

# **Public Energy Company Common Weal Consultation Response**

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**COMMON WEAL POLICY**

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For more information on Common Weal Policy visit [allofusfirst.org/policy](http://allofusfirst.org/policy) or email [craig@common.scot](mailto:craig@common.scot)



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## **Forward**

*Common Weal has long argued for a radical rethink of the way that Scotland both generates, uses and distributes energy. This is a fundamental issue to Scotland's economy as without energy, nothing functions.*

*The Scottish Government has recognised this and is working along several lines of research in this area.*

*In 2017, the Scottish Government consulted on propositions for the overall Energy Strategy for Scotland. Common Weal responded to this consultation by calling for a publicly owned energy company (POEC) which we believe is the best way to ensure an affordable system of distributing energy. This would balance the costs to energy generators and users compared to the current system which currently allows users to bear the bulk of such costs – leading to higher energy bills at a time when fuel and energy poverty are a major concern.*

*We were pleased that this recommendation was adopted by the Scottish Government and have continued to work closely with them and others to develop the proposal and help bring it to fruition.*

*To this end, the Scottish Parliament's Economy, Jobs and Fair Work Committee has launched a call for views into the objectives that a proposed Scottish POEC would aim to meet – including the creation of new energy infrastructure, accelerating energy system reform, increasing engagement with the energy system and reducing costs to consumers.*

*This report forms Common Weal's response to that call for views and has been written by members of the Common Weal Energy Working Group.*

**Craig Dalzell –**  
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# Scottish Publicly Owned Energy Company (POEC)

## What are your general views on the idea of a POEC?

Common Weal has long argued for a Scottish publicly owned energy company (POEC) to be established<sup>1</sup>. Our previous consultation to the Scottish Energy Strategy stated:

*“We strongly support the establishment of a Scottish Energy Company which can support local energy cooperatives and smaller public energy companies and provide a level playing field for energy pricing and investment.*

*This should be backed by Energy Bonds and a public investment bank.*

*Indeed if the model for the public energy company was the Danish Energy Agency, which administers energy and supply in Denmark, many of the problems*

*associated with a privatised energy market could be addressed.”*

Major changes in the GB<sup>2</sup> and Scottish energy sector are in progress with the extension of auctions for new generation, the prospective devolution of Crown Estates in Scotland and the move of SSE and SPEN to turn into DSOs which may require a separate Scottish regulatory framework to ensure continued support for community energy.

These changes provide increased opportunities for a Scottish POEC within the existing GB electricity market that in time may move to a full Energy Agency along the Danish model. Common Weal fully supports such a move.

### 1.1. What role should it fulfil and how?

Common Weal believes the POEC can help fulfil each of the four purposes set out in the SPICE briefing namely:

- Creating new infrastructure platforms
- Accelerating wider energy system transformation
- Increasing engagement and participation in the energy market
- Reducing costs to customers.

We agree that:

*“The creation of a POEC provides the opportunity to better coordinate those existing policy initiatives and provide strategic oversight as well as various types of support for on-the-ground delivery”*

This however, means that the POEC should not be solely a commercial company, although we recognise that potential state aid issues and procurement/funding arrangements for non-commercial activities will need to be addressed.

### 1.2. The POEC should be both a Government Agency and a Commercial Company

The POEC must combine the role of a Government agency, insofar as it acts as a one point stop for information, advice and expertise with the role of a wholly owned arms-length company along the lines of Scottish Water or CalMac Ferries Ltd.

Its agency board would comprise Scottish Executive officials chaired by a minister reporting to parliament. Its company board would combine energy expertise with Government appointees.

<sup>1</sup> Repossessing the Future 2013 (Mike Danson, Geoff Whittham, Andrew Cumbers, Gordon Morgan, George Callaghan) <http://reidfoundation.org/portfolio/repossessing-the-future-a-common-weal-strategy-for-community-and-democratic-ownership-of-scotland's-energy-resources/>

<sup>2</sup> The Electricity market covers GB only. Northern Ireland is part of the all-Ireland market.

