

# Climate Change Mitigation Position Paper

## A Dorset Local Nature Partnership Position Paper



### Aim

Dorset Local Nature Partnership (DLNP) wants Dorset to play its part in mitigating climate change by improving energy efficiency in our homes, communities and workplaces; encouraging sustainable travel options and harnessing our viable renewable energy resources, thereby maximising the local economic, environmental and community benefits that doing this can bring.

Dorset Local Nature Partnership therefore makes the following recommendations:

### Recommendations

#### Strategic

1. Ensure that Dorset continues to have a robust and challenging climate change mitigation framework in place to provide a co-ordinated strategic approach to reducing carbon dioxide emissions across the local area, including the following plans/strategies (or their replacements):
  - o Bournemouth, Dorset and Poole Renewable Energy Strategy 2020 – encourage local stakeholders to play their part in fully delivering the strategy including ensuring the necessary resources to do this are secured.
  - o Bournemouth, Dorset and Poole Energy Efficiency 2009 – encourage and support the Dorset Energy Partnership to review, update and deliver a new Energy Efficiency Strategy to significantly reduce carbon emissions and to seek to eliminate fuel poverty.
  - o Local Transport Plan 3 2011 – encourage future reviews of the plan to include strong policies and interventions to ensure sustainable, active, healthy, low carbon forms of travel continue to be prioritised.
2. Local Plans must incorporate climate change mitigation policies including aims for significant carbon reduction measures.
3. Ensure that through any Local Government Re-organisation local authorities in Dorset are strongly encouraged to continue to act in their role as community leaders to mitigate climate change both across the local area and internally within their own estate and operations.

#### Specific

##### Renewable energy

4. All new buildings should meet a significant proportion of their energy requirements from renewable and low carbon energy sources.
5. Strong encouragement and support should be made for community led initiatives for renewable and low carbon energy across Dorset.
6. Businesses, householders and the public sector should be encouraged to install locally appropriate renewable energy technologies wherever possible, buying from reputable local installers.



### Energy efficiency

7. All new build and building restoration should meet the highest levels of energy efficiency with real ambitions towards carbon neutral buildings.
8. Insulation (walls, floors and roofs) of existing homes and more efficient and lower carbon heating systems should be encouraged.
9. As many fuel poor homes in Dorset as is reasonably practicable should achieve a minimum energy efficiency rating of Band C properties by 2030<sup>1</sup> in line with national targets.
10. Businesses should be encouraged and supported to significantly improve their energy performance.

### Sustainable travel

11. Action to design an integrated transport system that promotes the use of alternatives to road transport across Dorset should be coordinated and scaled up.
12. Sustainable travel should be encouraged by creating safe cycling and walking routes both for leisure and travel to work, supporting both a low carbon and healthy community.
13. Infrastructure (charging points and solar PV) should be installed to enable greater take up of electric and hybrid cars which are improving in their design and affordability.

### Food miles

14. Allotment spaces and/or community growing spaces should be included in new developments, through green infrastructure plans and existing spaces should be protected.
15. Greater support for local food should be encouraged with consumers, retailers, hospitality sector, and public sector procurement.

### Sustainable settlements

16. Planning systems should be used as a positive tool to reduce emissions through encouraging mixed settlements with provision for housing, employment and retail in close proximity.
17. Planning applications should include a climate change impact assessment as part of the planning process (with reference to National Planning Policy Framework and good practice elsewhere).



Wind Turbine, Bere Regis  
Photo: DCC



Cavity wall insulation installation  
Photo: BBC

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<sup>1</sup> A Fuel Poverty Strategy for England

[www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/408644/cutting\\_the\\_cost\\_of\\_keeping\\_warm.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/408644/cutting_the_cost_of_keeping_warm.pdf)

## Why look at climate change?

There is virtually unanimous scientific agreement that climate change is already happening and that it is significantly driven by human action. Climate change will affect the entire world – land and ocean. Indeed it is already impacting negatively on Dorset’s environment, economy, communities and infrastructure and we need to take action urgently. As a relatively wealthy community which uses more than our equitable share of greenhouse gases, we (public, private, voluntary and community sector organisations and residents in Dorset) have a responsibility to play our part in mitigating climate change by reducing our carbon footprint.

DLNP wants to promote more effective action to reduce Dorset’s impact on the global environment, and to encourage the county to benefit from the development of a low-carbon, resource efficient and socially inclusive economy in which greener business practices are widely adopted. This aspiration is set out in DLNP’s Strategy and Vision<sup>2</sup>, Natural Value Report<sup>3</sup> and Natural Capital Investment Strategy<sup>4</sup>.

DLNP has published two position papers on climate change – this one focused on mitigation and another on adaptation. While these are fundamentally linked and should be read in conjunction with each other, they contain different solutions and recommendations. Both papers reflect an agreed consensus among the different interests represented on the DLNP.

DLNP is not in a position to influence the larger climate trends nor indeed to make the decisions which affect how Dorset mitigates against its effects. However DLNP can seek to raise awareness of the mitigation opportunities; disseminate good practice from within and outside the county; and inform understanding and action by decision makers, policy makers and practitioners who influence Dorset’s social, economic and environmental future. This paper proposes a series of recommendations which Dorset residents, decision makers and partnerships can take in order to mitigate climate change.

