



In partnership with

Goodbusiness

Aviva Climate-Ready Index

Results, Analysis and Methodology

November 2022



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01

Executive Summary

“At the most basic level, we have chosen to act in the face of the climate crisis because we live on this planet, just like everyone else. We want to push ourselves, and others, to take concrete steps towards a fairer society and a more sustainable world.”

Amanda Blanc, Group Chief Executive Officer

Aviva Climate-Ready Index




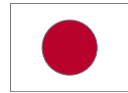




Executive Summary

The climate crisis is one of the greatest and most urgent threats facing our planet. Tackling the crisis requires countries to be as climate-ready as they can be.

As part of our longstanding commitment to climate action Aviva has released our first Climate-Ready Index to provide a simple measure for how influential countries are progressing on vital climate mitigation, resilience and adaptation actions. **We want this Index to work as a tool for starting conversations, creating a platform to share and collaborate on ideas and solutions to accelerate progress.**

Aviva and Good Business drew on existing datasets and collaborated with a range of experts to create a Climate-Ready Index to track the climate action of G7 countries (Canada, France, Germany, Italy, Japan, United Kingdom, United States) and Ireland. Four key pillars of measurement are used, within which 11 key factors are assessed.

No large economy is without development areas that need to be tackled to become more climate-ready. **At best, the top three nations score around 65 points out of 100 for being climate-ready**, with many nations scoring 55 points or fewer.

Rank	Country		Score	
1 st		Germany	66.34	<div></div>
2 nd		France	65.22	<div></div>
3 rd		UK	62.83	<div></div>
4 th		Japan	55.36	<div></div>
5 th		Ireland	52.90	<div></div>
6 th		Italy	50.07	<div></div>
7 th		USA	46.81	<div></div>
8 th		Canada	45.18	<div></div>

Pillars

Emissions & Mitigation

Relates to national-level net-zero targets, progress towards targets and the ambition of future policies.



Pillar top score:
73.09 UK

Environment & Adaptation

Addresses the consequences of climate change, including both the natural and human environment, and the importance of fair and universal adaptation measures.



Pillar top score:
59.60 Germany

Economy & Business

Addresses the importance of national economies and businesses in climate-readiness, at a national and global level.



Pillar top score:
74.68 France

Society & Community

Incorporates the human angle of climate readiness, and the importance of ensuring that society as a whole is ready and equipped to be part of the climate solution.



Pillar top score:
79.11 Ireland

The UK is leading in emissions mitigation, Germany is leading in adaptation, and France in economic response. Ireland is the lead country in community and society responses to climate change. The results show that each country has something to learn from each other. Working together to share best practice would make everyone better prepared.

Aviva’s goal is to be net-zero by 2040. We want to support our people and customers with sustainable choices, and we are working with partners like WWF to build community resilience. We are using our influence as an investor and urging governments to shape a financial system that incentivises action on climate change. We know climate action is a team endeavour. **The Aviva Climate-Ready Index shows that we need governments, business and society to work together to tackle the climate crisis.**

Aviva's role in creating a more climate-ready world

Helping shape a better future

We help over 18 million customers build a brighter future. The challenges facing our world - the climate crisis, social inequality, financial insecurity - affect all of us.

[Aviva's Sustainability Ambition](#) sets out the steps we'll take to address them:

- 1. Protecting the planet** - acting on climate change to become a net-zero company by 2040, one of the most demanding goals of any insurance company in the world today.
- 2. Build stronger communities** - encouraging connections between people. By 2025 we'll make 10million people more resilient so they are more able to shape their future and handle set-backs.
- 3. Embed sustainability in the way we do business** every day. We want to push ourselves and our industry to act in a way that will create a future we can be proud of.

We've been taking care of people for over 325 years and aim to be doing so for the next 300 years too. The choices we take today will create what's possible tomorrow.

We are not alone. Many of our peers in our industry are also taking serious action, and governments are increasingly aware of the scale of the action necessary. However, we are acutely aware that more has to be done across all areas of society to move towards a climate-ready world.

Read more about [Aviva's Climate-related financial disclosure](#), [in accordance with the Taskforce on Climate-related Financial Disclosures (TCFD)], and Aviva's Climate Transition Plan. Aviva has disclosed against the requirements of the TCFD since 2016 to be transparent upon climate risks and opportunities. We introduced our Climate Transition Plan in 2021 to show how we intend to act in transitioning to a low carbon economy.

Aviva is progressing against our ambition and by end of 2021 we were proud to report:

Reduced operational carbon emissions since 2010

Target:
8% reduction per annum to hit Net-zero by 2030

Progress:
81%

% reduction in weighted average carbon intensity (tCO₂e/\$m sales) of Aviva shareholder and with-profit investment portfolio (equity and credit)

Target: 25% reduction by 2025 based on 2019

Progress: **16%**

Community investment

Target:
average of 2% of annual profits invested in the community and 10 million people made more resilient 2020 - 2025

Progress:

£31.8m
2.1% of pre-tax profit

2.1m
people made more resilient in 2021

UK infrastructure and real estate investment

Target:
£10bn 2020 - 2023

Progress:

£4.3bn 2021

£7.6bn

invested in green assets as at 31 December 2021

Aviva's role in creating a more climate-ready world

Taking Climate Action Together

Our [Building Future Communities Report](#) sets out some of the biggest climate challenges and opportunities facing UK households and businesses. It explores innovative solutions, and makes clear policy calls, to mitigate the impacts of climate change on the communities in which we live and work.



In our [partnership with WWF](#) we are working with communities in the UK and Canada using nature-based solutions to build healthier and more resilient ecosystems and reduce the risk of climate-related natural disasters. Together we are calling for all climate plans to consider nature and biodiversity. We are sharing the [footprint calculator](#) so everyone can act.



[Making green choices easy](#) for customers is vital to getting climate-ready. From providing more efficient white goods and flood resilient refits to encouraging electric vehicles and great green investment options, everything helps. In fact, your pension is powerful. Investing in lower-carbon funds can be 21x more effective at reducing your carbon footprint than things like giving up flying, switching to renewable energy and going vegetarian.



For further detail on Aviva's Sustainability Ambition follow these links to [Aviva's Sustainability Report](#), [Climate Transition Plan](#) and [TCFD](#) report

The vital role of governments and the financial system

Helping the world become more climate-ready

The Climate-Ready Index shows that there is more that all of us in society - as individuals, as businesses and at government level - can do to limit the impact of climate change.

As part of our plan to be a net-zero company by 2040, Aviva is pushing governments to shape a financial system that incentivises action on climate change.

We call on governments to:

1. Set binding net-zero ambitions and plans -

These should be aligned with science and include short, medium and long term targets. Plans should cover detailed policy by sector, including investments. Targets and plans should be independently assessed. Governments should be formally accountable for delivery.

2. Ensure regulators incorporate climate risks -

Regulators' mandates should be updated to include climate. They should shape and enforce consistent and comparable climate disclosure, including for corporate net-zero transition plans. Regulation and frameworks affecting investment (e.g. Solvency II) should be assessed to ensure they do not discourage but enable climate investments.

3. Build climate resilience - too many governments prioritise reducing emissions over preparing for climate impacts. Both are essential. Governments should work with the private sector and local authorities to develop national and regional climate resilience plans, setting out how they will prepare for climate impacts. These should include detailed policies on how people and property will be protected (e.g. see [our calls for the UK](#) here).

4. Protect Nature and Biodiversity - protecting and restoring nature will reduce net emissions, help limit climate impacts and

improve our quality of life. For too long it has been an afterthought in government policy in many countries. We want governments to assess nature and biodiversity as part of the net-zero and resilience planning processes.

5. Enhance international cooperation - no single country can tackle the climate crisis alone. Yet the big multilateral organisations (e.g. the IMF, World Bank, OECD) and standard setters (e.g. Financial Stability Board) haven't yet updated their roles fully to address climate. We propose countries convene a summit to harness the international financial architecture to the promotion of a global net-zero target. This might be most appropriately hosted at Bretton Woods in 2024 - the 80th anniversary of the historic meeting that shaped the current global system.

More information on Aviva's sustainable finance government calls can be found at: <https://www.aviva.com/sustainability/climate/sustainable-finance/>



“Institutional investors are looking for clear policy signals from governments to create an environment that will incentivise capital to flow to climate solutions. This index provides a useful guide to show which countries are leading the way on this task, which will hopefully inspire a race to the top on climate action as COP27 approaches.”

Emily Murrell
Director, Climate Policy Programme,
Institutional Investors Group on Climate Change

02

Report

“There is now clear consensus in the business and investment community that the transition to net zero emissions and nature restoration are two significant investment, job creation and growth opportunities. This report therefore provides a valuable assessment of the strengths and weaknesses of each G7 member in tackling climate change and makes the compelling case that countries need to work with and learn from each other to support investors and businesses in reaching critical climate and environmental goals. As a global investor, Aviva has clearly identified that strong government leadership and collaboration around the world is essential to create viable markets for low carbon and nature restoration solutions. For instance, the report shows that the UK has much to learn from Germany’s approach on climate adaptation and resilience, whilst Germany could learn from some of the UK’s successes in rapidly cutting emissions, in particular in the power sector.”

Josie Murdoch, Senior Policy Officer, Aldersgate Group

Introduction

Welcome to the first Aviva Climate-Ready Index

The climate crisis is one of the greatest and most urgent threats facing our planet. Tackling the crisis requires countries to be as climate-ready as they can be, learning from each other for the good of all. While we want the UK to be as climate-ready as it can be, we also want to play our role in bringing countries together to work through the global challenges we all face.

The journey towards becoming more climate-ready starts with an open and frank conversation about how we are doing and requires individuals, families, communities, businesses, and countries to be united in understanding what action they can take.

Aviva has released our first Climate-Ready Index to provide a clear measure for how influential countries perform in their mitigation and adaptation for climate change. We want this Index to act as a tool for starting conversations, creating a platform to share and collaborate on ideas and solutions to help the world prepare and plan better for the years ahead.

While as much as possible should be done to mitigate the severity of climate damage through emissions reduction, we also need to think more broadly and pragmatically about the realities of how climate change is going to alter our society over the coming decades and prepare for change.

The Aviva Climate-Ready Index tracks 11 measures, developed in collaboration with experts, on how each country is managing key sustainability factors such as reducing emissions, supporting biodiversity, building a climate-resilient infrastructure, and helping communities and businesses contribute to climate efforts while successfully and equitably adapting to the impacts of climate change.

