Keeping Energy Value Local

CARES Conference Workshop, 19 November 2026



Introductions

Speakers

- Iona Hodge, Local Energy Scotland
- Doug Tollemache, Scottish Government
- Simon Gill, University of Strathclyde
- Temi Omojola, Energy Local
- Phyl Meyer, Tiree Community Development Trust (Urras Thiriodh)

Other Contributors

- Adam Kell and Carmen Shek, Local Energy Scotland
- District Network Operators (DNO) and District System Operators (DSO):
  - SP Energy Networks (SPEN)
    - Pamela Mathieson
    - Grace McGovern
  - Scottish and Southern Energy Networks (SSEN)
    - Elizabeth Porter
    - Rory Brown

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Agenda

- Introduction to Local Energy Markets
  – Iona Hodge, Local Energy Scotland
- Importance of Community Involvement
  – Emma Shepherd, Scottish Government
- A whole-system perspective
  - Simon Gill, University of Strathclyde
- Energy Local Clubs
  – Temi Omojola, Energy Local
- Case Study: Tiree
  - Phyl Meyer, Tiree Community Development Trust (Urras Thiriodh)
- Discussion (25 mins)

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Keeping Energy Value Local

Communities are increasingly looking beyond renewable generation and exploring how energy can be generated, used and shared locally.

Connecting local generation with local demand through participating in local energy markets can be done in many ways and can create a range of benefits.

We'll explore this today and continue with future support from CARES in collaboration with others.



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Participating in Local Energy Markets – How?



use renewable electricity

e.g., solar photovoltaic, battery, heat pumps



sell electricity

e.g., solar PV, wind, hydro, storage



maximise local and flexible use

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Participating in Local Energy Markets – Why?
For the community:

Bill savings

Community Funds

Resilient Hubs

More connected generation

Just Transition for Net Zero





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Participating in Local Energy Markets – Why? The wider context:

Constrained Grid and Net Zero Plans

Just Transition and Community Influence

Policy and Regulations

Market participation opportunities



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Participating in Local Energy Markets – Examples

Energy Local Clubs

Behind the meter

Private wire

Energy service companies

Peer to peer trading

Power Purchase Agreements

Flexibility services



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Keeping Energy Value Local

More to come……

- in this workshop

- and in support from CARES



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Keeping Energy Value Local: Importance of Community Involvement

CARES Conference
19th November 2026

Emma Shepherd, Scottish Government



Keeping Energy Local

Programme for Government

- Commitment to maximise the local use of Scotland's renewable energy resources
- Confirmed increased funding to £15 million for CARES to ensure more people benefit from the energy transition

Community Energy Growth Fund

- Funding to enhance existing or new community generation projects through energy storage and/or flexible use
- 5 of 25 projects funded in most recent funding round have aspects of demand flexibility and will be supported – include things like Energy Local Clubs and broader participation in flexibility markets