As is stated in the Spice briefing, the Scottish Executive already has taken initiatives to promote energy efficiency, roll out electric charging, support community energy schemes and combat fuel poverty. However, the pace of take up of these schemes is uneven across the country, the level of expertise in local authorities and other public bodies with regard to the types of energy schemes, geothermal, solar, small hydro, heat networks etc, is low as is knowledge of anticipated costs and available funding.

It is clear that a greater level of technical support will be required than is currently available within the existing arrangements. This would be the role of the Scottish Energy Agency.

It would initially be an extension of the Scottish Government energy executive, however, there would be benefits from a degree of separation, most particularly in its public profile.

### 1.3. The POEC Commercial Company would develop over time

It would be inappropriate to establish a large commercial energy company without identifying the areas of need. There are small and large specialist companies and local companies, which could deliver energy projects for communities, housing associations or councils.

In the initial agency phase of the POEC, viable energy schemes would be identified across the country and sources of finance would be identified<sup>3</sup>. This work would draw on the Heat Maps being constructed by Local Authorities. The devolution of Crown Estates could allow smaller towns to benefit from offshore wind without significant network infrastructure allowing the POEC and the National Investment Bank to ensure that as far as possible the profits from Scotland's wind stays in Scotland, with the host communities.

The current system under which communities, local authorities, and their partners compete for projects is highly inefficient and places the costs of developing evidence to support projects on them, whereas this could be done more effectively and cost-effectively through a national body.

The POEC would initially act as a channel through which schemes can be explored and prioritised, costs and finances explored and where practical local companies invited to tender. Where no suitable company was available or the tender was excessive the POEC could manage the project and charge a standard fee.

In carrying out this work, the POEC will need to coordinate with the network providers, SSE and SPEN who may also be taking energy initiatives affecting communities. At the end of the process, a national plan of prioritised schemes can be drawn up and timetabled to meet Government

energy objectives and available funds.

The POEC will not be the vehicle for raising funds. This should be a combination of the National Investment Bank, the Scottish and UK Governments, Local Authorities, Housing Associations and the DSOs. The POEC will however, ensure effective and efficient investment is made in energy transformation and help drive and direct investment in energy for the public good. It will also provide a facilitation role in enabling the energy system to be decentralised to local communities.

It should be noted that the move to DSOs mean that SSE and SPEN will require more detailed access to customers energy use<sup>4</sup>. It is important that legislation or regulations governing DSOs ensures Community Energy Schemes needs are taken into account.

These roles we believe necessitate the establishment of the POEC through legislation.

Over time the POEC could establish separate subsidiaries covering generation, energy consultancy and project management.

The POEC cannot be viewed in isolation from the wider commitment of the Scottish Government to tackle climate change, as set out in its Energy Strategy, or its commitment to tackle fuel poverty and inadequate housing.

In total the Scottish Government is committed to spend in 2018/19:

- £299.3M on Enterprise
- £93.6M on Energy

<sup>3</sup> A similar process was carried out when the North of Scotland Hydro-Electric Board was set up following the 1943 Act

<sup>4</sup> The ENA definition of a DSO states that: "A Distribution System Operator securely operates and develops an active distribution system comprising networks, demand, generation and other flexible distributed energy resources (DER). "As a neutral facilitator of an open and accessible market it will enable competitive access to markets and the optimal use of DER on distribution networks to deliver security, sustainability and affordability in the support of whole system optimisation. "A DSO enables customers to be both producers and consumers; enabling customer access to networks and markets, customer choice and great customer service."

- £115.7M on Innovation and Industries
- £122.2M on Cities Investment and Strategy
- In addition there is a commitment to generate £750M of investment in affordable housing
- The Scottish Energy Efficiency Programme is

designated to receive £500M of investment over 4 years.

It is in relation to these sums, most of which affect energy, fuel poverty or housing that the scope and role of a POEC should be assessed and that the potential savings can be made.

## 1.4. A Retail Energy Company?

Our Power, although not strictly speaking a POEC, has received Scottish Government support and is owned by largely Scottish housing associations and councils<sup>5</sup>.

