HERBATA DATA CENTRE, NAAS - RESPONSE TO REQUEST FOR FURTHER INFORMATION ("RESPONSE TO RFI") FROM KILDARE COUNTY COUNCIL

ADDENDUM TO CHAPTER 16 CLIMATE CHANGE

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16 CLIMATE CHANGE

16.1 Introduction

This Addendum to Chapter 16 Climate Change of the Environmental Impact Assessment Report (EIAR) (dated June 2024), submitted to Kildare County Council (KCC) as part of the planning application for the Project on 13th August 2024, updates the climate change assessment of the Project in response to the RFI raised by KCC. Specifically, this Addendum to Chapter 16 of the EIAR is provided to respond to Item 1 of the RFI which states the following:

1. Policy RE P12 of the Kildare County Development Plan 2023-2029 seeks to ensure that economic and enterprise related development is provided in a manner which facilitates a reduction in greenhouse gas emissions and accelerates the transition towards a sustainable, low carbon and circular economy. Furthermore, Policy RE P11 and Policy EC P18 seek to support the accommodation of Data Centres at appropriate locations in line with the objectives of the National Planning Framework and the principles for Sustainable Data Centre Development of the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy (July 2022) subject to appropriate Transport, Energy and Environmental Assessments and all relevant planning conditions.

The Data Centre development as proposed would result in the emission of 28.6 million tCO2e (tonnes of carbon dioxide equivalent) during its lifetime which represents c. 49.35% of the Sectoral Emissions Ceiling for the entire Commercial Built Environment Sector to 2030. This level of emission is considered to be excessive for one development and would have wider implications for the sector to remain within its emission ceiling, with a consequent negative impact on climate change. The proposed development, as proposed, would run counter to the provisions of National Policy as set out in Ireland's Integrated National Energy and Climate Plan 2021-2030 and in the Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy 2022, both of which require decarbonisation through emissions reduction/removal and design. The development would therefore be contrary to Policy RE P12, RE P11, and EC P18 of the Kildare County Development Plan 2023-2029, would set an undesirable precedent for similar developments of this nature and would be contrary to the proper planning and sustainable development of the area.

This Addendum to Chapter 16 of the EIAR seeks to address KCC's concerns principally regarding:

1. The net greenhouse gas (GHG) emissions figure of 28.6 million tCO_2e reported within Table 16.7 of Chapter 16 of the EIAR; and
2. The context of such emissions against the Sectoral Emissions Ceilings, reported within Table 16.9 of Chapter 16 of the EIAR, comprising 49.35% of the Sectoral Emissions Ceiling for the Commercial Built Environment Sector.

Were such a quantum of emissions to be projected to arise over an assumed 50-year lifetime of the construction and operation of this Project, it would rightly be of concern. However, there are a number of reasons why the level of GHG emissions presented in the EIAR is highly conservative and is not a realistic assessment of the likely GHG emissions arising from the proposed development, including:

- The figure of 28.6 million tCO_2e set out in the EIAR is calculated over an assumed 50-year lifetime, which is based on the standard timeframe for carbon life cycle assessment. On review of other consented data centres in Ireland, the typical operational lifetime of such operations is up to 20 years. A calculation over a realistic 20-year timeframe results in lifetime emissions of circa 11.6 million tCO_2e, illustrating that the data presented in Chapter 16 of the EIAR is based on a significantly over-estimated timeframe and is therefore not a realistic estimate of the likely lifetime emissions of the proposed development.
- The direct emissions from the operation of the data centre presented in the EIAR assumed that there would be no decarbonisation of the gas network and excluded a number of commitments presented in the *Energy Policy Compliance Report* (which commitments all form an integral part of the proposed development) to present a highly conservative worst case assessment of operational direct emissions which did not reflect the actual likely emissions arising from the proposed development.
- The assessment of indirect emissions from embodied carbon in the manufacture of servers that will be used in the operation of the data centres is inherently speculative given there is a level of unknown in relation to the server choices that will ultimately be made by the tenants of the data centres, and the assessment presented in the EIAR assumed the highest possible embodied carbon in the production of

the servers, and the highest frequency of server replacement, to present a highly conservative worst-case assessment of indirect emissions. However, this assessment set out in the EIAR did not take account of the obligations placed on the tenants of the Data Centres by the Carbon Neutral Data Centre Pact, which will lead to a reduction in the likely embodied carbon arising from the manufacture of servers.

This Addendum provides a sensitivity analysis of a more likely emissions scenario for the construction and operation of the Project that removes the very high level of conservatism built into the EIAR analysis to properly reflect what in fact will be the carbon emissions arising from the Project and puts these emissions in context of the relevant policy documents noted in the RFI.

Furthermore, the addendum seeks to present the likely greenhouse emissions associated with the Project as a result of the following changes to the Project design and commitments which will enable emissions reductions throughout the lifetime of the Project:

1. Decreased footprint of Data Centre 4 and amendments to external plant yard (see Addendum to Chapter 4: Description of the Project and Need for the Project for further detail);
2. Commitment to source 50% of the Project's electricity demand from new renewable energy sources (secured via Corporate Power Purchase Agreements (CPPAs)), this is an increase from the 30% committed to in the original submitted application. Additional renewable energy will be provided by on site solar PV arrays. (see Addendum to Chapter 4: Description of the Project and Need for the Project for further detail);
3. Commitment to source 100% hydrogen from 2039 onwards (see Energy Policy Compliance Report – Updated, HRD, 2025 for further detail); and
4. Use of Combined Cycle Gas Turbines, which will offer energy efficiency improvements to reduce the volume of gas required to serve the data centres, with a consequent reduction of 552,000 tonnes in carbon emissions (see Energy Policy Compliance Report – Updated, HRD, 2025 for further detail).

16.1.1 Scope of the Addendum

To address KCC's concerns, and to account for the above design changes and updated commitments, this Addendum to Chapter 16 of the EIAR provides an update with regards to the following:

1. Review of the Climate Action Plan 2025 (Government of Ireland, 2025) which was published in May 2025 (Section 16.2) post lodgement of the planning application.
2. Presentation of a revised analysis in the context of the sectoral emissions ceilings (Section 16.3.1), to respond to KCC's comments regarding the contribution of the Project towards the Sectoral Emissions Ceiling for the Commercial Built Environment Sector.
3. Presentation of a revised analysis based on a typical 20-year Project lifetime for a data centre (Section 16.3.2). The 50-year lifespan assumed in the EIAR is not a realistic assumption for a development of this nature, and in fact the operational lifespan of the Project will be significantly less than 50 years. On review of other consented data centres in Ireland, the typical operational lifetime of such operations is up to 20 years. As such, the total lifetime emissions of the project have been further re-assessed on the basis of a 20-year lifespan in this Addendum.
4. Assessment of operational effects (Section 16.4) including an updated assessment case (i.e. updated magnitude of emissions) which has been presented to account for the increased commitments to renewable energy procurement, green gas procurement, and gas turbines (informed by the Energy Policy Compliance Report – Updated, HDR, 2025). Additionally, a review of emissions within the context of a 20-year assessment period has also been provided (informed by an update to the calculations provided within Chapter 16 of the EIAR).
5. Assessment of construction effects (Section 16.5) including an updated assessment case (i.e. updated magnitude of emissions) presented to account for the design changes to Date Centre 4. A sensitivity case is also provided to demonstrate how emissions associated with server fit out by tenants may be reduced. As with the operational assessment, a review of emissions within the context of a 20-year assessment period has also been provided (where this will impact replacement rates associated with battery energy storage systems (BESS) and servers throughout the lifetime of the Project). The updated assessment case, sensitivity case and review of emissions over a 20-year assessment period have been informed by an update to the calculations provided within Chapter 16 of the EIAR.

6. Assessment of whole life effects (Section 16.6) including an updated assessment case (i.e. updated magnitude of emissions) to account for the changes to the operational and construction phase emissions, as set out in points 4 and 5 above.

This Addendum to Chapter 16 should be read in conjunction with the previously submitted EIAR, Chapter 16 Climate Change, and its associated appendices, and in conjunction with the other information and documentation submitted as part of the response to the RFI such as the Energy Policy Compliance Report – Updated (HDR, 2025) and Energy Strategy Report (BOS Energy Ltd, 2025). Where relevant, the headings used within Chapter 16 Climate Change of the EIAR have been followed in this Addendum to Chapter 16, to ensure consistency.

It should be noted that while this Addendum to Chapter 16 presents an updated assessment in the form of a more realistic likely emissions scenario with a reduced magnitude of emissions to that previously presented in Chapter 16 of the EIAR, such changes do not affect the overall conclusions and final significance of effects presented in Chapter 16: Climate Change of the EIAR. This is because the assessment of significance is informed by more than the magnitude of emissions reported, and accounts for mitigation measures embedded within the design of the Project to enable emissions reductions in line with national decarbonisation targets. This is further explored within the assessments of significance at Sections 16.4 and 16.5. However, notwithstanding that the overall conclusion of this Addendum to Chapter 16 (Climate Change) of the EIAR is unchanged from that set out in Chapter 16 of the EIAR submitted as part of the application for planning permission, namely that the Project will result in a **not significant minor adverse** effect on climate, it is clear from what is set out below that the magnitude of impact of the Project is significantly reduced from that originally set out in the EIAR, with a 84% reduction in the total lifetime carbon emissions of the Project compared to the emissions set out originally in the EIAR.

16.1.2 Original Assessment (Chapter 16 of the EIAR)

For clarity regarding the 'starting point' in response to the RFI concerns and updates to the assessment, Table 16.1 summarises the magnitude of emissions reported within Chapter 16 of the EIAR. Table 16.1 largely reflects Table 16.7 of Chapter 16 of the EIAR, with the exception of the construction emissions, which have been separated into those under the control of the Applicant (direct), and those under tenant control (indirect). These values have been separated as this Addendum seeks to provide further context regarding the magnitude of emissions arising from the server fit out, given their scale and contribution towards net lifetime emissions.

While the concern raised within the RFI regarding the magnitude of emissions arising from the Project is reasonable based on the quantum of emissions originally set out in the EIAR submitted with the application for planning permission, as stated throughout Chapter 16: Climate Change of the EIAR, the emissions reported for the construction and operational phases of the Project in Chapter 16 Climate Change of the EIAR presented a conservative assessment, with likely reductions assessed qualitatively throughout the chapter. As set out in Section 16.1.1, this addendum now quantifies those reductions, informed by the Energy Policy Compliance Report – Updated (HDR, 2025), to present a more robust and realistic assessment of the direct and indirect emissions associated with the Project.

Table 16.1: Project net GHG impact (50 Year 'Assessment Case' lifetime emissions reported in the Climate Change EIAR Chapter)

Source	Chapter 16 of the EIAR - Assessment Case (tCO_2e)
Applicant Controlled Elements (Direct)	
Embodied carbon in construction materials[1]	211,936
Regulated energy use (i.e. space heating and cooling, hot water, ventilation, and lighting)	88,351
Unregulated energy use (i.e. data hall demand)	14,933,067
Battery energy storage systems[2]	235,889
Sub-Total	**15,469,243**
Tenant Controlled Emissions (Indirect)	
Embodied carbon in servers	13,177,597
Sub-Total	**13,177,597**

Total	**28,646,840**

[1]As the reduction in embodied carbon as a result of the implementation of the proposed mitigation measures (detailed within section 16.3 of Chapter 16 of the EIAR) has not been quantitatively assessed at this stage, this value does not account for the likely reductions that will be achieved.

[2]This assumes the worst-case BESS scenario, with the fewest avoided emissions (see section 16.6.2.2.1 of Chapter 16 of the EIAR).

16.2 Climate Action Plan 2025

Since the submission of the planning application the Climate Action Plan 2025 (Government of Ireland, 2025) has been published. This Plan builds on what was detailed in the Climate Action Plan 2024 (Government of Ireland, 2023a), further detailed within Chapter 16 of the EIAR, and sets out what has been achieved and what needs to be done to ensure emissions remain within the second carbon budget (for the period 2026-2030).

Further, the Climate Action Pan 2025 states on page 20 that *"In contrast to previous iterations of the Climate Action Plan, CAP25 is to be read in conjunction with CAP24 and takes account of key developments in the policy and evidence base in the previous year while setting out a range of new actions in response to the latest data. This is intended to facilitate a focus on the delivery of outstanding actions from CAP24 and high-impact legacy actions from CAP23."* Therefore, the Climate Action Plan 2025 should be read in conjunction with the Climate Action Plan 2024.

