

ULI C Change Case Study: Transition Risk Assessment Guidelines

# **Q&A on experiences with the guidelines**

Savills Investment Management

**“The guidelines provide a wider, more modernised outlook for real estate investment and asset management.”**

**CChange**

**Savills Investment Management (Savills IM) used the ULI C Change Transition Risk Assessment Guidelines to assess a multi-tenanted office building in central London, which was built in 2008 and acquired in 2010 and is due to be subject to a complete refurbishment programme. We spoke with Steven Evans, Senior Sustainability Risk Manager and Angus White, Portfolio Manager at Savills IM, about their experience of using the guidelines.**

**What is your current approach to assessing transition risks?**

We identify transitional and physical risks through our acquisition process. When new assets are proposed for purchase, there is a set guidance paper which is integrated in our investment committee (IC) processes. The IC will review the asset proposal, challenge and provoke a debate as to how or why the proposal meets the requirements for our investors.

Within this process, we have embedded sustainability criteria spanning across our focus areas: climate action, people, and nature. From a transition risk perspective, we analyse current performance and develop a high-level net zero transition plan. The initial assessment includes conducting a CRREM (Carbon Risk Real Estate Monitor analysis) analysis, understanding local energy regulations, evaluating energy use and fuel sources, assessing onsite renewables, determining if occupier green lease clauses are in place, and other factors.

At present, this information provides us with an indication of the transition risk for a proposed purchase.

**What do you see as the benefits from having an industry approach to assessing transition risks?**

Alignment within the industry, which we would hope brings about more transparent market pricing in respect of transition risks. Not all real estate firms benefit from having the same amount of resources as larger investment managers and in turn may not have all the tools at their disposal to identify and address transition risks. Having an industry approach to identify and assess transition risks would therefore provide best practice and alignment for those without enhanced ESG resources.

**Why did you choose to test the guidelines through a case study?**

We wanted to understand how the guidelines worked in practice. Within Savills IM, we have a Restorative Business Champion programme, which is comprised of a network of passionate colleagues across our global business who focus on how to reframe business challenges to achieve restorative outcomes<sup>1</sup>. A dedicated working group was established to focus on climate action, and to test the ULI C Change Transition Risk Assessment Guidelines on multiple assets. The team was comprised of various members of our investment and ESG teams.

<sup>1</sup> A restorative outcome is one which seeks to restore ecological and social systems, e.g. climate adaptation through green infrastructure.

**“We would hope [the guidelines] bring about more transparent market pricing in respect of transition risks.”**

The team chose this office asset in central London as it is due to undergo a refurbishment programme. A net zero carbon (NZC) audit had already been performed and therefore, we felt this was a good opportunity to test the guidelines.

Given the refurbishment programme's objectives and the stranding risk of the asset, this case study lends itself to be a good example of how we could quantify transition risks of a standing asset into the cash flow.

### How would you describe the stranding risk for the building you assessed?

Based on the 2021 full-year energy data utilised by Evora, our external sustainability consultant, for their CRREM analysis, the asset has already been classified as stranded against the CRREM greenhouse gas (GHG) emissions pathway as of 2022.

### Would this risk have an impact on your portfolio?

Yes, the asset's concentration accounts for a significant share of a fund portfolio. Our assumption is that by not mitigating the stranding risk, this would have a negative impact on a potential sale which could prevent our ability to achieve the targeted internal rate of return (IRR) at portfolio level. Additionally, neglecting this risk could compromise the resiliency of our assets and expose us to reputational and regulatory compliance risks, further affecting overall portfolio performance.

Beyond this, there is a risk that it could impact the fund's wider ability to capital raise and affect the capacity to recycle capital from the asset, if needed.

### What about the impact on the building's wider location?

Through improving the sustainability credentials of

the property, we would create a more operationally efficient and attractive workspace for potential occupiers. This could then benefit the building's wider location through job creation, and have an impact on the wider sub-market. We would hope that in addressing the transition risks, this property will also attract desirable tenants at stronger rents, therefore inspiring other landlords to follow suit.

