



Annex 1

Aberdeen City Council Business Case

Establishing an ESCO

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FINAL

Governance Information

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2 EXECUTIVE SUMMARY

2.1 PURPOSE

This report sets out a proposal for ACC to establish an Energy Services Company (ESCO), as an arms-length external organisation (ALEO) wholly owned by the Council.

The report provides a detailed business case for doing this which includes an options appraisal, risk assessment and reviews the opportunities and challenges in taking this route. The report recommends the development of a detailed business plan to create an ESCo in line with the recommendations set out in this paper.

The establishment of an ESCo will provide a mechanism to deliver the objectives of Powering Aberdeen. It will also establish the skills set to manage the sale and distribution of energy generated from activities being developed by the Council such as the Energy from Waste plant and excess heat and power from the energy centre at the AECC.

2.2 OPTIONS APPRAISAL

An options appraisal has been carried out to consider the most appropriate structure for an ESCo for Aberdeen City Council (ACC). The following options were considered which are based on existing models and have been developed with reference to the Scottish Futures Trust guidance on establishing Energy Services Companies¹.

- *In House* – This option considers retaining the energy related services in house using existing resources with the recruitment of additional resource as necessary.
- *ESCO - Joint Venture* – this option considers setting up the ESCo as a joint venture with a private sector partner to share risks and costs.
- *ESCO-project specific* - this option involves setting up ESCos on a project specific basis, such as to manage the heat and power from the Energy from Waste plant and develop and build the associated heat network.
- *ESCO-Strategic-wholly-owned* – this option considers setting up a strategic ESCo wholly-owned by the Council with a wide-ranging energy efficiency scope. It can therefore develop partnerships and new ventures as it sees fit, subject to approval through a business planning and governance process that will allow the Council to influence it's direction.

These options were then evaluated against key criteria developed in consultation with ACC staff. On the basis of the options appraisal and evaluation it was determined that a strategic wholly owned ESCo was the most suitable vehicle to deliver on the Council's objectives.

2.3 SCOPE

It is proposed that the scope of the ESCO is not limited and that it should be able to become involved in activity relating to the management, generation and distribution of energy including demand management, subject to a robust business plan.

¹ Scottish Futures Trust: legal guidance on establishing Energy service Companies (ESCOs) March 2015

2.4 VISION

The establishment of the ESCo will support the delivery of the vision set out in Powering Aberdeen.

“By 2030 Aberdeen is a vibrant, world class city which is an attractive and sustainable place to live and do business. The economy has diversified and is supported by efficient, low carbon buildings and transport infrastructure. The health and wellbeing of citizens continues to improve and fuel poverty has been eliminated. Carbon emissions have reduced by at least 50%. “

2.5 RECOMMENDATION

It is recommended that ACC further investigate the option to set up a strategic ESCo as an arms-length external organisation (ALEO) wholly owned by the Council to manage all energy related activity undertaken by ACC with the option to expand and develop energy related services over time.

It is recommended that an informal Working Group reporting to the Director of Communities, Housing and Infrastructure and led by a project manager from that department should take forward the development of a detailed business plan. The Working Group would include relevant internal energy experts as well as representatives from legal and finance. Appropriate external support would also be included to facilitate the development of the business plan. The principal role of this group would be to undertake the following:

- Agree a legal structure for the organisation
- Establish a governance structure
- Identify and agree a priority project list
- Develop a staff and management structure and job descriptions
- Develop initial resource and funding requirements
- Develop an initial business plan for the first three years.

It is proposed that this work will be undertaken from August to December 2016 with a view to presenting the business plan to Full Council in December 2016, with the intention that the ESCO be established in early 2017.

2.6 RATIONALE FOR THE RECOMMENDATION

Although the establishment of a strategic ESCo appears to be the best route in principle, further work to develop a business plan addressing the issues identified in this paper around structure, projects and establishing an economically viable entity needs to be undertaken. An important element of the business planning process will be to establish the role of AHP which already exists as an ESCo to manage specific energy services associated with developing heat networks. Early discussion has taken place but further more detailed consideration is necessary to determine the most effective way of bringing the ESCo and AHP together to deliver Powering Aberdeen. Options might include evolving AHP to become a wider entity or an activity within the new body.

It is also necessary to undertake more detailed work to address how ACC will manage any risks associated with the establishment of the ESCo and the appropriate governance structure for the

proposed entity. The next phase of the project, putting together a detailed business plan will consider all these issues in more detail.

2.7 STRATEGIC FIT

On 11th May 2016 Council approved Powering Aberdeen-Aberdeen's Sustainable Energy Action Plan. The ESCo will be an important vehicle in delivering the ambitions of Powering Aberdeen which is a city wide strategy to reduce emissions and whose delivery will involve a wide range of partners and stakeholders. Powering Aberdeen will enable the city to achieve its objectives in relation to reducing emission and growing renewable energy generation while at the same time reducing fuel poverty and promoting equality, which in turn will support the delivery of Scottish and UK Government objectives.

The ambitions of Powering Aberdeen are also echoed in key strategic documents including:

- Aberdeen-The Smarter City - Smarter Environment which includes the following core themes.
 - *We will design and construct all new infrastructure to be energy efficient by maximising the use of low carbon technology and materials. We will use recycled materials where appropriate.*
 - *We will increase energy efficiency and introduce carbon reduction measures in our processes and our housing and non-housing assets to reduce our carbon footprint, save money and to bring people out of fuel poverty.*
- The Community Plan and Single Outcome Agreement - sets the ambition for Aberdeen to be a socially, economically and environmentally sustainable city.
- The five year business plan 2013-2018-sets sustainable economic growth for the benefit of national outcomes as a key priority.

By bringing together all energy related activity into one place the city will be better able to deliver local ambitions to provide affordable, sustainable low carbon energy to residents and businesses in the city and to promote improvements in energy efficiency while at the same time supporting the delivery of Scottish and UK Government objectives and increasing energy security.

2.8 FINANCIAL AND NON-FINANCIAL BENEFITS

- The ESCo will be a key vehicle to deliver the objectives of Powering Aberdeen as it will provide a vehicle through which to grow energy demand services, increase generation using alternative technology and grow the heat network.
- Overtime the ESCo will have the potential to provide an income stream for the Council. Some of the services currently provided directly by the Council are likely to move into the ESCo if appropriate business cases can be made reducing costs to the Council.
- It will help to reduce emissions, alleviate fuel poverty, create economic and employment opportunities.
- A strategic ESCo will provide a central resource with the necessary skills and expertise to manage energy related services in a strategic way that maximises the benefit of investment and allows skills sharing and resource sharing across energy related services.

- The presence of a strategic ESCo will allow ACC to build a trusted brand for energy related services which will be necessary to expand these services, attract funding and grow the customer base.
- By not limiting the activity of the ESCo it will be able to exploit new market opportunities and have the potential to encourage innovation.
- The ESCo will provide a vehicle to bring together a range of partners to facilitate the delivery of projects and act as an ambassador for energy efficiency measures in the city.

2.9 DIS-BENEFITS

- Investment will be required to establish the ESCo through initial staffing prior to it becoming income generating.
- The Council will need to provide resource to manage the ESCo
- By not limiting the scope of the ESCo this opens the company to potentially higher commercial risks. These need to be managed on a project by project basis.

2.10 MEASURES OF SUCCESS

The success of the ESCo will be measured by tracking the number of energy schemes which it has helped deliver and its achievement of a number of objectives including:

- Increasing the proportion of energy sourced from renewables
- Increasing partnering activity and the number and range of energy efficiency projects.
- Reducing energy consumption
- Reducing carbon emissions
- Reducing energy costs
- Generating income
- Creating jobs through sustainable energy projects.
- Reducing the number of people in fuel poverty.

