

H HEURISTICS

Navigating a Changing World

The Future of Global Habitability

*Identifying Regions Most Likely to Sustain Human Health,
Stability, and Prosperity Under Emerging
Polycrisis Conditions*

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Abstract

Public debate about the climate century often asks which parts of the planet will become uninhabitable. This report asks the question from the other side: which places are most likely to keep sustaining human health, stability and prosperity while climate, resource, demographic and governance stresses arrive together? It builds a transparent 0 to 100 Habitability Resilience Index (HRI) for 175 countries holding 8.19 billion people, 99.5 per cent of humanity, from 19 public indicators in five pillars: climate safety, water and food, health, stability, and prosperity and capacity. Inputs are World Bank indicators, the 2025 Worldwide Governance Indicators and CMIP6 climate projections from the [World Bank Climate Change Knowledge Portal](#), with the population outlook from the [UN World Population Prospects 2024](#).

The results are sharply concentrated. The 35 Tier 1 countries, led by Norway, Iceland, Canada, Sweden and New Zealand, hold 1.11 billion people, 13.5 per cent of the world; the 35 Tier 5 countries, 25 of them in sub-Saharan Africa, hold 1.46 billion. The ranking is robust: across 5,000 random weightings Norway and Iceland never leave the top two, and the Spearman correlation with four alternative weight sets never falls below 0.975. The index tracks the independent [ND-GAIN Country Index](#) closely ($r = 0.89$) but is not simply a proxy for income: Iceland, Bhutan, Canada, New Zealand and Norway beat the income-predicted score by 18 to 19 points, while the Gulf states fall short of it by 24 to 32. The decisive finding is a demographic mismatch. On UN medium-variant projections the population of Tiers 1 and 2 falls by 0.94 billion by 2100, while Tier 5 grows by 2.03 billion, more than the entire net growth of humanity, so that the share of people living in Tier 4 and 5 countries rises from 47 per cent today to 55 per cent in 2050 and 66 per cent in 2100, a share that barely moves across the UN low and high variants.

Heat is the pillar that changes most: the population-weighted number of days a year above 35 °C rises from 41 to 52 by mid-century under SSP2-4.5 and to 87 by the 2080s under SSP5-8.5. Yet a high-end climate stress test moves only 15 countries across a tier boundary, because most of the habitability gap is institutional rather than climatic. That is both the warning and the opportunity. The report also shows, from recent shocks in North Carolina, Canada, Europe, Uruguay and New Zealand, that no place is a refuge by geography alone. It closes with scenarios to 2050 and a three-track agenda: protect and adapt the high-habitability core, build capacity before the mid-century window in the middle tiers, and finance and plan mobility for the hotspots.

Keywords: habitability; climate havens; polycrisis; resilience index; extreme heat; water stress; food security; governance and stability; demographic change; adaptive capacity; migration; scenarios

JEL classification: Q54, Q56, O13, O57, J11, F22, I15; climate and the economy; environment and development; comparative country studies; demography; international migration; health

Data and method: The HRI combines 19 indicators from the World Bank World Development Indicators, the 2025 Worldwide Governance Indicators and CMIP6 ensemble-median projections (World Bank CCKP), retrieved on 10 October 2026, with UN WPP 2024 populations. Indicators are winsorised, log-transformed where skewed, min-max scaled and aggregated by transparent weights; robustness is tested over 5,000 random weightings and against ND-GAIN. Country averages mask subnational variation and are not forecasts; Figures 1, 8 and 19 are conceptual, and the scenarios are qualitative. Figures 2 to 7 and 20 chart values from the cited sources or from the World Bank and UN data described above. Every external claim is linked to its source, and information is current to 10 October 2026.

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Executive Summary

The question is not which places will become uninhabitable. It is which places will keep working, for health, for order and for livelihoods, when heat, water, food, demographic and political stresses arrive together. The answer is more concentrated, more institutional and less comfortable than the “climate haven” idea suggests.

- **Habitability is concentrated.** Of 175 countries holding 99.5 per cent of humanity, the 35 in Tier 1 hold 1.11 billion people (13.5 per cent); the 25 highest-scoring hold 6.6 per cent. The population-weighted index is 55.1, below the simple country mean of 57.7.
- **The leaders are robust.** Norway and Iceland rank first and second under all 5,000 random weightings tested, and rankings correlate at 0.975 or higher across four alternative weight sets and at 0.89 with the independent [ND-GAIN Country Index](#).
- **Habitability is more than wealth.** Income explains about two-thirds of the variation. Iceland, Bhutan, Canada, New Zealand and Norway beat the income-predicted score by 18 to 19 points; Qatar, Bahrain, Saudi Arabia and the United Arab Emirates fall 24 to 32 points short.
- **The pillars fail together.** Health and stability correlate at 0.81. Heat is the exception: climate safety is only loosely tied to prosperity (0.40), so heat is a distinct risk that income alone does not predict.
- **Heat changes most.** The population-weighted number of days a year above 35 °C rises from 41 today to 52 by mid-century under SSP2-4.5 and to 87 by the 2080s under SSP5-8.5. The share of people in countries averaging more than 90 such days rises from 13 per cent to 37 per cent by 2050.
- **The mismatch is demographic.** By 2100 the population of Tiers 1 and 2 falls by 0.94 billion while Tier 5 grows by 2.03 billion, more than the net growth of the whole sample. The share of people in Tier 4 and 5 countries rises from 47 per cent to 55 per cent in 2050 and 66 per cent in 2100, whichever UN variant is used.
- **Hotspots compound.** Twenty-five countries, 18 of them in sub-Saharan Africa, score below 35 on three or more pillars: 1.08 billion people today, 2.30 billion in 2100, about 23 per cent of humanity.
- **No place is a refuge by geography alone.** Hurricane Helene in North Carolina, Canada’s 2023 and 2025 fires, 62,775 heat deaths in Europe in summer 2024, Montevideo’s 2023 drought and Cyclone Gabrielle show that high-habitability places absorb shocks because of capacity, which can erode.
- **The gap is mostly institutional.** A high-end warming stress test moves only 15 of 175 countries across a tier boundary, so finance, governance and early action are the leverage points.

What follows

Section 14 sets out a three-track agenda. **For the high-habitability core**, adapt now, house people well and treat openness to migration as a capacity decision. **For the middle tiers**, build cooling, water and grid capacity before the 2040 to 2060 window. **For the hotspots**, close the adaptation finance gap, which UNEP puts at 12 to 14 times current flows, protect buffers, and plan mobility before a crisis forces it.

1. Introduction: Which Places Keep Working?

Habitability is not a property of a latitude. It is what a place can still do for its people, for decades, when several things go wrong at once.

The climate conversation has long carried a quiet binary: places that will become uninhabitable and places that will not. The binary is attractive because it is simple, and it is misleading because it asks the wrong question. Very few places will cease to be physically survivable this century. Many will become costlier, riskier and harder to govern, and a few will do better than the average. What matters for the more than eight billion people alive today, and the roughly 10.3 billion projected at the peak in the mid-2080s ([UN World Population Prospects 2024](#)), is how that difference is distributed and what decides it.

The conditions that frame the question are no longer hypothetical. The [Copernicus Climate Change Service](#) reports that 2025 was the third-warmest year on record at 1.47 °C above the 1850 to 1900 average, and the 2023 to 2025 average exceeded 1.5 °C for the first time. The [UNEP Emissions Gap Report 2025](#) puts warming at 2.3 to 2.5 °C by 2100 if national pledges are fully implemented and about 2.8 °C on current policies. At the same time the hazards are meeting thin buffers. This series' [Global Polycrisis Outlook 2027](#) records a war that has halted traffic through the Strait of Hormuz, a strong El Niño building toward a winter peak, and a 23 per cent fall in official development assistance in 2025, the largest one-year drop on record.

Five conditions that decide whether a place can sustain human life well

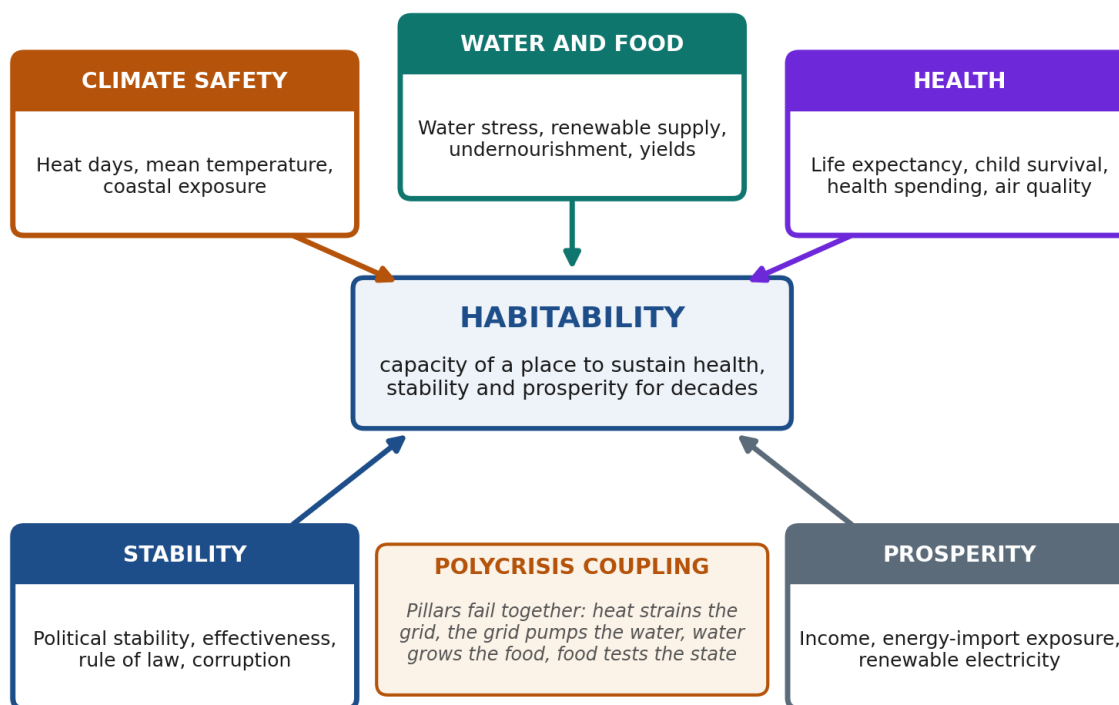


Figure 1. Five conditions that decide whether a place can sustain human life well, and the coupling that links them. The schematic is a conceptual synthesis by the author.

Source: Author's framework; pillar definitions in Section 2 and indicators in Section 7.

1.1 What this report adds

This is the eighth report in the H Heuristics series and the one that turns the earlier questions round. [Human Survivability in the Twenty-First Century](#) (HH-2026-05) asked how much of humanity will live with a shrinking margin for error, region by region. [The Polycrisis Risk Reduction Index](#) (HH-2026-06) compared the capacity of 40 countries to reduce, absorb and adapt to compound risk. The Outlook (HH-2026-07) mapped the convergence of risks into 2027. This report asks where the margin is widest. It covers 175 countries, builds one transparent index from public data, tests it hard, and then confronts it with three questions that the earlier reports left open: who lives where the index is high, what happens when people and habitability move in opposite directions, and what the evidence from recent shocks says about the idea of a refuge.

1.2 Five claims

First, habitability is a system property. It is set by five conditions, namely climate safety, water and food, health, stability, and prosperity with adaptive capacity, and by how they interact, not by temperature alone (Section 2). **Second**, the global distribution is steep and stable: a small group of mostly cool-temperate, high-capacity countries sits well above everyone else, and the ranking survives every reasonable change of weights (Sections 8 to 10). **Third**, the mismatch between where habitability is high and where population is growing is the central structural fact of the century (Section 11). **Fourth**, the climate stress test and the evidence from recent shocks both point to capacity as the controllable variable (Sections 12 and 13). **Fifth**, the policy agenda follows from the first four: protect the core, build the middle, finance and plan for the hotspots (Section 14).

1.3 How to read the report

Sections 3 to 6 establish the evidence base for each pillar. Section 7 sets out the index. Sections 8 to 10 give the results and test them. Sections 11 to 13 examine demography, stress and the limits of the country average. Section 14 draws out the implications and Sections 15 and 16 give the limitations and conclusions. A country table is in Appendix A. The index is a structured summary of public data, not a forecast, and it is built to be challenged: every transformation is documented in Section 7 and every external claim is linked to its source.

2. Defining Habitability Under Polycrisis

Hazard is what the climate does. Vulnerability is what the hazard finds. Habitability is what remains possible for the people who live there.

2.1 From hazard to habitability

Three concepts are often run together. A **hazard** is a physical event or trend such as a heatwave, a drought or a rising sea. **Vulnerability** is the susceptibility of people and systems to harm from a hazard, and it is the subject of mature indices such as the [ND-GAIN Country Index](#), which pairs vulnerability with readiness. **Habitability**, as used here, is broader: the capacity of a place to sustain health, stability and prosperity across decades. It includes exposure and vulnerability, but it also counts the positive assets that make a place a good one to live in, such as functioning institutions, a healthy population and a productive economy. A country can be hazard-exposed and still habitable if it has the capacity to manage the exposure; the Netherlands is the standard example.

The concept is deliberately relative and deliberately about people rather than land. The strongest empirical anchor is the idea of a human climate niche. Xu and colleagues showed in [PNAS](#) that for six thousand years human population has clustered in a narrow band of mean annual temperature around 11 to 15 °C, and projected that 1 to 3 billion people could be left outside it within 50 years under business-as-usual. Lenton and colleagues, in [Nature Sustainability](#), estimated that about 9 per cent of people are already outside the niche and that at the roughly 2.7 °C implied by current policies, a third (22 to 39 per cent) could be outside it by 2080 to 2100. Both papers are explicit that this is a measure of human cost, not a forecast of migration. It tells us where conditions are moving beyond historical experience, not what people will do about it.

2.2 Five pillars

The index rests on five pillars (Table 1). Each answers a different question about what could fail, and each can fail on its own. Their joint behaviour is the subject of the rest of this section.

Table 1. The five habitability pillars

Pillar	The question it answers	What failure looks like	Core indicators
Climate safety	How often will conditions exceed what bodies, crops and infrastructure were built for?	Lost working days, heat deaths, grid and rail failure, flooded coasts	Days above 35 °C, mean temperature, population below 5 m
Water and food	Can the place feed and hydrate its people from its own resources and its trade?	Aquifer depletion, rationing, hunger, price-driven unrest	Water stress, renewable water per person, undernourishment, cereal yield
Health	Do people survive childhood, breathe clean air and reach old age?	Child deaths, epidemics, pollution mortality, low productivity	Life expectancy, under-5 mortality, health spending, PM2.5
Stability	Can the state keep order, enforce rules and deliver services?	Conflict, displacement, corruption, service collapse	Four World Bank governance indicators
Prosperity and capacity	Does the place have the income and energy system to buy protection?	No money for cooling, defences or relocation; energy price shocks	GDP per person, renewable electricity, net energy imports

Indicator definitions, sources and weights are in Table 2 (Section 7).

2.3 Why a polycrisis changes the question

A single hazard in a strong system is a manageable event. The reason the polycrisis framing matters is that hazards no longer arrive singly. The [Cascade Institute](#) defines a global polycrisis as a situation in which crises in multiple global systems become causally entangled, so that together they degrade humanity's prospects by more than the sum of their parts. Lawrence and colleagues, in [Global Sustainability](#), identify three coupling mechanisms: common stresses that hit several systems at once, domino effects that propagate failure from one system to another, and feedbacks that link systems into reinforcing loops. The [World Economic Forum's Global Risks Report 2026](#) ranks geoeconomic confrontation first for the next two years and environmental risks first for the next ten.

For habitability the implication is that the pillars should not be treated as independent, and the data bear this out (Section 10). A heatwave strains the grid, the grid runs the pumps that water the crops, failed harvests raise food prices, and food prices test a state's legitimacy. The most useful property of a place under these conditions is therefore not the absence of any one hazard but the depth of its buffers: incomes, reserves, institutions and health systems. This report measures those buffers alongside the hazards. Because a high score on one pillar can mask a collapse on another, it also reports a separate list of **hotspots**, countries that score below 35 on three or more pillars (Section 11), rather than letting a good average hide a compound failure.

2.4 What the index is not

The index is not a forecast: it describes where capacity and exposure stand now, with heat projected forward, and it does not predict what will happen to any country. It is not a migration model: nothing here says that people will or should move from low to high tiers. It is not a moral ranking: the tiers describe conditions, and many Tier 4 and 5 countries bear little responsibility for them. And it is a country average. Section 13 returns to this last point, because the variation inside countries is large and is where the idea of a refuge has most often been tested.

