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Arneken Galerie Hildesheim CLIMATE RELATED RISK ASSESSMENT

Klépierre Projekt
Arnekenstrasse Vermietung
GmbH

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QUALITY CONTROL

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QUALITY CONTROL

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An aerial photograph of a dense, lush green forest. A winding road with yellow and blue lane markings curves through the center of the image. The forest is composed of many small, closely packed trees, creating a textured green canopy. The lighting is bright, casting soft shadows within the foliage.

INTRODUCTION

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PROJECT OVERVIEW

A climate-related risk assessment has been conducted for Arneken Galerie Hildesheim. 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: Arnekenstraße 18, 31134 Hildesheim

Asset Type: Shopping Centre

Construction Year: 2012

Gross Internal Area: 62,995 m²

Number of Floors: 3

Climate Background (Hildesheim, Germany)

- Temperate climate with maritime influence;
- Cool winters and warm summers;
- Heatwaves, heavy rainfall and drought periods are becoming more common;
- 10 warmest years in Germany on record in last 25 years;
- The average annual precipitation in Hildesheim between 1991 and 2020 was 780 mm;
- Summers are projected to become hotter and drier, while winters are projected to become milder and wetter.

A low-angle photograph of a modern building with a glass and wood facade, framed by green trees. The building's facade consists of horizontal wooden slats and large glass panels that reflect the sky and surrounding greenery. The trees in the foreground are lush and green, with some branches extending into the frame. The overall scene is bright and clear, suggesting a sunny day.

PHYSICAL RISK ASSESSMENT

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	High	High	High	High	Medium	High	High	High	Low	Medium	Medium
Flood (coastal, fluvial, pluvial, ground water)	High	High		High	High					High		High	High	Medium	Medium
Temperature variability	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Storm	Medium													Low	Medium
Tornado	Medium													Low	Medium
Water stress	Medium					Medium	Medium	Medium	Medium	Medium	Medium	High	High	Medium	Medium
Heavy Precipitation	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Subsidence	Medium	Medium	Medium	High	High	Medium	Medium	Medium	High	Medium	High	High	High	Medium	Low
Hail	Medium													Medium	Medium

A photograph of a wind farm on a grassy hill. Several white wind turbines are visible, with the largest one in the foreground. The sky is filled with soft, colorful clouds from a sunset or sunrise, with the sun partially visible on the right. The overall scene is peaceful and scenic.

TRANSITION RISK ASSESSMENT

POLICY AND REGULATION

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

Building Energy Act / Gebäudeenergiegesetz (GEG)

EU Energy Performance of Buildings Directive (EPBD)

Carbon Pricing under Fuel Emissions Trading Act (BEHG)

Renewable Energy Heat Act / Municipal Heat Planning (Wärmeplanungsgesetz, 2024)

EU Taxonomy for Sustainable Activities (2020)

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

Particularly, Klépierre Projekt Arnekenstrasse Vermietung GmbH should be aware of the EU and German regulatory framework for existing large non-residential buildings. Most critically, the GEG (2024) required any new heating installations to use at least 65% renewable energy, and the EPBD recast (2024) mandates renovation of the worst-performing 16% of non-residential buildings by 2030.

Non-compliance with GEG heating requirements restricts the ability to commission new plant, while failure to meet EPBD renovation thresholds may result in mandatory retrofits and restrict the asset's market value and leaseability.

Key building features of Centrum Galerie Dresden that impact the sensitivity and adaptive capacity, include:



Fuel type used for heating



Type of cooling equipment and refrigerants used



Onsite renewable energy technology presence, such as PV



Energy performance rating

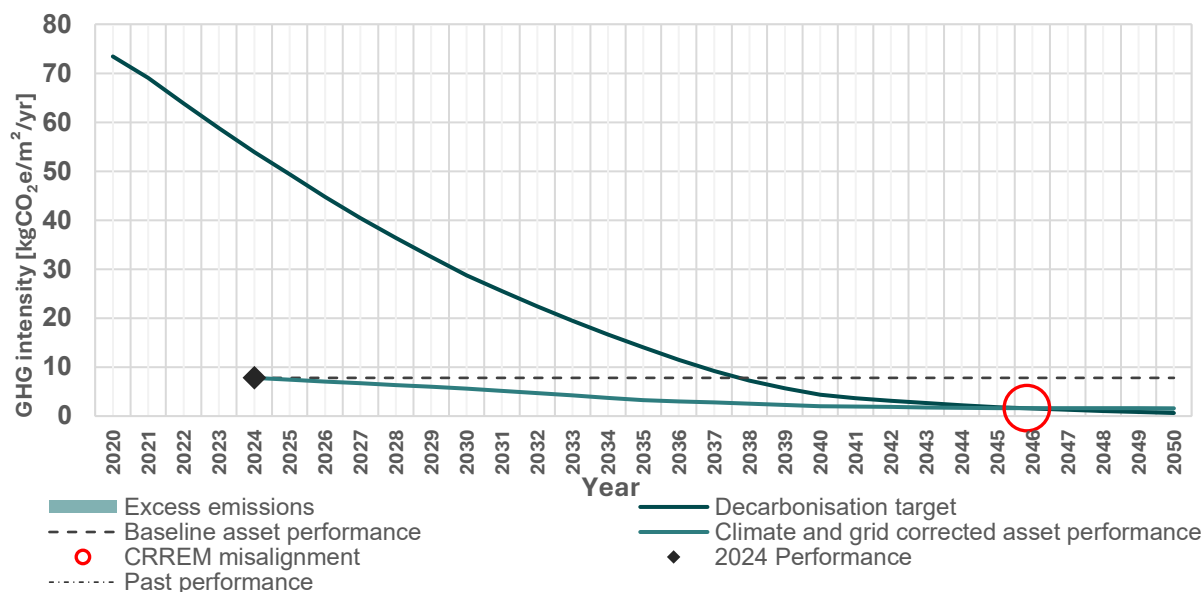


Corporate or asset level targets and policies pertaining to sustainability, green procurement and risk management



Carbon footprinting for scope 1, 2 and 3 emissions

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 compares the asset's future greenhouse gas intensity performance (light green line) with the target decarbonisation pathways for the residential Retail Shopping Centre in Germany (dark green line).

Based on the 2025 consumption data, Arneken Galerie will become misaligned from the CRREM pathways in 2046, 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.

MARKET	EXPOSURE	SENSITIVITY	ADAPTIVE CAPACITY-RELATED RISK	OVERALL RISK
	MEDIUM	MEDIUM		MEDIUM

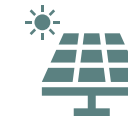
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TECHNOLOGY

The technologies considered to have a material risk in for Arneken Galerie Hildesheim based on the competitiveness and regulations in Germany are:

Automatic Meter Readings	EV Charging Points	Smart Building Technologies	Natural Gas Boilers	Onsite Renewable Energy	Green Energy Contracts
- Mandatory rollout of smart meters for most buildings by 2032 - Replacement of conventional meters required - Responsibility lies with metering operators (8-year rollout window)	- 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	- Mandatory automation for large non-residential buildings. Systems must monitor and optimise energy use - Integration across building systems required	- Gradual phase-out of fossil fuel heating (target: 2045) - New systems must be ≥65% renewable energy - Compliance deadlines depend on location and building type	- 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	- 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	MEDIUM

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 Arneken Galerie Hildesheim.

REPUTATION	EXPOSURE	VULNERABILITY	OVERALL RISK
	HIGH	MEDIUM	MEDIUM

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

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 ➤ Vector-borne diseases
 Tenant Disruption	➤ Displacement and migration ➤ Industry disruptions
 Economic Inequality	➤ Access to affordable buildings ➤ Increased costs
 Social Inequality	➤ Vulnerability of marginalised groups
 Social Disruption	➤ Divestment campaigns ➤ Social movements ➤ Community resistance
 Service Disruption	➤ Networks and Resources
 Strategic Shifts	➤ Training and awareness ➤ Investment redirection



Potentially Material Implications

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

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.

