

UKERC
UK Energy Research Centre

**energy
technologies**
institute

**THE UNIVERSITY
of EDINBURGH**



What We Know about Local Authority Engagement in UK Energy Systems

Ambitions, Activities, Business Structures
& Ways Forward

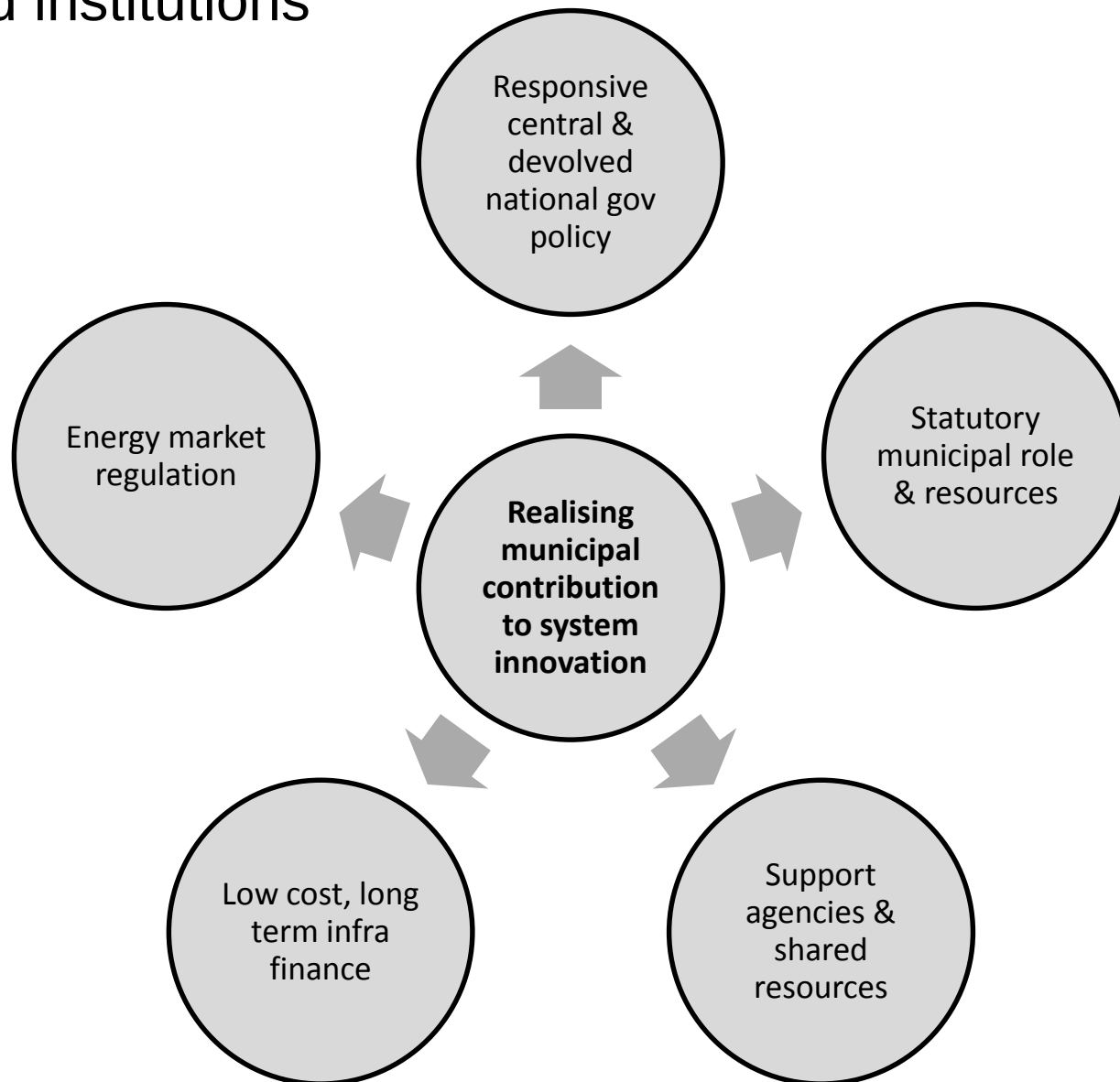
Mags Tingey

24 January 2018

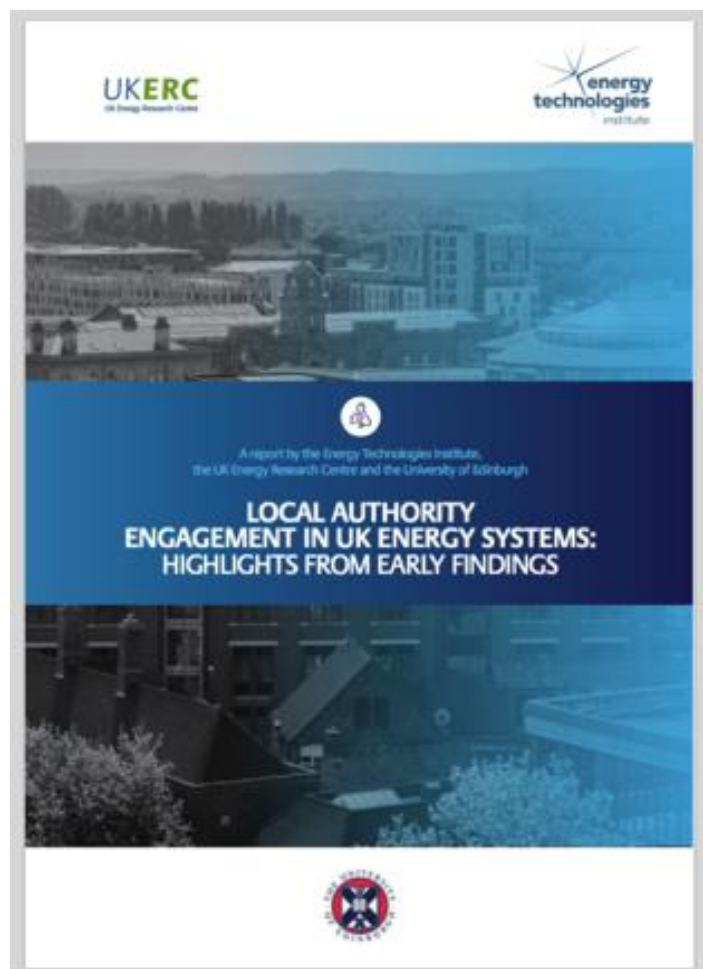
UK District Energy Vanguard Network Event

Leeds

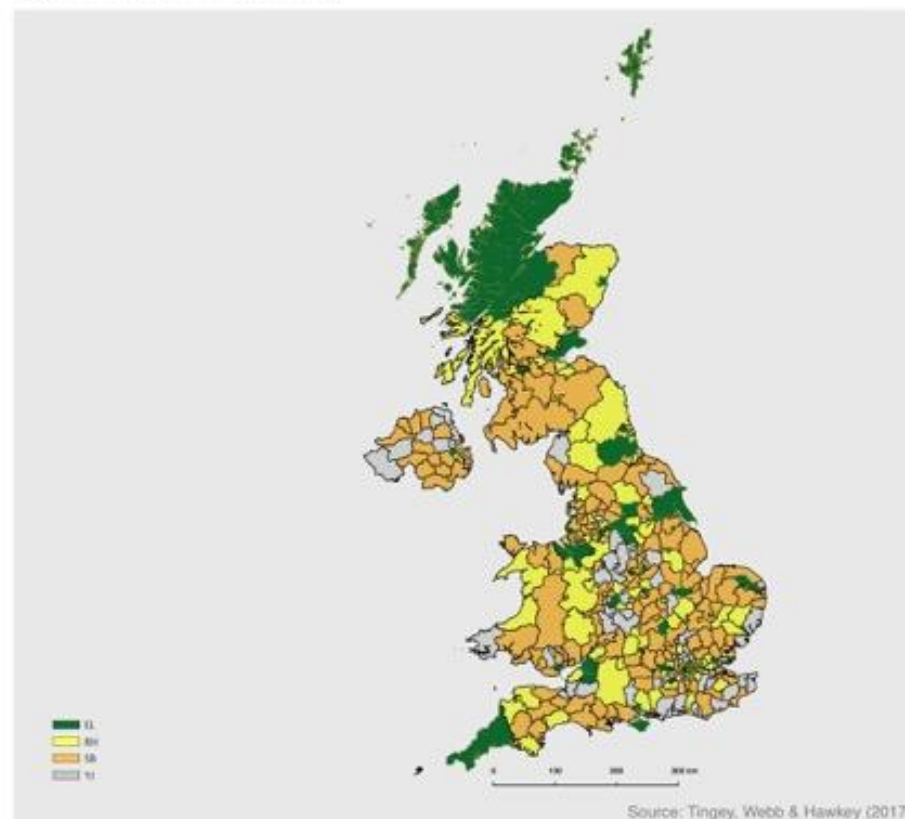
Significant Local Authority contribution needs responsive policy and institutions



Research Phase 1: mapping energy plans & investments across all UK LAs



Map 1
UK Local Authority Engagement in Energy Systems
(map shows unitary and lower tier authorities)



Sources: Contains Ordnance Survey data 2012; 2013; National Statistics data 2013; NIRSA data 2013; NRS data 2013. Crown copyright and database right. Map created using QGIS (QGIS Development Team, 2016).

