POST-COVID / HYBRID-WORKING
Defining a 'new normal for OFFICE' for Green Star Existing Building Performance v1
- ENERGY & WATER PERFORMANCE PERIODS (ENE-1, ENE-2 & WAT-1)
- NORMALISING FOR REDUCED OCCUPANCY DENSITY DUE TO HYBRID-WORKING

OVERVIEW

Since Covid-19 pandemic the energy and water performance have been affected in commercial buildings. Some of the primary factors that have affected energy and water include:

- Increased vacancy in spaces (potentially reducing energy & water consumption)
- Reduced occupancy resulting from 'remote work' and/or 'hybrid work' (potentially reducing energy & water consumption)
- Changes to operating procedures in terms of HVAC and hygiene (potentially increasing energy & water consumption)

What is proposed is a starting point in terms of an approach for benchmarking energy and water in a 'new normal' context. From this starting point, data can then be collected to inform future benchmark upgrades.

In summary, the following is recommended:
It is proposed that energy and water data collected after Dec 2021 may be used for benchmarking purposes in the Green Star – EBP v1 rating tool, provided appropriate normalising is applied to account for the impact of Covid-19 as follows.

For **office** buildings:

- Vacancies are accurately normalised. Annual vacancy of up to 70% is permissible in terms of eligibility.
- Occupant densities are normalised for the period (to account for the impact of hybrid/remote working)

It is advised that project teams provide a short report giving detail about how their projects and tenants are using the space i.e. are tenants using 'remote work' and/or 'hybrid work' approaches. (which could potentially reduce energy & water consumption)

POST-COVID / HYBRID-WORKING BENCHMARKING FOR OFFICE BUILDINGS:

Time periods to be excluded:

Due to the extended periods of lockdown with restriction on particular building access, it is recommended that data between the period of March 2020 to December 2021 (inclusive) are excluded from benchmarking, regardless of normalising.

It is proposed that consumption data post Dec 2021 may be used in benchmarking, provided that the normalising strategies below are applied.
NOTE that data before time period may not be used for EBP-ENE-2: Peak Electricity Demand comparison data.

Normalising for vacancy:

The EWP benchmarking tool allows for vacancy normalising, meaning that vacancies in the post- covid period can be accounted for, and the GLA adjusted accordingly. All projects are to provide vacancy schedules for the energy and water performance period, demonstrating that this vacancy has been entered into the EWP tool correctly.

Normalising for occupancy reductions:

A reduction in occupant density has been a very common trend in the 'new normal' office building, largely due to an increase in remote working and/or hybrid working.

The EWP calculator allows for normalising of the benchmark by adjusting the occupant density entered.
It is thus proposed that all projects affected by hybrid-working are required to normalise for reduced occupancy through one of the following methods:

- **Confirming an actual occupant count on a typical work-day during the period; or**
- **Where actual office occupancy is not known for the period, default office occupancy or pre-covid office occupancy should be reduced by 30%*. i.e. 19.5 m2 per person is to be used for default office occupancy in lieu of the previous 15 m2 per person.**

** An adjustment of 30% is recommended based on international research on* hybrid/*remote working trends.*

It is acknowledged that a 30% occupant density reduction in tenanted spaces may not accurately reflect the building's occupancy. However, using the 'default occupancy of 15 m2 per person' was in itself always an estimate. This proposed approach ensures that there is some adjustment for hybrid/remote working, aligned with research on post-covid trends in this regard. The intention with this uniform adjustment is that it allows for current performance data to be collected. Over time, a set of 'new normal' data will emerge, and occupant density benchmarks can then be updated accordingly.

Normalising for changes in operating procedures:

No normalising is recommended for changes in operating procedures post-covid. It is acknowledged that some projects may have higher than normal HVAC energy consumption due to increased fresh air for example, however these are not to be adjusted for. Over time, a set of 'new normal' data will emerge, and benchmarks can be updated accordingly.

If any project team wishes to see 'Context & References' section for further details, please contact the GBCSA.