2.11 PROJECT STAGES, PHASES AND TIMELINE

The project to develop the ESCo has a number of key stages:

- Develop initial business case and get full council approval to progress a detailed business plan – August 2016
- Establish a detailed business plan to include legal structure, governance structure, staff and management structure and job descriptions, initial resource and funding requirements, initial business plan for the first three years.
- Secure Council approval for the business plan – December 2016
- Set up the ESCO as a legal entity and commence recruitment of core staff – January - April 2017
- Start operation – April 2017
- Progress initial project list 2017 onwards

3 OVERVIEW

3.1 INTRODUCTION

This paper sets out the proposal to establish an ESCo, the reasons why, the proposed scope as well as an options appraisal. It seeks approval to develop a detailed business plan to create an ESCo in line with recommendations set out in this paper.

In May 2016 Aberdeen City Council (ACC or the Council) approved Powering Aberdeen – Aberdeen’s Sustainable Energy Action Plan (SEAP). The plan aims to cut carbon emissions across the city by 31% by 2020 and 50% by 2030. It identifies substantial social, economic and environmental benefits from achieving these targets including the elimination of fuel poverty and potential to diversify the economy in Aberdeen.

The plan proposes actions in the areas of energy efficiency, renewable energy, energy from waste, district heating, alleviation of fuel poverty and sustainable transport. In leading the implementation of the plan the Council needs to be clear and consistent about its priorities, lead by example and foster collaboration with wider stakeholders.

There are already a number of projects underway that are being developed and funded by the Council that support the ambitions of Powering Aberdeen and will make ACC a more significant player in the energy market. These include the development of the Energy from Waste plant at Tullos that will generate heat and power for onward sale as well as the Anaerobic Digestion plant and energy centre being developed at the AECC that will provide the opportunity to generate excess heat and power for sale beyond the AECC site boundary.

To ensure the outcomes of these projects are successfully delivered in terms of having an effective mechanism for the onward sale of the heat and power that will be generated and to support the activity envisaged within Powering Aberdeen additional skills and resources are required that are not currently available within the Council. These include metering, billing, customer service, energy trading, delivery and implementation skills such as project management, commercial and transactional capability as well as access to wider funding markets. The establishment of an Energy Services Company (ESCo) will provide a vehicle to manage this activity and procure these skills.

This paper takes account of current developments surrounding ESCo’s elsewhere in the country and has drawn on a range of research into such models including the Scottish Futures Trust² recent report on legal considerations which can help to inform a business case for an ESCo and the Institute of Public Policy Research (IPPR) report City Energy which sets out the case for greater involvement by public sector bodies to transform British cities to smarter, cleaner and more affordable energy.³

3.2 WHAT IS AN ESCO

An ESCo is a descriptive term for an entity which is in some way involved in the provision of energy services. This can be the generation, transmission, distribution and supply of energy but also supporting services such as energy efficiency, energy savings, renewable/sustainable energy and/or

² Scottish Futures Trust: legal guidance on establishing Energy service Companies (ESCos) March 2015

³ http://www.ippr.org/assets/media/publications/pdf/city-energy_Jul2014.pdf

emission reductions. The entity in question may be procuring these services, managing them, operating them and/or financing them. It can also assist in facilitating community energy initiatives.

An ESCo could be a public sector organisation, a private sector organisation or a joint venture between two or more organisations. A public body may establish an ESCo with or without private sector involvement and may establish one to implement a particular project, or it may be established on a more strategic basis with a view to implementing a variety of projects.

An ESCo can be established as profit or not for profit but ultimately it is recommended that any Aberdeen ESCo should be a self-financing entity delivering significant economic and energy efficiency benefits for the city.

ESCO structures have existed for a number of years and have been established by a number of authorities in England. A number of Scottish authorities are now examining the potential for such entities with some in active consideration or process of establishment. ESCo's have been developed to help tackle the issues of fuel poverty, system resilience, investment in local clean energy while boosting jobs and growth in the local economy.

3.3 EXAMPLES FROM ELSEWHERE

There is no standard role or form for an ESCo. Different cities have different models depending on their particular issues and objectives.

In some cases an ESCo is an entity set up by a public sector organisation (with or without private sector participation) to deliver energy efficiency, energy savings, and/or renewable energy, through a variety of different schemes or through a particular project such as district heating. Such entities may use a variety of delivery models, including contracting with the private sector.

Some ESCos are joint ventures between the private and public sectors where risks and rewards are shared and some publicly-led ESCos that have joint venture subsidiaries.

In other cases, an ESCo may be a private sector entity set up to design, build, operate and manage an individual facility for a local authority or other public body. This arrangement may or may not be based on energy performance contracting whereby payments from the public sector client to the private sector operator depend on the achievement of energy efficiency targets.

Aberdeen Heat and Power (AHP) is an example of a publicly owned ESCo established for the purpose of delivering a particular project. It was established in 2002 as an independent, not for profit company limited by guarantee focused on providing affordable heat to disadvantaged communities in Aberdeen through the development of a local heat network. AHP manages the operations, maintenance, heat supply and billing but procures from the private sector the construction of the energy centres and heat network.

Some other examples are given below.

Coventry District Heating Scheme

The District Energy Company is a wholly-owned subsidiary of the private sector operator Engie (previously called Cofely). Coventry City Council agreed a 25 year concession for heat which enabled infrastructure investment to be privately financed, assisted with some grant funding from the Housing and Communities Agency. Engie buy heat from an existing municipal owned waste-to-energy plant on the edge of the city centre and transport it via a 6.6km network of buried pipes to consumers in the city centre. The 'Heatline' low-carbon district heating network is installed in Coventry city centre and the heat is sold to scheme members. Phase I

involved Council buildings being supplied with heat and hot water. The objectives were to secure the future and viability of the EfW plant; help tackle fuel poverty and reduce carbon emissions. Challenges are around managing variances in load; achieving compatibility with traditional building services and the infrastructure cost.

Bristol City Council

Bristol City Council has established an ESCo wholly owned by the Council which has a number of subsidiaries. These currently include an energy supply company Bristol Energy⁴. The aim is for the ESCo to be self-funding after initial set-up costs and ultimately to provide a revenue stream for the city. It has four main strands of activity including solarPV; district and communal energy; public building retrofit and domestic retrofit. Bristol Energy was established with a £2.5 million European fund and is seeking to champion social equality, local renewables and stronger local communities. They have been in operation for 6 months and have 10,000 customers nationally and employ 75 members of staff. The ESCo also manages the city councils domestic energy efficiency programmes through access to external funding and working in partnership with EDF using Energy Company Obligation funding.

Nottingham Council⁵

Nottingham Council has established the UK's first local authority-owned fully licensed gas and electricity supplier. The company is wholly-owned by Nottingham City Council, with a board consisting of Nottingham councillors. It is run on a strictly not-for-profit basis and aimed predominantly at the domestic sector and aims to reduce fuel poverty, address the disadvantages of those on pre-payment meters and deliver great customer service.

They have identified the following challenges - building the necessary customer base and retaining those customers; establishing commercial companies within local government sector such that they have sufficient independence to take commercial decisions and pay market rate salaries but also allow for the political input to strategy around business case objectives. Energy supply is a scale game, therefore there is a need to achieve as big a footprint as possible; a key differentiator will need to be brand, trust and customer service; significant upfront costs to assess the business case (£200k) and set up the vehicle (£2m)

Edinburgh City Council

Edinburgh City Council has developed a business case and secured Council approval for a wholly-owned strategic ESCo focussed on delivery of the Council's Sustainable Energy Action Plan (SEAP) which is in the early stages of development. They have developed the legal and governance structure and are recruiting external non-executive directors.

They have developed a business plan and identified a number of projects that the ESCO should take forward. At the heart of the business plan is delivering the SEAP and addressing issues including lowering carbon emissions, creating employment opportunities, addressing fuel poverty, cutting costs and generating income. The entity has not yet undertaken any trading activity having only recently been established.

