EPRI

# 2022 METRICS TO BENCHMARK ELECTRIC POWER COMPANY SUSTAINABILITY PERFORMANCE

2022 marks the ninth year of EPRI's ongoing effort to identify and understand metrics appropriate for benchmarking the performance of electric power companies on industry sustainability priorities. The metrics outlined in this document reflects learnings from research begun in 2014 (3002004255) and evolving thinking informed by an annual reflection and refinement period in collaboration with EPRI's Energy Sustainability Interest Group (ESIG). This process helps to ensure metric boundaries are up-to-date with evolving standards, guidance, and science, and reflect insights from metric use by companies over time. This document contains metrics deemed to be appropriate for benchmarking electric power company performance on industry-level sustainability priorities. Several major changes were made to existing metrics this year, most notably, an overhaul of the Habitat & Biodiversity metrics based on new learnings and engagement. In addition to refining two existing metrics within that sustainability priority, two new pollinator-focused metrics have been added. Finally, 10 metrics were removed across the Air Emissions, Community Vitality, Greenhouse Gas Emissions, Safety & Health, Waste, and Water sustainability priorities.

Since 2014, several reports have been published to share learnings gathered through each reflection and refinement period. These provide insight into the research evolution, and may be useful in better understanding the context of the metrics captured in this document:

- *Sustainability Metric Compilation for the Electric Power Industry: Results of Industry Interviews and Metric Database Development* (3002004255)
- *Metrics to Benchmark Sustainability Performance for the Electric Power Industry* (3002007228)
- *2016 Metrics to Benchmark Electric Power Company Sustainability Performance* (3002009923)
- *2017 Metrics to Benchmark Electric Power Company Sustainability Performance* (3002011884)
- *Metrics to Benchmark Sustainability Performance for the Electric Power Industry: 2017 Update* (3002012060)
- *2018 Metrics to Benchmark Electric Power Company Sustainability Performance* (3002013458)
- *Sustainability Metrics Landscape Compilation for the Electric Power Industry: Results of Research with Electric Power Companies and Metric Database Development* (3002013459)
- *2019 Metrics to Benchmark Electric Power Company Sustainability Performance* (3002016760)
- *2019 State of the Metric: Summary of Learnings from Sustainability Metrics Research* (3002016114)
- *2020 Metrics to Benchmark Electric Power Company Sustainability Performance* (3002019251)
- *2021 Metrics to Benchmark Electric Power Company Sustainability Performance* (3002021713)

In 2018, EPRI carried out a comprehensive landscape review of all existing sustainability metrics and catalogued nearly 5,000 metrics that are: (1) currently disclosed through electric power company sustainability reports or (2) requested through sustainability ranking and rating organizations (including but not limited to CDP, the Dow Jones Sustain- ability Indices [DJSI], and Sustainalytics). The metrics were then organized into a database that contains 72 columns, allowing the user to sort data based on their research need. The database was published in 2019 through ESIG (3002015192). The metrics identified through this effort were then reviewed by EPRI subject matter experts along with ESIG members and their colleagues to identify which metrics are appropriate to benchmark electric power company sustainability performance. Three metrics uncovered through that landscape review – "Effective energy efficiency investment rate" (Assets & Operations), "Weighted equivalent forced outage rate demand (WEFORd)," (Energy Reliability & Resiliency), and "Percent spend with Tier 1 suppliers that responded to a sustainability survey" (Supply Chain) – were tested through the Benchmarking Project as emerging metrics and are now published in this report.

The "Total $CO_2$ emissions rate for electricity used to meet end load metric" (Greenhouse Gas Emissions) was identified in collaboration with EPRI greenhouse gas accounting experts, tested in EPRI's sustainability benchmarking activities for two years as an emerging metric, and is now published in this report alongside the six Natural Gas metrics that were tested since 2018:

"Fugitive emissions intensity," "Distribution pipeline replacement rate," "Percentage of distribution system still to be upgraded," "Gas dig-in rate," "Gas emergency response rate," and "Leak repair rate." Additional emerging metrics will be tested in the future as EPRI refreshes and evolves its list of sustainability priorities for the electric power industry. The findings from the 2020–21 refresh can be found in Sustainability Priorities for The North American Electric Power Industry: Results of 2020–2021 Research with Electric Power Companies and Stakeholders in the United States and Canada (3002020773).

In 2019, EPRI published a metrics update report (3002016114) comprehensively summarizing ESIG's metrics research since 2017. That report overviews the inaugural effort to identify a succinct list of "core" metrics that represent the most widespread and commonly used measures of sustainability performance among electric power companies.

Finally, as noted in past publications related to this work, the following list of metrics is not intended to be used as an index to rank electric power companies. Instead, these metrics have been identified as technically appropriate and potentially insightful ways for a company to understand their performance on individual sustainability priorities, how that performance compares to peer companies, and how they may be used to inform goalsetting.

If there are questions about this list of metrics or EPRI's portfolio of sustainability research more broadly, please contact:

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EPRI's sustainability metrics research is conducted in collaboration with members of the Energy Sustainability Interest Group (ESIG) and subject matter experts from throughout the Institute. The portfolio of sustainability work is designed to advance technical research and cross-sector dialogue around what a sustainable electric power company is and how it can support the sustainable generation, delivery, and utilization of electric power - aligned with EPRI's public benefit mission.


Each year ESIG has had approximately 40 participating companies, representing a diverse segment of the North American electric power industry. ESIG is designed to create the tools and resources electric power companies need to establish and enhance their sustainability programs. It also provides a forum for sustainability professionals to interact and share leading practices that can help further inform the development of sustainability programs throughout the industry.

ESIG's benchmarking stream of work builds off the metrics research by providing an opportunity to test their applicability, technical validity, and informativeness. Each year roughly 30 project participants submit their performance data to EPRI's online platform to benchmark with industry peers. Members collaborate through webcasts and an annual forum, where results of the benchmarking are presented, and leading practice presentations provide insights into how to drive continuous improvement. In December 2021, EPRI published its second ever public report through the Benchmarking Project (3002021719), providing insights gained from multiple years of metric usage through the annual benchmarking process since 2015. The report also provides an overview of aggregate results from the 2021 benchmarking effort for 10 core metrics.

ESIG's work is organized into five research streams. The effort to identify metrics appropriate for benchmarking electric power company performance on sustainability priorities falls into the area of Measure and Manage Performance.

To learn more about EPRI's sustainability research, please see EPRI's public sustainability website: www.epri.com/sustainability.

If you are interested in joining EPRI's sustainability communications list to receive announcements of new publications and invitations to public webcasts, please email sustainability@epri.com.

# SUMMARY OF MAJOR CHANGES MADE TO 2021 SUSTAINABILITY METRICS

As introduced above, two metrics have been promoted to the list featured in this report after two years of testing in ESIG's benchmarking activities. In the interest of consolidating metrics where technically appropriate, these promotions have been made concurrently with the removal of 10 metrics. Major 2022 changes are described below.

## METRIC REMOVALS

In an effort to manage the number of metrics, as deemed technically appropriate, the following fuel-specific Air Emissions and Greenhouse Gas Emissions metrics were removed as they are already captured in the aggregate under at least one other metric.

- Air permit non-compliance rate with fine
- Waste non-compliance with fine
- Water permit violation rate with fine
- Water permit non-compliance rate with fine

The Reportable environmental events metric (a "core" metric) captures the same information as the four metrics above, in the aggregate. The companion non-compliance metrics without fines (e.g., Air permit non-compliance rate) have been retained because, though they are also imperfect, they may still inform understanding of priority-specific non-compliance.

The following metrics were removed because they measured absolute quantities and reflect dynamics captured by a companion intensity-based (e.g., rate) metric. These absolute quantities are challenging to benchmark. Further the Sponsored community volunteerism: volunteer hours for employees and members of the public metric can be highly challenging to track and may not reflect a company's performance as it can be skewed by public participation.

- Employee volunteerism: corporate volunteer hours
- Employee volunteerism: paid corporate volunteer hours
- Employee volunteerism: total employee volunteer hours
- Sponsored community volunteerism: volunteer hours for employees and members of the public
- Recruitment – partnerships and programs

The following metric was removed due to consistently low reporting in EPRI's sustainability benchmarking research, and it being considered uninformative by the majority of ESIG companies and EPRI Sustainability experts:

- Electric emergency response rate

The following metric was removed for several reasons. First, the metric presented fundamental technical challenges since it requires reporting companies to downscale gross $CO_2$ emissions from generated and purchased electricity to MWhs of power delivered to retail customers. Second, the term "power deliveries" may have varying interpretations across electric power companies, and in turn, adversely impact peer benchmarking. Third, the metric directs reporting companies to exclude emissions for power generated and sold wholesale electricity markets, which would render the metric inapplicable to companies with wholesale activities, as these companies typically sell all of their generation into the market and must buy back all or some of that power to meet end-load (i.e., power to be "delivered" to retail customers, plus other load). Finally, the Total $CO_2$ emissions rate for electricity used to meet end load metric better captures the dynamics that challenge the metric below.

