Partnering with

Aviva Climate-Ready Index Report

Results, analysis and methodology



Contents

Foreword

Climate-Ready 2024 results

Overview of Climate-Ready model
Overview of Climate-Ready results

Interactive elements

Use the contents page or navigation at the top of sections to easily click through to the information you require.



Take me to contents page.

Indicates what page you're on. Text navigation can also be clicked to move through the sections quickly.

Six key insights

Summary

Insight 1: Accelerating transition

Insight 2: Nature and adaptation

Insight 3: Renewables on the rise

Insight 4: Businesses need support

Insight 5: A fair transition

Insight 6: Bigger lifestyle changes

Spotlight: Environment and Adaptation

Introduction

Progress towards global goals

Nature-based solutions

Top-down action: Policy, infrastructure and finance

Bottom-up action: Business, community and local activation

Country analysis

Germany

France

UK

Ireland

Japan

Italy

Canada

USA

Appendix

Pillars explained

Public and business attitude surveys

Weighting process

Cautionary statement

Endnotes

Foreword

"Aviva and Good Business created the Climate-Ready Index to support the UK on its journey to becoming the most Climate-Ready nation among the G7 and Ireland. This innovative index has been designed to review and capture the reality that the various challenges of climate change cannot be overcome separately. Critical efforts to limit emissions and protect biodiversity must go hand in hand with work to adapt to the realities of a hotter planet."

Claudine Blamey,

Group Director of Sustainability, Aviva

The observations made in this report are those of Aviva and Good Business, informed by the underlying data and subject-matter experts. The findings are based on data from the Climate Change Performance Index, the Notre Dame Global Adaptation Initiative, the Environmental Performance Index, the OECD, the Green Futures Index, the Social Progress Imperative,

the Positive Peace Index, and Aviva-led research with YouGov. The opinions presented here are intended to contribute to the debate, help move from ambition to action and ultimately support the UK, and other countries where we operate, to become more climate-ready.

The third Climate-Ready Index indicates that the transition to a more climate-ready world is underway across the G7 and Ireland. All countries in the Index except Canada have improved their overall scores this year compared to last, with Germany still leading the way.

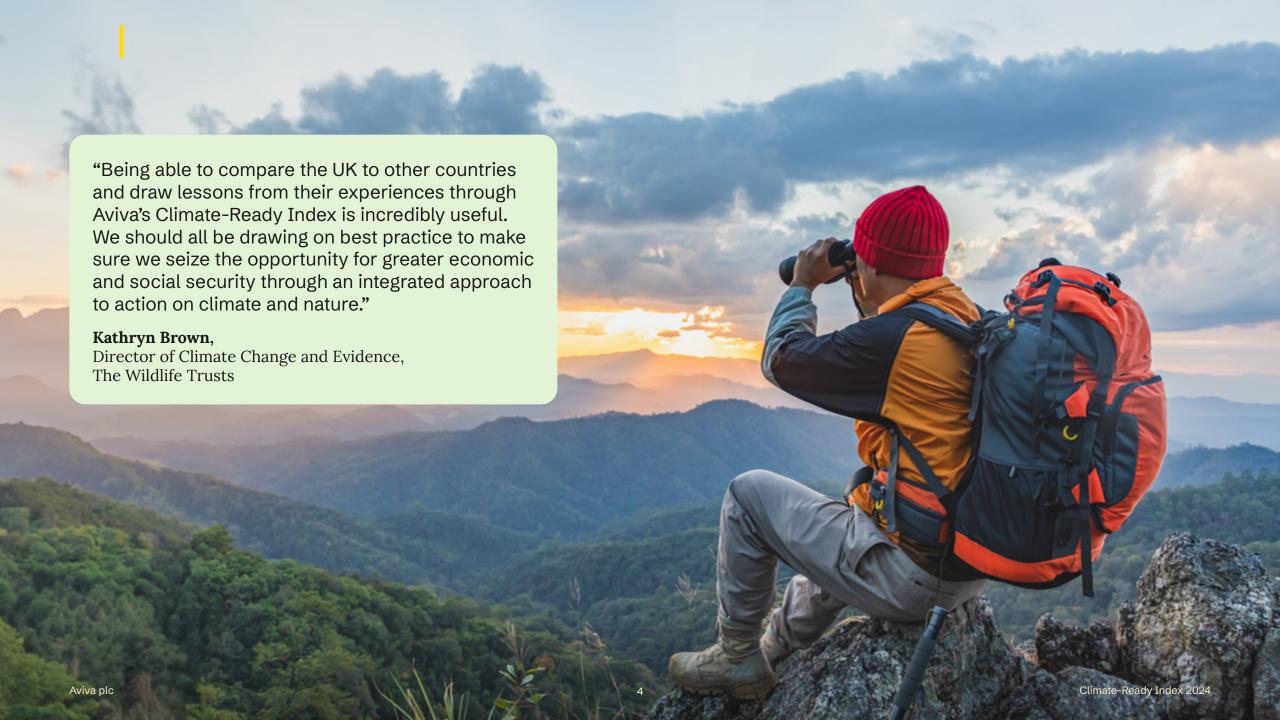
To date, societal responses to climate change have primarily been focused on reducing emissions, with less attention given to other vital areas for action, but this is changing. Two important elements of climate-readiness gaining broader attention are the protection and restoration of nature, and adaptation to the impacts of climate change. The emergence of global goals for these challenges, as well as guidance and support for meeting them, is beginning to drive tangible action. This year's Climate-Ready Index report includes a deep-dive exploration of these two vital factors – adaptation and nature – unpacking trends across the Index, barriers to further action and inspirational examples from across the world.

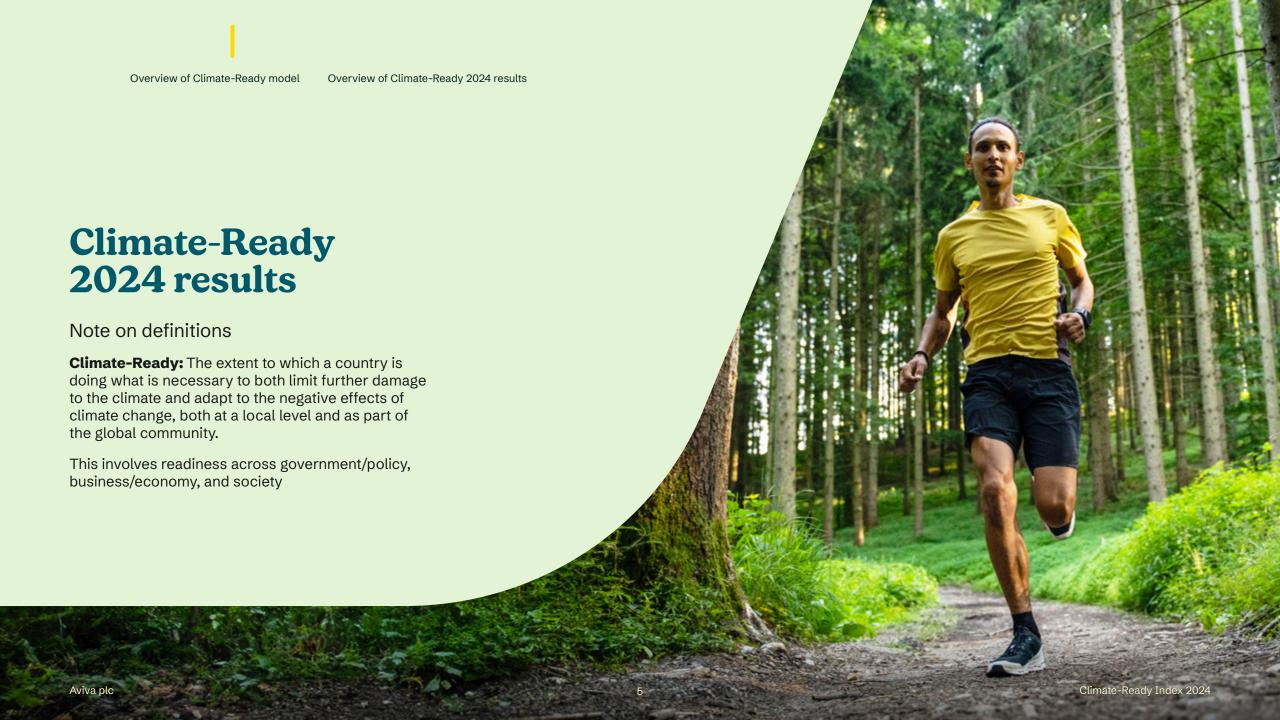
Businesses are taking more climate-ready action than they were 12 months ago. The 2024 Climate-Ready

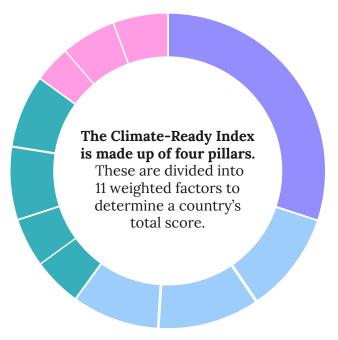
Index, compared to previous indexes, demonstrates a rise in the number of businesses with a structured plan, including targets and actions, for reducing carbon emissions, and a rise in the number taking action to protect their operations against extreme weather. But companies still lack the information, guidance and financial support they need to make more fundamental and meaningful change happen.

People are taking simple everyday climate actions, but they need more support in making the bigger lifestyle changes that will have meaningful impact – helping them to make informed choices about the way they travel, the food they eat and how they invest and save their money. However, the economic challenges faced by nations across the Index are important context to explain the lack of even more meaningful action by members of the public, with most agreeing that dealing with the cost of living is currently more important than reducing their environmental impact. It's the role of government, businesses and communities to make climate-conscious decisions as easy as possible for people to take.

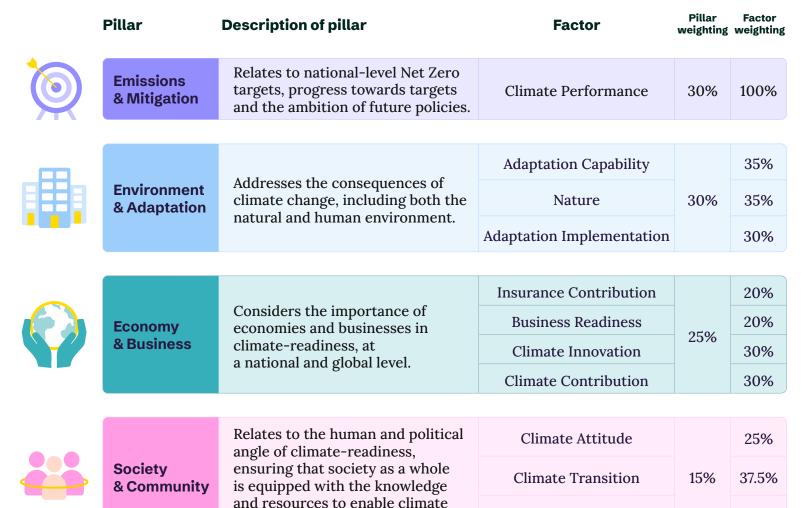
Overall, the results of the Index show encouraging progress, but there is still more to do. Countries need to go further and faster to ensure they are reducing their emissions in line with the 1.5°C Paris Agreement and are taking action to adapt to already very visible climate change impacts.







The majority of factors are informed by existing data sets and indices. However, the Business Readiness and Climate Attitudes factors are informed by two primary research studies conducted by YouGov on behalf of Aviva in June 2024. For each factor, a survey with multiple statements was developed, and respondents asked to rate their level of agreement with each. The findings of the surveys that underpin these two factors are referred to throughout this Climate-Ready Index report. Full details of weighting methodology are included in the Appendix.



progress effectively and equitably.

Social Resilience

37.5%

A note on data

The Climate-Ready Index uses the best available data at time of publication. Data relating to three factors in this year's Index remains unchanged from last year due to unavailability of the underlying data for *Climate Insurance*, *Climate Innovation* and *Climate Contribution* factors this year. Therefore, while countries' performance in these factors still contributes to their overall scores, this report does not focus in depth on these factors in the analysis. However, future editions of the Index will explore these in more detail when more up-to-date datasets are available.

The methodology and data sets underlying two factors in the Environment & Adaptation pillar have been updated this year to reflect growing research and best practice. The data underlying the *Nature* factor (previously named *Biodiversity*) has been updated to reflect a broader range of measures relating to healthy ecosystems – and the bespoke *Adaptation Implementation* measure has also been updated and enhanced to reflect new best practice.