Widely established ambition, but small scale & uneven developments

Figure 1

UK Local Authorities According to Level of Engagement in Energy Systems

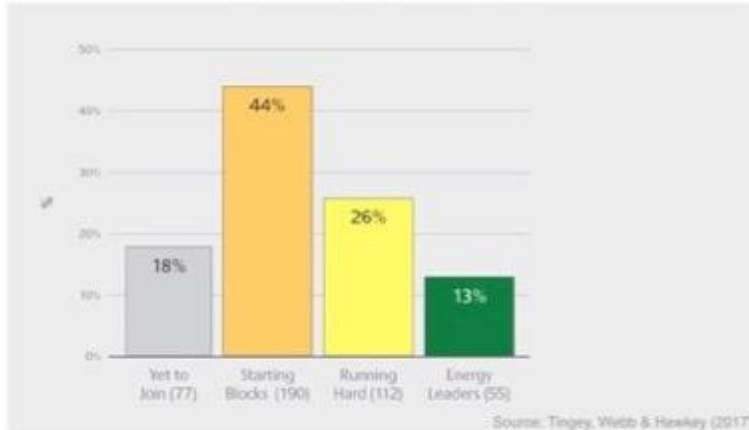
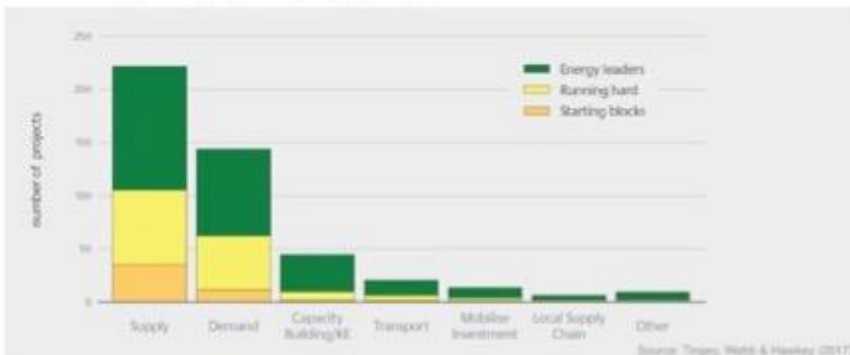


Figure 2

Number of Each Type of Energy Project and Category of Engagement



Phase 2: 40 local authority cases



Variety of innovative & enterprising Energy Project Case Studies

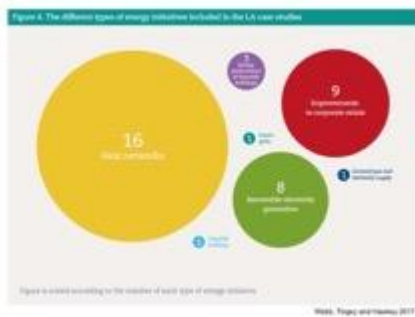
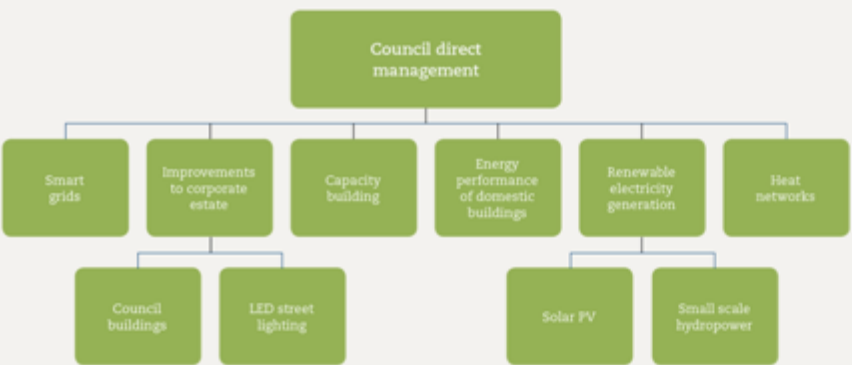
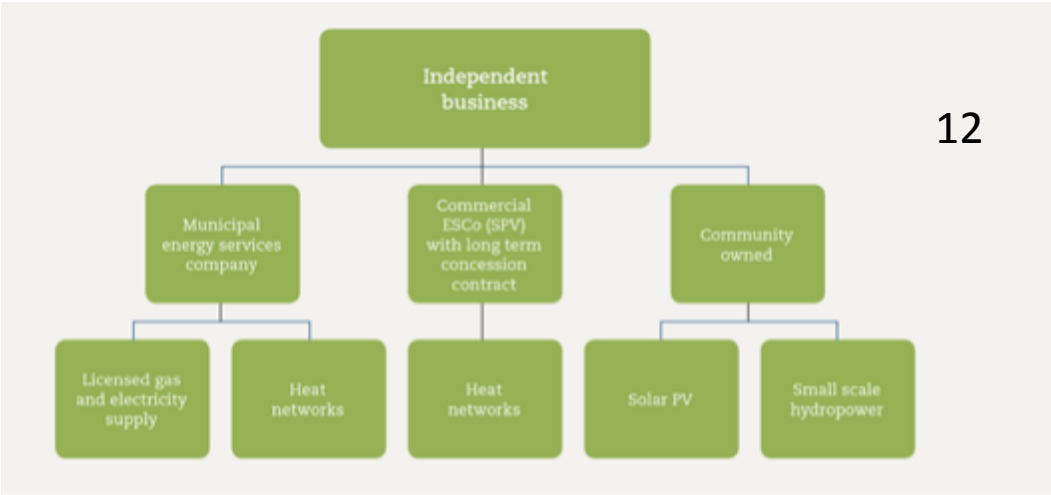