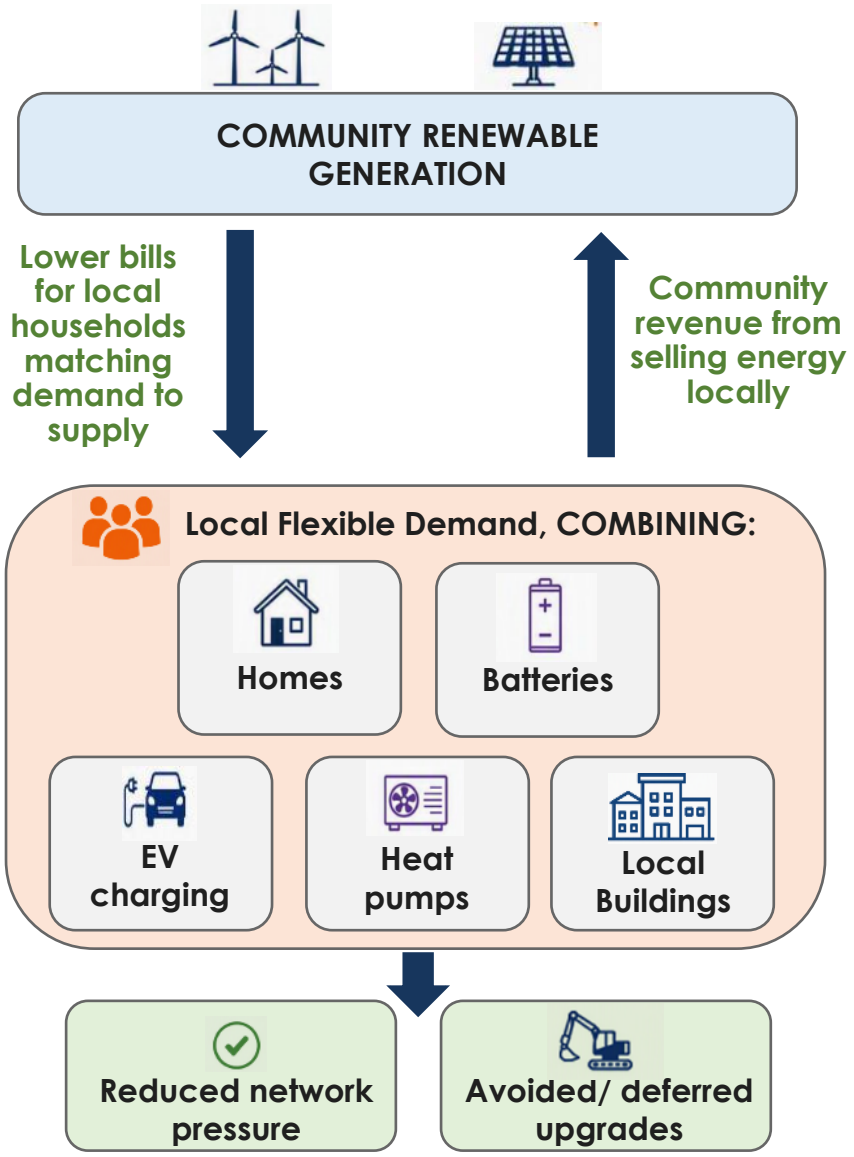


Keeping Energy Local

Matching community-owned generation with flexible local demand can:

- Make better use of locally generated renewable electricity
- Lower bills for local consumers
- Increase revenue retained by communities
- Improve local energy resilience
- Reduce network pressure and help defer upgrades

Different communities and projects will need to follow different models to realise these benefits







Keeping energy value local:

A whole-system perspective

Dr Simon Gill

Principal Knowledge Exchange Fellow

Director of Grid Innovation Strategy

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What do we mean by local value?

Value is the benefit the energy system delivers, taking account of the costs and impacts of providing it.

Local value is the benefit people, businesses and communities in a place receive, taking account of the costs and impacts they experience.

