Sustainable Fitch

Glas Cymru Holdings Cyfyngedig

Corporates | Water/Wastewater Utility | United Kingdom

ESG Ratings

	ESG Rating[a]	Score	Analysis Type
Entity	2	76	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: 3 November 2022.
Note: For Framework, analysis types can be green, social, sustainability, sustainability-linked, conventional, or other.

Credentials

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

See Appendix A for definitions of Transition and ICMA; other details

Contact – Analytical

Victoria Munarriz
+44 20 3530 1419
victoria.munarriz@sustainablefitch.com

Contact – Media

Tahmina Pinnington-Mannan
+44 20 3530 1128
tahmina.pinnington-mannan@thefitchgroup.com

The Entity – Highlights

Glas Cymru Holdings Cyfyngedig (Glas Holdings) is a not-for-profit holdings company, and the ultimate parent of the group of companies established under a whole business securitisation structure that form the Glas group. Withing this group, Dwr Cymru Cyfyngedig (Welsh Water) supplies drinking water and wastewater services to over 3 million people across most of Wales and some parts of western England. The company is the sixth largest of the 10 regulated water and sewerage companies in England and Wales.

Glas Holdings is also the ultimate parent of the non-Glas group companies. This group undertakes commercial activities and include Welsh Water Holdings Limited, Welsh Water Infrastructure Limited, Cambrian Utilities Limited, Welsh Water Organic Energy Limited, Welsh Water Organic Energy (Cardiff) Limited and Welsh Water Organic Waste Limited.

Glas Holdings' sustainability strategy is comprehensive and demonstrates a clear focus on ESG aspects ranging from a net-zero emissions strategy for the short to long term, creating benefits for communities, providing financial assistance to customers, and developing a sustainable procurement policy for its supply chain, to ensuring fair employment practices and a transparent corporate governance.

Glas Holding's ESG strategy was approved in February 2022 and includes 10 key objectives established to focus on delivering the company's long-term strategy "Welsh Water 2050", including its 18 strategic action plans. Long-term planning and sustainability is at the core of its objectives.

The group has committed to reduce its total carbon footprint (covering operational and embedded carbon) by 90%, with a target of having total emission levels of around 30,000tCO2e to 35,000tCO2e by 2030, subject to funding through the regulatory review process. It has also committed to achieving net-zero carbon emissions for Scopes 1, 2 and 3 by 2040. Since the financial year to the end of March 2011 (FY11), the group has demonstrated good progress reducing its total carbon footprint (both operational and embedded) by 67% compared to an estimated baseline footprint of 335,000tCO2e.

In order to meet its overall 2030 carbon reduction target, Welsh Water aims to increase its energy self-sufficiency to 35% by 2025, and targets reaching 50% by 2030. The group continues to invest in renewable energy generation technologies and projects to reduce energy consumption in order to increase its energy self-sufficiency to 35% from its current level of 24%.

In June 2021, the board of directors formed the ESG committee, which is chaired by a non-executive director. The ESG committee is responsible for setting the ESG strategy, reviewing the group's performance against a set of ESG performance indicators, and monitoring the quality of the reporting around these areas.

The Entity – Highlights

In addition, the group worked with an external consultant during 1Q22 to produce its first climate risk assessment, in line with the recommendations made by the Task Force on Climate-Related Financial Disclosures (TCFD) in the four key areas of governance, strategy, risk management, and metrics and targets; this was overseen by the board's ESG committee.

During FY22, the board also approved an updated enterprise risk management (ERM) framework. In April 2022, the group appointed a chief risk officer whose responsibilities include overseeing the sustainability of the ERM framework, the effectiveness of the risk management, and the reporting.

The group is working towards achieving full compliance with the TCFD's 11 recommended disclosures, and an increased focus on climate change risks and opportunities is clearly prominent in the group's long-term planning and asset health review; and is also a priority for the ESG committee.

The group has produced a comprehensive range of ESG disclosure reports and policy statements, including its Journey to Net Zero, Wellbeing Commitments 2020, Making time for Nature 2020, and other technical reports such as a drainage and wastewater management plan, a water resources management plan, and the 2020–2025 business plan for the current regulatory period.

Best practice would be for the group to publish a dedicated sustainability and impact report annually, in line with international market standards such as those of the TCFD, the Sustainability Accounting Standards Board or the Global Reporting Initiative. This would be positive for the group's ESG profile and also strengthen the group’s sustainability reporting.

In March 2022, the board committed to support the Ten Principles of the UN Global Compact on human rights, labour, environment, and anti-corruption, and to report annually on progress in these areas. In Sustainable Fitch's view, mapping its contribution to the UN Sustainable Development Goals (SDGs) would enhance comparability with industry peers, and enhance the group’s sustainability reporting and ESG profile.

Source: Sustainable Fitch, Glas Holdings annual report 2022, TCFD report 2022, other reports from the company's website

Entity Analysis

Broader Perspective on Sector

Sector Trajectory	Fitch's View
Short Term	• The water and sewerage industries are essential components of the overall utilities sector. Supplying clean, safe drinking water to consumers around the world is an essential activity that caters for the most basic of physical needs. Sewage collection, treatment, disposal and recycling are essential activities that are relied on to maintain basic sanitation, and to generate minimal damage from the disposal of sewage waste. • Companies operating in these sectors should be meeting the EU directives for environmental impact and biodiversity standards, as well as any more specific national standards. • The average energy consumption of the front-to-end water supply system should be improving, and the leakage of the water supply network decreasing. EU taxonomy thresholds should be the short-term targets at minimum. • Within sewage treatment, emphasis should be placed on doing no significant harm from wastewater treatment emissions to water, sewer overflow and sludge treatment, and minimising detrimental impact to ecosystems. • Combined storm overlows (CSOs) are a feature of combined sewer systems, where sewage and storm water are carried in one sewer to a centralised waste water treatment plant. CSOs are only legal when specific conditions are met (e.g. persistent rain), and must be reported. However, they also sometimes occur due to blockages and operational issues. • Ofwat launched an investigation into CSOs in November 2021 to establish whether companies are complying with their statutory and licence obligations, following reports of widespread, unpermitted releases of sewage into the environment by water and wastewater companies. In addition, Ofwat reports that "new information, and analysis by the UK Environment Agency (EA), suggests that water and wastewater companies may have released sewage into rivers and waterways when they were not legally allowed to do so". The UK EA is now investigating potential breaches of environmental law. The results of this investigation will be actively considered within the analysis once they are known, with scoring being assessed based upon severity.
Long Term	• In the long term, companies in this sector should have ambitious targets that go well beyond the EU taxonomy thresholds, and strive for zero negative environmental incidents, as well as to continually increase efficiency of systems.

Broader Perspective on Sector

Sector Trajectory	Fitch's View
	• These targets could also be used to help facilitate improvements in less developed societies, where the treatment of water and sewage is significantly less advanced. • Beyond this, progress should be made on improving the diversity of the workforce, as waste and wastewater is a white male-dominated sector at both the employee and the management level. • In addition to companies in this sector proactively managing the reduction of CSOs, focus should be maintained on transparency for investors and other stakeholders when overflows and spills occur. This is due to the irrefutable increase in public interest and concern on the matter. • Affordability is also an important issue that is included in the strategic priorities and objectives that the UK and Welsh Government have set for the regulators, and which Ofwat sees as a key challenge for the next price control review, PR24. The regulator, and the water companies, will have to balance the need to keep customer bills affordable with that of delivering bigger and better environmental and social outputs through carefully measured investment plans that will need to incorporate a great level of efficiency and innovation.

Source: Sustainable Fitch

Entity Analysis

Broader Perspective on Company

Company Direction	Fitch's View
Short Term	• The group should continue to focus on the most pressing sustainability issues of carbon intensity, water leakages and sewage spills; so far, there is good evidence to show improvements and more stretching targets across these areas. • Welsh Water was rated 3-stars in the environmental performance assessment (EPA) metrics published by the UK EA and Natural Resources Wales (NRW) for 2021, having achieved 4-stars in 2020 for the first time. The company was downgraded from industry-leading status to good-company status due to a notable deterioration in its pollution incidents' performance during the year. • This is an area where the company needs to improve performance going forward through additional investment, and through improved practices and engagement with the Welsh Government to encourage a better control of plastics entering into sewers, which is one of the principal causes of blockages and subsequent pollution incidents. If the company fails to control the entry of rainwater and plastic into sewers, it will not be able to deliver zero significant-pollution incidents. • River water quality is an area of focus in the short term for the group, and one of its priorities is to help other sectors, such as agriculture, with expertise and practical support to tackle pollution. The group has committed to investing GBP833 million to improve its wastewater assets, particularly CSOs on sensitive rivers, over the five years from 2020 to 2025. • The group is also making progress delivering on its innovation strategy which was set up in 2019. The implementation of new technological advances and innovative initiatives to improve work practices – such as catchment solutions, nutrient trading, biodiversity projects and digital customer services – should result in greater ability to achieve the regulatory service outputs, the creation of efficiencies and the reduction in the use of resources and carbon emissions, as well as help the group to deliver its 2050 vision. • In 2020, the group launched its Wellbeing Commitments, which are aligned to the seven well-being goals identified in the Welsh Government's Wellbeing of Future Generations (Wales) Act 2015. These commitments set out measurable targets for 2025 and beyond. They include areas such as a customer support and satisfaction; leakage reduction; increasing access and well-being across the areas where it operates; social tariffs and mobility; removing lead pipes; reducing GHG emissions; and tackling the global water challenge. • Going forward, the group intends to incorporate the Wellbeing Commitments, within the targets it measures under the 10 principles of the ESG strategy approved by the ESG committee in February 2022, and to report consistently on performance against this combined set of objectives.
Long Term	• The Welsh Government and Ofwat have indicated that for the next five-year regulatory price control (PR24) starting in April 2025, a specific process will be applied in Wales to support Welsh Water's planning. This will enable the priorities for customers and the environment in its supply area to be the main considerations of the regulatory review process. • The group is working on defining the scope of its PR24 objectives as well as the first draft of its 2025–2030 investment plan, and it has confirmed that environmental improvement, climate change adaptation, and carbon reduction are a prominent part of the initial high-level proposals. • The company is expected to submit its draft business plan for AMP8 (the eighth asset management period) in the autumn of 2023, following extensive consultation with its customers and other stakeholders during 2022. • The group has set out its long-term strategy in the "Welsh Water 2050" and "Welsh Water 2050 Review and Update" publications, which cover key challenges and opportunities faced by the business and how it plans to confront them.

