

Country Sustainability Ranking Update –
September 2022

Country Sustainability: Finland stays on top

Sustainable Investing Expertise by
ROBECOSAM



Country Sustainability Ranking Update

Marketing material
for professional investors

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About this report

This semi-annual report provides a succinct summary and analysis of the environmental, social, and governance (ESG) profiles of 150 countries around the globe. It builds on the results of the proprietary Robeco Country Sustainability Ranking (CSR) tool which collects and analyses the relevant ESG data via a structured and comprehensive framework to calculate an overall country score.

The resulting scores offer insights into the investment risks and opportunities associated with each country and provide investors with a better frame of reference for making comparisons among countries and regions from a risk/return perspective.

The summary outlined here complements findings gained from a more traditional country risk assessment and is particularly focused on integrating long-term perspectives. Please see the Appendix for further details regarding data indicators and methodology.

For a brief methodology overview or to request more comprehensive information, please visit <https://www.robeco.com/en/key-strengths/sustainable-investing/country-ranking/>

Author's note: ESG data contained in this report is as of April 2022, unless otherwise indicated. Commentaries, summaries, and analyses are as of September 8, 2022.

Contents

ESG Scores in Context.....	4
Dramatically shifting ESG focus.....	4
Country Sustainability Report – 2022	5
Finland as frontrunner	5
North-South divide in Europe	6
Special Country Reports.....	9
Will the war in Ukraine derail the energy transition?	9
... or accelerate decarbonization?	9
America’s promising climate-plus spending bill	10
France’s overall ESG performance with a solid track record	11
Russia – on the path to a pariah state?	12
CSR rankings vs benchmarks	14
Appendix A: CSR Framework.....	16
Appendix B: Data sources	17

ESG Scores in Context

Dramatically shifting ESG focus

A prolonged pandemic as well as widespread social unrest in many parts of the globe, put the “Social” dimension in the spotlight. However, at the turn of the year, as the pandemic receded in most regions, climate risks re-captured headlines as heatwaves, wildfires, storms, and floods multiplied and intensified. Signals of climate change’s broader devastation are beginning to materialize in key areas such as food security, human rights, mass migrations, social unrest, and political stability. But even as “S” and “E” ascended, Russia’s unexpected invasion of Ukraine was a jolting reminder that simmering (geo-)political risks, a key “G” factor, are still as present and dangerous as ever.

Changing times, adapting measures

The rotating dominance of different ESG issues makes it clear that no single ESG dimension should be ignored or neglected, even when others dominate the headlines. Moreover, outbreaks – whether of social protests, regional wars, or deadly viruses – clearly illustrate how quickly risks can erupt and evolve with devastating effect on individual countries and the global economy. In this context, in-depth analysis of individual ESG criterion as well as comprehensive analysis at the aggregate can help yield critical insights that inform balanced and well-founded investment decisions.

This view has always been the foundational core of our country sustainability ranking tool and it continues to guide recent efforts to improve underlying variables and structures to better reflect global risks and enhance investment insights. In the Environmental sphere, an increasing number of empirical analyses show that climate risks and continued biodiversity loss are profound, not just for human beings and nature but also for economic and financial stability. The risks are real, financially material, and imminent even if they are not yet fully reflected in financial market prices. Central banks and supervisors are, however, acting and plans for financial regulations are underway.

In the Social sphere, human rights is emerging as a factor in need of government and investor attention. There is increasing recognition that respecting the rights of individuals and adhering to globally accepted human rights standards positively increases a country’s reputation and economic growth over the long run.

The CSR framework is reviewed on a continual basis to ensure results accurately reflect current realities and future investment risks. In light of a changing global context, we have replaced existing indicators and re-assigned weights across all ESG dimensions. Most significant are changes to the environmental areas where we replaced broad third-party datasets with those that more discretely measure climate, biodiversity and water & waste. Environmental data now carry a 30% weight in the CSR, up from 20%. Indicators were also replaced in the social sphere to reflect the risks (and also opportunities) associated with good social capital management. Governance data continue to have the largest weight in the framework, but its weight has been reduced from 50% to 40%. Financial development data have been removed from the dataset. (Please see Figure 1 in the Appendix for more detail).

Changes will not only enhance our ability to comprehensively assess sovereign investment risks, they will also support our climate engagement activities with sovereign nations.

The latest country ESG scores will in some cases display larger changes compared to previous updates, especially for countries with poor performance on climate, biodiversity and human rights criteria. As a result, the country scores from this update cannot be compared directly with prior reports. See Appendix A for more details on the framework.

