

Appendix A

Climate and Ecology Update June 2022 – key achievements

1. Making Dorset Council operations carbon neutral by 2040

- 1.1** Dorset Council's carbon emissions baseline for 2019/20 was about 31,000 Tonnes CO₂e. This included emissions as a result of energy use in our buildings and assets, the fuel used in the various ways we travel on business to provide services and get to and from our work, embedded energy in materials used for highways repair and the waste we produce as an organisation.
- 1.2** In Autumn 2021, we reported that in 2020/2021 we had reduced the Council carbon emissions by 17%, to 25,867 Tonnes CO₂e. This is an excellent step towards our interim target of 40% reduction by 2025, but the report also highlights that the coronavirus pandemic significantly impacted on our services and on the way, we worked, which influenced this reduction in carbon. Table 1 shows the changes we saw in carbon emissions by area.

Carbon footprint area	Difference	Performance
Buildings - Energy	-21%	😊
Buildings - Water	-19%	😊
Streetlights & Intelligent transport systems	-22%	😊
Highway's materials	-33%	😊
Fleet fuel	+17%	😞
Dorset Travel Fuel	+14%	😞
Business mileage	-60%	😊
Commuting	-50%	😊
Waste	-35%	😊

Table 1 – changes in carbon emissions by area 2020 - 2021

- 1.3** Table 1, highlights that significant gains were made in some key areas, with the impacts of the Coronavirus pandemic resulting in using buildings differently and less travel as we worked more from home and used technology to connect. In contrast, our response to the pandemic required provision of additional services particularly increasing some elements of fleet and Dorset Travel. For example, many additional vehicles and journeys to ensure social

distancing for school travel. A transition to an EV fleet and use of alternative fuels over the coming years will aim to reduce the climate impact from our fleet.

1.4 Work continues to gather pace and become more embedded in our activities, helping to reduce our travel, energy use in buildings, street lighting and the embedded carbon in our highways construction projects. A further update on our carbon footprint will be available in Autumn 2022. Some of our key highlights to date are noted below:

- Secured £19m public sector decarbonisation fund to support retrofit programme - heating control upgrades, Solar PV installations, LED lighting upgrades, electricity infrastructure strengthening, heat pumps all for installation by end June 2022. To include -
 - o up to 90 PV arrays installed on council buildings and schools
 - o Window upgrades at County Hall
 - o Up to 100 buildings fitted with a new or upgraded Building Energy Management system (BMS)

- Increasing EV infrastructure at council sites – 2 sites upgrade to date further planned for this year

- Switching fleet vehicles from fossil fuels
 - o Developing fleet strategy
 - o Trialled electric vehicles and alternative fuel (Hydrotreated Vegetable Oil) for heavy vehicles
 - o Scheduled to expand fleet of electric vehicles in 2022/23 and 23/24

- Reduce carbon emissions from highways construction & maintenance
 - o Primary material use reduced by 30% in 21/22
 - o 15% scalplings recycled into new asphalt
 - o 49% asphalt laid was low energy asphalt – saving 15% embodied carbon

- Climate & Ecological emergency prioritised within Dorset Council plan and new Corporate Director of Climate and Ecological Sustainability appointed.

- Significant budget commitment in 2022/23 Dorset Council budget
 - o £10million Capital climate change budget
 - o £750k revenue priority commitment

- Strategy in place to decarbonise Dorset County Pension Fund's investment portfolio and reduce investment in all high carbon emitting companies, with at least 7% year on year reduction in weighted average carbon intensity of the portfolio.
 - o Estimated value of the pension fund's investment in companies primarily involved in the exploration, production, mining and/or refining of fossil fuels has reduced from £128 million to £41million since 2019.

This means that only 1.2% of the total investment assets are currently in fossil fuels

- Pro-active lobbying of Government for powers and funding to support strategy delivery

2. Helping Dorset to become Carbon Neutral by 2050

2.1 Baseline emissions for Dorset were 1.759 million tonnes of CO₂e in 2017. The latest government data for Dorset shows that Dorset emissions reduced to 1.662 million tonnes of CO₂e by 2019, equivalent to a 6 % reduction from 2017.¹

2.2 Carbon emissions from domestic buildings in Dorset reduced by 3% between 2017 & 2019. We are commissioning a building condition survey in 2021/22 which will give a better picture of housing across Dorset.

