A Sustainable Energy Agency for Cumbria

Business Plan

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1 Executive Summary

Executive Summary

Current national policy, local initiatives and the wealth of natural resources in the county make the setting up of an Energy Agency for Cumbria timely and appropriate. The purpose of the Agency will be to promote low-carbon distributed energy and energy efficiency ('sustainable energy') in the County. This business plan sets out a road map for establishing the Agency and a proposed programme of activity to ensure its success. The plan has been drawn up after consultation with stakeholders and consideration of the framework in which it will have to operate.

The Cumbrian Economic Strategy identifies 'Energy and the opportunities of the low carbon economy' as one of two simple strategic priorities. The purpose of this proposal is to ensure Cumbria has an effective agency that helps meet this priority.

The strategic aims of the Agency are:

- To reduce carbon emissions, in line with national and local targets
- To increase economic opportunities and employment in sustainable energy
- To reduce fuel poverty

The Agency's delivery objectives are:

- To work at a strategic level, in line with Cumbria's Economic Strategy, to improve opportunities for sustainable energy in Cumbria
- To link strategy with delivery, through exemplar projects
- To maximize Cumbria's share of funding for sustainable energy, from the public and private sector
- To be a hub of information on sustainable energy issues, providing impartial, independent initial advice and support

The Agency will be a social enterprise, with charitable status, governed by Trustees acting in an individual capacity. A small core of staff will provide the strategy, overview, information hub, and administration. To ensure flexibility and to allow the Agency to respond to needs and opportunities as they arise, the bulk of its work will be done on a project basis: time-limited projects, working in partnership with other organisations, drawing in different funding sources or revenue streams.

The Agency will become a County-wide champion for sustainable energy, working with regional bodies, local authorities, businesses and others to maximise opportunities and link to strategies for economic development and regeneration. It will act as an information hub on sustainable energy,

signposting sources of support and advice (both local and national), and referring to relevant organisations (Carbon Trust, Energy Saving Trust, CREA, Envirolink etc including private sector industry specialists). A small central team will do this strategy and signposting work, and will also develop further projects, in collaboration with others.

The Agency will develop time-limited, financially self-sufficient projects. These projects will be assessed against the aims of the Agency and will be designed to tackle specific barriers, demonstrate possibilities or make the most of opportunities open to Cumbria. Organisations and communities may suggest projects to the Agency to take forward.

'Financially self-sufficient' does not mean that the projects should be 'commercial', deriving revenue from sales of products or services. Rather, it means each project should have a separate budget and funding sources; such funding may come from any source.

Each project should also meet the following criteria: collaborative working, clear objectives, time-limited, financially self-sufficient and value for money. Each project should address at least two of the Agency's strategic aims, though not necessarily all three. All proposals for projects will be subject to a project review process before commencement.

The plan contains an outline of 6 front runner projects:

- Whole community approach
- On farm renewables
- Developing biomass supply and demand in the tourism sector
- Revolving loan fund
- Supply chain for renewables
- Advice and support for flagship renewables projects

And a longer list of potential future projects.

2 Introduction

2.1 Background to report

This report has been commissioned by Cumbria Vision and the NWDA. Its purpose is to provide a detailed business plan for an Energy Agency for Cumbria, to promote low-carbon distributed energy and energy efficiency ('sustainable energy') in the County.

2.2 The context for an Energy Agency

This proposal for an Energy Agency for Cumbria comes at a crucial time. The national strategy (see Annex 5) includes a new Climate Change Act, passed in November 2008, which commits the UK to working within a statutory 'carbon budget' set by the Climate Change Committee. The overall aim is an ambitious 80 per cent carbon reduction by 2050, with around 30 per cent by 2020. To meet these targets, a comprehensive set of policies is needed. Some are already in place; others are under development. All policies encourage people, businesses and local areas to take action and provide incentives for carbon reduction. This creates considerable economic benefits for those areas that organise to make the most of the opportunities (see Annex 3).

Many regions and localities have established local agencies or organisations to catalyse action on climate change, and to capitalise on the opportunities provided by national climate change policy. Many of these, such as Marches Energy Agency and Renewable Energy 4 Devon, are now significant organisations, acting as local champions of sustainable energy (see Annex 6).

Cumbria has an abundance of natural resources that could be used to generate electricity and heat, considerable expertise in energy, through local companies like Gilkes, Sundog and Turbine Services and support from influential community groupings such as the Transition Town initiatives around Kendal and Penrith. Despite this, it is not as effective as other areas in accessing the benefits of national schemes, policies and funding sources. For example, Cumbria does not get its 'fair share' of CERT funding, while the South West has had more than its expected share of grants under the Low-Carbon Buildings Programme. Contractors put this down to the success of local energy agencies.

However, Cumbria has now put the foundations in place for a robust response to climate change. A Climate Change Strategy has been agreed by the Cumbria Strategic Partnership, linked to the North West Climate Action Plan; a delivery plan has been drawn up to meet the County's per capita emissions target (NI 186) over the next three years, and the ten-year Cumbria Economic Strategy focuses on the economic opportunities of energy. The Energy Coast, a Masterplan for West Cumbria, includes a commitment to development of low-carbon and renewable energy industries. The Cumbria Renewables Panel, established in September 2008, provides a useful strategic steer for sustainable energy initiatives in the County. In the wider

region, the NWDA are developing a strong framework for low-carbon innovation, with services provided by Envirolink, including a new low-carbon market development programme to be introduced next year. Organisations like CBEN and the Energy Saving Trust Advice Centre already provide advice on energy efficiency and carbon saving (see Annex 4).

The proposed Energy Agency will capitalize on this progress. It will provide a strategic co-ordination role for sustainable energy in Cumbria, and work on collaborative projects to tackle specific needs and opportunities in the County.

2.3 Work undertaken

This work was undertaken between January and March 2009, as follows:

Phase 1 consisted of a review of existing work, including the work already undertaken for the Lake District National Park Authority to assess the role, scope and function of an energy agency; studies on the economic potential and benefits of sustainable energy; studies on the establishment of Energy Service Companies (ESCos); and a review of similar Agencies elsewhere in the UK. Findings from the review phase are presented as Annexes.

Phase 2 involved producing a draft business plan, and a finance and funding options paper, to discuss with the project Steering Group and with stakeholders.

Phase 3 involved extensive consultation across Cumbria and the North West, through one-to-one meetings and phone calls, and a stakeholder seminar on 9 March. Findings from the consultation are presented at Annex 2.

Phase 4 involved the production of the final business plan – this document – and initial discussions with potential funders of the Agency.

The work was overseen by a steering group consisting of members from Cumbria Vision, Cumbria County Council, NWDA and the Lake District National Park Authority.

3 Business Plan

This section sets out the proposed mission, aims and objectives of the Energy Agency, and its structure and governance arrangements, together with the reasons for taking the approach.

3.1 Mission, aims and objectives

Cumbria Energy Agency aims to facilitate Cumbria's transition to a low-carbon economy and society.

The strategic aims of the Agency are:

- To reduce carbon emissions, in line with national and local targets
- To increase economic opportunities and employment in sustainable energy
- To reduce fuel poverty

Reasoning:

*The **mission** and **strategic aims** of the Agency align closely with national goals for **carbon reduction**, notably the ambition to source 20% of all energy (heat, electricity and transport) from renewable sources by 2020, and the goal to cut emissions of carbon dioxide by 80% over the next forty years (with an interim target of around 30% by 2020). They also align with regional priorities, such as the North West's ambition to lead the way on responses to climate change, and Cumbria's own climate change strategy, as well as the proposed Renewables Strategy for the region.*

The Agency should cover energy efficiency, distributed energy (defined as 'the local supply of electricity and heat which is generated on or near the site where it is used'), and community-owned or managed renewable energy.

