

ULI C Change Case Study: Transition Risk Assessment Guidelines

Q&A on experiences with the guidelines

Sonae Sierra

"A standardised methodology ensures consistency across portfolios, enabling comparability and improving the accuracy of risk assessments."



CChange

ULI C Change Transition Risk Assessment Guidelines were put to test by Sonae Sierra, an international company which pursues an integrated approach to real estate, from shopping to public or living spaces. In this case study, Elsa Monteiro, Director, Sustainability, Guilherme Rodrigues, Associate, Investment Management, Hugo Pinheiro, Senior Associate, Investment Management and Bartolomeu Bernardes, Coordinator, Sustainability Development Services, explain the impact of transition risk assessment on investment modelling for two different retail assets.

What is your current approach to assessing transition risks?

Since 2021, we have carried out studies on most of our owned assets to determine climate-related risks (both physical and transition) and their financial impact. These studies helped us create a challenging and impactful decarbonisation roadmap for our portfolio, and manage risks effectively.

Our assessments look at transition risks such as carbon pricing, the CRREM misalignment year, as well as regulation – including Minimum Energy Performance Standards (MEPS) tied with the Energy Performance Certificate (EPC) obsolescence, or the new Energy Performance of Buildings Directive (EPBD) criteria which will require car parks at our retail assets to have electric vehicle charging points.

In parallel, Sonae Sierra has an ambitious goal to reach net zero greenhouse gas emissions across the whole value chain by 2040, with SBTi-approved 2030 and 2040 targets for Scopes 1,2 and 3.

What are the benefits of having a standardised, industry-wide approach to assessing transition risks?

A standardised methodology ensures consistency across portfolios, enabling comparability and improving the accuracy of risk assessments. It also helps streamline regulatory compliance with initiatives like the EU Taxonomy and SFDR, reducing complexity and uncertainty for all stakeholders.

In addition, it supports better collaboration within the industry, as companies can share knowledge and best practices on decarbonisation and work together to scale practical solutions to shared challenges.

Tools like ULI's Transition Risk Assessment Guidelines, as well as CRREM and SBTi, illustrate how a consistent, industry-wide methodology can accelerate the sector's transition to net zero and address transition risks proactively.

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

Sonae Sierra is a foundational supporter of ULI's C Change programme because we believe that it adds significant value to the real estate industry, particularly regarding transition risks.

We wanted to evaluate the guidelines' applicability and effectiveness in a real-world setting by applying them to specific retail and shopping centre assets. Gathering more market evidence on the impact of transition risks on asset value is essential to accelerating the built environment's decarbonisation efforts.

Using the guidelines allowed us to validate our assumptions about the financial and operational impacts of transition risks, particularly through Discounted Cash Flow (DCF) modelling, while identifying information gaps and data requirements for robust risk assessments. It also enabled us to examine how factors such as energy efficiency requirements, carbon pricing, and decarbonisation

costs could affect each asset's open market value (OMV) and capitalisation rate (cap rate).

How would you describe the transition risk for the buildings you assessed?

Two buildings were selected, quite different in where they are in their lifetime:

1. An old, typical shopping centre, partially renovated, and aligned with the CRREM pathway
2. A reasonably recent, open air shopping centre, partially renovated, misaligned with the CRREM pathway

Both require significant investments in decarbonisation and e-mobility measures.

The assessment highlighted that existing sustainability measures in one of the buildings may be mitigating risk effectively, but ongoing monitoring is necessary. The other building faces higher transition risk, suggesting that further decarbonisation measures or tenant engagement strategies may be needed to maintain competitiveness.

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

Measures applied at the building level can have significant positive impacts on the wider location. For example, investments in energy efficiency and retrofitting enhance the environmental

performance of the building, which can elevate the overall sustainability profile of the area. These upgrades can attract higher-quality tenants, increase foot traffic, and contribute to greater economic activity, benefiting local businesses and the surrounding community.

Additionally, implementing green infrastructure, such as improved mobility solutions, energy efficient systems, and renewable energy installations, helps reduce the building's environmental footprint and improves resource efficiency in the wider location. For example, installing more PVs and improving energy efficiency can create opportunities to share the excess energy generated with the community.

The summary results table is as follows:

Asset 1	As-Is	Transition Risk	Transition Risk - Incl. Shadow Costs
OMV Var. (€)	420 066 000	414 407 000	412 273 000
OMV Var. (%)		-1.3%	-1.9%
Cap rate	6.15%	5.9%	5.8%
Cap rate var. (%)		-3.5%	-5.2%

Asset 2	As-Is	Transition Risk	Transition Risk - Incl. Shadow Costs
OMV Var. (€)	226 369 000	222 584 000	218 388 000
OMV Var. (%)		-1.7%	-3.5%
Cap rate	6.50%	6.2%	5.9%
Cap rate var. (%)		-4.6%	-9.3%

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

As recommended in the guidelines, we integrated transition risks into the DCF, but also added a section with shadow costs to the assessment, which demonstrated the potential value impact of some transition risks which do not affect the actual DCF. The shadows costs included carbon pricing, embodied carbon, the cost of decarbonisation measures implemented by the tenants, as well as the energy costs for the tenant and common services. The energy costs for common areas are particularly important, as these are recharged to tenants and help us understand the financial impact of energy efficiency measures and fluctuating energy prices.

“[The guidelines] provided a robust framework for integrating transition risks into the financial realm. Their structured approach to assessing risks was highly valuable.”

