

SUMMARY DOCUMENT

Over the last few centuries, Planet Earth has been undergoing drastic changes. After the ice age, the greenhouse effect was identified from the 19th century onwards, and through physical evidence, research, developments in research methods and technological advances, it has been possible to confirm the impact and the direct and causal relationship between greenhouse gas emissions and global warming.

According to the IPCC, global temperatures are rising by approximately 0.2°C per decade, and the temperature has already risen by about 1°C today. It could even reach 2°C by 2060, as it is taken for granted that by 2040 the temperature will rise by 1.5°C, which will lead to catastrophic and irreversible consequences worldwide.

As buildings (building construction and operation) account for around 40% of global carbon emissions, Real Estate companies play a key role in climate change adaptation and mitigation. Thus, Real Estate companies need to mobilise to:

- **Understand, measure, analyse and manage the risks and opportunities** of existing assets in the face of climate change;
- **Increase investment in order to predict and mitigate the impacts of climate change** as well as promote the integration of this matter *vis-à-vis* investment principles and policies;
- **Communicate with stakeholders** to analyse existing adaptation options and solutions;
- **Defend and advocate resilience as a core business strategy**, according to best practices for reducing the carbon emissions of existing assets as well as investing in assets that are energy efficient and have low carbon emissions.

To ensure equity and a fair transition, the European Union has presented a long-term strategy, concerning greenhouse gas emissions, with the main goal of achieving net-zero greenhouse gas emissions, by 2050, based on existing technological solutions, the main measures are:

- **Boost energy efficiency benefits, including zero emission buildings**, as building (residential/services) represent 40% of the EU's total energy consumption.
- **Foster and maximise the application of renewable energy** as well as the use of electricity-based consumption systems for the decarbonisation of Europe's energy supply.
- **A competitive EU industry and circular economy** as a key enabler for the reduction of greenhouse gas emissions.

Energy and Climate is one of the key impact areas within the Sonae Sierra Sustainability Strategy. It includes energy efficiency, GHG emissions and their reduction, combined with the mitigation of other significant air emissions, and climate change adaptation strategies.

Committed to tackle climate change and its impacts, we've developed a study aiming to measure the effect of climate change on energy use in multiple shopping centres, searching to clarify the repercussions on the energy costs.

The main conclusions of the study are clear, increases in energy costs in comparison to the climate change scenarios assessed, **range from a residual value to almost 26%, consisting in average costs increase up to 2.2 M€.**

Find the full research of Climate Change: Adaptation and resilience [here](#).