Uzbekhydroenergo JSC

Corporates | Utilities - Non US | Uzbekistan | ESG Entity Rating

ESG Rating Type	ESG Rating[a]	Score	Analysis Type
Entity	2	65	Full Entity
Instrument	Not Applicable	Not Applicable	Not Applicable
Framework	Not Applicable	Not Applicable	Not Applicable

[a] ESG Rating of 1-5, where 1 is the strongest. Date ESG Rating and score assigned: 24 November 2023.
Note: For Framework, analysis types can be green, social, sustainability, sustainability-linked, conventional, or other.

Credentials

Transition	ICMA	EU Green Bond Standard
N/A	N/A	N/A

See Key Terms appendix for definitions of Transition, ICMA and other details.

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The Entity – Highlights

Uzbekhydroenergo JSC is the state-owned and monopoly producer of hydropower electricity in Uzbekistan, headquartered in the capital city, Tashkent. It operates businesses across electricity generation; construction, operation and maintenance of power plants; and production of specialised equipment for hydropower plants.

The company is wholly owned by the Ministry of Economy and Finance of the Republic of Uzbekistan, and produces more than 99% of the country's hydroelectricity, which is responsible for around 8% of the country's overall electricity generation. As of 1 December 2023, it operates 2,230MW of capacity from 15 hydropower clusters, consisting of 54 hydropower plants and one wind power plant, in seven regions across Uzbekistan.

The company implemented the development strategy 2030 aimed at adding around 2,900MW of additional installed capacity, which is projected to yield 9,200GWh of annual electricity production.

Uzbekhydroenergo is in the process of developing a strategy for systematic goal setting related to key ESG issues pertinent to its business. This ongoing commitment to refining its sustainability strategy includes the scope of decarbonisation targets that are yet to be established. The company stated it plans to develop a separate climate strategy as soon as possible. Sustainable Fitch would view commitment to net-zero emissions and established steps towards its achievement as aligned with business best practices.

We perceive Uzbekhydroenergo's core business of hydropower generation as environmentally advantageous, given its role in climate change mitigation and the energy transition in Uzbekistan towards less carbon-intensive sources.

The environmental profile of Uzbekhydroenergo exhibits an average performance, with comprehensive environmental policies addressing water, biodiversity, waste management and energy consumption. It produces ample disclosure of various environmental indicators, but the profile is negatively affected by insufficient coverage of Scope 3 emissions in the GHG inventory, an absence of long-term and short-term climate targets, and an absence of improving trends in emissions reduction and energy consumption.

Our assessment of the company's social profile is average. The company shows a notable gender disparity throughout its workforce and senior management, though its occupational safety metrics and the company-wide gender pay gap demonstrated an average level of performance. We somewhat positively view its contribution to the community and lack of record of significant social incidents.

Uzbekhydroenergo's governance profile shows an average performance, characterised by the low level of gender diversity on the supervisory and management boards, and a lack of

The Entity – Highlights

independence within the boards' composition. The indicative data to assess the pay fairness of the company demonstrated a relatively good level of pay equity, although it is constrained by the absence of actual CEO pay ratio disclosure. We view its system-wide risk management structure and internal audit function as sufficient, while recent cyber attacks limited its governance profile.

Uzbekhydroenergo's sustainability management system considers controlling and monitoring strategies and goals, and is under the responsibility of the management board. It plans to integrate ESG-related risks into its overall corporate risk management system in the coming year.

The company's materiality analysis on ESG topics identified 15 key areas, with land and biodiversity conservation, and emissions being particularly relevant in comparison to its peers. The company also intends to align its climate risk assessments with international standards starting from 2024.

Uzbekhydroenergo stated that its sustainability reporting has been prepared in accordance with the standards of the Global Reporting Initiative. This international guideline-based approach benefits stakeholders by bolstering the reliability and comparability of the data, while ensuring comprehensive coverage of various sustainability aspects.

The company aligns its strategic objectives with nine priority UN Sustainable Development Goals (SDGs), providing clear insight into how its operations contribute to each goal and outlining its achievements in these areas.

SDGs 7 (affordable and clean energy), 9 (industry, innovation and infrastructure), and 11 (sustainable cities and communities) appear most pertinent to Uzbekhydroenergo's activities, as the company's renewable power generation, infrastructure modernisation, and support for water supply in agriculture all provide environmental benefits and increase resilience against water-related disasters.

Source: Sustainable Fitch, Uzbekhydroenergo sustainability report 2022, other documents from the company's website

Entity Analysis

Broader Perspective on Sector

Sector Trajectory	Fitch's View
Short Term	• The energy sector is under pressure to decarbonise its operations and assets to support the transition to net-zero emissions. Companies with non-renewable assets face regulatory and financial risks, and will need to discontinue such operations or find strategies to decarbonise assets that lack alignment with climate targets and regulations. • This sector is facing increasing urgency to decarbonise assets and generate more energy from renewable sources. This is likely to result in higher potential for investments in renewable energy companies. Generation of energy from non-renewable sources in any capacity will continue to be penalised by regulators, investors and governments, due to a lack of alignment with global climate ambitions. • We therefore expect a strategy with short-, medium- and long-term targets for full decarbonisation and net-zero alignment in this sector at a minimum. The use of non-renewable fuels will be necessary in some instances, but it should have a clear justification and include a path to reducing dependence in the medium and long term. • Decarbonisation of the energy sector is a core pillar for the transition to a net-zero economy and the achievement of the goals of the Paris Agreement. Phasing out fossil fuel usage is one of the top priorities of the energy sector's decarbonisation, as fossil fuel has served as the primary energy source to date. • Under the net-zero emissions scenario of the International Energy Agency (IEA), global electricity generation from unabated coal is projected to phase-out from current size of 16,750TWh, which accounted for 36% of the total in 2021, to 12% by 2030 and a complete phase-out by 2040. To support this initiative, 48 countries have joined the Powering Past Coal Alliance, and have committed to the transition from unabated coal-based power generation to using clean energy. • The expansion of renewable energy capacity will act as a primary driver of the pathway to achieving net zero. The European Green Deal and the US Inflation Reduction Act are some of the examples of government policies that will accelerate the capacity addition of renewable energy. The International Renewable Energy Agency emphasises that around 975GW of renewable energy capacity must be added annually by 2030 to be aligned with the 1.5°C pathway. • Central Asian nations, such as Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan, are collaboratively addressing climate challenges via the water-energy nexus. 81% of the region's population resides within the Aral Sea basin, so water scarcity is a significant climate issue.

Broader Perspective on Sector

Sector Trajectory	Fitch's View
	• In February 2023, Kazakhstan, the Kyrgyz Republic, and Uzbekistan initiated a joint venture to construct a 1,860MW hydropower plant on the Naryn River for sustainable power generation and water supply. Furthermore, a regional knowledge and technical assistance partnership, the Central Asia Water and Energy Programme, is in operation to achieve regional energy and water security.
Long Term	• Companies should demonstrate increasing expenditure in innovative energy generation methods, such as hydrogen and biofuels, as well as increased efficiency through improvements in energy generation, for example, through larger capacity wind turbines. We expect electricity generation from fossil fuels to decline while generation from renewable sources will increase, due to decreases in the cost of electricity production from renewable sources and due to government regulation for transition into a net-zero emissions future. • Transitioning to the use of only renewable forms of energy is an integral part of meeting the Paris Agreement goals, in particular to limit the global temperature rise to 2°C above pre-industrialisation levels with a more ambitious target of 1.5°C. This means an increasing use of solar, wind and hydropower energy sources to generate cleaner energy. • Meeting the increased demand for electricity needed to displace fossil fuel use in industry, the heating of buildings, transport, etc. will be a significant challenge on the path to realising a low-carbon economy. The IEA reports that, in order to achieve net-zero emissions by 2050, global energy demand will need to be contained by increased energy efficiency. • Furthermore, by 2050, electricity will need to move from provisioning 20% of global energy demand to provisioning 52%. This is a 2.6x increase in global electricity generation from 28,300TWh to 73,200TWh. Renewables will need to provide 88% of this total, which is an 8x increase compared to current output. • To meet this demand for renewable electricity generation, capacity will need to increase and infrastructure will need to be upgraded. Transmission and distribution infrastructure will need to be built in order to bring more renewable capacity online. Balancing and energy storage solutions will be needed to address the challenges associated with the intermittence of renewable technology. A significant deployment of energy efficiency technology will also be required.

Source: Sustainable Fitch

Entity Analysis

Broader Perspective on Company

Company Direction	Fitch's View
Short Term	• As a monopoly hydropower plant operator in Uzbekistan, Uzbekhydroenergo plays a crucial role in the country's economic development plan of "the development strategy of new Uzbekistan for 2022–2026". This plan aims to ramp up the new generation projects from renewables, with an aim for 25% of electricity to be generated from renewables by 2030 compared to 10.2% in 2019. • Hydropower is practically the sole renewable energy source within the country's current generation mix; the country's capacity expansion plan includes 3.8GW of hydro energy, 5GW of solar energy and up to 3GW of wind energy in the deployment of up to 30GW of capacity addition by 2030. The company's plan for increasing installed capacity to 5GW from the current level of 2.1GW, and increasing electricity generation from 6,500GWh to 15,200GWh, both by 2030, mirrors this national-level capacity expansion plan. • The company's diversification strategy, encompassing pumped storage and small hydropower plants, offers social benefits by enhancing electrical supply stability and promoting equality. Small hydropower plants, adaptable to local needs, are particularly beneficial for remote, low-energy demand areas, thereby empowering marginalised communities, including women and young people. • Incorporating Scope 3 emissions into Uzbekhydroenergo's reporting framework is material for enhancing the precision and perimeter of its disclosed GHG inventory. Scope 3 emissions significantly affect the life-cycle emissions of hydropower facilities, with the construction phase accounting for 50% to 70% of total emissions according to the Net Zero Climate Resilient Hydropower Initiative's guidelines. Presently, Uzbekhydroenergo only reports on Scopes 1 and 2 emissions but is working towards including Scope 3 emissions across its operations. • Supplementing the information on the company's emissions profile with reporting on GHG emissions intensity could provide a useful context to assess its current performance and future trajectory. This is particularly significant as the company plans to modernise its assets with new technologies that will ultimately enhance their efficiency and output, and improve plants' flexibility for ancillary services. Its absolute emissions may increase, but efficiency improvements should reduce emissions intensity. Therefore, disclosing both indicators would offer stakeholders a more comprehensive understanding of the company's emissions profile.
Long Term	• Further refinement of the company's climate strategy and emission reduction goals, covering both the short and long run, is crucial given its significant role in attaining Uzbekistan's nationally determined contribution (NDC) of a 35% reduction in emissions per GDP unit from 2010 levels by 2030. The NDC encompasses four GHGs: CO2, methane, nitrous oxide, and hydrofluorocarbons; and covers five sectors, including energy. • As the government revises its green economy transition strategy to extend to 2050, reflecting its NDC, it is beneficial for Uzbekhydroenergo to establish a concrete strategy. Currently, the company's climate-related target only covers capacity expansion until 2030. A robust strategy could enhance the efficient deployment of renewable energy technologies by channelling funds towards renewable energy. • Given Uzbekhydroenergo's exclusive use of renewable power, reporting avoided emissions is pertinent for its long-term operations in light of Uzbekistan's anticipated energy transition towards a carbon-neutral electricity sector by 2050. Despite the country's current 85% dependency on fossil gas and absence of a phase-out plan, this metric could underscore the company's impact on capacity addition upon completion of the country's decarbonisation roadmap. • Given the increasing water scarcity concerns, it is pertinent for Uzbekhydroenergo to integrate climate change adaptation into its strategy, considering the long-term physical risk it presents. According to the World Bank, economic damage from droughts and floods in central Asia is projected to be up to 1.3% of GDP a year if no action is taken. Consequently, the company's proactive efforts to enhance water security and bolster climate resilience are deemed necessary in the long run. • Addressing the significant gender imbalance in the company's organisational structure would be a long-term ESG priority. Its gender diversity lags behind renewable energy industry averages, with the International Renewable Energy Agency's research showing 16% female representation, higher than the company's current figures. The lack of female representation underscores the need for initiatives such as gender targets, quotas, and enhanced training opportunities, which could improve the company's ESG profile.

Source: Sustainable Fitch

Entity Analysis

Business Activities

Company Material Core Contributions	Fitch's View	
	Environmental	Social
Hydropower plants construction and generation		
ESG Rating 2		
• Uzbekhydroenergo predominantly operates hydropower plants; its activity includes design and construction of large, medium and small hydropower plants, and investment projects for the construction of new plants and modernisation of existing plants. Represents 100% of revenue.	• Uzbekhydroenergo is present across the hydropower value chain, covering the design, construction, maintenance and operation of hydropower plants in Uzbekistan. We assessed the construction and power generation activities as a single segment given that these activities are vertically integrated within the company's business structure. • Uzbekhydroenergo's business primarily being hydropower generation benefits its ESG profile, as renewable energy sources contribute to climate change mitigation and support decarbonisation of the energy sector. • Hydropower is a greener generation source than conventional fossil fuel sources as it has fewer life-cycle emissions, which are mostly emitted during its construction. However, it can also result in adverse environmental impacts, primarily through waste generation and disruption to biodiversity. • As of December 2023, Uzbekhydroenergo's power portfolio mainly comprises hydropower, with a total installed capacity of 2,230MW, alongside a wind power capacity of 0.75MW. The company reported 6,480GWh of power generation in 2022, supplied exclusively to JSC National Electric Grid of Uzbekistan. • Major taxonomies, such as the EU taxonomy, recognise power generation from renewable energy sources, including hydropower, to be overall positive from a climate change mitigation perspective. Uzbekhydroenergo is not subjected to the EU taxonomy, though we consider compliance with a science-based threshold positive when assessing a company's contribution to climate change mitigation. • Under the EU taxonomy, hydropower generation is an eligible activity that is subject to meeting one of the following thresholds to be aligned with the technical screening criteria (TSC): the facility is a run-of-river plant without an artificial reservoir, the power density of the plant is above 5W/sqm, or the life-cycle GHG emissions are lower than 100gCO2e/kWh. • We confirmed that as of 1 December 2023, 46% of Uzbekhydroenergo's total installed power generation capacity aligns with the EU taxonomy's TSC for hydropower, either by meeting the power density threshold or being run-of-river plants without an artificial reservoir. These plants are exempt from life-cycle emissions assessment as they do not exceed 100gCO2e/kWh, underscoring their substantial contribution to climate change mitigation.	• The production of energy is essential for societies and it is relevant to SDG 7; however, energy demand can be met by multiple energy types and providers on the market, making it a widely available and substitutable service. The SDGs indicate energy supply is beneficial if it is particularly targeted at the least developed countries, small island developing states or landlocked developing countries. • Our view is that the generation of electricity is generally not considered to contribute to any specific SDGs when it is provided to a well-supplied and interconnected market. • The IEA's analysis of access to electricity across the world indicates 100% of the population of Uzbekistan has access to electricity. • In the SDGs, the goal of energy provision also focuses on the reliability of the supply, which allows the public to have stable access to energy. Electricity generation from hydropower generation is not an intermittent source of electricity and consequently can provide reliable output, especially when it incorporates pump storage and is located away from drought-prone areas. • It is also beneficial from the perspective of human health impact, as it does not carry the same associated negative impacts to human health that arise from the air pollution caused by the use of fossil fuels. • Uzbekhydroenergo has a plan to construct an 800MW capacity of pumped storage hydropower plants, in line with its capacity development strategy for 2030. This added capacity could further benefit the population by improving stability in electricity provision. Additionally, expanding the reliable base load of clean energy would allow the displacement of more polluting technologies. • The company's hydropower plant's operations contribute to SDG 11, as it operates four hydropower stations with agricultural irrigation, which enables farming in dry seasons, thus increasing crop yields and supporting food security.

Entity Analysis

Business Activities

Company Material Core Contributions		Fitch's View	
		Environmental	Social
Hydropower plants construction and generation			
ESG Rating	**2**		
		• The remaining 54% are deemed non-compliant with the EU taxonomy's TSC, due to exceeding the power density thresholds or by failing to align with the EU taxonomy's required GHG emissions accounting methodology.	
Source: Uzbekhydroenergo consolidated financial statement 2022, Uzbekhydroenergo sustainability report 2022		Source: Sustainable Fitch, based on Uzbekhydroenergo consolidated financial statement 2022, Uzbekhydroenergo sustainability report 2022	

Entity Analysis

Environmental View

ESG Rating: 3

Profile	Fitch's View	ESG Rating
Policies	• Uzbekhydroenergo's department of environmental protection and cadastral service is responsible for all environmental aspects related to its business operations, such as reducing wastewater consumption, minimising atmospheric pollution, optimising water body usage and improving waste disposal. • We positively view the company's comprehensive approach to environmental policy implementation, particularly its thorough assessment of project impacts at all stages to prevent substantial negative environmental effects through systematic planning. • The company has an established environmental management system, including compliance with national regulations for conducting environmental impact assessments. We consider its implementation of the requirements in ISO 14001:2015 within the company's environmental management to be positive from an ESG perspective. • The company's environmental compliance efforts, particularly in the area of land improvement, are also positively reflected in our assessment. This aspect is highly relevant to the company's hydropower generation activities, which can trigger specific environmental issues. These include altering land use and river flow patterns through the creation of artificial reservoirs that affect the local ecology. The company is involved in national-level biodiversity development programmes that are supported by the UN Development Programme and the Global Environment Facility.	1
Disclosure	• The company disclosed its GHG emissions and affirmed its adherence to the GHG Protocol Standard. Nevertheless, the inventory only encompasses Scope 1 and market-based Scope 2 emissions, without explicitly detailing the types of GHGs and the activities included within each Scope. In 2022, the company's Scope 1 emissions amounted to 958tCO2e, while its market-based Scope 2 emissions equalled 168tCO2e. • The overall disclosure section is affected by the lack of Scope 3 emissions disclosure, which is acutely relevant for hydropower producers, where Scope 3 emissions can account for up to 70% of the overall life-cycle emissions, according to the Net Zero Climate Resilient Hydropower Initiative. • It is relevant for Uzbekhydroenergo to include Scope 3 emissions into its GHG inventory, as utilities engaged in power plant construction are advised to account for the embodied carbon emissions related to the acquisition or construction of new power plants, which fall under category 2 (capital goods) of Scope 3 emissions. The company confirmed that the quantification of Scope 3 emissions is in progress for the next reporting year, 2023. • The company provides emissions data at an overall entity level rather than by individual business activity. Despite operating a vertically integrated business in hydropower generation, which is generally	4

Environmental View

ESG Rating: 3

Profile	Fitch's View	ESG Rating
	regarded as having small life-cycle emissions, a significant portion of its emissions comes from transportation during construction. Therefore, it would be advantageous to have emissions data specific to each business activity. • Uzbekhydroenergo's environmental data disclosure is granular and includes various aspects such as water and energy consumption, and waste generation. The disclosure of numerous environmental metrics has enhanced our assessment, enabling stakeholders to gain a clearer understanding of the company's environmental impact. • The company notes that its fossil fuel consumption is solely for road transportation. However, transportation plays a substantial role in the construction of hydropower plants, a major source of emissions for this type of power generation. Therefore, it is pertinent for the company to work towards reducing emissions from vehicles. • Data on waste generation is available and categorised by disposal methods. The company's waste disposal implies a negative environmental impact, as only a minor portion of 4% of its total waste is recycled and 96% is disposed to landfill sites mainly designed for solid waste. Improvement in waste disposal using more preferred measures under the waste hierarchy would be relevant for the company. The company additionally disclosed that 96% of its total generated waste is from categories with low hazardousness.	
Evolution	• We observed an overall increase of 7% in the past three years' emissions trend. Despite a reduction of 9% in 2021 compared to 2020, there was a substantial surge of 18% in 2022 compared to 2021, which ultimately resulted in a net increase. Given that Scope 2 emissions constitute a small fraction of emissions compared to Scope 1, the overall emissions trend is primarily influenced by the changes within the Scope 1 boundary. • Uzbekhydroenergo's emissions trajectory, while on the rise, is indicative of a larger share of hydropower in the country's energy mix. This is shown by the increase in the company's annual production to 6,480GWh in 2022 from 5,010GWh in 2021, which supports the country's shift towards more sustainable energy sources. The company confirmed that the significant increase in overall Scopes 1 and 2 emissions is due to the increased installed capacity, which led to the additional consumption of fuels in its operations. • The company's aggregate energy consumption, comprising diesel, gasoline, and natural gas consumption, showed a surge in 2022 following a slight decrease in 2021. • There was a modest year-on-year reduction in 2021 compared to 2020, of between 5% and 12% depending on source, but we negatively viewed the significant rebound in 2022, with increases varying from 10% to 43% across the fossil fuel sources. However, the	4

Entity Analysis

Environmental View

ESG Rating: 3

Profile	Fitch's View	ESG Rating
	company attributes this growth in fuel consumption to the resumption of repair and construction work at its facilities. • Its electricity consumption demonstrated a decremental trend since 2020, with an overall 3% decrease during the period. The company confirmed that most of its electricity consumption is from its own generation, which is from renewable sources. • We also observe contrasting trends in waste generation, water usage, and air pollutants between 2020 and 2022, where waste production has risen by 36%, but air pollutants decreased by 3% and domestic water consumption decreased by 16%. • Despite these differing resource trends, we draw attention to the available information concerning the company's compensation payments for environmental damage resulting from air emissions, wastewater discharges, and waste disposal. We infer a degradation in its natural resources consumption, given the substantial increase in compensation payment, rising from UZS67 million in 2021 to UZS117 million in 2022.	
Targets and Supply Chain	• The company has not established specific emissions reduction targets, but it does have a goal to expand its installed generation capacity to 5,000MW by 2030. We consider this target to be equally significant, given the company's exclusive engagement with hydropower generation. Such capacity expansion aligns with the country's broader energy transition objectives. • As of 2022, Uzbekhydroenergo possessed a total installed capacity of 2,070MW from its hydroelectric power plants. The company reported that it met and also exceeded its electricity generation target from hydropower by 1.17 billion kWh as of 1 January 2023. • The company also sets yearly intermediate targets leading up to the 2030 capacity goal. Having multiple targets is advantageous as they enable more effective tracking of progress. • Uzbekhydroenergo does not yet have a company-wide emissions reduction target, though the company plans to develop an emissions reduction strategy in 2024, and we anticipate a comprehensive plan to be introduced soon. Setting targets and their achievement strategy in line with widely accepted frameworks, such as the Science Based Targets initiative, could be beneficial from a credibility perspective. • The company has mentioned that it has short-term (monthly and quarterly) and long-term (annual) plans approved by the supervisory board to enhance its environmental performance. The company confirmed that the targets approved by the supervisory board encompasses tree planting, pollutant emissions into the atmosphere and increasing energy production. However, the company does not yet link these targets with the management's remuneration.	3