*A key aim is to increase **economic opportunities and employment**, in line with the goals of the Cumbria Economic Strategy, which commits to developing the energy and environmental technologies sector. The 'Britain's Energy Coast' Masterplan also stresses opportunities for renewable and sustainable energy. A 2008 study for Cumbria Vision demonstrated the potential for economic development from this sector, including around 1500 new jobs in the sustainable energy and tourism sectors.*

***Reducing fuel poverty**, as well as being a central goal of national energy policy, is of particular importance to Cumbria. Compared with the national picture, incomes are low, the county has an ageing population, and much housing is old and difficult to heat. To address these difficulties, Cumbria County Council is currently drawing up a fuel poverty strategy (see Annex 11 for a map of fuel poverty in the North West).*

In order to achieve its strategic aims, the Agency's delivery objectives are:

- To work at a strategic level, in line with Cumbria's Economic Strategy, to improve opportunities for sustainable energy in Cumbria
- To link strategy with delivery, through exemplar projects
- To maximise Cumbria's share of funding for sustainable energy, from the public and private sector
- To be a hub of information on sustainable energy issues, providing impartial, independent initial advice and support

Reasoning:

The Agency's delivery objectives are a response to the needs and opportunities within Cumbria itself. An earlier study for the LDNPA highlighted the need for ***work at a strategic level*** *to improve opportunities for sustainable energy in Cumbria. The Cumbria Economic Strategy, published in February 2009, identifies 'Energy and the opportunities of the low carbon economy' as one of two simple strategic priorities. The Cumbria Renewables Panel advises Cumbria Vision on strategy in this area. There are also a wide range of organisations involved in delivery of sustainable energy (see section 2 and Annex 4). The Agency will link strategy with delivery, building up a picture of needs and opportunities, and developing projects to address them. Experience from other Agencies, such as the Cornwall Sustainable Energy Partnership and Marches Energy Agency, shows the importance of this 'champion' role.*

A further important aim for the Agency is ***to maximise Cumbria's share of funding for sustainable energy****. Cumbria is currently not as effective as it could be at accessing funding from EU or national sources for sustainable energy. Examples of this include:*

- *CERT funding (see funding section for explanation of CERT) tends to go to big urban areas with high housing density, where it is easier and cheaper to undertake large insulation schemes. Pulling resources into Cumbria requires an active relationship with energy companies.*
- *Similarly with grant funding, the South West has had more than its expected share of grants under the Low-Carbon Buildings Programme, partly because of the activities of local energy agencies.*
- *Cumbrian organisations do not often apply for EU funding for 'transnational projects' (collaborations between member states) although relevant opportunities exist, for example under the Intelligent Energy for Europe programme.*

The Agency would allow an overview of funding opportunities, and ensure that Cumbria extracts a fair level of resource.

It is also proposed that the Agency acts as ***a hub of information on sustainable energy issues, providing initial advice and support.*** *This role is discussed below.*

3.2 Governance

The Agency will be a social enterprise, with charitable status, governed by Trustees acting in an individual capacity. This structure will provide access to a wide range of funding sources. The Agency will be informed by an advisory group drawn from relevant local and regional organisations (possibly a sub-group of the Cumbria Renewables Panel). Initially, the Agency could be hosted by an established organisation.

Reasoning:

The proposed organisational structure is based on successful Energy Agencies elsewhere (see annex 6). Nearly all such Agencies have charitable or non-profit status, to enable them to access the range of funding sources, including public money from EU, national, regional and local sources, private grant-making trusts, the private sector and other sources such as the Lottery. Charitable status also allows the Agency to make use of volunteers. If there is a need for a more commercial structure, for example to establish an energy service company (ESCO) or to provide consultancy services, this can be done through one or more associated trading companies.

As a charity, the Agency will be governed by a volunteer board of Trustees acting in an individual capacity, not representing particular organisations. Charity Commission guidance will be followed to ensure that the Trustees have a clear role, remit, terms of office, rules governing appointment etc.

To allow formal input from relevant local and regional organisations, there could also be an advisory group made up of representatives from these organisations. However, the decision-making body would be the board of Trustees. There could be a formal link to the Cumbria Renewables Panel – for example, the advisory group could be a sub-group of the Panel, or the chief executive of the Agency could do a regular report to the Panel.

The new delivery boards for Carlisle, Eden and South Lakeland, Barrow and West Cumbria could link to the Agency, possibly through Cumbria Vision or the Renewables Panel.

During its start-up phase, the Agency could be hosted by an organisation with a Cumbria-wide remit, such as Cumbria Vision, or the County Council. Initially, it would be subject to the host organisation's governance arrangements. However, the prospective Trustees and Advisory Group could act in an advisory capacity. Once established, the Agency could seek charitable status.

3.3 Structure and work plan

The Agency needs to be flexible, act as a catalyst, and work closely with partner organisations. A small core of staff will provide the strategy, overview, information hub, and administration. To ensure flexibility and to allow the Agency to respond to needs and opportunities as they arise, the bulk of its work will be done on a project basis: time-limited projects, working in partnership with other organisations, drawing in different funding sources or revenue streams.

Reasoning:

There are already a range of organisations working on sustainable energy issues – see annex 4 for details. This structure has both strengths and weaknesses, as identified by the earlier paper for the LDNPA:

Strengths:

- *There is advice available, particularly on energy efficiency, to businesses, householders and communities, through CBEN, the ESTAC and CAfS as well as self-help groups, though all organisations are under-resourced*
- *The business sector is relatively strongly supported (CBEN, Envirolink, ENWorks and the developing programme of 'Britain's Energy Coast')*

Weaknesses:

- *There is no 'champion' to provide leadership and strategic oversight (except for the Cumbria Renewables Panel, which is an advisory body)*
- *Advice is reactive – there are few attempts at proactive project*
- *Development. Advice and support services are 'wide and shallow' not 'narrow and deep'*
- *There is little cross-sector working between business, community and public sector organisations, and some perceived competition between organisations*
- *There is little organised support for the public sector, beyond the framework set by the Strategic Partnership (though several LAs are working together on a joint Carbon Trust carbon management project)*

The Agency should therefore work to address these weaknesses. Hence its role in providing strategic oversight; in working on exemplar projects rather than reactive advice; and in collaborating with existing organisations to tackle barriers and exploit opportunities.

The proposal is therefore to combine a small core of staff with further work on a project basis. The proposed core-and-projects structure allows for considerable flexibility. It provides the ability to respond to issues as they arise, experiment with new approaches, and work in partnership with a range of organisations. This structure is set out in more detail below.

3.3.1 Core

The Agency will become a County-wide champion for sustainable energy, working with regional bodies, local authorities, businesses and others to maximise opportunities and link to strategies for economic development and regeneration. It will act as a 'first port of call' for enquiries about sustainable energy, signpost sources of support and advice (both local and national), and refer to relevant organisations (Carbon Trust, Energy Saving Trust, CREA, Envirolink etc as well as private sector organisations). A small central team will do this strategy and signposting work, and will also develop further projects, in collaboration with others. The nature of this programme is described below, together with outlines of some proposed initial projects.

Reasoning:

The 'core' of the Agency is necessary to maintain continuity, and to provide the strategic overview that has been identified as a gap in current provision. This overview will allow the Agency to work with Cumbria Vision and local authorities to co-ordinate and catalyse action on sustainable energy. This overview is also necessary to decide where to focus efforts and develop further projects (see below).

There is already a range of organisations providing help and advice, but the picture can be confusing for people and organisations seeking help. The Agency will maintain an 'information hub': an overview of sources of help, advice and funding, and refer enquiries accordingly. However, it will not routinely offer detailed advice to enquirers. Where a gap in provision is identified, this may be addressed through a specific project (see below). The aim is not to funnel all enquiries through the Agency, but for the Agency to maintain an overview. This will help to identify needs and opportunities for projects.

