



SASB standards table

The Sustainability Accounting Standards Board's (SASB) mission is to develop sustainability metrics for public corporations to disclose material, decision-useful information to investors. We support work that contributes directly to generating comparable and consistent data. The nature of our business directs us to consult SASB's standards for *Infrastructure Sector – Electric Utilities* as defined by SASB's Sustainable Industry Classification System (SICS). Below is a table which contains those topics we have identified as key issues and against which we are able to report as a publicly traded company. Topics that are not applicable to NRG as denoted as such. Activity metrics that may assist in the accurate evaluation and comparability of disclosure may be found in NRG's 2020 [Form 10-K](#), NRG's 2021 [Proxy Statement](#), and in NRG's 2020 Sustainability Report. Quantitative data may be followed by narrative information that contextualizes the data table and is also responsive to any qualitative metrics. For more details on our report process please visit our approach to sustainability reporting on [page 92](#).

Sustainability Disclosure Topics and Accounting Metrics

Topic	Accounting Metric		SASB Code
Greenhouse Gas Emissions (GHG) & Energy Resource Planning	(1) Gross Global Scope 1 Emissions (million metric tons)	29,900,000* *Includes 37.5% ownership of a 605 MW capacity coal plant in Australia. Generation includes equity-owned plants as of Dec. 31, 2020.	IF-EU-110a.1
	(2) Percentage Covered under Emissions-Limiting Regulations, and	10%	
	(3) Percentage Covered under Emissions-Reporting Regulations	99.99%	
	Clarification of percentage covered under emissions-limiting and emissions-reporting regulations: Nearly all (>99%) of NRG's emission sources are subject to mandatory U.S. federal (Environmental Protection Agency (EPA)) greenhouse gas reporting regulations. In addition, some of these emission sources (10%) specified under IF0101-01(2) above) also report to regional and state CO ₂ e reporting programs (RGGI, AB32).		
	Discussion of accounting, estimations and uncertainty for Scope 1 Emissions: Scope 1 includes only direct GHG emissions associated with fuel combustion in boilers, turbines and engines used for the production of electric power. Scope 1 GHG emissions were determined by using methods specified within Title 40, Chapter I, Subchapter C, Part 98, Subparts A, C, and D of the Code of Federal Regulations. The determination of the equity share of GHG emissions is consistent with equity share methodologies for equity share accounting for greenhouse gas emissions as described in GHG Protocol: A Corporate Accounting and Reporting Standard, Revised Edition. GHG emissions from combustion of fossil fuels used for other activities or equipment, such as auxiliary boilers, starter engines, mobile sources and offices is not included and was estimated to represent under 0.25% of reported Scope 1 emissions. Scope 1 emissions do not include emissions from fugitive sources such as hydro fluorocarbon releases from use of refrigeration and/or air conditioning equipment, sulfur hexafluoride (SF6) from electrical equipment and methane releases from natural gas transport.		IF-EU-110a.2
	GHG emissions associated with power deliveries	Not applicable. NRG does not own transmission or distribution lines.	