**Definition: Climate Change Mitigation** An *anthropogenic* intervention to reduce the *sources* or enhance the *sinks* of *greenhouse gases*. (IPCC). In other words human action to reduce carbon emissions for example through using renewable energy, improving energy efficiency, building sustainably and reducing transport emissions as well as improving carbon storage through soils, forests and oceans).



Crossways Solar Farm

Photo: DLNP

<sup>2</sup> [www.dorsetlnp.org.uk/hres/DORSET-LNP-STRATEGY-Update-2016.pdf](http://www.dorsetlnp.org.uk/hres/DORSET-LNP-STRATEGY-Update-2016.pdf)

<sup>3</sup> [www.dorsetlnp.org.uk/Natural\\_Value\\_Report](http://www.dorsetlnp.org.uk/Natural_Value_Report)

<sup>4</sup> [www.dorsetlnp.org.uk/Natural\\_Capital\\_Investment\\_Strategy](http://www.dorsetlnp.org.uk/Natural_Capital_Investment_Strategy)

## National context

In 2008 the UK Government passed the Climate Change Act which commits to reducing greenhouse emissions by at least 80% of 1990 levels by 2050. This target was derived as a contribution to a global emissions path aimed at keeping global temperature rise to around 2°C above pre-industrial levels.

To meet these targets, the government has set five-yearly carbon budgets which currently run until 2032. They restrict the amount of greenhouse gas the UK can legally emit in a five year period. The UK is currently in the second carbon budget period (2013 to 2017). UK emissions were 38% below 1990 levels in 2015. The first carbon budget (2008 to 2012) was met and the UK is currently on track to outperform on the second (2013 to 2017) and third (2018 to 2022). However, it is not on track to meet the fourth carbon budget (2023 to 2027).

The Committee on Climate Change<sup>5</sup> recognised that *‘to meet future carbon budgets and the 80% target for 2050, the UK will need to reduce emissions by at least 3% a year, from now on’*.

In November 2016, the UK Government ratified the Paris Agreement which aims to put the world on track to avoid dangerous climate change by limiting global warming to well below 2°C and to pursue efforts to limit it to 1.5°C. Limiting warming to 1.5°C is recognised to help reduce some key significant impacts from climate change but not all.

In response to the Paris Agreement the Committee on Climate Change reported *‘that current policies will at best deliver about half the required reduction in emissions’* and recommends *‘that the Government vigorously pursue the measures required to deliver on existing UK commitments and maintain flexibility to go further’*.

The Committee also noted that *‘Global emissions would need to peak soon and then decline rapidly for the Paris Agreement goals to be feasible. Even in this scenario the uncertain sensitivity of the climate to greenhouse gases means there would be a small chance of 4°C or more of warming by 2100.’*

Alongside carbon reduction delivering climate change mitigation has other benefits to the environment, society and the economy. The Marmot Review<sup>6</sup> states:

*“The creation of healthy, sustainable places and communities should go hand in hand with the mitigation of climate change and have a shared policy agenda. Access to good quality air, water, food, sporting, recreational and cultural facilities and green space all contribute to reducing inequalities as well as helping to create sustainable communities. Policies concerning sustainable places and communities and designed to mitigate climate change prioritise the environment, and should, and sometimes do, include strategies to improve diet, physical activity, and mental health. Aligning the sustainability and climate change agendas can help to frame the way healthy communities and places are created and developed and create conditions that enable everyone to flourish equally, within the limits of finite ecological resources.”*

A significant benefit from the transformation to a low carbon economy will be new skilled job opportunities, helping to retain younger people in Dorset. In 2016 wind energy and solar PV constituted 78.4% of new electricity generation capacity in the EU<sup>7</sup>.

<sup>5</sup> The Committee on Climate Change is an independent, statutory body established under the Climate Change Act to advise the UK Government on emissions targets and report to Parliament on progress made in reducing greenhouse gas emissions.

<sup>6</sup> [www.instituteofhealthequity.org/projects/fair-society-healthy-lives-the-marmot-review](http://www.instituteofhealthequity.org/projects/fair-society-healthy-lives-the-marmot-review)

<sup>7</sup> <https://windeurope.org/about-wind/statistics/european/wind-in-power-2016/>

## What are we doing locally?

In terms of mitigating climate change in Dorset, this is strategically co-ordinated through the delivery of a 'Climate Change Mitigation Strategic Framework for Dorset' which comprises three key strategies:

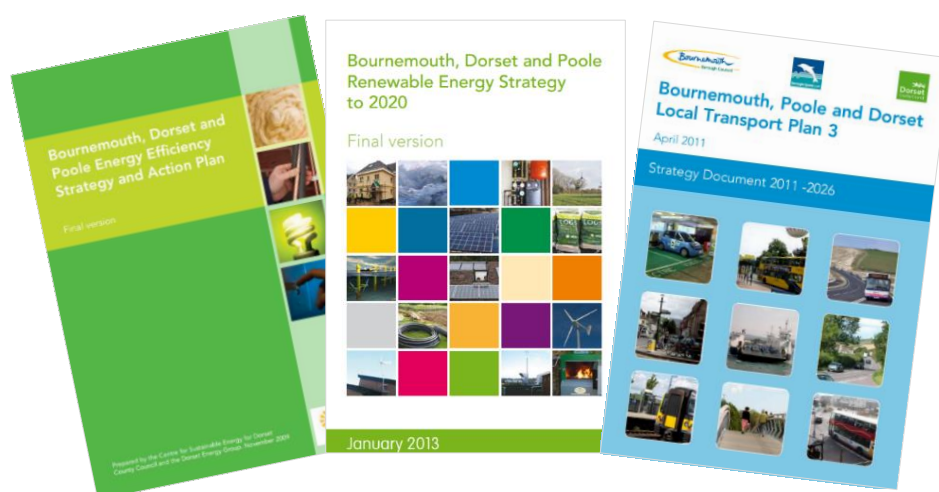
- The Bournemouth, Dorset and Poole Renewable Energy Strategy (2012)<sup>8</sup>
- The Bournemouth, Dorset and Poole Energy Efficiency Strategy (2009)
- The Local Transport Plan (LTP) 3 (2011)