Thamesway Energy (Thamesway) Ltd in Woking, Surrey

Thamesway provides low carbon power and heat to the local area. It was established by Woking Borough Council, through cross party collaboration and agreements, to assist the Council in furthering its objectives

⁴ <https://bristol-energy.co.uk>

⁵ <https://www.robinhoodenergy.co.uk>

across its Climate Change and Community and Housing strategies. It is structured as a number of wholly-owned individual companies, joint ventures and subsidiaries. Since its formation in 1999, the group has grown through acquisitions and start-ups and diversified to provide a wide range of energy, environmental and affordable housing enterprises. All profits are utilised for the furtherance of energy efficiency and sustainable investment within the borough.

Thameswey has successfully developed solutions to the technical, political and managerial issues inherent in the implementation of long term energy projects. It provides a vertically integrated range of energy-related services, from design and consultancy through to operation, maintenance, customer services, metering and billing. The joint venture enterprises have added solar energy, land and property development to the Thameswey portfolio.

Thameswey has now expanded into Milton Keynes where a number of developments connect to its first energy centre in the city. Thameswey are contracted to deliver electricity and heat to new developments within the city centre and now supply electricity and heat to over 900 residential and 30 retail units including The Pinnacle, Milton Keynes largest office development for over 25 years.

Blue Sky Peterborough

The Council's Energy Services Company seeks to generate renewable energy and reduce energy consumption while generating income for the Council and creating financial benefits for the community. Activity includes:

- A contract to deliver guaranteed energy efficiency for non-domestic properties that has been let to Honeywell Solutions.
- An agreement with British Gas to address the challenge of domestic energy efficiency. This is the first strategic partnering agreement between an energy provider and local authority. "Heataborough" is a scheme designed to help residents of Peterborough heat their homes more efficiently and save money on their energy bills. It utilises the Energy Company Obligation (ECO), a government initiative being delivered by all major energy suppliers designed to help low income families access energy efficiency measures, such as loft and cavity wall insulation, boiler repairs, and double glazing. British Gas will fund these improvements to boost the energy efficiency of 7,000 homes across the city targeted at low income communities, vulnerable residents and hard to treat properties.
- In line with the Council's Capital Agenda to create 'green energy', the Council has also been promoting the installation of solar panels on public buildings and schools to generate renewable energy which can be sold to boost the local economy.

The examples above illustrate a range of approaches to addressing the energy agenda for a city, some wholly owned, some private sector led and some through joint ventures. It is clear that all have identified common themes to be addressed and that there exists considerable opportunity in the energy sector to offer alternative solutions to residents and stakeholders. The decision about which model to choose depends on the aims and objectives of the Council, project-specific issues such as cost and complexity, the attitude of the Council to funding and risk, the degree of knowledge and experience within the Council on energy matters and whether the focus is on a single scheme or a wide range of energy programmes.

4 OPTIONS APPRAISAL

4.1 INTRODUCTION

In the following section we set out the outcome of an options appraisal to consider the most appropriate approach for ACC to take in establishing an ESCO. The following options have been considered based on the experience and structures emerging elsewhere.

- *In House* – This option considers retaining the energy related services in house using existing resources with the recruitment of additional resource as necessary.
- *ESCO - Joint Venture* – this option considers setting up the ESCo as a joint venture with a private sector partner to share risks and costs.
- *ESCO-project specific* - this option involves setting up ESCOs on a project specific basis, such as to manage the heat and power from the Energy from Waste plant and develop and build the associated heat network.
- *ESCO-Strategic-wholly-owned* – this option considers setting up a strategic ESCo wholly-owned by the Council with a wide-ranging energy efficiency scope. It can therefore develop partnerships and new ventures as it sees fit, subject to approval through a business planning and governance process that will allow the Council to influence it's direction.

These options have then been evaluated against a number of key evaluation criteria to establish the preferred option.

4.2 OPTION 1 – IN HOUSE

This option considers retaining the energy related services in house and managing them using existing resources with the recruitment of additional resource as necessary. This option assumes dedicated resource both is, and remains, available in house over the long-term, due to the long life span of many energy related projects. To manage a range of projects across departments a range of core skills needs to be retained or available and it is likely to be more beneficial to bring collective skills and experience to bear on managing these projects rather than managing them separately.

To manage the billing and sales of future generating capacity ACC will need to access a sales, billing and customer service engine. Experience elsewhere with the likes of Robin Hood and Bristol energy indicates that this is a complex and costly process to develop and manage. It is likely to be more cost effective to source this through a third party with requisite licences and systems. If these projects sit within ACC it will need to develop an identity and brand that is not associated with ACC for the sale of heat and power and build customer confidence that it can manage energy related services although it is not a core business.

Table 1 – Pros and Cons of Option 1

Pros	Cons
Lower set up costs as these are likely to be limited to some additional recruitment.	Not core business to the Council
Total control	Need to define new structures and internal ownership to ensure effective delivery
	Limit to ability to invest in new infrastructure

	Development potential will be driven by Council resources
	Possibility of customer mistrust in buying energy services from an organisation for which this is not core business
	Lack of billing and customer service engine to manage energy generation which would either need to be developed or bought in
	Less flexibility to attract external finance and partners
	Resource and skill constraints presented by reducing local government finances

4.3 OPTION 2 - ESCO - JOINT VENTURE

This option considers setting up the ESCo as a joint venture with a private sector partner to share risks and costs. The success of this option will depend on the ability to find the right partner.

Time will need to be allowed to identify the right partner and then to negotiate a suitable relationship either through procurement process or joint venture company. It would need to be ensured that the objectives and motivations of the partner were aligned to those of ACC in relation to areas such as providing affordable heat and community benefits

Table 2 – Pros and Cons of Option 2

Pros	Cons
Shared risk	Less control over direction and activity
Shared costs of set up and management	More complicated to establish and could therefore take considerable time to set up maybe 1 to 2 years.
Potential to leverage investment	Need for profit sharing
Bring resources and expertise	Could limit the scope of activity undertaken by the ESCO depending on the views of the joint venture partner.
	Different views on the objectives of the venture
	Harder to split if the relationship does not work out as envisaged

4.4 OPTION 3 - ESCO-PROJECT SPECIFIC – WHOLLY-OWNED

This option involves setting up ESCOs on a project specific basis. For example an ESCo might be established to manage the heat and power generated by the Energy from Waste plant and associated heat delivery network. Another ESCo might be used to manage the sale of excess heat and power from the energy centre at the AECC.

In this approach energy related activity is likely to continue to grow in connection with specific projects being driven by the Council rather than being an end in itself as there is no part of the Council that currently has this as it's remit.

Careful consideration would need to be given as to how to develop a trusted local brand in this scenario and how to manage potential competition between ESCo's. Different ESCo's with different identities could create confusion in the market and spread customer volumes.

Table 3 – Pros and Cons of Option 3

Pros	Cons
Each ESCO can have a simpler structure and will be easier to set up	Separate ESCOs will take more resource to procure and manage centrally and there will be a need for ACC to co-ordinate their activity
Costs of set up will be lower	The activity of each ESCo will be limited, limiting the opportunity for growth and investment
Risks easier to manage on a case by case basis	There will be no benefits from economy of scale or opportunity to reinvest in new areas
	Individual ESCOs will require to source their own funding and there will be limited opportunity for central support. Subject to the scale of the projects this may reduce their attractiveness
	The growth of energy related services is likely to be piecemeal rather than driven by a wider strategy or growth in market opportunities.
	It will be difficult to build up a trusted brand

4.5 OPTION 4 – ESCO- STRATEGIC-WHOLLY-OWNED

This option considers setting up a strategic ESCo wholly-owned by ACC that is not restrained in scope. It could develop projects, partnerships and new ventures across a range of sectors of the energy market in line with its agreed business plan.

This option would establish an entity that had fewer restrictions on growth. It could develop the skills and resources to focus on growing energy related services in a way that will benefit the citizens and businesses of Aberdeen while at the same time it could develop projects that can generate income for reinvestment in energy related services and for the Council.

Under this option the development of energy related services could be driven by a wider strategy allowing the ESCo to identify and respond to new market opportunities.