- Total $CO_2$ emissions rate for retail power deliveries

## METRIC BOUNDARY AND/OR NAME CHANGES

- Following the reflection on the Total $CO_2$ emissions rate for retail power deliveries metric, the boundary of the Total $CO_2$ emissions rate for electricity used to meet end load metric was refined to provide more explicit calculation guidance to reporting companies.
- HFC, PFC, $NF_3$ and $SF_6$ were removed from the boundaries of the Total Scope 2 $CO_2e$ emissions and Total Scope 2 $CO_2e$ emissions intensity metrics because it is extremely unlikely that these gases would constitute an electric power company's Scope 2 emissions, as indicated by examining five years of data from EPRI's sustainability benchmarking data and consulting with EPRI greenhouse gas accounting experts.
- The boundary of the Percentage of distribution system still to be upgraded metric was refined to replace the "miles of distribution pipeline that needs to be upgraded" with "total miles of legacy distribution pipeline" (e.g., unprotected steel, cast iron, wrought iron) "planned to be upgraded." This refinement was made to remove the implicit assumption that all distribution pipeline needs to be upgraded.
- The name of the Percentage of distribution system still to be upgraded metric was changed to Percentage of legacy distribution pipeline still to be upgraded.
- The boundary of the Distribution pipeline replacement rate metric was refined in the same manner as the Percentage of distribution system still to be upgraded metric.
- The name of the Distribution pipeline replacement rate metric was changed to Legacy distribution pipeline replacement rate.
- The Gas emergency response rate metric was refined to include all natural gas-related calls (not only 911 calls) to allow companies to better track events and provide an expanded understanding of emergency response rates.

In addition to the refinements described above, the Habitat & Biodiversity metrics underwent significant refinement to enhance peer benchmarking and prepare companies for potentially more-sophisticated sustainability reporting requests from stakeholders (e.g., Global Reporting Initiative, CDP). Overall, EPRI sought to strike a balance between company data

availability, ability to report, and consistency with the underlying goals of peer benchmarking. It should be noted that none of the Habitat and Biodiversity metrics attempt to capture habitat quality, which would require site visits, species presence/absence, population counts, and field studies. The metrics below focus on capturing overall habitat quantity. Further, these are considered quantitative "performance" metrics and do not include broader management elements such as existence of organizational biodiversity programs, corporate strategies, specific taxa management plans (e.g., Avian, Monarch.), or collaborations with stakeholders. The following refinements were made:

- The Total acres of habitat protected, enhanced or restored that supports natural habitat and biodiversity as required for mitigation metric was renamed to Natural land managed to support habitat and biodiversity as required for mitigation.
- The Total acres of habitat protected, enhanced or restored that supports natural habitat and biodiversity voluntarily was renamed to Natural land managed to support habitat and biodiversity voluntarily
- Both of the metrics above were refined to specify reporting of acres of land in the reporting year rather than cumulative acres.
- An optional normalizing denominator was added for both of the metrics above to enhance the ability to trend and benchmark data.
- The Natural land managed to support habitat and biodiversity as required for mitigation metric assumes that the overseeing agency related to the mitigation will confirm site conditions. Therefore, knowledge of site conditions is not a requirement for numerator OR denominator for this metric.
- A company can only include habitat in the numerator of the Natural land managed to support habitat and biodiversity voluntarily metric if the site conditions are considered via field visit, satellite imagery, or habitat modeling (they know its condition). Land where conditions are unknown should not be included in the numerator of this metric. The condition of the land does not need to be know for the denominator of this metric.

Please contact EPRI for additional information on Habitat & Biodiversity benchmarking metrics.

## METRIC ADDITIONS

Based on learnings from one year of test benchmarking, expert judgment, and engagement with members of ESIG and EPRI's Power-in-Pollinators project, the following metrics were added to this document:

- Natural land managed to support pollinator habitat and biodiversity as required for mitigation
- Natural land managed to support pollinator habitat and biodiversity voluntarily

These metrics are a subset of the Natural land managed to support habitat and biodiversity as required for mitigation and Natural land managed to support habitat and biodiversity voluntarily metrics mentioned above focused only on pollinators.

Issue carried over

Issue evolved

New issue identified through 2017 priority issue refresh

Issue removed through 2017 priority issue refresh

Not a formal priority issue

Issue identified in initial 2014 priority issue identification but metrics not identified; reemerged in 2017 priority issue refresh

| SUSTAINABILITY ISSUE[11] | ORIGINAL METRICS IDENTIFIED[4] | METRICS FOR BENCHMARKING | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 2015[5] | 2016[6] | 2017[7] | 2018[8] | 2019 | 2020 | 2021 | 2022 |
| Air Emissions | 35 | 16 | 17 | 17 | 17 | 17 | 17 | 10 | 9 |
| Assets and Operations | | | | | | | | | 1 |
| Business Model | | | | | | | | | |
| Climate Change | | | | | | | | | |
| Community Vitality | 20 | 6 | 7 | 7 | 7 | 8 | 8 | 8 | 4 |
| Customer Relations | | | | | | | | | |
| Cyber and Physical Security | | | | | | | | | |
| Economic Viability of Electric Utilities | 32 | | | | | | | | |
| Energy Reliability and Resiliency | 71 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 |
| Energy Affordability | 2 | | | | | | | | |
| Engagement and Collaboration | 10 | | | | | | | | |
| Greenhouse Gas Emissions | 78 | 11 | 12 | 12 | 12 | 12 | 12 | 10 | 9 |
| Habitat and Biodiversity | 17 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 |
| Job Satisfaction | 12 | | | | | | | | |
| Labor Relations | | | | | | | | | |
| Public Policy Relations | | | | | | | | | |
| Reportable Environmental Events | N/A | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Safety and Health[1] | 44 | 11 | 11 | 11 | 10 | 10 | 10 | 10 | 9 |
| Skilled Workforce Availability[2] | 8 | 14 | 17 | 17 | 10 | 10 | 10 | 10 | 9 |
| Supply Chain[9] | | | | | | 1 | 1 | 2 | 2 |
| Waste | 31 | 7 | 12 | 12 | 12 | 12 | 12 | 11 | 10 |
| Water[3] | 88 | 4 | 12 | 12 | 14 | 14 | 14 | 13 | 11 |
| Workforce Diversity, Inclusion and Equal Opportunity | | | | | 7 | 7 | 9 | 9 | 9 |
| Natural Gas[10] | | | | | | | | 6 | 6 |

1 From 2014-2017, Safety and Health metrics were in two issues (Public Safety and Health and Employee Safety and Health) and combined through EPRI's Priority Sustainability Issue Refresh (3002011444).

2 Some of the metrics in Skilled Workforce Availability were moved to Workforce Inclusion, Diversity and Equal Opportunity in 2018.

3 From 2014-2017, Water metrics were in two issues (Water Quality and Water Availability) and combined through EPRI's *Priority Sustainability Issue Refresh* (3002011444).

4 *Sustainability Metric Compilation for the Electric Power Industry: Results of Industry Interviews and Metric Database Development* (3002004255).

5 *Metrics to Benchmark Sustainability Performance for the Electric Power Industry* (3002007228).

6 *2016 Metrics to Benchmark Electric Power Company Sustainability Performance* (3002009923).

7 *2017 Metrics to Benchmark Electric Power Company Sustainability Performance* (3002011884).

8 *2018 Metrics to Benchmark Electric Power Company Sustainability Performance* (3002013458).

9 The Percent Spend with Diverse Suppliers metric was moved from Community Vitality to Supply Chain in 2019

10 Natural Gas is not a formal priority sustainability issue.

11 EPRI plans to map its legacy priority sustainability issues to sustainability priorities identified in 3002020773.

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|---|---|
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## AIR EMISSIONS

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Mercury (Hg) emissions | EO | Absolute lbs. of mercury emissions from company, equity-owned generation.<br>Companies should use emissions rate-based, direct measurement as outlined in the EPA Mercury and Air Toxics Standard (MATS) or regulatory equivalent for international operations. | lbs. |
| Mercury emission rate for total company-owned net generation | EO | **Numerator:** Total lbs. of mercury emissions from company, equity-owned generation.<br>**Denominator:** MWh from company, equity-owned total net generation. | lbs. / MWh |
| $SO_2$ total emissions | EO | Absolute lbs. of $SO_2$ emissions from company, equity-owned generation.<br>Report $SO_2$ values aligned with current EPA reporting or regulatory equivalent. | lbs. |
| $SO_2$ emissions rate from company-owned fossil fuel generation | EO | **Numerator:** Total lbs. of $SO_2$ emissions from company, equity-owned fossil fuel generation.<br>"Fossil fuel generation" to include generation from company, equity-owned coal, natural gas, and oil plants.<br>**Denominator:** MWh from company, equity-owned total fossil net generation. | lbs. / MWh |
| $SO_2$ emissions rate from company-owned total net generation | EO | **Numerator:** Total lbs. of $SO_2$ emissions from company, equity-owned generation.<br>**Denominator:** MWh from company, equity-owned total net generation. | lbs. / MWh |
| NOx total emissions | EO | Absolute lbs. of NOx emissions from company, equity-owned generation.<br>Report NOx values aligned with current EPA reporting or regulatory equivalent. | lbs. |
| NOx emission rate from company-owned fossil fuel generation | EO | **Numerator:** Total lbs. of NOx emissions from company, equity-owned fossil fuel generation.<br>**Denominator:** MWh from company, equity-owned total fossil net generation. | lbs. / MWh |
| NOx emission rate from company-owned total net generation | EO | **Numerator:** Total lbs. of NOx emissions from company, equity-owned generation.<br>**Denominator:** MWh from company, equity-owned total net generation. | lbs. / MWh |
| Air permit non-compliance rate | EO | **Numerator:** Number of non-compliance events/violations of federal, state/provincial, or local air permits.<br>Permits include, but are not limited to:<br>• Permit to Operate (PTO) • Permit by Rule (PBR) • New Source Review (NSR) • Standard Permits<br>If a non-compliance event/violation is excused due to a force majeure or equipment malfunction in the data year by your regulatory authority, it does not need to be counted for this metric.<br>Do not count opacity exceedances for the purposes of this metric.<br>Any event that requires reporting to an agency - either immediately or in periodic reporting - that is a deviation from permit requirements should be included. If the event is an exception in semi-annual or annual reporting, the event should be included in scope.<br>Only count a non-compliance event/violation once. For example, if you have a violation of your Title V permit in April, and receive an NOV for that violation in July, this event is counted as one non-compliance event/violation for the data year.<br>Count based on equity ownership unless responsibility and reporting is done otherwise as agreed upon through management/operational contracts.<br>**Denominator:** Number of air quality permits. | # events / # permits |

