Aviva Climate-Ready Index Report

Results, Analysis and Methodology

October 2023



In partnership with



Contents

3 Aviva's view

4 Foreword

01

- 6 Aviva's policy asks
- 8 Aviva's commitment to a more climate-ready world

11 The Report

12 Introduction

02

- 13 Overview of the Climate-Ready model
- 15 Results of the 2023 Climate-Ready Index

03

18 Analysis of results by pillar

- 19 Pillar-level results
- 20 Factor-level results
 - 21 Emissions and Mitigation
 - 22 Environment and Adaptation
 - 23 Economy and Business
 - 25 Society and Community

04

26 Country summaries

- 27 Germany
- 30 France

33 UK

37 Japan

40 Ireland

43 Canada

46 Italy

49 USA

05

54 Methodology

- 55 Pillars explained
- 59 Public and Business Attitude surveys
- 61 Weighting process
- 62 Cautionary statement
- 63 Endnotes

01 Aviva's view

I am worried that UK climate action has stalled this year, according to our analysis. The UK's ambitious climate goals are under threat due to a lack of practical and detailed plans. This puts at clear risk the jobs, growth and the additional investment the UK requires to become more climate-ready. Despite this, we can see UK businesses trying to address the climate challenge in greater numbers and putting action plans in place. To support them, we urgently need a UK, whole economy, transition plan which allows us to compete more effectively with the US Inflation Reduction Act and help the UK become the most climate-ready major economy by 2030."

Amanda Blanc,

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Group Chief Executive Officer, Aviva plc

Foreword

The reality of the climate crisis is ever more apparent, the science is irrefutable. And yet this report reveals that over the last 12 months the G7 and Ireland – the influential economies which are analysed in the index – have only made patchy progress in response. A range of factors, from the war in Ukraine to high inflation and increasing political polarisation, have combined to limit progress even as the need to accelerate global transformation becomes more pressing.

Aviva and Good Business conceived the Climate-Ready Index to help support the UK in becoming the most climate-ready nation in the G7 and Ireland. It is designed to capture the reality that the various challenges of climate change cannot be overcome separately. Critical efforts to limit emissions and protect and promote biodiversity must go hand in hand with work to adapt to the realities of a hotter planet.

Since last year's report, countries have continued to push new climate policy, most notably in the USA's Inflation Reduction Act which commits \$369 billion in subsidies to power the green economy. Many countries updated or published for the first time a climate change adaptation strategy, taking an important step towards a more holistic view of climate-readiness. Private investment in ESG assets continued to grow. Climate change and challenges to biodiversity are rarely out of the headlines, and global renewables grew to around 30% of total electricity generation.¹

However, at the same time, there are significant and growing challenges. Skyrocketing energy prices and concerns about energy security have persisted into this year. Faced with these challenges, some have argued for short-term solutions in locally sourced fossil fuels, while others have pointed to the long-term security and cost-savings offered by renewables. Similarly, rising interest rates and the associated cost of living challenges across many G7 countries and in Ireland threaten to put the brakes on progress in climate change legislation, policy action, business and individual commitments. This comes at a time when, environmentally, economically and socially, we can ill afford such a row-back. Most pressingly for the UK, the significant decline in its Emissions and Mitigation score this year points to the importance of overcoming short-term thinking if the country is to reclaim its status as a leader in the climate transition. Long-term investment in building the green economy will not only support delivery of carbon reduction, energy security and restored biodiversity, it could also provide sustainable jobs, drive growth and, done right, build a more equitable society.

More positively, the UK's performance in Business Readiness provides a strong platform upon which to build. It shows that UK businesses are increasingly taking steps to tackle the climate crisis, both by reducing their company's impact and by protecting their operations and supply chains from the disruption that the climate crisis is already creating. We see this shift among our own business customers, who are increasingly engaged with climate change issues and the role of investment and insurance in supporting their future. The key to ongoing success will be further collaboration within and between sectors to make mitigation and adaptation as simple, effective and attractive as possible.

An increasing number of organisations are making public commitments to reach Net Zero. Yet existing transition plans vary in detail and quality, limiting the ability of stakeholders to assess their credibility. There is substantial and increasing demand from the private sector and from investors for standardised, high quality plans to make better-informed decisions about how to allocate capital. This will support the global transition to Net Zero. Amanda Blanc, Group CEO Aviva, is Co-Chair of a Transition Plan Taskforce that recently released a simple 'gold standard' framework for climate transition plans.

Beyond business, a climate-ready nation will also rely on wider public buy-in and motivation for change. This year's index shows that people are not opposed to tackling climate change but there is a potentially concerning rise in uncertainty and range of opinion about their ability to make a substantive difference.

To reverse this trend, more can be done to help people grasp their own potential as agents of change, helping their families, communities and country get ready. By showing people the opportunities of a climate transition, the benefits of being climate-ready and, crucially, demonstrating that when people take action, tangible benefits follow, more can be encouraged to make changes with a measurable impact on their world.

Beyond the national picture, effective climate action cannot rest on any one country. Nor can any country isolate themselves from the global effects of a changing climate on local infrastructure and international trade. This means that for the UK to be a leader, the country not only needs to model best practice in reducing emissions, but also needs to redouble its commitment to influence the global debate. A steadfast commitment to being an exemplar in climate finance helps underpin mitigation and adaptation efforts across the world. It also boosts our credibility to advocate for change at the G7, G20, UN and other bodies.

The financial services sector has an important role to play in the green transition. There is an industry appetite for change, driven by the recognition of the economic benefits and reduction of risk that climate action brings with it. We see the platform of the Climate-Ready Index as an opportunity for collaboration and joined-up conversations across the financial services industry, policymakers, NGOs, communities, Aviva customers and beyond, with a focus on driving real and lasting change.

When times are hard, making clear-sighted long-term climaterelated decisions can be difficult. But it is even more difficult to imagine the costly physical and economic consequences if these decisions are not taken. By looking across the best performers in the Climate-Ready Index and beyond, we can find the inspiration and best practice that the UK will need to make a reality of a climate-ready future.

Aviva will continue to use our influence as an investor, our relationships with customers and stakeholders, and the work of our core business and products to drive and help support the UK (and beyond) towards that goal. Success will take collective action, and we aim to lead by example.



Aviva's policy asks

Aviva's ambition to become a Net Zero company by 2040 is contingent on governments taking policy action which drives the transformation of the financial system and wider economy. That is why Aviva continues to proactively shape the policy debate.



Set legally binding Net Zero targets in line with 1.5°C warming

To keep the goals of the Paris Agreement alive, we must reach Net Zero by 2050 globally. Yet with just over 25 years to go, many countries do not have legally binding Net Zero commitments. Tackling climate change is a global effort and universal targets support a level playing field, so all countries must have legally binding Net Zero by 2050 targets.

Back up Net Zero commitments with a national transition plan to get ready to compete in the green economy

For national Net Zero goals to be credible, they need to be backed up by clear, whole-of-economy transition plans with short, medium and long-term targets. These should detail policy measures, fiscal incentives (including carbon pricing) and regulation across all economic sectors. National transition plans support private sector investment, but governments should be formally accountable for delivery.

Introduce sustainability disclosure requirements for firms, including Net Zero transition plans

Ultimately, public finance alone will not be sufficient to meet the scale of the climate challenge. The introduction of financial regulation and frameworks which support alignment of private financial flows with a 1.5°C pathway is therefore paramount. All countries should adopt sustainability disclosure frameworks, which include reporting on climate risk and disclosure of transition plans. Crucially, these should align with international standards to minimise fragmentation, reduce burden on firms and increase data comparability.

Unlock private finance for adaptation to build climate resilience

In 2023, the effects of climate change were laid bare. We now have climate impacts posing a constant threat to lives and livelihoods. Meanwhile, just 2% of adaptation finance comes from the private sector, compared to over half for mitigation. Governments, including state-owned infrastructure banks, should work with the private sector and local authorities to explore ways to risk share in order to crowd in private capital.

Push for integration of climate into the international financial architecture

As countries and firms undergo structural transformation to reflect the climate emergency, international bodies should too. Multilateral organisations should develop transition plans for the alignment of their work and supervision with Net Zero and report annually on progress. Members of the international financial architecture – like the IMF and World Bank – should review their mandates and constitutions to include mention of the Paris temperature and adaptation goals.

Develop and disclose National Biodiversity Strategies and Action Plans (NBSAPs) aligned with the Global Biodiversity Framework (GBF)

Nature plays a fundamental role in regulating our climate and helps us adapt to global warming, yet these services are undervalued in economic systems, which has led to its ongoing destruction. In 2022, 196 countries agreed the GBF – the clearest plan yet to halt and reverse biodiversity loss by 2030. Governments must now turn pledges into action and update their NBSAPs to align with the GBF, which includes reducing harmful subsidies.

Aviva's commitment to a more climate-ready world

We help **over 18 million customers** build a brighter future. We've been taking care of people for **over 325 years** and aim to be doing so for the next 300 years too, recognising that the choices we make today will create what's possible tomorrow.

The challenges facing our world - the climate crisis, biodiversity loss, 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 ambitions of any insurance company in the world today.

2. Building stronger communities

Encouraging connections between people. By 2025 we aim to have helped 10 million people be more resilient to climate, financial and health shocks so they are more able to shape their future and handle set-backs.

3. Embedding 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. This includes ensuring clear accountability for action, and transparent reporting. Aviva is progressing against our ambition and are proud to report:

During **2021**

Committed £100million by 2030

to explore the best nature-based interventions to remove carbon while providing other social and economic benefits.

To date we have allocated funding of

£38million

to The Wildlife Trusts to restore Britain's lost temperate rainforests. to the Woodland Trust to support its Woodland Carbon Scheme.

f10 million

£21million

to the Wildfowl & Wetlands Trust to restore saltmarsh and help to develop best practice in saltmarsh restoration.

End of **2022**

43%²

reduction in our operational carbon emissions from a 2019 baseline.

39%3

reduction in weighted average carbon intensity (tCO2e/\$m sales) of Aviva's shareholder and with-profit investment portfolio (equity and credit) from a 2019 baseline.

Most Recently

Helped finance acquisition of Hornsea 2 offshore transmission assets.

Aviva Investors provided the infrastructure debt financing for the acquisition of offshore transmission assets at Hornsea 2 offshore wind farm in the UK.

Aviva Investors has now provided around

£1.7billion (€2billion₄)

of financing towards renewable energy infrastructure projects.

Become one of the first UK insurers to expand our underwriting appetite

to include engineered timber for commercial buildings to support insurance provision for sustainable developments.

Launched a Sustainable Business Coach tool⁵

to help brokers upskill on sustainability by providing them with actionable sustainability advice and guidance.

Played a role in the Finance for Biodiversity Foundation's delegation to make sure Financial Services have a defined role to play in reversing biodiversity loss by 2030.

We shared an assessment of deforestation risks in our investments and underwriting activities to understand our exposure to commodity-driven deforestation. We launched our first biodiversity themed global equity fund to support the transition to a nature positive economy. We are not alone. Many peers in our industry are also taking action, and governments are increasingly aware of the scale of 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 <u>Aviva's Climate-related financial</u> <u>disclosure</u>, [in accordance with the Taskforce on Climate-related Financial Disclosures (TCFD)], the Climate Transition Plan we launched in 2021 or review our reporting criteria. Aviva has disclosed against the requirements of the TCFD since 2016.

02 The Report

Climate change is one of our greatest challenges but also a huge economic opportunity - we need governments and businesses to seize this chance to create a nature-positive Net Zero economy. However, it's evident in Aviva's Climate Ready Index that the UK is slipping down the league tables in most areas, largely due to the current Government's lack of commitment on the climate and nature crisis.

Further delay will put the UK at an increasing disadvantage in the face of rising global competition and mean we risk missing out on the benefits of the transition, including robust growth in green industries, abundant skilled jobs, and cheaper, more secure energy. The UK must get on track to strengthening and delivering our climate pledges and be an international leader in tackling climate change."

Rick Parfett, Senior Policy Advisor – Climate, WWF-UK

Introduction

The Climate-Ready Index 2023 measures holistic climate action, country-by-country

This is the second year of the Climate-Ready Index. The first, published in November 2022, was developed with climate change experts to help understand how some of the world's most influential countries are performing across a wide range of critical areas of climate action. It measures 'climate-readiness': the extent to which a country is both limiting damage to the climate and adapting to the impacts of climate change, within its own borders and as part of the global community.

Climate-readiness is measured through eleven factors and supporting data points, weighted and organised into four pillars: Emissions and Mitigation, Environment and Adaptation, Economy and Business, and Society and Community (full details are included in the <u>Methodology</u>). By bringing together a set of deeply interrelated but often unhelpfully siloed topics, the Index hopes to illuminate the holistic breadth of the challenge of climate change, and drive co-ordinated responses across government, business and society.

Progress among leaders is stagnating – the easy wins are over and real commitment is needed to build a climate-ready future

This year's results see a narrowing of scores between the most and least climate-ready countries in the G7 and Ireland. The worst performers from 2022 have, broadly speaking, improved, with a number of positive signals for future progress. However, in higher scoring countries, the UK included, attainment has stagnated and, in many areas including critical mitigation scores, gone backwards.

