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KLEPIERRE

# FORUM DUISBURG CLIMATE RELATED RISK ASSESSMENT

## Klépierre Duisburg Leasing GmbH

30 March 2026

# QUALITY CONTROL

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|---|---|
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# TABLE OF CONTENTS



LONGEVITY PARTNERS

# INTRODUCTION

# PROJECT OVERVIEW

A climate-related risk assessment has been conducted for Forum Duisburg. The scope of this assessment is as follows:

**1. Exposure to physical hazards and transition risks:**

- Physical Exposure: Assessment of exposure of the asset to different physical hazards using high resolution data under multiple climate scenarios and future time horizons through to 2100.
- Transition Exposure: Examining exposure to different types of relevant legislations, market conditions, technologies, and reputational risk.

**2. Vulnerability assessment:**

- Based on the features and the policies in place at the asset.

**3. Social implications:**

- The social implications of physical and transition climate risks are analysed.

**4. Financial implications:**

- The implications of each relevant risk is examined and indications of capital expenditures for the proposed risk reduction measures are provided.

Please note that a complimentary Appendix Report has been provided, alongside this Executive Summary Report, which outlines the full methodology and the process of risk identification, vulnerability analysis, financial and social implications, and recommendations to improve climate resilience.

These reports are compliant with EU taxonomy; TCFD/ISSB reporting; BREEAM in Use certification (credits RSL01, RSL03, RSL06, RSL07 and RSL08); BREEAM New Construction (WST05); and GRESB benchmarking RM5, 6.1, 6.2, 6.3 and 6.4. Please see the appendix tables at the end of this report for the compliance achieved for this specific asset.

# BACKGROUND

## Asset Background

Location: Königstrasse 48, Duisburg, Germany

Asset Type: Shopping Centre

Construction Year: 2008

Gross Internal Area: 102.101 $m^2$

Number of Floors: 4

## Climate Background (Duisburg, Germany)

- Temperate climate with maritime influence;
- Cool winters and warm summers;
- Extreme weather conditions becoming more common;
- 10 warmest years in Germany on record in last 25 years;
- The average annual precipitation in Duisburg between 1991 and 2020 was 776 mm;
- Summers are predicted to become warmer and drier, winters are predicted to become milder and wetter.

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# PHYSICAL RISK ASSESSMENT

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# EXPOSURE

Physical exposure data is summarised for all material hazards. Scenario analysis is available for data sourced from Munich Re Location Risk Intelligence due to climate modelling capabilities. Refer to the Appendix Report for absolute variable indicators as well as for the exposure projections of immaterial hazards.

| Hazard | Present | SSP2/RCP4.5 | | | | SSP3/RCP7 | | | | SSP5/RCP8.5 | | | | Sensitivity | Adaptive Capacity-Related Risk |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2030 | 2040 | 2050 | 2100 | 2030 | 2040 | 2050 | 2100 | 2030 | 2040 | 2050 | 2100 | Present | Present |
| Cold Wave / Frost | High | High | High | High | Medium | High | Medium | Medium | Low | High | High | Medium | Low | Medium | Low |
| Hail | High | | | | | | | | | | | | | Medium | Medium |
| Heavy Precipitation | Medium | Medium | Medium | Medium | Medium | Medium | Medium | Medium | Medium | Medium | Medium | Medium | Medium | Medium | Medium |
| Storm | Medium | | | | | | | | | | | | | Low | Low |
| Tornado | Medium | | | | | | | | | | | | | Low | Medium |

# TRANSITION RISK ASSESSMENT

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# POLICY AND REGULATION

The key pieces of EU, national and local legislation relevant to this report's aims which should be considered and aligned to are the following:

- **Gebäudeenergiegesetz (GEG)**
- **Bauordnung (BauO) NRW & SAN-VO NRW**
- **Wärmeplanungsgesetz (WPG) & Duisburg municipal heat plan**
- **Energy Performance of Buildings Directive (EPBD)**
- **EU F-gas Regulation 2024/573 + German ChemKlimaschutzV**
- **CSRD / ESRS climate reporting**

| | EXPOSURE | SENSITIVITY | ADAPTIVE CAPACITY-RELATED RISK | OVERALL RISK |
|---|---|---|---|---|
| POLICY | HIGH | MEDIUM | MEDIUM | MEDIUM |

Particularly, Forum Duisburg should be aware of the EU, German and NRW regulatory framework for existing large non-residential buildings. This includes the GEG, which can require building automation and control systems for larger technical plant, and NRW's solar obligation, which may apply if a full roof renewal is undertaken.

The asset should also consider the Wärmeplanungsgesetz and Duisburg's municipal heat plan because the building is connected to district heating. In addition, the recast EPBD and the EU F-gas framework may increase future compliance pressure for building performance and cooling-related systems.

Key building features of Forum Duisburg that impact the sensitivity and adaptive capacity include:

- District heating connection and decarbonisation pathway
- Type of cooling equipment and refrigerants used
- Roof condition and suitability for future PV installation
- Energy performance and technical services systems
- Asset-level sustainability targets, data quality, and transition planning maturity
- Metering boundaries, landlord/tenant split, and annual end-energy consumption

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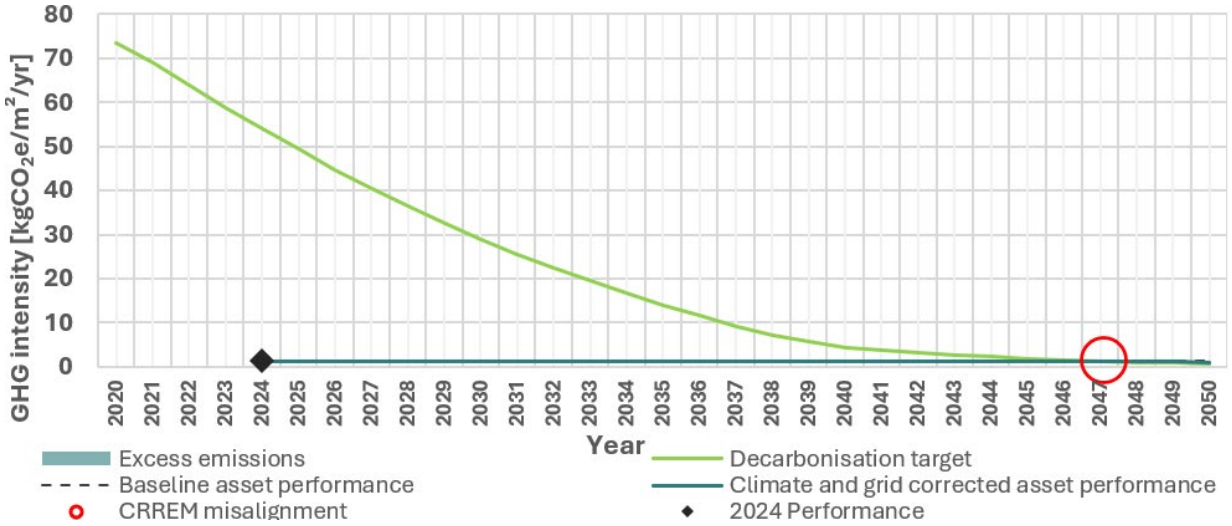
# MARKET




The preliminary step to reach carbon net-zero is to set annual carbon emission reduction targets which align with national decarbonisation targets for the Retail Shopping Centre asset type, as defined by the Paris Agreement in 2015.

These specific targets are illustrated in the appendices of this report, and the full CRREM analysis summary is available in the Appendix Report.

This misalignment diagram from CRREM v2.07 compares the asset's future greenhouse gas intensity performance (blue line) with the target decarbonisation pathways for the Retail Shopping Centre asset type in Germany (green line).

Based on the 2024 consumption data, Forum Duisburg will become misaligned from the CRREM pathways in 2048, which means that from that point it will no longer be aligned to the decarbonisation trajectory required to meet the Paris Agreement targets consistent with a 1.5°C limit on warning.

Carbon emissions will need to be reduced before the asset becomes misaligned in order to achieve compliance with national targets.

| | EXPOSURE | VULNERABILITY | OVERALL RISK |
|---|---|---|---|
| MARKET | MEDIUM | MEDIUM | MEDIUM |

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# TECHNOLOGY

The technologies considered to have a material risk for Forum Duisburg based on the competitiveness and regulations in Germany are:

## Automatic Meter Readings

- Mandatory rollout of smart meters for most buildings by 2032
- Replacement of conventional meters required
- Responsibility lies with metering operators (8-year rollout window)

## EV Charging Points

- Mandatory minimum EV charging infrastructure in many buildings
- New buildings must include future-ready cabling at scale
- Existing non-residential assets require at least once charger.

## Smart Building Technologies

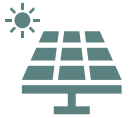
- Mandatory automation for large non-residential buildings. Systems must monitor and optimise energy use
- Integration across building systems required

## Natural Gas Boilers

- Gradual phase-out of fossil fuel heating (target: 2045)
- New systems must be ≥65% renewable energy
- Compliance deadlines depend on location and building type

## Onsite Renewable Energy

- Strong financial incentives for PV (subsidies + feed-in tariffs)
- 0% VAT on solar systems significantly reduces upfront cost
- Size limits apply depending on building type



## Green Energy Contracts

- Wide availability of renewable electricity supply options
- Major utilities and specialised providers offer green tariffs
- Easy pathway to reduce operational carbon without capex

| TECHNOLOGY | EXPOSURE | SENSITIVITY | ADAPTIVE CAPACITY-RELATED RISK | OVERALL RISK |
|---|---|---|---|---|
| | HIGH | MEDIUM | MEDIUM | HIGH |

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# REPUTATION

The reputation risk assessment outlines the risks associated with changing markets and user preferences due to the transition to a low carbon economy and highlights current trends and the impacts these could have on Forum Duisburg.

| REPUTATION | EXPOSURE | VULNERABILITY | OVERALL RISK |
|---|---|---|---|
| | VERY HIGH | LOW | HIGH |

| Trends | Reputation Analysis |
|---|---|
| Rising Consumer Expectations | Consumers increasingly demand transparency on climate impact, making retailers reputationally exposed if they lag on sustainability. |
| Tenant and Brand Risk Translates into Landlord Risk | As retail brands face climate backlash, landlords that host them are also criticised for enabling unsustainable operations. |
| Green Building Certifications | Assets with certifications like LEED or BREEAM are seen as reputationally safer, while those uncertified risk being perceived as outdated or irresponsible |
| Urban and Flagship Stores Under Greater Scrutiny | High-visibility locations amplify reputational risks, with climate-related criticism more likely to attract public and media attention. |
| NGO and Activist Pressure | Retailers are prime NGO targets given their consumer reach, creating reputational spillovers for property owners and investors. |
| Integration of ESG into Investor Due Diligence | Investors now factor retail climate reputational risks into capital allocation; penalising assets linked to unsustainable practices. |

# SOCIAL IMPLICATIONS

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# SOCIAL IMPACT ASSESSMENT

Climate-related risks can create social implications for all asset-related stakeholders. These implications can affect the economic stability, safety and well-being of individuals and communities, as well as the financial performance and sustainability of real estate assets. Some such implications are listed below.

| Category | Social Implication |
|---|---|
| **Health** | ➢ Increased morbidity and mortality<br>➢ Vector-borne diseases |
| **Tenant Disruption** | ➢ Displacement and migration<br>➢ Industry disruptions |
| **Economic Inequality** | ➢ Access to affordable buildings<br>➢ Increased costs |
| **Social Inequality** | ➢ Vulnerability of marginalised groups |
| **Social Disruption** | ➢ Divestment campaigns<br>➢ Social movements<br>➢ Community resistance |
| **Service Disruption** | ➢ Networks and Resources |
| **Strategic Shifts** | ➢ Training and awareness<br>➢ Investment redirection |

## Potentially Material Implications

- Health and safety
- Tenant Disruptions
- Economic Inequality
- Social Inequality
- Social Disruption
- Strategic Shifts

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# COMMUNITY RISKS

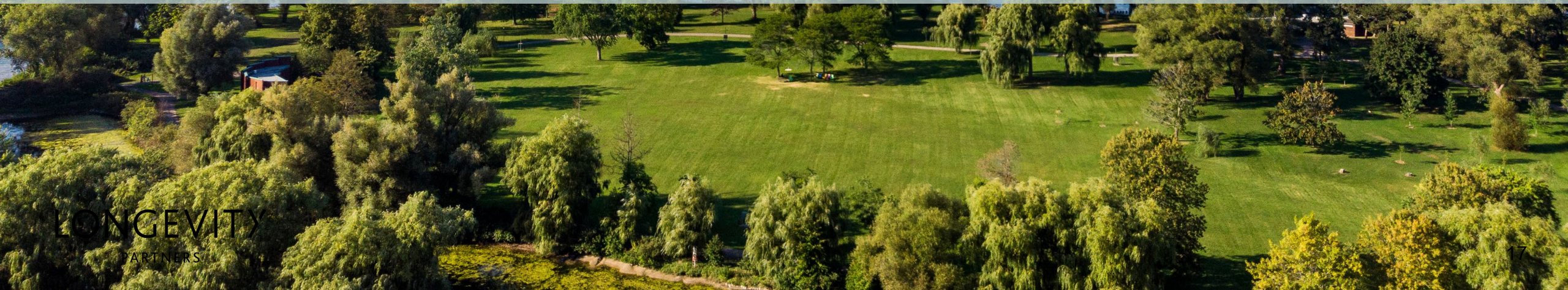
Addressing the social implications of physical and transition climate risks in real estate requires a collaborative approach among all stakeholders. This involves integrating climate resilience and sustainability into planning and investment decisions, prioritising the well-being of building occupiers and the community, and ensuring that adaptation and transition efforts are equitable and inclusive.

In this context, it is important to identify relevant risks to and from the community. The table below illustrates that, for Forum Duisburg, the most significant vulnerabilities relate to ‘reduced customer visits’, ‘employee availability’ and ‘connectivity and transport implications’.

| Risks to and from the Community | Forum Duisburg Vulnerability |
|---|---|
| Reduced Customer Visits and Employee Availability | HIGH |
| Connectivity and Transport Implications | HIGH |
| Work Disruption and Employment Challenges | MEDIUM |
| Health Issues | MEDIUM |
| Energy Costs for Tenants | MEDIUM |
| Damage to the Building | MEDIUM |
| Power Outages and Damage to the Building | LOW |
| Demand for Emergency Supplies | LOW |

For specific recommendations relating to applicable community risks, refer to the Appendix Report.

# FINANCIAL IMPLICATIONS



# FINANCIAL IMPACT ASSESSMENT

Climate-related risks can have severe financial implications on an asset. A financial assessment was conducted as a factor of the identified risks at the asset to determine the degree of material impact on the asset structure and contents, its operations and financial planning thereafter.

## IMPACTS DUE TO PHYSICAL RISK

| | |
|---|---|
| | Potential for increased insurance costs or reduced insurance availability |
| | Increased operating costs due to need for increased resources (energy/water) to adapt to changing climates |
| | Potential business disruption due to damages to assets and physical property caused by extreme events |
| | Costs to repair damaged assets or increased maintenance costs from wear and tear |
| | Employee injury or illness causing increased health costs and reduced business costs due to time taken off work |

## IMPACTS DUE TO TRANSITION RISK

| | |
|---|---|
| | Reduced economic activity in vulnerable markets |
| | Reduced occupier demand for properties |
| | Reduced asset values |
| ★★☆ | Risk to company brand and reputational damages from negative stakeholder feedback if no action is taken |
| | Lower liquidity and reduced attractiveness of assets without climate resilient measures |
| | Increased cost of business due to compliance measures |
| | Increased taxes from climate policies (e.g., carbon taxes) |
| | Loss of funding opportunities |
| | Increased costs of resources such as energy and water |
| | Investment into climate initiatives |
| | Reduced sales due to increased financial burden of climate change on customers |
| | Investment into low-carbon infrastructure and systems |

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# CLIMATE EXPECTED LOSS AND DAMAGE

**Climate Expected Loss** is the average annual loss due to physical damage to buildings and their contents due to tropical cyclone, extratropical storm, river flood (defended) or storm surge (defended) events.
The **1-in-100 Year Damage** measures the mean damage degree to an affected asset at a location-specific hazard intensity for tropical cyclone, extratropical storm, river flood (defended) or storm surge (defended) events with a return period of 100 years.

