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MULTINATIONAL CORPORATIONS IN SUSTAINABLE CITIES: THE CASE OF A SUSTAINABLE HEADQUARTERS BUILDING

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ABSTRACT:

This empirical chapter contributes to International Business (IB) research on the United Nations' Sustainable Development Goals (SDGs) by opening a new research trajectory on sustainable headquarters (HQ) buildings. Our multidisciplinary study conceptualises the notion of a sustainable HQ based on a case study and three streams of literature – research on HQs, sustainable office design and the SDGs in IB. It offers a novel angle to prior research on HQs that has largely focused on their functional roles. While IB scholars are increasingly embracing the SDGs, limited attention has been devoted to SDG 11, 'Sustainable Cities and Communities'. This chapter draws on a real-time, longitudinal, single case study of a Nordic multinational in renewable products. We adopt a future-facing, phenomenon-based approach to envision and reimagine the modern wooden corporate HQ building on a culturally sensitive site in the heart of Helsinki, Finland. The findings emphasise the environmental, social, economic and cultural considerations of HQ buildings. By combining HQ premises with commercial spaces, and by opening the building to citizens, sustainable HQ buildings create a lively city space and increase urban social cohesion. The use of wood as a construction material and the application of design principles that promote human–nature relationships, have a positive impact on climate and human health. By focusing on the physical building, we aim to change the way IB scholars understand and study the role of HQ as a part of sustainable cities.

KEYWORDS:

1. Headquarters (HQ)
2. Sustainable buildings
3. Sustainable Development Goals (SDGs)
4. Sustainable city
5. Multinational corporation (MNC)
6. Sustainable architecture and office design

Introduction

Multinational corporations (MNCs) are facing mounting pressures to contribute to the advancement of the United Nations' Sustainable Development Goals (SDGs) (Buckley, Doh, & Benischke, 2017; Montiel et al., 2021; Sun et al., 2021). As part of their sustainability efforts, MNCs “are increasingly embracing the SDGs in their corporate strategy” by translating country-level frameworks into concrete actions (Montiel et al., 2021, p. 1000). One such concrete action is the design of sustainable MNC headquarters (HQ) buildings, because buildings offer possibilities for some of the most cost-effective solutions for mitigating climate change (Amiri et al., 2020; UNEP, 2021).

This chapter focuses on SDG 11 Sustainable Cities and Communities, which aims at making “cities and human settlements inclusive, safe, resilient and sustainable” (<https://sdgs.un.org/goals/goal11>). Cities and built environments play a crucial role when countries and MNCs race to achieve the SDGs (Goubran, 2019; Sachs & Sachs, 2021; Wen et al., 2020). Cities not only host half of the world's population but also the majority of MNC headquarters, rendering them essential in meeting the SDGs and ensuring sustainable development. Although large office buildings have recently been challenged by climate change, global pandemics and digitalization, which enables remote work (van Meel & Vos, 2001), the megatrend of sustainability has triggered new questions about the environmental, social and cultural value of HQ buildings.

In this chapter, we argue that sustainable HQ buildings have a central role to play in contemporary urban areas and communities. We follow the extended triple-bottom-line approach to sustainability consisting of social, economic and environmental pillars (Elkington, 2008) and add a fourth pillar, cultural sustainability (Hawkes, 2001). Cultural sustainability refers to the preservation of the heritage of communities, including their history and buildings (Loach et al., 2017), but also cultural vitality (Soini & Birkeland, 2014) social cohesion, inclusion and shared values (Hawkes, 2001). We define a sustainable HQ building as an economically efficient entity that minimises its environmental impact, energises and inspires its users and promotes their well-being, offers flexible spaces, is open to the broader community of stakeholders, blends into the urban space and cherishes the cultural heritage of its location. Much of the previous IB research has focused on the functional roles of corporate, divisional and regional HQs in controlling, coordinating and allocating resources (Barner-Rasmussen et al., 2007; Kähäri et al., 2017), but left HQ buildings untheorised. Furthermore, relatively few IB studies focusing on SDG 11, which is dedicated to sustainable cities and communities (Montiel et al., 2021). In this chapter, we initiate a multidisciplinary conversation about the physical HQ building – whether corporate, divisional or regional – and its implications for sustainability, a topic that has not been previously addressed (Kunisch et al., 2020). More specifically, we set out to answer the following research questions: What constitutes a sustainable HQ building? How will the sustainable HQ buildings of the future contribute to sustainable cities and communities? We answer these questions in a longitudinal case study of the modern wooden HQ building of the renewable materials company Stora Enso. The new HQ is at present under construction on a culturally sensitive site in the heart of Helsinki, Finland and scheduled for completion in 2024. Helsinki is one of the fastest growing metropolises in Europe; according to estimates it is expected to grow by 2050 from 650,000 residents to 860,000, with approximately two million in the metropolitan region (KTI, 2022; www.stat.fi). The new HQ of Stora Enso is intended to serve as a flagship for modern wood construction and “represent progressive environmental values” (www.katajanokanlaituri.fi), for instance by using low-carbon and circular building materials.