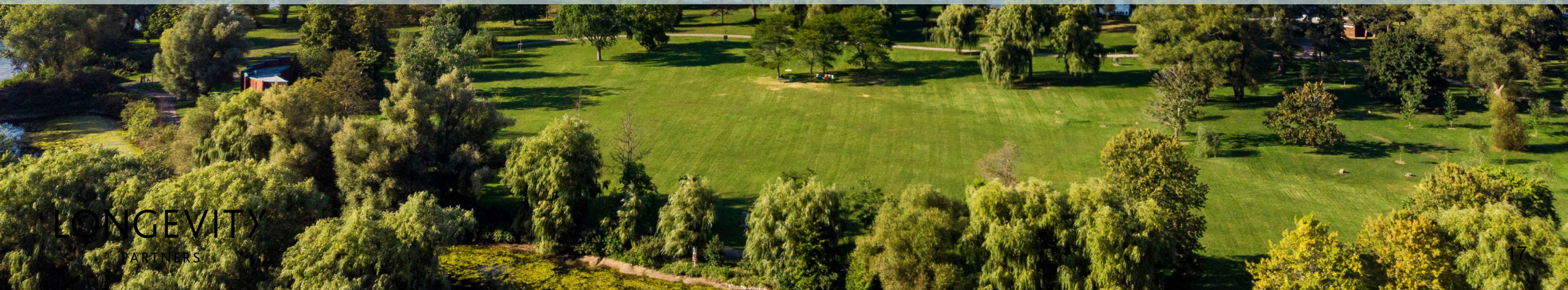
In this context, it is important to identify relevant risks to and from the community. The table below illustrates that, for Arneken Galerie Hildesheim, the most significant vulnerabilities relate to ‘reduced customer visits’, ‘employee availability’ and ‘connectivity and transport implications’.

Risks to and from the Community	Arneken Galerie Hildesheim 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	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 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



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

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	0.04‰	0.10%
River Flood (defended)	0.00‰	0.00%
Storm Surge (defended)	0.00‰	0.00%



CONCLUSION AND IMPLEMENTATION PLAN

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
Flood	High	High		High	High					High		High	High
Cold Wave / Frost	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Low
Hail	Medium												
Storm	Medium												
Tornado	Medium												
Water Stress	Medium					Medium	Medium	Medium	Medium	Medium	Medium	High	High
Subsidence	Medium	Medium	Medium	High	High	Medium	Medium	Medium	High	Medium	High	High	High
Heavy Precipitation	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Temperature Variability	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium

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

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.

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
Policy and Legislation	MEDIUM	MEDIUM	MEDIUM
Technology	MEDIUM	MEDIUM	MEDIUM
Reputation	MEDIUM	MEDIUM	
Market	MEDIUM	MEDIUM	