The table shows current projections of expected loss and damage percentages only, with the only modelled hazard with projected financial implications being extratropical storm. Refer to the Appendix Report for future time horizon projections for climate expected losses, as well as financial implication analysis relating to transition-related risks (CRREM analysis).

| | Expected Loss (%) | Damage (%) |
|---|---|---|
| Tropical Cyclone | 0.00% | 0.00% |
| Extratropical Storm | 0.03% | 0.10% |
| River Flood (defended) | 0.00% | 0.00% |
| Storm Surge (defended) | 0.00% | 0.00% |

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# CONCLUSION AND IMPLEMENTATION PLAN

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# SUMMARY OF RISKS - PHYSICAL

The overall risk for each material physical hazard is summarised in the table below. These ratings are calculated from inputs of 50% exposure and 50% vulnerability, as explained in more depth in the methodology of the Appendix Report.

| Hazard | Present | SSP2/RCP4.5 | | | | SSP3/RCP7 | | | | SSP5/RCP8.5 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2030 | 2040 | 2050 | 2100 | 2030 | 2040 | 2050 | 2100 | 2030 | 2040 | 2050 | 2100 |
| Cold Wave / Frost | Medium | Medium | Medium | Medium | Medium | Medium | Medium | Medium | Low | Medium | Medium | Medium | Low |
| Hail | Medium | | | | | | | | | | | | |
| Heavy Precipitation | Medium | Medium | Medium | Medium | Medium | Medium | Medium | Medium | Medium | Medium | Medium | Medium | Medium |
| Storm | Medium | | | | | | | | | | | | |
| Tornado | Medium | | | | | | | | | | | | |

The asset is projected to be at material exposure to the physical hazards of heavy precipitation, temperature variability, cold wave/ frost, hail, storm and tornado.

In order to ascertain the full extent of the resilience of the asset to these physical hazards, a vulnerability assessment was conducted. This determined the overall risk levels illustrated in this table. For a full methodology breakdown, refer to the Appendix Report.

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# SUMMARY OF RISKS - TRANSITION

The overall risk for each material transition hazard is summarised in the table below. These ratings are calculated from inputs of 50% exposure and 50% vulnerability, as explained in more depth in the methodology of the Appendix Report.

| Hazard | Overall Risk (Present) | Sensitivity | Adaptive Capacity-Related Risk |
|---|---|---|---|
| Technology | HIGH | MEDIUM | MEDIUM |
| Reputation | HIGH | LOW | |
| Policy and Legislation | MEDIUM | MEDIUM | MEDIUM |
| Market | MEDIUM | MEDIUM | |

As seen in the table, the transition-related risks of most overall risk significance are Technology and Reputation. These output ratings are a combination of exposure and vulnerability analyses, as outlined in more depth in the Appendix Report.

The combination of the material physical and transition hazards could lead to the following key aspects of the building being impacted:

1. Roofing materials and integrity
2. Exterior wall materials and insulation
3. Windows and glazing systems
4. HVAC (Heating, Ventilation, and Air Conditioning) systems
5. Water supply and plumbing infrastructure
6. Landscaping and vegetation around the building
7. Foundation stability and soil moisture levels
8. Building envelope integrity and air leakage
9. Energy efficiency of the building
10. Interior comfort and air quality

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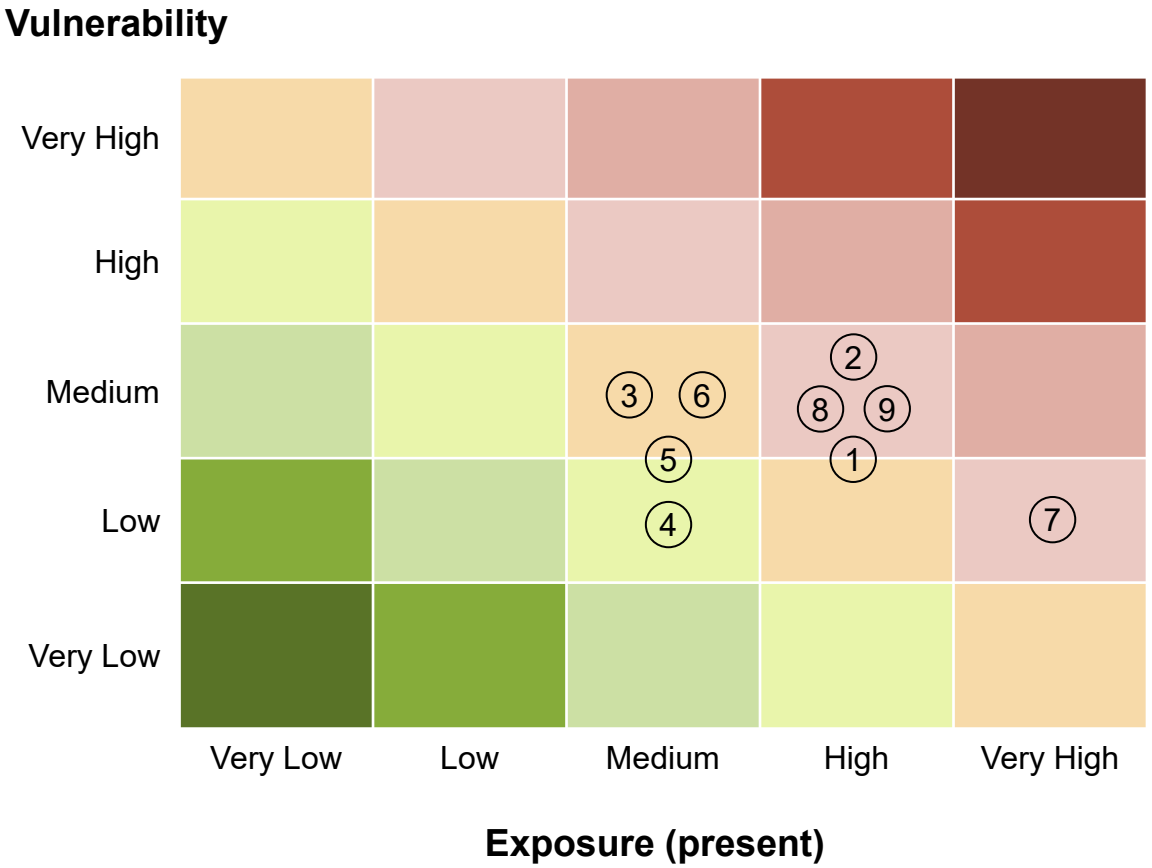
# RISK PRIORITISATION

