

C0. Introduction

C0.1

**(C0.1) Give a general description and introduction to your organization.**

DTE Energy (NYSE: DTE) is a diversified U.S. energy company with approximately \$12.7 billion in revenues for 2020. Our largest operating subsidiaries are DTE Electric Co., an electric utility, and DTE Gas Co., a natural gas utility. DTE Electric is a Michigan corporation organized in 1903 and is a public utility subject to regulation by the Michigan Public Service Commissions (MPSC) and the Federal Energy Regulatory Commission (FERC). DTE Electric is engaged in the generation, purchase, distribution and sale of electricity to approximately 2.2 million customers in southeastern Michigan. DTE Gas is a Michigan corporation organized in 1898 and is a public utility subject to regulation by the MPSC. DTE Gas is engaged in the purchase, storage, transmission, gathering, distribution and sale of natural gas to approximately 1.3 million customers throughout Michigan and the sale of storage and transportation capacity. Our other businesses are involved in 1) natural gas pipelines, gathering and storage; 2) power and industrial projects; and 3) energy marketing and trading operations. On October 27, 2020, DTE Energy announced that its Board of Directors had authorized management to pursue a plan to spin-off the DTE Midstream business, reflecting a shift in strategy to a predominantly pure-play utility. The spin-off would establish DTE Midstream as an independent, natural gas midstream company with increased flexibility and opportunities. The separation was completed on July 1, 2021 with the launch of the new DT Midstream organization.

More information on DTE Energy can be found at [DTEenergy.com](https://DTEenergy.com) and information on sustainability performance can be found at <https://empoweringmichigan.com/dte-impact/performance/>

C0.2

**(C0.2) State the start and end date of the year for which you are reporting data.**

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1 2020	December 31 2020	No	<Not Applicable>

C0.3

**(C0.3) Select the countries/areas for which you will be supplying data.**

United States of America

C0.4

**(C0.4) Select the currency used for all financial information disclosed throughout your response.**

USD

C0.5

**(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.**

Operational control

C-EU0.7

**(C-EU0.7) Which part of the electric utilities value chain does your organization operate in? Select all that apply.**

**Row 1**

**Electric utilities value chain**

Electricity generation  
Distribution

**Other divisions**

Gas storage, transmission and distribution

**(C-OG0.7) Which part of the oil and gas value chain and other areas does your organization operate in?**

**Row 1**

**Oil and gas value chain**

Midstream

**Other divisions**

- Biofuels
- Grid electricity supply from gas
- Grid electricity supply from coal
- Grid electricity supply from renewables

**C1. Governance**

**C1.1**

**(C1.1) Is there board-level oversight of climate-related issues within your organization?**

Yes

**C1.1a**

**(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.**

Position of individual(s)	Please explain
Chief Executive Officer (CEO)	Our President and CEO, together with other senior leaders of the company, exercise leadership in our sustainability initiatives. Through the Executive Committee, Government Regulatory Committee, Force for Growth Committee, ESG Committee and other leadership committees, DTE Energy's senior management: • Executes the company's Environmental, Social, and Governance (ESG) strategy in consultation with the Board of Directors • Manages our environmental compliance processes and carbon reduction aspirations • Mobilizes our employees, resources and partner organizations to strengthen and promote prosperity in our communities • Reports to Board of Directors on outcomes of ESG initiatives • Manages risks associated with environmental and sustainability opportunities • Receives compensation tied to achievement of company goals, including ESG targets An example of a decision made by our CEO related to climate: In September 2020, after a thorough review of feasibility options, our CEO recommended to the Board of Directors to announce a net zero by 2050 goal for DTE Electric generation.
Other, please specify (Lead Independent Director)	The Board continues to believe a good governance practice is to elect a Lead Independent Director. The Lead Independent Director will have such responsibilities as required under the NYSE listing standards, as well as such other responsibilities as determined by the Board, including approving the agenda for Board discussions of strategic issues (including climate-related issues) for the company.

**C1.1b**

**(C1.1b) Provide further details on the board's oversight of climate-related issues.**

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – all meetings	<ul style="list-style-type: none"> <li>Reviewing and guiding strategy</li> <li>Reviewing and guiding major plans of action</li> <li>Reviewing and guiding risk management policies</li> <li>Reviewing and guiding annual budgets</li> <li>Reviewing and guiding business plans</li> <li>Setting performance objectives</li> <li>Monitoring implementation and performance of objectives</li> <li>Overseeing major capital expenditures, acquisitions and divestitures</li> <li>Monitoring and overseeing progress against goals and targets for addressing climate-related issues</li> </ul>	<Not Applicable>	<p>Climate-related issues impact all areas of DTE Energy's business and are therefore incorporated into the agenda at all Board meetings. Examples include obtaining approval from the Board for the company's 2050 carbon reduction goal announced in 2017 and updated in 2019, long-term strategies and action plans to meet these goals, risks associated with meeting or not meeting these goals, capital expenditures necessary to meet these goals, and setting milestone targets to track and measure progress towards these goals. The Public Policy and Responsibility Committee (PPRC) of the DTE Energy Board of Directors is responsible for reviewing and advising the Board on emerging social, economic, political, reputational and environmental issues that could significantly affect the Company's business and performance in relation to the community, shareholders, customers and employees. The PPRC's responsibilities and duties include direct responsibility for climate change issues that affect the Company. The Committee met 5 times in 2020. The PPRC's Charter is available on our website and includes the following statements on Membership &amp; Authority: 1. The Committee shall be composed of three or more directors as determined by the Board of Directors. Committee members are appointed for one-year terms and can be re-appointed for additional terms. 2. The Committee has the authority to perform the duties listed in this Charter, as it determines to be necessary and advisable from time to time in its business judgment. 3. The Committee shall meet as necessary, but no fewer than three times a year. The Committee shall keep minutes or other records of its meetings. 4. The Committee has the authority to retain independent outside professional advisors or experts as it deems advisable or necessary, including the sole authority to retain and terminate any such advisors or experts, to carry out its duties. The Committee shall have sole authority to approve related fees and retention terms.</p>

**C1.2**

**(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.**

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Other, please specify (Vice President Environmental Management & Safety)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly
Other committee, please specify (ESG Committee)	<Not Applicable>	Managing climate-related risks and opportunities	<Not Applicable>	As important matters arise
Other, please specify (Force for Growth Committee)	<Not Applicable>	Managing climate-related risks and opportunities	<Not Applicable>	As important matters arise
Other committee, please specify (Executive Committee, Government, Regulatory and Community Committee, Risk Management Committee)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	As important matters arise
Chief Executive Officer (CEO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly

**C1.2a**

**(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).**

The VP-Environmental Management & Safety reports directly to the President and COO of DTE Electric and oversees the company's environmental operations. This responsibility is given to the VP-Environmental Management & Safety so that a high-level executive position has the main responsibility of overseeing environmental operations under the direction of C-suite officers. In managing our sustainability initiatives, the VP-Environmental Management & Safety:

- Represents the company on environmental issues with the public and in environmental regulatory and legislative development
- Coordinates environmental studies and conducts environmental audits
- Supervises a department of approximately 100 people

**ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) COMMITTEE**

The cross-functional ESG Committee was formed to coordinate and execute the company's multiple streams of ESG disclosure. The ESG Committee has members from legal, corporate communications, human resources, investor relations, environmental compliance, public affairs, and the corporate secretary's office. The Committee is given the responsibility of coordinating the company's ESG strategies and disclosures. The multiple disciplines and business units represented on the ESG Committee allow them to make climate-related recommendations and decisions that benefit the entire company. The ESG Committee:

- Evaluates potential ESG disclosure platforms and templates, and makes recommendations to management
- Reviews peer company disclosures for best practices
- Collects internal ESG data and drafts disclosure documents in consultation with relevant business units
- Incorporates input from management and board reviewers
- Meets at least monthly

**SENIOR MANAGEMENT — GOVERNMENT, REGULATORY AND COMMUNITY (GRC) AND FORCE FOR GROWTH (FFG) COMMITTEES**

Our President and CEO, together with other senior leaders of the company, exercise leadership in our sustainability initiatives through executive committees. The GRC and FFG committees include C-suite officers and other senior management as members. Through monthly meetings of the GRC, FFG, and other leadership committees, DTE Energy's senior management:

- Executes the company's ESG strategy including governance, engagement and oversight 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

Senior management is given these responsibilities in order to provide high-level direction toward climate-related initiatives for the rest of the company.

**C1.3**

**(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?**

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

**C1.3a**

**(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).**

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target	Our CEO received 64% of his 2020 total compensation in contingent, performance-based incentives that are focused on meeting our system of corporate priorities, including our target to reduce carbon emissions. For our other named executive officers, the average percentage of contingent, performance-based compensation was 40%. • Our short-term and long-term performance metrics all tie directly to our system of priorities. These are the same metrics that management uses to assess the Company's progress toward our aspiration of becoming the best-operated energy company in North America and a force for growth and prosperity in the communities where we live and serve.
All employees	Monetary reward	Other (please specify) (Corporate Priority Scorecards)	The company utilizes scorecards as a means to measure progress towards meeting company goals. The scorecards are utilized to assess annual incentive awards at the business unit level for all employees. Examples of corporate level priorities related to climate change that were tracked on scorecards at the business unit level in 2019 included the following: 1. Reduce carbon emissions 21% below 2005 (on way to 80% reduction by 2050) 2. Achieve annual customer electricity savings of 1.5% 3. Achieve annual customer gas savings of 1.0% 4. Drive 25% energy, water and waste reduction from 2016 levels by 2022
All employees	Monetary reward	Other (please specify) (Alex Dow Award)	Alex Dow Award - The Alex Dow Award recognizes outstanding achievement related to the company's operation that is consistent with its responsibilities as an investor-owned utility and exemplifies DTE Energy's Core Values and incorporates the DTE Energy Operating System principles. Awards fall into the following categories: 1. Achievement or Innovation: An original achievement or innovation that has significant positive impact on corporate cost savings or increased revenues, gained outside recognition, and supports corporate strategies. 2. Emergency: An individual(s) taking extraordinary action in an emergency to prevent injury, loss of life, or damage to or loss of property. 3. Improved Operation: An outstanding individual(s) effort, beyond normal responsibilities, which significantly improved company-wide operations, greatly impacted the company's financial success and supported corporate strategies. 4. Human Relations: An outstanding, sustained individual effort that has had a significant impact on improving the quality of life in the Community or the Company. 5. Public Relations: An outstanding, sustained individual effort that has had a significant impact on improving the corporate service and awareness in the communities in which we serve 6. Above and Beyond: Exceptional, consistent, and sustained efforts to achieve business success that goes above and beyond and exceeds expectations. 7. Lifetime Achievement: Original achievements and innovations that have had a sustained impact on the corporation and gained outside recognition. The Alex Dow award is one of 3 established employee performance recognition programs. Although these programs do not specifically target management of climate change issues, recipients have been awarded this honor in the past who are instrumental in creating and sustaining many environmental initiatives.
All employees	Non-monetary reward	Other (please specify) (Sarah Sheridan Award)	Sarah Sheridan Award - The Sarah Sheridan award recognizes the commitment, innovation and sustained efforts of employees that provide Service Excellence to our external and internal customers, and our community (including volunteerism). Such efforts by an individual or team epitomize our Service Key behaviors. The Sarah Sheridan Award is one of 3 established employee performance recognition programs. Although these programs do not specifically target management of climate change issues, recipients have been rewarded for their work in climate change or related environmental issues.
All employees	Monetary reward	Other (please specify) (Walter J. McCarthy Award)	Walter J. McCarthy, Jr. Award - Through the Walter J. McCarthy Volunteer Leadership Individual Grant Program, the DTE Energy Foundation awards up to \$1,000 on behalf of its employees and retirees who volunteer personal time with eligible non-profit organizations in Michigan. The Walter J. McCarthy, Jr. Award is one of 3 established employee performance recognition programs. Although these programs do not specifically target management of climate change issues, recipients are often rewarded for their work in climate change or related environmental issues.
All employees	Monetary reward	Other (please specify) (Employee engagement to reduce emissions)	The EV Incentive program allows eligible DTE Energy employees to receive a \$2,000 incentive for purchasing or leasing a new Electric Vehicle (EV) from January 1- November 30, 2020. The Charging Forward program allows eligible DTE Energy employees to receive \$500 rebate on the purchase and installation of a qualified Level 2 charger after the purchase or lease of an EV.

**C2. Risks and opportunities**

**C2.1**

**(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?**

Yes

**C2.1a**

**(C2.1a) How does your organization define short-, medium- and long-term time horizons?**

	From (years)	To (years)	Comment
Short-term	0	5	Aligned with annual planning cycles and shorter term targets to reach performance goals.
Medium-term	5	15	Generally aligned with Integrated Resource Plan timeframe and other regulatory submittals and disclosures required by the Michigan Public Service Commission.
Long-term	15	30	Aligned with DTE Energy's goal to achieve net zero carbon emissions by 2050.

**C2.1b**

## (C2.1b) How does your organization define substantive financial or strategic impact on your business?

DTE identifies issues that are material to its financial or strategic planning in required financial filings to the Securities and Exchange Commission (e.g. annual 10-K reports). SEC provides guidance on reporting material issues in financial statements in SEC Staff Accounting Bulletin No. 99, August 12, 1999. The Bulletin suggests that a mix of quantitative and qualitative information is necessary to evaluate the materiality of an aspect or issue. The definition of materiality extends to any financial and strategic impact that an investor would deem substantive, and DTE aims to maintain a reputation of sound risk assessment and management among its investors. For example, extreme weather conditions are identified as a risk in our 2020 10-K Annual Report, which we would consider a substantive financial or strategic impact if it caused damage to the electric distribution system infrastructure and power generation facilities. The 2019 Polar Vortex is an example of an event we would consider substantive; very cold-weather may impact normal daily operations our facilities. Recovering from these setbacks would result in increased costs from unforeseen maintenance to our power generation facilities, therefore negatively impacting the financial performance of the company.

A brief explanation of the more significant risks associated with DTE Energy's businesses are provided in our 2020 Form 10-K annual report. Although we have tried to identify and discuss key risk factors, others could emerge in the future. Key risk factors related to climate change include the following:

- We are subject to rate regulation.
- Changes to Michigan's electric retail access program could negatively impact our financial performance.
- Our electric distribution system and our gas distribution system are subject to risks from their operation, which could reduce revenues, increase expenses, and have a material adverse effect on their business, financial position, and results of operations.
- DTE Energy's non-utility businesses may not perform to expectations
- Environmental laws and liability may be costly.
- Construction and capital improvements to our power facilities, distribution systems and its Gas Storage and Pipelines business subject us to risk.
- Operation of a nuclear facility subjects us to risk.
- The supply and/or price of energy commodities and/or related services may impact our financial results.
- The supply and/or price of other industrial raw and finished inputs and/or related services may impact our financial results
- Emerging technologies may have a material adverse effect.
- Our participation in energy trading markets subjects us to risk.
- Weather significantly affects operations.
- Unplanned power plant outages may be costly.
- Renewable portfolio standards and energy waste reduction may affect our business and federal and state fuel standards may affect DTE Energy's non-utility investments.
- Our ability to utilize production tax credits may be limited.
- Regional, national and international economic conditions can have an unfavorable impact on us.
- If DTE Energy's goodwill becomes impaired, it may be required to record a charge to earnings.
- We may not be fully covered by insurance.