An alternative raised by several organisations during the consultation phase is for the Agency to bring together the existing organisations providing advice and support in this area. This would consolidate and clarify, and would give the Agency considerable weight, influence and ability to deliver. However, it would be extremely difficult to merge organisations in this way, not least because they all have different objectives, funders and histories. This business plan therefore proposes a strategic role for the Agency in linking across organisations, rather than a consolidation role.

3.3.2 Projects

Working closely with other regional and local organisations, the Agency will develop time-limited, financially self-sufficient projects. These projects will be assessed against the aims of the Agency (as above) and will be designed to tackle specific barriers, demonstrate possibilities or make the most of opportunities open to Cumbria. Organisations and communities can suggest projects to the Agency to take forward.

'Financially self-sufficient' does not mean that the projects should be 'commercial', deriving revenue from sales of products or services. Rather, it means each project should have a separate budget and funding sources; such funding may come from any source (see section 5).

Reasoning:

The Agency will need to be flexible and creative in its approach, to tackle needs as they arise, make the most of opportunities (including funding opportunities), and to work sensitively with partner organisations.

For this reason, rather than having a fixed structure, the proposal is for a project-based model, similar to that used by Marches Energy Agency and other similar Agencies. Projects will be assessed against clear criteria (see section 3.4) and above all, must further the aims and objectives of the Agency.

The alternative model would be to have an Agency which had a fixed structure, with separate programmes to deal with different sectors (business, public sector, communities) and / or different technologies (energy efficiency, biomass heat, microgeneration of electricity, etc). Such a structure would be problematic for three reasons. Firstly, it would replicate the work of existing organisations, which tend to work mainly with a specific sector or technology. Secondly, it would not allow cross-sectoral or cross-technology projects, such as the 'greening' of a whole community (see illustrative projects, below). Thirdly, it would not allow a creative approach to funding sources, and would be more likely to rely on core funding from the NWDA or similar.

3.4 Criteria for project selection

Any project undertaken by the Energy Agency must contribute toward the Agency's strategic aims, and meet a number of criteria for efficient and effective working.

All proposals for projects will be subject to a project review process by the Agency's trustees and advisory group, to ensure that they meet the criteria.

The criteria are as follows

Contributing to strategic aims:

Each project should address at least two of the Agency's aims, though not necessarily all three, as follows:

- Reducing carbon emissions (measured using standard government methodologies, taking account of carbon savings over time)
- Increasing economic opportunities or promoting innovation (measured using estimates of direct and indirect jobs created or safeguarded, and using GVA measures; and through an assessment of contribution to

innovation, accepting that this is difficult to measure in quantitative terms)

- Reducing fuel poverty (measured using the standard government metric, i.e. a household is in fuel poverty when it needs to spend more than 10% of household income on domestic fuel use)

Efficient and effective working:

Each project should also meet the following criteria:

Collaborative working

Relevant stakeholders in Cumbria and elsewhere should be consulted at the project development phase. For example, any proposed project supporting community renewables should be discussed with CAfS and / or Voluntary Action Cumbria. Many Agency projects will be collaborative, carried out in partnership with other organisations, but there should not be a requirement for partnership working at all times. The nature of the collaboration will need to respond to circumstances.

Clear objectives

Each project should have its own clear objectives and targets, linked to those of the Agency. Wherever possible, the targets should be quantified (e.g. carbon savings / jobs created)

Time-limited

The projects should have a clear start and end date. The time span will depend on the type of project.

Financially self-sufficient

Each project will require separate funding, from one or more sources (see project descriptions for examples of this). It should not rely on funding from the Agency core.

Value for money

The project must demonstrate value for money. This does not necessarily mean that projects must offer the cheapest carbon mitigation or job creation possible. However any project must show that it is a cost-effective way of achieving the outcomes set.

3.5 Human resources

The core of the Agency will require three members of staff:

- A CEO, to manage the organisation and to work at a strategic level to develop opportunities for sustainable energy
- An information officer, to act as a hub of information and advice on sustainable energy and to assist the Director in developing projects
- An administrative officer to work on administration, finance, IT etc.

The Director and information officer should be recruited first. They could spend a short while on attachment to a similar Agency (Marches Energy Agency have offered support of this kind) to see what is possible. Administrative support can be recruited later or sourced from an established organisation.

The Agency will also employ staff to undertake the projects. These roles will be funded by the projects themselves. However an initial project development fund will greatly help to establish the Agency's first projects.

In addition, Envirolink will shortly be recruiting two staff in Cumbria, one as part of the NWDA's Low-carbon Market Development Programme and one additional person providing support to low carbon industries. Initially these posts will be based at Cumbria Vision. However once the Agency is established, a formal link to the Agency could be created, with staff co-located.

3.6 Financial information

The core work requires start-up funding for three years. The start-up funding required is as follows:

- £500,000 over three years for the core functions of the Agency (see cost projections below)
- A project development fund of £500,000 over three years, to establish the Agency's first projects, lever in additional funding and allow recruitment of project staff. Further details on project costs are in section 4 below, but these are indicative at present.

After three years, it is envisaged that the Agency's core functions will be funded through monies raised for projects.

Energy Agency core costs

Office salary and administration costs					
	Per annum	One off cost	Total Cost	Capital Equipment	
CEO	£40,000			3 computers	1500
Information Officer	£25,000			Network PC's & telephone	2000
Administrative Officer	£17,500			Email & website	1000
NI	£9,075			Furniture (desk, chair, drawers, cupboards)	1500
Pension	£3,300			Telephone system	2000
Rent	£20,000			Printers x 2	500
Rates	£2,500			Scanner	150
Heat & Light	£1,200				
Capital Equipment		£8,650			8650
Stationery & postage	£2,000				
Telephone	£3,000				
Travelling & subsistence	£2,000				
Training	£2,000				
Sundries	£2,500				
PC maintenance	£400				
Marketing & Brochures	£3,000	10000			
Audit & accounting	£15,000				
	£148,475	£18,650	£167,125		
inflation	3%				103.00%
year 2 annual costs	£152,929.25				
year 3 annual costs	£157,517.13				
Total over 3 years	£458,921.38	£18,650	£477,571.38		

3.7 SWOT analysis

The table below summarises the potential strengths, weaknesses, opportunities and threats linked to the creation of an Agency.

Strengths • Overview of sustainable energy issues in the County • Projects self financing • Aligned with regional and local strategy • Flexible and entrepreneurial, can respond to change rapidly • Collaborative working with other organisations • Links strategy with delivery	**Weaknesses** (also see risk analysis) • Funding not yet certain and is ongoing issue for projects • Unclear boundaries • Some solutions difficult to apply in rural areas • Dependent on small number of key individuals
Opportunities • Increase Cumbria's share of national and EU funding • Can access money from outside the County (e.g. CERT, EU) • National policy changes (e.g. feed-in tariffs, renewable heat incentives) and the 'green jobs' element of the stimulus package • Create possibility for step change in Cumbria's position on climate change • Large and increasing number of possible projects • Opportunity to roll out successful projects to rest of County • Can copy work of other Agencies in UK	**Threats** (also see risk analysis) • Funding could be at risk in current financial crisis • Political support for the Agency could lessen • Projects could fail to achieve momentum • Low oil / gas prices could make low-carbon energy options appear more expensive • Lack of support from other organisations in Cumbria

3.8 Risk analysis

The table below outlines the main risks that the Agency will be exposed to. It focuses on 'external' risk (funding, market issues, etc) rather than 'organisational' risk (HR, fraud etc). Once the Agency is established, a risk register should be drawn up to cover all these areas, following Charity Commission guidelines.

