



TCFD Disclosure
2022

Task Force on Climate-related Financial Disclosure (TCFD)

Governance

The Board is ultimately responsible for ESG at Cairn while the Executive Directors (CEO and CFO, who are Board members) maintain full strategic and operational oversight of the sustainability agenda, which incorporates our response to the transition risks associated with the shift to a lower-carbon economy, and the physical risks it faces in respect of climate change.

At each Board meeting (approximately eight per year), progress towards our strategic objectives is discussed, together with factors that are affecting or may affect those objectives and our strategy. Climate-related issues are a key lever in our strategic focus areas and, consequently, form an integral part not only of the strategic reporting cycle, but also the annual strategic review.

The Audit & Risk Committee maintains oversight of the risk register, monitors our response to risk and has identified the impacts of climate change as a principal risk. The risk management framework supports and promotes the identification and management of climate-related issues on a business wide basis, managed through our embedded risk management process. This is reflected in the inclusion of sustainability within our LTIP (Long Term Incentive Plan), which in turn is underpinned by sustainability metrics incorporated into our remuneration frameworks (approved by the Remuneration Committee), ensuring that targets and objectives of employees, including Executive Directors, and the business, are aligned.

The Chief Executive Officer retains responsibility for defining the strategic direction of the business and Cairn's climate-related performance. Operationally, our Senior Leadership Team, supported by Cairn's ESG Team and Innovation Forum, direct the management of climate-related risks and opportunities. Separately, the Chief Financial Officer is responsible for ensuring the financial impacts of climate-related issues are fully understood and reflected in Company budgets.

All employees in Cairn, regardless of seniority, are responsible for supporting the delivery of goals and objectives, identifying and managing risks, and promoting Company values. Through our People Strategy, the Chief People Officer ensures that climate-related issues, and our response to them, are both communicated and incorporated into employees' annual objectives and associated incentives. The Chief People Officer is also responsible for ensuring the Company's resources and capabilities match its climate-related responses.

Our disclosure is in line with latest TCFD guidance, recommendations, and publications. We will continue to enhance our TCFD disclosure in line with latest guidance and supplement our responses.

All employees in Cairn, regardless of seniority, are responsible for supporting the delivery of goals and objectives, and identifying and managing risks.






Strategy

Our risk management framework, which identifies climate-related issues as a principal risk and uncertainty, considers all risks on the basis of three horizons.




The climate-related risks and opportunities presented here were identified through our climate-related scenario analysis. Further details of this analysis can be found on [page 19](#).

RISK TIME HORIZON EXPLAINED

-  **Here and now**
Risks to the immediate term (one year or less) goals and objectives of the business
-  **Medium-term**
Risks with a horizon of between 1 year and 4 years
-  **Long-term**
Risks with a horizon of more than 4 years

Climate-related risks are categorised into “transitional risks”, being the risks related to the transition to a lower carbon economy and “physical risks” being risks arising from the physical effects of climate change.

CLIMATE-RELATED RISKS AND OPPORTUNITIES

	TCFD RISK/ OPPORTUNITY TYPE	DESCRIPTION	TIME HORIZON	RESPONSE
Transitional Risk	Technology	Risk that Cairn may be unable to transition to low carbon options at the pace needed. For example, there are often public/local authority obstacles to using reused materials within Cairn sites. And where these obstacles are overcome, there may be issues with securing a reliable supply of those materials on a large scale. Some targets for reduction would require timber frame in apartments, which is not currently the norm. There is also a consideration that financiers may not lend to potential customers if units are not built to certain specifications e.g. no brick and clad.	 Long-Term	Our Technical team continues to review low carbon products, systems and processes for our house types. We are members of the Irish Green Building Council and actively participate in the Healthy Homes Ireland Forum with the aim of delivering greener, healthier homes.
Transitional Risk	Emerging Regulation	Emerging regulation poses a risk to Cairn. Increasing carbon pricing may lead to an increase in material costs as manufacturers face increased costs. There is also increasing regulation on energy efficiency, which Cairn must keep up with. There is focus on retrofit of existing buildings and quotas on new builds in Net Zero scenarios for Ireland. Cairn does not currently retrofit and may be limited in output in these scenarios. Broader planning conditions expected to include more environmental mitigation, specifically related to biodiversity and climate resilience.	 Medium-Term	We have submitted a Science Based Target for validation by the Science Based Targets Initiative in line with a 1.5°C pathway. This will guide our internal strategy towards the same goal as national and EU regulation to keep in line with the Paris Agreement and mitigate risk from emerging regulation.
Transitional Opportunity	Products and Services	Scenarios to keep in line with national climate reduction targets show all new builds should be A rated and have heat pumps as a heating source. This demand may come from any or all parts of our customer base including individual homebuyers and institutional buyers, particularly Government agencies.	 Medium-Term	All of our new houses have heat pumps by default and all of our homes have a BER rating of A3 or above. We are also researching passive house standards to further reduce energy demand for the homes we build.