With regards to information directly relevant to the Project and to the assessment of emissions presented within this Addendum to Chapter 16 of the EIAR, the Climate Action Plan 2025 sets out the following:

- Recommends the implementation of an Enhanced Electricity Emissions Reporting Framework for Large Energy Users. The recommendations for such a framework have been published by the Sustainable Energy Authority of Ireland (SEAI, 2024), however no final requirements have been published.
- Extreme weather events have been recorded within the year, exemplifying that the effects of climate change are being felt now. A second statutory National Adaptation Framework was published in June 2024, which places stronger emphasis on avoiding maladaptation, promoting nature-based solutions, and enhancing resilience. A climate change risk assessment (Appendix 16.2 to Chapter 16 of the EIAR) was undertaken and submitted within the original application, the results of which were detailed within Chapter 16 of the EIAR. As a result of embedded mitigation measures incorporated into the Project's design, no significant effects were identified to arise from the impacts of climate change on the Project or its users.
- The electricity sector accounted for 12.5% of Ireland's GHG emissions in 2023. This figure represents a 22% decrease on the 2021 emissions which resulted from an increase in the share of renewable electricity generation and net imports of electricity, resulting in a reduction in the consumption of coal, oil and gas.
- Targets to increase demand side flexibility with regards to the electricity sector, with electricity storage highlighted as playing a crucial role in accelerating the deployment of renewable electricity generation and ensuring grid stability. This is further detailed within the Electricity Storage Policy Framework, published in July 2024 (Government of Ireland, 2024a) and the National Energy Demand Strategy (Commission for Regulation of Utilities, 2024). The Project supports the increase in flexible electricity provision through the incorporation of BESS within the design of the Project. See Section 8 (Developing a 24/7 Renewable Supply) within the Energy Strategy Report (BOS Energy, 2025) which details the role of battery storage at the Project.
- A review of the Large Energy Users Connection Policy is ongoing and will ensure that new Large Energy User grid connections do not contribute to energy security challenges and that the power system decarbonises new demand in line with climate targets. A final decision is expected in 2025. See the Section 3 (Large Energy User Policy update 2025) within the Energy Strategy Report (BOS Energy, 2025) for further detail regarding the compliance of the Project.
- The National Hydrogen Annual Work Programme has been updated for 2025, with an appropriate regulatory arrangement to be put in place to support future scale-up of the sector as it evolves. This will be overseen by the Hydrogen Task Force.

The Climate Action Plan 2025 further references the following document, which include information of relevance to the Project:

- Ireland's Long-term Strategy on Greenhouse Gas Emissions Reduction (Government of Ireland, 2024b) sets out that energy demand, including from data centres, will be expected to operate within sectoral emissions ceilings. Further, as set out above, development of energy storage and flexibility will be required to enable net zero carbon data centres.

The climate action plans recognise LEUs as having a critical role in delivering high levels of flexibility across time and geographical locations and matching energy consumption with renewable energy generation. By employing the very flexible and agile technology used in the Project, the Project is designed to align with the new enhanced reporting framework and also to fully comply with this CAP action.

The proposed Data Centre, (an LEU), makes provision for on-site renewable energy production (through onsite solar PV) and on-site energy storage. CPPAs will also enable sustainable sources of energy generation to serve the development. The remaining energy requirement shall be met by gas, a transitionary fuel moving to net zero, from the national gas grid. In addition, the proposed data centre will have the flexibility to export energy to the national grid if and when required.

In addition to the above, the Environmental Protection Agency (EPA) have published Ireland's GHG emissions projections from 2024 to 2055 (EPA, 2025). This document sets out projections, accounting for existing reduction measures, and ambitions for emissions reductions. Under both scenarios the EPA has found that Ireland is not projected to meet the 51% emissions reduction target by 2030. However, the scenarios used do not account for the increase in zero emission gas fired generation from biomethane and green hydrogen by 2030, which can be expected to further reduce national emissions.

Therefore, the Competent Authority can be satisfied that in granting planning permission for the proposed development, it will be performing its functions, insofar as practicable, in a manner consistent with the most recent approved Climate Action Plan (being CAP25, which must be read in conjunction with CAP24), and (as described in section 16.2.1 of Chapter 16 of the EIAR submitted with the application for planning permission) the other matters specified in section 15 of the Climate Action and Low Carbon Development Act 2015 (as amended).

16.3 Sectoral Emissions Ceilings and Project Lifetime

16.3.1 Sectoral Emissions Ceilings

Item No. 1 of the RFI issued by KCC refers to the contextualisation of Project emissions relative to the Sectoral Emissions Ceiling for the Commercial Built Environment Sector (associated with the residential, public and commercial sectors, predominantly relating to space and water heating of such buildings), totalling 49.35% of this ceiling over the 2021 to 2030 carbon budget periods.

In responding to this aspect of the RFI, a review of the sectoral ceilings was undertaken to identify whether emissions ceilings for the Commercial Built Environment Sector are appropriate for use on this Project, or whether emissions ceilings for another sector would provide more appropriate contextualisation. This review has been informed by an evaluation of national policy, and consideration of evaluation criteria used on other data centre projects (in particular those consented in Kildare) to ensure consistency for KCC.

This review identified that the Sectoral Emissions Ceiling for the Commercial Built Environment Sector did not present appropriate context for the Project given the nature of the Project. The Electricity Sectoral Emission Ceiling was identified as the appropriate emissions ceiling against which to contextualise Project emissions for a number of reasons, including:

- This sector accounts for emissions from fuels combusted in electricity generation. The use of a set of on-site gas turbines to generate electricity for use on site designates the site as a large/medium combustion plant, indicating that this Project falls within the Electricity Sector, rather than the Commercial Built Environment Sector (for projects in the Commercial Built Environment sector, electricity and/or gas is imported for space/water heating);
- The use of the Electricity Sectoral Emission Ceiling as an emissions ceiling against which to contextualise project emissions in other consented data centre developments. For example, the Kildare Innovation Campus which was granted permission by KCC on the 7th September 2023 (KCC Ref: 2360047, ABP Ref: 318151) employed the Electricity Sectoral Emission Ceiling in the evaluation of impacts. Therefore, the use of this sectoral ceiling in the assessment of this project also facilitates consistency in assessment and decision making as between different applications for planning permission; and
- In addressing the potential climate impact of data centres in the *Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy 2022*, the impact is addressed in the context of the Electricity Sectoral Emission Ceiling, illustrating the key importance of data centres with respect to this sector and its emissions ceilings.