The benefit of another retail electricity and gas company operating in the same commercial space as Our Power, is not immediately apparent. Indeed it could have a negative impact on the latter's goal of achieving profitability by 2021. The Scottish Government would be far better to encourage more Housing Associations, Community Controlled organisations and Councils to join Our Power. This would enable a faster take up of customers switching to Our Power and its reaching break even faster.

The advantages of having a local point of contact able

to offer advice on power tariffs and identify those in fuel poverty cannot be overestimated. Whilst not directly promoting Our Power, the Government should improve the information supplied to those in fuel poverty who are often those most reluctant to change suppliers. This we believe is affecting the rapid take up of Our Power customers.

Our Power could admit the Scottish Government to its board on the same £1 membership share as other members. Where appropriate the POEC could enter into PPA's with Our Power offering lower cost energy and leveraging investment in local schemes. The Government could also encourage Our Power to adopt a governance structure that could readily be brought within a legislative framework appropriate to a semi-state enterprise.

# What are the key challenges that the POEC should address?

The fundamental role of the POEC should be to support the development and delivery of energy projects that will serve to build resilience amongst fuel poor, vulnerable, and isolated communities.

This is needed to tackle the growing gap in energy equity, where householders who can afford to do so or who are organised as a local community to produce their own power, can take themselves fully or partially off-grid. Unless mitigation measures are introduced this will result in the total electricity infrastructure costs being passed on to a smaller number of often poorer householders<sup>6</sup>.

We are aware that many rural households, particularly those in fuel poverty, use expensive oil products for heating, and to meet climate change targets they are being encouraged to switch to electric heating or fuel pumps. Unless the costs of conversion and provision of infrastructure are underwritten, this will not reduce their fuel poverty if higher infrastructure costs arise. We have previously noted that the current proposals under the Fuel Poverty (Target, Definition and Strategy) (Scotland) Bill may serve to further exacerbate the multiple poverty related problems of high fuel costs, high transport costs and lack of access to services these householders face before they can be switched to electric heating or heat pumps<sup>7,8</sup>.

<sup>5</sup> Whilst there are other not for profit energy companies in Scotland, Our Power has the most customers, the greatest public sector involvement and is furthest along the road to profitability. For these reasons we recommend it is used as the basis for the retail wing of the POEC.

<sup>6</sup> Atterson, B., Restrict, S., Baker, K.J., Mould, R., Stewart, F., & Melone, H., 2018. Down to the Wire: Research into support and advice services for households in Scotland reliant on electric heating. Report for the Consumer Futures Unit, Citizens Advice Scotland.

<sup>7</sup> Baker, K.J., Mould, R., & Restrict, S., 2018. Rethink fuel poverty as a complex problem. Nature Energy, 2nd July 2018. DOI: <https://doi.org/10.1038/s41560-018-0204-2> Available at: <https://rdcu.be/2j8E>

<sup>8</sup> Bell, S., 2018. Scottish Government's Bill on fuel poverty is a 'missed opportunity', energy poverty expert says. Commonsense, 28th June 2018. Available at: <https://www.commonspace.scot/articles/12956/scottish-government-s-bill-fuel-poverty-missed-opportunity-energy-poverty-expert-says>

One of the issues Our Power has faced is the extreme reluctance of those who are fuel poor and could benefit most from energy switching to do so. Ofgem tries to encourage this as does the Scottish Government, however, a concerted and better coordinated effort should be made by the Scottish Government, councils and Housing Associations to identify the fuel poor and particularly the rural fuel poor.

The POEC can help address the lack of take up or failure of community energy projects due to inadequate knowledge, expertise or lack of cash, through providing a dedicated

team of contract and financial advisors and experts in the most relevant energy fields of solar, hydro, geothermal, wind, anaerobic digestion, storage or district heating energy systems design. Most of these can be drawn from universities for initial assessment, before the POEC appoints a project manager who would work with the community to implement the project. Where viable projects affect rural communities, these should be prioritised.