Country Sustainability Report – 2022

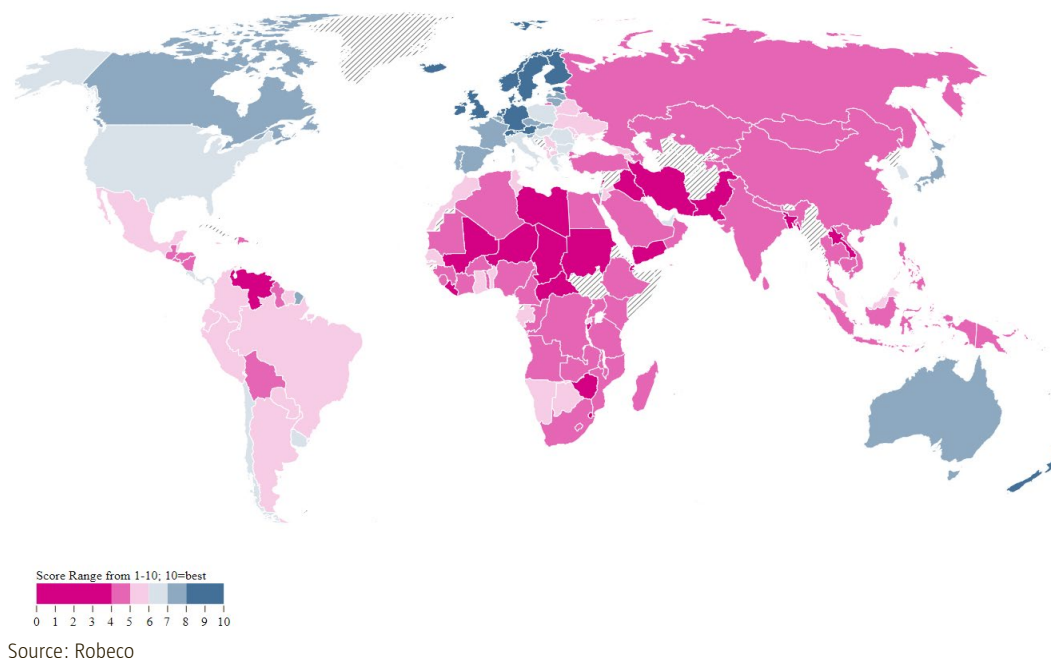
Finland as frontrunner

Despite revisions to the country sustainability ranking (CSR) tool, as of Spring 2022, the Nordic nations continued to sustain their global sustainability leadership. With an ESG score of 9.13, Finland once again tops the ranking, ahead of its Scandinavian neighbours Sweden, Norway, and Denmark. Switzerland follows in fifth place with a score of 8.78, just ahead of Iceland, the last of the Northern European countries.

Superior ESG scores reflect countries with robust and well-balanced ESG profiles which left those at the top largely unaffected by changes in the CSR framework (see previous section, ESG Scores in Context). The top-ranking group (with an ESG score of 8.0 or above) hosts 14 countries and includes New Zealand whose score of 8.01 makes it the only non-European nation on the list of high-performing countries (see **Figure 1**). Australia and Canada managed to stay in the top twenty but saw scores drop with the intensified focus on environmental metrics measuring climate change and biodiversity.

At the other end of the ranking is the group of 19 countries with scores below 4.0. Of these, 13 are located in Africa, six in Asia and one, Venezuela, in Latin America. A comparison with the World Bank's country classifications shows that low and lower-middle income countries dominate this group, with Iraq standing as the lone upper-middle income outlier. Iraq's performance has been dragged down by weak climate metrics, fragile governance and tenuous social structures, the last of which have never fully recovered from the protracted armed conflict with the U.S. and allied countries from 2003-11.

Figure 1 | The global country sustainability ranking map (as of April 2022)



Estonia (ranked 11th with a score of 8.17) secured its position as the sustainability leader within the EM universe. It is the only emerging market country among the top ESG performers, well ahead of the next best emerging economy, the Czech Republic (20th with a score of 7.50). Out of the group of 127 emerging and developing economies, only nine made it into the second-best category (ESG scores between 7.0 and 8.0). Apart from Israel

and Singapore, they are all EU member states. In contrast, the sustainability scores of BRICS¹ and other emerging heavyweights, such as Indonesia, Mexico and Turkey continue to disappoint, especially considering their economic and human potential.

Figure 2 | Top five and bottom five sustainability performers

Country	Score ↓	Governance 40% weight	Environmental 30%	Social 30%	Score Δ	Rank Δ
1. Finland	9.13	8.71	9.24	8.60	+0.22	0 —
2. Sweden	9.09	8.36	9.52	8.67	+0.21	0 —
3. Norway	9.09	8.26	9.61	8.71	+0.27	1 ↗
4. Denmark	8.95	8.43	9.08	8.59	+0.12	1 ↘
5. Switzerland	8.78	8.72	8.53	8.23	+0.25	1 ↗
117. Turkey	4.32	4.50	4.41	4.31	-0.50	22 ↘
120. Viet Nam	4.28	4.99	2.66	3.23	-0.76	38 ↘
125. India	4.14	5.33	3.13	3.84	-0.23	11 ↘
128. Nigeria	4.11	3.57	4.93	4.38	+0.47	11 ↗
142. Pakistan	3.65	3.93	3.40	4.04	+0.25	2 ↗
146. Chad	3.32	3.20	3.90	3.47	+0.10	0 —
147. Sudan	3.26	2.97	3.78	3.74	+0.11	1 ↗
148. Iran	3.04	3.73	2.08	3.75	-0.72	13 ↘
149. Iraq	2.97	3.19	2.45	3.88	-0.57	7 ↘
150. Yemen	2.71	2.48	4.04	2.43	+0.44	0 —

Data source: Robeco, country sustainability scores as of April 2022.

Data note: The five countries framed in the middle of the chart designate the bottom-five ranked emerging market countries when considering only countries within the investable universe (defined as the top-50 developed and emerging economies in terms of nominal GDP).

Figure 2 displays the wide gap in sustainability performance between those at the top and bottom of the ranking. The countries at the bottom depend on which universe is being counted. Turkey, Vietnam, India, Nigeria, and Pakistan make up the lowest-performing countries when only the top 50 economies in terms of nominal GDP are considered. In the fully assessed universe of 150 countries, Chad, Sudan, Iran, Iraq and Yemen round out the bottom five. Unsurprisingly, the bottom five countries involve economically, socially, and politically fragile states in Africa and the Middle East.

North-South divide in Europe

The sustainability landscape in Europe displays a distinct pattern, with Northern and Central European economies clustered at the top of the ranking while Southern European peripheral countries hover in the middle of the ESG score range. In addition, the map reveals a gap in ESG profiles between the Western and Eastern parts of the continent, with Eastern European countries grouped mostly in the middle ESG segment.

At the bottom lie the worst performers comprised mostly of the Balkan nations, including EU member states, Bulgaria (45th) and Romania (47th). After having gained access to the bloc, the progress of these latter two has slowed considerably, especially in terms of governance, where reform dynamics have slackened in recent years. Not far ahead is Hungary, which has suffered a continuous decline in its scores since Prime Minister Orbán rose to power more than a decade ago and transformed the country into an authoritarian state.

¹ Brazil, Russia, India, China & South Africa.

Gains and losses in the past 6-months

Figure 3 shows the countries with the biggest gains or losses in ESG scores over the preceding six-months. The graph does not cover all countries but is limited to the universe of the larger economies. The changes in the scores are mainly attributable to the modifications in the CSR framework in which larger weights are allocated to climate change, biodiversity, and human rights. Countries with a better climate & energy score – a group mostly composed of developed economies in Western Europe – saw their scores and ranks improve.

Nigeria leads the list of winners in the short term. Despite this triumph, it nevertheless remains a poorly performing country with substantial shortcomings in most other ESG areas. As for those on the losing end, large GHG emissions doomed many including the US and Australia whose stronger profiles in governance and social criteria were not sufficient to offset the poor performance on climate change. Unsurprisingly, the list of losers also includes three Gulf Cooperation Countries (GCC), which not only show poor climate & energy profiles but also severe deficiencies in human rights.