This option would bring all energy related services into one organisation. Some of the services currently provided directly by the Council could move into the ESCo if appropriate business cases can be made. The ESCo would focus on developing a trusted brand for energy related services and seek to attract investment to grow and develop the business.

Table 4 – Pros and Cons of Option 4

Pros	Cons
No limitations on growth subject to the agreed business plan	Investment required to establish entity
Development of energy related services will be driven by a wider strategy governed by a business plan process and under the overarching Council strategy.	Potentially some higher risks for ACC that need to be carefully managed through a business planning process
A larger well-established entity will find it easier to attract investment and build a loyal customer base	Governance structure needs to be defined in a shareholder agreement and KPI's established
There will be the potential to reinvest profits from one part of the business to support activity in other parts of the business.	The entity would require to employ additional commercial, technical and marketing skills which would need to be factored into the business planning process.
The company will be able to provide wide-ranging services in response to market demand	
It will have the ability to respond quickly to market changes and will be able to take advantage of new markets as they develop e.g. energy storage.	
There will also be the potential to support third party projects with other public sector bodies, the private sector and community energy companies	
Offers the potential to develop a core skill set to run multiple projects	
Energy related services will be delivered through a self-sufficient entity rather than at a public cost	

4.6 COMPARISON OF KEY EVALUATION CRITERIA

The different options considered above have been evaluated using a number of evaluation criteria. These criteria were developed on the basis of a workshop held on the 22nd June 2016 where the

opportunities, risks, benefits and critical success factors of establishing an ESCo were discussed. These criteria are set out below and the evaluation is presented in Table 5 below.

- Must be capable of providing strategic leadership for Powering Aberdeen and clarity about the city’s priorities.
- Must be capable of engaging public, private and community stakeholders in developing and implementing innovative solutions across the energy agenda.
- Must be capable of attracting substantial external resources to get programmes off the ground.
- Must be flexible enough to adapt and exploit new opportunities quickly.
- Must be capable of being self-sufficient
- Must be capable of being held to account by the Council for progress and Council spend.

Table 5 - Options evaluation

Scoring key: Meets criteria=green, Partly meets criteria = orange, Fails to meet criteria =red

Criteria	Option 1 In house	Option 2 JV ESCo to supply energy.	Option 3 Council owned project specific ESCo	Option 4 Council owned strategic ESCo
Strategic leadership for Powering Aberdeen and clarity about the city’s priorities.	ORANGE Council could lead through its members and officers but may lack sufficient specialist skills as not a core activity for Council. Lack of billing and customer service engine to manage energy generation which would either need to be developed or bought in.	RED Would have a brief to build and supply energy through specific schemes. Couldn’t take a holistic view of the city’s needs. Less control over direction and activity. Limited scope	RED Would be focussed on delivery of a single project so would lack a strategic approach to wider energy related opportunities. The growth of energy related services is likely to be piecemeal rather than driven by a wider strategy or growth in market opportunities.	GREEN A strategic ESCo would look holistically at the cities priorities and Powering Aberdeen and would be able to consider these across different activities. Work to an agreed business plan under the overall ACC strategy.
Engage public, private and community stakeholders in solutions.	ORANGE Private sector partners may become frustrated with Council processes and timescales.	ORANGE Model could engage all relevant partners for a specific scheme but not for the city as a whole.	GREEN A strength of current Council ALEOs is their stakeholder engagement. Greater potential to engage other parties through project specific entities but more difficult to build a trusted and cohesive	GREEN Ownership model would ensure stakeholder engagement. There will be the potential to reinvest profits from one part of the business to support activity in other parts of the

Project Name: Developing an ESCO

			brand.	business.
Attract substantial external resources into programmes.	RED Council's powers to raise some types of funding are restricted. Could face resource and skill constraints.	ORANGE Able to raise funds for schemes covered by the ESCo but this is not likely to cover the range of issues covered by Powering Aberdeen.	ORANGE Could have powers to raise funding but would be restricted to the activity of the ESCo.	GREEN Could have powers to raise funding and develop business models across a range of projects and with a range of partners.
Flexible to adapt and exploit new opportunities quickly	ORANGE Likely to face limitations as to potential to grow Council processes make it hard to respond quickly and flexibly.	ORANGE Could be expanded beyond initial brief depending on partners but may be differing objectives. May be a procurement issue depending on initial choice of partner.	RED Would be focussed on a particular project so would not have the flexibility to exploit new opportunities unless they were considered to be within the organisations area of operation. Limits to growth and investment.	GREEN Could have powers to set up subsidiaries, enter into JVs etc.to provide wide-ranging services in response to market demand and take advantage of new markets as they develop e.g. energy storage, subject to these forming part of the agreed business plan.
Must be capable of being self-sufficient	ORANGE No set-up costs. Use existing staff. Likely to be project specific. Surpluses could be used in any way deemed fit by the Council so there would be no guaranteed re-investment in programmes that further the objectives of Powering Aberdeen.	GREEN Benefits are shared set up costs, resources and expertise. Would require lengthy procurement process; and significant professional fees. Any profits split with private sector partner. Surplus to Council but likely to be for general use.	GREEN Limited potential to build core skill set. Lower set up costs Economics will be project specific. No ability to re-invest in other projects.	GREEN Entity will be set up with a business plan to be self-sufficient based on projects identified. Surpluses generated to be reinvested in entity to ensure it is self-sufficient after initial start-up costs.

Capable of being held to account by the Council for progress and Council spend.	<p>GREEN</p> <p>Officers accountable to the Council members through the Economic Development Committee.</p> <p>Need to define new structures and internal ownership to ensure effective delivery.</p> <p>Lower set up costs.</p>	<p>ORANGE</p> <p>Would be held to account for the specific schemes it was set up to run but governance structure would include representatives from the external investor that might have different priorities from the Council.</p>	<p>GREEN</p> <p>Would be accountable in the area of activity covered by the ESCo but not the wider delivery of powering Aberdeen.</p>	<p>GREEN</p> <p>Wholly owned by the Council; Board appointed by the Council with external non-executive directors with relevant expertise.</p> <p>An agreed three-year rolling business plan with KPI's set in agreement with Council.</p>

On the basis of the above options appraisal and evaluation the Council owned strategic ESCo is the only option that meets all the criteria; therefore it is proposed that ACC set up a Council owned strategic ESCo.

4.7 CONSULTATION

The options appraisal and supporting proposal have been informed by the outputs of a workshop held with key internal stakeholder on the 22nd June 2016. A full list of stakeholders consulted in putting together this paper is presented in Appendix A. The workshop discussed the following:

- Is participation in an ESCo desirable?
- How might this be structured to facilitate projects?
- What benefits might we expect to arise?
- What projects should the ESCo take forward?
- What issues should the ESCo address?
- Will public sector invest – in cash or in kind?
- What high level risks do we see with an ESCo?
- What is required to secure approval – detailed business case?
- What will be the approval processes?

Informal discussions have also been held with Aberdeen Heat and Power. These will be followed by more detailed discussion as part of the business planning process to determine the appropriate operating model.

Overall there is agreement, that in principle an ESCo is an appropriate way to help achieve the identified targets of lowering carbon emissions, reducing energy costs, increasing economic activity and reducing fuel poverty. A business plan with a cost/benefit/risk analysis has been identified as

the next step in order to fully examine the potential projects that could be progressed by the ESCo and the legal, governance and management structures as well as risks and financial rewards.

5 SCOPE, VISION AND PROPOSITION

5.1 SCOPE

In line with the outcome of the options appraisal it is proposed ACC should establish a strategic ESCo with its scope established in a rolling three year business plan. It should be able to become involved in activity relating to the management, generation and distribution of energy including demand management, alleviation of fuel poverty and innovative projects such as energy storage.

The intention is that the ESCo will become self-funding with the ability to reinvest profits to develop and grow the business.

5.2 VISION

The ESCo will support delivery of the vision for Powering Aberdeen.