We have measured and compared the G7 countries (Canada, France, Germany, Italy, Japan, United Kingdom, United States) and Ireland. These countries are some of the richest and most influential in the world, so have a responsibility to take action. Many of them, in many areas, are doing so. But there is much progress still to be made.

Of course, climate change is a global issue and managing its impacts can never be undertaken purely within borders, but we can learn from each other. It is of vital importance that the most vulnerable globally are supported in transforming towards green economies, and in implementing the adaptation measures needed.

By focusing on the G7 + Ireland, we will use this Index to understand what responsible action is being taken among some of the world's most affluent climate leaders. In doing so, we intend to provide a means of sharing good practice and solutions and ultimately to drive positive change for all of us.

The term **climate-ready** is defined as:

The extent to which a country is doing what is necessary to both limit further damage to the climate and adapt to the negative effects of climate change, both at a local level and as part of the global community.

This involves readiness across government/policy, business/economy, and society.

Aviva working in partnership

A robust Index developed with experts

Aviva has collaborated with a range of experts and partners to create the Climate-Ready Index. The Index acts as a clear framework for measuring and tracking countries' progress on climate change over time.

We worked together with our lead partner, Good Business, a sustainability consultancy based in London with over 25 years' experience in helping businesses and non-profit organisations manage, lead, and communicate on social and environmental issues such as climate change.

At each stage of the process we have consulted with experts from government, academia and climate NGOs to ensure the robustness and credibility of the climate-ready model.

In addition, our team at Aviva and Aviva Investors has many subject matter experts, particularly when it comes to issues of adaptation through our insurance business, and the role of governments and companies to reduce carbon emissions.





“Businesses and communities need a transformational shift to a nature-positive net-zero economy, and Aviva’s Climate-Ready Index shows action on the environment is mission critical for the finance sector. The UK should be the undoubted leader on climate change, with climate-readiness the real key to our competitiveness, yet recent policies that increase fossil fuel extraction or remove environmental protections will only send the UK further down the leader board.”

Angela Francis, Director of Policy Solutions - WWF UK



“Climate change is one of the greatest threats facing humanity and the question is how ready we are to deploy solutions and deal with the inevitable impacts. Aviva have created the Climate-Ready Index to answer this question for the G7 and Ireland. It reveals the strengths and weakness of each country’s state of readiness and will allow us to encourage and track their improvements year to year.”

Professor Mark Maslin, Department of Geography - University College London and Natural History Museum of Denmark / University of Copenhagen



“All countries in the world are in a race to get ready for climate change – both in reaching net zero and in improving their resilience to climate impacts. Businesses, civil society and individuals need to play their part and work with governments to achieve this. This index gives us a great insight into where we can all act to deliver a race to the top on climate.”

Sagarika Chatterjee, Finance Lead, UN Climate Action Champions



“Despite the progress the UK has made in increasing the scale and scope of its efforts to tackle climate change, it’s clear from our recent Measuring Up 2.0 report that the siloed approach to achieving net-zero is putting us at risk of leaving many people and places behind. It’s great to see that Aviva’s #ClimateReady campaign includes a broad set of issues such as biodiversity and social resilience. These play a critical role in delivering holistic action and ensuring that everyone, everywhere, is part of the climate solution.”

***Jessica Lobo**, Global Goals and Climate Programme Manager - United Nations Global Compact Network UK*



“Every day, all over the world, worsening climate shocks are rewriting people’s expectations for the future. The need to reach net zero and become more resilient is accepted almost everywhere and this means there is an economic race to get ahead of new extremes as well as an environmental and societal imperative. No one should be left behind. Countries can learn a lot from each other about climate preparedness and this index provides a helpful snapshot of where different countries stand. It will provide policymakers everywhere with insights on what’s working and what’s not.”

***Emma Howard Boyd**, Former Chair of England’s Environment Agency and UN Global Ambassador to Race to Zero and Race to Resilience*

Aviva Climate-Ready Index

Methodology

Aviva and Good Business went through three steps in the creation of the Climate-Ready Index and scoring system.

Firstly, we undertook extensive desk research, alongside conversations with subject matter experts, to map out all of the issues that we believe are important in defining how climate-ready a country is.

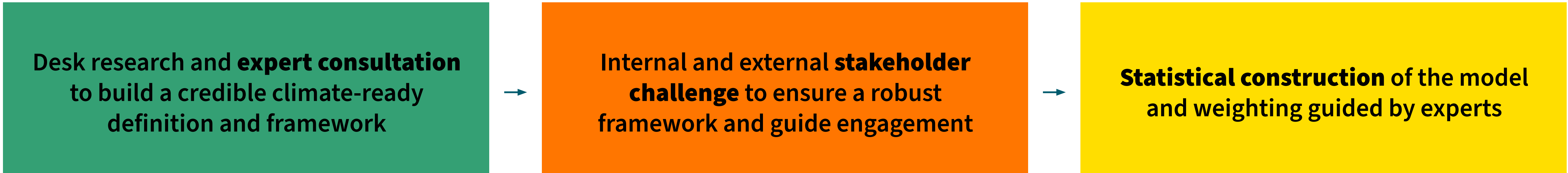
This research and mapping exercise led to the creation of a simple four pillar framework, with a number of climate-ready factors under each pillar. Each of the factors was matched with a robust and reputable data source that would provide the data for

measuring national progress in that area. Some areas of climate-readiness do not yet have data to support robust measurement year-on-year, for example measurement to understand the extent to which adaptation measures have been taken to appropriately protect a country from the climate change impacts it faces. To take effective action on climate change, the world needs consistent, transparent data. The measures chosen are, we believe, the most useful and robust available today, and will be reviewed annually.

Secondly, we took our draft model to a range of experts, particularly focusing on those stakeholders with a strong interest in specific focus areas of climate change. This included government experts, academics and NGOs working in this area.

Finally, we built the statistical model that provides a robust and fair way to rank the countries across the different pillars and factors. This process involved data normalisation using accepted and statistically robust processes, as well as a weighting of the different pillars and factors. This weighting process was undertaken, again, with subject matter experts, whose consensus view is reflected in the model. The most recent data available was processed through the statistical model, producing our first set of climate-ready findings and rankings.

This document contains additional methodological notes by factor in the Appendix.



Aviva Climate-Ready Index

Methodology

There are four key pillars of measurement. These are divided down into eleven weighted factors to determine a country's total score.

Emissions and Mitigation relates to national-level net-zero targets, progress towards targets and the ambition of future policies.

Environment and Adaptation addresses the consequences of climate change, including both the natural and human environment.

Economy and Business addresses the importance of national economies and businesses in climate-readiness, at a national and global level.

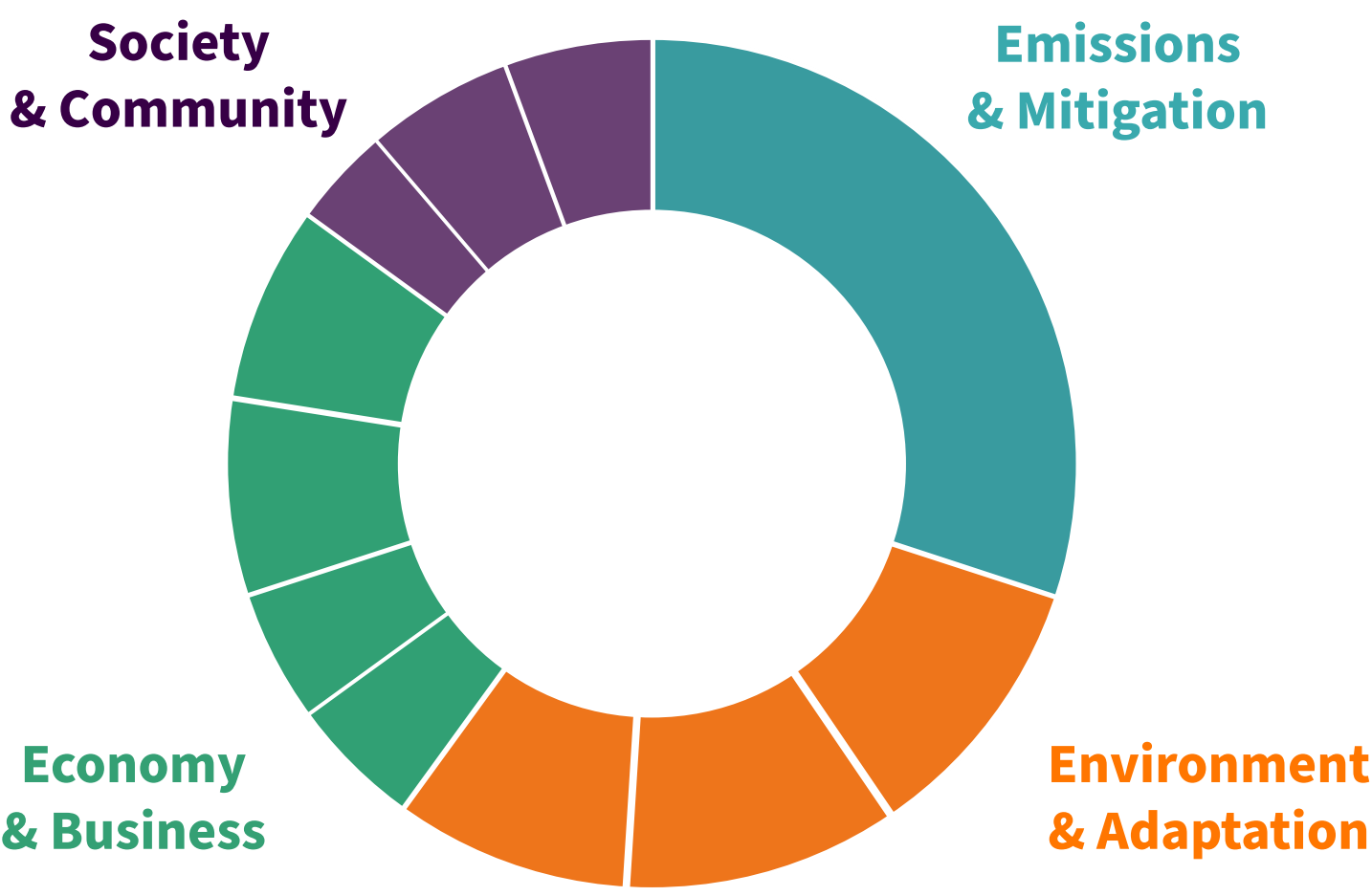
Society and Community relates to the human and political angle of climate-readiness, ensuring that society as a whole is equipped with the knowledge and resources to enable climate progress effectively and equitably.