Figure 7. Types of projects according to business structure

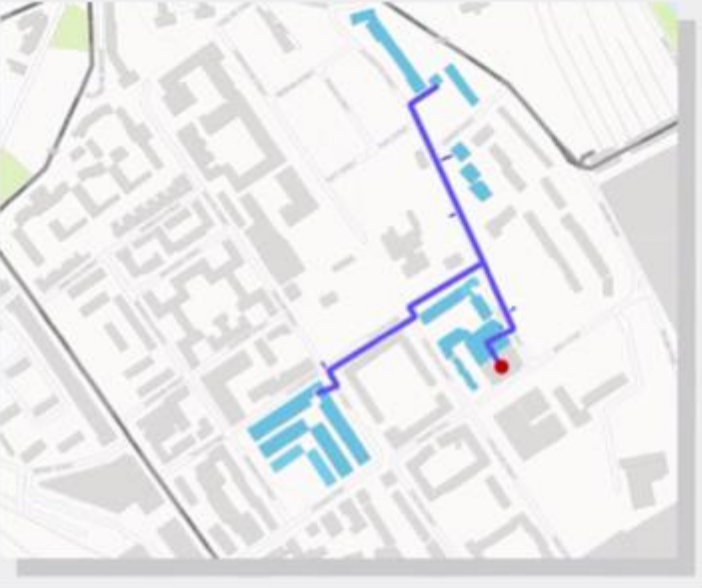


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Somers Town



Somers Town Energy

- Phase 1 Social housing tenants ~339
- Phase 2 CHP connecting Francis Crick Institute
- Approx 90% capex s106 funding
- Phase 3 ~130 housing, school, community centre
- Retained in-house under direct management

...we retain the control and that was a really key consideration for us because we didn't want a third party organisation coming in and telling our customers what they would be charged. We have that control, because it's our responsibility to give them the fairest deal.

Camden Council



- mid 2000s LCC plan DH expansion of existing 1980s scheme
- Shelved for a time...
- 25-year concession contract with Cofely Ltd (now Engie) to create LDEC Ltd in 2010
- Concession: Council meets carbon reduction objective, network renewal and city centre extension at no upfront capital cost
- Engie ~ £14 million
- GDF Suez ~ £1 million
- City centre 30 council buildings, UoL
- Upgraded older island networks ~ 3,000 social housing
- Network extension more difficult:
 - level of commercial returns
 - guaranteed customer connections
 - 550 new student accom connected in 2016.