3. The Planetary Envelope: Warming, Heat and the Shifting Niche

Heat is the pillar in which the future departs most from the present, and the one in which poor countries are least able to buy their way out.

3.1 Where the climate stands

The baseline is already outside the range of the last century. The [World Meteorological Organization](#) notes that the eleven years from 2015 to 2025 are individually the eleven warmest in the 176-year observational record. The [Global Tipping Points Report 2025](#) concluded that warm-water coral reefs, on which nearly a billion people depend, have passed their tipping point, and the [Stockholm Resilience Centre](#) reports that seven of nine planetary boundaries are now breached. These facts matter for habitability not as abstract thresholds but because they erode the natural infrastructure, from reefs to glaciers, on which many regional economies and water systems depend.

3.2 Thresholds and the human burden

Physiology sets the hardest limits. A wet-bulb temperature of 35 °C is often cited as the ceiling of survivability for healthy people at rest, but laboratory work by [Vecellio and colleagues](#) found that critical limits for young, healthy adults are lower, near 31 °C wet-bulb at very high humidity, and lower still for older people and for those who work outdoors. [Raymond and colleagues](#) documented brief episodes approaching 35 °C wet-bulb at a small number of locations, notably around the Persian Gulf and in South Asia. The practical danger zone therefore begins well before the theoretical limit.

The burden is already measurable. The [2025 Lancet Countdown](#) estimates that heat-related deaths averaged about 546,000 a year in 2012 to 2021, 63 per cent more than in the 1990s. In 2024 the average person experienced about 16 additional health-threatening hot days attributable to climate change, and heat exposure cost an estimated 639 billion work hours and US\$1.09 trillion in potential labour income ([WHO summary](#)). The [International Labour Organization](#) estimates that more than 2.4 billion of the world's 3.4 billion workers are likely to be exposed to excessive heat at work. The first cost is functional, in lost output and schooling and strained grids, and the fatal cost follows for the old, the poor and the outdoor worker.

3.3 Heat in the index data

The index uses the World Bank's CMIP6 country series for two heat variables, the annual number of days above 35 °C and mean annual temperature, with the intermediate pathway SSP2-4.5 for 2040 to 2059 as the central case and the high-emissions pathway SSP5-8.5 for 2070 to 2089 as a tail test. National means understate exposure in the hottest and most populous districts, so the figures below are conservative. On this basis the population-weighted number of days above 35 °C is 41 in 2015 to 2024. It rises to 52 by mid-century under SSP2-4.5 and to 61 by the 2080s, but to 87 by the 2080s under SSP5-8.5, more than twice today's level (Figure 2A).

The people exposed are growing faster than the temperature, because population is growing fastest where it is already hot. In 2025 about 1.0 billion people, 13 per cent of the world, live in countries averaging more than 90 days a year above 35 °C. By the 2050s, on UN projected population, that is 3.6 billion (37 per cent) under SSP2-4.5, and by the 2080s 4.3 billion (42 per cent) under SSP2-4.5 or 5.5 billion (53 per cent) under SSP5-8.5 (Figure 2B). Counting people in countries whose national mean temperature is 29 °C or above,

the threshold in the niche literature, gives 0.07 billion today, 0.20 billion by the 2050s and between 1.1 and 1.8 billion by the 2080s depending on the pathway, a deliberate lower bound against the roughly 2 billion at 2.7 °C that Lenton and colleagues estimate with finer spatial resolution. The same hazard is also a threat to the wealthy, but they have means of defence that the poor do not. The [SEforALL Chilling Prospects 2025](#) analysis counts just over a billion people at high risk of lacking access to cooling and a further 2.83 billion at medium risk.

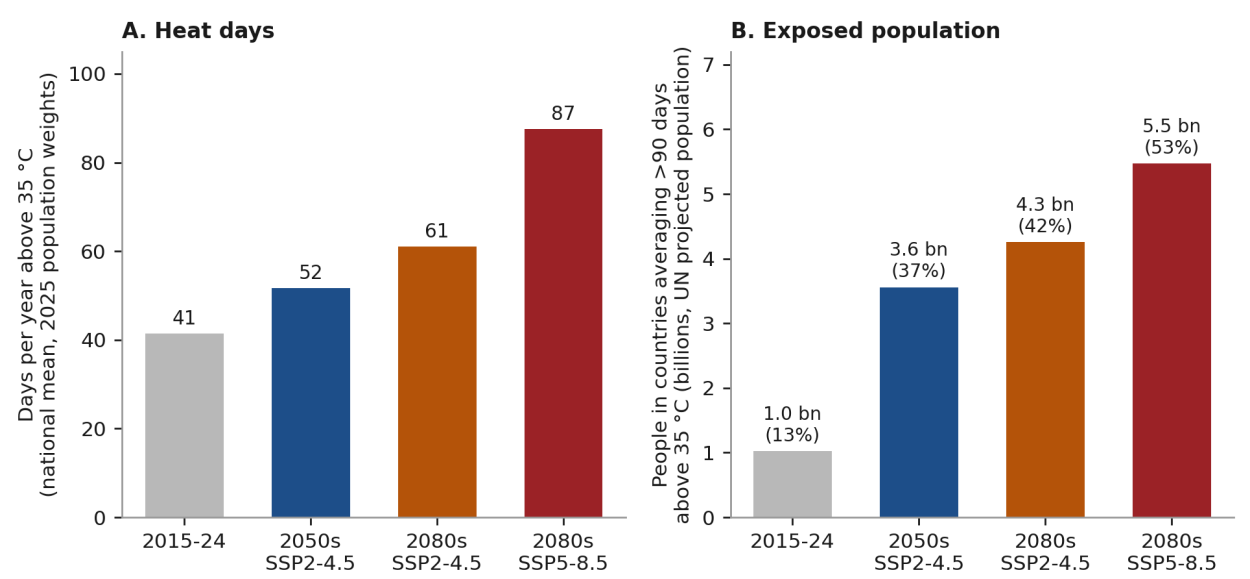


Figure 2. Heat days and the people exposed to them. Panel A weights national means by 2025 population so that it isolates the climate signal; panel B counts people in countries averaging more than 90 days a year above 35 °C, using UN projected population for each period (2025, 2050, and 2075 for the 2080s windows).
Source: World Bank CCKP, CMIP6 ensemble median (0.25°); UN WPP 2024 medium variant; author’s calculation. National means understate exposure in hot, populous districts.

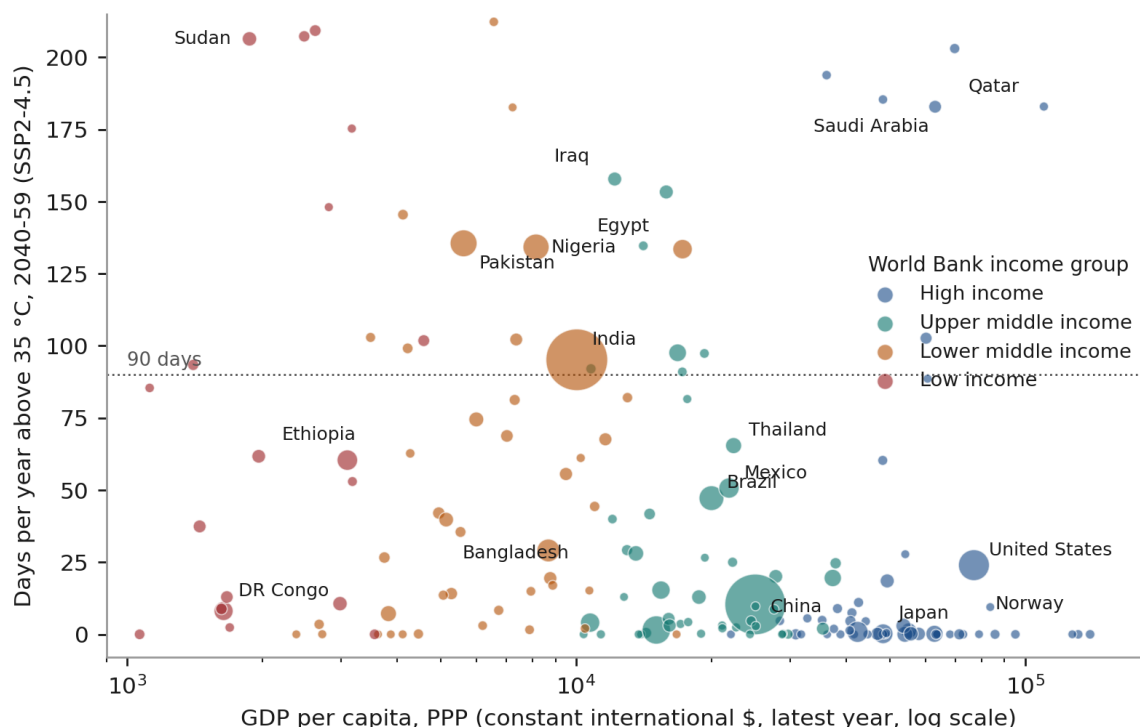


Figure 3. Heat and income. Each bubble is a country, sized by 2025 population. Days above 35 °C in 2040 to 2059 (SSP2-4.5) against GDP per capita at purchasing-power parity.

Source: World Bank CCKP (CMIP6); World Bank WDI (NY.GDP.PCAP.PP.KD); UN WPP 2024; author's calculation.

3.4 Reading the heat channel

Figure 3 shows the pattern that makes heat a justice problem. Twenty-three low- and lower-middle-income countries, home to 2.4 billion people or about two-thirds of the population of those income groups, average more than 90 days a year above 35 °C by mid-century. The lower-left corner, cool and poor, is nearly empty, and the only high-income countries above the 90-day line are Australia and five Gulf states. Among the 35 countries in the highest habitability tier, Australia is the only one with more than 30 such days in the 2050s; the Tier 1 median is a fraction of a day, against 134 for Tier 5. Cooling is the decisive adaptation, but it is bought with electricity and income, and 655 million people still lacked electricity in 2024 ([Tracking SDG7 2026](#)).

There is a second reading. Because heat is only loosely correlated with the other pillars (Section 10), a country can be rich and hot, like Qatar, or poor and cool, like Lesotho. Heat is therefore the pillar most likely to reorder the middle of the ranking over time. In the earlier survivability report, Latin America and the Caribbean showed the fastest proportional rise in heat days, a ninefold increase under very high emissions. A strategy built on today's heat map will underinvest where the change is fastest.

4. Water, Food and the Living Systems

Water and food are where the physical and the institutional meet. A place can be water-rich and water-insecure, or water-poor and secure, depending on what it can build and buy.

4.1 Water

The [World Resources Institute's Aqueduct analysis](#) finds that 25 countries, home to a quarter of the world's people, face extremely high water stress each year, using more than 80 per cent of their renewable supply, and that at least half of humanity, about four billion people, lives under highly stressed conditions for at least one month a year. The index uses the World Bank's complementary measure, freshwater withdrawals as a share of available resources, together with renewable water per person. On this measure 4.3 billion people live in countries withdrawing 40 per cent or more of their renewable supply, including 0.86 billion in countries above 70 per cent (Figure 4A). A figure above 100 per cent, as in Saudi Arabia, the United Arab Emirates and Kuwait, means a place is spending water capital: desalinating, drawing fossil aquifers or importing river flows.

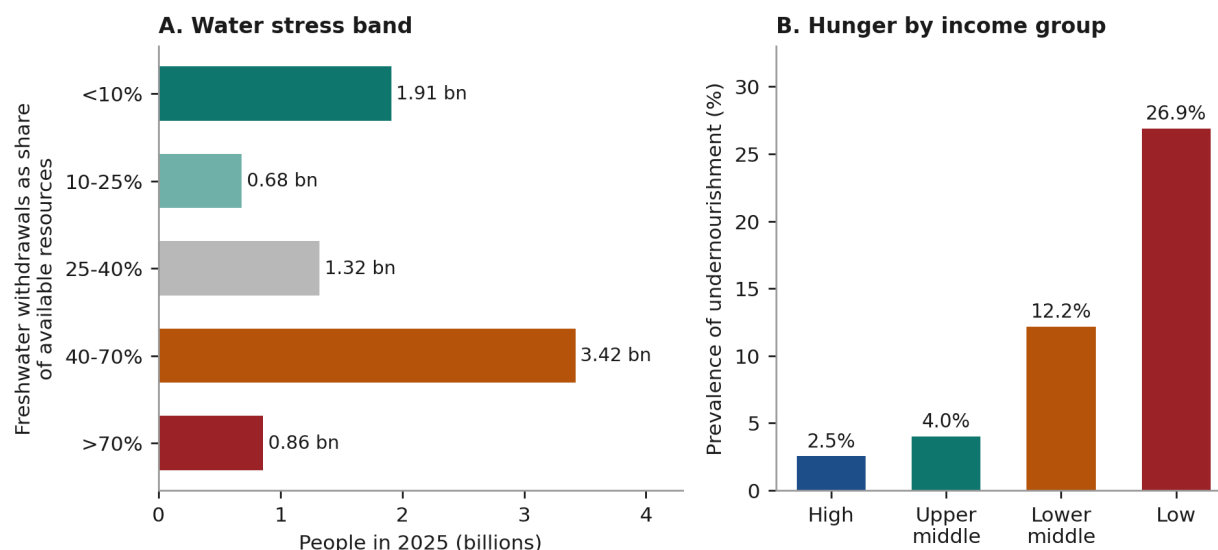


Figure 4. Water stress and hunger. Panel A shows people by national water-stress band (countries with data, 2025 population); panel B shows the prevalence of undernourishment by World Bank income group, population-weighted.

Source: World Bank WDI (ER.H2O.FWST.ZS, SN.ITK.DEFC.ZS; latest year 2022 and 2024); UN WPP 2024; author's calculation.

The slow variables are the most worrying. The [United Nations University](#) argues that in many places the problem has moved from temporary shortage to lasting damage, and the [Global Commission on the Economics of Water](#) warned in 2024 that the water crisis could threaten more than half of global food production by 2050 and cut average GDP by about 8 per cent, with losses of up to 15 per cent in lower-income countries. Scarcity is not the whole story. In services, 2.1 billion people still lack safely managed drinking water ([WHO and UNICEF](#)), many of them where rainfall is not the constraint. Money, infrastructure and institutions are.

4.2 Food

Hunger is falling slowly, and it is concentrated. The 2026 edition of [The State of Food Security and Nutrition in the World](#) estimates that 645 million people faced hunger in 2025, 7.8 per cent of the world and the third consecutive fall, while about 2.7 billion could not afford a healthy diet. World Bank data show how steep the gradient is by income: 2.5 per cent of people in high-income countries are undernourished, 4.0 per cent in upper-middle, 12.2 per cent in lower-middle and 26.9 per cent in low-income countries (Figure 4B).

Climate adds an uneven overlay. [Jägermeyr and colleagues](#) found that, with a new generation of crop models, global maize yields fall about 24 per cent by the end of the century under very high emissions, while wheat gains about 18 per cent as CO₂ fertilisation and expanded high-latitude cultivation outweigh warming. The headline is not that the world will starve. It is that gains accrue to temperate and high-latitude producers and losses to tropical ones, who also have the least capacity to adapt. Trade then transmits the shocks: the Outlook notes that the Strait of Hormuz carries more than 30 per cent of global urea trade, which is how an energy shock reaches fertiliser and then food prices.

4.3 Reading the water and food channel

The pillar's leaders are not the wettest countries but the most secure ones: Guyana, New Zealand, Norway and Canada score 96 to 98, combining abundant renewable water with low hunger and productive agriculture. Its laggards are Yemen, Bahrain, Qatar and Syria, where scarcity is acute and, in several cases, import-dependent. Two cautions follow. First, the country average hides within-country scarcity: India's national withdrawal ratio of 67 per cent understates how severe stress is in the north-west. Second, a high score reflects the present system, and the system can be broken. Uruguay scores 91 on this pillar, yet in 2023 [the reservoir behind Montevideo's main supply fell to about 2.4 per cent of capacity](#) after years of drought and thin investment, and residents were supplied with brackish water. The point is returned to in Section 13.

5. Health, Demography and Human Capital

Health is where capacity becomes personal. It is the pillar that most closely tracks stability, and the one that the demographic future will test hardest.