Both assets experienced value depreciation under transition risk assessments, with further reductions when shadow costs were incorporated.

- Asset 1: Market value decreased from about €420 million to €414 million when transition risk was included (a 1.3% fall), and to €412 million with shadow costs (a 1.9% fall).
- Asset 2: Market value decreased from about €226 million to €223 million when transition risk was included (a 1.7% fall), and to €218 million with shadow costs (a 3.5% fall).

Capitalisation rates compressed by **3.5% to 9.3%** across the two assets, reflecting how transition risks influence investor yield expectations. Normally, lower cap rates would imply higher valuations, but here the reductions in projected income driven by transition costs outweigh that effect, leading to overall value declines.

However, these declines are modest in comparison to past economic crises - the 2007–09 financial crisis, the European Sovereign Debt Crisis or the COVID-19 pandemic.

What about the qualitative risks impacting the shadow costs?

Only quantitative risks were included in our analysis. However, several qualitative risks are also relevant.

Sonae Sierra faces reputational risks as investors increasingly prioritise sustainable and decarbonised portfolios: co-investors might be willing to exit the asset if its pathway is misaligned with the net zero trajectory. Failing to adequately address transition risks such as carbon pricing, energy performance and embodied carbon reduction could harm our reputation as a sustainability leader, potentially deterring certain investors. With our commitment to ambitious goals like achieving carbon neutrality by 2040, any delays or perceived shortcomings could erode trust among stakeholders, impacting capital inflows and investor confidence.

Access to debt capital is similarly affected, as lenders are starting to incorporate ESG metrics into financing decisions. While brown assets are not yet penalised, the trend is towards embedding these requirements into the lending frameworks, and therefore the inability to demonstrate robust decarbonisation plans could increase borrowing



costs or limit access to funding. Sonae Sierra's proactive measures, including green certifications and decarbonisation roadmaps, strengthen its position in securing favourable financing terms, but ongoing investment in retrofits is critical to maintaining this advantage.

Internal resourcing also presents a challenge, as transitioning to a low-carbon portfolio requires expertise in sustainability, including such topics as energy modelling, carbon accounting or reporting frameworks.

Finally, access to insurance is another significant concern from physical risk perspective, as insurers increasingly assess environmental performance and climate resilience when underwriting properties.

“If the guidelines were widely used across the industry, it would help increase the evidence of the impacts of transition risk on asset value to market, allowing the valuers to consider them in their valuation process.”

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

The results of the assessment reinforce our decision to decarbonise the assets and invest in energy efficiency measures. They mean we will likely allocate capital to assets with better prospects for meeting CRREM and SBTi decarbonisation pathways.

However, the results would have a much higher potential to influence the future plans if the valuers formally included these kind of transition risks in the valuation assessments.

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

This exercise shows that the decarbonisation efforts should be focused not only on the landlord-controlled common services but also on the tenant areas. We will need to incentivise tenant retrofits/ refurbishments to avoid future rent discount requests linked to increases in, for example, energy costs.

Nonetheless, even for the tenants that are sustainability-focused, the shop unit's energy

consumption is not material within their cost structure or sustainability policy, which can make engaging tenants on decarbonisation quite challenging.

The assessment also shows that the current valuation methodology is counterproductive as the investment to decarbonise impacts negatively the OMV of an asset. If valuers integrate transition risk into their models, assets with a comprehensive decarbonisation plan would have a lower risk profile and capitalisation rates, benefiting the valuation.

The guidelines emphasise the need for more transparency and data sharing. Which data is easier to share, and which is more challenging?

First and foremost there must be a willingness from all parties to share data with the other real estate players and the market. Without this determination, the transparency is lost and the players most willing to disclose information might be at a disadvantage.

Tenant data is the Achilles' heel: both the energy consumption and the cost of decarbonisation measures are still not fully disclosed to building owners.



What was your overall experience of using the guidelines?

The overall experience was positive, as they provided a robust framework for integrating transition risks into the financial realm. Their structured approach to assessing risks was highly valuable.

However, data availability for more complex metrics like embodied carbon and tenant-specific energy usage posed a challenge.

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

Yes, if the guidelines were widely used across the industry, it would help increase the evidence of the impacts of transition risk on asset value to market, allowing the valuers to consider them in their valuation process.

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://cchange.uli.org/>

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. You can read the guidelines [here](#).

To facilitate the industry-wide adoption of the guidelines, ULI is developing Preserve - an open-source tool for consistently and transparently quantifying transition risks in discounted cash flow models. You can learn more about Preserve [here](#).

About Sonae Sierra

Sonae Sierra is a multinational company that operates in an integrated manner in the real estate business, focusing on urban transformation and innovation. With projects carried out in more than 35 countries, it currently manages around 7 billion euros in assets. Sierra's sustainability strategy has always been a differentiating element and one of the main pillars of the company's positioning in all business areas.

Contacts and C Change partners

ULI Europe project staff

Lisette van Doorn, CEO

Sophie Chick, Vice President, ESG Programmes

Aleksandra Smith-Kozłowska,
Director, Research, Europe

Emily Hallworth, Manager, ESG Programmes

Sonae Sierra staff

Elsa Monteiro, Director, Sustainability

Bartolomeu Bernardes, Coordinator, Sustainability
Development Services

Guilherme Rodrigues, Associate, Investment
Management

Hugo Pinheiro, Senior Associate, Investment
Management

Partners:



Supporters:

