Colchester®
GLOBAL INVESTORS

ESG Engagement Report

January 2023

Introduction

Today's global energy crisis has dramatically impacted energy markets and policies and will continue to do so for years to come. Russia's invasion of Ukraine is a reminder of the fragility and unsustainability of the current global energy systems. As we highlighted in our previous report, the key question is whether this crisis will be a setback or a catalyst to a cleaner and more secure energy complex in the future. For instance, in Europe we have seen a return to coal given Russia's curtailment of natural gas supply as well as European sanctions imposed on its imports of oil. Meanwhile an unprecedented level of global government policy response including the Inflation Reduction Act[1] in the United States, the Next Generation EU Fund[2] and the FIT 55[3] in Europe and China's 1+N policy framework[4] has continued to accelerate the clean energy transition and push sustainability to the top of the agenda.

While the crisis has also caused global inflation levels to remain elevated, the recent fall in energy prices[5] and the prospect of a slowdown in global economic growth suggest inflation may have peaked. However, central banks are committed to tightening monetary policy to ensure price stability. Meanwhile, governments have supported households and businesses in response to the rising cost of living, especially those on lower or fixed income who can least afford it, but the legacy of higher debt burden from the pandemic is limiting their capacity to continue.

Leading the headlines from Climate Change Conference (COP27) in 2022 was the creation of the "Loss and Damage" fund which recognised the need for richer countries to financially support poorer countries most vulnerable to climate-related disasters. However, details regarding the eventual size or who should pay into the fund were notably absent. This is likely to be on next year's agenda. Nonetheless, it has set a framework for a more equitable and feasible path to global net zero. As the world parses on the conclusions of COP27, nations convened at the UN Biodiversity Conference (COP15) to tackle what will become more mainstream in Environmental, Social and Governance (ESG) investing in coming years - biodiversity risk.

In this report, we share country engagements highlighting the importance of governance in underpinning the commitment to green energy transition, upgrading of digital infrastructure to improve human capital as well as discussions on reducing biodiversity risk aimed at achieving key sustainable goals. In support of the green bond funding, we have encouraged governments to adopt more granular reporting and enhance transparency in their Green Bond framework. Finally, we document more examples of our collaborations with industry-level peers, to demonstrate the integration of ESG into our investment process.

[1] Inflation Reduction Action (IRA) aimed at deficit reduction and fighting inflation. Part of the direct federal spending will go toward reducing carbon emissions by the end of 2030, upgrading energy infrastructure, and lowering healthcare cost.

[2] European Union (EU) economic recovery package to support the EU member states recovering from the COVID-19 pandemic, support green transition to a climate-neutral economy and digital transformation.

[3] European Union's target of reducing net greenhouse gas emissions by at least 55% by 2030.

[4] China's policy framework for carbon dioxide peak by 2030 and carbon neutrality by 2060.

[5] Indicative of energy price change we use the Bloomberg Generic 1st Crude Oil Index which fell by 25.1% in the 6 months to end December 2022.

Summary of Engagements

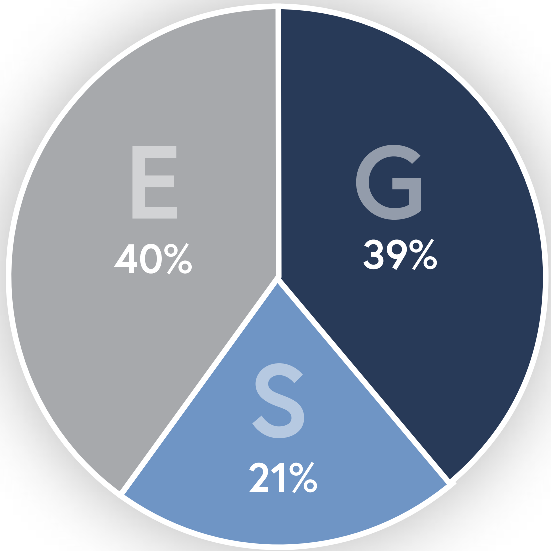
30 Engagements and 57 Issues

60% of engagements with Government Officials

13% of engagements are Industry-level collaborations

27% of engagements are with non-Issuer Stakeholders

H2 2022 Engagement Activities

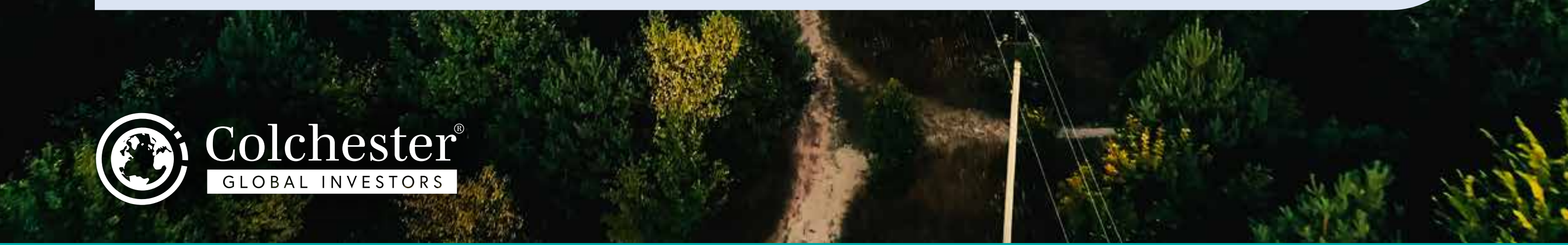


Engagements Listed in Detail

Government Engagements

26/9/2022	Italy	Director General of Public Debt from the Italian Treasury Department	Implementation and governance of Italy's National Recovery and Resilience Plan.
27/9/2022	Sweden	Head of Funding from the Sweden National Debt Office	Climate Policy Framework and Net Zero Targets. Different measures of Greenhouse Gas Emission.
28/9/2022	Supranational	Deputy Treasurer of the European Bank for Reconstruction and Development	Use of Proceeds from Green Bonds.
10/10/2022	New Zealand	Representative from the Debt Management Office	Discussion on new Green Bond Framework and planned issuance.

31/10/2022	Kazakhstan	Official at the US Embassy in Kazakhstan	Human Rights in Kazakhstan and Green Transition.
31/10/2022	Kazakhstan	Director & Head of Kazakhstan from the European Bank for Reconstruction and Development	Provide Kazakhstan government with expertise on internal auctions for green power generation.
31/10/2022	Kazakhstan	Representatives from Agency for Regulation and Development of Financial Markets	Governance of the Financial Sector - Reducing Bad loans in the Banking Sector and Asset Quality Review.
1/11/2022	Uzbekistan	Deputy Finance Minister Ministry of Finance	Discussed Plan for Green Bond issuance and SDGs.
1/11/2022	Uzbekistan	Representative from the World Bank in Uzbekistan	Discussed the Country Climate Development report.
2/11/2022	Kazakhstan	Representatives from the World Bank in Kazakhstan	Voice and Accountability from the "Listening to Kazakhstan Survey" and work on energy tariff reforms.
2/11/2022	Kazakhstan	Deputy Governor from the National Bank of Kazakhstan	Reform of Pension Fund Scheme.
2/11/2022	Kazakhstan	Deputy CEO from the Development Bank of Kazakhstan	Discussions on funding of renewable green projects.
4/11/2022	Azerbaijan	Representatives from State Oil Fund of the Republic of Azerbaijan	Framework for management of sovereign wealth assets.
4/11/2022	Azerbaijan	Vice President from State Oil Company of the Republic of Azerbaijan	Plans on Green Transition.
4/11/2022	Azerbaijan	Representative from Azerbaijan Investment Holdings	Discussed reforms to State Owned Enterprises.
4/11/2022	Azerbaijan	Central Bank of the Republic of Azerbaijan	Plans on Green Transition.
01/12/2022	India	Representative from India's Ministry of Finance	Introduction to India's Green Bond Framework.
16/12/2022	UK	Co-Head of Policy and Markets at the UK Debt Management Office	Details of the Green Bond allocation report and pre-issuance impact reporting.



Industry Engagements

22/8/2022	Global	Representatives from Moody's Investor Services	Moody's to include the Open Budget Index within their sovereign rating methodolody.
13/9/2022	Global	Representatives from the World Bank	Financing climate actions and engaging with investors on climate-related information.
23/11/2022	Mexico	CFA Society Mexico	Presenting on Colchester's inflation forecast model and incorporating balance sheet and ESG factors.
30/11/2022	Mexico	Consejo Consultivo de Finanzas Verdes (CCFV)	Presentation on the importance of governance.

Other Engagements

31/10/2022	Kazakhstan	Deputy SEO from Halyk Bank	Discussion on funding of solar, wind and potentially nuclear energy projects.
31/10/2022	Kazakhstan	Managing Partner from Rakurs Consultants	Discussed the challenges of the low carbon transition for Kazakhstan and feasibility of reaching renewable energy targets.
1/11/2022	Uzbekistan	Representative of UzAuto Motors	Electric vehicle production capacity and ESG reporting.
1/11/2022	Uzbekistan	Chairman of Ipoteka Bank	Uzbekistan banking reforms.
2/11/2022	Kazakhstan	Head of Corporate Finance from KazMunayGas	Discussion of alternative routes to deliver oil and gas.
4/11/2022	Azerbaijan	Representative from Azerbaijan Banking Association	Discussion on the level of corruption.
4/11/2022	Azerbaijan	Deputy Chairman of ABB Bank	Assessing whether Banking reforms has improved efficiencies.
30/11/2022	China	Program Manager at Global Environment Institute - China	Reducing Biodiversity Risk to achieve SDGs.

Global Bond Strategy Engagements

Sweden

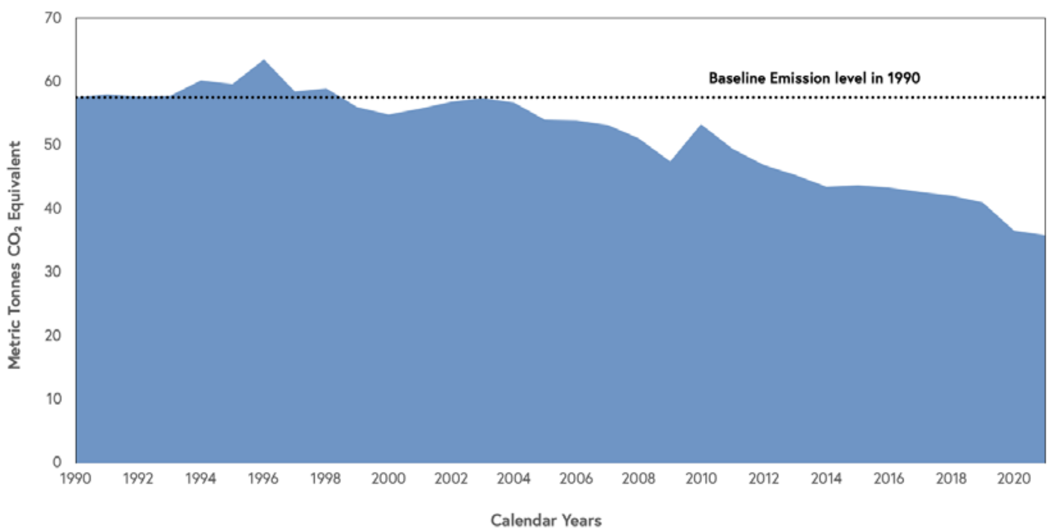
Sweden's climate policy framework is based on specific targets for emissions and is legislated for in the Climate Act of 2018. The Act requires current and future governments to pursue policies that live up to the Paris Agreement and are based on the targets detailed as follows. It also requires that the government:

i) present a climate report in its Budget Bill each year,
ii) draw up a climate policy action every fourth year to describe how the climate targets are to be achieved (the next is due in 2023),
iii) ensure that climate policy goals and budget policy goals work together.

Sweden's environmental governance policy is also strengthened by the establishment of the Climate Policy Council in 2020 – an independent body tasked to evaluate the government's policy decisions and their compatibility with the country's climate goals.

Sweden's climate target is to achieve net zero greenhouse gas emission by 2045. Accordingly, this means that Sweden's emissions should be at least 85% lower than in 1990. Beyond that, Sweden aims to offset or mitigate the remaining 15% through carbon sequestration in forest and land, carbon capture and storage technology (CCS) as well as reducing emission efforts outside the country. Ambitiously, the framework also looks to achieve negative net emissions after 2045. The latest data to end 2021 (Chart 1) shows that Sweden has reduced emissions by c. 38% since 1990 – although, like many countries, the reduction in the last two years was distorted by the temporary impact of the pandemic.

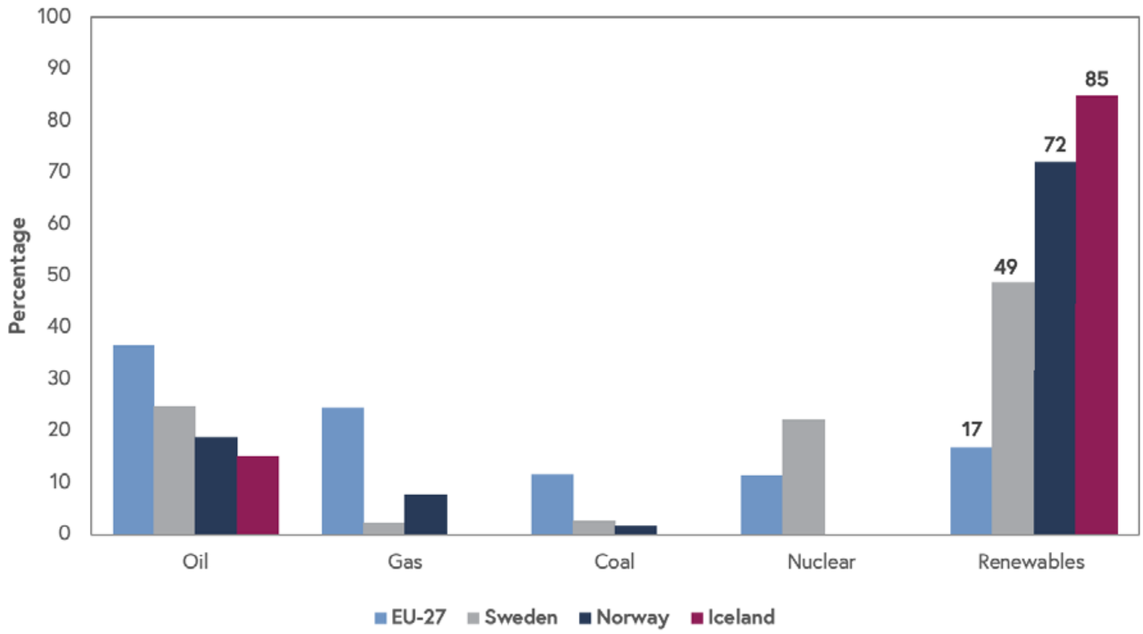
Chart 1: Sweden - Annual Greenhouse Gas Emission Since 1990



Source: Our World in Data, 2021. Carbon dioxide (CO_2) emissions from fossil fuels and industry. Land use change is not included.