Risk area	**Likelihood** **High** **Medium** **Low**	**Impact** **H** **M** **L**	**Possible mitigation**
Funding / economics			
Inadequate funding for start-up of agency	M	H	Gain senior-level support for the Agency, eg through CLASB. Obtain three-year start-up funding before establishment of Agency.
Inability to generate a return from energy projects eg ESCos	H	L	ESCos not seen as suitable funding vehicle for Agency at this stage, due to level of difficulty and risk
Projects more difficult to fund than anticipated	M	M	Start with a small number (2 / 3) projects. Invest time in fundraising.
Projects do not provide funding for core functions of Agency	M	H	Ensure that funding proposals cover core functions (eg strategic / overview role). Apply for funding specifically for this function (eg from charitable Trust)
Economic downturn makes investment capital scarce	H	M	Make realistic assumptions. Tap into support provided by national government for green industries as part of stimulus package.
Low oil / gas prices make investment in renewables appear more costly	M	M	In forecasts, do not assume energy prices will stay low.
Lack of availability of grants or loans for capital projects	M	M	Keep register of grant sources. Advocacy with local / regional government if funds insufficient.
Market issues			
Not enough demand for distributed energy (demand backed up by action, not just enthusiasm)	M	L	Agency should help with awareness-raising and education in the County. Should work to turn enthusiasm into action.
'Competition' from other Agencies, organisations or private companies	M	M	Dialogue with other Agencies.
Few local firms involved in supply and installation of renewables – possible bottlenecks	H	L but benefits would go outside Cumbria	Agency to work on supply chain issues. Also work with University of Cumbria and Further Education providers to develop skills within County.
Technology advice not available, or technologies prove inadequate	M	M	Agency needs to work to develop advice available on technology options

Policy risks			
Changes to Government policy may reduce confidence and certainty	H	M	Agency and local decision-makers to stress need for strong local action on climate change and green jobs to counter national uncertainty.
Policies to incentivise renewables and sustainable energy e.g. CERT, Feed-in Tariffs, RO etc may be inadequate to generate projects on economic grounds	M	M	Agency to focus on cost-effectiveness and value for money as criteria for projects. Should not assume that energy generation schemes will turn a profit. Need for careful cost modelling.
Policy may focus on urban not rural energy solutions	H	M	Need advocacy with central government and RDA to change this. Also work with rural support initiatives eg RDPE to channel rural support to sustainable energy.
'Political' risks			
May not be supported because of unpopularity of large-scale renewables (eg wind)	L	M	Need careful engagement with communities around multiple benefits of sustainable energy (jobs, fuel poverty, carbon saving)
May not gain support of all local authorities, because of other priorities	M	M	Engage LAs at senior level (CEOs and councillors) – discuss draft BP with them and involve them in funding bids for Agency
Case for the economic potential of renewable and sustainable energy may not succeed (funding going to 'conventional' business support and regeneration activities instead)	M	M	Dialogue with providers of business support – Cumbria Vision, NWDA, business link etc – to focus on benefits of sustainable energy projects for jobs and economic outcomes
Organisational risks			
Health and safety of staff and third parties	To be considered and addressed with appropriate policies and practices at start-up phase.		
Fraud			
Reputation: behaviour of staff; allegations/complaint; adverse publicity; brand; relations with funders			
Human resources: loss of key personnel; training; HR policies; contracts; employment law; equal opportunities; volunteers; consultants; morale; disputes; work/life balance			
Compliance (Charity Commission, Companies Act, Inland Revenue, Health and Safety, Data Protection, reports to funders etc)			
Disasters: fire, flood, storm; loss of major supplies			
Operational: failure to keep to plans; project over runs;			

unprogressive plans; website/ IT; environment; professional advice; breach of confidence; internal communications	
Governance: management structure & skills; management focus; reporting to Trustees and advisory group	

4 Potential projects

4.1 Introduction

As explained above, the Agency will carry out much of its work on a project basis: time-limited projects, working in partnership with other organisations, drawing in different funding sources or revenue streams. Below, seven project ideas are described. Each is assessed against the project criteria set out above. Where possible, indicative funding requirements and potential partner organisations are set out.

The ideas presented below are the front-runner projects based on the research and consultation carried out for this report. However, all require further development. In addition, there may be other projects that have not yet been examined in detail.

It is envisaged that the Agency would begin with around three projects. The Trustees and Advisory Group will advise on project selection, using the project criteria established.

There are overlaps and synergies between the projects listed below. The Agency would need to ensure a balanced portfolio covering different technologies and sectors (communities, business, public sector).

4.2 Whole community approach

This project will identify a likely community to demonstrate low carbon technologies, from generation to end user. This could include energy efficiency, renewables and low-carbon technologies as well as measures to change behaviour. This approach has been adopted successfully by Marches Energy Agency, British Gas (in its Green Streets initiative) and individual communities such as Ashton Heyes.

Best exemplar communities will have the following features:

- Off gas network (see Annex 12)
- More than 100 households
- Power source nearby, either wind, hydro or biomass, at sufficient levels to support economic generation
- Some fuel poverty (see Annex 11)
- Existing supportive community group, or enthusiastic individuals
- Community buildings suitable for ‘greening’

The project will be determined as follows:

- Form short list
- Evaluate power sources
- Evaluate sources for funding to tackle energy efficiency
- Evaluate community buildings for appropriate mix of microgeneration and energy efficiency
- Evaluate likelihood of local support

- Identify likely partners
- Choose location
- Carbon Footprinting to establish baseline

Then plan project:

- Organise feasibility for energy generation (see illustrative wind and hydro financial models at Annex 9)
- Plan for campaign on energy efficiency on whole community basis
- Decide on which community building offers most promise
- Marshall community support
- Decide on priorities and organise funding

Performance against project criteria

Carbon reduction: will depend on projects chosen, but aim will be to maximise across the whole community, by combining a range of approaches (energy efficiency, renewables, behaviour change)

Jobs / innovation / GVA: again dependent on project decisions, but could provide economic opportunities for local suppliers

Reducing fuel poverty: will seek to achieve this in community chosen

Collaborative working: could be done in partnership with an established community group (eg Transition South Lakes / PACT / Sustainable Brampton etc) or with CAfS. Will require partnership with an energy company for CERT funding.

Clear objectives: one overriding objective: to demonstrate the full carbon reduction potential within a single community.

Time-limited: will probably take 3 years minimum to achieve complete programme

Financially self-sufficient: as long as energy generation is financially robust, other aspects should be capable of being financed from match funding and other sources.

Value for money: again, as long as generation is self-sufficient, whole project should demonstrate good value, particularly as an exemplar for other communities to follow

Approximate costs: wholly dependent on community chosen

Likely funders and partners: CERT, grant funding for capital projects, EST, University of Cumbria, local councils, voluntary groups, churches, etc. Community Energy Solutions are running similar schemes in the North East under the 'GoWarm' brand and could be useful partners.

4.3 On-farm renewables

There is considerable scope for developing renewables on farm land and buildings in Cumbria. This may include biomass, biogas and biofuels, as well as use of agricultural land for solar and wind power. There is particular scope for renewable heat in areas off the gas grid. Renewable electricity generated may be used on site, or exported to the grid (when it will benefit from feed-in tariffs and / or ROCs).

Biogas projects using slurry as a feedstock will also help farmers meet their obligations under the Nitrates Directive, and allow them to avoid costs incurred by storing slurry.

There are some projects already planned or underway, such as the Silloth biogas AD plant. Experience from these early projects can used to inform the initiative.

The project will provide information and support to promote the application of on-farm renewables in Cumbria, and contribute towards improved economic performance of agriculture in the county as well as carbon reduction targets.