Source: Sustainable Fitch

Entity Analysis

Business Activities

Company Material Core Contributions	Fitch's View: Environmental	Fitch's View: Social
Water Collection, Treatment and Supply		
ESG Rating 2		
• Welsh Water provides water services to 3 million people around most parts of Wales, Herefordshire and parts of Deeside. It supplies 828 million litres of water every day through 26,500km of water mains, and maintains 92 reservoirs. Represents 46.48% of revenue.	• The provision of water and wastewater services and management of water resources is important to improve public health, protect the ecosystem and maintain the security of supply. • Providing water is an eligible activity under the EU taxonomy; however, the company does not appear to provide sufficient information for us to ascertain whether it complies with either of the two thresholds: a high degree of energy efficiency or using the infrastructure leakage index rating method to show the threshold value is below 1.5. • Compliance with the high energy efficiency threshold requires either an average energy consumption of less than 0.5kWh/m3 of billed or unbilled authorised water supply, when related to the construction, extension and operation of water collection, treatment and supply systems; or for the average energy consumption to decrease by at least 20% when it relates to the renewal of the systems. • Hydropower is subject to a threshold under the taxonomy, which considers facilities with life-cycle emissions lower than 100gCO2e/kWh, declining to 0gCO2e/kWh by 2050, to be eligible. Hydropower activities may also cause additional negative environmental impacts, such as water pollution, generation of waste, and impacts on biodiversity, where the taxonomy requires mitigating measures to be taken for it to remain taxonomy aligned.	• The collection, treatment and supply of clean water has an inherent social benefit to the general population, as it is an essential service. • In our view, the provision of these services contributes to ensuring high-quality drinking water, the security of the water supply and the effective management of water resources; all of which contribute to the health of the population and to SDG 6 (clean water and sanitation), SDG 9 (industry, innovation and infrastructure) and SDG 15 (life on land).
Wastewater Collection, Treatment and Recycling		
ESG Rating 2		
• Welsh Water provides sewerage services over 30,000km of sewers and manages 800 wastewater treatment works. • The group also owns 70 operational renewable energy assets for renewable energy generation. In FY21, the group self-generated around 24% of its energy needs through a portfolio of assets comprising 45% hydro, 45% combined heat and power (CHP), 5% wind and 5% solar. Represents 52.36% of revenue.	• The provision of wastewater, and the renewal of wastewater collection and treatment services, represent an essential environmental service for societies. Major taxonomies have identified wastewater infrastructure as a positive contributor to climate change mitigation, providing the assets can comply with energy consumption thresholds. • Reducing discharges from CSOs and phosphate discharges from wastewater treatment plants has become a priority for wastewater companies due to the significant negative environmental impacts that they cause. Welsh Water has outlined proposals to invest an extra GBP100 million before the end of 2025 in addition to the GBP836 million it has already budgeted in its business plan for 2020–2025. Another issue affecting wastewater companies is the number of serious pollution incidents, which in the case of Welsh Water has resulted in the company being downgraded	• Wastewater collection, treatment and recycling has an inherent social benefit for the general population, as it is an essential service. • The treatment of wastewater contributes to eliminating bacteria, viruses, nitrogen, phosphorus and other pollutants that can pose a risk to human health. We view the provision of this service as beneficial from a social viewpoint, with a direct contribution to SDG 6, SDG 7 (affordable and clean energy) and SDG 9.

Business Activities

Company Material Core Contributions	Fitch's View: Environmental	Fitch's View: Social
Wastewater Collection, Treatment and Recycling		
ESG Rating 2		
	from 4-stars to 3-stars under the 2021 EPA. • The score for the wastewater business activities also incorporates our assessment of the renewable energy generation from the assets owned by the group. Renewable generation from solar and wind are eligible activities under the EU taxonomy and are currently derogated from demonstrating alignment under any taxonomy threshold. • CHP generation fuelled by biogas derived from sewage facilities provides renewable energy generation from bioenergy, which is an eligible activity under the EU taxonomy if it generates an 80% reduction in carbon emissions compared to the substitute fossil fuel. Welsh Water's CHP assets are certified as 'Good Quality' under the UK government's CHP Quality Assurance programme, which is aligned with the EU taxonomy threshold of 80%. • Anaerobic digestion of sewage sludge is aligned if a monitoring and contingency plan is in place in order to minimise methane leakage at the facility, and the produced biogas is used directly for the generation of electricity or heat, upgraded to bio-methane for injection in the natural gas grid, or is used as vehicle fuel or as feedstock in chemical industry. The composting	

