

CSEP Delivery against Cornwall Sustainable Energy Strategy/Action Plan, December 2006.

No.	Action detail	Update
1	Increasing Staffing and more inter task group working	<ul style="list-style-type: none"> <li>• Since the launch of the Energy Strategy in 2004, the CSEP team has grown from three to seven.</li> <li>• Lindsay Knuckey, European Funding Officer, joined the team in Feb 2005. Jasmine Reilly, Press &amp; Publicity Officer, joined the team in June 2006.</li> <li>• Since March 2005 CCC has provided a secondment to CSEP for an administrative post. Alison Palmer has been providing the CSEP team with admin support since January 2006.</li> <li>• Will Wason started in July 2006 as CSEP's Renewable Energy Technical Officer. Will's initial role is to lead delivery of Cornwall's 3 year LAA microgeneration stretch target.</li> <li>• During the last two years three students have worked with the CSEP team.             <ul style="list-style-type: none"> <li>- Philip Overy joined CSEP as a Research Assistant for the summer in 2005 and worked on baseline research and development of the stretch target for LAA.</li> <li>- Kieran Highman joined CSEP as Research Assistant in July 2006 for a 2 month summer work placement researching the renewable energy manufacturing potential in the CPR area and assisting with the development and improvement of CSEP's information resources.</li> <li>- Both Philip and Kieran were students on the BSc Renewable Energy course at the University of Exeter, Cornwall Campus.</li> <li>- Peter Ssali volunteered for CSEP for 2 weeks in July 2006. Peter was completing the <i>Cornwall College</i> Renewable Energy foundation degree. Peter produced a number of case studies on projects in Cornwall. See: <a href="http://www.csep.co.uk/page109g.html">http://www.csep.co.uk/page109g.html</a>.</li> </ul> </li> </ul>
2	Establish an Energy Service Company	<ul style="list-style-type: none"> <li>• In 2004 and 2005 CSEP organised training sessions on ESCo's from EST for a wide range of partners.</li> <li>• In 2006 CEP (via EDF Energy) and CPRR (via SWRDA) co-funded a <b>Feasibility Study for a Sustainable Energy Infrastructure in the Camborne-Pool-Redruth regeneration area</b>. Element Energy Ltd., working in partnership with GeoScience (on mine-water heat pumps) and Thameswey (the Woking ESCO) completed the study. The study provides a</li> </ul>

		<p>financial and technical assessment of the area's potential for above standard energy efficient building design, CHP, district energy, energy from waste, biomass, mine water heat pumps, micro hydro, building integrated renewables and an ESCO.</p> <ul style="list-style-type: none"> <li>• CSEP and CPRR arranged a visit for CPRR board members to Woking in November 2006 to find out more about the Thameswey ESCo.</li> <li>• The CPRR Board has identified ESCo formation as a project in its <b>Draft Investment Programme for the CPR Economic Growth Zone</b>. Following on from his presentation at the CSEP Annual Meeting, Ray Morgan, Woking BC CEO, is to meet with the CPR Energy Steering Group and the CSEP Sustainable Energy Planning Group.</li> </ul>
3	<p>a) Input into regional energy strategies and other regional strategies. b) Input into EU structural Funds SPD beyond 2006</p>	<p><b>a) Input into regional energy strategies and other regional strategies</b></p> <ul style="list-style-type: none"> <li>• CSEP has inputted to various consultations for regional strategies such as ReVision 2020, the Regional Spatial Strategy, the South West Regional Low Carbon Housing &amp; Fuel Poverty Strategy and the Local Government White Paper.</li> <li>• A report from the <b>Energy in Regeneration Conference</b> (July 2005) was submitted to the UK Parliamentary Sustainable Energy Partnership, detailing recommendations for action by the Government departments DTI, DEFRA and ODPM.</li> <li>• The Education and Community Group of the Energy Efficiency Partnership for Homes commissioned a piece of research into the potential for a small grant fund for community groups interested in setting up or becoming involved in energy projects. The work was carried out by CEP, CSEP, Future Perspectives Cooperative and Richard Hoggett. The <b>Energising Communities</b> report includes information on existing funding opportunities for energy related projects, guidance on implementation of a new grant fund and alternative support models.</li> <li>• CSEP started work in 2006 on a one year research project for the Department for Culture and Local Government (DCLG) to assist four government departments (DTI/DEFRA/DFT &amp; DCLG) on policy development and <b>Aligning National and Local Energy Policy</b>. The work will concentrate on aligning departmental energy objectives to achieve more effective methodologies for local delivery.</li> <li>• Through 2005 and 2006 CSEP has supported the signing and implementation of the</li> </ul>