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## ASSETS AND OPERATIONS

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Effective energy efficiency investment rate | FC | **Numerator:** Total electric energy savings for the data year as reported on Schedule 6, Part A of the EIA Form 861 and/or equivalent international reporting.<br>Incremental Annual Savings for the reporting year are those changes in energy use caused in the current data year by:<br>1. New participants in demand-side management (DSM) programs that operated in the previous reporting year.<br>2. Participants in new DSM programs that operated for the first time in the current reporting year.<br>A "new program" is a program for which the reporting year is the first year the program achieved savings, regardless of when program development and expenditures began.<br>**Denominator:** Total investment in the data year for electric energy efficiency programs as reported to EIA on Form 861 and/or equivalent international reporting. | kWh / $ invested |

## COMMUNITY VITALITY

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Charitable contribution rate | FC | **Numerator:** Charitable contributions include money or property given to: (1) Churches, synagogues, temples, mosques, and other religious organizations; (2) Federal, state, and local governments, if your contribution is solely for public purposes (for example, a gift to reduce the public debt or maintain a public park); (3) Nonprofit schools and hospitals; (4) The Salvation Army, American Red Cross, CARE, Goodwill Industries, United Way, Boy Scouts of America, Girl Scouts of America, Boys and Girls Clubs of America, etc.; and (5) War veterans' groups.<br>Charitable contributions do not include money or property given to: (1) Civic leagues, social and [non-501(c)(3)] sports clubs, labor unions, and chambers of commerce; (2) Foreign organizations (except certain Canadian, Israeli, and Mexican charities); (3) Groups that are run for personal profit; (4) Groups whose purpose is to lobby for law changes; (4) Homeowners' associations; (5) Individuals; (6) Political groups or candidates for public office; (6) Cost of raffle, bingo, or lottery tickets; (7) Dues, fees, or bills paid to country clubs, lodges, fraternal orders, or similar groups; (8) Tuition; (9) Value of blood given to a blood bank.<br>Matched donations may be accounted for in this metric; but only in the amount given by the company (e.g., an employee makes a $100 gift to an academic institution that is matched by the company, $100 would be counted for this metric).<br>Scholarships awarded can be counted if they meet the following criteria, identified in the IRS Company Scholarship Program (October 2016):<br>"Company-related scholarship programs can meet the scholarship requirements by ensuring that the scholarships awarded are for the main purpose of furthering the recipients' education rather than compensating company employees.<br>1. The preferential treatment derived from employment must not have any significance beyond that of an initial qualifier,<br>2. The selection of scholarship grantees must be controlled and limited by substantial non-employment related factors, including a selection committee of individuals who are independent and separate from the private foundation, its organizer, and the employer concerned, and<br>3. There must exist only a limited probability that qualified employees or their children will receive scholarship grants."<br>Money spent to sponsor a work-related event should not be counted in this metric (e.g., sponsorship of a Ceres conference or purchase of a table at an energy-focused event).<br>Money donated through a company's foundation may be counted toward this metric. Corporate giving outside of a foundation may also be counted in this metric.<br>Money donated by employees through company campaigns should NOT be counted for this metric.<br>Charitable donations made in association with permit negotiations should NOT be counted for this metric.<br>For in-kind contributions, report the financial equivalent of the contribution (e.g., if making a book donation to a school, report the dollar amount of books contributed).<br>You MAY report the value of time or services donated (e.g., if doing pro-bono legal work, report the dollar amount of work being provided).<br>**Denominator:** Total operating revenue. | $ charitable contributions / $ revenue |

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## COMMUNITY VITALITY

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Corporate volunteerism rate | FC | **Numerator:** Number of employee corporate volunteer hours at company-sponsored events at non-profit or charitable organization.<br>"Corporate volunteer hours" reflect employee volunteering conducted through a company-sponsored event for non-profit or charitable organizations.<br>Company-sponsored events include events where a company encourages employee participation (e.g., company encourages employee participation in 5k charity run or a weekend habitat for humanity build).<br>Personal volunteer hours performed by employees for non-profit or charitable organizations on their own time should NOT be counted (e.g., hours committed to leading boy scout troop or coaching little league team not company sponsored).<br>Hours reported should include BOTH paid and unpaid hours committed by employees.<br>Time served as a member of a Board of Directors for a non-profit or charitable organization maybe included for the purposes of this metric.<br>Volunteer hours performed by retirees should not be counted for the purposes of this metric.<br>For example, a four-hour park clean-up sponsored by the company draws in 60 employees (20 of which are serving during their working hours, therefore being compensated for the effort, 40 of whom are volunteering on their own time) and an additional 40 members of the public. For the purpose of this metric, the company would report 240 hours (60 employees x 4 hours)<br>**Denominator:** Average number of employees.<br>Average number of employees should be calculated aligned with Bureau of Labor Statistics methodology (last updated 2018). | Employee hours / avg. # employees |
| Paid corporate volunteerism rate | FC | **Numerator:** Number of employee paid corporate volunteer hours at company-sponsored events at non-profit or charitable organizations.<br>"Corporate volunteer hours" reflect employee volunteering conducted through a company-sponsored event for non-profit or charitable organizations.<br>Absolute number of PAID employee corporate volunteer hours.<br>"Corporate volunteer hours" reflect employee volunteering conducted through a company-sponsored event for non-profit or charitable organizations.<br>Hours counted for the purposes of this metric should reflect time during an employee's normal paid work schedule where the employees are volunteering. DO NOT count volunteering done via flexible scheduling (i.e., if an employee takes off early to volunteer but makes up the time on a different day, this should not be counted).<br>Personal volunteer hours performed by employees for activities not sponsored by a company should NOT be counted (e.g., hours committed to leading a Boy Scout troop or coaching a little league team that is not company sponsored).<br>Hours should include ONLY paid hours committed by employees.<br>Time served as a member of a Board of Directors for non-profit or charitable organizations may be included for the purposes of this metric.<br>Volunteer hours performed by retirees should not be counted for the purposes of this metric.<br>For example, a four-hour park clean-up sponsored by the company draws in 60 employees (20 of which are serving during their working hours and are therefore being compensated for the effort, 40 of whom are volunteering on their own time) and an additional 40 members of the public. For the purpose of this metric, the company would report 80 hours (20 employees being paid x 4 hours).<br>**Denominator:** Average number of employees.<br>Average number of employees should be calculated aligned with Bureau of Labor Statistics methodology (last updated 2018). | Employee paid hours / avg. # employee |

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## COMMUNITY VITALITY

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Total employee volunteer hour rate | FC | **Numerator:** Number of employee corporate and personal volunteer hours at company-sponsored events at non-profit or charitable organizations.<br>Include BOTH corporate volunteer hours and personal volunteer hours performed by employees.<br>"Corporate volunteer hours" reflect employee volunteering conducted through a company-sponsored event for non-profit or charitable organizations.<br>"Personal volunteer hours" reflect employee volunteering conducted on personal time for non-profit or charitable organizations (e.g., hours committed to leading a Boy Scout troop or coaching a little league team that is not company sponsored).<br>Time served as a member of a Board of Directors for a non-profit or charitable organization may be included in this metric.<br>Volunteer hours performed by retirees should not be counted for the purposes of this metric.<br>For example, a company sponsors a 15-week tutoring program for local school children where 20 employees volunteer 1 hour a week (total of 300 hours). Three employees decide to continue volunteering on their own time for an hour each week for an additional 15 weeks (total of 45 hours). For the purposes of this metric, the company would report 345 hours (300 + 45).<br>**Denominator:** Average number of employees.<br>Average number of employees should be calculated aligned with Bureau of Labor Statistics methodology (last updated 2018). | Total employee hours / avg. # employee |

## ENERGY RELIABILITY AND RESILIENCY

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| System average interruption duration index (SAIDI) | EO | Average duration of planned and unplanned system interruptions per utility customer served during the data year.<br>Count system interruptions as defined by companies' regulatory PSC/PUC/BPU.<br>This metric should be reported according to the guidance set forth in 1366-2012 IEEE Guide for Distribution Reliability Indices and should exclude major storm events, unless the PSC/PUC/BPU has determined that a particular event should be included. | Minutes |
| System average interruption frequency index (SAIFI) | EO | Average number of interruptions that a customer would experience during the data year<br>Count system interruptions as defined by companies' regulatory PSC/PUC/BPU.<br>This metric should be reported according to the guidance set forth in 1366-2012 IEEE Guide for Distribution Reliability Indices and should exclude major storm events, unless the PSC/PUC/BPU has determined that a particular event should be included. | # (of interruptions) |
| Customer average interruption duration index (CAIDI) | EO | Average duration of planned and unplanned interruptions (i.e., average restoration time) during the data year.<br>Count system interruptions as defined by companies' regulatory PSC/PUC/BPU.<br>This metric should be reported according to the guidance set forth in 1366-2012 IEEE Guide for Distribution Reliability Indices and should exclude major storm events, unless the PSC/PUC/BPU has determined that a particular event should be included. | Minutes |
| Customer average interruption frequency (CAIFI) | EO | Average number of interruptions per customer interrupted during the data year.<br>Count system interruptions as defined by companies' regulatory PSC/PUC/BPU.<br>This metric should be reported according to the guidance set forth in 1366-2012 IEEE Guide for Distribution Reliability Indices and should exclude major storm events, unless the PSC/PUC/BPU has determined that a particular event should be included. | # (of interruptions) |

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## ENERGY RELIABILITY AND RESILIENCY

| | | | |
|---|---|---|---|
| Weighted equivalent forced outage rate demand (WEFORd) | EO | WEFORd for non-renewable generation within the data year. Guidance for calculation provided by North American Electric Reliability Corporation (NERC).<br>Any unit that runs throughout the year should be included in the calculation.<br>Refer to the North American Electric Reliability Corporation (NERC) Generating Availability Data System (GADS) Data Reporting Initiative (DRI) or international equivalent for further guidance. | % |

## GREENHOUSE GAS EMISSIONS

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Total $CO_2$ emissions rate for owned fossil fuel generation | EO | **Numerator:** Metric tons of $CO_2$ emissions from company, equity-owned fossil fuel generation.<br>"Fossil fuel generation" to include generation from company, equity-owned coal, natural gas, and oil plants.<br>**Denominator:** MWh from company, equity-owned total fossil fuel net generation. | Metric tons $CO_2$ / MWh |
| Total $CO_2$ emissions rate for total owned generation | EO | **Numerator:** Metric tons of $CO_2$ emissions from company, equity-owned generation.<br>"Fossil fuel generation" to include generation from company, equity-owned coal, natural gas, and oil plants.<br>**Denominator:** MWh from company, equity-owned total net generation across all units (i.e., full fleet). | Metric tons $CO_2$ / MWh |
| Total $CO_2$ emissions rate for biomass generation | EO | **Numerator:** Metric tons of $CO_2$ emissions from company, equity-owned biomass generation.<br>**Denominator:** MWh from company, equity-owned biomass net generation. | Metric tons $CO_2$/ MWh |
| Total Scope 1 $CO_2e$ emissions | FC | Total Scope 1 $CO_2e$ emissions from all company operations, including fossil fuel generation, natural gas, T&D, fleet, and other company operations. Emissions to be broken out and reported for $CO_2$, $CH_4$, $N_2O$, HFC, PFC, $NF_3$ and $SF_6$.<br>Further guidance on calculations can be found in The Climate Registry's General Reporting Protocol 2.1 (January 2016) and The Electric Power Sector Protocol. | Metric tons $CO_2e$ |
| Total Scope 1 $CO_2e$ emissions intensity | FC | Total Scope 1 $CO_2e$ emissions rate from fossil fuel generation, natural gas, T&D, fleet, and other company operations. Normalization factors include total operating revenue, employees, and customers. | Metric tons $CO_2e$ / factor |
| Total Scope 2 $CO_2e$ emissions | FC | Total Scope 2 $CO_2e$ emissions to be broken out and reported for $CO_2$, $CH_4$, and $N_2O$.<br>Further guidance on calculations can be found in The Climate Registry's General Reporting Protocol 2.1 (January 2016) and The Electric Power Sector Protocol. Companies may report using the market-based method. | Metric tons $CO_2e$ |
| Total Scope 2 $CO_2e$ emissions intensity | FC | Total Scope 2 $CO_2e$ emissions. Normalization factors include total operating revenue, employees, and customers. | Metric tons $CO_2e$ / factor |
| Total Scope 3 $CO_2e$ emissions | FC | Total Scope 3 $CO_2e$ emissions from any of the upstream and downstream activities that are applicable to the reporting company.<br>"Upstream and downstream activities" as categorized and defined in Technical Guidance for Calculating Scope 3 Emissions (version 1.0) from the World Resource Institute's Corporate Value Chain (Scope 3) Accounting and Reporting Standard (September 2011).<br>Further guidance on a full Scope 3 emissions calculation can be found as referenced by the Climate Registry's General Reporting Protocol 2.1 (January 2016). | Metric tons $CO_2e$ |

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|---|---|
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| EO | Boundary refers to electric power operations only. |
| NG | Boundary refers to natural gas operations only. |

## GREENHOUSE GAS EMISSIONS

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Total $CO_2$ emissions rate for electricity used to meet end load | EO | **Numerator:** Report the sum of the following $CO_2$ emissions:<br>1. Emissions from equity-owned power generation facilities (*GEN*)<br>2. Emissions embedded in net power purchased through specified contracts (*SC*) or agreements (e.g., PPAs) above and beyond what your company generated<br>3. Emissions associated with net power purchased from the wholesale power market for resale to end-use customers (*PP*)<br>**Denominator:** Total MWh of energy sold to end-use customers.<br>**Equation:** (*GEN* + *SC* + *PP*) / MWh | Metric tons $CO_2$ / MWh |

## HABITAT AND BIODIVERSITY

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Natural land managed to support habitat and biodiversity as required for mitigation | FC | **Denominator:** Total acres of natural land which the organization has authority and control to manage, whether that is through easement, lease, or ownership. Condition of the natural land does not need to be known.<br>"Natural land" includes water and terrestrial land that is in a natural state (e.g., fallow, naturally vegetated, open water, streams, wetlands). Excludes non-natural impermeable, concrete, parks inconsistent with biodiversity (e.g., soccer/golf parks), and cropland not supporting habitat.<br>"Habitat/species/biodiversity mitigation" includes Supplemental Environmental Project negotiation (SEP), operating/siting permit, or any other federal, state, or local requirement or negotiation (e.g., FERC, US Endangered Species Act, US Clean Water Act).<br>As this is "required for mitigation", it is assumed that the overseeing regulatory authority has determined that the land is suitable as habitat. Therefore, the condition of the land does NOT need to be known for the numerator or denominator.<br>For linear locations, such as streams, rivers, and rights-of-ways, estimate the acres by multiplying the linear feet by its width.<br>For the purposes of this metric, the following may be included:<br>• ALL land being managed during the data year, regardless of the year management began.<br>• In-lieu fees that can be accurately translated into acres of conservation, credits translated into acres purchased/applied via mitigation banking.<br>• As this is "required for mitigation", it is assumed that the overseeing regulatory authority has determined that the land is suitable as habitat. Therefore, the condition of the land doesn't need to be known.<br>The following should NOT be included:<br>• Recreation areas that are not managed in a way consistent with supporting biodiversity (e.g., soccer fields, baseball parks, heavy use of pesticides).<br>• Acres managed by others through financial donations as part of the mitigation negotiation. | Absolute (Acres) if only reporting numerator.<br>Percentage (%) if also reporting denominator. |

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## HABITAT AND BIODIVERSITY

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Natural land managed to support habitat and biodiversity voluntarily | FC | **Numerator:** Acres of natural land which the organization has authority and control to manage (whether through easement, lease, or ownership) in the reporting year, AND was managed to support biodiversity, where the condition of the property is known.\<br><br>The condition of the property (when reporting the numerator of this metric) can be determined via site visit, satellite imagery, habitat modeling analysis or other verification approach.<br><br>**Denominator:** Total acres of natural land which the organization has authority and control to manage, whether that is through easement, lease, or ownership. Condition of the natural land does not need to be known. (Reporting of denominator is optional).<br><br>"Natural land" includes water and terrestrial land that is in a natural state (e.g., fallow, naturally vegetated, open water, streams, wetlands). Excludes non-natural impermeable, concrete, parks inconsistent with biodiversity (e.g., soccer/golf parks), and cropland not supporting habitat<br><br>"Managed to support biodiversity" includes activities taken specifically for the purpose of ensuring habitat is created/maintained/enhanced/restored.<br><br>For linear locations, such as streams, rivers, and rights-of-ways, estimate the acres by multiplying the linear feet by its width.<br><br>For the purposes of this metric, the following may be included:<br>• ALL land being managed during the data year, regardless of the year management began.<br>• Habitat managed in Transmission and Distribution Rights-of-Ways via lease, easement, or ownership (e.g., land managed with biodiversity-friendly Integrated Vegetation Management (IVM) programs).<br>• Habitat co-located with other land uses (e.g., solar sites, wind turbines, camping)<br><br>The following should NOT be included:<br>• Recreation areas that are not managed in a way consistent with supporting biodiversity (e.g., soccer fields, baseball parks, heavy use of pesticides).<br>• Corporate surplus property where the condition is unknown.<br>• Acres managed by others through philanthropic donations (e.g., The Nature Conservancy).<br>• Property applied towards mitigation, including mitigation/species banks. | Absolute (Acres) if only reporting numerator.<br><br>Percentage (%) if also reporting denominator. |
| Natural land managed to support pollinator habitat and biodiversity as required for mitigation | FC | This is a subcategory of the metric: "Natural land managed to support habitat and biodiversity as required for mitigation." A company may not report more acres in this pollinator sub-metric than in the "Natural land managed to support habitat and biodiversity as required for mitigation" metric.<br><br>**Numerator:** Acres of natural land which the organization has authority and control to manage (whether through easement, lease, or ownership) in the reporting year, was applied towards pollinator species mitigation.<br><br>**Denominator:** Total acres of natural land which the organization has authority and control to manage, whether that is through easement, lease, or ownership. (Reporting of denominator is optional)<br><br>As this is "required for mitigation", it is assumed that the overseeing regulatory authority has determined that the land is suitable as habitat. Therefore, the condition of the land does NOT need to be known for the numerator or denominator.<br><br>Pollinators include insects, birds, and animals that are known to move pollen between flowers. Their habitat includes a mix of flowering plants, forbs, and grasses (preferably native to the eco-region) that are maintained with minimal use of chemicals. | Absolute (Acres) if only reporting numerator.<br><br>Percentage (%) if also reporting denominator. |

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| NG | Boundary refers to natural gas operations only. |

## HABITAT AND BIODIVERSITY

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Natural land managed to support pollinator habitat and biodiversity voluntarily | FC | This is a subcategory of the metric "Natural land managed to support habitat and biodiversity voluntarily." A company may not report more acres in this (pollinator) metric than in the "Natural land managed to support habitat and biodiversity voluntarily" metric.<br><br>**Numerator:** Acres of natural land (water and terrestrial) which the organization has authority and control to manage (whether through easement, lease, or ownership) in the reporting year, AND managed to support pollinators voluntarily. Condition of the land needs to be known.<br><br>The condition of the pollinator-supporting habitat must be known (when reporting on the numerator of this metric) via site visit, remote sensing, satellite imagery (or other similar means) to include pollinator-supporting plants and/or pollinators.<br><br>**Denominator:** Total acres of natural land the organization has authority and control to manage, whether that is through easement, lease, or ownership. Condition of the natural land does NOT need to be known. (Reporting of denominator is optional)<br><br>"Managed to support pollinators" includes activities taken specifically for the purpose of ensuring habitat is created/maintained/enhanced/restored.<br><br>Pollinators include insects, birds, and animals that are known to move pollen between flowers. Their habitat includes a mix of flowering plants, forbs, and grasses (preferably native to the eco-region) that are maintained with minimal use of chemicals. | Absolute (Acres) if only reporting numerator.<br><br>Percentage (%) if also reporting denominator. |

## REPORTABLE ENVIRONMENTAL EVENTS

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Reportable environmental events (REE) | FC | Environmental events are those that:<br>• Should have been subject to an environmental permit or regulatory notification, but the organization failed to obtain the appropriate permit or make the required notification, or<br>• Violates permit conditions or other regulatory requirements and triggers regulatory required oral or written notification to a regulatory agency, or<br>• Triggers enforcement action by a regulatory agency.<br><br>Events should include non-compliance events/violations of air, water, and waste permits and regulations already accounted for through metrics in other priority issue areas. This metric should ALSO include any additional spills to water, reportable oil/chemical spills, reportable quantity release, and other federal, state, or provincial regulatory non-compliance or discharge exceedances.<br><br>Any event that requires reporting to an agency - either immediately or in periodic reporting - that is a deviation from permit requirements should be included. If the event is an exception in semi-annual or annual reporting, the event should be included in scope.<br><br>Metric is limited to environmental events and should not include events related to other areas of company activities (e.g., traffic violations).<br><br>By definition, a Notice of Violation (NOV) will always be an REE, but an REE will not always result in an NOV.<br><br>Do not count opacity exceedances for the purposes of this metric.<br><br>Count events based on equity ownership unless responsibility and reporting are done otherwise as agreed upon through management/operational contracts. | # |

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## REPORTABLE ENVIRONMENTAL EVENTS

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Reportable environmental events with fine | FC | Environmental events are those resulting in a fine that:<br>• Should have been subject to an environmental permit or regulatory notification, but the organization failed to obtain the appropriate permit or make the required notification, or<br>• Violates permit conditions or other regulatory requirements and triggers regulatory required oral or written notification to a regulatory agency, or<br>• Triggers enforcement action by a regulatory agency<br>Events should include non-compliance events/violations of air, water, and waste permits or regulations with fines already accounted for through metrics in other priority issue areas. This metric should ALSO include any additional spills to water, reportable oil/chemical spills, reportable quantity release, and other federal, state, or provincial regulatory non-compliance or discharge exceedances.<br>Any event that requires reporting to an agency - either immediately or in periodic reporting - that is a deviation from permit requirements should be included. If the event is an exception in semi-annual or annual reporting, the event should be included in scope.<br>Metric is limited to environmental events and should not include events related to other areas of company activities (e.g., traffic violations).<br>By definition, an NOV will always be an REE, but an REE will not always result in an NOV.<br>Do not count opacity exceedances for the purposes of this metric.<br>Count events based on equity ownership unless responsibility and reporting are done otherwise as agreed upon through management/operational contracts. | # |
| Environmental fines | FC | Total amount paid for non-compliance events/violations in connection with regulation enforcement actions. If a fine was paid in the data year for a violation in a previous year, it SHOULD BE included in this total. | $ |

## SAFETY AND HEALTH

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Public fatalities | FC | Total number of fatalities to members of the public not in the employ of, or under contract to, the reporting company, and that occur as a result of contact with company equipment and assets, to include electric and gas.<br>Include fatalities whether or not the company is deemed to be at fault.<br>To include all company assets (e.g., cable, vehicles, dams) and company operations/activities.<br>To include total number of fatalities to members of the public not in the employ of, or under contract to, the reporting company due to any of the following causes:<br>• Electrical contact with assets<br>• Electrical contact with unintentional energized metallic object<br>• Collision with poles<br>• Pole-related (collapse or maintenance)<br>• Copper theft<br>• Auto accidents<br>• Drowning<br>• Natural gas (contact with the commodity, e.g., carbon monoxide poisoning)<br>• Other | # |

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## SAFETY AND HEALTH

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Public injuries | FC | Total number of injuries to members of the public not in the employ of, or under contract to, the reporting company, and that occur as a result of contact with the member company equipment and assets, to include electric and gas.<br>Include injures whether or not the company is deemed to be at fault.<br>To include all company assets (e.g., cables, vehicles, dams) and company operations/activities.<br>To include total number of injuries to members of the public not in the employ of, or under contract to, the reporting company, due to any of the following causes:<br>• Electrical contact with assets<br>• Electrical contact with unintentional energized metallic object<br>• Collision with poles<br>• Pole-related (collapse or maintenance)<br>• Copper theft<br>• Auto accidents<br>• Natural gas<br>• Other | # |
| Employee fatalities | FC | Total fatalities for employees; record for all employees on company payroll, whether they are labor, executive, hourly, salary, part-time, seasonal, or migrant workers. Also report fatalities to those that occur to employees who are not on the company payroll if you supervise these employees on a day-to-day basis. If the company is organized as a sole proprietorship or partnership, the owner or partners are not considered employees for recordkeeping purposes.<br>For temporary employees, report fatalities if you supervise these employees on a day-to-day basis.<br>If the contractor's employee is under the day-to-day supervision of the contractor, the contractor is responsible for recording the fatality. If you supervise the contractor employee's work on a day-to-day basis, the fatality is recorded through this metric. | # |
| Contractor fatalities | FC | Total fatalities of contract employees who are under the day-to-day supervision of the contractor. | # |
| Recordable incident rate for employees | FC | **Numerator:** Number of recordable injuries or illnesses x 200,000.<br>Injury or illness is recordable if it results in any of the following: death, days away from work, restricted work or transfer to another job, medical treatment beyond first aid, or loss of consciousness. You must also consider that a case meets the general recording criteria if it involves a significant injury or illness diagnosed by a physician or other licensed health care professional, even if it does not result in death, days away from work, restricted work or job transfer, medical treatment beyond first aid, or loss of consciousness.<br>Record the injuries and illnesses of all employees on the company payroll, whether they are labor, executive, hourly, salary, part-time, seasonal, or migrant workers. You also must record the recordable injuries and illnesses that occur to employees who are not on the company payroll if you supervise these employees on a day-to-day basis. If the company is organized as a sole proprietorship or partnership, the owner or partners are not considered employees for recordkeeping purposes.<br>For temporary employees, you must record these injuries and illnesses if you supervise these employees on a day-to-day basis.<br>If the contractor's employee is under the day-to-day supervision of the contractor, the contractor is responsible for recording the injury or illness. If you supervise the contractor employee's work on a day-to-day basis, you must record the injury or illness.<br>**Denominator:** Number of employee labor hours worked. | # injuries or illnesses x 200,000 / # of employee labor hours worked |
| Recordable incident rate for contractors | FC | **Numerator:** Number of recordable injuries or illnesses x 200,000.<br>Injury or illness is recordable if it results in any of the following: death, days away from work, restricted work or transfer to another job, medical treatment beyond first aid, or loss of consciousness. You must also consider that a case meets the general recording criteria if it involves a significant injury or illness diagnosed by a physician or other licensed health care professional, even if it does not result in death, days away from work, restricted work or job transfer, medical treatment beyond first aid, or loss of consciousness.<br>Include employees under the day-to-day supervision of your contractor.<br>**Denominator:** Number of contractor labor hours worked. | # injuries or illnesses x 200,000 / # of contractor labor hours worked |

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## SAFETY AND HEALTH

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Lost-time case rate | FC | **Numerator:** Number of Lost Time Cases x 200,000.<br>Only report for employees of the company as defined for "Recordable incident rate for employees" metric.<br>A lost time incident is one that resulted in an employee's inability to work the next full work day.<br>**Denominator:** Number of employee labor hours worked. | # of lost time cases x 200,000 / # of employee labor hours worked |
| DART rate | FC | **Numerator:** Total Number of DART incidents x 200,000.<br>Only report for employees of company as defined for "Recordable incident rate for employees" metric.<br>A DART incident is one that resulted in one or more Lost Days, one or more Restricted Days or that resulted in an employee transferring to a different job within the company.<br>**Denominator:** Number of employee labor hours worked | Total # of DART incidents x 200,000 / # of employee labor hours worked |
| Severity rate | FC | **Numerator:** Total number lost workdays.<br>Only report for employees of company as defined for "Recordable incident rate for employees" metric.<br>Denominator: Total number of recordable incidents. | Total # lost workdays / total # of recordable incidents |

## SKILLED WORKFORCE AVAILABILITY

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Progression planning – early career | FC | **Numerator:** Number of full-time employees 29 years old or younger.<br>**Denominator:** Average number of employees over the year.<br>Average number of employees should be calculated aligned with Bureau of Labor Statistics methodology (last updated 2018). | # employees <30 / avg. # employees |
| Progression planning – mid-career | FC | **Numerator:** Number of full-time employees 30-50 years old.<br>**Denominator:** Average number of employees over the year.<br>Average number of employees should be calculated aligned with Bureau of Labor Statistics methodology (last updated 2018). | # employees ≥ 30 and ≤ 50 / avg. # employees |
| Progression planning – mature career | FC | **Numerator:** Number of full-time employees aged 51 and older.<br>**Denominator:** Average number of employees over the year.<br>Average number of employees should be calculated aligned with Bureau of Labor Statistics methodology (last updated 2018). | # employees >50 / avg. # employees |
| Progression planning – eligibility to retire | FC | **Numerator:** Number of employees eligible to retire within 5 years.<br>Eligibility to retire as defined by the company's individual retirement policies. In the absence of company policy, reporting should default to social security requirements which identify retirement age as between 65 and 67 depending on birth year.<br>**Denominator:** Average number of employees over the year.<br>Average number of employees should be calculated aligned with Bureau of Labor Statistics methodology (last updated 2018). | # employees eligible to retire / avg. # employees |

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## SKILLED WORKFORCE AVAILABILITY

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Employee turnover rate | FC | **Numerator:** Employees who leave voluntarily (including retirement).<br>**Denominator:** Average number of employees over the year.<br>Average number of employees should be calculated aligned with Bureau of Labor Statistics methodology (last updated 2018). | # voluntary separationsm/ avg. # employees |
| Training for career advancement (per employee) | FC | **Numerator:** Total hours training to include leadership and skills-based training provided in the classroom (company facility), online, and documented on-the-job.<br>Count BOTH required (e.g., OSHA-required, sexual-harassment, etc.) and professional development (leadership, conflict resolution, etc.) training hours.<br>**Denominator:** Average number of employees.<br>Average number of employees should be calculated aligned with Bureau of Labor Statistics methodology (last updated 2018). | Hours training / avg. # employees |
| Continuing education contributions (per employee) | FC | **Numerator:** Dollars committed to continuing education of employees pursuing degrees or certifications outside of the company.<br>Financial contributions of a company to employees pursuing careers or certifications outside the company. Criteria for inclusion is based on individual company policy and procedures (e.g., If a particular certification costs $1000.00 and company A's policy is to cover 80% and company B's policy is to cover 50%, they should report $800.00 and $500.00, respectively).<br>**Denominator:** Average number of employees.<br>Average number of employees should be calculated aligned with Bureau of Labor Statistics methodology (last updated 2018). | $ for continuing education / avg. # employees |
| Recruitment – partnerships and program success rate | FC | **Numerator:** Number of recruitment partnerships and programs to engage and recruit potential employees from whom employees were hired during the data year.<br>**Denominator:** Number of recruitment partnerships and programs.<br>Count partnerships and programs with academia, trade schools, co-ops, and non-governmental organizations active during the data year with the intent to engage and recruit potential employees by furthering education and skills development in areas relevant to the electric power industry. | % |
| Recruitment – partnerships and program employee hire rate | FC | **Numerator:** potential employees.<br>**Denominator:** Number of employees hired in the data year. | % |

## SUPPLY CHAIN

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Percent spend with diverse suppliers | FC | **Numerator:** Dollars spent with diverse suppliers (women-, minority-, LGBT-, veteran-, and service disabled veteran-owned businesses) during the data year.<br>Only count dollars spent with direct suppliers; money spent with diverse sub-contractors should not be counted for the purposes of this metric.<br>Denominator: Total dollars spent in data year for materials and services. DO NOT include dollars spent to procure fuel for electricity generation or real estate. | % |
| Percent spend with Tier 1 suppliers that responded to a sustainability survey | FC | **Numerator:** Spend on materials and services provided by a Tier 1 supplier that has responded to a sustainability-focused supplier survey.<br>Tier 1 suppliers as defined by the reporting company.<br>A sustainability-focused supplier survey can include a company-specific survey, or an external survey administered by a third party.<br>**Denominator:** Total spend in data year for materials and services from Tier 1 suppliers. | % |

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## WASTE

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Coal combustion products recycled intensity | EO | **Numerator:** The amount of coal combustion products (CCPs) - fly ash, bottom ash, boiler slag, flue gas desulfurization materials, scrubber bi-product - diverted from disposal into beneficial uses, including being sold. Include any CCP that is generated during the data year and stored for beneficial use in a future year. Only include CCP generated at company equity-owned facilities.<br>For the purposes of this metric, beneficial use is defined using the April 2015 CCR disposal rule: The beneficial use of CCR definition is comprised of four criteria:<br>• The CCR must provide a functional benefit;<br>• The CCR must substitute for the use of a virgin material;<br>• Meets product specifications and/or design standards; and<br>• When unencapsulated use of CCR involves placement on the land of 12,400 tons or more in non-roadway applications, the user must demonstrate, and provide documentation upon request, that environmental releases to groundwater, surface water, soil, and air are comparable to or lower than those from analogous products made without CCR, or that releases will be below relevant regulatory and health-based benchmarks for human and ecological receptors.<br>If no weight data are available, estimate the weight using available information on waste density and volume collected, mass balances, or similar information.<br>**Denominator:** Total tons of CCP generated during the data year. | Tons diverted/ tons generated |
| Low-level radioactive waste disposal rate | EO | **Numerator:** cubic feet disposed from company-owned nuclear facilities (not including decommissioning waste), including Class A, B, and C radioactive waste as defined by the Nuclear Regulatory Commission (NRC).<br>**Denominator:** Net, company, equity-owned nuclear power generation. | Cubic feet / MWh |
| Hazardous waste disposed | FC | Tons of hazardous waste, as defined by the Resource Conservation and Recovery Act (RCRA) disposed of to a Treatment Storage and Disposal (TSD) facility. Methods of disposal include disposing to landfill, surface impoundment, waste pile, and land treatment units. Hazardous wastes include either listed wastes (F, K, P and U lists) or characteristic wastes (wastes which exhibit at least one of the following characteristics: ignitability, corrosivity, reactivity, toxicity).<br>If the reporting organization is an international business, a regulatory equivalent to the RCRA definition may be substituted for the purposes of this reporting.<br>Hazardous waste sent for incineration SHOULD BE counted UNLESS the waste is being burned for significant energy and material recovery, with waste treatment being a secondary benefit.<br>Hazardous waste which is recycled should NOT be reported for this metric (e.g., hazardous waste that is blended in fuel would NOT be counted for this metric).<br>Do not include PCB, used oil, or asbestos disposal in this metric<br>If a waste is not identified at the federal level as hazardous, but IS identified as hazardous within the state your facility is located, the waste SHOULD be included in this metric.<br>If no weight data are available, estimate the weight using available information on waste density and volume collected, mass balances, or similar information. | Tons |

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## WASTE

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Hazardous waste disposal rate | FC | **Numerator:** Tons of hazardous waste, as defined by the Resource Conservation and Recovery Act (RCRA) disposed of to a Treatment Storage and Disposal (TSD) facility. Methods of disposal include disposing to landfill, surface impoundment, waste pile, and land treatment units. Hazardous wastes include either listed wastes (F, K, P and U lists) or characteristic wastes (wastes which exhibit at least one of the following characteristics - ignitability, corrosivity, reactivity, toxicity).<br>If the reporting organization is an international business, a regulatory equivalent to the RCRA definition may be substituted for the purposes of this reporting.<br>Hazardous waste sent for incineration SHOULD BE counted UNLESS the waste is being burned for significant energy and material recovery, with waste treatment being a secondary benefit.<br>Hazardous waste which is recycled should NOT be reported for this metric (e.g., hazardous waste that is blended in fuel would NOT be counted for this metric.<br>Do not include PCB, used oil, or asbestos disposal in this metric.<br>If a waste is not identified at the federal level as hazardous, but IS identified as hazardous within the state your facility is located, the waste SHOULD be included in this metric.<br>If no weight data are available, estimate the weight using available information on waste density and volume collected, mass balances, or similar information.<br>**Denominator:** Total operating revenue. | Tons / $M |
| Universal waste generated and recycled | FC | Tons of universal waste, as defined by 40 C.F.R. 273 including batteries, pesticides, mercury-containing equipment (including many thermostats), and lamps containing mercury (e.g., fluorescent lamps, including compact fluorescent lamps), generated and recycled.<br>If reporting organization is an international business, a regulatory equivalent definition for 40 C.F.R. 273 may be substituted for the purposes of this reporting.<br>If a waste is not identified at the federal level as universal, but IS identified as universal within the state your facility is located, the waste SHOULD be included in this metric.<br>If no weight data are available, estimate the weight using available information on waste density and volume collected, mass balances, or similar information. | Tons |
| Universal waste generated and recycled rate | FC | **Numerator:** Tons of universal waste, as defined by 40 C.F.R. 273 including batteries, pesticides, mercury-containing equipment (including many thermostats), and lamps containing mercury (e.g., fluorescent lamps, including compact fluorescent lamps), generated and recycled.<br>If reporting organization is an international business, a regulatory equivalent for 40 C.F.R. 273 may be substituted for the purposes of this reporting.<br>If a waste is not identified at the federal level as universal, but IS identified as universal within the state your facility is located, the waste SHOULD be included in this metric.<br>If no weight data are available, estimate the weight using available information on waste density and volume collected, mass balances, or similar information.<br>**Denominator:** Total operating revenue. | Tons / $M |
| Non-hazardous municipal solid waste diversion rate | FC | **Numerator:** Non-hazardous municipal solid waste as defined by EPA diverted during the data year. For the purposes of this metric, "diverted" includes waste recycled, repurposed, or otherwise handled so as not to enter a landfill.<br>If reporting organization is an international business, a regulatory equivalent for the EPA definition may be substituted for the purpose of this metric.<br>If no weight data are available, estimate the weight using available information on waste density and volume collected, mass balances, or similar information.<br>**Denominator:** Total tons of non-hazardous municipal solid waste generated during the data year. | % |

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|---|---|
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## WASTE