Sustainable cities and HQ buildings of MNCs

IB scholars have recently turned to the role of MNCs in enabling the rapid, transformative changes necessary for reaching the SDGs (e.g. Cuervo-Cazurra et al., 2022; Stephenson et al., 2021; van Zanten & van Tulder, 2018). To date, however, few IB studies have been devoted to sustainable cities and communities (Montiel et al., 2021; Sachs & Sachs, 2021). Moreover, existing research has investigated natural disasters in the city context with a focus on corporate donations (e.g. Ballesteros et al., 2017; Zhang & Luo, 2013) or location choice (e.g. Oh et al., 2020). To the best of our knowledge, the targets of SDG 11 – protection of the world’s cultural and natural heritage, reduction of the environmental impact of cities and access to safe and inclusive green and public spaces have remained unaddressed in IB research. As cities are essential for the transformations required to reach the SDGs, we contribute to this research gap (Sachs & Sachs, 2021). Cities also serve as primary locations for HQs and MNCs can play a stonger role in contributing proactively to the achievement of SDGs, for instance through cross-sector partnerships (van Zanten & van Tulder, 2018; Cuervo-Cazurra et al., 2022).

Cities, in which urban life is scripted, have been the target of sustainability research for at least a few decades. While the original focus was on the environmental sustainability of cities (Register, 1987), in recent years a more holistic approach has emerged. This approach emphasises development of a just and socially integrated urban environment that provides all residents with well-being and a good quality of life (Jenks & Dempsey, 2005; Yazdani & Dola, 2013). The cultural dimension of sustainability, including architecture, respect for historical layers and urban planning, can also be considered an important feature of a sustainable city (Girard, 2013; Cohen, 2018). Hence, while protecting ecosystems, sustainable cities also manage to attract commerce, culture and people, and in this way provide opportunities for interaction (Cohen, 2018).

Today, urban cities host more than half of the world’s population and 80 per cent of the global economic output (Lall et al., 2021; United Nations, 2018; World Bank, 2020). Cities are the main culprit in climate change, consuming two-thirds of the world’s energy and accounting for the same share of global CO₂ emissions. Buildings are the largest contributor to city emissions because they currently are responsible for 50-70% of city emissions and almost forty per cent of annual global greenhouse gas emissions (UNEP, 2021). Moreover, as the global building floor area is expected to double by 2060 this figure may rise (Architecture 2030.org). Currently, building operations account for almost thirty per cent of annual global CO₂ emissions and building materials and construction for the remaining ten per cent (Architecture 2030.org). At the same time, buildings could reduce negative externalities (Montiel et al., 2021) because wooden building materials function as carbon sinks. Hence, although buildings could be one of the most cost-effective solutions for mitigating climate change (Amiri et al., 2020), their potential has not yet been fully utilised. HQ buildings act as symbolic focal points for MNCs (Adler & Florida, 2020), possess communicative power in the pursuit of sustainability and encourage others to join the effort (Barras, 2019; Elsbach & Behcky, 2007).

In IB research, MNC HQ have traditionally been approached from the perspective of their economic and functional roles (Chandler, 1962, 1991; Collis et al., 2007). This body of work has shed light on e.g. the disaggregation, structure, skills and staffing of HQ units (Nell et al., 2017; Menz et al., 2015). Furthermore, IB research has provided many reasons why HQ units are relocated and their tasks are distributed in the MNC organisation (Alfoldi et al., 2012; Birkinshaw et al., 2006; Laamanen et al., 2012). Recently, the importance of proximity between corporate HQs and external partners such as lawyers, financial institutions and advertising agencies in making location decisions regarding HQs has been recognised (Kunish et al., 2020).

Unlike IB, the field of management and organisation has embraced the aesthetic, social and symbolic functions of office buildings (e.g. Elsbach, 2003; Elsbach & Bechky, 2007) and studied HQ architecture and corporate campuses as symbols of power (e.g. Kerr & Robinson, 2016) and corporate identity (e.g. Elsbach, 2003) and remembering (e.g. Decker, 2004) as embodiments of cultural change processes (van Marrewijk, 2009), but not focused on sustainable HQs. Thus, the sustainability aspects of well-known and iconic HQ buildings remain largely uncharted and are hence a highly attractive area of study. Next we turn to the related streams of literature on sustainable buildings and office design to gain insight into what constitutes a sustainable HQ building.