In our engagement with the Head of Funding and Chief Economist at the Swedish National Debt Management Office, we were able to get a better understanding of Sweden's climate policy framework and its achievements. Sweden's total emission reduction path has been supported by the increase in the share of renewable energy from 35% in 2001[6] to nearly 50% in 2021 (Chart 2), third in the world behind Iceland at 85% and Norway at 72%, and is significantly higher than the EU average of 17%.

Chart 2: Energy Mix - 2021



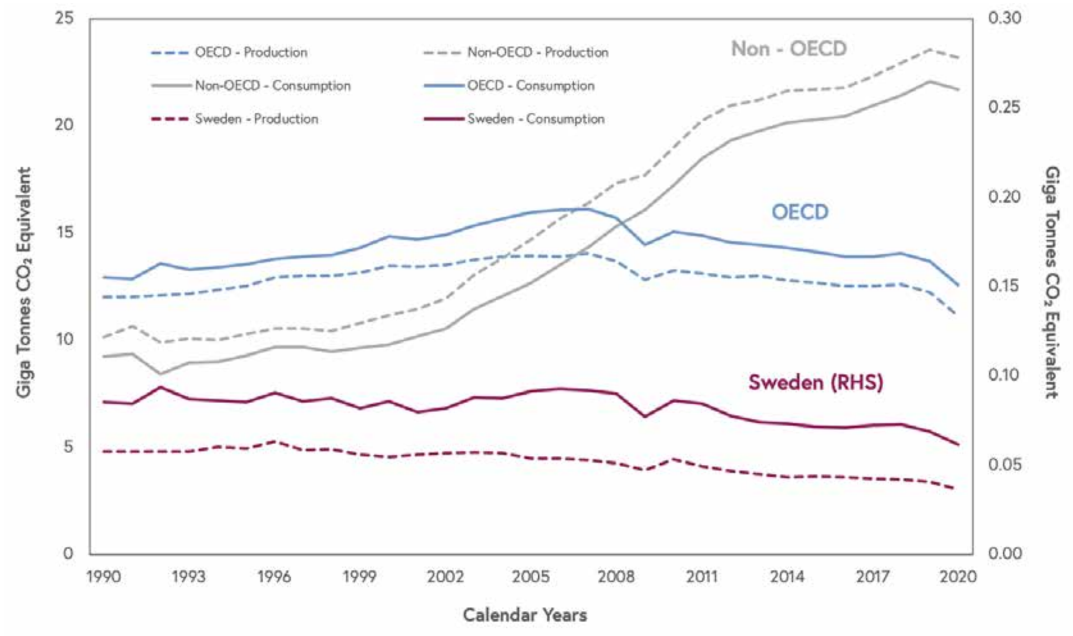
Source: Our World in Data, 2021.

We also discussed how greenhouse gas (GHG) emissions can be measured to monitor the work needed for countries to transition towards their own "net zero" targets. GHG emissions are typically measured on the basis of 'production' resulting in national climate targets that are dependent upon reported emissions created in a country's territory. However, many countries outsource production of carbon-intensive goods to other countries, shifting some emission responsibilities elsewhere. Some outsourced countries may adopt less carbon-efficient techniques or apply less stringent environmental standards, thus undermining environmental and climate policies.

An alternative and possibly fairer measure of a country's emissions is to calculate this on the basis of consumption. These are emissions associated with goods and services consumed in a particular jurisdiction, regardless of where the emissions occur and therefore considers the wider impact beyond territorial borders. Chart 3 shows GHG emission data from a consumption and production-based perspective for OECD and non-OECD countries as well as for Sweden. Over the past two decades it can be observed that carbon emissions in non-OECD countries have not only increased, but have in 2007 surpassed that of OECD countries, driven largely by China. Meanwhile, emissions from generally wealthier OECD countries have remained fairly constant and appear to have peaked in 2006.

[6] Our World in Data

Chart 3: Greenhouse Gas Emission Consumption and Production



Source: Our World in Data, 2021.

However, consumption-based emissions are higher than production-based emission in OECD countries as is the case in Sweden. This difference can be explained by the fact that many of the goods consumed in high income countries are produced elsewhere, and are imported, often from lower-income countries. As high-income countries have shifted their economies away from manufacturing and toward services in recent decades, so they have shifted the emissions of GHG to other regions.

We learned through our engagement discussion that Sweden is the first country in the world to propose the adoption of consumption-based emission targets. While timing of this has yet to be finalised, Sweden's decision should also complement the EU's plan to impose a carbon tax on imports of certain goods such as cement, iron, steel and fertilisers under the Carbon Border Adjustment Mechanism (CBAM) due to come into force in 2026. While the complexity of ascertaining consumption-based emission data remains a challenge, we recognise, as Sweden does, that this is an equitable way to achieve global net zero. Sweden's climate policy framework is a strong model that many other countries could benefit from following. We look forward to reviewing Sweden's Climate Policy Plan in 2023.

Italy

In 2021, the European Commission launched the €800bn NextGeneration EU fund (NGEU) to support economic recovery from the COVID-19 pandemic in Europe, strengthen the resilience and sustainability of economies, and to prepare for the digital and green transition and improve social cohesion. The funds are available to all EU member states and are disbursed in instalments between 2021 and 2026. Italy will be the largest recipient of NGEU consisting of grants and loans totalling €191bn[7]. It is expected to raise Italy's GDP by up to 1.5-2.5% by 2026[8]. Access to NGEU funds will be subject to the EU Commission's assessment of Italy's National Resilience Recovery Plan (NRRP) and achieving milestones and targets including the requirement to allocate at least 37% of its resources to improve environmental sustainability and 20% to digital transformation.

Italy's snap general elections in September 2022 resulted in the first far-right led government since the end of the Second World War and the country's first female Prime Minister. We engaged with the Director General of Public Debt and his team to discuss:

i) the details of Italy's NRRP to gain a better understanding of the government's commitments to reforms, investments and what sectors would likely benefit,

ii) the current challenges to support businesses and households in the current energy crisis and how this might impact the planning of NRRP.

The NRRP is structured around 6 Missions as follows, with Italy focusing on 16 components[9] where investments and reforms projects are directed.

1) *Green revolution and ecological transition* – aimed at improving the sustainability and resilience of the economic system while ensuring a fair and inclusive environmental transition.
2) *Digitalisation, innovation, competitiveness, culture and tourism* – mission aimed at promoting Italy's digital transformation, supporting innovation in the production system, and investing in culture and tourism.
3) *Infrastructure for sustainable mobility* – focus on developing a modern and sustainable transport infrastructure such as a high speed rail network across all regions of Italy.
4) *Inclusion and cohesion* – objective to facilitate greater labour market participation, training and fostering social inclusion such as supporting female empowerment.
5) *Health* – seeking to strengthen local prevention and health services which includes modernising the digital and healthcare system to ensure fair access to care.
6) *Education and Research* – policies for the next generation to strengthen education.