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Non-hazardous industrial waste diversion rate | FC | **Numerator:** Non-hazardous industrial solid waste - Including construction and demolition (C&D) waste, scrap metal, wood (including poles) and soil – diverted during the data year. For the purposes of this metric, "diverted" includes waste recycled, repurposed, or otherwise handled so as not to enter a landfill.<br>Do not include liquids (e.g., oil) or items that are sold through auction.<br>If no weight data are available, estimate the weight using available information on waste density and volume collected, mass balances, or similar information.<br>As CCR/CCPs are captured through a separate metric, they should not be included in the non-hazardous waste diversion rate metric.<br>**Denominator:** Total tons of non-hazardous industrial waste generated during the data year. | % |
| Facility energy consumption rate | FC | **Numerator:** kBTu of energy consumed by company facilities.<br>Include facilities that house administrative or support functions including, but not limited to, office buildings, warehouses, and maintenance buildings.<br>Energy consumption calculations should reflect SOURCE energy. Further guidance on calculation can be found in the US Environmental Protection Agency's documents:<br>• Energy Star Portfolio Manager Technical Reference: Thermal Energy Conversions (2015)<br>• Energy Star Portfolio Manager Technical Reference: Source Energy (2018)<br>**Denominator:** Either (1) square footage of facilities for which energy consumption is reported or (2) number of employees that report to the facilities for which energy consumption is reported. | kBTu energy consumed / sq. ft. or employee |
| Waste non-compliance | FC | Number of non-compliance events/violations of federal, state/provincial, or local waste regulations in data year.<br>Non-compliance related to manifests SHOULD be included for the purposes of this metric.<br>Any event that requires reporting to an agency - either immediately or in periodic reporting - that is a deviation from permit requirements should be included. If the event is an exception in semi-annual or annual reporting, the event should be included in scope.<br>If a non-compliance event/violation is excused due to a force majeure or equipment malfunction in the data year by your regulatory authority, it does not need to be counted for this metric. | # |

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## WATER

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Water permit violation rate | EO | **Numerator:** Number of non-compliance events/violations of federal, state/ provincial, or local water quality permits during data year with and without fines<br>To include NPDES, SPDES, and any other water quality-related permit requirements for POINT SOURCES.<br>The following permits for non-point sources should NOT be included:<br>• 404 wetland violations/mitigation or impoundments<br>• MS4s (stormwater)<br>Any non-compliance/violation of a water quality permit, regardless of whether a fine is incurred or not, should be counted for the purposes of this metric. If a non-compliance event is excused due to a force majeure or equipment malfunction in the data year by your regulatory authority, it does not need to be counted for this metric.<br>Only count a non-compliance event/violation once. For example, if you have a pH violation at a plant in April, and receive an NOV for that violation in July, this event is counted as one non-compliance event/violation for the data year.<br>Count based on equity ownership unless responsibility and reporting is done otherwise as agreed upon through management/operational contracts.<br>**Denominator:** Number of water quality permits. | # violations / # permits |
| Water permit non-compliance rate | EO | **Numerator:** Number of federal, state/provincial, or local water quality permits violated during data year.<br>**Denominator:** Number of water quality permits.<br>To include NPDES, SPDES, and any other water quality-related permit requirements for POINT SOURCES.<br>The following permits for non-point sources should NOT be included:<br>• 404 wetland violations/mitigation or impoundments<br>• MS4s (stormwater)<br>Any violation of a water quality permit, regardless of whether a fine is incurred or not, should be counted for the purposes of this metric. If a non-compliance event is excused in the data year by your regulatory authority, it does not need to be counted for this metric.<br>Any event that requires reporting to an agency - either immediately or in periodic reporting - that is a deviation from permit requirements should be included. If the event is an exception in semi-annual or annual reporting, the event should be included in scope.<br>Count based on equity ownership unless responsibility and reporting is done otherwise as agreed upon through management/operational contracts. | # permits violated / # permits |
| Freshwater consumption rate – fossil fuel generation | EO | **Numerator:** Gallons of fresh water consumed for company, equity-owned fossil fuel generation.<br>"Freshwater" includes water sourced from fresh surface water, groundwater, rainwater, and fresh municipal water. Do NOT include recycled, reclaimed, or gray water<br>Water consumption is defined as water that is not returned to the original water source after being withdrawn, including evaporation to the atmosphere.<br>**Denominator:** Company, equity-owned total net generation from fossil fuel. | Gallons / MWh fossil fuel generation |
| Freshwater consumption rate – nuclear generation | EO | **Numerator:** Gallons of fresh water consumed for company, equity-owned nuclear generation.<br>"Freshwater" includes water sourced from fresh surface water, groundwater, rainwater, and fresh municipal water. Do NOT include recycled, reclaimed, or gray water.<br>Water consumption is defined as water that is not returned to the original water source after being withdrawn, including evaporation to the atmosphere.<br>**Denominator:** Company, equity-owned total net generation from nuclear. | Gallons / MWh nuclear generation |

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## WATER

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Freshwater consumption rate – electric total generation | EO | **Numerator:** Gallons of fresh water consumed for ALL company, equity-owned generation.<br>"Freshwater" includes water sourced from fresh surface water, groundwater, rainwater, and fresh municipal water. Do NOT include recycled, reclaimed, or gray water.<br>Water consumption is defined as water that is not returned to the original water source after being withdrawn, including evaporation to the atmosphere.<br>**Denominator:** Company, equity-owned total net generation from all electric generation. | Gallons / MWh total generation |
| Total water consumption rate – electric total generation | EO | **Numerator:** Volume of water (fresh and degraded) consumed for ALL company, equity-owned generation.<br>"Freshwater" includes water sourced from fresh surface water, groundwater, rainwater, and fresh municipal water. "Degraded water" refers to water that has undergone degeneration of quality (e.g., stormwater runoff, agricultural runoff, saline ground water, mine runoff, produced water from fuel extraction, and treated wastewater).<br>Water consumption is defined as water that is not returned to the original water source after being withdrawn, including evaporation to the atmosphere.<br>**Denominator:** Company, equity-owned total net generation from all electric generation. | Gallons / MWh total generation |
| Freshwater consumption – non-generation operations | EO | **Numerator:** Gallons of fresh water consumed by company facilities.<br>Include facilities that house administrative or support functions including, but not limited to, office buildings, warehouses, and maintenance buildings.<br>EXCLUDE water consumed for electricity generation. Include any water consumed for the purposes of landscaping.<br>You should NOT include generating facilities, even if they may contain offices and/or administrative support.<br>"Freshwater" includes water sourced from fresh surface water, groundwater, and fresh municipal water. Do NOT include recycled, reclaimed, or gray water.<br>**Denominator:** TWO OPTIONS<br>1. Square footage of facilities that meet the boundary definition of facility for the metric numerator, as well as any square footage of outdoor landscaping irrigation<br>2. Number of employees that report to the facilities that meet the boundary definition of facility for the metric numerator. | Gallons / sq. ft. or employee |
| Freshwater withdrawal rate – fossil fuel generation | FC | **Numerator:** Gallons of fresh water withdrawn for company, equity-owned fossil fuel generation.<br>Include water sourced from fresh surface water, groundwater, rainwater, and fresh municipal water. Do NOT include recycled, reclaimed, or gray water.<br>Information on organizational water withdrawal may be drawn from water meters, water bills, calculations derived from other available water data or (if neither water meters, bills or reference data exist) the organization's own estimates.<br>**Denominator:** Company, equity-owned total net generation from fossil fuel. | Gallons / MWh fossil fuel generation |
| Freshwater withdrawal rate – nuclear generation | EO | **Numerator:** Gallons of fresh water withdrawn for company equity-owned nuclear generation.<br>Include water sourced from fresh surface water, groundwater, rainwater, and fresh municipal water. Do NOT include recycled, reclaimed, or gray water.<br>Information on organizational water withdrawal may be drawn from water meters, water bills, calculations derived from other available water data or (if neither water meters, bills or reference data exist) the organization's own estimates.<br>**Denominator:** Company equity-owned total net generation from nuclear. | Gallons / MWh nuclear generation |
| Freshwater withdrawal rate – total generation | EO | **Numerator:** Gallons of freshwater withdrawn for all generation.<br>Include water sourced from fresh surface water, groundwater, rainwater, and municipal water.<br>Information on organizational water withdrawal may be drawn from water meters, water bills, calculations derived from other available water data or (if neither water meters, bills or reference data exist) the organization's own estimates.<br>**Denominator:** Company, equity-owned total net generation from all electric generation. | Gallons / MWh total generation |

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## WATER

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Total water withdrawal rate – total generation | EO | Volume of water (fresh and degraded) withdrawn for ALL company, equity-owned generation.<br>"Freshwater" includes water sourced from fresh surface water, groundwater, rainwater, and fresh municipal water. "Degraded water" refers to water that has undergone degeneration of quality (e.g., stormwater runoff, agricultural runoff, saline ground water, mine runoff, produced water from fuel extraction, and treated wastewater).<br>Information on organizational water withdrawal may be drawn from water meters, water bills, calculations derived from other available water data or (if neither water meters nor bills or reference data exist) the organization's own estimates.<br>**Denominator:** Company, equity-owned total net generation from all electric generation. | Gallons / MWh total generation |