These concerning trends, evident across each of the four pillars of the Index, indicate a crossroads in tackling climate change and its impacts. The post-Covid opportunity for transformation has been missed. The easy wins have been largely won, but they are not enough to build a climate-ready future. Ahead is the more difficult work that requires a step-change in approach, but also presents the opportunity for both global climate leadership and economic growth. Done right, this has the potential to be the engine of long-term economic success, as countries deal with today's cost of living crisis and prepare future generations for a more resilient future.

However, this acceleration demands bold political, social and business decision-making. It also demands a rebuilding of the public narrative around climate change, emphasising not only that action is urgent, but also achievable, effective and economically and socially beneficial. The Climate-Ready Index gives signals that bold action is possible, can be popular with the public, and, in pockets, is already beginning. As the impacts of a changing climate are increasingly being felt in communities across the world, and as a raft of major elections, including in the EU, UK and USA, loom over the next 12-18 months, a decisive and socially inclusive transition to a climate-ready world has never been more pertinent. There is an opportunity to note this crossroads and accelerate towards a more climateready future.



Overview of the Climate-Ready model

	Pillar	Description of Pillar	Factor	Pillar weighting	Factor weighting	
The Climate-Ready Index is made up of four pillars. These are divided into eleven weighted factors to determine a country's total score.	Emissions & Mitigation	Relates to national-level Net Zero targets, progress towards targets and the ambition of future policies.	Climate Performance	30%	100%	•
			Adaptation Capability		35%	
	Environment & Adaptation	Addresses the consequences of climate change, including both the natural and	Biodiversity	30%	35%	•
		human environment.	Adaptation Implementation		30%	Climate-
						+ readiness
The majority of factors are informed by existing data sets and indices. However, the Business Readiness and Climate Attitudes factors are informed by two primary research studies conducted by YouGov on behalf of Aviva in June 2023. For each factor, a survey	Economy &		Insurance Contribution		20%	score per
		Considers the importance of economies and businesses in climate-readiness, at a national and global level.	Business Readiness	0.50/	20%	country
	Business		Climate Innovation	25%	30%	•
			Climate Contribution		30%	
with multiple statements was developed,						
and respondents asked to rate their level of agreement with each. The findings of the surveys that underpin these two factors are referred to throughout this Climate- Ready Index report. Full details of weighting methodology are included in the <u>Appendix</u> .	Society & Community	Relates to the human and political	Climate Attitude		25%	
		angle of climate-readiness, ensuring that society as a whole is equipped with	Climate Transition	15%	37.5%	•
		the knowledge and resources to enable climate progress effectively and equitably.	Social Resilience		37.5%	

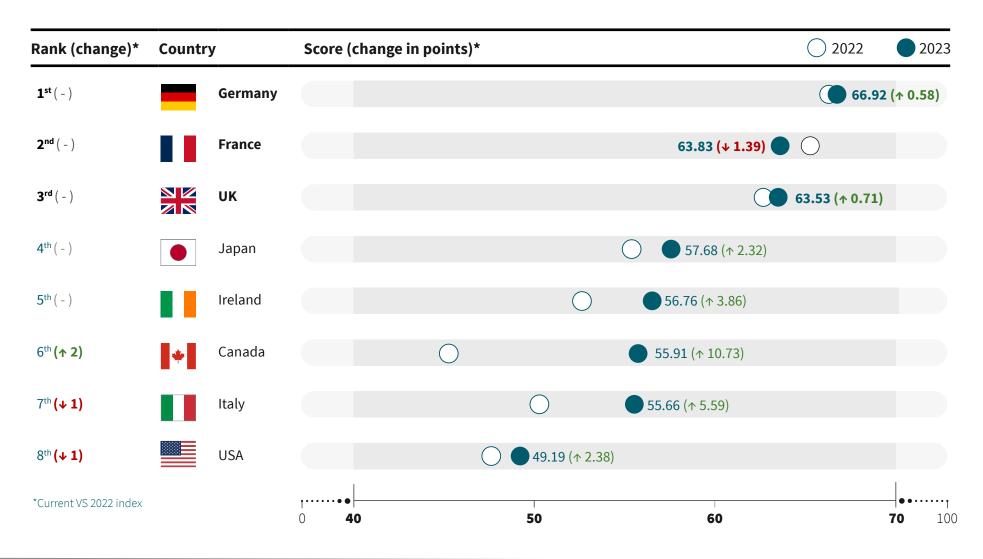
A note on data

Like any index, the Climate-Ready Index uses the best available data at time of publication. As such, there are two factors in this year's Index where data has not been updated because it is released biennially: Biodiversity and Social Resilience. In addition, the data set underpinning the Climate Transition factor has been unexpectedly discontinued, so a new data set has been used in its place. Therefore, while performance in these factors still contribute to overall scores, this report does not focus on these factors in its analysis, but future iterations of the Index will. There is also an inevitable lag between data collection and reporting, and the slow real-world impact of changing political policy. In both cases, changes take time to reflect in the Index, and data findings must be supplemented with additional up-to-date context in order to fully understand them. We have endeavoured to do so throughout this report, including through the inclusion of more timely primary data collected by Aviva in June 2023.

Results of the 2023 Climate-Ready Index

Stagnation exists among leading countries. The top 3 countries have maintained positions since 2022 yet have not meaningfully progressed.

The largest improvements have been amongst those at the bottom of the table who have implemented changes that have driven index improvement since 2022.





Stagnation among leading countries

Germany retains the top spot in the Climate-Ready Index with relatively stable results across each pillar and an overall score, that while over three points clear of France, still falls well short of being meaningfully climate-ready. Over the past 12 months, Germany's mitigation score has decreased. It dropped two places in the Environment and Adaptation pillar due to its stagnation relative to the improvements of peers, and its scores for business and public attitudes to climate change, potential bellwethers for change, have both seen concerning drops. However, with France's overall score declining, Germany holds on to the top spot with a wider gap between it and its closest competitor than in 2022.

France's decline is due to a significant drop in its mitigation score, a worrying backwards step that is second only to the UK, whose mitigation score dropped ten points from last year's Index – the most dramatic fall of any country across any pillar of the Climate-Ready Index. The UK holds on to third position overall because Japan, a non-mover in fourth, also saw a drop in its mitigation score and failed to close the gap in other areas. The countries in the top half of the table, therefore, are struggling to maintain momentum in crucial elements of climate-readiness.

Improvement among those at the bottom of the table, with positive future signals

At the other end of the Index, some of the lowest-scoring countries began to make progress implementing the changes needed to drive improvement. Ireland, in fifth, is relatively stable, with incremental improvements across several areas including mitigation and adaptation, and a positive jump start in international climate contribution. The 2022 Climate Ready Index's backmarker was Canada, which has been the biggest improver this year, moving up two places, narrowly overtaking Italy, into sixth place overall. Canada's swift rise is driven by the release of its inaugural National Adaptation Strategy, published after an extensive stakeholder and expert engagement process. In addition, Canada increased its score through an impressive rise in investment in overseas climate finance. Canada's significant weakness is in mitigation, where a financial reliance on fossil fuels and a continued failure to implement sufficient carbon reduction measures undermines its target of becoming Net Zero by 2050.

With Canada's rise, Italy moves down to seventh in the Index, with the USA relegated to last place with significant ground to make up, even though its own score improved this year. In fact, the USA is the only country in the G7 and Ireland to be relatively stable or to have shown improvement across every individual factor of the Index. This is from a very low base but demonstrates green shoots sown by changes in policy under the Biden administration, including the highly significant Inflation Reduction Act, the effects of which are only just becoming visible in the Climate-Ready Index. And while public attitudes towards climate change are improving in some areas, a note of caution is needed as the country remains highly politically divided, with climate change a major flashpoint.

The UK goes backwards in crucial mitigation measures, but green shoots exist in other areas of its performance

The UK displays a similarly stagnant pattern to other Index leaders. Compared to Germany, in first place, the UK has lower overall attainment but more promising attitudinal findings, particularly among UK businesses. This societal engagement with climate change in the UK is a positive sign. On the other hand, concerns around the UK's political commitment to the environmental agenda raise questions around the country's future attainment in the Index.

The UK's strongest performing area – climate change mitigation – has seen a significant drop in performance over the last 12 months as the Government increasingly focuses on short-term energy security over long-term sustainability. The country has a good framework of mitigation targets setting the direction to Net Zero but is generally failing to put in place the delivery mechanisms to achieve them. This is reflected in the assessment of the UK's Climate Change Committee (CCC) Chair. These concerns have only intensified during a period of instability for environmental policy since the CCC's assessment.

However, despite some emerging uncertainty in attitudes to climate change, the UK public remain some of the strongest believers in the need for climate action, and UK businesses, while still not leaders in the Index, are

<mark>56</mark> –

The failure to act decisively in response to the energy crisis... means that the UK has lost its clear global climate leadership... The Government must act urgently to correct the failures of the past year."⁶

Lord Deben, Chairman of the Climate Change Committee

reporting they have taken significant steps to make change in both mitigation and adaptation. On adaptation more generally, the UK has published a new national strategy that, while still lacking necessary targets and detailed costings, provides a positive direction of travel.

The UK has historically presented itself as a global climate leader through commitments to carbon reduction and the green economy. However, there are concerning signs that the environment is being undermined and politicised in new ways. The country will have to work hard to ensure its position among climate leaders is maintained.



03 Analysis of results by pillar

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As Aviva's Climate Ready Index shows, countries are in a pivotal period for achieving the goal of climate safety by mid century. Physical and transition risks from climate change are already exacerbating the political challenges involved.

Governments must take a strategic and rounded approach to whole-of-economy transition, managing risks while driving emissions reductions in line with keeping warming below 1.5 degrees and, crucially, collaborating to ensure that the global economy can offer prosperity to all."

Kate Levick, Associate Director, Sustainable Finance, E3G

Pillar-level results

Ranking		Emissions & Mitigation			Environment & Adaptation			Economy & Business			Society & Community		
	Country	Rank (change)*	Score (change in points)*	Country	Rank (change)*	Score (change in points)*	Country	Rank (change)*	Score (change in points)*	Country	Rank (change)*	Score (change in points)*	
1 st (-)	UK	(-)	63.07 (↓ 10.02)	Canada	(个 4)	73.85 (↑ 22.71)	France	(-)	75.16 (↑ 0.48)	Ireland	(-)	81.93 (NA)	
2 nd (-)	Germany	(-)	61.11 (↓ 2.42)	UK	(↑ 2)	62.41 (↑10.24)	Germany	(-)	71.35 (↑ 0.21)	France	(↑ 1)	81.47 (NA)	
3 rd (-)	France	(-)	52.97 (\ 8.04)	Germany	(↓ 2)	62.24 (↑ 2.64)	Japan	(-)	64.13 (↑ 3.44)	Germany	(↓ 1)	80.52 (NA)	
4 th	Italy	(-)	52.9 (↓ 2.49)	Japan	(个 2)	58.43 (↑ 10.04)	Italy	(个 3)	56.41 (↑ 13.03)	UK	(-)	79.34 (NA)	
5 th	Ireland	(-)	48.47 (↑ 0.61)	Ireland	(↓ 2)	56.86 (↑ 2.89)	Canada	(个1)	56.09 (↑ 10.89)	Japan	(-)	79.08 (NA)	
6 th	Japan	(↑ 1)	40.85 (↓ 7.68)	France	(↓ 4)	56.44 (↑ 0.21)	UK	(↓ 2)	55.95 (↑ 0.39)	Canada	(个1)	78.65 (NA)	
7 th	USA	(↓ 1)	38.53 († 1.14)	USA	(-)	47.3 (↑ 0.42)	USA	(↓ 2)	51.83 (↑ 4.02)	Italy	(↓ 1)	77.51 (NA)	
8 th	Canada	(-)	26.47 (↑ 0.44)	Italy	(-)	46.89 (↑ 7.54)	Ireland	(-)	51.50 (↑ 9.57)	USA	(-)	69.89 (NA)	
												*Current VS 2022 inde	

Factor-level results

Country	Emissions & Mitigation	Environment & Adaptation					iomy siness	Society & Community			
	Climate Performance	Adaptation Capability	Biodiversity	Adaptation implementation	Climate insurance	Business readiness	Climate innovation	Climate contribution	Climate attitudes	Climate transition	Social resilience
UK	1	2	5	1=	5	6	4	6	4	2	6
Germany	2	1	7	1=	3	7	3	1=	6	5	2
France	3	4	6	4=	2	4	1	1=	2	1	5
Italy	4	8	8	7	7	3	5	4	1	3	8
Ireland	5	7	4	4 =	6	1	7	7	3	4	3
Japan	6	6	3	4=	8	8	2	1=	7	6	4
USA	7	5	2	8	1	5	6	8	8	8	7
Canada	8	3	1	3	4	2	8	5	5	7	1



Steps backwards in climate change mitigation

The Emissions and Mitigation pillar underpins any country's approach to becoming more climate-ready, and scores in this pillar make up almost one third of the weighting of a country's overall Climate-Ready score. Over the last year there has been a worrying decline in mitigation performance across leading countries in the Climate-Ready Index. The UK narrowly hangs on to the top position, though registering a decline of over 10 points – the biggest decline of any country across any factor in the Climate-Ready Index. Second-place Germany's score declined to a lesser extent, and France in third also saw a significant drop of eight points. The door is closing on achieving emissions reduction towards a 1.5°C world, with significant global consequences if that threshold is breached.

At the bottom of the pillar sits Canada, which has a significant and urgent need to decarbonise its economy, the USA, which is already beginning to take action to do so, and Japan, which saw a significant drop in score this year that critics fear may not be sufficiently counteracted by its newly published Green Transformation policy.

