November 2021

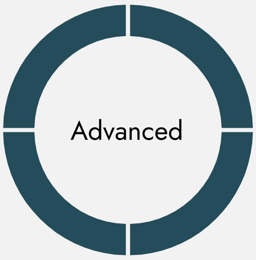
SECOND PARTY OPINION

on the sustainability of Vistra's Green Finance Framework

V.E is of the opinion that Vistra's Framework is aligned with the four core components the ICMA's Green Bond Principles 2021 ("GBP") and the LMA's Green Loan Principles 2021 ("GLP")

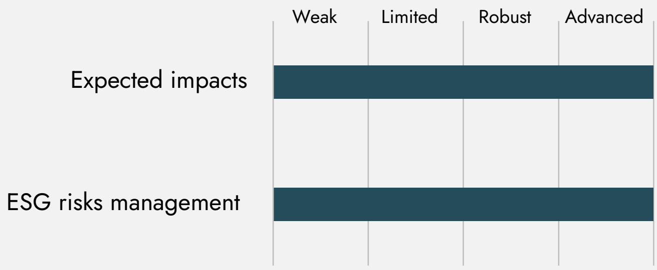
Framework

Contribution to Sustainability:



Advanced Limited

Robust Weak



SDG Mapping

Characteristics of the Framework

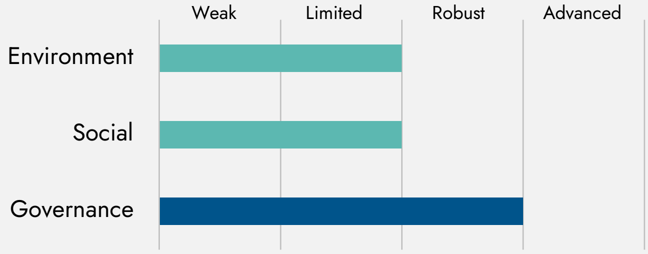
Green Project Categories	⇒ Renewable Energy ⇒ Energy Efficiency
Project locations	United States of America
Existence of framework	Yes
Share of refinancing	To be disclosed for each bond issuance
Look back period	18 months

Issuer

ESG Performance as of August 2020

Advanced Limited

Robust Weak



ESG Controversies

Number of controversies	None
Frequency	NA
Severity	NA
Responsiveness	NA

Controversial Activities

The Issuer appears to be involved in three of the 17 controversial activities screened under our methodology:

- ☐ Alcohol
- ☐ Animal welfare
- ☐ Cannabis
- ☐ Chemicals of concern
- ☐ Civilian firearms
- ☒ Fossil fuels industry
- ☒ Coal
- ☐ Gambling
- ☐ Genetic engineering
- ☐ High interest rate lending
- ☐ Human embryonic stem cells
- ☐ Military
- ☒ Nuclear power
- ☐ Pornography
- ☐ Reproductive medicine
- ☐ Unconventional oil and gas
- ☐ Tobacco

Coherence

Coherent

Partially coherent

Not coherent

We are of the opinion that the Framework is coherent with Vistra's strategic sustainability priorities and sector issues and that it contributes to achieving the Issuer's sustainability commitments.

Key findings

V.E is of the opinion that Vistra's Framework is aligned with the four core components of the GBP and GLP.

Use of Proceeds – aligned with GBP and GLP and best practices identified by VE

- The Eligible Categories are clearly defined and detailed, the Issuer has communicated the nature of the expenditures, the eligibility criteria, and the location of eligible projects.
- The Environmental Objectives are clearly defined, these are relevant for all the Eligible Categories and set in coherence with sustainability objectives defined in international standards.
- The expected Environmental Benefits are clear and precise, these are considered relevant, measurable, and will be quantified for all the Eligible Categories in the reporting.
- The Issuer has committed to transparently communicate the estimated share of refinancing for each bond issuance.
- The look-back period for refinanced eligible projects will be equal or less than 18 months from the issuance date, in line with good market practices.

Evaluation and Selection - aligned with GBP, GLP, and best practices identified by VE

- The process for Project Evaluation and Selection has been clearly defined and detailed by the Issuer, it is considered well-structured in all the evaluation and selection steps (including the proposal, selection, validation, monitoring of eligible projects). The roles and responsibilities are clear and include relevant internal expertise. The Process is publicly disclosed in the Framework.
- Eligibility criteria (selection and exclusion) for project/asset selection have been clearly defined and detailed by the Issuer for all the Eligible Categories.
- The process applied to identify and manage potentially material E&S risks associated with the projects is publicly disclosed (in the herewith SPO). The process is considered advanced: it combines monitoring, identification, corrective and preventive measures for all categories.

Management of Proceeds - aligned with GBP, GLP, and best practices identified by VE

- The Process for the Management and Allocation of Proceeds is clearly defined and detailed, and is publicly available in the Framework.
- The allocation period will be 24 months or less.
- Net proceeds of the Instruments will be tracked by the Issuer in an appropriate manner and attested to in a formal internal process.
- Information on the intended types of temporary placement for the balance of the unallocated net proceeds is publicly disclosed.
- The Issuer has committed that as long as the Instrument is outstanding, the balance of the tracked net proceeds will be periodically adjusted to match allocations to eligible projects made during that period.
- The Issuer has provided information on the procedure that will be applied in case of project/asset divestment or postponement and it has committed to reallocate divested proceeds to projects that are compliant with the Framework within 24 months.

Reporting - aligned with GBP and GLP

- The Issuer has committed to report on the Use of Proceeds annually, until full allocation and on a timely basis in case of material developments. The report will be publicly available until the Instrument's maturity.
- The reporting will cover relevant information related to the allocation of the Instrument's proceeds and to the expected sustainable benefits of the categories. The Issuer has also committed to report on material developments/controversies related to the projects/assets.
- The reporting methodology and assumptions used to report on environmental benefits of the Eligible Categories will be publicly disclosed.
- An external auditor will verify the tracking and allocation of funds to eligible projects until full allocation and in case of material changes. Indicators used to report on environmental benefits of the eligible projects will be verified internally by the Issuer.