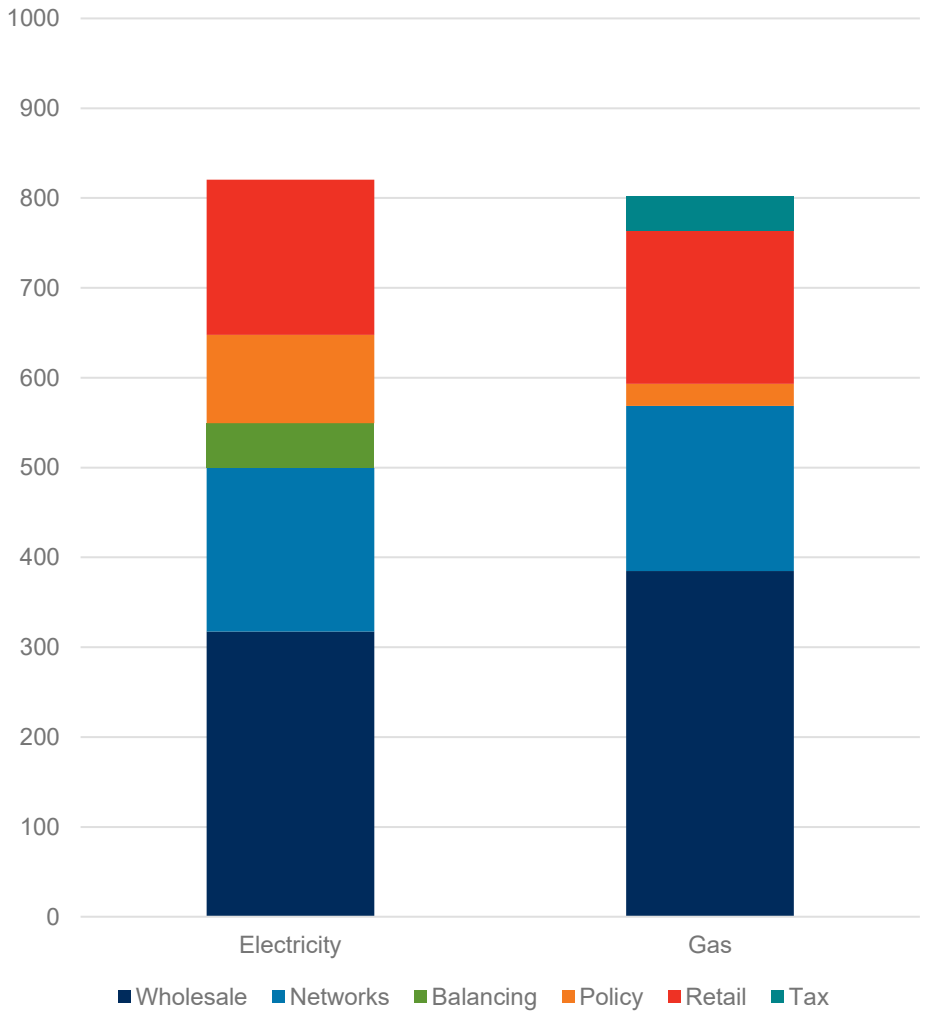




Some examples of local energy value

Lower bills	Match local supply and demand in a way that can directly save on wider system costs such as network and balancing.
Income that stays local	**Community ownership** (e.g. Tilley, Tiree's community wind turbine) or **shared ownership** (e.g. Crossdykes wind farm)
More reliable, higher-quality supply	**Supporting supply during storms and after faults** can support resilient supply even after a fault on the network (e.g.SPEN StormFlex, SSEN 2-min Operational Utilisation Product)
Support for local people and organisations	**Energy project includes resources to support the community** such as a community café, local facilities or support for jobs (e.g. BeGreen Dunbar)
A better local environment	**Community energy project involves improving the local environment** through tree planting, habitat development etc. (e.g. Western Isles Croft Woodlands Project)

How costs feed through to the energy bill



Tax: VAT charged (currently) only on gas

Retail: The cost of running a supply company, including covering unpaid debt

Policy: The cost of government programmes to support renewables generation and some social programmes such as the Warm Home Discount

Balancing: the cost of keeping the GB electricity system in balance, including managing transmission constraints

Networks: the cost of moving electricity from generators to users

Wholesale: the cost of buying energy from the wholesale market

Where value may best come from the national system

The energy system has developed as a national system for many good reasons.

- **Economies of scale:** large-scale generation generally produces electricity more cheaply than smaller projects using the same technology.
- **Access to the best resources: t**he grid gives communities access to good wind, solar and hydro resources elsewhere.
- **Shared backup resources:** communities can share spare generation and storage, reducing the need for each to provide its own backup.
- **Diversity:** connecting different types of generation, locations and patterns of demand helps smooth fluctuations in supply and demand.
- **Access for everyone:** communities can benefit from the shared system even where they lack the sites, funding or capacity to develop their own projects.