5.1 The health gradient

The 2025 [WHO and World Bank universal health coverage report](#) estimates that 4.6 billion people still lack access to essential health services and that 2.1 billion experience financial hardship in paying for care. The outcome gap is stark and runs along income lines (Figure 5). Population-weighted life expectancy is 80.3 years in high-income countries, 76.0 in upper-middle, 69.5 in lower-middle and 65.2 in low-income countries. A child born in a low-income country is about twelve times as likely to die before the age of five as one born in a high-income country, with 62 deaths per 1,000 against 5.

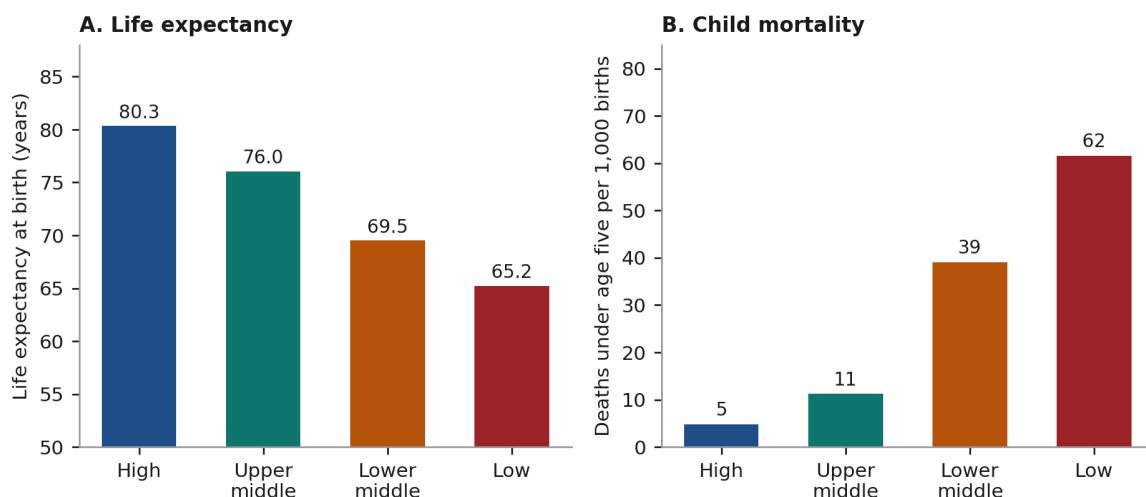


Figure 5. The health gradient by World Bank income group, population-weighted. Panel A: life expectancy at birth. Panel B: deaths under age five per 1,000 live births.

Source: World Bank WDI (SP.DYN.LE00.IN, SH.DYN.MORT; latest year 2024); UN WPP 2024 population weights; author's calculation.

5.2 Air, heat and infection

Three other health channels feed the pillar. Air pollution is the largest environmental risk: [State of Global Air 2025](#) links it to 7.9 million deaths in 2023, and the index includes the population-weighted PM2.5 concentration for that reason. Heat adds both direct mortality and the loss of productive capacity set out in Section 3. And infection tests the weakest systems first: the [Outlook](#) records a Bundibugyo-virus Ebola outbreak in eastern Congo, with no licensed vaccine, spreading through a conflict zone where health workers, laboratories and funding are scarce. The countries at the bottom of the health pillar, Niger and Nigeria at 3 and Chad at 9, share thin health spending, high child mortality and weak states; those at the top, Sweden, Norway, Luxembourg and Iceland, score 97 to 100.

5.3 The demographic backdrop

Demography is the most predictable force in this report and the one that sets the denominator for every other pillar. The UN projects that world population will rise from 8.2 billion to about 10.3 billion in the

mid-2080s before easing, with a peak judged to be about 80 per cent likely before the end of the century. Beneath that headline the divergence is sharp. Sixty-three countries, including China, Germany, Japan and Russia, have already peaked and are projected to shrink, while the fastest growth is concentrated in sub-Saharan Africa. The index data show the gradient in fertility: the median total fertility rate is 1.4 births per woman in Tier 1 countries, all 35 of which are below replacement, and 3.9 in Tier 5 countries, 17 of which are at or above four.

Ageing societies face their own version of the problem. Japan recorded [671,236 births in 2025, the lowest since records began](#), with a fertility rate of 1.14, while South Korea's fertility rate rose to 0.80, a [second consecutive increase](#) from a very low base. In the median Tier 1 country one person in five is aged 65 or over, against about one in thirty in the median Tier 5 country. The older population is more exposed to heat and pollution and more costly to care for, which is a part of the context for the migration question in Section 11. Population change is slow, but it is also close to certain, and it is the main reason the geography of habitability and the geography of people are drifting apart.

6. Stability, Governance and Prosperity

The pillars that decide whether a society can respond are the least physical and the most unequal. They are also the ones that move fastest, in both directions.

6.1 Conflict, displacement and trust

Stability is under strain on every measure. The Uppsala Conflict Data Program registered [65 state-based conflicts in 2025](#), the highest since records began in 1946, and the number of interstate conflicts doubled for the second year running. [UNHCR](#) counted 117.8 million forcibly displaced people at the end of 2025, the first fall in a decade, though much of the decline reflected returns under adverse conditions, and the [Internal Displacement Monitoring Centre](#) put the stock of internally displaced people at 82.2 million, with a record 32.3 million new conflict displacements during the year. The [Global Peace Index](#) for 2026, as [reported](#), again places Iceland first and finds that global peacefulness has declined for the twelfth year in a row.

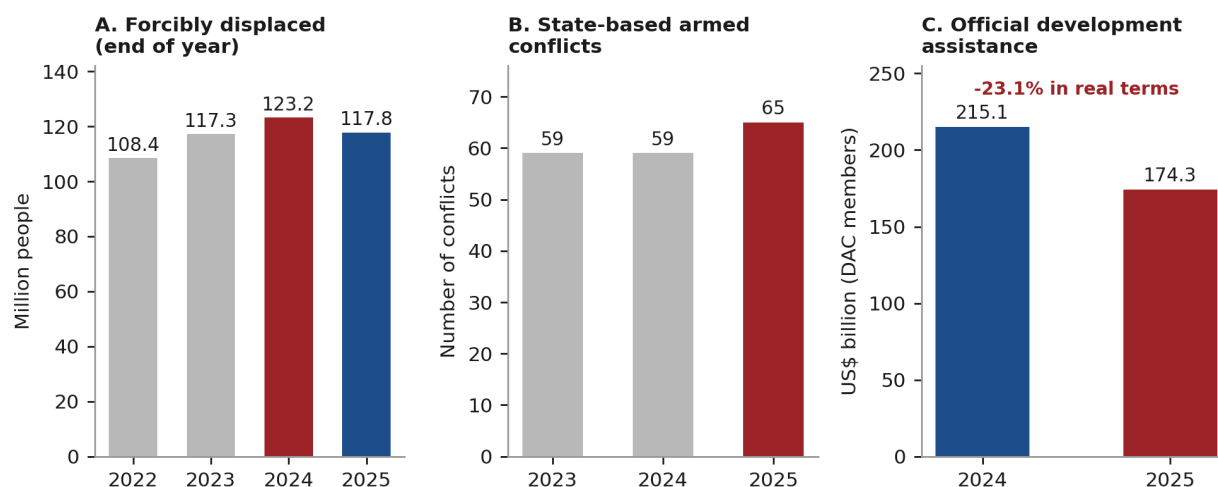


Figure 6. *The stability buffer in retreat. Panel A: forcibly displaced people at year-end. Panel B: state-based armed conflicts. Panel C: official development assistance from OECD DAC members.*

Source: UNHCR Global Trends (2024 value as reported in the 2025 edition); UCDP (2026); OECD preliminary ODA data (April 2026), as compiled in the Outlook.

Governance is the multiplier. The [V-Dem Democracy Report 2026](#) estimates that 74 per cent of the world's population lived in autocracies at the end of 2025 and a record 41 per cent in countries that are autocratising. Regime type is not a direct cause of risk, but it conditions how reliably early warnings are heard and how well coordination works. The index captures it through four World Bank governance indicators, whose gap across the tiers is wide: the median government-effectiveness score is +1.32 in Tier 1 and -1.02 in Tier 5. Aid, meanwhile, is retreating from the places that rely on it. [OECD preliminary data](#) show official development assistance from DAC members falling 23.1 per cent in real terms in 2025 to US\$174.3 billion, the largest one-year fall on record; only four countries, Denmark, Luxembourg, Norway and Sweden, met the 0.7 per cent target. They are four of the ten highest-ranked countries in this report.

6.2 Energy, income and fiscal room

Prosperity in the index is deliberately about capacity rather than output. It combines income with two features of the energy system, the share of electricity from renewable sources and net energy imports, because the 2026 energy shock showed how quickly import dependence becomes a habitability variable. The war that halted traffic through Hormuz, which the [IEA](#) calls the largest supply disruption in the history of the oil market, raised the cost of fuel, fertiliser and freight for every importer. At the same time the structural counterweight is real: [IEA](#) data show annual clean-energy investment of about US\$2.2 trillion against US\$1.2 trillion for fossil supply, and [Ember](#) reports that wind and solar met 99 per cent of the growth in global electricity demand in 2025. Yet 655 million people still lacked electricity in 2024.

Fiscal room determines whether countries can buy protection. [UNCTAD](#) found that developing countries paid US\$921 billion in net interest in 2024 and that 61 of them spent at least 10 per cent of revenue on interest, at borrowing costs two to four times those of the United States. This is the part of the prosperity pillar that income alone does not capture, and it is why the Gulf states, with high incomes but extreme heat, water scarcity and, for most of them, export routes through a single chokepoint, score lower than their wealth would suggest (Section 10).

6.3 The adaptation finance gap

The finance that would build capacity in the places that lack it is far below what is needed. The [UNEP Adaptation Gap Report 2025](#) puts the adaptation finance needed by developing countries at about US\$310 billion a year by 2035 on modelled costs, rising to US\$365 billion on needs extrapolated from national plans, against international public adaptation finance flows of US\$26 billion in 2023. That is a shortfall of 12 to 14 times current flows, and the doubling goal set at Glasgow, to about US\$40 billion by 2025, is itself unlikely to be met. The returns to closing the gap are high: the [Global Commission on Adaptation](#) estimated benefit-cost ratios from 2:1 to 10:1 across early warning, resilient infrastructure, dryland agriculture, mangroves and water resilience.

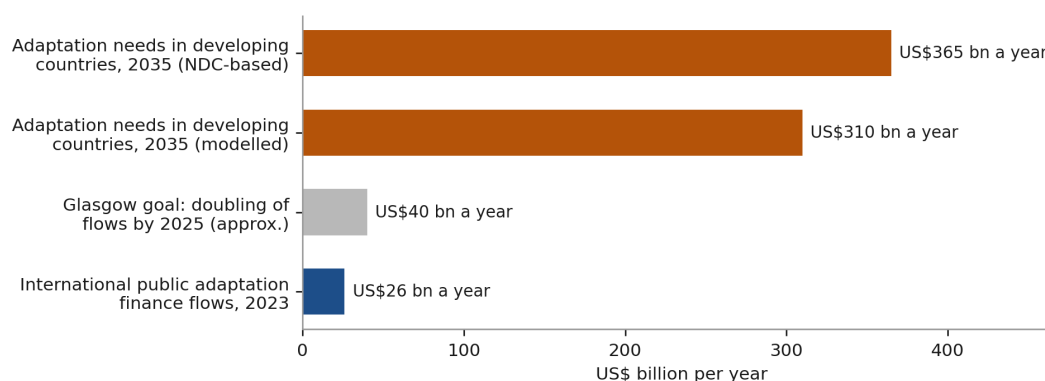


Figure 7. *The adaptation finance gap. Annual adaptation needs in developing countries in 2035 against international public adaptation finance flows in 2023.*

Source: UNEP Adaptation Gap Report 2025 (needs, flows and the approximate Glasgow doubling goal).

6.4 Reading the capacity channel

At the top of the stability pillar are Luxembourg, Switzerland and Singapore (99 each) and New Zealand (98); at the bottom, Somalia, Yemen and Sudan score 0 and Syria 2. In prosperity, Norway scores 100 and

Iceland 95, helped by renewable electricity and net energy exports. The two capacity pillars, stability and prosperity, correlate with health at 0.81 and 0.67 and with each other at 0.63 across the 175 countries, which is what the polycrisis literature would predict: the places that are well governed and well funded are also the places where people live longest. The next section turns these pillars into an index.

7. Method: The Habitability Resilience Index

The index is built to be inspected. Every input is public, every transformation is simple, and every choice that matters is tested in Section 10.

7.1 Design principles

Four principles guided the design. The index is **transparent**: a reader with a spreadsheet can reproduce it from the sources in Table 2. It is **public-data only**, so that it can be updated and challenged. It is **comparative and bounded**, scoring each country from 0 to 100 against the observed range of all 175. And it is **conservative about what it claims**: it covers what is measurable at national level and says what it leaves out (Section 15). It is not an attempt to model every mechanism of the polycrisis; it is a structured way to summarise the buffers and exposures that the evidence in Sections 3 to 6 identifies as decisive.

7.2 Data

The index draws on 19 indicators from four public sources, retrieved on 10 October 2026: the World Bank [World Development Indicators](#), the 2025 edition of the [Worldwide Governance Indicators](#), the CMIP6 ensemble-median projections in the World Bank [Climate Change Knowledge Portal](#), and, for population weights and projections, the [UN World Population Prospects 2024](#). Where a country's latest value falls between 2012 and 2025 the most recent year is used. Heat is the only forward-looking pillar input; every other input is the latest observation, so the index describes capacity and exposure as they stand, with heat projected.

Table 2. Indicators, sources and weights

Pillar	Indicator	Source and code	Direction and transform	Weight in pillar
Climate safety	Days above 35 °C, 2040-59, SSP2-4.5	CCKP, CMIP6 hd35	Lower is better	35%
	Days above 35 °C, 2070-89, SSP5-8.5 (tail)	CCKP, CMIP6 hd35	Lower is better	25%
	Mean annual temperature, 2040-59, SSP2-4.5	CCKP, CMIP6 tas	Lower is better	25%
	Population living below 5 m elevation (%)	EN.POP.EL5M.ZS	Lower is better	15%
Water and food	Freshwater withdrawals, % of available resources	ER.H2O.FWST.ZS	Lower is better	30%
	Renewable internal freshwater per person	ER.H2O.INTR.PC	Higher; log scale	30%
	Prevalence of undernourishment (%)	SN.ITK.DEFC.ZS	Lower is better	30%
	Cereal yield (kg per hectare)	AG.YLD.CREL.KG	Higher; log scale	10%
Health	Life expectancy at birth	SP.DYN.LE00.IN	Higher is better	35%
	Under-5 mortality per 1,000 births	SH.DYN.MORT	Lower; log scale	25%
	Current health expenditure per person (US\$)	SH.XPD.CHEX.PC.CD	Higher; log scale	20%

Pillar	Indicator	Source and code	Direction and transform	Weight in pillar
	PM2.5 air pollution, mean annual exposure	EN.ATM.PM25.MC.M3	Lower is better	20%
Stability	Political stability and absence of violence	WGI , 2025	Higher is better	30%
	Government effectiveness	WGI , 2025	Higher is better	25%
	Rule of law	WGI , 2025	Higher is better	25%
	Control of corruption	WGI , 2025	Higher is better	20%
Prosperity	GDP per person, PPP (constant international \$)	NY.GDP.PCAP.PP.KD	Higher; log scale	50%
	Renewable electricity (% of total)	EG.ELC.RNEW.ZS	Higher is better	30%
	Net energy imports (% of energy use)	EG.IMP.CON.S.ZS	Lower; clipped at $\pm 100\%$	20%

Each pillar contributes 20% of the headline index. Latest available year, 2012 to 2025. Heat indicators are national means of the CMIP6 ensemble median.

7.3 Construction

The sample is every country with at least 250,000 people in the UN's 2025 estimates for which at least four of the five pillars can be computed, which gives **175 countries and 8.19 billion people, 99.5 per cent of the 2025 world population**. Six countries lack a prosperity score and are rated on four pillars. Each indicator is winsorised at the 3rd and 97th percentiles to limit the influence of outliers, log-transformed where the distribution is strongly skewed (income, renewable water, child mortality, health spending and cereal yield), and rescaled from 0 to 100 by min-max, with the direction reversed where lower values are better. A pillar score is the weighted mean of its available indicators, and a pillar is computed only if at least 60 per cent of its weight is present. The Habitability Resilience Index is the equal-weighted mean of the five pillars.