Business Activities

Company Material Core Contributions	Fitch's View: Environmental	Fitch's View: Social
Wastewater Collection, Treatment and Recycling		
ESG Rating 2		
	of separately collected bio-waste must meet requirements for emissions, leachate contamination and fertilising materials to be taxonomy compliant. • The company does not appear to disclose enough information on the majority of the activities mentioned above for us to assess its alignment with the EU taxonomy.	
Other Commercial Activities		
ESG Rating 2		
• Other commercial activities are limited and consist of organic energy and waste processing activities that are complementary to the company's core operations, and that sit outside of the group's regulated water and sewerage business. • Glas Holdings' subsidiary Welsh Water Holdings Limited is the intermediate holding company for Welsh Water Infrastructure Limited, Welsh Water Organic Energy Limited, Welsh Water Organic Energy (Cardiff) Limited and Welsh Water Organic Waste Limited. • Welsh Water Infrastructure Limited pursues commercial activities while Welsh Water Organic Energy Limited and Welsh Water Organic Energy (Cardiff) generate and supply electricity, through anaerobic food digestion and composting services from food waste, to the group's wastewater treatment plant in Cardiff.	• Anaerobic digestion of biowaste activities makes a positive contribution to the environment as it is a renewable source of energy and does not exploit natural resources, since it uses waste products to produce energy. It also produces by-products such as compost and fertiliser that are used in farms, and improves water quality through the removal of phosphorous and other metals that are found in waste products. Furthermore, this activity reduces the GHG emissions released by waste, as it gets treated instead of being sent to landfills. • Anaerobic digestion of bio-waste is EU taxonomy aligned depending on its methane leakage compliance and how the biogas it produces is used; while the composting of separately collected bio-waste must meet requirements for	• We consider generation of renewable energy to be neutral from a social perspective.

Sustainable Fitch

Entity Analysis

Business Activities

Company Material Core Contributions	Fitch's View: Environmental	Fitch's View: Social
Other Commercial Activities		
ESG Rating 2		
• The companies operate a contract to process all domestic food waste from the Cardiff and Vale of Glamorgan Councils over a 25-year period, while also recycling domestic green waste at the same site. • Welsh Water Organic Waste Limited provides waste disposal services for trade effluent customers. Represents 1.16% of revenue.	emissions, leachate contamination and fertilising materials to be taxonomy compliant. • In addition, electricity generation from bioenergy must achieve GHG emission savings of at least 80% compared to the relevant fossil fuel comparator. • The company does not appear to disclose enough information on all the activities mentioned above for us to assess its alignment with the EU taxonomy.	
Source: Glas Cymru Holdings Cyfyngedig annual report 2022, other reports published on the company's website	Source: Sustainable Fitch, based on Glas Cymru Holdings Cyfyngedig annual report 2022, other reports published on the company's website	

Environmental View

ESG Rating: 2

Profile	Fitch's View	ESG Rating
Policies	• Glas Holdings has policies and remediation plans for water use, land, biodiversity, waste and pollution; with the supply of high-quality water and wastewater services to customers at an affordable price being its top priority as water is at the core of the group's business model. • Environmental protection is embodied in the group's policies and wider strategy, and it is established through its environmental policy statement, the "Welsh Water 2050" vision document and the group's biodiversity plan "Making time for nature". • Additionally, the group's "Journey to Zero" plan includes six strategic principles, which include increasing self-generation, and sourcing remaining electricity from Welsh-based renewable generators; prioritising the use of sewage derived biogas to decarbonise heat and transport; and gradually replacing fleet with vehicles that use low-carbon fuels (e.g. hydrogen and biomethane) or electricity. • The remaining strategic principles include controlling and reducing the fugitive emissions from wastewater treatment processes by fully automating the control of all aeration plants; monitoring and reducing the carbon emissions associated with construction and refurbishment of its assets; and maximising the carbon sequestration and biodiversity potential of its land holdings. • The group has also published its second biodiversity plan, which includes plans to reduce its impact on rivers and facilitate investment in CSOs in areas where the company can improve water quality. The plan includes 30 commitments for improving biodiversity, which cover the areas of drinking water supplies, treatment of wastewater and management of surface water, education, climate change, looking after protected sites, working in partnerships and people. The group expects to publish an updated report in December 2022.	1
Disclosure	• Glas Holdings reports on its Scopes 1, 2 and 3 emissions, including granular disclosure by business activity. It also reports on emission reductions related to the renewable power it exports to the grid and the renewable energy it procures through the purchase of renewable energy guarantee of origin (REGO) backed electricity from its suppliers. Energy consumption, energy intensity and carbon intensity metrics are also disclosed by business activity. We find this level of disclosure to be comprehensive, and this is reflected positively in the group's ESG profile. • The company reports mandatory Scope 3 emissions related to business travel, fuel- and energy-related activities, waste generated in operations, outsourced activities, and transmission and distribution losses associated with electricity use; however, the carbon emissions related to purchased good and services, and downstream transportation and distribution of goods, are not included in the reported figures. It also reports on voluntary Scope 3 emissions, which are an estimate of the embedded carbon emissions associated with the capital investment programme.	2

