



How is the ESG agenda of the real estate sector impacting our cities

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How is the ESG agenda of the real estate sector impacting our cities...

Today, as a result of growing urbanisation, more than half of the global population is living in cities¹. And this trend is set to continue at a rapid pace. According to the World Bank, the urban population will double by 2050. It is estimated that more than 70% of the world population will live in cities by then. As such, our environment and city agendas are intimately intertwined. Cities are perhaps those unique places that epitomize how these different pressures meet, combine and clash.

The real estate industry is increasingly adopting ESG² strategies, commitments and policies to play its part. Some may say that it is not moving fast enough given the urgency of the situation. The reality is that a lot of the market players (real estate investors, property developers, construction companies...) have defined ambitious ESG transformation roadmaps. Many have been increasing the size of their sustainability teams to do more and more quickly. More stringent reporting and monitoring requirements are being imposed to them (think about the Corporate Social Responsibility Directive in the EU that is asking for more than 1,100 data points or the recent discussions in California for tougher emission tracking requirements³). Adopting green certifications such as BREEAM, LEED etc. is becoming a standard practice (and not a nice-to-have). Some even go as far as redefining their building standards to reduce the embodied carbon of their projects etc. And I could add many more examples to illustrate the U-turn this industry has to take and the deep transformations that are yet to come to really match the size of the climate and environmental challenge.

In considering all of the above one particular aspect should spark the interest of those who plan cities, make cities and live in the cities. What does this growing ESG agenda mean for our cities? How does it influence the way we think of them and the way we plan them? In this post, I will explore a few interesting dimensions of this. I obviously cannot go deep in all aspects of the ESG agenda - this probably would require quite a few PhDs to do so.

I) Understanding what ESG means, particularly in the context of real estate assets and cities, is in itself a conceptual challenge...

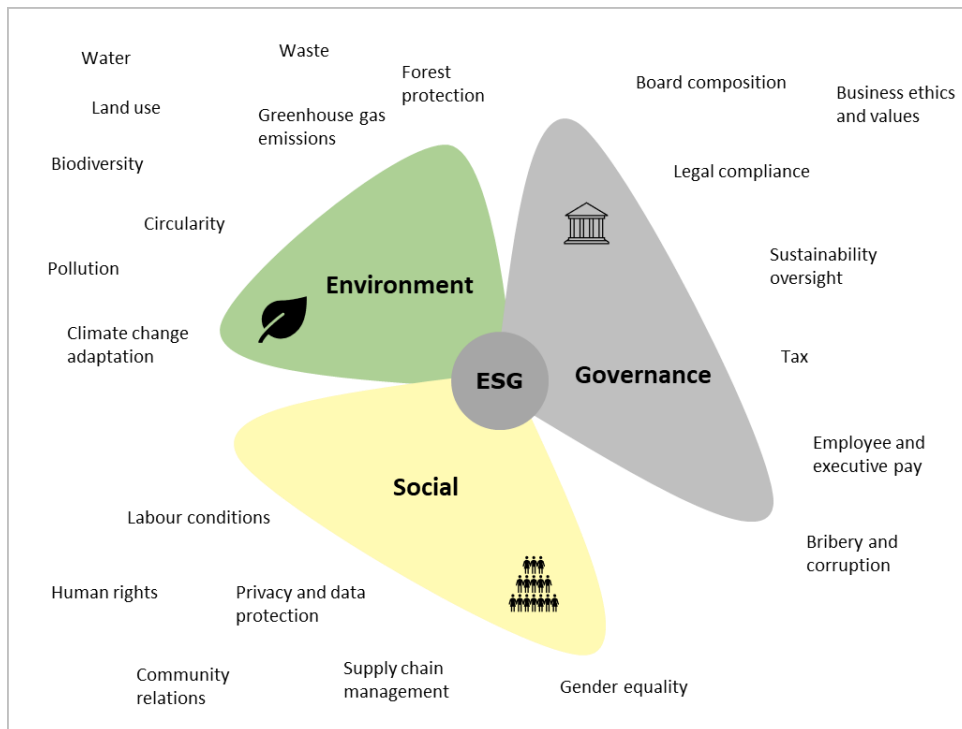
ESG is in itself quite a fluid concept that is not easy to define. If you google it, you will probably find many definitions, frameworks, standards that have been developed by many organisations to try to capture the full scope of an acceptable definition. It is not a new concept either: it has been out there for a little while. It is a bit of all-encompassing notion that is built around the willingness to simultaneously address 3 key dimensions of sustainability: environmental, social and governance. A critical moment of the ESG history is perhaps the publication of a report called "Who cares wins - Connecting financial markets to a changing world"⁴ by the Global Compact. And interestingly finding a clear definition for ESG is somehow the result of efforts from the financial sector to have a standard and clear guidelines on how to integrate the ESG considerations in asset management, financial services, research etc. The purpose of this post is not to discuss at length a right definition of ESG. But it may be useful to start from an overview of the very broad scope of topics and challenges that can be addressed under the banner of ESG:

¹ <https://www.worldbank.org/en/topic/urbandevelopment/overview>

² ESG - Environmental, Social, Governance

³ <https://www.cbsnews.com/sanfrancisco/news/california-climate-legislation-would-compel-companies-to-disclose-emissions/>

⁴ https://www.ifc.org/wps/wcm/connect/de954acc-504f-4140-91dc-d46cf063b1ec/WhoCaresWins_2004.pdf?MOD=AJPERES&CVID=jqeE.mD



Source: author's own illustration

From a corporate perspective and particularly in the real estate sector, an ESG approach is built around a few critical questions:

- What are the impacts of the business operations on the environment / natural world? how can they be managed, minimised or even reduced to the lowest possible level?⁵
- What are the impacts of the business operations on society, communities, stakeholders? And can the needs of these stakeholders be addressed?
- How is the organisation structured, run and governed to achieve the above objectives? How are activities monitored and reported on?

In practice, adopting an ambitious ESG agenda has so many profound consequences for the building industry. I would like to highlight 3 key challenges that are directly connected to city development agenda:

- **The Carbon Challenge:** in the Urban Land Institute (ULI) 2022 Global Sustainability Outlook report⁶, a critical need that is highlighted is the adoption and implementation of the net zero agenda. ULI underlines how the real estate sector has been lagging in advancing this and how the entire industry is facing mounting pressure to do more and much more quickly. As such, it shall be noted that Europe and Asia are moving faster than the US⁷. Much more particularly needs to be done to reduce scope 3 emissions⁸ (and specifically how buildings are built or refurbished - through the choice of materials, design, selection of buildings etc.) and much more needs to be done to reduce tenant energy consumption (one can think of the growing but slow adoption of green leases in the commercial real estate sector as an example). Adopting and implementing credible plans to trail towards net zero performance will undoubtedly require some serious change in the real estate sector.
- **The Measuring Challenge:** PRI, GRESB, SASB, CSRD, GRI, CRREM... (and a few more) - there are today many standards, be they voluntary or legally required, to measure and report on ESG performance that can be used by the real estate industry. Robust and trustworthy data is required to understand future energy needs, CO2 emission reductions, waste, water usage... and equally importantly, social impacts of the real estate activities. Whilst the environmental footprint of an organisation is getting clearer and clearer (despite some remaining challenges to overcome when it comes to precisely measure scope 3 emissions), the social aspects of the ESG agenda are more difficult to evidence. And it is all the more critical to be able to do so when one considers that buildings are there to stay for quite a few decades (if not more...)

⁶ <https://knowledge.uli.org/en/reports/research-reports/2022/uli-global-sustainability-outlook-2022>

⁷ <https://www.avivainvestors.com/en-gb/capabilities/real-assets/real-assets-study-2023/>

⁸ Scope 1 covers direct emissions from owned or controlled sources. Scope 2 covers indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by the reporting company. Scope 3 includes all other indirect emissions that occur in a company's value chain

once built. For instance, understanding the socio-economic benefits that a real estate developer may deliver through a new neighbourhood is key. And it is equally key to understand how these benefits can be nurtured over time (e.g., will the value of my apartment be the same with a changing climate? Will this neighbourhood remain a children-friendly place?...).

- **The Value Challenge:** in the last few years, there has been in the real estate investment a long-debated discussion about whether going green brings less or more return. There is growing evidence that “green buildings” attract better financial performance⁹: data collected by the US Green Building Council suggests that LEED certified office buildings offer on average a rent that is 5.6% higher than non-certified buildings. And additional data also suggests that a more demanding certification - say LEED Platinum vs LEED Silver - rewards building owners with a higher annual rent growth. Other asset categories - retail, residential, industrial... - still somewhat lack data to fully evidence a similar pattern. Despite this encouraging example of commercial assets, the real estate industry is still struggling to fully and unarguably evidence that so-called green premium. However, having higher rents is not without consequences in terms of affordability for families who want to live in our cities or small business that want to continue running a high street business. I recently spoke with a pub owner who was being evicted from his current property by the real estate developer that acquired the building. And he was worried about his inability to stay there because of the rent in the new certified building that is going to be erected instead of the existing building...

