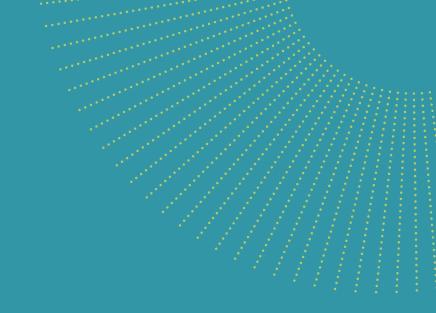


2021 ENVIRONMENTAL, SOCIAL AND GOVERNANCE SUSTAINABILITY REPORT

Serving With Our Energy In accordance with EEI/AGA ESG Template

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Sustainablity strategy

Our commitment to ESG best practices – such as producing clean, affordable and reliable energy, emphasizing workplace diversity, equity and inclusion, and providing strong corporate governance policies and practices – is ingrained in our culture and processes and ensures our stakeholders influence and inform our strategies.

In 2021, we completed a refresh of our sustainability priority assessment to understand the changing priorities, needs and expectations of our stakeholders and our business. We are using the assessment results and insights to enhance our sustainability strategies, inform stakeholder engagements, improve ESG reporting and support the risk management process. See the 2021 Sustainability Priority Assessment for the full list and descriptions of our 25 sustainability priorities.

To supplement our sustainability priority assessments, which are conducted every 3-5 years, we have established processes to engage all stakeholders periodically throughout the year to provide additional insights into their needs, priorities and experiences.

Our team

At DTE, our employees are the foundation of our company and the energy behind our culture and operations. Throughout our company, we strive to maintain a positive, collaborative workplace environment where everyone feels valued. Employee engagement is the key enabler and driver to achieving our other priorities.

To measure the success of our engagement efforts, we rely on the Gallup employee engagement survey. Gallup is a global research and polling company that combines analytics and advice to help leaders and organizations identify opportunities and create meaningful change. DTE ranked in the top 3% of companies worldwide as measured in the Gallup global database. This extraordinary achievement can be attributed to our persistent focus on engagement, including our industry-leading safety performance, a robust diversity, equity and inclusion program with nine employee resource groups, comprehensive health and wellness programs and a thriving volunteerism program.

Our customers

DTE's operational success is, in part, measured by our ability to maintain customer satisfaction. While DTE has closely monitored customer sentiment for many years, in 2020, we implemented a Net Promoter Score (NPS) measurement system to evaluate customer satisfaction on a continuous basis. An executive committee uses insights from the data to inform operational decisions and support our engagement strategy with customers, regulators and investors.

Our community

Additionally, we engage our community partners through an annual community partners meeting and community advisory council forums that allow for open dialogue with key community leaders and organizations and identify opportunities for us to work together.

DTE's supply chain is a vital part of its commitment to provide safe, reliable energy for its customers. Beyond the basics of delivering high-quality, cost competitive services, supply chain specializes in ensuring suppliers operate efficiently, safely and ethically. DTE also uses its procurement dollars to support local economic growth, provide opportunities for diverse businesses and build strong, vibrant communities.

Our team listens and responds to local, state and federal officials' constituents and executes on a local level interacting with municipal, elected leaders and other influential community members across Michigan to ensure their needs are voiced and addressed.

Our investors

Over the last seven years, we've consistently engaged with our investors on ESG topics. These discussions provide critical insight on key areas of focus for our investors and provide an opportunity to discuss our ESG priorities. As part of our process, we share highlights of the discussions and feedback from our investors with our corporate governance committee and board of directors. We will continue to engage in a variety of ways with shareholders to provide timely and relevant information on topics of interest.

We remain committed to improving our ESG transparency and enhancing our disclosures. As an indicator of our commitment, a cross-functional internal ESG committee coordinates and executes our company's multiple streams of ESG disclosures. Recent improvements include the 2020 Sustainability Summary, designed for our employees and community stakeholders, and the inaugural release of the 2019 TCFD and SASB disclosures and methane intensity report.

To learn more about our stakeholders, click here.

To learn more about our ESG efforts and disclosures, please visit our <u>Sustainability Performance site</u>.



At DTE Energy, the ultimate oversight of environmental, social and governance efforts – including risk management – rests with the board of directors and permeates all levels of corporate executive leadership.

"The DTE board of directors has a critical role in understanding and evaluating the risks and value-creation opportunities posed by ESG factors, including how these factors affect corporate strategy, business operations, financial performance and DTE's contribution to society in the long-term. It is a matter of value – and values." Ruth Shaw, lead independent director, DTE Energy.

Governance highlights

The board is committed to creating long-term value for all stakeholders while operating in an ethical, legal, environmentally sensitive and socially responsible manner. The board follows shareholder-focused and comprehensive governance practices:

All but two of DTE's directors are independent; our executive chairman, and our president and chief

executive officer are the only management directors.

- All board committees are composed exclusively of independent directors.
- We have implemented a proxy access provision, which makes it possible for a group of shareholders meeting certain criteria to nominate and include a candidate for the board in our company's proxy material.
- We have a lead independent director, elected by the independent members of the board. The lead independent director maintains final approval authority for board agendas, meeting materials and schedules. The lead independent director also is available for consultation and direct communication with large shareholders.
- All of our directors are elected annually. The board and its committees conduct annual self-assessments. In addition, each independent director who has

served for one year or more undergoes an annual peer review.

- Our executive officers and directors are all subject to robust stock ownership requirements. We've instituted anti-hedging policies applicable to all company directors, officers and employees.
- Our board's mission and governance guidelines recommend that the board consider a diversity of characteristics including experience, gender, race, ethnicity and age when evaluating nominees for the Board.
- We limit our directors who are employed by public companies to a total of not more than two public company boards and all other directors to a total of not more than four public company boards.

Please see our <u>2021 Proxy Statement</u> for further information.

Board of directors

Elected annually by our shareholders, the board of directors meets regularly to lead our company, creating and sustaining long-term value for all stakeholders. With respect to sustainability, the board of directors:

- Bears responsibility for oversight and risk management of plans to create long-term value for shareholders, while ensuring our company operates in an environmentally and socially responsible manner.
- Oversees company management and assesses the effectiveness of management policies and decisions, including management's development and execution of our company's strategies.
- Approves all major environmental initiatives.