Environmental View

ESG Rating: 2

Profile	Fitch's View	ESG Rating
	• The group monitors and measures its carbon footprint by using the UK water industry carbon accounting tool (the Carbon Accounting Workbook), which follows the 2013 UK Government Environmental Reporting Guidance and the GHG Protocol's Corporate Accounting and Reporting Standard (2015). The net carbon emissions (market-based) have been verified to ISO 14064 1:2018 and the Certified Emissions Measurement And Reduction Scheme (CEMARS). • The group also provides a comprehensive set of operational metrics and related commentary on progress and mitigation actions in its annual performance report. • The report is prepared in line with Ofwat's regulatory requirements, and includes metrics related to raw water transport, raw water storage, water treatment, treated water distribution mains analysis, communication pipes, metering and leakage activities, bioresources sludge, operating expenditure analysis, bioresources energy, liquors analysis, and sludge treatment and disposal data.	
Evolution	• For FY22, the group reported its total Scopes 1, 2 and 3 net emissions (market-based method) were 110,667tCO2e, which represents a 67% reduction compared to FY11 baseline total emissions of 335,000tCO2e. • Its total Scopes 1, 2 and 3 net emissions (market-based method) show an random trajectory, as they increased to 110,667tCO2e in FY22 compared to 106,049tCO2e in FY21, while the emissions reported for FY20 were higher at 116,592tCO2e. On the other hand, its total Scopes 1, 2 and 3 net emissions (location-based method) show a steady reduction over three years, with 185,421tCO2e reported for FY22 compared to 193,396tCO2e in FY21 and 209,629tCO2e in FY20. • Its total Scopes 1, 2 and 3 net emissions (market-based method) were higher in FY22 mainly due to less renewable energy being procured during the year to offset gross emissions; it offset 81,645tCO2e compared to 94,364tCO2e in FY21. The gross emissions reported by the group are offset by a combination of the company's own renewable generation, electricity bought from suppliers, and the purchase of REGO-backed electricity from suppliers to get to the net emissions reported. • Reporting on the annual environmental performance for Welsh Water is published by the Welsh regulator NRW, with contribution from the UK EA as the latter regulates the company's operations in England. • In 2021, Welsh Water achieved a 3-stars good-company status, which dropped from the 4-stars industry-leading rating achieved in 2020. This was the result of some deterioration in performance, with it falling below targets related to pollution incidents and discharge permit compliance.	3

Environmental View

ESG Rating: 2

Profile	Fitch's View	ESG Rating
	• It also reported two serious sewerage incidents that had a high (category 2) environmental impact, and one serious clean water incident that had a high (category 2) environmental impact, which reflects a deterioration in performance compared to the one sewerage pollution incident reported in 2020 and the none reported in 2019. • For self-reporting of pollution incidents, the company is required to self-report at least 80% of its pollution incidents; in 2021, it achieved 76% reporting (compared to 80% in 2020). • Discharge permit compliance for sewage treatment works and water treatment works is another area where performance has worsened compared to 2020, when this metric was above target for the first time since 2016. This metric related to permits for water discharges issued by NRW and the UK EA that need to meet specific criteria to not cause harm to the environment. • There were seven non-compliant sewage treatment works out of 562 that the company operates, and three non-compliant water treatment works out of 34 operated by the company. • Welsh Water's performance for total pollution incidents for sewerage was better than targeted, although the total number of pollution incidents increased slightly compared to 2020. Also, the asset management plan national environment programme delivery was above target, with all 63 schemes delivered as planned (17 in England and 46 in Wales). The improvements delivered by the programme will mean assets achieve higher standards and deliver water quality improvements. • The supply demand balance index has also been better than targeted. This metric measures how the actual supply demand balance has performed compared to what is set out in a water company's water resources management plan; the NRW expects companies to have a score of 100, which the company achieved for 2021. • Welsh Water has also achieved a 5.2% leakage reduction (based on three year averages from the FY20 baseline) for FY22, as reported by Ofwat in July 2022; though this figure is provisional as the company has initiated a review of its interpretation of Ofwat's guidance on reporting methodology. The outcome of the review will be known later this year.	
Targets and Supply Chain	• The group's environmental targets are embedded in its strategic objectives and performance tracking. The performance commitment plan for the main operating company, Welsh Water, includes outcome delivery incentive (ODI) targets for the 2020–2025 period, as required by the regulator, Ofwat. These cover areas such as leakage, supply interruptions, sewer flooding (internal and external) and pollution incidents. • There is no specific reference to linking ESG targets to executive directors' remuneration, but performance-related pay is linked to a	2

Environmental View

ESG Rating: 2

Profile	Fitch's View	ESG Rating
	range of performance measures, including delivery for customers through C-MeX and D-MeX metrics (Ofwat's customer measures of experience and satisfaction). • Welsh Water joined the UN Race to Zero initiative in June 2021, and has set targets that are measured annually and verified to ISO 14064 1:2018 and CEMARS. These targets are considered as science-based and aligned to the Paris Agreement, and ensure strong accountability on the group's path to net-zero emissions. • Welsh Water relies heavily on energy to deliver its essential service; it currently generates 23% of its own energy needs through wind, hydro, solar and advance anaerobic digestion, with the rest procured from 100% renewable energy resources. • The company plans to be 35% energy self-sufficient by 2025, and will make an additional investment of GBP21 million to achieve this during the current regulatory investment period to 2025. Welsh Water's aim is to become 100% energy self-sufficient/energy neutral by 2050. • Welsh Water has recently invested GBP50 million into the Cog Moors Wastewater Treatment Works in the Vale of Glamorgan to generate clean, green energy from sewage through its anaerobic digestion facility, thus creating enough energy to power the works, which will make it an energy neutral site. • The company is also adapting its assets and services to mitigate climate risks; it has set aside a budget of over GBP80 million for research and innovation over the next five years to achieve this. The company's plans include innovative ways to harness nature through its biodiversity plan, peatland restoration, wetland treatment and catchment management. Other initiatives include support for two LIFE (EU) funded river habitat restoration projects led by the NRW, and investment in nature-based solutions, particularly in catchment and waste water nutrient management work. It has also committed to investing GBP833 million to improve its wastewater assets, particularly CSOs, over the five year regulatory period from 2020 to 2025. • The group also works closely with its supply chain partners on developing green solutions that benefit the environment and it is developing a sustainable procurement policy; however, market best practice would be to include environment-linked commitments on suppliers' contracts. This would also be positive for its ESG profile.	
Risks and Incident Treatment	• During 2021, Welsh Water reported three serious pollution incidents classified as category two (category one incidents have a serious, extensive or persistent impact on the environment, people or property; category two incidents have a lesser, yet significant, impact according to the UK EA). • Two of the incidents were related to its wastewater assets and one to its water assets. Compared to peers, the company ranks third,	3