The work will consist of:

- Information provision for farmers on the potential for on-farm renewables, by:
    - Mapping the availability of potential energy sources (slurry, food waste, biomass, wind etc), energy "sinks" (e.g. grid access, opportunities for sale of industrial and residential heat), and matching these to identify areas of best potential for on-farm renewables.
- Research visits to successful schemes in Cumbria and more widely
- Outreach work to locations likely to succeed with a project
- Support and advice for those with a viable project, including information on grant funding available
- Charging of fees for advice etc where funds permit

Performance against project criteria

Carbon reduction: the project will aim to establish 5 projects as a result of its actions. This will result in carbon reduction, particularly in areas off gas-grid. (According to Defra information, there are 3,500 cattle farms in Cumbria with 320,000 cattle; if 1% of these farms adopt AD/biogas systems = 35 farms). The direct carbon savings will not be significant, but the project may result in indirect savings as awareness spreads.

Jobs / innovation / GVA: the project fits in with the aims of the Rural Development Programme for England, to diversify farming businesses. It will also provide or safeguard jobs in renewables supply and installation, some of which will be local jobs. Indicative jobs created are as follows:

- 5 biogas projects over 3 years – 6 jobs
- 10 farmers setting-up wood fuel schemes – 10 jobs
- "Grow-your-own diesel" co-operative using Newton Rigg's demonstrator technology if it turns out to be viable – 2 or 3 jobs safeguarded

Reducing fuel poverty: the project may help some farm dwellers who are defined as being in fuel poverty. However this is not the primary aim of the work.

Collaborative working: this work will be carried out collaboratively with farming organisations (see partners, below)

Clear objectives: the project's aims are clear:
- To increase awareness of potential for on-farm renewables
- To help farmers access advice and grants to install renewables
- To achieve a defined number of projects and jobs, plus a defined level of carbon reduction

Time-limited: the project could run for three years, 2010 to 2014, when the Rural Development Programme for England comes to an end.

Financially self-sufficient: the project could be funded through the RDPE (see below).

Value for money: to be defined against objectives, above.

Approximate costs: the main costs will be staff time in awareness-raising and advice. The costs will depend on the scale of the project.

Likely funders and partners
The most likely funding source for this work is the Rural Development Programme for England (see funding paper). The RDPE could help in two ways:
- Support for the project itself, through RDPE money held centrally at NWDA
- Capital grants for parts of Cumbria, under a scheme established by Solway, Borders and Eden LEADER programme (local disbursement of RDPE funds)

Other grant sources could also be exploited to help participants, such as the Community Sustainable Energy Programme (if non-profit scheme), the bioenergy capital grant scheme, or the Lake District Sustainable Development Fund.

The Energy Agency could work collaboratively with CREA (who have already conducted a pilot project on resource efficiency for farms) and / or the Cumbrian Farmers' Network (who also advise on resource efficiency). Cumbria Woodlands could contribute expertise on biomass.

4.4 Developing wood fuel supply and demand in the tourism sector

There is a nascent but potentially strong wood fuel sector already existing in Cumbria, supported by Cumbria Woodlands and the Forestry Commission. There are a number of existing installations in domestic, commercial and industrial settings; and several local companies involved in the biomass supply chain, providing both equipment and wood fuel. However, the potential is far greater. A study by Quantum Consulting for Cumbria Vision highlighted biomass as a potential source of economic development and job creation for Cumbria. Demand could be stimulated by the introduction of a Renewable Heat Incentive currently being considered by Government. At present, though, fewer than half of the woodlands in Cumbria are managed, (see Annex 10) and there are market issues including high upfront capital costs; lack of understanding and awareness; and lack of boiler suppliers, installers and maintainers.

With this project, the Agency would work collaboratively with Cumbria Woodlands and the Forestry Commission to develop both the demand side and the supply side for wood fuel within one particular sector, tourism, which is important to the Cumbrian economy. Actions they have identified as necessary include:

- Capital investment, including support for accessing grants (eg bioenergy capital grants scheme, which currently has a low uptake in Cumbria)
- Training for firms in the wood fuel supply chain including resource owners, installers, architects and energy managers
- Advice and information, to help those interested in switching to wood fuel
- Awareness-raising.

Performance against project criteria

Carbon reduction: there is considerable potential for carbon reduction, particularly if linked to energy efficiency measures, and if the focus is on areas off the gas grid.

Jobs / innovation / GVA: the Quantum study showed that there is considerable job creation potential in biomass, and benefits also in improving the environmental performance and reputation of the tourism sector.

Reducing fuel poverty: will depend on the installations.

Clear objectives: to make Cumbria a national leader in biomass supply and demand, and to promote a sustainable tourism industry.

Time-limited: the project will need to run for at least three years, to allow the market to develop.

Financially self-sufficient: the project will require upfront funding.

Value for money: the project will provide value for money particularly if it can lever money in from elsewhere, such as the bioenergy capital grants scheme. Although capital costs of biomass are high, it can be competitive with oil-fired heating in off-gas-grid areas (see map at Annex 12).

Approximate costs: depends on scale of project.

Likely funders and partners: the project will be a collaboration between the Agency, Cumbria Woodlands and the Forestry Commission. Cumbria Tourism will also be involved. Aspects of this work may be funded by the Rural Development Programme for England. Applications to the bioenergy capital grants scheme could be encouraged, however this would not fund the project itself.

4.5 Revolving loan fund

A loan fund could be established to provide capital for carbon saving in Cumbria. The idea for such a fund – the 'Cumbria Climate Fund' – was put forward in the draft Action Plan for the NI 186 Target for Cumbria. The fund would provide low-interest or interest-free loans for businesses, other organisations, households or communities, to encourage them to make investments in energy saving or on-site energy generation. A loan fund works by motivating people to act, and demonstrating that the payback is worthwhile.

A fund would work as follows:

- The Agency administers applications to the Fund, which could be advertised through existing support networks, including the ESTAC, Cumbria Action for Sustainability, CBEN etc
- Organisations or individuals can apply for a loan to invest in
- Carbon saving measures, as recommended by the support organisation(s)
- Loan repayments are nominally funded through the savings on energy bills, but in practice, straightforward loan repayment terms will need to be set.
- Repaid loans are used to finance further projects.

Such loan schemes operate successfully elsewhere. Kirklees Council set up a loan system in 1998 to fund energy savings in Council buildings. Loans can be repaid over 25 years. Kirklees' scheme is only open to local authority projects. Leicester City Council provide interest-free loans for householders to invest in energy-efficiency and renewable equipment, with repayment terms dependent on the nature of the investment – for example 10 years for solar panels, 5 years for boiler replacements and 2 years for insulation.

Note that loan schemes already exist for some sectors: the Carbon Trust offers interest-free loans for energy saving to SMEs; the SALIX fund provides loans for the public sector. Proposals have also been made for a North West-wide revolving fund. This scheme would need to be designed to avoid duplication.

Performance against project criteria

Carbon reduction: the Fund will result in significant carbon reduction if focussed on energy efficiency measures; less so if funding small-scale renewables.

Jobs / innovation / GVA: the Fund will indirectly create or safeguard jobs in the sustainable energy supply chain, particularly if funding small-scale renewables.

Reducing fuel poverty: the Fund will be unlikely to be of much help to those in fuel poverty, many of whom are eligible for grants for energy efficiency measures.

Collaborative working: the loan fund can support other projects and organisations, so would add value to others' work.

Clear objectives:

- to provide capital for energy efficiency and renewables projects
- to motivate people and organisations to act on carbon saving

Time-limited: the fund should be limited to three years in the first instance, to evaluate its success.

Financially self-sufficient: the project will require considerable upfront funding, to provide capital for loans. There will also be administrative costs.

Value for money: the Fund is an efficient use of money, compared with a grant. With a grant, the recipient is effectively paid twice: once through the grant, and again through the cost savings that result.

Approximate costs

The main cost is the capital for the loan fund. Loans for energy efficiency work do not need to be substantial, but loans for small-scale renewables will need to be larger. In some models (particularly in the US) the loans are provided by a commercial bank, with subsidy from local government to make the loans cheaper or interest-free. There will also be administrative costs and risks associated with managing the fund.