The Electricity Sectoral Emission Ceiling has therefore been used within the assessment presented below, to contextualise Project emissions where appropriate for the determination of climate impact. The ceiling for each carbon budget period is detailed within Table 16.2 below. The national carbon budgets, quoted in Section 16.2.2.1 of Volume I of the EIAR, remain valid and are also used in this analysis to inform the significance of impact.

Both the national Carbon Budgets and Sectoral Emission Ceilings for the Electricity Sector are summarised within Table 16.2, below.

Table 16.2: Carbon Budgets and Sectoral Emissions Ceilings used within this Addendum

Time Period	2021-2025	2026-2030	2031-2035
Ireland Carbon Budget (tCO_2e)	295,000,000	200,000,000	151,000,000
Sectoral Emissions Ceiling – Electricity (tCO_2e)	40,000,000	20,000,000	n/a

16.3.2 Project Lifetime

For the purpose of determining the 'lifetime' emissions assessment presented in Chapter 16 of the EIAR an operational lifetime was required over which to define the assessment period. A very conservative Project lifetime of 50 years was applied in the EIAR. That is not to suggest that the facility will operate over a 50-year lifetime but rather adopts conservative carbon lifecycle assessment reporting principles in the presentation of the assessment.

However, data centres have a typical lifespan of circa 15-20 years, and this is evident in applications for such facilities where an operational lifetime is specified. For example, the Kildare Innovation Campus which was granted permission by KCC on the 7th September 2023 (KCC Ref: 2360047, ABP Ref: 318151), presents emissions based on a 15-year lifetime (2025 to 2040). However, most data centre applications simply present climate emissions as a single annual emission with no defined lifetime.

Therefore, as stated in Section 16.1.1 of the EIAR, in addition to the emissions assessment under the conservative 50 year assessment period, this Chapter also presents an emissions assessment under a more likely 20 year assessment period to provide further context regarding the more likely lifetime emissions of the Project.

In short, a typical 20-year lifetime is included in this analysis as the likely emissions lifetime but should the lifetime of the project extend beyond 20 years, the 50-year lifetime is also presented for context and for the purposes of comparison against the quantum of emissions originally set out in Chapter 16 of the EIAR.

16.4 Impact Assessment – Operational Effects

16.4.1 Magnitude of Impact

Emissions associated with the operational phase of the Project can be split into those associated with regulated energy use (i.e. space heating and cooling, hot water, ventilation, and lighting), unregulated energy use (i.e. data hall demand), and BESS charging.

As a result of the changes to the Project design and commitments listed at Section 16.1 (i.e. increased renewable and green gas procurement, and switch to combined cycle gas turbines with improved efficiency), operational emissions arising from the Project will be significantly reduced. Such changes have been quantified below.

16.4.1.1 Regulated Energy Demand

The regulated energy demand of the Project (i.e. electricity demand from controlled fixed building services such as space heating and cooling, hot water, ventilation and lighting) presented within Chapter 16 of Volume 1 of the EIAR totals 88,351 tCO_2e over the 50-year operational assessment period.

Conservative assumptions were made to inform the calculation of such operational emissions. Of the most importance is the use of the emissions factor for natural gas, which is static and current in the EIAR and, as such, does not account for the planned decarbonisation of the gas network (i.e. through increasing content of hydrogen/biogas) in line with policy and legislation. Therefore, emissions reported for the operational phase of

the Project within Chapter 16: Climate Change of the EIAR present a conservative case which will be lower in reality as the gas network decarbonises.

The calculation of such emissions has been revisited to account for the increased commitment to procure 50% of the Project's energy demand from renewable sources, and to source 100% hydrogen from 2039 onwards. The updated calculation of likely emissions has followed the methodology detailed from paragraph 1.4.9 of Appendix 16.3 to Chapter 16 of the submitted EIAR, with updates made to assumptions regarding renewable supply and decarbonisation of emissions by 2039. Resultant updated emissions total 10,308 tCO_2e (see Table 16.3) which is **88% lower than that presented in the EIAR**.

Given emissions associated with the regulated energy consumption will be fully decarbonised by 2039 (as detailed above), there is no change in emissions presented for the 50- and 20-year assessment periods. In other words, all emissions calculated to result from the operational regulated energy demand arise from the operational period of the Project up until 2039, which falls within both the 50- and 20-year assessment periods.

Table 16.3: Lifetime emissions from regulated energy demand

Source	Chapter 16 of the EIAR - Assessment Case (tCO_2e)	Updated Assessment Case – 50 years (tCO_2e)	Updated Assessment Case – 20 years (tCO_2e)
Regulated energy use (i.e. space heating and cooling, hot water, ventilation, and lighting)	88,351	10,308	10,308
Difference from Chapter 16 of the EIAR - Assessment Case	**n/a**	**-88%**	**-88%**

16.4.1.2 Unregulated Energy Demand

The unregulated energy demand of the Project (i.e. electricity demand from the data halls) presented within Chapter 16 of Volume I of the EIAR totals 14,933,067 tCO_2e over the 50- year operational assessment period.

Conservative assumptions were made to inform the calculation of such operational emissions. As with the assessment of unregulated energy demand, of the most importance is the use of the emissions factor for natural gas which was assumed static and current in the EIAR and presents a conservative case which will be lower in reality as the gas network decarbonises.

The Energy Policy Compliance Report – Updated (HDR, 2025) provides a quantification of the decarbonisation of such emissions, accounting for the implementation of government policy on grid decarbonisation and includes all of the energy commitments presented in the application (i.e. procurement of renewable electricity to meet 50% of the Project's energy demand, use of improved efficiency gas turbines, procurement of 100% hydrogen from 2039 onwards enabling the Project to achieve net zero carbon emissions). This has been informed by relevant national plans and strategy documents (Government of Ireland, 2024c, 2025, 2023a, 2022b, 2023b) as set out in detail in the Energy Policy Compliance Report – Updated (HDR, 2025).

On the basis of these national policies regarding the decarbonisation of the gas network, the Project will decarbonise completely by 2039 (as detailed within the Energy Policy Compliance Report – Updated (HDR, 2025)), thereby reducing the operational emissions reported for the Project in Chapter 16 Climate Change of the EIAR. This value has been presented below to provide KCC with a more defined and likely direct operational impact of the Project.