Three further constructions follow. **Tiers** divide the 175 countries into quintiles of 35: Tier 1 for scores of 72.9 or above, Tier 2 for 62.6 to 72.9, Tier 3 for 52.6 to 62.6, Tier 4 for 43.7 to 52.6 and Tier 5 below 43.7. **Hotspots** are countries scoring below 35 on three or more pillars, a rule that flags compound weakness which a good average could hide. And a **stress test** replaces the central heat inputs with SSP5-8.5 values for 2070 to 2089 to see how far a severe climate path alone reshuffles the ranking (Section 12).

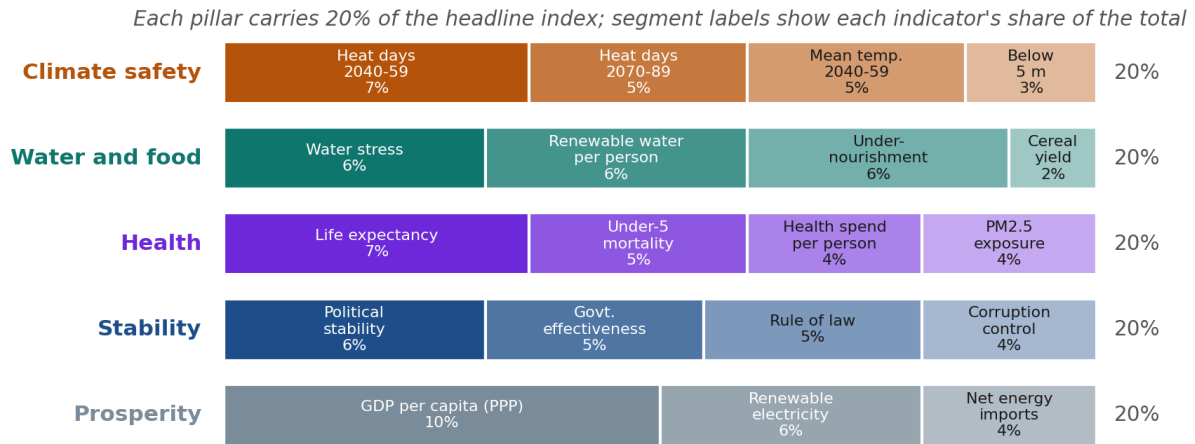


Figure 8. Architecture of the Habitability Resilience Index. Five pillars carry equal weight; segment labels show each indicator's share of the headline score.

Source: Author's construction; see Table 2.

7.4 What the choices imply

Equal weights are a neutral prior, not a claim that the pillars matter equally: Section 10 tests 5,000 random weightings and four deliberately skewed sets. The aggregation is compensatory, so a high score on one pillar can offset a low one, which is why hotspots are reported separately. Country means conceal variation, so heat and water are understated for hot, populous districts and overstated for cool ones. The governance indicators are expert and survey perceptions rather than direct measures. And the climate pillar says nothing about humidity, which matters for wet-bulb limits but which no country-level projection used here captures. These are limits of the data, set out again in Section 15, and none changes the direction of the results that follow.

8. Results: The Global Picture

The world's habitability is concentrated in a belt of cool-temperate, high-capacity countries that hold a seventh of its people.

8.1 The ranking

The ten highest scores are Norway (97.8), Iceland (95.4), Canada (92.3), Sweden (90.9), New Zealand (90.1), Switzerland (90.0), Luxembourg (89.6), Finland (89.2), Austria (87.0) and Denmark (85.7). Norway scores 96 or more on every pillar, with its prosperity pillar at the global maximum. At the other end, the ten lowest scores are Yemen (16.5), Somalia (18.5), Sudan (19.9), Niger (21.4), Chad (22.6), Burkina Faso (26.1), Syria (26.6), Mali (28.6), South Sudan (29.4) and Pakistan (29.8). The population-weighted index is 55.1, against a simple country mean of 57.7, because the countries where most people live score lower than the typical country. The top ten countries hold 1.1 per cent of humanity and the top 25 hold 6.6 per cent.

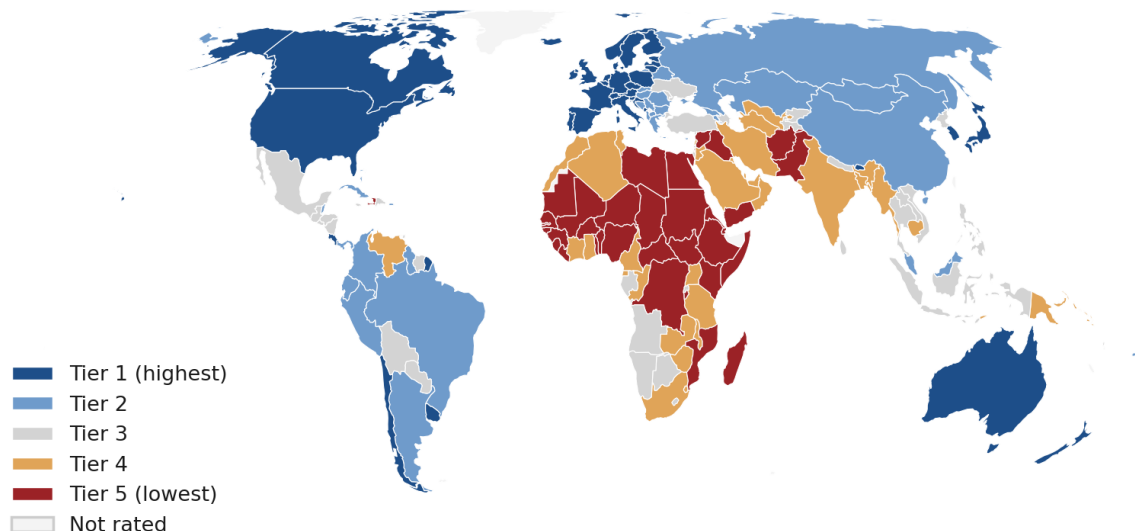


Figure 9. *The Habitability Resilience Index by country, in quintile tiers. Tier 1 holds the 35 highest-scoring countries and Tier 5 the 35 lowest. Equal Earth projection; countries without a rating are shown in pale grey.*

Source: Author's calculation from World Bank WDI, WGI, CCKP and UN WPP 2024 data; map geometry from Natural Earth.

8.2 Tiers and people

Tier 1 consists of 25 countries in Europe and Central Asia, four in East Asia and the Pacific (Australia, Japan, New Zealand and South Korea), three in Latin America (Chile, Costa Rica and Uruguay), the United States and Canada, and Bhutan. Tier 5 consists of 25 countries in sub-Saharan Africa, nine in the Middle East, North Africa, Afghanistan and Pakistan, and Haiti. Just eight countries, the United States, Japan, Germany, the United Kingdom, France, Italy, South Korea and Spain, hold 77 per cent of Tier 1's 1.11 billion people. Five countries, Nigeria, Pakistan, Ethiopia, Egypt and the Democratic Republic of the Congo, hold 59 per cent of Tier 5's 1.46 billion.

Table 3. The five habitability tiers

Tier	Countries	HRI range	People 2025 (bn)	Share of world	Median GDP per person (PPP \$)	Median life expectancy	Median days >35 °C, 2050s	Median fertility rate	Median political stability
Tier 1	35	73-98	1.11	13.5%	53,993	82.1	0	1.4	0.81
Tier 2	35	63-73	2.10	25.6%	29,218	76.7	3	1.5	0.25
Tier 3	35	53-63	1.11	13.5%	13,785	72.7	14	2.2	-0.01
Tier 4	35	44-52	2.42	29.6%	9,767	70.7	44	2.6	-0.38
Tier 5	35	16-43	1.46	17.8%	3,131	63.8	134	3.9	-1.57

Tiers are quintiles of 35 countries. Medians are across countries. Days above 35 °C are for 2040-59 under SSP2-4.5. Political stability is the WGI estimate (about -2.5 to +2.5).

The gradient across tiers is the story of the century in one table. Moving from Tier 5 to Tier 1, median income rises seventeen-fold, life expectancy by 18 years and political stability from a deeply negative to a positive score, while the median number of days above 35 °C falls from 134 to less than one and the median fertility rate falls from 3.9 to 1.4. The conditions that make a place good to live in and the conditions that make it demographically stable travel together.

8.3 Where the big populations sit

Of the 16 countries with more than 100 million people, only two are in Tier 1 (the United States and Japan) and five are in Tier 5 (Nigeria, Pakistan, Ethiopia, Egypt and the Democratic Republic of the Congo). China (54th, Tier 2), Russia (44th, Tier 2) and Brazil (67th, Tier 2) sit in the upper-middle band, helped by climate safety and, for Brazil, water, but held back by stability. Indonesia (82nd), Mexico (94th), Vietnam (85th) and the Philippines (102nd) are in Tier 3. India (132nd, 45.0) and Bangladesh (137th, 43.9) are in Tier 4. India's position is worth noting: it scores 61 on water and food, but 48 on climate safety and only in the low thirties on health, and its 1.46 billion people make it the largest single block of humanity in Tier 4.

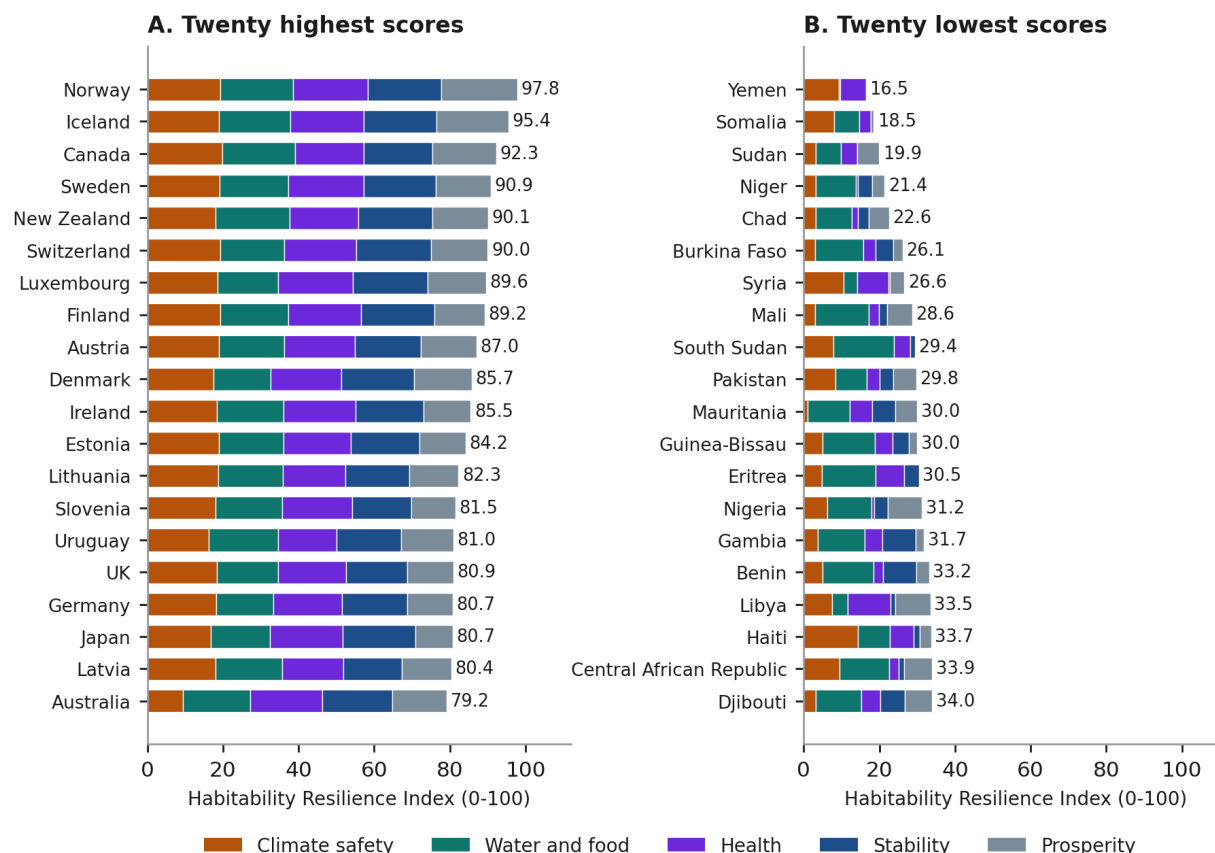


Figure 10. The twenty highest and twenty lowest scores. Bars stack each pillar's contribution, so bar length equals the index; countries lacking a pillar are scored on the remaining pillars.

Source: Author's calculation; see Section 7.

8.4 The leaders by pillar

The pillar leaders differ from the overall leaders in instructive ways. In climate safety, the Kyrgyz Republic, Canada, Russia and Mongolia score 98 to 99, because they are cold and continental; the bottom are the United Arab Emirates and Mauritania (5 each), Senegal (12) and Burkina Faso (15). In water and food the top is Guyana (98), New Zealand (97), Norway (96) and Canada (96); the bottom is Yemen (1), Bahrain (10) and Qatar (14). In stability the leaders are Luxembourg, Switzerland and Singapore. A country that leads one pillar often trails another: Russia's climate score (99) is among the world's best and its stability score (26) is low, and the six Gulf states, with some of the world's highest incomes, all fall in Tier 4. This is why the aggregation matters, and why the next two sections ask how stable the picture is.

9. Regional Patterns

Region by region, the story is the same one told at national scale: capacity is the discriminator, and demography runs the other way.

Table 4 and Figures 11 and 12 group the 175 countries into 18 regions that respect climate and political geography (Appendix B lists the membership). Scores are population-weighted. Regions are defined for readability, not as units of analysis; the within-region range is often as wide as the between-region range.

Table 4. Habitability by region, population-weighted

Region	Countries	People 2025	HRI	Weakest pillar	Strongest pillar	Population change 2025-2100
Nordic and Baltic	8	34 m	89	Prosperity (76)	Health (95)	-11%
Australia and New Zealand	2	32 m	81	Climate safety (54)	Health (95)	+52%
Western and Central Europe	14	0.34 bn	79	Prosperity (58)	Climate safety (90)	-10%
North America	2	0.39 bn	79	Prosperity (67)	Water and food (86)	+23%
Southern Europe	14	0.17 bn	75	Prosperity (57)	Health (87)	-37%
East Asia (temperate)	5	1.62 bn	68	Prosperity (50)	Climate safety (88)	-53%
Eastern Europe and Caucasus	7	0.21 bn	67	Stability (30)	Climate safety (96)	-24%
Southern Cone and Andes	9	0.22 bn	65	Stability (41)	Water and food (89)	-5%
Brazil and Amazon basin	3	0.21 bn	64	Stability (44)	Water and food (93)	-23%
Southeast Asia	11	0.70 bn	56	Stability (43)	Water and food (80)	-3%
Central America and Caribbean	16	0.23 bn	56	Stability (35)	Water and food (74)	+2%
Pacific Islands	4	13 m	52	Prosperity (31)	Water and food (75)	+73%
Central Asia	6	0.13 bn	49	Stability (27)	Climate safety (75)	+120%
Southern Africa	12	0.21 bn	47	Health (33)	Climate safety (69)	+124%
Middle East and North Africa	20	0.61 bn	44	Stability (31)	Health (52)	+49%
South Asia	7	1.95 bn	43	Health (32)	Water and food (60)	+17%
Central and East Africa	17	0.58 bn	42	Stability (23)	Climate safety (64)	+202%
Sahel and West Africa	18	0.54 bn	32	Health (12)	Water and food (60)	+137%

Population projections are UN WPP 2024, medium variant. The Pacific Islands row covers the four island states with enough data to be rated.

	Climate safety	Water and food	Health	Stability	Prosperity	HRI
Nordic and Baltic	94	88	95	94	76	89
Australia and New Zealand	54	90	95	93	73	81
Western and Central Europe	90	78	90	81	58	79
North America	83	86	86	71	67	79
Southern Europe	83	78	87	67	57	75
East Asia (temperate)	88	75	71	58	50	68
Eastern Europe and Caucasus	96	86	68	30	57	67
Southern Cone and Andes	72	89	65	41	61	65
Brazil and Amazon basin	53	93	67	44	66	64
Southeast Asia	64	80	50	43	46	56
Central America and Caribbean	65	74	60	35	45	56
Pacific Islands	74	75	39	39	31	52
Central Asia	75	57	42	27	41	49
Southern Africa	69	57	33	37	38	47
Middle East and North Africa	47	47	52	31	44	44
South Asia	49	60	32	42	34	43
Central and East Africa	64	58	25	23	42	42
Sahel and West Africa	28	60	12	23	35	32

Figure 11. Pillar scores and the headline index by region, population-weighted. Darker blue is stronger; red is weaker.