Environmental View

ESG Rating: 3

Profile	Fitch's View	ESG Rating
	• The company verified that its environmental policy extends to its affiliates, including companies engaged in joint activities and contractual work, notably suppliers. We would view the implementation of binding environmental targets for its suppliers more favourably, considering the greater additionality that can be derived from such measures. • The company confirmed to us that its GHG inventory is based on the GHG Protocol. It would be beneficial for the company to openly disclose the methodology used for GHG emissions reporting in its sustainability report, as this would enhance stakeholders' understanding of its emissions.	
Risks and Incident Treatment	• Uzbekhydroenergo appears to not have had any environmental incidents over the past three years, reflecting positively on its management and monitoring of environmental risks. However, voluntary disclosure of any environmental incidents would still be valuable, considering the potential impact of hydropower plants on biodiversity and ecosystems.	1

Source: Sustainable Fitch, based on Uzbekhydroenergo sustainability report 2022, other documents from the company's website

Entity Analysis

Social View

ESG Rating: 3

Profile	Fitch's View	ESG Rating
Human Rights	• Uzbekhydroenergo has a human rights statement, where it has committed to follow relevant international standards including the Universal Declaration of Human Rights and the UN Global Compact on human rights, labour, anti-corruption and environmental protection. However, the company is not a signatory to the UN Global Compact, meaning that while it has pledged to follow these principles, it has not formally committed to the UN Global Compact's 10 principles and its framework for businesses.	1
Labour Rights	• Uzbekhydroenergo's human rights statement incorporates international guidelines, but its human capital management approach is guided by national regulations, such as the labour code of Uzbekistan. • The company has a legally binding collective agreement that dictates various facets of employment terms, including work conditions, compensation, benefits and rights. As of 2022, the company reported that the agreement covers 100% of its employees. • Additionally, a trade union committee is included within the company's organisational structure. In 2022, the committee's inspection reported no violations of workers' rights to freedom of association. This shows the company's commitment to upholding its employees' rights and ensuring fair working conditions. • The company manages occupational health and safety risks through its integrated management system, which aligns with the ISO 45001:2018 standard. The company identified 11 risk factors related to occupational health and safety, and developed mitigation strategies for each. • The company reported two serious injuries and three fatal incidents from 2020 to 2022; all three fatal incidents were in 2020 and 2021, indicating the status of fatal incidents improved in 2022 with no fatal incidents. Its disclosure on safety-related incidents is granular as the data is further provided at the level of injury type. • The company's employee turnover rate was 10.7% in 2022, which is an average level of performance in terms of work environment. It also confirmed that all employees were voluntarily dismissed. However, it would be beneficial if the company included information regarding the nature of this turnover, such as whether it includes both voluntary and involuntary departures, in its reporting document. This added detail could offer a more comprehensive view of employee satisfaction and the overall work environment at Uzbekhydroenergo.	3
Diversity	• Uzbekhydroenergo's workforce is significantly imbalanced in terms of gender, with women constituting 13.6% of all employees. This is in line with the industry average, as the energy sector workforce consists of 84.6% men, leaving 15.4% as women, according to research by the IEA in 2019.	4

Social View

ESG Rating: 3

Profile	Fitch's View	ESG Rating
	• However, when compared to the national context, this figure presents a better gender diversity profile, as the average female representation in Uzbekistan's construction industry was reported to be 6.2% in 2019, according to the country's national statistical service. Nonetheless, even though the company's gender representation is better than the national average and aligns with industry standards, there is still a considerable gender disparity. This suggests that there may be room for improvement in promoting diversity and inclusion within the company. • Gender diversity at the senior management level exhibits further imbalance, with a female representation of 6%. • Nonetheless, Uzbekhydroenergo has undertaken initiatives to address gender diversity within its workforce, acknowledging the broader challenge of entrenched gender imbalances in Uzbekistan. The World Bank reports the nation exhibits a pronounced gender disparity, with female labour force participation trailing that of men by 28pp, accompanied by a substantial gender wage gap relative to neighbouring states. In response, the company formed a gender equality advisory council and launched several targeted programmes, in line with the national objective to attain gender equality by 2030. • Uzbekhydroenergo's organisational diversity disclosure encompasses ethnic diversity, with 17 ethnicities represented across various job roles. However, to provide a more granular and comprehensive view of its diversity landscape, the inclusion of additional factors such as disability in its disclosure would be advantageous. • The company provided us with the remuneration of its employees, indicating a 20% gap in the average annual salary between genders. The company asserts compliance with the national-level convention on equal remuneration for men and women for work of equal value.	
Community and Customers	• The company primarily engages with its local community through charitable contributions and sponsorships. It has increased its social impact, reporting social investments totalling UZS111 billion (USD9.9 million) in local communities, around double the amount invested in the previous year. This demonstrates a commitment to community support and development. • Its community involvement in terms of empowering education through training and development of human resources is also notable. The company supported scholarship programmes, including undergraduate and graduate tracks, which partially contributed to the subsequent employment of scholarship recipients.	2
Targets and Supply Chain	• Uzbekhydroenergo has implemented various social initiatives, predominantly aimed at promoting gender equality, but the absence of quantitative targets is noticeable. Establishing specific, measurable goals linked to these initiatives, and ideally linking them to the	3

Entity Analysis

Social View

ESG Rating: 3

Profile	Fitch's View	ESG Rating
	management's remuneration, could enhance the effectiveness of these initiatives. • Promoting social values including human and labour rights, and gender diversity is remotely referenced at the supply chain level, mainly through the codes applicable to the procurement procedures. • The company indicated its plan to develop an ESG procurement strategy that is aligned with its sustainability goals and to set specific procurement-related ESG goals, such as on supplier diversity and ethical sourcing, during 2023.	
Risks and Incident Treatment	• On 1 May 2020, the dam collapse near Sardoba, Uzbekistan, resulted in six fatalities and the hospitalisation of 56 people. Uzbekhydroenergo's ownership of the dam was transferred from the government in 2021 following a government decree, which is after the occurrence of the incident. Uzbekhydroenergo informed us that the purpose of transferring the dam's ownership was to reinforce oversight and prevent similar issues going forward. • Uzbekhydroenergo is further implementing safety measures in the facility and on the process of digitalising the Sardoba Reservoir branch. It aims to fully automate the plant's control system in 2024.	1