The Renewable Energy and Energy Efficiency Strategies were developed, and are delivered by, the Dorset Energy Partnership involving officers from Dorset County Council, all of Dorset's district/borough councils, Poole and Bournemouth unitary authorities, as well as other stakeholders from across the public, private, voluntary and community sectors.

The Bournemouth, Dorset and Poole Renewable Energy and Energy Efficiency Strategies identified priority areas for action which are taken forward by annual action plans developed and delivered by the Dorset Energy Partnership's working groups. These action plans address sustainable energy in the community, public, and domestic sectors as well as planning and bioenergy. The working groups include representatives from Dorset's local authorities, community and business sectors.

**Figure 1: Dorset Carbon Footprint (by local authority area)<sup>9</sup>**

Area	2005 CO <sub>2</sub> emissions per capita	2014 CO <sub>2</sub> emissions per capita	% reduction in emissions
England	8.5	6.0	29%
South West	8.2	5.8	29%
Bournemouth	5.7	3.6	37%
Dorset	7.5	5.7	24%
Poole	6.8	4.5	34%
<b>Combined Dorset</b>	<b>6.8</b>	<b>4.9</b>	<b>28%</b>



<sup>8</sup> [www.dorsetforyou.gov.uk/article/417819/View-the-Local-Transport-Plan](http://www.dorsetforyou.gov.uk/article/417819/View-the-Local-Transport-Plan)

<sup>9</sup> [www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-2014](http://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-2014)



The latest per capita emission data for Dorset and how it compares to the SW and England is shown in figure 1. This shows that Dorset's CO<sub>2</sub> emissions continue to fall year on year in line with the government's 2020 CO<sub>2</sub> reduction target.

Whilst it is recognised that some of this is down to national carbon reduction programmes and drivers, for example the decrease in the use of coal for electricity generation (increase in renewables and nuclear), reduction in the use of natural gas for space heating and improved vehicle efficiency, it is also in part due to local action.

## Renewable Energy

The Renewable Energy Strategy proposes a twin track target which includes '*an aspirational target of at least 15% of Dorset, Bournemouth and Poole's energy needs to be met from renewable energy resources by 2020 in line with the UK's legally binding target*'<sup>10</sup>. However, to reflect the expectation that approximately 7.5%<sup>11</sup> of this will be delivered via renewable energy resources considered by Government as national regardless of local action, the Strategy focuses on delivering a secondary target of a minimum of 7.5% of Dorset's energy needs to be met from local renewable energy resources over which we have more influence and control.

The latest data for Dorset, shows that renewable energy production has increased in Bournemouth, Dorset and Poole from 0.95% of local energy consumption in February 2011 to 5.5%<sup>12</sup> in March 2016. This is estimated to have significant local economic benefit, with approximately £490m of capital investment since 2010 and helping retain around £66m per year in the local economy.

The majority (87 %) of the installed renewable energy capacity in Dorset is from solar photovoltaics, mainly (76 %) ground mounted solar farms but also from roof mounted installations (11 %).

Dorset is fifth<sup>13</sup> out of the seven county areas within the south west in terms of installed renewable energy capacity. Nationally Dorset is 20<sup>th</sup> out of 56 county areas across England & Wales<sup>14</sup> whilst Poole is 179<sup>th</sup> and Bournemouth is 270<sup>th</sup> out of 348 local authority areas across England and Wales<sup>15</sup>.

National policy changes since 2015 including the removal of financial support for solar and onshore wind, and a requirement for complete local community support for onshore wind, have presented major barriers to further large scale renewable energy development in Dorset.

Overall the UK is currently not on track to meet the 15% renewable energy target by 2020<sup>16</sup>. The overall obligation includes three sub-targets: 30% in electricity, 12% in heat and 10% in transport. The UK is three-quarters of the way towards its 30% electricity sub-target and is expected to exceed it by 2020, but it is not yet halfway towards 12% in heat and the proportion of renewable energy used in transport actually fell in 2015.

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<sup>10</sup>The target to supply 15% of the UK's energy demand from renewable energy by 2020 as set out in the 2009 European Renewable Energy Directive.

<sup>11</sup> In July 2011 DECC published a Renewable Energy Road map for the UK to 2020 which sets out how the government expects the national target to be achieved. This indicated that 50% of the national target is likely to be made up from renewable energy deployed at the national level, such as off shore wind or large scale biomass stations.

<sup>12</sup> As reported in the Dorset Energy Partnership's Annual Report 2015/16

<sup>13</sup> Regen SW 2016 Progress Report.

