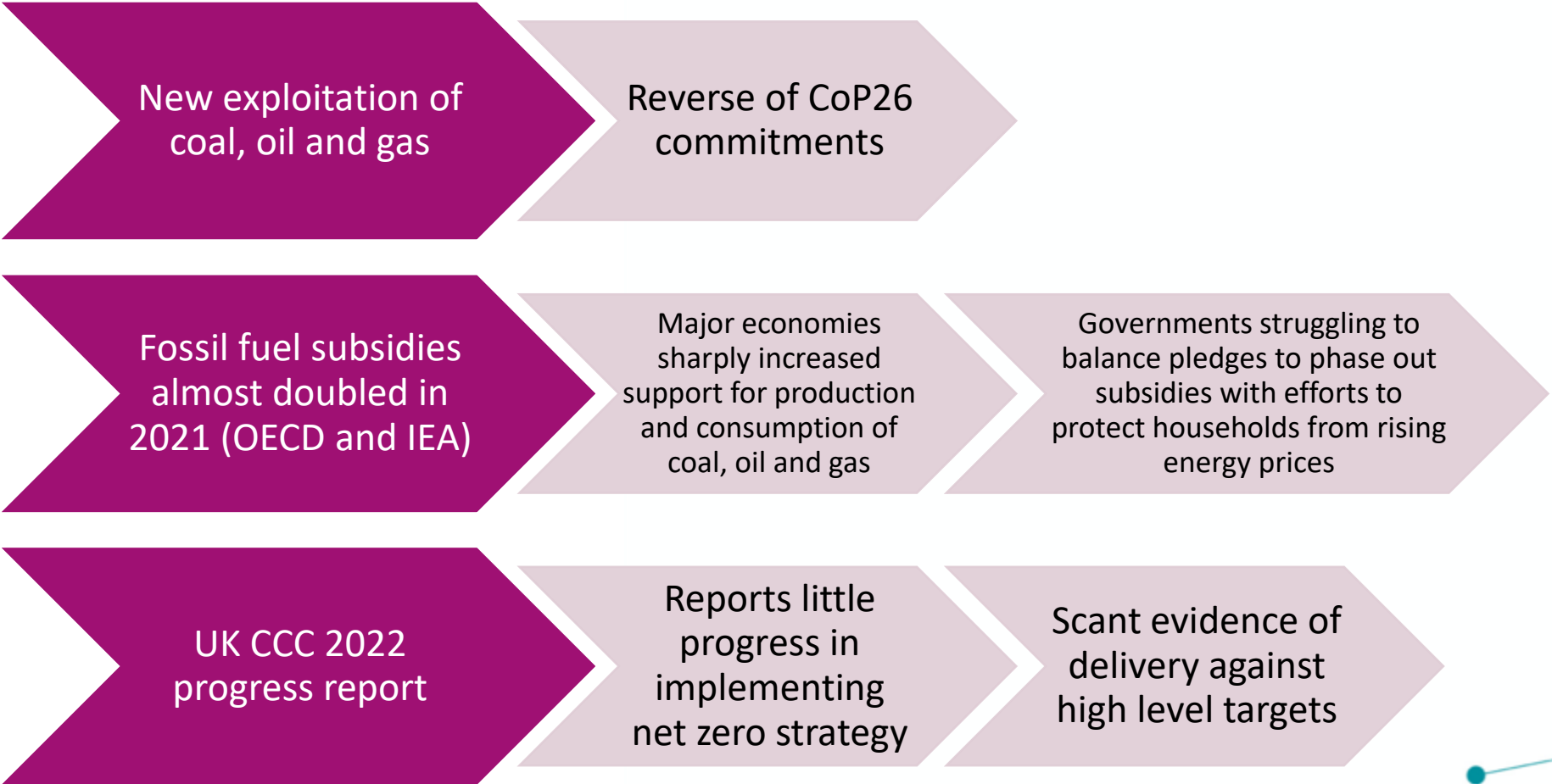
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# Interacting climate, political-economic and energy crises with impacts on life chances everywhere



