

Appendix D

Case study examples of wider benefits of tackling climate and Ecological emergencies

The ways we tackle the climate and ecological emergencies, can not only help reduce carbon emissions and help to reduce the decline in our natural environment but have wider economic, environmental, and social co-benefit.

Below are just a few examples -

[Community-led projects delivering for the water environment](#)

Over the past year, a partnership of Dorset AONB, Dorset Wildlife Trust and Farming and Wildlife Advisory Group have engaged with communities and farmers within the catchments of the Rivers Char, Asker and Monkton Wyld Stream. The aim is to generate more awareness of the issues facing the water environment, and action that can be taken to overcome these issues.

As well as community engagement, action has also been taken to improve the condition of the rivers, which are failing Water Framework Directive targets for ecology, primarily due to poor plant communities. By opening up the tree canopy that line the rivers, to allow more light into the bed and banks, you provide more favourable conditions for plants to grow. This benefits species such as purple loosestrife and river water crowfoot. This work on the River Asker has gone in hand-in-hand with control of the invasive non-native species Himalayan balsam, which also causes bank erosion when the dense stands die back in autumn.

In tandem with river restoration, the partnership has also been delivering Natural Flood Management solutions in the headwaters of the River Char and River Asker. The aim, through many small interventions, is to slow the flow of water after torrential rain and reduce the severity of flooding. This is ongoing work, and over the past few years, over 40 structures have been installed in the headwaters of the Asker alone. Anecdotally, comments from the community suggest this approach is making a difference:

I have to say that I was seriously impressed by the leaky dams which Nick and his colleague put into the unnamed 'stream' in the field above me a few weeks ago – in the past, the quantity of rain which we had today would have meant that stream bursting its banks and coming across and up the road, but it behaved beautifully today. Fingers crossed that that happy state of affairs continues!

Funding from the Green Recovery Challenge Fund, Environment Agency and Natural England supported delivery.

[Purbeck Heaths Wilder Grazing Unit](#)

This Dorset AONB-led project supported by the Wytch Farm Landscape Enhancement Fund and the Green Recovery Challenge Fund (largely in FY21-22) has connected 3 holdings in the Purbeck Heaths National Nature Reserve as a single unit of 1370ha with no internal fencing. Within this area, cattle, ponies and pigs will graze and forage alongside the area's wild deer. This is primarily for nature recovery, reinstating natural processes – the introduction of pigs (as a wild boar surrogate) is particularly important for creating and maintaining some disturbed ground essential for some of the heath's rarer plants and insects.

Wider benefits include an enhanced visitor experience through new signage and interpretation alongside better promotion of the access points and routes. A sustainable tourism working group has also been established so that the companies whose livelihoods come from giving people unique experiences in this special landscape can work with the land stewards and local community for best mutual effect.

[Farming In Protected Landscapes](#)

A 3-year (2021-2024) Defra-origin grant programme managed by the Dorset AONB team, in its first year (FY21-22) distributed £212k in grants to projects which delivered on the FIPL outcomes of People, Place, Nature & Climate. This includes 75 farmer beneficiaries (of which 21 had previously not participated in agri-environment schemes). Alongside creating 2 new farmer clusters and supporting 3 more, nearly 1500ha is being managed by regenerative farming techniques; 5km hedgerows have been planted; 597 individual trees, 0.77ha woodland and 42 fruit trees planted, and over 4000ha has been improved for wildlife connectivity. Supported projects include:

- Coppett's Hill Forest School: a small investment for a parachute shelter and a compost toilet has enabled the opening up of a site primarily for use by Symondsburry Primary School. This school has such a commitment to learning outside the classroom that every child will have a forest school day once every termtime fortnight. This is important in helping those children develop a deep connection with nature, known to lead to increased pro-environmental behaviour as an adult.
- Farm manure composting trials: a farmer was supported to purchase a compost turner and covers, and to undertake training in soil health. He will create and use compost from on-farm wastes as a primary nutrient source for growing forage for his dairy enterprise. A farm conservation charity is also being supported to monitor, document and demonstrate the process and outcomes to a group of at least 25 interested farmers, in the hope that this beneficial technique is extended across a much wider area. Compost can be used instead of artificial fertiliser for top-dressing applications (once the crop is growing) in a way that uncomposted manures cannot, leading to increased soil organic matter (and ultimately sequestered soil carbon), better soil structure and biodiversity, as well as reducing input costs for the farm business.