### What were the main material transition risks the guidelines helped you identify?

The main four risks were:

- **Decarbonisation** – Our NZC audit only considered operational decarbonisation and we incorporated the intervention costs into a discounted cash flow (DCF), as the cost of decarbonisation. As the NZC audit was carried out in 2022, we have applied the annual inflation rate to these costs for years 2022 and 2023. We therefore had to estimate the cost of embodied carbon removal which could result in inaccurate results for full decarbonisation.
- **Energy costs** – There is a lack of data in considering energy costs. When running the case study, we did not factor in changes to energy costs given that tenants are responsible for utility costs and therefore no direct financial impact is expected, although improved rent levels will partially mirror that energy/cost efficiency achieved post completion of works. A further analysis should be conducted to see the impact of the decarbonisation measures in terms of usage and energy costs as well as carbon analysis of grid composition vs. fossil fuel sources.
- **Carbon price** – The lack of standardisation in pricing mechanisms applicable to real estate in the UK made this process challenging and could lead to an under-pricing of carbon emissions. We used guidance from the UK Green Building Council (UKGBC) which helped provide some clarity on the process, but coming to a clear rationale on the price per ton of CO<sub>2</sub> was very challenging.
- **Tenant voids** - given the wholesale refurbishment and works required to each floor, there is an inherent risk of increased tenant voids. Furthermore, as the void period is accounted for at the point where works are completed, external factors such as the state of the market at the point of re-letting could also impact on this. We assume that, as is reflected in the model, risk of tenant voids is reduced through the creation of more desirable office space and improved energy efficiency.

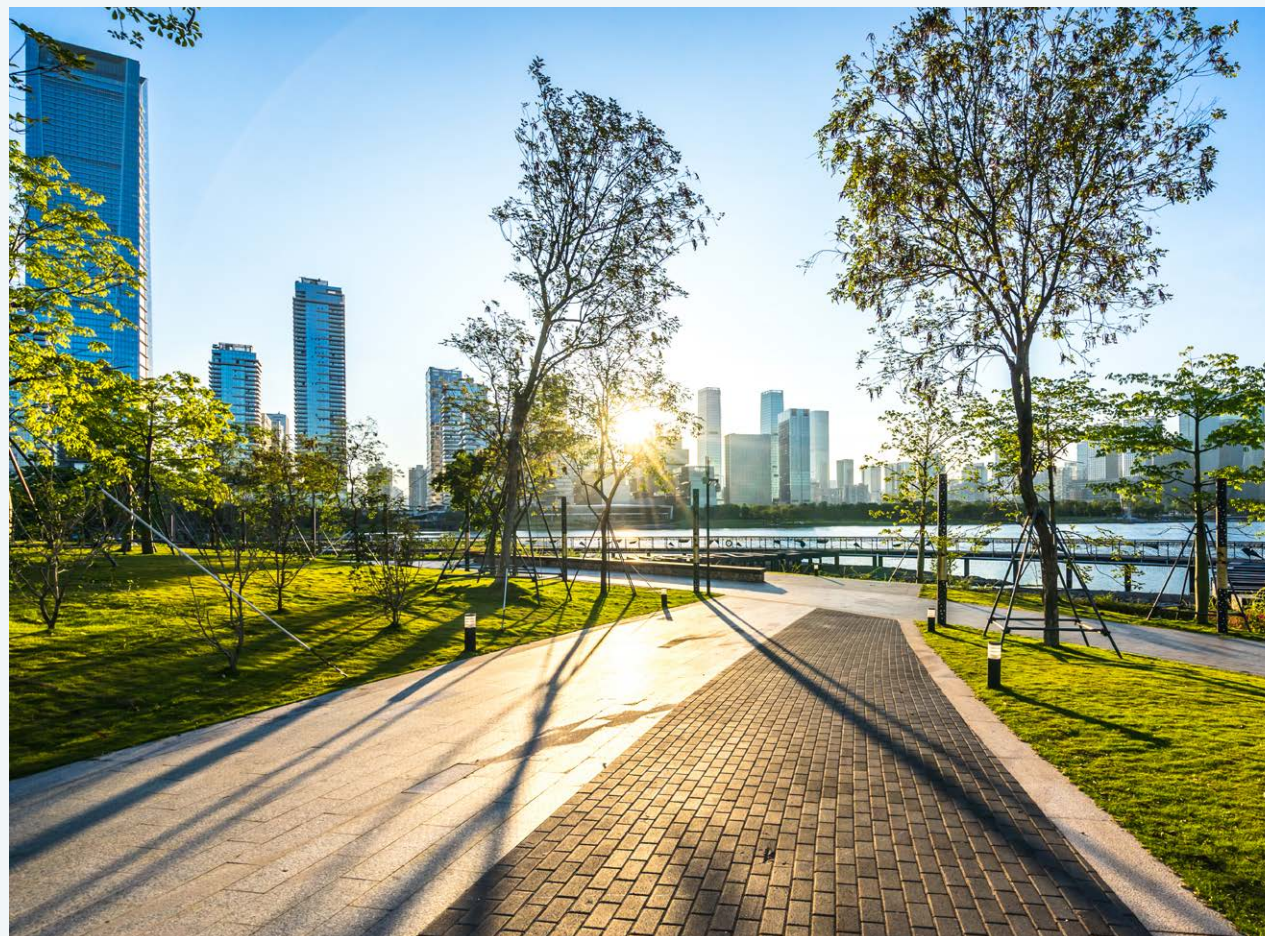
A building can be highly sustainable but if it is not resilient to physical climate risk it could become inaccessible from localised flooding, for example. Addressing transitional climate risk in real estate can significantly enhance the resilience and sustainability of the wider location. It often leads to improved infrastructure, such as better flood defences and energy-efficient public services, which benefit the entire community. Additionally, it can drive up local property values and attract eco-conscious investors and businesses, fostering economic growth and environmental stewardship in the area.