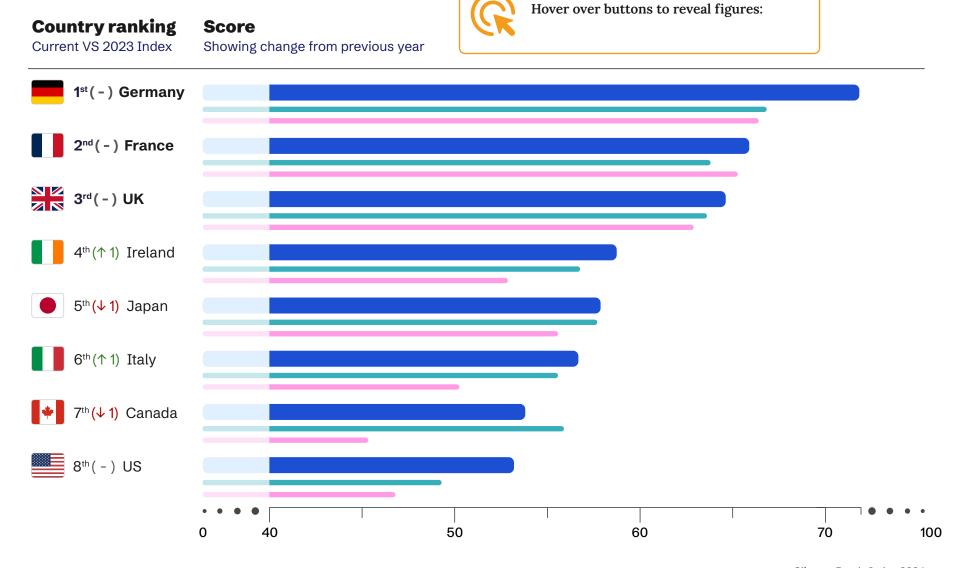
There is an inevitable lag between data collection and reporting, and the slow real-world impact of changing political policy. In both cases, changes take time to reflect in the Index, and data findings must be supplemented with additional up-to-date context to fully understand them. We have endeavoured to do so throughout this report, including through the inclusion of more timely primary data collected by Aviva in July 2024.

Full methodological detail can be found in the Appendix.



This year, the third year of the Climate-Ready Index, sees a more positive pattern emerging for the climate-readiness of the majority of countries in the G7 and Ireland.

Compared to the previous year, we are seeing more action and faster rates of improvement, as countries are transitioning towards a more climate-ready world. Germany retains its top position extending its lead from the rest of the pack and the USA, despite being the second biggest improver, remains in last position.



Interactive chart

The transition to a more climate-ready world is accelerating

In this third Climate-Ready Index, a positive pattern is emerging – countries in the G7 and Ireland are becoming more climate-ready. We are seeing more action and faster rates of improvement as countries transition towards a more climate-ready world, but this acceleration needs to continue.

Once again, Germany tops the Index, but this year it extends its lead further by registering the largest score increase of any country, breaking the 70-point mark for the first time. Its improvement is primarily driven by positive climate policies: Germany has planned for a rapid green energy transition, has made inroads to preserve, protect and enhance its ecosystems and the services they provide such as food and water, and has made robust investment plans for adaptation. The country now leads in both the Emissions and Mitigation pillar and the Environment and Adaptation pillar, and ranks second in the remaining two pillars.

Similarly encouraging are the changes at the bottom of the Index. For the first time, all countries score over 50 points, significantly shrinking the gap between fourth and eighth place to just six points, compared to eight points in 2023 and ten in 2022. At the bottom of the Index, the USA has improved its score in three out of four pillars analysed.

The USA records the second largest rise in its overall score, driven by a step-change in climate change mitigation incentives as part of the Inflation Reduction Act,¹ and the introduction of its Federal Climate Resilience Framework.² In a country so obviously affected by climate-related natural disasters, this rapid improvement is welcome. Ireland is another country that has made positive changes, rising to fourth place from fifth through improvements in three of the four pillars.

Nature and adaptation: the stakes have been raised and countries are starting to step up

This year, the Climate-Ready Index has strengthened scoring criteria in two key factors: *Nature* and *Adaptation Implementation*, which both fall under the *Environment and Adaptation* pillar. Both are hugely important to the climate-readiness of a country, but both have historically presented challenges in assessment and measurement. As understanding and data availability improves, the measures in the Index have been refined and expanded (full details can be found in the Spotlight section of this report).

The *Nature* factor is an evolution of the previous *Biodiversity* factor. The updated measure now considers marine environments and ecosystem services such as water, in addition to highly specific measures of biodiversity maintenance used last year. This year, Germany leads on this factor, with 30% of land and seas under protected areas (according to the Environmental Performance Index already meeting the 2030 "30x30" target set globally), treating 100% of its wastewater, and pioneering pesticide-free agricultural systems.³

The Adaptation Implementation factor has also been strengthened. While there is still limited comparable

global data on adaptation, the adaptation scoring system created for this Index has been updated to reflect guidance contained in the latest United Nations Adaptation Gap Report.⁴ The updated measure includes data points on the existence of administrative bodies that evaluate progress towards meeting key goals, the level of investment directed to adaptation, engagement with stakeholders to ensure equitable outcomes, and integration of climate adaptation into wider policy.

Germany continues to lead the Adaptation Implementation factor, followed closely by Canada, which had no national adaptation strategy in place in the first Climate-Ready Index. The USA has also considerably improved its performance since the 2023 Climate-Ready Index due to the publication of its National Climate Resilience Framework,⁵ accompanied by departmental and state-level adaptation plans, though the country still ranks sixth. The raising of the bar in this factor has particularly impacted France and the UK, with the latter's score in particular dropping since this re-evaluation. In order to further increase scores in this factor of the Index, countries should look to put in place a proper plan for funding adaptation and implement more thorough monitoring and evaluation systems.

This insight and the pillar it reflects is explored in further detail in the **Spotlight** section of this report.

Renewables are on the rise but dependency on fossil fuels remains strong

Efforts to limit global temperatures to 1.5 °C have been mixed in recent years. While 2022 saw CO₂ emissions from electricity generation hit a record high, it also saw the installation of more renewable energy capacity than ever before,⁶ investment in clean energy rise by 40% since 2020⁷ and over 130 countries commit to tripling their renewable energy capacity by 2030 at COP28.⁸

This expanded focus on renewable energy is evident in the Index, which considers both 2022 emissions data and more recent policy action. Germany, which tops the *Emissions and Mitigation* pillar for the first time, and Ireland, which places fourth having improved its rank in the pillar every year, are clearly signalling that renewables are integral parts of their decarbonisation strategies. Both nations have set ambitious targets to surpass 80% renewable electricity generation by 2030. 910 There has also been progress at the other end of the table; the USA's Inflation Reduction Act has led to significant investments in renewable energy and energy

efficiency measures – projections suggest that one in two cars registered in 2030 will be electric¹¹ – pushing the USA up to sixth in the pillar.

Nonetheless, enormous challenges persist. In 2022, the world spent a record US\$7 trillion on fossil fuel subsidies¹² and the phase out of coal needs to be seven times faster than current rates if we are to halve global emissions by 2030. Although shortterm increased reliance on fossil fuels is largely explained by national government responses to the Russian invasion of Ukraine, it demonstrates that global dependency on fossil fuel runs deep. While scaling of renewable energy capacity and generation is integral to the successful transition to Net Zero, this is not enough on its own to limit global temperatures to 1.5 °C. In order to meet that target it would need to be paired with decarbonisation in critical sectors such as transport, buildings, agriculture and aviation, on which many countries in the Index are falling behind. For example, the UK, which led the Emissions and Mitigation pillar for the past two years, has this year been overtaken by Germany, with the UK's lack of sector-specific decarbonisation plans playing a significant role in its lack of progress in this pillar of the Index.

Businesses are getting climate-ready but need more support

In 2023, we identified the vital role of businesses in driving climate-ready change, and this is just as true this year. Climate action is on the radar of businesses across the G7 and Ireland, with most companies recognising the need for action across both mitigation and adaptation.¹³

This positive picture is not just limited to larger companies. The bespoke survey data that underlies the Business Attitudes factor is weighted towards smaller companies to give a more realistic representation of the business landscape. So, while large companies tend to perform better in terms of climate-readiness, smaller companies are not being left behind.

Across all countries in the G7 and Ireland, the majority of businesses believe it is important to act on climate change, with the highest level of support from businesses in Ireland (78%) and the UK (73%). Critically, since the last Climate-Ready Index, there has been a rise in businesses taking action. This year sees a 5% increase from the 2023 Index

in businesses creating a structured plan, including targets and actions, for reducing carbon emissions (now 50%) and companies taking action to protect their operations against extreme weather (now 53%).

More businesses (53%) now agree they have access to the knowledge, support and resources they need to take effective climate action, up from 49% in the 2023 Climate-Ready Index. The most notable improvements are in the UK (48%, up from 36% in 2023) and Ireland (68%, up from 55% in 2023). Creating the right support for businesses will be even more important in the future, as companies face a tightening global regulatory environment and a growing sustainability skills gap. Green job opportunities grew 8% per year in the past five years, but employees lack the skills to fill them.¹⁴

Aviva plc Climate-Ready Index 2024



Countries need to go further and faster to deliver a fair and equitable transition to Net Zero

The idea of a fair and equitable transition to a climate-ready world - meaning that the transformation to a green economy is done in a way that does not exacerbate social inequality - is gaining traction among civil society and policymakers. However, the more we understand about the importance of such a transition, the more it becomes clear that many countries - including those in the G7 and Ireland - are under-prepared to deliver it. Delivering the transition to Net Zero in ways that are economically equitable and sustainable is crucial for a climate-ready world, as it ensures that communities everywhere can benefit from the opportunities and progress being made.

The performance of every country in the *Climate* Transition factor (the Index's measure of a fair and equitable transition) has fallen since 2023, with the biggest fall in Ireland and the smallest in Italy and Germany, with the latter the leader in this factor. The methodology of the Just Transition Score¹⁵ (the data set that underlies this factor) has been updated

and expanded to reflect growing understanding of the key elements of a fair and equitable transition. The addition of new data points, which have exerted downward pressure on countries' performance, include measurement of the relationship between, on the one hand, emissions, biodiversity and natural resource use, and on the other, the meeting of societal needs such as nutrition, housing, education and political freedoms (as measured by the Social Progress Index).¹⁶

The closely-related Social Resilience factor measures underlying social conditions that provide the foundations for creating a climate-ready world, including levels of trust in government, the state of international relations and conflict and corruption. Scores in this factor (using data from the Positive Peace Index¹⁷) have declined this year, reflecting a turbulent global and, in places national, political situation. Ireland performs best, with the highest rank and lowest fall in its score. Germany, Canada and Japan also receive high scores, but all with significant drops in performance since 2022. The freedoms measured in this factor are integral to the health and resilience of society and play a powerful role in enabling the transition to a climate-ready world - for example, building trust in institutions could help support the implementation of more ambitious climate policy.

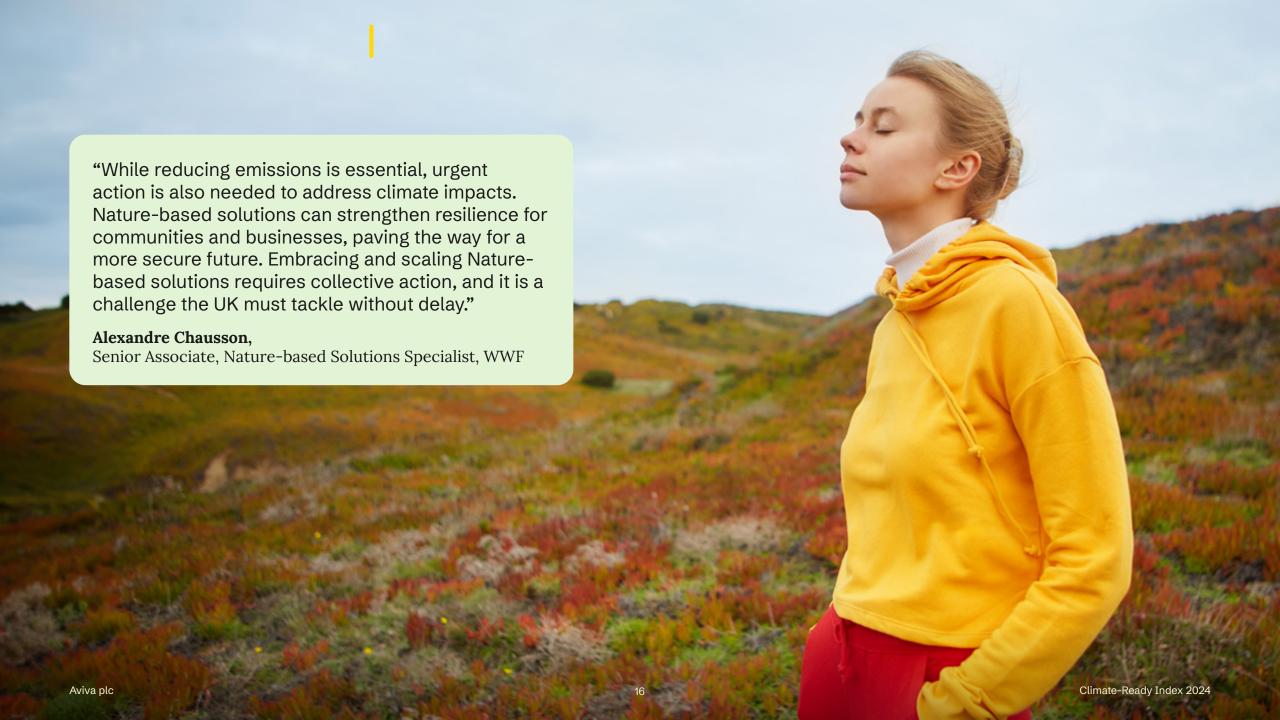
People are taking simple everyday climate-friendly actions but need support to make bigger lifestyle changes

Year on year, public concern surrounding climate change remains high, with approximately 70% of the general public across countries in the Index agreeing that there will be more frequent and extreme weather events over the next 10 years and that urgent action is needed to tackle climate change.¹⁸

However, this concern is not always translating into meaningful action fast enough. With 45% of the public reporting significant lifestyle changes to reduce their environmental impact, such as the way they travel, the food they eat and the financial decisions they make, there is a gap between concern and action. Even fewer respondents say climate change influences their purchasing decisions (41%).