Sustainable buildings and office design

Sustainable buildings are key to reaching SDG 11, Sustainable Cities and Communities, but they also contribute to other goals, such as SDG 7, Affordable and Clean Energy and SDG 8, Decent work and Economic Growth (Goubran, 2019; Wen et al., 2020). Scholars in the field of architecture have advanced the understanding of sustainable “green” buildings (Gissen, 2002; Yeang, 2006) and their positive effects on organisational success, tenant productivity (e.g. Heerwagen, 2010) and user experience (e.g. Brown et al., 2010). Similar to research on sustainable cities, the work on sustainable buildings has evolved from environmental considerations to other aspects such as the well-being of a building’s users and aesthetics. Kibert (1994) was one of the early contributors to this discussion, emphasising guidelines for ecological construction and resource efficiency as prerequisites for a green building. Subsequent research has highlighted the importance of energy efficiency, waste management, the durability and sustainability of building materials and the minimisation of pollution throughout the long life cycles of buildings (Akadiri et al., 2012; Hill & Bowen, 1997; Kibert, 2007). Nevertheless, environmental sustainability remains at the core of rating tools and certificates for global sustainable building (Kibert, 1994; Berardi, 2013; Duxbury et al., 2012; Zuo & Zhao, 2014).

A recent trend in research on sustainable office design is to incorporate social considerations. Scholars have started to pose questions regarding the impact of buildings on their users with respect to e.g. safety and well-being. Recently natural features have also been included in the design of corporate buildings (O’Brien, 2016; Kwun, 2018; Sears, 2016; Korody, 2016) because building users are expected to benefit from multisensorial contact with nature at work (Klotz & Bolino, 2021). Opportunities to connect with nature are found to increase employees’ energy levels, contribute to their well-being and improve the economic effectiveness of the organisation (Klotz, 2020; Klotz & Bolino, 2021; Surma et al., 2021). Such ‘biophilic design’ builds on the human desire to be in contact with nature (Kellert & Wilson, 1993; Kellert, 2005). A socially sustainable building also provides attractive acoustic designs, thermal comfort, daylight and aesthetics (Akadiri et al., 2012). But a socially sustainable building is not only expected to promote physical human health and safety; it should also increase and strengthen a sense of community, social equity and mental health (Berardi, 2013). This has been found to strengthen employee engagement, in other words “a positive, fulfilling, work-related state of mind”, which decreases the risk of burnout (Schaufeli et al., 2002, p. 74).

The Coronavirus Pandemic (COVID-19) has challenged a sense of community at workplaces as offices have become ‘borderless’ (Gratton, 2021, p. 72). The post-COVID-19 workplace encompasses both physical and virtual realities that connect employees’ homes with hubs and shared spaces located in company satellite and main offices. But Surma et al. (2021) encourage us to expand our conceptualisation of the contemporary workplace by considering

the total workplace ecosystem post-COVID-19 as the unit of analysis. Cities, they argue, are an inherent part of the total workplace ecosystem in this new era because they provide knowledge workers with wide access to wi-fi in third places and spaces for cognitive refreshment, sustainable transportation and opportunities to work in satellite offices located near residential districts.

Today's workplaces are also "culture spaces" (Fayard et al., 2021), rendering cultural considerations relevant for our discussion of sustainable buildings and office design. Buildings are entities that interact constantly with their surrounding, contributing to the sustainability of host cities and local communities (Berardi, 2013; Hill & Bowen, 1997). Cultural sustainability entails identification and conservation of historical areas and buildings but also the ways in which new buildings are constructed (Opoku, 2019). In the latter case, the sense of place and fit between new buildings and their surroundings requires careful consideration (Duxbury et al., 2012; Opoku, 2019). While cultural sustainability is typically included under the pillar of social sustainability, we argue that it deserves its own pillar, along with material (e.g. buildings, artifacts such as artworks), immaterial (e.g. values) and temporal dimensions (history, present, future). Hence, this conceptualisation of culture is more holistic than that of the dominant views in IB research.

Hence researchers across the three disciplinary fields of HQ research in IB, sustainable office design in management and organisation studies, and SDG research have paid limited attention to the sustainable HQ buildings of MNCs and their embeddedness in sustainable cities as part of SDG 11, which is the focus of our study.

Methodology

This study repurposes the classical single case study method towards what we call a future-facing, phenomenon-based approach to research. This type of research aims to "capture, describe and document, as well as conceptualize, a phenomenon so that appropriate theorizing and the development of research designs can proceed" (Von Krogh et al., 2012, p. 278). As sustainable HQ buildings represent an undertheorised phenomenon in IB, a phenomenon-based approach guides us to focus on the phenomenon first, in order to be able to theorise about it (Doh, 2015; Wickert et al., 2021). Unlike most phenomenon-based research, we rely on data that envision the future. This differs from typical approaches in IB and management research that tend to look at research objects from a retrospective perspective. The ongoing case study focuses on the design phase of a new HQ building.

Stora Enso Headquarters

Stora Enso is a Finnish-Swedish renewable materials MNC established in 1998 through a merger of the Finnish forestry products firm Enso-Gutzeit and the Swedish mining and forestry products firm Stora. Both corporations have a long history preceding the merger. Stora Enso is one of the top 10 largest companies in Finland and employs more than 20 000 employees in 30 countries (Stora Enso, 2021). Given its history, Stora Enso is a particularly significant employer in the Nordics as approximately 49 per cent of its employees are located either in Finland (26%) or Sweden (23%) (Stora Enso, 2021). During the past decade, Stora Enso has transformed itself from a traditional pulp and paper producer to a global innovation leader in renewable materials.