Source: Sustainable Fitch, based on Uzbekhydroenergo sustainability report 2022, other documents from the company's website

Entity Analysis

Governance View

ESG Rating: 3

Profile	Fitch's View	ESG Rating
Financials and Reporting	• Uzbekhydroenergo's financial statements are prepared according to IFRS and audited by PwC. There have been no issues with the financial reporting of the company between 2020 and 2022.	1
Top Management and Control	• The company operates under a two-tier board system, comprising a management board and a supervisory board. As of 2022, the total number of board members is 11, with six supervisory board members and five management board members. • However, we observed a noticeable lack of gender diversity in the board composition. There are no female members on either the supervisory or management boards, and all members are nationals of Uzbekistan. Further disclosure on other diversity factors, such as disability and ethnicity, could enhance the comprehensiveness and inclusivity of the company's board representation. • Uzbekhydroenergo's boards lack independent members, which negatively affects our assessment due to the potential compromise on governance objectivity and accountability. • The company's charter indicates the involvement of four independent members on the supervisory board, but this commitment is not factually observed in the current board composition. The company reported that, as of 2022, there are six supervisory board members and one vacant position for an independent member. Having a majority of independent board members is material for maintaining transparency in corporate governance and would align the company with market best practice. • The company has adopted the segregation of duty by splitting the roles of the CEO and chair of the board. We view the separation of the roles as positive as it improves the governance structure by reinforcing checks and balances. The company also confirmed that it does not have employee representatives on the boards. • Its supervisory board is supported by four committees: audit, strategy and investment, nominations and remuneration, and anti-corruption and ethics. • Uzbekhydroenergo's audit committee, under the supervisory board, is responsible for overseeing internal audit services, risk management and internal control. However, as of 2022, the two standing members of this committee were not independent, leaving the quota for an independent member vacant. This lack of independence may raise concerns for the company's audit function, which is crucial for transparent corporate governance. • It is commendable that the company has made all audit findings and corporate assessments public on its website since 2017, indicating a functioning internal audit for over three years, though these reports are only available in Uzbek. Despite the concerns over independence,	4

Governance View

ESG Rating: 3

Profile	Fitch's View	ESG Rating
	this transparency demonstrates a level of commitment to better corporate governance practice.	
Remuneration	• The company stated that it adheres to the procedure for financial remuneration of members of management and supervisory bodies, which is national legislation for board member remuneration. However, granular information on its management remuneration structure is not publicly disclosed due to its internal policy regarding confidentiality. • While the detailed management remuneration structure was not disclosed, the company still has a governance system under the purview of the supervisory board. The board primarily determines its executive remuneration based on quarterly results and the company confirms respective key performance indicators are set for each individual management board member. The nomination and remuneration committee, a subset of the supervisory board, manages the management board's appointment, performance evaluation and compensation. • The company does not disclose the ratio of CEO pay against the median workforce salary. However, we referenced the remuneration of management executives as a proxy to assess the company's pay equity. The average remuneration of individual management board members seemed to be 13x higher than the average annual salary of employees. • The indicative data for assessing the company's pay fairness was available, but it is relevant for the company to disclose the remuneration of respective executives, as it stated each executive's remuneration is decided based on their achievement of relevant key performance indicators. This limited transparency could hinder investors' ability to assess the income equity of the company.	2
Risk Management	• Uzbekhydroenergo's corporate risk management is incorporated within its internal control system, as governed by the internal control system policy. It conducts risk assessments and identifies key risks such as corruption risk and risks in the field of occupational health and industrial safety. • Despite having a risk management function, more extensive risks would potentially need to be included in its assessment scope given that there are risks, such as legal and regulatory, and market risks, that the company is systemically exposed to. The company acknowledges the need for further development of a risk management policy and the integration of ESG risks to identify critical risks and implement a monitoring system. • The company confirmed that there were two cyber attacks in 2022; however, comprehensive information on the incidents was limited due to the company's security policy. It also stated that internal remedies	3

Entity Analysis

Governance View

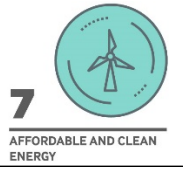
ESG Rating: 3

Profile	Fitch's View	ESG Rating
	were made in two reported cases relating to conflict of interest and corruption. • Its anti-corruption and ethics committee, operating under the supervisory board, implements a compliance and corporate governance system in line with legal mandates and global standards. This committee manages business ethics-related matters, including compliance, legal risks, and the monitoring of IT processes and security systems, encompassing cyber risks. • The company's code of ethics covers a broader scope of business ethics, such as conflicts of interest, fairness, honesty, impartiality, and industrial safety, labour, and environmental protection. The company's cybersecurity management policy is not publicly disclosed, though Uzbekhydroenergo confirmed that the policy outlines the roles and responsibilities for the implementation and enforcement of cybersecurity measures.	
Tax Management	• Over the past three years, Uzbekhydroenergo has had no recorded tax management fines or breaches. • It operates exclusively within Uzbekistan, and the company has committed to adhering to all local tax laws. It has implemented a tax accounting policy and offers comprehensive disclosure of tax elements and calculation methodologies.	1

Source: Sustainable Fitch, based on Uzbekhydroenergo sustainability report 2022, other documents from the company's website

Entity Analysis

Relevant UN Sustainable Development Goals – Entity

7.1:	By 2030, ensure universal access to affordable, reliable and modern energy services	
7.2:	By 2030, increase substantially the share of renewable energy in the global energy mix	
9.1:	Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all	
11.5:	By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations	

Source: Sustainable Fitch, UN

Note: Sustainable Fitch evaluates the relevant UN Sustainable Development Goals at the entity level by considering direct contributions, not generic support.