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

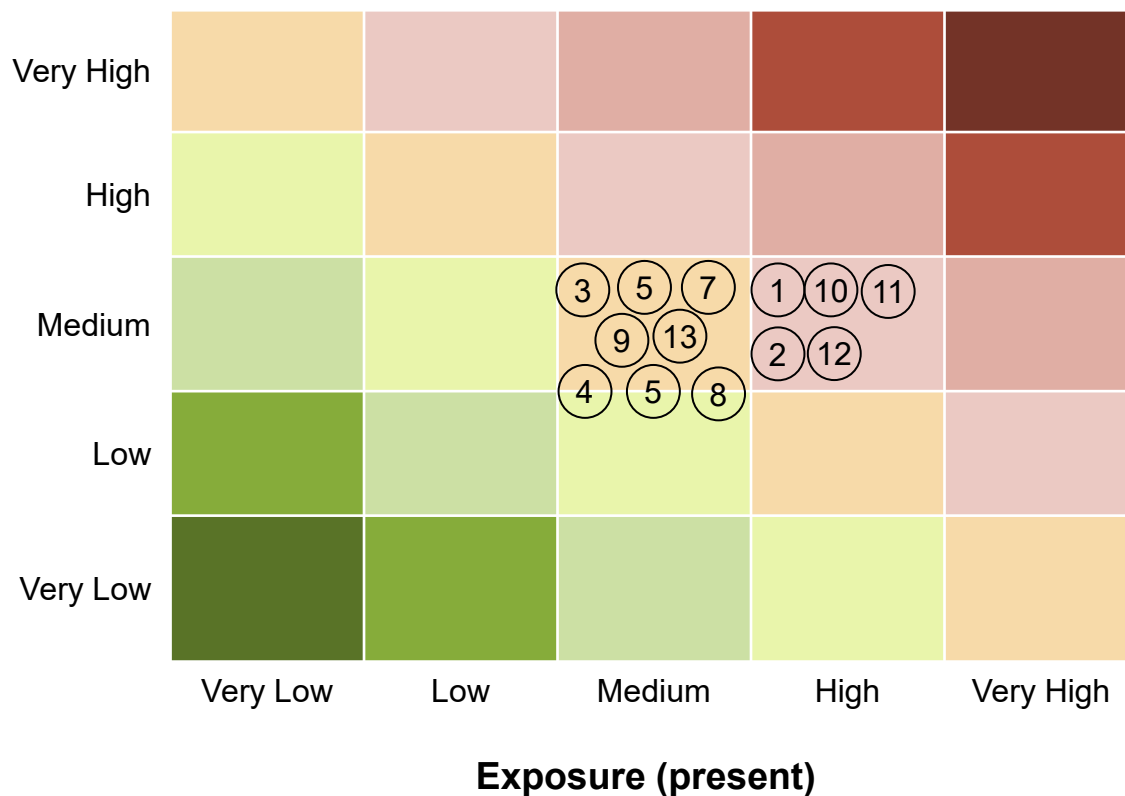
The combination of the material physical and transition hazards could lead to the following key aspects of the building being impacted:

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

RISK PRIORITISATION

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

Vulnerability



Physical Risks

1. Cold wave/ Frost
2. Flood
3. Temperature variability
4. Storm
5. Tornado
6. Water Stress
7. Heavy Precipitation
8. Subsidence
9. Hail