“By 2030 Aberdeen is a vibrant, world class city which is an attractive and sustainable place to live and do business. The economy has diversified and is supported by efficient, low carbon buildings and transport infrastructure. The health and wellbeing of citizens continues to improve and fuel poverty has been eliminated. Carbon emissions have reduced by at least 50%. “

Establishing an ESCo will help:

- Diversify the economy
- Improve energy efficiency
- Improve energy security
- Reduce carbon emissions; and
- Reduce fuel poverty

5.3 THE PROPOSITION

On the basis of the options appraisal undertaken in Section 4 it is proposed that ACC should establish an ESCo as an arms length external organisation (ALEO) wholly owned by the Council.

The scope of the ESCo should not be limited in order to allow it to develop and evolve services and projects in response to the needs of the city and its businesses and residents. This is considered particularly important in what is a rapidly evolving market. It will also allow the organisation to explore the potential for new partnerships, technologies and innovation.

A wholly-owned strategic ESCo could fulfil its role directly by entering into partnership with investors and communities (perhaps through project specific special purpose entities, joint venture entities or social enterprises) or it might facilitate partnerships between others. Critically, it needs to be entrepreneurial and collaborative in its outlook, quick to respond to opportunities, imaginative with its solutions and commercially astute.

Appendix B indicates the range of types of projects already being undertaken by ACC that could be considered for inclusion in the ESCo. These include for example:

- Sale of heat and power from the Energy from Waste plant and the development and establishment of the associated heat network.
- Provision of domestic energy efficiency services by project management of projects and services currently delivered in-house and by potentially supplying the contracting services.
- Potential to provide a wider range of energy efficiency services for both Council and non-Council buildings possibly through energy performance contracts.
- Growing energy generation capacity through for example a solar PV farm at former Ness landfill

ACC already has an ESCo involved in the management of certain specific energy services in the form of AHP. AHP has considerable experience in developing heat networks that they can bring to bear. Early discussion has taken place but further more detailed consideration is necessary to determine the most effective operating model by which the ESCo and AHP can deliver Powering Aberdeen. This might include evolving AHP to become a wider entity or incorporating AHP in an appropriate way into the new body. In consultation with AHP the appropriate way forward will be determined for the detailed business plan.

The activity to be undertaken and the potential structure of the ESCo now needs to be the subject of a detailed business plan.

5.4 LEGAL AND GOVERNANCE

The legal constitution of the entities in the ESCo as well as the board and governance arrangements will be developed in discussion with Council officials taking into account current experience of the existing ACC ALEO's and other current guidance. This will form part of the business plan that would also contain recommendations regarding management and staff structures to deliver the projects proposed for the ESCo.

The proposals should follow evolving Council governance arrangements. The Board could include a mix of Council members and external recruits with experience in energy and finance amongst other skills. Careful consideration will given to the role of AHP within this process.

Legal model

Scottish Future Trust working with Brodies and the Heat Network Partnership has recently published a document entitled "Legal Guidance on establishing Energy Service Company". This document indicates that there are three legal models that are suitable to use to establish an ESCo if they are not limited to community schemes. These are:

- Company limited by shares
- Company limited by guarantee
- Limited liability partnership

These characteristics of these different structures and their suitability for an ESCo are summarised in Table 1 below which is an extract taken directly from the above document.

Legal form	Separate legal personality	Limited liability	Suitability for financing	Ability to grant security	Profit/Not for profit	Flexibility (ease of exit)	Tax transparent
Limited liability partnership	Yes	Yes	Full	Full	For profit	Yes	Yes
Company limited by shares	Yes	Yes	Full	Full	Either	Yes	No
Company limited by guarantee	Yes	Yes	Good	Good	Not for profit	No	No

An early decision needs to be made as to which is the preferred option. As part of the business planning process these options would be discussed and examined in more detail with the ACC legal team. It also needs to be determined whether the ESCo will be for profit or not for profit and how any profit will be distributed or reinvested. On the basis of the recent workshop discussion with Council officials that took place as part of developing this business case the general view was that the ESCo should be for profit but that at least initially the profit should be reinvested in the entity rather than distributed to shareholders. In either event the proposal is that the ESCo should be a self-sustaining commercial entity that is ultimately not dependent on ACC.

Governance

Once the legal structure is agreed the governance structure needs to be established and a draft shareholder agreement developed. This needs to consider the following issues:

- How it will implement its objectives-the business planning process
- How and by whom the ESCO will be managed.
- Policies and procedures for the management and monitoring of the ESCO.
- Other policies and procedures; and
- The relationship between the ESCO and its parent public body or bodies.

In establishing the governance structure ACC will take account of its considerable experience in establishing and managing (Arm's Length External Organisations) ALEOs. A review is currently underway looking at the governance structures of existing ALEOs, what is working and not working to bring all ALEOs together under one governance structure. The work being undertaken in this review will be important in informing the governance structure for the ESCo going forward. We are liaising with legal services in this regard and will factor this work into the proposed business plan.

As part of this we will also consider the skills required from core staff and external non-executive directors to support the diverse and complex activities of the proposed ESCo. A range of experience including commercial, technical and financial will be critical to support the business and the management team.

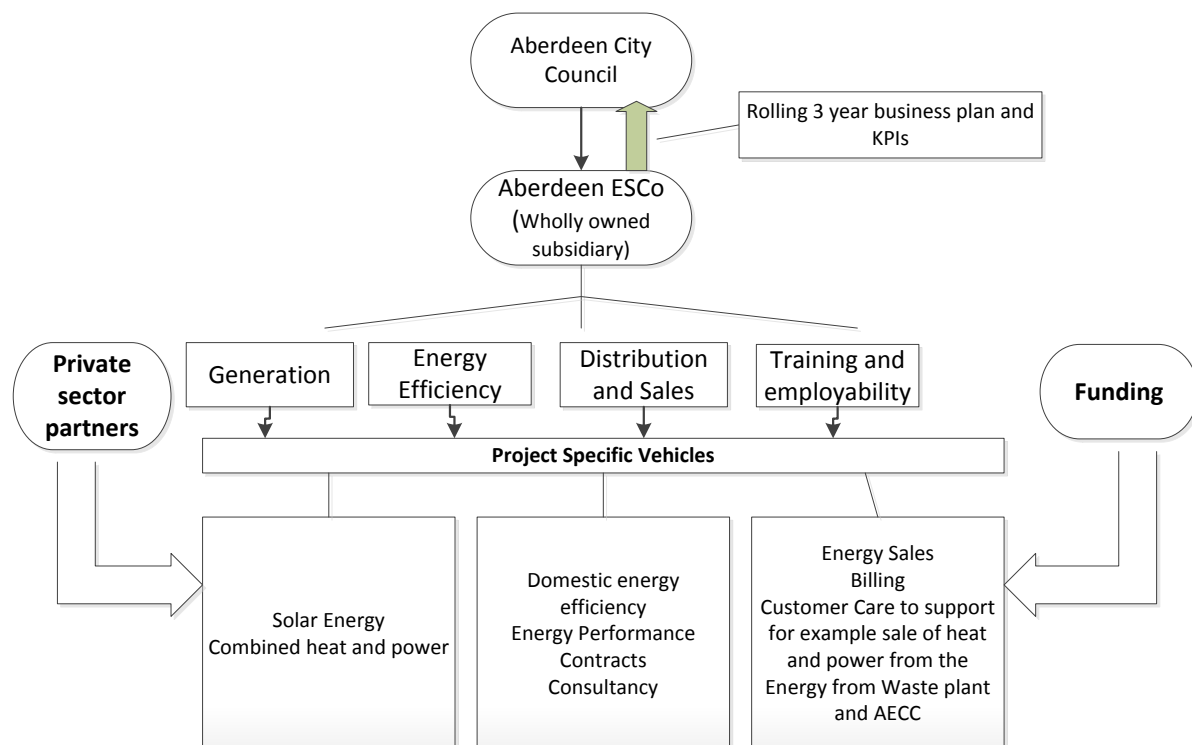
Organisational Structure

An appropriate structure for the organisation needs to be agreed. One structure that was discussed at the recent workshop could be to establish a number of divisions representing the core areas of activity of the ESCo which could be:

- Generation – all generating activity would sit in this division including for example Aberdeen Heat and Power, solar projects and other renewable energy projects.
- Distribution and sales – this division would deal with the buying and selling of energy from for example the Energy from Waste plant, distribution to and management of customers including sale of energy. This activity is likely to be delivered in partnership with a third party. Identifying this third party would be an early activity of the ESCO.
- Energy services – this would cover demand management such as energy efficiency services.
- Other - this could cover innovative projects such as energy storage or other new technologies that may emerge.