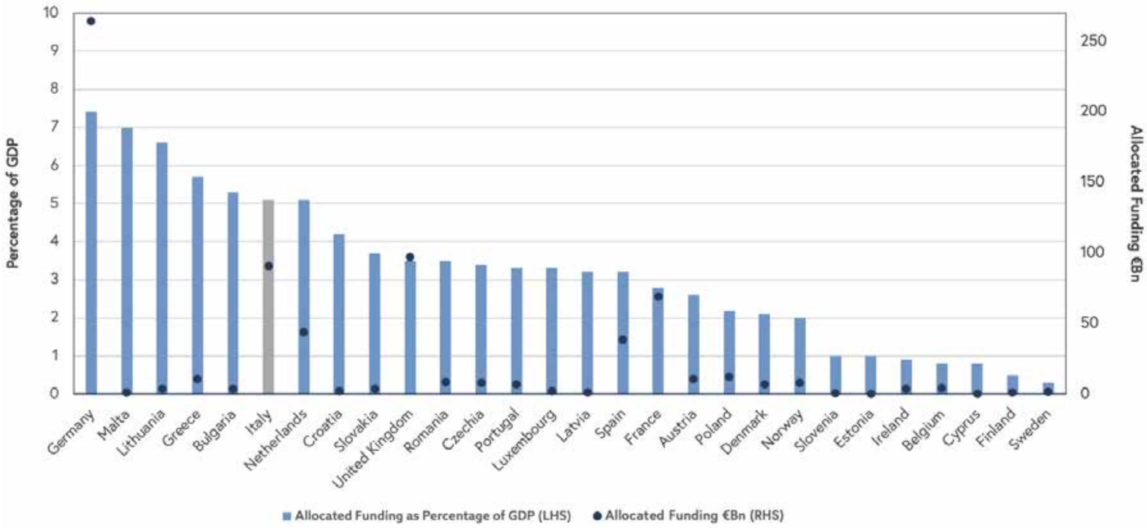
[7] €69 billion in Grants, €122.6 billion in Loans.

[8] European Commission estimates.

[9] https://www.governo.it/en/approfondimento/nrrp-missions-and-components/19325

We voiced our concerns during our engagement regarding Italy's ongoing commitment to NRRP and its use of funds at the time of an energy crisis. According to the Director General, Italy has already spent c. €60bn[10] from its fiscal budgets to shield households and businesses from the energy crisis since September 2021. As Chart 4 shows, Italy's support has been one of the highest in Europe - whether measured as a percentage of GDP or in terms of allocated funds. Given Italy's public debt is already high at 147% of GDP[11] and financing needs are large[12], it is likely to constrain future fiscal budgets should more support be needed. Therefore contributions from NGEU funds are, at least over the next few years, conducive to Italy's debt sustainability. However, Italy's history of political instability may cause delays to future EU payments if new or future governments seek to change Italy's commitments to NRRP.

Chart 4: Government earmarked and allocated funding (Sept 2021 - Nov 2022)



Source: Bruegel, 2022

To ensure continued commitment to NRRP, Italy has created a multi-level governance framework to implement, monitor and control the plan. It is supported by passing two legal acts. The first act[13] sets governance provisions, identifying the responsible bodies and defining their competence and duties, whilst simplifying administrative procedures. The second act[14] sets measures to strengthen administrative capacity for implementation and monitoring. For example, a Steering Committee at the Prime Minister's Office will regularly monitor progress towards the plan, requiring the submission of a report every six months to the two branches of Parliament as well as an annual report on the use of funds and the results achieved. Another example is the Ministry of Economy and Finance who are responsible for the central coordination of the NRRP to work with the European Commission. It is also responsible for establishing an independent audit body for monitoring and reporting on Italy's NRRP.

Italy's NRRP policy framework highlights the importance of governance underpinning economic growth and debt sustainability. For Italy, policies addressing structural issues such as unemployment and low labour market participation, notably of women and youth, and investments in green and energy efficiency projects, all contribute to the resilience and sustainability of the economy. Despite the recent change in government, the EU Commission has endorsed the positive assessment of Italy's request for NGEU funds resulting in the country's second instalment of €21bn in November 2022. At the time of this report, Italy has received €66.9bn or approximately a third of its entitled NGEU allocation, leaving a further eight instalments outstanding.

[10] As at the end of December 2022 – Italy has provisioned €90.7bn (Source: Bruegel.org).

[11] IMF 2022 estimates.

[12] IMF project Italian government gross financing needs to be over c. 25% of GDP in 2023 and 2024.

[13] Decree law of 31 May 2021, No 77.

[14] Decree law of 9 June 2021, No 80.

Emerging Markets Strategy Engagements

China

Following the UN Climate Change Conference (COP27) in November 2022, nations subsequently convened at the UN Biodiversity Conference (COP15) to set the tone and goals to solve Earth's other crisis: loss of living species. Biodiversity refers to the variety of living species in their natural environment and how they collectively relate to each other in an ecological process. Biodiversity and sustainable development of human society are therefore interrelated. Many scientists agree that biodiversity is at risk, pointing to human activities such as overfishing and altering land as the cause of loss of species.

As co-host of COP15, China led discussions on the post 2020 global biodiversity framework[15] whilst examining its own progress on biodiversity conservation. Between 1990 and 2020, China's annual real GDP growth averaged 9.1%[16] allowing millions to be lifted out of poverty. However, accelerated urbanisation and industrialisation have brought direct threats and pressure to habitats of species and ecosystem. Environmental pollution has impacted aquatic and river coastal biodiversity. According to the Convention on Biological Diversity, in China around 30% of wild plants are endangered, 233 vertebrate species face extinction and nearly half of wild animal populations are in decline. Some 90% of grasslands are experiencing different degrees of degradation or desertification and 40% of major wetlands are at risk of severe degradation.

In our engagement with the Program Manager at the Global Environment Institute – China (GEI-China)[17], we discussed some of the policies and actions that China has implemented to tackle biodiversity risk. GEI-China described some of its work with communities, local and central government which has helped to ensure that biodiversity conservation programmes are integrated with the UN Sustainability Development Goals (SDG)[18]. Examples of these were projects in the Sichuan Province to protect hectares of woodlands and bodies of water, and schemes in Inner Mongolia to reduce desertification and offer animals a more sustainable food supply. GEI-China has also extended similar schemes internationally, to countries such as Myanmar, Cambodia and countries in Africa to achieve common sustainability goals.

As one of the mega-biodiverse countries in the world, China has continued in the past decade to prioritise eco-environmental progress and pursue green developments. Amid concerns on how "green" China can remain during the recovery pressures of the pandemic, the government released the "Master Plan for National Key Ecosystem Protection and Restoration Major Projects (2021-2035)" in June 2020. The plan stipulated ecosystem quality improvements targets by 2035 while rolling out nine national major ecosystem protection and restoration projects. This includes building the national parks system and setting Ecological Conservation Red Lines, strengthening in-situ conservation such as setting up Protected Areas which contribute to the conservation of key natural ecosystems, biological resources and habitats for key species. It also stepped up ex-situ conservation systems including botanical gardens, wildlife rehabilitation and breeding centres, germplasm resource centres, and gene banks.

[15] This sets out plans to implement broad based action to bring about transformation in human society relationship with biodiversity to ensure that, by 2050, the shared vision of 'living in harmony' with nature is fulfilled.

[16] Figures sourced from Bloomberg.

[17] GEI-China is an independent Chinese environmental non-governmental organisation and think tank based in Beijing working with government and academic institutions in China.

[18] UN Sustainable Development Goals (SDG) are a set of 17 goals and 169 targets adopted by members of the UN in 2015 to meet the so called "2030 Agenda." The goals are currently structured with 232 indicators to measure a country's ability and progress in achieving sustainability in three main areas: environmental, social and economics.

China has made significant progress in biodiversity conservation. It has the fastest expanding forest area in the world. Between 2013 and 2017, China reforested 334 million hectares of land – equivalent to four times the entire US national forest system[19]. Populations of some well-known endangered species such as the giant panda and snow leopard are recovering, and even the less known white dolphins and Przewalski horses (the last truly wild horse) are returning. Clearly China has more to do, but its efforts to address biodiversity loss and ecosystem degradation are notable as well as leading the world in their investments of renewable technology to tackle climate change. We hope to see China move closer to achieving significant milestones and goals under the SDG. We will continue to monitor China's progress towards key targets SDG 14 and SDG 15 – namely "Life below Water" and "Life on Land."