Finally, long-range planning risks associated with the transition of DTE's generating fleet to less carbon-intensive technologies are addressed through the company's Integrated Resource Planning process. These risks include increasing pressure by investors and other stakeholders to conduct climate scenario analyses demonstrating the company's commitment to limiting global warming to less than 2-degrees C above pre-industrial levels.

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## C2.2

**(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.**

**Value chain stage(s) covered**

Direct operations

**Risk management process**

Integrated into multi-disciplinary company-wide risk management process

**Frequency of assessment**

More than once a year

**Time horizon(s) covered**

Short-term

Medium-term

Long-term

**Description of process**

Governance Process for Evaluating Which Risks and Opportunities Could Have a Substantive Financial or Strategic Impact: Each Board Committee is responsible for overseeing and considering risk issues relating to their respective Committee and reporting their assessments to the full Board at each regularly scheduled Board meeting. When granting authority to management, approving strategies and receiving management reports, the Board and Committees consider, among other things, the risks we face. The following committees review management's assessment of risk for that Committee's respective area of responsibility: Audit Committee Finance Committee Organization and Compensation Committee Corporate Governance Committee Nuclear Review Committee Public Policy and Responsibility Committee The charters for each of these committees are posted on the DTE Energy website. The Company also utilizes an internal Risk Management Committee, chaired by the Chairman, President and CEO and comprised of the Chief Financial Officer, Chief Risk Officer, General Counsel, General Auditor and other senior officers, that, among other things, directs the development and maintenance of comprehensive risk management policies and procedures, and sets, reviews and monitors risk limits on a regular basis for enterprise-level risks. The Company's Chief Risk Officer attends all Audit Committee meetings and meets annually with either the joint Audit Committee and Finance Committee or the full Board to update the members on the Company's enterprise-level risk management. The Chief Risk Officer also periodically meets with the other Board Committees and the full Board as may be required. These periodic meetings allow for two-way exchange of company and asset related risk, either from the business unit level that has identified an asset related risk, or from the Board Committee that may have a generally identified risk that could impact assets. The Public Policy and Responsibility Committee (PPRC) of the DTE Energy Board of Directors is responsible for addressing climate change issues that affect the Company. The PPRC Committee met 5 times in 2020. The Board receives, reviews and assesses reports from the Board Committees and from management relating to enterprise-level risks, including climate risks. DTE Energy's long-term planning, including management of climate-related risk, is guided by our commitment to reduce carbon emissions to net zero by 2050. Climate-related issues impact all areas of DTE Energy's business and are therefore incorporated into the agenda at all Board meetings. Case Study 1: in response to transitional risk identified in C2.3, our CEO recognized the need to go beyond our DTE Electric carbon reduction goals outlined in the March 2019 Integrated Resource Plan and obtained approval from the Board for DTE Electric's updated net zero goal announced in September 2019. This goal requires the development of strategies and action plans to meet these goals in the short, medium and long-term horizons, risks associated with meeting or not meeting these goals, potential capital expenditures necessary to meet these goals, and setting milestone targets to track and measure progress towards these goals. These goals require an evaluation of risk to meet the following short, medium and long-term carbon reduction goals: 32 percent below 2005 by 2023 50 percent below 2005 by 2030 80 percent below 2005 by 2040 Net zero by 2050 Furthermore, recognizing the increasing external stakeholder pressure on the role of the oil and gas industry's role in climate change, DTE announced a net zero goal for its gas utility in June 2020. The holistic three-fold approach will include natural gas suppliers to operate at net zero greenhouse gas emissions by 2050; DTE Gas operations, both combustion and fugitive emissions, will also achieve net zero by 2050; and partnerships with customers on energy efficiency and voluntary offsets will reduce their emission by approximately 35% by 2050. Case Study 2: DTE is working to build a 21st century grid that meets the customer needs of tomorrow, and that will help to minimize the impacts from increased physical risks due to climate change such as ice storms, tornadoes, or high winds, as well as building a grid that accommodates the needs of an increasingly decarbonized electricity sector. In response to an order from the Michigan Public Service Commission, DTE Electric developed a Distribution Operations Five-Year (2018-2022) Investment and Maintenance Plan in 2018 that provides a detailed summary of the current state of DTE's distribution infrastructure and the needs of the future. DTE has planned, approved and disclosed in the 2020 10K that DTE Electric's capital investments over the short-term 2021-2025 period are estimated at \$7 billion for distribution infrastructure. These investments will include infrastructure resilience and hardening to help minimize the impacts from increased physical risks due to climate change; infrastructure redesign to increase system capacity (which will accommodate demand growth due to electrification); and technology and automation including smart meters and technologies to incorporate distributed energy resources such as rooftop solar.

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C2.2a

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**(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?**

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	An example of assessed current regulations are the U.S. EPA rules under the Clean Air Act that impose limits on air emissions, including greenhouse gases. U.S. EPA rules under the Clean Air Act requiring carbon performance standards for new and existing electric generating unit (EGU) sources of greenhouse gases under Sections 111(b) and 111(d) of the Clean Air Act were finalized in 2015. The 111(d) rule for existing sources, also known as the Clean Power Plan, was repealed in June 2019 and replaced with the Affordable Clean Energy Rule. Though now repealed, DTE Energy was able to assess this risk by engaging extensively with U.S. EPA on influencing a final rule for the Clean Power Plan that was reasonable and affordable for the electric power industry. DTE also assessed this regulation-related risk by determining how the Clean Power Plan, as proposed, could impact the reliability of the nation's electric grid; our CEO Gerry Anderson spoke on behalf of DTE and EEI on this topic in 2015. Our CEO (now Chairman) continues to influence the industry on climate related issues through his role as EEI Chairman. Regulation pertaining to renewable energy and/or clean energy requirements is also considered. In late 2016, Michigan passed legislation requiring electricity providers to meet a 12.5% renewable portfolio standard by 2019 and 15% by 2021 and an energy optimization goal of meeting at least 35% of the State's electric needs through energy waste reduction and renewable energy by 2025. The Michigan energy legislation also requires periodic submittal of an Integrated Resource Plan (IRP) to the Michigan Public Service Commission. DTE Electric submitted its IRP in March 2019 which included an accelerated carbon reduction goal of 80% reduction from 2005 levels by 2040 and a 50% reduction by 2030. These goals exceed the requirements of the repealed Clean Power Plan.
Emerging regulation	Relevant, always included	Uncertainty around future environmental regulations creates difficulty planning long-term capital projects in our generation fleet and gas distribution businesses. These laws and regulations require us to seek a variety of environmental licenses, permits, inspections and other regulatory approvals. An example of a potential emerging regulation is the requirement to install expensive pollution control measures or limit or cease activities, including the retirement of certain generating plants, based on the outcome of future regulations. In addition, emerging state or local legislative and /or ballot initiatives focused on clean energy and reducing carbon emissions are considered in climate risk assessments. DTE Energy is currently participating in the Michigan Council on Climate Solutions that was created by an executive order of the governor to create an action plan that will move the state of Michigan to carbon neutrality by 2050. The final action plan is scheduled to be completed in December 2021 and may include recommendations for regulations.
Technology	Relevant, sometimes included	An example of key technology uncertainties that impact future planning risks is feasibility and cost of energy storage technologies. Utility-scale energy storage technologies (e.g. batteries) to store energy from intermittent renewable generation, which are currently not feasible for wide-scale deployment across our service territory. However, if costs of utility-scale storage decrease significantly, long-term generation planning could be impacted. Other technologies being considered to help us reach our net zero goals and which will require a risk assessment include carbon capture and storage, modular nuclear reactors, and alternative fuels such as renewable natural gas or hydrogen.
Legal	Relevant, always included	An example (case study) of a legal risk considered in climate-related risk assessments is the initiation of enforcement actions against DTE Electric Co. by the EPA and environmental groups alleging, among other things, that five DTE Electric power plants violated New Source Performance standards, Prevention of Significant Deterioration requirements, and operating permit requirements under the Clean Air Act. DTE Electric could be required to install additional pollution control equipment at some or all of the power plants in question, implement early retirement of facilities where control equipment is not economical, engage in supplemental environmental programs, and/or pay fines. The litigation described above was resolved in 2020, resulting in a consent decree to retrofit, refuel or repower coal units, a \$1.8 million civil penalty, and a \$5.5 million bus replacement project to be paid for by DTE. The company considers potential enforcement actions similar to those described above in its climate-related risk assessments.
Market	Relevant, sometimes included	An example of an assessed potential market risk is a carbon emission trading or similar program that could be required by future legislation or regulations, placing a price on the direct emissions of carbon. This could potentially impact the affordability of electricity to our customers.
Reputation	Relevant, always included	DTE Energy's aspiration is to be the best operated energy company in North America and a force for growth and prosperity in the communities where we live and serve. We are guided by our company's purpose, values and system of priorities to support our journey towards our aspiration. Risks that detract from achieving our aspiration would be considered reputational risks. An example of a reputational risk is repeated outages and reliability impacts from severe weather events. In January 2018, DTE Electric filed with the MPSC its five-year distribution operations investment and maintenance plan to improve system reliability. DTE Electric will be submitting an updated distribution operation investment and maintenance plan to MPSC in 2021.
Acute physical	Relevant, always included	An example of acute physical risk is the increased frequency of severe storm events (e.g. severe thunderstorms, tornadoes, wind storms, floods and ice storms), which have an impact on the electrical transmission and distribution system infrastructure (e.g. poles and wires). DTE has a robust Storm Emergency Plan that is put into action during storm emergencies and reviewed for improvement in after action reviews following each storm.
Chronic physical	Relevant, sometimes included	An example of chronic physical risk is decreases or increases in Great Lakes water levels due to changes in precipitation and evaporation patterns, which could have a negative impact on the ability to utilize water for electric generation cooling purposes or in transporting fuel and other raw materials to our plants via water vessels. Warmer average summer and winter temperatures could potentially impact seasonal demand for electricity and natural gas.

**C2.3**

**(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?**

Yes

**C2.3a**

**(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.**

**Identifier**

Risk 1

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Emerging regulation	Mandates on and regulation of existing products and services
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**Primary potential financial impact**

Increased direct costs

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

Pending or future legislation or other regulatory actions could have a material impact on DTE Electric's operations and financial position and the rates charged to its customers. Impacts include expenditures for environmental equipment beyond what is currently planned, financing costs related to additional capital expenditures, the purchase of emission credits from market sources, higher costs of purchased power, and the retirement of facilities where control equipment is not economical. DTE Electric would seek to recover these incremental costs through increased rates charged to its utility customers, as authorized by the MPSC. Increased costs for energy produced from traditional coal-based sources due to recent, pending, and future regulatory initiatives, could also increase the economic viability of energy produced from renewable, natural gas fueled generation, and/or nuclear sources, energy waste reduction initiatives, and the potential development of market-based trading of carbon instruments which could provide new business opportunities for DTE Energy's utility and nonutility segments. At the present time, it is not possible to quantify the financial impacts of these climate related regulatory initiatives on DTE Energy or its customers. In June 2019, EPA finalized the Affordable Clean Energy (ACE) Rule to regulate emissions of carbon dioxide from existing coal-fired power plants. The ACE Rule was vacated and remanded back to EPA by the D.C. District Court in January 2021. Future actions by

the EPA to develop a replacement for the ACE rule are uncertain and contribute to the risk of potential emerging regulations.

**Time horizon**

Medium-term

**Likelihood**

More likely than not

**Magnitude of impact**

Medium-high

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

The Company cannot predict the financial impact of this risk at this time.

**Cost of response to risk**

0

**Description of response and explanation of cost calculation**

We manage these risks through the Board Committee structure described in our response to Question C1.1 and through our established long-term planning processes. We are actively involved in shaping and influencing proposed regulations at both the state and federal level through our involvement with industry groups. We advocate for environmental policy that proceeds in a manner that can be absorbed financially by our customer base.

**Comment**

No additional cost of management - these costs are integrated into existing budgets.

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**Identifier**

Risk 2

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Technology	Transitioning to lower emissions technology
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**Primary potential financial impact**

Increased capital expenditures

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

We manage these risks through the Board Committee structure described in our response to Question C1.1 and through our established long-term planning processes, including the Integrated Resource Planning (IRP) process that is managed by the Michigan Public Service Commission (MPSC). We must seek approval from the MPSC for electric rate increases to support the capital costs of transitioning to a lower carbon supply of electricity.

**Time horizon**

Short-term

**Likelihood**

Likely

**Magnitude of impact**

High

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

3800000000

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

DTE's IRP, filed in 2019, indicated that the cost to transition to lower carbon emitting sources of generation, including renewables, a natural gas plant, and upgrades to a pumped storage hydroelectric facility will be around \$3.8 billion over the next 5 years. In the IRP, DTE evaluated numerous resource options to determine the recommended combination of supply-side and demand-side options. DTE performed robust scenario and sensitivity analyses, considering the uncertainty around environmental regulations, resource cost and performance, fuel prices, load, and other regulatory and legislative effects. In addition to scenario and sensitivity analysis, the Company conducted four additional risk analyses. The Company's proposed course of action focuses on the years 2020–2024 and considers the most affordable and reliable mix of supply-side and demand-side resources available today.

**Cost of response to risk**

0

**Description of response and explanation of cost calculation**

Actions being implemented to manage this risk include investing in technology and infrastructure with approval by the MPSC. The MPSC approved a \$188 million rate increase for DTE Energy in May 2020 based upon the initial request of \$351 million in July of 2019. The need for the rate increase was driven primarily by capital investments since the last general rate case to replace aging distribution system infrastructure and to invest in long-term generation assets, among other rising costs. DTE is investing \$1 billion in a natural gas plant, which will be the most efficient power plant in the state producing affordable and reliable low-emission electricity for 850,000 homes beginning in 2022. This was approved by the MPSC in early 2018. When it begins operations in 2022, Blue Water Energy Center will represent DTE's single largest step in reducing carbon emissions to date.

**Comment**

No additional cost of management - these costs are integrated into existing budgets.

**Identifier**

Risk 3

**Where in the value chain does the risk driver occur?**

Upstream

**Risk type & Primary climate-related risk driver**

Market	Increased cost of raw materials
--------	---------------------------------

**Primary potential financial impact**

Increased indirect (operating) costs

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

Our mid and long-term planning relies on replacement of our retiring coal generation with natural gas and renewable energy. This includes a reliable and affordable supply of natural gas. Volatility in natural gas prices present a risk to the viability of future natural gas generation as part of a generation portfolio to meet carbon reduction goals.

**Time horizon**

Medium-term

**Likelihood**

Unlikely

**Magnitude of impact**

Medium-high

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

The Company cannot predict the financial impact of this risk at this time.

**Cost of response to risk**

**Description of response and explanation of cost calculation**

The cost of fuel that we charge customers is managed through a Power Supply Cost Recovery mechanism authorized by the Michigan Public Service Commission that allows DTE Electric to recover through rates its fuel, fuel-related, purchased power costs. Changes in fuel prices, including gas price volatility, would be managed through this program. An action being implemented to mitigate this risk is DTE's increasingly diverse portfolio and investment in renewable energy infrastructure, including energy storage. Renewable energy allows DTE to provide reliable energy to its customers with a decreased risk of cost increase due to fuel prices. In addition, recent upgrades and a license renewal by DTE Electric Company and Consumers Energy Company at the shared Ludington Pumped Storage provide energy storage flexibility that helps to store excess energy (e.g. from renewables) and minimize cost of fuel impacts.

**Comment**

No additional cost of management - these costs are integrated into existing budgets.

**Identifier**

Risk 4

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Reputation	Increased stakeholder concern or negative stakeholder feedback
------------	--

**Primary potential financial impact**

Other, please specify (Reduction in price of DTE shares due to market reaction)

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

Incorrect or negative perceptions of the company's approach to addressing climate change may lead to shareholder resolutions requesting additional action from the company.

**Time horizon**

Short-term

**Likelihood**

About as likely as not

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

The estimated financial implications would vary depending on the scope of a proposed shareholder resolution. We cannot predict the financial impact of this risk at this time.

**Cost of response to risk**

0

**Description of response and explanation of cost calculation**

An action being implemented is the Company's active communication with its shareholders about a broad range of topics through published sustainability reports. For example, DTE voluntarily publishes an annual Environmental, Social, Governance, and Sustainability (ESG) Report. This includes the EEI/AGA ESG Template that allows investors to compare environmental impacts and initiatives across companies within the electric utility and natural gas industries. Furthermore, DTE publishes an annual Corporate Citizenship Global Reporting Initiative (GRI) Report that is indexed to the GRI standards. We respond to ESG stakeholder requests for information such as the CDP Carbon and CDP Water questionnaires. Our shareholder engagement efforts have generated valuable feedback related to renewable energy and sustainability, and we will continue to seek input from our shareholders around these issues.

**Comment**

We do not expect this risk to require an additional cost of management - these costs are integrated into existing budgets.

---

**Identifier**

Risk 5

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Acute physical	Increased severity and frequency of extreme weather events such as cyclones and floods
----------------	--

**Primary potential financial impact**

Increased direct costs

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

Ice storms, wind storms, severe thunderstorms and tornadoes can damage the electric distribution system infrastructure and require us to perform emergency repairs and incur material unplanned expenses. The expenses of storm restoration efforts may not be fully recoverable through the regulatory process. The biggest financial implications associated with the identified risks are the severe weather events for which DTE Electric Co. already has an existing budgeting and planning process in place to manage.

**Time horizon**

Short-term

**Likelihood**

Virtually certain

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

7000000000

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

DTE Electric's capital investments over the 2021-2025 period are estimated at \$7 billion for distribution infrastructure which will strengthen the reliability and resiliency of the electric distribution infrastructure. The approach to developing the infrastructure upgrade costs is explained in a five year distribution operations investment and maintenance plan to improve system reliability that DTE Electric filed with the Michigan Public Service Commission (MPSC) in January 2018. DTE Electric is required to

update this plan on a regular basis and will seek regulatory approval for capital expenditures consistent with prior ratemaking treatment. DTE will be submitting an updated distribution operations investment and maintenance plan in August 2021.

**Cost of response to risk**

**Description of response and explanation of cost calculation**

DTE Electric maintains a storm emergency and readiness center that is put into action when severe weather causes sudden increases in customer outages. The unpredictability of severe weather events makes it difficult to quantify the potential incremental cost of this risk that would be attributed to climate change. We don't expect physical risks from climate change to impact the company's storm emergency planning process in a way that would impact our normal long-range planning process. We cannot predict whether long term changes in frequency of severe weather events due to climate change will have more of an impact on the electric distribution infrastructure than normal year to year variations in severe weather events.

**Comment**

No additional cost of management - these costs are integrated into existing budgets.

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**Identifier**

Risk 6

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Chronic physical	Rising mean temperatures
------------------	--------------------------

**Primary potential financial impact**

Decreased revenues due to reduced demand for products and services

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

Year to year deviations from normal hot and cold weather conditions affect our earnings and cash flow. Warmer than normal winters reduce the need for natural gas for heating, resulting in lower gas sales to retail customers by DTE Gas. However, higher than normal summer temperatures increase electricity demand for residential and commercial air conditioning, and potentially increase peak demand days for DTE Electric.

**Time horizon**

Short-term

**Likelihood**

Virtually certain

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

We cannot predict whether long-term trends in average temperatures due to climate change will have more of an impact on the demand for electricity or natural gas than year to year variations from normal temperatures. We cannot predict the financial impacts of this risk at this time.

**Cost of response to risk**

**Description of response and explanation of cost calculation**

We don't expect physical risks from climate change to impact the company in a way that would impact our normal long-range planning process. Meeting customer demand for our products is part of our normal operational planning. We do not see any change as a result of increased temperatures impacting this process.

**Comment**

No additional cost of management - these costs are integrated into existing budgets.

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**Identifier**

Risk 7

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Chronic physical	Other, please specify (Fluctuating Great Lakes water levels)
------------------	--

**Primary potential financial impact**

Increased direct costs

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

Decreases or increases in Great Lakes water levels due to changes in precipitation and evaporation patterns could have a negative impact on the ability to utilize water for electric generation cooling purposes or in transporting fuel and other raw materials to our plants via water vessels.

**Time horizon**

Short-term

**Likelihood**

Very likely

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

Financial implications of Great Lakes water level changes could include capital costs to change cooling water intake structures and equipment, and costs to modify existing vessel unloading facilities. A longer shipping season on the Great Lakes due to warmer lake temperatures could have beneficial financial impacts due to a longer season for shipping coal and other commodities transported by ship. We cannot predict the financial impact of Great Lakes water level changes at this time.

**Cost of response to risk****Description of response and explanation of cost calculation**

We don't expect physical risks from climate change to impact the company in a way that would impact our normal long-range planning process. Over the past 100 years, Lake Erie and Lake Huron levels have fluctuated by almost 2 meters from highest levels to lowest levels. The company has planned around these fluctuations in the past and is not actively planning to manage or adapt to changes in Great Lakes water levels as a result of climate change.

**Comment**

No additional cost of management - these costs are integrated into existing budgets.

**Identifier**

Risk 8

**Where in the value chain does the risk driver occur?**

Direct operations

**Risk type & Primary climate-related risk driver**

Emerging regulation	Mandates on and regulation of existing products and services
---------------------	--

**Primary potential financial impact**

Decreased revenues due to reduced demand for products and services

**Climate risk type mapped to traditional financial services industry risk classification**

<Not Applicable>

**Company-specific description**

Potential restrictions by local governments on new natural gas distribution infrastructure, including bans on natural gas hook-ups for new construction.

**Time horizon**

Medium-term

**Likelihood**

About as likely as not

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

The magnitude of the financial impact would depend on the size of the community or local government that implements restrictions on natural gas infrastructure. We cannot predict the financial impact of ordinances that could restrict the use or growth of natural gas infrastructure at this time.

**Cost of response to risk****Description of response and explanation of cost calculation**

The company has an active stakeholder outreach process that works with municipalities and local governments to help them achieve their energy needs while keeping costs affordable for our customers.

**Comment**

No additional cost of management - these costs are integrated into existing budgets.

## C2.4

**(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?**

Yes

## C2.4a

**(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.****Identifier**

Opp1

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Energy source

**Primary climate-related opportunity driver**

Use of lower-emission sources of energy

**Primary potential financial impact**

Returns on investment in low-emission technology

**Company-specific description**

Opportunities to invest in low emissions (renewable and natural gas) generation to replace retiring coal-fired units. DTE Electric's capital investments over the 2021-2025 period are estimated at \$2.0 billion for new generation. DTE Electric has retired five coal-fired generation units at the Trenton Channel, River Rouge, and St. Clair facilities and has announced plans to retire its remaining twelve coal-fired generating units. River Rouge's final unit will retire in 2021, and five additional coal-fired generating units will be retired through 2022 at the Trenton Channel and St. Clair facilities. The remaining coal-fired generating units at the Belle River and Monroe facilities are expected to be retired by 2040. The retired facilities will be replaced with renewables, energy waste reduction, demand response, and natural gas fueled generation. In April 2018, DTE Electric received approval from the MPSC to build a natural gas fueled combined cycle generation facility to provide approximately 1,100 megawatts of energy beginning in 2022. In August 2018, DTE Electric began construction on its natural gas fueled combined cycle generation facility. In its August 2020 Renewable Energy Plan, approved by the MPSC in June 2021, DTE noted it will bring an additional 1,237 MW of renewable projects fore its voluntary green pricing program online by 2026. DTE Electric plans to seek regulatory approval for capital expenditures consistent with prior ratemaking treatment. These opportunities are driven by DTE Energy's goal to reduce carbon emission 80 percent from 2005 levels by 2040 as committed to in the March 2019 Integrated Resource Plan submitted to the Michigan Public Service Commission.

**Time horizon**

Short-term

**Likelihood**

Virtually certain

**Magnitude of impact**

High

**Are you able to provide a potential financial impact figure?**

Yes, an estimated range

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

65000000

**Potential financial impact figure – maximum (currency)**

188300000

**Explanation of financial impact figure**

The Michigan Public Service Commission issued an order in DTE Electric's rate case on April 19, 2018 that authorized DTE Electric to raise base rates by \$65 million annually and approved a return on equity of 10% for the company's capital investment of more than more than \$1.1 billion since the last general rate case to replace aging distribution system infrastructure and to invest in the Company's long-term generation assets, lower sales, inflation and working capital increases due primarily to changes in retiree benefit costs. On May 8, 2020, MPSC approved a \$188.3 million rate increase for DTE Electric. The new funding includes investments that will help DTE improve electric reliability, support Michigan jobs, reduce carbon emissions and provide needed upgrades at the Ludington Pumped Storage Power Plant. To help meet its carbon emissions reduction commitments, DTE is retiring three coal power plants in two years. These plants represent about 20% of the generating capacity used to serve the peak energy needs of DTE customers. A portion of the May 2020 order approved in the Commission's decision will support continued reliability and emissions reductions as DTE transforms its generation resources through these plants retirements. A breakdown of the financial impacts related to the investment in lower emitting generation is not available.

**Cost to realize opportunity**

2000000000

**Strategy to realize opportunity and explanation of cost calculation**

DTE Electric's capital investments over the 2021-2025 period are estimated at \$2.0 billion for new generation. In April 2018, DTE Electric received approval from the MPSC to build a natural gas fueled combined cycle generation facility to provide approximately 1,100 megawatts of energy beginning in 2022. In March 2018, DTE Electric filed its 2018 Renewable Energy Plan with the MPSC proposing approximately 1,000 additional megawatts of energy from new wind and solar projects to be completed by 2022. DTE plans to purchase three new wind parks, two of which will be the largest clean energy projects in the state. The MPSC had previously approved 300 of the 1,000 additional megawatts for wind projects in an MPSC order received in September 2016. In its March 2020 Renewable Energy Plan, DTE noted it will bring an additional 353 MW of wind and solar projects online in 2022.

**Comment**

Our path to net zero carbon emissions is described at: <https://dtecleanenergy.com>. In additions, DTE Electric's 2019 Integrated Resource Plan summary describes the Company's strategy and plan to transition to a lower carbon emitting generation fleet and to meet a carbon reduction goal of 80 percent below 2005 levels by 2040. The IRP Summary is available on our website: [https://geg2a4cqqdz35Inem46az2tb-wpengine.netdna-ssl.com/wp-content/uploads/2019/03/IRP\\_Summary.pdf](https://geg2a4cqqdz35Inem46az2tb-wpengine.netdna-ssl.com/wp-content/uploads/2019/03/IRP_Summary.pdf).

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**Identifier**

Opp2

**Where in the value chain does the opportunity occur?**

Downstream

**Opportunity type**

Products and services

**Primary climate-related opportunity driver**

Development and/or expansion of low emission goods and services

**Primary potential financial impact**

Increased revenues resulting from increased demand for products and services

**Company-specific description**

Increased customer participation in voluntary green power programs. Customers may opt-in to programs to buy all or part of their energy from renewable energy sources. DTE Energy currently offers the following voluntary green power programs to customers: 1) Introduced in 2017, MIGreenPower is a voluntary renewable energy program that provides DTE's residential and business customers with an easy and affordable way to reduce their carbon footprint by increasing the percentage of their energy use attributable to local wind and solar energy sources, up to 100 percent. MIGreenPower is available to business owners, homeowners or renters to help them go green, without installing special equipment or making exterior alterations. Participating customers, who now number more than 20,784, see a slight increase in their monthly bill while supporting Michigan's clean energy future. DTE Electric's 2019 Integrated Resource Plan committed us to an expansion of our MIGreenPower program to our large business and industrial customers. We're expanding this voluntary initiative to meet the needs of our largest business and industrial customers who are working to meet their own sustainability goals, enabling them to invest in renewable energy. The program is designed to grow and represents a progressive approach to fill market demand. We've already partnered with Ford and GM to provide renewable energy to support their sustainability goals. Ford has committed to procuring 543,000 MW hours annually of both wind and solar energy to power several of its Michigan facilities, including the plant that makes its popular F-150 truck. GM has partnered with DTE to procure 747,000 MW hours annually of wind and solar energy to power 100 percent of GM's DTE-supplied facilities in southeast Michigan by 2023. DTE plans to actively market up to 500 MW of voluntary renewable energy programs in the next 5 years. MIGreenPower is Green-e Energy certified for businesses and for residential customers who subscribe at or above 25 percent, and meets the environmental and consumer protection standards set forth by the non-profit Center for Resource Solutions. 2) As part of DTE Energy's 2050 net zero commitment, DTE Gas launched its CleanVision Natural Gas Balance program in January 2021 that offers customers a way to reduce their carbon footprint using carbon offsets and renewable natural gas. The carbon offset program is focused on protecting Michigan forests that naturally absorb carbon dioxide.

**Time horizon**

Short-term

**Likelihood**

Virtually certain

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

The voluntary green power program and associated tariff are designed to grow with customer demand in phases. New assets will be added to ensure the program grows with our customers' needs. Initial program assets will be approved through the existing REP contract-approval process, ensuring fairness and cost competitiveness. Understanding that it would not be prudent to bring on excess resources without adequate demand, DTE aims to manage both forecasted demand and renewable energy construction timelines to ensure that there is no extended gap in program availability to new subscribers. The build plan is designed to be flexible and accommodate growing demand over time for DTE's voluntary green power programs.

**Cost to realize opportunity**

0

**Strategy to realize opportunity and explanation of cost calculation**

The MIGreenPower and BioGreenGas programs are managed through established marketing and billing programs. Launched in April 2017, the MIGreenPower program provides interested customers with an easy and affordable way to reduce their carbon footprint by increasing the percentage of their energy usage that is attributed to DTE's newest renewable projects. Customers who subscribe to MIGreenPower can elect to increase the amount of renewable energy they use in 5 percent increments, up to 100 percent. DTE Gas residential and small business owners may elect to pay a premium in increments starting at of \$4.00 per month to offset 25 to 100 percent or more of their greenhouse gas emissions and to support the development and utilization of natural gas generated from biogas resources.

**Comment**

The company cannot share the cost of these programs at this time.

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**Identifier**

Opp3

**Where in the value chain does the opportunity occur?**

Downstream

**Opportunity type**

Products and services

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**Primary climate-related opportunity driver**

Development and/or expansion of low emission goods and services

**Primary potential financial impact**

Reduced direct costs

**Company-specific description**

DTE previously committed to increasing electric energy efficiency at a level equivalent to 1.5 percent of sales annually. Our efforts already have resulted in nearly 700 MW annually (equivalent to the capacity of one large power plant) of reduced energy demand since 2009 when energy efficiency requirements from Michigan Energy legislation went into effect. In DTE's 2019 Integrated Resource Plan we committed to a 1.75 percent annual reduction in electric energy usage through energy efficiency, and in April 2020 regulators asked DTE to reach annual energy savings goals of 1.75 percent in 2020 and 2 percent in 2021. In addition to the primary potential financial impact of reduced direct costs, DTE also receives a maximum financial performance incentive equal to 20% of EWR spend. In addition, DTE has committed to increasing its natural gas annual energy savings goals from 1.00 percent to 1.05 percent in 2023. Improving energy efficiency also results in lower bills for customers; for every dollar invested in energy efficiency, customers save over \$2. Improving energy efficiency will reduce our carbon emissions even further – meaning we need to generate less energy and reduce the need for investment in new generation. The expansion of those programs also will mean more jobs and business for the Michigan firms that support them. DTE also is a leader in demand response, rewarding residential and business customers who reduce or shift electricity usage during peak periods. We offer our customers the opportunity to reduce their energy use and lower their bills through multiple programs. Our demand-response program is in the top 25 percent nationwide and is the largest in Michigan, with more than 700 MW of program capacity.

**Time horizon**

Short-term

**Likelihood**

Virtually certain

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

Yes, a single figure estimate

**Potential financial impact figure (currency)**

371339890

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

Lifecycle Dollar Savings: This represents the dollar savings resulting from the current and future energy costs avoided as a result of an energy efficiency action over the effective life of that action. The lifecycle dollar savings are based on verified net savings, which have been adjusted for free riders. Lifecycle dollar savings are presented as the present value of those savings.

**Cost to realize opportunity**

169000000

**Strategy to realize opportunity and explanation of cost calculation**

DTE Energy EWR programs are funded through surcharges on customer energy bills that are approved by the Michigan Public Service commission. In 2020, DTE Electric raised \$144.4 million in surcharge revenue and spent \$128.8 million compared to the planned \$128.1 million on Energy Waste Reduction (EWR) programs, and DTE Gas raised \$26.6 million in surcharge revenue and spent \$40.0 million compared to the planned \$39.1 million on EWR programs. The total spent on EWR programs in 2020 to realize this opportunity is \$169 million.

**Comment**

The annual results of DTE Energy's electric and gas energy waste reduction (EWR or efficiency) programs, including lifecycle savings, annual revenue, and annual spend are submitted annually to the Michigan Public Service Commission.

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**Identifier**

Opp4

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Products and services

**Primary climate-related opportunity driver**

Development and/or expansion of low emission goods and services

**Primary potential financial impact**

Increased revenues resulting from increased demand for products and services

**Company-specific description**

Renewable Gas Recovery — Power and Industrial Projects has ownership interests in, and operates, twenty-two gas recovery sites in nine different states. The sites recover methane from landfills and agricultural businesses and convert the gas to generate electricity, replace fossil fuels in industrial and manufacturing operations, or refine to pipeline-quality gas, which can then be used as vehicle fuel.

**Time horizon**

Short-term

**Likelihood**

Virtually certain

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

We cannot disclose a financial impact figure related to renewable gas recovery activities by DTE power and industrial project operations.

**Cost to realize opportunity**

1000000000

**Strategy to realize opportunity and explanation of cost calculation**

Power and Industrial Projects will continue leveraging its energy-related operating experience and project management capability to develop and grow its varied business lines, including renewable energy businesses. Power and Industrial Projects anticipates building around its core strengths in the markets where it operates. In determining the markets in which to compete, Power and Industrial Projects examines closely the regulatory and competitive environment, new and pending legislation, the number of competitors, and its ability to achieve sustainable margins. Power and Industrial Projects plans to maximize the effectiveness of its related businesses as it expands. Power and Industrial Projects intends to focus on the following areas for growth: • Providing energy and utility-type services to commercial and industrial customers • Acquiring and developing renewable energy projects and other energy projects. Power and Industrial Projects' capital investments over the 2020-2024 period are estimated at \$1.0 billion to \$1.4 billion for industrial energy services and RNG projects.

**Comment**

DTE Biomass Energy (DTEBE) partners with landfill owners and dairy farmers across the country to produce marketable, renewable transportation fuel by extracting and utilizing landfill and agricultural waste gas. The gas produced by DTEBE is sold to off-takers along with its low carbon attributes for use as low carbon transportation fuel. In 2020, DTEBE generated more than 120,000 metric tons of California Low Carbon Fuel Standard (LCFS) credits and more than 28 million CNG gallons of renewable fuels recorded under the U.S. Renewable Fuel Standard program as Renewable Identification Numbers (RIN).

**Identifier**

Opp5

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Products and services

**Primary climate-related opportunity driver**

Development of new products or services through R&D and innovation

**Primary potential financial impact**

Increased revenues through access to new and emerging markets

**Company-specific description**

DTE Electric has completed the issuance of approximately \$2.2 billion of green bonds. In 2018, DTE Electric issued \$525 million of Green Bonds to finance new and existing "Eligible Green Expenditures," which include renewable energy infrastructure and energy efficiency initiatives. DTE Electric's Green Bond issue was the first by an investment-grade energy company in Michigan and the fifth nationwide by an investment-grade energy company. In 2019, DTE Electric completed a second issuance of \$650 million of Green Bonds. An investment tool, bonds are referred to as "Green Bonds" when the proceeds are earmarked for environmental or "green" projects or programs.

**Time horizon**

Short-term

**Likelihood**

Virtually certain

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

The inaugural offering of DTE Energy Green Bonds was \$525 million in 2018, followed by a second offering of \$650 million in February 2019, and a third offering of \$1 billion in March 2021.

**Cost to realize opportunity**

0

**Strategy to realize opportunity and explanation of cost calculation**

Green bonds will help finance our low-carbon investments, which will enable us to continue moving Michigan toward a cleaner, more sustainable energy future. This is a tangible way for investors to demonstrate their commitment to the environment, and is one of many steps in our aggressive plan to reduce carbon emissions by more than 80 percent by 2050. DTE is among the first energy companies to offer this green investment option DTE utilized an investment bank to help structure and launch the green bond offering. The cost to realize the Green Bond activity cannot be disclosed at this time.

**Comment****Identifier**

Opp6

**Where in the value chain does the opportunity occur?**

Direct operations

**Opportunity type**

Products and services

**Primary climate-related opportunity driver**

Development and/or expansion of low emission goods and services

**Primary potential financial impact**

Increased revenues through access to new and emerging markets

**Company-specific description**

Charging Forward and its three primary components were approved by Michigan regulators on May 2, 2019. The three original components included Customer Education & Outreach, Residential Smart Charger Support, and Charging Infrastructure Enablement for a total of \$13.1 million, and are intended to increase EV adoption and efficiently integrate EV load with the grid. In addition, other EV pilots initiated in 2018 were rolled under the Charging Forward umbrella. DTE meets bi-annually with stakeholders and based on feedback, three additional program elements have been folded into Charging Forward activities: an EV-Grid Impact Study, an EV-Ready Builder Rebate pilot, and a residential off-peak charging pilot (Bring Your Own Charger). The overall Charging Forward program now totals \$14.1 million. Additionally, DTE proposed Charging Forward eFleets through an ex-parte filing on December 3, 2020 and received approval on March 19, 2021. DTE developed eFleets, a five-year \$13.4M program to accelerate electric fleet adoption in Michigan. The program is designed to help fleet owners reduce barriers of electrifying their fleets, efficiently integrate charger load with the DTE Electric distribution system and pilot new clean technologies. Similar to Phase I, eFleets was approved with three primary components: Education & Outreach, Advisory Services, and Charging Infrastructure Enablement for commercial fleets.

**Time horizon**

Short-term

**Likelihood**

Virtually certain

**Magnitude of impact**

Medium-high

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

We cannot disclose a financial impact figure related to the adoption of electric vehicles by our customers and the Charging Forward program.

**Cost to realize opportunity**

27500000

**Strategy to realize opportunity and explanation of cost calculation**

The strategy consists of three components: 1. Customer Education and Outreach - Increase EV awareness, engage current EV drivers, and inform/recruit potential site hosts 2. Residential Smart Charger Support - Provide up to \$500 rebates to support installation of approximately 2,600 smart chargers 3. Charging Infrastructure Enablement - Utilize a make-ready model to support the deployment of approximately 90 DC fast chargers with rebates up \$55,000 per charger and approximately 1,000 Level 2 ports with a rebate of \$2,500 per port. The strategy for Charging Forward eFleets also has three components: 1. Customer Education and Outreach - Increase EV awareness and engage fleet operators 2. Fleet Advisory Services - Support the commercial customer's journey to electrification 3. Charging Infrastructure Enablement - Utilize a make-ready model to provide rebates up to \$5,000 per Level 2 port and up to \$70,000 per DC fast charger

**Comment**

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**Identifier**

Opp7

**Where in the value chain does the opportunity occur?**

Upstream

**Opportunity type**

Energy source

**Primary climate-related opportunity driver**

Use of lower-emission sources of energy

**Primary potential financial impact**

Increased revenues resulting from increased demand for products and services

**Company-specific description**

DTE Energy is taking action to encourage our natural gas suppliers to reduce their climate impacts. These actions include encouraging our suppliers and peers to report using the Natural Gas Sustainability Initiative guidelines established by the Edison Electric Institute and American Gas Association in an effort to enhance transparency and emissions reporting consistency throughout the natural gas industry. As an active member of the NGSC, DTE is also working with our industry partners to: 1. Benchmark the environmental attributes of our natural gas supply portfolios, 2. Evaluate natural gas certification programs and methane measurement technologies, 3. Discuss regional policy solutions, 4. Engage Natural Gas producers and marketers to help address the challenges with transparency throughout the gas purchasing process. In 2019, DTE surveyed our natural gas suppliers to identify their efforts to monitor and reduce methane emissions and make more informed purchasing decisions in the future. DTE is planning discussions with the MPSC about incorporating supplier methane emissions levels into its gas procurement process. In March 2021, DTE Gas sent a letter to our natural gas suppliers and pipelines encouraging them to begin reporting under the newly launched NCSI protocol for reporting of methane intensity across the natural gas value chain.

**Time horizon**

Short-term

**Likelihood**

Virtually certain

**Magnitude of impact**

Medium

**Are you able to provide a potential financial impact figure?**

No, we do not have this figure

**Potential financial impact figure (currency)**

<Not Applicable>

**Potential financial impact figure – minimum (currency)**

<Not Applicable>

**Potential financial impact figure – maximum (currency)**

<Not Applicable>

**Explanation of financial impact figure**

We cannot disclose a financial impact figure at this time.

**Cost to realize opportunity**

**Strategy to realize opportunity and explanation of cost calculation**

In June 2020, DTE Gas announced a holistic net zero goal that includes achieving net zero emissions from DTE's natural gas suppliers by 2050. The goal will require DTE to develop and refine a supplier tracking process to track supplier's greenhouse gas emissions.

**Comment**

**C3. Business Strategy**

**C3.1**

**(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?**

Yes, and we have developed a low-carbon transition plan

**C3.1a**

**(C3.1a) Is your organization's low-carbon transition plan a scheduled resolution item at Annual General Meetings (AGMs)?**

	Is your low-carbon transition plan a scheduled resolution item at AGMs?	Comment
Row 1	No, and we do not intend it to become a scheduled resolution item within the next two years	DTE has Annual General Meetings, but does not intend for the low-carbon transition plan to become a standard resolution at the meetings.

**C3.2**

**(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?**

Yes, qualitative and quantitative

**C3.2a**

**(C3.2a) Provide details of your organization’s use of climate-related scenario analysis.**

Climate-related scenarios and models applied	Details
Other, please specify (Climate scenarios to support integrated resource plan (IRP))	<p>Case Study: We use forward-looking scenario analyses to support DTE Electric’s integrated resource plan (IRP) efforts that were submitted to the Michigan Public Service Commission in March 2019. These scenarios also assess the feasibility of reducing emissions from DTE Energy 80% by 2040. These scenarios describe achievable pathways for meeting carbon reduction targets that are aligned with a multitude of pathways that the scientific community has identified as capable of limiting global warming to less than 2-degrees C above pre-industrial levels. This plan is also consistent with the Paris Accord to address climate change. The IRP proposes a flexible Proposed Course of Action (PCA); one that is short-term focused, with defined resources for the next five years, 2020 – 2024 (or until the Company files its next IRP), and flexible pathways for years 2025 – 2040. The PCA meets DTE Electric’s commitment to 50 percent clean energy by 2030 and to reduce carbon emissions by more than 80 percent by 2040, an acceleration by a decade of our previous 2050 goal. The defined resource components of the PCA for 2020-2024 include adding solar and wind generation, ramping up our voluntary green power programs for customers, retiring coal plants, building a new gas combined cycle plant, committing to increased energy efficiency programs by our customers, and increasing demand response programs. Approval of the IRP by the MPSC lays the groundwork for DTE to seek regulatory recovery of the costs to deploy these generation resources by seeking approval from the MPSC for electric rate increases. We have not followed prescribed methods for conducting climate scenario analyses. Marketed approaches for conducting climate scenario analyses (e.g. SBTi, Ceres, UNEP FI Pilot) have limited considerations of uncertainty with regards to pathways that are consistent with limiting warming to 2-degrees C. In addition, these approaches do not consider uncertainty in climate policy design that would drive countries, regions and/or sectors to implement mandatory carbon reduction programs. Company flexibility in GHG reduction levels is constrained or not considered in these approaches as well. Flexibility that allows coordination within or across sectors or an entire economy provides opportunities for more cost-effective solutions to society. For more information on the limitations of these approaches, please see: Rose, SK, M Scott, 2018. Grounding Decisions: A Scientific Foundation for Companies Considering Global Climate Scenarios and Greenhouse Gas Goals. EPRI, Palo Alto, CA. 3002014510. Available at: <a href="https://www.epri.com/#/pages/product/000000003002014510/?lang=en-US">https://www.epri.com/#/pages/product/000000003002014510/?lang=en-US</a></p>