Board sub-committees

The corporate governance committee is tasked with reviewing risks associated with our company's governance practices and the interaction of the company's governance with enterprise risk-level management. This committee oversees DTE's shareholder engagement activities and responds to investor feedback regarding environmental, social and governance (ESG) areas of interest.

The audit committee is responsible for the overall review of risk issues, policies and controls associated with DTE's financial reporting and disclosure process and legal compliance, and reviews policies on risk control assessment and accounting risk exposures, as well as cybersecurity risk.

The organization and compensation committee is responsible for reviewing and assessing the risks involved in executive compensation plans, arrangements and performance goals and payouts. It is also responsible for assessing the effectiveness of policies and programs promoting diversity, equity and inclusion among DTE's employees and officers. The public policy and responsibility committee is tasked with reviewing our company's performance as a responsible corporate citizen and promoting policies to enable our company to respond appropriately to its social responsibilities. This committee advises the board of directors on emerging ESG issues, including climate change, and annually reviews our company's political activities.

The board sub-committees share ESG topics with the full board of directors at every board meeting.

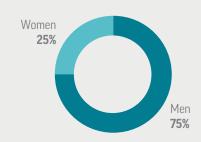
Senior management

DTE Energy's senior management team:

- Gathers and responds to input from investors and other key stakeholders regarding our ESG strategies and initiatives.
- Executes our company's ESG strategy, including governance, engagement and oversight initiatives, in consultation with the board of directors.
- Manages our environmental compliance processes and carbon-reduction strategy.
- Manages the progress of our diversity, equity and inclusion strategies through the oversight of the Executive Diversity, Equity and Inclusion Steering Committee.
- Mobilizes our employees, resources and partner organizations to strengthen and promote prosperity in our communities through the oversight of the force for growth priority committee.
- Reports the outcomes of our ESG initiatives to the board of directors.
- Manages risks and opportunities associated with environmental and social initiatives.
- Receives compensation tied to achievement of company goals, including ESG targets.

Board demographics

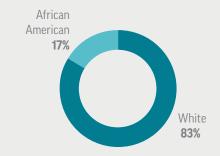




33%

ETHNICITY

GENDER





Protecting customer and company information

We work 24/7 to deliver safe, reliable energy to our customers. An essential part of that effort is protecting our physical and digital infrastructure. This commitment is supported by a dedicated cybersecurity team and an employee education program that puts customer and company information front and center.

We have also forged trusted partnerships with companies, organizations and state and federal agencies to share best practices, tools and threat information to keep our infrastructure and our customers' information secure. This includes partnering with others in our industry to form the Electricity Subsector Coordinating Council (ESCC). The ESCC is the principal liaison between the energy sector and the federal government in coordinating efforts to prepare for, and respond to, threats to critical infrastructure. To improve cybersecurity, the ESCC focuses on:

- Supporting the deployment of tools.
- Improving the flow of threat information.
- Preparing for incidents.

• Working closely with other interdependent infrastructure sectors like telecommunications and transportation.

DTE's chief information officer oversees our cybersecurity. The Operational Risk and Resilience Committee also addresses cybersecurity. This committee includes key members of executive management and is chaired by the president of DTE Electric.



Sustainability priorities

The utility industry is facing a number of internal and external factors that will affect our future for years and decades to come. An estimated 35% of DTE's workforce could be eligible to retire within the next five years. Building a diverse and sustainable talent pipeline is critical to maintaining safe and high-quality service and delivery of our energy products. We need skilled people to lead us into a carbon-neutral future. That's why we work with partners in communities we serve to build a diverse talent pipeline and provide internships, workshops and training to prepare people for hard-to-fill positions and outreach to populations who need support in gaining employment. Good-paying jobs in these communities directly impact the overall health of our economic vitality as a state, making it crucial for us to work with Michigan suppliers and small businesses to create strong and sustainable paths for employment.

At the same time, the momentum of addressing climate change is driving our decarbonization commitments, from plant retirements to infrastructure upgrades.

As we manage these factors, we are also keeping affordability and the community impact of these changes front and center. We have outlined our strategy and management approach for each of these issues in the sections below.

Building a diverse and sustainable talent pipeline

DTE is deeply invested in talent development and provides access and guidance on career and technical programs including providing pre-apprenticeship programs and supporting mentoring and employment opportunities for those who enroll at Career Technical Education (CTEs) schools. DTE has committed countless volunteer hours and millions of dollars to three Detroit-based CTE schools to develop a pipeline of employees to fill high-demand jobs. The programs offered by these schools will contribute to a better prepared workforce for Detroit and offer opportunities to its youth.

Despite the challenges of COVID, we saw a critical need to continue our 2020 summer student program to help our local youth and communities thrive. We were one of the only large companies in our region to move forward with our summer jobs programs, and through our support of Grow Detroit's Young Talent and other community organizations, we provided meaningful employment that helped students acquire new life and career skills, and opened their minds to new career opportunities at DTE and in the energy industry.

Sustaining Michigan's economy

The prosperity of Michigan's economy has a direct impact on the success of DTE's business. A thriving and growing business community, one that creates jobs, generates taxes and feeds the economy drives our business growth.

Small businesses are the primary drivers of Detroit's job creation, constituting 50% of the city's employment. In the spring of 2020, DTE mobilized a coalition of more than 60 organizations to create <u>Detroit Means Business (DMB)</u>, a virtual resource hub where businesses can access valuable information about small business loans and other critical topics, free one-on-one financial coaching and many other offerings that help Detroit's small businesses stabilize and grow despite the pandemic.

Additionally, DTE's executive chairman, Gerry Anderson, co-chaired the Michigan Economic Recovery Council, which advised Governor Whitmer on reopening based on risk, workplace environment and geography. Tasked with assessing the public health risk of reopening sectors of the economy that have been shut down since March 2020, the Council and governor considered workplace environment, geographical region, and the detected prevalence of COVID-19 when assessing what businesses should reopen next.

We're at our best when our supply chain reflects the broad diversity of the customers we serve. That's why we seek out small and medium businesses statewide and connect them with new growth opportunities.

We're taking aggressive action to dramatically reduce greenhouse gas emissions as part of our net zero journey, and in leading the effort to decarbonize our state's economy. We firmly believe this is the right thing to do for our customers, business and the communities we serve – and our efforts are important in our mission to provide our customers with the safe, reliable and affordable energy they expect from us.

