



**Methodology for estimating annual Greenhouse Gas (GHG) emission savings from DEEP/LEA-funded project:**

This output will be estimated in tonnes of Carbon Dioxide CO<sub>2e</sub> (equivalent) per year reduced as a result of those Distributed Energy (DE) projects installed and operational by end July 2023.

To evidence the Greenhouse Gas (GHG) emissions reductions, the estimated annual carbon dioxide (equivalent) emissions from the realised project shall be deducted from the GHG emissions for the counter factual (baseline) case.

The counter factual (baseline) case is represented by GHG emissions calculated using a baseline of meeting the project energy (heat and/or electricity) demand from a gas-fired heat only boiler with annual seasonal efficiency of 85%<sup>1</sup>, and where appropriate, from grid electricity using the BEIS 2017 carbon factors accessed via: <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2017> as per the latest ERDF guidance (ESIF-GN-1-002 ERDF Output Indicators Definition Guidance). This counter factual case, including all values will not change for the duration of the project. The DEEP/LEA project is focused on realising locally generated and distributed, low or zero carbon energy sources and not on primary energy savings (though these are encouraged).

For the determination of the GHG emissions (CO<sub>2e</sub>) reduction, the counter factual case factors used will be the same for all projects (as above). Consultants from the DE Framework will then be required to either use energy software available on the market (such as Energy Pro <https://www.emd.dk/energypro/>) or the consultants' own in-house developed toolkits, which have been tested against real case scenarios. The BEIS 2017 conversion factors will be used in these toolkits as per the latest ERDF guidance.

The year these estimated GHG emissions (CO<sub>2e</sub>) reduction savings are counted will be the first full calendar year after all projects will have been installed and generating energy by end July 2023. These estimated annual GHG emissions will be reported to ERDF by end July 2023.

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<sup>1</sup> From the GLA's Heat Network Manual II section on Heat Carbon Intensity