Some factors are informed by primary Aviva research. Other factors are informed through existing established indices. We applied selection criteria to secondary sources of insight. To be used insight must:

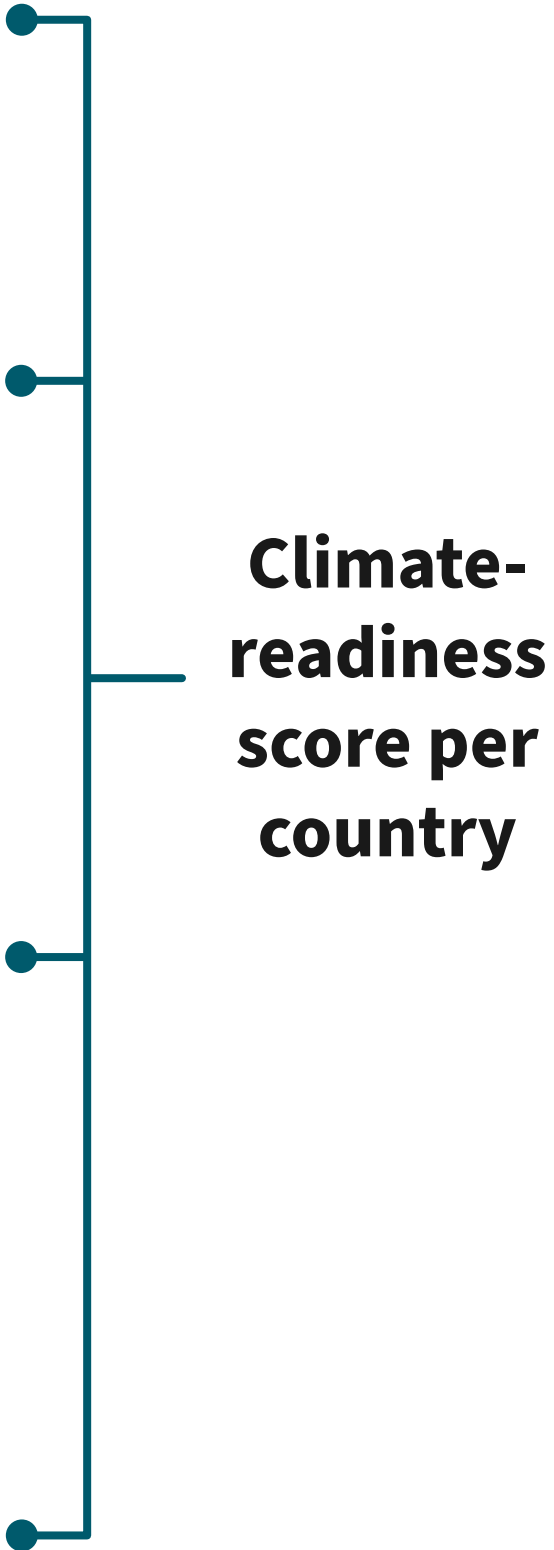
- be recent data, ideally from 2020 or later
- be available for all G7 + Ireland nations
- have a high likelihood of annual continuation of the data set
- be transparent and conceptually clear
- be from a reputable provider of high-quality data

Aviva Climate-Ready Index

Pillar



Pillar	Factor	Pillar weighting	Factor weighting
Emissions & Mitigation	Climate Performance	30%	100%
Environment & Adaptation	Adaptation Capability	30%	35%
	Biodiversity		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		37.5%



Note: Rationale and process for weighting in the Appendix.

Aviva Climate-Ready Index

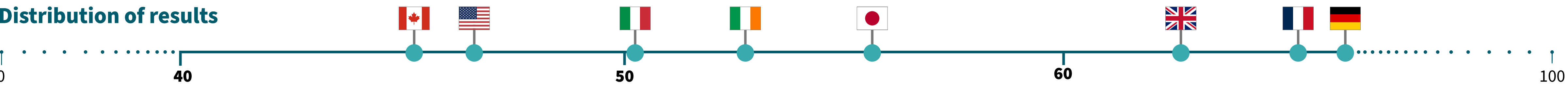
Overall results

Germany, France and UK are some way ahead of other reviewed countries within the Index.

No large economy is without development areas that it needs to tackle to become more climate-ready. At best, the top three nations score around 60 points out of 100 for being climate-ready, with many nations scoring fewer than 50 points.

Rank	Country	Score
1	Germany	66.34
2	France	65.22
3	UK	62.83
4	Japan	55.36
5	Ireland	52.90
6	Italy	50.07
7	USA	46.81
8	Canada	45.18

Distribution of results



Aviva Climate-Ready Index

Results

Countries can learn from each other. Every country comes top in at least one measure, except Japan. Collaboration will be the key to ensuring all countries are as climate-ready as they can be.



Germany is leading in adaptation (capability and implementation), France in economic response (climate innovation and climate contribution), and the UK in emissions mitigation.



Ireland is the lead country in community and society responses to climate change (climate transition).



Italy leads on climate attitude, performs reasonably in mitigation but is bottom for adaptation.



Canada leads on biodiversity and the USA on insurance contribution, however both have key areas to focus on and improve, including Canada around mitigation and the USA at the bottom for social response.



Japan is mid-ranking across the board.

Aviva Climate-Ready Index

Results

The top-ranking countries globally by factor (i.e. including countries beyond the G7+Ireland) are:
‘Climate performance’= **Denmark** (though CCPI leaves the top 3 spots empty as no country is doing enough).
‘Adaptation Capability’= **Norway**. ‘Biodiversity’= **Canada**. ‘Insurance contribution’= **Netherlands**. ‘Climate innovation’= **Finland**. ‘Climate contribution’= **Germany**. ‘Climate transition’= **Switzerland**. ‘Social resilience’= **Sweden**

	Emissions & Mitigation		Environment & Adaptation				Economy & Business					Society & Community			
Pillar weighting	30%		30%				25%					15%			
Factor weighting	100%		35%	35%	30%		20%	20%	30%	30%		25%	37.50%	37.50%	
	Climate Performance rank (score)	Pillar rank (score)	Adaptation Capability rank (score)	Biodiversity rank (score)	Adaptation implementation rank (score)	Pillar rank (score)	Insurance contribution rank (score)	Business readiness rank (score)	Climate innovation rank (score)	Climate contribution rank (score)	Pillar rank (score)	Climate Attitudes rank (score)	Climate transition rank (score)	Social resilience rank (score)	Pillar rank (score)
Germany	2 (64)	2 (63.53)	1 (70)	7 (36)	1 (75)	1 (59.60)	3 (49)	5 (60)	3 (65)	2 (99)	2 (71.14)	6 (65)	3 (73)	2 (90)	2 (77.43)
France	3 (61)	3 (61.01)	4 (67)	6 (37)	2 (67)	2 (56.23)	2 (59)	4 (62)	1 (68)	1 (100)	1 (74.68)	2 (71)	4 (70)	5 (86)	3 (75.88)
UK	1 (73)	1 (73.09)	2 (69)	5 (37)	4 (50)	4 (52.17)	5 (37)	7 (52)	4 (61)	4 (65)	4 (55.56)	3 (69)	2 (73)	6 (83)	4 (75.73)
Japan	5 (49)	5 (48.53)	6 (66)	3 (44)	5 (33)	6 (48.40)	8 (22)	8 (46)	2 (65)	3 (92)	3 (60.69)	7 (63)	6 (68)	4 (88)	5 (74.08)
Ireland	6 (48)	6 (47.86)	7 (64)	4 (40)	3 (58)	3 (53.97)	6 (30)	1 (69)	7 (52)	7 (22)	8 (41.93)	4 (69)	1 (76)	3 (89)	1 (79.11)
Italy	4 (55)	4 (55.39)	8 (60)	8 (31)	6 (25)	8 (39.35)	7 (25)	3 (65)	5 (59)	6 (26)	7 (43.38)	1 (74)	5 (68)	8 (76)	6 (72.05)
Canada	8 (26)	8 (26.03)	3 (68)	1 (79)	8 (0)	5 (51.14)	4 (38)	2 (68)	8 (51)	5 (29)	6 (45.20)	5 (67)	7 (55)	1 (91)	7 (71.56)
USA	7 (37)	7 (37.39)	5 (66)	2 (46)	6 (25)	7 (46.88)	1 (94)	6 (58)	6 (53)	8 (5)	5 (47.81)	8 (60)	8 (54)	7 (76)	8 (63.88)

03

Observations at a Country Level

On the following pages we have shared observations drawn from the data within the index. These are not intended as a full diagnostic and for further details we recommend consulting the sources referenced in the appendices. The observations highlight some of the relative strengths and weaknesses and are intended to spark conversation and collaboration to drive action on climate readiness.

1st Germany

Germany's performance* is strong across the board, with a leadership position in Environment & Adaptation.

“Germany is a progressive player in climate negotiations; it receives a high rating for International Climate Policy. Despite this, the experts wish the country would take an ambitious frontrunner role in climate policy in the future.”

Climate Change Performance Index, 2022



Flooding of street after a storm, Germany.



Germany places second in **Emissions & Mitigation**:

- Germany is on a path to improvement in Greenhouse Gas (GHG) emissions, scoring a high rating in this category of the Climate Change Performance Index (CCPI). This is driven by high performance in the GHG per Capita current trend indicator, with emissions being decreased.
- **In 2021, Germany set more ambitious climate targets: reducing emissions 65% by 2030** compared with the 1990 level (up from a 55% reduction), **and it set its net-zero target to 2045**. However, more action is needed for Germany to achieve these new goals – and even to achieve the old goals. Government studies show they are currently lagging in performance and need to take action.
- **Germany is a progressive leader in climate policy and negotiations.**

Sources: Climate Change Performance Index 2022 | Climate Change Performance Index (ccpi.org) and Rankings // Notre Dame Global Adaptation Initiative // University of Notre Dame (nd.edu)

Germany is top ranked in **Environment & Adaptation**, the joint most highly-weighted pillar in the Climate-Ready index:

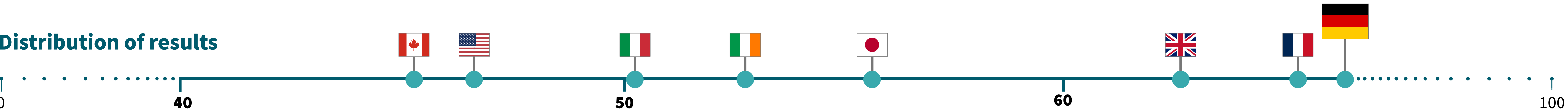
- This top ranking is driven by a leading score on both ‘adaptation capability’, and ‘adaptation implementation’. According to the Notre Dame Global Adaptation Initiative, **Germany’s ‘adaptation capability’ is strong** – it ranks 8th in this index’s global ranking. Climate vulnerability exists, with dependency on imported energy, worsening urban concentration and dam capacity. However, the country is in a strong and stable position to adapt to these challenges.
- In ‘adaptation implementation’, **Germany has published the most comprehensive monitoring report of the G7+Ireland**, detailing how adaptation plans will be put into action. This monitoring report was published in 2019 and the reporting cycle is every four years. Although more frequent reporting periods would be preferable, the monitoring report is thorough in its assessment and outlines specific objectives for 15 action areas of adaptation.