Across all countries in the Index, the public report, perhaps unsurprisingly, that they are more likely to make simpler everyday changes that reduce their environmental impact (63%) than these more fundamental lifestyle shifts. This reaffirms the need for governments, civil society and businesses to create the enabling conditions for the public to act. Successes such as the single-use carrier bag charge in the UK,¹⁹ which stopped seven billion plastic bags entering circulation, demonstrate the power that even small changes can have. These lessons need to be applied elsewhere to foster more significant and long-term lifestyle changes that will have greater impact, such as investment options on pensions and savings, and travel choices.

Aviva plc Climate-Ready Index 2024



Spotlight: Environment and Adaptation

Notes on definitions

Nature: The natural world, with an emphasis on the diversity of living organisms (including people) and their interactions among themselves and with their environment.

Climate adaptation: The actions taken to adjust our surroundings and lifestyles to current or expected climatic impacts in order to moderate harm or exploit beneficial opportunities.

Ecosystem services: The direct and indirect benefits of ecosystems to human well-being such as food, water, climate regulation, pollination and more.



Why nature and adaptation are essential to being climate-ready

In this year's Climate-Ready Index report, we explore why protecting and restoring nature and adapting to climate change are critical for climate-readiness. We examine what is working well, the barriers to success and shed some light on the reasons for strong performance at a country level in specific factors relating to nature and adaptation.

By focusing on these specific areas of the Index in more detail, we hope to draw attention to the lessons that the UK (and others) can learn from countries in the Index, and beyond, to become more climateready. As such, this section has a focus on the UK and is supported by additional research conducted with the UK public and businesses. This spotlight approach will be replicated for other areas of the Index in future years.

Nature and climate adaptation are deeply connected

The entire economy is underpinned by nature. Businesses and communities need nature and the services it provides in many forms – from the food we eat and the water we drink to the products we buy – so much so that around half of the world's GDP is considered highly or very highly dependent on nature and its services.²⁰

Human activities have already fundamentally affected nature everywhere.²¹ The UK is no exception to this, with decades of intensive land and sea use meaning the UK is in the top 10% of the most naturedepleted countries in the world.²² The exploitation of resources combined with a changing climate is devastating ecosystems and communities at a global level – even small changes to global temperatures, as little as 0.1 °C, cause sea-levels to rise, floods and droughts to devastate habitats, and changing temperatures to bleach coral and alter migration patterns of animals such as birds.²³ Nature also plays a vital role in regulating our climate, absorbing CO₂ from the atmosphere;²⁴ but deterioration in ecosystems is affecting nature's ability to do so. For example, in the UK, the poor state of peatlands means they are releasing 3.5% of total national greenhouse gas emissions per year, rather than absorbing and storing carbon as they have done in the past.²⁵

In some cases, these impacts seem disconnected from many people's day-to-day lives. But roughly 40% of the global population already live in highly climate-vulnerable areas, ²⁶ and estimates suggest that climatic natural disasters caused \$275 billion of economic losses globally in 2022 alone.²⁷

Accelerated action is needed to halt and reverse nature loss, or otherwise risk increasing the frequency and diversity of climatic events. In the following section we identify four key areas for action:

- 1. Making faster progress towards global goals
- 2. Putting in place nature-based solutions for the climate, nature and people
- 3. Increasing top-down support through policy, infrastructure and finance
- 4. Enabling local activation through businesses and communities

Updates to the Environment and Adaptation pillar

Nature

The measure of *Nature*, previously Biodiversity, has been broadened this year to better reflect our improved global understanding of what comprises healthy ecosystems. Our measure is taken from the Environmental Performance Index (EPI) measure of 'Ecosystem Vitality'. This new measure provides a more holistic look at the actions taken to protect and restore nature, with indicators across water, forests, marine ecosystems, agriculture, and terrestrial biodiversity.

Adaptation Implementation

The bespoke Adaptation Implementation measure has been enhanced this year to provide more detailed insight into the progress of national adaptation strategies. Despite the ongoing lack of comparable global data on adaptation planning and execution, the criteria used to assess national plans attempts to bridge this gap. Drawing on insights from the UN Adaptation Gap Report, we have refined our measure to better evaluate countries' preparedness to implement adaptation strategies. The updated measure now includes data on the comprehensiveness of adaptation plans, the engagement of stakeholders to ensure equitable actions, the structures in place to implement adaptation, the integration of adaptation into national, regional, and local policies and plans, and evidence of monitoring and evaluation systems in place to track progress. By updating this measure, we are better positioned to monitor adaptation both now and in the future as plans evolve and expectations increase.



Aviva plc Climate-Ready Index 2024

Making faster progress towards global goals

Summary: Despite decades of relative inaction, momentum surrounding nature and adaptation is building politically and across the private sector, galvanised by a set of global goals.

Over the last decade, nature and adaptation have not gained as much attention as other similarly important environmental issues. This is in part because of a lack of clear definitions and goals, but also because the unique needs of different geographies and communities makes understanding and measuring success on these issues a particular challenge. None of the global Aichi Biodiversity Targets, which ended in 2020, were met in full and the climate adaptation goal set out in the Paris Agreement was not supported by practical guidance and ways to monitor progress, forcing these topics down the agenda.

In December 2022, 196 countries, including all countries in the Climate-Ready Index except the USA, adopted the Kunming-Montreal Global

Biodiversity Framework. This provides an updated and ambitious framework to support the vision of a world living in harmony with nature by 2050. It comprises four long-term goals and 23 short-term targets, which together aim to reverse the rapid decline of biodiversity by 2030 and 'restore harmony with nature' by 2050. Among other indicators, progress towards these goals is included within the *Nature* factor of the Climate-Ready Index.

One notable commitment of the Kunming-Montreal Global Biodiversity Framework is to 'effectively conserve and manage' 30% of land, freshwater and seas for nature by 2030, known as '30x30'. Germany, which leads in this factor of the Climate-Ready Index, is the only country in the Index to surpass 30% protected areas for both land and seas.³¹ However, the effectiveness of these protected areas has been legitimately questioned by conservation experts.³²

Another Kunming-Montreal Global Biodiversity Framework commitment is for each country to set National Biodiversity Strategy and Action Plans to put commitments into practice and make progress towards long and short-term goals. These plans must include a number of practical elements missing from the previous Aichi Biodiversity Targets, including sector-level pathways to support the transition to a nature positive economy.³³

While the 2015 Paris Agreement established a broad goal for climate adaptation – 'enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change' – the lack of guidance and details on measurement parameters have been significant barriers to progress. It is encouraging that an overarching framework for this global goal was established in 2023 at CoP28. But the nine-year wait to get to this point has cost vital time, meaning progress at a national level has been slow and variable.

The Climate-Ready Index shows significant differences between countries in their adaptation planning. The UK, for example, was among the first to set out its legal framework for climate adaptation in the 2008 Climate Change Act.³⁴ However, early progress has not translated to leadership in 2024. The Climate Change Committee's initial review of the UK's third national adaptation plan (NAP3) concluded it still falls short of what is needed to protect the UK from climate change impacts, with the plan requiring more pace, ambition and specificity. As a result, the UK drops to joint third in the *Adaptation Implementation* factor.

Despite implementation challenges, the Kunming-Montreal Global Biodiversity Framework and Global Goal on Adaptation are important steps forward. They provide the overarching principles and frameworks necessary to ensure the variability of climate adaptation and nature needs are accounted for, which could translate to improvements in both the Nature and Adaptation Implementation factors of the Climate-Ready Index in the coming years.

The important role of business in inspiring, financing and taking the action needed to turn goals into tangible change is being recognised explicitly in global agreements. There has been continued action by industry initiatives, alliances and some businesses to create the shift in mindset and demonstrate the new best practice necessary to drive change across different sectors of the economy. Aligning financial flows to support global ambition such as the Kunming-Montreal Global Biodiversity Framework will need continued collective action to build on this work, including communicating with the public and advocating for change.

Lessons from the Index

Although no country is fully prepared for the impacts of climate change, there are countries in the Index and beyond that are setting best practice. Germany tops the Index in the *Adaptation Implementation* factor with an updated and highly detailed climate adaptation monitoring report published in April 2024.³⁵ Canada, which in the first Climate-Ready Index had no national adaptation strategy in place, now ranks second in the same factor. Its quantitative, measurable and time-bound targets across five interconnected systems – nature and biodiversity, infrastructure, economy and workers and its use of and engagement with local communities – is a significant contributor to this improvement.

Aviva plc Climate-Ready Index 2024

Putting in place nature-based solutions for the climate, nature and people

Summary: As we understand more about the relationship between climate change, nature and the communities they impact, it is becoming increasingly clear these issues cannot be tackled in isolation.

Implementing nature-based solutions to overcome environmental challenges use nature itself to both help mitigate emissions and protect landscapes and communities against extreme weather. These solutions come in a range of shapes and sizes, with the term covering a broad range of actions to protect, restore or sustainably manage landscapes, seascapes, watersheds and urban areas. For example, mangrove forests are being created or restored, 36 seagrass meadows are being used to protect coastlines from storm surges while supporting marine life and absorbing CO_2 from the atmosphere (see case study), and green spaces are being created to reduce temperatures in urban areas, known as the heat-island effect 37 (see case study).



Aviva plc

Japan harnesses seagrass to protects its coast

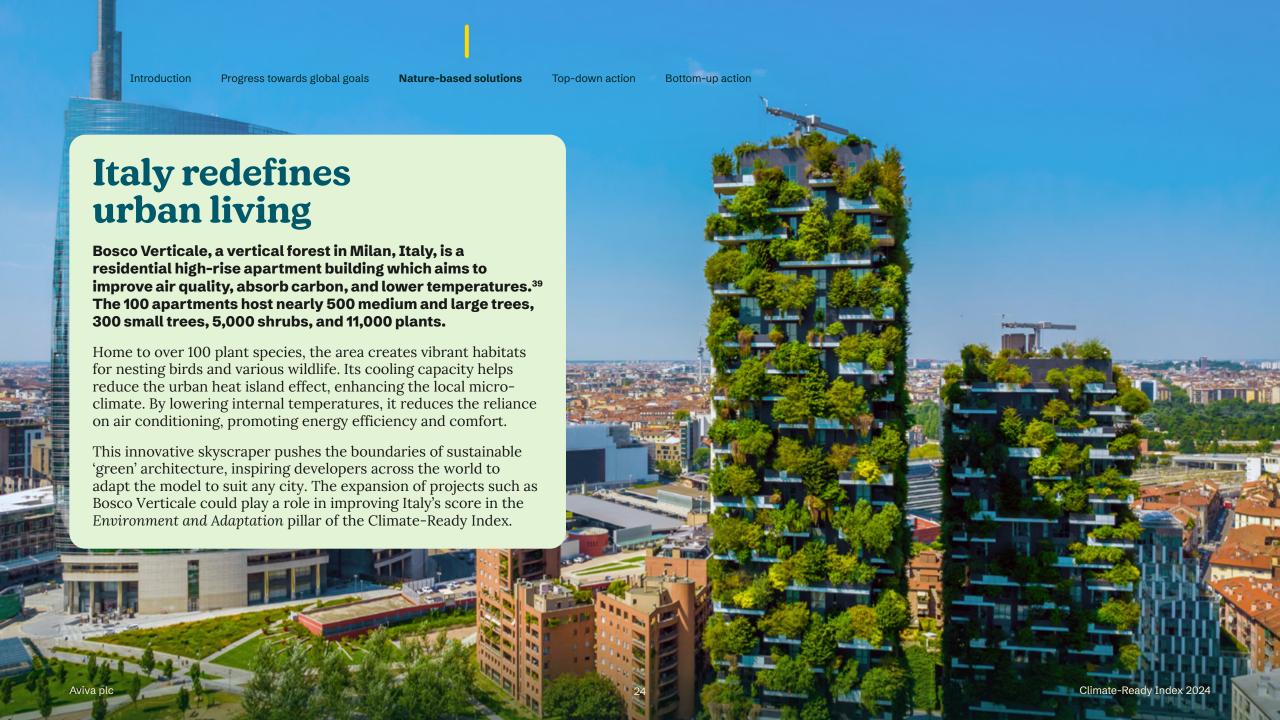
Seagrass is a powerful tool in the fight against climate change, absorbing carbon 35 times faster than a tropical rainforest.³⁸ Seagrass meadows are also powerful protectors against coastal erosion.