These divisions would sit under the central structure. Within each division there would be the option to grow the business or deliver the service either through Council only funded activity or in partnership with a third party. To that end project specific special purpose subsidiaries would be established as appropriate. There would be the potential to secure funding at the individual project level or potentially to create a separate investment fund for projects managed by the ESCo. Figure 1 shows this proposed outline structure.

Figure 1 – Possible structure of the ESCO



Business Plan

The next stage is to develop a business plan to develop the ESCo. As part of developing the business plan the following needs to be undertaken.

- Agree a legal structure for the organisation
- Establish a governance structure
- Identify and agree a priority project list
- Develop a staff and management structure and job descriptions
- Develop initial resource and funding requirements
- Develop an initial business plan for the first three years.

Monitoring and Measurement

The success of the ESCo will be measured by tracking the number of energy schemes it has helped deliver and its achievement of a number of objectives including these examples:

- Reducing energy costs
- Increasing the proportion of energy sourced from renewables
- Reducing carbon emissions
- Creating jobs through sustainable energy projects.
- Reducing the number of people in fuel poverty.
- Increasing partnering activity and the number and range of energy efficiency projects.
- Reducing energy consumption.
- Generating income.

Key Considerations

The phasing of the development of the ESCo will be a key consideration in the business planning process. An initial project list has been developed and establishing timelines and priorities to progress these projects will be part of the detailed business planning process. Key projects would be to establish a billing and customer service facility to manage the sale of heat and power from the Energy from Waste plant, the planned expansion of the Aberdeen Heat and Power network and the potential sale of surplus energy from the Energy Centre at the AECC.

The role of Aberdeen Heat and Power also needs to be carefully considered. Early discussions have taken place but more detailed discussion is required to determine the most appropriate way to integrate them into the ESCo.

5.5 RATIONALE FOR THE PROPOSAL

An ESCo will help deliver the objectives of Powering Aberdeen and provide the vehicle to ensure we realise a number of major projects that are in progress in particular developing the heat networks from the energy from waste plant and the energy centre at the AECC.

A strategic ESCo will open up the opportunity to further build local energy generating capacity within the city, further extend the heat network, address fuel poverty issues and provide a range of

supporting services. Without an ESCo the ability of the Council to progress projects in these areas will likely be constrained by the necessary skills and resources.

Bringing these activities together into one ESCo will provide benefits from economy of scale through sharing of skills and resources relevant across many energy related projects, a vehicle to encourage private investment and a flexible framework through which we can develop and grow new services.

The ESCo can draw in a variety of partners and users to maximise the impact from the project pipeline. In this way more efficient projects are created and cost sharing and income generating opportunities are optimised; potentially through the bundling of projects to enable otherwise challenging projects to be implemented.

5.6 MAJOR RISKS AND ISSUES

The following issues and risks were identified as part of the process of preparing this paper:

5.6.1 There is no dedicated Council budget currently attached to this proposal

It is essential that if ACC decides to establish a strategic ESCo to deliver energy services that it is provided with the necessary financial and staff resources to be successful. Ultimately the ESCo should look to generate revenue to be self-sustaining however this is unlikely to cover the whole cost of the early years activity. Resources are already being expended on energy efficiency projects and these could be consolidated under the ESCo structure. Discussions should also be commenced with the Scottish Government and other potential funding sources to identify potential support.

5.6.2 The right skill set cannot be procured

The success of the ESCo will depend on being able to recruit the right skill base to support it's development in particular commercial and marketing expertise. If the necessary resource or skill base is not provided the likelihood of commercial failure is high as is the case in any commercial organisation. Lack of resources or the right skills will impact on the ability of the organisation to look for growth opportunities, to provide the quality of service necessary to build the positive reputation of the organisation which will in turn impact on its ability to attract customers and investment as discussed below. The right skill sets will be established as part of developing the business plan. Contingency measures could include secondments and interim employment as required.

5.6.3 The capacity of the company in the early years is significant restricted

It is important that the new ESCo team is appropriately resourced to develop and bring on stream projects quickly. This situation will be helped by the fact that projects that could be managed by the ESCo are already in the pipeline and can be brought into the ESCo at the appropriate time subject to an appropriate business case.

5.6.4 Lack of credibility of the ESCo

The ability of the ESCo to succeed in growing a customer base and attracting investment will depend on building a credible organisation with a credible brand. This will be necessary to grow the customer base and attract investment. The success of the ESCo will depend on it being able to generate income streams from projects, maximise the sale of heat and power and being able to invest in areas such as growing heat networks that will require the ability to raise funds and investment at scale.

5.6.5 Lack of flexibility

The relationships between ACC and the ESCo must be such that ACC is able to retain the necessary control to ensure that the ESCo delivers on its objectives but must not limit the ability of the organisation to be flexible and respond to market demand and enter new markets. One of the benefits of establishing an ESCo is that as a separate organisation that needs to be commercially viable the organisation needs to be looking for new opportunities to maximise on its investment and to grow new income streams.

5.7 EQUALITY IMPACT CONSIDERATIONS

An Equality Impact Assessment based on the recommendation is provided in Appendix C.

5.8 CHALLENGES AND OPPORTUNITIES

The potential challenges and opportunities associated with adopting the proposition set out above are summarised below

Challenges

- *Investment required to set up the ESCo* - ACC will need to make investment in setting up the ESCo, establishing it as a legal entity, bringing in appropriately skilled resources to manage and run the ESCo and establishing an appropriate governance structure.
 - *Attracting the necessary skill base* – the success of the ESCo is dependent on being able to invest in and attract people with the necessary skills. This involves the need to offer competitive salaries and benefits.
 - *Finding the right partners* – the success of the ESCo in progressing projects will depend on finding the appropriate partners given the complexity of energy projects. The careful selection of the right partner for a particular project will be an important activity for the future ESCo.
 - *Managing commercial risks* – any commercial organisation carries with it commercial risks. This needs to be considered when establishing the entity and developing the various contractual models to deliver specific projects. These risks will be considered in more detail during development of a detailed business plan and appropriate mitigation measures identified to manage them.
- Retaining influence* – In setting up an ESCo there may be concerns about ACC's ability to retain influence over the services run through the ESCo. There will be a balance to be had between allowing the ESCo the flexibility to be able to respond to market issues while at the same time ensuring it is delivering ACC's objectives. This will be addressed in detail in the business plan and governance structure.

Opportunities include:

- *Initial investment* – although there would be costs in establishing the ESCo, ACC is a unique position in that it has already committed investment for the development of energy generation activity that could be assigned to the ESCo.
- *Income generation* - the aim of the ESCo is to be self-sustaining and potentially to generate income for the Council through the energy projects it develops.
- *Offering affordable, sustainable heat and power* – through the ESCo Aberdeen will be able to offer heat and power across the city at affordable, sustainable prices to both businesses and residents. The potential to establish a local tariff with appropriate metering and billing mechanisms will be developed as part of the detailed business planning process. An important consideration will be to ensure the Council develops the ability to offer those in fuel poverty heat and power at affordable, sustainable prices.
- *Developing the heat network* – ACC has ambitions to extend the existing heat network into the city centre and beyond. Bringing all activities that produce heat under one body will make strategic planning for expansion of the heat network easier. It will also provide a more viable entity through which to raise capital and funding for this expansion either through partnership or raising capital from third parties.