A challenging context that needs to drive change, not hold it back

Russia's invasion of Ukraine has been a significant factor for this declining performance as countries looked for short-term fixes for energy security, but it is not the only cause of declining scores. For example, in Ireland, emissions increased in response to the crisis in Ukraine, but the country's wider decarbonisation efforts and policies mean that its Emissions and Mitigation pillar score actually improved by 0.6 points. Conversely, provisional data indicates that the UK's absolute emissions decreased over the last 12 months, but its Emissions and Mitigation pillar score dropped significantly.⁷ This is due to wider issues such as a lack of a policy framework to phase out oil and gas extraction, further highlighted by the issuing of new licences to drill domestically for fossil fuels.

Therefore, while the crisis in Ukraine provides important context, the critical measure is how countries are responding to the situation with long-term transformation in mind. There is an opportunity for a step-change towards a greener energy system and economy. This opportunity must not be missed.

A clear way forward with renewed commitment

Future improvements in the Emissions and Mitigation pillar will require a redoubling of efforts towards Net Zero targets, achieved primarily through the rapid phasing out of fossil fuels and acceleration of the green energy transition. Fossil fuel subsidies, which hit a global record high of \$7tn in 2022⁸, must be ended and investments in the energy system aligned with a 1.5°C future.

Global leader Denmark (outside the detailed assessment of this Index) is setting international best practice with good progress towards its target of 70% reduction of greenhouse gases by 2023 (compared to 1990) including through the introduction of a limited carbon tax. The EU is playing an important role in pushing policy direction with its European Green Deal launched in late 2019, including reform of its long-standing Emissions Trading System, European Climate Law and ground-breaking Cross Border Adjustment Mechanism. While others, the UK included, are mirroring and building on such measures, further regulation and incentives will be necessary. Crucially, the focus must not be solely on planning, but effective and timely delivery, with countries taking accountability for the emissions reductions they need to make.

Environment and Adaptation

Signs of improvement in vital adaptation measures

The Environment and Adaptation pillar has seen the biggest year-on-year improvement in scores across the Index as countries published and upgraded their national adaptation strategies. While reducing emissions is critical, changes in climate are already evident in extreme heat, storms and floods, all of which will increase in regularity and severity, and require infrastructure adaptation to keep homes and businesses safe. Mitigation and adaptation are two sides of the same coin: reducing emissions reduces the need for adaptation, and protecting infrastructure means a more efficient use of natural resources.

Not all countries are equally vulnerable to climate events, and each must be prepared to act against the specific risks they face. This is measured in the Adaptation Capability factor of the Index, which remained stable, with a slight uplift, since 2022.

Publication of adaptation strategies drives rise in scores

The significant rise in Environment and Adaptation pillar scores across many countries is primarily due to the publication of adaptation strategies and monitoring reports that are both crucial for a country to become more climate-ready. Today, seven of the eight countries in the Index, the USA excluded, have a national adaptation strategy in place – a clear signal of the issue's justified but slow rise up the political agenda. Most notably, Canada has moved from fifth to first in this pillar with the publication of a strong and costed adaptation strategy – its first ever, explaining its rapid rise in score. Canada's approach is not perfect, with improvements needed in the monitoring and evaluation process, but it is a stake in the ground for the country's adaptation ambition at a time when climate impacts are being acutely felt across the nation.

This year the UK released its Third National Adaptation Programme, which takes positive steps, but which also lacks all-important costing of adaptation measures, targets and clear steps towards implementation. Unfortunately, this kind of clarity and route to action is also absent in adaptation strategies across the world. There is a clear and urgent need for global adaptation leaders to emerge and set best practice that will drive wider change.

This is only the first step in a longer journey of transformative action

While these new and updated adaptation strategies and monitoring reports are to be welcomed, they are only the first step in what must be an accelerating journey towards more climate resilience. This will require a number of significant changes and innovations, including better mapping of climate risks, the creation of financial mechanisms to incentivise adaptation measures, and much improved adaptation data. This data will also help improve the Climate-Ready Index, which currently relies on measuring commitments rather than action for this factor. In future years, we will raise the bar for attaining high marks in Adaptation Implementation and will continue to call for the creation of robust data sets. Better data will allow for more detailed understanding, planning and, crucially, evaluation that can hold governments to account for funding and implementing measures that can protect communities across the world.

The growing profile of biodiversity and nature

Over the last 12 months, the importance of biodiversity and nature to climate action has continued to increase, with recognition of the critical importance of a healthy ecosystem to carbon sequestration and nature-based solutions to adaptation challenges. The COP15 Biodiversity Conference held in late 2022 closed with a landmark agreement to address biodiversity loss, restore ecosystems and protect indigenous rights. Signed by all countries in the Index except the USA, the Global Biodiversity Framework (GBF) commits nations to protect 30% of the planet by 2030 and support proposals to close the biodiversity finance gap of \$700 billion. Although not a signatory, the USA has committed domestically to support the '30x30' ambition. While scores for this factor of the Climate-Ready Index have not moved this year due to biennial updates in the underlying datasets (as outlined in methodology), biodiversity still forms an integral part of Climate-Ready scores. Detailed analysis of performance will be a focus of the Index in future years.



Improvements in our attitudinal study measuring Business Readiness, particularly among lower performers including the UK

A strong pattern of improvement is evident in the Economy and Business pillar where every country has improved its score to at least some degree, if not significantly. Taken in the context of challenging economic conditions and uneven government support, this improvement is a positive sign. In many countries, it reflects growing investment in a transition to a green economy, as well as the influence of a growing minority of large or visible businesses pushing their stakeholders, regulators and the public towards more sustainable norms.

The attitudinal study measuring Business Readiness reflects the Index-wide pattern of the top performers losing ground and the weaker performers gaining traction this year. The leading three countries – Ireland in first place, then Canada and Italy – all saw drops in score from 2022. This could be because of lowering attainment, but, due to the self-reported nature of the data, another hypothesis is that businesses in leading countries are judging their progress more harshly than last year as standards rise. This insight is particularly compelling for Canada, with a high score of 75% of surveyed organisations believing that all businesses should reduce their carbon footprint – up slightly from last year. It is notable that these three countries that score the highest for Business Readiness are all in the bottom half of the overall Climate-Ready Index. This could suggest a dynamic in which businesses are filling a governmental policy gap with their own action. Governments need to create and nurture a business ecosystem that reduces risk and increases profitability for companies making sustainable choices.

Among the improving laggards in Business Readiness, the biggest acceleration was by UK businesses. The country moved up one place and gained nearly seven points on last year by improving its responses to all but one question in the underlying attitudinal survey. This survey found that the significant majority (67%) of UK businesses agree with the statement that 'all businesses should work on reducing their carbon footprint', even though this question was the single point of slight decline for the UK in the last 12 months. 44% of UK businesses now have a climate action plan in place compared to 34% last year – a significant rise.⁹

The USA, ahead of fifth-placed UK in the pillar, improved its score on every question. Notably, over half of US businesses surveyed state that they now have a climate change plan in place – among the highest of any country in the Index. This is perhaps the first sign that the Inflation Reduction Act, with its focus on making climate action more profitable, is improving businesses' attitudes to climate change. In both the UK and the USA, businesses are feeling significantly more pressure from their operating environment to act on climate change. This is an encouraging sign of the increasing sense of business responsibility in these markets as a whole, at a time when the importance of business transition plans to a climate-ready future cannot be overstated.

Positive and necessary improvements in climate finance

In Climate Contribution – the measure of international environmentally-related finance being provided by each country – there has been an improvement across the vast majority of countries, and in some cases a significant step forward. Germany and Japan now join France in meeting the benchmark for a minimum 'equal share' of this climate contribution. This benchmark is based on the calculation by the World Resources Institute of suggested contribution to the \$100 billion of climate finance per year needed to achieve targets set out by the UN Sustainable Development Goals¹⁰. Italy, Canada and Ireland have all kick-started a significant increase in contribution, each moving up over 30 points in this factor.

The only country to have gone backwards is the UK, which drops two places due to lower levels of funding in comparison to last year, at just 61% of its 'equal share' target. However, since this data was collected, the UK has restated its intention to meet its aggregate international climate finance commitments for 2021-2026.¹¹ Meeting this commitment would result in an improvement in future iterations of the Index. A continued point of contention within the wider discussion of climate finance is the relative merits of grants and loans. The latter, while supported by those that provide them, are criticised by some NGOs for their impact on long-term affordability. The Climate-Ready Index does not currently differentiate between the provision of grants and loans.

Stable results in other economic areas not surprising in difficult times

Investment in Climate Innovation is relatively static – perhaps not a surprise in difficult economic circumstances, but worrying in the context of the significant need for investment in promising green technologies across all areas of the economy. The leader in this factor among the G7 and Ireland is France – a strong global player in climate innovation. Leading the way globally, however, is Finland which has placed innovation at the centre of its ambitious decarbonisation target, emphasising the role of scientific discovery and new technologies in the transition to a Net Zero future.

However, in many countries, the priority issue for climatereadiness is not necessarily new technologies, but the more effective implementation of existing technologies. In particular, in the UK and beyond, the limitations of the electric power transmission grid is proving a barrier to getting more renewables online. In both innovation and implementation of technology, accelerated progress is needed in future. The insurance-related factor in the Economy and Business pillar also remains reasonably static. Insurance will play an important role in supporting individuals, businesses and communities to adapt and recover from climate change events. In particular, more specific focus on the impacts of climate change will need to be considered by the insurance industry through greater levels of collaboration, transparency and product innovation – reaffirming the need for the introduction of sustainability disclosure requirements for firms, including Net Zero transition plans, which will help to drive the industry forward.



Strong support for climate action remains among the majority of countries, but with signs of growing uncertainty

Across the Index, public attitudes towards climate action remain strong. In five of the eight countries in the Index, including the UK, over 70% of people surveyed agree with the 'need for action on climate change in the next ten years'. Only in the USA does this support dip below 60% of the population. ¹²

Nevertheless, in the last 12 months there has been a softening of these attitudes in the context of political, social and economic challenges, as well as the growing complexity and fearfulness in the climate change public debate. In six of the eight countries in the Index, people have become less engaged with the idea of climate action, as well as less likely to take action through long-term lifestyle changes everywhere but the USA. In general, these opinions are not moving to actual opposition to action on climate, but towards uncertainty and perhaps apathy. In some countries (Germany, USA) there are signs of political polarisation on the issue of climate change, but in general the picture is not one of discord, but rather of a lack of conviction, particularly in challenging economic circumstances. In response, countries, businesses and communities need to find ways to better inform, motivate and enable people to support and take action on climate change. Already an average of 46% of people across the Index report that they have made 'significant and long-lasting changes' to their lifestyle for environmental reasons, and 42% report that these concerns impact their purchasing choices. This is supported by further Aviva research that found that, across countries in the Climate-Ready Index, 57% of people take five or more separate everyday sustainable actions, such as recycling and saving energy¹³. The focus must be on making climate action as easy as possible by lowering barriers to change and providing viable alternatives in high polluting sectors like transport.

Attitudes towards adaptation more stable

While attitudes towards climate change across the board have been slipping, peoples' views in relation to adaptation have been more stable than other areas of the public attitudinal survey. This demonstrates that even climate sceptics understand the need for more resilient infrastructure in the face of more extreme weather events. The data for this factor was collected in early June 2023, before many countries in the Index were subject to a summer of extreme heat and flash floods. As climate change impacts become more directly felt in daily life, attitudes relating to both mitigation and adaptation may, and should, continue to shift.

Continued importance of social factors in ensuring the transition to a climate-ready world

The two remaining factors in the Society and Community pillar relate to social factors. It is impossible to fully understand climatereadiness without recognising the unequal impact of climate events, pollution and economic shocks across and between populations. The Climate Transition factor measures progress in a 'just transition' towards an economy that is not only greener, but also more equal. In conjunction, the Social Resilience factor measures the structures that create inclusive and peaceful societies that are resilient and adaptable to the kind of change necessary to implement climate measures. These factors are crucial in delivering a climate-ready world, and while the data from these factors contributes to overall scores, performance analysis is not the focus of this year's reports due to biennial updates of underlying data points and substitution of source data from the 2022 Index (as outlined in more detail in the Methodology section). These factors will be examined in more detail in future iterations of the Index

04 Country summaries

Investors are uniquely placed to support the climate transition. However, their ability to do so is in part predicated on a supportive and conducive political and regulatory environment. Diluting policy ambition at this critical juncture, as we have recently seen in the UK, not only undermines private sector action but also hurts the UK economy's international competitiveness. Instead, we should seize the opportunity to capitalise on one of the greatest economic opportunities of our time and the associated benefits, including job creation – a message investors are increasingly conveying to governments. Holistic analysis of government climate commitments and actions, such as that provided by the Climate Ready Index, can be a powerful tool to guide investors in these engagement efforts."