MICHIGAN SPEND (MILLIONS)



DIVERSITY SPEND (MILLIONS)





Building a clean energy future

Electric

Solar and wind energy investments

As Michigan's leading producer of renewable energy, DTE is committed to continuing to increase our generation from clean energy sources such as wind and solar. Over the next five years, we are investing an additional \$2 billion in renewable energy projects.

Currently, our 18 wind parks and 32 solar farms generate enough clean energy to power nearly 700,000 homes. By 2023, we will generate enough wind and solar energy to power approximately 900,000 homes.

Our renewable energy facilities are in 16 counties, stretching from urban epicenters in Detroit to rural counties in the Upper Peninsula – we are proud of the tax base that our developments have created across the great state of Michigan. Additionally, our clean energy initiatives create hundreds of temporary jobs during construction and several permanent positions after the projects are built. DTE has created or supported more than 4,000 Michigan clean energy jobs since 2009.

Clean Vision: MIGreenPower

Among the top three voluntary renewable energy programs in the country, DTE's <u>MIGreenPower program</u> provides customers with a flexible and affordable way to reduce their carbon footprint and support more local renewable energy development. Since the program's inception, MIGreenPower subscribers have supported 1.8 million megawatt hours of clean energy, avoiding more than 1.4 million tons of CO2 or the greenhouse gas emissions from 277,400 passenger cars driven for a year. More than 350 Michigan businesses and 32,000 residential customers are using MIGreenPower to reduce their impact on the environment and support the development of Michigan-made renewable energy. Prominent business subscribers include General Motors, Ford Motor Company, Bedrock, the University of Michigan and the Detroit Zoo. The State of Michigan also recently announced that it will enroll eligible state buildings in the program.

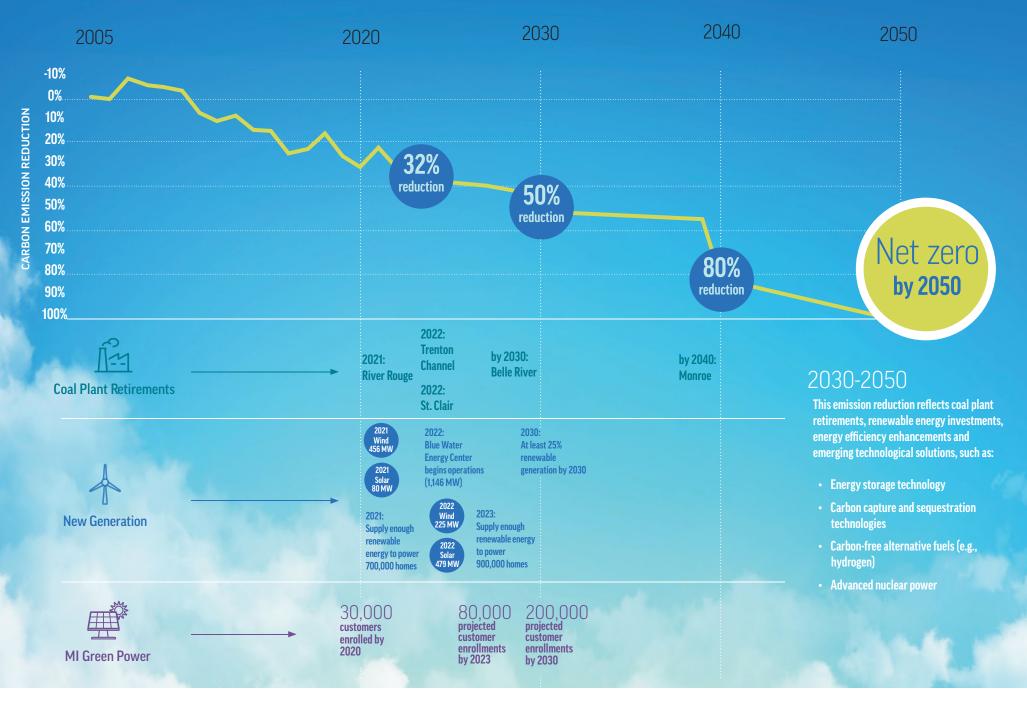
A just transition

A key part of our clean energy generation transformation and net-zero carbon emissions goal involves the sequential retirement of our coal-fired power plants. We have already retired four coal facilities (Marysville, Harbor Beach, Conners Creek and River Rouge) and have plans to retire St. Clair and Trenton Channel in 2022, Belle River by 2030 and Monroe by 2040.

Our vision is to retire our plants with pride, which have served the communities where we live and serve for nearly 75 years – a legacy that we will continue to build upon for generations to come. DTE, in conjunction with union leadership, has developed an employee transition strategy that puts employees first while maintaining affordable and reliable 24/7 power for our customers.

As part of our Retiring with PRIDE strategy, a crossfunctional Transition Team has been formed to provide critical pathways to help impacted employees and communities throughout the coal plant retirement process. We have committed to no layoffs as a result of the plant retirements.

DTE Electric Decarbonization





Gas

Clean vision: natural gas balance

At DTE Gas, we will reduce greenhouse gas emissions to net zero by 2050 – from procurement through our delivery operations. And we'll amplify this net zero commitment by partnering with customers to address up to 100% of their own natural gas carbon footprint with programs that encourage energy efficiency and participation in Natural Gas Balance.

The Natural Gas Balance program offers customers a way to affordably offset 25% to 100% of greenhouse gas emissions from an average home's natural gas use through a combination of carbon offsets and renewable natural gas. The carbon offset portion of the program protects 24,000 acres of Michigan forests that naturally absorb greenhouse gases.

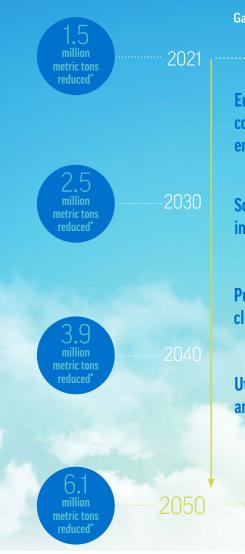
Natural Gas Sustainability Inititiative

We were also an early proponent for the development of a consistent method of calculating and <u>reporting</u> <u>methane</u> intensity across the natural gas industry. In July of 2020, we completed a pilot program to test the new Methane Emissions Intensity Protocol developed by the Natural Gas Sustainability Initiative (NGSI), a collaborative effort of EEI and AGA. We were among the first to publicly report our methane emissions intensity results using the NGSI Protocol.