Our view is optimistic, and we believe that undertaking these works would hopefully spur a chain of events where other Landlords undertake a similar exercise with the end result of the immediate submarket becoming less carbon-intensive and improving the submarket as a whole.

**Were there key differences between the outputs of your baseline discounted cashflow and the risk-adjusted version using the guidelines?**

We saw differences in our IRR and cash-on-cash returns. Inevitably distribution is hit due to the higher cost of works versus not undertaking the works, however the IRR is more attractive upon completion of the works as asset liquidity is improved at the point of disposal.

Our assumption is that if we decarbonise the asset from an operational perspective,



improvements in operational efficiency will aid in attracting better tenants at stronger rents. Upon completion of the works, we would seek to obtain a BREEAM certification, which we expect to improve the asset's liquidity. Given sustainability is (or should be) at the forefront of investment managers' minds, futureproofing the asset should enhance capital value growth.

**How did the assessment impact the building value in quantitative terms?**

Given the current stranding nature of the asset, and assuming we addressed all transition risks, we assumed the exit yield would be compressed by -50 bps in comparison to our base case model, seeing a total increase of 6.6% of capital value growth at exit in comparison to the base case.

The exit yield compression is based on research undertaken by our investment advisors who have compared London office pricing for assets which are BREEAM accredited (for example) against those which are not. Whilst our modelling showed the cash-on-cash being hit due to the quantum of CapEx works as taken from the guidelines, this was offset by the assumed capital value growth achieved at exit.

We would also highlight that the costs of decarbonisation using the transition risk guidelines have been modelled on a straight-line basis. To ensure full accuracy in terms of sequential treatment of the works, we would need to employ a project manager to create a timeline of when each CapEx line item should take place. This is particularly important as we understand that not all works associated with decarbonisation may be carried out using this approach, alongside ensuring sufficient liquidity is held at the key dates to carry out the works.

#### **What about any impacts on asset value in qualitative terms?**

Whilst there have not been any qualitative impacts input into the model, apart from the compressed yield (-50bps) applied at exit due to the asset being more liquid, these impacts would largely be external and applicable should no action be taken. This is because asset quality determines the Fund / asset's access to insurance, debt capital and internal resource alongside potential reputational risk to Savills IM through not addressing our

sustainability obligations as an investment manager. We believe these points would ultimately impact asset value, therefore reflecting the need to address these transition risks.

#### **Were you able to include the quantitative shadow costs as part of the Discount Cash Flow, namely carbon pricing and embodied carbon?**

In 2022 we had a NZC audit carried out to establish what measures would be required to decarbonise the asset. The audit identified interventions to achieve NZC for the operational carbon of the site. The output proposed interventions and costs, which we included in the model. In terms of embodied carbon, this was more difficult to calculate given there is no set guidance on how we could set an internal carbon price. We ended up using the same approach as taken from the 'Greater London Authority guidance for London's Local Planning Authorities on establishing carbon offset funds – July 2022'. We calculated the cost per tonne of CO<sub>2</sub> against the building's gross leasable area (GLA) to provide us with an estimated cost of embodied carbon which was £95 per tonne of CO<sub>2</sub>.

