

Sustaining The Future Hybrid Workplace

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ABSTRACT

As our society grows more interconnected through digital and physical platforms, the number of ways to carry out work-related tasks has increased quickly. Work may no longer be linked to a physical space. Many consider the productive environment created by the COVID-19 lockdowns as clear evidence that hybrid work may be successful, hence advancing digital transformation trends [1]. However, there are still several gaps that need to be tackled to address the challenges of hybrid work, particularly in terms of understanding its implications on personal wellbeing, job performance, and energy consumptions. To address these challenges, an interdisciplinary project has recently been set up, with a funding from BELSPO (The Belgian Science Policy Office): Sustaining Hybrid Work (SUSHY). In this project, we tackle to the third track, particularly addressing the challenges of hybrid work from the perspective of energy performance.

Hybrid work refers to the possibility for workers to combine multiple locations to carry out their work [2]. Yet, the current scientific understanding of hybrid work is still fragmented, making it challenging for decision-makers (policymakers, unions, and employers) to make fully informed decisions supporting a sustainable hybrid work environment. Some studies have emphasized the environmental impacts of hybrid work in terms of energy needs and associated carbon emissions due to heating, cooling, lighting, and other journeys occurring during hybrid working days. However, the exact magnitude of such energy "balance" is complex to estimate, and a comprehensive assessment of the actual effects of hybrid work practices remains uncertain. Very rarely, the energy use patterns (i.e., office energy use, household consumption, and mobility) have been evaluated comprehensively, also considering the temporality of their occurrence [3] [4]. Likewise, questions remain on how hybrid work practices can contribute to shape tomorrow's workplaces to sustain a consistent work environment considering the energy demands required to operate buildings.

In terms of the methodology, this study first applies a large-scale employee survey to characterize hybrid work and project the effects of hybrid work practices on energy demands in Belgium. Workers from different companies will be recruited via a link to a web survey sent out through their employers and/or trade union representatives. On these bases, case studies will be conducted in a selected set of Belgian companies. The case studies will rely on semi-structured interviews with key people (e.g., HR director, facility manager, CFOs, etc.) offering an access to existing data on energy demands (i.e., bills, consumption monitoring, etc.). Then, the study will apply a diary research method combining both quantitative and qualitative elements. The diary instrument will integrate structured questions and will include regular

measurements of energy demands. The objective is to unveil the reasons leading to lower or higher energy demands regarding the implementation of hybrid work. Being in an early phase of the project, the methodology will be the subject of the presentation at the conference.

References

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