<sup>14</sup> <https://renewablelocator.green-alliance.org.uk/>

<sup>15</sup> <https://renewablelocator.green-alliance.org.uk/>

<sup>16</sup> [www.parliament.uk/business/committees/committees-a-z/commons-select/energy-and-climate-change-committee/news-parliament-2015/heat-transport-report-published-16-17/](http://www.parliament.uk/business/committees/committees-a-z/commons-select/energy-and-climate-change-committee/news-parliament-2015/heat-transport-report-published-16-17/)



## Energy Efficiency

The Energy Efficiency Strategy includes a target to achieve a 30% reduction in CO<sub>2</sub> emissions by 2020, relative to 2005, in line with national targets<sup>17</sup>. The Strategy identifies, using projections for population and household growth, that the 2020 target will be equal to a 34% reduction in per capita emissions.

The Energy Efficiency Strategy identified what these local actions could be in relation to improving energy efficiency in the domestic, business, public and community sectors in Dorset.

**Figure 2: CO<sub>2</sub> Emissions by source (2014)<sup>18</sup>**

	Bournemouth	Dorset	Poole	Combined	England
Industry	32%	33%	36%	33%	41%
Domestic	42%	32%	36%	35%	28%
Transport	26%	35%	27%	32%	31%

As can be seen from figure 2 the most significant difference between the three authority areas is from CO<sub>2</sub> emissions from transport largely due to the rural nature of Dorset.

**Figure 3: Fuel Poverty**

Local Authority	Estimated number of households 2012	Estimated number of households in fuel poverty	% of households fuel poor	Estimated number of households 2014	Estimated number of households in fuel poverty	% of households fuel poor
	<b>2012</b>			<b>2014</b>		
Christchurch	22,139	1,456	6.6%	22,566	1,954	8.7%
East Dorset	38,744	2,397	6.2%	39,516	3,281	8.3%
North Dorset	29,582	2,497	8.4%	30,181	3,587	11.9%
Purbeck	20,207	1,694	8.4%	20,631	2,187	10.6%
West Dorset	45,782	4,233	9.2%	46,699	5,521	11.8%
Weymouth & Portland	29,435	2,775	9.4%	30,631	3,544	11.8%
Bournemouth	84,750	8,367	9.9%	86,299	9,712	11.3%
Poole	65,450	4,805	7.3%	66,698	5,937	8.9%
<b>Total</b>	<b>336,089</b>	<b>28,224</b>	<b>8.4%</b>	<b>343,221</b>	<b>35,723</b>	<b>10.4%</b>

The Strategy also adopted a national fuel poverty target 'To seek to eliminate fuel poverty in Bournemouth, Dorset and Poole by 2016'. This target was not met and current figures<sup>19</sup> show that fuel poverty has increased since 2012<sup>20</sup>. However, Dorset is below average for the SW which has 12.2% of fuel poor households – figure 3.

<sup>17</sup> The Energy Efficiency Strategy identifies using projections for population and household growth, that the 2020 target will be equal to a 34% reduction in per capita emissions.

<sup>18</sup> [www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-2014](http://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-2014)

<sup>19</sup> Sub regional fuel poverty data 2014 [www.gov.uk/government/statistics/2014-sub-regional-fuel-poverty-data-low-income-high-costs-indicator](http://www.gov.uk/government/statistics/2014-sub-regional-fuel-poverty-data-low-income-high-costs-indicator)

<sup>20</sup> New national fuel poverty indicator is based on those households on low incomes with above average fuel needs.



## Local Transport

In 2009 the Department for Transport outlined in the *Low Carbon Transport:*

*A Greener Future strategy that they expect carbon emissions from transport to fall by 14% on 1990 levels by 2020 with a heavy reliance on technology and low carbon vehicles, with alternatives to the car and reducing the need to travel playing a secondary role.*

The Local Transport Plan (LTP3) is a 15-year strategy for the management, maintenance and development of the area's transport system prepared jointly by the local authorities of Bournemouth, Dorset and Poole.

Goal 2 of the LTP3 is to tackle climate change and '*reduce the overall level of emissions of carbon dioxide and other greenhouse gases from travel and transport and ensure the transport network is resilient*'.

The key challenges for this climate change goal are:

- To reduce overall levels of greenhouse gas emissions from travel and transport to, from and within Dorset
- To increase the use of lower carbon, affordable and accessible transport modes to reduce our reliance on fossil fuels
- To provide a resilient and adaptable transport network
- To maximise the benefits and uptake of greener fuel vehicle technology

As part of the aim to reduce the need to travel or transport goods, local food reduces 'food miles' and therefore the associated transport emissions.

Figure 1 demonstrates the carbon emissions from transport in 2014 and figure 4 highlights the change in per capita emissions.

**Figure 4: Change in per capita carbon emissions from road**

		2013/14	2014/15
Total Carbon emissions from road transport (kilotons)	Dorset	1.93	1.96
	Bournemouth	0.942	0.935
	Poole	NA	NA



Allotments  
Photo: M.Simons, DCC



Cycling on Newstead Road Bridge  
Photo: DCC



## Key Action Areas and Local Achievements

The following section highlights some of the key achievements across Bournemouth, Dorset and Poole from a range of stakeholders in helping to deliver the above strategies and wider carbon reductions relating to food over the last few years.