#### **What about the qualitative risks impacting the shadow costs?**

Our assumption is that post completion of the works, the re-letting outlook of the building improves with shortened void periods. However, there remain inherent risks to the Landlord through unseen operational costs (e.g. business rates) at the points where each floorplate is vacant. This

is further exacerbated when running a phased re-letting programme where we are forecasting the time at which each floor will be let. Inevitably, there will be some unforeseen costs and delays stemming from the transition risk refurbishment programme, or even changed market conditions at the point of reletting. We assume that this risk is mitigated through the fact that, in theory, a modernised, more sustainable asset is assumed to attract a wider pool of tenants and yield stronger rental levels at the point of disposal. In the short term, we expect to see tenant voids and loss of rent due to the phased approach to the refurbishment programme required when undertaking the transition risk alongside the wider refurbishment programme.

#### **How might the results of the transition risk assessment influence your investment decision-making for the asset?**

The ULI C Change Transition Risk Guidelines provided criteria to better analyse the financial implications associated with transition risk. As this asset is due to undergo a refurbishment programme there are several other CapEx line items which need to be analysed in detail to ensure that all measures can be covered without running out of capital. Therefore, proper cash flow management is essential to ensure all initiatives can be covered, whilst future-proofing the asset. If we are not able to fund the transition risk activities, it may lead to early disposal or a decline in asset performance and value.

### **How do the results influence your plans for the asset's long-term operations, maintenance, and capex planning?**

There is an increased need to be scrupulous with cashflow management. Should there be additional works needed at the property, the added costs to address transition risks alongside other unforeseen costs would inevitably impact on the scope of ongoing works, and any future works intended to be undertaken.

With a finite amount of capital available, a particularly targeted approach is required when selecting which works are to be undertaken, whilst being mindful of operational and maintenance costs that are incurred on a routinely basis. Taking this into account and given the refurbishment programme at play, this asset provided the opportune time to assess the impacts of addressing transition risks with less of an impact on operational aspects such as tenant voids and loss of rent, as we would look to undertake all works across the same timeline.

The NZC audit identified where quick wins could be achieved and how we could best develop medium and long-term implementation plans with detailed, costed interventions aligned with lease events and intended hold period. The outcomes of the audit informed our ESG planning, implementation timing, and budgeting processes, which are then applied at the portfolio level using a top-down approach. This comprehensive "Fund Net Zero Pathway" strategy is further enhanced by

automation via our data platform, Deepki, ensuring efficient and effective execution.

### **Have the results of the transition risk assessment changed your view on the business case to decarbonise the asset?**

Owing to the upcoming refurbishment works in line with the existing asset strategy, there have not been any changes made to the prospective void periods forecasted in the base case model and the transition risk model. Our assumption is that the end result provides more desirable office space for occupiers, savings are made on operational costs (from a tenant's perspective), in turn enhancing estimated rental values (ERVs) at the point of re-letting, with the net result of an improved IRR at exit (benefitting from a compressed exit yield). Whilst the cost of capital was greater when incorporating the transition risks, this impact was reduced due to the scale of the wider refurbishment costs, where we assume we are able to carry out the works at the same time, as opposed to incurring further CapEx sums at later dates.

Whilst there remains a series of unknowns (e.g. shadow costs), alongside the fact that some costings (for example, embodied carbon pricing) are not ratified, the outcome of this case study is largely positive for the business case, having created a more liquid asset at the point of exit. Whilst the cost of capital was negatively impacted, with an increase of 27% in overall cost seen, the costs of the transition risk were mitigated by the

capital value growth (when benefitting from a compressed exit yield). The difficulty here would be for investors that are cash-on-cash driven rather than IRR focused, as the quantum of works erode distribution significantly during the time the works are taking place, however, the benefit of the works is then recaptured in the IRR at exit, subject to market conditions at the time of disposal.

### **What worked well when using the guidelines, and what was more difficult?**

The guidelines work well where all emissions data is available. It is more difficult for aspects where there is a lack of information such as carbon pricing mechanisms for commercial real estate. In turn, when coming to modelling the transition risks, the model inherently becomes more theoretical given the series of unknowns that we were presented with.