The company HQ of Stora Enso is located in the Katajanokka area in Helsinki, the capital of Finland. The company has remained for nearly 60 years in its iconic HQ designed by

the renowned Finnish architect Alvar Aalto and currently owned by a German real-estate investor. Stora Enso published its vision of a new HQ building in 2019. In addition to the need to move HQ activities to modern and more efficient premises better suited to the requirements of working life in the 2020s, the sustainability of the new HQ has been emphasised. The new building, due for completion in 2024, is constructed of Stora Enso's own wood material and applies the company's office building concept. The Mutual Pension Insurance Company Varma will be the owner of the building, which will also host a luxury hotel, restaurants and other commercial space (Stora Enso, 2019a,b).

In the spring of 2020 an invited architectural design competition was organised by Varma, the City of Helsinki and Stora Enso as the main tenant of the building. The winner was chosen on the basis of the following evaluation criteria: Firstly, the quality of the building design was expected to be appropriate for the prestigious and culturally sensitive location in Helsinki. Secondly, the winning proposal of the building should demonstrate architectural merit by emphasising the strong identities of both Stora Enso and a luxury hotel. Thirdly, the winning proposal should embrace functional aspects such as offices, shared spaces and direct pedestrian routes. Finally, the evaluation committee assessed the technical and financial criteria, including feasibility and value for money, carbon neutrality, energy efficiency and sustainability throughout the lifecycle of the building (Varma, 2020a).

Data collection

To understand how different organisations envision what constitutes a sustainable HQ building, we draw on diverse sources of empirical data. We interviewed nine individuals representing the HQ, the owner of the building, the architectural office and the city of Helsinki. Table 1 provides an overview of the data sources. Due to COVID-19, all interviews were conducted remotely, recorded and transcribed. One interview was a group interview with three representatives of Stora Enso. We also collected a wealth of secondary data including the programme of the invited architectural competition, submissions for the architectural competition, the jury's evaluation reports, decisions of the Helsinki City Council, stakeholder consultation reports from the City of Helsinki, photographs, and diverse corporate materials such as annual reports and press releases. Furthermore, we watched and transcribed three webcasts from conferences where the building was presented to wood construction experts. Finally, we observed videos showcasing the future building and a realtime video of the actual construction site (see Table 1)

TABLE 1 HERE

Data analysis

We followed phenomenon-based theorising in which an undertheorised phenomenon – sustainable HQ buildings – calls for a plausible explanation. Phenomenon-based theorising is closer to abduction because it is triggered by knowledge of existing theory combined with personal experience, curious observation, facilitating conversations, data complication or a revelatory example (Fisher et al., 2021, p. 632). This approach differs from literature-driven deductive reasoning and data-driven inductive reasoning that assumes “a position of “unknowing” on the part of the researcher (Fisher et al., 2021, p. 631). Photographs, webcasts and videos offered visual representations of the future building and were central for immersing ourselves in the research context. The sketches and drawings of the building acted as boundary

objects conveying information (Bechky, 2003) between the various actors (e.g. architects, owners, residents, representatives of the MNC and the City). The architects mediated between the various actors and converted requirements from the general specifications of the architectural competition into a tangible form. In so doing, the architects bridged the present and the future, reduced the high degree of uncertainty coupled with the unknown and made the future seem more concrete to the various parties involved in the building project. In reporting the findings below we have used pseudonyms to protect the identity of the interviewees.

Findings: Visions of a sustainable HQ building of the future

“Although sustainability imperatives are tough, buildings currently offer few answers. We should be much more advanced in our thinking. Therefore, these kinds of projects that raise collective awareness and interest [are important]. We should not drown people in big sustainability problems but also offer concrete solutions and alternative approaches. – Otto, Architect

This quote by Otto illustrates why the visible HQ buildings of MNCs contribute significantly to SDG 11 Sustainable Cities and Communities. HQs are often considered landmark buildings that have enormous potential to catalyse change across the globe.

In our quest to explore what constitutes a sustainable HQ building, we realised that a broad ecosystem perspective (Surma et al., 2021) needs to be adopted, including the entire community and the urban place where the building will be located. Hence, “the engagement factor” (Whittington & Galpin, 2010) is not only about constructing attractive offices for talented employees, but also about the strategic engagement of other users of the building in the construction project. Figure 1 portays the key users and other stakeholders of the new HQ building we studied.

FIG 1 HERE

The main user group of the building will be the 450 Stora Enso employees based at the corporate HQ. Before COVID-19, it was estimated that approximately two-thirds of the staff would be in the office at any given time and hence 330-340 work stations would be needed. In addition, the building was expected to house “flexzone” offices with 130-140 work stations, a 150-160 room hotel and a restaurant (Varma, 2020a). Additional main users of the building are employees of other tenants located in the building and hotel guests and staff. The owner, in this case the real-estate investor, has a crucial stake in the building. Real-estate investors are currently making massive investments in sustainable buildings because tenants are interested in office space that is congruent with their desired organisational identity and values. Sanna, a representative of the main tenant Stora Enso, explained this in our interview:

“We have an exciting opportunity in Helsinki to make a wood-constructed building that tells the story and values that we as a company represent...For us, as a global corporation, the HQ is an important business card for our employees and stakeholders and customers...The role of the HQ will remain in the [post-pandemic]future.”

As Figure 1 shows, the politicians and residents of Helsinki have high stakes in the building as it also shapes the city’s urban space. Furthermore, the architects, constructors and consultants involved in the project have a stake in the building, which is now under construction.

Next, we will discuss the various meanings attributed to the new headquarters building by Stora Enso managers, City officials, the owner and the architects. Their visions of the sustainable HQ building of the future include environmental, social, cultural and economic considerations. It is worth noting that although these considerations are intertwined and overlapping, we will discuss them separately for analytical purposes.

Visions of an environmentally sustainable HQ building

An environmentally sustainable HQ can be defined as a carbon-neutral and energy-efficient building throughout its long life cycle. These were “must-have” features which were set in ‘Silmu’, the invited architectural design competition:

“Silmu will be a carbon-neutral development. The design must be long-lasting, energy-efficient and allow for repair and maintenance throughout the building’s lifespan. Competition proposals should support carbon neutrality through structural decisions, material selection and efficient façade design.” – Varma 2020a, p. 20

The City of Helsinki links this carbon neutrality requirement to its own goals, as the Deputy Mayor explained:

“Our goal – to be carbon-neutral by 2035 – means that emissions will decrease by 80% from the base year of 1990. These [building] projects must come up with solutions that support this goal.” – Kalle, City of Helsinki

Equally, the owner of the building emphasised carbon neutrality as a key driver in its own real estate investment strategy:

“We certainly have ambitious goals as a company... Carbon neutrality is of course something we should all try to achieve in construction. We have a general aim of carbon-neutral buildings and hence we have ambitious objectives for this project.” – Timo, real-estate investor

Interestingly, however, although carbon neutrality was a key concept in the collected data, it was not defined, probably reflecting its taken-for-granted status among professionals. Essentially, a carbon-neutral building does not contribute to net emissions of greenhouse gases that cause climate change throughout its existence (design, construction operation). This requires that the amount of CO₂ emissions is balanced by climate-positive impacts such as materials that act as carbon stores and green roofs and walls. Wood, the primary material of the building’s massive structures, plays a crucial role, which was reflected in Stora Enso’s announcement of the six architectural entries on its webpage: “Sustainable cities of the future will be built with wood.” As explained by Stora Enso’s project manager, this is because “a massive wood-constructed office acts as a carbon storage throughout its entire life...In addition, a holistic carbon footprint and handprint calculation will be conducted.” (webinar, 4 Nov. 2020)

In addition to carbon neutrality, energy efficiency is an integral part of a sustainable HQ building. Energy-efficiency was a central concern –from the demolition of the old warehouse that previously existed on the site to the specific solutions for the new building.

Gaining LEED platinum certification for the building, which relied on the use of renewable energy, guided much of this work:

“One example of the energy-efficiency will be the solar panels on the roof of the building in addition to the green roof limiting the thermal islet phenomenon.”
– Sanna, Stora Enso

Over and above the solar panels, which are designed to occupy 200 m² of the roof space and meet the requirements of LEED certification, attention was focused on energy-efficient systems. Also, the architects emphasised the flexibility and long life cycle of the building as a design principle. One of the architects elaborated as follows:

“A significant feature of a sustainable building lies in its long life cycle...In order to pursue this, the construction elements must stand the test of time – aesthetically, physically and functionally. Furthermore, the spatial design has to accommodate several users during the life cycle of the building.” – Otto, Architect

Thus, a sustainable HQ building’s use of space enables multifunctional and versatile interaction between people, functions and space over time. The design competition programme also called for a design that “must be long-lasting, energy-efficient and allow for repair and maintenance throughout the building’s entire lifespan” (Varma, 2020a, p. 20). Circular economic principles were also practiced, including a pilot project in which 99.5 per cent of the construction and demolition waste from the site was reused (webinar, 4 Apr, 2022).

The features of an environmentally sustainable HQ building also include accessibility. The location was expected to encourage the use of public transport, which would in turn result in reduced emissions from transportation. Hence *“the building will be constructed amidst the existing urban structure”* (Otto, Architect). The central location was also crucial for Stora Enso, which wants to be close to its key stakeholders:

“We might have hundreds of visitors at the office on a single day. As many other companies and organisations are located in the city center, it is easy to bring our visitors to them. These considerations are important, too.” – Lotta, Stora Enso

Jaana, another manager at Stora Enso, explained the role of the central location to us:

“The ministries and the offices are around the corner and I can walk there or ride a company ‘Jopo’ bike ... My work involves liaising with the country manager and the CFO who need to interact with the ministries.”