Appendix A: Key Terms

Term	Definition
Debt types	
Green	Proceeds will be used for green projects and/or environmental-related activities as identified in the instrument documents. The instrument may be aligned with ICMA Green Bond Principles or other principles, guidelines or taxonomies.
Social	Proceeds will be used for social projects and/or social-related activities as identified in the instrument documents. The instrument may be aligned with ICMA Social Bond Principles or other principles, guidelines or taxonomies.
Sustainability	Proceeds will be used for a mix of green and social projects and/or environmental and social-related activities as identified in the instrument documents. The instrument may be aligned with ICMA Sustainability Bond Guidelines or other principles, guidelines, taxonomies.
Sustainability-linked	Financial and/or structural features are linked to the achievement of pre-defined sustainability objectives. Such features may be aligned with ICMA Sustainability Bond Guidelines or other principles, guidelines or taxonomies. The instrument is often referred to as an SLB (sustainability-linked bond) or SLL (sustainability-linked loan).
Conventional	Proceeds are not destined for any green, social or sustainability project or activity, and the financial or structural features are not linked to any sustainability objective.
Other	Any other type of financing instrument or a combination of the above instruments.

Term	Definition
Standards	
Transition	A term applied to green, social, sustainable or sustainability-linked instruments, only when the purpose of the debt instrument is to enable the issuer to achieve a climate change-related strategy according to Fitch criteria or methodology.
ICMA	International Capital Market Association. The “ICMA” credential on page 1 refers to alignment with ICMA’s Principles and Guidelines: a series of principles and guidelines for green, social, sustainability and sustainability-linked (or KPI-linked) instruments.
EU Green Bond Standard	A set of voluntary standards created by the EU to "enhance the effectiveness, transparency, accountability, comparability and credibility of the green bond market".
LSTA	Loan Syndications and Trading Association. We refer to alignment with LSTA’s Loan Principles: a series of principles and guidelines for green, social, sustainability and sustainability-linked (or KPI-linked) instruments.
Other terms	
ESG debt	Green, social, sustainability and sustainability-linked types of debt.
Short term	Within five years.
Long term	At least six years away.
Entity’s business activity overlap with use of proceeds	The share of the entity’s total business activities that can use proceeds from the debt instrument in question.
NACE	An industry standard classification system for economic activities in the EU, based on the United Nations’ International Standard Industrial Classification of All Economic Activities (ISIC).

Source: Sustainable Fitch, ICMA, UN, EU Technical Expert Group

Appendix B: Methodology and ESG Rating Definitions

Fitch's ESG Ratings are designed to indicate an entity's Environmental, Social and Governance (ESG) performance and commitment, as well as its integration of ESG considerations into its business, strategy and management, with a focus on actions and outcomes rather than purely on policies and broader commitments.

There are three ratings: the ESG Entity Rating (ESG ER), ESG Instrument Rating (ESG IR) and, for debt instruments linked to ESG key performance indicators (KPIs) and/or use of proceeds, the ESG Framework Rating (ESG FR). ESG Ratings are on a scale from one to five, where one represents full alignment with ESG best practice. Behind each rating sit scores of zero to 100, as well as sub-scores for even greater granularity.

Sustainable Fitch's analysts assess all the business activities of an entity and more than 40 additional headline factors, covering all three ESG pillars. For debt instruments, they assess use of proceeds and more than 20 additional headline factors.

Fitch provides individual datasets with grades and commentary through a feed**.** The score and sub-score database allows direct comparison of entities and instruments, on a full ESG basis or on selected fields.

ESG ERs consider the issuer's strategy, how it relates to sustainability, and how sustainability is embedded in the issuer's business, including ESG policies, procedures, and outcomes. The entity is broken down into constituent business units, with NACE codes, for a granular assessment of E and S factors. Fitch assesses G aspects at the company level.

ESG FRs consider any type of bond, with varying analysis if there is a defined use of proceeds, KPI-linked coupon, or conventional bond. The rating aims to identify the strength of the bond framework on a standalone basis, separate to the entity, regardless of any self-assigned descriptions. Fitch analysts categorise bonds as Green, Social or Sustainability (GSS) types independently, based on their view of the main area covered by the use of proceeds, rather than automatically using the entity's categorisation. They will also determine if the bond should be classed as a transition bond and if it aligns with the EU Green Bond Standard and ICMA principles. Analysis considerations include the use of proceeds and sustainability-linked targets that form the primary purpose of the instrument, and the structure and effectiveness of the framework being used to further that purpose.

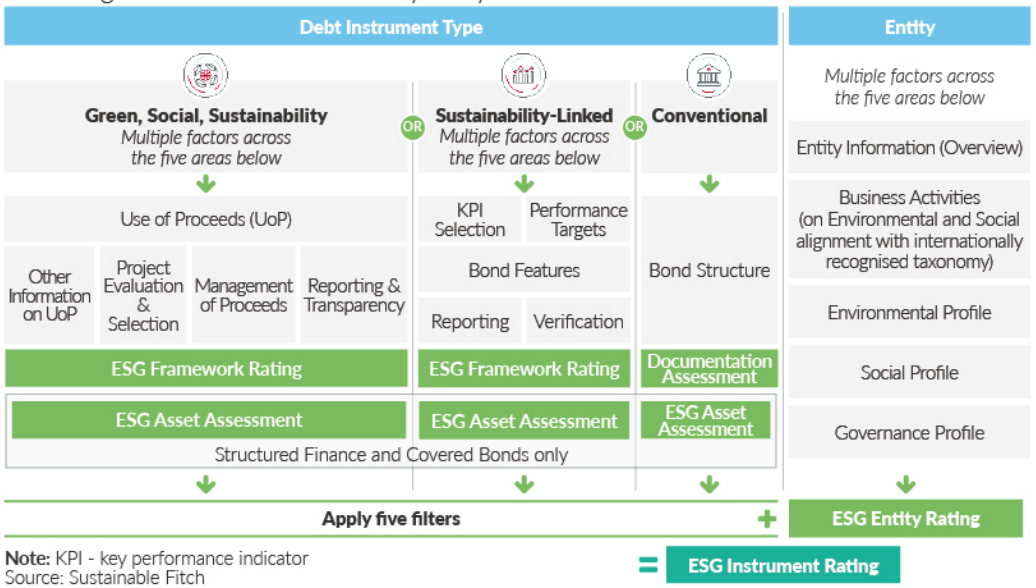
ESG IRs consider different types of debt instruments in the context of the issuing entity, enabling absolute ESG credentials comparisons for similar types of instruments issued by different types of entities, different types of instruments issued by different issuers, as well as different types of instruments issued by a single entity.