Natural gas reliability improvements in 2020



DTE Gas Decarbonization





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Gas Extraction, Production, Gathering, Storage and Transportation

Encouraging transparent and consistent reporting of methane emissions

Sourcing gas with lower methane intensities

Pursuing programs which promote a clean natural gas product

Utilizing carbon offsets to balance any remaining emissions

> Net Zero GHGs by 2050





Utility Distribution Infrastructure

Replacing old steel and cast-iron pipes with new durable pipes

Implementing new technologies to detect leaks more quickly

Reducing gas being vented to the atmosphere

Utilizing carbon offsets to negate any remaining emissions

Upgrading compressor stations

Net Zero GHGs by 2050 Downstream Customer-use emissions



Industry, Homes and Businesses

Offering voluntary program -Natural Gas Balance

Increasing energy efficiency targets

Incorporating renewable natural gas into our system supply

Pursuing advanced technologies such as hydrogen and carbon capture

> Reduce GHGs 35% by 2050*

DTE Gas is taking a unique, holistic approach to achieving our net zero goal by including our suppliers and our customers on the journey.

Creating a next-gen infrastructure

Electric business

Despite the many challenges 2020 brought to us, we forged ahead on our mission to be the best-operated energy company in North America. We know achieving this aspiration begins and ends with delivering energy that's safer, cleaner and more reliable and affordable, so we're investing heavily in tree trimming and equipment upgrades to make our energy grid stronger and smarter. In fact, on average our customers have already experienced 25% improvement in power reliability. <u>Click</u> <u>here</u> to learn more about our electric reliability efforts.

Gas business

At DTE, we are committed to reducing methane emissions while at the same time allowing natural gas to play an integral role in our company's energy portfolio. Our continued commitment to gas main replacement and proactive compressor station maintenance is driving much of the improvements that will allow us to reduce methane emissions by more than 80 percent in the next 20 years. Through our \$1.6 billion investment in upgrading our natural gas infrastructure – including pipelines, system upgrades and technology – serving Michigan neighborhoods and businesses, we'll create and support more than 8,500 jobs in our home state of Michigan. In 2020, we hit a milestone of replacing 1,000 miles of older natural gas pipelines with safer, air-tight materials, and completed maintenance upgrades at multiple DTE Gas compressor stations across the state. We are seeing additional improvements through a new blowdown project to evacuate as much gas from pipes as possible before any maintenance work is done.

Electric reliability improvements in 2020





Managing affordability

Managing affability continues to be one of DTE's top priorities. When the pandemic began, we kept energy flowing to all customers regardless of payment status, revised our policy for medical holds to add COVID as an eligible condition, provided up to \$40 million in bill relief to our customers and worked with the Michigan Department of Health and Human Services (MDHHS) to forgive \$13 million worth of arrears for 21.000 customers. We also created new forms of payment assistance to aid our customers during this unprecedented time; our new Personalized Service Protection Plan empowers our representatives to customize offerings including payment plans, assistance and financial aid based on a customer's unique situation. Our company also earned Navigator status with MDHHS allowing us to help customers apply for financial aid through the State of Michigan.

DTE Electric's commitment to customers is to continue providing reliable, affordable energy while minimizing our impact on the environment, including reducing carbon emissions that affect climate change. A blend of flexible resources continues to be a key in maintaining power reliability while supporting our environmental commitment and keeping costs affordable for customers. We are focused on the next five years and will consider the most affordable and reliable mix of generation sources that are available today. However, these technologies are improving rapidly, so we also have created a flexible long-term plan that allows us to review technological advancements as they become feasible and affordable.

To help ensure our gas product and service remains affordable, DTE Gas has many efforts underway to

ensure it is delivering safe and reliable natural gas in the most cost-effective manner. DTE Gas projects that the average monthly bills for customers will modestly increase as our company continues to make investments in the safety and reliability of the system. These necessary investments will be made at a measured pace to ensure that the affordability of delivered natural gas for customers is maintained.

We work with customers having difficulty paying their bills through payment plans and services that provide funds for energy assistance and continue to expand our Low-Income Energy Waste Reduction (EWR) program to assist customers in need. The program partners with local agencies to provide energy efficiency upgrades or solutions to residential customers at no cost to them.

Index of links

We have more to tell about around our sustainability story, see the links below for more detailed information.

ESG Reports (GRI, SASB, TCFD, CDP)

2020 DTE Proxy Statement

2020 DTE Form 10-K

2021 Sustainability Priority Assessment

Corporate Governance

Investor Relations

Electric Reliability Efforts

Electric Vehicles

Site Remediation

Human Capital Management

Labor Management

DTE Safety Management

Political Participation

Supply Chain Management

Stakeholder Engagement

Diversity, Equity and Inclusion



EEI ESG/Sustainability Template - Section 2: Quantitative Information

Disclaimer: All information below is being provided on a voluntarily basis, and as such, companies may elect to include or exclude any of the topics outlined below and customize the template to their specific needs. The decision to include data for historical and future years is at the discretion of each company and the specific years (e.g., historical baseline) should be chosen as appropriate for each company.

Parent Company:	DTE Energy
Operating Company(s):	DTE Electric
Business Type(s):	Vertically Integrated
State(s) of Operation:	Michigan
State(s) with RPS Programs:	Michigan
Regulatory Environment:	Regulated
Report Date:	May 19, 2021

Ref. No.		Baseline 2005 Actual	Last Year 2019 Actual	Current Year 2020 Actual	Next Year 2021 Forecast	Comments, Links, Additional Information and Notes
	PORTFOLIO					
1	Owned Nameplate Generation Capacity at end of year (MW)					
1.1	Coal	7,733	5,995	5,775	5,715	
1.2	Natural Gas	2,683	2,946	2,946	2,946	
1.3	Nuclear	1,154	1,161	1,161	1,161	
1.4	Petroleum	666	325	325	325	
1.5	Total Renewable Energy Resources	997	2,084	2,084	2,711	
1.5.1	Biomass/Biogas	8	321	321	321	
1.5.2	Geothermal	0	0	0	0	
1.5.3	Hydroelectric	989	1,088	1,088	1,088	
1.5.4	Solar	0	65	65	65	
1.5.5	Wind	0	611	611	1,236	
1.6	Other	0	0	0	0	
2	Net Generation for the data year (MWh)					
2.1	Coal	41,764,875	25,338,739	18,355,668	28,588,921	
2.2	Natural Gas	1,033,086	2,759,281	3,949,860	1,355,691	
2.3	Nuclear	8,753,555	9,694,651	5,941,638	9,052,225	