Also on the losing end are Turkey and Russia – two countries defined by authoritarian tendencies and flawed governance. Moreover, Hong Kong sank in the short-term, reflecting downgrades not only in its environmental profile but also in governance as China tightens its grip at the expense of the territory’s legal framework and institutions.

Figure 3 | Largest gains and losses in ESG scores over 6-months

TOTAL TOTAL SCORE				GM CHANGE		TOTAL SCORE				GM CHANGE	
Country	Score ↓	Score Δ	Rank Δ	Country	Score ↓	Score Δ	Rank Δ				
128. Nigeria	4.11	+0.55	12 ↑	104. Saudi Arabia	4.53	-0.99	42 ↓				
33. Croatia	6.80	+0.54	11 ↑	120. Viet Nam	4.28	-0.77	38 ↓				
7. Germany	8.44	+0.41	6 ↑	36. United States	6.63	-0.74	14 ↓				
31. Italy	6.99	+0.39	8 ↑	28. Singapore	7.22	-0.73	13 ↓				
12. United Kingdom	8.13	+0.32	5 ↑	43. Hong Kong	6.32	-0.72	14 ↓				
9. Austria	8.28	+0.34	7 ↑	44. Qatar	6.13	-0.55	7 ↓				
15. France	7.84	+0.31	4 ↑	41. United Arab Emirates	6.39	-0.54	8 ↓				
16. Japan	7.73	+0.28	4 ↑	117. Turkey	4.32	-0.50	23 ↓				
3. Norway	9.09	+0.27	1 ↑	110. Russia	4.46	-0.49	21 ↓				
5. Switzerland	8.78	+0.25	1 ↑	19. Australia	7.58	-0.47	7 ↓				

Data source: Robeco; data assessed as of April 2022

The chart displays countries with the largest score gains (left) and losses (right) over the past six months ending April 2022. Only countries comprising the top-50 developed and emerging economies in terms of nominal GDP are shown.

Gains and losses over three years

The list of winners and losers over the preceding three years looks largely the same (See **Figure 4**). The appearance of Finland and Greece on the list of gainers reflects the gradual progress of both in several social and governance features. In the last three years, they have seen improvements in scores for aging, corruption, and political risk.² Greece has also seen an advance in its scores for social unrest, institutions and political freedom.

Once again, Hong Kong tops the list of losers over three years. Canada, Indonesia, and Vietnam also saw large declines. Canada's scores have deteriorated on social unrest, inequality, political risk & stability, all of which are strongly related to the adverse socio-economic impacts of Covid-19. Indonesia's decline pre-dates Covid, as signs of erosion in quality of democracy began to emerge already in early 2019. Its president, Joko Widodo (or Jokowi) has pursued a delicate two-track strategy to cope with the country's increasingly influential Islamist movement. These moves, along with controversial laws to combat the Covid-19 pandemic, has increased political uncertainty, reflected in the decline in scores for political risk and stability.

Finally, Vietnam has experienced setbacks in the political risk and globalization & innovation categories. These appear temporary as the country slowly navigates out of the economic fallout of the corona crisis. As already noted, next to climate change, inequality and political stability were the main factors driving weaker scores for Australia and the US.

Figure 4 | Largest gains and losses in ESG scores over 3-years

TOTAL SCORE				3Y CHANGE			TOTAL SCORE				3Y CHANGE		
Q	Country	Score ↓	Score Δ	Rank Δ	Q	Country	Score ↓	Score Δ	Rank Δ				
33.	Croatia	6.80	+0.60	11 ↑	43.	Hong Kong	6.32	-1.28	25 ↓				
31.	Italy	6.99	+0.41	9 ↑	36.	United States	6.63	-0.85	13 ↓				
40.	Greece	6.39	+0.38	8 ↑	104.	Saudi Arabia	4.53	-0.80	35 ↓				
1.	Finland	9.13	+0.33	2 ↑	28.	Singapore	7.22	-0.75	13 ↓				
7.	Germany	8.44	+0.29	4 ↑	17.	Canada	7.67	-0.63	9 ↓				
15.	France	7.84	+0.28	4 ↑	120.	Viet Nam	4.28	-0.61	33 ↓				
9.	Austria	8.28	+0.26	5 ↑	44.	Qatar	6.13	-0.53	7 ↓				
5.	Switzerland	8.78	+0.26	1 ↑	19.	Australia	7.58	-0.50	6 ↓				
16.	Japan	7.73	+0.25	6 ↑	90.	Indonesia	4.81	-0.50	19 ↓				
32.	Poland	6.89	+0.25	6 ↑	110.	Russia	4.46	-0.46	25 ↓				

Data source: Robeco; data assessed as of April 2022

The chart displays countries with the largest score gains (left) and losses (right) over the past three years ending April 2022. Only countries comprising the top-50 developed and emerging economies in terms of nominal GDP are shown.

² Finland may see future declines in political stability due to Russian aggression over its accession to NATO.

Special Country Reports

Will the war in Ukraine derail the energy transition?

The global energy picture has changed significantly in the wake of the COP26 climate conference in Glasgow last year. The Russian invasion of Ukraine precipitated a global energy crisis and put the net-zero transition at a crossroads. European countries were suddenly confronted with the challenge of ensuring energy security despite a heavy reliance on Russian oil and gas and now may even delay timelines for fossil fuels reductions.

The invasion of Ukraine came at a time already marked by insufficient progress toward the energy transition. Indeed, far from declining, coal use surged globally to record levels over the past winter. According to the latest IMF figures, global GHG emissions rebounded 6.4% in 2021, eclipsing the pre-pandemic peak as global economic activity resumed. Even before the war began, coal was enjoying a comeback. In the US, for example, coal-fired power generation was higher in 2021 than it was in 2019. In Europe, coal power rose 18% last year. Meanwhile, China, already the world's largest GHG emitter (see **Figure 5**), is still constructing new coal plants. Emissions there rose by 4% in 2021, a quarter of the global total.

Figure 5 | Top-20 green house gas emitters (2018)

Country	ISO	Fossil GHG totals by country in Mt CO2eq/yr	Global Rank (1-208)	Share of World Total	Change 1990-2018	Fossil GHG capita in t CO2eq/yr	Global Rank (1-208)	X Times the World Average	Change 1990-2018	Fossil GHG per GDP in t CO2eq /KUSD/yr	Global Rank (1-198)	X Times the World Average	Change 1990-2018
China	CHN	13,739.79	1	26.8%	250.5%	9.71	51	1.4	190.4%	0.65	36	1.6	-68.8%
United States	USA	6,297.62	2	12.3%	2.2%	19.27	19	2.9	-21.0%	0.31	119	0.8	-47.5%
India	IND	3,619.80	3	7.1%	163.3%	2.67	143	0.4	69.2%	0.41	86	1.0	-52.6%
Russia	RUS	2,313.73	4	4.5%	-24.2%	16.07	23	2.4	-22.3%	0.59	45	1.5	-45.2%
Japan	JPN	1,270.21	5	2.5%	-2.2%	9.99	48	1.5	-4.3%	0.24	145	0.6	-23.7%
Brazil	BRA	1,259.51	6	2.5%	86.3%	5.97	88	0.9	31.9%	0.41	87	1.0	-10.1%
Indonesia	IDN	1,074.19	7	2.1%	162.1%	4.03	111	0.6	78.3%	0.35	107	0.9	-26.4%
Iran	IRN	926.37	8	1.8%	189.2%	11.30	36	1.7	98.3%	0.84	17	2.1	22.4%
Germany	DEU	873.60	9	1.7%	-29.0%	10.62	41	1.6	-31.7%	0.20	167	0.5	-46.2%
Mexico	MEX	801.38	10	1.6%	76.1%	6.13	85	0.9	15.0%	0.32	118	0.8	-9.4%
Canada	CAN	762.14	11	1.5%	29.2%	20.62	15	3.1	-3.2%	0.42	83	1.0	-37.6%
Korea, Repub	KOR	758.14	12	1.5%	135.5%	14.82	24	2.2	97.6%	0.35	109	0.9	-39.4%
Saudi Arabia	SAU	750.60	13	1.5%	226.7%	22.37	12	3.3	59.0%	0.47	76	1.2	45.8%
Australia	AUS	581.97	14	1.1%	30.0%	23.49	10	3.5	-10.6%	0.47	71	1.2	-44.4%
Turkey	TUR	579.19	15	1.1%	162.1%	7.07	66	1.1	72.5%	0.25	143	0.6	-23.1%
South Africa	ZAF	573.96	16	1.1%	44.4%	10.00	47	1.5	-5.5%	0.79	23	2.0	-24.9%
Pakistan	PAK	504.59	17	1.0%	148.2%	2.51	147	0.4	33.1%	0.50	63	1.2	-17.1%
United Kingdom	GBR	463.73	18	0.9%	-39.9%	6.97	68	1.0	-48.4%	0.15	178	0.4	-65.4%
France	FRA	450.39	19	0.9%	-18.1%	6.90	70	1.0	-28.5%	0.15	184	0.4	-46.7%
Thailand	THA	434.78	20	0.8%	109.0%	6.28	81	0.9	70.9%	0.35	112	0.9	-30.2%
World	WRL	51,199.87		100.0%	56.8%	6.71		1.0	9.5%	0.40		1.0	-34.0%

Data source: EDGAR – Emissions Database for Global Atmospheric Research

... or accelerate decarbonization?

True, the invasion of Ukraine is likely to complicate the energy transition and thus have a negative impact on climate change in the short term. However, in view of mounting physical risks and concerns over energy security it could also accelerate the trajectory towards faster decarbonization, particularly in Europe. Encouraging signs are coming out of Australia, India, and the US – all among the largest GHG emitters – that could lift their climate & energy scores and, more importantly, lend significant thrust to the low-carbon transition.

Following the election of a center-left Labor Party government under the direction of prime minister Albanese in May, Australia swiftly moved to put environmental and climate change back on the policy agenda. In early September, both houses of parliament passed a ground-breaking bill to update nationally determined contributions (NDCs) to include larger emission cuts (43% up from a previous 26-28%) by 2030 and promised to reach “net zero” by 2050. The move marks an important step that should help gradually improve the country's poor score for climate & energy compared to advanced economy peers (3.66 compared with 5.87 in Q1/2022). Though encouraging, further action will still be required to reach 1.5°C Paris Agreement compatibility.

In India, the pressure of an extreme heatwave this past spring forced the federal cabinet to finally approve new emissions targets. In its newly announced national emissions pledges (NDCs), India – the world’s third largest carbon polluter – commits to reduce the emissions intensity of its GDP by 45% from 2005 levels over the next eight years – an increase of 10 percentage points compared to its previous 2016 pledge. In addition, the country plans to speed up renewable energy expansion and will require that half (up from 40%) of its energy needs are met by non-fossil fuel-based energy sources (solar, wind, hydropower and nuclear) by 2030.

Shortly thereafter, the lower house of parliament passed the Energy Conservation Amendment Bill 2022, enabling a series of moves by the government to regulate and mandate the transition to clean and renewable energy sources in industry, transportation, and buildings. The legislation also proposes the country’s first-ever carbon market, centralizing the trade of carbon and environmental credits across industries.

In addition, the export of carbon credits will be prohibited until India meets its 2030 NDC climate commitments. While this is certainly an advance compared to past efforts, India’s aim to become carbon neutral by 2070 is far less ambitious than pledges of other major GHG polluters and still 20 years beyond the 2050 tipping point for averting catastrophic danger according to climate scientists.

