Appendix A: Sustainability credentials

The purpose of this Appendix is to provide more detail on how the Didcot Garden Town Housing Infrastructure Fund project (HIF1) addresses climate change issues, and how the wider strategy in the Science Vale area integrates with HIF1 to achieve wider sustainability aims for the area in the short, medium, and long term. HIF1 will provide a major step in delivering these longer term aims.

Science Vale (Didcot) Area Travel Plan
The Area Travel Plan sets out how people will be traveling around the whole Science Vale area and the other interventions that are needed alongside the HIF1 funded infrastructure to achieve modal shift to public transport, walking and cycling, reduce the need to travel, measures that support behavioural change and also work towards the Local Transport and Connectivity Plan targets. These measures may include further active travel user prioritisation on the historic bridges, future bus improvements across the area and speed limit changes. The work for the Science Vale (Didcot) Area Travel Plan is currently being scoped as part of the programme to develop the strategy alongside other assessment tools that are used to fully assess the wider impacts including sustainability credentials.

HIF1
The sustainability credentials of HIF1, including in respect of climate change issues, were fully explored in the recent call-in planning inquiry. OCC produced detailed expert evidence in support of HIF1's sustainability credentials. That evidence was summarised in OCC's closing submissions to the call-in planning inquiry, which can be found on the inquiry website[1]. Key points include the following.

The effect of HIF1 on climate change and carbon emissions was fully considered in Chapter 15 – Climate of the Environmental Statement for HIF1, which assesses the effects on the climate of greenhouse gases arising from the construction and operation of HIF1. The assessment showed that greenhouse gas effects during the HIF1 construction phase (which arise from matters including the embodied carbon in construction materials) are predicted to be minor adverse and therefore not significant. HIF1 operation (i.e. emissions from road users) is shown to <u>reduce</u> greenhouse gas emissions compared to the without HIF1 scenario, thus HIF1 is predicted to have a minor beneficial effect in respect of greenhouse gas emissions during the operational phase. The reduction in greenhouse gas emissions with HIF1 in operation is a result of reduced congestion and journey times as a consequence of the improvements to the road network.

Significance is determined by contextualising the emissions by reference to the UK carbon budgets, with a level of less than 1% of the carbon budget not considered to be significant. HIF1's contribution to the UK's 4th carbon budget (for 2023 – 2027) is 0.0077%, comprising 154,842t CO_2e for construction and -4,601t CO_2e for operation (i.e. a reduction for operation compared with the do nothing baseline). For the 5th (2028

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[1] https://gat04-live-1517c8a4486c41609369c68f30c8-aa81074.divio-media.org/filer_public/05/15/05156f58-1309-4681-95fa-279166a59cee/occ_-_closing.pdf. See paragraphs 124 – 136 under the sub-heading "Issue 8: the effect of the proposal on climate change and carbon emissions".

– 2032) and 6th (2033 – 2037) budgets, there is no construction contribution as HIF1 is built, and the operational emissions are again reduced, such that HIF1 does not contribute at all to the UK carbon budget and, indeed, creates some additional headroom.

Since the Environmental Statement was produced, the Department for Transport has updated the Emissions Factors Toolkit ("**EFT**"), with the latest version 12.0.1 being released in December 2023. OCC presented a sensitivity analysis to the planning inquiry, which showed that the EFT v12 update has only a very slight impact on the assessment presented in the ES. Thus the position remains, in accordance with the conclusions of the Environmental Statement, that there is a minor adverse impact during construction and a minor beneficial impact during operation, and there are no likely significant effects.

These emission figures are dependent on the outputs of the traffic modelling for HIF1, and OCC produced expert evidence for the called-in planning inquiry showing that the traffic modelling is robust. Indeed, even if the actual figures varied from those modelled (which is not predicted), the contributions to the UK carbon budget are so small that it would make no difference to the assessment of significance in respect of greenhouse gas emissions.

Mitigation measures have been embedded into the HIF1 design to minimise the effects of carbon emissions. These include:
- design enhancements,
- more efficient construction processes, and a
- focus on reuse of materials and waste reduction.

These mitigation measures are secured through their inclusion in the Construction Environmental Management Plan and the Site Waste Management Plan that will be included within the CEMP. Greenhouse gas mitigation measures include energy-efficient road lighting design and encouraging low-carbon forms of transport through the construction of the shared cycleways / footways. In addition, a carbon management plan is required by condition to support carbon reductions, by quantifying emissions, setting targets, monitoring and reporting.

More generally, it should be noted that HIF1 is designed to improve access to future allocated housing and employment growth in the local area, including access by walking, cycling and public transport. HIF1 is policy backed by and is the cornerstone of mitigation for the planned growth in the area. HIF1 does not aim to provide unlimited highway capacity for cars, or to remove all congestion; it forms part of a balanced transport strategy, which also provides high quality walking and cycling infrastructure, helping to engender modal shift to more sustainable modes. HIF1 also forms a critical part of the forthcoming Science Vale (Didcot) Area Travel Plan, providing a key role in creating resilient active travel and public transport networks, which support the area.