		<p><b>'South West Wind Protocol'</b> by Cornwall's local authorities. Restormel Borough Council and Kerrier District Council have signed the protocol (see the <a href="#">Regen SW Website</a>).</p> <ul style="list-style-type: none"> <li>• Restormel Borough Council, Penwith District Council and the Council of the Isles of Scilly have all signed the <a href="#">Nottingham Declaration</a>.</li> <li>• Kerrier District Council, Carrick District Council, Penwith District Council and Cornwall County Council have all signed the <b>Declaration for the European Regions for Energy Efficiency and Renewable Energy Sources</b>.</li> </ul> <p><b>b) Input into EU structural Funds SPD beyond 2006</b></p> <ul style="list-style-type: none"> <li>• A report from the <b>CSEP Energy in Regeneration Conference</b> (July 2005) was submitted to the Cornwall Economic Forum, Government Office South West, South West RDA and Cornwall Enterprise on the opportunities for supporting energy-related projects and programmes through any future round of EU Structural Funding in Cornwall.</li> <li>• Tim German represents Cornwall on the <b>CPMR Energy Working Group</b>. Tim presented at the CPMR 'Energy for the Periphery' Conference that took place in Navarra, Spain, in October 2006. The event was organised by the Energy Working Group to present the conclusions of three seminars held during the previous 12 months, the first of which was held in Cornwall in September 2005. A report was prepared for the CPMR Energy Working Group from the Energy in Regeneration Conference.</li> <li>• The <b>ASPIRE project</b> aims to develop a delivery pathway for creating a sustainable energy community in peripheral areas. For the UK component, CSEP will draw on the issues in the CPR area. The project involves 12 European partners. The kick off meeting for the project was hosted by CSEP in October 2006. ASPIRE is funded through the Intelligent Energy Europe (IEE) programme, and was the 4<sup>th</sup> highest scoring bid in 2006.</li> <li>• <b>Kyoto in the Home</b> is also funded through the 2006 IEE programme. It is a 13-partner European project to develop renewable energy teaching tools for schools. The CEP team will work with five schools beginning work in early 2007.</li> </ul>
--	--	---

4	Integrate sustainable energy in County level strategies and plans	<ul style="list-style-type: none"> <li>• CSEP has provided input to the energy priority of the draft <b>Strategy and Action</b>. Strategy and Action is the economic development strategy for Cornwall up until 2021. The revised Strategy and Action document will be officially launched in November 2006.</li> </ul>
5	Work with LSPs and integrate sustainable energy in district level community strategies, local development frameworks and parish plans	<ul style="list-style-type: none"> <li>• In 2006, CSEP is represented on 5 of Cornwall's 6 <b>Local Strategic Partnerships</b> - Cornwall Strategic Partnership, West Cornwall Together, Carrick LSP, Restormel LSP (Sustainability &amp; Culture Sub Group) and Caradon LSP. Tim German is Cornwall's sustainability sector representative on Cornwall Strategic Partnership.</li> <li>• CSEP has requested that Kerrier District Council incorporates the recommendations from the Element Energy CPR Sustainable Energy Feasibility study into the <i>CPR Area Action Plan</i> (part of Kerrier's LDF). More information on the Kerrier DC <a href="#">website</a>.</li> <li>• Penwith District Council is the first council in Cornwall and the Isles of Scilly to adopt a district-wide <b>Climate Change Strategy</b>. The Strategy covers all aspects of energy use within the District and also addresses how the authority and its partners will introduce measures to help Penwith mitigate the potential effects of Climate Change. Following the publication of the strategy an Officer/Member working group has been formed to ensure that the actions stated in the strategy are implemented.</li> <li>• CSEP has been assisting the Council of the Isles of Scilly to produce its own <b>Energy Strategy</b> for the islands. The consultation process took place in summer 2006 and an evaluation of the feedback by Richard Hoggett was used to present recommendations to the council. It is hoped that the strategy will be adopted by the Council in early 2007.</li> </ul>
6	Create a common gateway for advice and support	<ul style="list-style-type: none"> <li>• The <b>EnVision Cornwall</b> bid was approved by Objective One and SWRDA in 2005. It provides a subsidised advice service to small business in Cornwall, covering energy, waste, water and environmental management systems. The Environment Agency is the lead body. The advice service is delivered by CEP, ReZolve, Cornwall Business School, Groundwork and Global Action Plan. Companies in Cornwall are provided with 5 days support and a mentor from one of the five organisations above, who performs a baseline audit and works out what support is needed.</li> <li>• CEP and CoaST are delivery partners for Cornwall's sustainable tourism LAA Outcome stretch target to enable a total of 273 tourism businesses to achieve <b>Green Tourism</b></li> </ul>

		<p><b>Business Scheme</b> accreditation by 2009. The LAA funds two GTBS business advisors, one based at CEP and one at CoaST. Since the scheme started in August 2006, 11 businesses in Cornwall have already achieved accreditation, all managing either Silver or Gold awards.</p> <ul style="list-style-type: none"> <li>• The 2006-2009 LAA energy stretch outcome has enabled <i>CEP</i> to provide a free impartial <b>microgeneration advice service</b> for community groups, developers, housing providers and householders in Cornwall.</li> <li>• From October 2006 CEP has been part of a regional team providing a local technical advice service for small scale <b>wood fuel</b> boiler systems.</li> </ul>
7	Create GIS map based databases on levels of fuel poverty and energy efficiency of the housing stock	<ul style="list-style-type: none"> <li>• CEP's '<b>Hot Spots</b>' initiative is an adaptation of the already successful and award winning Home Health scheme and a Creative Environmental Network project which has operated successfully in the London, Lewisham area. GIS mapping technology is used to overlay key social and statistical data onto maps, highlighting the areas that can benefit most from energy efficiency measures. During autumn 2006, in partnership with Carrick DC, CEP rolled out the second phase of the project.</li> </ul>
8	Fuel Poverty and Energy Efficiency Action Plan  'Fuel Poverty & Energy Efficiency'	<ul style="list-style-type: none"> <li>• CSEP commissioned CSE to produce a <b>Cornwall Fuel Poverty and Energy Efficiency Action Plan (FPPEAP)</b> in 2004. Part of the action plan is to include an updated Fuel Poverty Indicator (FPI) to inform targeting of resources. Unfortunately the work on the FPI has still not been completed, but it is hoped that the FPPEAP will be completed by the end of 2006. Members of the CSEP Domestic Energy &amp; Health Task Group contributed their expertise to the FPPEAP in 2004.</li> <li>• A <b>Health &amp; Community Group</b> was set up in June 2006 to improve connections with the Health and Voluntary and Community Sectors.</li> <li>• The first <b>Domestic Energy Discussion Forum</b> met in September 2006 and brought together local authority housing officers with health, social services and voluntary sector agencies to explore ways in which the identification and referral of vulnerable households for insulation and heating can be further "mainstreamed" into the activities, targets and performance indicators of all these agencies.</li> <li>• CEP, in partnership with the South West Peninsula Strategic Health Authority, the Peninsular Medical School and EAGA Partnership, organised an interactive <b>Health</b></li> </ul>