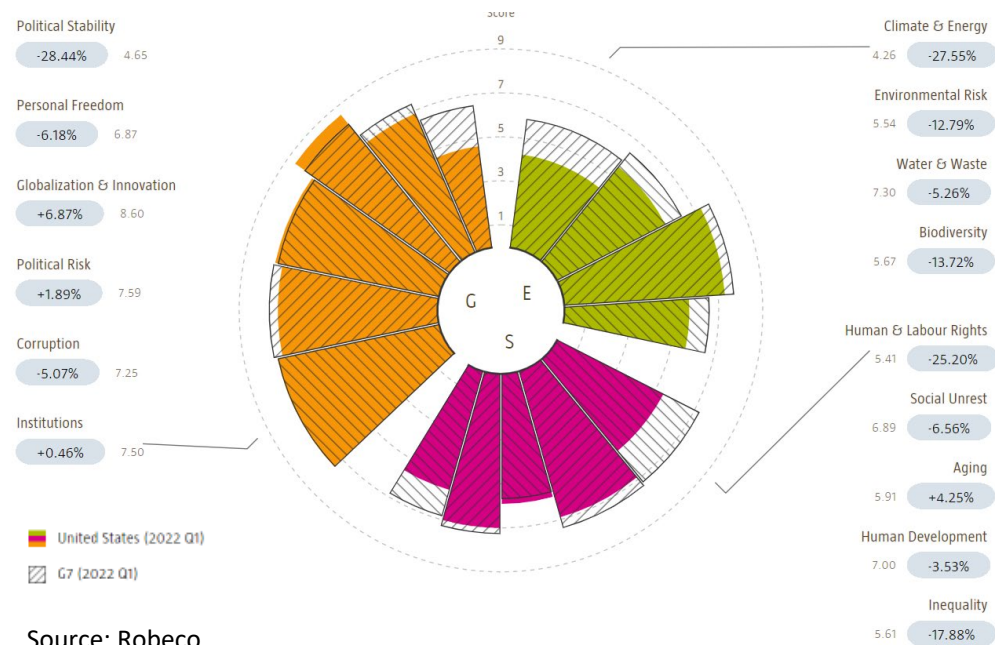
America’s promising climate-plus spending bill

After months of wrangling, the US Senate approved a sweeping USD 739 billion health care and climate & energy bill with the tightest possible margin of 51-50 votes. The bill, dubbed the “Inflation Reduction Act (IRA)”, seeks to lower the cost of some medicines, implement a 15% minimum corporate tax on large corporations, and allocate USD 369 billion for climate and clean energy investments.

True, the current legislation is a significantly trimmed down version of the USD 3.5 trillion package that was initially proposed by the Biden administration. However, it is still the largest climate bill ever passed in the US and should help the US meet its proposed 40% emissions reduction from 2005 levels by 2030. Though still short of Biden’s original 50% target, the US move should add significant symbolic force and revitalise international efforts to tackle global warming.

Apart from bringing the US closer to achieving its climate goals, the IRA is also expected to lower healthcare costs for many Americans. It allows Medicare to negotiate the price of certain expensive prescription drugs, caps out-of-pocket drug costs for those on Medicare and keeps health insurance premiums affordable for low-income families. These are all welcome developments that will reduce social and health inequalities and help enhance the US’s currently mediocre “health” score of 5.70.

Figure 6 | ESG profiles in comparison: the US trailing the G-7 average



Source: Robeco

A look at the country's overall ESG profile (see **Figure 6**) reveals that the US is lagging behind its G7 counterparts in several ESG criteria including climate & energy, biodiversity, human & labour rights, inequality and political stability. Low scores are largely a relic of the Trump legacy which saw an across the board erosion of ESG performance.

While the Biden administration has undertaken some efforts to regain lost ground, the continuation of a more sustainability-oriented policy course will heavily depend upon the outcome of the mid-term elections in November. The accelerated approval of the IRA – a core element of Biden's agenda – by both chambers could provide the Democrats a timely and much-needed boost prior to November's elections.

Despite overall performance lags, the US continues to display strong leadership in defending democratic values and global norms, which is once again evident in its support for Ukraine. Without the significant efforts of the US, it would be much more difficult for European nations to safeguard crucial values, such as political freedom, respect for human rights and national security. While there is certainly room for improvement in its ESG profile, we also acknowledge the US's pivotal role in securing the institutions, laws and global norms we value so highly in our Country Sustainability Ranking. We believe these will be decisive factors for generating positive sustainability performance in the long run.

France's overall ESG performance with a solid track record

With a country ESG score of 7.84 and rank of 15th overall, France shows robust sustainability performance and scores higher than the EMU average. The country has a strong track record in ESG-related regulation, has been a leader in sustainable finance, and has helped to advance key international environmental conventions such as the Paris Agreement and the Convention on Biological Diversity. As visible from **Figure 7**, France scores highest in the environmental dimension, with climate & energy and water & waste among the strongest pillars. In December 2020, France committed to an enhanced NDC aimed at net emission reductions of at least 55% compared to 1990 levels by 2030, but a full transition to net zero will require additional efforts.

Concerted efforts will also be needed to better protect the country's biodiversity – an area where, ironically, France performs worse than its peers. In February, Macron announced a nuclear-heavy energy plan that included a program to build as many as 14 new reactors in order to reduce the country's reliance on fossil fuels, to enhance energy independence, and to become carbon neutral by 2050. This marked a U-turn on earlier pledges to reduce France's nuclear energy capacity and sparked tensions with some EU member states, notably Germany, over what constitutes clean energy. At present, nuclear energy contributes close to 70% of France's electricity production and fossil fuels around 10%, with the rest coming from hydropower and wind.

On the social front, France is more or less at par with its EMU peers with the exception of aging, where it shows slightly worse values for the old-age dependency ratio and the labor force participation rate for the age group of 55-64. Though overall social performance is solid, the country is not without weak spots including high youth unemployment and persistent inequalities for low-income regions and households. The "Gilet Jaunes" (Yellow Vests) protests that dominated pre-covid headlines lost some intensity during the pandemic. But tensions remain high and discontent widespread over increasing costs of living and growing inequalities which could easily spark renewed protests.

France has a long tradition of upholding democratic principles, respecting human rights and the rule of law, and promoting civil liberties and accountability, all of which are reflected in robust scores for the Worldwide Governance Indicators that form important components of the corruption, institutions, personal freedom, and political stability criteria in our CSR framework. A strong institutional capacity and established rights of political participation should also help the country to keep the growing populist sentiment – a growing source of political instability in recent years – in check.

Figure 7 | France's performance by ESG criteria and dimensions



Source: Robeco

Data note: EMU comprises the nineteen member countries of the Economic and Monetary Union.

The present environment is complex. Balancing ESG performance amidst ongoing pandemic concerns, growing economic uncertainties, and sharpening geopolitical risks while also managing other important policy objectives will be challenging going forward. Even more so for France. Emmanuel Macron's centrist alliance fell short of an absolute majority in the Assemblée Nationale in the June parliamentary election, just weeks after Macron was re-elected president. Without an absolute majority and a more fragmented parliament, the legislative process will certainly become more complicated. It is likely to lead to a much slower and more modest reform agenda but could also result in political deadlock with negative impacts on the country's future ESG performance.