Type of External Reviews supporting this Framework

☒	Pre-issuance Second Party Opinion	☐	Independent verification of impact reporting
☒	Independent verification of funds allocation	☐	Climate Bond Initiative Certification

Contact

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SCOPE

V.E was commissioned to provide an independent opinion ("SPO") on the sustainability credentials and management of the Green Financing Instruments[1] to be issued by Vistra (the "Issuer") in compliance with the Green Finance Framework (the "Framework") created to govern their issuances.

Our opinion is established according to V.E's Environmental, Social and Governance ("ESG") exclusive assessment methodology and to the latest version of the International Capital Market Association's (ICMA) Green Bond Principles ("GBP") - edited in June 2021 and the Loan Market Association, Asia Pacific Loan Market Association, Loan Syndications & Trading Association (LMA/APLMA/LSTA) Green Loan Principles (GLP) – edited in February 2021.

Our opinion is built on the review of the following components:

- Framework: we assessed the Framework, including the coherence between the Framework and the Issuer's environmental commitments, the Green Instrument's potential contribution to sustainability and its alignment with the four core components of the GBP and GLP.
- Issuer: we assessed the Issuer's ESG performance, its management of potential stakeholder-related ESG controversies and its involvement in controversial activities[2].

Our sources of information are multichannel, combining data (i) gathered from public sources, press content providers and stakeholders, (ii) from V.E's exclusive ESG rating database, and (iii) information provided from the Issuer, through documents.

We carried out our due diligence assessment from February 9th, to November 30th, 2021. We consider that we were provided with access to all the appropriate documents and interviewees we solicited. Reasonable efforts have been made to verify data accuracy.

[1] The "Green Financing Instrument" is to be considered as the instrument to be potentially issued, subject to the discretion of the Issuer. The name "Green Financing Instrument" has been decided by the Issuer: it does not imply any opinion from V.E. The Issuer reports that the instruments can include bonds, loans or letters of credit, private placements, preferred stocks.

[2] The 17 controversial activities screened by V.E are: Alcohol, Animal welfare, Cannabis, Chemicals of concern, Civilian firearms, Coal, Fossil Fuels industry, Unconventional oil and gas, Gambling, Genetic engineering, Human embryonic stem cells, High interest rate lending, Military, Nuclear Power, Pornography, Reproductive Medicine and Tobacco.

COHERENCE

Coherent
Partially coherent
Not coherent

We are of the opinion that the contemplated Green Financing Framework is coherent with Vistra's strategic sustainability priorities and sector issues and that it contributes to achieving the Issuer's sustainability commitments.

The North American Electric & Gas Utilities sector has a major role to play with regard to climate change and energy efficiency through the promotion of renewable energy sources, energy efficiency (the National Action Plan for Energy Efficiency) and a reduction in greenhouse gas emissions of power plants (U.S Environmental Protection Agency (EPA) Clean Power Plan). Companies are expected to set ambitious climate change strategies, backed by relevant targets and widespread environmental management systems.

Vistra aims to transition towards a greener business strategy that properly incorporates climate change risks and opportunities. In particular, Vistra has an Environmental Principles Statement which discloses its commitment towards different environmental issues including:

- Energy efficiency and conservation: The Issuer's goal is to encourage their customers to take advantage of all cost-effective opportunities to improve their energy efficiency. To that end, Vistra will invest in initiatives that achieve long-lasting energy efficiency improvements across all their businesses, promoting energy efficiency and conservation through new energy management tools and products for their customers, education and conservation programs designed to reduce overall energy use, and operational improvements at their facilities.
- Development of new technologies: Vistra commits to continue investing in and supporting research efforts to develop new and emerging solutions, including, but not limited to, technologies for carbon-capture and storage, renewable energy, and end-use efficiency improvements to promote cleaner air, water and land.
- Climate change: to address the growth of carbon dioxide emissions and their potential impact through climate change, Vistra will continue to advocate for economically rational and market-based policies and solutions to address greenhouse gases. The Issuer is committed to work within their industry and across other stakeholders to help develop policies that address the issue, balance the need for reliable and affordable power, and consider the impact on the domestic economy.
- Renewable energy: Vistra will continue to support policies that effectively use renewable resources to help meet growing energy needs and will seek to maintain a leadership position in the growth and development of renewable energy. Additionally, the Issuer commits to continue to pursue and invest in development opportunities for renewable energy resources including solar and wind, as well as battery energy storage facilities.

Vistra appears to acknowledge its role with regard to climate change, through formalised commitments and targets:

- Vistra has undergone a climate scenario analysis to evaluate risks and opportunities for its business over the next 10 to 30 years, for three scenarios (Sustainable Future Scenario, 2-Degree scenario and Current Policies Scenario), in order to make informed decisions for its strategy and operations.
- On September 29th, 2020, the company announced that its strategic plans support accelerating its emissions reduction targets with an updated expectation to achieve a 60% reduction in CO_2 equivalent emissions by 2030 as compared to a 2010 baseline with a long-term goal to achieve net-zero carbon emissions by 2050, assuming necessary advancements in technology and supportive market constructs and public policy.

- Vistra's management supports the Paris Agreement and signed the Science Based Target initiative (SBTi)[3] 1.5-degree commitment letter in May 2021 to ensure their interim greenhouse gas emissions reduction targets are in line with targets necessary to achieve its goals.
- Vistra is adopting various initiatives to decarbonize its operations, which include retiring older fossil fuel generation assets, including nearly all of its remaining coal fleet by 2027; enhancing efficiency and reducing emissions of existing operations.
- Vistra is also engaged in land reclamation of mining sites: since mining began more than 50 years ago, Luminant, a Vistra subsidiary, has reclaimed more than 86,000 acres of land for use as pastures, forests, wildlife habitat, and water resources, and the company has already secured reclamation bond liability releases on over 45,000 acres, demonstrating that it meets or exceeds pre-mine standards.
- Regarding diversification into low-emission businesses, Vistra expects it will invest ~$5 billion in renewable resources and energy storage systems by year-end 2026, resulting in a renewable and storage portfolio of greater than 5,000 MWs.
- Vistra supports advocacy for the development of legislation and regulation for lowering GHG emissions in the US. It is a founding member of the Climate Leadership Council (CLC), and actively supports its framework of a consistently applied national carbon fee and dividend approach with a border tax adjustment[4].
- In 2020 Vistra similarly advocated for policies that would help support the nation's clean energy transition by leading an effort at the Federal Energy Regulatory Commission to consider and encourage regional carbon pricing, working with stakeholders in both PJM[5] and ISO-NE[6] on carbon-pricing regimes, participating as an active member of the Zero Emissions Transportation Association (ZETA), and advocating for legislation in Illinois that would support the conversion of retiring coal plants to solar and batteries.
- Vistra actively monitors and invests in technological innovation and sustainability, to help accelerate the viability of carbon free and carbon reducing technologies.