Colombia

In its update to the National Determined Contribution[20] (NDC) in 2020, the government of Colombia committed to limit its level of GHG to 169.44 million tCO_2e (tonnes of Carbon Dioxide equivalent) by 2030. This means a 51% reduction in GHG emissions compared to the 2030 forecast in the reference scenario[21]. Determined to go further, Colombia established the National Climate Change System and National Climate Change Policy and Climate Action Law in 2021[22] to set guidelines and strategies to foster sustainable and low carbon development, allowing Colombia to commit to carbon neutrality (net zero) by 2050. The government has also promoted an agenda CONPES[23] to protect natural resources and mitigate the social and economic impacts of climate change. This agenda focuses on enabling the country to meet its SDG by establishing measures that support the mobilisation of resources through green, social and sustainable financing.

The Ministry of Finance and Public Credit (MHCP) is responsible for establishing the Sovereign Bond framework for Sustainable Development Financing. In 2021, the MHCP's Green Bond Framework paved the way to Colombia's inaugural ESG labelled bond[24] and the first local currency sovereign Green Bond in Latin America. Colombia's Green Bond Framework is aligned with the International Capital Markets Association's (ICMA) Green Bond Principles (GBP)[25] which are voluntary process guidelines for issuing green bonds consisting of four core components to provide transparency, disclosure and promote the integrity of the green bond market.

The four components for alignment with the GBP are:

i) *Use of proceeds* – Details of the use of proceeds should be appropriately described in the legal documentation of the security.

ii) *Process for Project Evaluation and Selection* – communicating to investors the environmental sustainability objectives of eligible green projects, the process by which the issuer determines how the projects fit within the eligible green project categories, and complementary information on process by which the issuer identifies and manages perceived social and environmental risk associated with the relevant projects.

[19] Convention of Biodiversity.

[20] Determined Contributions or NDC's are non-binding climate goals under the Paris Agreement. NDCs are the efforts by each country to cut emissions and adapt to the impacts of climate change.

[21] National Determined Contribution.

[22] Law No.2169 of 2021.

[23] Policies under the Economic and Social Council (CONPES).

[24] Green, Social, Sustainable bonds and Sustainability linked bonds are collectively known as ESG labelled bonds.

[25] https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/green-bond-principles-gbp/

iii) *Management of Proceeds* – The proceeds of a green bond should be credited to a sub-account and managed carefully to ensure transparency and the management of the proceeds be supplemented by the use of an external auditor to verify the issuer's internal tracking methods.

iv) *Reporting* – issuers should make and keep readily available up-to-date information on the use of proceeds to be renewed annually until full allocation, and on a timely basis in case of material development.

Following the successful launch of Colombia's Green Bond, Colchester has continued to work with the Emerging Markets Investors Alliance (EMIA)[26] to engage with Colombia's Ministry of Finance. Writing to the Director of Public Credit and National Treasury, we focused on aiming to enhance Colombia's Green Bond Framework and, at the time, its unfinalised Sustainable Bond Framework[27] by recommending the MHCP adopt the EMIA's enhanced Labelled Bond Principles. This principle offers more specific and granular guidance for Emerging Market labelled bond issuance and is designed to complement existing standards. Moreover, they will both strengthen the current labelled bond market and narrow the scope for green and social washing in future issuance.

Going further than market-based standards we highlight below several key aspects of the EMIA Enhanced Labelled Principal as follows:

i) Enhances transparency under the Process for Project Evaluation and Selection which, for sovereign issuers, requires independent oversight of the process by a Multilateral Development Bank or International Financial Institution.

ii) Increased accountability of external verifiers on the use of proceeds, such that should an independent verifier find in their annual review any funds have been spent on items different from those specified in the legal documentation provided at issuance, they should make it public, and the issuer should be required to immediately replenish these funds in the ring-fenced pool from its general budget.

iii) Issuers must report any findings from the external verifier regarding a failure to spend proceeds on specified uses throughout the life of the bond to all ESG data providers and scoring agencies for a reassessment of implications regarding the issuer's general ESG status/ratings.

The enhanced transparency, increased accountability of the external verifiers, and strengthened stewardship on the part of the issuer, and de-labelling consequences, should enable investors to better assess the green and social eligibility of the projects and make more informed investment decisions as well as improve environmental, social, and governance – or ESG – outcomes.

[26] Emerging Markets Investors Alliance (EMIA) is a non-profit organisation that enables institutional emerging investors to support good governance, promote sustainable development, and improve investment performance in the governments and companies in which they invest.

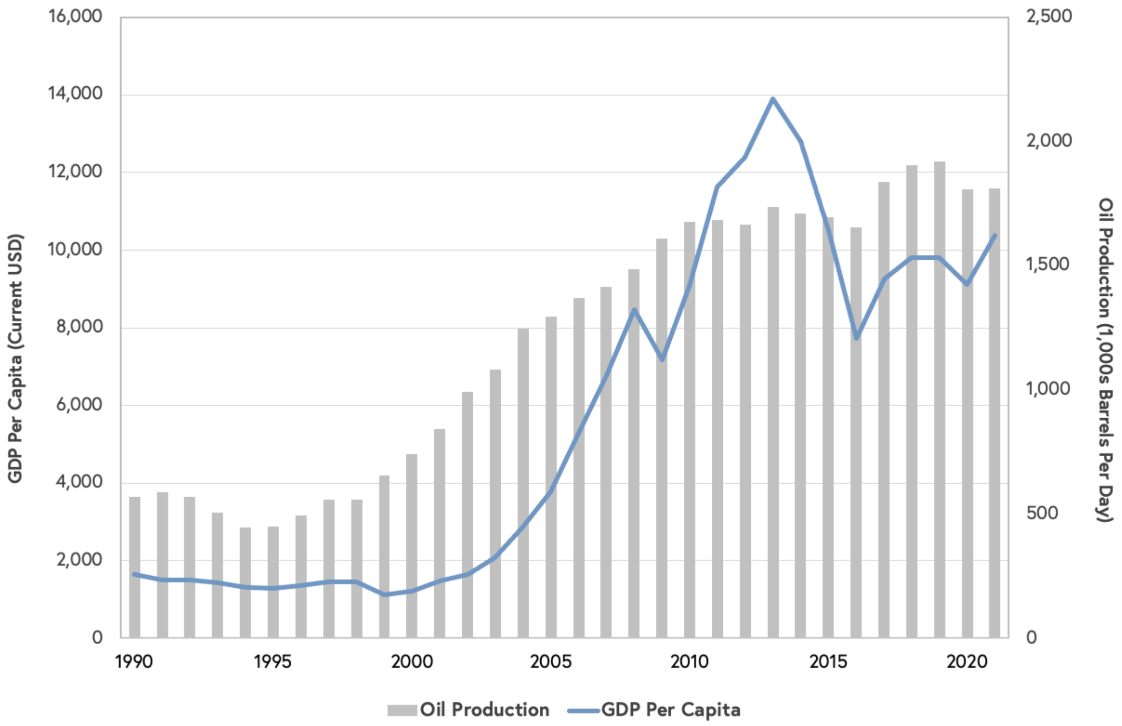
[27] The framework governing the issuance of bonds that intentionally mix eligible Green and Social projects.

Frontier Markets Strategy Engagements

Kazakhstan

Kazakhstan broke away from the Soviet Union in 1990 and was a relatively poor country, but with the discovery of large oil reserves in the Caspian Sea in 2000, the country saw a pick-up in oil production and a corresponding rise in wealth. Chart 5 shows GDP per capita against oil production since the country became independent. Over the period, the GDP per capita rose from around USD1,650 to a current level of over USD10,000.