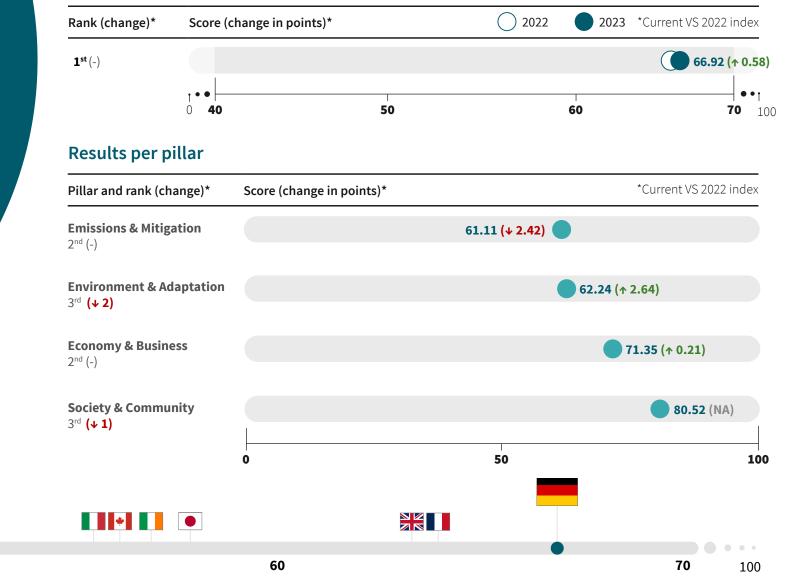
Emily Murrell,

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

1st Germany

Consistently strong performance across each pillar, rather than stand-out leadership in any particular area, sees Germany remain top of the Climate-Ready Index. However, it has been a year of relatively stagnant performance from the leader, with other countries gaining ground in Adaptation Implementation, coupled with a concerning lack of progress in business and public attitudes to climate change - culminating in an overall theme of divided opinion across government, business and society. A step-change is required if Germany is to keep its top spot in the future.

Overall score



Distribution of results for each country

50

0



Germany remains second in the Emissions and Mitigation pillar, reflecting improvements in climate policy. However, the country's reaction to the energy crisis, slow roll-out of heat-pumps and the rebound of emissions in the transport sector after the pandemic contribute to Germany's fall in overall score in this pillar.

Germany's new government has adopted a suite of climate policies, the "Easter Package", which contributes to its high performance in the pillar. Launched in Spring 2022, the package represents Germany's largest energy policy amendment in decades, centring on the vast expansion of renewable energy generation by 2030. However, tensions on climate change policy within the coalition government have been visible – particularly over proposals to accelerate the roll-out of heat-pumps and Germany's reaction to the recent energy crisis. Resorting to the development of overseas gas reserves and mining of additional brown coal (lignite) has been criticised and is a significant contributor to the decline in score versus last year. Despite Germany's recently announced intention to bring forward the phase-out of coal in the Rhine area to 2030, and calls to bring forward the planned nation-wide phase-out by 2038 in line with this, it remains one of nine countries worldwide responsible for 90% of global coal production. This is incompatible with a 1.5°C world.

The transportation sector still poses a significant threat to Germany's emissions reduction targets. Germany's Council of Experts on Climate Change¹⁴ determined that as much as a 14-fold increase in average annual emissions reductions in the sector would be required to meet 2030 decarbonisation targets. Related to this, Germany successfully lobbied for a carve-out for contentious "e-fuels" from new EU legislation phasing out internal combustion engines by 2035, which remains a sticking point for the long-term decarbonisation of the sector. Experts demand stronger regulations, the phase-out of fossil fuelpowered cars, highway speed limits, and more support for the public transportation system – these areas must be addressed if Germany is to move up to the top spot.

Germany falls two places in the Environment and Adaptation pillar to third place. This has been a year of stable performance while country peers have made significant improvements. Germany must not let momentum falter.

Germany remains top in our assessment of Adaptation Capability, with the highest levels of economic, political and societal "readiness" among the G7 countries and Ireland in the Notre Dame Global Adaptation Initiative data set. The country remains well positioned to adapt to the impacts of climate change, but planning and implementation are key.

In last year's Index, Germany set itself apart from country peers with the relative comprehensiveness of its adaptation monitoring and evaluation reporting process. However, peers are catching up – Germany ties with the UK for first place this year in Adaptation Implementation. To regain leadership and keep up with the fast-moving landscape of adaptation requirements, more frequent evaluation of progress towards Germany's National Adaptation Strategy is required. The devastating floods that took place in 2021 and the droughts that affected German shipping routes this summer demonstrate that more needs to be done to assess the financial requirements and implications of climate adaptation in the country.

Germany retains second place in the Economy and Business pillar but is failing to close the gap with firstplace France, and third-place Japan is catching up. Strong performance in Climate Contribution is countered by a poor and declining performance in Business Readiness, which is a major area of concern for Germany.

Overseas climate finance remains an area of strong performance for Germany, where it ties with France and Japan at the top of the leaderboard. In 2021, the level of Germany's international climate finance payments reached a new all-time high of €5.34 billion¹⁵. Germany is on track to achieving its commitment of delivering €6 billion per year by 2025, contributing to its strong overall performance in the Economy and Business pillar.

However, German businesses are falling quickly and are significantly behind in Business Readiness, with a two position drop to seventh place. The scores of German businesses in the attitudinal survey that underpins this factor declined across most questions, and in some places significantly. For example, there was a 12-point drop in businesses reporting that 'concerns about climate change influence the purchasing decisions we make'.

There are growing signs of polarisation among businesses relating to their beliefs and tendency to take climate action. Notably, German businesses are most likely across all countries to 'strongly disagree' when asked if 'all businesses should work on reducing their carbon footprint', indicating that key strands within Germany's business sector are uncertain or unsupportive of their position and role in a Net Zero future.

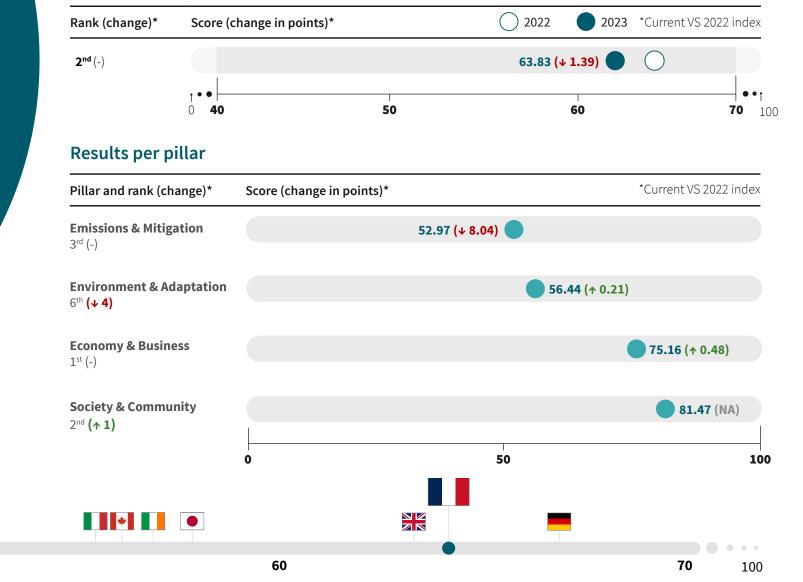
Germany falls from second to third in the Society and Community pillar. Germany's success in recent years in developing high levels of human capital has been notable. However, a shortage of high-skilled workers and an impending demographic crisis suggest a possible decline in future performance. Additionally, poor public attitudes towards climate change are an area of concern – there are signs of polarising views on climate action.

Germany remains sixth placed in public Climate Attitudes, with a lower score than last year. While the majority of Germans (64%) support 'urgent climate action', this belief contrasts with the level of action people actually report taking on the issue. German people have the highest levels of disagreement across all countries when asked if they have made 'significant and long-lasting changes to lifestyle' because of climate change (31% of people disagree, up eight points from last year) – including but not limited to allocation of pension, switching energy provider, dietary preference, and personal travel choices. This is a concerning trend indicating a distinct gap between belief and action.

2nd France

France remains in second place in the Climate-Ready Index but is the only country to see a decline in its overall score. Germany is moving further ahead in first place and the gap behind to third place UK is shrinking. France's performance is inconsistent – leadership in the Economy and Business pillar, with standout performances in Climate Contribution and Climate Innovation, is offset by a drop down the rankings to sixth in the Environment and Adaptation pillar as country peers move ahead in the implementation of adaptation measures.

Overall score



Distribution of results for each country

50

0

France maintains its third-place position in the Emissions and Mitigation pillar, but scores have declined significantly. The country's dependence on nuclear energy is leading to slow implementation of renewable energy. However, France continues to play a prominent role in international climate change diplomacy.

France's commitment to stop funding new oil and coal projects by the end of 2022 was an important moment for the country's mitigation efforts. The policy ends the French export credit agency's support for the exploration, production, transport, storage, refining or distribution of oil and gas (although with some exceptions). Additionally, the consideration of 'sufficiency'¹⁶ in France's climate and energy policies is an important distinction compared to country peers.

However, the absence of commitments regarding cessation of funding of new gas projects is an area of concern for experts, and while France's share of renewable energy generation has grown in recent years, more needs to be done to support it if the country is to become aligned with a well-below -2°C trajectory.



Efforts towards France's already low target of 33% renewable energy generation by 2030 are slowed by the government's strong stance on and reliance on nuclear energy generation, contributing to France's decline in score in the Emissions and Mitigation pillar.

Although currently under revision, experts highlight that France's National Strategic Plan for the EU's Common Agricultural Policy 2023–2027, in its current form, contributes to achieving only half of the climate objectives set out in the National Low-Carbon Strategy by 2030¹⁷. Considering the sector's economic value, cultural significance, and contribution to the country's Greenhouse Gas (GHG) footprint, this is a critical area for France to address.

Encouragingly, experts note improvements made in the transport sector. In February 2023, Prime Minister Élisabeth Borne presented the plan to invest €100 billion into the sector by 2040, with a significant focus on the decarbonisation of cars, massive support for rail, improvements of transport networks and public transport.

France falls four places to sixth in the Environment and Adaptation pillar due to stagnant performance in Adaptation Implementation, coupled with a significant rise in the performance of other countries in this factor.

France has not moved the dial enough on adaptation since last year's Index, with no major revisions or evaluation of its National Adaptation Strategy. France's adaptation strategy has been praised for its participatory approach and alignment with other key policies¹⁸, but notably lacks measurable objectives, insufficient calculation of required funding, and an overall cost/benefit analysis. Additionally, more regular evaluation of progress in line with the National Adaptation Strategy is required if France is to respond effectively to the climate impacts that the country is increasingly experiencing.

France's High Council for Climate¹⁹, an independent body that provides advice and recommendations to the French government on climate policy and action, stated in its 2023 progress report that France's approach to adaptation must transform its current reactive approach to better anticipate future climate impacts. France's third National Adaptation Strategy is expected to be released later this year – this is a significant opportunity for France to boost its performance in next year's Index if recommendations for improvements are applied.

The Economy and Business pillar remains an area of leadership for France – with notably strong performances in Climate Innovation and Climate Contribution.

The provision of global climate finance remains a longstanding priority of French development policy. In 2021, France contributed approximately €4.5 billion to international climate and environment finance²⁰. At COP27, the country reiterated its commitment to the allocation of €6 billion per year for climate change²¹. Delivering on this commitment will see France maintain its position of joint leadership in this factor.

Despite only slightly increasing its overall score, France retains the top spot in the Climate Innovation factor - bolstered by improvements in food tech private investment, consistency of performance in issuing green patents and cross-border clean energy development. However, consistency of performance will not be enough to meet science-based emissions reduction targets. More rapid innovation will be needed to decarbonise in line with a well-below 1.5°C trajectory.

France moves up the rankings to second in the Society and Community pillar, driven by strong performances in Climate Attitudes and Climate Transition factors.

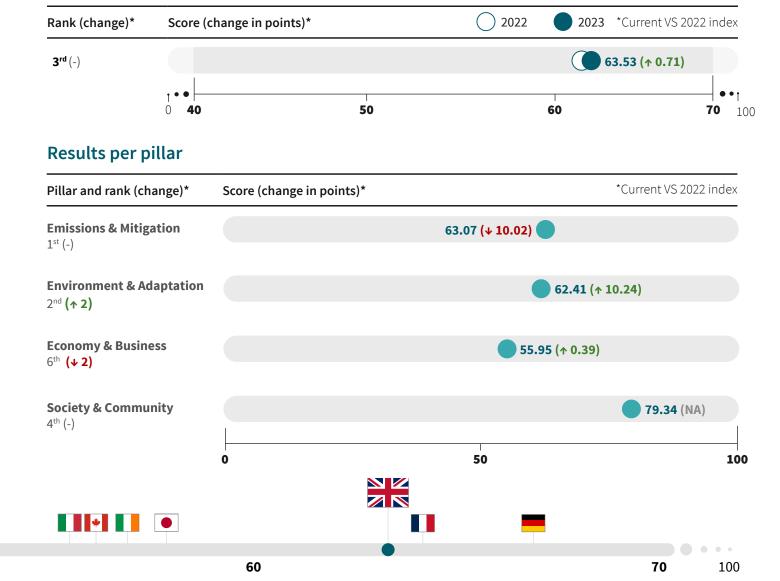
France maintains second place in Climate Attitudes, reflecting positive public attitudes towards climate action across the survey that underpins this factor. The French public ranks top in agreement with the statement that they have made 'significant and long-lasting lifestyle changes to reduce environmental impact' (53% agree), and that they feel 'pressure to act on climate change' (32%). This suggests that belief in climate change is translating into action.

While overall performance is strong in this factor, there is also evidence of some growing uncertainty and apathy across the majority of responses in the survey. For example, respondents are increasingly apathetic towards the belief that 'government and business must increase investment in green infrastructure, energy and assets to tackle climate change' (6-point increase in 'neither agree nor disagree', from 11% to 17%) and uncertain of the 'increasing frequency of climatechange related extreme weather events in the future' (5-point drop in overall agreement, from 77% to 72%).

