Appendix 2: Ideas/opportunities for Carbon reduction and sustainability projects and Initiatives

The following are potential ideas and opportunities to deliver carbon reduction and sustainability projects which could be funded using the funding earmarked for separate food waste collections included in the Medium Term Financial Analysis for food waste collections from 2025/26.

Further work will be needed to develop fully costed programmes.

Transport

• SCC Members and officers are pushing the case for the rapid transition to Zero Emission buses in the city. We know that compliance with our clean air directives, coupled with need to significantly improve our aging bus fleet in the city, means that expanding EV bus provision in the city is critical. Although buses are owned and operated by the private sector in South Yorkshire (and the network is managed by SYMCA) the funding could be used to purchase approx. 35 EV buses. Arrangements would need to be put in place to structure an agreement with operators and SYMCA on how the money would be used, how charging and other garaging infrastructure would be delivered and how ongoing maintenance would be managed.

As set out in <u>Bus Back Better: national bus strategy for England</u>, each zero emission bus reduces carbon emissions by about 70% (46 tonnes) annually compared to a diesel bus and also avoids the 23kg of nitrogen oxides (NOx) emitted by a diesel bus each year. Using these figures for Sheffield, and extrapolating over the 5 years of the funding allocation, the introduction of 35 Zero Emission buses could reduce CO2 emissions in the city by approximately 8,000 tonnes.

- E-bikes. The council's recently adopted Decarbonisation Route Map 'The Way We Travel', sets out SCC policy around modal shift and the need to promote active travel as part of efforts to reduce emissions, ease congestion, save carbon, create a safer and more resilient transport network and enable healthier lifestyles. Given Sheffield's topography, e-bikes are a good way for people to travel around the city but are sometimes more expensive than non-powered bikes. The higher cost of entry may put e-bikes out of the reach of significant numbers of citizens in Sheffield. A programme to develop a low cost/zero cost e-bike ownership programme for the city would go a significant way in addressing some of the objectives set out in the city's transport, climate and public health strategies.
- Subsidised/free public transport. Part of the allocation could be used to promote Sheffield's
 public transport networks through promotional offers of free or heavily subsidised transport
 on certain days (e.g. one weekend a month) or over specific periods public holidays/festive
 periods etc.
- Many of Sheffield's anchor institutions and businesses carry the post of travel
 planner/transport planner as part of their organisations. Funding the post of a council wide
 travel planner, to work with Members, committees and staff networks to promote modal
 shift, embed decarbonisation through committee decision making and encourage and
 facilitate a move to more sustainable modes, will assist the organisation in its moves
 towards Net Zero, a cross party objective.

Climate change

- Climate Hub. Part of the challenge in adapting to and mitigating the impacts of climate change, and the need for us all to live more sustainably, is the difficulty in accessing information. Working closely with Sheffield's universities, the college, the VaC sector and business community, a 'Climate Hub' would provide opportunities for the following:
 - Members of the public to see demonstrations of new technology, seek information on products and services and information on available grants and packages to upgrade heating/energy systems.
 - Opportunities for the SME sector to promote products and services in order to develop the green tech market and support the pipeline of jobs in renewables and retrofit.
 - Event space to run workshops on technologies/sustainable living, urban agriculture, school events, community local renewable projects, etc.
 - A space for students/graduates/ people looking for work and/or a career change to learn about the employment opportunities associated with the transition to Net Zero and a more sustainable Sheffield.
 - A facility for college/Unis to deliver information on courses and other learning and training opportunities.

Combination of capital (set up costs, fit out, rent if non council owned building) and revenue (staffing, community outreach, business outreach, event management, demonstrations, training programme).

- Local industrial decarbonisation programme. Programme of funding/grant support/information and expertise for Sheffield's businesses to learn about and install carbon saving technologies or working practises at the local level. Peer to peer business support to support objectives under SCC's Business Decarbonisation Routemap. Could be a combination of revenue support (training, audit, carbon analysis, business impact review, carbon/energy saving audit) and capital (grants for new technology/retrofit/EV vehicles).
- Community energy/travel based programme. Opportunity to co-create and fund a package
 of community-based programmes as a model for neighbourhood sustainability, e.g. working
 with community based enterprises like Heeley Development Trust on active
 travel/community renewable energy projects/community growing programmes. Developing
 a replicable sustainable model for community transition to low carbon living could allow
 model to be implemented across the city, based on the needs of each community.

Waste Management

- Part of the allocation could be used to introduce a small number of electric refuse collection vehicles into the Veolia fleet. Currently Sheffield does not operate any eRCVs and this could provide an opportunity to test this new technology on Sheffield hills and assess reliability, maintenance costs, and battery life to inform future fleet replenishment decisions. The cost of replenishing diesel vehicles (7 year cycle) is included in the Veolia contract and the cost would be the additional amount required to procure an electric vehicle. Discussions would have to take place with Veolia to assess maintenance and fuelling costs.
- Household Waste Recycling Centre Supersite. Sheffield has 5 small HWRCs which provides waste disposal for household waste only, with limited space for recycling, level access at

only one site, and unlike in other Council areas, no reuse centre. A Members working group will be established to inform the development of a business case for investing in a new waste and recycling supersite. Subject to finding a suitable location, the allocation could be used to establish a new supersite which provides:

- o An improved customer experience with level access
- A potential reuse shop
- O Ability to accept waste and recycling from SMEs on a charged for basis

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