Likely funders and partners

Local Authorities in Cumbria could back such a Fund as a way of meeting NI 186 targets. The NWDA may be developing a scheme for the whole of the North West, which the Energy Agency could manage for Cumbria. A partner with experience in loan finance would be required, such as a bank or credit

union. The Co-operative Bank would be a possibility (see funding section below).

4.6 Supply chain for renewables

This project will develop a sustainable supply chain for renewable energy technology projects, covering:

- Project development and management
- Design
- Manufacture
- Installation and commissioning
- Operational support and maintenance

It will build on capabilities of indigenous companies already active in this field, and externally-owned companies with significant operations in Cumbria, with ability to reach back into their operations elsewhere, and bring new capability to Cumbria. It will provide support to the Cumbria supply chain to identify opportunities and support its involvement in renewable energy projects in Cumbria and elsewhere. It will work closely with Envirolink North West, who will shortly have two staff working on these issues in Cumbria.

This project will work in partnership with and provide additionality to:

- Britain's Energy Coast: "Industries for the Future" project, which has similar objectives but is specific to the supply chain in West Cumbria (Allerdale and Copeland)
- Invest in Cumbria: inward investment by supply chain companies
- Universities (Cumbria, Lancaster, UCLan for example). The Joule Centre and other research and development organisations, to identify technology opportunities

Contribution to the Agency's Objectives

Carbon reduction: indirect carbon reduction from projects implemented.

Jobs / innovation / GVA: the primary aim of this project.

Reducing fuel poverty: not an aim for this project.

Collaborative working: see above

Clear objectives: to develop the supply chain for renewable energy

Time-limited: will need to be long enough to see effects

Financially self-sufficient: this project will require upfront funding

Value for money: could be assessed by number of jobs created.

Approximate costs:
3 year appointment, located within the Agency (or self-employed, home-based)

Approximate cost per annum:	
Salary:	£35,000
NI, Pension	£5,000
Travel	£2,500
Total	£42,000 per annum, £126,000 for 3 years

Possible funders:

- Britain's Energy Coast – specifically for companies in Allerdale and Copeland
- Nuclear Decommissioning Authority
- Cumbria Vision

4.7 Advice and support for flagship renewables projects

Advice on renewables is available from CBEN, the ESTAC and elsewhere. However, such advice services are 'wide and shallow', focusing on basic advice to many, rather than 'narrow and deep' – a small number of more ambitious projects. This basic advice is absolutely essential, but there is a need to develop flagship projects as well, to demonstrate the potential for renewables in Cumbria. This need was expressed strongly at the consultation event for the Energy Agency business plan.

This project therefore proposes a programme of intensive support and advice to a small number of renewable energy schemes. These could include:

- A micro-hydro scheme such as the Kentmere project or similar (see financial projections and notes for hydro at Annex 9)
- Support for a biomass heating cluster, possibly building on an existing community scheme (e.g. Eskdale)
- Work to develop flagship public sector building, such as one of the new Academies on the West Coast, or the refurbishment of the Newton Rigg campus of the University of Cumbria

Projects will be selected by the Agency's steering group according to criteria developed. Each project will receive intensive advice and support, on technical issues, funding applications and community involvement, for example. They will pledge to help similar future projects. The 'Renewable Energy for Devon' (RE4D) project is a possible template to follow. Each project supported by RE4D receives five days of support and advice, and can bid for funding.

Performance against project criteria

Carbon reduction: the projects themselves will lead to carbon saving, but there will be indirect benefits too, from the demonstration role.

Jobs / innovation / GVA: the project will safeguard jobs in the sustainable energy supply chain. The use of local firms could be encouraged.

Reducing fuel poverty: fuel poverty will not be a direct objective of this work.

Collaborative working: will be a collaboration with the demonstrator sites, e.g. University of Cumbria or Eskdale Community.

Clear objectives:

- to provide intensive advice and support to a small number of demonstration projects in Cumbria, in order to influence wider uptake of renewables.

Time-limited: the project will help a small number (three?) projects over a specific time. These will need to be identified early on to ensure chance of progression in timescale and to have maximum input at the planning stage.

Financially self-sufficient: the project will require upfront funding. However it will aim to draw money in from outside the County, through helping the schemes with seeking funding.

Value for money: the project will provide value for money through providing impartial and independent advice on projects using public money and additionally if it can lever money in from elsewhere. The value of an example for others to follow is not measurable but could be considerable.

Approximate costs: depends on how many projects are helped, and the level of support.

Likely funders and partners: projects on the West Coast of Cumbria could be funded by the NDA community fund. Community benefit funds from wind developments will be a possibility. Projects may be able to access renewable energy grants and finance opportunities for capital costs of installations.

4.8 Developing Energy Service Companies (ESCOs)

In developing the Business Plan for a Cumbria Energy Agency, the team have been asked to look at the possibility of developing Energy Service Companies (ESCos) which could, over time, fund the work of the Agency itself. However, research has indicated that it is unlikely that this funding model will work, given current market conditions - see the financial models for renewables developments at Annex 9 for a demonstration of this point. Therefore, the Business Plan does not propose a specific Agency project to develop ESCos.

Instead, below is a discussion of the issues surrounding ESCos and a proposal for how the Agency could be involved in this area in the future.

Definition
There is no one distinctive type of ESCo: they have tended to develop to serve a particular purpose and vary in style and content depending on the circumstances. However they do share certain characteristics:

- They aim to provide 'Energy Services' (heat, power, hot water, energy efficiency) rather than electricity or gas
- They aim to reduce CO2
- They require upfront financing, usually from the local authority, though some commercial ESCOs exist
- They tackle specific projects in specific geographies.

See Supporting Information for examples of UK ESCOs. Some ESCos take on additional roles in energy advice and energy efficiency. Because of the differing nature of individual ESCos, each has to be judged on its own merits.

Where the ESCo is seeking to provide all energy (heating, electricity and hot water) it usually also generates the energy required, and minimizes its usage by better design and insulation of buildings. Such ESCos can tackle community schemes particularly effectively in areas of fuel poverty, by retrofitting efficient and low carbon systems. It is only when action occurs at scales above 100 households, and ideally at or above the 500 household level, that significant carbon savings become available.

The key need is to secure finance for the capital costs of this work. In countries where such ESCos have been successful, they have been financed by the state. In Cumbria such a project will require the financial support of local authorities or public agencies to have the best chance of success. Alternatively, grant funding could be sought to finance capital costs.

Finance issues
Given current market conditions for energy, it is unlikely that self-financing ESCos (i.e. not dependent on grant funding) could be developed. It is even less likely that establishing ESCos will provide a revenue stream for the Energy Agency. Market conditions may change as national policy develops, with the introduction of feed-in tariffs, heat incentives and so on. Such changes may affect the financial viability of individual projects, which will need to be assessed in the light of conditions at the time. This is discussed further in the funding section of this business plan.

Technology types
Current thinking is that in terms of the most appropriate areas for an ESCo to operate, the greatest benefits of scale (and hence of community activity) are seen for wind turbines in windy areas. Wind turbines benefit most from scaling up in terms of reducing cost of energy delivered and cost of CO2 saving.

A good case can also be made for biomass and CHP technologies (biomass and gas based) in dense urban areas, where cost effective energy provision is attractive from 500 dwellings upwards. In less dense communities (from sub-urban to rural), deploying heat technologies that incorporate district heating can prove more costly than acting at the individual level. This is particularly true between five and 100 homes and is more relevant for the less dense community types.

Community energy schemes can compete economically for heat provision in dense urban centres (where cost of energy from conventional technology is c. £75/MWh) and for electricity generation from large wind turbines in windy rural areas (competing with grid prices of £140/MWh). In general, improvements in installation efficiencies in new build projects reduce the cost of distributed generation technologies. However, the lower thermal demands tend to reduce the overall CO2 saving potential of new build installations.