Table 16.4 presents the conservative assessment case used within Chapter 16: Climate Change of the EIAR that does not quantitatively consider the decarbonisation of the gas network. Also presented is the updated assessment case, as detailed in the Energy Policy Compliance Report – Updated (HDR, 2025) (Appendix 4.3, Volume II). The updated assessment case assumes that 50% of the energy demand for the data centre campus will be sourced from renewable sources via CPPAs, which has been increased from 30% of the energy demand as originally proposed.

Remaining energy demand will be provided by on site power generation fuelled initially by natural gas, transitioning to a blend of biomethane, green hydrogen and natural gas to gradually decarbonise through to 2038. From 2039, all energy will be sourced from renewable energy via CPPAs and/or on-site generation fuelled fully by green hydrogen (as evidenced in the Energy Policy Compliance Report Updated (HDR, 2025)). The updated assessment case results in an **85% reduction in lifetime operational emissions**, compared to the original assessment detailed in Chapter 16 of the EIAR (see Table 16.4).

Given emissions associated with the unregulated energy consumption will be fully decarbonised by 2039 (as detailed above), there is no change in emissions presented for the 50- and 20-year assessment periods. In other words, all emissions calculated to result from the operational unregulated energy demand arise from the operational period of the Project up until 2039, which falls within both the 50- and 20-year assessment periods.

Table 16.4: Lifetime emissions from data hall energy demand.

Source	Chapter 16 of the EIAR - Assessment Case (tCO_2e)	Updated Assessment Case – 50 years (tCO_2e)	Updated Assessment Case – 20 years (tCO_2e)
Unregulated energy use (i.e. data hall demand)	14,933,067	2,185,760	2,185,760
Difference from Chapter 16 of the EIAR - Assessment Case	**n/a**	**-85%**	**-85%**

16.4.1.3 Battery Energy Storage Systems

As stated within Section 16.6.2.2.1 of Chapter 16 of the EIAR, for the purpose of providing uninterrupted and conditioned power, each data centre building will have a dedicated BESS system. The storage capacity provides a back-up energy source to the data centres, in addition the BESS adds resilience to the wider electricity network as it will have the capacity to provide immediate export of energy to the grid, or the capacity to store excess grid electricity generated externally, if required.

It is likely that the BESS would be charged both from surplus electricity generated by on-site gas turbines, in addition to electricity from the grid. The greatest emissions arise from the charging of the BESS from the on-site turbines, given emissions associated with electricity generation from gas combustion is greater than from renewable sources from the grid. Emissions associated with the BESS over the 50-year assessment period, as stated within Section 16.6.2.2.1 of Chapter 16 of the EIAR totals 235,889 tCO_2e.

The calculation of such emissions has been revisited, following the methodology detailed from paragraph 1.4.25 of Appendix 16.3 to Chapter 16 of the submitted EIAR. In line with the commitment to source 100% gas from biomethane or hydrogen (see the Energy Policy Compliance Report – Updated, HDR, 2025), emissions associated with charging the BESS will be decarbonised from 2039. Resultant updated emissions total 38,529 tCO_2e (see Table 16.5) which is **84% lower than that presented in the EIAR**.

As stated in Section 16.4.1.1 and 16.4.1.2 given emissions associated with the BESS will be fully decarbonised by 2039 (as detailed above), there is no change in emissions presented for the 50- and 20-year assessment periods. In other words, all emissions calculated to result from the BESS arise from the operational period of the Project up until 2039, which falls within both the 50- and 20-year assessment periods.

Table 16.5: Lifetime emissions from the BESS (worst case scenario)

Source	Chapter 16 of the EIAR - Assessment Case (tCO_2e)	Updated Assessment Case – 50 years (tCO_2e)	Updated Assessment Case – 20 years (tCO_2e)
Battery energy storage systems[1])	235,889	38,529	38,529
Difference from Chapter 16 of the EIAR - Assessment Case	**n/a**	**-84%**	**-84%**

[1]This assumes the worst-case BESS scenario, with the fewest avoided emissions (see section 16.6.2.2.1 of Chapter 16 of the EIAR).

16.4.1.4 Summary

A summary of total operational emissions is presented in Table 16.6, which shows an 85% reduction for the updated assessment case (under both the 50- and 20-year assessment periods) compared to the assessment scenario in Chapter 16 Climate Change of the EIAR when applying the reductions detailed above.

Table 16.6: Total operational emissions summary

Source	Chapter 16 of the EIAR – Assessment Case (tCO_2e)	Updated Assessment Case – 50 years (tCO_2e)	Updated Assessment Case – 20 years (tCO_2e)
Regulated energy use (i.e. space heating and cooling, hot water, ventilation, and lighting)	88,351	10,308	10,308
Unregulated energy use (i.e. data hall demand)	14,933,067	2,185,760	2,185,760
Battery energy storage systems	235,889	38,529	38,529
Total	**15,257,307**	**2,234,597**	**2,234,597**
Difference from Chapter 16 of the EIAR - Assessment Case	**n/a**	**-85%**	**-85%**

16.4.2 Significance of Effect

Total operational emissions associated with the updated assessment case (as summarised within Table 16.6) comprise a negligible proportion of Ireland's Carbon Budgets (see Table 16.7), accounting for the phased construction of the Project.

Table 16.7: Updated assessment case operational emissions in the context of Ireland's Carbon Budgets

Time Period	2021-2025	2026-2030	2031-2035
Ireland Carbon Budget (tCO_2e)	295,000,000	200,000,000	151,000,000
Regulated emissions (tCO_2e) – Updated assessment case	1,262	5,259	6,521
Percentage contribution to budget (%)	0.001%	0.003%	0.002%
Unregulated emissions (tCO_2e) – Updated assessment case	267,644	1,115,184	1,382,828
Percentage contribution to budget (%)	0.13%	0.74%	0.39%
BESS emissions (tCO_2e) – Updated assessment case	4,718	19,657	24,375
Percentage contribution to budget (%)	0.00%	0.01%	0.01%
Total operational emissions (tCO_2e) – Updated assessment case	**273,624**	**1,140,100**	**1,413,724**
Percentage contribution to budget (%)	**0.14%**	**0.76%**	**0.40%**

When considered in the context of the Sectoral Emissions Ceiling for Electricity (stated within Table 16.2), total operational emissions account for **1.37%** of the 2026-2030 budget period (accounting for the phased construction of the Project). See Table 16.8 for detail regarding the contribution of operational emissions in the context of the Sectoral Emissions Ceiling for Electricity.