## How might a Scottish energy supply company work best to support the growth of local and community projects, and fuel poverty reduction?

Common Weal would like the POEC to adapt the Danish approach to dealing with these issues as they have proved significantly successful in this regard<sup>9</sup>. There are a number of ways the POEC could deliver potentially significant benefits:

- As a vehicle for identifying and supporting the development and delivery of projects which have been assessed by the POEC as having the greatest potential to deliver both direct and indirect benefits (co-benefits) to local communities. One standard example being community-scale district heating projects to tackle fuel poverty in rural communities where the scope of the project includes the development of large scale solar thermal arrays and local biomass supply chains from woodlands managed for other forestry products, recreation, tourism and biodiversity<sup>10</sup>. Another is the development of wind and wave / tidal projects linked to the development and deployment of energy storage technologies in the islands (as per the Orkney energy park). Yet another is district heating systems fed by anaerobic digestion plants, which require substantial up-front investment but good and lower-risk returns on that investment.

- On the role of the POEC as a partner in community energy projects, there is an obvious potential conflict of interest if the POEC is involved in competing bids, especially where these are between competing communities. This emphasises the need for the POEC, if it is to own generation assets, to also have a clear national strategic role in identifying and supporting the development of projects. If this competitive element (between projects) is removed it eliminates one area where Col concerns would arise, with the POEC then clear to compete with other suppliers to deliver these projects.

Without knowing the Scottish Government's thinking on the future relationship between the POEC and Our Power there is obviously some potential for the POEC to operate a similar dual tariff for householders on Economy 10 / 'Total Heat, Total Control' electricity tariffs as an alternative provider to SSE and Scottish Power. This would also open up a route for directly engaging with a large number of fuel poor householders. If this option is to be pursued we would strongly recommend that the tariff aims to deliver 100% renewable electricity, to demonstrate political and financial support for renewables.

## How can the POEC be best designed to align with wider Scottish energy policy

<sup>9</sup> See, for example, Professor Henrik Lund on Denmark's Renewable Energy Strategy [https://www.youtube.com/watch?v=9y2lgffl\\_Oc](https://www.youtube.com/watch?v=9y2lgffl_Oc)

<sup>10</sup> Pridmore, A., Smith, A., Baker, K.J., Ahlgen, C., & Williamson, T., 2017. Evidence Review of the Potential Wider Impacts of Climate Change Mitigation Options: Built Environment Sector. Report for the Scottish Government.

## objectives, and to avoid potential policy conflicts?

See our previous and following answers.

In a world of limited funding and competing needs for support the Scottish Government urgently needs a national strategy to identify and prioritise the development of energy generation and infrastructure to deliver the greatest benefits to those most in need. The current system under which communities, local authorities, and their partners compete for projects is highly inefficient and places the costs of developing evidence to support projects on them, whereas this could be done more effectively and cost-effectively through a national body.

This is particularly the case where the costs of ensuring new and existing housing meet raised energy standards can be offset by innovative energy schemes through the advice of the POEC.

We propose the Scottish Energy Agency / POEC prioritises viable projects in line with Government policy objectives and available cash. The POEC would ensure suitable local or national contractors were used and only act as manager where no such were found.

## Should a new Scottish POEC be more than solely a licensed energy supply company?

### Should it have a direct role in energy generation?

We are unconvinced of the value of the POEC if it doesn't have a direct role in generation and infrastructure.

As a solely supply company the POEC would be competing directly with Our Power and any other community-based supply companies as well as the commercial suppliers, and so could disadvantage the growth of the former as an unintended consequence of having to compete with the

latter. The "supply" component of the delivered energy price is relatively small compared with generation and wires charges, so providing customers with cheaper energy is often more about a fortuitous outturn for the supplier's hedging strategy. By far the greater value in developing the POEC would be in leveraging capital and significantly reducing investor risk in community-based energy projects.

## How might the POEC be designed to promote objectives and functions beyond the retail of gas and electricity (e.g. supporting investment and innovation in new technologies and infrastructure)?