Since 1990, Japan's seagrass and seaweed beds have shrunk by 40% due to urban development. Over the past two decades, over 100 volunteers on the beaches of Yokohama, Japan, have worked to plant eelgrass seedlings in shallow waters to rebuild these ecosystems. Marine ecosystems are of great importance to Japan which is reflected in high scores in Marine Habitat Protection, an indicator within the *Nature* factor of the Climate-Ready Index that reflects the percentage of marine and costal habitats that are covered by marine protected areas.

Seagrass serves as a natural habitat and nursery for marine biodiversity, providing vital ecosystem services to coastal communities including food security, as seagrass meadows serve as a prominent feature in fishery production worldwide. By restoring and stabilizing the coastline, seagrass provides storm defences for coastal communities, enhancing the resilience of ocean-dependent areas.

Seagrass restoration presents a useful tool for Japan to not only meet its carbon reduction targets, but successfully adapt to climate change and protect coastlines.





One important and well-recognised role of nature-based solutions is to mitigate greenhouse gas emissions by capturing carbon, often referred to as 'carbon sinks'. For example, the UK's forests are estimated to currently store around four billion tonnes of carbon and sequester around 4% of the country's total emissions. However, the introduction, restoration and expansion of natural carbon sinks takes time to have an impact. By scaling up nature-based initiatives today, while also reducing top-line emissions, the positive impacts will be felt in the decades ahead.

However, nature-based solutions can also be powerfully employed in the protection of landscapes, infrastructure and communities against the physical impacts caused by climate change. For example, planting trees and hedges reduces flood risk in a number of ways – leaves and branches increase the time it takes for rainwater to reach the ground, and roots increase the amount of water stored in soil and slow water run-off to streams and rivers.⁴² With water entering rivers more slowly, flooding in communities downstream is less likely.

There is growing scientific evidence of the effectiveness of nature-based solutions in protecting communities. ⁴³ As a result, local and national governments are employing these solutions in areas vulnerable to extreme weather. For example, in the UK, natural flood defences are being used to protect coastal communities from storm surges and flooding (see case study). This kind of initiative could support the UK in continuing its upward trajectory in the *Nature* factor of the Climate-Ready Index, and provide insight and inspiration to other countries.

Aviva plc 25 Climate-Ready Index 2024

The UK's natural flood defence

The Medmerry project on the West Sussex Coast is a large-scale managed realignment initiative aimed at restoring intertidal habitats, protecting communities from flooding and coastal erosion, and regenerating local wildlife. 44 Managed realignment involves constructing a sea defence inland and allowing the area between it and the ocean to revert to natural habitat.

Medmerry's seven-kilometre flood bank created 184 hectares of saltmarsh and mudflats, along with 263 hectares of other priority habitats. Clay extracted during construction formed freshwater ponds and reedbeds, attracting wildlife back to the area. Local farmers graze livestock on the saltmarsh, while neighbouring land supports cereals and bird seed mixes to further benefit biodiversity.

The project provides flood protection to 348 properties, reducing the annual flood risk from 100% to 0.1%. It is estimated that it will save £78 million over 100 years. ⁴⁵ Medmerry also addresses biodiversity loss through collective ditch management, which supports water voles, amphibians, and dragonflies. In addition to coastal protection, it serves as a water treatment facility and provides infrastructure for 5,000 residents.

As one of Europe's largest managed realignment projects, Medmerry plays a vital role in countering habitat loss due to sea level rise and erosion, safeguarding both people and wildlife.



A less-explored benefit of nature-based solutions is the potential for positive impact on social and economic factors, including those in other pillars of the Climate-Ready Index. Our survey of the UK public found that 87% believe that being able to access nature is important for their health and wellbeing. Bringing more natural landscapes into urban and suburban areas through nature-based solutions could support happier and healthier populations. Wider research also suggests that nature-based solutions could have a positive impact on food and water security, and economic and social development. 47

Most countries in the Climate-Ready Index already reference nature-based solutions in climate-related strategies, but leaders are also emerging. For example, Germany has published a Federal Action Plan on Nature-based Solutions for Climate and Biodiversity and allocated €4 billion to implement this plan. Across Germany, nature-based solutions are already being implemented, such as the integration of green roofs into local development plans. This intervention is now mandated in two-thirds of German cities, a testament to the influence that strong regulation can have in scaling these solutions and contributing to Germany's first

place ranking in both the Nature and Adaptation Implementation factors. Other countries across the Index are starting to adopt similar approaches, including Canada with Toronto's Green Roof Bylaw,⁴⁹ which could lead to increased scores in the Environment and Adaptation pillar in future years. 27 Climate-Ready Index 2024

Aviva plc 27



Green is the new grey in Sheffield

Over the past four years, the city of Sheffield has created one of the UK's largest Sustainable urban Drainage Systems (SuDS), through the Grey to Green scheme to promote nature and climate resilience. Many parts of Sheffield face a high risk of flooding, exacerbated by climate change and urbanisation, which increases surface water runoff.

The Grey to Green scheme has transformed roadways into a 1.3 km green corridor that naturally manages floodwater, enhances biodiversity, and creates community spaces. The project transformed hard surfaces into meadows, rain gardens, and vegetation, creating a natural "sponge" that mitigates the risk of surface flooding. This multi-functional design incorporates drought-tolerant plants with long flowering seasons to support pollinators and has generated numerous job opportunities for local residents.

Beyond effectively managing stormwater, the project contributes to cooling the city, improving air quality, and enhancing the well-being of its residents.

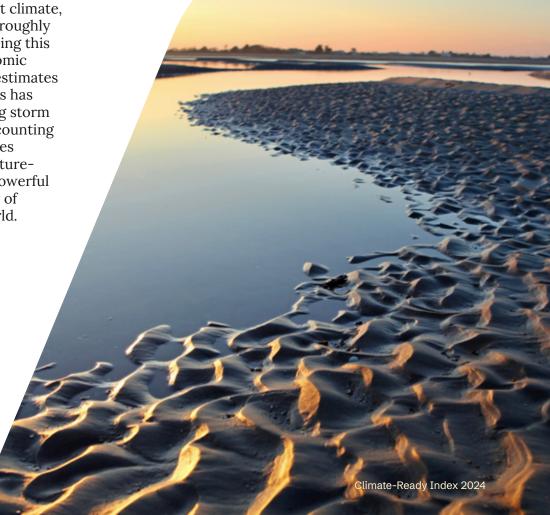
A notable innovation in the project is the implementation of flush curbs, which eliminate the need for traditional road gullies by allowing water to flow seamlessly into the drainage system. These curbs combined with generous footways, cycle routes, planting, seating areas and gathering places have improved accessibility and created a key link between the city centre and emerging residential communities.



Awareness of the role of nature-based solutions, and even the terminology, is growing among the general public. Our survey of the UK public found that 55% of respondents are familiar with the term 'nature-based solutions', and 75% agree that measures such as tree-planting, development of green spaces and wetland restoration can play a role in protecting against extreme weather events.

However, there are several barriers to more widescale adoption of nature-based solutions. Supply limitations, misconceptions about the associated risks and rewards and lack of standardisation all contribute to a continued overreliance on 'hard' (or 'grey') adaptation and infrastructure solutions, such as flood walls, dams and levees. Although they provide vital protection to lives and livelihoods, 'grey' solutions can be costly, have a high risk of failure and affect nature's ability to regenerate.⁵⁵ In contrast, nature-based solutions can be more cost effective. have a lower risk of failure and are more flexible and responsive to a changing climate.⁵⁶ However, it's important to recognise the geographic specificity of these solutions – they need to be developed at a local level, appropriate to their surroundings, and can take time to mature. Nevertheless, the benefits, as described in this section, are well-evidenced.

Because of these barriers, current investment in nature-based solutions remains low. The UN Environment Programme estimates that finance flows for nature-based solutions must increase to US\$484 billion yearly by 2030 to meet climate, biodiversity, and land protection goals, roughly triple current investment levels.⁵⁷ Realising this investment could have enormous economic benefits. For example, the World Bank estimates that globally, the presence of mangroves has avoided \$65 billion in damages, reducing storm impact and preventing flooding, not accounting for the added value of ecosystem services delivered.⁵⁸ Increasing investment in naturebased solutions, therefore, could be a powerful and cost-effective solution to a number of climate challenges faced across the world.



Aviva plc

Increasing topdown support through policy, infrastructure and finance

Summary: Clear policies and government guidance is essential in addressing the challenges associated with both nature loss and climate adaptation. To bring policy to life, it should be matched with the necessary investment and include practical applications for the most critical sectors.

National strategies for nature and adaptation are now largely in place in more economically developed countries, including those in the Climate-Ready Index. However, these plans are not yet being fully matched by tangible policy change.

No country in the Climate-Ready Index achieves top marks in the Adaptation Implementation factor, with particular gaps in implementation mechanisms such as policy, regulation, incentives and direct investment or funding. This is one of the central criticisms from the Climate Change Committee's review of the UK's Third National Adaptation Plan (NAP3) – that the plan is largely based on existing policy commitments and mechanisms, and coordinated from a single department. To integrate adaptation with other priorities such as nature restoration, infrastructure development, Net Zero, and health, adaptation needs to be a fundamental aspect of policy making across all government departments.

Best practice, however, is being developed beyond countries included in the Climate-Ready Index. The Delta Programme in the Netherlands has a strong basis in policy commitments and effectively brings together national government, local authorities and infrastructure authorities to make communities more resilient to flood risk (see case study).

Netherlands makes room for river expansion

The Netherlands is famous for its many lakes, rivers, and canals. However, climate change is increasing the frequency of both extreme water shortages and surpluses.

The Netherlands' Delta Programme⁵⁹ is a national initiative designed to protect the country from flooding, manage freshwater supply, and adapt to climate change. Promoting sustainable urban planning and nature-based solutions to reduce risk and ensure long-term safety and water security, the programme includes large-scale infrastructure projects such as embankments, storm surge barriers, and floodplains.

The Afsluitdijk restoration project was launched in 2019 as part of the Delta Programme. It aims to reinforce the 32-kilometer dyke that has protected the Netherlands from flooding for years, restore ecosystems and migratory routes, and create new opportunities for renewable energy. The project will raise the dyke for improved storm-surge protection and install additional gates and high-capacity pumping stations to remove water and prevent flooding. Additionally, the dyke will serve as a testing ground for renewable energy projects utilizing water currents and the mix of fresh and saltwater. The project will also restore a 4-kilometer fish migration route, reconnecting Lake IJssel with the Wadden Sea. The dyke reinforcement was completed successfully in 2023 with the other projects ending in 2025.

Financed by the Delta Fund, the Dutch government has committed €1.25 billion a year to the programme up to 2032. Through collaboration with residents, businesses, academic institutions, and NGOs, the programme works to safeguard the Netherlands for future generations while setting a global standard in water management.



If designed and managed correctly, infrastructure systems can be a powerful lever to positively impact climate mitigation, adaptation and nature.61 One form of this radical re-thinking is naturebased or 'green' infrastructure. This refers to a network of both green spaces (areas with plants and trees) and blue spaces (rivers, lakes, ponds and wetlands) that provide services relevant to the functioning of infrastructure while delivering a range of environmental, economic, and social benefits. For example, Vancouver, Canada, has deployed green rainwater infrastructure to enhance the city's flood resilience, highlighting the strengths of Canada's national and regional adaptation plans which have contributed to the country's improved performance in the Adaptation Implementation factor of the Index.



Vancouver harnesses the rain

In Vancouver, Canada, residents are well acquainted with rain. But the city's Rain City Strategy⁶² is reimagining rainwater management to enhance water quality, urban resilience, and liveability. The strategy aims to capture and clean 90% of the rainwater that falls in the city. As of January 2023, there are over 300 green infrastructure systems in the City of Vancouver collecting and cleaning rainwater runoff from over 16 hectares of city land.