**C3.3**

**(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.**

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	DTE Electric and DTE Gas are providing energy waste reduction services to customers in accordance with Michigan legislation and Michigan regulators required DTE Electric in April 2020 to increase its commitment to increase energy efficiency to 1.75 percent of annual sales in 2020 and 2 percent in 2021. We have also developed voluntary renewable energy programs for both DTE Electric and DTE Gas that customers may subscribe to in helping to meet customer’s own renewable energy goals. DTE Power and Industrial Projects has ownership interests in, and operates, twenty-two gas recovery sites in nine different states. The sites recover methane from landfills and agricultural businesses and convert the gas to generate electricity, replace fossil fuels in industrial and manufacturing operations, or refine to pipeline-quality gas, which can then be used as vehicle fuel. Climate related risks are driving the transition of DTE Electric’s generation fleet to cleaner alternatives and are moving DTE’s gas operations to consider cleaner alternatives for supplying gas to our customers. These have a high impact on the types of products and services that we provide to our customers.
Supply chain and/or value chain	Yes	DTE is part of the Electric Utility Industry Sustainable Supply Chain Alliance (EUISSCA), an organization of utilities and suppliers collaborating to advance sustainability best practices in supply chain activities and supplier networks. The Company uses The Sustainability Project (TSP) supplier survey tool, which was launched in 2018, to assess suppliers’ environmental impacts. We are working in the short term to improve the sustainability rating of top suppliers so they achieve an average score of 80% on The Sustainability Project’s (TSP) environmental sustainability survey by 2022. The transition to more non-emitting fuel sources directly impacts our fuel supply chain, i.e. buying less coal for generation. Climate related risk has a high impact on our fuel supply chain as risks are driving the transition from higher emitting fuel sources like coal to low and zero emitting generation, such as renewables and natural gas. In 2019, DTE Energy joined the Natural Gas Supply Collaborative which is a voluntary collaborative of natural gas purchasers that are promoting safe and responsible practices for natural gas supply, including reduction of methane emissions from the natural gas supply chain. In 2020 DTE Gas announced a holistic natural gas net zero goal that includes reducing emissions from DTE Gas suppliers to net zero by 2050. In 2021 DTE joined the ONE Future coalition, a group of more than 40 Natural Gas companies working together to voluntarily reduce methane emissions across the Natural Gas value chain to 1% (or less) by 2025.
Investment in R&D	Yes	We fund and participate in R&D programs and projects managed by the Electric Power Research Institute (EPRI), which helps to identify cost-effective strategies and evaluate alternatives for meeting future generation requirements, including environmental and climate related requirements. EPRI R&D projects address short-term issues such as strategies for setting climate goals, as well as long term issues such as identifying technologies to achieve net zero targets. For example (Case Study), EPRI’s recent GHG Accounting methods review helped in confirming our climate reduction goals that are summarized in the IRP and that utilize net sales/purchases in addition to direct emissions from our power plants to calculate our goals. In addition, EPRI’s support on understanding the development of 2-degree C climate scenarios and setting climate goals provides DTE with information to respond to stakeholders (e.g. shareholders) on how DTE Energy’s carbon goals align with goals being advocated in the international policy community. In 2021, DTE Energy joined the Low Carbon Research Initiative jointly managed by EPRI and the Gas Technology Institute (GTI) to identify and accelerate development and demonstration of low- and zero-carbon energy technologies. Climate related risks have a medium impact on the company’s investment in R&D depending on the nature of the climate-related issue that requires research.
Operations	Yes	DTE Electric has committed to a carbon reduction goal that will achieve a 32 percent reduction in CO2 emissions from 2005 levels by the early 2020s, a 50 percent reduction by 2030, an 80 percent reduction by 2040 and net zero by 2050. As explained in our publicly available IRP Summary, these goals will be achieved through aggressive investment in energy efficiency, renewables, the Blue Water Energy Center natural gas plant, and our voluntary renewables programs, as well as through coal plant retirements. While we reduce carbon emissions from our electric generation, DTE Gas has also committed to reduce emissions of methane by more than 80 percent by 2040 and in June 2020 committed to a net zero by 2050 goal for upstream natural gas suppliers as well our internal gas operations. We’re controlling methane leaks by replacing hundreds of miles of older natural gas pipelines with safer, air-tight materials and through maintenance upgrades at DTE natural gas compressor stations. Risks/opportunities have a high impact on the company’s operations, as risks/opportunities are driving the transition to renewables and natural gas. Additionally, variations in weather can impact electricity demand among customers. For example, extremely high or extremely low temperatures can increase electricity demand. Extreme weather events can also interrupt operations, resulting in infrastructure damage and outages. Case Study: The risk of increased frequency and severity of weather events is driving increased investment in DTE Electric’s distribution infrastructure to support a resilient grid that will meet the needs of the grid as it becomes increasingly decarbonized in the next 30 years. In response to an order from the Michigan Public Service Commission, DTE Electric developed a Distribution Operations Five-Year (2018-2022) Investment and Maintenance Plan in 2018 that provides a detailed summary of the current state of DTE’s distribution infrastructure and the needs of the future. In the short-term (2021-2025), DTE is investing \$7 billion to address these risks by investing in distribution infrastructure. An update to the distribution operations plan is being prepared for submittal to the MPSC in August 2021.

**C3.4**

**(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.**

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Capital expenditures Acquisitions and divestments Access to capital	Revenues have a high impact on our financial planning process. DTE Energy must seek approval from the Michigan Public Service Commission to increase electricity rates charged to customer to fund capital expenditures, including new generation to replace retiring coal generation. In May 2019 an MPSC order authorized DTE Electric to raise base rates by \$273.3 million and approved a return on equity ("ROE") of 10%. This order responded to a July 2018 application filed by DTE requesting a general rate increase in order to recover, among other things, capital costs associated with the addition of new generation, and the Charging Forward Electric Vehicle program. A new request for a rate increase for funding in investments that will help DTE improve electric reliability, support Michigan jobs, reduce carbon emissions and provide needed upgrades at the Ludington Pumped Storage Power Plant was filed in June 2019, and on May 8, 2020, MPSC approved a \$188.3 million rate increase for DTE Electric. A portion of the May 2020 order approved in the Commission's decision will support continued reliability and emissions reductions as DTE transforms its generation resources following these plant retirements. Capital expenditures to meet our climate targets have a high impact on our financial planning process. In order to meet DTE Energy's commitment to carbon reductions and to replace retiring coal generation, the company needs to invest in cleaner replacement generation. The company filed an Integrated Resource Plan (IRP) in March 2019 that accelerates our carbon reduction goal to 80 percent below 2005 levels by 2040 and provides a pathway to meet this goal. The IRP indicates that DTE will invest \$2 billion on renewable energy by 2024 and \$1 billion on the construction of the Blue Water Energy Center natural gas plant scheduled for initial operation in 2022. The ability to proceed with proposed acquisitions and/or divestments plays a strong role in our financial planning process. Climate risks and opportunities are considered during the due diligence process and are a significant driver impacting mergers and acquisitions. On October 27, 2020, DTE Energy announced that its Board of Directors has authorized management to pursue a plan to spin-off the DTE Midstream business, reflecting a shift in strategy to a predominantly pure-play utility. The spin-off would establish DTE Midstream as an independent, natural gas midstream company with increased flexibility and opportunities. The separation was completed on July 1, 2021 with the launch of the new DT Midstream organization. Access to capital has a high impact on our financial planning process. As explained above, DTE Energy must seek approval from the Michigan Public Service Commission to increase electricity rates charged to customer to fund capital expenditures, including new generation to replace retiring coal generation. In addition, DTE Electric priced its inaugural offering of green bonds in May 2018. Proceeds from the \$525 million in green bonds will be used to finance expenditures for solar and wind energy, payments under power purchase agreements for solar and wind energy, and energy optimization programs. DTE is the fifth investment-grade energy company in the nation – and the first company in Michigan – to sell green bonds. In February 2019, DTE Electric issued its second offering of green bonds in the amount of \$650 million. In March 2021 DTE Electric company completed its third offering of green bonds, the \$1 billion bond offering will finance green, or clean, energy investments, including renewables and energy efficiency programs.

**C3.4a**

**(C3.4a) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).**

In January 2021, DTE Midstream announced a goal to achieve net zero greenhouse gas emissions by 2050, including a 30% reduction in carbon emissions in the next decade. To achieve this goal, DTE Midstream plans comprehensive integration of carbon capture strategies to reduce carbon emissions in its operations.

**C4. Targets and performance**

**C4.1**

**(C4.1) Did you have an emissions target that was active in the reporting year?**

Absolute target

**C4.1a**

**(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.**

**Target reference number**

Abs 3

**Year target was set**

2017

**Target coverage**

Business division

**Scope(s) (or Scope 3 category)**

Scope 1

**Base year**

2005

**Covered emissions in base year (metric tons CO2e)**

37700000

**Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)**

94

**Target year**

2040

**Targeted reduction from base year (%)**

80

**Covered emissions in target year (metric tons CO2e) [auto-calculated]**

7540000

**Covered emissions in reporting year (metric tons CO2e)**

20887000

**% of target achieved [auto-calculated]**

55.7460212201592

**Target status in reporting year**

Underway

**Is this a science-based target?**

No, and we do not anticipate setting one in the next 2 years

**Target ambition**

&lt;Not Applicable&gt;

**Please explain (including target coverage)**

DTE Energy led the industry in setting an aggressive mid-century target for our electric utility in 2017. The 2017 carbon reduction commitment was 30 percent below 2005 levels by 2023, 45 percent by 2030, 75 percent by 2040, and more than 80 percent by 2050. In 2019, DTE Electric accelerated this carbon reduction commitment in the Integrated Resource Plan (IRP) submitted to the Michigan Public Service Commission followed by a net zero commitment in September 2019. The 2019 target is 32 percent below 2005 levels by 2023, 50 percent below by 2030, 80 percent below by 2040 and net zero (100 percent below) by 2050. Emissions in 2020 were 45 percent below 2005 levels. Note that 2020 emissions were low due to reduced demand for generation and other factors caused by the coronavirus pandemic.

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**Target reference number**

Abs 2

**Year target was set**

2017

**Target coverage**

Business division

**Scope(s) (or Scope 3 category)**

Scope 1

**Base year**

2005

**Covered emissions in base year (metric tons CO2e)**

37700000

**Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)**

94

**Target year**

2030

**Targeted reduction from base year (%)**

50

**Covered emissions in target year (metric tons CO2e) [auto-calculated]**

18850000

**Covered emissions in reporting year (metric tons CO2e)**

20887000

**% of target achieved [auto-calculated]**

89.1936339522546

**Target status in reporting year**

Underway

**Is this a science-based target?**

No, and we do not anticipate setting one in the next 2 years

**Target ambition**

&lt;Not Applicable&gt;

**Please explain (including target coverage)**

DTE Energy led the industry in setting an aggressive mid-century target for our electric utility in 2017. The 2017 carbon reduction commitment was 30 percent below 2005 levels by 2023, 45 percent by 2030, 75 percent by 2040, and more than 80 percent by 2050. In 2019, DTE Electric accelerated this carbon reduction commitment in the Integrated Resource Plan (IRP) submitted to the Michigan Public Service Commission followed by a net zero commitment in September 2019. The 2019 target is 32 percent below 2005 levels by 2023, 50 percent below by 2030, 80 percent below by 2040 and net zero (100 percent below) by 2050. Emissions in 2020 were 45 percent below 2005 levels. Note that 2020 emissions were low due to reduced demand for generation and other factors caused by the coronavirus pandemic.

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**Target reference number**

Abs 1

**Year target was set**

2017

**Target coverage**

Business division

**Scope(s) (or Scope 3 category)**

Scope 1

**Base year**

2005

**Covered emissions in base year (metric tons CO2e)**

37700000

**Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)**

94

**Target year**

2023

**Targeted reduction from base year (%)**

32

**Covered emissions in target year (metric tons CO2e) [auto-calculated]**

25636000

**Covered emissions in reporting year (metric tons CO2e)**

20887000

**% of target achieved [auto-calculated]**

139.365053050398

**Target status in reporting year**

Underway

**Is this a science-based target?**

No, and we do not anticipate setting one in the next 2 years

**Target ambition**

&lt;Not Applicable&gt;

**Please explain (including target coverage)**

DTE Energy led the industry in setting an aggressive mid-century target for our electric utility in 2017. The 2017 carbon reduction commitment was 30 percent below 2005 levels by 2023, 45 percent by 2030, 75 percent by 2040, and more than 80 percent by 2050. In 2019, DTE Electric accelerated this carbon reduction commitment in the Integrated Resource Plan (IRP) submitted to the Michigan Public Service Commission followed by a net zero commitment in September 2019. The 2019 target is 32 percent below 2005 levels by 2023, 50 percent below by 2030, 80 percent below by 2040 and net zero (100 percent below) by 2050. Emissions in 2020 were 45 percent below 2005 levels which exceeds the 2023 target. Note that 2020 emissions were low due to reduced demand for generation and other factors caused by the coronavirus pandemic.

**Target reference number**

Abs 4

**Year target was set**

2019

**Target coverage**

Business division

**Scope(s) (or Scope 3 category)**

Scope 1

**Base year**

2005

**Covered emissions in base year (metric tons CO2e)**

37700000

**Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)**

94

**Target year**

2050

**Targeted reduction from base year (%)**

100

**Covered emissions in target year (metric tons CO2e) [auto-calculated]**

0

**Covered emissions in reporting year (metric tons CO2e)**

20887000

**% of target achieved [auto-calculated]**

44.5968169761273

**Target status in reporting year**

Underway

**Is this a science-based target?**

No, and we do not anticipate setting one in the next 2 years

**Target ambition**

&lt;Not Applicable&gt;

**Please explain (including target coverage)**

DTE Energy led the industry in setting an aggressive mid-century target for our electric utility in 2017. The 2017 carbon reduction commitment was 30 percent below 2005 levels by 2023, 45 percent by 2030, 75 percent by 2040, and more than 80 percent by 2050. In 2019, DTE Electric accelerated this carbon reduction commitment in the Integrated Resource Plan (IRP) submitted to the Michigan Public Service Commission, followed by a net zero commitment in September 2019. The 2019 target is 32 percent below 2005 levels by 2023, 50 percent below by 2030, 80 percent below by 2040 and net zero (100 percent below) by 2050. Emissions in 2020 were 45 percent below 2005 levels. Note that 2020 emissions were low due to reduced demand for generation and other factors caused by the coronavirus pandemic.

**Target reference number**

Abs 5

**Year target was set**

2020

**Target coverage**

Business division

**Scope(s) (or Scope 3 category)**

Scope 3: Purchased goods &amp; services

**Base year**

2005

**Covered emissions in base year (metric tons CO2e)**

1260000

**Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)**

100

**Target year**

2050

**Targeted reduction from base year (%)**

100

**Covered emissions in target year (metric tons CO2e) [auto-calculated]**

0

**Covered emissions in reporting year (metric tons CO2e)**

919000

**% of target achieved [auto-calculated]**

27.0634920634921

**Target status in reporting year**

Underway

**Is this a science-based target?**

No, and we do not anticipate setting one in the next 2 years

**Target ambition**

&lt;Not Applicable&gt;

**Please explain (including target coverage)**

In June 2020, DTE announced a net zero goal for its gas utility that includes Scope 1 emissions from its direct operations, and upstream and downstream Scope 3 goals. The holistic three-fold approach will require natural gas suppliers to operate at net zero greenhouse gas emissions by 2050; DTE Gas operations, both combustion and fugitive emissions, will also achieve net zero by 2050; and partnerships with customers on energy efficiency and voluntary offsets will reduce their emission by approximately 35% by 2050. The upstream methane emissions are estimated using basin average methane intensities applied to the basins from which DTE Gas procures its natural gas. DTE Gas has procured natural gas from increasingly cleaner basins, including the Appalachian Basin since our 2005 baseline.

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**Target reference number**

Abs 6

**Year target was set**

2020

**Target coverage**

Business division

**Scope(s) (or Scope 3 category)**

Scope 1

**Base year**

2005

**Covered emissions in base year (metric tons CO2e)**

1400000

**Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)**

100

**Target year**

2050

**Targeted reduction from base year (%)**

100

**Covered emissions in target year (metric tons CO2e) [auto-calculated]**

0

**Covered emissions in reporting year (metric tons CO2e)**

623755

**% of target achieved [auto-calculated]**

55.4460714285714

**Target status in reporting year**

Underway

**Is this a science-based target?**

No, and we do not anticipate setting one in the next 2 years

**Target ambition**

<Not Applicable>

**Please explain (including target coverage)**

In June 2020, DTE announced a net zero goal for its gas utility that includes Scope 1 emissions from its direct operations, and upstream and downstream Scope 3 goals. . The holistic three-fold approach will require natural gas suppliers to operate at net zero greenhouse gas emissions by 2050; DTE Gas operations, both combustion and fugitive emissions, will also achieve net zero by 2050; and partnerships with customers on energy efficiency and voluntary offsets will reduce their emission by approximately 35% by 2050. We're controlling methane leaks by replacing hundreds of miles of older natural gas pipelines with safer, air-tight materials and through maintenance upgrades at DTE natural gas compressor stations. In 2020, DTE Gas direct (Scope 1) emissions (including fugitive and combustion emissions) from our utility operations were approximately 55 percent below our estimated 2005 baseline.

**Target reference number**

Abs 7

**Year target was set**

2020

**Target coverage**

Business division

**Scope(s) (or Scope 3 category)**

Scope 3: Use of sold products

**Base year**

2005

**Covered emissions in base year (metric tons CO2e)**

9200000

**Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)**

100

**Target year**

2050

**Targeted reduction from base year (%)**

35

**Covered emissions in target year (metric tons CO2e) [auto-calculated]**

5980000

**Covered emissions in reporting year (metric tons CO2e)**

11060600

**% of target achieved [auto-calculated]**

-57.7826086956522

**Target status in reporting year**

Underway

**Is this a science-based target?**

No, and we do not anticipate setting one in the next 2 years

**Target ambition**

<Not Applicable>

**Please explain (including target coverage)**

In June 2020, DTE announced a net zero goal for its gas utility that includes Scope 1 emissions from its direct operations, and upstream and downstream Scope 3 goals. . The holistic three-fold approach will require natural gas suppliers to operate at net zero greenhouse gas emissions by 2050; DTE Gas operations, both combustion and fugitive emissions, will also achieve net zero by 2050; and partnerships with customers on energy efficiency and voluntary offsets will reduce their emission by approximately 35% by 2050. In 2020, Scope 3 emissions from customer use of natural gas was about 20 percent above our estimated 2005 baseline. The emissions from customer use of natural gas are as reported to EPA under 40 CFR 9 Subpart NN. Note that year to year emissions are weather dependent and may be above or below the baseline since natural gas is the dominant space heating fuel in Michigan.

**C4.2****(C4.2) Did you have any other climate-related targets that were active in the reporting year?**

Target(s) to increase low-carbon energy consumption or production

**C4.2a****(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.****Target reference number**

Low 1

**Year target was set**

2018

**Target coverage**

Business division

**Target type: absolute or intensity**

Absolute

**Target type: energy carrier**

Electricity

**Target type: activity**

Production

**Target type: energy source**

Renewable energy source(s) only

**Metric (target numerator if reporting an intensity target)**

Percentage

**Target denominator (intensity targets only)**

&lt;Not Applicable&gt;

**Base year**

2009

**Figure or percentage in base year**

1

**Target year**

2030

**Figure or percentage in target year**

25

**Figure or percentage in reporting year**

12.5

**% of target achieved [auto-calculated]**

47.9166666666667

**Target status in reporting year**

Underway

**Is this target part of an emissions target?**

This renewable energy goal will help to meet targets ABS1 and ABS in our response to C4.1a. In May 2018, DTE Energy and Consumers Energy announced plans to produce cleaner energy in Michigan, targeting at least a 50 percent Clean Energy Goal by 2030— achieved through a combination of investments in at least 25 percent renewable energy, and the remaining through energy efficiency. DTE and Consumers Energy have both announced plans to reduce carbon emissions by more than 80 percent in the coming decades. Leveraging the already aggressive framework established in Michigan’s 2016 bipartisan energy law, the state’s two largest energy companies are advancing their plans to invest in Michigan in conjunction with an agreement by Clean Energy, Healthy Michigan (CEHM) to place aside a ballot proposal to increase the state’s renewable portfolio standard. DTE Energy has also complied with all state-mandated targets for renewable energy. Previous legislation had required a 10 percent renewable standard by 2015, which we have met or exceeded each applicable year. The most recent energy legislation sets a 12.5 percent renewable energy target by 2019 and 15 percent by 2021. DTE Energy is well positioned to meet these future goals with the addition of new generation resources currently planned or under development. The commitment to a 25 percent renewable portfolio standard by 2030 as well as the state-mandated targets for renewables were incorporated into the Integrated Resource Plan submitted to the Michigan Public Service Commission in March 2019.

**Is this target part of an overarching initiative?**

Other, please specify (DTE Electric’s decarbonization milestones to a goal of net zero carbon emissions by 2050.)

**Please explain (including target coverage)**

In March 2019, DTE Electric accelerated its carbon reduction commitment in the Integrated Resource Plan (IRP) submitted to the Michigan Public Service Commission. The 2019 target is 32 percent below 2005 levels by 2023, 50 percent below by 2030, 80 percent below by 2040 and more than 80 percent below by 2050. In September 2019, DTE raised the 2050 carbon reduction goal to net zero. This renewable energy target will help the company meet the overall net zero carbon reduction commitment.

**Target reference number**

Low 2

**Year target was set**

2009

**Target coverage**

Business division

**Target type: absolute or intensity**

Absolute

**Target type: energy carrier**

Electricity

**Target type: activity**

Consumption

**Target type: energy source**

Low-carbon energy source(s)

**Metric (target numerator if reporting an intensity target)**

Percentage

**Target denominator (intensity targets only)**

&lt;Not Applicable&gt;

**Base year**

2009

**Figure or percentage in base year**

0.3

**Target year**

2021

**Figure or percentage in target year**

2

**Figure or percentage in reporting year**

1.75

**% of target achieved [auto-calculated]**

85.2941176470588

**Target status in reporting year**

Underway

**Is this target part of an emissions target?**

This renewable energy goal will help to meet targets ABS1 in our response to C4.1a. Michigan's Energy Waste Reduction (EWR) standard, created under Public Act 295 of 2008 (PA 295 or the Act) as amended by PA 342 of 2016 (PA 342), requires all gas and electric utilities in the state to implement programs to reduce overall energy usage by specified targets, in order to reduce the future costs of gas and electric service to customers. Electric utilities were required to achieve 0.3 percent savings in 2009; 0.5 percent in 2010; 0.75 percent in 2011; and 1.0 percent in 2012 and each year thereafter until the end of 2021. Beyond 2021, the level of electric energy efficiency savings will be determined by the utility's Integrated Resource Plan. In DTE's 2019 Integrated Resource Plan we committed to a 1.75 percent annual reduction in energy usage through energy efficiency, and in April 2020 regulators asked DTE to reach annual energy savings goals of 1.75 percent in 2020 and 2 percent in 2021.

**Is this target part of an overarching initiative?**

Other, please specify (DTE Electric's decarbonization milestones to a goal of net zero carbon emissions by 2050.)

**Please explain (including target coverage)**

In March 2019, DTE Electric accelerated its carbon reduction commitment in the Integrated Resource Plan (IRP) submitted to the Michigan Public Service Commission. The 2019 target is 32 percent below 2005 levels by 2023, 50 percent below by 2030, 80 percent below by 2040 and more than 80 percent below by 2050. In September 2019, DTE raised the 2050 carbon reduction goal to net zero. This energy efficiency target will help the company meet the overall net zero carbon reduction commitment.

---

**Target reference number**

Low 3

**Year target was set**

2009

**Target coverage**

Business division

**Target type: absolute or intensity**

Absolute

**Target type: energy carrier**

Other, please specify (Natural gas consumption)

**Target type: activity**

Consumption

**Target type: energy source**

Low-carbon energy source(s)

**Metric (target numerator if reporting an intensity target)**

Percentage

**Target denominator (intensity targets only)**

<Not Applicable>

**Base year**

2009

**Figure or percentage in base year**

0.1

**Target year**

2023

**Figure or percentage in target year**

1.05

**Figure or percentage in reporting year**

1

**% of target achieved [auto-calculated]**

94.7368421052632

**Target status in reporting year**

Underway

**Is this target part of an emissions target?**

This renewable energy goal will help to meet targets ABS6 and ABS 7 in our response to C4.1a. Michigan's Energy Waste Reduction (EWR) standard, created under Public Act 295 of 2008 (PA 295 or the Act) as amended by PA 342 of 2016 (PA 342), requires all gas and electric utilities in the state to implement programs to reduce overall energy usage by specified targets, in order to reduce the future costs of gas and electric service to customers. Natural gas utilities must achieve 0.1 percent savings in 2009 based on annual percentage of planned retail sales; 0.25 percent in 2010; 0.5 percent in 2011; and 0.75 percent in 2012 and each year thereafter. Performance Incentives are built into the 2016 Michigan Legislation to encourage utilities to go beyond the minimum required energy savings (i.e. 0.75 percent from 2012 to 2021 for natural gas utilities). DTE's natural gas energy savings goals using Performance Incentives for this period are as follows: 2012-2016: 0.75% 2017-2021: 1.0%

**Is this target part of an overarching initiative?**

Other, please specify (This target supports a DTE Gas carbon reduction goal that was announced in June 2020.)

**Please explain (including target coverage)**

In June 2020, DTE Gas announced a holistic net zero carbon goal that will reduce emissions across the natural gas value chain from procurement through delivery. Natural gas efficiency goals will support DTE Gas operations and our customers in reaching these carbon reduction goals.

C-OG4.2d

**(C-OG4.2d) Indicate which targets reported in C4.1a/b incorporate methane emissions, or if you do not have a methane-specific emissions reduction target for your oil and gas activities, please explain why not and forecast how your methane emissions will change over the next five years.**

Absolute goals ABS 5 and ABS 6 are upstream and internal operations goals for DTE Gas that incorporate methane reductions as a component of the goal.

C4.3

**(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.**

Yes

C4.3a

**(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.**

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation		
To be implemented*	1	200000
Implementation commenced*	2	21600
Implemented*		
Not to be implemented		

C4.3b

**(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.**

**Initiative category & Initiative type**

Energy efficiency in buildings	Building Energy Management Systems (BEMS)
--------------------------------	---

**Estimated annual CO2e savings (metric tonnes CO2e)**

5300

**Scope(s)**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

0

**Investment required (unit currency – as specified in C0.4)**

12700000

**Payback period**

No payback

**Estimated lifetime of the initiative**

6-10 years

**Comment**

DTE Energy has committed to reducing its own utilization of energy 25% by 2022 at Company Headquarters and administrative offices managed by the DTE Corporate Facilities group. The proposed energy efficiency projects require capital funding of \$12.7 million and O&M funding of \$1.9 million through 2022. The net present value of energy efficiency savings for the period 2017-2027 varies from a net positive using commercial electric rates, to an equivalent net negative using the power supply cost recovery rates that DTE actually pays for electricity, which is why we are indicating zero payback. The annual savings from these energy efficiency projects in 2020 was approximately 7,600 MWh which translates to approximately 5,300 metric tonnes of CO2 savings.

**Initiative category & Initiative type**

Fugitive emissions reductions	Other, please specify (Natural gas methane leak capture and prevention)
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**Estimated annual CO2e savings (metric tonnes CO2e)**

16300

**Scope(s)**

Scope 1

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

0

**Investment required (unit currency – as specified in C0.4)**

320000000

**Payback period**

No payback

**Estimated lifetime of the initiative**

16-20 years

**Comment**

In 2018 DTE Gas committed to reduce methane emissions from its natural gas utility operations by more than 80 percent by 2040, part of a broad sustainability initiative the company has launched to reduce greenhouse gas emissions and address climate change while continuing to provide customers with reliable and affordable power. This commitment was rolled into DTE's holistic decarbonization goal that was announced in June 2020 for its gas utility. DTE is achieving these fugitive methane reductions by replacing steel and cast iron natural gas distribution pipelines at a more accelerated pace than recommended by the Environmental Protection Agency and by reducing equipment leaks at natural gas compressor stations. Funding for this initiative through 2023 has been approved by the Michigan Public Service Commission (MPSC). The estimated CO2-e savings are for 2020 only and may be higher or lower each year depending on the amount of pipeline replaced. DTE Gas capital investments over the 2021-2025 period are estimated at \$1.6 billion for gas main renewal, meter move out, and pipeline integrity programs, correlating to approximately \$320 million per year.

**Initiative category & Initiative type**

Other, please specify	Other, please specify (Customer program to offset direct emissions)
-----------------------	---

**Estimated annual CO2e savings (metric tonnes CO2e)**

200000

**Scope(s)**

Scope 3

**Voluntary/Mandatory**

Voluntary

**Annual monetary savings (unit currency – as specified in C0.4)**

0

**Investment required (unit currency – as specified in C0.4)**

0

**Payback period**

No payback

**Estimated lifetime of the initiative**

21-30 years

**Comment**

In June 2020, DTE announced a net zero goal for its gas utility that includes Scope 1 emissions from its direct operations, and upstream and downstream Scope 3 goals. . The holistic three-fold approach will require natural gas suppliers to operate at net zero greenhouse gas emissions by 2050; DTE Gas operations, both combustion and fugitive emissions, will also achieve net zero by 2050; and partnerships with customers on energy efficiency and voluntary offsets will reduce their emission by approximately 35% by 2050. Following our announcement of the DTE Gas goals, we began to develop our enhanced voluntary emissions offset program. The program was approved by the Michigan Public Service Commission in late 2020 and was successfully launched in 2021. The program is open to DTE Gas residential and small commercial customers who can select from four premium pricing options to reduce up to 100% of their carbon footprint. The program is a hybrid approach using both renewable natural gas (RNG) and forestry-based carbon offsets (the blend for offsetting emissions is 95% carbon offsets and 5% RNG). We are targeting approximately 200,000 metric tons of offsets per year for the first four years. We cannot disclose the cost of this program at this time.

**C4.3c**

**(C4.3c) What methods do you use to drive investment in emissions reduction activities?**

Method	Comment
Compliance with regulatory requirements/standards	Construction of renewable energy sources to meet a renewable portfolio standard, as well as programs to reduce demand through energy efficiency measures is required under Michigan Energy Legislation. Environmental regulations aimed at conventional pollutants such as sulfur dioxide, oxides of nitrogen, and mercury will drive emission reductions from coal-fired power plants that will also reduce emissions of greenhouse gases. Future compliance with federal greenhouse gas rules will drive additional curtailment of coal-fired generation and require investment in lower emitting generation sources such as renewables and natural gas fired power plants.
Partnering with governments on technology development	DTE's Smart Grid Investment initiative was funded in part by a grant from the U.S. Department of Energy. We have also applied for funding at the state level for research on electric vehicles and their impact on the electric power system.
Dedicated budget for energy efficiency	Building efficiency improvements described in our response to Question 4.3b are funded through dedicated energy efficiency budgets; however, payback amounts are challenging because DTE Electric's internal company rate is less than commercial rates charged to customers.
Employee engagement	DTE Energy is in the process of establishing and executing an employee communications and ambassador program, including change management strategies, to build awareness of and engagement in sustainability efforts. This includes a branding and communications campaign around environmental leadership, outlining launch of both internal and external campaigns and messaging.

**C4.5**

**(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?**

Yes

**C4.5a**

**(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.**

**Level of aggregation**

Group of products

**Description of product/Group of products**

DTE Electric customer Energy Waste Reduction Program offerings

**Are these low-carbon product(s) or do they enable avoided emissions?**

Avoided emissions

**Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions**

Other, please specify (Verified net energy savings are DTE's reported savings after they have been adjusted based on the results of a review by our independent evaluation contractor, Guidehouse, Inc.)

**% revenue from low carbon product(s) in the reporting year**

2.6

**% of total portfolio value**

<Not Applicable>

**Asset classes/ product types**

<Not Applicable>

**Comment**

544,499 metric tons of CO2 emissions avoided in 2020 as a result of DTE Electric customer savings of 770 GWh. Revenues collected for DTE Electric EWR programs in 2020 were \$144.4 million which represents 2.6% of total DTE Electric operating revenues of \$5,506 million in 2020. The verified net lifetime (2020-2029) greenhouse gas emissions reductions for DTE Electric's 2020 EWR program activities are 4,728,998 metric tons of CO2, This data is included in DTE Energy's Annual Energy Waste Reduction Report submitted to the Michigan Public Service Commission.