### Renewable Energy and Energy Efficiency

#### Community

- Dorset Community Energy, a not-for-profit Community Benefit Society, was set up in August 2013, by Dorset County Council, as part of the CLS Dorset<sup>21</sup> project. In 2015 the society raised £488,000 of local community investment from 150 mainly local shareholders, to finance 12 solar PV installations on schools and four PV installations on community buildings of a total installed capacity of 420KW.
- Sustainable Energy Across the Common Space (SEACs) was a 3-year European Interreg IVA funded project (2011-2014) to support and share information on energy efficiency in schools and communities in the south- west UK and in Brittany. UK partners included Dorset CC, Devon CC and Wiltshire CC working with 2 local authority partners in Brittany. In Dorset the project involved a number of community energy initiatives including thermal image surveys, energy surveys of village halls and renewable energy presentations to community groups. Additionally it supported a comprehensive programme of energy saving activities in 20 Dorset schools<sup>22</sup>.
- During the period 2014-16 11 town and parish councils were supported by the County Council to negotiate community benefit funds from local solar farm developments worth a total of £2m over a period of 20 years.
- A Community Woodland Network, led by the Dorset AONB, was established to support the management of woodlands for both wildlife and sustainable fire wood and involves nine groups. Donated wood from these groups was used to supply a Bridport Community Woodbank, where households at high risk of ill health due to cold homes were given seasoned firewood to help heat their homes.
- Hilfield Friary, Society of St Francis (an Anglican religious order) incorporates a wide range of mitigation measures including: 10 kw pv on their chapel roof; Woodchip biomass boiler with underground pipes which gives heat and hot water to the whole site (8 buildings, a community of 25 people and guests); 2 solar thermal systems and 3 community cars (1 is a Nissan Leaf, used for most short trips to Sherborne (e.g. the railway station), Dorchester and Yeovil. A second is a hybrid Mitsubishi, electric for the first 20 miles). More information at: <http://hilfieldfriary.org.uk/environment>



Solar Panels at Hilfield Friary  
Photo: Hilfield Friary



Council owned housing  
Photo: BBC

<sup>21</sup> [www.dorsetcommunityaction.org.uk/cls](http://www.dorsetcommunityaction.org.uk/cls)

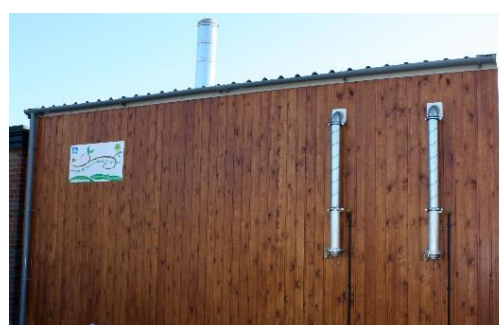
<sup>22</sup> A large number of useful resources and toolkits developed through the project are available at: <http://en.seacs.eu/>

## Public Sector

- Dorset County Council and Bournemouth and Poole Unitary Authorities have been proactive in installing renewable energy installations on their buildings, in schools and council owned housing stock. This includes 51 renewable energy installations by Dorset County Council and 942 solar PV installations with an approximate installed capacity of 2.5 MW by Bournemouth Borough Council.
- Dorset schools have been judged to be the most energy efficient in the country based on Display Energy Certificate Scores reflecting many years of continual investment in energy conservation measures by Dorset County Council.
- Staff and pupils of Merley First School Poole welcomed the installation of the Borough of Poole's first biomass boiler which was handed over to the school in September 2011. Entirely government funded, the new P4 Froling Pellet Boiler, Fuel Store and 3,000 litre hot water tanks have been retrofitted at the school as part of a project to help reduce CO<sub>2</sub> and contribute to the council's target of a 25% reduction in emissions by 2020.
- Bournemouth Borough Council has invested millions of pounds in energy efficiency (of its assets, business travel and fleet fuel consumption) and microgeneration projects such as the installation of solar photovoltaics, biomass boiler and replacing all street lights with LED lights. This investment has reduced carbon emissions by 4,885 tCO<sub>2</sub>e which equates to a 32% reduction in carbon emissions, supporting the aim to deliver the 4% 34% by 2020 compared to the 2008/09 baseline.
- Dorset County Council (DCC) had a carbon foot print from its operations of over 53,000 tCO<sub>2</sub>e and in 2009 committed to reducing this by 30% by 2020, equivalent to a reduction of over 15,000 tCO<sub>2</sub>e and £36m cumulative savings. DCC has invested in new technologies and working practices have achieved savings of approximately 13% (7,200 tCO<sub>2</sub>e). This has included reducing energy in buildings, cutting business travel and vehicle fleet fuel use, installation of renewable energy technologies and energy savings from upgrading streetlights and turning off some lights in the middle of the night. Utilisation of mobile technology to enable smart, flexible working is also achieving energy and travel savings.
- The Borough of Poole Council (BoP) civic centre car park solar PV and energy efficient lighting project presented an opportunity to install a solar panel roof, benefitting from a reduction in energy costs (11.503p/kWh) and income from the Government's Feed-in Tariff scheme (9.64p/kWh)<sup>23</sup> for 20 years. The on-site energy supply has improved the resilience of the Civic Centre to potential energy blackouts<sup>24</sup>. Finally, a roof would be supplied for part of the top floor of the car park, protecting the vehicles against excessively hot or inclement weather. The project is supporting the BoP commitment to reduce CO<sub>2</sub> by 20% by 2020.