Source: Author's calculation; regions defined in Appendix B.

9.1 The high-habitability regions

The Nordic and Baltic countries (89) score 88 or more on four pillars, with prosperity (76) the weakest. Australia and New Zealand (81) pair strong water-and-food (90) and health (95) scores with a climate pillar of 54 that reflects Australia's heat: it is the only Tier 1 country with more than 30 days a year above 35 °C by the 2050s. Western and Central Europe (79) and North America (79) are close behind. Southern Europe (75) is the cautionary case in the first tier: strong health and stability, but 62,775 heat-related deaths across Europe in summer 2024, two-thirds of them in the south ([ISGlobal](#)).

9.2 The middle

East Asia's temperate countries (68) combine a very large population, 1.62 billion, with a projected fall of 53 per cent by 2100, the steepest of any region. Eastern Europe and the Caucasus (67) have among the best climate scores in the world (96) but a stability pillar of 30, lower than in any region above them in Table 4. The Southern Cone and Andes (65) and Brazil and the Amazon basin (64) are water-rich and stability-limited, and the Amazon region carries a higher climate-stress sensitivity than its current score suggests (Section 12). Southeast Asia (56) and Central America and the Caribbean (56) sit in the Tier 3 band. Central Asia (49) and Southern Africa (47) are small in population but project growth of 120 and 124 per cent by 2100.

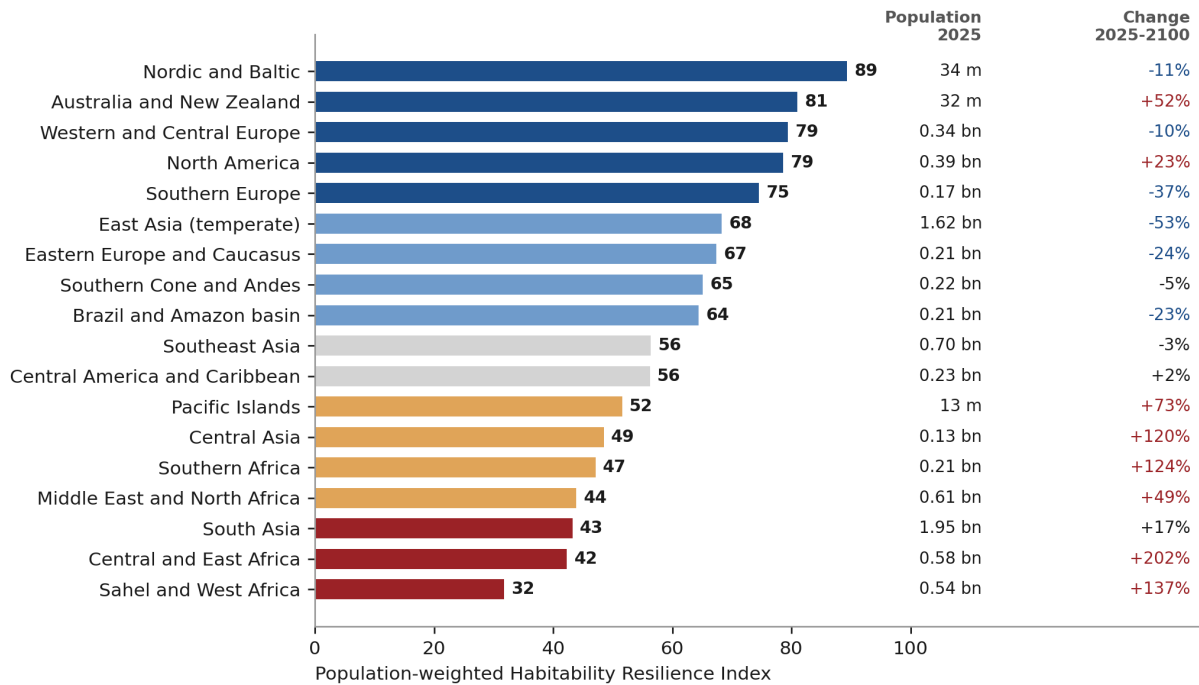


Figure 12. Population-weighted index by region, with 2025 population and projected population change to 2100. Bar colour shows the tier band of the regional score.

Source: Author's calculation; UN WPP 2024, medium variant.

9.3 The low-habitability regions

Three regions fall in the lowest band, and a fourth sits just above it. The Middle East and North Africa (44) is the most hazard-limited: its climate (47) and water-and-food (47) pillars are among the weakest of any region, and 83 per cent of its people already live under extremely high water stress by WRI's count. South Asia (43) holds 1.95 billion people, the largest population in a low band, with a health pillar (32) lower than any region except the two lowest-scoring African ones, and a stability pillar of 42. Central and East Africa (42) and the Sahel and West Africa (32) are the two lowest-scoring regions, with health at 25 and 12 respectively, stability at 23, and projected population growth of 202 and 137 per cent by 2100. It is the combination, not any single weakness, that sets them apart: they are the regions in which every pillar is thin at once, and in which the population is rising fastest.

10. Robustness, Validation and the Limits of the Index

A ranking is only as useful as it is hard to break. This section tries to break this one.

10.1 Does the ranking depend on the weights?

It does not, much. Figure 13 draws 5,000 random sets of pillar weights from a Dirichlet distribution centred on equal weights (concentration 4, so that individual weights typically range from about 8 to 35 per cent) and records each country's rank under each. Norway and Iceland rank first and second under all 5,000. Nineteen of the baseline top 25 stay in the top 25 in more than 90 per cent of draws, 33 countries stay in the top 40 in more than 90 per cent, and the median width of the 5th to 95th percentile rank interval for the top 25 is five places. Intervals widen for countries whose pillars diverge: Australia's climate score drags it between 11th and 44th depending on how much weight climate receives, and Russia ranges from 26th to 66th because its climate strength and stability weakness offset one another. Rankings among populous low-tier countries are tighter still: in 90 per cent of draws Pakistan stays between 159th and 169th and India between 123rd and 141st.

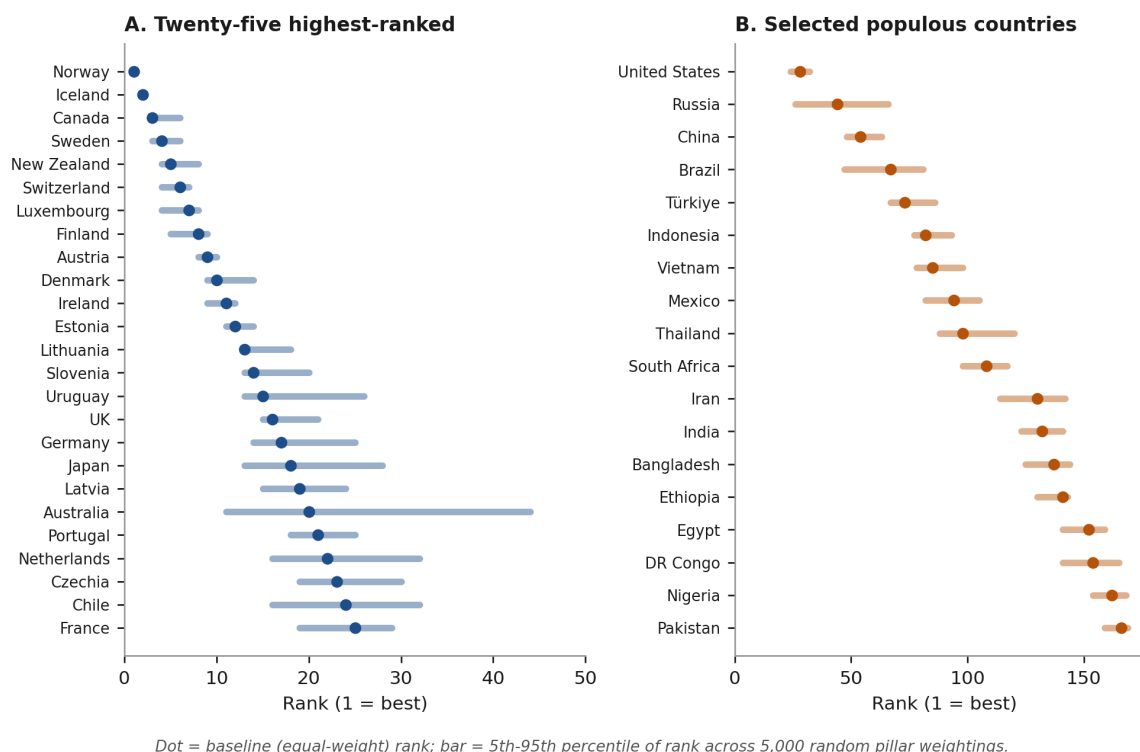


Figure 13. Rank stability under 5,000 random weightings. Dots show the baseline rank and bars the 5th to 95th percentile.

Source: Author's calculation.

Four deliberately skewed weight sets confirm the result (Table 5). Doubling the weight on climate, stability or prosperity, or tilting it toward the three biophysical pillars, changes at most one of the top five names and leaves the Spearman correlation with the baseline at 0.975 or higher. Eighteen to nineteen of the baseline top 20 remain in the top 20 under three of them and seventeen under the climate-heavy set.

Table 5. Alternative weight sets

Weight set	Weights (C/W/H/S/P, %)	Top five countries	Spearman vs baseline	Baseline top 20 retained
Baseline (equal weights)	20/20/20/20/20	Norway, Iceland, Canada, Sweden, New Zealand	1.000	20 of 20
Climate-heavy	40/15/15/15/15	Norway, Iceland, Canada, Sweden, Switzerland	0.975	17 of 20
Stability-heavy	15/15/15/40/15	Norway, Iceland, Switzerland, New Zealand, Sweden	0.981	19 of 20
Prosperity-heavy	15/15/15/15/40	Norway, Iceland, Canada, Luxembourg, Sweden	0.985	19 of 20
Biophysical	30/30/30/5/5	Norway, Iceland, Canada, Sweden, Finland	0.976	18 of 20

C = climate safety, W = water and food, H = health, S = stability, P = prosperity.

10.2 Do the pillars move together?

They do, with one exception that matters. Across the 175 countries the health and stability pillars correlate at 0.81, health and prosperity at 0.67 and stability and prosperity at 0.63 (Figure 14). Climate safety is the least correlated with the rest, between 0.40 and 0.56, and water and food correlates with the other pillars at only 0.39 to 0.52. This is the empirical shape of the polycrisis argument: the human-capital and institutional pillars rise and fall as a bloc, while the physical pillars are partly independent of them. A country can fail on climate and succeed everywhere else, as in the Gulf, or the reverse, as in several cool and poorly governed states. The case for treating the pillars as a system, not a list, rests on the first of these facts; the case for reporting them separately rests on the second.

	Climate safety	Water and food	Health	Stability	Prosperity
Climate safety	1.00	0.52	0.56	0.45	0.40
Water and food	0.52	1.00	0.39	0.41	0.47
Health	0.56	0.39	1.00	0.81	0.67
Stability	0.45	0.41	0.81	1.00	0.63
Prosperity	0.40	0.47	0.67	0.63	1.00

Figure 14. Correlation between pillar scores across 175 countries. The health, stability and prosperity pillars form a tight bloc; climate safety and water and food are looser.

Source: Author's calculation (Pearson correlations).

10.3 Does it agree with other indices, and is it just wealth?

Against the [ND-GAIN Country Index](#), an independent composite of climate vulnerability and readiness, the HRI correlates at $r = 0.89$ across the 172 countries in both (Spearman 0.89; Figure 15A). The two diverge in understandable ways. The HRI rates Bhutan (26th, against 101st in ND-GAIN), Vanuatu, Angola, Cuba and Ecuador higher, and the Gulf states, Uzbekistan, Jordan and Egypt lower. The differences reflect what each index counts: the HRI credits Bhutan's cool climate, abundant water and hydro-based electricity, for example, and penalises the Gulf states for projected heat days and extreme water stress.

Against income, the correlation is $r = 0.81$, so that income explains about two-thirds of the variance and each doubling of income is associated with about 8 index points (Figure 15B). The remaining third is where habitability is more than wealth. The countries that most exceed their income-predicted score are Iceland (+19), Bhutan (+19), Canada (+18), New Zealand (+18) and Norway (+18), followed by Malawi, Sweden, Finland, Vanuatu and Lesotho, with Estonia and Uruguay close behind. Those that fall furthest short are Qatar (-32), Bahrain (-31), Saudi Arabia (-24), the United Arab Emirates (-24), Libya, Egypt, Kuwait, Nigeria, Mauritania and Iraq. The first group is, with a few exceptions such as Malawi and Lesotho, cool, water-rich and well governed. The second is hot, water-short or institutionally weak, or all three. Wealth is a strong predictor of habitability. It is not a substitute for it.

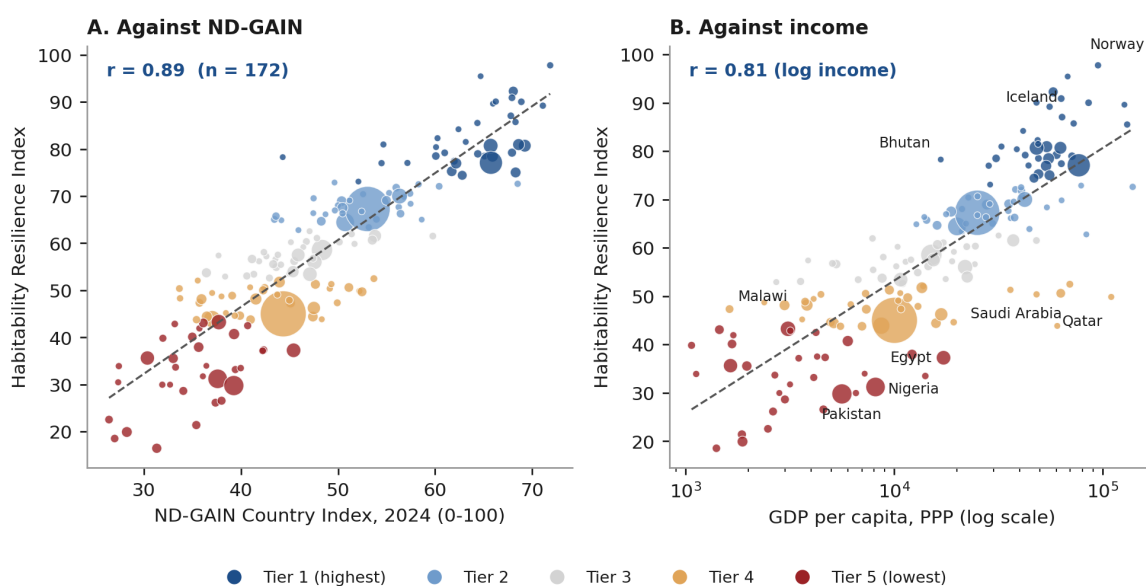


Figure 15. Validation. Panel A: the HRI against the ND-GAIN Country Index, 2024. Panel B: the HRI against GDP per person (PPP, log scale). Bubbles are sized by 2025 population and coloured by tier.

Source: Author's calculation; ND-GAIN Country Index 2026 edition (2024 scores); World Bank WDI.

11. The Demographic Mismatch

The places where habitability is highest are the places where people are becoming fewer. The places where it is lowest are the places where they are becoming many more.

11.1 The shape of the mismatch

Combining the index with the UN's medium-variant projections gives the central structural fact of this report (Figure 16). Today 1.11 billion people live in Tier 1 countries and 2.10 billion in Tier 2, together 39 per cent of the world. By 2100 those two tiers hold 2.27 billion, a fall of 0.94 billion, and Tier 2 alone shrinks by 42 per cent as China, Russia, Brazil and others age. Tier 3 grows modestly. Tier 4 grows from 2.42 to 3.20 billion. Tier 5 grows from 1.46 to 3.49 billion, an increase of 2.03 billion, which is more than the net growth of the whole 175-country sample over the same period (1.97 billion), because the shrinking tiers subtract from the total. The share of humanity living in Tier 4 and 5 countries rises from 47 per cent in 2025 to 55 per cent in 2050 and 66 per cent in 2100.