- *Attracting investment* – the ESCo as a separate body to the Council is likely to be better able to attract project finance either through private sector investment or other finance bodies. The extent to which ACC may be required to underwrite any of these deals will need to be carefully considered as part of the risk assessment to accompany a detailed business plan. Such an underwriting could be through financial support or guaranteeing a level of offtake from generating plant.
- *Opportunity to reinvest* – by establishing the ESCo as a commercial entity any profit can be reinvested in a way deemed suitable by the ESCo, arrangements for management of profits need to be established when the ESCo is formed.
- *Employment opportunities* – the establishment of the ESCo will require the need to employ a number of people with the necessary commercial, financial and business development skills to establish and grow the ESCo.
- *Skills development* – the ESCo will provide the opportunity to develop a local skill base for the activity delivered by the ESCo in particular relating to alternative energy and the low carbon economy.
- *Greater energy security* – by establishing a local energy company incorporating local energy generation and distribution ACC will increase energy security for the people and businesses in Aberdeen city and potentially beyond.

In summary the ESCo model whether public or private sector is gaining momentum as a way to deliver energy projects. At a time when energy prices and security are an increasing concern the development of a local generation and supply capacity based on a mix of technologies offers the council the opportunity to deliver on a number of its core objectives. There are issues to be addressed but the opportunities offered by an ESCo structure and the ability to facilitate the delivery of Powering Aberdeen as well as other challenging issues around energy supply make the development of such an entity a logical route forward.

6 RECOMMENDATION

RECOMMENDATION

It is recommended that ACC further investigate the option to set up a strategic ESCo as an arms-length external organisation (ALEO) wholly owned by the Council to manage all energy related activity undertaken by ACC with the option to expand and develop energy related services over time.

It is recommended that a Working Group reporting to the, Director of Communities, Housing and Infrastructure and led by a project manager from that department should take forward the development of the business plan. The Working Group would include relevant internal energy experts as well as representatives from legal and finance. Appropriate external support would also be included to facilitate the development of the business plan. The principal role of this group would be to undertake the following:

- Agree a legal structure for the organisation
- Establish a governance structure
- Identify and agree a priority project list

- Develop a staff and management structure and job descriptions
- Develop initial resource and funding requirements
- Develop an initial business plan for the first three years.

It is proposed that this work will be undertaken from August to December 2016 with a view to presenting the business plan to Full Council in December 2016, with the intention that the ESCO be established in early 2017.

6.1 RATIONALE FOR THE RECOMMENDATION

Although the establishment of a strategic ESCo appears to be the best route in principle, further work to develop a business plan addressing the issues identified in this paper around structure, projects and establishing an economically viable entity requires to be undertaken.

An important element of the business planning process will be to establish the role of AHP which already exists as an ESCo to manage specific energy services associated with developing heat networks. Early discussion has taken place but further more detailed consideration is necessary to determine the most effective way of bringing the ESCo and AHP together to deliver Powering Aberdeen. Options might include evolving AHP to become a wider entity or an activity within the new body.

It is also necessary to undertake more detailed work to address how ACC will manage any risks associated with the establishment of the ESCo and the appropriate governance structure for the proposed entity. The next phase of the project, putting together a detailed business plan will consider all these issues in more detail.

7 STRATEGIC FIT

7.1 INTRODUCTION

At a national level the Scottish Government has set ambitious targets to reduce carbon emissions. Specific targets have been set for renewables generation which are 100% of gross national electricity consumption and 11% of heat consumption by 2020.

Aberdeen City Council has developed Powering Aberdeen as the vehicle to support the Scottish Government in this ambition by setting city wide carbon reduction targets and plans to deliver this by improving energy efficiency, increasing use of renewable and alternative energy, managing resource more efficiently and moving to more sustainable transport. Through the Powering Aberdeen programme the ambition is to eliminate fuel poverty in the city and to support diversification of the economy by attracting new skills and technology to the area.

The ambitions of Powering Aberdeen are also echoed in:

- Aberdeen-The Smarter City - Smarter Environment – includes the following core themes.
 - *We will design and construct all new infrastructure to be energy efficient by maximising the use of low carbon technology and materials. We will use recycled materials where appropriate.*
 - *We will increase energy efficiency and introduce carbon reduction measures in our processes and our housing and non-housing assets to reduce our carbon footprint, save money and to bring people out of fuel poverty.*

- The Community Plan and Single Outcome Agreement - sets the ambition for Aberdeen to be a socially, economically and environmentally sustainable city.
- The five year business plan 2013-2018-sets sustainable economic growth for the benefit of national outcomes as a key priority.

The ESCo will support the delivery of these objectives and will act as a key delivery mechanism for Powering Aberdeen. By bringing together all energy related activity in one place the city will be better able to support the Scottish and UK Government and deliver local ambitions to provide affordable, low carbon energy to residents and businesses in the city and to promote improvements in energy efficiency.

7.2 FINANCIAL AND NON-FINANCIAL BENEFITS

- The ESCo will be a key vehicle to deliver the objectives of Powering Aberdeen as it will provide a vehicle through which to grow energy demand services, increase generation using alternative technology and grow the heat network.
- Overtime the ESCo will have the potential to provide an income stream for the Council. Some of the services currently provided directly by the Council are likely to move into the ESCo if appropriate business cases can be made reducing costs to the Council.
- It will help to reduce emissions, alleviate fuel poverty, create economic and employment opportunities.
- A strategic ESCo will provide a central resource with the necessary skills and expertise to manage energy related services in a strategic way that maximises the benefit of investment and allows skills sharing and resource sharing across energy related services.
- The presence of a strategic ESCo will allow ACC to build a trusted brand for energy related services which will be necessary to expand these services, attract funding and grow the customer base.
- By not limiting the activity of the ESCo it will be able to exploit new market opportunities and have the potential to encourage innovation.
- The ESCo will provide a vehicle to bring together a range of partners to facilitate the delivery of projects and act as an ambassador for energy efficiency measures in the city.

7.3 DIS-BENEFITS

- Investment will be required to establish the ESCo through initial staffing prior to it becoming income generating.
- The Council will need to provide resource to monitor the activity of the ESCo
- By not limiting the scope of the ESCo this opens the company to potentially higher commercial risks. These need to be managed on a project by project basis.

7.4 CRITICAL SUCCESS FACTORS

There are a number of critical success factors associated with establishing an ESCO.

- The ESCo must be capable of providing strategic leadership for the development of the projects being managed through the ESCo and there must be clarity around stakeholder priorities.
- The ESCo must be capable of focusing single-mindedly on achieving the agreed objectives.

- The ESCo must have credibility and be capable of engaging public, private and community stakeholders in developing and implementing innovative solutions across the energy agenda.
- It is very important that the ESCo has sufficient financial and staff resources to deliver projects.
- It must be capable of attracting external funding.
- It must be flexible enough to adapt and exploit new opportunities quickly.
- It must be capable of taking and managing risk to facilitate development
- It must have an appropriate governance structure that reflects stakeholder interests.

8 IMPLEMENTATION COSTS

The next stage is to develop the detailed business plan for the ESCo over the period to December 2016. It is proposed that a Working Group is established to oversee the development of the plan and that this should meet fortnightly during the development period. A project manager from Communities, Housing and Infrastructure will lead the development of the business plan. We would utilise internal resources and existing guidance and precedents as much as possible however we are aware that internal resources are constrained. We estimate that we will require external support to develop the business plan in the areas of commercial structuring, financial modelling and some limited legal input. At this stage we estimate that these costs would be between £30,000 and £45,000 (excluding VAT) for external support.