Merley First School Biomass Boiler



Photos: BoP

<sup>23</sup> Confirmed until 1 July 2014 [www.ofgem.gov.uk/ofgem-publications/85846/010214rpiadjustedtariffspv1.pdf](http://www.ofgem.gov.uk/ofgem-publications/85846/010214rpiadjustedtariffspv1.pdf)

<sup>24</sup> Ofgem estimates the risk of blackouts in 2015 as 1 in 4 [www.telegraph.co.uk/finance/newsbysector/energy/10145803/Risk-of-UK-blackouts-has-tripled-in-a-year-Ofgem-warns](http://www.telegraph.co.uk/finance/newsbysector/energy/10145803/Risk-of-UK-blackouts-has-tripled-in-a-year-Ofgem-warns)

## Domestic

- The Healthy Homes Dorset Programme aimed to reduce illness and death caused and exacerbated by living in cold homes. Activities include improving the thermal insulation of 150 homes (annually) of residents vulnerable to the damaging health effects of living in a cold home. While the programme is not designed with climate change in mind, improving insulation will lower energy demand (and therefore CO<sub>2</sub> emissions) in heating homes adequately. This does not however mean that it will reduce CO<sub>2</sub> emissions in all homes improved – where insulation is installed in a home that was not being heated adequately, CO<sub>2</sub> emissions may stay the same or rise if the home is heated more adequately after improvements in insulation.
- The Bournemouth Warm Homes project follow-up surveys showed high levels of satisfaction with both the service received and the benefits of insulating homes. In total, 249 households were assisted with 310 measures that will save an estimated £1.7m and 9k tCO<sub>2</sub> over the lifetime of the projects.

## Business

- The Control Your Compressors project funded by Dorset County Council and managed by Dorset Chamber of Commerce and Industry helped 75 businesses reduced their energy use from compressed air.
- The LoToNo project was a two-year EU funded project (2014–2016) to support innovation and trans-European co-operation in the low carbon business sector in Dorset, Poole, Hampshire and the Isle of Wight. Partners included Dorset County Council, Borough of Poole and Future Solent and was led by WSX Enterprise. The project resulted in 25 businesses across Dorset, Poole and Hampshire receiving financial and mentoring support to develop new low carbon products and services.
- Borough of Poole Council developed the Green PEA (Positive Environmental Action) award. The Green PEA scheme is a multi-award-winning business to business certification scheme. Since its inception, the scheme has helped over 75 businesses save money and reduce their carbon footprint by becoming more energy efficient. Members are offered a free opportunity assessment which helps to provide a bench mark and recommendations which businesses can then work through to reach a number of levels and milestones within the scheme. To date, the Green PEA Scheme has saved businesses a total of £108,000 and 519,232kg of CO<sub>2</sub> (over a 10 year period).

## Planning

- All the councils within Bournemouth, Dorset and Poole have in place Local Plans or Core Strategies (part 1 of the local plan) adopted primarily between 2012 and 2016 and containing up to date policies of sustainable development and climate change.
- A number of Neighbourhood Plans across Dorset include sections on climate change and sustainable energy.



Green PEA logo  
Photo: BoP



Dorchester town centre to Poundbury electric bus  
Photo: DCC

## Transport and travel

### Sustainable Travel

- Dorset's first electric bus service began operating in 2012. Dorset County Council (with a grant from the Department for Transport's Green Bus Fund), West Dorset District Council and the Duchy of Cornwall jointly funded an electric bus service operating in Dorchester between Poundbury and the town centre. There has been an estimated carbon emissions saving of around 39 tons per year compared to diesel buses.
- Dorset County Council's secured funding from the Local Sustainable Transport Fund for the Weymouth to Dorchester corridor to improve the walking and cycling network, add electric vehicles to the public sector fleet, expand the Dorchester Car Club scheme and install electric car charging points into public car parks.
- Department for Transport funding was allocated to Bournemouth, Poole and Christchurch for the Three Towns Travel project. The project supported improvements to public transport (including new bus shelters), bike facilities and safer crossings for walkers. A Business Travel Grant was set up to support organisations to deliver projects to enable and encourage their employees to travel more sustainably, such as showers, lockers and bike storage.

### Food Miles

- Community growing projects and allotments have become increasingly popular in recent years and organisations such as the National Trust have provided new allotments and community growing projects at places like Langton Matravers and Kingston Lacey. Alongside this parish and town councils provide many allotment spaces to enable communities to grow local food.
- Some Transition Towns in Dorset run community orchards and/or community farms. This not only reduces food miles but enables people to get closer to the natural environment, something that has been shown to be beneficial for both physical and mental health as well.
- Bournemouth & Poole Sustainable Food Cities is promoting local and sustainable food. The priority for year one was to become the first sustainable fish city in the world – this has resulted in businesses and organisations only using fish from sustainable sources. Another project was the creation of the Bournemouth Food Assembly which brings local food producers to a weekly pop-up market.
- The Square Meal Debate led by Communities Living Sustainably brought together over 100 people to look at the issues around sustainable food, farming, health and wildlife.
- The Dorset AONB led, Dorset Food and Drink works on promoting local food producers, including meet the buyer events to bring producers and restaurants together as well as supporting a range of local food festivals and markets around the county. Dorset Food and Drink has 220 members (as of March 2017).