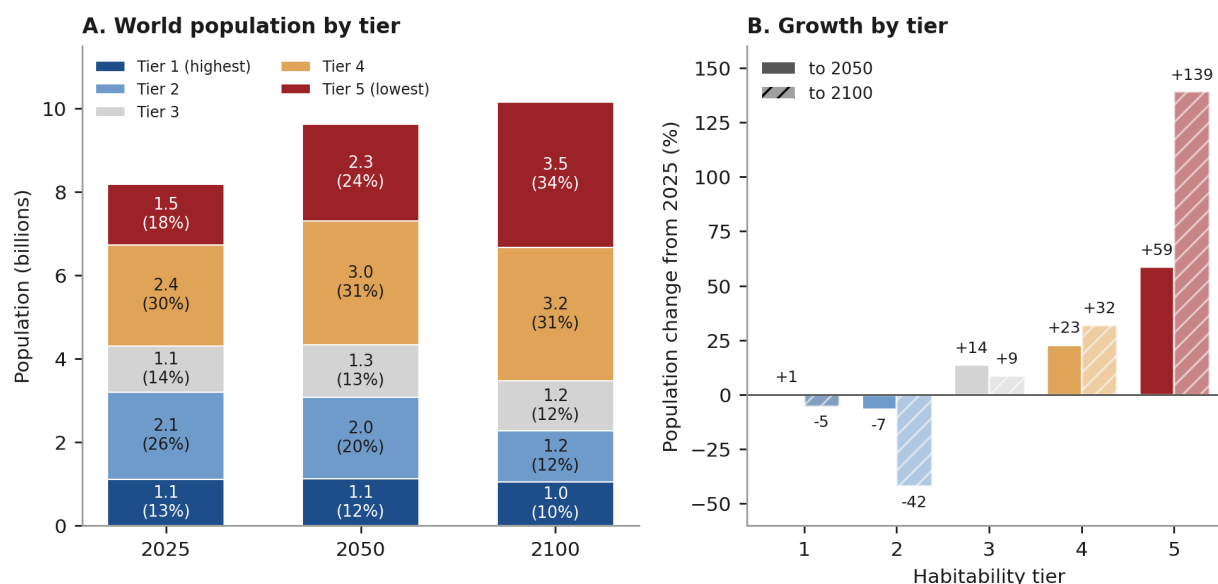


Figure 16. The demographic mismatch. Panel A: world population by habitability tier, 2025, 2050 and 2100 (UN medium variant), in billions and as a share of the total. Panel B: population change from 2025 by tier.

Source: Author's calculation; UN World Population Prospects 2024, medium variant; tiers from the HRI (Section 8).

Two features of the mismatch deserve emphasis. It is not an artefact of a single year: the correlation between a country's HRI and its projected population growth to 2050 is -0.74 (Spearman -0.77), and the Spearman correlation with growth to 2100 is -0.72 . And it is not small. Forty-eight countries, with 1.6 billion people today, are projected to more than double by 2100; their mean HRI is 40.2 and 56 per cent of them are in Tier 5. At the other end, 44 countries, with 2.3 billion people today, are projected to shrink by more than 20 per cent; their mean HRI is 69.7. Twenty-six of the 35 Tier 1 countries are projected to lose population by 2100.

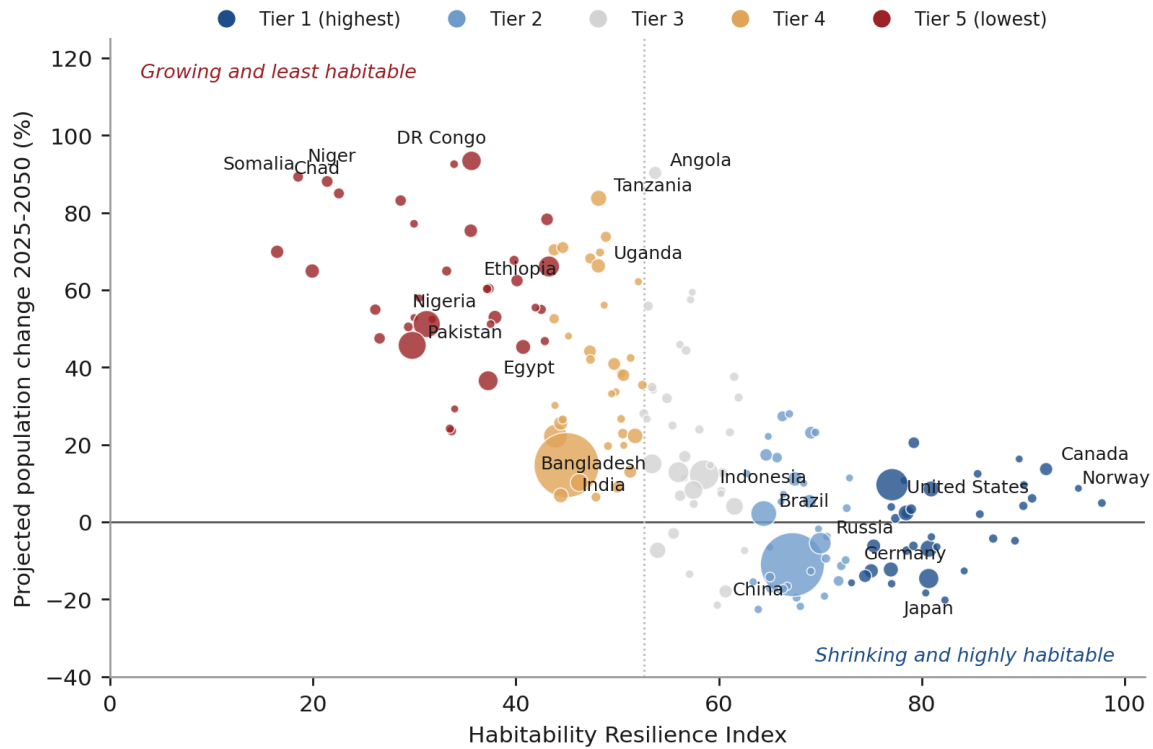


Figure 17. Habitability and projected population growth to 2050. Each bubble is a country, sized by 2025 population and coloured by tier. The most habitable countries are shrinking or flat; the least are growing fastest.

Source: Author's calculation; UN WPP 2024, medium variant.

11.2 Compound hotspots

A tier average can hide a compound failure, so Section 7 also flags hotspots, countries scoring below 35 on three or more pillars. There are 25. Eighteen are in sub-Saharan Africa, five in the Middle East, North Africa, Afghanistan and Pakistan, and one each in South Asia (Bangladesh) and the Caribbean (Haiti). They hold 1.08 billion people today, about 13 per cent of humanity, a projected 1.64 billion in 2050 and 2.30 billion in 2100, about 23 per cent of the world. Widening the net to countries below 35 on at least two pillars adds 26 more and brings the total to 51 countries with 3.3 billion people today and 4.6 billion in 2050. The largest hotspots are populous: Pakistan, Nigeria and Bangladesh together hold 0.67 billion people today. Table 6 lists the twelve largest.

Table 6. The twelve largest compound hotspots

Country	People 2025 (m)	People 2100 (m)	HRI	Pillars scoring below 35
Pakistan	255	511	30	Health, Stability, Prosperity
Nigeria	238	477	31	Climate safety, Health, Stability
Bangladesh	176	209	44	Health, Stability, Prosperity
Sudan	52	137	20	Climate safety, Water/food, Health, Stability, Prosperity
Afghanistan	44	130	36	Health, Stability, Prosperity
Yemen	42	110	16	Water/food, Health, Stability
Madagascar	33	85	40	Health, Stability, Prosperity
Niger	28	91	21	Climate safety, Health, Stability, Prosperity
Syria	26	44	27	Water/food, Stability, Prosperity
Mali	25	79	29	Climate safety, Health, Stability, Prosperity
Burkina Faso	24	50	26	Climate safety, Health, Stability, Prosperity
Chad	21	70	23	Climate safety, Health, Stability, Prosperity

Hotspots are countries scoring below 35 on three or more pillars. Population is UN WPP 2024, medium variant.

11.3 The receiving-capacity question

The mismatch invites an obvious but dangerous inference: that people should move from low-tier to high-tier countries. The report draws no such conclusion, for three reasons. The scale is out of proportion: Tier 5 adds 2.03 billion people by 2100, almost twice the present population of all of Tier 1, and the [OECD](#) counted 6.2 million new permanent immigrants in OECD countries in 2024, 15 per cent above 2019, alongside a record 3 million new asylum applications. Most people do not move across borders, and the [IOM](#) estimates 304 million international migrants, 3.7 per cent of the world's population, most of them moving for work. And the receiving countries are themselves constrained by housing, public consent and institutions that migration puts under pressure.

There is nonetheless a real complementarity. All 35 Tier 1 countries have fertility below replacement, with a median of 1.4 births per woman, and in the median Tier 1 country one person in five is aged 65 or over. Japan recorded a [record-low 671,236 births in 2025](#), a decline running about 15 years ahead of national projections. Ageing economies need workers and carers, and growing ones need jobs. How far that complementarity is realised is a matter of policy and politics, not of the index. What the index contributes is a sense of the stakes: managed, lawful mobility is one of the few adaptation options that scales with the problem, and the countries best placed to host it are also the ones whose own habitability depends on the capacity, health and skills of an ageing population.

12. Stress Tests and Scenarios to 2050

A ranking that only holds in good weather is not much use. Two tests ask how much a severe climate path, or a different demographic one, would change the picture.

12.1 A high-end climate stress test

The first test replaces the central heat inputs with the high-emissions pathway, using SSP5-8.5 values for 2070 to 2089 for both heat-day and mean-temperature indicators, and keeps everything else unchanged. The effect on the climate pillar is substantial but uneven: the average country loses 2.9 points, the population-weighted average 3.1, and seven countries lose more than 10 points. The largest losses are in humid, already-warm countries where a few more degrees takes conditions past functional limits: El Salvador (from 54 to 39), Venezuela (52 to 39), Brazil (54 to 41), Suriname (44 to 31), Cambodia, Thailand, Colombia, Bolivia and Côte d'Ivoire (Figure 18A). The effect on the headline index is much smaller. The average country loses 0.6 points and the largest drop is 3.4 points, for Venezuela, and 15 of 175 countries change tier, 13 of them downward: Brazil, Guyana and Montenegro fall one tier, five countries including Thailand and Angola move from Tier 3 to Tier 4, and Bangladesh, Bahrain, Myanmar, Zimbabwe and Côte d'Ivoire move from Tier 4 to Tier 5. Two countries, the United Arab Emirates and Trinidad and Tobago, move up.

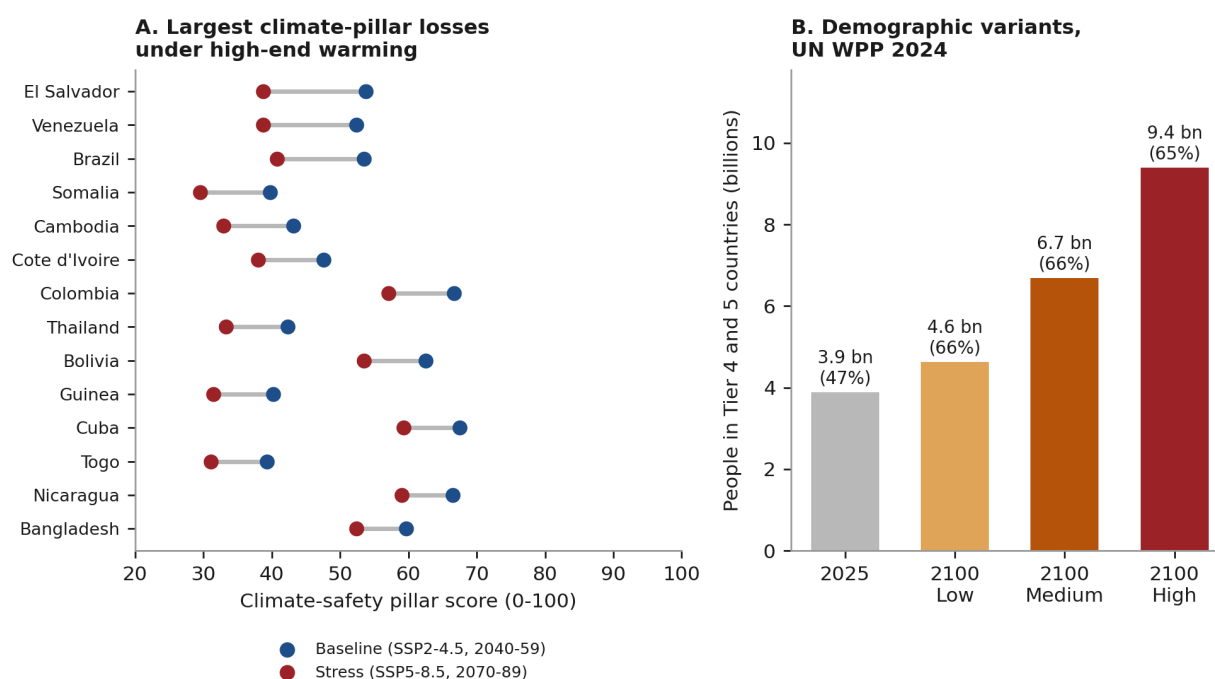


Figure 18. Stress tests. Panel A: the fourteen largest climate-pillar losses among countries with more than five million people when heat inputs are replaced by SSP5-8.5 values for 2070 to 2089. Panel B: people in Tier 4 and 5 countries in 2025 and in 2100 under the UN low, medium and high population variants.

Source: Author's calculation; World Bank CCKP; UN WPP 2024.

Two readings follow. The first is reassuring in a limited way: the architecture of habitability is mostly institutional, so that even a severe warming path changes the ranking at the margin, not at the core. Tier 1 loses only Montenegro to Tier 2, and the top ten are untouched. The second is a warning against over-

reading that result. The test updates only heat. It does not update water supply, crop yields, coastal flooding or the damage that heat and displacement do to institutions, so it is a lower bound on what a high-end path would do. It is also silent on the speed of change, which matters as much as the endpoint for places whose adaptive investment lags.

12.2 Demographic variants

The second test asks whether the demographic result depends on the UN’s central projection. It does not. The UN’s low variant puts 4.6 billion people in Tier 4 and 5 countries in 2100 and the high variant 9.4 billion, a range of 4.8 billion, against 3.9 billion today (Figure 18B). But the share is nearly constant at 65 to 66 per cent in all three. The mismatch is a structural fact, and what the variants change is its size, which is why fertility and mortality outcomes in a few African and South Asian countries matter so much for the global total.

12.3 Four scenarios to 2050

Beyond sensitivity tests, scenarios help to think about how the index itself could change. The scenarios here turn on two swing factors, both of which are choices more than forecasts: how far warming is held, close to 2 °C or nearer 3 °C and above, and whether governance is cooperative or fragmented, in finance, trade and mobility. They are qualitative judgements, not model outputs, and are built to be compatible with the pathways in [UNEP’s emissions gap assessment](#) and the risk landscape in the [Outlook](#).

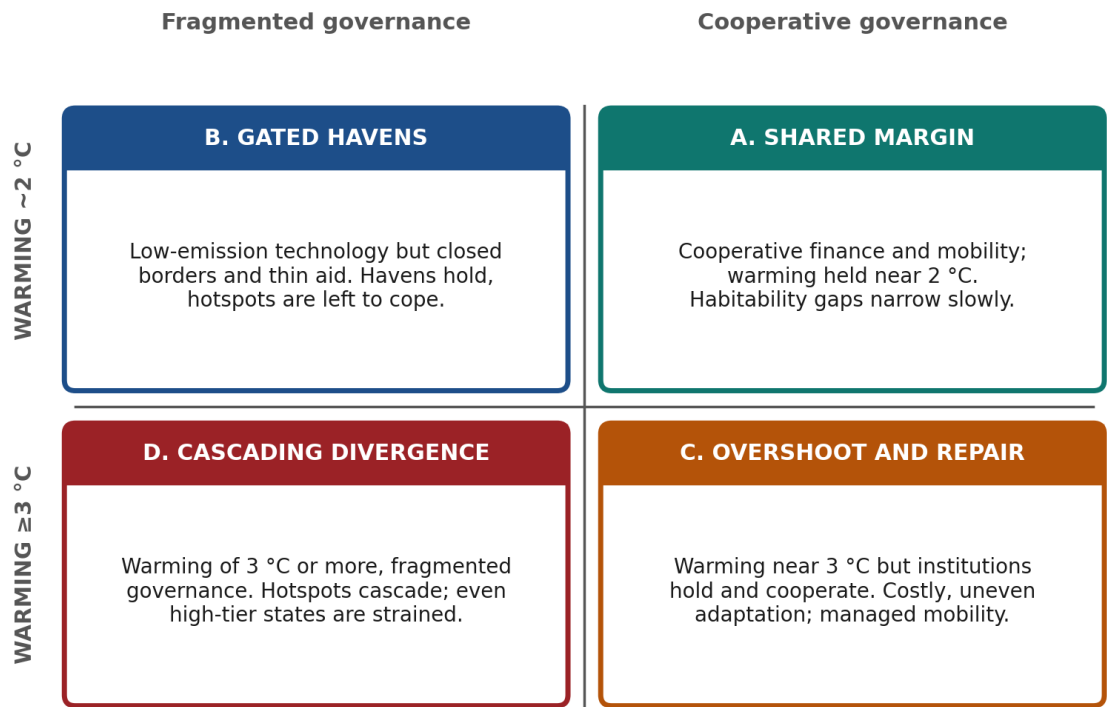


Figure 19. Four scenarios to 2050, defined by the global warming path and the quality of international governance. The scenarios are qualitative and illustrative.