Environmental View

ESG Rating: 2

Profile	Fitch's View	ESG Rating
	with United Utilities and Northumbrian Water reporting one pollution incident each while Anglian Water, Thames Water and Southern Water are the worst performers, reporting 14, 12 and 12 pollution incidents respectively. • The company is investing in new technology to reduce the risk of serious pollution incidents from burst rising mains, and has also started a review of drainage plans for its high risk water treatment works in order to ensure that any spillages are contained and do not enter surface water drainage. • In June 2021, Welsh Water was fined GBP180,000 due to a pollution incident at the Five Fords wastewater treatment plant in Wrexham that affected a 9km stretch of the river Clywedog in north Wales, where around 675,000 litres of untreated sewage was washed into the river in September 2018 when storm tanks overflowed. The environment body NRW indicated that the discharge had resulted in the largest fish kill recorded in north Wales, with over 3,000 fish perishing in the incident. • Welsh Water was also subject to a formal caution in 2021 due to a pollution incident in September 2019 at its Maerdy Treatment Works, where it committed an offence under the Environmental Permitting (England and Wales) Regulations 2016.	

Source: Sustainable Fitch, based on Glas Cymru Holdings Cyfyngedig annual report 2022, TCFD report 2022, other reports from the company's website

Social View

ESG Rating: 2

Profile	Fitch's View	ESG Rating
Human Rights	• The group has stated its commitment to respect human rights in relation to employees and its supply chain; its support is shown through its commitment to the UN Global Compact principles. The group's code of conduct includes a number of policies such as anti-bullying and harassment, whistleblowing, antibribery and corruption, and anti-fraud.	1
Labour Rights	• The group holds several employee engagement sessions with non-executive directors during the year to discuss topics such as inclusivity and diversity; sustainability; risk management; the role of the remuneration committee; and senior colleague pay. • In our view, the company could strive to adhere to the conventions of the International Labour Organization to cement its workforce social practices, which would also underpin and boost its recent commitment to support labour rights principles under the UN Global Compact. • The company's employee turnover was 1.29% in FY22, down from 1.46% in FY21; which has reduced slightly over the last three years. The turnover ratio is low compared to market standard, which is reflected positively in its ESG profile. • During FY22, the group continued implementing its health, safety and well-being strategy "Journey to Zero for 2020–2025" which covers five key areas; health and safety leadership; its "safety takes every person" (STEP) initiative and colleague engagement; risk management; health and well-being; and contractor management. It has also worked with contractors to improve reporting of "near misses" and positive interventions. • Most of the categories of occupational health and safety performance have continued to show improvements in FY22 compared to prior years, but the accident frequency rate has increased slightly to 0.183 incidents per 100 people in FY22 from 0.122 in FY21. • The group's health and safety procedures and policies are aligned with ISO 45001. In FY22, Welsh Water retained its Royal Society for the Prevention of Accidents Gold Award for Health and Safety, and the Welsh Government's Platinum Corporate Health Standard.	2
Diversity	• The group has embarked of a number of key initiatives to promote diversity and inclusivity in all of its businesses. • It also has a number of memberships to organisations that focus on different aspects of diversity and inclusivity, such as Stonewall Diversity Champion for LGBT members, Women in Science and Engineering Membership, Business Disability Forum, Education Engineering Scheme Wales, Business in the community, Work with me–Scope, Time to Change Wales (mental health), Chwarae Teg (promoting equality in Wales), Legacy International (access to work for disable people) and the Armed Forces covenant (support for ex-armed forces members). • Glas Holding's overall workforce is 70.2% male, with female representation at 29.8%. This is in line with the average for the water sector, but much lower than across all other sectors, according to a report by the Energy & Utilities Skills Partnership, which found women make up 29.1% of the workforce in the water industry, compared to 47.3% in the UK's workforce across all sectors. Gender diversity at the senior management level is slightly better, with 31.2% female representation. • The median gender pay gap scores are relatively good, at 4.2% for FY21, compared to peers such as United Utilities at 9.8%, Severn Trent at 9.1% or Yorkshire Water at 5.7%; while the national average score is around 15.4% (as reported by Glas Holdings). This is reflected positively in the group's ESG profile. • It would be useful for investors and other stakeholders, and also help the group's reporting transparency, if the company were to publish the gender pay gap at the senior management level as well as diversity metrics covering BAME representation and the percentage of employees with disabilities. • The group has explored the potential to include ethnicity pay gap in its FY22 report, but it has not been able to collect sufficient information from its workforce to produce meaningful data. It is encouraging to see this type of initiative being developed by the group, and data published on this respect in the future is expected to have a positive impact on its ESG profile.	3
Community and Customers	• Welsh Water reports on customer satisfaction through Ofwat's C-MeX (customer measure of experience measuring customer satisfaction) and D-MeX (developer measure of experience measuring customer service for new connection customers) measures. • Welsh Water achieved 82.93 out of 100, and ranked fifth against all other water companies in the sector for FY22; in FY21, it scored 85.15 and ranked fourth. Performance achieved against the D-MeX measure (based on information as at 9 June 2022) placed the company in 12th position with a score of 83.94 (in FY21, it scored 82.69 and also ranked 12th). The company expects to remain in the bottom half of the industry league tables, as it claims the methodology does not take into account policy differences between England and Wales that affect developer customers, such as build standards. • Welsh Water provides more financial assistance to customers who struggle to pay their bills than any other utility company. Since the not-for-profit ownership model was set up 20 years ago, Welsh Water's customers have benefited from more than GBP440 million through additional investment in its services and it has helped more than	1