Table 16.8: Updated assessment case operational emissions in the context of the Sectoral Emissions ceiling for Electricity

Time Period	2026-2030
Sectoral Emissions Ceiling - Electricity (tCO_2e)	20,000,000
Regulated emissions (tCO_2e) – Updated assessment case	1,262
Percentage contribution to budget (%)	0.01%
Unregulated emissions (tCO_2e) – Updated assessment case	267,644
Percentage contribution to budget (%)	1.34%
BESS emissions (tCO_2e) – Updated assessment case	4,718
Percentage contribution to budget (%)	0.02%
Total operational emissions (tCO_2e) – Updated assessment case	**273,624**
Percentage contribution to budget (%)	**1.37%**

When accounting for both the magnitude of emissions associated with the operation of the Project, alongside the mitigation measures incorporated to reduce operational emissions (i.e. those detailed within Section 16.3

of Chapter 16 of the EIAR, which comprise energy efficiency measures to reduce energy demand such as adiabatic cooling systems, use of heat pumps, and improved fabric efficiency, renewable energy procurement, connection to the gas network to enable decarbonisation from the increased provision of hydrogen and biomethane, and provision of BESS to provide a back-up source of electricity and improve resilience of the wider electricity network; in addition to the uplift in renewable energy procurement, hydrogen and biomethane procurement, and improved efficiency gas turbines considered within this Addendum to Chapter 16 of the EIAR and outlined at Section 16.1), the impact of the GHG emissions associated with both the regulated and unregulated energy consumption on the high sensitivity receptor[1] is aligned with Ireland's national legislation and policy regarding net zero. As such, in line with IEMA (2022) guidance on the assessment of GHG emissions, the operational effects of GHG emissions resultant from the Project on the high sensitivity receptor is aligned with Ireland's 1.5°C trajectory and comply with up-to-date policy and good practice emissions reduction measures, resulting in **not significant minor adverse** effects.

Despite the change in magnitude of emissions presented within this chapter of the addendum, this conclusion is consistent with that detailed within Chapter 16 of the EIAR, as the mitigation measures implemented to reduce operational emissions within the original application (i.e. energy efficiency measures to reduce energy demand), alongside the qualitative consideration of the decarbonisation of the gas network, were considered to align with Ireland's national legislation and policy regarding net zero. As such, in line with IEMA (2022) guidance on the assessment of GHG emissions, the Project was considered to align with Ireland's 1.5°C trajectory and comply with up-to-date policy and good practice emissions reduction measures, resulting in a **not significant minor adverse** effect. However, notwithstanding that the overall conclusion of this Addendum to Chapter 16 (Climate Change) of the EIAR is unchanged from that set out in Chapter 16 of the EIAR submitted as part of the application for planning permission, it is clear from what is set out in this Addendum that the magnitude of impact of the Project is significantly reduced from that originally set out in the EIAR, with a 85% reduction in the total lifetime carbon emissions of the operation phase energy use of the Project compared to the emissions set out originally in the EIAR.

16.5 Impact Assessment – Construction Effects

16.5.1 Magnitude

As a result of the changes to the Project design listed at Section 16.1 (i.e. decreased footprint of Data Centre 4 and amendments to external plant yard), direct construction emissions arising from the Project will be affected. Such changes have been quantified below to provide an updated assessment case.

Furthermore, context has been provided regarding the lifetime impact of emissions over the 50- and 20-year assessment periods (see Section 16.3.2), given the assessment periods will result in changes to the total number of server and BESS replacements required over the period.

In addition to the updated assessment case, a sensitivity analysis has been completed to provide additional context regarding indirect emissions associated with the server fit out, and how these may be reduced with the implementation of low carbon server procurement and maintenance by the tenant. As a data centre operator, any future tenant will be required to align operational practices with the Climate Neutral Data Centre Pact including the requirement to ensure that server equipment is assessed for reuse, repair or recycling.

16.5.1.1 Updated Project Design

As detailed within the Addendum to Chapter 4: Description of the Project and Need for the Project, the footprint of Data Centre 4 and its external plant yard has been updated from that stated within the original application.

To account for this change, associated construction stage emissions have been updated following the methodology detailed from paragraph 1.3.4 of Appendix 16.3 to Chapter 16 of the submitted EIAR. The updated floor areas have been scaled by published benchmarks (RICS, 2012) to reach a revised magnitude

[1] The receptor, with regards to the assessment of GHG emissions, is the global atmospheric mass of GHGs, which is defined as a receptor of high sensitivity in line with IEMA (2022) guidance on assessing GHG emissions. This is detailed within Section 16.2.5.1 of Chapter 16 of the EIAR.

of direct construction phase emissions associated with the Project which is **15% lower than that presented in the EIAR**.

The updated assessment case is presented within Table 16.9, with additional context regarding the 50- and 20-year assessment periods. Indirect emissions associated with the 20-year assessment period are **reduced by 62% compared to the 50-year assessment period in the EIAR** given fewer server and BESS replacements that would be required over this shorter period.

Table 16.9: Updated assessment case construction emissions

Source	Chapter 16 of the EIAR - Assessment Case (tCO_2e)	Updated Assessment Case – 50 years (tCO_2e)	Updated Assessment Case – 20 years (tCO_2e)
Applicant Controlled Elements (Direct)			
Embodied carbon in construction materials	211,936	205,862	179,093
Difference from Chapter 16 of the EIAR - Assessment Case	**n/a**	**-3%**	**-15%**
Tenant Controlled Elements (Indirect)			
Server fit out	13,177,597	13,177,597	5,068,306
Difference from Chapter 16 of the EIAR - Assessment Case	**n/a**	**0%**	**-62%**

16.5.1.2 Sensitivity Analysis

Circa 47% of the Project's whole life emissions arise from the construction-stage (see Table 16.1) indirect emissions associated with the embodied carbon in construction materials and server fit-out. Emissions associated with the server fit out were reported within Chapter 16 of the EIAR to total 13,177,597 tCO_2e.

The final 'as built' embodied carbon from servers over the Project lifetime is dependent on tenant procurement and server maintenance practices. Tenants will be required to align operational practices with the Climate Neutral Data Centre Pact with regards to server management which requires operators to assess 100% of used server equipment for reuse, repair and recycling. Such actions are likely to greatly reduce emissions associated with server embodied carbon, thereby reducing whole life emissions from the Project.