**Level of aggregation**

Group of products

**Description of product/Group of products**

DTE Gas customer Energy Waste Reduction Program offerings

**Are these low-carbon product(s) or do they enable avoided emissions?**

Avoided emissions

**Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions**

Other, please specify (Verified net energy savings are DTE's reported savings after they have been adjusted based on the results of a review by our independent evaluation contractor, Guidehouse, Inc.)

**% revenue from low carbon product(s) in the reporting year**

1.9

**% of total portfolio value**

<Not Applicable>

**Asset classes/ product types**

<Not Applicable>

**Comment**

118,849 metric tons of CO2 emissions avoided in 2020 as a result of 2,240 MMcf of DTE Gas customer savings. Revenues collected for DTE Gas EWR programs in 2020 were \$26.6 million which represents 1.9% of total DTE Gas operating revenues of \$1,414 million in 2020. The verified net lifetime (2020-2029) greenhouse gas emissions reductions for DTE Gas' 2020 EWR program activities are 1,355,593 metric tons of CO2, This data is included in DTE Energy's Annual Energy Waste Reduction Report submitted to the Michigan Public Service Commission.

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**Level of aggregation**

Product

**Description of product/Group of products**

Addressing climate change must be a cross-industry effort, so we've expanded our MiGreenPower program to our large business and industrial customers. Introduced in 2017, MiGreenPower is a voluntary renewable energy program that provides DTE's residential and business customers with an easy and affordable way to reduce their carbon footprint by increasing the percentage of their energy use attributable to local wind and solar energy sources, up to 100 percent. MiGreenPower is available to business owners, homeowners or renters to help them go green easily and affordably, without installing special equipment or making exterior alterations. Participating customers, who now number more than 13,000, see a slight increase in their monthly bill while supporting Michigan's clean energy future. DTE Electric's 2019 Integrated Resource Plan committed us to an expansion of our MiGreenPower program to our large business and industrial customers. We're expanding this voluntary initiative to meet the needs of our largest business and industrial customers who are working to meet their own sustainability goals, enabling them to invest in renewable energy. The program is designed to grow and represents a progressive approach to fill market demand. In fact, we've already partnered with Ford and GM to provide renewable energy to support their sustainability goals. Ford has committed to procuring 500,000 MW hours annually of wind energy to power several of its Michigan facilities, including the plant that makes its popular F-150 truck. GM has partnered with DTE to procure 800,000 MW hours annually of wind energy to power 100 percent of GM's DTE-supplied facilities in southeast Michigan with wind or solar energy by 2023. MiGreenPower is Green-e Energy certified for businesses and for residential customers who subscribe at or above 25 percent, and meets the environmental and consumer protection standards set forth by the non-profit Center for Resource Solutions. DTE also is exploring opportunities to expand its residential offerings to those interested in more local, community renewable energy.

**Are these low-carbon product(s) or do they enable avoided emissions?**

Low-carbon product and avoided emissions

**Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions**

Other, please specify (MiGreenPower is Green-e Energy Certified)

**% revenue from low carbon product(s) in the reporting year**

0

**% of total portfolio value**

&lt;Not Applicable&gt;

**Asset classes/ product types**

&lt;Not Applicable&gt;

**Comment**

We cannot disclose the percent revenue attributed to the MiGreen Power program at this time.

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**Level of aggregation**

Product

**Description of product/Group of products**

As part of DTE Energy's 2050 net zero commitment, DTE Gas launched its CleanVision Natural Gas Balance program in January 2021 that offers customers a way to reduce their carbon footprint using carbon offsets and renewable natural gas. The carbon offset program is focused on protecting Michigan forests that naturally absorb carbon dioxide. DTE Gas residential and small business customers may elect to pay a premium in increments starting at \$4.00 per month to offset 25 to 100 percent or more of their greenhouse gas emissions and to support the development and utilization of natural gas generated from biogas resources.

**Are these low-carbon product(s) or do they enable avoided emissions?**

Low-carbon product

**Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions**

Other, please specify (EPA Landfill Methane Outreach Program and )

**% revenue from low carbon product(s) in the reporting year**

0

**% of total portfolio value**

&lt;Not Applicable&gt;

**Asset classes/ product types**

&lt;Not Applicable&gt;

**Comment**

We cannot disclose the percent revenue attributed to the BioGreen Gas program at this time.

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C-EU4.6

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**(C-EU4.6) Describe your organization's efforts to reduce methane emissions from your activities.**

DTE has worked with the Edison Electric Institute (EEI) and the American Gas Association (AGA) on the Natural Gas Sustainability Initiative (NGSI) and the voluntary reporting Environmental, Social and Governance (ESG) template of key sustainability metrics, including emissions of methane from our gas operations. The NGSI is a CEO-led initiative designed to improve sustainability performance and disclosure across the value chain, from production well to burner tip. In 2020 DTE Energy was one of the participants in the EEI and AGA pilot testing of the NGSI Methane Intensity Protocol, a proposed method to standardize methane intensity metrics across the five segments of the natural gas supply chain. In September 2020, DTE disclosed its methane intensity metrics for the natural gas segments in which the company operates using the pilot methane intensity protocol. The NGSI methane intensity protocol was finalized in early 2021.

DTE has also initiated efforts to influence DTE Gas' natural gas suppliers to reduce their emissions. In 2019 DTE joined the Natural Gas Supply Collaborative (NGSC), a voluntary group of 13 natural gas purchasers promoting safe and responsible practices for natural gas supply. DTE Gas has adopted the NGSC's rating system to assess internally the efforts of our own suppliers, and intends to leverage our membership in the collaborative to strengthen their efforts to hold suppliers accountable for their methane emissions.

Case Study: In 2018 DTE Gas committed to reduce emissions of methane by more than 80 percent by 2040. We're controlling methane leaks by replacing hundreds of miles of older natural gas pipelines with safer, air-tight material and through maintenance upgrades at DTE natural gas compression stations. DTE Gas is a member of the Environmental Protection Agency's Natural Gas STAR Methane Challenge Program. The Company has made the following commitments under the Methane Challenge Program which supports our commitment to 80% reduction by 2040: 1.Reducing leaks from gas compressor engines by implementing a rod packing leak rate testing and replacement program. 2.Replacing all existing cast iron and unprotected steel gas distribution mains over the next 20 years. In June 2020, DTE Gas announced a holistic three-fold carbon reduction goal that will work to reduce natural gas supplier emissions to net zero by 2050 and to reduce our internal carbon emissions (fugitive methane emissions and combustion emissions) to net zero by 2050. The 2018 methane reduction goal was rolled into the goals announced in June 2020. In 2021, DTE also joined the ONE Future coalition, a group of more than 40 natural gas companies working together to voluntarily reduce methane emissions across the natural gas value chain to 1% (or less) by 2025.

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**C-OG4.6**

**(C-OG4.6) Describe your organization's efforts to reduce methane emissions from your activities.**

DTE has worked with the Edison Electric Institute (EEI) and the American Gas Association (AGA) on the Natural Gas Sustainability Initiative (NGSI) and the voluntary reporting Environmental, Social and Governance (ESG) template of key sustainability metrics, including emissions of methane from our gas operations. The NGSI is a CEO-led initiative designed to improve sustainability performance and disclosure across the value chain, from production well to burner tip. In 2020 DTE Energy was one of the participants in the EEI and AGA pilot testing of the NGSI Methane Intensity Protocol, a proposed method to standardize methane intensity metrics across the five segments of the natural gas supply chain. In September 2020, DTE disclosed its methane intensity metrics for the natural gas segments in which the company operates using the pilot methane intensity protocol. The NGSI methane intensity protocol was finalized in early 2021.

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**C-OG4.7**

**(C-OG4.7) Does your organization conduct leak detection and repair (LDAR) or use other methods to find and fix fugitive methane emissions from oil and gas production activities?**

No, this is not relevant to our operations

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**C-OG4.7b**

**(C-OG4.7b) Explain why you do not conduct LDAR or use other methods to find and fix fugitive methane emissions, and whether you have a plan to do so from your oil and gas production activities.**

DTE Energy has no operations in oil and gas production.

## C-OG4.8

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**(C-OG4.8) If flaring is relevant to your oil and gas production activities, describe your organization's efforts to reduce flaring, including any flaring reduction targets.**

DTE Energy has no operations in oil and gas production.

## C5. Emissions methodology

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### C5.1

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**(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).**

#### Scope 1

**Base year start**

January 1 2005

**Base year end**

December 31 2005

**Base year emissions (metric tons CO2e)**

37722000

**Comment**

Scope 1 emissions from DTE Electric (formerly Detroit Edison) power plants only. This represents more than 90% of total CO2 emissions for DTE Energy in 2005.

#### Scope 2 (location-based)

**Base year start**

January 1 2006

**Base year end**

December 31 2006

**Base year emissions (metric tons CO2e)**

3600000

**Comment**

As reported to CDP for reporting year 2006.

#### Scope 2 (market-based)

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

### C5.2

---

**(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.**

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)  
US EPA Center for Corporate Climate Leadership: Direct Emissions from Stationary Combustion Sources  
US EPA Center for Corporate Climate Leadership: Direct Emissions from Mobile Combustion Sources  
US EPA Mandatory Greenhouse Gas Reporting Rule  
Other, please specify (US EPA eGRID Summary Tables 2016)

### C5.2a

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**(C5.2a) Provide details of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.**

US EPA eGRID Summary Tables 2016 (Created 2/15/2018) - Table 1. Subregion Output Emission Rates - Subregion: RFC Michigan (RFCM)

US EPA Mandatory Greenhouse Gas Reporting Rule (40 CFR 98) Table A-1 to Subpart A - GWPs (published 11/29/2013 & effective 1/1/2014). Note these 100 year Global Warming Potentials align with the IPCC 4th Assessment Report (AR4).

U.S. EPA Center for Corporate Climate Leadership - Emission Factors for Greenhouse Gas Inventories (Last Modified 3/9/2018) - Tables: 1 - Stationary Combustion; 2 - Mobile Combustion CO2; 8 - Business Travel & Employee Commuting; & 9 - Upstream Transportation and Distribution and Downstream Transportation and Distribution

## C6. Emissions data

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### C6.1

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#### (C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

##### Reporting year

##### Gross global Scope 1 emissions (metric tons CO2e)

24558180

##### Start date

<Not Applicable>

##### End date

<Not Applicable>

##### Comment

Scope 1 emissions include emissions from the following business units: DTE Electric Company - stationary sources and fleet vehicles; DTE Gas company - stationary sources (including fugitive emissions) and fleet vehicles; DTE Power and Industrial Projects - stationary sources; DTE Gas Storage and Pipelines - stationary sources (including fugitive emissions).

### C6.2

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#### (C6.2) Describe your organization's approach to reporting Scope 2 emissions.

##### Row 1

##### Scope 2, location-based

We are reporting a Scope 2, location-based figure

##### Scope 2, market-based

We have operations where we are able to access electricity supplier emission factors or residual emissions factors, but are unable to report a Scope 2, market-based figure

##### Comment

DTE reports Scope 2 emissions associated with transmission and distribution line losses for wholesale power purchased from other parties and transmitted or distributed across the company's system. Scope 2 emissions from any power purchased by DTE Electric for buildings such as headquarters, service centers and warehouses is considered to be insignificant because the majority of this power is within the DTE Electric service territory and emissions are accounted for from DTE Electric's Scope 1 direct emissions. Power purchases by DTE Gas and P&I facilities outside of DTE Electric's service territory are currently not counted or included in the Scope 2 emissions calculation because these emissions are considered to be small compared to DTE Electric's overall Scope 2 emissions.

### C6.3

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#### (C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

##### Reporting year

##### Scope 2, location-based

279000

##### Scope 2, market-based (if applicable)

<Not Applicable>

##### Start date

<Not Applicable>

##### End date

<Not Applicable>

##### Comment

Scope 2 emissions are reported for transmission and distribution line losses from wholesale power purchased from other parties and transmitted or distributed across the company's system. US EPA's eGRID2019 (Location-based) emission factors were used to calculate emissions.

### C6.4

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#### (C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

Yes

### C6.4a

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**(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.**

**Source**

Scope 1 emissions for stationary sources not subject to US EPA's Greenhouse Gas Reporting Rule under 40 CFR Part 98.

**Relevance of Scope 1 emissions from this source**

Emissions are relevant but not yet calculated

**Relevance of location-based Scope 2 emissions from this source**

Emissions are not evaluated

**Relevance of market-based Scope 2 emissions from this source (if applicable)**

Emissions are not evaluated

**Explain why this source is excluded**

Facilities not subject to Greenhouse Gas Reporting under 40 CFR Part 98 are considered minimal sources of greenhouse gas emissions (under 25,000 mt of CO<sub>2</sub>e). Emissions from these sources have not yet been calculated and are therefore not included in the Scope 1 emissions. Emissions from facilities only subject to state greenhouse gas reporting (such as Cal-eGGRT) are also not included in Scope 1 emissions. Scope 2 emissions are included for all DTE Electric Company facilities, regardless of whether they are subject to 40 CFR Part 98. See below for Scope 2 emissions from the other business divisions.

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**Source**

Scope 2 emissions from the following business divisions: DTE Gas Company, DTE Gas Storage and Pipelines, and DTE Power and Industrial Projects

**Relevance of Scope 1 emissions from this source**

No emissions excluded

**Relevance of location-based Scope 2 emissions from this source**

Emissions are relevant but not yet calculated

**Relevance of market-based Scope 2 emissions from this source (if applicable)**

Emissions are relevant but not yet calculated

**Explain why this source is excluded**

DTE Electric Company accounts for the majority of DTE Energy purchased energy emissions. Scope 2 emissions (purchased power) from DTE Gas Company, DTE Gas Storage and OPIplines, and DTE Power and Industrial Projects have not yet been calculated.

---

**Source**

Scope 1 mobile sources (e.g. company owned/controlled fleet vehicles and heavy mobile equipment onsite) from the following business divisions: DTE Gas Storage and Pipelines and DTE Power and Industrial Projects.

**Relevance of Scope 1 emissions from this source**

Emissions are relevant but not yet calculated

**Relevance of location-based Scope 2 emissions from this source**

No emissions from this source

**Relevance of market-based Scope 2 emissions from this source (if applicable)**

No emissions from this source

**Explain why this source is excluded**

DTE Electric Company and DTE Gas Company account for the majority of fleet vehicles. Scope 1 mobile source emissions from DTE Gas Storage and Pipelines and DTE Power and Industrial Projects have not yet been calculated.

---

**Source**

Greenhouse gases other than CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and CO<sub>2</sub>e.

**Relevance of Scope 1 emissions from this source**

No emissions from this source

**Relevance of location-based Scope 2 emissions from this source**

No emissions from this source

**Relevance of market-based Scope 2 emissions from this source (if applicable)**

No emissions from this source

**Explain why this source is excluded**

Greenhouse gases other than CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, biogenic CO<sub>2</sub>, and CO<sub>2</sub>e are considered minimal or zero (e.g. SF<sub>6</sub>). Therefore, they are not included.

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**C6.5**

**(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.**

## Purchased goods and services

### Evaluation status

Relevant, not yet calculated

### Metric tonnes CO<sub>2</sub>e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

DTE Energy purchases significant amounts of goods and services to maintain business unit operations, especially for the utility operations: DTE Electric Company and DTE Gas Company. In 2020, DTE spent \$2.2 billion with Michigan businesses and \$969 million with Detroit suppliers. Purchasing goods and services locally reduces upstream CO<sub>2</sub>e emissions by reducing the length of transportation (e.g. goods travel significantly less miles than if purchased overseas) and minimizing or eliminating business travel associated with purchased services (e.g. reduced flying and driving for the companies providing services to DTE). Emissions from these purchases have not been calculated.

