

MSCI ESG GOVERNMENT RATINGS

FROM MSCI ESG RESEARCH INC.

MSCI ESG Government Ratings identify a country's exposure to and management of environmental, social, and governance (ESG) risk factors and explain how these factors might impact the long-term sustainability of its economy. By providing a long-term view on sustainability the ratings aim to complement traditional government debt analysis for analyzing a country's credit worthiness.

KEY FEATURES AND BENEFITS

Broad Universe Coverage

MSCI ESG Government Ratings provide an overall sustainability assessment of 198 countries/regions and 45 Local Authorities covering Developed, Emerging and Frontier Markets, containing historical time series results of over 9 years. They offer unique matching capabilities by containing a file matching more than 13,000 issues updated on a monthly basis. Coverage is designed to provide ratings on 99% of government bonds issued in the marketplace.

Understand ESG Risks That May Not Be Captured By Conventional Analysis

MSCI ESG Government Ratings assess a country's exposure to and management of environmental, social and governance risks. ESG risk exposure and management has an important bearing on the long-term competitiveness and sustainability of a country's economy and, in turn, the attractiveness of the country as an investment destination.

Support the Integration of ESG into Investment Analysis

Integrating ESG into the investment process is the first principle for the UN Principles for Responsible Investment (PRI) signatories and is increasingly being mandated and scrutinized by asset owners.

Institutional investors require core portfolios of equities and bonds and MSCI ESG Government Ratings are a critical tool to integrate ESG research into their fixed income portfolios.

Ratings and Research

MSCI ESG Government Ratings scores and rates countries on a seven point scale from 'AAA' (best) to 'CCC' (worst). Ratings are derived from 0-10 scores on underlying factors in three pillars: Environmental, Social, and Governance. The model contains scores on all of these sub-factors to provide granular insight on a country's performance on the issues.

Custom Weights

The product has a custom weighting feature to allow for clients to incorporate their views about the impact of different ESG risk factors on country ratings and ranking.

Screening Capability

Included are a set of screening factors for each country which allows investors to assess the profile of a country's status with respect to various values- and mission-based issues and controversies, such as child or forced labor and armed conflicts, and whether the country is a party to international conventions related to endangered species, biological diversity, chemical and biological weapons.

MSCI ESG GOVERNMENT RATINGS SEEKS TO ANSWER THE FOLLOWING QUESTIONS:

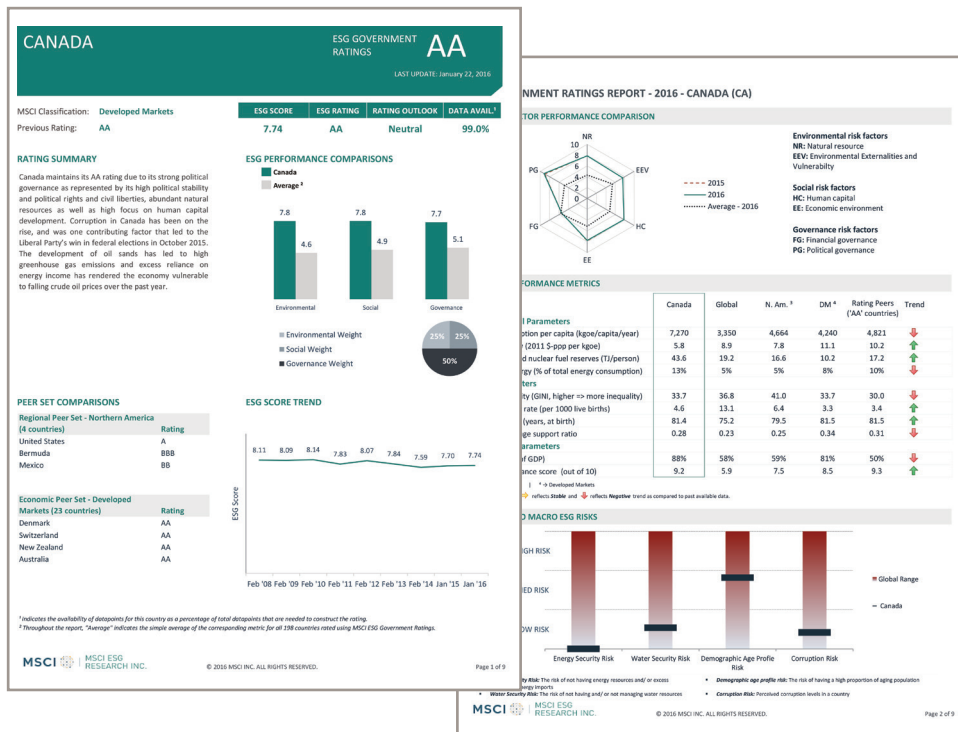
What ESG risks are countries exposed to based on their natural, financial, and social resource availability and their political governance structures?

How does the country being rated actually manage and enable its resources?

Is that country's management and performance commensurate with its ESG risk exposure?

MSCI ESG Government Ratings assesses a country's ESG Risk Exposure, Risk Management Practices and Performance:

- Countries are endowed with varying amounts of natural, financial and human resources. Hence, they have inherent advantages or disadvantages in converting these assets into productive goods and services. However, these are not the sole determinants of a country's economic and ESG performance. An effective government and judiciary, and a supportive economic environment can enable efficient utilization of these resources. In the MSCI ESG Government Ratings, these endowments define the parameters for the measure of ESG risk exposure.
- A country's relative ESG risk exposures are measured against its applied ESG risk management practices and demonstrated ESG performance results to form the basis of our final ESG Government Ratings. Efficiency of resource utilization, performance on socio-economic factors, financial management, corruption control, political stability and other factors define the parameters for measuring ESG risk management.



MSCI ESG Government Ratings: ESG Risk Factors

PILLAR	RISK FACTOR	SUB-FACTORS (EXPOSURE)	SUB-FACTORS (MANAGEMENT)
Environmental Risk	Natural resource risk	<ul style="list-style-type: none"> Energy resources Bio-capacity Water resources Consumption levels 	<ul style="list-style-type: none"> Energy resource management Resource conservation Water resource management
	Environmental externalities and vulnerability risk	<ul style="list-style-type: none"> Vulnerability to environmental events Environmental externalities 	<ul style="list-style-type: none"> Environmental performance Impact of environmental externalities
Social Risk	Exclusion	<ul style="list-style-type: none"> Basic human capital Higher education and technology readiness 	<ul style="list-style-type: none"> Basic needs Health levels
	Economic environment risk	<ul style="list-style-type: none"> Economic environment 	<ul style="list-style-type: none"> Employment Wellness
Governance Risk	Financial governance risk	<ul style="list-style-type: none"> Financial capital 	<ul style="list-style-type: none"> Employment Wellness
	Political governance risk	<ul style="list-style-type: none"> Institutions Judicial and penal system Governance effectiveness 	<ul style="list-style-type: none"> Political rights and civil liberties Corruption control Stability and peace

ABOUT MSCI ESG RESEARCH PRODUCTS AND SERVICES

MSCI's ESG products and services are provided by MSCI ESG Research Inc. and are designed to provide in-depth research, ratings and analysis of environmental, social and governance-related business practices to companies worldwide. ESG ratings, data and analysis from MSCI ESG Research are also used in the construction of the MSCI ESG Indexes. MSCI ESG Research is produced by MSCI's indirect wholly-owned subsidiary MSCI ESG Research Inc., a Registered Investment Adviser under the Investment Advisers Act of 1940.

ABOUT MSCI

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