WE ARE A COMMUNITY BENEFIT SOCIETY GIVING PLYMOUTH THE POWER TO TRANSFORM HOW WE BUY, USE AND GENERATE ENERGY



Plymouth Energy Community

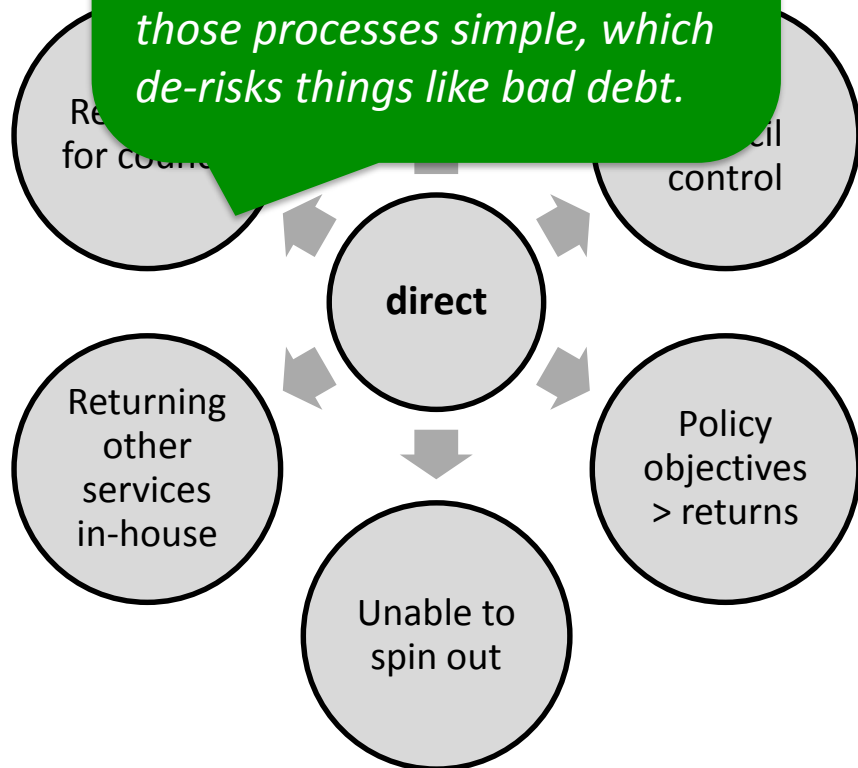
- 2012 Cooperative council model in Plymouth Labour Party manifesto
- Integrated into corporate plan
- 2013 Plymouth Energy Community
- Solar PV, energy advice, LEDs schools
- Council recognised as trusted local partner supporting PEC growth, enabling a more inclusive model of clean energy services for council, citizens and investors
- Extend to DH??

The council has been supportive in terms of providing host sites and financial support through loans... that's helped to create confidence in the organisation. Now there's the confidence... [and] because it's got a track record it goes from strength to strength.

Plymouth City Council

Decision making logics for business structure

We were trying to deliberately not set up new processes and structures because it works. ... By changing as little as possible, the plan is to keep those processes simple, which de-risks things like bad debt.



They had a tried and tested very traditional model that ... they knew gave them the returns that they wanted and would achieve what we wanted from the carbon emission reductions. And it is doing that, it does what it says on the tin.

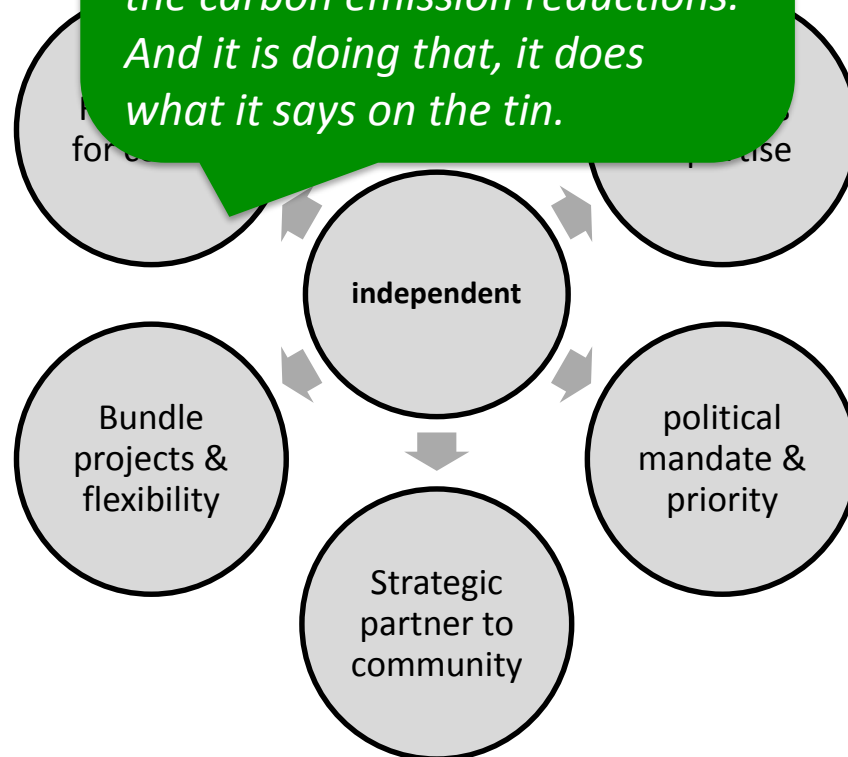


Figure 5. Capital expenditure across the different types of energy initiatives



Figure 6. Breakdown of the different sources of finance for capital expenditure across 15 projects