The heat map below illustrates the vulnerability and exposure of the identified material physical risks, and the transition risks.




| Physical Risks | Transition Risks |
|---|---|
| 1. Cold Wave / Frost | 6. Market |
| 2. Hail | 7. Reputation |
| 3. Heavy Precipitation | 8. Policy and Legislation |
| 4. Storm | 9. Technology |
| 5. Tornado | |

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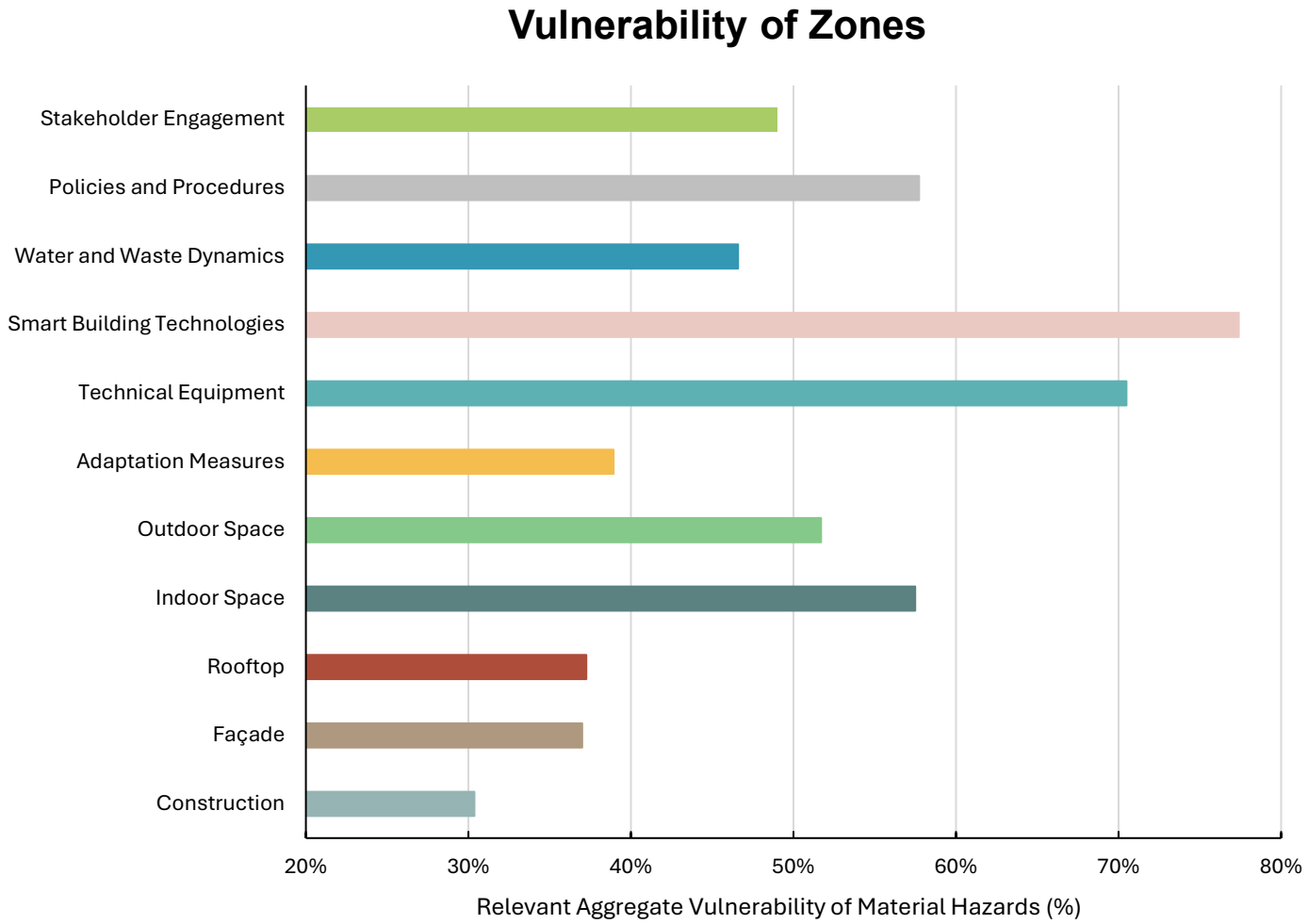
# VULNERABILITY OF ZONES

The graph illustrates the most vulnerable elements of the building to the perceived material hazards and thus where remediation and resiliency enhancement should be focused.

The results have determined that the zones of most significant relative vulnerability are Smart Building Technologies and Technical Equipment.

It is therefore Longevity Partner's advice to focus, where possible, on these aspects of the building when considering phased action aligned with the recommendations of this report.