Topic	Accounting Metric			SASB Code	
	Description of Long-term and Short-term Strategy or Plan to Manage Scope 1 Emissions, Emission-Reduction Targets, and an Analysis of Performance v. Those Targets	NRG's goal is to reduce its total U.S. Scope 1, 2, and 3 (business travel) CO ₂ e emissions 50% by 2025, and achieve net-zero by 2050, using 2014 as a baseline. From 2019-2020 our emissions decreased 24%. Disclosure of our strategy to manage Scope 1 emissions is reported through CDP Climate Change questionnaire annually as well as in NRG's Sustainability Linked Bond Framework .		IF-EU-110a.3	
	Number of customers served in markets subject to renewable portfolio standards (RPS) and percentage fulfillment of RPS target by market	The applicability of this metric is under consideration.		IF-EU-110a.4	
Air Quality	Air emissions source	Air emissions (metric tons)	Percentage from production facilities within urbanized areas	IF-EU-120a.1	
	NOx	12,050	30%		
	SOx	27,401	78%		
	PM10*	1,284	61%		
	Pb**	.047	30%		
	Hg**	.018	24%		
	Discussion of accounting, estimations, and uncertainty for Air Emissions: Data collection varies based on the generation facility and may includes engineering calculations and/or continuous emissions monitoring systems (CEMS). *The requirement to report PM- 10 emissions in annual emissions inventories or emissions statements varies between states. In addition, the earliest reporting deadline for a reporting year is July 1 of the following year. For sites in NRG's fleet that have not yet or are not required to report PM-10 emissions at the time of submittal to SASB, NRG has used the U.S. EPA's AP-42 emission factors to estimate emissions. ** In the case of lead and mercury emissions, volumes are estimated for some facilities due to incomplete data at time of publication.				
Water Management	(1) Total Water Withdrawn (thousands of cubic meters)	3,672,533			IF-EU-140a.1
		2020 NRG GLOBAL WATER WITHDRAWN BY SOURCE			
		Water Source	Total (Thousands of Cubic Meters)	Percent	
		Fresh Water	2,245,000	61%	
		Non-Fresh Water	857,000	23%	
		Ocean	570,000	16%	
		Total	3,672,000	100%	
	(2) Total Water Consumed, (thousands of cubic meters)	902,781			
	Percentage of Each in Regions with High or Extremely High Baseline Water Stress	Baseline Water Stress High (40-80%) or Extremely High (>80%)	Withdrawal from areas with High or Extremely High Baseline Water Stress	Consumption from areas with High or Extremely High Baseline Water Stress	
		Percent of Total Water	19%	<1%	
		Percent that is Non-Fresh*	13%	<1%	
		NRG uses the WRI Aqueduct tool to model and help assess water basin risks in combination with regional internal expertise. *Non-Fresh water has a total dissolved solids greater than 1000 mg/l and is not used for agriculture or municipal water supply.			



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	Percentage of Each in Regions with High or Extremely High Baseline Water Stress	Type of Generating Facility in Baseline Water Stress Area	Number
		Fossil Fuel (Natural Gas, Coal, Oil)	6
		Renewable (Solar and Wind)	0
		Nuclear	1
		Thermal (District Heating and Cooling)	0
		Total	7
	Number of Incidents of Non-Compliance with Water-Quality and/or Quantity Permits, Standards, and Regulations	0	IF-EU-140a.2
Water Management	Discussion of Water Management Risks NRG's definition of substantive risk from water is the possibility that an event will occur and significantly affect the achievement of NRG's business goals. Risk identification and assessment process applies to both direct operations and supply chain. NRG uses measures, metrics and indicators for water risk assessment leveraging management and professional judgment from the following perspectives: - Financial impact: - Corporate earnings - Capital expenditure on technologies to reduce water consumption and withdrawal - Plant operation - Operation disruption due to shortage - Increase in water cost - Supply chain risk - Environmental impact - Availability - Quality of river basins - Regulations that impact supply and/or management of water		IF-EU-140a.3
	Discussion of strategies and practices to mitigate risks Water risk is monitored by the risk owners (individual plant operators) and reported to management upon material changes with a threshold of 20% in water consumption and withdrawal levels. If determined that a water supply risk exists that could impact projected generation levels at any plant within a two year time frame, risk mitigation efforts are identified and economically evaluated for implementation. NRG Plant Operations team reviews modeling scenarios generated. Plant water usage is reviewed annually. Analysis is reviewed by the senior leaders of NRG's Operations, Engineering and Commercial Operations teams. WRI Aqueduct tool is used annually to develop a high level view of basin level risk that informs strategic decision-making and the setting of goals and targets. This tool was chosen because of its open source nature and ease of use. Each generating facility is unique and the water risk approach identifies and addresses risks for each covering: •Availability •Quality •Regulatory •Stakeholders •Supply chain impacts •Financial •Operational •Environmental. Risk response decisions are primarily made and executed by managing plant operations to maintain compliance with all regulations. NRG reports supply chain water risk annually through the CDP Water Risk Questionnaire.		

