



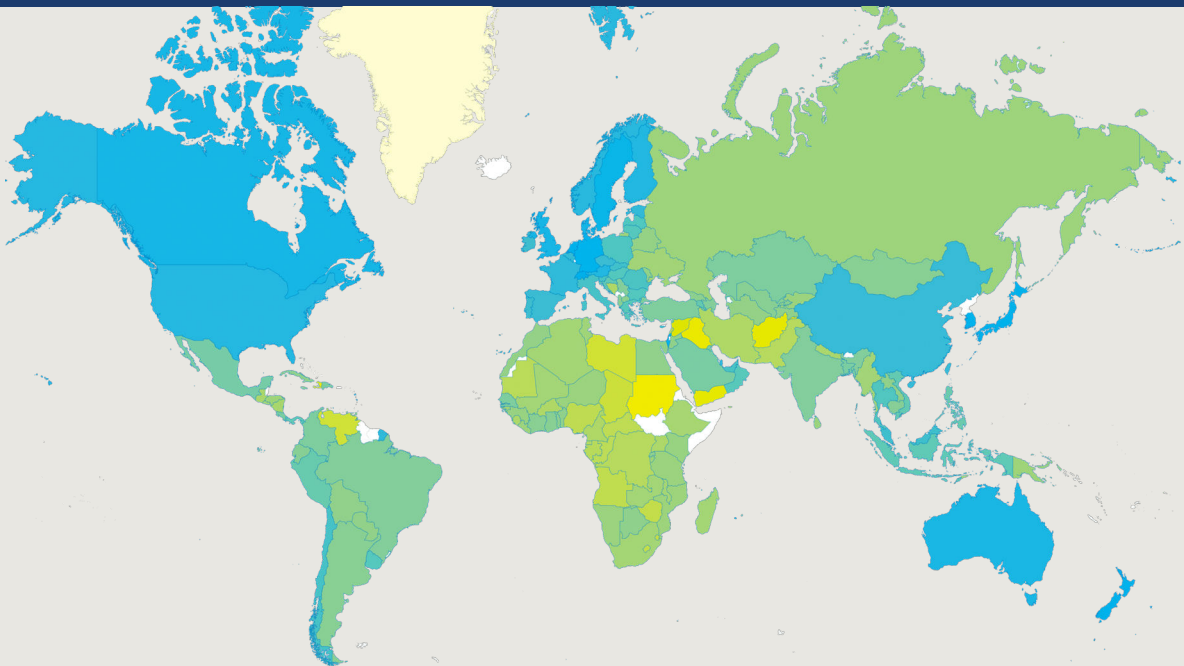
**ELITE QUALITY  
INDEX**  
EQx2024

This is a contribution from the following book:

# ELITE QUALITY REPORT 2024

Ecology's Integral Role in Elite Quality:  
Comprehensively Benchmarking the Sustainable  
Value Creation of Nations

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## Ecology's Integral Role in Elite Quality: Comprehensively Benchmarking the Sustainable Value Creation of Nations

Ecology plays a pivotal role in the Elite Quality Index (EQx). The 15 indicators that comprise the *Ecology EQx-Indicator Family* serve as a critical gauge for the sustainable practices of elite systems across the globe and the long-term viability of a particular country's economy. In the context of the EQx, ecological considerations are not merely ancillary but fundamental in assessing the quality of a nation's elite. This is because elite-led initiatives and business models have significant environmental footprints, which either contribute to or detract from sustainable development goals. The integration of ecological criteria into the EQx reflects a comprehensive understanding that true Elite Quality transcends short-term economic gains and encompasses environmental stewardship and sustainability.

The role of ecology in the EQx emphasizes the responsibility of the elite to adopt business models that are not only economically viable but also environmentally sustainable. This involves prioritizing the development of green technologies (e.g., *Green patents per capita* (GPA), iii.9), sustainable resource management (e.g., *Municipal waste recycling rate* (MWR), iii.9), and practices that minimize ecological degradation (e.g., *Terrestrial land protected* (TLP), iii.9). By highlighting the importance of ecology, the EQx encourages elites to lead by example, demonstrating that economic prosperity and environmental sustainability are not mutually exclusive but can be pursued in tandem. This approach aligns with a broader global movement towards sustainability, underscoring the role of the elite in spearheading positive ecological change.

Furthermore, the ecological aspects of the EQx serve as a benchmark for evaluating the long-term impact of elite actions on a country's environmental health. It incentivizes elites to consider the ecological consequences of their decisions, promoting a shift towards more sustainable and eco-friendly business practices. This shift is crucial for ensuring the resilience and sustainability of both the economy and the natural environment, which are inextricably linked. Sustainable practices endorsed by the elite can lead to significant improvements in ecological preservation, thereby enhancing the quality of life for current and future generations.

Japan's position as a leader in the EQx2024 (rank #4), is particularly due to its ecological performance (rank #1), underscoring its commitment to innovative environmental practices. As the highest-ranked country in terms of ecological performance, Japan exemplifies how technological advancement and environmental sustainability can be intertwined. A notable example of Japan's ecological stewardship is its commitment to innovative green technology initiatives (e.g., GPA, iii.9, rank #1). The country has made significant strides in reducing its energy consumption and carbon footprint through the widespread invention and adoption of energy-saving technologies and practices. These efforts are a testament to Japan's elite prioritizing sustainable growth and environmental preservation, setting a global benchmark for ecological performance within the EQx framework.

Portugal, ranked #4 in ecological performance, showcases the impact of policy and community engagement on environmental sustainability. Portugal's investment in renewable energy sources, particularly wind and solar power, exemplifies its commitment to reducing reliance on fossil fuels and minimizing environmental impact, leading, for example, to a high score in the *Air Quality Index* (AIR, iii.9, rank #9). This shift towards green energy not only reflects the country's dedication to sustainable development but also illustrates the influential role of its elites in championing ecological initiatives. Through strategic investments and policies, Portugal's elites are helping to forge a path toward a more sustainable and environmentally-friendly future, further solidifying its commendable position in the EQx ecology rankings.

Costa Rica, at #9 in ecological performance, is often celebrated for its pioneering efforts in conservation and sustainable development. This Central American nation is a shining example of how dedication to ecological preservation can shape a country's development trajectory. One of Costa Rica's most innovative initiatives is its payment for ecosystem services program, which compensates landowners for the conservation of forests. This business model not only contributes to the reduction of carbon emissions but also promotes biodiversity conservation, illustrating how Costa Rica's elites are effectively leveraging natural capital to support sustainable development. Their efforts underscore the vital role of ecological stewardship in enhancing a nation's overall Elite Quality.

Singapore's ecological performance (#18 rank) is significantly below its #1 overall EQx ranking, but still showcases its innovative approach to sustainable urban planning, remarkable *Municipal waste recycling rate* (MWR, iii.9, rank #3), and exemplary management of *Natural resources rents* (NRR, iii.9, rank #1). Beyond the 'City in a Garden' initiative, Singapore excels in waste management and recycling, adopting a comprehensive approach that includes state-of-the-art waste-to-energy plants and aggressive recycling programs. This high level of efficiency in managing waste underscores the country's commitment to a circular economy, minimizing landfill use and reducing environmental pollution. Furthermore, Singapore's strategy regarding natural resources rents provides lessons on how a country with limited natural resources and very high population density can still maximize economic benefits while ensuring sustainability. The city-state has leveraged its strategic location and human capital to develop a high-value-added economy, focusing on sectors like finance, technology, and services, rather than relying on natural resource exploitation. This shift away from natural resource dependency towards a knowledge-based economy highlights the foresight and commitment to sustainable development exhibited by Singapore's elites. By effectively managing its natural resources rents and excelling in recycling efforts, Singapore sets a global standard for ecological performance in urban environments.

At the other end of the spectrum, Thailand, another Southeast Asian nation, is positioned poorly at rank #125 and faces challenges with regard to its ecological performance, with many areas for improvement. Despite its rich biodiversity and natural resources, poor scores for the *Deforestation rate* (DER, iii.9, rank #107), *Air Quality Index* (AIR, iii.9, rank #53), and extensive *Fish consumption per capita* (FIS, iii.9, rank #129) have marred its ecological record. These challenges are indicative of the need for a stronger commitment from Thailand's elites toward environmental conservation and sustainable practices. Enhancing ecological performance requires not only policy reforms but also a shift in the business models and practices of the country's elites to embrace more sustainable and environmentally conscious approaches, underscoring the critical role of Elite Quality in achieving ecological sustainability.

Turning to countries like Senegal (rank #116) and Bangladesh (rank #103), we observe the complexities of ecological challenges in developing contexts. In Senegal, issues such as coastal erosion, overfishing (FIS, iii.9, rank #74), and desertification pose significant threats to its ecological sustainability. These challenges highlight the need for concerted efforts from the country's elites to invest in sustainable practices and envi-

ronmental preservation. Similarly, Bangladesh faces critical environmental pressures from climate change, including rising sea levels and increased salinity, impacting both agriculture and livelihoods. The country's low position in the ranking emphasizes the urgent need for its elites to prioritize ecological resilience and sustainable development strategies, illustrating the intricate relationship between Elite Quality and ecological performance on a global scale.