II) So, what does it mean for our cities going forward?

The entire real estate industry (property developers, investors, construction companies, public authorities etc.) will irremediably be transformed by the greatest challenge of our generations (and those to come). And it is clear that the impacts on our cities are far from being fully visible to us. Obviously, many other factors have also profound impacts on the “life and death” of cities, to use the words of Jane Jacobs - think about how the suit and shirt shops and the coffee shops of the City of London have been massively impacted by the remote working habits generated by the Covid crisis... But a few areas are worth exploring and undoubtedly deserve entire research projects to be fully analysed and understood.

Build less, reuse more and more efficiently: it may sound obvious, but it is not. Give or take, more than 80% of the buildings that we will use in 2050 are already built. Therefore, a large scale, profound renovation wave is required to bring our building stock up to the requirements that will align with the Paris agreement and other objectives to ensure that we can live within the planetary boundaries. But it is fair to say that, as a society, we have not been really tackling this so far... Local authorities along with other levels of administration will most likely play a pivotal role to help the market address the “building stock challenge” - without such level of intervention, many deep renovation projects will not happen by themselves (even when these renovations tend to increase asset values¹⁰). Classic public tools such as tax discounts, offsets, density premium, accelerated planning approvals etc. are just some examples of public interventions that contribute to fuel the renovation movement. This renovation issue is not spatially and socially distributed - many households on the lower end of the income scale are simply unable to afford these renovations costs. And many may be stuck in their houses and flats in the next few years when properties with a poor energy performance (may simply be impossible to resell (or without a large discount¹¹)).

Beyond the renovation of the existing stock, there is probably a wider consideration - perhaps more philosophical - about whether we need to build that much and where we really need to build or reuse existing buildings¹². In my view, the sustainability agenda should be calling for more action on rebalancing socio-economic activity within countries, to the benefit of those areas that can offer ready-to-reuse land and building assets. This is not a new topic obviously. Whether it is about regenerating the north of England (the “Northern Powerhouse”), avoiding the unsustainable macrocephaly of Paris and looking at developing regions in the Italian Mezzogiorno... this topic has been a sensitive - and politically divisive - one for many decades. But I am inclined to think that the pathway to a more environmentally acceptable development should be also using this structural and powerful lever whilst addressing the need for a just transition and a more balanced development of our regions and communities. As such, one might even consider planning the shrinking of some cities and urban areas to the wider benefit of the country as a whole. But easier said than done, I will give you that!

In addition, land availability - or its lack of - is also having a deep influence over development patterns and project implementation by real estate developers and planning processes. Availability of land in strategic locations - e.g., near transport infrastructures or in direct proximity of large catchment areas such as large metropolitan areas - is

⁹ <https://www.cbre.com/insights/reports/esg-and-real-estate-the-top-10-things-investors-need-to-know>

¹⁰ https://www.lemonde.fr/argent/article/2022/04/22/les-investisseurs-immobiliers-sous-pression-face-aux-defis-energetiques_6123195_1657007.html

¹¹ <https://www.quechoisir.org/actualite-marche-immobilier-les-ventes-de-logements-classes-f-et-g-explorent-n96660/>

¹² I do not ignore long term demographic trends that result in additional housing supply. My objective here is not to “deny reality” but rather to discuss the philosophical dimension of our spatial development.

getting thinner, in particular for warehouses and logistics activities. Local authorities are in many places becoming reluctant to grant planning permissions as these projects do not always create a lot of jobs. Similarly, industrial projects are also more carefully considered to avoid urban sprawl and low-quality landscaping and architectural style (who does not know an ugly business park?). And brownfield regeneration is not just about soil depollution and economic development... but equally about nature and biodiversity, urban quality and attractiveness.

Winning the race to net zero and the scope 3 emissions - the building sector has widely embraced the need to tackle scope 1 and 2 emissions that are directly under control of building owners. But many actors along the supply chain have been putting pressure to address the bigger chunk - scope 3 emissions - which mainly come from the construction (think of large volumes of concrete, steel, glass... that a typical building requires) and energy use by tenants. Scope 3 emissions are increasingly pushing the real estate players to think about their "value chain". And as such, no building is an island: its direct vicinity, its connection to the energy grid, its procurement of construction materials... are all important factors in the journey to net zero. As such, city authorities, utilities companies, legislators... should work together more to enable quicker reduction of scope 3 emissions.

Building electrification is also a key area of work, in particular in countries like the US. The need to move away from fossil fuel combined with the energy crisis calls for a large-scale electrification. It is apparent that many investors and building owners will not want to sit for too long on buildings with fossil fuel-related risks. But this obviously requires a combination of legislative measures - including at the municipal level - such as banning gas in buildings and large investments to support a large-scale electrification of existing and new developments. Many areas such as business parks or industrial areas are clearly not ready for an acceleration of electrification (electrification for heating but also EV charging points that are mushrooming) - often because their grid was simply built at a time when this was not an issue.

Creating resilient buildings and fit for the future - with the growing need to adapt to a changing climate, water cycle, heat etc. and generally speaking, climate risks, there has been a growing focus on working on urban and building resilience. When thinking about resilience, one may think about large-scale projects such as the flood protection strategy of New York City developed on the aftermath of Hurricane Sandy or the way Dutch cities have been historically designed and developed to live with water.

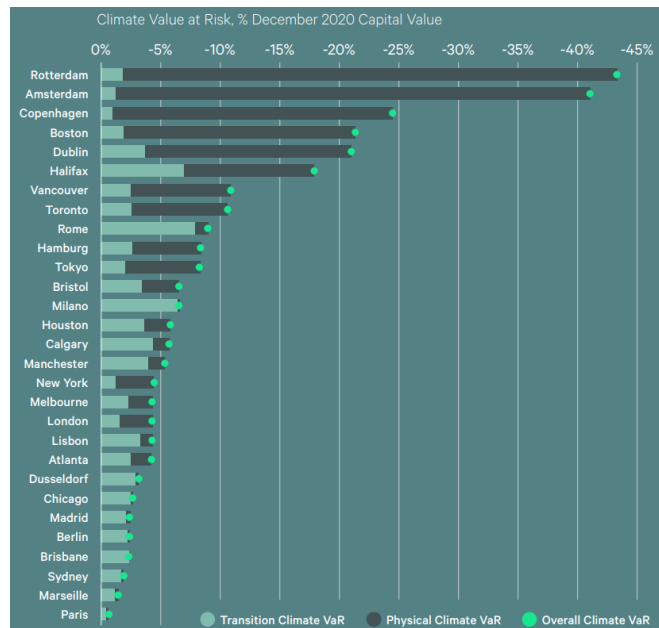
Building resilience can be defined with 4 main dimensions¹³ that offer interesting insight for cities:

- **Robustness:** it deals with the ability to maintain critical operations and functions during a time of crises. This includes the building itself, the design of the infrastructure (office buildings, power generation, distribution structures, bridges, dams, levees), system redundancy and substitution (transportation, power grid, communications networks) etc.
- **Resourcefulness:** it deals with the ability to prepare for, respond to and manage a crisis or a situation that may trigger a disruption. Classically this requires robust business continuity planning, training of on-site teams (users, facility managements, emergency services etc.), supply chain, damage mitigation, effective communication etc.;
- **Rapid recovery:** it deals with the ability to return to and/or reconstitute normal operations as quickly and efficiently as possible through good contingency plans, efficient emergency operations, efficient resource mobilisation etc.
- **Redundancy:** it deals with having back-up resources to support the originals in case of failure. This is typical for example for sensitive infrastructure such as data centres, critical operations etc. This is particularly critical for social infrastructures such as emergency services, hospitals, strategic government functions. The Covid crisis has shed the light on quite a few weaknesses of our modern societies...