3rd UK

The UK remains third in the Climate-Ready Index, closing the gap to second placed France. Its lead is maintained in the Emissions and Mitigation pillar despite a declining performance and there are welcome improvements in adaptation efforts relative to the rest of the G7 and Ireland. The acceleration of action among UK businesses is not enough to alleviate a significant drop-off in the Economy and Business pillar and stagnant performance in the Society and Community pillar, which results in a mixed picture of climate-readiness. There are clear areas of strong performance, from which other nations can learn, and other areas where improvement is drastically needed.

Overall score



Distribution of results for each country

50

0



The UK remains top among the G7 and Ireland in the Emissions & Mitigation pillar, despite a dramatic decline in performance since last year. A strong framework of mitigation targets towards a Net Zero future is let down by the lack of delivery mechanisms in place to achieve them. Further plans to increase domestic oil and gas drilling demonstrate the extent to which immediate corrective action is needed.

The UK Government plans to phase out coal power by 2024 and double renewable energy generation within 15 years, both of which are strong commitments that must be delivered. However, after Norway, the UK is Europe's second-largest oil and gas producer, and the country's lack of a policy framework to phase out oil and gas extraction is a major area of concern. While all countries will need to continue using fossil fuels during the energy transition, the UK's decision to proactively expand domestic oil and gas production is a worrying shift.

In addition, there is widespread concern about the UK's response to the energy crisis caused by Russia's invasion of Ukraine. The country's Climate Change Committee (CCC) criticised the government for its failure in "embracing the rapid steps that could have been taken to reduce energy demand and grow renewable generation" as fossil fuel prices rose in 2022 and 2023.²²

The UK is presently the global leader in offshore wind energy.

More widely, the UK's climate change policy framework has continued to develop over the past year, including new detail on the Carbon Budget Delivery Plan²³, Net Zero Growth Plan²⁴ and the Energy Security Plan²⁵. However, development continues to be too slow to meet future targets, and recent political indications suggest that the pace of change will be even slower than expected. If the UK's performance in this pillar is to rebound, significant emphasis is required on phasing out fossil fuel extraction, improving energy efficiency of buildings, and scaling-up renewables.

After years of being seen as a leader in climate action, culminating in the successful hosting of 2021's COP26, the UK's leadership position in climate change mitigation is in serious jeopardy.

The UK moves up two places into second in the Environment and Adaptation pillar, driven by consistency of performance in Adaptation Capability and improvements in Adaptation Implementation.

The UK remains second in Adaptation Capability. The country is currently the least vulnerable to the impacts of climate change among the G7 and Ireland in the Notre Dame Global Adaptation Initiative data set, combined with relatively good levels of assessed adaptation readiness. The UK is therefore well equipped with the necessary foundations to adapt to the impacts of climate change. However, where real global leadership can be shown is in the widescale implementation of effective adaptation measures and initiatives.

Importantly, the UK is taking adaptation implementation more seriously than previously, publishing significantly more information about adaptation planning than 12 months

ago and more than most peers in the Index. This moves the country up into tied first place with Germany for Adaptation Implementation. The UK's Third National Adaptation Programme (NAP3)²⁶, published in July 2023, was positioned as a step-change in the country's approach to adaptation, as the CCC's review of the second NAP determined that it has not adequately prepared the UK for climate change. However, as it lacks detailed objectives, priority actions and thorough cost analysis, early indications are the Programme does not move the dial enough to adequately prepare individuals, businesses and communities to respond to both the risks and opportunities that climate change poses. Additionally, while stating the need for private sector investment to support adaptation action, the NAP3 provides little detail on how this will be mobilised. The Programme has moved adaptation up the UK climate change agenda, but a consistent focus on the delivery of effective adaptation measures is arguably still missing.

The role of the UK CCC in monitoring and publishing reports on the UK's progress towards adaptation goals is a considerable strength relative to some peers in the Index. However, the barometer for success is undoubtedly how well the UK government responds to the CCC's findings through action and investment. The improvement in performance in the Environment and Adaptation pillar does not mean the UK is in a comfortable position – far more action is needed now, and in the years ahead.

The Economy and Business pillar is a mixed bag for the UK, with poor overall performance that sees the country fall two places to sixth in the pillar, but with significant green shoots in the Business Readiness factor. The UK shows good progress from a reasonably low base in Business Readiness, with the biggest improvement in score across peers and a move up the rankings from seventh to sixth. However, the country still sits outside of the leading group. According to the business attitudes survey that underpins the Business Readiness factor, nearly 7 in 10 businesses (67%) agree with the statement that 'organisations should reduce their carbon footprint', and there has been a significant rise in the number of UK companies that say they have 'made a structured plan to reduce climate impact' (44% of companies have done so, compared to 34% in 2022). This proportion, however, is still not high enough to ensure climate-readiness, and the UK still lags behind Ireland (52% have made a plan), France (52%) and the USA (51%). Similarly, significantly more companies have 'taken measures to assess and protect the supply chain against extreme weather', but still fewer than half of companies overall (40%, up 14 points since 2022).

Therefore, there is still significant progress to be made in the UK, both in business commitment and action. The findings here are consistent with those from EY that suggest that, while 80% of UK businesses have committed to becoming Net Zero, only 5% have publicly disclosed detailed action plans to reach their target.²⁷ This concrete transition planning should be a priority for UK businesses.

The UK is the only country in the Index that saw an overall decrease in Climate Contribution, dropping to a score indicating that 61% of its 'equal share' in international climate-related finance was delivered in 2021 – the most recent release of OECD data²⁸. As a result, the UK falls two places into sixth in this year's Index. However, since OECD data

collection, the UK government has reiterated its commitment to providing at least £11.6 billion between 2021 and 2026 in international climate finance – doubling the country's previous funding. UK adaptation financing will also rise to £1.5 billion by 2025, a three-fold increase from 2019²⁹. If delivered, the UK's performance in this factor is expected to improve significantly in future years - though its ability to do so may be compromised by cuts in overall overseas aid budget.

The UK remains a stable fourth in the Climate Innovation factor, some way off top-placed France. Although the UK displays consistency in scores across green patents, crossborder clean energy investment and food tech private investment, much more rapid and climate-focused innovation is needed if the UK is to cement its position as a global leader in this space. The CCC criticised the UK's slow reaction to the US Inflation Reduction Act and the EU's proposed Green Deal Industrial Plan, both of which now provide a strong pull for green investment away from the UK. Action is needed to ensure the UK's performance in the Economy and Business pillar does not drop.

The UK remains middle of the pack (fourth) in the Society and Community pillar, despite a softening of public attitudes towards climate change.

People in the UK remain some of the most supportive of climate action across the Index, with 7 in 10 people agreeing with the statement that 'urgent action must be taken', according to the attitudinal survey underpinning the Climate Attitudes factor. This finding is consistent with other data sets: the Office for National Statistics (ONS) surveying the British public at a similar time to data collection for the Climate-Ready Index, found that only 6% of people 'do not believe in climate change', and among under 30s this figure was so small as to be unreportable³⁰.

There is also UK public support for adaptation measures – the UK remains top among the G7 and Ireland in the belief that adaptation measures in buildings and infrastructure are needed to deal with the effects of extreme weather (82% agree).

However, across the survey, support is softening. The level of agreement with the need for 'urgent climate action' has slipped by seven points over the last 12 months, but into uncertainty or apathy ('neither agree nor disagree'), not active disagreement (only 12% of the UK public disagree with the statement). This fall is indicative of a wider drop in agreement across the survey that relegates the UK into fourth place behind Ireland in the Climate Attitudes factor. This concerning pattern is present in questions about belief, but also action: this year sees a five-point fall in the proportion of people who agree that 'climate change influences purchasing decisions' – down to 43%. However, this drop-off must be considered in the context of difficult economic circumstances.

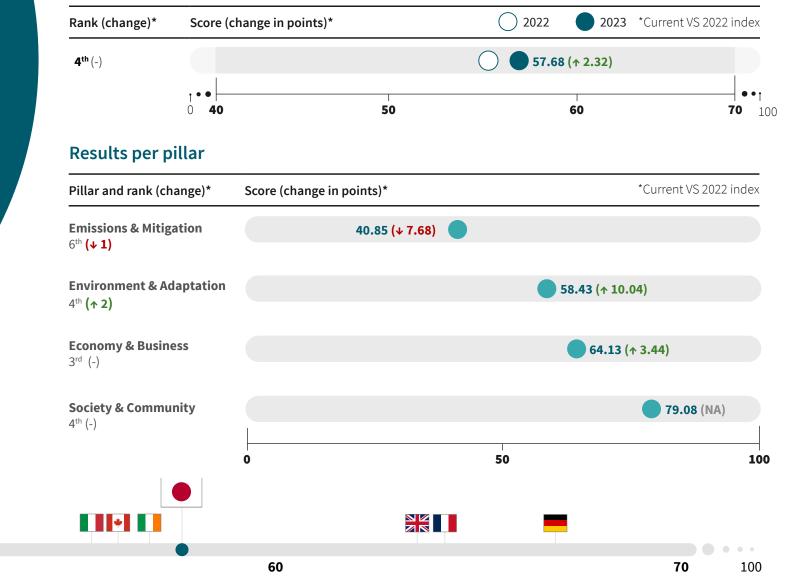
Although this dampening of attitudes towards climate action is not unique to the UK, these findings call for a reinvigoration of public engagement on climate change, creating the right socioeconomic conditions, incentives and motivations to drive action. As highlighted by the CCC, the UK should empower the public to make "easy, attractive and affordable" green choices.



4th Japan

Japan remains fourth overall, but with a very mixed performance. Improvements in adaptation are not reflected in the country's mitigation efforts, which lack a clear plan. The Economy and Business pillar, which sees Japan both leading and trailing in various factors, is indicative of Japan's performance across the board. Business Readiness – the measure of business attitudes to climate action – is a significant area of underperformance which needs to be addressed if the private sector is to play a pivotal role in the country's decarbonisation efforts, as the Japanese Government intends it to.

Overall score



Distribution of results for each country • • • • • • •

50

Japan's 2030 emissions reduction target is insufficient and a clear plan detailing the journey towards Net Zero is lacking. Therefore, Japan falls from fifth to sixth in the Emissions and Mitigation pillar with a significant decline in score.

Japan is aiming for carbon neutrality by 2050, including a 46% emissions reduction by 2030. However, given Japan's heavy reliance on imported fossil fuels, there are significant gaps in the roadmap to delivering this target: a phase-out of coal-power production, effective carbon pricing and renewable energy development are all currently missing. The Green Transformation (GX) Basic Policy, launched in February 2023, lays out Japan's new decarbonisation strategy, aimed at investing approximately \$1 trillion of public and private investment over the next decade. However, critics of this policy question the emphasis placed on energy security and economic growth rather than definitive emissions reduction targets³¹.

Despite some positive revisions to energy legislation that promote energy efficiency measures³² and a long-term roadmap to boost the deployment of carbon capture technologies, Japan's reluctance to set a phase-out date for all coal power is a concerning signal for future performance in the Index.



Japan moves up two places in the Environment and Adaptation pillar into fourth place. The revision of Japan's adaptation strategy in 2021 was an important step in the nation's approach to adaptation, but there are clear gaps to be addressed.

According to the Notre Dame Global Adaptation Initiative data set, Japan ranks as the most vulnerable to climate-related risks of all countries in the Climate-Ready Index, emphasising the importance of implementing effective adaptation solutions.

Japan's updated adaptation plan includes strategies for coordinating and collaborating adaptation policies, climate research, an information infrastructure, localised adaptation measures, public awareness, and a focus on promoting adaptation action in the business sector. Importantly, the revised plan includes a total of 66 Key Performance Indicators for fundamental and sectoral measures to monitor progress – a strong and welcome emphasis on target-setting and monitoring. However, the plan fails to provide details or estimates of the cost implications and benefits of adaptation measures at a national or sectoral level.

Although not directly reflected in the standings, Japan's role in international adaptation is noteworthy – its expertise in Disaster Risk Reduction is applied internationally through development assistance and its early warning systems technologies, particularly against earthquakes and tsunamis, typhoons and heatwaves, are some of the most advanced in the world³³. Japan's performance across factors in the Economy and Business pillar varies drastically. First and secondplace performances in Climate Contribution and Climate Innovation respectively are counter-balanced by lastplace performances in both Climate Insurance and Business Readiness. This results in Japan taking third place in the pillar.

Japan ranks joint first in the Climate Contribution factor for its contribution to global climate finance, rising two places this year. In 2021, Japan renewed its commitment to providing approximately \$42 billion (JYP 6.5 trillion) of public and private climate finance from 2021 to 2025³⁴, placing it well among global leaders in the provision of overseas climate finance. However, questions remain over the role of climate finance provided in loan form, rather than grants – the majority of Japan's international climate finance is provided as loans.

In Business Readiness, Japan still trails behind peers in every question of the business attitudes survey that underpins this factor. This places the country bottom with a considerable gap to seventh placed Germany. This is particularly concerning considering Japan's long-term national climate strategy refers to the importance of business engagement with international climate programs including the Science Based Targets initiative (SBTi).