Ref. No.		Baseline 2005 Actual	Last Year 2019 Actual	Current Year 2020 Actual	Next Year 2021 Forecost	Comments, Links, Additional Information and Notes
2.4	Petroleum	7,800	62,280	67,895	1,285	
2.5	Total Renewable Energy Resources	551,685	3,735,410	4,303,863	3,574,189	
2.5.1	Biomass/Biogas		453,750	489,747		
2.5.2	Geothermal		0	0		
2.5.3	Hydroelectric		21,464	25,046		
2.5.4	Solar		76,912	91,046		
2.5.5	Wind		3,183,284	3,698,024		
2.6	Other		0	0		
3	Investing in the Future: Capital Expenditures, Energy Efficiency (EE) and Smart Meters					
3.1	Total Annual Capital Expenditures (nominal dollars)	\$722,000,000	\$2,194,000,000	\$2,700,000,000	\$3,000,000	
3.2	Incremental Annual Electricity Savings from EE Measures (MWh)		717,072	769,790	914,733	
1.3	Incremental Annual Investment in Electric EE Programs (nominal dollars)		\$108,500,000	\$128,800,000	\$181,300,000	
ļ	Retail Electric Customer Count (at end of year)					
.1	Commercial	126,706	114,360	114,894		
1.2	Industrial	2,235	1,316	1,335		
.3	Residential	2,043,475	1,854,780	1,922,712		
	EMISSIONS					
i	GHG Emissions: Carbon Dioxide (CO $_2$) and Carbon Dioxide Equivalent (CO $_2$ e)					
	Note: The alternatives available below are intended to provide flexibility in reporting					
5.1	Owned Generation					
i.1.1	Carbon Dioxide (CO2)					
5.1.1.1	Total Owned Generation CO ₂ Emissions (MT)	38,434,949	28,308,661	21,088,148	29,051,688	
5.1.1.2	Total Owned Generation CO_2 Emissions Intensity (MT/Net MWh)	0.738	0.681	0.647	0.682	
5.1.2	Carbon Dioxide Equivalent (CO₂e)					
5.1.2.1	Total Owned Generation CO₂e Emissions (MT)		28,520,222	21,238,469		$\ensuremath{\text{CO}_{\text{ze}}}$ was not considered in 2005. DTE does not provide a target for $\ensuremath{\text{CO}_{\text{ze}}}$.
5.1.2.2	Total Owned Generation CO₂e Emissions Intensity (MT/Net MWh)		0.686	0.650		$\ensuremath{\text{CO}_{ze}}$ was not considered in 2005. DTE does not provide a target for $\ensuremath{\text{CO}_{ze}}$.
5.2	Purchased Power					
5.2.1	Carbon Dioxide (CO2)					

Ref. No.		Baseline 2005 Actual	Last Year 2019 Actual	Current Year 2020 Actual	Next Year 2021 Forecast	Comments, Links, Additional Information and Notes
5.2.1.1	Total Purchased Generation CO ₂ Emissions (MT)	824,758	3,464,366	7,952,656	1,708,447	
5.2.1.2	Total Purchased Generation CO $_{\rm Z}$ Emissions Intensity (MT/Net MWh)	0.710	0.596	0.540	0.596	
5.2.2	Carbon Dioxide Equivalent (CO₂e)					
5.2.2.1	Total Purchased Generation CO_2e Emissions (MT)		3,487,064	8,004,145		CO_2e was not considered in 2005. DTE does not provide a target for $CO_2e.$
5.2.2.2	Total Purchased Generation CO $_{\rm 2}e$ Emissions Intensity (MT/Net MWh)		0.600	0.543		CO_{2e} was not considered in 2005. DTE does not provide a target for $CO_{2e}.$
5.3	Owned Generation + Purchased Power					
5.3.1	Carbon Dioxide (CO₂)					
5.3.1.1	Total Owned and Purchased Generation CO $_{\rm 2}$ Emissions (MT)	39,259,707	31,773,027	29,040,804	30,760,135	
5.3.1.2	Total Owned and Purchased Generation CO $_{\rm 2}$ Emissions Intensity (MT/Net MWh)	0.737	0.670	0.613	0.677	
5.3.2	Carbon Dioxide Equivalent (CO ₂ e)					
5.3.2.1	Total Owned and Purchased Generation CO $_2e$ Emissions (MT)		32,007,286	29,242,614		CO_2e was not considered in 2005. DTE does not provide a target for $CO_2e.$
5.3.2.2	Total Owned and Purchased Generation CO $_{\rm 2}e$ Emissions Intensity (MT/Net MWh)		0.675	0.618		$CO_{2}e$ was not considered in 2005. DTE does not provide a target for CO_2e.
5.4	Non-Generation CO ₂ e Emissions of Sulfur Hexafluoride (SF6)					
5.4.1	Total CO ₂ e emissions of SF6 (lbs)					Below threshold for reporting to EPA.
5.4.2	Leak rate of CO ₂ e emissions of SF6 (lbs/Net MWh)					Below threshold for reporting to EPA.
6	Nitrogen Oxide (NO _X), Sulfur Dioxide (SO ₂), Mercury (Hg)					
6.1	Generation basis for calculation		TOTA	AL		
6.2	Nitrogen Oxide (NO _X)					
6.2.1	Total NO _X Emissions (MT)	58,477	15,749	11,268	16,788	
6.2.2	Total NO_X Emissions Intensity (MT/Net MWh)	1.12E-03	3.79E-04	3.45E-04	3.94E-04	
6.3	Sulfur Dioxide (SO2), Sulfur Dioxide (SO2), Mercury (Hg)					
6.3.1	Total SO ₂ Emissions (MT)	194,205	33,360	22,067	45,856	2020 NOx emissions were 81% below 2005 emissions.
6.3.2	Total SO ₂ Emissions Intensity (MT/Net MWh)	3.73E-03	8.02E-04	6.77E-04	1.08E-03	
6.4	Mercury (Hg)					
6.4.1	Total Hg Emissions (kg)	724.9	63.3	36.2	79.5	2020 Hg emissions were 95% below 2005 emissions.
6.4.2	Total Hg Emissions Intensity (kg/Net MWh)	1.39E-05	1.52E-06	1.11E-06	1.87E-06	