Strategy continued

RISK TIME HORIZON EXPLAINED

! Here and now
Risks to the immediate term (one year or less) goals and objectives of the business

🕒 Medium-term
Risks with a horizon of between 1 year and 4 years

📅 Long-term
Risks with a horizon of more than 4 years

Climate-related risks are categorised into “transitional risks”, being the risks related to the transition to a lower carbon economy and “physical risks” being risks arising from the physical effects of climate change.

CLIMATE-RELATED RISKS AND OPPORTUNITIES CONTINUED

	TCFD RISK/ OPPORTUNITY TYPE	DESCRIPTION	TIME HORIZON	RESPONSE
Physical Risk	Chronic Physical	In extreme scenarios, there is expected to be an increase in heatwaves and temperatures overall in Ireland. Homes sold by Cairn need to be able to withstand these rising temperatures and not overheat more than 2-3% of the year. An increase in dry periods may also lead to an increase in dust on site. The implication of excess dust exiting the site is that there can be a work stoppage, or site closure by the EPA, County Councils or the HSA. A decrease in rain in the summer may also lead to stress on water systems. Increased rain in winter may lead to a higher risk of accidents and could mean that homes need to be designed differently to account for changing subsidence patterns.	📅 Long-Term	Our technical, construction and environmental teams are analysing the impact of shifts in climate patterns such as prolonged increasing temperatures on our house types. As an ongoing project they are assessing mitigating overheating in our homes through altering our home designs and any impacts that would have on costs. We closely monitor weather forecasts to ensure worker safety, and make preparations or adjust build schedules where needed. Remediations are designed on a site by site basis, informed by a pre-commencement risk assessment and responsive mitigation plan based on: (i) implementation of a robust dust minimisation plan during specified weather conditions (e.g. wind, dry spells, etc.); (ii) regular water suppression of site haul roads and other areas that are in close proximity to sensitive receptors; (iii) implementation of dust fogging systems for high-risk sites; and (iv) systematic dust suppression.
Physical Risk	Acute Physical	Rising sea levels and increased rainfall in winter are expected to lead to a higher risk of flooding in Ireland. This may pose an issue for Cairn if potential customers face challenges when looking for mortgage approval or home insurance due to changing flood plains. For example, where homes are built on areas that were not deemed to be flood plains during development but are expected to become floodplains in a >3°C scenario.	📅 Long-Term	The impacts of severe weather events and extreme conditions are actively monitored and evaluated by the Group’s technical, construction and environmental teams on a site-by-site basis with remediations developed to respond to site specific risk and mitigate the cost impact. Flood risk assessments are a key part of our land appraisals.

Strategy continued

Climate change represents a principal risk and uncertainty to our strategic intent. We reviewed two scenarios to identify climate risks and opportunities, aligned to 1.5°C and >3°C models, to inform our strategy.



Scenario Analysis

This year we underwent a more detailed scenario analysis than in 2021, constructing a bespoke scenario relevant to our industry. Quantitative measures have been used to assess climate related risk and opportunities impacts. However, the assessment of risk impact is still ongoing while we refine this assessment process.

We reviewed two climate scenarios this year to identify climate related risks and opportunities. The first scenario was a transitional scenario in line with a 1.5°C world which included inputs from Ireland's Climate Action Plan 2021, International Energy Authority (IEA) Net Zero by 2050 Scenario, the London Energy Transformation Initiative (LETI) and the Irish Green Building Council. The second scenario was a transitional scenario in line with a >3°C world and based on climate modelling from EPA Ireland. This showed Ireland's climate from 2041-2060 modelled with the IPCC Representative Concentration Pathway (RCP) 8.5 scenario. This climate related scenario analysis helped to identify material risks and opportunities and inform our strategy for managing these risks.

Where possible, we have estimated the potential financial impact of climate related risks and opportunities. The transitional and physical climate risks and opportunities of our product directly influence our financial planning through three key processes outlined below:

1. Risks and opportunities influence financial planning through ongoing cost benefit analyses of new technologies and options for more sustainable construction or green building. The known and material environmental benefits of new technologies are noted and addressed in a qualitative manner in this analysis while financial impacts on costs and revenues are recorded in monetary terms.

2. Project-level financial appraisal that accounts for the additional costs associated with mitigating known risks as well as savings or increased revenue associated with climate opportunities. This includes a tender assessment for each element procured. Cost of all known inputs then form the budget for the project.

3. Strategic cost planning for the business as a whole is undertaken annually and is based on projections of costs and revenues for future developments and operations including those associated with climate risks and opportunities. This process covers an eight-year time horizon.

We recognise that climate change represents a principal risk and uncertainty to our strategic intent. Consequently, our process for identifying and reviewing that strategic intent incorporates a comprehensive analysis and understanding of the climate-related risks and opportunities presented by Our Purpose and Our Vision. This informs our strategy and goals creating a positive feedback process in which climate-related risks and opportunities play a fundamental role in defining strategy, with goals and objectives to mitigate or capitalise on opportunities having budgeted cost and margin impacts.

In 2022, we set Science-Based Targets for our scope 1, 2 and 3 emissions to drive down future carbon emissions and have aligned to 1.5°C. While completing this process we modelled various reduction targets on current and future developments. This exercise has allowed us to understand the potential changes that will be required operationally from the business and the outcomes they will cause. We have linked our carbon reduction commitments to a sustainability linked loan to ensure action.

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD) CONTINUED

Risk Management

Our risk management framework assesses climate-related risks and opportunities, through engagement at all levels of the business to ensure comprehensive identification and evaluation. We consider the likelihood of the risk occurring, and then the impact of the risk should it occur (having regard to controls we have already effectively implemented). This assessment supports decisions on how we apply Cairn's risk appetite to each risk and informs the materiality of the risk (or associated opportunity).

The purpose of the risk management process is to: help define strategies, including controls, to mitigate risks, or capitalise on the opportunities they may present; establish a process to consider risks and opportunities in the context of Cairn's risk appetite; and ensure risks, mitigating controls and responsibilities for managing risk and opportunities are recorded and monitored.

Risk management is an important tool and we take a business-wide approach, allowing us to consider the potential impact and opportunity presented by all types of risk affecting our business, including climate-related risks. When considering climate-related risks, we seek to identify and consider all material existing and emerging factors relevant to our core activities:

- **Policy Risks:** how Government policy in respect of climate may impact on our business model, for example through planning policies or economic policies;
- **Brand Risks:** how our brand is impacted by our response to climate-related risk, for example if our developments do not meet customer requirements;
- **Economic Risks:** how climate-led factors impact economic conditions, such as increases in supply chain costs;
- **Development Risks:** how climate-related issues impact on our ability to deliver developments, including through local development plans; and
- **Compliance Risks:** such as how the Company complies with regulatory constraints on what and how we build.

Our approach to the assessment of risk is consistently applied based on the probability of the risk arising, and the consequences of the risk (which includes a materiality assessment based on a range of financial and non-financial factors).

Our response to the risk is then dependent on the overall risk rating (low, medium, high, or extreme) and the Company's appetite for the risk.

Identifying and proactively responding to the challenges of climate change is core to Our Purpose and strategy. This means that as part of our overall risk management process, we proactively identify and manage risks associated with climate change in a way that ensures we can continue to deliver on Our Vision.

Metrics and targets

For the 2022 reporting period we are disclosing the metrics to assess and manage climate related risks and opportunities as set out within the "Disclosures and Policies" section.

As a homebuilder, we operate in an energy intensive industry. Emissions are the key driver of global temperature rises and result in many of the regulatory changes we are now faced with. Measuring our carbon emissions allows us to gain a full and thorough understanding of the emissions we produce directly and indirectly. Our Scope 1 and 2 emissions are reported under GRI-305-1 and GRI-305-2. Our Scope 3 emissions are reported under GRI-305-3.

This year we solidified our commitments to change for the better at Cairn and lead the way for our industry:

- submitted science-based targets to the SBTi for scope 1, 2, and 3;
- completed an updated materiality assessment to better understand the impacts of our activities;
- continued our support for Business in the Community Ireland's Low Carbon Pledge, showing leadership by achieving the goal of setting Science Based Targets.

We have taken our commitments further by incorporating sustainability into our remuneration frameworks. This demonstrates the importance we place on accountability for our sustainability commitments.

We have:

- incorporated environmental metrics on biodiversity net gain into our long-term incentive plan; and
- incorporated social metrics, including our customer and people framework with a health and safety underpin, into our short-term incentive plan. All metrics and targets are reported in line with appropriate standards including SASB, GRI, EPRA and DEFRA.

METRICS AND TARGETS

KPI	CODE	2022	2021
Gross direct (Scope 1) GHG emissions	GRI305-1	1,777 tCO ₂ e	1,522 tCO ₂ e
Gross market-based energy indirect (Scope 2) GHG emissions	GRI305-2	299 tCO ₂ e	695 tCO ₂ e
Gross other indirect (Scope 3) GHG emissions by category (including embodied carbon)	GRI305-3	209,685 tCO ₂ e (1.41 per square metre)	177,138 tCO ₂ e (1.49 per square metre)
Total energy consumption within the organisation	GRI302-1	10,647,906 kWh	10,211,304 kWh
Total weight of waste generated including breakdown by disposal route	306-3, 306-4	12,810 tonnes 3.9% sent to landfill (495t) 96% recycled or recovered (1,096t recycled and 11,219t recovered).	6,810.7 tonnes 4.0% sent to landfill (272t) 96% recycled or recovered (538t recycled and 6,001t recovered).
Percentage of sites with biodiversity impact assessments	Industry	100% of our developments meet this standard.	100% of our developments meet this standard.

Our combined Scope 1 and Scope 2 GHG emissions have reduced by 6.4% in 2022 vs. 2021, and our Scope 3 GHG emissions on a per square metre basis, have reduced by 5.4% over the same period.