		<p>Conference in October 2006. The conference engaged with health professionals on energy, fuel poverty and climate change issues and identified ways of increasing joined-up working with other front-line organisations like Cornwall EEAC and Age Concern.</p>
9	Roll out Home Health programme to other parts of Cornwall and develop 'Home health Plus' for private rented sector housing	<ul style="list-style-type: none"> <li>• CSEP's successful funding bids have enabled the continued roll out of <b>Home Health</b> to every district/ borough in Cornwall since 2004. Since the first pilot projects in 2002 Home Health has provided over 5265 homes with at least 1 free major energy efficiency measure, saving 11,0879 tonnes of carbon dioxide and over £382,625 p.a. on domestic energy bills.</li> <li>• <b>Home Health Plus</b> is now an established project offering free insulation measures to private tenure households through a variety of schemes in each district/ borough.</li> </ul>
10	Develop programme for those 'able to pay'	<ul style="list-style-type: none"> <li>• CEEAC provides all householders with free and impartial advice on the grants available for insulation in Cornwall, including support for 'able to pays'.</li> <li>• A pilot 'able to pay' scheme was run in early 2006 in Four Lanes, but take up rates were low (20 referrals).</li> <li>• Enact Energy continue to deliver the Heat Cornwall programme.</li> </ul>
11	Develop programme to address 'hard to treat' homes	<ul style="list-style-type: none"> <li>• In 2005 Carrick Housing installed six air source heat pumps into hard to treat homes as part of a pilot project involving Kensa Heat Pumps, EDF Energy, Carrick DC and CSEP.</li> <li>• Utilising <b>Decent Homes</b> funding and the Powergen HeatPlant scheme, in 2006 Carrick Housing has carried out a programme of mass heat pump installations in off-gas homes across the district. Between April - November 2006, Earth Energy Systems installed 56 GSHP's, totalling 259 kW, to Carrick Housing properties.</li> <li>• In 2006 CSEP submitted a <b>Hard to Treat Homes</b> paper to ODPM and DEFRA describing the special circumstances and treatments for homes in Cornwall that cannot be improved with loft or cavity wall insulation. Under the 2003-2006 Local Public Service Agreement, ODPM and DEFRA agreed to take this paper into account when reviewing schemes for the relief of fuel poverty (such as Warm Front and EEC). The paper is available on the CSEP website at: <a href="http://www.csep.co.uk/page132g.html">http://www.csep.co.uk/page132g.html</a>.</li> <li>• In 2006 Coastline Housing converted a former hostel to provide 12 flats for homeless</li> </ul>

		<p>families. The energy efficiency of the building will be improved with dry lining and loft insulation alongside a proposal to install sixteen 1kw micro-wind turbines to heat the electric hot water system in each flat. Solar technologies are also under consideration. CSEP is assisting with technical advice, facilitation support and a £46,564 contribution from LPSA Reward funding.</p> <ul style="list-style-type: none"> <li>• Drilling started in July 2006 for six 3.5kW and four 5kW Calorex ground source heat pumps into 10 affordable new homes being built by Cornwall Rural Housing Association at Delabole. The properties have also been designed to maximise passive solar gain in order to reduce heating requirements.</li> <li>• Penwith Housing Association and Earth Energy are installing ground source heat pumps to social housing in Trewellard, near Penzance, as part of the LAA delivery plan.</li> <li>• In 2006 the Energy in Buildings Group developed a <b>Microgeneration Monitoring project</b> to obtain independent data on the performance of heat pumps in various situations. UoE is leading this project. A large number of new GSHP's in Carrick Housing and PHA properties will be monitored. Cornwall College &amp; ESD are supplying data loggers and Cornwall College students are assisting. There will be sub-metering to establish energy consumption. UoE and CEP are looking for funding to expand the project to monitor 4 different micro-wind turbines on one property.</li> </ul>
12	Work with Parish Councils to create sustainable communities	<ul style="list-style-type: none"> <li>• CSEP assisted with the successful passage through Parliament of the <b>Climate Change and Sustainable Energy Act</b> in June 2006.</li> <li>• The CEP Community Team has been providing a support service to parish councils by providing awareness raising presentations.</li> <li>• The <b>CEP Community Climate Change Forum</b> is supporting Cornwall Friends of the Earth on an initiative to enable St Endellion in North Cornwall to become a Climate Friendly Parish (2006).</li> </ul>
13	Work with the RETG to promote the role of RE technologies in new housing schemes	<ul style="list-style-type: none"> <li>• Government funding for the Pathfinder project was diverted to North West England. However it is hoped that a similar programme for microgeneration will take place in Cornwall in 2007.</li> <li>• In 2006 CEP (via EDF Energy) and CPRR (via SWRDA) co-funded a <b>Feasibility Study for a</b></li> </ul>