Transition Risks

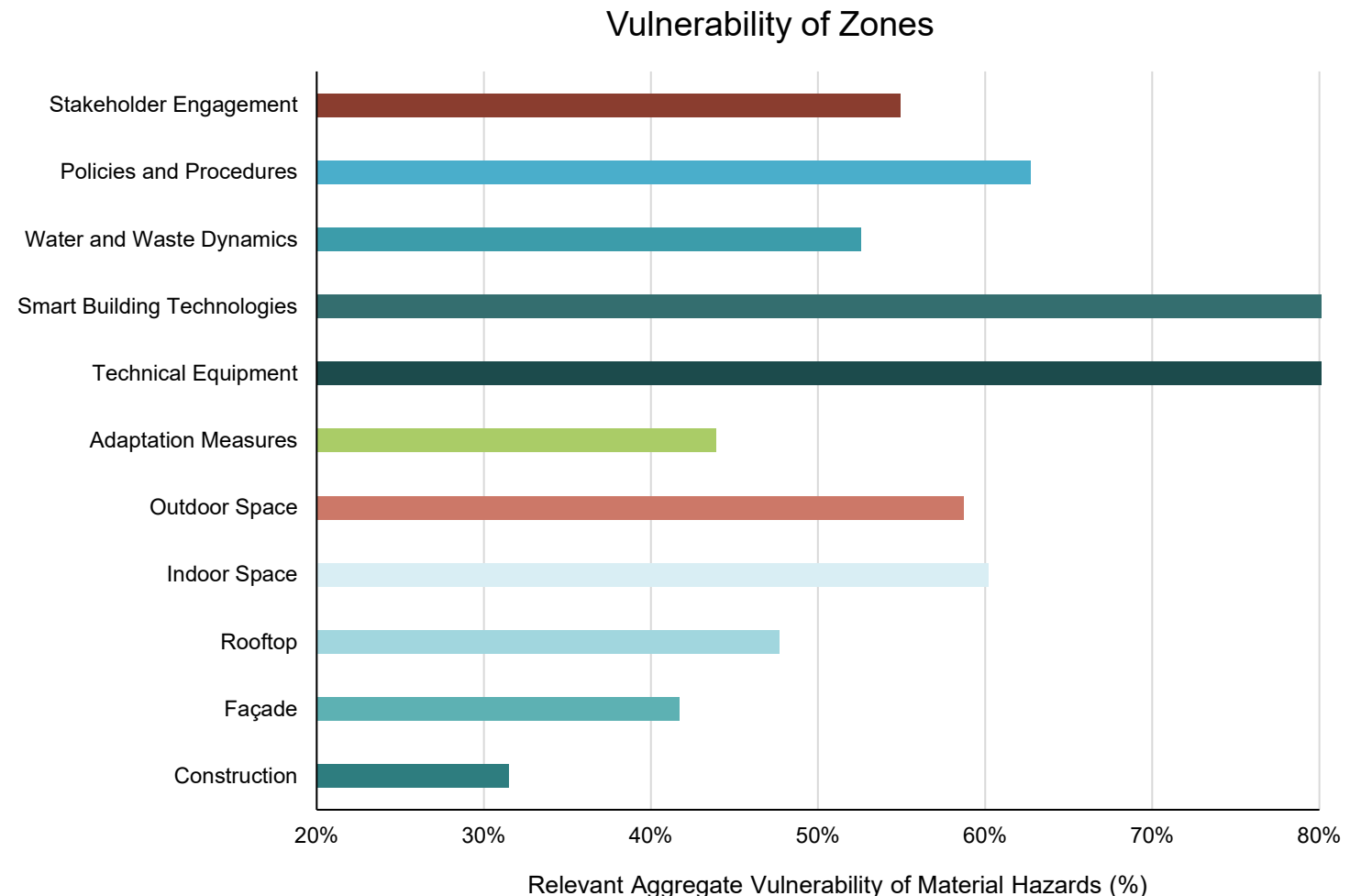
9. Policy and Regulation
10. Technology
11. Reputation
12. Market

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.



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	Implementation Timeline
VERY HIGH	Maintenance and monitoring of water pipes	Prevents pipe bursts and reduces water damage risk during freeze events	Internal resourcing	Soft	Cold Wave / Frost	Immediately
VERY HIGH	Install deployable flood barriers at key entry points	These systems can be rapidly deployed during flood events to prevent water ingress into the building.	Moderate capital expenditure	Hard	Flood / Heavy Precipitation	3–6 months
HIGH	Increase vegetated outdoor area	Helps absorb rainfall and reduces surface water runoff	Local provider consultation necessary	Hard	Cold Wave / Frost, Flood and Heavy Precipitation	Within the next year
HIGH	Track water consumption and implement water efficiency and conservation measures	Reduces water consumption, improves efficiency, and enhances resilience during water scarcity	Internal resourcing	Soft	Water Stress	Within the next 3–6 months
HIGH	Installation of PV / renewable energy sources	Reduces grid electricity consumption, lowers operational carbon emissions, and improves energy cost efficiency through on-site renewable generation	€1,000–€1,800/kWp installed	Hard	Policy and Legal, Market, Technology	Within the next 1–3 years

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.