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Coal Ash Management	Amount of Coal Combustion Residuals Generated (metric tons rounded to nearest thousand)	748,000						IF-EU-150a.1
	Percentage Recycled (metric tons rounded to nearest thousand)	80% (601,000)						
	Total Number of Coal Combustion Residual Impoundments	12 surface impoundments as defined by 40 CFR 257.2						IF-EU-150a.2
	Number by EPA Hazard Potential Classification, Broken Down by EPA Structural Integrity Assessment	NRG Impoundment Structural Integrity Rating and Hazard Potential Classification						
			Less than Low	Low	Significant	High	Incised*	
		Satisfactory	0	1	5	0	0	
		Fair	0	0	0	0	0	
		Poor	0	0	0	0	0	
		Unsatisfactory	0	0	0	0	0	
Not Applicable*		0	1	2	0	2		
*To align with EPA reporting we have added a column for 'Incised' and a row for 'Not Applicable' to account for all impoundments as defined by the EPA.								
Workforce Health & Safety	(1) Total Recordable Injury Rate	0.32						IF-EU-320a.1
	(2) Fatality Rate	0						
	(3) Near-Miss Frequency Rate	17.09 Process for classifying, recording and reporting # of Near Misses Reported / Total Hours Worked X 1,000,000 = Near-Miss Frequency Rate The National Safety Agency defined near misses as "an unplanned event that did not result in injury, illness, or damage, but had the potential to do so." NRG uses an electronic Incident Management System to document, communicate, track, and trend specific factors about each event including causal factors and corrective actions; this system provides automated fleet-wide notifications. The number of near-misses is derived from a report pulled from the Incident Management System. NRG's Operational Health and Safety (OHS) management system applies to 100% of U.S. operations. The system also includes notifications to executive management when significant safety events occur that meet the defined criteria for a Significant Event notification. The system also generates weekly reports to communicate any events from the previous week to NRG personnel.						

Topic	Accounting Metric			SASB Code	
Nuclear Safety & Emergency Management	Total Number of Nuclear Power Units, Broken Down by Nuclear Regulatory Commission Action Matrix Column	NRG South Texas LP (STP) is a 44% owner of a joint undivided interest in STP.			IF-EU-540a.1
		Reactor Unit	Action Matrix Column	Current Regulatory Oversight	
		South Texas 1	Licensee Response	Baseline inspection	
		South Texas 2	Licensee Response	Baseline inspection	
	Table source: https://www.nrc.gov/reactors/operating/oversight/actionmatrix-summary.html				
	Discussion of Efforts to Manage Nuclear Safety and Emergency Preparedness	As a holder of an ownership interest in STP, NRG South Texas LP is an NRC licensee and is subject to NRC regulation. The NRC license gives NRG the right only to possess an interest in STP but not to operate it. As a possession-only licensee, i.e., non-operating co-owner, the NRC's regulation of NRG South Texas LP is primarily focused on NRG's ability to meet its financial and decommissioning funding assurance obligations. In connection with the NRC license, NRG and its subsidiaries have a support agreement to provide up to \$120 million to support operations at STP.			IF-EU-540a.2
Management of the Legal & Regulatory Environment	Discussion of Positions on the Regulatory and Political Environment Related to Environmental and Social Factors and Description of Efforts to Manage Risks and Opportunities Presented	A discussion of risks can be found in the 2020 10-K SEC filing, Item 1-A, Risk Factors Related to NRG Energy, Inc., pages 26-40. Throughout 2020, we continued to engage with policymakers in Washington, D.C. and at the state level. We also maintained our relationships with groups such as the Electric Power Supply Association and various informal organizations. When possible, we collaborate with major environmental groups on clean energy access and climate solutions. Typically, we engage on legislative and regulatory actions designed to mitigate GHG emissions, as well as policies that support the development and deployment of competitive low-carbon power generation technologies. We are most active in the debate aimed at protecting and expanding competitive power markets and consumer choice, both of which we believe are critical enablers of achieving least-cost low-carbon outcomes. Regulatory filings, white papers, presentations, and other materials that NRG has prepared and submitted setting forth NRG's positions on a variety of critical subjects driving our business and the industry can be found at http://www.nrg.com/company/energy-policy/ .			IF101-21
The following SASB topics and corresponding activity metrics are not applicable to NRG.					
- Energy Affordability (IF-EU-240a. 1 through IF-EU-240a.4) - This topic pertains to regulated electric utilities, and NRG is not a regulated utility. - End-Use Efficiency & Demand (IF-EU-420a. 1 through IF-EU-420a.3) - This topic pertains to regulated electric utilities, and NRG is not a regulated utility. - Grid Resiliency (IF-EU-550a. 1 through IF-EU-550a.2) - NRG does not have transmission and distribution operations.					