In **Economy & Business**, Germany comes a close second to France:

- Germany’s high score is driven by its strong ‘climate contribution’. **Germany’s contribution to overseas climate mitigation and adaptation through Official Development Assistance is significant**. UN guidance indicates that a minimum of \$100 billion of climate finance per year is necessary to reach targets set by the UN Sustainable Development Goals. Using this figure, **the World Resources Institute calculates that each country’s contribution should be 0.23% of Gross National Income. Germany’s contribution is almost exactly 0.23%**. It should be noted, however, that this measure does not currently differentiate between loans and grants.

Source: : A Breakdown of Developed Countries’ Public Climate Finance Contributions Towards the \$100 Billion Goal | World Resources Institute (wri.org)

Distribution of results





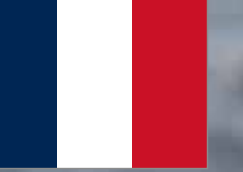
In **Society & Community**, Germany places 2nd, with strong scores across two of the three factors, but its lowest ranking (6th place) is on ‘climate attitudes’:

- **Germany comes 2nd in ‘social resilience’**, with a very good score in the Positive Peace Index. Germany’s score is consistently good across all of the factors this index measures, with **particular success in developing high levels of human capital through good education, allowing the free flow of information, and having a well-functioning government.**
- Germany comes 6th in ‘climate attitudes’ – its lowest ranking across the whole index:
 - German people’s responses across the survey were in the low end of middle across all questions – there was no stand-out area of lack of understanding or of action, nor any stand-out positive results.

- **Only 67% of German people think urgent action is needed on climate change in the next ten years, though a higher proportion, 3 in 4 (75%), think there will be a need to adapt buildings and infrastructure to climate impacts.**
 - Only 45% of Germans have made climate-influenced lifestyle changes, and just 38% are changing their buying habits. However, there is a suggestion that attitudes and actions are reasonably polarised, as there is a smaller gap between belief and lifestyle change than in many other countries (22 percentage points). This suggests that Germans who understand the urgent need for action are more likely to put that action into place.
- Just 2 in 3 Germans believe that government and businesses will have to invest in green infrastructure, energy and assets to take action on climate change – placing them third from bottom in this measure.

Source: : A Breakdown of Developed Countries’ Public Climate Finance Contributions Towards the \$100 Billion Goal | World Resources Institute ([wri.org](https://www.wri.org))

Overall, Germany performs consistently well across all pillars, relative to peers. Regardless of some slightly lower-scoring areas, particularly around public attitudes towards climate change, Germany is placing itself in a strong position in becoming more climate-ready.



2nd France

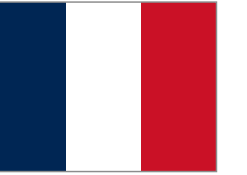
France comes in 2nd place*, with a similar pattern of high rankings across the board to that of Germany, but with leadership in Economy & Business.

“ Since 2015, France has had one of the world’s most comprehensive hydrogen development policies and regulatory frameworks; France will invest €7 billion by 2030 to support the development of low-carbon and renewable hydrogen. ”

*Massachusetts Institute of Technology (MIT)
Green Future Index, 2022*



Glaciers in retreat. The Alps, France.Germany.



France places 3rd in **Emissions & Mitigation:**

- France’s scores in the Climate Change Performance Index (CCPI) are mixed, with a high rating in the climate policy category, but low scores in share of renewable energy use and energy use per capita.
- **The high point of France’s mitigation performance is its new climate law that sets a legal basis for its target of carbon neutrality by 2050.** The law strengthens actions towards this target, including decarbonisation across key areas of the economy and a 10-year energy plan. However, the plan still fails to align with the Paris Agreement.
- While **France’s energy mix is dominated by nuclear, and renewables are being increased year on year**, fossil fuels are still part of France’s energy and more could be done to phase them out.

In **Environment & Adaptation**, France is ranked 2nd:

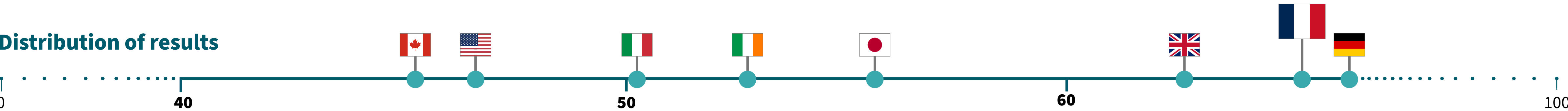
- This rank is based on strength in ‘adaptation implementation’ (2nd) and to a lesser extent in ‘adaptation capability’ (4th):
- France’s strong performance in ‘adaptation implementation’ is a result of its national and sector-level plans, and monitoring process. Whilst not containing the same level of detailed objectives and cost estimates as Germany, France has laid a solid set of foundations to ensure adaptation to climate change progresses.
- **France has a low climate vulnerability score and a high readiness score**, according to the Notre Dame Global Adaptation Initiative. This places it 16th in this index’s global rankings, and 4th among the G7+Ireland. Climate vulnerability exists, with worsening vulnerability around dependency on imported energy, urban concentration and dam capacity. However, the country is in a strong and stable position to adapt to these challenges. France’s adaptation capability therefore has a similar profile to that of Germany, but France scores lower in this factor.

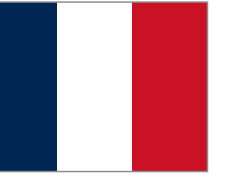
- However, France scores poorly in ‘biodiversity’, reflecting the fact that there has been significant habitat loss, degradation, and fragmentation relative to what should naturally exist there. France’s poor score places it at 143rd in the world (out of 180 countries) in the Biodiversity Habitat Index.

In **Economy & Business**, France’s leadership position is driven by top placement in the two most highly-weighted areas: ‘climate contribution’ and ‘climate innovation’, as well as second place ranking in 'insurance contribution'.

- France’s contribution to overseas climate mitigation and adaptation through Official Development Assistance is significant. UN guidance indicates that a minimum of \$100 billion of climate finance per year is necessary to reach targets set by the UN Sustainable Development Goals. Using this figure, **the World Resources Institute calculates that each country’s contribution should be 0.23% of Gross National Income. France’s contribution is ahead of this, at 0.29%.** It should be noted, however, that this measure does not currently differentiate between loans and grants.

Distribution of results





Economy & Business continued:

- **France also tops the rankings for ‘climate innovation’.** This score is driven particularly by its large number of green patents, and good performance in the high carbon impact sector of foodtech. France is also investing in cross-border clean energy generation, in part through its world-leading hydrogen production technology. France’s score in this factor is a reflection of its attainment in the clean innovation measures of the MIT Green Future Index, in which it places 7th globally.
- France comes in 2nd place in ‘insurance contribution’, with a high penetration of non-life insurance, second only to the USA among the G7+Ireland, but a long way behind first place.
- France’s results in the ‘business readiness’ survey are middling, but **it is worth noting that France has a small gap between businesses understanding the need to reduce their carbon footprint, and the proportion of businesses taking action. French businesses are walking the talk.**

France is 3rd in **Society & Community**, with mid-to-low scores except for a good result in ‘climate attitudes’, where it is 2nd:

- **France’s population is well-informed and taking action on climate change issues**, with good scores across all questions asked in the survey.

- **81% of French people recognise the need for urgent action on climate change**, with similar numbers recognising the role of government and business to drive change (78%) and for buildings to be adapted to extreme weather events (83%).
- **Over half of French people (56%) have made lifestyle changes because of climate change concerns**, and just under half (47%) have changed their buying habits. Although these figures are relatively high, they are well below the numbers of people who understand the need to change – the ‘say-do’ gap in personal behaviour in France is higher than in many other markets. However, we should not read too much into the ‘say-do’ gap for judging climate-readiness – the most important climate action is to be taken by governments and business; the important thing is that people understand the issues sufficiently to accept changing policy and norms.
- **Among G7+Ireland countries, French people feel among the most under pressure from people around them to take action on climate change issues. However, this figure is still low: 30%.** This is significantly below the number of people that know that action is needed (81%), and one of the biggest gaps across the data set.

Overall, France is strong across the board, which reflects in its high ranking among the G7+Ireland. Its strength in the Economy & Business pillar is offset by its relative weakness in Society & Community, but there are no stand-out poor scores for France across any particular factor in the index.



3rd UK

The UK comes in 3rd*, as the back marker of the leading pack of countries. Its success is driven by Emissions & Mitigation, with poorer mid-table scores across other areas of the Index.

“The country has substantial political and financial support to deliver its net-zero 2050 target and the new interim target for a net-zero power system by 2035.”

Climate Change Performance Index, 2022

Drought conditions of reservoir. Lancashire, England.



The UK is top for **Emissions & Mitigation**, and by a good distance. This is a hugely important pillar, with a high weighting within the Climate-Ready Index.

- The UK delivers strong performance in reduction of Greenhouse Gas (GHG) Emissions, Energy Use, and in Climate Policy within the Climate Change Performance Index (CCPI). This places it at number four in their global rankings, and number one among G7 + Ireland countries.
- **The UK’s net-zero 2050 target, and the new interim target for a net-zero power system by 2035, are strong. The country has also created policies to support development of hydrogen, Carbon Capture Usage and Storage (CCUS), carbon removal, and greater take-up of electric vehicles.**
- **The UK is a leader in climate policy, with substantial political and financial support to deliver on its targets.** It remains to be seen whether this support continues in the new government. For example, the proposed ‘Elms’ farm subsidy scheme aimed at restoring nature and sequestering carbon is reported to be under threat.
- Additional policy action is needed to ensure per capita energy use and renewable energy production becomes aligned with a well-below-2°C trajectory. A major focus should be household

- energy efficiency and heating, and it is concerning that fossil fuel subsidies remain in place.
- The UK does not have sufficient focus on offshore emissions – a major source of future concern.

