

1. Excluding EPC ratings, does your organisation measure carbon emissions due to energy use in relation to your built assets? Yes / No / Partially / Don't know (**See below**)
2. What was the annual carbon footprint (in CO2) of your organisation's HQ building in 2018? **New build handed over 10th January 2019, assume 2018 is a typo error?**
3. Does your organisation have a carbon emissions reduction plan in place, for energy use related to your built assets? Yes / No / Don't know **Like all Public bodies, there is a commitment, compared to our old facilities the new HQ should exceed all targets.**
4. With the UK Government having signed legislation to commit the UK to a legally binding target of net zero carbon emissions by 2050, is your organisation already planning towards 'net zero carbon' operation by 2050? Yes / Partially / No / Don't know **No plans of yet.**

1. Yes – as the new building was constructed under the Soft Landings framework the utilities have been tracked since occupancy, and continuous improvements monitored for their effectiveness. The new building is heavily metered, and this data is reported monthly, and reviewed at quarterly meetings to ensure consumption is on a downward trend.

3. The UKHO, as a Government organisation, are working towards the Government's goal of being carbon neutral by 2050. To that end, the first, major, step has been to move into the new headquarters building. This is providing a more efficient working environment, and has been designed holistically to be as passive a building as possible, from the point of view of utility consumption. As well as the complete design, there are many individual features to reduce energy consumption compared to the old buildings. These include natural ventilation, solar panels, and reduced lighting requirements.

The building is largely naturally ventilated (over 75% of the floorplate), apart from high occupancy meeting areas, and toilets. This reduces the requirement for high consuming fans for forced ventilation. Cooling load is also reduced significantly for much of the year by using night purging to cool the exposed thermal mass of the building overnight.

The windows have been taken up to the soffit line, to increase daylight into the floors. Electric light is manually turned on when required, but automatically turned off by absence detection, to reduce its use. Background light is also held at a low level of 200 lux, with task lighting at desk level where and when required.

Settings and programming in the building energy management system have also been designed to be as energy efficient as possible. There is also an ongoing programme to improve these settings and ensure that operational changes made do not degrade the energy efficiency. Building performance is still being tracked as part of the extended handover period, which so far has shown performance in Year 1 to be better than predicted when designed.

4. There are not currently plans as to how to achieve the 2050 goal of carbon neutrality, but as discussed above, the building is on track for continuous improvement and energy reduction. Further capital and revenue decisions will be taken towards the 2050 target once it is believed that all current savings have been achieved.