

TRANSPORT

Scale of the challenge...

Due to its dependency on fossil fuels the transport sector is a major contributor to our nation's carbon footprint. Decarbonising this sector will be a key challenge in moving towards a zero-carbon future.

Here in Dorset transport alone is responsible for an estimated **765 kilotons of CO₂e** each year, making it the single biggest contributor to our county's footprint. To reach zero carbon, fossil fuel use in the transport sector will need to be eliminated. This will not be as simple as just switching to different fuels or energy sources. It will require significant changes in attitudes, planning and infrastructure, economic incentives and political and institutional changes.

In rural areas like Dorset, car ownership is amongst the highest in the country. And in 2018 just over 2,500 million vehicle miles were travelled in Dorset Council area. A significant shift will be needed to make active travel and public transport the first transport mode of choice. This will be a significant challenge, in 2018 only 1% of UK passenger journeys were made on public transport.

Transport will also need to be a key focus for Dorset Council in its own ambitions to eliminate emissions from its activities and services. Change will be required in the way staff commute to work, workplace practices, fleet operations and business travel.

Over 9,000 Dorset Council employees currently commute to work. Changing commuter travel behaviour and achieving a shift from cars to more sustainable modes of transport will be required.

Mileage undertaken by council staff on work business will also need to

be significantly reduced, last year this amounted to 5.3million miles, costing the council £1.6m and emitting 1,496 tonnes of CO₂e.

The council's fleet vehicle emissions will also need to be eliminated, this will require a staged renewal programme to replace the existing fleet with electric or best possible alternative.

To support the move to electric vehicles in both the Council fleet and the county there will need to be an increase in the provision of electric vehicle charging points. This will require significant action from both public and private sectors in Dorset.

Dorset's progress so far...



UK ban on the sale of new petrol and diesel cars by 2040, government consulting on earlier 2035 ban



Dorset's Local Transport Plan already demonstrates a strong commitment to sustainable transport policies and carbon reduction



662 tonnes of CO₂e have been saved since 2015 as a result of CarshareDorset.com car sharing scheme



BCP Council & Dorset Council awarded £79 million in 2020 by DfT's Transforming Cities fund to deliver large sustainable transport network






Hear more about the challenges we are facing here in Dorset from Dorset Council's [Transport Planning Manager...](#)











Key Issues...

Nationally

-  **Lack of national direction and strategy**, although this will improve with the publication of the decarbonisation plan and bus strategy
-  **Transport networks are closely interlinked** so climate related disruption affecting one form of transport can have knock-on effects on others
-  **Relatively little overall change** in the level of greenhouse gas emissions from the transport sector in last 20 years

In Dorset

-  **Inherited infrastructure network built around private vehicle usage** which has led to the car being the first choice of travel
-  **Culture of commuting to work** with car being the default mode of travel
-  **School choice contributes** to transport issues
-  **Rural nature of parts of Dorset** means that accessing employment, training and other essential services requires increased travel
-  **Quality of digital infrastructure in rural areas** to support home working, online learning and e-commerce
-  **Low carbon active travel infrastructure not sufficiently developed** to complete area-wide networks
-  **Lack of funding to upgrade bus infrastructure** and support rural services
-  **Lack of service frequency on some rail corridors**, not suitable for commuting

Key Opportunities...

-  **Additional funding available from central government** for buses funding, EV charging, active travel
-  **Embed zero-carbon transition into statutory planning documents** including the Local Plan & LTP
-  **Capitalise on private sector investment** to expand public electric vehicle charging network
-  **Increased health benefits** from active travel with resulting impacts on wellbeing
-  **Reduced air pollution** from transport
-  **Greening of the council fleet** utilising replacement programme to transition to ULEVs
-  **Encourage continuation of behaviour & organisational changes that have resulted from COVID-19**, including increased active travel and home working
-  **Creation of jobs in Dorset's green economy** as a result of investment in zero carbon











Figure 34






Areas for Action...

Decarbonising Dorset's transport sector will be a major step towards a net zero future, and significant action will be required from the Council to eliminate associated emissions from its own activities & services, as well as working with partners and using its influence to facilitate change on a county-wide level...






Direct

-  Maximise ultra-low-carbon vehicle replacement within Council fleet
-  Provide EV charging points & other ultra-low-emission fuel alternatives across the Council property estate
-  Reduce emissions from transport infrastructure construction and maintenance
-  Ensure access to sustainable transport is considered in planning applications
-  Encourage behavioural change in way staff travel to and for work
-  Reduce the need for staff to travel to and for work
-  Understand key risks and potential costs posed by climate change to transport & travel in Dorset
-  Mainstream climate resilience in future strategies and policies

Indirect (through services)

-  Improve low-carbon transport infrastructure by embedding it in the Local Plan and Transport Plan
-  Increase investment in walking, cycling & public transport infrastructure - secured through LTP, developer contributions, and other available funding streams
-  Encourage decarbonisation of road transport through development of EV charging network & promotion of low emissions transport vehicles
-  Improve quality & availability of public transport to make services more attractive to the travelling public
-  Encourage behaviour change through active & sustainable travel campaigns and initiatives.

Influence & Partnership

-  Lobby government - e.g. for Rail improvements
-  Respond to government calls and submit high quality grant applications
-  Redirect investment from strategic road schemes to low-carbon transport (Work with Subnational Transport Body and Local Enterprise Partnership)
-  Work with Dorset Business Travel Network & Digital Dorset to promote use of ICT to individuals and businesses to avoid travel & encourage working from home
-  Work with schools, parents and partners to reduce the carbon foot print of the daily school commute

Case Study: Greener Highways

For the first time, this year will see **Dorset Council** using low energy asphalt (LEA) on all resurfacing schemes and as a surface course on new construction projects such as cycleways.

The material is produced 30 to 40 degrees lower than conventional material, which is usually produced at 180 degrees. This reduced heat results in 15% less carbon emissions during the production process.



Although widely used in America and France, low energy asphalt is much less common in the UK.

Councillor Ray Bryan, Portfolio Holder for Highways, Travel and Environment, said: “Following two successful resurfacing schemes trialling LEA here in Dorset, we’ve been very keen for mass-production of the material at the regional quarry, Whatley. Working closely with our private sector partner Hanson UK this has become a reality. The quality of the lower energy material is not affected, it helps reduce our carbon footprint and it’s actually easier to keep at temperature during transport due to the lower production temperature”.

Case Study: Electric Pool Cars

On average **Dorset Council** pool-cars travel about five to six thousand miles each year. And it’s estimated that each standard diesel pool-car produces between 1.4 and 1.7 tonnes of CO₂ per year. In 2013, Dorset Council introduced three electric cars into its pool-car fleet to reduce these emissions.

Electric vehicles produce no carbon emissions in use, but do still have some associated emissions unless the electricity to recharge them comes from renewable sources.

Compared to a standard diesel pool car that travels 5-6k miles annually, its estimated that an electric equivalent travelling the same distance produces between 0.5 to 0.6 tonnes of CO₂ a year. Since introducing the three electric pool-cars its estimated that the Council has saved around 10.5 tonnes of CO₂. There are opportunities to reduce emissions further by using only renewably sourced electricity and by increasing the number of electric pool-cars within the fleet.