Under its Climate Action plan, Vistra has invested in several changes in its business to reduce its environmental impact, such as:

- Developing its Vistra Zero portfolio which includes emission-free resources from its existing nuclear, renewable, and energy storage facilities as well as its new carbon-free development projects.
- In 2020, Vistra purchased more than 2,200 GWh of wind power for its customers, the energy equivalent of more than 1,190,000 metric tons of carbon emissions avoided.
- Developing ~1,000 MW of solar and energy storage projects in Texas and evaluating an additional 1,000 to 1,500 MW of potential projects, in addition to its 180-MW Upton 2 Solar and Energy Storage Facility.
- Since 2010, Vistra has announced plans to retire ~20,000 MWs of coal and gas plants.

[3] https://sciencebasedtargets.org/
[4] https://clcouncil.org/mission/
[5] PJM Interconnection LLc is a regional transmission organisation in the United States. See more at https://www.pjm.com/about-pjm
[6] ISO New England is a not for profit organization in charge of grid operation, market administration and power planning in the New England states. Se more at https://www.iso-ne.com/about/what-we-do/three-roles

FRAMEWORK

The Issuer has described the main characteristics of the Instruments within a formalized Green Financing Framework which covers the four core components of the GBP 2018 and GLP 2020 (the last updated version was provided to V.E on November 24th, 2021). The Issuer has committed to make this document publicly accessible on Vistra's website, in line with good market practices.

Use of Proceeds

Not Aligned	Partially Aligned	Aligned	Best Practices

The net proceeds of the Instruments will exclusively finance or refinance, in part or in full, projects falling under two Green Project Categories ("Eligible Categories"), as indicated in Table 1.

- The Eligible Categories are clearly defined and detailed, the Issuer has communicated the nature of the expenditures, the eligibility criteria, and the location of eligible projects.
- The Environmental Objectives are clearly defined, these are relevant for all the Eligible Categories and set in coherence with sustainability objectives defined in international standards.
- The expected Environmental Benefits are clear and precise, these are considered relevant, measurable, and will be quantified for all the Eligible Categories in the reporting.
- The Issuer has committed to transparently communicate the estimated share of refinancing for each bond issuance.
- The look-back period for refinanced eligible projects will be equal or less than 18 months from the issuance date, in line with good market practices.

BEST PRACTICES

⇒ Content, eligibility and exclusion criteria are clear and in line with international standards for all eligible categories.
⇒ Relevant environmental and benefits are identified and measurable for all eligible categories.
⇒ The Issuer has committed to transparently communicate the estimated share of refinancing for each bond issuance.

Table 1. V.E' analysis of Eligible Categories, Sustainability Objectives and Expected Benefits as presented in the Issuer's Framework.

- Nature of expenditures: Predominantly Capex, possibly future Opex and R&D expenditures.
- Location of Eligible Projects/Assets: United States.

ELIGIBLE CATEGORIES	DESCRIPTION	SUSTAINABILITY OBJECTIVES AND BENEFITS	V.E'S ANALYSIS
Renewable Energy	Investments associated with the development, construction, acquisition, installation and maintenance of renewable energy production projects in line with the EU Taxonomy for Sustainable Activities[7]. Wind, solar and green hydrogen[8] projects that meet the following criteria: - Average carbon intensity of the electricity produced, including that used for hydrogen manufacturing, at or below 100 gCO_2e/kWh; - Direct CO_2 emissions from production of hydrogen below 5.8 tCO_2e/t hydrogen; - Electricity use for hydrogen produced by electrolysis at or lower than 58 MWh/t hydrogen.	<u>Climate change mitigation</u> Increase installed capacity from renewable sources Increase share of renewable energy in global energy mix GHG emissions avoidance	The Eligible Category is clearly defined, the Issuer has communicated the nature of the expenditures, the eligibility criteria, and location of Eligible Projects. The Environmental Objective is clearly defined, it is relevant and set in coherence with sustainability objectives defined in international standards. The expected Environmental Benefits are clear, they are considered relevant, measurable, and will be quantified in the reporting.
Energy Efficiency	- Investments associated with the acquisition, development and maintenance of battery energy storage projects in line with the EU Taxonomy for Sustainable Activities; - Investments or expenditures associated with customer energy efficiency incentive programs including the installation of smart meters; - Investment in technologies that increase operational energy efficiency, reduce energy consumption or mitigate GHG emissions by more than 20% (building automation systems, LED lighting and occupancy sensor); - Research and development of innovative technological advancements and supporting infrastructure (e.g. early-stage technology including hydrogen electrolysers, fuel cells, batteries).	<u>Climate change mitigation</u> GHG emissions avoidance Energy savings Increase installed storage capacity	The Eligible Category is clearly defined, the Issuer has communicated the nature of the expenditures, the eligibility criteria, and location of Eligible Projects. The Environmental Objective is clearly defined, it is relevant and set in coherence with sustainability objectives defined in international standards. The expected Environmental Benefits are clear, they are considered relevant, measurable, and will be quantified in the reporting.

[7] https://ec.europa.eu/info/files/200309-sustainable-finance-teg-final-report-taxonomy_en
[8] Vistra 2020 Climate Report (Page 11,13)

SDG Contribution

The Eligible Categories are likely to contribute to three of the United Nations' Sustainable Development Goals ("SDGs"), namely:

ELIGIBLE CATEGORIES	SDG	SDG TARGETS
Renewable Energy Energy Efficiency	7 AFFORDABLE AND CLEAN ENERGY	7.2 By 2030, increase substantially the share of renewable energy in the global energy.
Energy Efficiency		7.3 By 2030, double the global rate of improvement in energy efficiency.
Energy Efficiency	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.
Renewable Energy Energy Efficiency	13 CLIMATE ACTION	UN SDG 13 consists of taking urgent action to combat climate change and its impacts. Companies can contribute to this goal through renewable energy and energy efficiency projects.