Ref. No.		Baseline 2005 Actual	Last Year 2019 Actual	Current Year 2020 Actual	Next Year 2021 Forecast	Comments, Links, Additional Information and Notes
	RESOURCES					
7	Human Resources					
7.1	Total Number of Employees	11,360	11,171	10,986		This metric is for all of DTE Energy (not specifically the Electric Company).
7.2	Percentage of Women in Total Workforce	25.3%	26.5%	27.1%		This metric is for all of DTE Energy (not specifically the Electric Company).
7.3	Percentage of Minorities in Total Workforce	26.6%	28.7%	28.2%		This metric is for all of DTE Energy (not specifically the Electric Company).
7.4	Total Number on Board of Directors/Trustees	13	13	12		This metric is for all of DTE Energy (not specifically the Electric Company).
7.5	Percentage of Women on Board of Directors/Trustees	15.4%	23.1%	25.0%		This metric is for all of DTE Energy (not specifically the Electric Company).
7.6	Percentage of Minorities on Board of Directors/Trustees	23.1%	23.1%	17%		This metric is for all of DTE Energy (not specifically the Electric Company).
7.7	Employee Safety Metrics					
7.7.1	Recordable Incident Rate	N/A	0.81	0.40		This metric is for all of DTE Energy (not specifically the Electric Company).
7.7.2	Lost-time Case Rate	N/A	0.37	0.12		This metric is for all of DTE Energy (not specifically the Electric Company).
7.7.3	Days Away, Restricted, and Transfer (DART) Rate	N/A	0.52	0.23		This metric is for all of DTE Energy (not specifically the Electric Company).
7.7.4	Work-related Fatalities	N/A	0	0		This metric is for all of DTE Energy (not specifically the Electric Company).
8	Fresh Water Resources used in Thermal Power Generation Activities					
8.1	Water Withdrawals - Consumptive (Millions of Gallons)	21,082	19,802	17,677		
8.2	Water Withdrawals - Non-Consumptive (Millions of Gallons)	1,386,528	1,043,220	923,704		
8.3	Water Withdrawals - Consumptive Rate (Millions of Gallons/Net MWh)	4.05E-04	4.76E-04	5.42E-04		
8.4	Water Withdrawals - Non-Consumptive Rate (Millions of Gallons/Net MWh)	2.66E-02	2.51E-02	2.83E-02		
9	Waste Products					
9.1	Amount of Hazardous Waste Manifested for Disposal (tons)		20.3	47.3		
9.2	Percent of Coal Combustion Products Beneficially Used		58.96%	58.33%		

AGA Voluntary Sustainability Metrics: Quantitative Information

Disclaimer: All information below is being provided on a voluntary basis, and as such, companies may elect to include or exclude any of the topics outlined below and customize the template to their specific needs. The decision to include data for historical and future years is at the discretion of each company and the specific years (e.g., historical baseline) should be chosen as appropriate for each company. © American Gas Association. All rights reserved.

Parent Company:	DTE Energy
Operating Company(s):	DTE Gas; DTE Gas, Storage and Pipeline
Business Type(s):	Vertically Integrated
State(s) of Operation:	Michigan, New York, Pennsylvania, West Virginia, Louisiana, Texas
Regulatory Environment:	Both; Regulated & Non-Regulated
Note:	Data from operating companies is rolled up to the corporate level.
Report Date:	May 19, 2020

Ref. No.		Last Year 2019	Current Year 2020	Definitions	Comments, Links, Additional Information and Notes
	NATURAL GAS DISTRIBUTION				
1	Methane Emissions And Mitigation From Distribution Mains				
1.1	Number of Gas Distribution Customers	1,276,293	1,290,937		
1.2	Distribution Mains in Service			These metrics should include all local distribution companies (LDCs) held by the Parent Company that are above the LDC Facility reporting threshold for EPA's 40 C.F.R. 98, Subpart W reporting rule.	
1.2.1	Plastic (miles)	11,700	12,229		
1.2.2	Cathodically Protected Steel - Bare & Coated (miles)	5,193	5,194		
1.2.3	Unprotected Steel - Bare & Coated (miles)	1,314	1,230		
1.2.4	Cast Iron / Wrought Iron - without upgrades (miles)	1,905	1,693		
1.3	Plan/Commitment to Replace / Upgrade Remaining Miles of Distribution Mains (# years to complete)			These metrics should provide the number of years remaining to take out of service, replace or upgrade catholdically unprotected steel mains, and cast iron/wrought iron mains, consistent with applicable state utility commission authorizations.	DTE is scheduled to complete the replacement/upgrade by 2035.
1.3.1	Unprotected Steel (Bare & Coated)	15	14		
1.3.2	Cast Iron / Wrought Iron	15	14		
2	Distribution CO ₂ e Fugitive Emissions				
2.1	CO2e Fugitive Methane Emissions from Gas Distribution Operations (metric tons)	458,378	423,425	Fugitive methane emissions (not CO_2 combustion emissions) stated as CO_2e , as reported to EPA under 40 CFR 98, Subpart W, sections 98.236(q)(3)(ix)(C)and (D), 98.236(r)(1)(iv) and (v), and 98.236(r)(2)(v)(A) and (B). This metric should include fugitive methane emissions above the reporting threshold for all natural gas local distribution companies (LDCs) held by the Parent Company that are above the LDC Facility reporting threshold for EPA's 40 C.F.R. 98, Subpart W reporting rule.	