## WORKFORCE DIVERSITY, INCLUSION AND EQUAL OPPORTUNITY

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Employee diversity: minority share of workforce | FC | **Numerator:** Number of employees who meet the definition for minority.<br>Minority employees are defined as the smaller part of a group. A group within a country or state that differs in race, religion or national origin from the dominant group. Minority is used to mean four particular groups who share a race, color or national origin.<br>These groups are: (1) American Indian or Alaskan Native. A person having origins in any of the original peoples of North America, and who maintain their culture through a tribe or community; (2) Asian or Pacific Islander. A person having origins in any of the original people of the Far East, Southeast Asia, India, or the Pacific Islands. These areas include, for example, China, India, Korea, the Philippine Islands, and Samoa; (3) Black (except Hispanic). A person having origins in any of the black racial groups of Africa; (4) Hispanic. A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.<br>Report consistent with your EEO1 filing to the U.S. Equal Employment Opportunity Commission. If an international company, report consistent with a regulatory-equivalent filing.<br>**Denominator:** Average number of employees in the data year.<br>Average number of employees should be calculated aligned with Bureau of Labor Statistics methodology (last updated 2018). | # minority employees / avg. # employees |
| Employee diversity: minority share of executive or senior level officials | FC | **Numerator:** Number of employees who meet the definitions for minority and Executive/Senior Level Officials and Managers.<br>Minority employees are defined as the smaller part of a group. A group within a country or state that differs in race, religion or national origin from the dominant group. Minority is used to mean four particular groups who share a race, color or national origin.<br>These groups are: (1) American Indian or Alaskan Native. A person having origins in any of the original peoples of North America, and who maintain their culture through a tribe or community; (2) Asian or Pacific Islander. A person having origins in any of the original people of the Far East, Southeast Asia, India, or the Pacific Islands. These areas include, for example, China, India, Korea, the Philippine Islands, and Samoa; (3) Black (except Hispanic). A person having origins in any of the black racial groups of Africa; (4) Hispanic. A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.<br>Executive/Senior Level Officials and Managers are defined as individuals who plan, direct and formulate policies, set strategy and provide the overall direction of enterprises/organizations for the development and delivery of products or services, within the parameters approved by boards of directors or other governing bodies. Residing in the highest levels of organizations, these executives plan, direct or coordinate activities with the support of subordinate executives and staff managers. They include, in larger organizations, those individuals within two reporting levels of the CEO, whose responsibilities require frequent interaction with the CEO. Examples of these kinds of managers are chief executive officers, chief operating officers, chief financial officers, line of business heads, presidents or executive vice presidents of functional areas or operating groups, chief information officers, chief human resources officers, chief marketing officers, chief legal officers, management directors and managing partners.<br>**Denominator:** Total number of Executive/Senior Level Officials and Managers. | # minority executives or senior level / # executives or senior managers |

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## WORKFORCE DIVERSITY, INCLUSION AND EQUAL OPPORTUNITY

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Employee diversity: minority share of career development advancements | FC | **Numerator:** Number of employees who meet the definitions for minority and career development advancement.<br>Minority employees are defined as the smaller part of a group. A group within a country or state that differs in race, religion or national origin from the dominant group. Minority is used to mean four particular groups who share a race, color or national origin.<br>These groups are: (1) American Indian or Alaskan Native. A person having origins in any of the original peoples of North America, and who maintain their culture through a tribe or community; (2) Asian or Pacific Islander. A person having origins in any of the original people of the Far East, Southeast Asia, India, or the Pacific Islands. These areas include, for example, China, India, Korea, the Philippine Islands, and Samoa; (3) Black (except Hispanic). A person having origins in any of the black racial groups of Africa; (4) Hispanic. A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.<br>Career development is defined as the overlap of the organization's needs with the individual employee's career interests. It can also be described as an ongoing process of gaining knowledge and improving skills that allows an employee, when in alignment with the organization's needs and individual career interests, the opportunity to advance their career.<br>**Denominator:** Total number of promotions or lateral moves intended for career development. | # minority career development advancements / # career development advancements |
| Employee diversity: women share of workforce | FC | **Numerator:** Number of employees who identify as female.<br>**Denominator:** Average number of employees in the data year.<br>Average number of employees should be calculated aligned with Bureau of Labor Statistics methodology (last updated 2018). | # female employees / avg. # employees |
| Employee diversity: women share of executive or senior level officials | FC | **Numerator:** Number of employees who identify as female and meet the definition of Executive/Senior Level Officials and Managers.<br>Executive/Senior Level Officials and Managers are defined as individuals who plan, direct and formulate policies, set strategy and provide the overall direction of enterprises/organizations for the development and delivery of products or services, within the parameters approved by boards of directors or other governing bodies. Residing in the highest levels of organizations, these executives plan, direct or coordinate activities with the support of subordinate executives and staff managers. They include, in larger organizations, those individuals within two reporting levels of the CEO, whose responsibilities require frequent interaction with the CEO. Examples of these kinds of managers are chief executive officers, chief operating officers, chief financial officers, line of business heads, presidents or executive vice presidents of functional areas or operating groups, chief information officers, chief human resources officers, chief marketing officers, chief legal officers, management directors and managing partners.<br>**Denominator:** Total number of Executive/Senior Level Officials and Managers. | # female executives or senior level / # executives or senior managers |
| Employee diversity: women share of career development advancements | FC | **Numerator:** Number of employees who identify as female and meet the definition of career development advancement.<br>Career development is defined as the overlap of the organization's needs with the individual employee's career interests. It can also be described as an ongoing process of gaining knowledge and improving skills that allows an employee, when in alignment with the organization's needs and individual career interests, the opportunity to advance their career.<br>**Denominator:** Total number of promotions or lateral moves intended for career development. | # female career development advancements / # career development advancements |
| Military workforce | FC | **Numerator:** Employees that are active military or veteran status.<br>**Denominator:** Average number of employees in the data year.<br>Average number of employees should be calculated aligned with Bureau of Labor Statistics methodology (last updated 2018). | # active military or veteran status employees / avg. # employees |

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## WORKFORCE DIVERSITY, INCLUSION AND EQUAL OPPORTUNITY

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Women share of board members | FC | **Numerator:** Number of employees who meet the definitions for minority and Board Member.<br>Minority employees are defined as the smaller part of a group. A group within a country or state that differs in race, religion or national origin from the dominant group. Minority is used to mean four particular groups who share a race, color or national origin. These groups are:<br>1. American Indian or Alaskan Native. A person having origins in any of the original peoples of North America, and who maintain their culture through a tribe or community;<br>2. Asian or Pacific Islander. A person having origins in any of the original people of the Far East, Southeast Asia, India, or the Pacific Islands. These areas include, for example, China, India, Korea, the Philippine Islands, and Samoa;<br>3. Black (except Hispanic). A person having origins in any of the black racial groups of Africa;<br>4. Hispanic. A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.<br>**Denominator:** Number of Board Members.<br>Board Members are defined as individuals elected to represent shareholders or constituents, and are responsible for establishing policies for company management and oversight, making decisions on major company issues. | # minority board members / # board members |
| Minority share of board members | FC | **Numerator:** Number of Board members who identify as female.<br>**Denominator:** Number of Board Members.<br>Board Members are defined as individuals elected to represent shareholders or constituents, and are responsible for establishing policies for company management and oversight, making decisions on major company issues. | # female board members / # board members |

## NATURAL GAS

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Fugitive emissions intensity | NG | **Numerator:** Volume of CH4 Emissions from distribution pipeline as reported through Subpart W.<br>**Denominator:** Total volume of natural gas throughput on distribution pipeline as reported through Subpart W.<br>Distribution pipeline means a pipeline that is designated as such by the Pipeline and Hazardous Material Safety Administration (PHMSA) 49 CFR 192, and to include mains and services. | % |
| Percentage of legacy distribution pipeline still to be upgraded | NG | **Numerator:** Total miles of legacy distribution pipeline planned to be upgraded.<br>"Legacy distribution pipeline planned to be upgraded" can include unprotected steel, cast iron, and wrought iron.<br>**Denominator:** Total miles of distribution pipeline.<br>"Distribution pipeline" refers to pipeline that is designated as such by the Pipeline and Hazardous Material Safety Administration (PHMSA) 49 CFR 192, and to include mains and services. | % |

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## NATURAL GAS

| METRIC NAME | TYPE | DESCRIPTION/BOUNDARY | UNITS |
|---|---|---|---|
| Legacy distribution pipeline replacement rate | NG | **Numerator:** Miles of legacy distribution pipeline planned to be upgraded during the data year.<br>"Legacy distribution pipeline planned to be upgraded" can include unprotected steel, cast iron, and wrought iron.<br>**Denominator:** Total miles of legacy distribution pipeline planned to be upgraded.<br>"Distribution pipeline" refers to pipeline that is designated as such by the Pipeline and Hazardous Material Safety Administration (PHMSA) 49 CFR 192, and to include mains and services. | % |
| Gas dig-in rate | NG | Number of distribution pipeline dig-ins (excavation damages) by a third party per 1,000 underground service tickets.<br>Distribution pipeline means a pipeline that is designated as such by the Pipeline and Hazardous Material Safety Administration (PHMSA) 49 CFR 192, and to include mains and services. | Rate |
| Gas emergency response rate | NG | The percentage of time company employees are on-site within 60 minutes after receiving a natural gas-related emergency call, with on-site defined as arriving at the premises where the emergency personnel are standing by. | % |
| Leak repair rate | NG | **Numerator:** Number of Grade 2 and 3 leaks on the distribution system repaired during the data year.<br>**Denominator:** Total number of Grade 2 and 3 leaks on the distribution system during the data year (i.e., number repaired plus number of leaks still open at the close of the data year).<br>Distribution pipeline means a pipeline that is designated as such by the Pipeline and Hazardous Material Safety Administration (PHMSA) 49 CFR 192, and to include mains and services. | Rate |

**About EPRI**

Founded in 1972, EPRI is the world's preeminent independent, non-profit energy research and development organization, with offices around the world. EPRI's trusted experts collaborate with more than 450 companies in 45 countries, driving innovation to ensure the public has clean, safe, reliable, affordable, and equitable access to electricity across the globe. Together, we are shaping the future of energy.



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