In **Environment & Adaptation**, the UK is placed 4th:

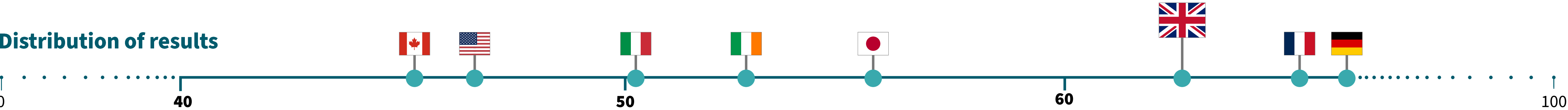
- The UK has a good score (2nd place ranking) for ‘adaptation capability’. **The country has a low climate vulnerability score and a high readiness score**, according to the Notre Dame Global Adaptation Initiative. This places it 11th in this index’s global rankings. Climate vulnerability exists, with worsening vulnerability around urban concentration, dam capacity and projected change of annual runoff. However, the country is in a strong and stable position to adapt to these challenges.
- However, this capability is not matched by implementation, where the UK’s plans for climate adaptation place it mid-table (4th). The UK’s implementation plans could be strengthened with more detailed sector-level plans, more detailed and quantified targets, and monitoring reports that cover both national-level and sector-level adaptation progress. In addition, and most clearly lacking, the UK should begin to understand and report on the costs associated with its adaptation plans.

- The UK’s poor ranking (5th) for ‘biodiversity’ indicates significant habitat loss, degradation and fragmentation relative to what should naturally exist there. The country’s poor score places it at 140th in the world (out of 180 countries) in the Biodiversity Habitat Index.

The UK is 4th for **Economy & Business** with no notable high-scoring results, but a poor 7th place in ‘business readiness’, the factor measuring business attitudes to climate change:

- **UK businesses are highly aware of their responsibility to reduce carbon impact** (72%, joint second in the G7+Ireland). But businesses in the UK are not acting on that knowledge – only 1 in 3 businesses (34%) have put plans in place to reduce their carbon, the second-lowest figure, only ahead of Japan. This gap between knowledge and action (38 percentage points) is far and away the biggest across the data set.
- UK businesses are also failing to take action on adaptation. The country is second bottom (only Japan is lower) on operational adaptation (36%), change in purchasing decisions (37%), and adaptation of supply chains (a very low 26%). This last data point is particularly concerning given the pressure that UK supply chains will likely come under in the coming years.

Distribution of results





Economy & Business continued:

- The UK has the second lowest level of feeling pressure to act (31%) and feeling supported to act (35%). That only 1 in 3 businesses feels pressure over climate change, and the same number supported to take action, is poor. Ramping up both of these factors would likely make a difference to the low level of action being taken by UK businesses.

The UK is 4th in the **Society & Community** pillar, with high scores in ‘climate transition’, but a low ranking (6th) in ‘social resilience’:

- The UK scores strongly in the ‘climate transition’ factor, which measures the performance of countries towards a fair and prosperous sustainability through the Transitions Performance Index (TPI). The UK scores well across the board in the TPI, with an overall rating of ‘strong transition’, and ‘leadership’ positions in 8 of the 16 sub-pillars. **A particular area of strength for the UK is ‘environmental transition’ to a green economy**, where it comes comfortably top of the global rankings. The environmental transition pillar of the TPI measures the transition to a green economy through the pursuit of investments and reforms supporting low-carbon investment, backed up with efficient climate policies. While for a truly ‘just transition’ this pillar needs to be viewed in combination with the other pillars (social, economic and governance transitions), success in the environmental transition pillar sets strong foundations for a more climate-ready future.

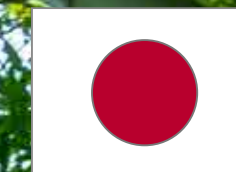
- The UK is ranked 6th in ‘social resilience’, with a relatively poor score in the Positive Peace Index. In fact, the UK is among the poorest performers across Europe in the last 10 years, with a significant deterioration in its score in this index. A major contributor to this deterioration has been Brexit, through greater social and cross-border political tensions. Overall, the UK’s lowest scores are in areas relating to acceptance of the rights of others, levels of corruption, and inequitable distribution of resources.

“The UK had one of the poorest performances [in the Positive Peace Index] of any European nation in the last decade... It is possible for the UK to reverse these trends in the years ahead. But it will require clarity and resolution from authorities, as well as policies that promote the inclusion of different societal views.”

Positive Peace Index, 2022

Overall, the UK’s high ranking is based primarily on its performance in the Emissions & Mitigation pillar, with weaker scores across all other areas of the Index. It is not a consistently high performer. Most concerning is the UK’s low score in ‘business readiness – businesses are a key lever for delivering on a more climate-ready country and world, and UK businesses have an important role to play.

4th Japan

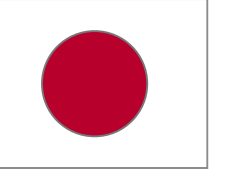


The gap between 3rd and 4th is significant - Japan is a long way behind the UK. Japan's strongest area is in two factors of Economy & Business pillar, but elsewhere across the Index its performance* is average or below.

“Japan is another country looking at achieving leadership in hydrogen technology and production capabilities as a key component of its greener future.”

Massachusetts Institute of Technology (MIT) Green Future Index, 2022

Bamboo is considered a highly sustainable resource due to its rapid growth rate, ability to regenerate after being harvested, and its resistance to pests and diseases. Japan.



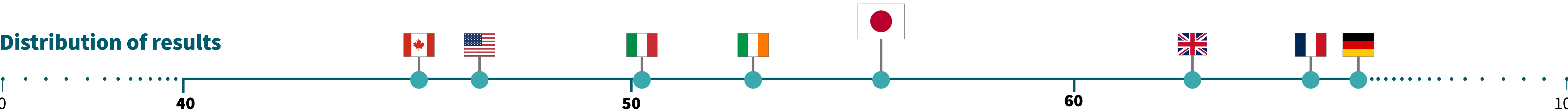
Japan places 5th in **Emissions & Mitigation**:

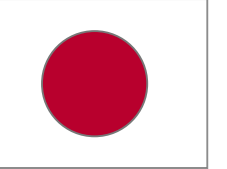
- The country receives low ratings in the Greenhouse Gas (GHG) emissions, Renewable Energy, and Climate Policy categories of the Climate Change Performance Index (CCPI), but a medium rating for Energy Use.
- In 2021, Japan significantly increased its ambition around carbon reduction, raising its target to a reduction of 46% by 2030 (compared to 2013), with a stretch goal of 50%. The country’s long-term target of carbon neutrality by 2050 is also strong.
- However, crucially, there is currently an absence of a clear plan for delivering these goals, with few concrete policies in place for meeting either target. This is the area in which Japan has to improve.
- The country plans to increase consumption of natural gas and create new hydrogen demand. However, meeting carbon targets may require the continued use of nuclear power, and the role of renewables in Japan’s energy mix is very small, despite government support for increasing renewables.

In **Economy & Business**, Japan is placed 3rd, but with highly mixed performance, coming bottom on two factors, but with strong scores in the other two:

- **Japan comes 2nd in ‘climate innovation’**, derived from its high score in the clean innovation measures of the MIT Green Future Index. This score is **driven by a very high number of green patents** – Japan is placed 2nd in the world on this measure, according to MIT.
- Japan provides a good ‘climate contribution’ to overseas climate mitigation and adaptation through Official Development Assistance. UN guidance indicates that a minimum of \$100 billion of climate finance per year is necessary to reach targets set by the UN Sustainable Development Goals. Using this figure, the World Resources Institute calculates that each country’s contribution should be 0.23% of Gross National Income. Japan contributes 0.21%, and therefore scores highly in this factor, even though its contribution is below the amount required by UN/WRI guidance.
- Japan comes last in ‘insurance contribution’, with a very low penetration of non-life insurance. However, the scores at the bottom of this factor are quite close.

Distribution of results





Economy & Business, 'business readiness' continued:

- Japan comes last in 'business readiness':
 - The majority (55%) of Japanese businesses see the need for companies to act to reduce their carbon footprint, but only one in five are actually taking action (22%). This 33 point gap is high – the second highest in the G7+Ireland, behind only the UK.
 - Japanese businesses are also failing to take action to protect their businesses from climate impacts, with only one in four (24%) taking steps to protect their operations or supply chain from extreme weather events and other climate change disruptions.
- There are only low levels of societal pressure on Japanese businesses to take action (only 22% feel any stakeholder pressure), and low levels of support available to those that want to act (29% think they have the support required). There is therefore little impetus to make change happen.
- It is clear that Japanese businesses understand the need for action more than they are taking it. 31% of businesses are changing their purchasing decisions based on climate change factors, but a far lower proportion are actually doing anything to mitigate emissions or adapt to its impacts.

Overall, Japan's placement in the top half of the Index is based on mid-level consistency, and a good performance on 'climate contribution' and 'climate innovation'. However, in other areas of the Index there is clear weakness, including in the two other factors of the Economy & Business pillar. The country's relative consistency compared to fifth placed Ireland keeps it in the top half of performers

5th Ireland



Ireland's mid-table result* is a story of variation. There is leadership in the Society & Community pillar, but last place in this Index within the Economy & Business pillar, and 6th in Emissions & Mitigation.

“The main demand the experts expressed is for climate action plans to align with the Paris Agreement so that Ireland does its fair share and endeavours to reach net-zero emissions before 2050, an increased focus on ending fossil fuel heating in homes through comprehensive retrofitting programmes particularly for those at risk of fuel poverty.”

Climate Change Performance Index, 2022

Deforestation and climate change impacting forest area cover. Ireland.



Ireland places 6th in **Emissions & Mitigation**:

- Ireland scores very low on current Greenhouse Gas (GHG) emissions per Capita, and National Climate Policy performance – including in the country’s progress towards a 2030 target.
- While **the 2021 Climate Act is a positive step**, more needs to be done to drive implementation and accountability of climate change mitigation targets.

