



Cornwall and Isles of Scilly 2007-2013 ERDF Convergence Programme

Thematic Evaluation

Environment Theme Report

May 2015

Cornwall and Isles of Scilly 2007-2013 ERDF Convergence Programme evaluation supported by ERDF Convergence through the Convergence Support Team project, Cornwall Council and Cornwall and Isles of Scilly Local Enterprise Partnership



AMION Consulting Limited
Customs House, 7 Union Street, Liverpool L3 9QX

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Reviewed and approved by: Signature(s):	
Name(s):	Graham Russell
Job Title(s):	Chief Executive
Date:	May 2015

AMION Consulting is the trading name of AMION Consulting Limited
Registered Office: Langtons, The Plaza, 100 Old Hall Street, Liverpool L3 9QJ
Company No: 3909897
Tel: 0151 227 5563

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1 Introduction

1.1 Overview

AMION Consulting, ICF International and Spirul were appointed by Cornwall Council on behalf of the Convergence Programme Local Management Committee (LMC) to undertake a thematic evaluation of the Cornwall and Isles of Scilly European Regional Development Fund (ERDF) Convergence Programme. The evaluation has been structured to focus, in particular, on exploring the impact and difference that the Programme has made, and its cost effectiveness, in the following four thematic areas:

- Business support;
- Innovation and Research and Development (R&D);
- Workspace; and
- Transport infrastructure.

In addition, the evaluation has also explored a number of more qualitative and process-related issues in relation to the themes above, plus a further two focusing on:

- Regeneration/place-based interventions; and
- Environment.

This document contains the Thematic Report for Environment and forms one of six individual thematic reports listed above to accompany the final overall report. It provides an assessment of the integration of the environment cross-cutting theme (CCT) in the Convergence Programme and has been based on the following information:

- an analysis of Programme Management Information on expenditure, and outputs and results relative to targets;
- a review of programme / project documentation and other elements of the existing evidence base, including the Annual Implementation Reports, the SQW Interim Programme Evaluation (2010)¹ and available project evaluations; and
- stakeholder consultations based upon structured topic guides.

1.2 The Environment Cross-Cutting Theme

The environment has been included in the ERDF Convergence Programme as a cross-cutting theme (CCT), in order to:

¹ SQW, October 2010, Programmes Review of European Regional Development Fund in the South West – Convergence Programme

- recognise the potential impact of economic regeneration on the environment i.e. projects should minimise their environmental impact and enhance environmental opportunities and benefits, whilst achieving their social and economic goals;
- recognise the potential economic benefit that the environment can bring i.e. by realising environmental gains (resource, energy and waste savings) and economic gains (cost reductions, greater productivity, new business opportunities) that can also be achieved.

Specifically, the Operational Programme for 2007-13² describes its environmental objectives as:

- increasing the sustainable use of natural resources, including land, water and the management of waste and energy (including both energy conservation and the use of renewable energy);
- increasing both the business opportunities arising from increased demands for environmental technologies, goods and services and business awareness of the value of the environment and its role in economic development;
- conserving the value of the natural and historic environments; and
- using the Programme and its projects as examples of the successful integration of economic and environmental goals, including the identification of good practice.

As well as being included as a CCT, the environment has also been incorporated as specific strands of activity within elements of the Convergence Programme. For example, one of the four strands of activity specified under Priority 1 (Innovation and Research & Development) relates to the development of the environmental goods and services sector. The indicative allocation of Priority 1 funding to this strand of activity was 10-25%. Similarly, under Priority 2 (Enterprise and Investment) there have been specific opportunities to fund projects that raise the environmental performance of businesses and / or promote services to improve the performance and competitiveness of environmental goods and services businesses.

2 Linkages

There are no environment projects per se. All project investment had the primary purpose of delivering on the Operational Programme objectives of delivering a high growth economy. However a number of investments in a number of key initiatives and schemes can be seen to serve environmental objectives (either directly or indirectly), by generating positive environmental enhancements or mitigating negative environmental impacts; including by:

- *improving the environmental performance of buildings* (achieving at least BREEAM/CEEQUAL 'excellent' or equivalent) – for example, Environment and Sustainability Institute (ESI); the European Centre for Environment and Human Health; Science and Engineering Research Support Facility; the Innovation Centres; and the Redruth Brewery Quarter Enabling and Public Realm;

² Cornwall and Isles of Scilly Convergence Operational Programme 2007-13 (amended version)

- *improving the resource efficiency of businesses* – for example, Envision Phase 3; Improving Your Resource Efficiency (revenue); and Hendra Low Carbon Grant Fund;
- *building the research and innovation base in the Environmental Goods and Services (EGS) sector* - e.g. Wave Hub (construction and development); Peninsula Research Institute for Marine Renewable Energy (PRIMaRE); ESI; and the European Centre for Environment and Human Health;
- *supporting the adoption of environmental technologies through innovation and enterprise support* – for example, Improving Your Resource Efficiency (capital grants);
- *building the capacity of the EGS sector across the region* – for example, Mi-Generation Consultancy Ltd; Mojo Maritime Ltd; Perpetuwave; and the Green Build Hub; and
- *investing in renewable and low carbon energy* – for example, Watergate Bay Low Carbon Project; National Solar Centre; Dartmouth Wave Energy; Keo Energyshare, Hendra.

These projects account for some £88 million of ERDF (total cost £130 million) and have been primarily (93%) funded through Priority 1 - partly reflecting the large capital investments made under that Priority such as those in the ESI and the Wave Hub.

Although not included in the following analysis of funding, environmental objectives have been further pursued as a cross-cutting theme. Examples of this include, for example, through the workspace programme and the more general stipulation that programme capital investments should be conditional on achieving BREEAM 'excellent' (or equivalent) for new build projects, BREEAM 'very good' (or equivalent) for refurbishment projects and CEEQUAL 'very good' for infrastructure/ public realm projects.

3 Funding and implementation aspects

3.1 Key projects delivering environmental benefits

The environment CCT does not have a specific budget allocation, although resources are reserved to support the embedding of the CCT through the technical assistance budgets (see section 3.2 for information on how this has been used). Indicative allocations for environmental activities were also specified for some of the priorities. For example, Priority 1 had an indicative allocation of €10.5-26.2 million to support the environmental goods and services sector. Similarly, an indicative allocation of €13-19 million was specified for Priority 2. Together, this represented a considerable amount of potential funding to support the objectives of the environment CCT.

Table 3.1 indicates those projects which, while primarily focused on economic impacts, were identified as also delivering environmental benefits. As can be seen, significant amounts of funding have been committed. Projects have included in particular support, both directly and indirectly, for the environmental goods and services sector under Priority 1. Funding for the same sector under Priority 2 has been more limited but several environmental goods businesses have still received direct support.

There are a number of other projects which could have been classified as delivering valuable environment benefits such as the St Agnes Island Hall and Workspace project which attracted £1.98 million of ERDF funding towards a £2.4 million total investment. The project won a sustainability award. It is not included in this theme as it was considered by the steering group to be more closely identified with the workspace theme.

Table 3.1: Projected expenditure, ERDF Grant commitments and average intervention rates by sub-theme			
Project	ERDF Grant	Project expenditure	Intervention Rate
GBI Mojo Maritime Limited	£327,953	£728,785	45.0%
The National Solar Centre	£870,798	£1,161,044	75.0%
GBI Dartmouth Wave Energy Limited	£110,804	£246,232	45.0%
Improving Your Resource Efficiency Revenue	£768,663	£873,016	88.0%
Envision Phase 3	£213,623	£267,295	79.9%
GBI Keo Energyshare Limited	£240,000	£480,000	50.0%
GBI MiGeneration Consultancy Limited	£154,786	£310,193	49.9%
Improving Your Resource Efficiency SW Capital Grants	£243,500	£277,082	87.9%
Hendra Low Carbon Grant Fund	£132,639	£265,278	50.0%
Watergate Bay Low Carbon Project	£107,305	£214,610	50.0%
GBI Perpetuwave	£62,631	£139,180	45.0%
Total Business Support / PA2	£3,232,702	£4,962,715	65.1%
Science and Engineering Research Support Facility	£3,915,467	£5,220,623	75.0%
Wellbeing Innovation Centre	£9,987,638	£13,316,851	75.0%
Tremough Innovation Centre	£9,570,961	£12,841,480	74.5%
Pool Innovation Centre	£8,966,339	£11,955,031	75.0%
Wave Hub Construction Costs	£16,390,446	£30,257,612	54.2%
Wave Hub Development Costs	£1,713,703	£2,284,938	75.0%
Environment and Sustainability Institute	£21,381,840	£29,014,841	73.7%
European Centre for Environment and Human Health Phase 2	£2,999,964	£3,999,952	75.0%
European Centre for the Environment and Human Health	£3,053,411	£6,046,358	50.5%
Peninsula Research Institute for Marine Renewable Energy (PRIMaRE)	£3,985,616	£4,856,485	82.1%
Total Innovation / PA1	£81,965,385	£119,794,171	68.4%
Green Build Hub	£1,121,400	£1,495,200	75.0%
Redruth Brewery Quarter Enabling and Public Realm Project	£1,701,602	£3,524,270	48.3%
Total Regeneration / PA4	£2,823,002	£5,019,470	56.2%
Grand Total All Environment	£88,021,089	£129,776,356	67.8%

One example of a programme designed to promote energy and resource efficiency and low carbon energy generation was the Low Carbon Fund. However, only two projects were awarded funding under this programme.