Chart 5: Kazakhstan: GDP Per Capita and Oil Production

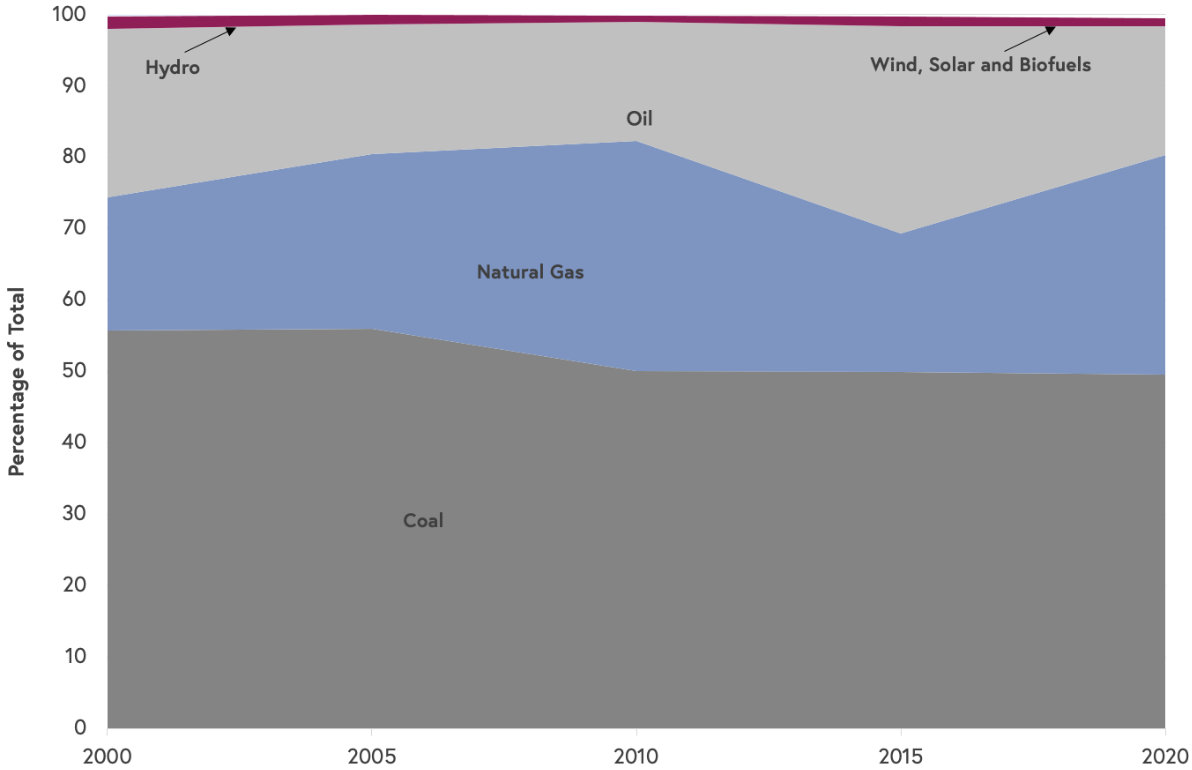


Source: World Bank, BP Statistics Review of World Energy, 2021.

The rise in wealth was not solely due to oil production as Kazakhstan is also rich in other resources. It has the tenth largest coal reserves in the world, the fifteenth largest gas reserves, the twelfth largest oil reserves, and is the world's largest uranium supplier[28]. Unfortunately, Kazakhstan never developed nuclear power and instead has relied heavily on the abundant resources of coal, especially for electricity production. This can be seen in Chart 6 which shows the total energy supply by source over time, with coal making up around 50% of the total.

[28] BP Statistical review of world Energy 2020, World Nuclear Association – data July 2022.

Chart 6: Total Energy Use By Source in Kazakhstan

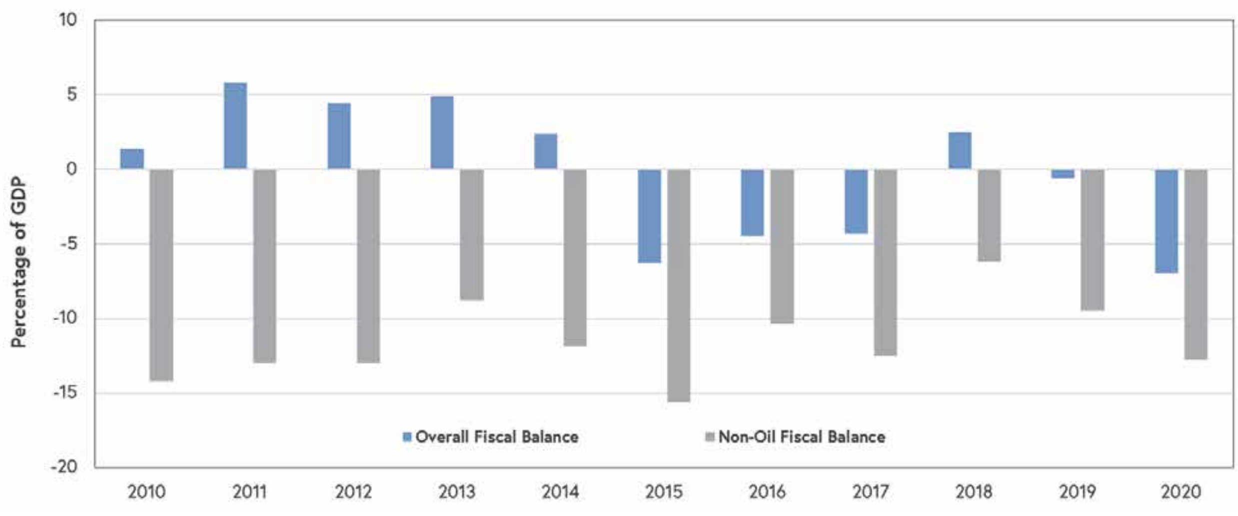


Source: EIA, 2020.

Kazakhstan's economic prosperity is dependent upon the production and export of fossil fuel. For example, oil and gas account for 60% of total exports and is more than a third of government revenues[29]. Highlighting the importance of fossil fuels, Chart 7 shows the government's fiscal balances between 2010 and 2020. During periods of high oil prices such as 2010-2013, the government generated a regular budget surplus. Conversely, when oil prices fell during 2015-2017 and 2020, the government generated an overall fiscal deficit. However, if the oil sector is excluded, the budget balance consistently runs a non-oil fiscal deficit. Government revenues also face the long-term risk of a projected decline in global demand as the world transitions away from fossil fuel, whilst in the short-term the Russian-Ukraine conflict brings the risk of disruption to oil export routes that pass through Russia.

[29] World Bank Group – Climate and Development Report 2022.

Chart 7: Kazakhstan Fiscal Balance: 2010 - 2020



Source: IMF, 2020

Despite the reliance on fossil fuel, Kazakhstan has ambitious plans to decarbonise its economy. The country is a signatory to the Paris Agreement and, in its Nationally Determined Contribution, has pledged to reduce emissions by 15%-25% below the 1990 level by 2030. The country has also committed to carbon neutrality by 2060. Given these targets, it is critical that Kazakhstan balances the climate and developments goals whilst maximising returns from the energy sector.

There are reasons for optimism. Even without any commitment to green energy production, the country will have to invest to upgrade its ageing energy infrastructure. In 2020 there were 248 unscheduled outages in the electricity networks of the Kazakhstan Electricity Grid. Therefore, coal generators should be retired as they reach the end of their economic life, shifting towards an increase in the use of natural gas as a transitional and less carbon intensive fuel. Reducing carbon emissions can help Kazakhstan diversify its fossil fuel dependent economy and open new drivers of economic growth[30]. The country has vast steppes that have globally competitive wind and solar resources which can produce energy in scale to support the economy as well as a significant source of export. The production of cleaner energy should then enable Kazakhstan to transition towards a lower carbon economy. To achieve this, Kazakhstan will need strong political will and a strong governance framework to support its energy transition. Therefore, on a recent research trip to the country, we conducted several engagements to understand its path to a more sustainable future.