Nevertheless, there are signs of improvement from last year's survey. This year, 33% of businesses said that they had not made a 'structured plan' to reduce climate impact – falling

from 43% in 2022. This shift helps reduce the 'say-do' gap for businesses in Japan. There was also a significant drop in 'strong disagreement' with the idea that Japanese businesses feel pressure from their operating environment to take climate action – this year only 12% of Japanese businesses surveyed strongly disagree, compared to 23% in 2022. These nascent trends must continue if businesses are to play an integral role in the country's decarbonisation efforts.

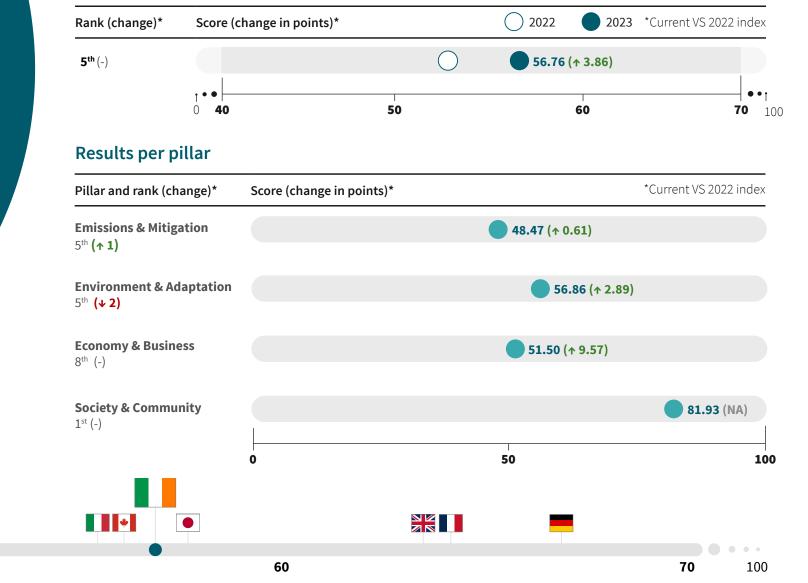
Japan remains fifth in the Society and Community pillar due to very poor performance in Climate Attitudes and poor-to-middling performances in Climate Transition and Social Resilience.

Public attitudes to climate change are a significant area of underperformance for Japan. The country remains seventh in the Climate Attitudes factor, but a decline in score since last year moves it down towards last-placed USA. There was a significant fall in the agreement of respondents when asked if 'concerns about climate change influence purchasing decisions' – with agreement with this statement falling six points from last year to just 26%. The lack of public engagement with climate change is an area of concern for Japan. If the country is to move up in the standings in the Society and Community pillar, greater emphasis needs to be placed on driving consumer support and action.

5th Ireland

Ireland remains fifth in the overall Climate-Ready Index but closes the gap with fourth placed Japan to within one point. Ireland's performance is mixed, with top and bottom-placed performances in the Society and Community and Economy and Business pillars respectively, and consistent middling performance in both the Emissions and Mitigation and Environment and Adaptation pillars. The attitudinal Business Readiness factor is a significant strength for Ireland and could indicate the propensity of the private sector to play a role in the country's climate efforts.

Overall score



Distribution of results for each country

50

0



Ireland moves up one place to fifth in the Emissions and Mitigation pillar, with significant progress in climate policy through the introduction of sectoral emissions caps and legally binding carbon budgets. However, the energy crisis and weak government implementation of climate change measures have contributed to emissions rebounding to pre-pandemic levels.

Ireland is committed to reducing emissions by 51% by 2030 (compared to 2018 levels) and achieving Net Zero emissions by no later than 2050. Despite these goals, lack of government action in implementing measures to drive change has led to a rebounding of emissions. For example, coal power generation has increased, and fossil gas infrastructure and gas connections are also still being promoted. For future advancement, it is important that positive steps forward in policy translate into substantive and practical action.

Notably, Ireland's economic dependence on agriculture remains a challenge for its mitigation efforts – agriculture is the largest contributor to Ireland's overall emissions at around 38% of total greenhouse gas emissions. Sectoral carbon budgets and the climate action plan 2023 envisage a reduction in greenhouse gas emissions from agriculture of 25% by 2030 (from 2018 levels), a compromise in percentage reduction contested between farmers and environmentalists.

To achieve even this compromise target, the whole sector needs to respond, with an increased focus on sustainable methods of agriculture – government policy and support is needed to enable this transformation.

Ireland drops from third to fifth in the Environment and Adaptation pillar, as the country failed to increase performance in adaptation planning in line with peers.

In September 2022, Ireland published a review of its National Adaptation Strategy. The report evaluates progress against the twelve key national actions identified in the 2018 National Adaptation Framework. This report contributes to Ireland's improved score in the Adaptation Implementation factor but did not do enough for it to keep pace with some country peers. In particular, the strategy fails to consider the financial requirements and implications of adaptation. As noted within the report itself, "there is a general challenge estimating the level of funding being devoted to climate adaptation action nationally". If Ireland is to improve performance in this pillar, more consideration must be given to this issue.

Ireland's last place performance in the Economy and Business pillar tells a conflicting story. Topping the rankings in Business Readiness is not enough to counteract second-to-last place performances in both Climate Innovation and Climate Contribution.

Business Readiness remains a significant area of leadership for Ireland – concerns about climate change influence Ireland's business sector more so than any other country in the Index. In the attitudinal survey underlying this factor, 52% of Irish businesses say they have a 'structured plan to reduce climate impact' and 62% say 'concerns about climate change influence purchasing decisions'. There is also a high tendency among Irish businesses to take action in adaptation to assess and protect operations from extreme weather events, in which the country places second, with 56% of businesses having done so.

However, while Ireland remains top for this factor, it has experienced a sizable drop in score across nearly every survey question since last year's Index. This drop reflects an overall softening commitment to take action on climate change but could also signal a general rise in standards – fewer businesses reporting that they have 'a structured plan' in place (down nine points) might, in the context of the wider responses of Irish businesses, be interpreted as a higher bar for what 'a structured plan' looks like. Notably, there is a significant rise in disagreement with the statement that businesses 'feel pressure to take action on climate change' – 31% of Irish businesses surveyed now disagree with the statement.

Ireland's contribution to global climate finance has increased substantially from a low base in last year's Index, and therefore remains in seventh place in this factor. Importantly, the country's Climate Action Plan seeks to at least double the percentage of Official Development Assistance spending on climate finance by 2030, to deliver at least €225 million a year by 2025³⁵. This would be a significant rise relative to its Gross National Income (GNI) and would see Ireland move up the rankings if delivered. Ireland remains top of the Society and Community pillar, with consistently strong performances across all factors and a move up the rankings to third place in public Climate Attitudes.

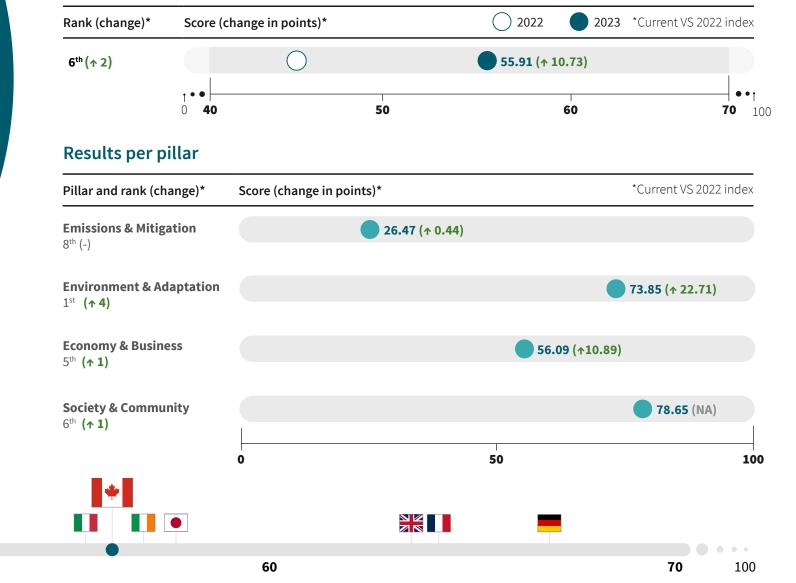
Ireland overtakes third place UK in Climate Attitudes, despite a fall in factor score. Irish consumers are the joint top in strongly agreeing with the statement that 'concerns about climate change influence personal purchasing decisions' (48%) and joint second in the belief that 'urgent action is needed to tackle climate change' (73%).

However, there is a notable fall in support across responses to many questions. For example, there has been a five-point fall in the belief that 'government and businesses need to invest in green infrastructure, energy and assets to tackle climate change' (74% now agree), indicating that people may understand action is required, but may not necessarily understand where it is most needed. A concerted effort is needed to ensure that Ireland harnesses this strong public sentiment in national decarbonisation efforts.

6th Canada

Major improvements made by Canada this year in the Environment and Adaptation pillar, most notably through the release of its inaugural National Adaptation Strategy, have led the country to an overall rise from eighth to sixth in the Climate-Ready Index. However, these improvements are not mirrored in the Emissions & Mitigation pillar, which continues to hold the country back. Climate progress is still somewhat limited by the political authority of federal and provincial governments, which makes mitigation and adaptation measures difficult and slow to implement.

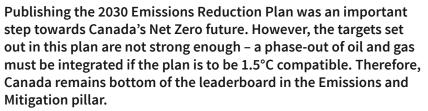
Overall score



Distribution of results for each country

50

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The Emissions Reduction Plan sets out a roadmap to reducing greenhouse gas emissions by 40% by 2030 and reaching Net Zero by 2050. Despite this, Canada's current Nationally Determined Contribution (NDC) must be considerably strengthened if it is to be 1.5°C-compatible. Canada's commitment to phase out fossil fuel production and export does not extend to oil and gas – as well as being among the 20 countries with the largest developed oil and gas reserves globally, Canada plans to increase its gas and oil production by more than 5% by 2030³⁶.

Additionally, commitments to eliminate fossil fuel subsidies have not yet been reflected in action, and instead the country continues to focus on solutions such as carbon capture and storage, and fossil-based hydrogen, which are yet unproven at scale. Considerable action is needed from Canada to improve performance in the Emissions and



Mitigation pillar.

The publishing of Canada's National Adaptation Strategy delivers a much-needed step-change in the country's approach to adaptation, contributing to Canada's rise to the top of the Environment and Adaptation pillar. Although the successful implementation of the strategy remains the real barometer of success, Canada's progress here is important considering the extreme weather events that have impacted the country this year.

Canada's adaptation strategy takes important steps to build resilience by setting nationwide adaptation priorities for action, and measurable targets. For instance, the strategy directs governments to work together to identify and map Canada's riskiest flood zones and take steps to protect people and communities in those areas, it encourages collaboration of industries to build climate resilience into critical infrastructure, and it commits the government to support municipalities and indigenous communities with resources required to adapt effectively to climate change. These measures put Canada among global leaders in adaptation planning. However, work is still needed to identify the top risks facing Canadians, priority action areas, using whole-of government tools and strengthening the monitoring and evaluation framework. Importantly, action and investment must be scaled dramatically to meet the targets set out and to respond to the extreme weather events that the country is increasingly facing.

Canada is top in the Biodiversity factor, far outperforming peers in the Index in its prevention of habitat loss, degradation and fragmentation, and preservation of the natural landscape and ecosystem. At COP15, Canada advocated for international collaboration on ambitious goals, including conserving 30% of land and oceans by 2030, which was included in the eventual agreement³⁷. With Canada's 2030 National Biodiversity Strategy currently in development for release in 2024, it is essential that Canada continues to strengthen its leadership in this area.

Business Readiness for climate change remains an area of strong performance for Canada, leading to a move up the rankings into fifth in the Economy and Business pillar. It is poor performance in the Climate Innovation factor and middling contribution to global climate finances in the Climate Contribution factor that prevents Canada from moving into the top half of the pillar leaderboard.

Canadian companies are the most in agreement across the Index that 'business should be reducing their carbon footprint', with 75% agreeing with the statement. However, there is a significant gap between the belief that action is required versus whether a company is taking action, for example through the development of action plans, resilience measures and purchasing decisions. This contributes to Canada's Business Readiness score – high though it is – falling the fastest of all markets this year. However, given the strong belief of Canadian businesses in the need for climate action, this reduction of score could potentially be explained by rising standards of what businesses consider adequate climate action, as the environmental claims of the private sector are placed under increasing scrutiny.

Canada remains bottom of the rankings for Climate Innovation despite small improvements in its factor score, driven by a growth in food tech private investment and consistent performance in other areas of innovation. Clearly, more focus is needed on this factor.