Russia³ – on the path to a pariah state?

In late February 2022, Russia invaded Ukraine in a major escalation of the Russian-Ukraine conflict that began in 2014. Although a full-scale attack was unexpected, Russia's weakening governance structures and political developments in recent years were already strong signals of aberrant leadership and erratic decision-making. An authoritarian political system without properly functioning checks and balances is more susceptible to this kind of event risk.

President Putin's efforts to consolidate power through the establishment of an authoritarian political system that concentrates power in his hands has resulted in a continuous erosion of Russia's institutions and legal system. Several governance indicators in our CSR framework including political rights, civil liberties, rule of law, and political risk & stability have long pointed to grave deficiencies and heightened risk in Russia's governance. Large distortions quickly become apparent when comparing Russia with peers in the upper-middle income country group.

³ Robeco is not and was not invested in Russian sovereign bonds, even prior to the Ukraine invasion. Moreover, Russia has been added to our country exclusion list, which prohibits funds from investing in Russian government bonds.

Figure 9 | Russia’s ESG profile with obvious deficiencies in governance



Source: Robeco

Data note: The upper-middle income country group includes forty developing and emerging economies.

While Russia compares well with its counterparts on environmental and social dimensions – with the notable exception of climate & energy – it performs well short of its peers on governance (see **Figure 9**). Driven by a sharp deterioration in the political risk & stability metrics, the governance score has even taken another hit since the autumn 2021 update, falling from 4.71 in October 2021 to 4.46 in April 2022. It will most probably see another decline in the forthcoming CSR updates.

As a consequence of Russia’s invasion of Ukraine, the US, the European Union and their allies have imposed broad-based economic and financial sanctions on the country. Western countries have also taken a different approach in their political relations with Russia, which will leave it increasingly isolated and likely lead to a further hardening of the political climate at home with multiple adverse ramifications in the long run. Taken together, these do not bode well for Russia’s ESG profile in the foreseeable future.

Proprietary rankings vs independent benchmarks

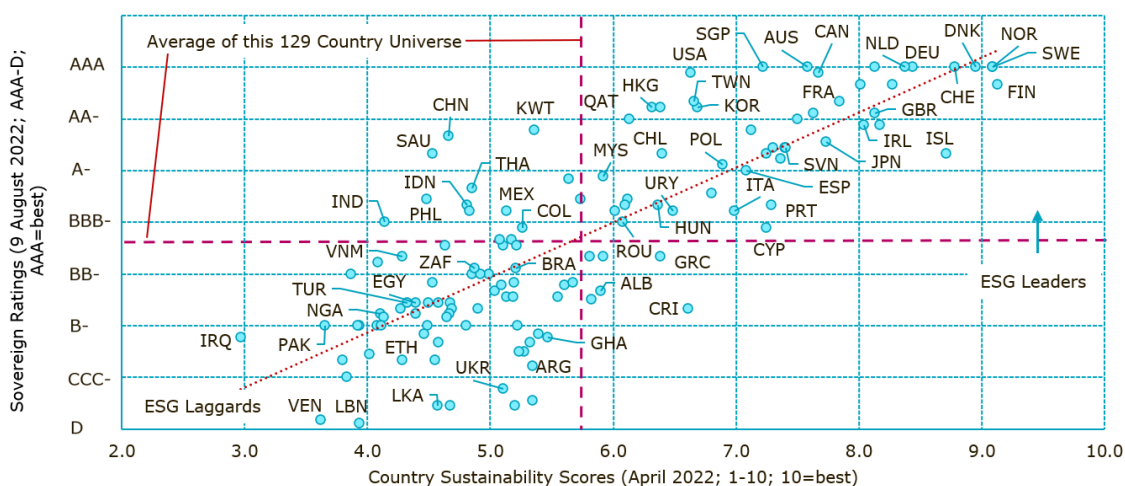
Country sustainability rankings vs. sovereign ratings and CDS

It has become widely accepted in financial markets and among investors that a nation’s ability and willingness to honour its financial obligations is influenced not only by financial and macroeconomic variables but also by a wide range of ESG features. These include a country’s political situation, quality of governance, strength of institutions, social climate, and environmental factors, especially climate change and energy.

Country ESG data may contain risks that are not always obvious (and probably not captured sufficiently) in traditional sovereign credit risk analyses which are still more focused on macroeconomic variables and debt servicing. However, the invasion of Ukraine is a rude reminder of the risks of investing in a country with a weak ESG profile and the strong need for comprehensive ESG analysis to determine a country’s risk/reward pattern.

It seems obvious that robust sustainability performance promotes economic growth, contributes to a healthy fiscal position and, ultimately, to a stronger sovereign credit profile in the long run. The opposite is also true; institutional failures, severe social disparities and pronounced inequalities undermine political and macroeconomic stability. **Figure 10** bears this out, where a fairly high positive correlation between Robeco’s country ESG scores and sovereign credit ratings is observed.

Figure 10 | Robeco country ESG scores: reflective of sovereign credit risk ratings



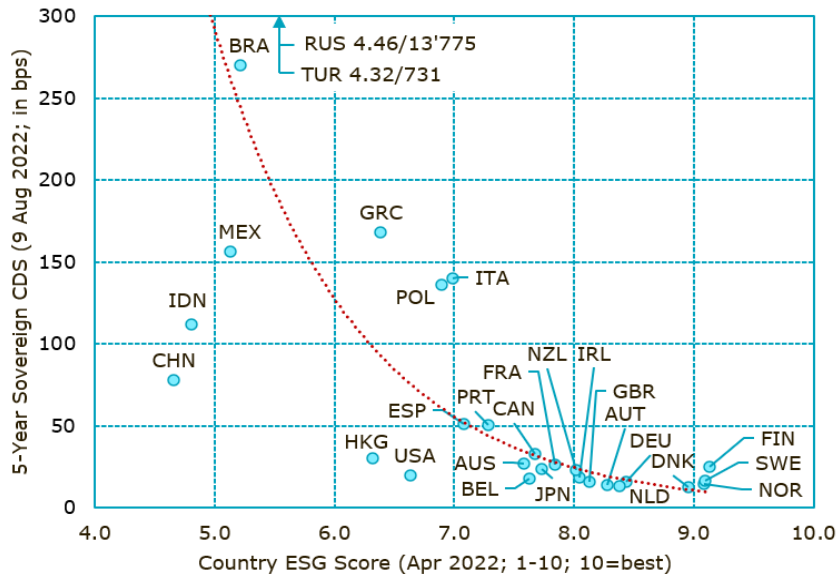
Data source: Fitch, Moody’s, Standard & Poor’s, Robeco.