		<p><b>Sustainable Energy Infrastructure in the Camborne-Pool-Redruth</b> regeneration area. Element Energy Ltd., working in partnership with GeoScience (on mine-water heat pumps) and Thameswey (the Woking ESCO) completed the study. The study provides a financial and technical assessment of the area's potential for above standard energy efficient building design, CHP, district energy, energy from waste, biomass, mine water heat pumps, micro hydro, building integrated renewables and an ESCO.</p> <ul style="list-style-type: none"> <li>• CSEP was successful in negotiating a <b>LAA</b> stretch target to encourage the take up of renewable energy in domestic and community buildings. The LAA enabled CSEP to appoint a technical officer from July 2006, who has a key role to work directly with developers, councils and housing associations on the integration of RE in new build housing schemes. EiBG partners helped with development of the LAA outcome.</li> <li>• In September 2006 the <b>CLEO funding call</b> (part of CSEP's LAA target) was launched with a deadline of 31<sup>st</sup> October 2006. There is £42k available for microgeneration measures in domestic/ community buildings.</li> <li>• In September 2006 the first <b>Renewable Energy Discussion Forum</b> was held. The event focussed on microgeneration and was targeted largely at developers and housing associations. The event was attended by over 100 people who had the opportunity to question a wide range of experienced renewable energy manufacturers and installers on current technologies, costs, planning, and installation.</li> <li>• Penwith District Council is drafting climate change proofing guidance for developers.</li> </ul>
14	Work with local & regional partners to assist in meeting the 2010 targets for renewable electricity	<ul style="list-style-type: none"> <li>• As part of the LAA microgeneration target CSEP is gathering data and reporting to RegenSW on the installation of renewable energy technologies in Cornwall. The county's current total of renewable electricity generation is 54 MW (the target is 93-108MW by 2010).</li> <li>• <b>Cornwall Switch Campaign</b> was launched in 2005. To date, 127 households have switched to green energy. Once the threshold of around 150 switches has been reached, surplus income will be donated to Oxfam, Water Aid and a new local sustainable energy grants programme (The Cornwall Green Communities Fund) run in partnership with CEP and Cornwall Community Foundation.</li> </ul>

15	<p>Work with building developers and regeneration agencies to ensure that local renewable resources (providing heat and/or electricity) are considered in all developments e.g. CPR Regeneration</p>	<ul style="list-style-type: none"> <li>• In 2006 CEP (via EDF Energy) and CPRR (via SWRDA) co-funded a Feasibility Study for a Sustainable Energy Infrastructure in the Camborne-Pool-Redruth regeneration area. Element Energy Ltd., working in partnership with GeoScience (on mine-water heat pumps) and Thameswey (the Woking ESCO) completed the study. The study provides a financial and technical assessment of the area's potential for above standard energy efficient building design, CHP, district energy, energy from waste, biomass, mine water heat pumps, micro hydro, building integrated renewables and an ESCo. The <b>CPR Energy Feasibility Study</b> was launched at a well attended stakeholder event at Cornwall College on 9 Feb 2006.</li> <li>• Kieran Highman joined CSEP as Research Assistant in July 2006 for a 2 month summer work placement researching the renewable energy manufacturing potential in the CPR area.</li> <li>• The Board of CPRR are very interested in the ESCo proposal and key members attended a fact-finding visit to Woking in November 2006.</li> <li>• In 2006 CSEP submitted sustainable energy recommendations to Kerrier District Council on a consultation for the revised Urban Design Framework for <b>Rosewarne Village</b> (Boilerworks Road Site) in Camborne.</li> <li>• The <b>ASPIRE</b> project aims to develop a delivery pathway for creating a sustainable energy community in peripheral areas. For the UK component, CSEP will draw on the issues in the CPRR area. The project involves 12 European partners. The kick off meeting for the project was hosted by CSEP in October 2006. ASPIRE is funded through the Intelligent Energy Europe (IEE) programme, and was the 4<sup>th</sup> highest scoring bid in 2006. ASPIRE will provide revenue funding for the partners to devise a model for creating SE communities in peripheral areas.</li> <li>• Penwith District Council is drafting climate change proofing guidance for developers.</li> <li>• In September 2006 the first <b>Renewable Energy Discussion Forum</b> was held. The event focussed on microgeneration and was targeted largely at developers and housing associations the event was attended by over 100 people who had the opportunity to question a wide range of experienced renewable energy manufacturers and installers on current technologies, costs, planning, and installation. It was well attended by developers working in Cornwall.</li> </ul>
----	--	---