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# RECOMMENDATIONS/ADAPTATION PLAN

A risk reduction plan should be implemented based on the identified significant climate risks which, to date, do not have sufficient risk reduction measures installed to mitigate the risk (as determined by the vulnerability analyses in the Appendix Report).

The key recommendations to be prioritised are listed below, with the full list of recommendations provided the Appendix Report. We recommend that high priority measures are implemented first where possible.

| Priority | Risk Reduction Measures | Impact | Indicative Costs | Hard or Soft Measure | Risk Addressed | Implementatinon Timeline |
|---|---|---|---|---|---|---|
| **VERY HIGH** | *Develop an asset or corporate-level health and safety policy* | *Improves emergency preparedness and protects staff, tenants and visitors* | *Internal resourcing* | *Soft* | *Cold / Frost, Tornado, Heavy precipitation, Storm and Hail* | *2026* |
| **HIGH** | *Weather monitoring and early warning system* | *Enables earlier response to severe weather and reduces disruption* | *Internal resourcing* | *Soft* | *Storm, Tornado, Heavy precipitation and Hail* | *2026* |
| **HIGH** | *Increase (roof) vegetation* | *Helps absorb rainfall and reduces surface water runoff* | *Local provider consultation necessary* | *Hard* | *Cold / Frost and Heavy precipitation* | *Within the next year* |
| **HIGH** | *Check (& upgrade) Glazing type* | *Improves resilience to impact, wind and extreme weather* | *Local provider consultation necessary* | *Hard* | *Cold / Frost, Hail, Storm and Tornado* | *Within the next year* |
| **MEDIUM** | *Installation of storm shutters* | *Reduces storm damage risk and protects the building envelope* | *€350-1200 (electric shutters)* | *Hard* | *Storm, Tornado* | *Immediately* |

*Note that the indicative investment costs may be expensive at the time of implementation, but the gain in energy efficiency and equipment durability will reduce operational costs and can be beneficial for the resilience of the building or for its resale.*

# CO-BENEFITS

✓ Benefit to this hazard or category

✗ May exacerbate or increase the negative impact of this category

⊘ No impact on this hazard on this category

± Could have a positive or negative impact depending on the type or management of this measure

| Measures | Cold Wave / Frost | Hail | Heavy Precipitation | Storm | Tornado | Health and Wellbeing | Biodiversity | Carbon Emissions |
|---|---|---|---|---|---|---|---|---|
| Health and Safety Policy | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ⊘ | ⊘ |
| Weather Monitoring and Early Warning System | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ⊘ | ✓ |
| Vegetation | ✓ | ⊘ | ✓ | ± | ± | ✓ | ✓ | ± |
| Glazing | ✓ | ✓ | ⊘ | ✓ | ✓ | ✓ | ± | ± |
| Storm shutters | ⊘ | ✓ | ⊘ | ✓ | ✓ | ✓ | ⊘ | ⊘ |

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# APPENDICES

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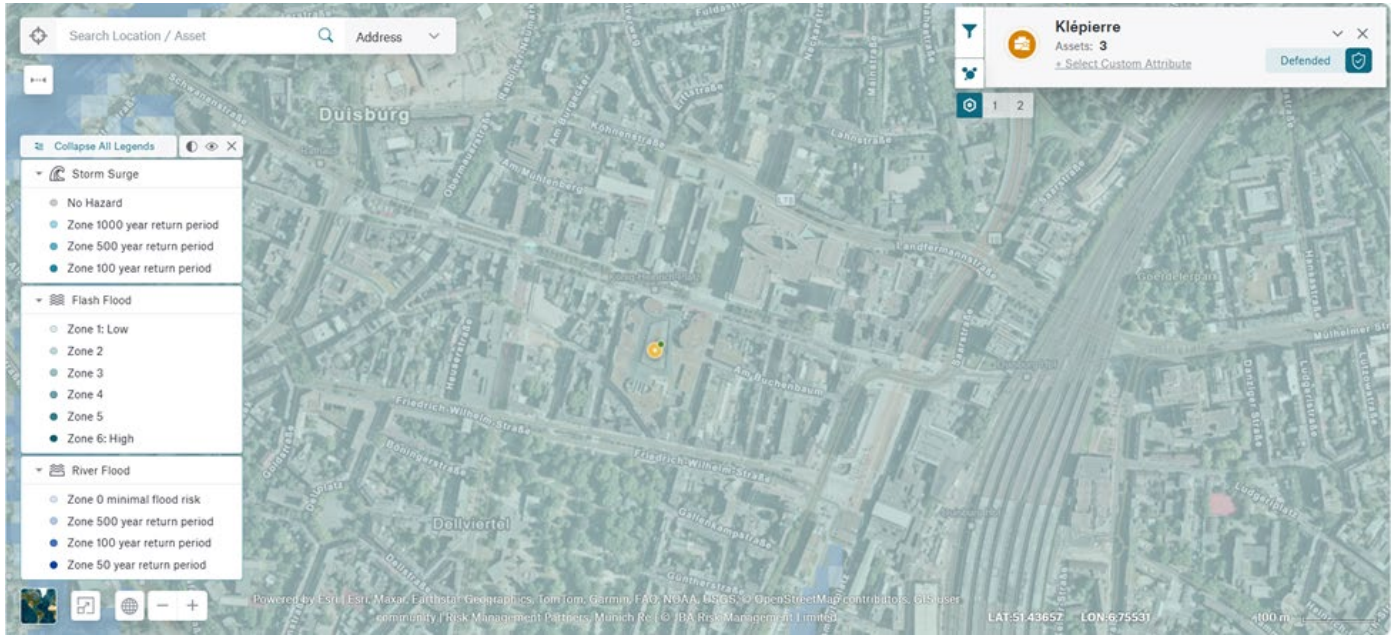
# APPENDIX 1: FLOOD

The flood hazard, from Munich Re Location Risk Intelligence's modelling, was found to be immaterial. The flood risk map below illustrates the lack of exposure of the asset's location to flooding.