In the context of the climate and environmental crisis, resilience is becoming more and more critical. Many real estate investors and developers have progressively adopted measures to assess and mitigate certain risks such as climate risks (both physical and transition risks). The growing use of the TCFD framework (Taskforce for Climate-Related Financial Disclosures) is an example of the increasing need for the industry to consider and factor in this new type of risk. And the EU Taxonomy is also requiring companies to report on it. Critically and beyond the legal reporting requirements, market-leading developers have adopted resilience as a key requirement / specification in their design briefs for new projects. For instance, this means taking into account risks like rising temperatures (and higher frequency of heat waves), rising sea levels, modification of rain patterns, impact of dryer conditions on soil stability etc. The need to address resilience directly impacts the areas in which these buildings are developed. For instance, the need to mitigate risks associated with cloudburst leads municipalities to design public spaces differently to deal with sudden and enormous volumes of rainwater or consider nature-based solutions to mitigate heat island effects (we are even rediscovering the power of trees...). And this climate risk can be remarkably acute for some cities. The below graph shows the value of the risk for a sample of cities analyses by MSCI¹⁴:

¹³ <https://www.wbdg.org/resources/building-resiliency>

¹⁴ <https://www.cbre.com/insights/reports/esg-and-real-estate-the-top-10-things-investors-need-to-know>



VaR - Value at Risk

Avoiding stranded assets and stranded neighbourhoods: stranded assets can be defined as “assets that have suffered from unanticipated or premature write-downs, devaluations or conversion to liabilities”¹⁵. Real estate owners and investors are naturally trying to avoid the risk of sitting on numerous financially obsolete buildings. If one considers that the role of urban planning is to determine the trajectory of a city, a neighbourhood or a plot of land... the city authorities face a pressing challenge to create the right conditions to minimise the risk of the emergence stranded assets. But the problem is that there are already plenty of them already...

A country like France has an estimated volume of 90,000 to 150,000 ha of *friches industrielles* (unused and derelict brownfield sites)¹⁶ - a large portion of that land bank is difficult to redevelop, requires a lot of public investment to ensure that a sound business case can be achieved for private projects. This is the equivalent of the whole area of the London Green Belt! Minimising the risk of facing a new wave of *friches* is critical to ensure the impacts on natural habitats, biodiversity etc... as well as minimising the need for city extensions and unnecessary use of agricultural land. As such, France has recently passed a first-of-its-kind law to achieve a net zero land artificialisation by 2050. Within this legal requirement cheap and easy-to-develop land will become more and more difficult to find.

Climate change risks are already impacting real estate assets and creating stranded assets. Perhaps one of the most prominent examples of this is a building called Le Signal, located in Soulac-sur-Mer in France (not far from Bordeaux). The residential building was built in 1965, quite far from the beach back then... Due to accelerating coastal erosion, the building is now uninhabitable... it took nearly a decade for the case to be settled in court, many millions for financial compensation, and many political controversies... The demolition just started. And that was just one building...

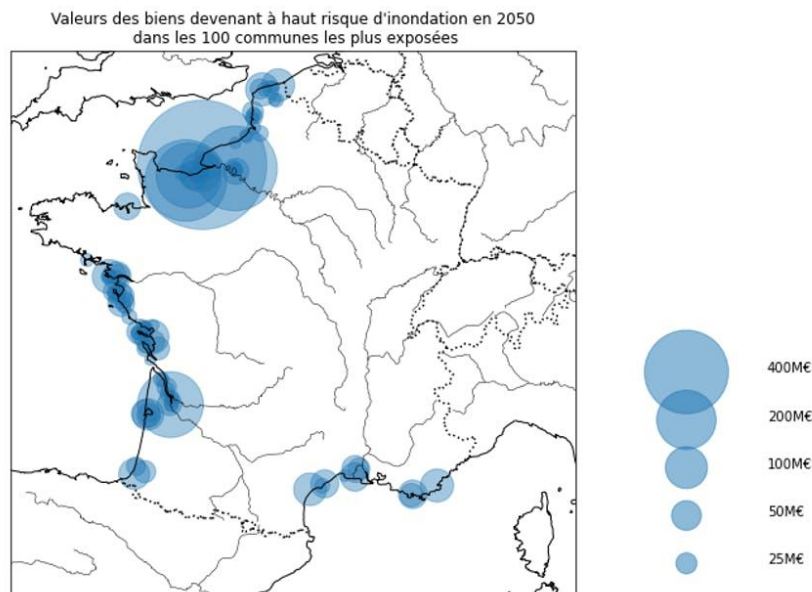


¹⁵ <http://www.smithschool.ox.ac.uk/research/stranded-assets/>

¹⁶ <https://www.banquedesterritoires.fr/friches-industrielles-une-mission-dinformation-lassemblee-pour-lever-les-freins-la-revitalisation>

Source: <https://www.sudouest.fr/gironde/soulac-sur-mer/immeuble-le-signal-menace-par-l-ocean-a-soulac-33-qui-va-financer-son-rachat-8197539.php>

You may say that this building is a very unique example... now, you may want to look at the below map¹⁷ that shows the value of assets at risk of flooding in 2050. The numbers are staggering!