Evaluation and Selection of Eligible Projects

Not Aligned	Partially Aligned	Aligned	Best Practices

- The process for Project Evaluation and Selection has been clearly defined and detailed by the Issuer, it is considered well-structured in all the evaluation and selection steps (including the proposal, selection, validation, monitoring of eligible projects). The roles and responsibilities are clear and include relevant internal expertise. The Process is publicly disclosed in the Framework.
- Eligibility criteria (selection and exclusion) for project/asset selection have been clearly defined and detailed by the Issuer for all the Eligible Categories.
- The process applied to identify and manage potentially material E&S risks associated with the projects is publicly disclosed (in the herewith SPO). The process is considered advanced: it combines monitoring, identification, corrective and preventive measures for all categories.

Process for Project Evaluation and Selection

- For the purpose of the Instruments, a Sustainability Financing Committee will be created ("the Committee"). This Committee is composed of:
    - The Chief Purpose & Sustainability Officer & SVP, Investor Relations (chair) ;
    - Chief Executive Officer ;
    - President & Chief Financial Officer ;
    - EVP & Chief Commercial Officer;
    - EVP, General Counsel, & Chief Compliance Officer;
    - EVP & Chief Administrative Officer;
    - EVP, Renewables, Battery Storage, Fossil Operations & Services;
    - EVP & President, Vistra Retail;
    - SVP & Treasurer;
    - SVP, Environmental Health & Safety
    - SVP, Development
- New projects are identified on an ongoing basis by the respective operational and/or finance teams of various business units and submitted to the Sustainability Financing Committee.
- The Committee is responsible for:
    - Evaluating the eligibility of these projects in the context of this Framework, and deciding on the integration to a Portfolio of Eligible Green Projects;
    - Overseeing the Green Financing Reporting process;
    - Managing the process should the Framework need to be updated.

- The traceability and verification of the evaluation and selection of the projects is ensured throughout the process:
    - The Committee will meet periodically, at least semi-annually, to monitor the compliance of selected projects/assets with the eligibility criteria throughout the lifetime of the Instrument. Projects that are no longer eligible will be substituted.
    - The Committee will monitor potential ESG controversies[9], and escalate to the Executive Committee as needed. Vistra monitors daily news stories referring to Vistra and its subsidiaries, and any issues are raised with a cross-departmental group, and with the Sustainability Financing Committee when they concern an eligible project, to determine the appropriate response. The Issuer commits to replace the projects/assets facing ESG controversies with other eligible projects.
    - Traceability is ensured through meeting minutes recording discussion and decisions.

Eligibility Criteria

The process relies on explicit eligibility criteria (selection and exclusion), relevant to the environmental objectives defined for the Eligible Categories.

- The selection criteria are based on definitions in the Eligible Categories defined Table 1 in the Use of Proceeds section.
- The exclusion criteria are clear and relevant: expenditures associated with nuclear or fossil fuel power generation are excluded.

BEST PRACTICES

⇒ Eligibility and exclusion criteria for project selection are clearly defined and detailed for all the eligible categories.

⇒ The Issuer reports that it will monitor compliance of selected projects/assets with eligibility and exclusion criteria specified in the Framework throughout the life of the instrument and has provided details on content/ frequency/duration and on procedure adopted in case of non-compliance

⇒ The Issuer reports that it will monitor potential ESG controversies associated with the projects throughout the life of the instrument and has provided details on frequency, content and procedures in case a controversy is found on a project.

[9] Vistra considers an ESG controversy to be any allegation of a violation of federal, state, and/or local laws or regulations related to ESG matters (e.g. lawsuits, notices of violations from regulatory agencies, inquiries from public officials, etc.) that could have a material impact on the company or that receives significant public attention.

Management of Proceeds

Not Aligned	Partially Aligned	Aligned	Best Practices

- The Process for the Management and Allocation of Proceeds is clearly defined and detailed, and is publicly available in the Framework.
- The allocation period will be 24 months or less.
- Net proceeds of the Instruments will be tracked by the Issuer in an appropriate manner and attested to in a formal internal process.
- Information on the intended types of temporary placement for the balance of the unallocated net proceeds is publicly disclosed.
- The Issuer has committed that as long as the Instrument is outstanding, the balance of the tracked net proceeds will be periodically adjusted to match allocations to eligible projects made during that period.
- The Issuer has provided information on the procedure that will be applied in case of project/asset divestment or postponement and it has committed to reallocate divested proceeds to projects that are compliant with the Framework within 24 months.

Management Process

- The net proceeds of the Instruments will be credited to the Issuer's general treasury account.
- An amount equivalent to the net proceeds of each Green Financing Instrument will be earmarked for allocation against the Portfolio of Eligible Green Projects. The net proceeds from the Green Financing Instruments will be tracked internally.
- Vistra intends to fully allocate the proceeds of the Instrument within 24 months from the date of issuance.
- The unallocated funds will be held within Vistra's treasury in accordance with its liquidity management policy, including in cash or cash equivalents, or in other liquid marketable instruments. The Issuer has committed not to invest temporarily unallocated net proceeds in GHG intensive activities or controversial activities.
- In case of projects postponement, cancelation, divestment or ineligibility, or in case an Eligible Project has matured, the Issuer has committed to replace the no longer Eligible Project by a new Eligible Project within 12 to 24 months.

BEST PRACTICES

⇒ The allocation period is 24 months or less.

⇒ The Issuer has committed not to invest temporarily unallocated net proceeds in GHG intensive activities or controversial activities.

⇒ The Issuer has provided information on the procedure that will be applied in case of project divestment or postponement and it has committed to reallocate divested proceeds to projects that are compliant with the framework within 24 months.

Monitoring & Reporting

Not Aligned	Partially Aligned	Aligned	Best Practices

- The Issuer has committed to report on the Use of Proceeds annually, until full allocation and on a timely basis in case of material developments. The report will be publicly available until the Instrument's maturity.
- The reporting will cover relevant information related to the allocation of the Instrument's proceeds and to the expected sustainable benefits of the categories. The Issuer has also committed to report on material developments/controversies related to the projects/assets.
- The reporting methodology and assumptions used to report on environmental benefits of the Eligible Categories will be publicly disclosed.
- An external auditor will verify the tracking and allocation of funds to eligible projects until full allocation and in case of material changes. Indicators used to report on environmental benefits of the eligible projects will be verified internally by the Issuer.