Social View

ESG Rating: 2

Profile	Fitch's View	ESG Rating
	127,000 customers to pay their water bills through the company's social tariffs scheme. • Customers are represented through "The Customer Challenge Group", which is an independent customer-focused stakeholder group formed of representatives from organisations working on behalf of older people and people in vulnerable circumstances, as well as environmental organisations. This group challenges Welsh Water's customer strategy by providing independent scrutiny from household and business customer representatives. It also assesses the group's progress against the Wellbeing Commitments published in 2020. • The group has demonstrated proactivity in working with local communities; it also makes donations and works with food banks and other agencies to promote the support it provides to its vulnerable customers.	
Targets and Supply Chain	• The group has a sustainable procurement policy in place, and is working with key suppliers to improve transparency and promote fair employment practices. The group launched its supplier code of conduct in 2021, which incorporates references to Glas Holding's anti-modern-slavery policy, and a number of key suppliers signed up to it in FY22. • In our view, the company could strive to include a process to negotiate and monitor sustainability-linked commitments on suppliers' contracts, which would be best practice and positive for its ESG profile. • We find it encouraging that the group has set a target having 80% of employees add details about their personal characteristics into the group's human resources system in order to create a baseline set of metrics against which it can measure attraction, retention, and progress through the company for generally under-represented groups. As of March 2022, 66.5% of employees had completed information requests. • However, it appears to lack social targets compared to other UK water companies. This could be addressed by it having short- and long-term social targets for areas such as employee satisfaction, under-represented gender and races, and social mobility which would be complementary to the set of metrics that the group plans to report on in the future. This would also be beneficial for its ESG profile.	2
Risks and Incident Treatment	• No public fatalities have been recorded or reported; however, the indirect potential social and environmental effects of wastewater spillage have been taken into account. • During FY22, a critical incident involving a subcontractor was reported and an incident investigation was carried out by the main contractor, while Welsh Water also carried out a serious incident review. The contractor has put in place a health and safety improvement plan with progress against this being monitored; it also launched a focused campaign on cable strike prevention that will continue during FY23.	3

Source: Sustainable Fitch, based on Glas Cymru Holdings Cyfyngedig annual report 2022, TCFD report 2022, other reports from the company's website

Governance View

ESG Rating: 1

Profile	Fitch's View	ESG Rating
Financials and Reporting	• Glas Holding's financial statements are prepared according to UK adopted international accounting standards and are audited by KPMG. • There have been no relevant audit remarks in the last three years, and no fines related to financial reporting.	1
Top Management and Control	• Since Glas Holdings acquired Welsh Water in 2001, the company has followed the UK Corporate Governance Code and has worked to ensure good governance and informed decision making at all levels of the organisation. • Given the group's status as a not-for-profit company, limited by guarantee, it has a body formed of 71 Glas members, including those on the board of directors, instead of shareholders. Glas members do not have a financial stake in the group, are unpaid and independent, and chosen mainly from around Welsh Water's operational area. • The role of the Glas members is to perform a governance function as stewards of the business, by holding the board accountable for the good running of the company. They do not make strategic decisions, but are able to approve amendments to the group's articles of association and also approve the remuneration policy of the board. • There is a good structure for the audit process, which is independent from the senior management and reports directly to the audit board committee. It has comprehensive layers of governance to enable strong oversight and accountability, including several committees such as the audit, nomination, technology, finance, remuneration, quality and environment, and ESG committees. • Every year the group carries out a review of the effectiveness of the board and its committees; an independent external evaluation is also conducted every three years, with the next one taking place during FY23. • The group focuses on maintaining an appropriate balance of tenure, diversity, and skills, and promoting inclusivity; but, in our view, it could strive to improve its current composition of 37.5% women board members (reported as of FY22), as well as other forms of diversity. It is encouraging to see the revised board diversity statement be approved by the board and published in February 2022, which includes an aim to appoint at least one non-executive director from a BAME background by 2025. • The chairperson and chief executive roles are held by different people, which is satisfactory to us from a governance stance. • There are eight directors (including the CEO and the chief financial officer) on Glas Holdings' board of directors; six of them are independent non-executive members, which is also positive for its ESG profile in Fitch's view. All board members are directors of both Glas Holdings and the regulated operating company, Welsh Water,	2