The flood map illustrates the projected present-day exposure of the asset location to all flood sources covered by Munich Re Location Risk Intelligence (flash flood, storm surge, and river flood).

Note that the exposure to these flood sources is not material at present or under any SSP scenario from present day through to 2100.

The flood risk zones in the surrounding area (including the inner harbour) are located at a sufficiently safe distance from the asset.

Note that in addition to the flood risk analysis conducted by Munich Re, 'hochwasserkarten.nrw.de' was checked to confirm the finding that flood risk at the asset location is not material.

# APPENDIX 2: EU TAXONOMY COMPLIANCE

| Category | Severity | Climate-related hazards | Materiality |
|---|---|---|---|
| Temperature-related | Chronic | Changing Temperature (Air, Freshwater, Marine Water) | Low materiality |
| | | Heat Stress | Low materiality |
| | | Temperature Variability | Low materiality |
| | | Permafrost Thawing | Very low materiality |
| | Acute | Heat Wave | Very low materiality |
| | | Cold Wave / Frost | High materiality |
| | | Wildfire | Very low materiality |
| Wind-related | Chronic | Changing Wind Patterns | Very low materiality |
| | Acute | Cyclone / Hurricane / Typhoon | Very low materiality |
| | | Storm (Including Blizzards, Dust and Sandstorms) | Medium materiality |
| | | Tornado | Medium materiality |
| Water-related | Chronic | Changing Precipitation Patterns and Type (Snow/Ice, Hail, Rain) | Very low materiality |
| | | Precipitation Or Hydrological Variability | Low materiality |
| | | Ocean Acidification | Very low materiality |
| | | Saline Intrusion | Very low materiality |
| | | Sea Level Rise | Very low materiality |
| | | Water Stress | Very low materiality |
| | Acute | Drought | Low materiality |
| | | Heavy Precipitation (Rain, Hail, Snow/Ice) | Medium materiality |
| | | Flood (Coastal, Fluvial, Pluvial, Ground Water) | Very low materiality |
| | | Glacial Lake Outburst | Very low materiality |
| Solid mass-related | Chronic | Coastal Erosion | Very low materiality |
| | | Soil Degradation | Very low materiality |
| | | Soil Erosion | Very low materiality |
| | | Solifluction | Very low materiality |
| | Acute | Avalanche | Very low materiality |
| | | Earthquake / Landslide | Very low materiality |
| | | Subsidence | Low materiality |

The analyses undertaken are aligned with the EU Taxonomy criteria for DNSH to climate change adaptation* - thereby contributing to the asset's overall alignment under the climate change mitigation objective (Activity 7.7. Acquisition and ownership of real estate).

The materiality rating of hazards is as in the present day, or as near to as is applicable. Note that low materiality hazards may have projections of increases to medium (material) or higher exposure risks in the medium or long term. Please refer to the Appendix Report for a more in-depth breakdown of projected exposure risks from Munich Re Location Risk Intelligence.

** The physical climate risks that are material to the building have been identified by performing a robust climate risk and vulnerability assessment with the following steps:*

*1. Identification of physical climate risks from list in Annex and how they may affect the building over its expected lifetime.*
*2. If risks have been identified in (1), conduct a climate risk and vulnerability assessment to assess the materiality of those risks for the building.*
*3. Identify adaptation solutions that can reduce identified climate risks.*

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# APPENDIX 3: ACHIEVING CARBON NET-ZERO

The targets used in this assessment are calculated from the CRREM v2 GHG and energy use intensity pathways.

The table proposes the absolute greenhouse gas targets for two decarbonisation scenarios for Forum Duisburg from a baseline 2024 value of 1.00 $kgCO_2e/m^2/yr$, using a location-based emission analysis.

The percentage reductions from the baseline emissions in 2024 are stated. The scenarios presented are:

1. To align to the CRREM 1.5°C trajectory by 2050
2. To align to Net Zero by 2040

The asset's energy intensity is already below the CRREM 2050 target pathway. As a result, no further reduction is required for CRREM compliance. The asset is therefore already compliant with the CRREM targets and only needs to maintain its current performance level through to 2050.

## Absolute Reduction Targets

| | CRREM 2050 1.5°C Trajectory | | | CRREM 2040 1.5°C Trajectory | | |
|---|---|---|---|---|---|---|
| Year | Absolute emissions ($kgCO_2e/yr$) | Intensity Emissions ($kgCO_2e/m^2/yr$) | Percentage target reduction (from 2024 baseline) | Absolute emissions ($kgCO_2e/yr$) | Intensity Emissions ($kgCO_2e/m^2/yr$) | Percentage target reduction (from 2024 baseline) |
| **2024** | 102.101 | 1,0 | 0,0% | 102.101 | 1,0 | 0,0% |
| **2025** | 98.940 | 0,9 | 3,1% | 98.702 | 1,0 | 3,3% |
| **2030** | 84.481 | 0,8 | 17,3% | 83.154 | 0,8 | 18,6% |
| **2035** | 74.151 | 0,7 | 27,4% | 72.047 | 0,7 | 29,4% |
| **2040** | 67.390 | 0,7 | 34,0% | 64.777 | 0,6 | 36,6% |
| **2045** | 65.628 | 0,6 | 35,7% | - | - | - |
| **2050** | 64.777 | 0,6 | 36,6% | - | - | - |