The Low Carbon Grant Fund was a £5 million ERDF programme which was launched on 26th April 2011. The aim of the fund was to offer grants to ERDF eligible organisations in Cornwall and the Isles of Scilly to improve their energy/resource efficiency and/or enable the generation of low carbon energy. The project needed to be innovative. The minimum ERDF investment in this programme was £70,000 with a maximum of £1,000,000 although it was stated that requests in excess of £1,000,000 would be assessed on an individual basis. The outcomes were to demonstrate carbon savings and none of the other programme outcomes formed part of the contract.

The commission was run by Cornwall Council on behalf of the ERDF Secretariat as they were experiencing resource issues following the abolition of the South West of England Regional Development Agency (SWRDA) and the transfer of the Managing Authority responsibility to the Department for Communities and Local Government (DCLG). The application process involved 2 stage with Expressions of Interest invited which were assessed and a short list drawn up to take forward to full business plan stage. A total of 82 requests for the Expression of Interest forms were received which led to 24 submissions for assessment. Applications were received from a wide variety of businesses who proposed an impressive range of projects to improve energy and resource efficiency. Of the 24 submissions the Commissioning Team took forward 15 projects (total value £8 million) to full business plan stage.

The Expressions of Interest were ranked in order of carbon saving per £ of grant awarded and on quality of the submission.

Of the 15 invited to submit a Full Business Plan only 6 final submissions were received and assessed:-

- Fraddon Biopower
- Ginsters
- Green Waste Company
- Hendra
- PEP
- Watergate Bay

The process of assessment of the Full Business Plans was lengthy (including independent verification of the carbon savings proposed) and 4 of the 6 withdrew leaving Hendra and Watergate Bay to be awarded grants of £133,138 and £107,305 respectively.

3.2 Implementation as a cross-cutting theme

Whilst developing high standards of environmental sustainability and using the Convergence Programme to stimulate movement towards a low carbon economy have been core objectives of the 2007-2013 Convergence Programme, the delivery of the environment CCT within the context of a regional economic development programme has been challenging.

In acknowledging that economic growth must be secured within the environmental limits of Cornwall and the Isles of Scilly, the South West RDA (as the then ERDF Programme Intermediate Body) decided to use tonnes of carbon dioxide equivalents as a proxy measure for the 'environmental intensity' of the investments made.

This led to the development of a carbon accounting methodology (Carbon Compass) which was used to assess the carbon intensity of an investment before it was commissioned or contracted. This methodology sought to establish both the 'upstream' (the carbon impact associated with construction and implementation phases of projects) and 'downstream' (operational carbon impacts) of both revenue and capital investments.

However, according to consultees, this approach was never fully developed into an appropriate tool (it largely remained a concept) and, with the closure of the SWRDA, was only applied subjectively to categorise projects according to their carbon "intensity".

The approach to integrating environmental sustainability was further developed during the implementation of the programme, including through the development of additional guidance material and indicators. The indicators were aimed to support more qualitative environmental reporting from investments.

A more focused Technical Sub Group which explored the environmental sustainability implications of certain investment types in more detail was also established due to concerns from the Cross Programme Environmental Advisory Group regarding the level of environmental sustainability integration into Programme investments³.

Furthermore, a number of devolved investment delivery teams and resources were established (CPR Regeneration Company, Cornwall Development Company, Combined Universities of Cornwall and the Isles of Scilly Strategic Investment Framework (SIF) Delivery Team) to:

- provide an integrated network of environmental sustainability advice to developers and investments;
- encourage wider mainstreaming of environmental sustainability principles in project commissioning and development; and
- enable continuous improvement whilst providing links with other local and regional strategies (such as, Cornwall & Isles of Scilly Local Area Agreement and Sustainable Communities Strategy)⁴.

According to the consultees, the support provided by these investment delivery teams was invaluable in terms of integrating environmental sustainability within investments. They also had an important educational and advocacy role. So whilst the documentary guidance provided a useful reference point, it was the personal contact and advice that had the most significant impact on the integration of environmental sustainability (including the identification of potential environmental impacts and possible mitigating measures).