### What benefits are there to having wider objectives?

If the POEC is to have an impact on tackling fuel poverty it needs to become a developer of first resort for new infrastructure for delivering district heating (including using

large scale solar thermal) and energy storage (including thermal storage infrastructure such as boreholes and covered reservoirs as well as batteries and hydrogen). The

POEC could also work to address the urgent need to tackle the lack of progress on the deployment<sup>11</sup> of domestic solar thermal and PV panels, which have significant benefits for tackling fuel poverty<sup>12</sup>. Solar also has the benefit of being viewed very favourably by the public, with a 2014 survey finding 84% of Scottish householders would be happy or unconcerned about living next to a solar farm<sup>13</sup>.

As regards the potential for solar PV, the Solar Trade Association has estimated that achieving a capacity of 2GW across Scotland by 2020 (a tenfold increase on 2016) is a reasonable target however, uncertainties over the future of Feed in Tariffs (FiTs) due to cuts by the UK Government have created significant uncertainties that are hampering this deployment<sup>14</sup>. Given that solar PV is a very low risk, reliable, and popular technology, there is an obvious role for the POEC in facilitating and investing in the deployment of new solar installations. Moreover as the price of solar panels continues to fall, this should contribute to lower energy costs overall.

Calculating the operational capacity of Scotland's solar thermal installations is more difficult due to the need to capture the number of micro-installations and the need to match supply with other heat sources (e.g. for household installations supplemented by other forms of central heating). In 2016 there were approximately 22,000 solar thermal installations in Scotland, ranging from microgeneration systems on domestic roofs to the few large-scale installations, such as the 1.8MW installation at Mackies Ice Cream in Aberdeenshire<sup>15</sup>.

At the small scale facilitating the deployment of low-cost solar thermal systems to fuel poor householders would represent an easy win for the POEC, and is one of the few 'low hanging fruit' left for Scottish energy policy. However, more significantly, the POEC is an ideal vehicle for bringing about a Scottish solar revolution through enabling the development of large-scale solar thermal installations for providing district heating as part of mixed technology systems using locally and sustainably-sourced biomass, inter-seasonal thermal storage, and heat recovery (the latter two being critical for maximising the benefits of such systems). Examples of such installations, which have proved highly effective in decarbonising energy supplies and tackling fuel poverty, include Dronninglund (26MWth)<sup>16</sup>, Marstal (23MWth), Grasten, and Braedstrup (both 13 MWth)<sup>17</sup> in Denmark. Braedstrup uses water stored in boreholes for thermal storage whilst Dronninglund and Marstal use gravel-lined pits<sup>18</sup>. Even in Norway, which has been traditionally reliant on electric heating powered by its vast hydropower capacity, there has been a renewed focus on coupling solar thermal with DHS, exemplified by the development of a 4GWh installation at Lillestrøm<sup>19</sup>.

If the Scottish Government is to be confident in achieving the ambitions set out for the POEC then it simply cannot afford to neglect the roles that solar will need to play in our energy future.

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- 11** There is currently 188 MW2 of solar PV capacity in Scotland compared to 8,700 MW across the UK. Source: Solar Trade Association, 2016. STA Scotland: Key facts and statistics. Available at: <http://www.solar-trade.org.uk/wp-content/uploads/2016/03/Key-facts-and-statistics-Solar-in-Scotland-v8.pdf>
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## What governance arrangements should a Scottish POEC have?

### Who should it be accountable to e.g. Parliament?

The POEC must combine the role of a Government agency, insofar as it acts as a one point stop for information, advice and expertise with the role of a wholly owned arms-length company along the lines of Scottish Water or CalMac Ferries Ltd.

Its agency board would comprise Scottish Executive officials chaired by a minister reporting to parliament. Its company board would combine energy experts with Government appointees.

### Should legislation be required to underpin the creation of a POEC?

Common Weal believes that the creation of a POEC must be legislated through parliament if it is to be given the right to intervene to correct market failure either in supply or in the network provider, so that its remit is clearly defined from the outset.



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