Data note: Sovereign ratings reflect the average of the three rating agencies; Sovereign credit risk ratings of 9 August 2022; Robeco country sustainability scores as of April 2022.

For sure, the ESG score to credit rating correlation is not perfect. In the case of Japan, Spain, Switzerland, and the United Kingdom, for example, the correlation holds well. In the case of Greece or Portugal, however, the sovereign credit ratings appear too conservative relative to their sustainability scores, suggesting the potential for an upgrade. On the other hand, China, India, and Saudi Arabia enjoy sovereign ratings that seem stronger than implied by their rather poor sustainability profiles.

Russia does not appear on the chart. The country’s average sovereign rating – marginally above BBB- before the start of the invasion in Ukraine – appeared slightly high relative to the country’s ESG score at that time (4.71). Its rating has subsequently been downgraded to default; meanwhile all three major agencies have withdrawn sovereign ratings and ratings on individual Russian entities.

Figure 11 | Country ESG scores plotted against sovereign CDS



Data source: World Government Bonds, Robeco

Data note: The Robeco country sustainability scores as of April 2022. 5-year sovereign CDS spreads of 9 August 2022.

Figure 11 displays a negative correlation between the country ESG score and the sovereign credit default swap (CDS) spread as a measure of a sovereign’s default probability. It is evident overall that CDS spreads tend to reflect a risk profile which is often also picked up by the CSR scores. This makes an upward or downward trend in the CSR scores an interesting signal from a perspective of potential moves in the pricing of sovereign credit risk.

Appendix A: Country Sustainability Framework

Ongoing monitoring of the underlying data and data providers and maintenance of the methodology used to construct any model is an integral part of ensuring its accuracy, completeness, and ongoing predictive power. In the following pages, we provide our source data as well as the framework in which it is weighted and measured.

The current methodological framework has been revised and assigns greater weight to the environmental sphere, in particular to climate change and biodiversity, but also to human rights within the “S” dimension.

As shown in **Table 1** it comprises 50 indicators, which are combined into 15 criteria covering the three main ESG dimensions (environmental, social & governance).

The framework captures a broad set of relevant ESG factors with the ultimate aim of providing an assessment of whether a country’s development in the E, S and G areas helps preserve a sovereign’s long-term solvency.

The country sustainability assessment framework currently covers a universe of 150 countries, 23 of which are considered industrialized countries or advanced economies, and 127 emerging market and developing countries.

Table 1 | Robeco’s Country Sustainability Framework

Indicators	Criteria	Weight	Dimensions	Weight	Country
<p>For each country, numerous data series on a variety of ESG features are collected and summarized in 50 indicators. Each indicator gets a predefined weight and a relative score ranging from 1 to 10.</p> <ul style="list-style-type: none"> > Biodiversity Intactness Index > Natural Environment Index > Red List Index > Biodiversity Intactness Index 2015-30 Change > Consumption CO2 per Capita > GHG Emissions per GDP > Consumption CO2 5-Yr p/C Change > GHG Emissions 5-Yr p/GDP Change > GHG p/C Reduction 2015-30 > Integrated Water Management > Water Stress Level > Water Use Efficiency > Waste Management > Climate Risk Index > ND-GAIN Index 	<p>The indicators are aggregated to 15 criteria, whereby each criterion is also assigned a predefined weight.</p> <ul style="list-style-type: none"> > Biodiversity & Habitat Index > Natural Resource Protection Indicator > Biodiversity Intactness Index 2030 Projection > GHG Emissions per Capita > Share of Renewables > GHG Emissions 5-Yr p/C Change > Share of Renewables 5-Yr Change > GHG Emissions p/C Target 2030 > Wastewater Treatment > Water Stress 2030 Projection > Natural Hazard Index > Old-Age Dependency Ratio 2050 > Health > Human Rights > GINI Coefficient > Socio-Economic Vulnerability > Corruption Perception Index > Global Innovation Index > Regulatory Quality > Voice & Accountability > Political Risk Rating PRS > Political Stability/No Violence 	<ul style="list-style-type: none"> Biodiversity 5% Climate & Energy 10% Water & Waste 7.5% Environmental Risk 7.5% Aging 7.5% Human Development 5% Human & Labor Rights 7.5% Inequality 5% Social Unrest 5% Corruption 7.5% Globalization & Innovation 5% Institutions 10% Personal Freedom 5% Political Risk 7.5% Political Stability 5% 	<p>Each dimension weight is the sum of the criteria weights within the respective dimension.</p> <ul style="list-style-type: none"> Environmental 30% Social 30% Governance 40% 	<p>The country score is the weighted sum of all standardized indicator scores.</p> <p>Country Sustainability Score</p>	