### **What would you need to make it easier/more applicable?**

Investors need more guidance and transparency on how to price carbon emissions for the built environment. Given the lack of information and a set pricing mechanism for the UK commercial real estate sector, it would be beneficial for the industry to work towards providing best practice advice to address any gaps.

### **Which data was easy to collect and include in the discounted cash flow model, and which was more difficult?**

We appointed a third-party consultancy to perform

# “Proper cash flow management is essential to ensure all initiatives can be covered, whilst future-proofing the asset.”

a NZC audit. The output identified initiatives which would put the asset on a trajectory towards decarbonisation. We used the proposed intervention costs from the NZC audit report and included it in the model. It was more challenging to get information on embodied carbon and carbon pricing. Our NZC audit report only focused on operational emissions and considered embodied carbon more qualitatively. As stated above, we took the carbon pricing of £95 per tonne of CO<sub>2</sub> as detailed in the ‘Greater London Authority guidance for London’s Local Planning Authorities on establishing carbon offset funds – July 2022’. We calculated the cost per tonne of CO<sub>2</sub> against the building’s GLA to provide us with the total estimated cost of embodied carbon, as elaborated on further above.

The NZC audit approach has since evolved and we are further enhancing our approach using the platform Deepki. Deepki enables data monitoring, serves as a tool for engaging with stakeholders to encourage additional carbon reductions, support entity reporting, and track progress against ESG programs and KPIs.

We have also drafted a comprehensive scope for consultants conducting our NZC audits.



Recently, we expanded the analysis to include operational energy and carbon, embodied carbon, water, and waste management and efficiency. Additionally, we outlined the essential data inputs required from the asset team to enable a digital twin analysis, and maximise accuracy and quality outcomes. Furthermore, we detailed the anticipated audit outputs with key financial and performance KPIs and metrics that will be integrated into our ESG data platform.

**The guidelines increase the need to share data. Which data is easier to share, and which is more challenging?**

We would be comfortable sharing cost of decarbonisation data; on the basis it pushes the standardisation of such disclosure for the betterment of the real estate industry. Savills IM’s NZC objectives are a 50% reduction of CO<sub>2</sub> emissions by 2030 and achieving net zero by 2040. To therefore achieve our emission reduction

targets across our assets under management, we are of the view that collaboration with other market participants and occupiers is critical. We need to find a way to get each other comfortable in disclosing this information as it will aid the RE industry through the provision of industry level guidance, but some data continues to remain commercially sensitive, such as financial performance and occupier data, including but not limited to - return on investment, leasing (rental) details, consumption data etc.

**Are there elements of the guidance, you will integrate into your assessments going forward?**

Yes. The guidelines helpfully identify the main aspects the real estate industry sees as material for pricing transition risks for real estate investing. We have previously accounted for decarbonisation and energy efficiency initiatives as a general CapEx item, but decarbonisation was never considered as a standalone item.