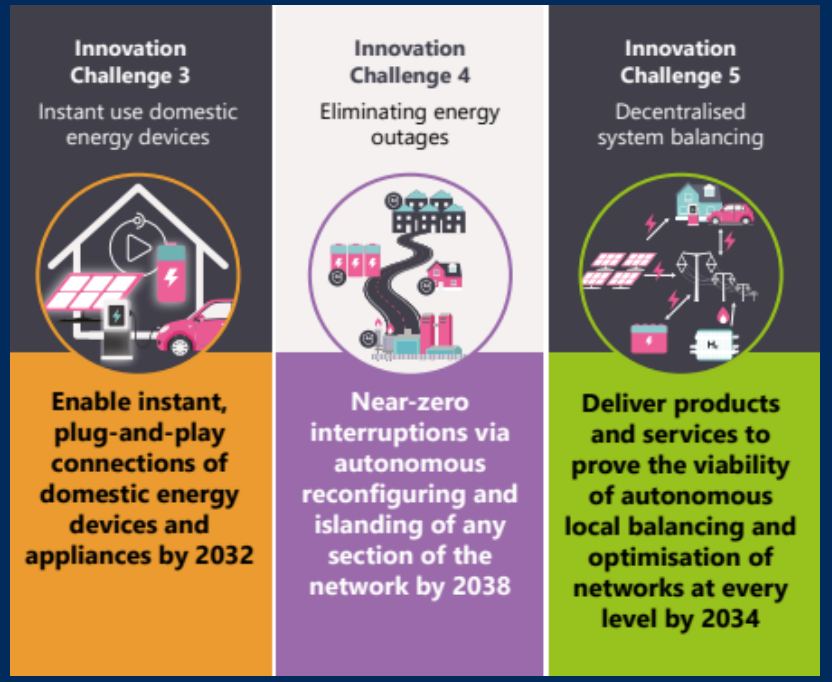
Networks in the energy system: the local link

RIIO-ED3: The next price control for electricity distribution

DSO: Flexibility markets run by local network operators

Demand Flexibility Service (DFS): shifting electricity use to ease transmission constraints

P441 (proposed) and P442 (in force): the possibility of realising reduced contribution to balancing and policy costs



Network innovation: local energy has a direct link to at least three of the five 'innovation challenges' set out by Ofgem for the RIIO-3 price control



Thank you

University of Strathclyde Glasgow

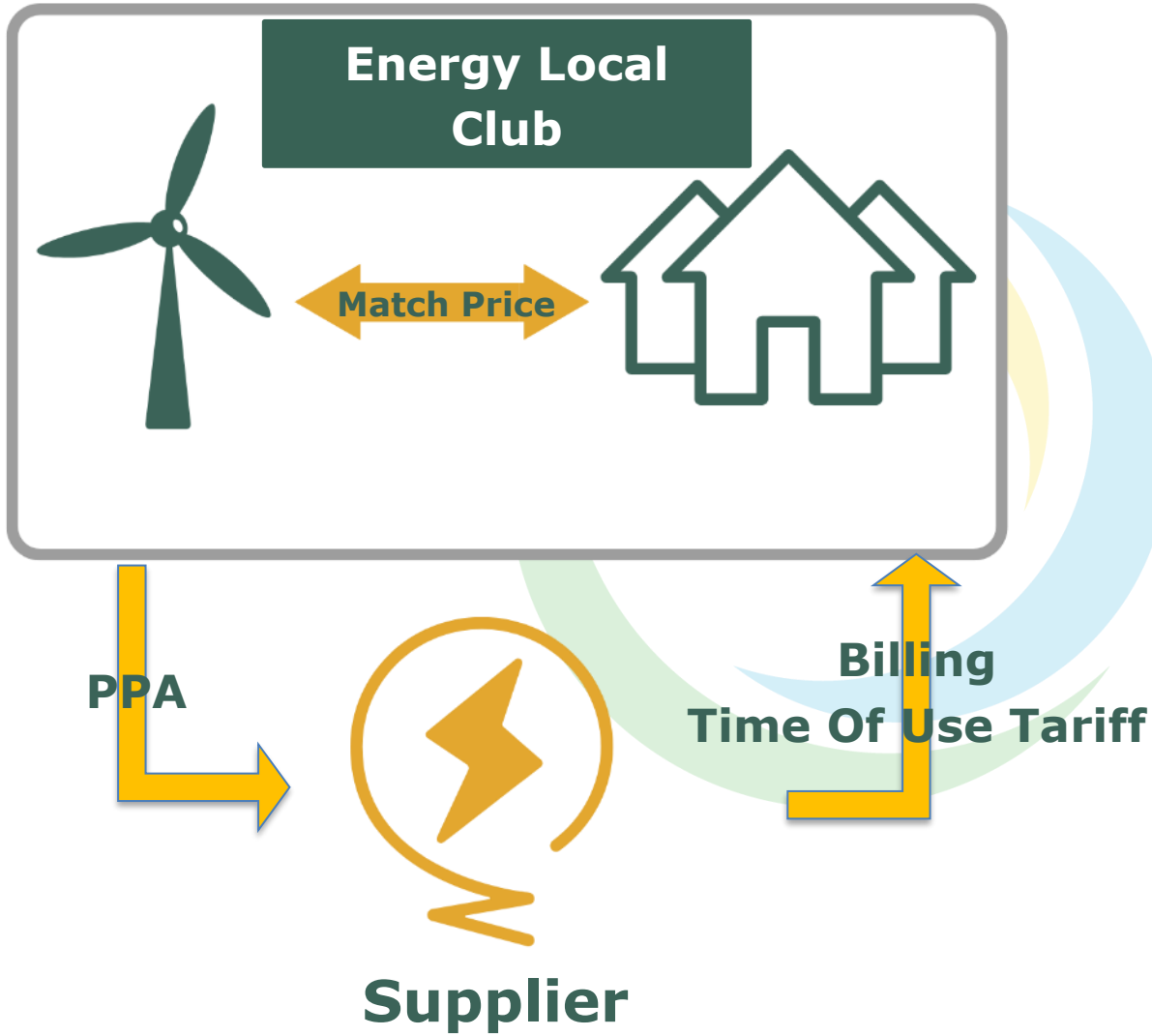
Dr Simon Gill, Principal Knowledge Exchange Fellow
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Energy Local