In conclusion, the role of the *Ecology EQx-Indicator Family* in the EQx underscores the importance of integrating environmental considerations into the core of elite-led economic activities. Such an approach would not only help in safeguarding the planet but also ensure that Value Extraction, in whatever domain, is identified, weighted, and mitigated. The EQx advocates a holistic and balanced view of sustainability and economic development, placing elite agency at the center of inclusive outcomes and growth. As such, the 15 ecology indicators within the EQx framework act as a crucial measure of elite commitment to fostering a sustainable future, making ecology essential in comparatively assessing Elite Quality on a global scale.

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EQx2024 Indicator Family

**Ecology**

Countries covered: 151

Indicators included:

|     |  | Weight within Family | Weight within EQx |
|-----|--|----------------------|-------------------|
| FSQ | Global Food Security Index - availability, q | 57.2%                | 0.4%              |
| NRR | Natural resources rents as % of GDP          | 5.9%                 | 0.5%              |
| GPA | Green patents per capita                     | 4.4%                 | 0.4%              |
| EPI | Environmental Performance Index              | 2.9%                 | 0.3%              |
| DER | Deforestation rate                           | 2.9%                 | 0.3%              |
| FUS | Fertilizer usage kg per hectare              | 1.5%                 | 0.1%              |
| TLP | Terrestrial land protected                   | 2.9%                 | 0.3%              |
| CDD | CO2 emissions embodied in domestic final     | 4.4%                 | 0.4%              |
| CDO | CO2 emissions (metric tons per capita)       | 4.4%                 | 0.4%              |
| AIR | Air Quality Index                            | 4.4%                 | 0.4%              |
| HAZ | Hazardous waste per capita                   | 1.5%                 | 0.1%              |
| WPC | Waste collected per capita                   | 1.5%                 | 0.1%              |
| MWR | Municipal waste recycling rate               | 1.5%                 | 0.1%              |
| FIS | Fish consumption per capita                  | 1.5%                 | 0.1%              |
| MET | Red meat consumption kilograms per capita    | 2.9%                 | 0.3%              |

Ecology EQx Indicator Family, total weight **4.4%**

**Rationale**

The Ecology EQx-Indicator Family is a construct formed by 15 Indicators. The weighting of each Indicator is conceptual and is expected to evolve in future iterations of the EQx. The rationale of the Ecology EQx-Indicator Family is simple. Any type of environmental damage is unsustainable and results in a long-term burden for society. As such, it represents Value Extraction and rent-seeking behavior by one subset of society (those who exploit the environment) to the detriment of society at large. In contrast, any type of investment into or improvement to the state of the environment is sustainable and represents a form of Value Creation that is available to all.