2.3 Since 2017 carbon emissions from industrial and commercial activity in Dorset have reduced by 6% and 14% respectively.

2.4 There is now nearly 420 Mega Watts (MW) of installed renewable energy capacity in the Dorset and BCP area. The majority of this is solar but other technologies include small wind, small hydro, anaerobic digestion, and land fill gas. In 2019 Dorset and BCP local renewable energy sites generated 484 Giga Watt hours (GWh) of renewable electricity equivalent to just under 4% of Dorset & BCP total energy demand.

2.5 Significant support for business, community, and public organisations to reduce their carbon emissions, provided by the EU funded Low Carbon Dorset project, has resulted in the following:

- 168 grants awarded and over 400 organisations benefitting from advice
 - £6.1 million worth of low-carbon projects already operational
 - 7,000 tonnes carbon already saved
 - 4.4 Mega Watts for renewable energy installed
- Healthy Homes Dorset has supported over 130 homes in Dorset in the last year with energy efficiency and improvement measures and an additional 240 households in Dorset and BCP area have received Green Homes Grants in the current round of funding to install energy measures including insulation, ventilation, and Solar Panels.
 - Phase of public electric vehicle charge points completed delivering 42 new EV charge sockets at 21 locations
 - Created an enhanced partnership with local bus operators to help improve the quality & availability of public transport.

¹ UK local authority and regional carbon dioxide emissions national statistics: 2005-2019

- Expanded cycle training & independent travel training programmes with over 3,600 participants
- Gigabyte broadband coverage in Dorset increased by nearly 8% last year to 19.5%
- Encouraging waste reduction and support transition to a circular economy
 - o 60% recycling achieved. Dorset Council is the eighth best performing council in England and the third best unitary council in England for recycling and composting.
 - o 155 communal site improvements predicted to save £125k through increased recycling, less rubbish and less recycling contamination.
 - o 6,000 residents spoken to through door-to-door project.

3. Supporting Dorset's ecological aspirations for nature recovery by 2030

3.1 Baseline still to be determined, but latest figures suggest that 6% of land is in good condition, with an additional 9% classified as 'known ecological interest', 15% is classified as poor, with a further 70% not identified as of existing interest.

- Purbeck is one of the most wildlife rich places in the UK and has gained further recognition with the declaration of the new Purbeck Heaths National Nature Reserve (NNR).
 - o Declared on 21st February 2020, the new NNR covers 3,331 hectares (8,231 acres). It stretches from Grange Heath in the west to Studland in the east and from the Arne peninsula in the north to Norden in the south. It is now the largest area of lowland heath managed as a single nature reserve in England.
 - o It envelops three existing NNRs at Hartland Moor, Stoborough Heath and Studland and Godlingston Heath and adds new land to form a new 'super' National Nature Reserve at landscape scale.
- South Dorset Marine Conservation Zone
 - o It is located approximately 17.5 km south of St Alban's (St Aldhelm's) Head, to the south-east of Swanage. The site covers an area of approximately 193 km² making it one of the largest inshore MCZs
 - o Damaging fishing activity will be prohibited in the South Dorset Marine Conservation Zone. This includes byelaws, which have been subject to extensive consultation with industry and other stakeholders.
 - o The new measures will prohibit fishing activities in MPAs where there is evidence that they harm wildlife or damage habitats.
- Several projects underway with Dorset Coast forum to include
 - o Studland eco moorings and the protection of seagrass beds (carbon sequestration) - (£35K).
 - o Climate resilience project for Weymouth - BRIC building resilience in flood disadvantaged communities - (£106K).

- The Farming in Protected Landscapes programme managed by the Dorset AONB has distributed £212k in year 1 to 40 projects. This includes, amongst other projects, supporting
 - o 0.77 ha of woodland creation
 - o 1482 ha of land being managed with regenerative farming techniques
 - o 6 projects to improve soil quality & 9 projects helping to reduce flood risk

- Supporting natural flood management – Over 40 natural flood management structures installed to slow the flow of flood water in two catchments

- Increased verge & amenity space management for biodiversity benefit by 350,000m² through expansion of cut and collect programme