Indicators

The Issuer has committed to transparently communicate at Eligible Category level, on:

- Allocation of proceeds: The indicators selected by the Issuer to report on the allocation of proceeds are relevant and exhaustive.

REPORTING INDICATORS
⇒ List of projects and description ⇒ The aggregated amount of (re)allocated net proceeds to Eligible Projects at Eligible Category level ⇒ The proportion of net proceeds used for financing vs refinancing (%) ⇒ The balance of the unallocated proceeds and information on types of temporary investments

Of note, Vistra does not currently anticipate co-financing. If Vistra has co-financing in the future, this information will be included in the reporting.

- Environmental benefits: The indicators selected by the Issuer to report on the environmental benefits are clear, relevant and exhaustive.

ELIGIBLE CATEGORIES	ENVIRONMENTAL BENEFITS INDICATORS	
	OUTPUTS AND OUTCOMES	IMPACT INDICATORS
Renewable Energy	- Estimation of renewable energy produced (MWh) - Installed capacity (MW)	- Increase of energy supply from renewable sources (%) - GHG emissions reduction ($MMtCO_2e$)
Energy Efficiency	- Storage installed capacity (MW/MWh) - Annual renewable energy stored in MWh	- Energy saved (MWh) - Estimation of annual GHG emissions reduced or avoided (tCO_2e)

An area for improvement consists in committing to an external verification of the indicators used to report on the environmental benefits of the Eligible Projects.

BEST PRACTICES
⇒ The Issuer report will be publicly available. ⇒ The indicators selected by the Issuer are exhaustive with regards to allocation reporting. ⇒ The indicators selected by the Issuer are clear and relevant and cover all expected benefits associated with the Eligible Categories. ⇒ The reporting methodology and assumptions used to report on environmental benefits of the Eligible categories will be disclosed publicly.

Contribution to sustainability

Expected Impacts

The potential positive impact of the eligible projects on environmental objectives is considered to be advanced.

ELIGIBLE CATEGORIES	EXPECTED IMPACT	ANALYSIS
Renewable Energy	ADVANCED	Fossil fuels represent over 62% of energy sources for electricity generation in the United States according to data from the International Energy Agency for 2020. As a retail electricity and power generation company in the US, investing in renewable energy is of very high relevance to address the critical environmental issue of climate change mitigation. The project has a systemic positive impact, by impacting the company, its customers, and the supply chain, as well as globally through the reduction of GHG emissions. The projects have a long-term positive impact, by investing in clean energy assets. The project follows the best market standards currently available, the EU Taxonomy for Sustainable Activities.
Energy Efficiency	ADVANCED	Energy efficiency, in particular through reducing energy consumption and developing battery storage, are crucial components for the transition to renewable energy generation and the reduction of GHG emissions. By contributing to climate change mitigation, these projects positively impact all relevant stakeholders. The project has long-term impacts, by investing to reducing energy consumptions and supporting electricity generation from renewable sources. The project follows the best market standards currently available, the EU Taxonomy for Sustainable Activities.
OVERALL ASSESSMENT	ADVANCED	

ESG Risks Identification and Management systems in place at project level

The identification and management of the environmental and social risks associated with the Eligible Projects are considered advanced.

Environmental Management System

Vistra's corporate Environmental Health & Safety team has a centralised system that tracks environmental issues, permit requirements, and tasks. Vistra's development team tracks projects in a system that covers securing land, tracking environmental requirements, tracing permits, obtaining and tracking interconnection requirements, obtaining tax abatements, and all other necessary requirements to fully develop a project.

Environmental Impact Assessment and eco-design

Vistra conducts Environmental Impact Assessments (EIA) on a project by project basis, and according to local State requirements. All projects meet and exceed all permitting requirements of the federal, state and local jurisdiction. The EIAs include identification and mitigation measures.

Vistra has communicated that each renewable energy project uses current day engineering and permitting methods to meet and exceed all required LEEDS, federal, county and state requirements. The design starts during conception, incorporates all environmental requirements including wetlands, habitat, species, before it moves into permitting. Depending on the locality and situation, Environmental Impact Studies, geotechnical studies, habitat and species studies are required for each development. States such as California use the California Environmental Quality Act (CEQA) permitting process to ensure all aspects are covered.

Responsible sourcing, end of life and decommissioning

Vistra has communicated that batteries are sourced from manufacturers who are able to provide detailed sourcing and tracking methods of the ultimate product procured, with for example complete traceability back to the mine in which the raw materials were produced, the batch mixing completed, who the operators were and the ultimate production date, including all testing and quality assurance reports. In addition, Vistra's battery procurement also arranges for recycling requirements and sets minimums for recyclability. At current, over 95% of an energy storage battery can be recycled.

Vistra has further communicated that solar panels have a similar procurement process. Strict adherence to traceability is required and obtained from the manufacturer, by being integrated in the Request for Proposal process. Vistra states that the majority of components within a solar panel can be recycled.

End of life components and treatment is built into Vistra's standard procurement policy and process. During all conceptual design and through project completion, Vistra plans for and contracts for end of life issues such as solar panel replacement or energy storage battery recycling. For example, at the Moss Landing battery energy storage project, they have contracted with the battery supplier for the recycling activities as part of the battery procurement. When procuring solar panels, Vistra typically requires recycling data and locations to ensure that adequate recycling capabilities exist.

Climate change adaptation

In 2020, Vistra engaged a third-party to conduct a climate scenario analysis to look at both physical and transition risks to the business over the next 10 to 30 years. Texas, particularly West and North Texas, the location of most of Vistra's projects, was one of the regions in focus to analyse possible weather impacts to Vistra's physical operations. The results of the analysis concluded that under all scenarios evaluated, even the most extreme business as usual case, Vistra's generation facilities are well-positioned to withstand a variety of weather events including rising sea and river levels, droughts, and increasing temperatures.

