# Appendix 7: Existing projects impacting on emission reduction and climate change adaptation

Sheffield City Council has already committed £43 million from its capital budget to address climate issues in the city over the next five years, as well as accessing more funding from Government. Investments that will help us on our path to net zero carbon include:

#### **Sustainable Travel**

- Over £100 million of investment from the city and successfully raised from government is going towards making travelling in Sheffield greener and cleaner and making it safer and easier for people to travel by bike. This includes the new <u>Connecting Sheffield</u> project which is key to our work transforming the city's mobility infrastructure to enable people to get around the city more easily using low carbon, sustainable and inclusive ways of travelling including walking, cycling and public transport.
- Previous work to further active travel includes:
  - Accessing emergency funding for active travel made available as a consequence of Covid, and trialling low traffic neighbourhoods, road closures and new cycle lanes.
  - Investing £1.5m from DfT to deliver high quality cycle networks linking the city centre to Broomhall and providing segregated and direct links across the Inner Ring Road.
  - Promoting active travel with more walking routes, segregated cycle lanes and bus lanes.
  - Funding cycle loans, invested in a fleet of bikes and ebikes that people can loan for free; provided cycle training to people and Bikeability training to school pupils in Sheffield.
- £896,000 funding has been made available for <u>electric vans which businesses</u> can hire to try before buying and <u>32 electric cargo bikes</u> for small businesses.
- The Council is making its own vehicle fleet cleaner and greener. The Streets
  Ahead team will run another 15 electric vehicles to replace its current diesel
  vehicles. It is also taking a major eco-friendly step by trialling two vans that
  use a hydrogen fuel cell to extend the range of power the battery gives to
  approximately 200 miles. The Council also runs an extra five hydrogen
  vehicles.
- 22 ultra-low taxi charge points are to be installed in the city centre.
- Working with Bus companies and government £4.9 million will be invested in to <u>Cleaner Bus Technology Fund</u> to retrofit up to 277 buses to the Euro VI standard.
- Investing £1.25m to increase access to rapid-charge points for electric cars, with many more charging points planned for the city.

### Renewable and Sustainable Energy

- Council electricity is now generated from 100% renewable sources, an increase of 81% on last year.
- Energy Surgeries have been established to provide advice on sustainable energy in the home and Smart Energy Meters have been installed for Council tenants – creating a 40% saving for tenants as well as a substantial reduction in wasted energy.
- The Council is leading on a funding bid with three other local authorities in the city region to develop a project to support small to medium sized enterprises (SME's) to implement low carbon improvements within the business.

#### Waste, recycling and energy recovery

- We have improved recycling facilities for shared properties such as flats, high density housing, and student accommodation.
- Sheffield is <u>trialling electric bin lorries powered by the very waste they have collected</u>. The re-powered lorries have zero carbon emissions and produce no air pollution.
- We are <u>working with the city's schools</u> to see a reduction in plastic, including huge reductions in the amount of single use plastics used at school meal times.
- General household waste is taken to the city's <u>Energy Recovery Facility</u> (<u>ERF</u>), which generates electricity for the National Grid and heat for the city's award winning District Energy Network. As well as reducing landfill waste the ERF reduces greenhouse gas emissions because it avoids the need to burn fossil fuels to produce energy. This prevents around 21,000 tonnes of carbon emissions from being released every year, as well generating energy for the city's schools, council owned buildings and thousands of homes.

## Trees, Woodlands and Green Spaces

 Over the next 10 years the Council will plant 100,000 trees as part of its Trees and Woodland Strategy.

# **Climate adaptation**

- Work is ongoing and more than £18 million is being spent to protect Sheffield from the expected increased flood risk resulting from climate change. Work has already been completed on some schemes and further resilience projects are being progressed.
- The award-winning <u>Grey to Green</u> sustainable urban drainage system contributes both to climate emission reduction and also to adaptation. It has replaced roads with cycle paths and drought-friendly, pollen rich planting which is designed to capture water to prevent flooding.
- Flood resilience work to protect the Lower Don Valley completed in 2017 and during the recent flood event in November 2019 these defences prevented significant damage and disruption.

- Plans are now moving forward for the £9 million Upper Don Valley flood protection scheme and phase 1 (Lower Loxley defences) started in August. This scheme will protect parts of Hillsborough and Owlerton that flooded last year.
- A £3m citywide culvert scheme is being developed to improve water flow throughout the city, diverting excess water away from the city's roads and highways.

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