16	Implement model planning policies to promote integration of RE technologies in new development	<ul style="list-style-type: none"> <li>• The CSEP Sustainable Energy Planning Group is leading on this. The group <i>was</i> aiming for 15% minimum RE integration in new developments. However, the draft RSS may now increase its baseline from 10% to 20%. The Energy Review is also considering permitted development rights for micro-renewables.</li> <li>• A Planning Guidance document for renewable energy in Cornwall was published in 2004. The work was coordinated by the County Council's Spatial Planning team and complements the Energy Strategy for Cornwall. Members of the CSEP Renewable Energy Task Group provided expert input to the development of the brief. <a href="http://www.csep.co.uk/page129g.html">http://www.csep.co.uk/page129g.html</a></li> </ul>
17	Promote proving zone for Sea Power	<ul style="list-style-type: none"> <li>• The results of the Wave Hub feasibility study, commissioned by SWRDA, were presented to the CSEP Marine Renewables stakeholder Group in February 2005. The study concluded that the project is technically viable. SWRDA subsequently appointed Halcrow to undertake an Environmental Impact Assessment (EIA) of the proposed site of the Wave Hub which was completed in Summer 2006.</li> <li>• Three developers have been chosen to test their technologies on the Wave Hub: Ocean Power Delivery with 'Pelamis'; Ocean Power Technology with the 'Powerbuoy' and Fred Olsen Ltd with the 'Buldra' device. SWRDA are also investigating the possibility of inviting a further developer to take the forth berth on Wave Hub.</li> <li>• Consent applications were submitted to DTI and Defra in June 2006. £4.5 million of funding has been secured from the DTI and SWRDA will contribute funding towards the implementation of Wave Hub. It is likely that Wave Hub will be a priority in the Convergence Programme for Cornwall and Isles of Scilly and additional funding will be provided through this programme.</li> <li>• Pending approval of the necessary consents it is currently anticipated that installation will take place in March 2008.</li> </ul>
18	Facilitation of a stakeholder group to address the wider impacts of the deployment of Marine Renewable technologies off the coast of Cornwall	<ul style="list-style-type: none"> <li>• CSEP has established a stakeholder group consisting of individuals and organisations interested in or potentially affected by the Wave Hub development. In the development of the Wave Hub project stakeholder meetings took place on a regular basis. In addition various larger events have been held, including a Public Exhibition that took place on 6 October 2005 at the Passmore Edwards Institute in Hayle, at which members of the Wave Hub project team and CSEP were present to answer questions</li> </ul>

		<p>and enquiries about the proposal. A further public open day was held in June 2006, which was attended by over 100 members of the public.</p> <ul style="list-style-type: none"> <li>• There have been some objections to the Wave Hub development, principally by some members of the surfing community that are concerned over the potential impacts on wave height. CSEP facilitated a meeting between surfers and Wave Hub project developers in September 2006 to address these concerns. This meeting also included representatives from the University of Exeter in Cornwall which has carried out independent research into the potential impacts of marine energy devices on wave height. As an outcome of this meeting it was agreed that a third independent review of existing studies on the projected effect of Wave Hub on surf conditions would be commissioned. This review will also assess where there is a need to continue to measure wave height after Wave Hub has been installed.</li> </ul>
19	Promote development of small-scale biomass plant and markets for biomass energy	<ul style="list-style-type: none"> <li>• CSEP's <b>Bio-Energy Group</b> has met on a quarterly basis since the launch of the Energy Strategy. The group has been very active in responding to local, regional and national consultations and policy developments.</li> <li>• The bio-energy group played a key role in the regional <b>Bioscope Project</b>, which investigated various biomass opportunities for specific projects across Cornwall. The project ended with a well-attended seminar held in June 2005. As a result of this project, Cornwall County Council is investigating opportunities to replace existing inefficient boilers at Pencalenick School, near Truro, with wood fuelled boilers. The success of the Bioscope Project led to the development of the regional <b>Woodfuel South West Programme</b>, for which CEP is the Cornwall delivery partner.</li> <li>• CSEP's partners have been active in developing markets for biomass energy, including the Eden Project which in 2006 installed a 300 kW biomass boiler to provide all year round baseline heat. The University of Exeter in Cornwall is currently carrying out various practical research projects into biofuels, including the use of biodiesel in jet turbines and fishing fleets, as well as carrying out research into the non technical barriers to biodiesel production.</li> <li>• In October 2006 CSEP helped to co-ordinate a <b>Farming &amp; Sustainable Energy Conference</b>. The event was attended by nearly 200 farmers, landowners and renewable energy installers and focused on different technologies that can be utilised on farms, and the practical and financial issues involved in installing RE technologies.</li> </ul>

