

Dorset Energy Partnership

Annual review 2013/14

The Dorset Energy Partnership (DEP)

The Dorset Energy Partnership (formerly Dorset Energy Group) is an active group of organisations set up to develop and deliver the Bournemouth, Dorset and Poole Renewable Energy (2013) and Energy Efficiency Strategies (2009).

The Partnership comprises an Executive and five working groups. The Executive is responsible for the overall direction, delivery and monitoring of both strategies and has a core membership of 20 members including representatives from Dorset County Council, all of the Dorset's district/borough councils, the unitary authorities of Poole and Bournemouth, as well as other stakeholders across the community and business sectors.

The working groups are responsible for delivering the priority action areas in each strategy and as such address sustainable energy in the public, community and domestic sectors as well as planning and bioenergy. Each working group is responsible for developing and delivering annual action plans and again include representatives from Dorset's local authorities and community and business sectors.

The key achievements of each working group in delivering their annual action plans during 2013/14 are highlighted in this Annual Review. The action plans, Energy Efficiency and Renewable Energy strategies can be viewed online at <https://www.dorsetforyou.com/dorset-energy-partnership>

Community Sustainable Energy Group

The Community Sustainable Energy Group membership includes local authority sustainable energy, environmental and community development workers, Dorset Agenda 21, Dorset Energy Advice Centre and representatives from local community energy and Transition Town groups.

Key achievements

- The Big Lottery funded 'Communities Living Sustainably in Dorset' project has supported the delivery of a number of community energy activities including:
 - An open eco homes weekend in September 2013 featuring 19 open homes in Bridport, Dorchester and surrounding parishes which included 800 visits and had positive feedback from both hosts and visitors.
 - A follow-up series of 5 open eco homes short video films plus a video providing advice on running an open eco homes event, all hosted on the Communities Living Sustainably in Dorset website.
 - Support for the launch of the Transition Together behavioural change programme in Dorset building on an initiative started by Transition Town Dorchester. Transition Together will be included as part of the Dorset Best Village Competition in 2014 under a Best Environmental Village Category (which will also provide training in DIY environmental and energy audits of village halls).
 - Support to set up a new co-operative, Dorset Community Energy Ltd, to enable local people to invest in solar PV panels on schools and community

halls. The co-operative was registered as an Industrial and Provident Society for the Benefit of the Community in August 2013.

- Free 'Draughtbuster' and thermal curtain making workshops in Bridport.
- The INTERREG IVA funded project Sustainable Energy Across the Common Space (SEACS) supported a number of community energy initiatives in Dorset including renewable energy presentations to community groups, 5 thermal image surveys carried out by the Weymouth Energy Advice Centre and 2 energy surveys of community halls. In addition the SEACS project supported a Schools Energy Officer to work with 20 schools in Dorset on energy saving activities. The SEACS project ends on 31st March 2014.
- The Sustainable Dorset Community Energy web resource was regularly updated and has proved a useful means of sharing information and publicising events.
- Individual member organisations have developed a range of sustainable energy projects and initiatives including:
 - Launch of the Energize Stur Valley Industrial and Provident Society which is currently developing solar PV and micro hydro installations at the Springhead Trust in North Dorset.
 - Weymouth Energy Advice Centre has organised a successful series of presentations on climate change, including a seminar at the Corn Exchange in Dorchester with guest speaker Oliver Letwin MP. The group has recently published a global warming and climate change booklet based on the presentations.
 - Activities delivered by Energize Dorset group in N. Dorset including further development of the Dorset Energized website, organising several renewable energy exhibitions and an open ecohomes event in N. Dorset planned for May 2014
 - Transition Town Bridport has re-launched the electricity monitor loan scheme through local libraries

Bio-energy Working Group

Only one meeting of the Bio-energy Working Group took place in 2013 (held jointly with the Dorset AONB Woodlink group), but a number of key actions in the 2013/14 action plan were taken forward through separate project delivery groups. The next meeting of the group to review progress and update the annual action plan will be held in May 2014.

Members of the joint group include local authority and AONB staff with an interest in sustainable woodland management and local woodfuel supply, the Dorset Wildlife Trust, Natural England, the Forestry Commission and the Dorset Farming and Wildlife Advisory Group.