Visions of a socially sustainable HQ building

A socially sustainable HQ building can be understood as an entity that accounts for the well-being of the users of the building but also offers opportunities to the wider public. In so doing, the building increases the social cohesion of the surrounding area, as the workplace ecosystem concept highlights (Smith et al., 2020; Surma et al., 2021). The city representative explained this to us:

”The overarching goal is that the surrounding city space will be attractive... The functions and design of the building... are open to the street so that there are attractive functions for others beyond the daily users of the building who work there. This means

that the building will form a kind of shared living area.”
– Kalle, City of Helsinki

The ground floor of the building was required in the architectural competition to accommodate commercial premises that are open to the public, thus bringing vitality to the area. City residents were invited to participate in selecting the winner of the architectural competition and altogether 1500 voted on the entries. Easily accessible and attractive pedestrian routes were another specific requirement set for the building. Hence Maija, one of the architects, emphasised the following:

“I believe that we should talk about city blocks. It’s not just about this particular office building. Fitting into the cityscape and functions is crucial. These viewpoints do not prevent the building from being the headquarters of a world-class corporation.”
–Maija, Architect

Also the employees of Stora Enso were engaged in the planning process through a survey. Creation of shared spaces, as described by one of our key informants, was among the key rationales for Stora Enso’s new office space :

“We wanted to develop the working environment so that it would better serve the well-being of employees and blur the boundaries between their professional and private lives... There will be restaurants, perhaps a gym or a spa or some kind of well-being facilities targeted at hotel guests. Furthermore, all sorts of small businesses ranging from a post office to other kinds of services that facilitate work-life integration.” – Sanna, Stora Enso

Hence a luxury hotel was considered a perfect solution for providing services that Stora Enso’s employees would also appreciate. The hotel operator was also appreciated by the City:

“From the city’s perspective, it is good that there will also be a hotel because it will make it easier to have cafes and restaurants that form the basis for customer flows. And this contributes to the formation of pedestrian routes. For the city, these routes are meant for local residents, all citizens of Helsinki and other Finns and foreigners who visit the area. The hotel suits this purpose because it will offer services aimed at everybody.” – Kalle, City of Helsinki

According to Sanna from Stora Enso, another crucial benefit of a hotel in the HQ building is that it *“opens new possibilities for us to organise events such as large seminars and conferences”*. The central hall on the street level is *“open by nature and in this synergistic central hall the lobby of the hotel, office space and [shared] exhibition space meet the restaurant and other open commercial space”* (Chief Architect, webinar 4 Nov 2021, See also Figure 2). An open, shared space of this kind transforms the stereotypical image of an HQ building as a ‘closed castle’ into an active participant of an ecosystem in which the HQ becomes an inherent part of its surroundings.

Overall, the narrative of employee well-being – their safety and health, both mental and physical – was a strong theme in our data. The overarching design philosophy of the building is biophilic, which *“brings nature and our relationship with it closer to the user experience”* (webinar, 4 Nov 2020). Otto explained this:

“What is strongly present in this design is the idea that the outdoor premises, roofs, and terraces become experiential to the daily user of the building; the materials are understandable and authentic and can be felt and touched. The smell and light and all that are also part of the concept.”
– Otto, Architect

Indeed, according to studies in most developed countries, people spend up to 90 per cent of their time indoors (Allen & Macomber, 2020), making elements such as air quality, daylight and planted areas central. Wood as a building material is thus increasingly used to bring nature into contemporary office space. Wood materials also play a crucial role in increasing employee performance as assured by Stora Enso’s project manager:

“People working or living in wooden buildings actually perform better. They are more productive and have lower heart rates and improved ability to focus. And the research which has taken place in past decades has shown that the positive health and well-being impacts of natural materials are there. So space built with wood helps us to decrease our stress-levels, aggression and blood pressure. It even improves our ability to concentrate.” (Podcast, 1 Apr 2021)

Figure 2 envisions the central lobby of the new building, in which the principles of biophilic design are in evidence. In addition to wood, natural materials and aesthetics such as stone, greenery, open space and natural light will be used.

FIG 2 HERE

In addition to its environmental properties, wood is also an antibacterial material, hence providing natural benefits in terms of contagious diseases. The importance of this characteristic of wood became obvious amidst the global pandemic, which affected the planning process significantly:

“[In the post-covid era] we can now design a solution from a clean slate. I believe we have a great opportunity to come up with a solution that takes into considerations the consequences of the pandemic. This may mean spatial laxity to allow for social distancing or decreasing the manual use of taps, handles or knobs for example. This would be possible through the use of facial recognition, voice activation and motion detector systems. We will have antibacterial materials, one of which is of course wood.”
–Sanna, Stora Enso

Visions of an economically sustainable HQ building

An economically sustainable HQ building uses resources efficiently while at the same time increasing employee efficiency, reducing operating costs and contributing to the economic vitality of the city and its neighborhoods. Essentially, many interviewees raised expectations about “value-for-money”. Stora Enso is expecting increased efficiency from the new HQ facilities, but the real estate investor also emphasised the long-term feasibility of the extensive investment. Interestingly, many of the expectations related to the increased level of economic

efficiency were intertwined with the social and environmental aspects of the new building, as Timo, representing the real-estate investor, explains:

“The projects must be future-proofed. When you have long-term investments, the life cycle of the building plays a crucial role...life-cycle consumption and emissions and the like.”