20	Promote the role of biomass CHP in all major new developments	<ul style="list-style-type: none"> <li>• The CPR Energy Study assessed opportunities for various types of low and zero carbon technologies including a biomass CHP Unit supporting a local supply network.</li> <li>• CSEP has been assisting Cornwall Partnership Trust to explore biomass CHP options for Cornwall's hospitals.</li> </ul>
21	Promote awareness of the benefits of RE in the context of sustainable communities	<ul style="list-style-type: none"> <li>• CSEP has been very active in promoting the benefits of RE in sustainable development at both local, regional, national and European level. CEP's Community Team has provided support and advice to many community organisations, including schools, which has led to the installation of many RE schemes across the county. This includes:</li> <li>• February 2004 - The Well Being Centre in Illogan installed a 4.8kWp grid connected photovoltaic array, funded by the EDF Energy Trust and the DTI PV scheme.</li> <li>• 2005 - Three 'Renewables in Action' projects completed, with 120 young people educated on renewable energy and climate change and shown how to install solar PV on community facilities. The 3 community-owned micro-solar PV projects are in Lanner, Mousehole and Hayle. One solar lighting and art display is now part of the world famous 'Mousehole Lights' that attracts 30,000 people.</li> <li>• 2006 - Carnyorth Outdoor Education Centre installed a 5kW solar PV and 6000kwh solar thermal system. Both were installed by local companies Plug into the Sun (PV) and Celtic Solar (solar thermal).</li> <li>• An interactive numerical game powered by a 50w solar panel has been created in the playground of Barripper Little Acorns Nursery and a 120w solar powered light display was created and installed at St Mawes Primary School.</li> <li>• CEP's Community team has also established a <b>Multi Faith Climate Change Forum</b>, combining representatives of the various faiths in Cornwall. The aim of this group is to promote awareness of the role the faith community can play in addressing climate change and help eradicate fuel poverty. The forum was launched at a conference in September 2005 and now has 44 members covering a range of faiths/denominations including Anglican, Catholic, Methodist, Jewish, Baha'i, Pagan, Humanist and Buddhist. It disseminates climate change and sustainable energy information through faith networks, holds workshops, lectures, book clubs and produces a regular newsletter. The creation of the forum has encouraged energy audits of churches and has</li> </ul>

		<p>established a number of voluntary Climate Champions.</p> <ul style="list-style-type: none"> <li>• The Cornwall Energy LAA focuses on developing Cornwall's sustainable energy economy and the important role of RE in housing developments. Many social local housing providers have been integrating renewable energy technologies as well as energy efficiency measures into new and existing developments, including Coastline Housing, Penwith Housing Association and Carrick Housing, the latter two of which have both received awards for their schemes. The LAA includes promotion of renewable energy to encourage take up.</li> <li>• As part of the Cornwall LAA, a <b>Renewable Energy Discussion Forum</b> was held at Delabole in September 2006, the theme of which was 'microgeneration'. Over 100 delegates attended the event, with 14 exhibiting companies and 12 talks focussing on a variety of renewable energy issues, including case studies, new technology, funding and policy.</li> <li>• In October 2006, a 15kW community wind turbine was installed in <b>South Wheatley</b>, nr Launceston. The turbine will serve 70% of the hamlet's overall electricity needs, save 20 tonnes of carbon a year and generate an income of about £3,000/yr which will be used to provide green grants for energy efficiency measures in up to 30 local homes. The turbine will be run by South Wheatley Renewable Energy Trust as a non-profit making company.</li> <li>• In October 2006 CEP and partners J&amp;M Consulting, St. Austell Brewery and the Eden Project launched the <b>Climate Change 'So What?'</b> Pub Quiz challenge at the Pandora Inn. The project is funded by DEFRA's Climate Challenge Fund. A series of pub quizzes, lectures and events will be held across the county to encourage people to think about climate change.</li> <li>• From 1 Jan 2007 Caradon, North Cornwall and Restormel Councils will be asking the public to chill out as part of the '<b>Cool It' Campaign</b>. They will ask everyone to make a pledge to take action to reduce their own CO<sub>2</sub> emissions. For each pledge made by members of the public the respective council will plant a native sapling as part of a community tree planting promotion.</li> </ul>
--	--	--

22	Work with education and training organisations to ensure R&D and skills capacity related to sustainable energy is developed	<ul style="list-style-type: none"> <li>• The <b>CSEP Education &amp; Skills Group</b> is working to ensure that within the future economic agenda the planning and implementation of sustainable energy skills and education is integrated, coherent and mutually supportive across all educational sectors.</li> <li>• In 2003 the University of Exeter in Cornwall launched a B.Sc. (Hons) <b>Renewable Energy Degree</b> course and in June 2006 the UK's first Renewable Energy graduates graduated achieving five firsts and three 2:1s. Of the 8 graduates, two are continuing education at the university and 6 others are entering the renewable energy sector. Since its launch, demand for the course has escalated with 35 students enrolling in September 2006.</li> <li>• In 2004 Cornwall College also launched a <b>Renewable Energy Technology foundation degree (FdSc)</b>. Students from this programme can progress into the fourth semester of the B.Sc. RE degree after graduating from their FdSc and having completed a six month work placement and bridging modules.</li> <li>• Cornwall Sustainable Building Trust is delivering '<b>Microgen</b>', a Workforce Development Project funded by the Learning and Skills Council and the European Social Fund. CSBT is working with the micro-renewables sector to develop industry approved installer training for domestic renewable energy devices. By the end of September 2006 the project had installed 3 solar thermal systems into homes in St Austell, St Just and St Agnes.</li> <li>• In Autumn 2006, the University of Exeter, Cornwall College, Carrick Housing and Penwith Housing Association commenced a <b>microgeneration monitoring project</b>. A large number of new GSHP's in Carrick Housing and PHA properties will be monitored and funding is being sought to monitor 4 different micro-wind turbines on one property. CCC is funding the research and Cornwall College and ESD are providing data loggers and Cornwall College is also providing student resources. There will also be sub-metering to establish energy consumption. The project will help to provide much needed impartial data on the performance of microgeneration technologies and will be of national significance, helping to further promote Cornwall's knowledge economy in this sector.</li> </ul>
----	---	--