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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	Flood	Temperature Variability	Tornado	Water stress	Heavy Precipitation	Hail	Health and Wellbeing	Biodiversity	Carbon Emissions
Water pipes maintenance and monitoring	✓	✓	✓	⊘	✓	✓	✓	✓	⊘	⊘
Deployable flood barriers	⊘	✓	⊘	⊘	⊘	✓	⊘	✓	✓	⊘
Increased vegetation	✓	✓	✓	±	±	✓	⊘	✓	✓	✓
Water efficiency and conservation measures	⊘	⊘	⊘	⊘	✓	✓	✓	✓	⊘	✓
Renewable energy sources	✓	⊘	✓	⊘	⊘	⊘	⊘	✓	⊘	✓

An aerial photograph of a two-lane asphalt road winding through a dense forest. The trees are in various stages of autumn, with some showing bright yellow and orange foliage against a backdrop of evergreens. A white semi-truck is visible on the road, moving away from the viewer. A semi-transparent grey banner is overlaid across the middle of the image, containing the word 'APPENDICES' in large, bold, black capital letters.

APPENDICES

APPENDIX 1: FLOOD

The flood hazard, from Munich Re Location Risk Intelligence's modelling, was found to be material. 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 fluvial sources (river) is high at present which remains high under SSP2 and SSP5 scenarios across all future time horizons, while no exposure is projected under SSP3.

Note that in addition to the flood risk analysis conducted by Munich Re, 'geoportal.bafg.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	Medium 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
		Cyclone / Hurricane / Typhoon	Very Low materiality
	Acute	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	Medium materiality
	Acute	Drought	Low materiality
		Heavy Precipitation (Rain, Hail, Snow/Ice)	Medium materiality
		Flood (Coastal, Fluvial, Pluvial, Ground Water)	High 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
		Avalanche	Very Low materiality
	Acute	Earthquake / Landslide	Very Low materiality
		Subsidence	Medium 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.

APPENDIX 1: ACHIEVING CARBON NET-ZERO

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

The first table proposes the absolute greenhouse gas targets for two decarbonisation scenarios for Arneken Galerie Hildesheim from a baseline 2024 value of 7.8 kgCO₂e/m²/yr, using a location-based emission analysis.

The percentage reductions from the baseline emissions and energy intensity 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

Year	CRREM 2050 1.5°C Trajectory			CRREM 2040 1.5°C Trajectory		
	Absolute emissions (kgCO ₂ e/yr)	Intensity Emissions (kgCO ₂ e/m ² /yr)	Percentage target reduction (from 2024 baseline)	Absolute emissions (kgCO ₂ e/yr)	Intensity Emissions (kgCO ₂ e/m ² /yr)	Percentage target reduction (from 2024 baseline)
2024	491,361	7.8	0.0%	491,361	7.8	0.0%
2025	453,136	6.6	7.8%	450,259	7.1	8.4%
2030	278,263	4.0	43.4%	262,222	4.2	46.6%
2035	153,335	2.1	68.8%	127,890	2.0	74.0%
2040	71,567	1.0	85.4%	39,967	0.6	91.9%
2045	50,260	0.8	89.8%	-	-	-
2050	39,967	0.6	91.9%	-	-	-

APPENDIX 2: 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 flooding hazard is high, 1 credit is attained . 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?	Please note that Longevity Partners can help advise on how to integrate climate-related risks into your existing emergency plan to target the exemplary credit (1% available) within the report and assist in integrating appropriate phrasing within the plan itself for an additional cost. This is an additional service to this report.
	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.
	Has the asset been assessed for exposure to social risks and opportunities through and risk assessment process?	2 credits are available for each of RSL 07 and RSL 08 if this report is not externally disclosed.

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 'geoportal.bafg.de'.



APPENDIX 3: 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 not significantly exposed to the following acute GRESB hazards: cold-frost, hail, heavy precipitation, storm, water stress, and tornado.
	Chronic stressors	The asset has material exposure to the chronic GRESB hazard of subsidence and 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 8 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 3: 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/tCO ₂ e under the German national emissions trading system (nEHS), which is an increase of 689,5% since 2015 when the price was €7.60/tCO ₂ e 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	71 climate litigation cases have been filed in this country.
	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.
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?	Increase stakeholder concern or negative stakeholder feedback	See analysis in Section 5.1.4 of the Appendix Report.
	Section 5.2.1 of the Appendix Report assesses the financial exposure to all direct and indirect transition risk impacts.	

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