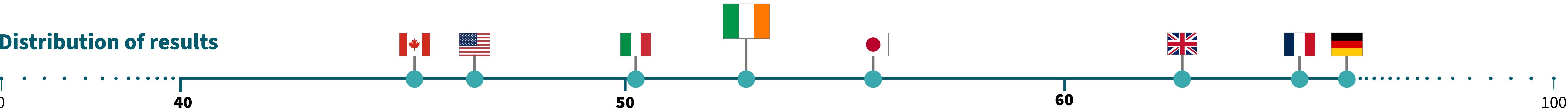
In **Environment & Adaptation**, Ireland places 3rd:

- This good score is driven by strong plans for ‘adaptation implementation’. **Published planning documents include sector-by-sector considerations**, but are limited by a lack of clear objectives, consideration of cost and a lack of monitoring processes.
- Ireland places 7th in terms of ‘adaptation capability’, but its score in the Notre Dame Global Adaptation Initiative (ND-GAIN) still places 21st globally according to the ND-GAIN. Areas in which vulnerability is worsening include dependency on imported energy, medical staff and dam capacity, and its readiness is decreasing in the area of innovation.

Ireland places last in **Economy & Business**, despite a good result (1st) in ‘business readiness’:

- Much of Ireland’s low placement is due to a 7th place ranking in ‘climate contribution’, with a very low level of environmentally-related Official Development Assistance. UN guidance indicates that a minimum of \$100 billion of climate finance per year is necessary to reach targets set by the UN Sustainable Development Goals. Using this figure, the World Resources Institute calculates that each country’s contribution should be 0.23% of Gross National Income. Ireland contributes just 0.05% of GNI in this way, giving the country a very low score on this factor.
- Ireland comes top in ‘business readiness’, topping every measure within the attitudinal questionnaire:
 - **Irish businesses embrace the idea that companies need to reduce their carbon footprint (76%), are taking action to do so more than any other nation (61%) and are also adapting their business operations (68%), supply chain (64%) and purchasing habits (69%) based on current and future climate change impacts.**
 - This is driven from a business environment that both feels the most pressure to take climate action (59%) and the most support to doing so (62%).
 - However, there is still some way to go. Nearly one in six (15%) of businesses know that they should be taking action to reduce their carbon footprint, but are not.

Distribution of results





In **Society & Community**, Ireland tops the table, with particularly strong performance on the ‘Climate transition’.

- Ireland leads on the ‘climate transition’ factor, which measures the performance of countries towards a fair and prosperous sustainability through the Transitions Performance Index (TPI). **Ireland comes** an impressive 3rd overall globally in the TPI, including **2nd place in the ‘economic transition’ pillar measuring a resilient prosperity model**, and a jump in score of nearly 10% over the last year. This **success has been significantly helped by the relocation of multinational corporations to the country, boosting the economic score**. Nonetheless, Ireland performs strongly across all four TPI pillars, with an overall rating of ‘transition leader’, and ‘leadership’ positions in 10 of the 16 sub-pillars.
- Ireland ranks in 3rd place in ‘social resilience’, reflecting a good score in the Positive Peace Index. In fact, Ireland is 10th globally in this index. **Ireland scores highly on acceptance of the rights of others, high levels of human capital through quality education, and the free flow of information**. Bringing down its score slightly is its deteriorating relationship with the UK post-Brexit.

“The sharp increase in Ireland’s Transitions Performance Index score (almost 10%) demonstrates that a country can continue to make progress even from a leading position.”

Transitions Performance Index, 2021

Overall, Ireland’s performance is inconsistent, and it is this inconsistency that is preventing it ranking higher in the Climate-Ready Index. In particular, it is poor results in the crucial pillar of Emissions & Mitigation, along with poor ‘climate contribution’, that leaves Ireland in the bottom half.

6th Italy



Italy's results* are weaker than others across three of the four pillars, but a decent showing of 4th place on Emissions & Mitigation keeps it above the bottom pair.

“The National Climate Policy indicator for Italy only shows a low performance... [Experts] criticise the conditionality of the coal phase-out in 2025 on development of new gas plants and related infrastructure.”

Climate Change Performance Index, 2022

Flood and sunken bridge. Venice, Italy.



Italy places 4th in **Emissions & Mitigation**:

- Italy's relatively strong position in the G7+Ireland rankings should be considered in the context of its relative ranking in Climate Change Performance Index –27th out of 60 countries. This is as a result of medium ratings across all categories of that index.
- In terms of national climate policy, Italy scores low ratings, with targets falling below even legal (EU) minimums, and below the Paris Agreement.
- There is also insufficient and weak planning for renewables uptake, phasing out of coal, and effectively renovating buildings.

In **Environment & Adaptation**, Italy comes bottom, a significant distance behind all other countries:

- The low ranking is driven by coming bottom on both 'adaptation capability' and 'biodiversity' factors.
- Italy places at the bottom of the G7+Ireland for 'adaptation capability'. Despite its low-ranking versus other similar

markets, the Notre Dame Global Adaptation Initiative still notes that Italy's climate vulnerability is relatively low, and its readiness relatively high, compared on a global scale. Italy is placed 33rd in this index's global rankings. The country has worsening vulnerability around projected change of cereal yields, dam capacity and dependency on imported energy.

- Italy ranks bottom of the list for biodiversity. This indicates very significant habitat loss, degradation and fragmentation relative to what should naturally exist there. The country's poor score places it at 168th in the world (out of 180 countries) in the Biodiversity Habitat Index.

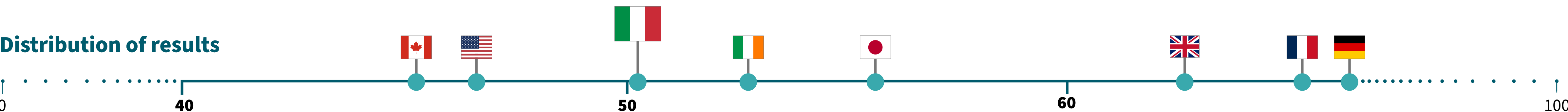
In **Economy & Business**, Italy comes 7th, driven by poor scores on both 'climate contribution' and 'insurance contribution'. However, Italy's performance in 'business readiness' is strong (3rd):

- Italy places 6th on 'climate contribution', with a very low level of environmentally-related Official Development Assistance. UN guidance indicates that a minimum of \$100 billion of climate finance per year is necessary to reach targets set by the UN Sustainable Development Goals. Using this figure,

the World Resources Institute calculates that each country's contribution should be 0.23% of Gross National Income. Italy contributes just 0.06% of GNI in this way, giving the country a very low score on this factor.

- Italy comes 3rd in 'business readiness':
 - Two thirds of businesses (67%) believe companies should take action on climate change, and Italy has the second highest figure (55%) of companies actually taking action. This gap between knowledge and action is also low – the second lowest in the data set.
 - Over half of Italian businesses are also adapting their business operations (53%), supply chain (55%) and purchasing habits (59%) based on current and future climate change impacts.
 - **The amount of pressure (49%) and support (51%) Italian businesses feel are just above average. However, on both counts businesses are unilaterally going further than the pressure they feel and the support they get, with 55% taking action. This is a proactive business environment.**

Distribution of results





In **Society & Community**, Italy comes 6th, but with a very varied set of scores. The country places 1st in ‘climate attitudes’ and last in ‘social resilience’:

- Italy is number one for ‘climate attitudes’:
 - Italians responded most positively to climate change-related questions in all areas of the survey, with top-ranking scores in the majority of areas.
 - **People in Italy are the most aware (83%) of the need for urgent action on climate change and are the most aware of the role that government and business needs to play in this (85%). They are also second-highest in understanding the adaptation that will need to take place across buildings and infrastructure (84%).**
 - **The Italian population is the most likely to have made significant lifestyle changes for environmental reasons (58%), and the most likely to have changed purchasing decisions (56%).**

- Nonetheless, only 28% of Italians feel under pressure from people around them to make these kinds of changes – a figure that comes mid-table across the G7+Ireland. This gap between the understanding that people have of the urgency of change, and the pressure they feel under to make such a change, is the highest across the data set. Increasing pressure on people would better match people’s beliefs and behaviours and could potentially influence an even more virtuous circle.
- Italy places last for ‘social resilience’ from the G7+Ireland, measured by the Positive Peace Index. This poor result is driven by three particular factors. The primary negative factor for Italy is its score in relation to levels of corruption. Also poor are its scores surrounding well-functioning government and levels of human capital, which relates to the quality of education provided.

Italy’s good attitudinal results are the stand-out finding from the country’s performance, but overall the picture is poor. Somewhat decent attainment in Emissions & Mitigation keeps Italy above the bottom two.



7th USA

The USA has weak performance* across most areas of the Climate-Ready Index, with particular problem areas in the Social & Community pillar, as well as in the two most highly-weighted pillars: Emissions & Mitigation and Environment & Adaptation.

“The EU-27 performance increased in all four [Transitions Performance Index] pillars... [the United States] need to further intensify their efforts to catch up within the next decades.”

Transitions Performance Index, 2021

Hurricane heading towards the coast, which are becoming more regular and severe. Florida, USA



The USA places 7th in **Emissions & Mitigation**, a significant distance behind 6th placed Ireland.

- The USA receives very low scores for the Greenhouse Gas (GHG) emissions, Renewable Energy, and Energy Use categories in the Climate Change Performance index.
- Current policies are not enough to deliver necessary emissions reductions – GHG per capita rates and trends are not in line to meet the well-below-2°C benchmark, and the use of renewable energy has been held back by a lack of related policy. There is no date for the phase-out of coal.
- However, it is clear that the USA’s approach to climate policy and action are changing. **President Biden has made positive steps to improving the USA’s position on climate change, including by re-joining the Paris Agreement and pledging to reduce GHG emissions by 50% by 2030, versus 2005 levels.** However, political divisions in Congress are a significant barrier to any ambitious national policies.

In **Environment & Adaptation**, the USA comes 7th:

- The USA ranks reasonably poorly (6th place) on ‘adaptation implementation’. This is driven by the lack of an overarching national level adaptation plan. Despite the existence of adaptation plans for various industry sectors, these lack the necessary level of detailed objectives and consideration of cost implications.