But uncertain context for project & strategy development

- Austerity budgets

- Restructuring and job losses: Fragmented knowledge & expertise

- No local authority mandate & no single problem owner

- Short term funding cycles

- Uncertain energy policy: Heat and energy efficiency

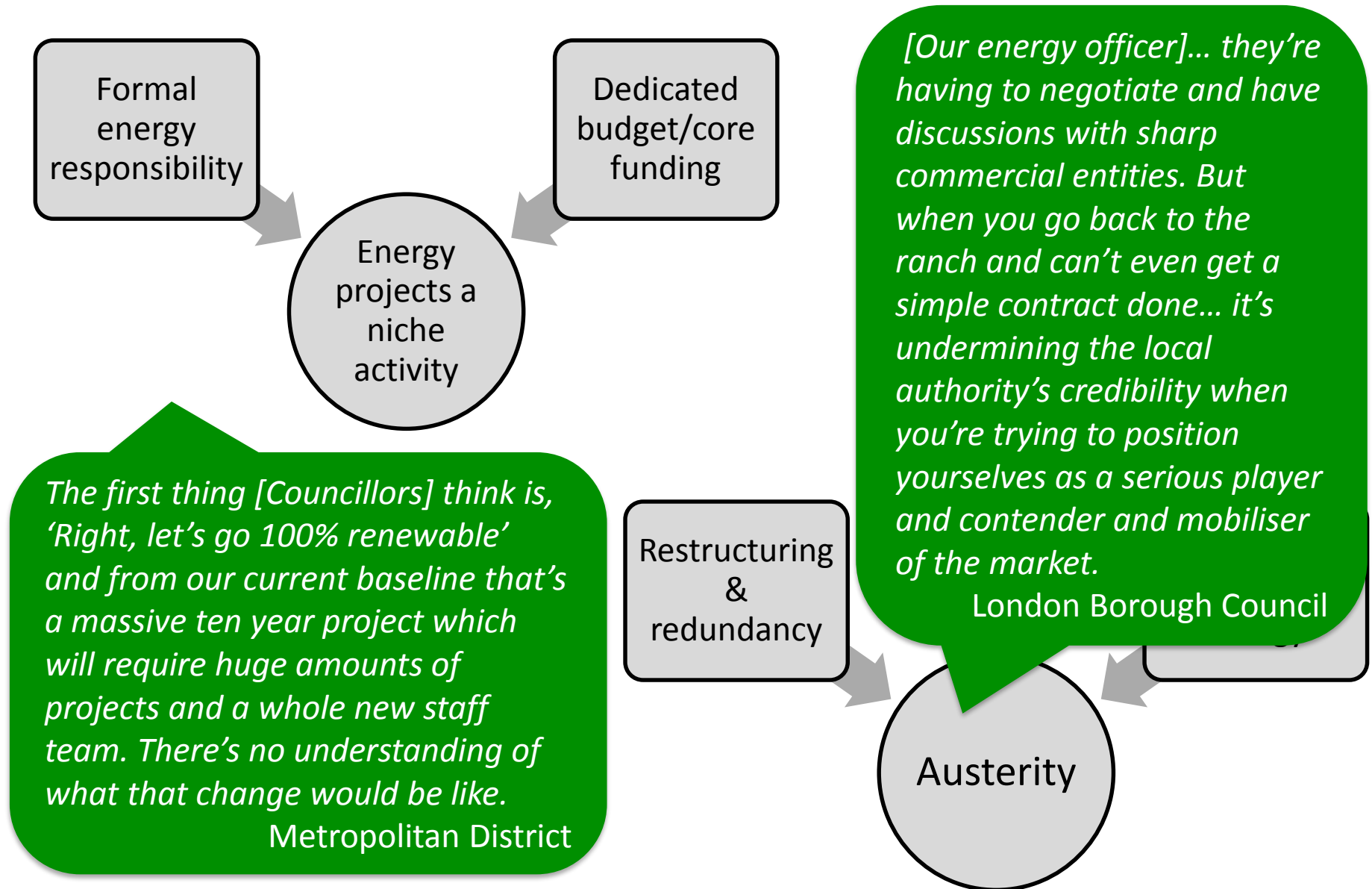
- Inequality and poverty

- Contrast with Northern Europe: Significant local political financial powers & municipal services