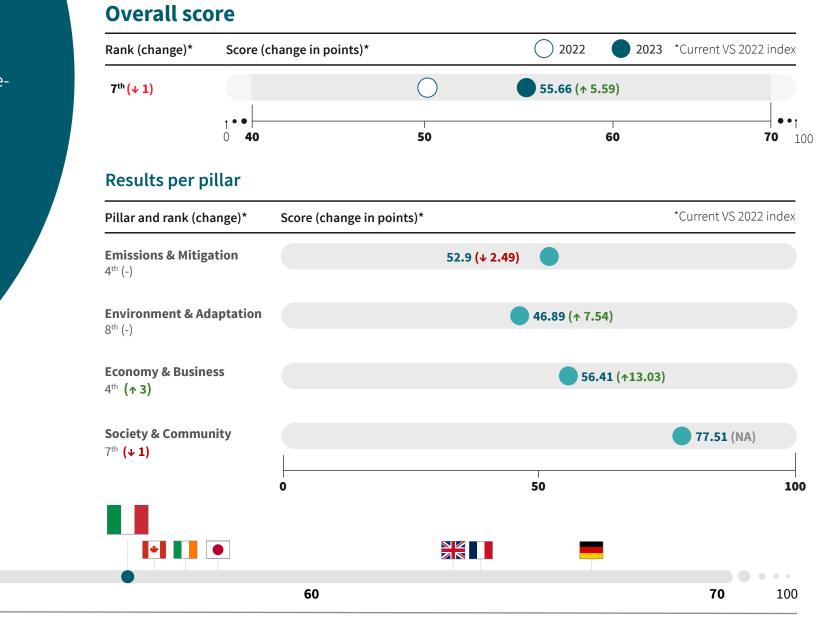
A leading performance in Social Resilience is countered by poor performance in Climate Transition and middling performance in public attitudes towards climate change. Canada therefore moves up one place to sixth in the Society and Community pillar.

Canada maintains a middling performance (fifth) in Climate Attitudes. Canadians' recognition of extreme weather events and the need to act is high – the country is the only place where belief with the statement that 'more frequent climate-change related weather events will occur over the next 10 years and beyond' is stable year-on-year at 73%, which is likely to have been driven by the extreme weather events experienced by Canada this year. However, similarly to Canadian businesses, there is a growing disparity among the public between the belief that climate action is required and the tendency to take action – with declining levels of agreement that climate change 'influences purchasing decisions' (42%, down four points from 2022). This action gap needs to be reduced if Canada's performance is to improve in this pillar.

Canada's strong performance in the Social Resilience factor is due to its sound business environment and well-functioning government, indicating high public perception of the quality of public and civil services, as detailed in the underlying data set behind this factor, the Positive Peace Index³⁸. The country's long-term attainment in the data set underlying this factor suggests more opportunity for future leadership.

7th Italy

Italy falls one place to seventh in the overall Climate-Ready Index, being narrowly overtaken by Canada. Italy's performance increase from last year's Index is greater than any other country in the Economy and Business pillar. However, this is negated by poor performances in Environment and Adaptation and Society and Community pillars, with adaptation and biodiversity being significant areas of concern considering the extreme weather events that the country has faced over the past year. A step-change is required in Italy's approach.



Distribution of results for each country

0

50



Italy remains in fourth place in the Emissions and Mitigation pillar with a small decline in overall score. The country has a low rate of emissions per capita compared with peers, but an increase in the implementation of climate policy, including a clear phase-out date for fossil gas, is needed if Italy is to decarbonise in line with a 1.5°C future.

Italy's National Recovery and Resilience Plan (NRRP), submitted in 2021, will see investment of over €150 billion to deliver against climate objectives and support the digital transition, including an economywide emissions reduction target of 51% by 2030³⁹. Additionally, in alignment with its Ecological Transition Plan, approved in March 2022, Italy has set targets to increase the share of renewable energy generation in the power sector to 72% by 2030, and approximately 100% by 2050⁴⁰, commitments, which contribute to its mid-table score in the pillar.

Notably, as in many other European countries, the Russian war in Ukraine has impacted Italy's mitigation efforts. Despite the country's ambition to phase out coal by 2025, the recent energy crisis resulted in Italy's decision to temporarily operate coal plants scheduled for closure at a higher capacity, with a significant impact on carbon emissions. As with all EU member states, Italy submitted a draft revision of its National Energy and Climate Plan (NECP) in 2023⁴¹. The draft plan will undergo review and amendment before a finalised version is approved by the European Commission by June 2024. However early indications of the current draft suggest it does not address areas previously flagged by experts - a clear phase-out path for oil and gas, a policy framework to support its ambition for renewables, stubbornly high transport emissions, and its projected reliance on Carbon Capture Storage, the scalability of which is unproven. These critical areas must be tackled if Italy's score in the pillar is to improve.

The Environment and Adaptation pillar is a significant area of underperformance for Italy, which remains bottom of the pillar leaderboard. Last-placed scores in Adaptation Capability and Biodiversity factors, and second-to-last place in Adaptation Implementation indicate that a stepchange is vitally needed.

Italy's vulnerability to climate change ranks as the second highest across the Index according to the Notre Dame Global Adaptation Initiative data set. This reflects the increasing number of extreme weather events experienced by the country this year, such as severe flooding, heatwaves, wildfires and storms. This relatively high vulnerability coupled with relative underperformance in readiness to adapt sees Italy place bottom in the Adaptation Capability factor. Italy's National Adaptation Strategy was submitted for review in 2018 and was not adopted until 2022⁴². This delay in adoption has caused the country to lag behind peers, particularly regarding the monitoring and evaluation of progress in line with its adaptation strategy. Considering the extreme weather events increasingly facing Italy, it is paramount that adaptation moves up the political agenda.

Italy is bottom of the table in the Biodiversity factor due to high levels of habitat loss, degradation and fragmentation⁴³. Beyond re-iterating its support for the EU's policy to protect 30% of land and sea by 2030, Italy failed to take the opportunity at COP15 to significantly further its ambition in regard to protecting and conserving biodiversity.

A strong performance in Business Readiness and improvements in Climate Contribution contribute to Italy jumping up three places to rank fourth in the Economy and Business pillar.

Italy's performance in Business Readiness remains reasonably stable, with the country retaining third place in this factor. 69% of Italian businesses surveyed believe that 'businesses should work on reducing their carbon footprint' – indicating a good level of support from the private sector which could be vital in driving Italy's climate agenda forward. However, there are indications across the attitudinal survey underpinning the Business Readiness factor that climate change could be becoming a slightly more polarising issue than last year there is a small but significant rise in those indicating 'strong disagreement' with the same statement. Future reports will indicate whether or not this is a persistent trend.

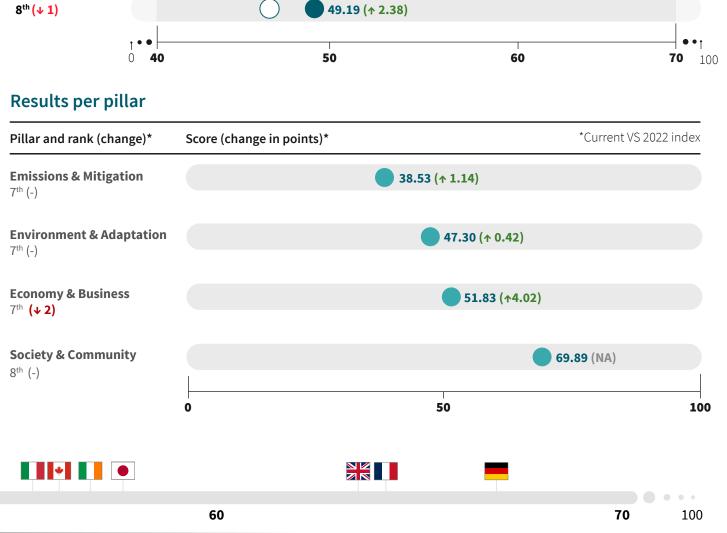
Italy's performance in the Society and Community pillar varies dramatically. A first-placed performance in Climate Attitudes is counteracted by last-place in Social Resilience, resulting in a seventh place overall.

Public attitudes to climate change remain an area of strong performance for Italy, with Index-leading results across the majority of questions in the attitudinal survey that underpins this factor. This year, Italians are the biggest supporters of 'urgent action on climate change' (74% agree), the most supportive of 'investment in green infrastructure' (77% agree) and joint top (with Ireland) on the question of whether 'climate concerns influence purchase decisions' (48% agree). However, results in each of these questions are down significantly from 2022. For example, the question on urgent action has seen an eight-point drop in agreement over the last 12 months.

8th USA

Bold new legislation, commitments and targets set the foundations for much needed climate progress in the USA. Despite the effects of landmark initiatives such as the Inflation Reduction Act (IRA) not yet showing up consistently across the Index, there are some initial positive signs in cleantech investment and job creation⁴⁴. However, ongoing political tensions are contributing to slow implementation of climate action. This means the USA slips into last place overall, despite positive signs for future performance.

Overall score Rank (change)* Score (change in points)*



 \bigcirc

2022

2023 *Current VS 2022 index

0

50

Distribution of results for each country

The announcement by the USA of new climate targets and policies contributes to an improvement in the Emissions and Mitigation pillar. However, in the context of a challenging international and domestic political landscape, implementation is too slow. The USA remains in seventh place in this pillar.

In 2021, the USA announced its Net Zero target for 2050, plans to phase out unabated coal plants by 2035, and a target of achieving a 50–52% Greenhouse gas emissions reduction from 2005 levels by 2030. The US is among the 20 countries with the largest developed oil and gas reserves and is also among the nine countries responsible for 90% of global coal production. The main shortcoming raised by experts is therefore that the USA will not halt domestic fossil fuel extraction, and there are still fossil fuel subsidies in place.

The Biden administration has announced many new targets and policies for climate action including the National Clean Hydrogen Roadmap⁴⁵, the Inflation Reduction Act⁴⁶ and Infrastructure Investment and Jobs Act - the latter will see over \$180 billion spent across public transport, environmental projects, electric vehicles, and power infrastructure, including the electrical grid's adjustment to renewable energy⁴⁷. The full impact of this will take time to come into effect but has the potential to be an inflection point in the country's mitigation efforts.



The USA's approach to adaptation is fragmented – it remains seventh in the Environment and Adaptation pillar. The catastrophic climate change-related events that have impacted the US this year have highlighted the gaps in the country's ability to respond effectively – a step-change is required.

The USA's capacity to adapt to the impacts of climate change remains good, demonstrated by a middling performance (fifth) in the Adaptation Capability factor. However, the fragmentation of departmental climate adaptation and resilience plans make implementation of adaptation measures across the country difficult. The USA is currently the only country in the Index lacking a national level plan – something which experts and lawmakers have advocated for to coordinate and prioritise the adaptation efforts across different sectors and regions. While recognising the relative complexity in assimilating state-level efforts in a national plan compared to Index peers, the lack of this plan places the USA far away at the bottom of the Adaptation Implementation factor.

Despite improvements in Business Readiness, the USA falls two places to seventh in the Economy and Business pillar. Performance in other areas is not increasing in line with peers, including a notable last place in the global Climate Contribution factor.

The USA rises from sixth to fifth in the Business Readiness factor that measures business attitudes to climate change through primary survey data. The responses of US companies have been consistent or improved across multiple areas, including agreement with 'reducing carbon footprint' (60%),

the development of 'structured plans' (52%), and 'climate change-influenced purchasing decisions' (50%). There has been a significant increase in the number of US companies surveyed that have 'assessed and protected operations against extreme weather' (58%, up nine points), and US businesses feel significantly more pressure to act on climate from factors in their operational environment (46%, up 11 points). This positive trend is likely being influenced by the implementation of the Inflation Reduction Act and increasing climate change disclosure requirements for listed companies. Given the continued impact of the IRA and other key policies, the confidence of US businesses going forward is likely to increase. However, this will be dependent on the continuation of the IRA under future Federal administrations and its application at state level, which varies drastically.

The provision of overseas financial Climate Contribution remains an area of significant underperformance for the USA relative to its Gross National Income (GNI), placing the country bottom of the leaderboard and a considerable distance behind seventh placed Ireland. Despite an increased emphasis on international climate support under the Biden administration, in 2021 (the year of OECD data collection) the US provided only approximately 12% of its 'equal share' of international climate finance. Delivering on its 2021 commitments to mobilise \$11.4 billion of global climate finance per year by 2024 would see the USA's performance improve in this area⁴⁸; however, it would still not be enough to move it up the rankings relative to its GNI. The social aspect of climate-readiness remains a significant area of concern for the USA, which places it bottom of the leaderboard for both Climate Attitudes and Climate Transition, and second-to-last place for Social Resilience. This results in a bottom-place performance in the Society and Community pillar.

Public attitudes to climate change present a considerable challenge to climate progress in the USA. Notably, the country displays the highest rates of polarisation when asked if 'urgent action to climate change needs to be taken within the next 10 years' (59% agree, 20% disagree).

Similarly to last year's Index, there is a high correlation between the proportion of people in the USA who believe in taking climate action, and the proportion that are personally taking action in their lives. This suggests the existence in the USA of a committed minority who are practicing what they preach. Unfortunately, these people remain the minority, and the country places bottom across most questions concerning the belief in climate action.

One notable exception is in climate resilience, where scores have stayed stable and improved since 2022, while responses in all other countries have declined. This is likely a reflection of the extreme weather events experienced across the country and beginning to influence public attitudes.

Our shared future is under threat, and the countries within the G7 and Ireland must decide whether they want to contribute to the solution or exacerbate the climate crisis. To effectively address the climate crisis, sound climate policies must be both consistent and comprehensive. Emissions must be rapidly reduced, and the exploration of new fossil fuels must cease if we aim to stay within the 1.5°C limit. I applaud the Aviva Climate Ready Index as a robust tool for monitoring the actions of the G7+Ireland. It is crucial for the financial markets to recognize their responsibility, establish their own targets, and actively participate in climate policy.

Jan Burck,

Senior Advisor, Germanwatch

Climate change is a threat on a scale that is hard to imagine. Dramatic effects are already on us, and we need to both drastically reduce carbon emissions to stave off the worst of changes, as well as prepare for what's already happening. We need sound data on the issues and obstacles, and an understanding of the relations between them, so we can tackle and solve the problems. Aviva's Climate-Ready Index is an important tool to create that understanding in stakeholders from industry, politics, and society as a whole.