Governance View

ESG Rating: 1

Profile	Fitch's View	ESG Rating
	which ensures a unified approach by aligning the interests of all the companies in the group.	
Remuneration	• The remuneration policy for the executive directors is well defined and transparently reported, including the criteria for awarding short- and long-term performance-related pay and how it is linked to the underlying performance of the company. • We consider the reported CEO pay ratio for FY22 of 15x (against median employee pay) to be within an acceptable range. It compares well against some peers in the utilities sector, such as Yorkshire Water and United Utilities, which have reported CEO pay ratios of 27x and 69x respectively for FY22, and also the average CEO pay ratio of 67x for companies in the FTSE 100 and the average ratio of 44x across the FTSE 350 companies for 2021.	1
Risk Management	• The group's ERM framework, which was updated during FY22, describes how risks are identified, evaluated, treated, monitored and governed, including an increased focus on risks related to climate change and cyber threats. • The ERM process is based on three lines of defence, where risks are assessed, managed and mitigated at an asset, project, function and strategic level. • The group's strategic report outlines the principal risks, and changes from the previous year are demonstrated alongside treatment plans to mitigate them. • Furthermore, there have been no major examples of cyber or IT incidents in the past three years.	1
Tax Management	• All of the group companies are UK tax resident, and subject to UK corporation tax on their profits. As the group has no shareholders and is run solely for the benefit of its customers, it seeks to utilise available tax reliefs and incentives put in place by the government in order to maximise funds available to benefit its customers. • The group does not use tax havens for tax avoidance purposes, and has a group tax policy and risk management framework in place to ensure that tax policies and objectives are fully complied with and applied at all levels.	1

Source: Sustainable Fitch, based on Glas Cymru Holdings Cyfyngedig annual report 2022, TCFD report 2022, other reports from the company's website

Sustainable Fitch

Entity Analysis

Relevant UN Sustainable Development Goals – Entity

6.1:	By 2030, achieve universal and equitable access to safe and affordable drinking water for all	
6.4:	By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	
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	
15.3:	By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world	

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".
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.

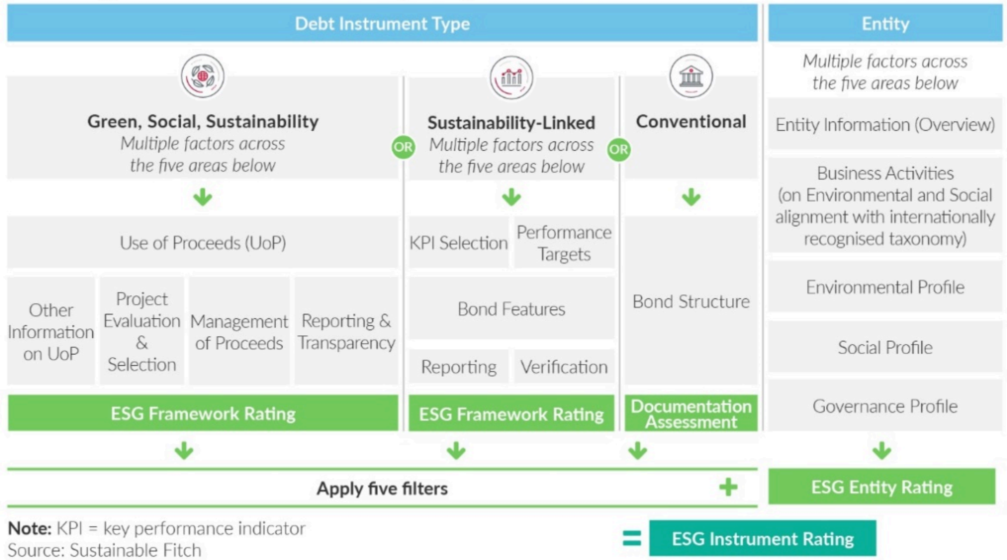
ESG IRs consider different types of debt instruments in the context of the issuing entity, enabling absolute ESG credentials comparisons for similar types of instruments issued by different types of entities, different types of instruments issued by different issuers, as well as different types of instruments 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. 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.	ESG IR of '1' indicates that the debt instrument in the context of the ultimate issuing entity 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. Instrument is excellent in terms of framework structure and proceeds destination.	ESG FR of '1' indicates that the framework for the instrument evidences an excellent ESG profile. 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. 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.	ESG IR of '2' indicates that the debt instrument in the context of the ultimate issuing entity 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. Instrument is good in terms of framework structure and proceeds destination.	ESG FR of '2' indicates that the framework for the instrument evidences a good ESG profile. 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. 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.	ESG IR of '3' indicates that the debt instrument in the context of the ultimate issuing entity 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. Instrument is average in terms of framework structure and proceeds destination.	ESG FR of '3' indicates that the framework for the instrument evidences an average ESG profile. 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. 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.	ESG IR of '4' indicates that the debt instrument in the context of the ultimate issuing entity 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. Instrument is sub-average in terms of framework structure and proceeds destination.	ESG FR of '4' indicates that the framework for the instrument evidences a sub-average ESG profile. 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. 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.	ESG IR of '5' indicates that the debt instrument in the context of the ultimate issuing entity 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. Instrument is poor in terms of framework structure and proceeds destination.	ESG FR of '5' indicates that the framework for the instrument evidences a poor ESG profile. 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.	