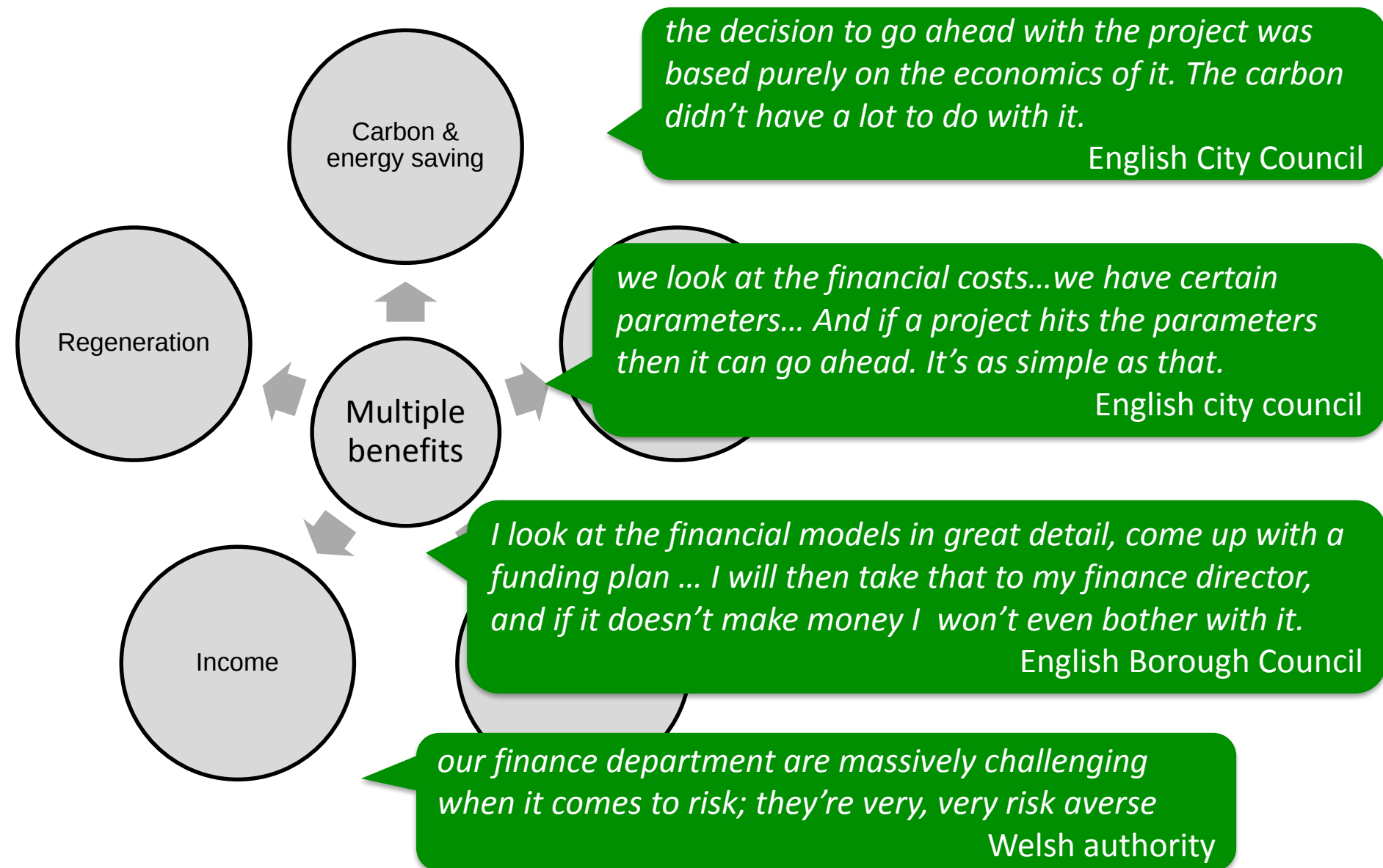
We have a big role to play in this [energy] agenda... There's obviously a big transformation of local government underway, and we must work differently ... we see the transformation of Birmingham's energy system, and its interactions with other service areas, as a catalyst for delivering multiple outcomes.