| Rank /151 | Country              | Score | Rank /151 | Country                  | Score | Rank /151 | Country              | Score |
|-----------|----------------------|-------|-----------|--------------------------|-------|-----------|----------------------|-------|
| 1         | Japan                | 76.1  | 51        | Peru                     | 56.5  | 101       | Liberia              | 44.7  |
| 2         | France               | 75.8  | 52        | Guinea-Bissau            | 56.4  | 102       | Nicaragua            | 44.0  |
| 3         | Finland              | 74.0  | 53        | Kazakhstan               | 56.3  | 103       | Bangladesh           | 43.7  |
| 4         | Portugal             | 72.6  | 54        | Jamaica                  | 56.3  | 104       | Uzbekistan           | 43.3  |
| 5         | Netherlands          | 72.4  | 55        | Lithuania                | 56.0  | 105       | Myanmar              | 43.1  |
| 6         | Ireland              | 72.0  | 56        | Estonia                  | 55.3  | 106       | Mauritania           | 43.1  |
| 7         | Denmark              | 71.9  | 57        | Lebanon                  | 55.0  | 107       | Tanzania             | 41.5  |
| 8         | Sweden               | 71.6  | 58        | Dominican Republic       | 55.0  | 108       | Papua New Guinea     | 41.4  |
| 9         | Switzerland          | 71.4  | 59        | Malaysia                 | 54.9  | 109       | Kyrgyz Republic      | 41.4  |
| 10        | Costa Rica           | 71.4  | 60        | Honduras                 | 54.7  | 110       | Malawi               | 41.2  |
| 11        | Belgium              | 71.3  | 61        | Qatar                    | 54.6  | 111       | Tajikistan           | 41.1  |
| 12        | Israel               | 71.1  | 62        | Georgia                  | 54.2  | 112       | Azerbaijan           | 40.3  |
| 13        | Canada               | 70.2  | 63        | Russian Federation       | 54.0  | 113       | Iran, Islamic Rep.   | 40.2  |
| 14        | United Kingdom       | 70.1  | 64        | Moldova                  | 53.9  | 114       | Benin                | 40.0  |
| 15        | Austria              | 69.6  | 65        | Cuba                     | 53.6  | 115       | Algeria              | 39.9  |
| 16        | Germany              | 69.3  | 66        | Belarus                  | 53.2  | 116       | Senegal              | 38.1  |
| 17        | Bulgaria             | 67.7  | 67        | Nepal                    | 53.1  | 117       | Botswana             | 37.9  |
| 18        | Singapore            | 67.4  | 68        | Ecuador                  | 53.1  | 118       | Turkmenistan         | 37.4  |
| 19        | Italy                | 66.6  | 69        | Eswatini                 | 52.5  | 119       | Lao PDR              | 37.3  |
| 20        | Spain                | 66.1  | 70        | Trinidad and Tobago      | 52.0  | 120       | Indonesia            | 37.2  |
| 21        | Czech Republic       | 65.5  | 71        | Gambia, The              | 51.4  | 121       | Libya                | 37.0  |
| 22        | Poland               | 65.2  | 72        | Bosnia and Herzegovina   | 51.4  | 122       | Mongolia             | 36.9  |
| 23        | El Salvador          | 64.7  | 73        | Saudi Arabia             | 51.3  | 123       | Ethiopia             | 36.8  |
| 24        | Argentina            | 64.4  | 74        | Central African Republic | 51.0  | 124       | Zambia               | 36.5  |
| 25        | Slovenia             | 64.4  | 75        | Vietnam                  | 50.9  | 125       | Thailand             | 36.3  |
| 26        | Norway               | 64.2  | 76        | Afghanistan              | 50.8  | 126       | Rwanda               | 36.3  |
| 27        | United Arab Emirates | 64.0  | 77        | Gabon                    | 50.5  | 127       | Mali                 | 36.3  |
| 28        | Greece               | 63.9  | 78        | Paraguay                 | 50.2  | 128       | Pakistan             | 36.2  |
| 29        | United States        | 63.9  | 79        | Armenia                  | 49.9  | 129       | Ghana                | 34.7  |
| 30        | China                | 63.8  | 80        | South Africa             | 49.8  | 130       | Burkina Faso         | 34.1  |
| 31        | Korea, Rep.          | 63.2  | 81        | Kenya                    | 49.7  | 131       | Togo                 | 33.6  |
| 32        | Turkey               | 63.1  | 82        | Jordan                   | 49.4  | 132       | Egypt, Arab Rep.     | 32.9  |
| 33        | Cyprus               | 62.7  | 83        | India                    | 49.3  | 133       | Sudan                | 32.7  |
| 34        | Chile                | 62.6  | 84        | Congo, Rep.              | 49.2  | 134       | Burundi              | 32.2  |
| 35        | Hungary              | 62.1  | 85        | Zimbabwe                 | 49.2  | 135       | Iraq                 | 31.7  |
| 36        | Romania              | 62.0  | 86        | Philippines              | 49.2  | 136       | Mozambique           | 31.6  |
| 37        | New Zealand          | 61.9  | 87        | Lesotho                  | 48.9  | 137       | Haiti                | 31.5  |
| 38        | Brazil               | 61.4  | 88        | Timor-Leste              | 48.4  | 138       | Guinea               | 30.6  |
| 39        | Mauritius            | 61.1  | 89        | Sri Lanka                | 48.1  | 139       | Nigeria              | 29.0  |
| 40        | Slovak Republic      | 60.9  | 90        | Ukraine                  | 47.9  | 140       | Venezuela, RB        | 29.0  |
| 41        | North Macedonia      | 59.9  | 91        | Bahrain                  | 47.5  | 141       | Niger                | 28.9  |
| 42        | Australia            | 59.7  | 92        | Colombia                 | 47.5  | 142       | Angola               | 27.2  |
| 43        | Mexico               | 59.6  | 93        | Morocco                  | 47.2  | 143       | Côte d'Ivoire        | 26.8  |
| 44        | Uruguay              | 59.2  | 94        | Serbia                   | 47.2  | 144       | Cameroon             | 26.7  |
| 45        | Latvia               | 58.6  | 95        | Guatemala                | 47.2  | 145       | Uganda               | 25.2  |
| 46        | Croatia              | 58.5  | 96        | Oman                     | 47.1  | 146       | Congo, Dem. Rep.     | 22.4  |
| 47        | Panama               | 58.4  | 97        | Equatorial Guinea        | 46.8  | 147       | Chad                 | 21.4  |
| 48        | Namibia              | 58.1  | 98        | Kuwait                   | 45.4  | 148       | Sierra Leone         | 21.2  |
| 49        | Bolivia              | 57.4  | 99        | Cambodia                 | 45.0  | 149       | Madagascar           | 21.2  |
| 50        | Albania              | 56.6  | 100       | Tunisia                  | 44.9  | 150       | Yemen, Rep.          | 21.1  |
|           |                      |       |           |                          |       | 151       | Syrian Arab Republic | 21.0  |

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