In **Economy & Business**, the USA ranks 5th, with ‘insurance contribution’ offsetting a last-place result for ‘climate contribution’:

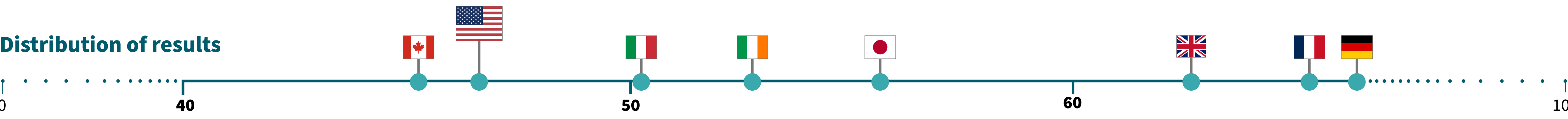
- **The USA is far and away the lead country in the G7+Ireland in measuring ‘insurance contribution’, with a high penetration of non-life insurance.**
- The USA has the lowest relative ‘climate contribution’ to overseas climate mitigation and adaptation through Official Development Assistance. UN guidance indicates that a minimum of \$100 billion of climate finance per year is necessary to reach targets set by the UN Sustainable Development Goals. Using this figure, the World Resources Institute calculates that each country’s contribution should be 0.23% of Gross National Income. The USA contributes just

0.01% of GNI in this way, giving the country a very low score on this factor. While the dollar figures that the USA provides in environmentally-related ODA may be high, and the country can claim a large number of programmes funded, the reality of this contribution as a percentage of GNI is very small.

The USA’s last place in **Society & Community** is reflective of bottom scores on ‘climate attitude’ and ‘climate transition’, and 7th place in ‘social resilience’:

- The USA is in last place for ‘climate attitudes’:
 - The country ranks last place in all of the questions relating to climate understanding: the need for urgent action, occurrence of more extreme weather and role of government and business to take action (all 59%), as well as the need to adapt buildings and infrastructure (66%). This is particularly concerning given the crises of extreme weather that the USA is already experiencing and will continue to experience in the years ahead.
 - However, the country does not rank bottom for action being taken by people in lifestyle changes (40%) and purchase decisions (41%).

Distribution of results





Society & Community, 'climate attitudes' continued:

- In addition, only one in four (24%) Americans feels pressure to make more environmentally-conscious decisions in their own lives.
- The fact that there are only small gaps between understanding of urgency and people taking personal action paints a picture of a divided society in which those that understand climate change feel pressure and take action, while those that don't, don't. The concern, of course, is that the group of people understanding and acting is not the majority.
- The USA is bottom in the 'climate transition' factor, which measures the performance of countries towards a fair and prosperous sustainability through the Transitions Performance Index (TPI). The USA is 45th in the world (out of 72 countries) in this index, behind the majority of developed countries. This poor performance is based on low scores in three of the four pillars of the index: environmental transition measuring a transformation to the green economy, social transition measuring the transformation of societal values, and governance transition measuring democracy, human dignity and equality. Balanced with relative success in the economic transition pillar, the USA gains a final rating of a 'moderate transition', the second-lowest rating bracket.
- The USA is 7th in social resilience, with a relatively poor score in the Positive Peace Index. The country only scores well on the 'sound business environment' measurement, with a particularly poor score on 'levels of corruption driven by a fictionalisation of elite classes'. The USA's overall score in the Positive Peace Index has been in decline, dropping over 17% in the last decade (including a drop of 10% since 2015), the 6th most significant drop across the world. One part of this decline has been in the 'quality of information' indicator, measuring the quality of information disseminated by members of society, the media and authorities, which has dropped by 150% over the decade.

Overall, consistently poor scores across the board, with a bottom-ranked finish on the Society & Community pillar, see the USA place close to the bottom of the pile. However very little separates them from 8th place Canada, and both countries hope for a greener future as their political environments change.



8th Canada

Canada is leading* on some factors, but has lower scores in other areas, in particular Emissions & Mitigation.

“The CCPI country experts regard the entering into law of Canada’s 2050 net-zero target in 2021 as fundamental for the country’s long-term climate ambition. It also signals a significant shift in climate ambition. While policy still lacks coherence for delivery and for achieving the target, detailed plans are on the way.”

Climate Change Performance Index, 2022

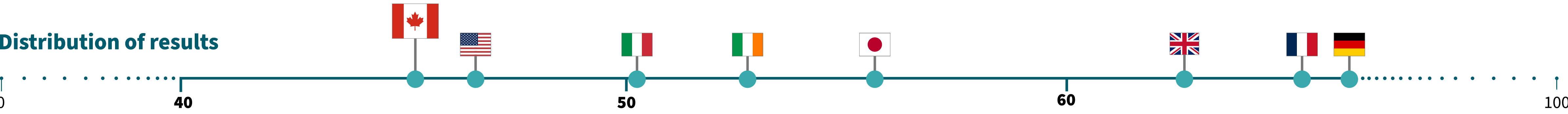
Arctic snowy tundra habitat, where average temperatures are rising. Churchill, Canada.



Canada places low in **Emissions & Mitigation**, below the USA in 7th place. This is the main source of its 8th place ranking in the overall Climate Ready Index score.

- Canada’s performance rates very low overall, with very poor scores in the Greenhouse Gas emissions, Renewable Energy, and Energy Use categories of Climate Change Performance Index (CCPI), and a low score for Climate Policy.
- However, there are signs that change is coming. **In 2021 the country signed its 2050 net-zero target into law** – an indication of shifting ambition. Although the policy still lacks coherence in how it will be delivered, detailed plans are in development.
- Canada has committed to reducing fossil fuel subsidies and emissions from oil extraction, but these remain an issue – the oil and gas industry is a major barrier to progress on policy. More should be done to promote renewable energy and decarbonise the economy.

Distribution of results



Canada places 5th in **Environment & Adaptation**, with a mixed bag of results – top in ‘biodiversity’, yet bottom for ‘adaptation implementation’:

- Canada ranks top of the list for biodiversity, with an enormous lead over 2nd place USA. This indicates **good work to prevent habitat loss, degradation and fragmentation, and preservation of the natural landscape and ecosystem**. The country’s very high score also places it at number one in the world (out of 180 countries) in the Biodiversity Habitat Index. However, this high score does not mean that Canada can rest on its laurels. The country’s score has reduced year-on-year and has faced other [criticism](#) for the biodiversity it has lost, and negative future trends in this area.
- A zero score on ‘adaptation implementation’ is a result of no officially published national or sector-level adaptation plans. However, these plans are currently in development, and improvements are expected next year.

In **Economy & Business**, Canada comes 6th. A strong performance in 'business readiness' and a middling score in 'insurance contribution' is not enough to outweigh a bottom place ranking in 'climate innovation':

- **Canada comes 2nd in ‘business readiness’:**
 - **There is a high level of business knowledge on the importance of reducing their carbon footprint (72%),** yet 53% put a carbon reduction plan in place. This 19% gap between knowledge and action is reasonably high among the G7+Ireland.
 - **Canadians are acting relatively more than most G7 countries + Ireland to adapt their processes to a changing climate.** They are 2nd place in adapting business operations (59%), supply chain (57%) and purchasing habits (59%) based on current and future climate change impacts.



Economy & Business continued:

- There are high levels of support provided to Canadian businesses (28%, putting it joint 2nd), but only medium levels of pressure (48% - less than half of businesses feel pressure to act). In fact, more businesses feel they are getting the support they need than are actually taking action. This speaks well of support provision by the government and others but suggests that Canadian businesses need to feel a bit more public and peer pressure to take more action.

In **Society & Community**, Canada has some work to do, with a 7th overall place, including lower scores across two of the three factors. However, it again performs erratically, with a top-place result in ‘social resilience’:

- In ‘climate transition’, Canada has displayed stagnant performance across all of the four areas of transition for the last decade, with particularly poor performance on Environmental Transition. In the global rankings of the Transitions Performance Index, it places just 43rd.
- **Canada is in first place in ‘social resilience’** with a strong score in the Positive Peace Index, placing it 7th globally in this index. Canada’s score is particularly strong in two areas. The first is **having a sound business environment, indicating high public perception of policies and regulations implemented to promote private sector development. The second is having a well-functioning government, indicating high public perception of the quality of public and civil services.** Canada’s performance in the Positive Peace Index has improved over the last decade, demonstrating more opportunity for leadership.

Overall, Canada’s 8th place ranking reflects the need to make improvements where it matters most – in Emissions & Mitigation, and key areas of Environment & Adaptation. However, there are signs that the political tide is turning, and that policy is following – improvements are expected from Canada over the coming years.

04

Appendices

For further details on measures within the Aviva Climate-Ready Index we recommend consulting the sources referenced in this section.

Aviva Climate-Ready Index

Pillars explained

Factors informed by reputable sources ensures robust data for measuring each country’s progress across the Climate-Ready Index.



Emissions & Mitigation			
Factor	Measure	Description	Rationale
Climate Performance	Climate change performance Index	Globally-recognised measure of national policy and delivery on wide-ranging climate change goals. Measures include green house gas (GHG) emissions, renewable energy, energy use and climate policy.	Mitigation of climate change through emissions reduction is critical in limiting the impact it will have on the world and our communities.

Use the hyperlinks to click to detail about the data source

Aviva Climate-Ready Index

Pillars explained



Environment & Adaptation			
Factor	Measure	Description	Rationale
Adaptation capability	Notre Dame Global Adaptation Initiative	Measures the vulnerability of countries to climate change impacts (food, water, health, ecosystem service, human habitat and infrastructure), and the capability to respond (economic readiness, governance readiness and social readiness).	Alongside work to mitigate against climate change, it is imperative that countries and communities adapt infrastructure and ways of life to be able to live within the reality of a more unstable world.
Biodiversity	Biodiversity Habitat Index (EPI)	Measures the effects of habitat loss, degradation and fragmentation in ecosystems of each country, relative to natural local biodiversity levels.	Strong biodiversity is an engine of positive impact on climate change: it actively plays a role in sequestering carbon from the atmosphere, can help guard against the impacts of climate events like floods, and is a signal of a healthy environment.
Adaptation Implementation	National Adaptation Plan checklist	A checklist of best-practice actions and accountability measures around National Adaptation Plans.	Ensuring that adaptation measures are put in place is crucial for protecting homes and infrastructure from the impacts of climate change. There is currently far less visibility on national-level adaptation plans and progress than on mitigation, and better measures will be necessary in future.