Urban mining and circularity in the built environment

The choice of materials is central in any robust and credible sustainability strategy for the development or renovation of our buildings and urban environments. The growing need for the building sector to embrace the circularity challenge (the EU is pushing hard with this agenda and more legislation is expected to come in 2023) has deep impacts on the sourcing, the use and the reuse of the materials and components that our cities are made of. This is equally a fundamental steppingstone towards achievement of net zero objectives that many property investors and developers have set for themselves.

Beyond the unavoidable and necessary technical debates about data associated with embodied carbon, LCAs and comparisons of materials to inform better choices, one area has perhaps attracted less focus in the last few years: the unexploited potential that already exists in our cities. Urban mining, as it is known, is as such not a new concept. However, it remains a rather confidential area of development. The main challenge lies in the ability of local stakeholders to find a way to organise themselves and establish a sound business model to give materials a new value. As such, many small-scale organisations exist and often cooperatives, grassroots organisations or other initiatives that can benefit from public funding¹⁸. The acceleration of the renovation of the building stock in the next few years will undoubtedly increase the “size of the mine” and consequently, the opportunity to explore it. Just think about this: in 2020, Europe produced 850M tons of construction waste... yes, 850 million!!

A great example of this is the building below: Resource Rows. Developed by the Danish firm Lendager Group and located in the Ørestad neighbourhood in Copenhagen, the building was developed using recycled bricks¹⁹ coming from different buildings, some located in other parts of the Copenhagen (Carlsberg Factory and Steiner School). This example shows the potential to explore the urban mine to substantially reduce the embodied carbon of our urban built environment whilst still delivering high quality architecture. And as shown in this example, I believe, offers a highly aesthetic urban experience for the residents and users of this area.

¹⁷ <https://www.mercipourinfo.fr/actualites/immobilier-logement/une-partie-de-limmobilier-cotier-est-menacee-de-submersion-909415>

¹⁸ See for instance this example in France: <https://www.ouest-france.fr/normandie/evreux-27000/la-plus-grande-ressourcerie-de-normandie-ouvert-dans-l-eure-6869482>

¹⁹ <https://www.architectsjournal.co.uk/buildings/old-into-new-recycled-bricks-form-facade-of-copenhagen-housing-project>



Channeling capital / funds towards urban regeneration schemes and projects with higher social impact

Planning the development of a city is truly about planning for the long-term. With the growing requirements associated with the social dimensions of the ESG agenda, many investors are seeking to increase the share of their portfolio into impact-making investments and projects. The image below shows an interesting result that I took from a study²⁰ that Aviva Investors recently conducted:



Though risk management and return remain key areas of decision, diversification of investment opportunities and alignment with values (often derived from the initial exercise of defining a sustainability strategy) are key factors when choosing investment projects with a social impact. That being said, not all projects with a social utility attract investment, which does question how certain social amenities will be funded in the future. Moral values of investors and return potential should not be the only parameters to decide on what is necessary for a city or a region.

Probably more to expect..

Cities have always changed, with or without the Paris agreement. People move, habits change, flows of goods, people and ideas are constantly reshaping our urban environments. In other words, our cities are just a reflection of who we are as individuals and social groups. The challenges that are rooted in the ESG agenda of those that make the urban fabric are there to remain for a while and will decisively impact our experience of cities. The return of nature, with its myriad of manifestations, is probably the best news in all of this. And the images of ducks, deers and wild boars joyfully wandering around our cities during the covid lockdown were there to remind us that we cannot build our cities against nature but find a way to truly reconnect with it. And accepting its limitations. Our limitations.

²⁰ <https://www.avivainvestors.com/en-gb/capabilities/real-assets/real-assets-study-2023/>

About the author

Jonathan graduated from the double Masters' degree programme in Urban Policy between Sciences Po in Paris and the London School of economics. He has been working in real estate and urban & local development consulting for the last 12 years. He currently works as a Manager in the Strategic Sustainability Consulting teams of Ramboll in Copenhagen, Denmark. He is also a member of the Royal Institute of Chartered Surveyors. This article represents the author's personal views only.