Current schemes in Cumbria

There is one ESCo-type scheme planned in Cumbria:

- Impact Housing Association is developing biomass district heating schemes aiming to tackle fuel poverty in off-gas grid communities. Impact is working on establishing a Cumbria-wide ESCo scheme, Impact Affordable Energy, to promote this model more widely. At present, grant funding is being sought.

CORE, Community Renewable Energy, is a social enterprise based in the North East. It has established ESCoRE, an ESCo which will sell energy and provide other financial services to community-owned renewable energy schemes. It is developing an ESCo based on anaerobic digestion on a farm in Silloth in Cumbria.

Potential role for the Energy Agency

Given the financial uncertainty surrounding ESCos, they are unlikely to provide a revenue source for the Agency in the short or medium term. However, there are other reasons to support ESCos, including their potential to address both fuel poverty and carbon emissions, and it is possible that their financial viability may change as national policy develops. The Agency can keep an overview of developments in the ESCo field (through liaising with other Energy Agencies, for example) and provide strategic advice in this area. One of the new Envirolink posts will also promote ESCo development where appropriate. The Agency could also potentially work with Impact on the establishment of a Cumbria-wide ESCo, providing advice and support to local projects within the County.

4.9 Other potential projects

This is a list of other potential projects that the Agency could undertake. The list is not exclusive and there are many other projects that may come forward once the Agency is in existence. The criteria, views of staff, trustees, advisory group and stakeholders will be taken into account in deciding which to take forward.

Training: instigating training for local companies who could become installers of energy systems, in collaboration with the University of Cumbria and other HE and FE providers. This could be funded by RDPE funds for 'training and information actions'.

Supporting planners: providing training and information on best practice for local authority planners, to build capability, allowing them to discuss sustainable energy options with developers at an early stage, before the formal planning application. This could link to the Rural Planning Facilitation Service.

Linking research to practice: in partnership with the University of Cumbria, this work could link research and funding with practical projects. There would also be possibilities to involve students in projects as part of their studies, in both the HE and FE sector. This could link to the University's 'knowledge transfer partnership' function.

'made in Cumbria' for energy products: tailored support and advice could be provided to local sustainable energy and related firms. This could include local branding, similar to the 'made in Cumbria' initiative.

Communication and engagement: with schools / community groups / local media / at fairs, shows and events. This is something that Marches Energy Agency does successfully, using funding from charitable sources.

Pan-European projects using EU money: there will be opportunities for the Agency to be involved in transnational projects under the EU's Intelligent Energy for Europe funding strand E. This requires collaboration with partner organisations in three or more member-states. The Leonardo programme also offers funding for vocational education and training of professionals, through exchanges and visits with other member states. This could be a source of funding for education and training initiatives run by the Agency. Such EU grants tend, however, to be complex to apply for, and outcomes are uncertain. For example, Severn Wye Energy Agency made seven applications to IEE in 2008, of which one was successful.

Carbon reduction commitment: this is a new, compulsory carbon trading scheme for larger businesses and public sector organisations to be launched in 2010. There may be a role for the Agency in raising awareness and helping organisations understand their duties and liabilities.

5 Finance and funding options

5.1 Introduction

Based on the model proposed in the business plan, funding will be needed for four different aspects of the Agency's work:

- Initial start-up funding to establish the agency
- Funding for the core of the Agency
- Funding for specific projects delivered by the Agency
- Capital funding for projects, such as the installation of distributed energy systems, that the Energy Agency might facilitate (while these funds would not be received directly by the Agency, they will be necessary to deliver its aims)

Under the model proposed, over time, the specific projects delivered by the Agency could help to fund the core functions. However, this will not happen until the Agency is established and on a firm footing. Self-generated income will take time - projects which generate income are complex to establish; they require upfront investment, and payback is often slow.

It is likely, therefore, that the Agency will be funded by a mix of grant funding from EU, national, regional and local public sector organisations; from energy companies through CERT, CESP and other sources; and from its own projects.

5.2 NWDA

The NWDA funds a range of activities to support a low-carbon economy, including:

- The new NorthWest Climate Fund, which seeks support from industry in the form of a 'carbon contribution' payment
- The work of Envirolink
- A possible regional Salix-style invest-to-save fund
- Funding linked to the NorthWest climate change action plan, some of which is currently administered through Cumbria County Council.

The NWDA can be asked to provide start-up funding for the Agency. The Agency may also potentially act as the Cumbrian distributor for money from the NW Climate Fund and the funding linked to the NorthWest climate change action plan.

Elsewhere, RDAs do fund Energy Agencies and similar activities. One NE is investing heavily in developing the NE as an 'energy centre' by promoting renewable energy industries:

- A New and Renewable Energy Centre (NAREC) has been established as a centre of energy research and technical solutions for distributed generation
- the NE Home Insulation Partnership (NEHIP) has been established (see below)

RDA funding is also available for specific programmes once an agency is established – for example, AWM supports Marches Energy's RE: Think Energy programme to encourage energy saving by SMEs in the RRZ.

5.3 Local Authorities

Local Authorities may support an Agency, particularly for work which helps the LA achieve its Local Area Agreement Targets on carbon and fuel poverty (NI 185, 186 and 187). Budgets are currently very tight. However, LAs must show that they have a credible action plan to achieve targets. There are many examples of Local Authorities funding Energy Agencies:

- Tadea (which now runs Carlisle Advice Centre) was started by Stockton Council and fulfils many 'Energy Agency' functions in the NE with plans for further expansion
- Renewable Energy 4 Devon is funded by County and District Authorities
- The Cornwall Sustainable Energy Partnership receives funding from Cornwall LAs. Under Cornwall's new unitary authority, CSEP will be merged into the economic development organisation for Cornwall
- Marches Energy's Low Carbon Communities programme draws funding from central government and AWM and is delivered with Shropshire CC

5.4 Energy Saving Trust (EST)

Many other Agencies run an Energy Advice Centre using EST funding (an ESTAC). The number of ESTACs has declined from 50 to 21 as they have become more regional.

This role develops experience, generates contacts and builds credibility and capacity. However, it is logistically complex, and involves delivering detailed targets devolved from EST centrally.

ESTAC contracts are typically awarded for 3 years – hence Carlisle ESTAC will be with Tadea until 2012 at least.

EST also funds specific programmes, including its Local Authority Support Programme and its Innovation Fund. SWEA had EST Innovation support for a initiative for an energy efficiency programme in prisons.

5.5 Rural Development Programme for England

This is a large (£16 million for Cumbria) and complex EU funding programme administered by the NWDA. It aims to make agriculture and forestry more competitive and sustainable and to enhance opportunity in rural areas.

Some of the funding is disbursed through the 'Leader' route, in specific action areas in Cumbria. These include Solway, Borders and Eden, and Fells and Dales. Money from Leader is unlikely to fund the Agency or its projects. However the Solway, Borders and Eden Leader have established a fund for renewables installations in micro-businesses.

There is a substantial amount of RDPE money currently unallocated and held by the NWDA. The RDPE team would be happy to discuss further the possibility of funding for the Agency.

RDPE also supports 'training and information actions' which could be used to fund certain aspects of the Agency's work.

5.6 CERT

This is an obligation on the utilities to deliver carbon savings through households. It is worth £600m p.a. and the utilities are known to be struggling to place the required funds.

Most CERT money funds basic insulation measures (eg loft and cavity wall insulation) but utilities are increasingly looking at other ways of meeting targets (through small-scale renewables, for example). Marches Energy Agency and Cornwall have received CERT money for heat pump installations in social housing.

The NE Home Insulation Partnership has been formed by ESTAC NE to 'insulate every home in the NE'; this has attracted grant funding from Defra in addition to CERT funding etc. to deliver national and regional targets. Note that this programme brings together utilities, other sector companies, councils and other organisations to attract funding from many sources.