Source: Robeco

Appendix B: Data sources

No.	Criterion	Indicator	Source	URL
1	Biodiversity	Biodiversity Intactness Index	Natural History Museum, London	The Biodiversity Intactness Index
2		Biodiversity & Habitat Index	Yale University/SEDAC	Downloads Environmental Performance Index (yale.edu)
3		Natural Environment Index	Legatum Institute	Legatum Prosperity Index 2021
4		Natural Resource Protection Indicator	SEDAC - Socioeconomic Data & Applications Center	SEDAC
5		Red List Index	Our World in Data/UNStats	Red List Index, 2022 (ourworldindata.org)
6		Biodiversity Intactness Index Change 2015-30	Natural History Museum, London	The Biodiversity Intactness Index
7		Biodiversity Intactness Index 2030 Projection	Natural History Museum, London	The Biodiversity Intactness Index
8	Climate & Energy	Consumption CO2 Emissions per Capita	Our World in Data/Global Carbon Project	Per capita consumption-based CO₂ emissions, 2019 (ourworldindata.org)
9		GHG Emissions per Capita	EDGAR	EDGAR - The Emissions Database for Global Atmospheric Research (europa.eu)
10		GHG Emissions per GDP	EDGAR	EDGAR - The Emissions Database for Global Atmospheric Research (europa.eu)
11		Share of Renewables to Energy Consumption	U.S. Energy Information Administration (EIA)	International - U.S. Energy Information Administration (EIA)
12		Consumption CO2 Emissions p/C 5-Yr Change	Our World in Data/Global Carbon Project	Per capita consumption-based CO₂ emissions, 2019 (ourworldindata.org)
13		GHG Emissions per Capita 5-Yr Change	EDGAR	EDGAR - The Emissions Database for Global Atmospheric Research (europa.eu)
14		GHG Emissions per GDP 5-Yr Change	EDGAR	EDGAR - The Emissions Database for Global Atmospheric Research (europa.eu)
15		Chg.	U.S. Energy Information Administration (EIA)	International - U.S. Energy Information Administration (EIA)
16		GHG Emissions p/C Reduction 2015-30	Climate Resource	NDCs - Climate Resource (climate-resource.com)
17	GHG Emissions p/C Target 2030	Climate Resource	NDCs - Climate Resource (climate-resource.com)	
18	Water & Waste	Integrated Water Management	UN Water - UNEP	Home SDG 6 Data
19		Wastewater Treatment	SEDAC - Socioeconomic Data & Applications Center	Environmental Performance Index (EPI) SEDAC (columbia.edu)
20		Water Stress Level	UN Water - FAO Aquastat	Home SDG 6 Data
21		Water Stress Projection 2030	World Resources Institute - Aqeduct	Data: Aqeduct Projected Water Stress Country Rankings World Resources Institute (wri.org)
22		Water Use Efficiency	UN Water - FAO Aquastat	Home SDG 6 Data
23		Waste Management	SEDAC - Socioeconomic Data & Applications Center	Environmental Performance Index (EPI) SEDAC (columbia.edu)
24	Environmental Risk	Climate Risk Index	Germanwatch	Globaler Klima-Risiko-Index 2021 Germanwatch e.V.
25		Natural Hazard Index	DRMKC - INFORM - European Commission	INFORM - Global, open-source risk assessment for humanitarian crises and disasters (europa.eu)
26		ND_GAIN Index	University of Notre Dame	Download Data // Notre Dame Global Adaptation Initiative // University of Notre Dame (nd.edu)
27	Aging	Labor Force Participation Rate 55-64	ILOSTAT - International Labour Organization	https://ilostat ilo.org/data/
28		Old-Age Dependency Ratio 2050	UN - Population Division	Population Division (un.org)
29	Human Development	Education	Legatum Institute	Legatum Prosperity Index 2021
30		Health	Legatum Institute	Legatum Prosperity Index 2021
31		Human Development Index	UNDP	Human Development Data Center Human Development Reports (undp.org)
32	Human & Labour Rights	Global Rights Index	ITUC - International Trade Union Confederation	Home - ITUC GRI 2021 (globalrightsindex.org)
33		Human Rights	Fund for Peace	Fragile States Index The Fund for Peace
34	Inequality	Gender Inequality Index	UNDP	Human Development Data Center Human Development Reports (undp.org)
35		GINI Coefficient	Our World in Data	Income inequality - Gini Index, 1981 to 2019 (ourworldindata.org)
36	Social Unrest	Fragile States Index	Fund for Peace	Fragile States Index The Fund for Peace
37		Socio-Economic Vulnerability	DRMKC - INFORM - European Commission	INFORM - Global, open-source risk assessment for humanitarian crises and disasters (europa.eu)
38	Corruption	Control of Corruption	World Bank	WGI 2021 Interactive > Home (worldbank.org)
39		Corruption Perception Index	Transparency International	2021 Corruption Perceptions Index - Explore the... - Transparency.org
40	Globalization & Innovation	Globalization Index	KOF/ETHZ	KOF Globalisation Index - KOF Swiss Economic Institute ETH Zurich
41		Global Innovation Index	WIPO	Indicator Rankings & Analysis Global Innovation Index
42	Institutions	Government Effectiveness	World Bank - Worldwide Governance Indicators	WGI 2021 Interactive > Home (worldbank.org)
43		Regulatory Quality	World Bank - Worldwide Governance Indicators	WGI 2021 Interactive > Home (worldbank.org)
44		Rule of Law	World Bank - Worldwide Governance Indicators	WGI 2021 Interactive > Home (worldbank.org)
45	Personal Freedom	Freedom in the World	Freedom House	Freedom in the World Freedom House
46		Voice & Accountability	World Bank - Worldwide Governance Indicators	WGI 2021 Interactive > Home (worldbank.org)
47	Political Risk	Political Risk Rating ECR	Euromoney Country Risk	Obtained via e-mail
48		Political Risk Rating PRS	PRS Group	Obtained via e-mail
49	Political	Human Hazard	DRMKC - INFORM - European Commission	INFORM - Global, open-source risk assessment for humanitarian crises and disasters (europa.eu)
50	Stability	Political Stability/No Violence	World Bank - Worldwide Governance Indicators	WGI 2021 Interactive > Home (worldbank.org)

Source: Robeco

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Some Funds referred to in this marketing material have been registered with the UAE Securities and Commodities Authority (the Authority). Details of all Registered Funds can be found on the Authority's website. The Authority assumes no liability for the accuracy of the information set out in this material/document, nor for the failure of any persons engaged in the investment Fund in performing their duties and responsibilities.

Additional Information for investors with residence or seat in the United Kingdom

Robeco is temporarily deemed authorized and regulated by the Financial Conduct Authority. Details of the Temporary Permissions Regime, which allows EEA-based firms to operate in the UK for a limited period while seeking full authorization, are available on the Financial Conduct Authority's website.

Additional Information for investors with residence or seat in Uruguay

The sale of the Fund qualifies as a private placement pursuant to section 2 of Uruguayan law 18,627. The Fund must not be offered or sold to the public in Uruguay, except under circumstances which do not constitute a public offering or distribution under Uruguayan laws and regulations. The Fund is not and will not be registered with the Financial Services Superintendency of the Central Bank of Uruguay. The Fund corresponds to investment funds that are not investment funds regulated by Uruguayan law 16,774 dated September 27, 1996, as amended.

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