Key achievements

- Dorset County Council's Property Management team commissioned a biomass heating feasibility study for County Hall. At the same time a biomass heat procurement report was completed internally, in order to evaluate options of self financing a biomass boiler installation based on income from the Renewable Heat Incentive, or purchasing biomass heat through a third party financed installation.
- Dorset County Council has continued to meet with other local authorities to share experience of biomass heating. A meeting was held with Wiltshire Council and

Hampshire County Council in July 2013 and a meeting with Wiltshire, Hampshire and Surrey County Council is planned for April 2014.

- The European funded ROKWOOD energy crops research and demonstration project held 2 international meetings to share best practice during 2013-14. The second of these was held in January 2014 in Bristol and attracted 21 delegates from 6 countries. The 3-day seminar was co-ordinated by the south west UK ROKWOOD project cluster which includes Dorset County Council, the Centre for Sustainable Energy and Crops for Energy Ltd.
- The 'Communities Living Sustainably in Dorset' project to set up a community woodfuel co-operative in Bridport has progressed slowly. The offer of a lease of woodland from the Woodland Trust at Conegar Hill has not been progressed because of difficulty of site access and lack of agreement on the lease conditions including the length of the lease. However a management plan for Jellyfields Wood near Bridport (a nature reserve managed by Dorset CC) has been completed and a training event held there. The group has a contact list of 50 people and is currently investigating potential sites for community woodland.
- Several woodfuel development and woodland management proposals were submitted in September 2013 as Expressions of Interest to the Dorset Local Enterprise Partnership (LEP) Strategic Investment Plan.
- The Dorset AONB along with a local woodland owner, the National Association of AONBs, Arnside and Silverdale AONB and the Wyre Forest have recently secured close to £50,000 from DECC, Cabinet Office and the Sustainable Investment Business to share the learnings of community woodfuel groups. The grant will support a series of study visits, technical workshops and peer to peer mentoring that will explore the barriers that are currently limiting greater uptake of woodfuel as an energy source. The events will start in Spring 2014 and run over the course of 12 months.

Sustainable Energy Planning Group

The Sustainable Energy Planning Group supports the delivery of the planning actions in the Bournemouth, Dorset and Poole Renewable Energy and Energy Efficiency Strategies. Membership mainly consists of local authority Planning Policy Officers but is also open to Development Management and Building Control Officers. One meeting of the group took place during 2013-14 with actions in the 2013-14 Action Plan being taken forward through separate project delivery groups.

Key achievements

- Christchurch Borough and East Dorset District Council, Purbeck District Council and North Dorset District Council have worked together to commission a landscape sensitivity study for large scale solar farms and wind energy developments.
- Planning authorities have co-operated and shared information in preparing the Navitus Bay offshore windfarm Local Impacts Report.
- Core Strategies are at various stages of development and consultation, most of which contain policies to support the uptake of low carbon energy in new developments. West Dorset and North Dorset Local Plans are at an advanced stage of development. The North Dorset Local plan contains sections on climate change and renewable energy and was publicised for pre-submission consultation in November 2013.

- The Planning Advisory Service delivered a sustainable energy training event for members of Planning Committees in Dorchester in early July 2013. The event was attended by 14 members of Planning Committees and received positive feedback.
- Regen SW and Good Energy Ltd delivered presentations on community benefits from solar farms at the Sustainable Energy Planning Group meeting held on 8th October 2013.

Dorset County Council's Renewable Energy Development Officer subsequently assisted two Parish Council's to negotiate community benefit funds, together worth £560,000 over 20 years. However there is currently a great deal of inconsistency in community benefit offers from developers and clearly a need to embed community benefit from all larger scale solar farms and potential wind energy developments in Dorset. The Renewable Energy Development Officer has therefore produced a community benefit discussion paper including recommendations designed to maximise the availability of community benefits during 2014.

Domestic Sustainable Energy Working Group

The domestic sector working group comprises Local Authority Officers with Home Energy Conservation Act (HECA) responsibilities; a Registered Provider representative; Dorset Energy Advice Centre: Home Improvement Agency representative; a Public Health representative, and a sustainable energy industry representative.

Key achievements

- The Home Energy Conservation Act 1995 required English Local Authorities to prepare a Further Report setting out the energy conservation measures that the Authority considers practicable, cost-effective and likely to result in significant improvement in the energy efficiency of residential accommodation in its area. Dorset Housing Authorities worked through the DEP to produce a joint further report signed by all District and Borough Council Chief Executives. It is available at <http://www.dorsetforyou.com/media.jsp?mediaid=183667&filetype=pdf>
- Delivery of a joint affordable warmth and fuel poverty project funded by a £322,000 grant from the Department of Health Warm Homes Healthy People Fund.
- Development of two successful funding bids to the Department of Energy and Climate Change Local Authorities Competition, totalling £780,000.
- Delivery of communications making local residents aware of the various opportunities made possible by central government initiatives, such as the Energy Company Obligation and Green Deal, and the external funding awarded to Dorset Local Authorities.
- Promotion of a variety of affordable warmth measures available to several particularly vulnerable groups of residents.
- Participation in a joint training session on the newly introduced Energy Company Obligation and Green Deal organised by the Warmer Group.
- Preparation of a joint bid to the DECC Green Deal Communities Fund, which is currently being evaluated by DECC.

Public sector energy managers working group

The public sector group includes local authority representatives with an energy and/or carbon management responsibility.

Key achievements:

- Group members shared information on a wide variety of topics including pool cars, low emission vehicles, electric cars and charging infrastructure, European and national government initiatives..

Business sector actions:

- RegenSW was commissioned to produce a Dorset Marine Renewable Energy Supply Chain Report, which identified 83 companies in Bournemouth, Dorset and Poole already active in the marine renewable energy sector, interested in diversifying into the sector or with relevant expertise to participate in marine renewable energy supply chains. Further sector development work has been commissioned from Regen SW during 2014 with a focus on the proposed Crown Estate tidal energy development zone off Portland.
- The, Dorset County Council, Borough of Poole and Future Solent submitted a successful £600,000 European funding bid, led by WSX Enterprise to support innovation in the low carbon business sector. It was the only UK project to be awarded funding through the EU 2013 'Clusters and Entrepreneurship in Support of Emerging Industries' programme. The Lo To No project will run for 2 years from February 2014 and provide £250,000 in business innovation vouchers to 25 low carbon business initiatives in Dorset, Poole and the Future Solent area.
- The Communities Living Sustainably in Dorset project is supporting domestic renewable energy installers working in the project area of Dorchester, Bridport and surrounding parishes. A renewable energy marquee showcasing local installers is being planned for the Dorset County Show in September 2014
- The 'Control Your Compressors' project funded by Dorset County Council and managed by Dorset Chamber of Commerce and Industry, won the DECC-sponsored ENDS Green Economy Awards 2013 "local Energy Catalyst" category. The project has helped 75 Dorset businesses reduce their energy use from compressed air.
- Several project proposals to support the emerging regional low carbon economy were submitted to the Dorset Local Enterprise Partnership (LEP) Strategic Investment Plan.

Total renewable energy installed capacity in Bournemouth, Dorset and Poole, February 2014

Technology	MW	Capacity Factor	Hours	GWh
Heat				
ATW + AD	1.2	0.9	8760	9.5
Biomass	5.9	0.1	8760	5.2
Heat pumps	1.6	0.1	8760	1.4
Sewage gas	1.2	0.9	8760	9.5
Solar thermal	0.6	0.1	8760	0.5
Poundbury biogas				20.0
Woodstoves				51.0
SUB TOTAL				97.1
Electricity				
ATW+ AD	1.8	0.9	8760	14.2
Hydro	0.09	0.5	8760	0.4
Landfill gas	14	0.8	8760	98.1
Onshore wind	0.6	0.25	8760	1.3
Sewage gas	2.4	0.9	8760	18.9
Solar PV roof mounted	35.9	0.1	8760	31.5
Solar farms	78	0.1	8760	68.3
SUB TOTAL				234.7
TOTAL				331.8

The total renewable energy generation of 331.8 GWh per year is equivalent to 2.1% of energy consumption in Bournemouth, Dorset and Poole, up from 143 GWh of renewable energy generation in January 2011. This represents an increase from 0.95% of total energy consumption to 2.1% over 3 years.

In addition, several renewable energy projects have recently received planning consent and are at various stages of development, including a total of a further 60MW of solar farms, which will take the installed renewable energy generation to 415 GWh, or 2.6% of total energy consumption.