As discussed in the previous section, the use of sustainable materials such as wood is envisioned to increase employee well-being. This in turn is likely to correlate with increased efficiency and innovativeness on the part of employees. Furthermore, the space is designed in such a way that it can be flexibly converted and used for multiple purposes. This is expected to prolong the life cycle of the building – an important consideration especially for the real estate investor.

From the City’s perspective, the HQ project is economically important as the goal is to keep jobs in Helsinki, and thus make it a *“job-intensive city”*. He continued:

“A blended city is a central aim for us. We are not planning or constructing a fully separate district for offices.. [the new building] will instead be part of the existing built environment.” – Kalle, City of Helsinki

The construction site has traditionally been regarded as a challenging area as previous projects have been rejected (e.g. the Guggenheim Helsinki art museum). This particular urban district is of national value, but is also sensitive because of the complexities associated with public-private funding models. Hence, Stora Enso’s HQ project will be funded entirely with private money, as highlighted in our interview:

“This project...is implemented as a long-term investment by Varma [the real estate investor]...The starting point here is much healthier than in some of the other projects that have failed in the South Harbour area.” – Sanna, Stora Enso

Visions of a culturally sustainable HQ building

Although culturally sustainable buildings are seamlessly rooted in their surroundings, they may also start a new dialogue within the urban space. The site of the new HQ building is in the Katajanokka district in central Helsinki, an area and cityscape of national value, adjacent to the South Harbour quay:

“The meaning of the location is highlighted by the fact that we are in a unique setting as part of the protected zone of the Fortress of Suomenlinna, a UNESCO World Heritage Site.” (webcast 4 Nov 2021).

Therefore, the building must fit the city of Helsinki’s silhouette with neoclassical Empire style architecture to the west and National Romantic Art Nouveau to the east. At the same time the building is expected to make *“a bold statement in support of a more sustainable future”* through *“the innovative use of [Stora Enso’s] timber-building concept”* (Varma, 2020a, pp. 2 and 7). Otto describes this architectural twist:

“Natural materials are part of this experienced environment, but at the same time we are in the middle of a historic stone-built city. Thus, in a way two very different worlds meet here.”

However, it is not only about spatial but also temporal connectivity, about bridging the past with the present. Stora Enso’s representative emphasises that the building will open a dialogue between the old and the new and this bridge will make it timeless:

“There is something very familiar in the building, but simultaneously something new and fascinating. The architecture is classic in the sense that it will stand the test of time. Hence, it is neither transient nor “wow” architecture; rather, it is a building that will look like it has been there forever.” – Sanna, Stora Enso

Also, Otto (an architect) highlights that the building *“connects to the previous layers of the built environment and its forms of expression. But at the same time, we wanted it to be a product of its time.”* For us, this contemporary twist is linked to the use of both wood, a traditional material and a new architectural language. The invited architectural design competition stipulated that the HQ building should be infused with a strong identity reflecting the Nordic relationship to the forest. Sanna (from Stora Enso) assured that once ready the building will *“reflect the unique relationship to the forest that especially we Finns and the [other] Nordics have in our DNA”* (webinar 4 Nov 2020). At least the jury was convinced of this because the winning entry was described as offering *“a proud and urban presence with the warmth, smell and feeling of a Nordic forest after a rain ”* (Varma, 2020b, p.2) According to Kalle, City of Helsinki, this intersection of historic city silhouette and modern wood building will introduce *“a new paradigm to wood construction.”*

From the perspective of Stora Enso, the new HQ building was seen to anchor the corporation more solidly in the Katajanokka district. After 60 years of history in the same neighbourhood, the location and site became an essential part of the new building. As our interviewee summarised: *“We are a significant part of Katajanokka, and Katajanokka is part of us.”* (Sari, Stora Enso). Thus, the geographical location of the HQ not only indicates the ‘nationality’ of the company (Laamanen et al., 2012) but also its ‘citizenship’ in a particular city and neighbourhood. In sum, a culturally sustainable HQ building cherishes the cultural heritage of its location, thus strengthening its sense of place.

Discussion and conclusions

This chapter has contributed to the existing body of knowledge on SDG 11 Sustainable Cities and Communities in IB research. We investigated sustainable MNC HQ buildings in cities – a phenomenon that has remained unaddressed in the IB literature and set out to answer two related research questions: What constitutes a sustainable HQ building? How will the sustainable HQ buildings of the future contribute to sustainable cities and communities? To address these questions, we repurposed the classical single case study as a form of phenomenon-based research (Fisher et al., 2021) for a future-facing perspective to envision sustainable HQ buildings of the future.