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# APPENDIX 4: BREEAM IN-USE COMPLIANCE

| BIU Credit | Question | Credits achieved through the Longevity Climate Risk Report |
|---|---|---|
| **Part 1: RSL 01 Flood Risk Assessment** | If a flood risk assessment (FRA) has been carried out, what was its scope and which flood risk level was assigned to the asset? | The number of credits gained here depends on the findings in the report. Since fluvial and tidal flooding hazards are less than medium exposure risk, **3 credits are attained**.<br><br>Please note that the **exemplary credit is achieved** from this report but scored separately. Therefore, the total score will be the number of credits above plus the one exemplary credit (1% available). |
| **Part 1: RSL 03 Natural Hazard Risk Assessment** | Has a risk assessment been carried out to understand an asset's exposure to current Natural Hazards? | Longevity Partners drafted a Natural Hazard Emergency Plan alongside this Natural Hazard Exposure Assessment. When implemented, **2 credits are achieved**. |
| **Part 2: RSL 06 Emergency plans and climate-related physical risks** | What is included within the scope of the Emergency plans? | Longevity Partners drafted a Natural Hazard Emergency Plan alongside this Climate-Related Risk Assessment. **One exemplary credit (1% available)** will be achieved. |
| | Has the asset been assessed for climate-related physical risks? | **3 credits will be achieved** from this asset level report ('Yes, and the risks posed to the asset value and the community have been identified'). |
| **Part 2: RSL 07 and RSL 08 Climate-related transition risks and opportunities and Social risks and opportunities** | Has the asset been assessed for exposure to climate-related transition risks and opportunities through a risk assessment process? | **4 credits are attainable** for each of RSL 07 and 08 out of this report, but only if the client are willing to incorporate this onto the website of the asset itself to make it externally disclosed. Longevity Partners can again advise on the wording for this disclosure. Full TCFD reporting, however, is not included within this scope of work but can certainly be provided at an additional cost.<br><br>**2 credits are available** for each of RSL 07 and RSL 08 if this report is not externally disclosed. |
| | Has the asset been assessed for exposure to social risks and opportunities through and risk assessment process? | |

Longevity Partners completed this assessment. A relevant, multi-disciplinary energy and sustainability consultancy who specialise in providing strategic guidance and compliance support.

Natural hazard data comes from Munich Re Location Risk Intelligence, which is a science-based platform. The additional data source for flood exposure analysis is 'hochwasserkarten.nrw.de' .

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# APPENDIX 5: GRESB COMPLIANCE (1)

| GRESB Credit | Risk Criteria | Asset Risk |
|---|---|---|
| **Does the entity have a systematics process for identifying physical risks that could have a material financial impact on the entity?** | Acute hazards | The asset is significantly exposed to the following significant acute GRESB hazards: Cold, Precipitation, Wind & Hail. |
| | Chronic stressors | The asset has material exposure to the GRESB hazard of cold. |
| **The entity's process for prioritising physical risks** | This is the entity's preference. It is recommended that risks are prioritised by severity in the short term under the least stringent climate scenario. | |
| **How materiality determinations are made for such risks** | In this assessment, materiality is determined by any hazard that shows a risk of moderate to extreme under each respective climate scenario and time horizon. | |
| **Does the entity have a systematic process for the assessment of material financial impact from physical climate risks on the business and/or financial planning of the entity?** | Section 7 of the Appendix Report assesses the financial exposure to all direct and indirect physical risk impacts. | |
| **The entity's process for prioritising transition risks** | This is the entity's preference. It is recommended that risks are prioritised by severity in the short term under the least stringent climate scenario. | |
| **How materiality determinations are made for such risks** | In this assessment, materiality is determined by any hazard that shows an exposure risk of medium or higher under any respective climate scenario and time horizon. | |

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# APPENDIX 5: GRESB COMPLIANCE (2)

| GRESB Credit | Risk Criteria | Asset Risk |
|---|---|---|
| **Does the entity have a systematic process for identifying transition risks that could have a material financial impact on the entity?** | Increasing price of GHG emissions | Current carbon price is ~€60/tCO2e under the German national emissions trading system, which is an increase of 689% since 2015, when the price was €7.60/tCO2e under the EU ETS. |
| | Enhancing emissions-reporting obligations | No current emissions-reporting obligation identified, but this may change in future. |
| | Mandates on regulation of existing products and services | Key regulations relevant for the asset are listed in section 5.1.1 of the appendix report. |
| | Exposure to litigation | At lest 71 climate litigation cases have been recorded in Germany. |
| | Costs to transition to lower emissions technology | Indicative Capex to adopt risk reduction measures are provided in the recommendations of this report. |
| | Changing customer behaviour | See analysis in Section 5.1.4 of the Appendix Report. |
| | Uncertainty in market signals – highlight uncertainty of climate models, renewable shares, energy prices, etc | Market analysis and costs of energy and emissions are outlined in Section 5.2.1 of the Appendix Report. |
| | Shifts in consumer preferences | See analysis in Section 5.1.4 of the Appendix Report. |
| | Stigmatisation of sector | See analysis in Section 5.1.4 of the Appendix Report. |
| | Increase stakeholder concern or negative stakeholder feedback | See analysis in Section 5.1.4 of the Appendix Report. |
| **Does the entity have a systematic process for the assessment of material financial impact from transition climate risks on the business and/or financial planning of the entity?** | Section 7 of the Appendix Report assesses the financial exposure to all direct and indirect transition risk impacts. | |

Longevity Partners completed this assessment. A relevant, multi-disciplinary energy and sustainability consultancy who specialise in providing strategic guidance and compliance support.

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