### Case Study: Communities Living Sustainably in Dorset (CLS Dorset)



A Big Lottery Funded partnership project based around Bridport and Dorchester. The 3-year project concluded in 2016 and covered actions including: encouraging behavioural change in terms of energy efficiency, community farms / community growing and sustainable travel; community renewable energy; education and awareness raising through schools via the Eco-Schools programme; and enhancing local food production and purchasing.

More information at: [www.dorsetcommunityaction.org.uk/cls](http://www.dorsetcommunityaction.org.uk/cls)



## What more do we need to do?

Overall good progress is being made on a national and local scale, but there is no doubt that a significant continued effort is required in order to avoid potentially serious impacts of climate change by limiting global warming to well below 2°C and to pursue efforts to limit it to 1.5°C. Dorset must continue to play its part in this by contributing to international and national carbon reduction targets and maximising the local economic, environmental and community benefits that doing so can bring.

## Key Challenges and Risks

There is uncertainty in government policy on energy and carbon reduction although there is increasing evidence that renewable energy developments will in future be driven by economic viability. For example, solar PV costs have come down by 85% in the last 7 years alone, meaning it already outcompetes fossil fuel generation costs in many regions of the world<sup>25</sup>.

Changes to national energy efficiency funding has affected the delivery of domestic energy efficiency programmes and has caused confusion for consumers. In some cases these policies has helped those 'able-to-pay' rather than those who most needed it<sup>26</sup>. Changes in policy instruments and financial incentives over recent years are likely to affect the take up of further low carbon measures moving forward. For example: reductions of Feed in Tariffs (FITs) and Renewable Heat Incentive (RHI).

The removal of incentives such as the Carbon Reduction Commitment and local authority carbon reduction targets and indicators has taken away a key driver for local government to lead on this area. Without a duty to monitor such indicators or targets the associated actions are often not prioritised in local authorities. Additionally over recent years financial and staff resources available to public and non-governmental organisations to tackle climate change have been reduced and stretched alongside reducing support within the community and voluntary sector to directly support communities to deliver mitigation projects. This reduction in staff support has effected the ability to address these issues and maximise opportunities as and when they arise. The impacts of the potential local government reorganisation on these resources is unknown.

The implications of the loss of European funding post Brexit is unclear and may impact on future research and development as well delivery of low carbon programmes.

Planning has a key role to play in climate change mitigation, through both the Local Plan which determines how land is allocated for particular purposes, and the development management process (including building control regulations) which specifies how a particular planning application is to be implemented. In the long term, the development of genuinely sustainable communities will in part require a planning system that ensures that new development genuinely enables people to live, work and conduct their leisure time without needing to use non-renewable forms of energy, through good design and through using innovative ways of generating and conserving energy.

Recent changes to planning policy have reduced the likelihood of onshore wind applications being successful in the future, due to addition requirements for full community support.

Dorset still has a high reliance on the car for the majority of journeys due to the dispersed nature of the county's towns and services and the lack of viable public transport alternatives. The best opportunity of reducing car journeys are within urban areas where shorter journeys are more easily undertaken by walking, cycling and public transport. Advances in technology to reduce carbon emissions through take up

<sup>25</sup> [www.lazard.com/perspective/levelized-cost-of-energy-analysis-100/](http://www.lazard.com/perspective/levelized-cost-of-energy-analysis-100/)

<sup>26</sup> [www.publications.parliament.uk/pa/cm201516/cmselect/cmenergy/552/552.pdf](http://www.publications.parliament.uk/pa/cm201516/cmselect/cmenergy/552/552.pdf)



of electric vehicles, hybrid, fuel efficient vehicles has already begun and will continue as reliance on fossil fuels declines.

### Future opportunities for delivery

There are opportunities for further influence and action to address climate change mitigation:

- All the local authorities are about to embark, or are already within, reviews of their local plans. This is to reflect more recent government legislation, revised housing need and also covers site specific issues and more detailed planning policies not covered by the Part 1 - Core Strategies.
- Dorset European Structural Investment Funds (ESIF), offers opportunity for low carbon funding and programmes. Dorset Low Carbon Economy Programme (ESIF funded) hopes to start in late 2017 and will offer technical support and £2.25m of grants for implementing low carbon technologies in Community, Public and Business sectors.
- Local Government Re-organisation offers an opportunity to pool resources and improve coordination and support for low carbon initiatives across the local authority areas particularly in the domestic, community and business sectors.
- Renewable Energy Business rates – Local Authorities in Dorset collect specific business rates for renewable energy installations in their area (i.e. £1m per annum). Government intended this to support Community Energy projects in line with the National Community Energy Strategy.
- Tackling Public Health issues and affordable warmth through energy efficiency improvement in people's homes offers valuable health intervention, cross working and greater access to funding for low carbon measures.
- Climate change remains a significant EU priority with 20% EU budget allocated to climate change mitigation and adaptation to 2020. Despite Brexit there is still a window of opportunity to continue to apply for EU funds.
- Growing examples of successful community energy programmes in Dorset and South West such as RegenSW's 'Peer Power' Community Energy Project recently launched in Dorset to help strengthen Dorset's community energy sector.
- Dorset County Council is considering installing a biomass Combined Heat & Power unit at County Hall. To help reduce the costs further, the Council is looking at self-supply of fuel from its own estate and through the use of wood waste from Household Recycling Centres.
- There is an increasing awareness of the value of local food both in terms of reducing food miles but also in supporting the local economy. Dorset Food and Drink is increasing its membership and working to raise the awareness and connect local producers to both local residents and local businesses (e.g. local restaurants).