9 APPENDIX A-STAKEHOLDER ENGAGEMENT

The following stakeholders were interviewed and/or involved in the collection and preparation of the information contained within this proposal:

Table 25 - Project Stakeholders

Name	Role	Service Group represented
Pete Leonard	Director	Communities, housing and infrastructure
Terri Vogt	Powering Aberdeen-Programme Manager	Planning and sustainable development
Scott Ramsey	Project Manager AECC	Economic development
Amy Perry	Project Officer involved in AECC and hydrogen project	Economic development
Kevin Christie	Senior Domestic Energy officer	Land and property Assets
Mai Muhammed	Energy manager	Land and property Assets
Carlo Grilli	Legal	Commercial and procurement services
Amye Robinson	Funding	Economic development
Scott Patterson	Senior Finance Officer	Finance
Helen Sherritt	Finance	Finance
Leona Lowe	Finance	Finance
Pete Lawrence	Waste and Recycling Manager	Public infrastructure and environment
David Leslie	PMO	Corporate Governance
David Dunne	Senior Planner	Planning and Sustainable Development
Ian Booth	Chief Executive	Aberdeen Heat and Power

10 APPENDIX B-PROJECT LIST

Projects that could be incorporated into the ESCO

Below is an initial list of projects that will be refined and developed as part of the business planning process.

Project	Description	Status	Capex	Timescales for delivery	Role ESCO Might play
Energy from Waste plant	Being developed to manage non-recycled waste which will be used to generate heat and power. Partnership project with Aberdeenshire and Moray Council	Planning stage, still to get planning permission	Funded separately to ESCo	To be up and running by 2021	Sale of heat and power
Tullos District Heating Network	This will take the heat from the energy from waste plant and distribute it to Tullos and possibly beyond.	Initial business case prepared. More detailed costs for development of the network being developed	Business case suggests Phase 1 – £5-10M Phase 2 - £31-50M	Available for connection by 2021	Invest in and install heat network
Anaerobic digestion plant at AECC	This will be located at the AECC and will generate gas to be sold to the gas network.	This will be part of a design and build contract which is at the competitive dialogue stage		July 2017	There is probably no foreseeable role for the ESCo in the short term as will be managed by a third party.
Energy Centre AECC	This will be a CHP plant that provides heat to a district heating system which will run throughout the AECC site and power to the grid.	Design and build and operate and maintain contracts will be established for the energy centre.		July 2017	No role initially as will be operated by a third party.
Supply of	Two district heating	Planned	None	Not	Extension of the heat

Project Name: Developing an ESCO

heat beyond the AECC boundary	spurs will be established from the AECC network towards the airport and proposed housing to allow these areas to be connected into the heating system in the future.		allocated	established	network beyond the AECC boundary will require sales, billing and customer service facilities that could be made available through the ESCo.
Aberdeen Heat and Power	Provide heat to 2050 flats in 33 multi story blocks and 13 public buildings. Further multi storey blocks to be incorporated over the next three years.	Operating ESCO since 2002	£3.64M per year over next three years	2016-2019	Support investment in and management of the current network to allow more rapid expansion to the city centre and to provide the metering, billing and customer support expertise necessary to deliver this.
Domestic energy efficiency services for private housing	Delivered through annual funding provided primarily by the Scottish Government. Home Energy efficiency programme to be replaced by SEEP Pathfinder fund. Historically match funding was available through ECO funding (fuel company obligation) but this is no longer available to LAs given directly to contractors. Some LA funding to develop area schemes. Delivered through contractors.	On-going but relies on annual applications for funding	Averages £2M per year	Annual budgets based on government funding although this will move to 3 years in 2018.	ESCO could deliver the work and employ their own contractors either in our out of house. This will open up the opportunity to apply for wider funding options in particular through the ECO fund where all money is now going to contractors.
Housing Revenue Account	Rent income used to maintain and improve Council properties which includes activity that improves energy efficiency. Driven by EESH. Annual schemes to blocks of flats of various numbers. Delivered through	On-going annual budget	There could be various aspects the ESCO could take on such as Insulation, maintenance and management	Annual budget project by project	The ESCo could manage procurement on behalf on the council and deliver through their own procurement arm. Undertake delivery locally and ability to undertake faster

	third party contactors mostly from out with Aberdeen.		of heating systems Funding allocated on a project by project basis.		procurement. A key challenge in public engagement expertise which the ESCo could build up.
Energy efficiency services	Provision of energy management services and energy efficiency advice in connection with the management of Council buildings and new builds. Spend to save budget.	On-going			Potential to provide this as a wider service through the ESCo for non-Council buildings and to consider providing a service through energy performance contracts.
Small scale renewables	ACC have PV as part of a rent to lease contract on relevant council buildings. There is the option to buy these and make the income. There are a number of other one off micro renewable installations.	One off installation exercise	Council provide roof space but contractor gets the income.	On-going	ESCo could buy out PVs and make the income. ESCo could also assist in developing additional small scale renewable projects for Council properties and non Council properties and work with communities to maximise carbon benefits.
Ness landfill solar farm	There is the potential to install a solar farm on a former landfill owned by Aberdeen city Council. Early feasibility work has been undertaken but needs updating.	Feasibility (needs updating)	Non allocated	None determined	Establish and manage a solar PV farm at Ness
Vertical wind turbines	Feasibility study currently being undertaken in conjunction with the Scottish cities alliance which will consider the options for the use of these turbines in Aberdeen.	Feasibility	Non allocated	None determined	Could be installed and managed through ESCO if deemed commercially viable
Hydrogen fuelling station at Cove	ACC are currently building an hydrogen fuelling station at Cove. This is fully	Under construction		For completion by end of 2016	This could be operated by the ESCo in the future if deemed appropriate.

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	owned and operated by the Council.				
22 city centre electric vehicle charging points	There are 22 electric charging points across the city. Usage is currently small and paid by the council but in the future as usage increases billing arrangements may need to be put in place.	Existing	Infrastructure paid for. Electricity use paid for by ACC.		In the longer term these could be managed and billed through the ESCo
Energy Performance certificates	Council has a number of staff who do the EPCs on ACC housing stock	On-going	NA	NA	This could be offered as a consultancy service

11 APPENDIX C – EQUALITY IMPACT ASSESSMENT

This Equality Impact Assessment (EIA) is based on the recommendation presented in this paper.

11.1.1 What is the title and aim of the activity?

A proposal to establish a strategic Energy Services Company (ESCo) for Aberdeen City Council which would be fully owned by the Council and established as an arms length entity. The paper seeks approval to develop a more detailed business plan for the proposal

11.1.2 What evidence was used in the assessment?

Consultation has been undertaken with a small group of employees who have an interest in the establishment and activity of an ESCo.

The experience of other local authorities in setting up an ESCo was considered.

11.1.3 Are there any gaps in evidence and what measures will be taken to fill them?

No gaps in evidence have been identified at this stage, more detailed consultation with employees will be required as we move to developing the detailed business plan.

11.1.4 What are the positive impacts on protected groups?

At this stage there are no positive or negative impacts on protected groups. As a wholly owned subsidiary of ACC any future recruitment by the ESCo would need to be in line with ACC's equality policies.

11.1.5 What are the negative impacts on protected groups?

None identified.

11.1.6 What steps are being taken to improve relations between groups?

As part of developing the more detailed business plan for the operations further consultation will be necessary.

11.1.7 How does it create opportunities for advancing equality of opportunity?

One of the objectives of the ESCo is to be able to provide affordable heat and power as part of the drive to reduce fuel poverty in the city which is likely to benefit those with disabilities and older citizens

11.1.8 What equality monitoring arrangements will be put in place?

KPIs for managing the ESCo will be established as part of the detailed business planning process which need to consider equality monitoring. A KPI in relation to fuel poverty and average energy costs is likely to be included which will assess the impacts if any the ESCo is having on the disadvantaged.

11.1.9 What is the outcome of the assessment?

No negative impacts have been identified at this stage.

12 APPENDIX D - GLOSSARY OF ACRONYMS

Table 31 – Glossary of Acronyms

ACC	Aberdeen City Council
AHP	Aberdeen Heat and Power
ALEO	Arms Length External Organisation
ESCo	Energy Services Company
KPI	Key Performance Indicator