Pollution and industrial accidents

All of Vistra's power plants obtain and operate in compliance with environmental permits. Emergency and spill plans are available at each location outlining mitigation strategies to contain releases should they occur. Vistra's corporate environmental team performs internal audits at sites on a regular basis and tracks open items to completion. Permit deviations, spills, or other environmental incidents are tracked in a central reporting system. The environmental team meets with senior management monthly to discuss compliance items, risks, and environmental planning.

Fundamental Human and Labour Rights

Vistra's Human Rights Policy was written for employees, contractors, consultants, and others who may be temporarily assigned to perform work or services in the company's value chain, such as suppliers and other business partners. Vistra is committed to respecting all internationally recognized human rights as embodied in the International Bill of Human Rights and the International Labour Organization's Declaration on Fundamental Principles and Rights at Work.

Health and Safety

Vistra aims to provide each employee with essential training and resources to help ensure their safety and health while planning or conducting onsite activities. Reporting of all incidents is critical and Vistra asks that each individual report safety incidents and hazards to assist in proper identification and remediation.

Additionally, Vistra works towards the prevention of errors and is committed to reducing error-likely situations. All vendors and contractors who work at Vistra's plants are required to meet certain safety standards and managed through a third-party supplier, ISNetworld.

Social and Environmental factors in the supply chain

Vistra conducts supplier assessments to ensure that all suppliers demonstrate a commitment to safety, performance excellence, environmental stewardship, and ethical business practices. During supplier evaluations, Vistra considers and weighs the ESG components of suppliers, including clean energy, recycling, testing and evaluations, third party reviews, and certifications. If specific topics are to be reviewed for explicit reasons such as a recycling program, or environmental stewardship, these are noted in the requests for proposals when they are issued.

In 2021, Vistra's Supply Chain and Sustainability teams launched its Supply Chain Sustainability Initiative. This initiative strives to lessen their environmental and social impacts by creating sustainable practices and tracking measurable results in partnership with their suppliers. As part of this initiative, Vistra's supply chain team has selected suppliers to participate in an annual sustainability reporting process. The team requested this group of suppliers to complete a questionnaire that asks suppliers to share their own ESG metrics and performance to ensure alignment with Vistra's own principles. Vistra Corp Supply Chain and Sustainability Office will review and consider the participant efforts in sustainability and alignment of principles prior to future contract awards and extensions.

Dialogue with local stakeholders

Vistra engages with local communities early on in the development cycle to address the potential impacts of its operations. Vistra communicates with residents through personal contact and local media. Vistra shared two examples:

- Vistra's subsidiary Luminant has hosted town halls for local residents to learn about plant initiatives. Luminant also holds emergency response trainings that engage local fire, EMS, and law enforcement departments at their facilities, familiarizing them with potential hazards they may encounter during a potential emergency response, and coordinating training exercises with Luminant's emergency response team.
- In Morro Bay, California, Vistra briefed the Morro Bay City Council in an open and public virtual meeting, accessible on YouTube, followed by several smaller group sessions organized by the Morro Bay Chamber of Commerce, including one before the Chamber's Government Affairs Committee, with public citizen meetings planned as well.

As plans for renewable projects progress, Vistra's Community Affairs team coordinates with Vistra Development to do outreach to residents, businesses and local government stakeholders making available to them direct contact information for specific Vistra personnel to respond to questions and concerns.

Project governance

Vistra's Code of Conduct establishes the ethics and compliance standards for employees at all levels across the company, including board members. Vistra's employees are required to complete a Code of Conduct training on an annual basis. Vistra has also established a Compliance Helpline, a resource available to all employees and contractors to anonymously submit any ethical or compliance concerns, including violations of Vistra's Code of Conduct, via phone or online, administered by an independent third-party service provider. When a compliance report is made through the Helpline, information is collected, and a report is provided to Vistra's internal investigation team. They work with other departments to ensure the concern is appropriately addressed, in a manner that protects confidentiality. Vistra's Whistle-blower Policy[10] provides additional information related to Vistra's complaint process.

[10] https://www.vistracorp.com/wp-content/uploads/2020/07/Whistleblower-Policy-Accounting-Internal-Accounting-Control-Auditing-and-Financial-Complaints.pdf

ISSUER

Vistra operates an integrated retail and generation business in markets throughout the United States. The Company is engaged in electricity market activities, including electricity generation, wholesale energy sales and purchases, commodity risk management and retail sales of electricity to end users.

ESG Performance

The Issuer's ESG performance was assessed through a complete process of rating and benchmarking.

As of August 2020, Vistra displays a limited ESG performance, ranking 10th in our Electric and Gas utilities sector North America, which covers 69 companies. The company is robust in the Governance pillar and limited in the Social and Environmental pillars.

DOMAIN	COMMENTS	OPINION
Environment	Vistra's performance in the Environmental pillar is considered limited. The Issuer has issued a formalised commitment to environmental protection in its Code of Conduct and in its Environmental Principles. In addition, the company has set targets on renewable energy investments and GHG emissions reduction. Vistra aims to reach net-zero carbon by 2050. The Issuer aims to invest in more than 6,000 MW of renewables and battery storage between now (2020) and 2030. Vistra appears to have comprehensive resources allocated to environmental management such as internal audits that assess the effectiveness of the Environmental Management System (EMS) and management review of the EMS. Pollution prevention, emergency and contingency plans appear to be in place. However, indicators on biodiversity are not disclosed and less than 1% of the Issuer's total energy generation comes from renewables as of 2020. Lastly, data on energy saved by customers is not publicly disclosed.	Advanced Robust Limited Weak
Social	Vistra's performance in the Social pillar is considered limited. In terms of Human Resources the Issuer discloses a commitment to promoting career management. In addition, the employee turnover rate decreased between 2017 and 2019. Trainings, internal monitoring and Health and Safety audits appear to be in place to address health and safety issues. However, safety KPIs for contractors are not disclosed. Vistra remains silent on responsible management of reorganisations. Regarding Human Rights, the Issuer has disclosed a formalised commitment to freedom of association and the right to collective bargaining. In addition, occasional risk mapping and on-going monitoring of labour rights risks appear to be in place to monitor the respect of freedom of association within its operations. In terms of non-discrimination and diversity, extensive measures have been allocated, including training, affirmative action programmes and monitoring of salary disparities. However, data on performance indicators such as the share of employees with disabilities in the workforce is not disclosed.	Advanced Robust Limited