The fund will run until March 2024. The AONB Partnership is working hard to secure a successor fund, which supports farmers in protected landscapes recognising that there can be some limitations to land-based businesses in AONBs and National Parks – both in terms of the physical environment as well as the regulatory framework.

[Low Carbon Dorset - Helping reduce Dorset's footprint](#)

Low Carbon Dorset is an ERDF funded project hosted by Dorset Council, that supports SME, community, and public organisations to reduce their carbon emissions through energy efficiency and renewable energy measures, as well as supporting SMEs to develop new, energy related, low carbon products and processes.

#LowCarbonHeroes

Tonnes of carbon saved, and megawatts of renewable energy produced are important. But behind this top line data are the stories of our Low Carbon Heroes. Businesses, community groups and public sector organisations making a real difference to the communities they serve. Here are just a few examples:

Family business Stewarts run three garden centres, a nursery, and landscaping unit in the east of Dorset. They have invested heavily in lowering their carbon footprint, now saving at least 450 tonnes CO₂e per year. But without Low Carbon Dorset support they wouldn't have been able to stretch to a new ground source heat pump to replace their previous oil-based systems. Together with other energy production and efficiency measures the business was predicted to save £50K on electricity costs per year; thermal screens in their glasshouses alone would reduce energy demand by 30%. With the recent huge rise in energy costs, the savings will be higher and the pay-back time for their investment will be less. This enterprise has helped to secure jobs and services well into the future through its commitment to a greener business.

Riversmeet Leisure Centre in north Dorset demonstrates a similar story of considerable cost savings on rising energy prices in this important community run asset for Gillingham and surrounding villages, contributing significantly to the health and wellbeing of their local community. When many pools and gyms faced closure due to the pandemic, further exacerbated by escalating bills, Riversmeet had already completely redesigned their pool heating and ventilation to be much more energy efficient, along with many other energy saving measures. Combined, these cut their energy use by 50%, a massive saving when your electricity bill had been £10K per month. As a not-for-profit organisation, the support from Low Carbon Dorset was critical in helping them to realise these changes. Their commitment to lowering their carbon footprint has allowed them not just to survive but to thrive, despite the recent challenges, and their staff have become knowledgeable advocates for greener solutions, proud of their centre and keen to do more.

Bridport Co-housing in association with Bournemouth Churches Housing Association know how vulnerable low-income households are to the cost-of-living crisis and in particular rising energy bills. Their innovative social housing development at Hospital Lane in Bridport, includes compact and highly efficient air source heat pumps for hot water in each home, supported by Low Carbon Dorset. We are also supporting **Hazelmead Community Energy** to install a solar powered micro grid for the site, providing this small community with lower cost electricity in 50+ highly energy efficient homes and securing a degree of energy independence. The solar and battery powered micro grid uses innovations only applied previously in one other area of the UK and shows how decarbonisation can be at the heart of delivering affordable, healthy, and warm homes for everyone.

(See our case studies for a range of completed projects [here](#))

Low Carbon Dorset summary outputs, and outcomes to date

The project has delivered the following outputs for the Dorset and BCP Council areas:

- 168 grants awarded with a value of £5.8 million and more than 400 organisations benefitting from technical advice
- £6.1 million worth of low-carbon projects already completed with another £10+ million worth in progress
- 7,000 tonnes carbon already saved cumulatively
- 4.4 Mega Watts of renewable energy installed with at least another 7.5 Mega Watts on track for installation by project end.

Key outcomes so far include:

- A range of SME, community, and public sector organisations able to meet their energy demand affordably into the future, helping to secure their businesses and services
- Energy efficiency measures that improve the fabric and long-term viability of commercial, community and public sector buildings
- A significant number of the above being listed or in constrained settings showing what can be achieved, whilst maintaining and enhancing our heritage assets
- Growing awareness and demand for independent advice and support for low carbon projects, amongst all sectors, for the environmental, financial, social, and public relations benefits that result
- Successfully completed projects in sectors that are key to the economies of Dorset and BCP, such as tourism and leisure, farm diversification, food and drink, light engineering, and quarrying, that act as learning exemplars for others in those sectors
- Successfully completed projects by organisations providing community benefits and services in areas typical of Dorset rural, such as village halls, churches, and small-scale sports facilities, that again act as learning exemplars for delivery of environmental and social benefits in dispersed rural populations, with many in protected landscapes.