The aspirational target in the Bournemouth, Dorset and Poole Renewable Energy Strategy to 2020 is 7.5% of energy consumption, or 1200GWh of energy from local renewable energy generation.

Capital investment in renewable energy in Bournemouth, Dorset and Poole since 2010 and approximate financial benefits

Technology	Capital investment total since 2010	Capital investment 2013-14	Annual value of local renewable energy generation (accumulative)
Solar PV (roof mounted)	£87 m	£6m	£15.6m (FIT income + savings)
Solar PV farms	£80m	£65	£10m (ROCs income etc)
Anaerobic digestion	£15m	£0	£1.5m (FITS + RHI income)
Biomass (woodstoves)	£10m	£2m	£ 0.6m (local log supply)
Biomass (boilers)	£9m	£0.5m	£0.7m (wood chip and wood pellet supply)

Wind energy	£0.8m	£0	£0.1m (FIT income)
Other microgeneration	£1.8m	£0.6m	£0.1 m (avoided fuel purchase)
TOTALS	£203.6m	£74.1m	£28.6m

Energy Company Obligation (ECO) funded measures installed January-September 2013

Area	Total number of ECO measures delivered	ECO measures per 1,000 households
Bournemouth UA	661	8.0
Poole UA	691	10.9
Dorset	1,060	5.9
Christchurch	139	6.5
East Dorset	174	4.6
North Dorset	82	2.9
Purbeck	74	3.8
West Dorset	197	4.4
Weymouth and Portland	394	13.8

A further 315 insulation measures were installed funded by the DECC Local Authorities funding and 277 measures installed using Department of Health Warm Homes Healthy People Fund.

Latest Fuel Poverty figures released August are for 2011. Table below shows figures using old "10% of income" definition and new "Low Income/High Cost" definition. With the exception of Weymouth and Portland, Fuel Poverty is approximately half what it was using the new definition:

Fuel Poverty 2011

Fuel Poverty		Old definition		New definition	
LA Name	All Households	Fuel Poor Households	Percent Fuel Poor	Fuel Poor Households	Percent Fuel Poor
Christchurch	21,367	3,219	15.1%	1,683	7.9%
East Dorset	37,305	5,242	14.1%	2,667	7.1%
North Dorset	28,234	4,836	17.1%	2,305	8.2%
Purbeck	19,515	3,140	16.1%	1,660	8.5%
West Dorset	43,916	7,990	18.2%	3,864	8.8%
Weymouth and Portland	28,934	4,008	13.9%	2,987	10.3%
Bournemouth	79,593	12,755	16.0%	8,886	11.2%
Poole	62,585	8,239	13.2%	5,332	8.5%

Local authority CO2 emissions data 2005 – 2011 (source Department of Energy and Climate Change)