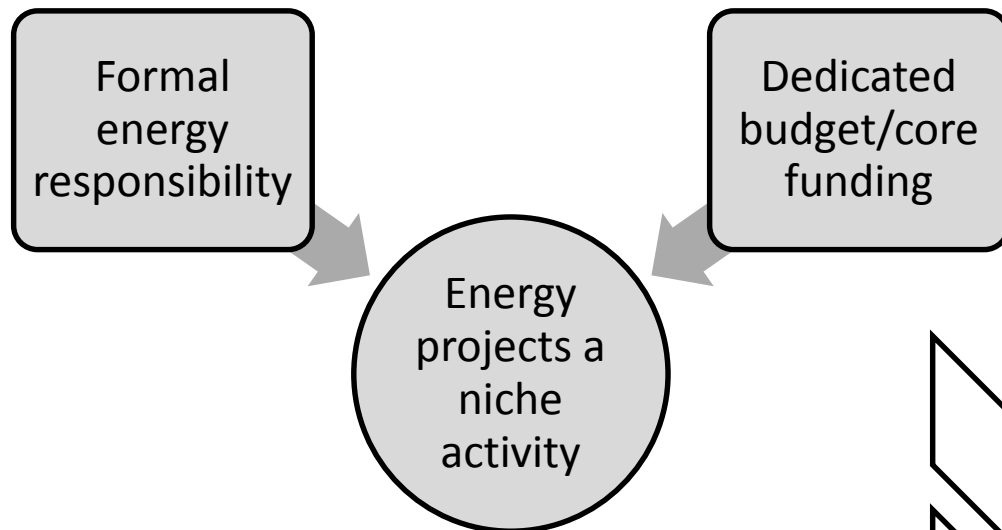
Birmingham City Council

Uncertain context for project & strategy development



Whilst multiple benefits sought, money dominates



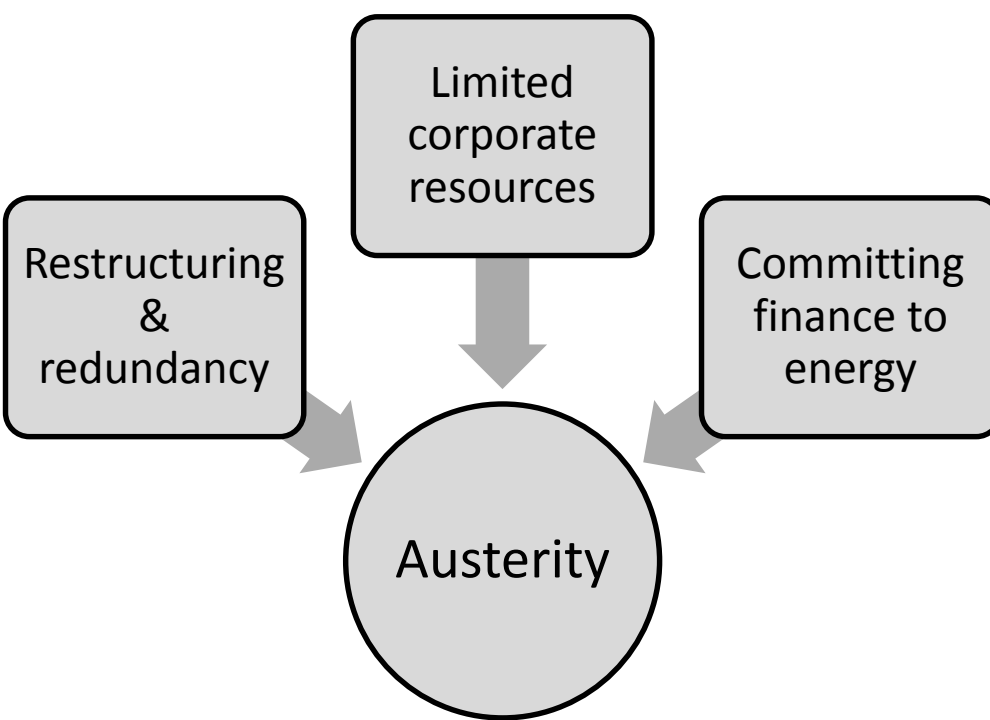


There's an [corporate energy] bill of about £10-12 million pounds per annum and somebody should have responsibility for that... at chief exec level ... That would be a massive driver because suddenly the chief exec's asking... You could then align with an elected member... between the two they'd make a real difference.

Scottish Authority

Some solutions...





We had a target to deliver. And not delivering against that target was going to have either reputational damage or we'd have to give some money back. Nobody wanted to give any money back. So there was a huge benefit of going into contract on the Project, because it gave some form of focus to everybody, corporately.

Cambridgeshire County

Mitigating actions...

- Self-financing energy teams
- Integrating energy services into finance & capital investment programmes
- Project or Programme Delivery Units
- Working with intermediaries
- Pooled resources in Combined Authorities



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New Website <https://heatandthecity.org.uk/>

Report <https://heatandthecity.org.uk/project/local-engagement-with-uk-energy-systems/>

Blog <http://www.ukerc.ac.uk/news/local-authorities-play-key-role-in-clean-energy-for-all.html>

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