23	Ensure that training is available for elected members and officers of public sector organisations on sustainable energy technologies	<ul style="list-style-type: none"> <li>• In April 2004 CSEP organised a seminar for 40 local authority and housing association officers on the revised Part L Building Regulations and Directive 2002/91/EC on the Energy Performance of Buildings (EPB), which came into force in Jan 2006.</li> <li>• In 2004 a successful bid for <b>EST Social Energy Housing Forum (SHEF)</b> funding enabled CSEP and Cornwall EEAC to provide Registered Social Landlords and Local Authority officers with general training on domestic scale renewable energy options (micro CHP, solar, GSHPs etc). Three sessions were held in west, mid and east Cornwall.</li> <li>• In August 2005 CSEP's <b>Local Authority Members Forum</b> was launched.</li> <li>• In January and March 2006 Ben Lundie, a member of CSEP's Strategic Steering Group, presented to two over subscribed events on the Renewable Obligation Certificate Scheme (ROCs).</li> <li>• In April 2006 a conference was held at Truro College on '<b>Planning for sustainable energy in development</b>'. The event was attended by planning, development and building control officers from across the county. It was followed in May by the first formal meeting of CSEP's Sustainable Energy Planning Group.</li> </ul>
24	Promote the procurement of 'green energy' and general procurement policies which take account of transport impacts and energy efficiency.	<p><u>Transport</u></p> <ul style="list-style-type: none"> <li>• CSEP's <b>transport group</b> was formed in 2005 to progress the issue of sustainable transport across the county and to generate local demand for biofuels.</li> <li>• Cornwall County Council is purchasing a 5% biodiesel blend for use in its fleet trucks and vans and also uses 3 electric vehicles.</li> <li>• Kerrier District Council is using a blend of 35% biodiesel blend in all of its fleet vehicles and is also exploring a salary sacrifice scheme which will give tax incentives to employees purchasing a bicycle from participating local suppliers. Elected members are investigating the issue of Green Travel Plans through a sub group of representatives of the Overview and Scrutiny committees. A staff travel survey has been carried out and work continues.</li> <li>• Penwith District Council is using a blend of 5% biodiesel in its fleet vehicles and is also redeveloping a Green Travel Plan.</li> </ul>

		<ul style="list-style-type: none"> <li>• Carrick District Council is currently redeveloping its Green Travel Plan.</li> </ul> <p><u>General</u></p> <ul style="list-style-type: none"> <li>• North Cornwall District Council, Kerrier District Council, Carrick District &amp; Penwith District Council are currently procuring 100% of metered electricity via green energy tariffs. Cornwall County Council is currently procuring 40% of electricity via a green energy tariff.</li> <li>• Penwith District Council has drafted an energy management policy and is hoping to implement the Carbon Trust's Carbon Footprint Toolkit.</li> </ul>
25	Promote and demonstrate good and progressive energy management in public sector organisations.	<ul style="list-style-type: none"> <li>• Cornwall County Council has joined Carbon Trust's Local Authority Carbon Management Programme which will assist the CC in creating an organisation-wide carbon management strategy and implementation plan. The plan should be ready in March 2007 and will include buildings, travel, street lighting and vehicle fleets.</li> <li>• North Cornwall District Council has gained energy efficiency accreditation with the Carbon Trust and has developed a 3 year improvement plan which identifies the need to set up and establish an EE policy and scoring matrix for any revenue items that council staff purchase for council purposes (e.g. fans, air con units, kettles, hand dryers, lightbulbs etc.). The Council will also be investigating opportunities for renewable energy generation at various sites.</li> <li>• Restormel Borough Council will be delivering a series of short staff briefings across its sites to raise awareness of the ways in which individuals can use energy more efficiently in the council offices. The aim is to establish a group of Energy Wardens within each department who can take responsibility and cascade information on ways in which individuals can use energy more efficiently in the council offices. Energy efficiency measures already adopted by the council are expected to achieve financial savings on energy between April 06 and April 07 of approx £ 65,000.00, and additional financial savings associated with energy of £ 48,000.00.</li> <li>• Kerrier District Council has an Energy Management Policy and has implemented many energy efficiency measures across council properties, such as the installation of motion activated light switch sensors, low energy lighting and full double-glazing, which have</li> </ul>