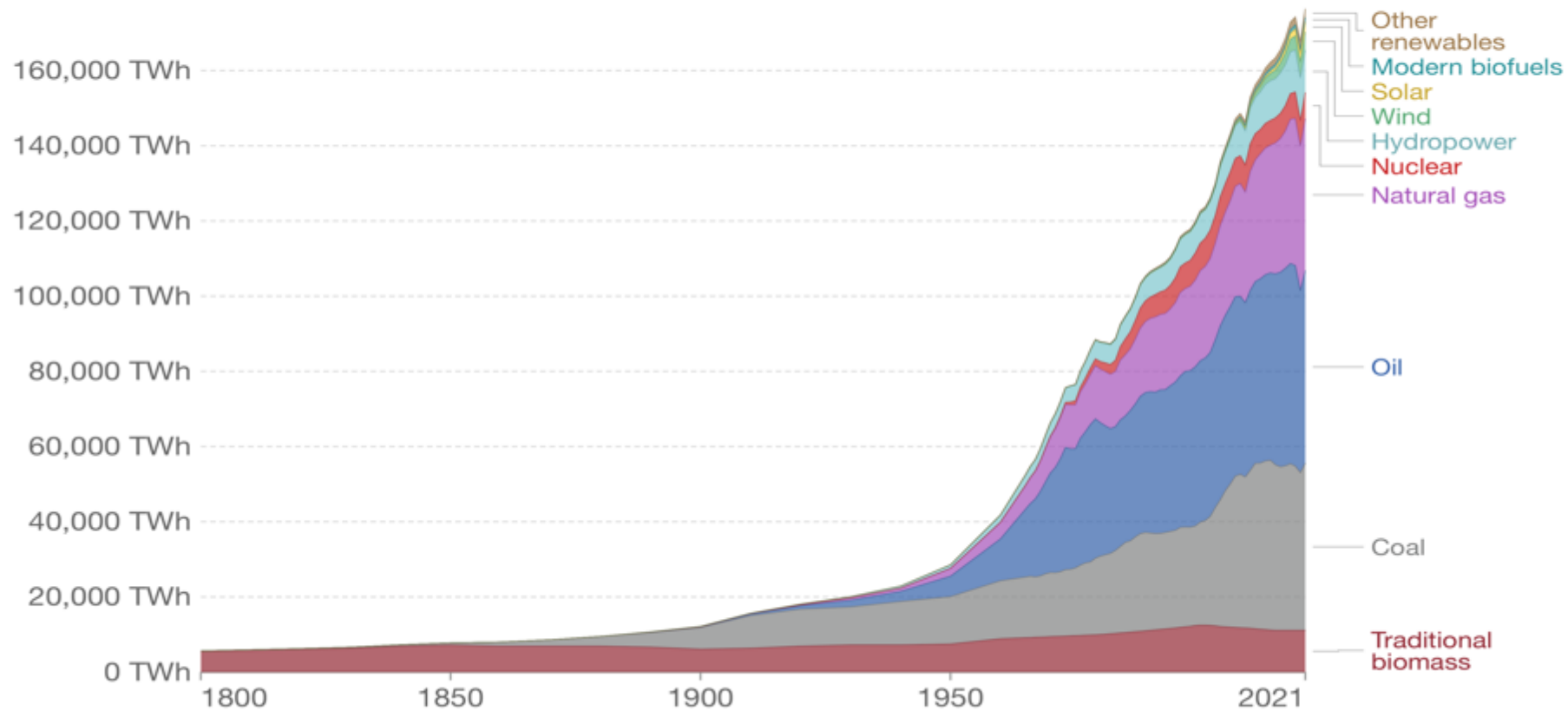
# Despite abundant evidence of causes of climate breakdown, commitments to net zero GHG targets are in question



# Main change in energy composition - *addition* of renewables to system dominated by coal, oil and gas

## Global primary energy consumption by source

Primary energy is calculated based on the 'substitution method' which takes account of the inefficiencies in fossil fuel production by converting non-fossil energy into the energy inputs required if they had the same conversion losses as fossil fuels.



Source: Our World in Data based on Vaclav Smil (2017) and BP Statistical Review of World Energy

OurWorldInData.org/energy • CC BY

# What future for community renewable energy in this context?



Contribution more important than ever

- local engagement in meaningful action
- improved understanding of climate crisis and causes
- & need for rapid change
- insights into current energy markets
- degree of self-determination



Every contribution to reducing GHG emissions matters



BUT supply chain issues and increasing prices for technology



Potential for reduced capacity with people facing financial and personal troubles



# Critical moment to work on *reducing need* for energy and developing local provision

Reducing bills *and* dependence on fossil fuels

Retrofitting homes and community buildings

Local 'heat hubs'/shared social spaces for staying warm

Community shares in DH developments

Solar pv increasingly cost effective, particularly where electricity is needed during daylight

Collaboration with LAs and not-for-profit enterprises

Press relevant investors to end fossil fuel investment and accelerate renewables



# Opportunity to reflect on community energy contribution to energy transition

## In Europe

- Varying community and local energy structures
  - depending on municipal government powers and resources, associated energy markets and infrastructures
- Danish community cooperatives alongside municipal energy and commercial enterprises.
- German community-led initiatives, and referenda, on municipal buy back of regional energy grids as route to more democratic energy systems
  - redefining energy as primarily public good rather than commercial commodity

## In Britain

- Initiatives usually small scale, co-existing with centralised regulation and large scale commercial businesses in a liberalised market
- Uncertainty about future energy markets, given UK Gov and Ofgem reviews of market arrangements
- Outcome of Ofgem review of rules on local energy systems and flexibility important for community energy futures.