	Year	Industry and Commercial Total	Domestic Total	Transport Total	N. LULUCF Net Emissions	Grand Total	Population ('000s, mid-year estimate)	Per Capita Emissions (t)
Christchurch	2005	96.5	120.1	103.2	- 0.5	319.3	45.8	7.0
	2006	97.5	117.9	105.8	- 0.6	320.6	46.0	7.0
	2007	94.3	112.6	108.9	- 0.5	315.2	46.5	6.8
	2008	98.7	113.0	103.6	0.1	315.3	47.0	6.7
	2009	85.2	101.6	101.2	0.2	288.2	47.3	6.1
	2010	87.5	109.1	98.0	- 0.1	294.5	47.7	6.2
	2011	80.7	94.8	96.0	- 0.2	271.3	47.9	5.7
East Dorset	2005	157.7	244.8	193.6	- 13.1	582.9	86.0	6.8
	2006	143.3	245.9	194.6	- 12.2	571.5	86.1	6.6
	2007	137.7	233.6	199.3	- 8.0	562.6	86.9	6.5
	2008	135.6	235.8	194.0	- 7.7	557.7	87.2	6.4
	2009	120.5	212.9	188.1	- 5.4	516.1	87.0	5.9
	2010	123.9	228.7	183.1	- 7.8	527.9	87.2	6.1
	2011	114.8	199.6	178.2	- 8.7	483.9	87.3	5.5
North Dorset	2005	145.1	184.2	135.6	2.7	467.5	65.9	7.1
	2006	148.7	188.4	137.2	2.8	477.1	67.0	7.1
	2007	140.7	178.1	138.5	5.6	462.9	68.1	6.8
	2008	142.5	181.9	134.3	5.4	464.1	68.1	6.8
	2009	132.6	168.1	130.1	7.1	437.9	67.8	6.5
	2010	132.7	180.9	128.6	4.9	447.0	67.9	6.6
	2011	125.5	157.6	126.7	3.9	413.7	69.0	6.0
Purbeck	2005	185.1	122.4	131.3	- 10.5	428.3	44.6	9.6
	2006	185.9	122.0	130.2	- 10.7	427.4	44.8	9.5
	2007	183.9	115.7	126.8	11.7	438.1	45.1	9.7
	2008	191.7	117.1	125.8	13.2	447.8	45.2	9.9
	2009	170.3	106.8	121.7	13.9	412.8	45.1	9.2
	2010	168.9	114.5	118.5	13.6	415.5	45.2	9.2
	2011	151.6	99.8	118.4	15.0	384.9	45.2	8.5
West Dorset	2005	252.9	286.8	285.9	31.3	857.0	96.4	8.9
	2006	256.2	289.5	289.3	30.3	865.3	97.1	8.9
	2007	247.5	276.4	290.3	31.9	846.2	98.0	8.6
	2008	241.3	279.4	278.4	31.6	830.7	98.5	8.4
	2009	218.6	258.3	269.1	32.7	778.7	98.6	7.9
	2010	228.8	282.5	263.6	30.3	805.3	99.0	8.1
	2011	212.6	239.1	258.0	29.0	738.7	99.3	7.4
Weymouth and Portland	2005	95.4	147.5	85.7	1.7	330.4	64.8	5.1
	2006	95.7	146.7	86.0	1.8	330.1	64.8	5.1
	2007	90.7	138.6	88.1	1.7	319.2	65.0	4.9
	2008	89.6	139.8	85.9	1.7	317.0	65.0	4.9
	2009	85.2	125.5	82.1	1.5	294.3	65.0	4.5
	2010	86.3	134.2	79.2	1.4	301.1	65.0	4.6
	2011	73.9	116.3	77.3	1.3	268.8	65.1	4.1
DORSET TOTAL	2005	932.7	1,105.7	935.4	11.5	2985.3	403.5	7.4
	2006	927.4	1,110.4	943.0	11.3	2992.0	405.8	7.4
	2007	894.7	1,055.0	952.0	42.4	2944.1	409.6	7.2
	2008	899.3	1,067.0	921.9	44.4	2932.6	411.0	7.1
	2009	812.3	973.2	892.4	50.1	2727.9	410.8	6.6
	2010	828.1	1,049.8	870.9	42.4	2791.3	412.0	6.8
	2011	759.0	907.2	854.6	40.5	2561.3	413.8	6.2

Local authority CO2 emissions data 2005 – 2011 (source Department of Energy and Climate Change)

	Year	Industry and Commercial Total	Domestic Total	Transport Total	N. LULUCF Net Emissions	Grand Total	Population ('000s, mid-year estimate)	Per Capita Emissions (t)
Bournemouth	2005	326.4	422.5	197.0	- 0.7	945.3	166.0	5.7
	2006	335.0	415.5	194.1	- 0.8	943.9	166.7	5.7
	2007	321.9	399.4	197.7	- 0.7	918.4	170.1	5.4
	2008	319.7	401.9	192.5	0.1	914.2	172.0	5.3
	2009	287.0	358.3	183.8	0.2	829.3	174.3	4.8
	2010	290.1	383.2	177.2	- 0.1	850.3	179.3	4.7
	2011	261.2	335.4	172.8	- 0.3	769.1	183.5	4.2
Poole	2005	388.3	355.5	202.9	- 1.3	945.4	139.9	6.8
	2006	391.7	353.6	196.3	- 1.4	940.2	141.1	6.7
	2007	394.0	337.9	199.5	- 0.5	930.9	142.9	6.5
	2008	381.4	342.1	196.7	0.5	920.6	144.2	6.4
	2009	333.1	304.9	190.4	0.6	829.0	145.4	5.7
	2010	341.6	326.2	186.2	0.3	854.3	146.8	5.8
	2011	312.5	285.9	183.5	0.2	782.2	148.1	5.3

Note: units = kt CO2