DOMAIN	COMMENTS	OPINION
	Related to Community Involvement, capacity building programmes have been implemented to promote local social and economic development. However, related indicators have not been disclosed. Moreover, the Issuer does not disclose any commitment to promotion of access to energy and prevention of fuel poverty. Lastly, measures and indicators related to access to energy are not disclosed.	Weak
Governance	Vistra's performance in the Governance pillar is considered robust. In terms of Corporate Governance, Vistra's Board of Directors is considered to be 90% independent. In addition, 30% of directors are women. The Audit Committee appears to have a comprehensive role in overseeing internal and external controls and CSR risks, namely climate change. Health and Safety and pollution prevention seem to be covered by Vistra's internal controls system. The Issuer respects the "one share-one vote" principle and its CSR strategy are reported to be presented to investors. Finally, all elements of executive remuneration are disclosed on an individual basis. Regarding prevention of corruption and anti-competitive practices, Vistra's commitments are disclosed in its Code of Conduct. Moreover, a confidential helpline has been set up to report non-compliance. However, no information is disclosed on internally reported noncompliance incidents. Regarding integration of social factors in the supply chain, it is unclear whether social audits are carried out and there is no transparency on social compliance in the supply chain. Furthermore, Vistra does not transparently report on the customer satisfaction indicators.	Advanced Robust Limited Weak

Management of ESG Controversies

As of February 2021, the review conducted by V.E did not reveal any ESG controversy against Vistra over the last four years.

Involvement in Controversial Activities

As of November 2021, Vistra appears to be involved in three of the 17 controversial activities screened under our methodology[11], namely:

- Major involvement in Fossil Fuels Industry: Vistra has an estimated turnover from fossil fuels which is over 50% of total turnover. This turnover is derived from fossil fuel-powered electricity generation and coal mining.
- Major involvement in Coal: Vistra has an estimated turnover from coal which is between 20% and 33% of total turnover. This turnover is derived from the generation of electricity from coal and coal mining activities.
- Major involvement in Nuclear Power: Vistra has an estimated turnover from involvement in nuclear power which is between 5% and 10% of total turnover. This turnover is derived from the generation of electricity from nuclear power.

The Issuer appear to be not involved in any of the other 14 controversial activities screened under our methodology, namely: Alcohol, Animal welfare, Cannabis, Chemicals of concern, Civilian firearms, Unconventional oil and gas, Gambling, Genetic engineering, Human embryonic stem cells, High interest rate lending, Military, Pornography, Reproductive Medicine and Tobacco. The controversial activities research provides screening of companies to identify involvement in business activities that are subject to philosophical or moral beliefs. The information does not suggest any approval or disapproval on their content from V.E.

[11] Based on 2019 data

METHODOLOGY

In V.E's view, Environmental, Social and Governance (ESG) factors are intertwined and complementary. As such they cannot be separated in the assessment of ESG management in any organisation, activity or transaction. In this sense, V.E provides an opinion on the Issuer's ESG performance as an organisation, and on the processes and commitments applicable to the intended issuance.

Our Second Party Opinions (SPOs) are subject to internal quality control at three levels (Analyst, Project Manager and Quality Reviewer). If necessary, this process is complemented by a final review and validation by the Expertise Committee and Supervisor. A right of complaint and recourse is guaranteed to all companies under our review, following three levels: first, the team in contact with the company; then the Executive Director in charge of Methods, Innovation & Quality; and finally, V.E's Scientific Council. All employees are signatories of V.E's Code of Conduct, and all consultants have also signed its add-on covering financial rules of confidentiality.

COHERENCE

Scale of assessment: not coherent, partially coherent, coherent

This section analyses whether the activity to be financed through the selected instrument is coherent with the Issuer's sustainability priorities and strategy, and whether it responds to the main sustainability issues of the sector where the Issuer operates.

FRAMEWORK

Alignment with the Green Bond / Loan Principles

Scale of assessment: Not aligned, Partially aligned, Aligned, Best Practices

The Framework has been evaluated by V.E according to the ICMA's Green Bond Principles - June 2018 ("GBP"), the LMA/APLMA/LSTA's Green Loan Principles - May 2020 ("GLP") and on our methodology based on international standards and sector guidelines applicable in terms of ESG management and assessment.

Use of proceeds

The definition of the Eligible Projects and their sustainable objectives and benefits are a core element of Green/Social/Sustainable Bonds and Loans standards. V.E evaluates the clarity of the definition of the Eligible Categories, as well as the definition and the relevance of the primary sustainability objectives. We evaluate the descriptions of the expected benefits in terms of relevance, measurability and quantification. In addition, we map the potential contribution of Eligible Projects to the United Nations Sustainable Development Goals' targets.

Process for evaluation and selection

The evaluation and selection process is assessed by V.E on its transparency, governance and relevance. The eligibility criteria are assessed on their clarity, relevance and coverage vs. the intended objectives of the Eligible Projects.

Management of proceeds

The process and rules for the management and the allocation of proceeds are assessed by V.E on their transparency, traceability and verification.

Reporting

The monitoring and reporting process and commitments defined by the Issuer are assessed by V.E on their transparency, exhaustiveness and relevance, covering the reporting of both proceeds' allocation and sustainable benefits (output, impact indicators).

Contribution to sustainability

Scale of assessment: Weak, Limited, Robust, Advanced

V.E's assessment of activities' contribution to sustainability encompasses both the evaluation of their expected positive impacts on environmental and/or social objectives, as well the management of the associated potential negative impacts and externalities.

Expected positive impact of the activities on environmental and/or social objectives

The expected positive impact of activities on environmental and/or social objectives to be financed by the Issuer or Borrower is assessed on the basis of:

i) the relevance of the activity to respond to an important environmental objective for the sector of the activity; or to respond to an important social need at country level;[12]

ii) the scope of the impact: the extent to which the expected impacts are reaching relevant stakeholders (i.e. the issuer, its value chain, local and global stakeholders); or targeting those populations most in need;

iii) the magnitude and durability of the potential impact of the proposed activity on the environmental and/or social objectives (capacity to not just reduce, but to prevent/avoid negative impact; or to provide a structural/long-term improvement);

iv) only for environmental objectives, the extent to which the activity is adopting the best available option.