CERT is a major funding source and utilities are known to be desperate to place the money through good quality programmes. An Energy Agency could develop such a programme for Cumbria but it will have to beat competition from other agencies and to build a strong consortium of professional organisations.

5.7 CESP

This is a new programme parallel to CERT but aimed at community facilities, especially in deprived areas. It should be worth £300m p.a. and is currently out for consultation. It could be a useful funding source for an Energy Agency, but funds will also be sought by well established competitors. It will

only apply in low-income areas, which for Cumbria means certain wards in Barrow, Allerdale and Copeland.

5.8 Energy Companies (non-CERT)

Energy companies involved in generation and supply are likely to provide funding separately from, or in conjunction with, CERT funding. This is a common model for other Energy Agencies. One possibility is for the Energy Agency to work with energy companies to disburse 'community benefit' funds resulting from wind farm developments. Initial discussions with one company, Npower Renewables, were favourable.

5.9 Community Benefit Funds linked to large-scale wind developments

Renewables developers who install commercial wind turbines normally pay into a 'community benefit' fund to support local people living near the turbines. This is seen as compensation for the loss of amenity due to the turbines. It is typically around £2000 per MW capacity. In some areas, the local authority has taken an active role in helping communities to negotiate these funds, and in working with local people to decide how the money should be spent. Sometimes a decision is made to use community benefit funds for local sustainable energy projects, and there could be a role for the Agency in establishing such a scheme and helping to distribute the funding. See Annex 13 for a sample policy, from Dumfries and Galloway Council.

5.10 Levies e.g. aggregates fund

These are funds from commercial activities that have a levy (either statutory or voluntary). Energy conservation within the area of activity is an attractive target for such funds, e.g.

- SWEA is involved in the Gloucestershire Environmental Trust which is funded by the Landfill Tax
- Marches Energy draws some funding from the Aggregates Levy Sustainability Fund

Such funding is a useful addition but only applicable in some areas and not necessarily available for the Agency's programme.

5.11 Community Sustainable Energy Programme

This programme, part of The Big Lottery Fund, can provide funding for specific sustainable energy projects designed to benefit communities, such as improvements to schools and public buildings. £8 million is available altogether; grants are typically £10k.

5.12 Grant-making Trusts and other charitable sources

If the Agency is (in part, or in full) a charity, it will be able to apply for funding from grant-making trusts. Possible sources include:

- Esmee Fairbairn Foundation, a large grant-making trust who have provided funding for similar projects (such as funding COIN, the Climate Outreach and Information Network, Sustainable Brampton, and Forum for the Future's sustainable Bristol region project). Their average grant is £50,000 but some are much larger than this
- Ashden Trust, one of the Sainsbury family trusts, who make smaller grants but will core-fund organisations
- Pilkington Energy Efficiency Trust fund research into sustainable energy, including demonstration projects
- The Hadfield Trust offer small grants to Cumbrian organisations working on environmental issues
- The Prince of Wales' Charitable Foundation offers grants for charitable purposes including the Environment. Given the Prince of Wales' strong connections with Cumbria, there may be possibilities for funding

The Agency would be likely to secure funding from some Trust sources, but the amounts will be small.

There are a further range of grants available to assist in the deployment of small scale renewable energy technologies. Many of these are targeted at certain sectors such as not for profit, community etc while others are open to anyone. These grants schemes can be used to part fund the delivery of projects with availability depending very much on the timescale of such a project. Many of these funds are competitive however the Agency will have up to date knowledge on the availability and priority of such funds to enable clients to produce robust applications meeting the aims and objectives of each fund, maximising the chance of success.

The availability of funds comes and goes over time but as of March 2009 the types of funds available include:

- Bioenergy Capital grant scheme
- Bioenergy Infrastructure Scheme
- Low Carbon Building Programme
- Grant funds through some of the main utility providers such as Eon, EDF and Scottish Power
- National Park and AONB Sustainability Funds
- Landfill Tax providers
- The new North West Climate Fund

5.13 ESCOs and revenue from energy generation

Over time, the Energy Agency may be able to raise revenue from establishing Energy Service Companies, installing generation capacity and raising revenue from the sale of energy and energy services. However as section 4.8 above makes clear, at present, the economics are not favourable.

The viability of such schemes depends on a range of factors, including:

- Energy prices
- The market for Renewable Obligation Certificates
- The level of feed-in tariffs (proposed by government, but without indications as to the level of support)
- Availability of funds, from investors, grants or loans (low-cost or commercial) for capital investment
- Costs of project development, including planning issues
- The general economic climate.

If some or all of these factors change, then the possibility of funding through the ESCo route could be re-examined.

5.14 Commercial banks

Commercial banks could provide backing for particular energy projects; they are, however, unlikely to fund the Agency itself. The two leading banks for small-scale renewables are Triodos and the Co-operative Bank, both of whom have dedicated funds for investment in renewables. For example, the Co-op has £400m for its Renewable Energy Asset Finance, funding renewables and energy efficiency projects.

5.15 EU funding sources

Many Energy Agencies, including Marches and Severn Wye, were established using EU funding, under the EU SAVE programme which was replaced by IEE (Intelligent Energy Europe) in 2004. The IEE programme still exists, and there is a call for proposals each year. However, it is unlikely that further rounds will provide funding for establishing Energy Agencies. If any such funding is available, it is likely to go to new entrant states.

There are opportunities, however, for the Agency to be involved in transnational projects under IEE. This requires collaboration with partner organisations in three or more member-states. Cumbrian organisations rarely apply for such transnational projects, but they are potentially very worthwhile, not least because they enable learning from elsewhere in the EU. Katie Hornby, European Officer for Cumbria's Regeneration Support Team, will be happy to advise on applications.

The Leonardo programme also offers funding for vocational education and training of professionals, through exchanges and visits with other member states. This could be a source of funding for education and training initiatives run by the Agency.

Such EU grants tend, however, to be complex to apply for, and outcomes are uncertain. For example, Severn Wye Energy Agency made seven applications to IEE in 2008, of which one was successful.

5.16 NDA, Nuclear Management Partners and Sellafield Ltd

As part of the commitments enshrined in the Energy Act 2004, the Nuclear Decommissioning Authority (NDA) has a supplemental function in respect of "giving encouragement and other support to activities benefiting the social or economic life of communities living near designated installations, designated sites or designated facilities."

This function is discharged through:

- The NDA's Socio-Economic Policy and annual Socio-Economic Plan
- Socio-economic plans developed by the Parent Bodies for its Site Licensee Companies, and by the Site Licensee Companies themselves

This means that, in West Cumbria, Socio-Economic Plans are developed annually by:

- The NDA
- The Parent Body for Sellafield (Nuclear Management Partners, a consortium of URS Washington, Areva and AMEC)
- Sellafield Limited

Governance for these funds and their interrelationships are still being developed (and the new West Cumbria Vision Board will have its say in this). However, it is likely that applications to the funds will be coordinated, with only one source providing support to any applicant (i.e. no "shopping around"), and any applications will need to align with the objectives and activities of the "Britain's Energy Coast" Masterplan and the projects within it.

What this means in respect of the Energy Agency is that funding could potentially be available to support both core costs and projects, but only to support delivery in West Cumbria.

6 Next steps

This business plan sets out how an Energy Agency for Cumbria could work. To make it happen, the next steps will be:

- Agree the final business plan with the Steering Group and Cumbria Renewables Panel
- Cumbria Vision to recommend the creation of an Agency along the lines suggested
- Aeek support for the Agency from Local Authority chief executives and leaders, through the CLASB forum
- Hold detailed discussions with organisations most closely linked to the Energy Agency's work and objectives: the Energy Saving Trust (Carlisle ESTAC and regional manager); CREA; Envirolink; West Lakes Renaissance. These discussions will clarify the links, synergies and potential overlaps in working areas
- Confirm hosting arrangements
- Seek funding for the first three years of the Agency