Source: Author’s framework.

Table 7. What each scenario means for the tiers

Scenario	What drives it	High-habitability core (Tiers 1 to 2)	Middle tiers and hotspots (Tiers 3 to 5)	Signposts to watch
A. Shared margin	Emissions peak soon; adaptation finance scales; mobility pathways open	Ageing eased by managed migration; heat and fire adaptation funded	Capacity gains outpace warming in the middle tiers; hotspots stabilise slowly	Adaptation finance rising toward US\$300 bn; aid recovering; labour mobility agreements
B. Gated havens	Clean technology succeeds but borders harden and aid stays low	Habitability holds; ageing, labour shortages and fiscal strain grow; security spending rises	Hotspots left to cope; displacement and informal migration rise	Aid below 0.3% of income; asylum recognition falling; border spending rising
C. Overshoot and repair	Warming near 3 °C but institutions cooperate and respond	Costly adaptation, higher insurance and cooling bills; fire and flood shocks absorbed	Heavy losses in humid tropics; managed relocation and cooling programmes carry the middle	Early-warning coverage; heat action plans; insurance and catastrophe-bond uptake
D. Cascading divergence	Warming of 3 °C or more and fragmented governance	Even Tier 1 states strained by shocks, imports and migration pressure; compound events more frequent	Hotspots cascade across borders; state failure, hunger and displacement spread to Tier 4	Simultaneous staple-price and energy spikes; conflict count rising; debt distress in several large economies

Scenarios are narrative judgements anchored in the evidence in Sections 3 to 11, not forecasts. Signposts are indicators that would show which path is being taken.

13. Beyond the Country Average: Havens, Refuges and Their Limits

The idea of a safe place is old and attractive. The evidence of recent shocks suggests that safety is something places do, not something they have.

13.1 The haven idea

The notion of a climate haven has become a staple of journalism and of real-estate marketing. In its serious form it rests on a sound observation: some regions face lower exposure to heat, sea-level rise and drought than others, and the Great Lakes region is the American example most often cited, with [researchers and planners](#) describing it as likely to face lower climate risks than much of the country while noting that it is not immune and that how people will respond is hard to predict. A more extreme version appears in the catastrophe literature. [Boyd and Wilson](#), in *Risk Analysis*, assessed 38 island nations for their resilience to abrupt sunlight-reducing catastrophes such as nuclear winter, and found Australia, New Zealand, Iceland, the Solomon Islands and Vanuatu most resilient. They also cautioned that food output is not enough: New Zealand's dependence on imported fuel and trade remains a vulnerability, and it is problematic to assume that institutions and technology survive intact without major upgrades in resilience.

The index reproduces the first half of that finding. Iceland and New Zealand rank second and fifth, Australia 20th, and Vanuatu is among the strongest relative to its income (+16 against the income-predicted score). It reproduces the caveat too: Australia scores only 47 on climate safety, and New Zealand's weakest pillar, prosperity (73), reflects the trade and energy dependence that Boyd and Wilson flagged.

13.2 What recent shocks show

Five recent events in high-habitability places show how they fail. In September 2024 Hurricane Helene devastated Asheville, North Carolina, a city that had been [marketed as a climate haven](#); its mountain location, far from the coast and from sea-level rise, offered no protection from a rain-driven flood. Europe has [counted 62,775 heat-related deaths](#) in summer 2024, 23.6 per cent more than in 2023 and 8.1 per cent fewer than in 2022, with more than 181,000 across the three summers, two-thirds of them in Southern Europe. Canada's fire seasons burned [more than 15 million hectares in 2023 and about 8.9 million in 2025](#), the second-worst on record and more than double the ten-year average. In 2023 the main reservoir behind Montevideo's supply fell to [about 2.4 per cent of capacity](#). And Cyclone Gabrielle cost New Zealand up to [NZ\\$14.5 billion](#) in 2023, on a Treasury estimate.

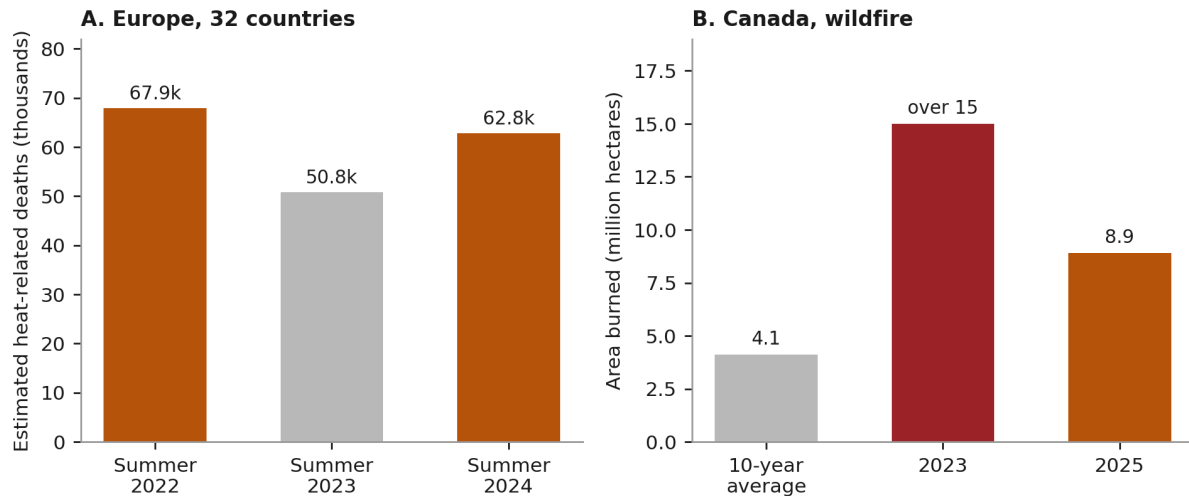


Figure 20. High-habitability places absorb heavy shocks. Panel A: estimated heat-related deaths in 32 European countries in the summers of 2022, 2023 and 2024. Panel B: area burned in Canada's wildfire seasons against the ten-year average.

Source: ISGlobal (Nature Medicine, 2025) for panel A, with 2022 and 2023 as revised in that study; Canadian national wildland fire situation report and press summaries for panel B (the 2023 figure is shown as 15 million, a floor).

Four lessons follow. First, losses in high-tier places are real and sometimes large, but they are borne by systems with the money, information and institutions to respond, which is why such events tend to cost fewer lives and cause less displacement per unit of hazard than in places that lack them. Compare the order of magnitude: the [2022 Pakistan floods](#) caused US\$14.9 billion in damage and US\$15.2 billion in economic losses, affected 33 million people and left reconstruction needs of over US\$16 billion, in a country that scores 30 on the index. Second, hazards are moving into places that had little reason to prepare for them: a flood in a mountain city, fire smoke in a cool northern forest. Third, infrastructure designed for the old climate is a latent liability, as the Uruguayan reservoir shows. Fourth, concentrated exposures matter: mass events such as the 2024 Hajj, [where 1,301 people died](#) in extreme heat, show that high national incomes do not protect people who are outside the system.

13.3 A typology of places

A more useful picture than a binary of haven and non-haven is a typology of place types, each with its own strengths and failure modes (Table 8). The assessment is a synthesis of the evidence in this report and is deliberately qualitative: the strengths are visible in the index, while the vulnerabilities are the ones recent events have exposed.

Table 8. A typology of high-habitability places

Place type	Examples	What it has	What can fail	What to watch
Cool-temperate, high-latitude	Nordic countries, Alpine states, Baltic states	Low heat and water stress, strong institutions, high incomes	Fire and smoke, permafrost and slope instability, flood from intense rain	Wildfire season length; winter warming; insurance retreat
Maritime temperate	United Kingdom, Ireland, New Zealand, Portugal	Moderate climate, water, stable governance	Storm and river flooding, imported fuel dependence, heat in the south	Flood-defence spending; energy security; cyclones
Continental cool interiors	Canada, Great Lakes, Russia, Mongolia	Very high climate safety scores, abundant freshwater, large land area	Wildfire and smoke, extreme precipitation, thin infrastructure in the north	Burned area; smoke-days; summer heat extremes
Highland and mountain	Bhutan, Andean and East African highlands, Alps	Cooler air, strong water supply from snow and glaciers	Glacier and snowpack loss, landslides, seismic risk, transport isolation	Glacier mass; dry-season flows; hydropower reliance
Temperate southern	Uruguay, Chile, Argentina, Costa Rica	Water and food strength, stable democracies	Multi-year drought, fire, thin water storage and dependence on rain-fed hydropower	Reservoir levels; drought frequency; hydropower share
Rich and hot	Gulf states, interior Australia, Singapore	High incomes and strong capacity to buy cooling and desalinated water	Heat and humidity beyond tolerance, energy and desalination dependence, single chokepoints	Cooling load; wet-bulb extremes; export-route security

Qualitative synthesis of the report's evidence. Examples are illustrative and several countries combine more than one type.

The typology underlines the central point. A place is not a haven because of where it is, but because of the quality of the systems operating there, and those systems can improve or decay. The practical corollary is that the most useful investment in the high-habitability core is not a claim to safety but a programme of adaptation: heat plans, resilient water storage, flood and fire management, energy security and public health systems. The places best equipped to absorb the next decade's shocks are those that treat themselves as exposed.

14. Implications: Protect the Core, Build the Middle, Finance the Hotspots

The findings point to three tracks of action. The tracks are different for different countries, but they share a principle: habitability is cheapest to build before it is needed.

14.1 Five principles

- **Capacity is the lever.** The stress tests show that most of the habitability gap is institutional. Money spent on capacity in the low and middle tiers buys more habitability per dollar than anything else, with benefit-cost ratios of 2:1 to 10:1 in the adaptation literature.
- **Treat no place as a refuge.** Even the highest-scoring countries face fire, flood, heat and drought. The core should adapt as if it were exposed, because it is.
- **Protect buffers.** The Outlook's central conclusion applies here: the cheapest response to converging risks is to protect the buffers, namely fiscal space, reserves, health capacity and trust, before the shocks land.
- **Plan mobility rather than hope to avoid it.** People will move in response to heat, conflict and opportunity regardless of policy. Planned pathways, funded and negotiated in advance, cost less and cause less harm than improvised ones.
- **Move before the window.** The earlier survivability report identified 2040 to 2060 as the period in which heat, water stress, cooling demand, demographic loading and fiscal strain converge. Capacity built before it is spread across a larger future population; capacity built after is playing catch-up.

14.2 Priorities by actor

Table 9. Priorities by actor

Actor	Priority	Evidence in this report	Horizon
High-habitability governments (Tiers 1 and 2)	Fund heat, flood and fire adaptation; secure energy and water; plan housing and services for ageing and migration; meet the 0.7% aid target and open lawful pathways	Section 13 shocks; Section 11 ageing; only four donors meet 0.7%	Now to 2030
Middle-tier governments (Tiers 3 and 4)	Cooling, water storage, grid reliability and energy diversification before 2040; diversify export and import routes; protect stability and health spending	Sections 3 to 6; heat days 44 (median Tier 4) rising; Gulf Tier 4 position	Now to 2040
Hotspot governments and partners	Early warning, primary health and clean energy first; conflict prevention; social protection; debt restructuring where interest crowds out investment	Section 11 hotspots; US\$921 bn interest; 24 hours' notice cuts damage by about 30%	Now
Multilateral banks and donors	Close the 12-to-14-fold adaptation finance gap; concessional and grant finance rather than debt for Tier 5; pre-arranged crisis finance	Figure 7; ODA fall of 23.1%	2026 to 2035
Investors, insurers and planners	Stress-test siting, supply chains and insurance exposure to compound events; avoid pricing in a safe-haven premium that shocks can erase	Section 13; Section 12 stress test	Ongoing
Researchers and statistical agencies	Build subnational indices; add humidity and wet-bulb data; track capacity, not only hazard; publish open data	Section 15 limitations	2027 onward

The 24-hours-notice figure is from the Global Commission on Adaptation work cited by the WMO Early Warnings for All initiative, as discussed in the earlier survivability report.

14.3 Reading across the tracks

The three tracks are connected. Adaptation in the core lowers the demand for emergency response and frees resources for aid. Capacity in the middle tiers is the least costly way to prevent hotspots forming, since a middle-tier country that loses its stability or health buffers moves toward Tier 5 within years. And finance and early warning in the hotspots reduce the pressure that becomes displacement and, ultimately, a demand on the core. A world that invests in all three is also the world of Scenario A, in which the habitability gaps narrow slowly. A world that invests in only the first drifts toward Scenario B, and one that invests in none toward D.

15. Limitations and Research Agenda

The index is a structured summary of public data. It is useful because it is simple, and it is limited for the same reason.

- **Country averages.** National means conceal large variation. Heat and water stress are understated for hot, populous districts and overstated for cool ones, and the index says nothing about cities, deltas or mountain valleys. Section 13 is a partial substitute, not a solution.
- **Heat only, and only dry-bulb.** Heat is the only forward-looking pillar, and the heat indicators are days above 35 °C and mean temperature. Humidity, which sets the limits that matter for survivability, is absent because no consistent country-level projection was used.
- **Hazards omitted.** Sea-level rise enters only through present coastal exposure, and the index does not model storms, wildfire, biodiversity loss, ocean systems or the tipping points discussed in Section 3.
- **Perception-based governance data.** The Worldwide Governance Indicators are composites of expert and survey assessments. They are widely used but contain judgement and can lag events.
- **Mixed vintages.** Latest values run from 2012 to 2025 depending on the indicator, and renewable electricity is for 2021. Updates will change scores, particularly for conflict-affected countries.
- **Weights and aggregation.** Equal weights are a neutral prior. The compensatory aggregation lets strength on one pillar offset weakness on another, which the hotspot flag partly corrects.
- **Relative tiers.** Tiers are quintiles, so a country's tier can change when others improve or decline without any change in its own conditions.
- **No behaviour.** The index does not model adaptation, migration or policy response. The population projections are the UN's and carry their own assumptions about fertility, mortality and migration.
- **Scenarios are judgements.** The scenarios in Section 12 are narrative and have no probability attached.

Research agenda. Four extensions would add the most. A subnational version of the index, starting with large countries, would test the typology in Section 13. A dynamic version, projecting capacity as well as heat, would connect this work to the pathway analysis in the [Polycrisis Risk Reduction Index](#). Wet-bulb and humidity data would sharpen the climate pillar. And migration and displacement models linked to habitability would move the discussion in Section 11 from description to analysis. The country data and the method in Section 7 are reproducible from the sources in Table 2.

16. Conclusion: Habitability Is Built, and It Is Unevenly Distributed

The places that will keep working are not the ones with the best latitude. They are the ones with the deepest buffers.

This report has asked where the world is most likely to sustain human health, stability and prosperity through a period of converging stress. The answer is concentrated. A group of 35 mostly cool-temperate, high-capacity countries, led by Norway, Iceland, Canada, Sweden and New Zealand, holds 1.11 billion people, 13.5 per cent of humanity, and the ranking at its top is robust to almost any reasonable change in method. At the other end, 35 countries, 25 of them in sub-Saharan Africa, hold 1.46 billion people and are the least equipped for what is coming.

Three findings stand out. First, habitability is more than wealth, and the Gulf states show that money does not buy climate, water or distance from a chokepoint. Second, the pillars rise and fall together, which is the empirical form of the polycrisis argument, with heat as the loosest link. Third, and most important, the geography of habitability and the geography of people are moving in opposite directions: the 0.94 billion fewer people projected in Tiers 1 and 2 by 2100 against the 2.03 billion more in Tier 5 are the largest structural fact in the data.