Calculated emissions associated with server fit out in the EIAR represent a conservative estimate where worst-case and 'business as usual' embodied carbon assumptions have been made. These assumptions include higher embodied carbon values per server, and a four-year lifetime per server (which does not account for any maintenance or refurbishment that extends server life and would reduce emissions).

A sensitivity analysis has been undertaken which investigates to what extent emissions associated with the server fit out may be reduced with the implementation of low carbon server procurement and maintenance by the tenant, aligning with the Climate Neutral Data Centre Pact. To inform this analysis, a lower embodied carbon server has been selected, and assumptions have been applied to the server lifetime informed by a possible upper limit for server lifetimes in data centres. This is presented in Table 16.10 alongside the conservative magnitude of emissions as presented in Chapter 16: Climate Change of the EIAR.

The data used to inform this analysis has been sourced from indicative server product life cycle assessments (LCA) detailed within Appendix 16.3 to Chapter 16 of the EIAR. Assumptions regarding the lifetime of servers was sourced both from the server LCAs, alongside indicative extensions to server lifetimes which recommend the lifetime of servers can be extended from four years to eight years if well maintained.

This sensitivity analysis demonstrates that should alternative servers to those considered in the EIAR be procured, and measures are undertaken to extend the lifetime of servers through maintenance regimes and reuse in line with the requirements of the Climate Neutral Data Centre Pact, associated emissions would be reduced across the lifetime of the Project **of the order of a circa 58% reduction relative to that in the EIAR**.

Table 16.10: Server embodied carbon sensitivity analysis

Scenario	Power rating (at 100% load)	No. units required	Assumed lifetime (years)	Replacement Rate	GWP ($kgCO_2e$ per unit)	Lifetime (50 years) embodied carbon (tCO_2e)	Lifetime (20 years) embodied carbon (tCO_2e)
Assessment Case	244.2	737,101	4	13	1,375	13,177,597	5,068,306
Sensitivity Case	449.8	400,178	8	7	1,770	4,959,046	2,125,305
Difference						**-62%**	**-58%**

16.5.2 Significance of Effect

With regards to the Applicant-controlled elements of the Project (i.e. the construction of the Project as described within Chapter 4 of the Addendum, which excludes server fit-out), there is a minor change to the magnitude of direct emissions presented within Chapter 16 of the EIAR to account for changes to the design of Data Centre 4, with further context provided regarding the 50- and 20-year assessment scenarios. Such emissions are presented in Table 16.11 to provide context against Ireland's Carbon Budgets, and in Table 16.12 to provide context against Ireland's Sectoral Emissions Ceiling for Electricity, both accounting for the phased construction of the Project.

Table 16.11: Updated assessment case construction emissions in the context of Ireland's Carbon Budgets

Time Period	2026-2030	2031-2035
Ireland Carbon Budget (tCO_2e)	200,000,000	151,000,000
Embodied carbon in construction materials	81,562	73,092
Percentage contribution to budget (%)	0.04%	0.05%

Table 16.12: Updated assessment case construction emissions in the context of the Sectoral Emissions Ceiling for Electricity

Time Period	2026-2030
Sectoral Emissions Ceiling - Electricity (tCO_2e)	20,000,000
Embodied carbon in construction materials	81,562
Percentage contribution to budget (%)	0.41%

It can be seen that direct emissions associated with the construction of the Project comprise a negligible proportion of both Ireland's Carbon Budgets, and the Sectoral Emissions Ceiling for Electricity. Consistent with Chapter 16 of the EIAR (see Section 16.5.2.2.3 of Chapter 16 of the EIAR), the magnitude of emissions presented, alongside mitigation measures implemented to reduce such emissions (i.e. procurement of low carbon materials, see section 16.3 of Chapter 16 of the EIAR for further detail), are considered to align with Ireland's national legislation and policy regarding net zero. As such, in line with IEMA (2022) guidance on the assessment of GHG emissions, the construction effects of GHG emissions resultant from the Project on the high sensitivity receptor is aligned with Ireland's 1.5°C trajectory and comply with up-to-date policy and good practice emissions reduction measures, resulting in a **not significant minor adverse** effect.

With regards to the Tenant-controlled elements of the Project (i.e. the server fit-out of the data centres), the magnitude of impact is estimated to be approximately between 13,177,597 tCO_2e and 5,068,306 tCO_2e under a conservative scenario, accounting for the 50- and 20-year assessment periods respectively as detailed in Table 16.10 above of this Addendum to Chapter 16. The sensitivity analysis has identified that these emissions may be further reduced to 4,959,046 tCO_2e and 2,125,305 tCO_2e, again under the 50- and 20-year assessment periods respectively.

As the servers will be procured from outside of the Republic of Ireland (manufacture of servers typically takes place in North America or the Asia-Pacific region), emissions arising from their manufacture do not fall under the scope of Ireland's Carbon Budgets or Sectoral Emissions Ceilings, given such budgets account for emissions arising from activities within Ireland and would not impact compliance with such emissions budgets.

As such, further contextualisation of these indirect emissions with respect to Irish budgets and ceilings is not appropriate.

Given that the tenant will be required to ensure that server equipment is assessed for reuse, repair or recycling, in line with the Climate Neutral Data Centre Pact (2023), the emissions reductions associated with server fit out as presented for the sensitivity case are applied in this analysis.

The magnitude of impact on the high sensitivity receptor would result in a **moderate adverse** indirect effect, which is **significant** in EIA terms. This is consistent with the conclusions reached in Chapter 16 of the EIAR (see Section 16.5.2.2.3 of Chapter 16 of the EIAR).

16.6 Whole Life Effects

16.6.1 Magnitude of Impact

16.6.1.1 Sensitivity Analysis

The updated assessments detailed within Section 16.4 and Section 16.5 have been summarised within Table 16.13 below, displaying the range of possible emissions from the original assessment, as presented within Chapter 16: Climate Change of the EIAR, to the updated assessment case presented within this Addendum to Chapter 16 of the EIAR.

As a result of updated calculations to account for the decarbonisation of the gas network, procurement of additional renewable electricity, and improved efficiency of gas turbines, lifetime emissions associated with the 50-year assessment scenario are reduced by 74%, while emissions associated with the 20-year assessment scenario are **reduced by 84% from that presented within the EIAR**.