Use the hyperlinks to click to detail about the data source

Aviva Climate-Ready Index

Pillars explained



Economy & Business			
Factor	Measure	Description	Rationale
Insurance Contribution	Insurance indicators (OECD)	Non-life insurance penetration.	Insurance is an important part of a country being prepared and able to respond to climate change as it helps protect buildings and infrastructure.
Business readiness	Aviva commissioned YouGov survey of business attitudes towards climate readiness.	Attitudinal research to understand the beliefs and actions of businesses in each country around climate-readiness.	A business community that is more knowledgeable and engaged with climate change is more ready to take the action needed.
Climate Innovation	Green Future Index – Clean Innovation	Measures include relative number of green patents, investment in sustainable food technology and clean energy technology domestically and globally.	Green innovation is an important part of responding to climate change, providing solutions that can drive global solutions in mitigation and adaptation.
Climate Contribution	OECD Green Growth Indicators – Environmental ODA	Environmentally related Official Development Assistance (ODA) as percentage of total Gross National Income.	Climate change cannot be addressed on a country-by-country basis. Supporting the global community in mitigation and adaptation is crucial.

Use the hyperlinks to click to detail about the data source

Aviva Climate-Ready Index

Pillars explained



Society & Community			
Factor	Measure	Description	Rationale
Climate Attitudes	Aviva commissioned YouGov to survey consumer attitudes towards climate readiness.	Attitudinal research to understand the beliefs and actions of people in each country around climate-readiness.	A population that is more knowledgeable and engaged with climate change is more ready to take the action needed.
Climate Transition	Transitions Performance Index (EU)	Measurement on four dimensions of a fair and prosperous transition to a more sustainable world: Economic, Social, Environmental and Governance.	Ensuring equality within a country as the economy and society transitions to a more sustainable norm – a ‘just transition’ – is important in ensuring success and fairness.
Social Resilience	Positive Peace Index	Measures the attitudes, institutions and structures that create and sustain inclusive and peaceful societies that are resilient and adaptable to change.	The social conditions in a country provide an important foundation for whether measures that improve climate change mitigation and adaptation can be implemented successfully and equitably.

Use the hyperlinks to click to detail about the data source

Methodological notes by factor

Factor	Methodological notes
Emissions and Mitigation	
Climate performance	<p>Measure: Climate Change Performance Index</p> <p>Notes: 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 28/9/2022.</p>

Methodological notes by factor

Factor	Methodological notes
Environment & Adaptation	
Adaptation capability	<p>Measure: Notre Dame Global Adaptation Initiative</p> <p>Notes: The Notre Dame Global Adaptation Initiative index produces a normalised score for each country from 0-100. No methodological changes have been made to 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 28/9/2022.</p>
Biodiversity	<p>Measure: Biodiversity Habitat Index (EPI)</p> <p>Notes: Countries are scored on a normalised scale from 0-100. No methodological changes have been made to the BHI for inclusion in the Climate-Ready Index. The index measures comparative rates of biodiversity loss and habitat degradation, so countries with naturally lower levels of Biodiversity are not penalised. A score of 100 indicates that a country has experienced no habitat loss or degradation, and a score of 0 indicates complete habitat loss. Therefore, top performing countries within our index are still experiencing some form of habitat loss. Data accessed 28/9/2022.</p>
Adaptation implementation	<p>Measure: National Adaptation Plan checklist</p> <p>Notes: There is a global lack of information and data about the level to which countries have implemented or are implementing climate change adaptation measures suitable for their particular context. This is an area where we believe data provision should be improved: in mapping climate risks and their likely impacts, assigning suitable measures for adaptation to protect communities and infrastructure, and tracking the implementation of those measures.</p> <p>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. Countries have been scored from 0-15, in intervals of 5, according to alignment with criteria. The data 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 28/9/2022.</p>

Methodological notes by factor

Factor	Methodological notes
Economy & Business	
Insurance contribution	<p>Measure: Insurance indicators (OECD)</p> <p>Notes: 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, including countries beyond the G7 + Ireland (the highest penetration is in the Netherlands, at 8.1%). Therefore, all scores within our model are relative to the maximum possible score of 8.1% and minimum possible score of 0%. Scores have been normalised on a scale from 0-100. Data accessed 28/9/2022.</p>
Business readiness	<p>Measure: Aviva led research</p> <p>Notes: Aviva commissioned YouGov to survey of business attitudes towards climate readiness among samples of c.250 business leaders working for SMEs and a small number of larger businesses in the G7+Ireland. All fieldwork was carried out online between 10th – 24th September 2022.</p>
Climate innovation	<p>Measure: Green Future Index – Clean Innovation</p> <p>Notes: 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 accessed 28/9/2022.</p>
Climate contribution	<p>Measure: OECD Green Growth Indicators – Environmental ODA</p> <p>Notes: 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.</p> <p>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 accessed 28/9/2022.</p>

Methodological notes by factor

Factor	Methodological notes
Society & Community	
Climate attitudes	<p>Measure: Aviva led research</p> <p>Notes: Aviva commissioned YouGov to survey consumer attitudes towards climate readiness among nationally representative samples of c.1,000 adults aged 18+ in the G7 + Ireland. All fieldwork was carried out online between 10th – 24th September 2022.</p>
Climate transition	<p>Measure: Transitions Performance Index (EU)</p> <p>Notes: The Transitions Performance Index produces a normalised score from 0-100. No methodological changes have been made for inclusion in our Climate-Ready Index. Using comparable international data, the TPI covers countries representing 76% of the total global population. Using a ‘beyond GDP’ approach, it enables a comparison of country performances in progressing towards fair, equitable and sustainable prosperity. Data accessed 28/9/2022.</p>
Climate resilience	<p>Measure: Positive Peace Index</p> <p>Notes: 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 28/9/2022.</p>

Consumer and Business Attitudes








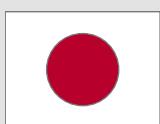
Aviva commissioned YouGov to carry out a survey of consumer attitudes towards climate readiness among nationally representative samples of c.1,000 adults aged 18+ in the UK, Ireland, Canada, US, France, Germany, Italy and Japan. All fieldwork was carried out online between 10th – 24th September 2022.

In addition to the consumer survey, Aviva commissioned YouGov to carry out a survey of business attitudes towards climate readiness among samples 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. All fieldwork was carried out online between 10th – 24th September 2022.

Sample for both surveys was drawn from YouGov’s own panels in all countries except Japan. In Japan, sample came from our trusted panel partner NRC.

The detailed breakdown of sample sizes in each country is shown in the table on the right.



Country	Consumer sample size	SME sample size
	1,008	253
	1,015	252
	1,009	260
	1,019	251
	1,015	250
	1,001	251
	1,013	256
	1,001	250

Aviva Climate Ready Index (Consumer Attitudes)

- 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 in the following slides for presentational purposes.
- All respondents were asked to what extent they agree or disagree with seven statements (shown in the table on the right) about climate change and sustainability.

Statement	Included in the Climate Readiness Index calculation?
Urgent action is required within the next 10 years to tackle climate change	✓
There will be more frequent climate change-related extreme weather events (e.g. flooding, storms, extreme temperatures) in [COUNTRY] and other countries over the next 10 years and beyond	✓
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	✓
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	✓
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)	✓
Concerns about climate change influence my purchasing decisions	✓
I feel pressure from those around me to act on climate change	✓

Aviva Climate Ready Index (SME Business attitudes)

- 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 in the following slides for presentational purposes.
- All respondents were asked to what extent they agree or disagree with seven statements (shown in the table on the right) about climate change and sustainability.

Statement	Included in the Climate Readiness Index calculation?
All businesses should work on reducing their carbon footprint	✓
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	✓
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)	✓
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)	✓
My business feels pressure from our operational environment to take action on climate change	✓
Concerns about climate change influence the purchasing decisions we make for our business (e.g. supply chain, business premises, and vehicles)	✓

Note on weighting

Weighting process

To determine the weighting of the Aviva Climate-Ready Index, a roundtable of experts from a variety of backgrounds, including academia, industry and NGOs, as well as a variety of specialisms was convened. Experts from Aviva and Aviva Investors were also included in this roundtable. 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.

Weighting rationale

- The pillars of ‘Emissions & Mitigation’ and ‘Environment & Adaptation’ should both be weighted equally. Often mitigation is given a primary role, but it is increasingly clear that, for a country to be climate-ready, adaptation should be a priority alongside mitigation.
- These two pillars should also be given more weight than the other two, as together they form the fundamental basis of climate-readiness. A weighting of 30% for each of these two pillars reflects their importance to the model.
- Across the two remaining pillars, ‘Economy & Business’ is of the greater importance because of the significant role that business has to play in ensuring a climate-ready future. While the role of ‘Society & Community’ is important, particularly in ensuring a just transition, readiness should be more strongly measured through the role of business. Therefore, a weighting of 25% and 15% respectively was agreed upon.
- Within the ‘Environment & Adaptation’ pillar, greater weight has been given to the robust measure of adaptation capability and the highly important area of biodiversity.
- Within the ‘Economy & Business’ pillar, increased weight has been given to the important role of green innovation in tackling climate issues, and to the national contribution to global readiness. Climate change does not happen within national boundaries, so the role played to support global readiness is crucial.
- Within the ‘Society & Community’ pillar additional weight has been given to the two factors that focus on the just transition. Ensuring issues of social inequality are not created through the process of addressing climate issues is hugely important.

Developed by Aviva in collaboration with Good Business

With thanks to the following organisations for their public data:

The Organization for Economic Cooperation and Development (OECD) for Insurance Indicators and Green Growth Indicators

Massachusetts Institute of Technology (MIT) for the Green Future Index

European Commission for the Transition Performance Index

The Climate Change Performance Index (CCPI)

The Notre Dame Global Adaptation Initiative (ND-GAIN)

Yale Center for Environmental Law & Policy for the Biodiversity Habitat Index

The Institute for Economics and Peace for the Positive Peace Index

With thanks to the following for their bespoke research:

YUOGOV for Aviva commissioned index work on business readiness and consumer attitudes

With thanks to the following organisations for their expert opinion on model design:

UK Government: Department of Business, Energy and Industrial Strategy (BEIS) and Environment Agency

World Wide Fund for Nature (WWF)

The Environmental Design Studio

University College London (UCL)

Client Earth

In partnership with

Goodbusiness

Read more about Aviva's Climate-related financial disclosure, [in accordance with the Taskforce on Climate-related Financial Disclosures (TCFD)], including Aviva's climate metrics and targets and independent assurance process in the Aviva Climate-related Financial Disclosure 2021 Report.

<https://www.aviva.com/sustainability/reporting/>

*The Climate-Ready Index was created using data available from the sources on 28/09/2022. Some of the sources use data from previous years, due to more up-to-date not being available. As a result, recent activity by specific countries may not be reflected in this year's Index. This activity will be reflected in next year's Index when the source data is updated.

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