Green rainwater infrastructure uses a combination of engineered and nature-based solutions to protect, restore, and replicate the natural water cycle. This approach allows soils, plants, trees, and built structures, such as blue-green roofs, rainwater tree trenches, and rain gardens, to capture, store, and clean rainwater. The captured water is then absorbed into the ground, returned to waterways and the atmosphere, or harvested for reuse.

The strategy is crucial as Vancouver faces the impacts of climate change, with more extreme rainfall events that elevate flood risks. At the same time, milder winters reduce snowpack in the city's drinking watersheds, resulting in less recharge of reservoirs in spring and summer. Longer dry spells in the summer and the urban heat island effect pose challenges for human health, water use, and natural ecosystems, making improved water management essential.

A suite of supporting actions and initiatives bring the strategy to life, from permeable pavement installation to encouraging residents to 'adopt a catch basin' to protect public and private property from flooding, improve water quality and give back to the community.⁶³



Successful policy implementation and re-designing infrastructure is only possible with adequate investment, and currently a significant funding gap exists. Estimates suggest the biodiversity funding gap is US\$700 billion annually,⁶⁴ while in the UK the Climate Change Committee estimates that the finance gap to make the UK resilient to the impacts of climate change could be in excess of £10 billion per year this decade.⁶⁵

These aren't just gaps to fill, they are opportunities to realise. Research suggests that early adaptation measures deliver between £2 and £10 for every £1 invested.⁶⁶ Nature offers similar opportunities for economic returns, and annual business opportunities could amount to \$10.1 trillion and could create 395 million jobs by 2030.⁶⁷ But according to our survey of the UK public, only around half of people believe that climate change adaptation could have positive economic impacts in their community. To make the private sector and the public aware of the size and scale of these economic opportunities, countries should upscale their efforts to quantify the potential financial impacts of both inaction and action.



Enabling local activation through business and communities

Summary: The impacts of climate change and nature loss are most acutely felt by communities and businesses on-the-ground. To effectively deliver the change needed, these local actors need to be empowered and supported to safeguard the health and prosperity of communities.

2023 was the hottest year on record, and research suggests it is highly likely that 2024 will be even hotter⁶⁸. In 2023, global mean sea levels reached a record high, and wildfires, floods, droughts and storms caused loss of life, homes, businesses and nature across the world.⁶⁹ In the UK, our survey of the public indicates that the impacts are already being felt, with 32% of people having experienced an extreme weather event in their community in the last 12 months and 50% believing that nature and biodiversity is declining in their community. Yet only

six in ten people (57%) are familiar with the idea of adapting to the impacts of climate change.

Climate change and nature loss affects communities everywhere, but the impacts and damage they cause are unique to every country and region. Because of this, local communities and institutions, including civil society organisations, small businesses, and local governments are often better placed to anticipate impacts and can be more effective in delivering on-the-ground solutions than national bodies. Our survey of the UK public reflects this, with local councils (83%) and local residents (78%) the most frequently cited as having a role to play in managing and improving nature in their local area. Despite this, less than 10% of climate finance from international climate funds is dedicated to local programmes.⁷⁰

Nonetheless, communities across the world are taking self-starting action. They are protecting their local wildlife, implementing flood protection and mitigation measures, adopting sustainable farming methods and managing extreme temperatures. However, these amazing programmes require heightened visibility to inspire more local people to get involved and to inspire other communities across the world to take similar action. Our survey of the UK public found that the most common reason people do not get involved in supporting nature in their community is not apathy, it is lack of knowledge of

the opportunities that exist (30% of people in the UK who do not get involved in supporting nature feel this way). Communicating local success stories more widely could not only increase valuable community involvement, but also raise the profile of initiatives that could benefit from additional funding and resources.

New Yorkers beat the heat

Access to green space is a critical issue in many cities, particularly in underprivileged neighbourhoods. In New York City, the Green Community Schoolyards⁷⁴ programme aims to tackle access to green public spaces while adapting to climate change. The renovated schoolyards absorb stormwater and produce a cooling effect during times of extreme heat.75 Through the programme, school children are the primary designers of their own schoolyards, applying their learning on stormwater management concepts, such as rain gardens and permeable turf fields, into their designs.

Schoolyards are opened to the public outside of school hours, often becoming community centres, strengthening bonds within neighbourhoods through events like cultural festivals, movie nights, group yoga and live performances.

Over the course of the project, 226 green schoolyards have been installed, transforming 700,000 acres of asphalt into porous surfaces to better absorb stormwater. Through community activations 220,000 children and community members have directly benefited from new schoolyards with 5,600 students participating in the design and stewardship of green schoolyards. As a result of the programme, over one million gallons of stormwater is diverted from each site per year, and five million people are now within a 10-minute walk of a green space.



Businesses are also an essential part of this community response. Operations and supply chains around the world are at risk of disruption due to climate impacts and nature loss. This year saw continued disruption to major supply routes due to changes in weather patterns. Both directly and indirectly, the price and availability of goods is affected by crop failures, labour shortages and economic disruptions, all of which are outcomes of unabated nature loss and climate change. But businesses also possess the technical capabilities, skills and resources to engage governments, civil society and communities to develop and implement innovative solutions for both nature and adaptation.

Google's Environmental Insights Explorer⁷⁷ provides a tangible example of this. This free tool uses Google's mapping data to help cities and regions identify climate adaptation opportunities, among other things, by providing detailed environmental data such as tree canopy coverage.

As the World Economic Forum recognises, "an increasing number of companies understand that by taking action on nature now, they can transform nature-related risks – physical, reputational or regulatory – into commercial opportunities."⁷⁸ Our survey of UK businesses supports this: 41% of businesses that have set nature-related targets

and are taking action to deliver them have done so because of the business and financial opportunities presented, making it the second most common driver of action. However, the most common driver of action for businesses of all sizes is more intangible: 60% have done so because "it is the right thing to do". While this reflects the profound effect nature has on our personal and professional lives, more needs to be done to demonstrate that positive action on nature can also provide benefits to businesses, such as the long-term protection of resources, resilience of supply chains, and anticipation of future regulation. Broader understanding of these benefits could help increase the number of businesses setting nature-related targets, which currently stands at 45% of UK businesses - an impressive figure to build upon.

Businesses are also taking action to adapt their operations and supply chains to a changing climate. Our survey of UK businesses shows that nearly 70% have taken some action to protect against extreme weather events. For those who disagree that their business has the support needed to make adaptations in response to extreme weather, the top three barriers to change are lack of information and guidance, difficulty of assessing business needs, and financial support.

On financial support, the wider business community could do more to accelerate adaptation uptake. The private sector has yet to fully realise the opportunity presented by significant national (and international) adaptation needs, with just 3% of global adaptation funding commitments today coming from the private sector.⁷⁹

For more widespread and unified business action to happen across both climate adaptation and nature protection and restoration, governments should work with industry to outline the roles and responsibilities expected of businesses. This means breaking down national commitments and plans to a sector level so that businesses can operationalise them. This is an approach set out in the Aviva WWF joint report on Nature-positive pathways.



Germany **Country analysis** The Climate-Ready Index has an inevitable lag between data collection and reporting, and the slow real-world impact of changing political policy. Therefore, recent changes in policy

direction, commitments and action at a national level may not yet be reflected in the findings of the Index. This section is not intended to be a comprehensive analysis of country-level performance, but rather it is a snapshot of our interpretation of this year's score and trends over the three-year period of the Index.

Key for country tables Increased rank from previous year Decreased rank from previous year Joint ranking

Increased score from previous year

Decreased score from previous year



1st Germany

Germany leads the Climate-Ready Index for the third consecutive year, and by a much greater margin than previous years. The Index leader surpasses the 70-point mark for the first time, a significant milestone considered by many of our contributing datasets as the benchmark for 'good' performance.

Germany overtakes the UK to secure the top spot in the *Emissions and Mitigation* pillar, improving its score due to several climate policies that have accelerated the expansion of renewable energy generation. Nonetheless, like all countries globally, Germany still has a way to go in continuing its progress in mitigation. This includes a further reduction in coal use (currently planned for phase-out by 2038)⁸⁰ and clearer plans for transitioning the building and transport sectors to Net Zero.⁸¹

Germany leads the Index in the Adaptation Implementation factor. With an updated monitoring report⁸² in the last 12 months, Germany's detailed analysis of how climate impacts are unfolding, and its consideration of cost implications are more detailed than any of its G7 and Ireland counterparts. Germany now leads the Index in the Nature factor, performing well in its management of natural resources and conservation of biodiversity and natural ecosystems; it is the only country in the Index to surpass 30% protected areas for both land and seas, according to the Environmental Performance Index.⁸³

Public attitude to climate change is Germany's most significant area of underperformance, placing sixth in the *Climate Attitudes* factor for the last three years. Across the countries in the Index, the German public is the least concerned about the impacts of climate change (62%) and among the least likely to agree that concerns about climate change influence their purchasing decisions (37%).

Overall results		2022 I			3 rank 2024 rank st 1 st	-	²⁰²⁴ s	
Pillar	2022 rank	2023 rank	2024 rank	2024 score	Factors	2022 rank	2023 rank	2024 rank
Emissions and Mitigation	2	2	1	65.8 (↑)	Climate Performance	2	2	1
					Adaptation	1	1	2
Environment and		3	1	75.1 (↑)	Capability	_	_	_
Adaptation	1	3			Nature Adaptation	7	7	1
					Implementation	1	1=	1
					Climate Insurance	3	3	3
Economy and	2	2	0	72.7 (1)	Business Readiness	5	7	3
Business	2	2	2		Climate Innovation	3	3	3
					Climate Contribution	2	1=	1=
					Climate Attitudes	6	6	6
Society and		2	2	76.9 (↓)				
Community	2 3	3			Climate Transition	3	5	4
					Social Resilience	2	2	2

2nd France

France remains second overall in the Climate-Ready Index, improving its overall score in two out of four pillars.

France's stand-out area of performance remains the Economy and Business pillar, which it tops for the third consecutive year, sharing with Germany the distinction of being more than ten points ahead of the rest of the Index. France is considered one of the main providers of climate finance on the global stage ranking joint top in the Climate Contribution factor with Germany and Japan. France also leads the Index in the Climate Innovation factor which measures the number of green patents issued, crossborder energy development and investment in food technology.

In the Society and Community pillar, France has seen year-on-year improvements in its ranking, topping the pillar for the first time this year despite a declining score. It leads the Climate-Ready Index for the second year

in the Climate Transition factor, making positive steps to deliver a fair and equitable transition to Net Zero.

In the Emissions and Mitigation pillar, France remains third. Its performance has improved on last year due to strengthened plans to reduce fossil fuel consumption by 40% by 2030, but its score has not returned to 2022 levels. The three-year trend is downward because France has extended the life of its two remaining coal plants, effectively delaying its coal exit from 2023 to 2024.

The Environment and Adaptation pillar remains France's most significant area of underperformance, where it is placed fifth, with a ranking of seventh in the Adaptation Implementation factor. Despite being an early mover in this space, launching its first National Adaptation Strategy in 2006, France has failed to assert itself as a leader in adaptation, with its strategy lacking mechanisms for implementation such as incentives, regulation and administrative bodies. Its Third National Adaptation strategy is due imminently and there are significant expectations.

Overall results		2022 2 ¹			arank 2024 ran and 2nd		^{2024 s}	
Pillar	2022 rank	2023 rank	2024 rank	2024 score	Factors	2022 rank	2023 rank	2024 rank
Emissions and Mitigation	3	3	3	57.1 (↑)	Climate Performance	3	3	3
					Adaptation Capability	4	4	4
Environment and	2	6	5	60.9 (↑)	Nature	6	6	3
Adaptation					Adaptation Implementation	2	4	7
					Climate Insurance	2	2	2
Economy and	1	1	1	75.1 (↓)	Business Readiness	4	4	5
Business			1		Climate Innovation	1	1	1
					Climate Contribution	1	1=	1=
Society					Climate Attitudes	2	2	3
and Community	and 3 2	1	77.9 (↓)	Climate Transition	4	1	1	
Johnnanty					Social Resilience	5	5	5

3rd UK

The UK retains third place in the Climate-Ready Index for the third consecutive year, with a small increase in its overall score.

In the Environment and Adaptation pillar, the UK moves up from fourth to second, driven by improving scores in both the Nature and Adaption Capability factors. Despite an overall decline in biodiversity and wider environment conditions, the UK places second in the Nature factor, moving up three positions due to progress in ecosystem restoration and species conservation. The UK and Germany are the only two countries in the Index with over 30% of seas under protection.84 Questions remain about harmful practices permitted within protected marine areas such as bottom trawling85 meaning the percentage of 'properly protected' areas could be disputed, but important progress has still been made towards the Global Biodiversity Framework's '30x30' target.