Activities' ESG risk management

The identification and management of the potential ESG risks associated with the eligible projects/activities are analysed on the basis of V.E's ESG assessment methodology, international standards and sector guidelines applicable in terms of ESG management and assessment.

[12] The importance of a specific social need at country level is assessed on the basis of the country performance on the priority SDG that the project is targeting using data from Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G., Woelm, F. 2020. The Sustainable Development Goals and COVID-19. Sustainable Development Report 2020. Cambridge: Cambridge University Press.

ISSUER

Issuer's ESG performance

Scale of assessment of ESG performance: Weak, Limited, Robust, Advanced

NB: The Issuer's level of ESG performance (i.e. commitments, processes, results of the Issuer related to ESG issues), has been assessed through a complete process of rating and benchmarking developed by V.E.

The Issuers ESG performance has been assessed by V.E on the basis of its:

- Leadership: relevance of the commitments (content, visibility and ownership).
- Implementation: coherence of the implementation (process, means, control/reporting).
- Results: indicators, stakeholders' feedbacks and controversies.

Management of stakeholder-related ESG controversies

A controversy is an information, a flow of information, or a contradictory opinion that is public, documented and traceable, allegation against an Issuer on corporate responsibility issues. Such allegations can relate to tangible facts, be an interpretation of these facts, or constitute an allegation based on unproven facts.

V.E reviewed information provided by the Issuer, press content providers and stakeholders (partnership with Factiva Dow Jones: access to the content of 28,500 publications worldwide from reference financial newspapers to sector-focused magazines, local publications or Non-Government Organizations). Information gathered from these sources is considered as long as it is public, documented and traceable.

V.E provides an opinion on companies' controversies risks mitigation based on the analysis of 3 factors:

- Frequency: reflects for each ESG challenge the number of controversies that the Issuer has faced. At corporate level, this factor reflects on the overall number of controversies that the Issuer has faced and the scope of ESG issues impacted (scale: Isolated, Occasional, Frequent, Persistent).
- Severity: the more a controversy is related to stakeholders' fundamental interests, proves actual corporate responsibility in its occurrence, and have caused adverse impacts for stakeholders and the company, the higher its severity is. Severity assigned at the corporate level will reflect the highest severity of all cases faced by the company (scale: Minor, Significant, High, Critical).
- Responsiveness: ability demonstrated by an Issuer to dialogue with its stakeholders in a risk management perspective and based on explanatory, preventative, remediating or corrective measures. At corporate level, this factor will reflect the overall responsiveness of the company for all cases faced (scale: Proactive, Remediate, Reactive, Non- Communicative).

The impact of a controversy on a company's reputation reduces with time, depending on the severity of the event and the company's responsiveness to this event. Conventionally, V.E's controversy database covers any controversy with Minor or Significant severity during 24 months after the last event registered and during 48 months for High and Critical controversies.

Involvement in controversial activities

17 controversial activities have been analysed following 30 parameters to screen the company's involvement in any of them. The company's level of involvement (Major, Minor, No) in a controversial activity is based on:

- An estimation of the revenues derived from controversial products or services.
- The specific nature of the controversial products or services provided by the company.

V.E'S ASSESSMENT SCALES

Scale of assessment of Issuer's ESG performance or strategy and financial instrument's Contribution to sustainability	
Advanced	Advanced commitment; strong evidence of command over the issues dedicated to achieving the sustainability objective. An advanced expected impact combined with an advanced to robust level of E&S risk management & using innovative methods to anticipate new risks.
Robust	Convincing commitment; significant and consistent evidence of command over the issues. A robust expected impact combined with an advance to robust level of assurance of E&S risk management or an advanced expected impact combined with a limited level of assurance of E&S risk management.
Limited	Commitment to the objective of sustainability has been initiated or partially achieved; fragmentary evidence of command over the issues. A limited expected impact combined with an advanced to limited level of assurance of E&S risk management; or a robust expected impact combined with a limited to weak level of assurance of E&S risk management; or an advance expected impact combined with a weak level of assurance of E&S risk management.
Weak	Commitment to social/environmental responsibility is non-tangible; no evidence of command over the issues. A weak expected impact combined with an advanced to weak level of assurance of E&S risk management or a limited expected impact with a weak level of assurance of E&S risk management.

Scale of assessment of financial instrument's alignment with Green and/or Social Bond and Loan Principles	
Best Practices	The Instrument's practices go beyond the core practices of the ICMA's Green and/or Social Bond Principles and/or of the Loan Market Association's Green Loan Principles by adopting recommended and best practices.
Aligned	The Instrument has adopted all the core practices of the ICMA's Green and/or Social Bond Principles and/or of the Loan Market Association's Green Loan Principles.
Partially Aligned	The Instrument has adopted a majority of the core practices of the ICMA's Green and/or Social Bond Principles and/or of the Loan Market Association's Green Loan Principles, but not all of them.
Not Aligned	The Instrument has adopted only a minority of the core practices of the ICMA's Green and/or Social Bond Principles and/or of the Loan Market Association's Green Loan Principles.

Statement on V.E' s independence and conflict-of-interest policy

Transparency on the relation between V.E and the Issuer: V.E has not carried out any audit mission or consultancy activity for Vistra. No established relation (financial or commercial) exists between V.E and the Issuer. V.E's conflict of interest policy is covered by its Code of Conduct, which can be found at http://vigeo-eiris.com/wp-content/uploads/2018/07/Code-of-Conduct-Vigeo-Eiris-EN.pdf.

This opinion aims at providing an independent opinion on the sustainability credentials and management of the Bond, based on the information which has been made available to V.E. V.E has neither interviewed stakeholders out of the Issuer's employees, nor performed an on-site audit nor other test to check the accuracy of the information provided by the Issuer. The accuracy, comprehensiveness and trustworthiness of the information collected are a responsibility of the Issuer. The Issuer is fully responsible for attesting the compliance with its commitments defined in its policies, for their implementation and their monitoring. The opinion delivered by V.E neither focuses on the financial performance of the Bond, nor on the effective allocation of its proceeds. V.E is not liable for the induced consequences when third parties use this opinion either to make investments decisions or to make any kind of business transaction.

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