³ Cornwall Development Company, December 2014, 2007-2013 Convergence Programme Cross Cutting Themes Lessons Learnt – Options Report

⁴ Ibid.

Despite these efforts to better integrate environmental sustainability in the projects, the environment CCT has, according to the stakeholder consultees, generally been poorly understood and undervalued by the applicants. Moreover, according to a recent Cornwall Development Company report on the CCTs, environmental sustainability was still largely considered ‘as an add-on in terms of effort and costs’ (although less so in respect of Priority 2 and Priority 4 (Unlocking the economic potential of place) where it was fundamental requirement for applications to be accepted)⁵. Environmental sustainability has been particularly weakly integrated in revenue projects. An important reason for this is that environmental sustainability has not been written into the project targets. With regard to the Isles of Scilly environmental considerations are a core consideration given that this is a fundamental part of the tourism offer on which the islanders rely for their economic wellbeing.

Consequently, and with the exception of a number of vertical investments, environmental sustainability has been weakly integrated within the Programme.

To some extent, this can be attributable to the economic recession and the subsequent impact that this had on project applications and delivery. Indeed, most consultees felt that this particularly impacted on the environment CCT.

The few projects that have been successful in integrating environmental sustainability are the ones that considered such aspects early on in the project development process. The integration of environmental sustainability worked less well when it was ‘retrofitted’ to projects. Indeed, for many projects the environment CCT has been an afterthought and thus was not properly embedded within the project. In these instances, the environment CCT largely became a ‘tick box’ exercise. This, combined with a lack of contractual obligations in relation to environmental sustainability, resulted in a weak integration of environmental sustainability. Indeed, one of the consultees noted that whilst there were examples of good work carried out up until the commissioning/contracting, there was little targeted monitoring thereafter to ensure that the commitments made during the business planning and application stages were delivered in the projects. This in turn may have contributed to the poor understanding and recognition of impact mentioned above.

4 Outputs and results relative to targets

4.1 Programme indicators

Performance against the main programme output and result indicators relevant to the environment CCT is summarised in Table 4.1.

⁵ The Isles of Scilly SIF team negotiated with PMC that BREEAM excellent was not appropriate standard for Isles of Scilly projects due to the scoring weight given to public transport which is not relevant to the Isles of Scilly.

Table 4.1: Reported and projected outputs and results relative to target				
Project	Contracted	Achieved	Achieved + Forecast	Programme target
Environmental goods & services businesses assisted	572	405	446	630
Businesses advised on environmental performance	391	408	408	1,400
Premises achieving BREEAM excellent	58	12	27	80%
Gross jobs created in environmental sectors	613	105	488	1,260

Source: Programme monitoring data

The performance across these indicators has been mixed, but it is likely that most of the OP targets related to the environment CCT will not be achieved. The only output that is likely to be achieved relates to the capital investment in new and refurbished premises. BREEAM and CEEQUAL ‘excellent’ has been delivered for all new capital builds and BREEAM ‘very good’ has been achieved for refurbishment projects. Concerns have however, been raised regarding the reliance on these accreditations, which, according to the consultees, do not cover all relevant aspects of environmental sustainability. As such, complementary indicators and measures are required (for example, in relation to habitat protection, biodiversity and visual impacts).

The number of enterprises assisted on the environment has been particularly disappointing and is currently a long way off being achieved. Similarly, the number of environmental goods and services businesses assisted remains quite a bit below the target for the Programme. Consequently, the total number of jobs created in environmental sectors is also underachieving.

Beyond these project specific outputs and results, the monitoring of the wider environmental objectives has proved challenging. For example, the consultees particularly highlighted the need for additional support in terms of demonstrating and measuring carbon dioxide equivalent savings. They reported the need to extend the indicators that are used to measure environmental sustainability. This does not always require a quantitative measure but could involve a qualitative assessment.

The consultees also highlight the need for environmental sustainability indicators to form a more integral part of the contractual commitments, particularly for revenue projects. Indeed, with the exception of the capital build projects, there have been few examples of contractual targets in relation to the environmental CCT.

Whilst the environmental sustainability indicators have been monitored on an on-going basis through the Programme Monitoring Committee (PMC) and subsequently the LMC, the opportunities for detailed discussions of any variations in achievement have been rare. This in turn has limited the opportunities for knowledge sharing and making improvements to projects.

4.2 Performance of key environmental projects

Table 4.2 reviews the performance of the previously identified key environmental projects. Performance in terms of outputs has generally achieved contracted targets although there has been a slight underperformance in terms of business assists. Job targets however appear unlikely to be achieved - 671 gross jobs have been created or safeguarded as opposed to a contracted target of 1,138. Some three quarters of jobs have been in the environmental sectors.