Analytical Process

Analysis considers all available relevant information (ESG and financial), including the entity's ESG report. Fitch's ESG Rating Reports transparently display the sources of information analysed for each section and provide a line-by-line commentary on the sub-factors analysed.

Fitch's ESG Rating Process

A visual guide to our debt and entity analysis



Note: KPI - key performance indicator
Source: Sustainable Fitch

An important part of the analysis is the assessment of the E and S aspects of the use of proceeds and business activities. In considering those aspects, the rating framework is inspired by major taxonomies (e.g. the EU taxonomy for E aspects, and the UN Sustainable Development Goals for S aspects). Once the analyst has completed the model, with commentary for the related ESG Ratings, it is submitted to the approval committee, which reviews the model for accuracy and consistency. ESG Ratings are monitored annually or more frequently if new information becomes available.

Use Cases

Sustainable Fitch's ESG Ratings can help inform decisions related to:

- Investment strategy
- Asset allocation and portfolio construction
- Benchmarking and index construction
- Risk management and stress testing
- Identification of transition bonds
- Disclosure and reporting.

Appendix B: Methodology and ESG Rating Definitions

Rating Scale and Definitions

	ESG Entity	ESG Instrument	ESG Framework
1	ESG ER of '1' indicates that the entity analysed evidences an excellent ESG profile.	ESG IR of '1' indicates that the debt instrument in the context of the ultimate issuing entity evidences an excellent ESG profile.	ESG FR of '1' indicates that the framework for the instrument evidences an excellent ESG profile.
	Entity is excellent both in terms of alignment of the activities with taxonomies of reference and integration of ESG considerations into the business, strategy and management.	Entity is excellent both in terms of alignment of the activities with taxonomies of reference and integration of ESG considerations into the business, strategy and management. Instrument is excellent in terms of framework structure and proceeds destination.	Framework structure is excellent in terms of alignment with ambitious best practises and proceeds are dedicated to excellent environmental and/or social activities/projects according to taxonomies of reference.
2	ESG ER of '2' indicates that the entity analysed evidences a good ESG profile.	ESG IR of '2' indicates that the debt instrument in the context of the ultimate issuing entity evidences a good ESG profile.	ESG FR of '2' indicates that the framework for the instrument evidences a good ESG profile.
	Entity is good both in terms of alignment of the activities with taxonomies of reference and integration of ESG considerations into the business, strategy and management.	Entity is good both in terms of alignment of the activities with taxonomies of reference and integration of ESG considerations into the business, strategy and management. Instrument is good in terms of framework structure and proceeds destination.	Framework structure is good in terms of alignment with ambitious best practises and proceeds are dedicated to good environmental and/or social activities/projects according to taxonomies of reference.
3	ESG ER of '3' indicates that the entity analysed evidences an average ESG profile.	ESG IR of '3' indicates that the debt instrument in the context of the ultimate issuing entity evidences an average ESG profile.	ESG FR of '3' indicates that the framework for the instrument evidences an average ESG profile.
	Entity is average both in terms of alignment of the activities with taxonomies of reference and integration of ESG considerations into the business, strategy and management.	Entity is average both in terms of alignment of the activities with taxonomies of reference and integration of ESG considerations into the business, strategy and management. Instrument is average in terms of framework structure and proceeds destination.	Framework structure is average in terms of alignment with ambitious best practises and proceeds are dedicated to average environmental and/or social activities/projects according to taxonomies of reference.
4	ESG ER of '4' indicates that the entity analysed evidences a sub-average ESG profile.	ESG IR of '4' indicates that the debt instrument in the context of the ultimate issuing entity evidences a sub-average ESG profile.	ESG FR of '4' indicates that the framework for the instrument evidences a sub-average ESG profile.
	Entity is sub-average both in terms of alignment of the activities with taxonomies of reference and integration of ESG considerations into the business, strategy and management.	Entity is sub-average both in terms of alignment of the activities with taxonomies of reference and integration of ESG considerations into the business, strategy and management. Instrument is sub-average in terms of framework structure and proceeds destination.	Framework structure is sub-average in terms of alignment with ambitious best practises and proceeds are dedicated to sub-average environmental and/or social activities/projects according to taxonomies of reference.
5	ESG ER of '5' indicates that the entity analysed evidences a poor ESG profile.	ESG IR of '5' indicates that the debt instrument in the context of the ultimate issuing entity evidences a poor ESG profile.	ESG FR of '5' indicates that the framework for the instrument evidences a poor ESG profile.
	Entity is poor both in terms of alignment of the activities with taxonomies of reference and integration of ESG considerations into the business, strategy and management.	Entity is poor both in terms of alignment of the activities with taxonomies of reference and integration of ESG considerations into the business, strategy and management. Instrument is poor in terms of framework structure and proceeds destination.	Framework structure is poor in terms of alignment with ambitious best practises and proceeds are dedicated to poor environmental and/or social activities/projects according to taxonomies of reference.

Source: Sustainable Fitch

Solicitation

Status	Solicited
The Ratings were solicited and assigned or maintained by Sustainable Fitch at the request of the rated entity.	

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