At a meeting with representatives from the European Bank for Reconstruction and Development (EBRD), we learned that they offered their expertise to Kazakhstan officials from the Ministry of Finance and the Ministry of Energy to help the process of auctioning wind power generation projects to international companies. They also partnered with the World Bank to help draft environmental regulations. Our meeting with the World Bank confirmed their collaboration with the government and pointed to additional green projects. One of these initiatives related to tariff reforms for utilities such as energy, water and sewage. Historically, tariff charges have been inadequate to support new or existing infrastructure investments, however we understand that the World Bank is working on a new pricing mechanism. The aim is to ensure future investments in energy efficient infrastructure and improve profitability while providing protection to households and businesses affected by these changes.

[30] World Banks's Country Climate Development Report, November 2022.

On social developments, the World Bank also shared with us work on a monthly survey called "Listening to Kazakhstan" – initially put in place to monitor the COVID-19 impact in 2020. The survey focuses on wellbeing and public opinion regarding the government's reform agenda such as support for the poor and includes interviews of 2000 people across Kazakhstan. The results between October 2020 and August 2022 highlighted the poverty status in the country. More than 40% of respondents said they were living in poverty at least once and, in the latest data of that survey, around a quarter classified themselves as poor. However, two thirds of respondents remained optimistic about the country's long-term economic prospects and believed that government reforms remain on track. Moreover, the survey is a platform for important feedback to the government on their implementation of reforms and public support for that agenda – the results of the which were made publicly available in early 2022. This demonstrates the government's improvement in a key dimension of governance – Voice and Accountability[31].

As well as meeting with international agencies, we also met with representatives from the Agency for Regulation and Development of Financial Markets (AFR) – a regulatory authority for the financial sector[32], and Halyk Bank, the largest bank in the country. Since the Global Financial Crisis of 2008 (GFC), Kazakhstan's banks have been plagued by bad debts and poor asset quality. However, over the last couple of years AFR has developed a market-based framework which has helped unlock distressed assets from the balance sheets of the domestic banks. To facilitate this, a law was passed in July 2022 to expand the list of market participants in the distressed asset market, including non-residents. The "clean up" of the banking sector has also resulted in the number of banks in the country to fall from 48 pre-GFC to just 22 today. In our discussions with the Deputy CEO of Halyk Bank, he told us how the healthier banking sector was helping the bank fund projects such as solar and wind farms in the country. Without a strong and healthy financial system, funding of private sector green projects would otherwise be more "difficult and expensive."

Diversification away from the fossil fuels represents a significant challenge for Kazakhstan. The fossil fuel industry is both a large employer in the country and has a considerable degree of political influence. We believe that Kazakhstan will require a significant amount of support from foreign agencies to ensure greater private sector participation and will need the financial sector to play a greater role to fund sustainable clean energy projects. We have seen some steps to improve governance in Kazakhstan, as evident from our engagements, but we hope to see more going forward.

[31] One of the six Worldwide Governance Indicators (www.govindicators.org) compiled by the World Bank.

[32] There are three financial regulators in Kazakhstan: Agency for Regulation and Development of Financial Markets (AFR), National Bank of Kazakhstan (NBK) and Astana Financial Services Authority (AFSA).

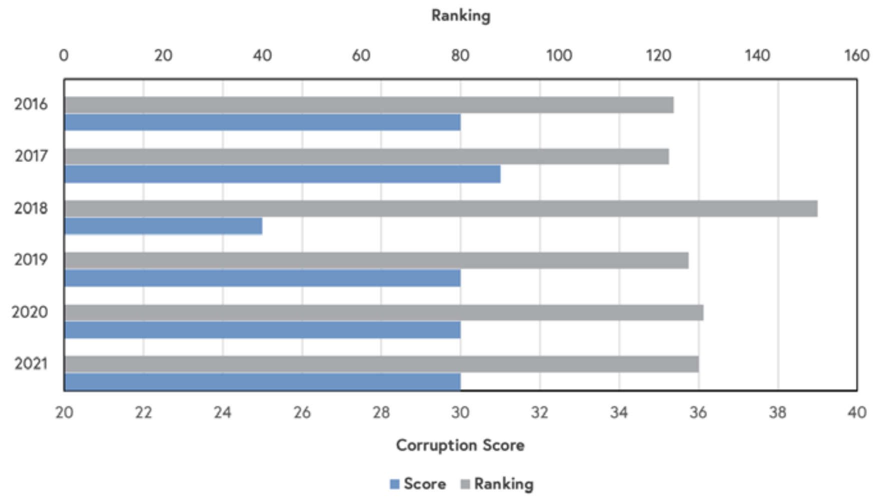
Azerbaijan

Azerbaijan is an ex-Soviet republic with a population of just over 10 million people[33]. The country regained independence from the Soviet Union in 1991 and since then has been run almost exclusively by one family. President Heydar Aliyev was in power from 1993 to 2003 when following his death, his successor as president, was his son Ilham Aliyev who remains in power today. The country's vice president is his wife Mehriban Aliyev. Analysing economic drivers, the oil industry was the foundation of Azerbaijan's wealth for well over a century and the government adopted a new oil and gas strategy[34] after independence aimed at boosting the economy. This resulted in the inflow of foreign investments, improved infrastructure and increased production and transportation to Europe. The oil and gas sector accounts for 90% of exports and close to 60% of the government's budget[35].

The Natural Resource Governance Institute (NRGI) Index[36] is a measure of the quality of governance in resource-producing countries such as Azerbaijan. In 2021, Azerbaijan scored 56 points out of 100, up 9 points since 2017. While scoring roughly in line with Kazakhstan[37] and higher than the average score of 39.7 for African countries[38], Azerbaijan's score is still considered "weak". We conducted a number of engagements with officials from Azerbaijan's government institutions, international agencies and banks to learn whether recent reforms have improved governance in the country.

In our engagements with senior bankers, we asked if they felt that the level of corruption was improving in the country. We were told that significant measures in banking regulations have reduced corruption. To gather more information, we looked at a measure of the risk of corruption in a country by using the Transparency International's Corruption Perceptions Index[39]. In 2021, Azerbaijan was ranked 128th out of the 180 countries surveyed. This ranks the country alongside places like Laos and the Dominican Republic, but slightly ahead of Angola and Liberia. Moreover, Azerbaijan's score has not changed in the 5 years to 2021 and although the relative ranking fluctuated somewhat due to a lower score in 2018 (Chart 8), this suggests that the level of perceived corruption did not improve.

Chart 8: Corruption Perception Index: Azerbaijan 2016 - 2021



Source: Transparency International, 2021

[33] Source: World Bank 2021.

[34] State Oil Company of the Republic of Azerbaijan (SOCAR) and a BP-led consortium of international energy companies (organised as the Azerbaijan International Operating Company – AIOC) signed a 30-year (1994-2024) production sharing agreement (PSA) called the Contract of the Century to develop the supergiant Azeri-Chirag-Gunashli (ACG) block. In September 2017, the PSA was extended to the end of 2049. In 1996, the government signed a further PSA for developing the Shah Deniz gas field with another BP-led consortium (including SOCAR and five other companies).