Ref. No.		Last Year 2019	Current Year 2020	Definitions	Comments, Links, Additional Information and Notes
2.2	CH4 Fugitive Methane Emissions from Gas Distribution Operations (metric tons)	18,335	16,937		
2.2.1	CH4 Fugitive Methane Emissions from Gas Distribution Operations (MMSCF/ year)	955	882	INPUT VALUE (total mt CH4) as explained in definition above. Subpart W input is CH4 (mt).	
2.3	Annual Natural Gas Throughput from Gas Distribution Operations (MSCF/year)	322,150,668	304,338,173	This metric provides gas throughput from distribution (quantity of natural gas delivered to end users) reported under Subpart W, 40 C.F.R. 98.236(aa)(9)(iv), as reported on the Subpart W e-GRRT integrated reporting form in the "Facility Overview" worksheet Excel form, Quantity of natural gas delivered to end users (column 4).	The change in throughput can be attributed to a slightly different method of calculation in addition to fluctuations in weather among other things.
2.3.1	Annual Methane Gas Throughput from Gas Distribution Operations (MMSCF/ year)	298,205	279,687		
2.4	Fugitive Methane Emissions Rate (MMSCF of Methane Emissions per MMSCF of Methane Throughput)	0.00320	0.00139	$\frac{E_{C}}{TP_{C}} = \frac{tonnes \ CH_{4}}{MMscf \ gas} \times \frac{10^{6} \ g \ CH_{4}}{tonne \ CH_{4}} \times \frac{g \ mole \ CH_{4}}{16 \ g \ CH_{4}} \times \frac{gmol \ Nat. \ Gas}{0.95 \ gmol \ OH_{4}} \times \frac{scf \ gas}{1.198 \ gmol \ gas} \times $	
				$\frac{MMscf\ gas\ emissions}{10^6\ scf\ gas} = \frac{MMscf\ gas\ emissions}{MMscf\ gas\ throughput} = \%$	
	NATURAL GAS TRANSMISSION & STORAGE				
				All methane leak sources per 98.232 (e) (1-8), (f)(1-8), and (m) are included for Transmission and Storage. Combustion sources are excluded. CO_2 and N_2O are excluded.	
1	Onshore Natural Gas Transmission Compression Methane Emissions			Fugitive Methane emissions as defined in 40 CFR 98 Sub W Section 232 (e) (1-8), CO $_{\rm 2}$ and $N_{\rm 2}O$ emissions are excluded from this section.	
1.1.1	Pneumatic Device Venting (metric tons/year)	37	43	Value reported using calculation in 40 CFR 98 Sub W Section 236(b)(4)	
1.1.2	Blowdown Vent Stacks (metric tons/year)	377	125	Value reported using calculation in 40 CFR 98 Sub W Section 236(i)(1)(iii)	
1.1.3	Transmission Storage Tanks (metric tons/year)	0	0	Value reported using calculation in 40 CFR 98 Sub W Section 236(k)(2)(v)	
1.1.4	Flare Stack Emissions (metric tons/year)	0	0	Value reported using calculation in 40 CFR 98 Sub W Section 236(n)(11)	
1.1.5	Centrifugal Compressor Venting (metric tons/year)	0	0	Value reported using calculation in 40 CFR 98 Sub W Section 236(o)(2)(ii)(D)(2)	
1.1.6	Reciprocating Compressor Venting (metric tons/year)	54	111	Value reported using calculation in 40 CFR 98 Sub W Section 236(p)(2)(ii)(D)(2)	
1.1.7	Equipment leaks from valves, connectors, open ended lines, pressure relief valves, and meters (metric tons/year)	116	56	Value reported using calculation in 40 CFR 98 Sub W Section 236(q)(2)(v)	
1.1.8	Other Leaks (metric tons/year)	0	0	Value reported using calculation in 40 CFR 98 Sub W Section 236(q)(2)(v)	
1.2	Total Transmission Compression Methane Emissions (metric tons/year)	584	335		
1.3	Total Transmission Compression Methane Emissions (CO $_{2e}$ /year)	14,592	8,378		
1.4	Total Transmission Compression Methane Emissions (MSCF/year)	30,400	17,454	Density of Methane = 0.0192 kg/ft3 per 40 CFR Sub W EQ. W-36	

Ref. No.		Last Year 2019	Current Year 2020	Definitions	Comments, Links, Additional Information and Notes
2	Underground Natural Gas Storage Methane Emissions			Fugitive Methane emissions as defined in 40 CFR 98 Sub W Section 232 (f) (1-8), $\rm CO_2$ and N2O emissions are excluded from this section.	
2.1.1	Pneumatic Device Venting (metric tons/year)	11	11	Value reported using calculation in 40 CFR 98 Sub W Section 236(b)(4)	
2.1.2	Flare Stack Emissions (metric tons/year)	0	0	Value reported using calculation in 40 CFR 98 Sub W Section 236(n)(11)	
2.1.3	Centrifugal Compressor Venting (metric tons/year)	0	0	Value reported using calculation in 40 CFR 98 Sub W Section 236(o)(2)(ii)(D)(2)	
2.1.4	Reciprocating Compressor Venting (metric tons/year)	59	13	Value reported using calculation in 40 CFR 98 Sub W Section 236(p)(2)(ii)(D)(2)	
2.1.5	Equipment leaks from valves, connectors, open ended lines, pressure relief valves, and meters (metric tons/year)	25	51	Value reported using calculation in 40 CFR 98 Sub W Section $236(q)(2)(v)$	
2.1.6	Other Equipment Leaks (metric tons/year)	0	0	Value reported using calculation in 40 CFR 98 Sub W Section $236(q)(2)(v)$	
2.1.7	Equipment leaks from valves, connectors, open ended lines, and pressure relief valves associated with storage wellheads (metric tons/year)	0	0	Value reported using calculation in 40 CFR 98 Sub W Section 236(q)(2)(v)	
2.1.8	Other equipment leaks from components associated with storage wellheads (metric tons/year)	0	0	Value reported using calculation in 40 CFR 98 Sub W Section 232(q)(2)(v)	
2.2	Total Storage Compression Methane Emissions (metric tons/year)	95	75		
2.3	Total Storage Compression Methane Emissions (CO2e/year)	2,382	1,873		
2.4	Total Storage Compression Methane Emissions (MSCF/year)	4,961	3,902	Density of Methane = 0.0192 kg/ft3 per 40 CFR Sub W EQ. W-36	
3	Onshore Natural Gas Transmission Pipeline Blowdowns			Blowdown vent stacks for onshore transmission pipeline as defined in 40 CFR 98 Sub W Section 232 (m), CO_2 and N2O emissions are excluded from this section.	
3.1	Transmission Pipeline Blowdown Vent Stacks (metric tons/year)	1,987	1,191	Value reported using calculation in 40 CFR 98 Sub W Section 232(i)(3)(ii)	
3.2	Transmission Pipeline Blowdown Vent Stacks (CO ₂ e/year)	49,675	29,775		
3.3	Transmission Pipeline Blowdown Vent Stacks (MSCF/year)	103,490	62,031		
4	Other Non-Sub Emissions Data			Additional sources required by ONE Future include dehydrator vents, storage station venting transmission pipeline leaks, and storage tank methane.	
4.1	Total Methane Emissions from additional sources not recognized by 40 CFR 98 Subpart W (metric tons/year)	323	644		
4.2	Total Methane Emissions from additional sources not recognized by 40 CFR 98 Subpart W (CO_ze/year)	8,069	16,100		
4.3	Total Methane Emissions from additional sources not recognized by 40 CFR 98 Subpart W (MSCF/year)	16,810	33,542		
5	Summary and Metrics				
5.1	Total Transmission and Storage Methane Emissions (MMSCF/year)	156	117		