The stress tests and the evidence from recent shocks agree on what to do about it. Capacity, not climate, explains most of the gap, so the cheapest response is to build capacity before it is needed. That means adaptation and openness in the core, cooling, water and energy in the middle, and finance, early warning and planned mobility for the hotspots, in the years before the 2040 to 2060 window. And it means giving up the comforting idea of a refuge. No place is safe by geography. The places that will hold up are the places that are prepared to be tested.

Sources and Data Notes

Data. [World Bank World Development Indicators](#); [Worldwide Governance Indicators 2025](#); [World Bank Climate Change Knowledge Portal](#) (CMIP6 ensemble median, 0.25°, SSP2-4.5 and SSP5-8.5); [UN World Population Prospects 2024](#) (medium, low and high variants); [ND-GAIN Country Index](#) (2026 edition, 2024 scores); map geometry from [Natural Earth](#). All data were retrieved on 10 October 2026.

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Polycrisis framing and the H Heuristics series. [Cascade Institute, polycrisis](#); [Lawrence et al. \(2024\), Global polycrisis: the causal mechanisms of crisis entanglement](#); [HH-2026-05, Human Survivability in the Twenty-First Century](#); [HH-2026-06, The Polycrisis Risk Reduction Index](#); [HH-2026-07, The Global Polycrisis Outlook 2027](#).

Data notes. (1) The index covers countries and territories with at least 250,000 people in 2025 and at least four rated pillars; it includes two territories, Puerto Rico and the West Bank and Gaza. (2) Population-weighted figures use UN WPP 2024 medium-variant populations for the matching year. (3) Where a source was consulted through secondary reporting rather than the primary document, the link is to the source that carries the figure. (4) The Kotz, Levermann and Wenz (2024) estimate of committed income loss was not used because the paper has been retracted by *Nature*.

Appendix A. Country Results

Countries are ordered by rank. Pillar scores run from 0 to 100 and a higher score is better. “n/a” means the pillar could not be computed, in which case the index is based on the remaining four pillars. People are in millions, 2025 (UN WPP 2024).

Table A1. Habitability Resilience Index by country, ranked

Rank	Country	HRI	Tier	Climate	Water, food	Health	Stability	Prosperity	People (m)
1	Norway	97.8	1	96	96	99	98	100	5.6
2	Iceland	95.4	1	95	94	97	96	95	0.4
3	Canada	92.3	1	99	96	91	91	84	40.1
4	Sweden	90.9	1	96	91	100	96	73	10.7
5	New Zealand	90.1	1	91	97	91	98	73	5.3
6	Switzerland	90.0	1	97	84	96	99	75	9.0
7	Luxembourg	89.6	1	93	81	98	99	77	0.7
8	Finland	89.2	1	97	89	97	97	66	5.6
9	Austria	87.0	1	95	86	93	87	74	9.1
10	Denmark	85.7	1	88	76	93	96	76	6.0
11	Ireland	85.5	1	92	89	95	90	63	5.3
12	Estonia	84.2	1	94	85	89	90	62	1.3
13	Lithuania	82.3	1	94	86	82	85	65	2.8
14	Slovenia	81.5	1	90	88	92	78	58	2.1
15	Uruguay	81.0	1	81	91	78	85	69	3.4
16	United Kingdom	80.9	1	92	81	90	81	61	69.6
17	Germany	80.7	1	91	75	91	86	60	84.1
18	Japan	80.7	1	84	79	96	96	49	123.1
19	Latvia	80.4	1	90	88	81	78	65	1.9
20	Australia	79.2	1	47	89	96	92	73	27.0
21	Portugal	79.2	1	81	83	92	78	63	10.4
22	Netherlands	79.0	1	77	75	93	92	58	18.3
23	Czechia	78.5	1	93	77	88	83	52	10.6
24	Chile	78.5	1	93	95	78	72	55	19.9
25	France	78.5	1	89	81	93	74	56	66.7
26	Bhutan	78.3	1	93	94	49	82	73	0.8
27	Belgium	77.4	1	90	71	93	80	53	11.8
28	United States	77.1	1	82	85	85	69	65	347.3
29	Croatia	77.0	1	84	90	78	68	66	3.8
30	Costa Rica	77.0	1	76	90	75	75	69	5.2
31	Italy	77.0	1	84	79	93	71	58	59.1
32	Spain	75.3	1	78	74	93	72	59	47.9
33	South Korea	75.0	1	87	66	90	85	47	51.7
34	Poland	74.4	1	92	75	80	73	52	38.1
35	Montenegro	73.1	1	89	n/a	80	62	61	0.6
36	Brunei	72.9	2	63	84	69	81	68	0.5
37	Singapore	72.6	2	76	45	93	99	51	5.9
38	Slovakia	72.5	2	92	75	78	66	52	5.5
39	Greece	72.1	2	79	82	86	61	52	9.9
40	Romania	71.8	2	88	80	71	59	60	18.9
41	Georgia	70.7	2	90	88	64	51	60	3.8
42	Hungary	70.6	2	86	76	78	62	51	9.6
43	Albania	70.4	2	82	86	72	55	57	2.8
44	Russia	70.0	2	99	91	70	26	63	144.0
45	Malta	69.8	2	82	56	89	73	49	0.5
46	Panama	69.5	2	73	91	72	51	60	4.6
47	Malaysia	69.1	2	68	89	68	68	52	36.0
48	Mauritius	69.1	2	79	79	61	74	52	1.3
49	Argentina	68.9	2	80	85	73	53	54	45.9
50	Cyprus	68.4	2	71	67	85	71	48	1.4
51	Bosnia and Herzegovina	68.0	2	90	89	69	41	51	3.1
52	Bulgaria	67.7	2	86	77	71	54	50	6.7
53	Colombia	67.5	2	67	93	67	37	73	53.4
54	China	67.3	2	88	76	68	55	50	1,416.1
55	Mongolia	67.0	2	98	84	48	53	53	3.5
56	North Macedonia	66.8	2	85	73	74	55	47	1.8
57	Fiji	66.4	2	70	88	46	71	56	0.9
58	Serbia	66.3	2	85	79	71	44	51	6.7
59	Kazakhstan	66.3	2	85	74	63	47	62	20.8
60	Bahamas	66.1	2	72	n/a	71	74	48	0.4
61	Ecuador	65.7	2	76	84	65	35	68	18.3
62	Belarus	65.1	2	94	83	75	34	40	9.0

Rank	Country	HRI	Tier	Climate	Water, food	Health	Stability	Prosperity	People (m)
63	Cuba	65.0	2	68	76	75	41	n/a	10.9
64	Barbados	65.0	2	76	54	71	80	43	0.3
65	Belize	64.9	2	51	92	59	55	67	0.4
66	Peru	64.7	2	76	92	61	38	55	34.6
67	Brazil	64.4	2	54	93	67	43	66	212.8
68	Puerto Rico	63.9	2	74	69	n/a	60	53	3.2
69	Armenia	63.4	2	93	69	66	46	43	3.0
70	Guyana	62.8	2	51	98	51	51	63	0.8
71	Trinidad and Tobago	62.5	3	75	68	62	54	53	1.5
72	Kyrgyzstan	61.9	3	99	76	50	34	51	7.3
73	Türkiye	61.5	3	81	74	64	36	52	87.7
74	Israel	61.5	3	59	43	89	63	54	9.5
75	Paraguay	61.1	3	47	89	60	42	67	7.0
76	Ukraine	60.7	3	90	73	65	36	40	39.0
77	Dominican Republic	60.3	3	74	75	56	58	39	11.5
78	Azerbaijan	60.2	3	80	67	55	45	54	10.4
79	Cabo Verde	60.2	3	77	55	62	72	35	0.5
80	Moldova	59.9	3	88	73	55	51	32	3.0
81	Suriname	59.2	3	44	88	58	54	52	0.6
82	Indonesia	58.6	3	70	80	48	43	51	285.7
83	Laos	58.1	3	71	86	35	43	56	7.9
84	El Salvador	57.5	3	54	77	55	44	58	6.4
85	Vietnam	57.5	3	56	79	54	53	45	101.6
86	Vanuatu	57.4	3	73	77	54	59	23	0.3
87	Gabon	57.2	3	72	77	39	38	60	2.6
88	Jamaica	57.1	3	72	74	53	58	28	2.8
89	Tajikistan	56.8	3	95	70	40	30	49	10.8
90	Nepal	56.6	3	85	83	32	37	47	29.6
91	Maldives	56.6	3	61	46	82	50	44	0.5
92	Sri Lanka	56.2	3	58	64	65	48	46	23.2
93	Namibia	56.2	3	57	61	44	64	55	3.1
94	Mexico	56.0	3	63	75	64	32	46	131.9
95	North Korea	55.5	3	92	47	58	25	n/a	26.6
96	Nicaragua	55.4	3	66	78	59	28	46	7.0
97	Guatemala	54.9	3	66	75	50	33	50	18.7
98	Thailand	54.0	3	42	76	63	46	43	71.6
99	Angola	53.7	3	69	68	31	32	69	39.0
100	Botswana	53.5	3	51	61	49	71	37	2.6
101	Honduras	53.4	3	71	75	51	30	41	11.0
102	Philippines	53.4	3	69	79	45	40	34	116.8
103	Rwanda	53.0	3	83	55	30	61	37	14.6
104	Lesotho	52.9	3	90	64	21	44	45	2.4
105	Bolivia	52.6	3	62	77	45	31	48	12.6
106	United Arab Emirates	52.5	4	5	40	71	78	68	11.3
107	Equatorial Guinea	52.1	4	76	89	23	24	49	1.9
108	South Africa	51.8	4	73	59	39	49	39	64.7
109	Oman	51.3	4	17	52	62	67	59	5.5
110	Morocco	51.3	4	65	61	58	44	28	38.4
111	Eswatini	50.6	4	75	54	36	32	57	1.3
112	Saudi Arabia	50.6	4	23	39	62	64	65	34.6
113	Cambodia	50.5	4	43	85	48	38	39	17.8
114	Kuwait	50.4	4	22	40	66	61	62	5.0
115	Papua New Guinea	50.4	4	75	75	37	35	31	10.8
116	Venezuela	50.0	4	52	89	50	8	n/a	28.5
117	Qatar	49.8	4	20	14	67	78	70	3.1
118	Uzbekistan	49.7	4	67	54	49	44	34	37.1
119	Timor-Leste	49.4	4	77	68	40	48	14	1.4
120	Lebanon	49.1	4	83	59	58	20	25	5.8
121	Zambia	48.9	4	69	52	33	44	47	21.9
122	Solomon Islands	48.7	4	69	62	50	54	8	0.8
123	Congo	48.3	4	73	71	28	24	46	6.5
124	Tanzania	48.2	4	75	62	33	41	30	70.5
125	Uganda	48.1	4	75	60	30	32	44	51.4
126	Tunisia	47.9	4	52	54	63	41	30	12.3
127	Jordan	47.3	4	54	37	59	54	33	11.5
128	Malawi	47.3	4	75	55	34	43	31	22.2
129	Ghana	47.3	4	40	73	31	54	40	35.1
130	Iran	46.2	4	54	61	56	17	43	92.4
131	Comoros	45.2	4	76	66	40	31	12	0.9
132	India	45.0	4	48	61	33	48	35	1,463.9
133	Cameroon	44.6	4	62	83	15	17	46	29.9
134	Turkmenistan	44.6	4	57	43	43	30	50	7.6
135	Myanmar	44.4	4	61	88	29	3	41	54.9
136	Algeria	44.4	4	34	43	58	38	48	47.4

Rank	Country	HRI	Tier	Climate	Water, food	Health	Stability	Prosperity	People (m)
137	Bangladesh	43.9	4	60	72	32	29	26	175.7
138	Bahrain	43.8	4	32	10	63	56	59	1.6
139	Côte d'Ivoire	43.8	4	48	73	25	39	34	32.7
140	Zimbabwe	43.8	4	66	52	27	23	50	17.0
141	Ethiopia	43.3	5	58	58	31	23	46	135.5
142	Mozambique	43.1	5	62	62	29	18	45	35.6
143	Sierra Leone	42.9	5	55	69	19	33	39	8.8
144	Guinea	42.5	5	40	81	17	26	48	15.1
145	Liberia	41.9	5	68	62	25	32	22	5.7
146	Kenya	40.7	5	51	40	31	34	48	57.5
147	Madagascar	40.1	5	70	55	26	30	19	32.7
148	Burundi	39.8	5	82	59	20	14	23	14.4
149	Iraq	37.9	5	33	57	42	12	46	47.0
150	Palestine	37.5	5	59	44	43	17	24	5.6
151	Senegal	37.3	5	12	73	30	52	19	18.9
152	Egypt	37.3	5	32	39	40	35	40	118.4
153	Togo	37.2	5	39	69	21	31	25	9.7
154	DR Congo	35.6	5	72	53	13	3	37	112.8
155	Afghanistan	35.6	5	71	48	25	2	33	43.8
156	Djibouti	34.0	5	16	60	25	32	36	1.2
157	Central African Republic	33.9	5	47	65	13	7	37	5.5
158	Haiti	33.7	5	72	42	31	8	15	11.9
159	Libya	33.5	5	38	20	57	6	47	7.5
160	Benin	33.2	5	25	67	13	44	17	14.8
161	Gambia	31.7	5	18	62	23	44	11	2.8
162	Nigeria	31.2	5	31	58	3	18	45	237.5
163	Eritrea	30.5	5	19	56	30	16	n/a	3.6
164	Guinea-Bissau	30.0	5	25	69	23	21	11	2.2
165	Mauritania	30.0	5	5	56	29	31	29	5.3
166	Pakistan	29.8	5	42	42	17	18	31	255.2
167	South Sudan	29.4	5	32	63	17	5	n/a	12.2
168	Mali	28.6	5	15	71	13	11	33	25.2
169	Syria	26.6	5	52	18	41	2	19	25.6
170	Burkina Faso	26.1	5	15	63	16	24	13	24.1
171	Chad	22.6	5	16	47	9	14	27	21.0
172	Niger	21.4	5	15	54	3	19	16	27.9
173	Sudan	19.9	5	16	34	21	0	29	51.7
174	Somalia	18.5	5	40	33	15	0	4	19.7
175	Yemen	16.5	5	37	1	28	0	n/a	41.8

HRI = Habitability Resilience Index (0 to 100, higher is better). Tier shading: 1 deep blue to 5 red. People are 2025 population in millions (UN WPP 2024).

Appendix B. Regional Groupings and Reproducibility

Regional scores in Section 9 are population-weighted means of the countries below, grouped by climate and political geography rather than by World Bank region. Countries and territories with fewer than 250,000 people, or fewer than four rated pillars, are excluded.

Table B1. Regional membership

Region	Countries
Nordic and Baltic	Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, Norway, Sweden
Australia and New Zealand	Australia, New Zealand
Western and Central Europe	Austria, Belgium, Czechia, France, Germany, Hungary, Ireland, Luxembourg, Netherlands, Poland, Slovakia, Slovenia, Switzerland, United Kingdom
North America	Canada, United States
Southern Europe	Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Greece, Italy, Malta, Montenegro, North Macedonia, Portugal, Romania, Serbia, Spain
East Asia (temperate)	China, Japan, Mongolia, North Korea, South Korea
Eastern Europe and Caucasus	Armenia, Azerbaijan, Belarus, Georgia, Moldova, Russia, Ukraine
Southern Cone and Andes	Argentina, Bolivia, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, Venezuela
Brazil and Amazon basin	Brazil, Guyana, Suriname
Southeast Asia	Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste, Vietnam
Central America and Caribbean	Bahamas, Barbados, Belize, Costa Rica, Cuba, Dominican Republic, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Puerto Rico, Trinidad and Tobago
Pacific Islands	Fiji, Papua New Guinea, Solomon Islands, Vanuatu
Central Asia	Afghanistan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan
Southern Africa	Botswana, Comoros, Eswatini, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Zambia, Zimbabwe
Middle East and North Africa	Algeria, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Syria, Tunisia, Türkiye, United Arab Emirates, Yemen
South Asia	Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka
Central and East Africa	Angola, Burundi, Cameroon, Central African Republic, Congo, DR Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Kenya, Rwanda, Somalia, South Sudan, Tanzania, Uganda
Sahel and West Africa	Benin, Burkina Faso, Cabo Verde, Chad, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, Sudan, Togo

Reproducibility

The index can be reproduced from Table 2 and Section 7: indicators come from the World Bank API by code, heat series from the Climate Change Knowledge Portal, and population from UN WPP 2024. Winsorising uses the 3rd and 97th percentiles, and robustness draws use a Dirichlet distribution (concentration 4) with a fixed seed.