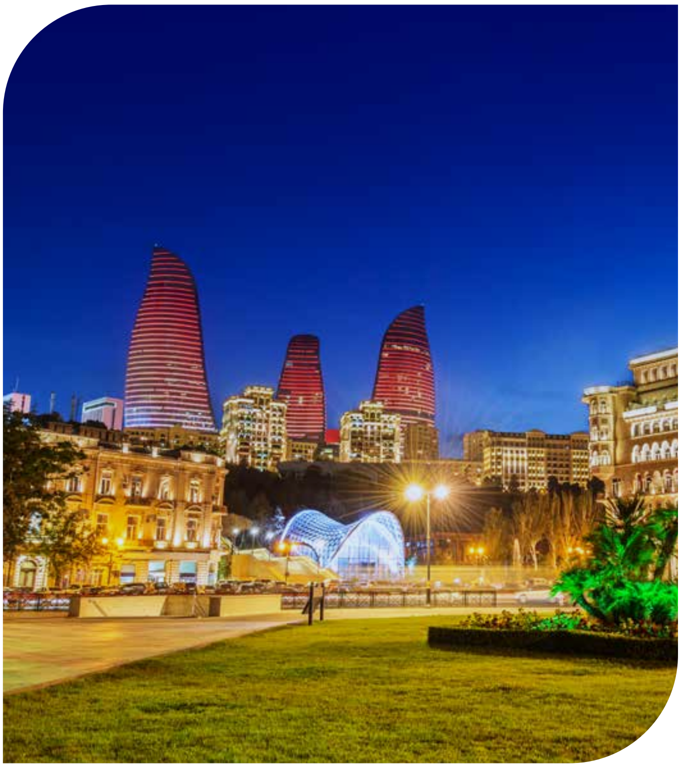
[35] IEA Energy Policy Review 2021.

[36] Natural Resource Governance Institute Index measures the quality of extractive sector governance in resource-producing countries around the world. Scores above 74 Good, 60-74 Satisfactory, 45- 59 Weak, 30-44 Poor and a score less than 30 Failing.

[37] Kazakhstan (Oil and Gas) RGI Score was 57 in 2017.

[38] Average Africa Country (Oil and Gas) RGI Score in 2017.

[39] The Corruption Perception Index reported by Transparency International ranks 180 countries by their perceived levels of public sector corruption, according to experts and business. A maximum score of 100 represents the least perception to corruption and the higher the ranking the lower the perceived risk of corruption.



We also had discussions on public sector reforms with representatives from Azerbaijan Investment Holdings (AIH) – a state owned company established in August 2020 to help improve governance and profitability in State Owned Enterprises (SOEs). One of the issues in Azerbaijan is the lack of competition given the dominance of large SOEs. Collaborations with international development agencies such as the World Bank have allowed AIH to gain expertise in managing, analysing and transforming SOEs. According to AIH, 12 SOEs have been transferred to the AIH's management which includes the State Oil Company of the Republic of Azerbaijan (SOCAR), the main oil and gas company in the country. To reform SOEs, AIH aims to attract private sector investment, possibly through Initial Public Offerings.

In our meeting with the State Oil Fund of the Republic of Azerbaijan (SOFAZ) – the country's sovereign wealth fund[40], we asked about the policy framework regarding drawdowns and transfers from SOFAZ to finance government budgets. The government has adopted a package of public finance management (PFM) reforms in 2018, including a limit to the quantity of funds transferred from SOFAZ to the government budget based on fiscal rules. SOFAZ transfers to government budgets averaged 83% between 2005 -2021[41]. This increased to almost 100% during the twin shock of the COVID-19 pandemic and the decline in oil prices. This resulted in the suspension of the fiscal rules in 2020, but was later reinstated in early 2022. However, Azerbaijan would benefit from a stronger fiscal framework – supported by policies to decrease dependency on oil revenues through stimulating development of non-oil sectors to mitigate depletion of SOFAZ assets.

In respect to the country's transition to a lower carbon economy, Azerbaijan has pledged to increase the share of renewables sources in electricity production to 30% by 2030, reduce greenhouse gas emissions by 40% by 2050 and create a zero-emission zone in the liberated territories[42]. However, we learned from our various engagements that despite the awareness of these climate targets and commitments there needs to be a greater focus on developing climate plans and policies.

We believe Azerbaijan requires strengthening governance across many dimensions as indicated from the measures of the Natural Resource Governance Index and the Corruption Perception Index. Conducting consultation with international development agencies to introduce reforms in the SOE sector is one positive step, however Azerbaijan should also take note of the recommendations put forward by the NRGI[43] to improve oil and gas governance. These recommendations include that SOFAZ should progress on disclosures in its management of the Sovereign Wealth Fund and be used as a benchmark for other Azerbaijani government institutions. Similarly, SOCAR should publish information on its commodity sales, ensuring disclosure of sales volumes and values, and identities of the buyers of oil. On the environmental front, The Ministry of Ecology and Natural Resources in Azerbaijan should pass laws mandating public disclosure of environmental impact assessments and introduce stricter rules and monitoring systems to ensure a holistic approach to mitigating the environmental risks of the extractive sector.

[40] The sovereign wealth fund for Azerbaijan accumulates and preserves the nation's oil and gas revenues for the future generation. Its main objectives are the preservation of macroeconomic stability in the country, decreasing dependence on hydrocarbons, ensuring intergenerational equality and financing major social and infrastructure projects that benefit the society and support socio-economic progress.

[41] Asian Development Bank.

[42] Conference of the Parties (COP26), 2021, share of renewables for electricity production is 5.4% sourced from Our World in Data 2021.

[43] Resource Governance Index Report (Azerbaijan), 2021.

Industry Collaboration

In the second half of the year Colchester continued to widen the scope of collaboration with industry partners to share and encourage best practices in ESG integration. As a member of EMIA, we worked together to engage with Moody's Investors Services (Moody's) on the transparency and quality of government accounts. More specifically, budget transparency can be informed by the "Open Budget Index" (OBI), a framework developed by EMIA's policy partner the International Budget partnership. The OBI ranks countries on fiscal transparency, a critical dimension of sovereign governance that ensures management of public finances, a critical pillar of sovereign creditworthiness. In November 2022, Moody's updated their sovereign rating methodology to include budget transparency. From Moody's Proposed Update of its Sovereign Ratings Methodology[44]:

"Our primarily qualitative assessment [of transparency and quality of government accounts] is also informed by various indices assessing transparency of fiscal reporting (for example, the Open Budget Index and certain dimensions of the World Bank's Country Policy and Institutional Assessment) as well as the IMF assessment on the adequacy of data for surveillance."

In another example of collaborative work with industry partners, we participated in the round table discussion organised by the World Bank Treasury's Sustainable Finance Advisory and ESG Advisory Services[45] on financing climate actions and climate related information. This was an opportunity to bring together debt management and budget officials from 32 countries to engage with investors specifically on the value of climate budget tagging – a practice aimed at identifying, measuring, and monitoring climate relevant expenditure. It promotes transparency and accountability of the use of proceeds, allowing sovereign debt investors to better assess how a country is funding its climate-related commitments across their whole budget and to incorporate climate considerations in their investments. Whilst still an evolving practice, at least 18 countries and one regional government have implemented budget tagging[46]. An example country is Indonesia whose climate budget tagging methodology was integrated with the national planning and budgeting cycle. This was monitored and results were published annually in a climate expenditure report. Indonesia's budget tagging also facilitated issuance of green, social and sustainable bonds.

[44] https://www.moodys.com/research/Moodys-updates-its-methodology-for-rating-sovereigns--PBC_1347357

[45] The World Bank Sustainable Finance and ESG Advisory Services team facilitates the development of green, blue and social bond markets in emerging markets through pre- and post-issuance technical assistance for issuers.

[46] https://openknowledge.worldbank.org/handle/10986/35174

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