Ref. No.		Last Year 2019	Current Year 2020	Definitions	Comments, Links, Additional Information and Notes
5.2	Annual Natural Gas Throughput from Gas Transmission and Storage Operations (MSCF/year)	522,420,456	526,770,173	EIA 176 throughput or other reference for other throughput selected	
5.2.1	Annual Methane Gas Throughput from Gas Transmission and Storage Operations (MMSCF/year)	480,052	500,432		
5.3	Fugitive Methane Emissions Rate (MMSCF of Methane Emissions per MMSCF of Methane Throughput)	0	0.00023		
	NATURAL GAS GATHERING & BOOSTING				
1	Methane Emissions				
1.1	Gathering and Boosting Pipelines, Blow Down Volumes, and Emissions				
1.1.1	Total Miles of Gathering Pipeline Operated by gas utility (miles)	725	878		Miles of pipeline increased due to acquisition of additional gathering system in Louisiana in 2019.
1.1.2	Volume of Gathering Pipeline Blow Down Emissions (scf)	40,735,586	229,058,357	This metric is collected to support calculations under EPA 40 CFR 98, Subpart W.	Increase due to anomalous events on the Bluestone system that resulted in unintended venting due to pressure relief and safety relief valve malfunctions. Corrective actions were taken and preventative measures have been implemented to avoid similar events in the future.
1.1.3	Gathering Pipeline Blow-Down Emissions outside storage and compression facilities (metric tons CO2e)	14,049	107,448		
2	$\text{CO}_{\text{2}\text{e}}$ Combustion Emissions For Gathering & Boosting Compression				
2.1	$\ensuremath{\text{CO}_{\text{ze}}}\xspace$ Emissions for Gathering & Boosting Compression Stations (metric tons)			$\rm CO_2$ combustion emissions reported to EPA under 40 CFR 98, Subpart C, as directed in Subpart W, 98.232(k).	DTE Gathering and Boosting facilities are not required to report under Subpart C, per 98.232(k).
3	Conventional Combustion Emissions From Gathering & Boosting Compression				
3.1	Emissions reported for all permitted sources (minor or major)			The number of permitted sources for conventional emissions may not be the same number	Emissions are included only for the
3.1.1	NO _x (metric tons per year)	480	529	of sources reporting under the EPA GHG reporting rule. Companies may wish to describe which, or how many, sources are included in the conventional pollutants data and whether	compressor stations that report annual emissions to the states of Pennsylvania and
3.1.2	VOC (metric tons per year)	144	221	the CO ₂ e data reported includes all of these sources.	Louisiana.
	HUMAN RESOURCES				
1.1	Total Number of Employees				Refer to Electric Company ESG/ Sustainability Quantitative Information Item 71.
1.2	Percentage of Women in Total Workforce				Refer to Electric Company ESG/ Sustainability Quantitative Information Item 7.2.

Ref. No.		Last Year 2019	Current Year 2020	Definitions	Comments, Links, Additional Information and Notes
1.3	Percentage of Minorities in Total Workforce				Refer to Electric Company ESG/ Sustainability Quantitative Information Item 7.3.
2.1	Total Number on Board of Directors/Trustees				Refer to Electric Company ESG/ Sustainability Quantitative Information Item 7.4.
2.2	Percentage of Women on Board of Directors/Trustees				Refer to Electric Company ESG/ Sustainability Quantitative Information Item 7.5.
2.3	Percentage of Minorities on Board of Directors/Trustees				Refer to Electric Company ESG/ Sustainability Quantitative Information Item 7.6.
3	Employee Safety Metrics				
3.1	Recordable Incident Rate				Refer to Electric Company ESG/ Sustainability Quantitative Information Item 7.7.1.
3.2	Lost-Time Case Rate				Refer to Electric Company ESG/ Sustainability Quantitative Information Item 7.7.2.
3.3	Days Away, restricted, and Transfer (DART) Rate				Refer to Electric Company ESG/ Sustainability Quantitative Information Item 7.7.3.
3.4	Work-Related Fatalities				Refer to Electric Company ESG/ Sustainability Quantitative Information Item 7.7.4.

Climate Goals

Goal Applicability	Baseline Year	"Target Year"	Reduction Goal Description (Short)	Source (URL)
DTE Electric	2005	2023	32% reduction in the carbon emissions of electricity delivered to DTE Electric customers.	DTE Energy - Net Zero Carbon Emissions by 2050 (<u>dtecleanenergy.com</u>)
DTE Electric	2005	2030	50% reduction in the carbon emissions of electricity delivered to DTE Electric customers.	DTE Energy - Net Zero Carbon Emissions by 2050 (<u>dtecleanenergy.com</u>)
DTE Electric	2005	2040	80% reduction in the carbon emissions of electricity delivered to DTE Electric customers.	DTE Energy - Net Zero Carbon Emissions by 2050 (<u>dtecleanenergy.com</u>)
DTE Electric	2005	2050	Net zero carbon emissions of electricity delivered to DTE Electric customers.	DTE Energy - Net Zero Carbon Emissions by 2050 (<u>dtecleanenergy.com</u>)
DTE Gas Suppliers	2005	2050	Net zero carbon emissions for natural gas procured by DTE Gas	DTE Newsroom (<u>meltwater.io</u>)
DTE Gas Operations	2005	2050	Net zero carbon emissions (fugitive and combustion) from DTE Gas operations	DTE Newsroom (<u>meltwater.io</u>)
DTE Gas Customers	2005	2050	35% reduction in carbon emissions from the combustion of natural gas by DTE Gas customers	DTE Newsroom (<u>meltwater.io</u>)

Notes

1. Additional information on the emissions goals listed above, including how they will be achieved, can be found in the Qualitative section.

2. Information on the type of emissions (e.g., carbon, methane, CO₂e, etc.) and which scope(s) of emissions—based on the WRI GHG Reporting Protocol – apply should be included in the goal description. Emissions reported in the Quantitative section are not based on a Scope 1, 2 or 3 methodology.

3. Goal Applicability refers to the entity to which the goal applies (e.g., parent company, operating company, electric or gas utility, etc.).