Dorset Food and Drink Fair  
Photo: DLNP



- The government published its Cycling and Walking Investment Strategy (2017) and it is hoped that this will be accompanied by much needed funding for local authorities to deliver more walking and cycling schemes to reduce congestion and improve air quality. Clean air zones are also being created in certain parts of the country to encourage cleaner vehicles and reduce pollution.

## Final Words

Continued climate change mitigation in Dorset is essential. Much work is already being delivered but more action is needed. Climate change mitigation needs to remain a priority for Dorset as a whole. Mitigation can easily fall down the priority list without a clear national lead but greater recognition needs to be made to the wider benefits mitigation can make to health and economic priorities.

The DLNP believes that climate change mitigation needs to be embedded in both development planning but also for service delivery planning. Robust climate impact assessments need to be undertaken and mitigation measures included in the associated action plans and strategies. DLNP, through its constituent members will challenge those that have not been through this process but will show support where appropriate.

Whatever the outcome of the current local government reorganisation proposals, the positive initiatives to address climate change that the majority of Dorset's councils have already put in place must be carried forward to the new organisations. Bournemouth and Poole Councils have joined the global Compact of Mayors initiative – the world's largest coalition of city leaders addressing climate change by pledging to reduce their greenhouse gas emissions, tracking their progress and preparing for the impacts of climate change. It would show genuine commitment if all councils in Dorset did the same or made a similar commitment in any future governance arrangements.

By working together across Dorset climate change mitigation can be achieved through encouraging and making it easier for people to play their own part through investment in energy conservation, promoting sustainable transport solutions, the development and promotion of renewable energy generation

If we do these things Dorset can be proud that it is reducing the worst impacts of climate change both in the county and the wider world. Dorset can become a role model for how to mitigate against future climate change which can inform and inspire people elsewhere to follow our example.



Stourfield Junior School  
Photo: BBC



Bournemouth Town Hall boiler room, valve insulation  
Photo: BBC



## For more information

Please contact the Dorset Local Nature Partnership for further information: [info@dorsetlnp.org.uk](mailto:info@dorsetlnp.org.uk)  
Or see the website: [www.dorsetlnp.org.uk](http://www.dorsetlnp.org.uk)

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## Thank you

The LNP wishes to thank the following people for their contributions to the development of this position paper: Dave Lawrence (Bournemouth Borough Council); Kate Hall (Dorset County Council); Kate Tunks (Dorset County Council); Rebecca Landman (Borough of Poole Council) and Roxanne King (Bournemouth Borough Council).

## Acronyms

BBC: Bournemouth Borough Council; BoP: Borough of Poole Council; DCC: Dorset County Council; DLNP Dorset Local Nature Partnership

The graphic is titled 'Energy' and 'Use Energy Efficiently'. It features a central image of a hand adjusting a thermostat. Below this, there are three yellow sticky notes with tips for energy efficiency. The first note, 'Do it now - it's easy and free!', lists tips for curtains, washing, kettle use, and thermostat settings. The second note, 'Invest a little time for big rewards...', lists tips for water pipes, doors and windows, curtains, and LED bulbs. The third note, 'More effort but once it's done it's done!', lists tips for walls, loft insulation, and being self-sufficient. A speech bubble encourages trying simple steps. The Wessex Energy logo and contact information are at the bottom right. The background is orange with a grassy field at the bottom.

# Energy

## Use Energy Efficiently

**Use Energy Efficiently**

We need energy to heat our homes and water, and electricity to power our lights and appliances.

Energy used in the home accounts for around one-quarter of all energy used in the UK. Use it well to save money and reduce your carbon footprint.

*Try these simple steps to use energy efficiently. Tick them off as you go!*

**Do it now - it's easy and free!**

- **Curtains** – close them at dusk to keep the heat in.
- **Wash** – at 30°C and dry outside when you can.
- **Kettle** – use only the amount of water you need – it saves time and money.
- **Thermostat** – turn your thermostat down by 1°C – save £60 a year!

**Invest a little time for big rewards...**

- **Water pipes** – lag your hot water pipes.
- **Doors and windows** – draught proof your doors and windows.
- **Curtains** – fit thermal linings to your curtains – you'll feel warm and cosy and save money on fuel bills.
- **LED bulbs** – swap for LED bulbs, they come on quickly, have a good light and are cheap to run.

**More effort but once it's done it's done!**

- **Walls** – insulate your walls and save 20% on your heating bill.
- **Loft insulation** – check your loft insulation, it should be 270mm!
- **Want to be self-sufficient?** – check if you could go renewable by generating your own heat and/or electricity.

**Wessex Energy**

For further details on how to reduce your energy consumption visit: [www.wessex.energy](http://www.wessex.energy)  
Tel: 01202 209410

Energy Efficiency Guide – [CLS Dorset](http://www.clsdorset.org.uk)