For the first time, the UK leads in the Adaptation Capability factor, which measures

a country's exposure, sensitivity and capacity to adapt to the negative effects of climate change, as well as its ability to use investments to take action on adaptation. The country also began its adaptation planning early compared to its G7 and Irish counterparts. However, in terms of putting adaptation into action (measured by the Adaptation Implementation factor) other countries are catching up with the UK, which drops to third place in this factor. The UK's Third National Adaptation Programme has been criticised by the UK's Climate Change Committee (CCC) as still falling "far short of what is needed, in particular, setting out coherent, specific and measurable goals and outcomes", which top performing countries in this factor successfully achieve.86

While the UK remains sixth in the Business Readiness factor, its score has improved. UK and US businesses are now the most likely across the G7 and Ireland to be concerned about climate change and its impacts – two thirds (68%) today up from just over half (54%) in 2022. Encouragingly, there is a similar rise in UK companies taking climate action. UK businesses are now more likely to consider the environmental impact of their actions (61% up from 47% in 2022),

Overall results		2022 31			3 rank 2 Prd	024 rank 3 rd		^{2024 s} 64. 4	
Pillar	2022 rank	2023 rank	2024 rank	2024 score	Factors		2022 rank	2023 rank	2024 rank
Emissions and Mitigation	1	1	2	62.4 (↓)	Climate Performance		1	1	2
			2		Adaptation Capability		2	2	1
Environment and	4	2		67.1 (↑)	Nature		5	5	2
Adaptation					Adaptation Implementat	ion	4	1	3
					Climate Insu	rance	5	5	5
Economy				56.7	Business Rea	diness	7	6	6
and Business	4	6	4	(1)	Climate Inno	vation	4	4	4
					Climate Cont	ribution	4	6	6
Society					Climate Attitu	udes	3	4	4
and	Society and 4 4 Community	3	75.9 (↓)	Climate Trans	sition	2	2	3	
Community				(*)	Social Resilie	ence	6	6	6

3rd UK

to have a structured plan in place to reduce their carbon footprint (51% up from 34% in 2022), and to have taken action to protect their own operations (48% up from 36% in 2022) and their supply chains (47% up from 26% in 2022). Despite the UK starting from a low base and remaining sixth in the Business Readiness factor, these are encouraging signs that UK businesses are taking climate action more seriously than before. However, the UK business community remains among the least equipped with the necessary knowledge, support and resources to prepare for climate change, with the UK 20 points behind the Index leader, Ireland, in this measure (48% compared to 68%). If provided with the necessary information, guidance and financial support, UK businesses could continue their positive improvement and increase UK performance further in this factor.

To date, the UK has been a strong performer in the *Emissions and Mitigation* pillar, with the UK's CCC commending the country's history of emission reductions, having met all targets set to date and successfully reduced territorial emissions by over half. However, this year, the UK loses its previous top spot in this pillar. The UK has committed to reduce its Greenhouse Gas emissions by 68% by 2030 (from

a 1990 baseline) and, with six years to go, the UK's CCC finds that the country is not on track to hit this target.⁸⁷ Looking at the underlying data in the Emissions and Mitigation pillar, the UK scores well for its level of GHG emissions and energy use. However, a lack of sector-specific reduction plans in 2023 result in low scores for both renewable energy and climate policy. If the UK is to capitalise on the opportunities presented by the transition to Net Zero, policy action and sector-specific plans from the government would be needed.

All countries' scores in the Society and Community pillar have fallen. However, the UK has fallen comparatively less than others, and therefore rises one place to third. The UK remains fourth in the Climate Attitudes factor, and public attitudes towards climate change have remained relatively stable across the three years. Despite the UK public being among the most likely to agree with statements relating to the need for urgent action (72%), the importance of adapting buildings and infrastructure to extreme weather (85%), and the need for governments and business to invest in delivering adaptive and mitigating solutions (76%), the three-year trend for UK public action is downwards. Although declines in

scores are relatively small, the UK is behind most of its peers in the proportion of the public who report having made significant and long-lasting lifestyle changes.

Along with all other countries in the Index, the UK's score in *Climate Transition* and *Social Resilience* has fallen, contributing to a decline in its score for the *Society and Community* pillar, but its decline was less than some of its Index counterparts. Digging deeper into the *Social Resilience* factor, the UK's scores for a 'sound business environment' are significantly lower than Ireland, which is the Index leader in this factor. This measure considers regulatory quality and the ability of governments to develop and implement effective policy and regulation, which could reflect the lack of support and guidance for UK businesses, indicated by findings from the *Business Readiness* factor.

WK businesses are now more likely to consider the environmental impact of their actions

Aviva plc Climate-Ready Index 2024

4th Ireland

Ireland rises to fourth place in the Climate-Ready Index and improves its score in three out of four pillars.

Ireland's greatest improvement is in the Business Readiness factor, taking first place for the third consecutive year and by a significant margin. Nearly three quarters (71%) of businesses in Ireland report having a structured plan in place to reduce their carbon footprint, 18% more than the next closest country (which is the US). Ireland's new Climate Enterprise Action Fund⁸⁸ and the Climate Toolkit 4 Business⁸⁹ to support business climate action are likely drivers of the 13% increase (68% compared to 55% in 2023) in businesses reporting having access to the knowledge, support and resources required to act.

Ireland jumps to fourth place in the Emissions and Mitigation pillar with a stand-out target of 80% renewable energy consumption by 2030,90 and Ireland and Germany have the most ambitious renewable energy targets across the Index. Nevertheless, critics note that Ireland's policies are missing a long-

term strategy for phasing out fossil fuel infrastructure and shifting investments from natural gas towards renewable energy.

Ireland also moves from fifth to fourth position in the Environment and Adaptation pillar, driven by a strong performance in the Nature factor with high scores for species protection. With a renewed national effort to address adaptation and nature, Ireland seeks to adopt a 'whole-of-government, whole-of-society' approach through its new National Adaptation Framework⁹¹ and National Biodiversity Action Plan.⁹²

However, Ireland sees a dramatic fall in Society and Community, ranking sixth after topping the Index in this pillar in the previous two years. Despite year-on-year movement up the ranks in the Climate Attitudes factor, scores for this measure have deteriorated compared to 2022 levels, but not to the same extent as other countries. The addition of new indicators for the Climate Transition factor highlights gaps in Ireland's approach. Our strengthened methodology for this factor now includes the carbon and environmental efficiency of social progress, and here Ireland's high consumption of natural materials per capita hampers its performance.

Overall results		20221 5 ¹			3 rank 2024 rank (th 4 th	•	²⁰²⁴ s 58.7	
Pillar	2022 rank	2023 rank	2024 rank	2024 score	Factors	2022 rank	2023 rank	2024 rank
Emissions and Mitigation	6	5	4	51.4 (↑)	Climate Performance	6	5	4
					Adaptation	7	7	7
Environment and		5	4	63 (↑)	Capability Nature	4	4	4
Adaptation					Adaptation Implementation	3	4	3
					Climate Insurance	6	6	6
Economy and	8	8	7	52.9 (↑)	Business Readiness	1	1	1
Business	8	8	7		Climate Innovation	7	7	7
					Climate Contribution	7	7	7
Society					Climate Attitudes	4	3	2
and	nd 1 1	6	74.3 (↓)	Climate Transition	1	4	7	
Community					Social Resilience	3	3	1

5th Japan

Japan slips to fifth place overall, largely due to poor performance in both *Emissions and Mitigation* and *Environment and Adaptation* pillars where the country drops into the bottom half.

Japan's strongest performances are in the Economy and Business pillar, placing joint first in the Climate Contribution factor with France and Germany, being considered among the top contributors to global climate finance needs, and the Climate Innovation factor, placing second and boasting high numbers of green patents.

Japan's ranking in the Emissions and Mitigation pillar has fallen every year the Climate-Ready Index has been published, where it now ranks seventh. Japan's emissions reduction targets are conservative and the country's reliance on coal is likely to persist. Experts criticise Japan's low renewable energy target of 36-38% consumption by 203093 and lack of clear roadmaps to divest from coal power. Developing and implementing effective carbon pricing and a robust renewable energy

development plan would help the country to effectively decarbonise.

This downward trend is also reflected in the Environment and Adaptation pillar, where Japan falls from fourth to sixth, with marginal improvements in its score but failing to keep pace with other countries in the Index. In order to increase its score, Japan's national adaptation plan needs to go beyond creating the enabling conditions for adaptation to take place and define clear implementation mechanisms in the form of policy commitments, incentives and governance processes.

While Japan's score is stable in the Economy and Business pillar, the country remains at the bottom of the pack in the Business Readiness factor, delivering low scores in business sentiment towards both climate change, and in taking climate action. With only 30% of its businesses reporting that they have a structured plan to reduce their climate impact, Japan lags behind other countries. Japan's performance is particularly significant due to the integral role the private sector is asked to play in the country's decarbonisation strategy. Despite this, pressure on businesses to act on climate change is remarkably low, with just 17% of businesses reporting feeling pressure from government or regulatory bodies to act.

		4	h		rank 2024 ran th 5th		²⁰²⁴ s 58. 0	
Pillar	2022 rank	2023 rank	2024 rank	2024 score	Factors	2022 rank	2023 rank	2024 rank
Emissions and Mitigation	5	6	7	42.1 (↑)	Climate Performance	5	6	7
			6		Adaptation	6	6	6
Environment and	6	4		59.8 (↑)	Capability	3	3	7
Adaptation	Ü	1			Adaptation Implementation	5	4	5
					Implementation			
					Climate Insurance	8	8	8
Economy and	0	3		64.2 (↑)	Business Readiness	8	8	8
Business	3	3	3		Climate Innovation	2	2	2
					Climate Contribution	3	1	1=
Society					Climate Attitudes	7	7	7
and		5	4	75.8 (↓)	Climate Transition	6	6	5
Community				Social Resilience	4	4	4	

6th Italy

Italy jumps ahead of Canada to take sixth position in this year's Climate-Ready Index, but still underperforms in some of the highest weighted factors in the Index.

Public attitudes to climate change remain Italy's strongest area of performance, and it tops the Index in the Climate Attitudes factor for the third consecutive year. The Italian public remain the most concerned about climate change across all countries in the Index. They are also most likely to consider the environmental impact of their actions and recognise the importance of adapting buildings and infrastructure to extreme weather. The latter is particularly relevant in the context of Italy's underperformance in actual implementation of climate change adaptation measures. While the government remains slow to act, the public is acutely aware of the importance of adaptive action.

Italy is the only country in the Index, along with the UK, to experience a declining score for the Emissions and Mitigation pillar, dropping one position to fifth. Experts suggest that its fossil-fuel policy is going backwards with new infrastructure planned for gas pipelines.⁹⁴

Italy's most significant area of underperformance compared to peers is the Environment and Adaptation pillar, where it remains in eighth position. Considering Italy is among the countries most at risk of extreme weather events and a changing climate within Europe, many would argue its approach to adaptation needs to be strengthened. Italy has been late to act compared with the majority of its G7 counterparts, with extensive consultation periods significantly delaying the publication of the country's adaptation strategy, and an evaluation process has failed to materialise over the last 12 months.

Overall results		2022 6 ¹			3 rank 2024 ran 7th 6 th		^{2024 s} 56.7	
Pillar	2022 rank	2023 rank	2024 rank	2024 score	Factors	2022 rank	2023 rank	2024 rank
Emissions and Mitigation	4	4	5	50.6 (↓)	Climate Performance	4	4	5
					Adaptation	8	8	8
Environment and	nt 8 8	8	53.7 (↑)	Capability Nature	8	8	5	
Adaptation				(.,	Adaptation Implementation	6	7	8
					Climate Insurance	7	7	7
Economy				56.4 (↑)	Business Readiness	3	3	4
and Business	7	4	5		Climate Innovation	5	5	5
					Climate Contribution	6	4	4
Society					Climate Attitudes	1	1	1
and	6	7	5	75.1 (↓)	Climate Transition	5	3	2
Community	Community			Social Resilience	8	8	8	

7th Canada

Canada falls one place in this year's Climate-Ready Index, to seventh place, with a declining score across three out of four pillars. It is the only country in the Index whose overall score has declined.

The Environment and Adaptation pillar is an area of strength for Canada, and it takes third place here with its national adaptation plan. The plan is in its infancy and time is needed to determine how successfully it is monitored, evaluated and implemented, given that it contains detailed, measurable targets for monitoring and evaluation. While the plan itself provides a good example for other countries, it will require significant funding to be effective. Canada's performance in this pillar is also undermined by poor management of natural resources and ecosystem services, ranking sixth in the Nature factor, after leading this factor last year. Broadening our measure of Nature has revealed Canada's areas of relative weakness

- specifically, the integrity of the country's forests and management of its fisheries.