Table 4.2: Key Environment Projects – Outputs and Results						
	Contracted	Achieved	Forecast	Achieved + Forecast		
	All	All	All	All	Innovation	Business Support
Outputs						
No of business assists	1,204	789	223	1,012	738	274
New businesses assisted	55	52	7	59	53	6
Environmental businesses assisted	289	230	17	247	229	18
Businesses involved in collaborative R&D	261	207	123	330	330	0
Businesses engaged with knowledge base	228	424	17	441	441	0
Businesses receiving environmental advice	251	198	0	198	0	198
BREEAM Excellent Projects	8	3	1	4	4	0
Research and Innovation Centres Supported	6	5	1	6	6	0
Results						
Gross new jobs created	1,073	223	383	606	88	516
Gross jobs created in environmental sectors	569	105	370	475	40	435
Gross jobs safeguarded	65	25	40	65	1	64
SMEs launching new products	100	15	45	60	0	60
Additional firms in clusters / networks	89	74	8	82	11	71
Gross increase in GVA	£70.68m	£8.61m	£34.11m	£42.72m	£0.85m	£41.87m

5 Key conclusions

Whilst the Convergence Programme has delivered a number of significant investments related to the environment CCT, it can be argued that overall the Convergence programme has found it difficult to deliver on its environmental sustainability objectives.

The Convergence Programme has particularly struggled to achieve horizontal integration of the environment CCT (i.e. the environment CCT has not been successfully integrated across the programme). There are many reasons for this, including, most notably, the lack of environmental

sustainability outputs and results as part of the contractual commitments of projects, particularly revenue projects.

Vertical integration of the environment CCT through direct investments appears to have worked well, not least because of contractual obligations to deliver carbon outputs and environmental impact reductions (and in most cases usable data was provided). The overall job outputs target identified for the key environmental projects appears unlikely to be achieved.

In terms of capital projects, the programme has been successful in terms of achieving the required BREEAM and CEEQUAL standards. These standards are well-established and valuable in terms of promoting environmental sustainability. Nevertheless, beyond the mandatory credits/ points, it would be helpful to provide better guidance and targeting of elective credits, including water, biodiversity, insulation, renewables and lighting. Moreover, it may be useful to consider other equivalent measures and provide clear guidelines on how these may be used to promote environmental sustainability. This would be particularly important for the Isles of Scilly where a number of elective BREEAM/ CEEQUAL credits may not be readily available to them for a number of reasons.

Progress towards the achievement of the environmental objectives have not been helped by the impact of the economic crisis and the institutional/ governance changes (such as the abolishment of the SWRDA and Business Link) that took place halfway through the programme.

Better knowledge is required on how to measure and assess carbon savings and other environmental impacts, particularly for revenue projects (and not only those that support direct environmental sustainability investments).

6 Lessons for the future

There are a number of general lessons that have been learnt from the experience of the Convergence Programme. For example, the environment CCT needs to be better understood and valued by all stakeholders and partners involved in the decision-making, appraising, implementing and monitoring operations. Moreover, it should have an equal status to economic and inclusion objectives and should not be seen as an area that can be compromised when changes are required within a project. Equally, it is important that the environment objectives and targets are appropriate and relevant to individual projects⁶.

There is a need for greater recognition that environmental sustainability is an economic driver enabling more resilient businesses through reducing costs and providing opportunities for growth. During the Convergence Programme 2007-2013, the focus has primarily been on the mitigation of environmental impacts.

The consultees also highlight the need for additional resources to support dedicated teams working with the environment CCT. Experiences from the Convergence Programme has shown that the personal contact and support provided by these dedicated teams can have a significant impact on the project design and the contractual commitments.

⁶ Cornwall Development Company, December 2014, 2007-2013 Convergence Programme Cross Cutting Themes Lessons Learnt – Options Report

Whilst the programme has been successful in achieving its target on capital builds (BREEAM and CEEQUAL status), there have been suggestions by the consultees that the programme has been overly reliant on such accreditations. This has in some cases resulted in important environmental impacts being not adequately considered or overlooked. For example, the requirements of the 2007-2013 Programme did not target any specific BREEAM credits (over and above the mandatory credits defined by BRE in the assessment process). Consequently, habitat and biodiversity credits were included almost by default, as they tended to be 'cheaper' than others. Additionally, some credits were considered to have been included purely to increase the score to reach the excellent banding and did not, in some circumstances, provide value for money⁷. At a broader level, it would also be useful to show project and programme impacts on carbon emissions (in an absolute and relative sense).

⁷ Ibid.