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| **LOW CARBON ENERGY INFRASTRUCTURE** |
| [**Local Industrial Strategy**](https://www.dorsetlep.co.uk/userfiles/files/LIS/Dorset%20Local%20Industrial%20Strategy%20-%20Draft%20.pdf) **(LIS)** | [**Dorset: Living Better investment prospectus**](https://investindorset.com/) | [**Decarbonising Dorset: Low Carbon Investment Opportunities**](https://www.dorsetlep.co.uk/dorset-net-zero) |
| By 2030, Dorset will:Develop a genuinely smart place that is well-connected, allowing people to interact both in person and digitally. A place that is energy resilient, utilising local renewable energy sources. The government’s 25 Year Environment Plan and proposed Environment Bill to support the UK 2050 net zero carbon target - prioritising action across improvements in clean air, clean and plentiful water, thriving plants and wildlife, using resources from nature more sustainably and efficiently, minimising waste, mitigating/adapting climate change and enhancing beauty, heritage and engagement with natural environment. | Ambition to unleash a new clean energy revolution in Dorset – generating all of our energy requirements through local renewable and net zero carbon sources by 2050.[**96% of Dorset’s energy requirements currently imported**](https://investindorset.com/wp-content/uploads/2021/03/Dorset-Investment-Prospectus-2021-30.pdf)(page 34). Government has identified clean growth and energy as enablers of economic growth as part of a ‘green industrial revolution.’ Clean energy aligns with ‘smart energy’ (Smart Technology portfolio)Recent evidence showing the potential for a new approach to energy flexibility opens-up a number opportunities for a mix of energy supply within a constrained local market using smart grid connectivity and battery storage.This enables a range of mix and scale of clean energy production (on land and offshore) – and we intend to maximise this through the development of a stimulus package for new clean energy generation across Dorset, with the potential to invest at scale or in smaller scale production (such as unlocking district or regional networks). Alongside this, we are looking to invest in an SME low carbon programme, focused on increased energy efficiency and renewable energy use across all SMEs in the Dorset LEP area.**Developing a workforce ready for a Green Industrial Revolution – ‘blue and green’ skills programme** (page 36). Working with Universities, colleges, and training providers in Dorset to develop a comprehensive suite of learning and skills opportunities.**‘Clean connected’ portfolio** – sets out the vision for a safe, reliable, and accessible low carbon transport system for the city region. | Aim: to achieve net zero carbon emissions by 2050.Decarbonising Dorset should not be viewed as a series of individual projects but as a fundamental system change, building a whole new green economy. Solar and offshore wind provide the most immediate opportunities for Dorset.**Low Carbon Generation** (page 9)Currently, UK relies on imports for majority of our energy needs. Opportunity to generate low carbon energy in the UK, retaining jobs and investment, and security of supply. **Generating solar energy, offshore wind opportunities, onshore wind, anaerobic digestion, biomass and biofuel** (page 16)**Focus on hydrogen** (page 18)Production of green hydrogen through electrolysis, **Energy Networks and flexibility** (page 25)Energy generated elsewhere and then transported to where it is needed. This is managed by National Grid in a centralised system. This system is facing challenges, focus is moving to developing a decentralised infrastructure. Requires investment and developing smarter systems. Recommendations for Dorset Councils and Dorset LEP to engage with energy networks.**Energy efficiency of buildings** (page 30)Regen’s analysis shows that 60% of homes in Dorset area would need to install significant energy efficient measures if the government want to meet their targets by 2035.Opportunity for retrofits. Warmer homes, fewer winter deaths and reduction in fuel poverty. Opportunities for jobs and economic activity for large and small business in the region.**Decarbonising heat** (page 33).**Decarbonising transport** (page 38). Decarbonising existing diesel and fuel vehicles, and increasing active travel (walking, cycling). Use of electric buses already in Dorset. Decarbonising rail travel. |