A continued reliance on fossil fuels puts Canada ten points behind others in the Emissions and Mitigation pillar, where it takes last place. Despite the Canadian government's commitment to adopt regulations to cap oil and gas emissions, it plans to increase oil and gas production by 2030. Canada remains highly reliant on fossil fuels, emphasising the need for specific provincial-level plans to phase them out. Without such plans, improvements in this pillar are unlikely.

Placing sixth in the Economy and Business pillar, Canada falls from second to seventh in the Business Readiness factor, despite minor score changes. Two-thirds of organisations in Canada agree that businesses should reduce their carbon footprint. However, a three-year downward trend in businesses reporting that they feel pressure from governments, consumers and other businesses to act on climate change (41% down from 48% in 2022) is a concerning trajectory considering the urgency of action required.

Overall results		2022 i			3 rank 2024 rank 5th 7 th	-	²⁰²⁴ s 53. 9	
Pillar	2022 rank	2023 rank	2024 rank	2024 score	Factors	2022 rank	2023 rank	2024 rank
Emissions and Mitigation	8	8	8	31.6 (↑)	Climate Performance	8	8	8
			Adaptation	3	3	3		
Environment and	5	1	3	65.2 (↓)	Capability Nature	1	1	6
Adaptation					Adaptation Implementation	8	3	2
			6	55.8 (\)	Climate Insurance	4	4	4
Economy and	6	5			Business Readiness	2	2	7
Business	О	Э			Climate Innovation	8	8	8
					Climate Contribution	5	5	5
Society					Climate Attitudes	5	5	5
and	7	6	7	72.8 (↓)	Climate Transition	7	7	6
Community					Social Resilience	1	1	3

8th USA

The USA improves its overall score, surpassing the significant 50-point threshold, but fails to move up in the overall rankings, remaining in eighth place.

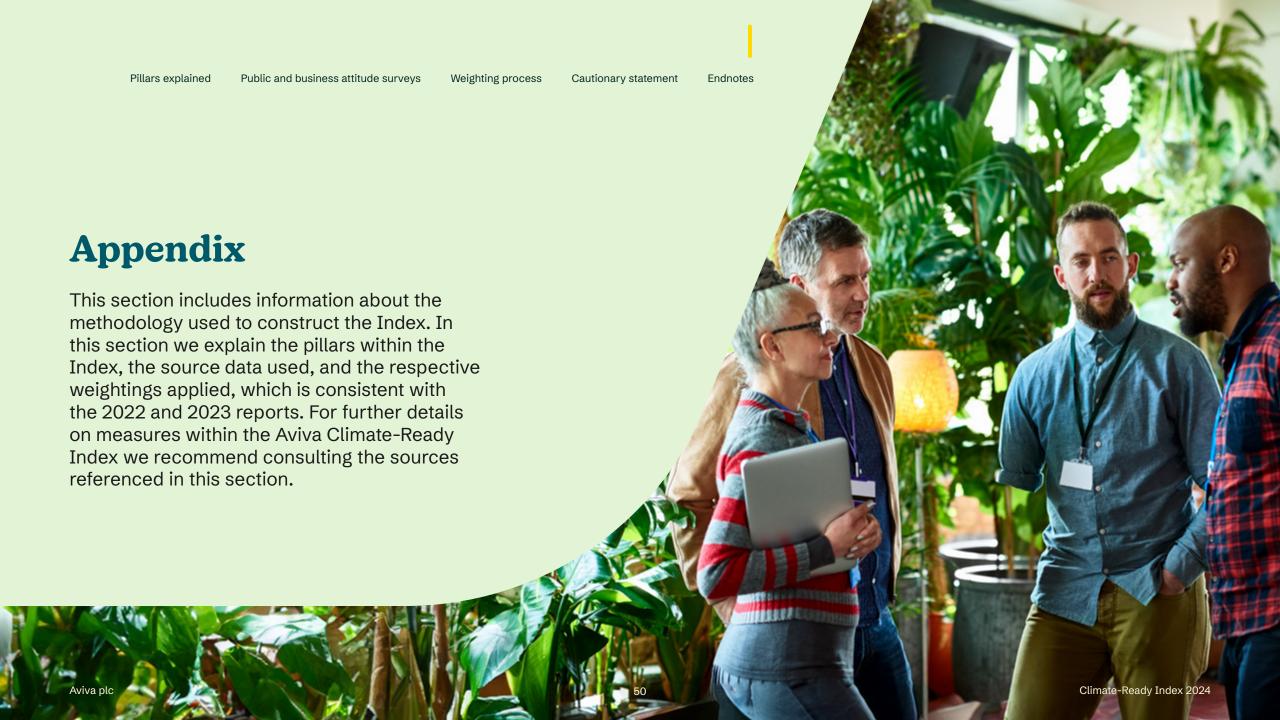
The USA's most dramatic rise in rank comes in the Business Readiness factor, where it leaps from fifth to second. US businesses are now the most concerned, alongside those in the UK, about the current impacts of climate change on their business. Critically, they are also among the most likely to have taken action to protect their own operations and supply chains against extreme weather events. The significant number of extreme weather events that have impacted the US over the last 12 months is a likely contributor to this action, but US businesses are going further than those in similarly-affected countries such as Canada and Japan.

Driven largely by climate policies under the Inflation Reduction Act, which aims to halve GHG emissions by 2030 and has led to significant investments in renewable energy infrastructure, the USA jumps ahead of Japan in the *Emissions and Mitigation* pillar to sixth place. However, more concrete implementation policies are needed to reach its Net Zero target. If policies related to the Inflation Reduction Act continue to be enacted, further positive impacts on the USA's score in this pillar will likely continue in the years ahead.

In the Environment and Adaptation pillar, the USA remains seventh, but its score has improved considerably. A new federal framework and departmental policies better position the USA to prioritise adaptation efforts across sectors and regions. This regional specificity and the sophistication of the USA's climate risk analysis was commended by our experts.

Despite failing to move up in the overall Climate-Ready Index, the USA's performance this year is encouraging, and, if the current trajectory is maintained, further improvements can be expected in future.

Overall results		2022 i			arank 2024 rank gth 8 th		²⁰²⁴ s	
Pillar	2022 rank	2023 rank	2024 rank	2024 score	Factors	2022 rank	2023 rank	2024 rank
Emissions and Mitigation	7	7	6	42.8 (↑)	Climate Performance	7	7	6
					Adaptation	_		,
Environment			7	57.2 (↑)	Capability	5	5	4
and 7 Adaptation	7	7			Nature	2	2	8
					Adaptation Implementation	6	8	6
					Climate Insurance	1	1	1
Economy and	5	7	8	52.8 (↑)	Business Readiness	6	5	2
Business	Ü	,			Climate Innovation	6	6	6
					Climate Contribution	8	8	8
Society	Society		8	66.2 (↓)	Climate Attitudes	8	8	8
and	8	8			Climate Transition	8	8	8
Community					Social Resilience	7	7	7



Pillar explained: **Emissions and Mitigation**



Factor	Measure	Notes
Climate Performance	<u>Climate change</u> <u>performance Index</u>	The Climate Change Performance Index (CCPI) produces a normalised score for each country from 0-100. No methodological changes have been made to the CCPI results for inclusion in the Aviva Climate-Ready Index. Although CCPI is the leading mitigation index, there are some issues to bear in mind. Only production-based emissions are used in calculation of the results – a country is held accountable for the emissions it is producing, rather than those from consumption. Similarly, no specific recognition is given to the role of outsourced emissions within this index. Also notable is that more than half of the CCPI ranking indicators are qualified in relative (better/worse) rather than absolute terms. Therefore, even countries with high rankings have no reason to be complacent. Data accessed 29/08/2024.

Aviva plc Climate-Ready Index 2024 51

Pillar explained: **Environment and Adaptation**



Factor	Measure	Notes
Adaptation Capability	Notre Dame Global Adaptation Initiative	The Notre Dame Global Adaptation Initiative index produces a normalised score for each country from 0-100. No methodological changes have been made to the index for inclusion in the Climate-Ready Index. Importantly, Notre Dame provides a score that measures the capacity and capability of countries to respond to the effects of climate change, therefore this does not necessarily indicate realized adaptation measures. For this reason, the Climate-Ready Index also includes the factor 'implementation of adaptation'. Data accessed 29/08/2024.
Nature	Ecosystem Vitality	Countries are scored on a normalised scale from 0-100. No methodological changes have been made to the Ecosystem Vitality Index for inclusion in the Climate-Ready Index. The index measures how well countries are preserving, protecting, and enhancing ecosystems and the services they provide. A score of 100 indicates that a country has effectively managed their natural resources and preserved biodiversity and ecosystems and a score of 0 indicates a failure to manage natural resources and preserve ecosystems. Therefore, top performing countries within our index are still experiencing some form of ecosystem degradation. The Ecosystem Vitality measure is taken from the Environmental Performance Index, which is updated biennially. Data accessed 29/08/2024.
Adaptation Implementation	National Adaptation Plan checklist	In order to provide the most useful score possible today, a bespoke checklist of criteria around the publication of National Adaptation Plans has been developed by Good Business, based on information that is publicly and readily available for all markets. This measure was updated in 2024 in alignment with the UN Adaptation Gap Assessment to better evaluate countries' preparedness to implement adaptation strategies. Countries' National Adaptation Plans have been scored from 0-10, according to alignment with the following criteria: • Comprehensiveness of plans across critical systems (defined by the Global Commission on Adaptation) • Inclusiveness of actions • Implementation mechanisms • Integration mechanisms • Monitoring and evaluation process This has been normalised to produce a score from 0-100. The checklist is reliant on the ready availability of National Adaptation Plans, which are not produced in a consistent format across countries or released in a co-ordinated way. Therefore, comparison and evaluation of country level plans is qualitative, with scores assigned based on the best available information. Data accessed 29/08/2024.

Aviva plc 52 Climate-Ready Index 2024

Pillar explained: **Economy and Business**



Factor	Measure	Notes
Climate Insurance	Insurance indicators (OECD)	For the use of our model, we have considered non-life insurance penetration figures. For the purposes of data normalisation, we have set the top boundary at the level of the greatest global penetration for the year 2021, including countries beyond the G7 + Ireland (the highest penetration is in the USA, at 7.5%). Therefore, all scores within our model are relative to the maximum possible score of 7.5% and minimum possible score of 0%. Scores have been normalised on a scale from 0-100. Data is unchanged from the 2023 Climate-Ready Index. Data accessed 11/08/2023.
Business Readiness	YouGov survey commissioned by Aviva	Aviva commissioned YouGov to survey business attitudes towards climate readiness among a sample of c.250 business leaders working for SMEs and a small number of larger businesses in the UK, Ireland, Canada, US, France, Germany, Italy and Japan. The survey was conducted online between 13th-30th June 2024.
Climate Innovation	<u>Green Future Index – Clean Innovation</u>	The Green Future Index produces a score for each country on 0-10 scale. For our Climate-Ready Index, we have used data from the Clean Innovation pillar only. Scores have been normalised to a 0-100 scale for inclusion in our model. Data is unchanged from the 2023 Climate-Ready Index. Data accessed 11/08/2023.
Climate Contribution	OECD Green Growth Indicators – Environmental ODA	We have calculated the Environmentally related ODA as a percentage of each country's total GNI, with each country scored relative to a maximum value of 0.23% and minimum value of 0%. Scores have been normalised on a scale of 0-100. The maximum score of 0.23% is based on UN guidance that a minimum of \$100 billion of climate finance per year is necessary to reach targets set by the UN Sustainable Development Goals, and additional analysis conducted by the World Resources Institute on what each country's contribution as a percentage of GNI should be to reach this target (their conclusion is 0.23%). The UN notes, however, that \$100 billion per year is the bare minimum, and that other organisations provide estimates that are much higher. This active debate will continue to be monitored in future years to ensure the measurement of this factor remains in line with any growing consensus. In addition, this measure does not currently distinguish between the form of ODA, for example grants and loans. This will also be monitored in future years. Data is unchanged from the 2023 Climate–Ready Index. Data accessed 11/08/2023.

Aviva plc 53 Climate-Ready Index 2024

Pillar explained: Society and Community



Factor	Measure	Notes
Climate Attitudes	YouGov survey commissioned by Aviva	Aviva commissioned YouGov to survey consumer attitudes towards climate readiness among nationally representative samples of c.1,000 adults aged 18+ in the UK, Ireland, Canada, US, France, Germany, Italy and Japan. The survey was conducted online between 13th-30th June 2024.
Climate Transition	Just Transition Score	The Just Transition Score produces a normalised score from 0-100. No methodological changes have been made for inclusion in our Climate-Ready Index. The Just Transition Score measures the carbon and ecological efficiency of social progress of each country. Based on the ratio of consumption-based CO ₂ emissions per capita, the Biodiversity Habitats Index, and material footprint per capita - to the Social Progresss Index (SPI). The underlying data set for this measure has changed from the Transition Performance Index used in the 2022 Climate-Ready Index. Data accessed 29/08/2024.
Social Resilience	Positive Peace Index	The Positive Peace Index scores countries from 5-1, with 1 being the highest score possible, and 5 being the lowest. The data has been inverted and normalised to produce a score from 0-100 for inclusion in the Aviva Climate-Ready Index. Data accessed 29/08/2024.