		<p>resulted in a very good Best Value Performance Indicator 180. This indicator relates to energy consumption per metre squared of the council's operational property as compared with the comparable buildings in the UK as a whole. In terms of electricity usage this shows that KDC uses only 70% of the typical benchmark and only 89% of the typical benchmark usage of fossil fuels.</p>
26	<p>Integrate sustainable energy consideration in PFI contracts and in all public sector building development.</p>	<ul style="list-style-type: none"> <li>• CSEP submitted a response to the Waste Development Framework consultation.</li> <li>• Penwith District Council is drafting climate change proofing guidance for developers.</li> </ul>
27	<p>Work with the Renewable Energy Task Group and the Business Sector Task group to promote the use of alternative and renewably fuelled vehicles in public sector transport fleets.</p>	<ul style="list-style-type: none"> <li>• CSEP's transport group was formed in 2005 to progress the issue of sustainable transport across the county and to generate local demand for biofuels.</li> <li>• Cornwall County Council is purchasing a 5% biodiesel blend for use in its fleet trucks and vans and also uses 3 electric vehicles.</li> <li>• Kerrier District Council is using a blend of 35% biodiesel blend in all its fleet vehicles and the announcement of this generated considerable positive local press coverage. The Council is also exploring a salary sacrifice scheme which will give tax incentives to employees purchasing a bicycle from participating local suppliers.</li> <li>• Penwith District Council is using a blend of 5% biodiesel in its fleet vehicles and is also redeveloping a Green Travel Plan.</li> </ul>
28	<p>Reduce car journeys through use of ICT and green travel plans.</p>	<ul style="list-style-type: none"> <li>• CSEP's Local Authority Member's Forum has used video conferencing for several meetings.</li> <li>• Cornwall County Council is working with employers, District Councils and schools, colleges and universities across the county to develop travel plans. The County Council also has its own Corporate travel plan as well as site specific travel plans for some of its offices across the County.</li> <li>• Penwith District Council is currently re-developing a Green Travel Plan.</li> <li>• Cornwall County Council has launched its second Local Transport Plan (LTP2) covering</li> </ul>

		<p>the period 2006 - 2011. LTP2 recognises the role that alternative fuels can play in Cornwall and CCC will work with partners through CSEP's transport group to promote innovative schemes to produce bio-diesel and particularly to encourage the distribution of bio-fuels.</p> <ul style="list-style-type: none"> <li>• Considerable improvements have been made to the Kerrier District Council website to increase functionality and usability. This has involved placing forms and requests for service online, the ability to view planning applications online. This has contributed to increased usage of the website, and will have ultimately reduced the number of car journeys to the council offices. KDC is also currently trialling a home working scheme for some staff that will contribute to reduced car journeys to and from the council offices and will shortly be opening a new 'one stop shop' in Helston so that people in the south of the district will be able to access council services without the need to travel to the main council offices in Camborne.</li> </ul>
29	Achieve an advice and support programme for businesses in Cornwall.	<ul style="list-style-type: none"> <li>• In 2005 Objective One funding was secured for the <b>ENVISION Cornwall</b> project. The Environment Agency is the lead body and the advice service is being delivered by Community Energy Plus, Rezolve, Cornwall Business School, Groundwork and Global Action Plan. ENVISION Cornwall's group of environmental business advisors working across Cornwall provide advice to SMEs on ways of reducing energy costs and improving environmental management. Businesses supported so far include Clowance Estates, Fifteen Cornwall, Blue Cornwall, Budock Vean Hotel, Cornwall Glass &amp; Glazing, Gylly Beach Café, Sharp's Brewery and the Wildlife chain of clothes shops.</li> <li>• In 2006 funding was secured from the Learning and Skills Council and European Social Fund to deliver a subsidised programme of <b>environmental management training to employees of SMEs</b> in specific emerging sectors (life sciences, marine, food, multi-media, environmental and earth technologies and renewable energy). The delivery partners are Cornwall Business School, Community Energy Plus and ReZolve. By the end of 2007 over 100 individuals will have participated in the Chartered Institute of Environmental Health's NVQ level 3 course in Environmental Management at Work.</li> </ul>

30	Work with the Renewable Energy Task Group to promote the use of renewable energy powered and fuel cell vehicles in private sector transport fleet	<ul style="list-style-type: none"> <li>• An application for a hydrogen bus scheme in north Cornwall was unsuccessful due to lack of adequate matching funding.</li> </ul>
31	Promote the benefits of sustainable design and incorporation of RE technologies in business developments	<ul style="list-style-type: none"> <li>• The CPR Energy Study includes recommendations for the integration of renewable energy measures in new developments in the area. In 2006 CPRR submitted a planning application for the Omega project business incubation units which included a biomass heating system.</li> <li>• The Envision programme provides a range of advice including renewable energy options for participating businesses.</li> </ul>
32	Promote greater engagement with the tourism industry	<ul style="list-style-type: none"> <li>• CEP and COAST are working together to deliver Cornwall's Sustainable Tourism LAA outcome stretch target to enable a total of 273 tourism businesses to achieve Green Tourism Business Scheme (GBTS) accreditation by 2009. Since the scheme started in August 2006, 11 businesses in Cornwall have already achieved accreditation, all managing silver or gold awards.</li> </ul>

## Glossary

---

ASPIRE - Achieving Energy Sustainability in Peripheral Regions of Europe  
 CEEAC - Cornwall Energy Efficiency Advice Centre  
 CEP - Community Energy Plus  
 CCC - Cornwall County Council  
 COAST - Cornwall Sustainable Tourism  
 CPMR - Conference of Peripheral Maritime Regions  
 CPRR - Camborne Pool Redruth Regeneration  
 CSEP - Cornwall Sustainable Energy Partnership

EST - Energy Saving Trust  
 ESCo - Energy Services Company  
 KitH - Kyoto in the Home  
 LAA - Local Area Agreement  
 PHA - Penwith Housing Association  
 RSS - Regional Spatial Strategy  
 UoE - University of Exeter