Keeping Energy Value Local

Temi Omojola
Club Development Manager
Energy Local

How an Energy Local Club works



Match price

Paid for matched local electricity

PPA

Supplier buys surplus generation

Time of Use Tariff

Supplier provides electricity not matched locally

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making energy work for you

What makes a Club possible?

- **A willing generator**
  With suitable metering and a route to sell exported power.
- **Members who want to take part**
  Households and businesses, with an understanding of their likely savings.
- **Local people to take it forward**
  An adviser, volunteers and a co-operative to manage the Club.
- **Energy Local and supplier support**
  Mapping, modelling, training, the portal and supplier arrangements.

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Tiree: the work already done

Tiree has been exploring how its renewable generation could serve local demand.

150 kW

Solar development

~100 kWh

Battery assessed

18%

Modelled shop bill saving*

Modelling has considered the filling station, EV charging, the local shop and combinations of solar and battery storage.

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making energy work for you

Tiree: starting small

- **Initial option**
  Solar generation, battery, the filling station and EV charging.

- **Other local demand**
  The shop was modelled as a possible next participant.

- **Wider participation**
  The modelling found spare solar generation that could support more members.

- **Looking further ahead**
  Wind could complement solar in winter; practical Club arrangements still need to be agreed.

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making energy work for you

Tiree Community Energy Projects – Keeping Energy Value Local

Phyl Meyer – Chief Executive Officer
Urras Thiriodh (Tiree Community Development Trust)

Q&A and Discussion



Networking break

Up next:
15:00 – 16:00

Afternoon sessions 2

- Community buildings: operations and maintenance – Auditorium B
- Unlocking energy opportunities on public land – Auditorium C
- Community-public sector partnerships – Room 6&7
- Keeping energy value local – Room 4&5
- Heat in Buildings workshop – Room 1

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Break/close

- Grab a cuppa and make your way to the auditorium for our film showing.
- Thank you for coming if you are leaving us here.
- We'll share notes and slides on our website.
- We hope you've enjoyed your day.
- Please take a moment to fill out our **feedback survey.**

Up next:

16:20 – 18:00

National Emergency Briefing film (optional)

An opportunity to watch and reflect on the National Emergency Briefing.
Hosted by Professor Stuart Galloway, University of Strathclyde

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