Christoph v. Friedeburg,

CEO of CF Energy Research-Consulting-Operations & CCPI contributor



The ABI is committed to showing leadership on climate action through our Climate Change Roadmap. This year, we have launched the Investment Delivery Forum to support our members to invest £100bn over ten years in the infrastructure the UK will need to be 'climate ready' and published our Guide to Action on Nature. Aviva continues to play a leading role in our work and has shown real commitment to helping the wider industry evolve.

We must keep momentum on Net Zero across the whole economy. Insurers can drive this through investment in new technology, helping customers manage the physical risks from higher temperatures and the economic risks that come with rapid change.

The Climate-Ready Index rightly recognises that the work to reach Net Zero cannot be taken forward in isolation from making our societies ready for a changing world. It is vital that 2024 becomes that year that adaptation, resilience and nature are all given top billing by policymakers.

Charlotte Clark,

Director of Regulation and Climate Change, ABI

Aviva's Climate Ready Index is a great tool for exploring a fundamental truth – namely that environmental sustainability, social resilience and economic strength are all fundamentally aligned. It also tells us that progress is being made on climate change but that no country is in a position to rest on its laurels. The UK is at risk of drifting backwards on areas of strength and seems reluctant to engage in areas where it notably needs to go further. Hopefully this report will provide a powerful signpost to UK government and business leaders to redouble efforts in the transition to becoming a more resilient, sustainable and prosperous economy for the long term.

Eliot Whittington,

Executive Director and Chief Systems Change Officer, Cambridge Institute for Sustainability Leadership

05 Methodology

As Peter Drucker famously said, "If you can't measure it, you can't manage it". The Climate-Ready Index is a tool that helps both industry and governments to identify where they are and where they need to be on the pathway to netzero. The urgency of change required should not be underestimated, but evaluation tools like this are vital in helping to provide a perspective that bridges between sectors, silos and scales."

Ed Barsley,

Founder & Director, The Environmental Design Studio

All factors within the Climate Ready Index are informed by reputable sources which ensures robust data for measuring each country's progress across the Index. For full details including a description and rationale for each factor, please see the methodology section of the <u>2022 Climate Ready Index</u>.

Emissions and	Factor	Measure	Notes	
Mitigation	Climate Performance	<u>Climate change performance Index</u>	The Climate Change Performance Index (CCPI) produces a normalised score for each country from 0-100. No methodological changes have been made to the CCPI results for inclusion in the Aviva Climate-Ready Index. Although CCPI is the leading mitigation index, there are some issues to bear in mind. Only production-based emissions are used in calculation of the results – a country is held accountable for the emissions it is producing, rather than those from consumption. Similarly, no specific recognition is given to the role of outsourced emissions within this index. Also notable is that more than half of the CCPI ranking indicators are qualified in relative (better/worse) rather than absolute terms. Therefore, even countries with high rankings have no reason to be complacent. Data accessed 11/08/2023.	

Environment and Factor		Measure	Notes	
Adaptation	Adaptation Capability	Notre Dame Global Adaptation Initiative	The Notre Dame Global Adaptation Initiative index produces a normalised score for each country from 0-100. No methodological changes have been made to 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 11/08/2023.	
	Biodiversity	<u>Biodiversity Habitat Index</u>	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. Biodiversity Habitat Index is updated biennially; therefore data is unchanged from the 2022 Climate Ready Index Data accessed 11/08/2023	
	Adaptation Implementation	National Adaptation Plan checklist	 In order to provide the most useful score possible today, a bespoke checklist of criteria around the publication of National Adaptation Plans has been developed by Good Business, based on information that is publicly and readily available for all markets. Countries have been scored from 0-15, in intervals of 5, according to alignment with the following criteria: Active National/Regional Adaptation Strategies Monitoring and evaluation process Consideration of financial implications Target setting Priority actions in critical systems (defined by the <u>Global Commission on Adaptation</u>). This has been normalised to produce a score from 0-100. The checklist is reliant on the ready availability of National Adaptation Plans, which are not produced in a consistent format across countries or released in a co-ordinated way. Therefore, comparison and evaluation of country level plans is qualitative, with scores assigned based on the best available information. Data accessed 11/08/2023. 	

Economy and	Factor	Measure	Notes	
Business	Climate Insurance	Insurance indicators (OECD)	For the use of our model, we have considered non-life insurance penetration figures. For the purposes of data normalisation, we have set the top boundary at the level of the greatest global penetration for the year 2021, including countries beyond the G7 + Ireland (the highest penetration is in the USA, at 7.5%). Therefore, all scores within our model are relative to the maximum possible score of 7.5% and minimum possible score of 0%. Scores have been normalised on a scale from 0-100. Data accessed 11/08/2023.	
	Business Readiness	YouGov survey commissioned by Aviva	Aviva commissioned YouGov to survey business attitudes towards climate readiness among business leaders working for SMEs and a small number of larger businesses in the UK, Ireland, Canada, US, France, Germany, Italy and Japan. The survey was conducted online between 6th – 23rd June 2023.	
	Climate Innovation	<u>Green Future Index – Clean Innovation</u>	The Green Future Index produces a score for each country on 0-10 scale. For our Climate-Ready Index, we have used data from the Clean Innovation pillar only. Scores have been normalised to a 0-100 scale for inclusion in our model. Data accessed 11/08/2023.	
	Climate Contribution	<u>OECD Green Growth Indicators – Envi-</u> ronmental ODA	We have calculated the Environmentally related ODA as a percentage of each country's total GNI, with each country scored relative to a maximum value of 0.23% and minimum value of 0%. Scores have been normalised on a scale of 0-100. The maximum score of 0.23% is based on UN guidance that a minimum of \$100 billion of climate finance per year is necessary to reach targets set by the UN Sustainable Development Goals, and additional analysis conducted by the World Resources Institute on what each country's contribution as a percentage of GNI should be to reach this target (their conclusion is 0.23%). The UN notes, however, that \$100 billion per year is the bare minimum, and that other organisations provide estimates that are much higher. This active debate will continue to be monitored in future years to ensure the measurement of this factor remains in line with any growing consensus. In addition, this measure does not currently distinguish between the form of ODA, for example grants and loans. This will also be monitored in future years. Data accessed 11/08/2022.	

Society and	Factor	Measure	Notes
Community	Climate Attitudes	YouGov survey commissioned by Aviva	Aviva commissioned YouGov to survey consumer attitudes towards climate readiness among nationally representative samples of c.1,000 adults aged 18+ in the UK, Ireland, Canada, US, France, Germany, Italy and Japan. The survey was conducted online between 6th – 23rd June 2023.
	Climate Transition	Just Transition Score	The Just Transition Score produces a normalised score from 0-100. No methodological changes have been made for inclusion in our Climate-Ready Index. The Just Transition Score measures the carbon efficiency of social progress of each country. Based on the ratio of consumption-based CO ₂ emissions per capita to the Social Progress Index (SPI), it measures the per capita carbon content in each unit of SPI. The underlying data set for this measure has changed from the Transition Performance Index used in the 2022 Climate Ready Index. Data accessed 11/08/2023
	Social Resilience	Positive Peace Index	The Positive Peace Index scores countries from 5-1, with 1 being the highest score possible, and 5 being the lowest. The data has been inverted and normalised to produce a score from 0-100 for inclusion in the Aviva Climate-Ready Index. The Positive Peace Index is updated biennially, therefore data is unchanged from the 2022 Climate Ready Index. Data accessed 11/08/2022.

Public and Business Attitude surveys

Aviva commissioned YouGov to carry out a survey of consumer attitudes towards climate readiness among nationally representative samples of c.1,000 adults aged 18+ in the UK, Ireland, Canada, US, France, Germany, Italy and Japan.

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.

Fieldwork for both consumer and business surveys was carried out online between 6th – 23rd June 2023.

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

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

Country	Consumer sample sizes		SME sample sizes	
country	2022	2023	2022	2023
UK	1,008	1,008	253	253
Ireland	1,015	1,007	252	266
Canada	1,009	1,013	260	286
USA	1,019	1,028	251	255
Germany	1,015	1000	250	251
Italy	1,001	1,007	251	253
France	1,013	1,000	256	250
Japan	1,001	1,016	250	249

Public and Business Attitude surveys

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

Some statements have been shortened for presentational purposes.

Public Attitudes survey

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

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

Business Attitudes survey

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

1. All businesses should work on reducing their carbon footprint

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

Weighting process

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

For full details of the weighting rationale, please see the methodology section of the <u>2022 Climate Ready Index</u>.

Cautionary statement

This report should be read together with the Aviva Climate-Ready Index Report 2022 which sets out the index methodology in more detail. The analysis contained herein is based on numerous assumptions, judgements, opinions and estimates, all of which are subject to change without notice. Different assumptions could result in materially different results. Therefore subsequent reports may not allow a reader to compare the outcome of the index or the scoring system on a like for like basis.

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Footnotes

- 1. International Energy Agency, 2023
- 1. % reduction in Scope 1 and 2 operational absolute CO₂e emissions against 2019 baseline.
- 2. Reduction in weighted average carbon intensity (tCO2e/\$m sales) of Aviva's shareholder and with-profit investment portfolio (equity and credit) and does not extend to policyholder funds. For more detail on our climate goals please see www.aviva.com/climate-goals.
- 3. Figure represents external client capital too.
- 4. The Sustainable Business Coach is built using the Future Fit Business Benchmark, a framework based on the UN Sustainable Development Goals. It is created using systems science to define what it takes for a business to be truly responsible and regenerative: providing a clear destination to aim for, and a way to steer towards it.
- 5. Letter: 2023 Progress Report to Parliament to Rt Hon Prime Minister, June 2023,
- 6. Department for Energy Security & Net Zero, March 2023
- 7. International Monetary Fund, August 2023
- 8. Aviva research with YouGov, June 2023
- 9. <u>A Breakdown of Developed Countries' Public Climate Finance Contributions Towards the \$100</u> <u>Billion Goal | World Resources Institute</u>
- 10. <u>HM Government, 'Together for People and Planet: UK International Climate Finance Strategy',</u> 2023
- 11. Aviva research with YouGov, June 2023
- 12. Aviva research with YouGov, June 2023
- 13. Germany's Council of Experts on Climate Change

- 14. Germany increases climate finance for developing and emerging economies 2021 commitments totalled 5.34 billion euros | BMZ
- 15. Sufficiency policies are a set of measures and daily practices that avoid demand for energy, materials, land and water while delivering human well-being for all, within planetary boundaries. IPCC Climate Change 2022: Mitigation of Climate Change, Summary for Policy Makers -
- 16. France | Climate Transparency (climate-transparency.org)
- 17. France English (europa.eu)
- 18. <u>High Council for Climate</u>
- 19. French official development assistance in figures Ministry for Europe and Foreign Affairs (diplomatie.gouv.fr)
- 20. <u>COP27: a Conference of the Parties placed under the duty of international solidarity Ministry</u> for Europe and Foreign Affairs (diplomatie.gouv.fr)
- 21. <u>Progress in reducing emissions: 2023 Report to Parliament, Climate Change Committee, June</u> 2023
- 22. Carbon Budget Delivery Plan GOV.UK (www.gov.uk)
- 23. Powering Up Britain: Net Zero Growth Plan GOV.UK (www.gov.uk)
- 24. Powering Up Britain: Energy Security Plan GOV.UK (www.gov.uk)
- 25. Third National Adaptation Programme (NAP3) GOV.UK (www.gov.uk)
- 26. EY press release, April 2023

Footnotes

- 27. <u>OECD Green Growth Indicators Environmental ODA</u>
- 28. <u>HM Government, 'Together for People and Planet: UK International Climate Finance Strategy',</u> 2023
- 29. Office for National Statistics, 2023
- 30. Japan | Climate Action Tracker
- 31. Advanced energy-saving investment promotion support project Climate Policy Radar
- 32. Profiles of Adaptation: Japan | World Resources Institute (wri.org)
- 33. Japan announced renewed commitment of JYP 6.5 trillion on public and private climate finance over the next 5 years, from 2021 to 2025 | Ministry of Foreign Affairs of Japan (mofa. go.jp)
- 34. gov.ie Climate Action Plan 2023 (www.gov.ie)
- 35. Canada Climate Performance Ranking 2023 | Climate Change Performance Index (ccpi.org)
- 36. <u>UN Biodiversity Conference: COP15 in Montréal Canada.ca</u>
- 37. Positive Peace Index
- 38. Italy's recovery and resilience plan (europa.eu)
- 39. Italy 2023 Analysis IEA
- 40. Italy Draft Updated NECP 2021-2030 (europa.eu)
- 41. <u>Italy English (europa.eu)</u>
- 42. Italy | Environmental Performance Index (yale.edu)

- 43. What the Inflation Reduction Act has achieved in its first year (economist.com)
- 44. <u>U.S. National Clean Hydrogen Strategy and Roadmap : DOE Hydrogen Program (energy.gov)</u>
- 45. Inflation Reduction Act Guidebook | Clean Energy | The White House
- 46. US Climate Performance Ranking 2023 | Climate Change Performance Index (ccpi.org)
- 47. EXECUTIVE SUMMARY: U.S. International Climate Finance Plan | The White House

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- Massachusetts Institute of Technology (MIT) for the Green Future Index
- The Social Progress Imperative for the Just Transition Score
- 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

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