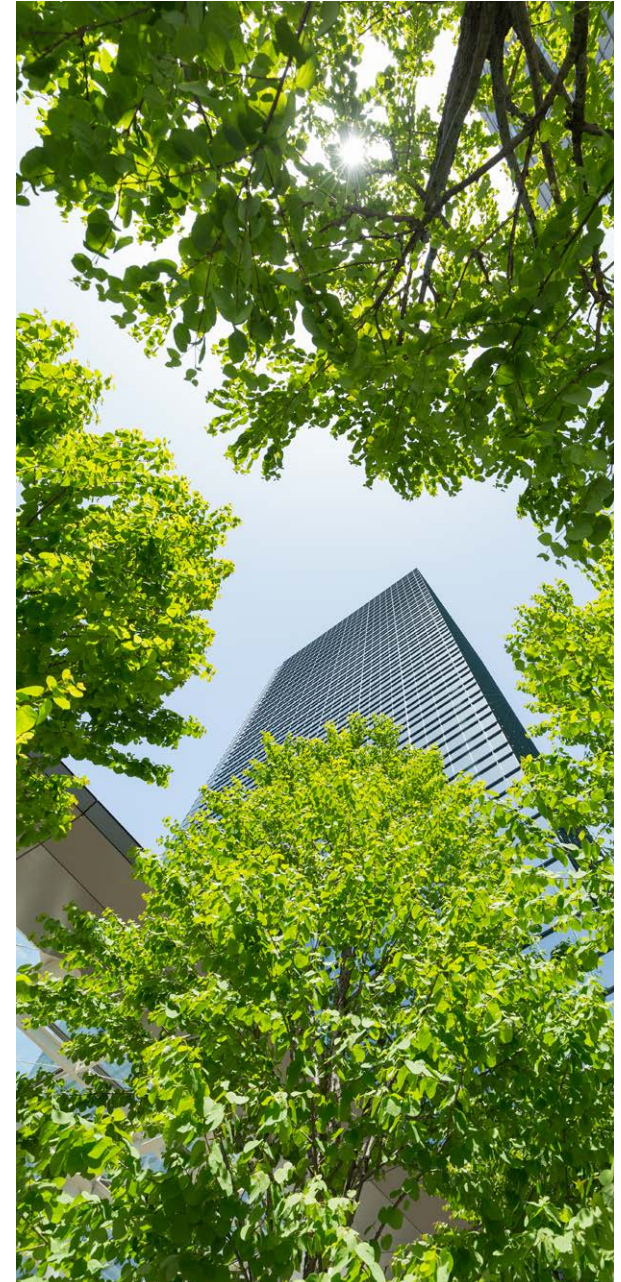
In our view, we would like to take these guidelines into account for all asset acquisitions and asset-level business plans but would likely need to phase in the approach. However, there is a risk that we will not be able to obtain all the required information upon underwriting if other market participants have also not incorporated these considerations into their underwriting process as well. Additionally, we would need to see how the Preserve tool would address the challenges here and simplify the overall process.

**What was your overall experience of using the guidelines?**

The guidelines provide a wider, more modernised outlook for real estate investment and asset management. They provide a view of how decarbonisation initiatives could be incorporated and categorised into the financial modelling of ongoing asset management initiatives, alongside any prospective acquisition. The guidelines showcase a more granular view of what can be undertaken to ensure that we are ahead of the curve as the real estate market continues to evolve and adapt, ensuring the asset's liquidity is maintained. They also gave us an understanding of the impact of transition risks on returns, and how it could become a key consideration when analysing any potential acquisition or undertaking a refurbishment programme.

**Would you recommend other companies test the guidelines and provide their feedback?**

Yes. To achieve alignment in how transition risks are identified and assessed across real estate investing, other market participants need to be onboard. We need to find a way to act all together to make the identification and assessment process achievable.





## About ULI Europe

The Urban Land Institute is a non-profit education and research institute supported by its members. Its mission is to shape the future of the built environment for transformative impact in communities worldwide. Established in 1936, the institute has over 48,000 members worldwide representing all aspects of land use and development disciplines.

In Europe, ULI has almost 5,500 members across 15 National Council country networks.

For more information on ULI, please visit

<https://europe.uli.org>

## About C Change

C Change is a ULI-led programme to mobilise the European real estate industry to decarbonise.

We're a movement empowering everyone to work together for a sustainable future. We connect the brightest minds from across the value chain. We challenge barriers, share expertise, and champion innovation to move swiftly to accelerate solutions that will transform our industry and protect our planet. C Change means real change.

C Change was formed in late 2021 by a group of leading real estate players that was united in its aim to focus on collaboration to ensure companies large and small have access to practical solutions and education on decarbonisation.

Please visit:

<https://europe.uli.org/research/c-change/>

## About the Transition Risk Assessment Guidelines

The Transition Risk Assessment Guidelines were launched by ULI in 2023 as part of the C Change programme, with the intention of providing a standardised approach to assess and disclose climate-related transition risks as part of property valuations. The guidelines are designed to support owners and managers to assess the impact of 12 transition risks which are material to real estate assets over the time series of an investment; both now and in the future. The adoption of these guidelines in the industry can help remove critical barriers, provide consolidation and enable us to accelerate the transition to a low carbon built environment.

Please visit:

<https://europe.uli.org/wp-content/uploads/2023/06/Transition-Risk-Guidelines-2023.pdf>

## About Savills Investment Management

Savills Investment Management is a dedicated real estate and real-estate debt specialist managing €25.8bn on behalf of institutional investors globally.

Our purpose is to build prosperity by investing in resilient real assets. Our vision is to be a trusted investment manager, respected for our expertise in restorative real estate investment enabling people, communities and eco-systems to thrive.

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