Table 16.13: Whole lifetime emissions summary

Source		Chapter 16 of the EIAR - Assessment Case (tCO_2e)	Updated Assessment Case – 50 years (tCO_2e)	Updated Assessment Case – 20 years (tCO_2e)
Applicant Controlled Elements (Direct)				
Construction	Embodied carbon in construction materials	211,936	205,862	179,093
Operation	Regulated energy use (i.e. space heating and cooling, hot water, ventilation, and lighting)	88,351	10,308	10,308
	Unregulated energy use (i.e. data hall demand)	14,933,067	2,185,760	2,185,760
	Battery energy storage systems	235,889	38,529	38,529
Sub-total		**15,469,243**	**2,440,458**	**2,413,689**
Percentage change from original assessment case		**n/a**	**-84%**	**-84%**
Tenant Controlled Emissions (Indirect)				
Construction & operation	Embodied carbon in servers	13,177,597	4,959,046	2,125,305
Sub-total		13,177,597	4,959,046	2,125,305
Total		**28,646,840**	**15,618,055**	**4,538,994**
Percentage change from original assessment case		**n/a**	**-74%**	**-84%**

16.6.1.2 Benchmarking

A benchmarking exercise has been undertaken to compare the operational emissions arising from the lifetime of the Project against other consented data centres in the locality. This is summarised within Table 16.14. The data centre applications considered below do not account for indirect emissions associated with server

manufacture in their assessment. This has therefore been excluded from the emissions totals associated with the Project to enable a fair comparison.

Given the example data centres present emissions as an annual average, the operational emissions associated with the Project have also been presented as an annual average (informed by the totals presented in Table 16.6, divided by the relevant number of years for each assessment period to present the range shown). It should be noted that the range in Project emissions presented are purely a result of the division of Project operational emissions by the assessment period, in reality all emissions for both periods will fall in the years up until 2039 (i.e. when the Project will reach net zero). Annual emissions have also been normalised against the number of data centres provided for each project, to indicate emissions intensity per data centre building.

Table 16.14: Benchmarking operational emissions against consented data centres

Source	Total annual emissions (tCO_2e)	Total annual emissions per Data Centre (tCO_2e)
Applicant Controlled Elements		
Updated assessment case – total operational emissions *	**44,692 to 111,730**	**7,449 to 18,622**
Consented Data Centres		
Kildare Innovation Campus (4 x Data Centre Buildings + 2 'Deep Tech' Buildings) (KCC Ref: 2360047, ABP Ref: 318151).	441,621	110,405
Toreen Data Centre (6 x Data Centre Buildings) (ABP Ref: 314474)	657,000	109,500
Clonee Data Centre (4 x Data Centre Buildings) (ABP Ref: 307546)	330,497	82,624
Cruisreath Road Data Centre (3 x Data Centre Buildings) (Ref: FW22A/0308)	202,139	67,380

*Averaged over the Project's lifetime for contextualisation against other projects only, annual emissions will differ year on year due to the decarbonisation of the gas network.

As shown in Table 16.14, the per annum emissions, and the per annum per data centre emissions associated with the updated assessment are exceeded by all examples of consented data centres' emissions. As such, the magnitude of emissions associated with this Project is significantly less than the magnitude of the impacts arising from these consented schemes.

16.6.2 Significance of Effect

Updated assessment case emissions have been presented within Table 16.15 and Table 16.16, to provide context of Project whole lifetime emissions against Ireland's Carbon Budgets and the Sectoral Emissions Ceiling for Electricity. In relation to the embodied carbon associated with the server fitout, as detailed at Section 16.5.2, as the servers will be procured from outside of the Republic of Ireland (manufacture of servers typically takes place in North America or the Asia-Pacific region), emissions arising from their manufacture do not fall under the scope of Ireland's Carbon Budgets or Sectoral Emissions Ceilings, given such budgets account for emissions arising from activities within Ireland, and would not impact compliance with such emissions budgets. Such emissions have therefore been excluded from whole lifetime contextualisation against the Carbon Budgets and Sectoral Emissions Ceilings. It can be seen that total emissions comprise a negligible proportion of Ireland's Carbon Budgets and Sectoral Emission Ceiling for Electricity.

Table 16.15: Updated assessment case whole lifetime emissions in the context of Ireland's Carbon Budgets

Time Period	2026-2030	2031-2035	Total
Ireland Carbon Budget (tCO_2e)	200,000,000	151,000,000	351,000,000
Project lifetime emissions	355,086	1,213,192	1,568,278
Percentage contribution to budget (%)	0.18%	0.80%	0.45%

Table 16.16: Updated assessment case whole lifetime emissions in the context of the Sectoral Emissions Ceiling for Electricity

Time Period	2026-2030
Sectoral Emissions Ceiling - Electricity (tCO_2e)	20,000,000
Project lifetime emissions	355,086
Percentage contribution to budget (%)	1.78%

As detailed at Sections 16.4.2 and 16.5.2, the Applicant is committed to reducing the lifetime emissions associated with the Project, incorporating mitigation measures within the design of the Project that enable the emissions reductions detailed, which are set out in detail in Section 16.3 of Chapter 16 of the EIAR, and 16.1 of this Addendum to Chapter 16 of the EIAR. Such emissions reduction measures include commitments to source 50% of operational energy demand from new renewable energy sources, commitment to source 100% hydrogen from 2039 onwards, enabling the Project to reach net zero emissions, installing combined cycle gas turbines which will offer energy efficiency improvements to reduce the volume of gas required to serve the data centres and thereby reduce the operational carbon emissions, utilising improved energy efficiency measures such as adiabatic cooling systems, heat pumps and improved fabric efficiency, and incorporating sustainable and low carbon procurement practices throughout the construction of the Project.

Informed by the magnitude of emissions, context within the Carbon Budgets and Sectoral Emissions ceilings, and the extent of mitigation measures implemented to reduce the lifetime emissions arising from the project, the Project aligns with Ireland's national legislation and policy regarding net zero. As such, in line with IEMA (2022) guidance on the assessment of GHG emissions, the whole life effects of GHG emissions resultant from the Project on the high sensitivity receptor is aligned with Ireland's 1.5°C trajectory and comply with up-to-date policy and good practice emissions reduction measures, resulting in a **not significant minor adverse** effect.

While this overall conclusion is unchanged from that set out in Chapter 16 of the EIAR submitted as part of the application for planning permission, it is clear from what is set out in this addendum and in the Energy Policy Compliance Report Updated (HDR, 2025) that the magnitude of impact of the Project is significantly reduced from that originally set out in the EIAR, with a 84% reduction in the total lifetime carbon emissions of the Project compared to the emissions set out originally in the EIAR.

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