First and foremost, our study contributes to better conceptualisations of the sustainable HQ of the 21st century (Kunisch et al., 2020). We draw on a longitudinal, real-time case study of Stora Enso’s new HQ, which will form the core of a modern wooden office and hotel complex in the heart of Helsinki. The building is scheduled for completion in 2024. On the basis of recent research on sustainable cities, sustainable buildings and office design and

insights from our case study, we put forward the following definition: *A sustainable HQ building is an economically efficient entity that minimises its environmental impact, energises and inspires its users and promotes their well-being, offers flexible spaces, is open to the broader community of stakeholders, blends into the urban space and cherishes the cultural heritage of its location.* This definition is holistic, encompassing economic, environmental, social and cultural factors in the sustainable HQ buildings of the future. We have argued that this is an important contribution, because much of the IB research to date has focused on the economic and functional roles of HQs (Alfoldi et al., 2012; Birkinshaw et al., 2006; Kähäri et al., 2017; Laamanen et al., 2012).

With regard to the second research question, we extend the limited IB research on cities that has tended to focus on global cities and economic aspects (e.g. Belderbos et al., 2017; Goerzen et al., 2013; Lorenzen et al., 2020). Instead of the more traditional focus on the economic role of MNCs, we focused on their contributions to the building of environmentally, socially and culturally sustainable cities and communities. As buildings account for approximately 40 per cent of annual global CO₂ emissions, their sustainability impact as highly visible examples of the journey towards carbon neutrality is considerable. Also, a significant number of MNC employees work in HQ buildings and their well-being in and attraction back to the post-COVID 19 office remains an important challenge. Equally, HQ buildings that embrace and elevate their cultural and aesthetic urban contexts and open their doors to diverse user groups offer great potential to sustainable cities of the future. MNCs are well-positioned to partner with cities to draw on their complementary resources, create shared space that fosters creativity and showcase successful examples that will also catalyse other firms to become more proactively engaged in achieving the SDGs (Cuervo-Cazurra et al., 2022; Sachs & Sachs, 2021; van Zanten & van Tulder, 2018).

In this chapter, we have initiated a conversation about sustainable HQ buildings of the future and make a call for more multidisciplinary research in this area. Future research could establish an innovative cross-disciplinary research agenda at the nexus of IB, city/urban studies (Sassen, 2005) and sustainable architecture. We adopted a broad ecosystem perspective that included many users and stakeholders associated with HQ buildings. Future IB research could explicitly focus on how MNCs as multi-identity and multi-locational organisations use architecture and design strategically to communicate their aspired values, identity and transformation over distance (Cameron, 2003; Liu & Grey, 2018) and signal environmental sustainability to both internal and external stakeholders. The core values of MNCs are often explicitly communicated in their buildings, e.g. in the form of glass walls representing transparency or green building certificates representing sustainability as a core value (Khanna et al., 2013, see also Barnes & Newton, 2019; Khanna et al., 2013). Thus, HQ buildings can be seen as tangible symbols of organisation culture (Elsbach & Behcky, 2007) and embodiments of organisational change (van Marrewijk, 2009) that may have a significant impact on the development of the MNC.

Our case study also has raises novel methodological questions. We engaged in phenomenon-based theorising (Fisher et al., 2021), but used our data set to envision the sustainable HQ buildings of the future rather than explain the past. This future-facing perspective differs from much of the IB and management research, which has tended to be retrospective in nature. The future orientation invites IB researchers to reflect on whether and how existing data collection techniques such as interviews could be revised for this purpose. Future research could introduce to IB methodologies and techniques from other fields with a long trajectory of studying future events and scenarios.

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Table 1. Overview of data sources

Length	Interviews, webcasts, videos and podcasts	Date
1h	Stora Enso HQ HQ, Sustainability	10 June 2020, a group interview
1h	HQ, Stakeholder relations HQ, Product stewardship HQ, Business development	3 Sept 2020
45 min	Real Estate Investor	9 Nov 2020
1h	City of Helsinki City of Helsinki, Urban environment	30 Sept 2020
45 min	City of Helsinki, Economic development, innovations and new experiments	7 Apr 2022
1h	Architectural practice Architect	15 Feb. 2021
1h	Architect	20 Apr 2021
6 h 30 min	9 interviewees	June 2020-April 2022
2 h	The Forest Academy of the Finnish Forest Association	4 Nov 2021
6 h	The National Wood Day Seminar	4 Nov 2021
6 h 50 min	The Annual Seminar of Low-carbon Construction	4 Apr 2022
20 min	Well-being with biophilic building design, 20 min	1 Apr 2021
	Videos showcasing the new building: https://www.youtube.com/watch?v=pOLDiuOcukErealttime construction site: https://katajanokanlaituri.fi and a constellation of photographs	
Total of 15 h 10 min	Webcasts, videos and podcasts	Oct 2020-on-going

Figure 1. Main users and other stakeholders of Stora Enso's HQ building
(Picture: Anttinen Oiva Architects, VARMA)



Figure 2. The building's shared lobby embodies principles of biophilic design.
(Picture: Anttinen Oiva Architects, VARMA)