Aviva plc 54 Climate-Ready Index 2024

Public and business attitude surveys

Aviva commissioned YouGov to carry out a survey of consumer attitudes towards climate readiness among nationally representative samples of c.1,000 adults aged 18+ in each market, and a survey of business attitudes towards climate readiness among samples of c.250 business leaders in each market working for SMEs and a small number of larger businesses. Fieldwork for both surveys was carried out online between 13th-30th June 2024 in the UK, Ireland, Canada, US, France, Germany, Italy and Japan.

Country	Consumer sample size			SME sample size		
	2022	2023	2024	2022	2023	2024
UK	1,008	1,008	1,007	253	253	260
Ireland	1,015	1,007	1,011	252	266	250
Canada	1,009	1,013	1,015	260	286	280
USA	1,019	1,028	1,026	251	255	259
Germany	1,015	1,000	1,012	250	251	251
Italy	1,001	1,007	1,020	251	253	255
France	1,013	1,000	1,011	256	256	253
Japan	1,001	1,016	1,034	250	250	249

Public and business attitude surveys

These statements were developed and refined by Aviva, Good Business and YouGov, intended to use for the Climate Readiness Index being developed by Good Business.

Some statements have been shortened for presentational purposes.

Public attitudes survey

All respondents were asked to what extent they agree or disagree with seven statements about climate change and sustainability.

- 1. Urgent action is required within the next 10 years to tackle climate change
- 2. There will be more frequent climate changerelated extreme weather events (e.g. flooding, storms, extreme temperatures) in [COUNTRY] and other countries over the next 10 years and beyond
- 3. Government and business will have to invest in green infrastructure, energy and assets (e.g. renewable energy production, green public transport, sustainable buildings) to tackle climate change and adapt to the impacts of climate change
- 4. It is important that buildings and infrastructure (e.g. train lines, buildings, river and sea defences) are adapted to deal with the effects of extreme weather
- 5. I have made significant and long-lasting changes to my lifestyle in order to reduce my environmental impact (e.g. travel habits, dietary preferences, financial decisions)
- 6. Concerns about climate change influence my purchasing decisions
- 7. I feel pressure from those around me to act on climate change

Business attitudes survey

All respondents were asked to what extent they agree or disagree with seven statements about climate change and sustainability.

- 1. All businesses should work on reducing their carbon footprint
- 2. My business has a structured plan, with targets and related actions, in place for how the business can reduce its carbon footprint/climate impact beyond everyday actions
- 3. In [COUNTRY] businesses have access to the knowledge, support and resources required to take action to prepare for the possible impacts of climate change (e.g. government grants, sector-specific guidance)
- 4. My business, has taken/is taking action to assess and protect our operations against extreme weather events (e.g. flooding, storms, extreme temperatures)
- My business, has taken/ is taking action to assess and protect our supply chain against extreme weather events (e.g. flooding, storms, extreme temperatures)
- 6. My business feels pressure from our operational environment to take action on climate change
- 7. Concerns about climate change influence the purchasing decisions we make for our business (e.g. supply chain, business premises, and vehicles)

Weighting process

For the 2024 Climate-Ready Index, the same weighting methodology from the 2022 and 2023 Climate-Ready Index has been applied. The weighting was determined by a roundtable of experts from a variety of backgrounds, including academia, industry and NGOs, as well as a variety of specialisms, in collaboration with experts from Aviva.

Through discussion and iteration, the group provided the weighting that has been applied to the index. The group was guided by the understanding that each of the factors in the model is important, but all are not of equal importance. The results of the weighting exercise reflect a view of what it means for a country to become more climate-ready, and a realistic balancing of the factors involved.

illar Factor		Pillar weighting	Factor weighting
Emissions & Mitigation	Climate Performance	30%	100%
Environment & Adaptation	Adaptation Capability	aptation Capability	
	Nature	30%	35%
	Adaptation Implementation		30%

Economy & Business	Insurance Contribution	25%	20%
	Business Readiness		20%
	Climate Innovation		30%
	Climate Contribution		30%

Society & Community	Climate Attitude	15%	25%
	Climate Transition		37.5%
	Social Resilience	Social Resilience	

Aviva plc 57 Climate-Ready Index 2024

Cautionary statement

The analysis contained herein is based on numerous assumptions, judgements, opinions and estimates, all of which are subject to change without notice. Different assumptions could result in materially different results. Therefore subsequent reports may not allow a reader to compare the outcome of the index or the scoring system on a like for like basis.

This document is not a financial promotion nor a marketing communication. The information in this document is for information purposes only and is not investment, legal, regulatory or tax advice. To the fullest extent permitted by law, we exclude all representations, warranties, conditions, undertakings and all other terms of any kind, implied by statute or common law, with respect to the information contained in this report including (without limitation) any representations as to the quality, suitability, accuracy or completeness of the information. Aviva, its directors, employees, agents or advisers do not accept or assume responsibility to any person to whom this document is shown or into whose hands it may come, and any such responsibility or liability is expressly disclaimed. The information in this document is provided 'as is' and 'as available'. Where this document contains third party information or data ('Third Party Data'), we cannot guarantee the accuracy, completeness or reliability of such Third Party Data and accept no responsibility or liability whatsoever in respect of such Third Party Data. We reserve the right to update this document at any time and without notice. However, we are under no obligation to update or amend this document or correct any errors in the document following the date of this report. Although the information contained in this document is believed to be correct. as at the time of publication, no assurance can be given to you that this document is complete or

accurate in the light of information that may become available after its publication. The information may not take into account any relevant events, facts or conditions that have occurred after the publication of this document.

Aviva plc is a company registered in England No. 2468686. Registered office: St Helen's, 1 Undershaft, London EC3P 3DQ.

Endnotes

- 1. Inflation Reduction Act | U.S. Department of the Treasury
- 2. US Framework for Climate Resilience and Security
- 3. Environmental Performance Index, 2024
- 4. United Nations Adaptation Gap Report
- 5. A U.S. Framework for Climate Resilience and Security | The White House
- 6. Climate Change Performance Index 2024 | Climate Change Performance Index (ccpi.org)
- 7. World Energy Outlook 2023 Analysis IEA
- 8. COP28: Global Renewables And Energy Efficiency Pledge
- 9. Renewable energy is to cover 80% of gross electricity consumption | Germany
- 10. Climate Action Plan 2023 | Ireland
- 11. World Energy Outlook 2023 Analysis IEA
- 12. Fossil Fuel Subsidies Surged to Record \$7 Trillion | IMF
- 13. Aviva research with YouGov, June 2024
- 14. With green jobs booming, here's how to plug the sustainability skills gap | World Economic Forum
- 15. Just transition score
- 16. Global Social Progress Index
- 17. Positive Peace Index
- 18. Aviva research with YouGov, June 2024
- 19. single-use carrier bag charge
- 20. New Nature Economy Report | World Economic Forum
- 21. Climate change impacts on nature | ICUN
- 22. Natural History Museum reveals the world has crashed through the 'safe limit for humanity' for biodiversity loss
- 23. Climate Change 2021: The physical science basis | IPPC
- 24. Global Carbon Budget 2020 | Earth System Science Data
- 25. Reducing peatland emissions | UK Parliament

- 26. IPCC Sixth Assessment Report
- 27. What gets measured gets managed. Time to act on climate adaptation | World Economic Forum (weforum.org)
- 28. Aichi Biodiversity Targets | Convention on Biological Diversity
- 29. Global Biodiversity Outlook 5 | Convention on Biological Diversity
- 30. Global goal on adaptation | United Nations Climate Change
- 31. https://epi.yale.edu/downloads/2024epireport.pdf
- 32. Frontiers | The contribution of private land conservation to 30x30 in Germany (frontiersin.org)
- 33. Aichi Biodiversity Targets | Convention on Biological Diversity
- 34. UK Climate Change Act 2008
- 35. 2023 Monitoring Report on the German Strategy for Adaptation to Climate Change
- 36. Mangroves as a solution to the climate crisis | WWF
- 37. Urban Heat Islands | Climate Portal
- 38. These Japanese volunteers are planting seagrass to fight climate change| World Economic Forum
- 39. Vertical Forest Milan | Boeri Studio
- 40. Forestry Facts and Figures 2020 Forest Research
- 41. Nature-based solutions can help cool the planet if we act now | Nature
- 42. Can trees and woods help reduce flooding? Woodland Trust
- 43. Nature-based Solutions in UK Climate Adaptation Policy
- **44.** The Medmerry project for intertidal habitat restoration with managed coastal realignment
- 45. Nature-based Solutions in Action: Lessons from the Frontline
- 46. Aviva research with YouGov, September 2024
- 47. Nature Based Solutions a review of current financing barriers and how to overcome these | WWF

Aviva plc 59 Climate-Ready Index 2024

Endnotes

- 48. Federal Action Plan on Nature-based Solution for Climate and Biodiversity | Germany
- 49. City of Toronto Green Roof Bylaw
- 50. Germany's sponge cities to tackle heat and flooding | OECD
- 51. Green Roofs, Green Facades and Interior Greening in Germany | BuGG
- 52. Green roof strategy of Hamburg
- 53. Four pillars to Hamburg's Green Roof Strategy: financial incentive, dialogue, regulation, and science | Climate Adapt
- 54. Grey to Green Sheffield (phase 1)
- 55. Nature-based solutions for adapting to water-related climate risks | OECD
- 56. Nature-based solutions for adapting to water-related climate risks | OECD
- 57. State of Finance for Nature 2022 | UN Environment Programme
- 58. Benefits and Costs of NBS for Climate Resilience| World Bank Group
- 59. National Delta Programme | The Netherlands
- 60. The Afsluitdijk: Ready for the future
- 61. Nature-based Infrastructure: How natural infrastructure solutions can address sustainable development challenges and the triple planetary crisis | UN Environment Programme
- 62. Rain City Strategy | City of Vancouver
- 63. Adopt a catch basin | City of Vancouver
- 64. Financing Nature: Closing the global biodiversity financing gap | Paulson Institute
- 65. Investment for a well-adapted UK 2023| The CCC
- 66. The Costs of Adaptation, and the Economic Costs and Benefits of Adaptation in the UK | The CCC
- 67. New Nature Economy Report II: The Future of Nature and Business | World Economic Forum
- 68. Surface air temperature maps | Copernicus
- 69. State of the Global Climate 2023 | World Meteorological Organization
- 70. Locally Led Adaptation | WRI

- 71. The Wildlife Trusts Nextdoor Nature
- 72. Oxford City Farm
- 73. Be a Buddy | NYC Mayor's Office of Climate and Environmental Justice
- 74. Green Community Schoolyards
- 75. Urban Heat Islands | Climate Portal
- 76. Global supply chains amplify economic costs of future extreme heat risk | Nature
- 77. Google Environmental Insights Explorer
- 78. The Global Risks Report 2020 | World Economic Forum.
- 79. Accelerating Business Action on Climate Change Adaptation | World Economic Forum
- 80. Existing fossil fuel extraction would warm the world beyond 1.5 °C | Environmental Research
- 81. Existing fossil fuel extraction would warm the world beyond 1.5 °C | Environmental Research
- 82. 2023 Monitoring Report on the German Strategy for Adaptation to Climate Change
- 83. Environmental Performance Index, 2024
- 84. State of Nature report
- 85. <u>UK Government Permits Destructive Trawling in Marine Protected Areas | Oceana</u>
- 86. <u>Independent Assessment of the Third National Adaptation Programme Climate Change Committee (theccc.org.uk)</u>
- 87. <u>Progress in reducing emissions 2024 Report to Parliament Climate Change Committee</u> (theccc.org.uk)
- 88. The Climate Enterprise Action Fund: helping firms to boost low-carbon agendas
- 89. Climate Toolkit 4 Business
- 90. Sustainable Energy Authority of Ireland
- 91. Ireland National Adaptation Framework
- 92. Ireland's 4th National Biodiversity Action Plan 2023-2030
- 93. Sixth Strategic Energy Plan 2050 Carbon neutral | IEA
- 94. Italy Climate Performance Ranking 2024 | Climate Change Performance Index (ccpi.org)

Aviva plc Climate-Ready Index 2024





Media relations contacts

Philippa Terry

philippa.terry@aviva.com +44 (0) 7385 537 458

Sarah Poulter

sarah.poulter@aviva.com +44 (0) 7800 691 569

Louise Soulsby

louise.soulsby@aviva.com +44 (0) 7800 699 526