## Capital goods

### Evaluation status

Relevant, not yet calculated

### Metric tonnes CO<sub>2</sub>e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

DTE Energy's utility businesses require significant capital investments to maintain and improve the electric generation and electric and natural gas distribution infrastructure and to comply with environmental regulations and renewable energy requirements. DTE Electric's capital investments over the 2021-2025 period are estimated at \$14 billion, comprised of \$5 billion for capital replacements and other projects, \$7 billion for distribution infrastructure, and \$2 billion for renewable generation. DTE Gas' capital investments over the 2021-2025 period are estimated at \$3 billion, comprised of \$1.4 billion for base infrastructure and \$1.6 billion for gas main renewal, meter move out, and pipeline integrity programs. DTE Electric and DTE Gas plan to seek regulatory approval for capital expenditures consistent with ratemaking treatment. DTE Energy's non-utility businesses' capital investments are primarily for expansion, growth, and ongoing maintenance. Gas Storage and Pipelines' capital investments over the 2021-2025 period are estimated at \$1.2 billion to \$1.7 billion for gathering and pipeline investments and expansions. Power and Industrial Projects' capital investments over the 2021-2025 period are estimated at \$1 billion to \$1.4 billion for industrial energy services and renewable energy projects. Emissions from capital goods have not been calculated.

## Fuel-and-energy-related activities (not included in Scope 1 or 2)

### Evaluation status

Relevant, not yet calculated

### Metric tonnes CO<sub>2</sub>e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

DTE reports upstream emissions from purchased electricity and natural gas under Other (upstream) for DTE Electric Company and DTE Gas Company, respectively.

## Upstream transportation and distribution

### Evaluation status

Relevant, calculated

### Metric tonnes CO<sub>2</sub>e

361071

### Emissions calculation methodology

Emissions are calculated by multiplying the coal burned (short tons) per coal source (e.g. Low Sulfur Western, High Sulfur Eastern) by the route distance (in miles) per coal source and transport type (i.e. rail vs vessel). Then, the total ton-miles for each facility (including all coal sources) is multiplied by the respective CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emission factors for either rail or waterborne craft. The emissions are then multiplied by the respective GWP per pollutant to calculate CO<sub>2</sub>e. Co<sub>2</sub>e is added for all facilities and transport types to calculate total CO<sub>2</sub>e for coal transportation. Emission factors for Rail and Waterborne Craft were utilized from Table 8 - Upstream Transportation and Distribution and Downstream Transportation and Distribution of U.S. EPA's Center for Corporate Climate Leadership's Emission Factors for GHG Inventories (Last modified 4/1/2021).

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

Emissions are calculated for upstream transportation of coal from mines to power plants and pet coke from the Marathon refinery in Detroit via rail and vessel.

## Waste generated in operations

### Evaluation status

Relevant, not yet calculated

### Metric tonnes CO2e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

DTE reduces downstream CO2e emissions by: 1. producing less waste; and 2. recycling or reusing waste generated. This reduces CO2 and CH4 emissions that would otherwise be produced by landfills. DTE's pollution prevention programs were established to minimize environmental impacts and conserve resources through reducing waste that would otherwise be disposed of in landfills. DTE also recovers used oil for energy across our gas and electric utilities. In addition, DTE captures the food and paper wastes at its Detroit headquarters campus, diverting these waste streams from landfills. Lastly, DTE limits generation of and properly stores and disposes of universal waste (light bulbs, batteries, etc.) and hazardous waste. The total emissions avoided from these recycling, energy recovery, composting, and beneficial use activities have not been calculated but tonnage per product are provided below: 574,953 tons (58%) of coal combustion products (CCPs) including fly ash, bottom ash, boiler slag, flue gas desulfurization materials, and scrubber by-products were managed as beneficial use by-products (including being sold) and were diverted from the landfill in 2020. This includes 204,736 tons (36%) of coal ash and 370,217 tons of gypsum (87%). In addition, 7,731 tons of materials were also recycled during 2020, including but not limited to: 1,997 tons of steel/ferrous from electric operations, 514 tons of steel/ferrous from gas operations, 894 tons of non-ferrous/transformers, 152 tons of non-ferrous/wire bundles, 484 tons of copper, 460 tons of lead, 171 tons of aluminum, 1,126 tons of miscellaneous metals, 38 tons of electric meters, 226 tons of gas meters, 993 tons of outage materials (e.g. poles, wires, and equipment from catastrophic storms), 26 tons of plastic (HDPE), 14 tons of scrap electronics, 240 tons (76,333 gallons) of transformer oil, 99 tons of cardboard, 262 tons of wood (e.g. poles, pallets), and 35 tons of paper. Of the food and paper wastes from the Detroit headquarters office, 7 tons were composted and 0 tons were converted to energy through incineration. 139,403 gallons of used oil were recovered for energy across gas and electric utilities.

## Business travel

### Evaluation status

Relevant, calculated

### Metric tonnes CO2e

3103

### Emissions calculation methodology

These emissions are based on employee business miles traveled in personal vehicles while on company business. Miles are claimed by each employee and recorded in a central database (SAP). Emission factors for Passenger Car and Light-Duty Truck were utilized from Table 10 - Business Travel and Employee Commuting of US EPA's Center for Corporate Leadership's Emission Factors for GHG Inventories (Last Modified 4/1/21).

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

Emissions related to business travel are currently only calculated for employee-owned vehicles (for which mileage was reimbursed). Air, rental vehicles, bus, motorcycle, and rail business travel are not accounted for. Note that emissions from company-owned vehicles are included in Scope 1.

## Employee commuting

### Evaluation status

Relevant, not yet calculated

### Metric tonnes CO2e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

DTE has 10,600 employees. Employee commuting has not yet been calculated.

## Upstream leased assets

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO2e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

DTE does not have any upstream leased assets.

## Downstream transportation and distribution

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO<sub>2</sub>e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

Downstream emissions from natural gas deliveries are reported separately under Use of Sold Products of Scope 3 emissions.

## Processing of sold products

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO<sub>2</sub>e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

DTE Energy's largest businesses are the utilities of DTE Electric Company and DTE Gas Company. The products sold for these utilities are electricity and natural gas. These products are used to provide energy to customers and are generally not processed or reprocessed into other materials.

## Use of sold products

### Evaluation status

Relevant, calculated

### Metric tonnes CO<sub>2</sub>e

11060604

### Emissions calculation methodology

This value is determined in accordance with the requirements of 40CFR Part 98 Subpart NN and therefore does not include emissions from deliveries to customers whose meters register an annual volume greater than 460,000 Mscf of natural gas deliveries.

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

Emissions reported represent what would result from the combustion of complete oxidation of natural gas delivered by local distribution companies (LDCS) owned by DTE Energy (DTE Gas Company and Citizens Gas Fuel Company).

## End of life treatment of sold products

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO<sub>2</sub>e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

DTE Energy's largest businesses are the utilities DTE Electric Company and DTE Gas Company. The products sold for these utilities are electricity and natural gas. Once consumed, there is no end of life of these sold energy products.

## Downstream leased assets

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO<sub>2</sub>e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

DTE does not have any downstream leased assets.

## Franchises

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO<sub>2</sub>e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

DTE does not own any franchises.

## Investments

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO<sub>2</sub>e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

DTE does not have investments that contribute to CO<sub>2</sub>e emissions (other than company-owned assets, whose emissions are already accounted for under Scope 1).

## Other (upstream)

### Evaluation status

Relevant, calculated

### Metric tonnes CO<sub>2</sub>e

8915995

### Emissions calculation methodology

DTE Electric Company upstream emissions are equal to purchased power \*eGRID 2019 emissions factor (Created February 23, 2021) using the total output emission rate (lb/MWh) for CO<sub>2</sub>e in subregion RFC Michigan. DTE Gas Company upstream emissions are calculated using a Gas Technologies Institute GHG calculators emission factor of 67 CO<sub>2</sub>e kg/MMBtu for the Michigan region \*% breakdown for normal molecule of natural gas via upstream, internal, and downstream = CO<sub>2</sub>e EF in MT/Mscf. This EF is \*BCF Amount (Mscf) (which is based on the GCR baseload).

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

### Please explain

This includes upstream emissions for both DTE Electric and DTE Gas Company. DTE Electric Company accounts for upstream purchased power emissions. DTE Gas Company accounts for upstream emissions from gas purchases. DTE Electric Company upstream emissions are estimated to be 7,996,968 MT CO<sub>2</sub>e (90% of total "Other (upstream)" emissions in RY2020. Note that DTE Electric Company historically reported these upstream purchased power emissions under "Fuel-and-energy-related activities (not included in Scope 1 or 2)". In RY2020, DTE includes these in "Other (upstream)". In recent efforts to reduce CO<sub>2</sub>e emissions from DTE Gas Company, reduction targets were established for upstream CO<sub>2</sub>e emissions from the business unit. In RY2020, DTE expanded Scope 3 in "Other (upstream)" emissions to include upstream emissions from gas purchases based on carbon intensities of the basins DTE buys gas from. We estimate 919,027 MT CO<sub>2</sub>e (10% of the total "Other (upstream)" emissions) are from DTE Gas Company for RY2020. It should be noted that there was a change in methodology in this line item for RY2020. As mentioned earlier in the CDP Report, DTE changed calculation methodologies for Scope 2 emissions in RY2020 to account for purchased power T&D line losses. DTE previously reported this value here under Scope 3 Other (upstream). In RY2020, it was removed from Scope 3 and allocated as Scope 2, to more accurately represent Scope 2 for an electric utility company.

## Other (downstream)

### Evaluation status

Not evaluated

### Metric tonnes CO<sub>2</sub>e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

### Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

### Please explain

DTE Energy's largest businesses are the utilities DTE Electric Company and DTE Gas Company. The downstream products sold for these utilities are electricity and natural gas. DTE Energy Waste Reduction (EWR) portfolio offers >20 programs for its customers to increase energy efficiency and optimization (e.g. insulation, LED light bulbs, pipe wrap, faucet aerators, higher efficiency appliances, etc.). This results in a decrease in downstream energy consumption and emissions by our customers. The avoided emissions as a result of these EWR programs are described in C12.1b. Additionally, DTE Electric offers a voluntary renewables program (MIGreenPower) whereby its customers can opt to purchase energy (0-100%) from renewable resources, such as wind and solar, with zero carbon emissions. This reduces or completely eliminates downstream emissions from residential and commercial customers. More information on the MIGreen Power program, including measures of success are included in our response to C12.1.b. DTE Gas launched its CleanVision Natural Gas Balance program in January 2021 that offers customers a way to reduce their carbon footprint from burning of natural gas using carbon offsets and renewable natural gas. The carbon offset program is focused on protecting Michigan forests that naturally absorb carbon dioxide.

## C6.7

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(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

No

## C6.10

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(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO<sub>2</sub>e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

**Intensity figure**

0.0021

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO<sub>2</sub>e)**

25328648

**Metric denominator**

unit total revenue

**Metric denominator: Unit total**

12177000000

**Scope 2 figure used**

Location-based

**% change from previous year**

18.75

**Direction of change**

Decreased

**Reason for change**

A very large decrease in emissions (-22%) with a slight decrease in company operating revenue (-4%) resulting in a -19% decrease in financial intensity overall for DTE Energy Company.

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**Intensity figure**

2389

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO<sub>2</sub>e)**

23328648

**Metric denominator**

full time equivalent (FTE) employee

**Metric denominator: Unit total**

10600

**Scope 2 figure used**

Location-based

**% change from previous year**

21.17

**Direction of change**

Decreased

**Reason for change**

A very large decrease in emissions (-22%) with a very slight decrease in the total number of employees (-1%) resulting in a -21% decrease in employee intensity overall for DTE Energy Company.

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**Intensity figure**

0.7834

**Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO<sub>2</sub>e)**

22818509

**Metric denominator**

megawatt hour generated (MWh)

**Metric denominator: Unit total**

29127336

**Scope 2 figure used**

Location-based

**% change from previous year**

1.3

**Direction of change**

Increased

**Reason for change**

A very large decrease in emissions (-25%) with a very large decrease in total generation (-26%) resulting in a +1% increase in output intensity overall from DTE Energy Company.

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C-OG6.12

(C-OG6.12) Provide the intensity figures for Scope 1 emissions (metric tons CO2e) per unit of hydrocarbon category.

Unit of hydrocarbon category (denominator)

Million cubic feet of natural gas

Metric tons CO2e from hydrocarbon category per unit specified

0.62

% change from previous year

15

Direction of change

Increased

Reason for change

DTE's MT CO2e/ Mmscf of natural gas was 0.62 for RY2020, up 15% from RY2019 at 0.54. The numerator (MT CO2e emissions) increased 29% overall. This is primarily due to a 62% increase in CO2e emissions from the GSP business division and a 10% decrease in CO2e emissions from the DTE Gas Company business division. The denominator (natural gas) increased 12%. This intensity is for DTE Gas Company transmission & storage and distribution and GSP gathering & boosting.

Comment

This is a new question to DTE in RY2020.

C-OG6.13

(C-OG6.13) Report your methane emissions as percentages of natural gas and hydrocarbon production or throughput.

Oil and gas business division

Midstream

Estimated total methane emitted expressed as % of natural gas production or throughput at given division

0.83

Estimated total methane emitted expressed as % of total hydrocarbon production or throughput at given division

0

Comment

This is a new question to DTE in RY2020. DTE does not have any hydrocarbon production/throughput or methane emissions in the Midstream oil and gas business division.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	23747394	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	710758	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	100028	IPCC Fourth Assessment Report (AR4 - 100 year)

C-EU7.1b

**(C-EU7.1b) Break down your total gross global Scope 1 emissions from electric utilities value chain activities by greenhouse gas type.**

	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Gross Scope 1 SF6 emissions (metric tons SF6)	Total gross Scope 1 emissions (metric tons CO2e)	Comment
Fugitives	0	0	0	0	We do not calculate fugitive emissions for DTE Electric operations. Emissions of SF6 are below the threshold that would require reporting to EPA's GHG reporting program.
Combustion (Electric utilities)	21921494	2299	0	22078137	The Total CO2e emissions include 99,156 metric tons of N2O as CO2e
Combustion (Gas utilities)	0	0	0	0	We do not calculate combustion emissions of gas utilities that supply DTE Electric.
Combustion (Other)	0	0	0	0	We do not calculate other combustion emissions of DTE Electric.
Emissions not elsewhere classified	0	0	0	0	We do not calculate emissions not elsewhere classified of DTE Electric.

**C-OG7.1b**

**(C-OG7.1b) Break down your total gross global Scope 1 emissions from oil and gas value chain production activities by greenhouse gas type.**

**Emissions category**

Combustion (excluding flaring)

**Value chain**

Midstream

**Product**

Gas

**Gross Scope 1 CO2 emissions (metric tons CO2)**

907829

**Gross Scope 1 methane emissions (metric tons CH4)**

16.82

**Total gross Scope 1 emissions (metric tons CO2e)**

908752

**Comment**

**Emissions category**

Flaring

**Value chain**

Midstream

**Product**

Gas

**Gross Scope 1 CO2 emissions (metric tons CO2)**

38120

**Gross Scope 1 methane emissions (metric tons CH4)**

268

**Total gross Scope 1 emissions (metric tons CO2e)**

44842

**Comment**

**Emissions category**

Venting

**Value chain**

Midstream

**Product**

Gas

**Gross Scope 1 CO2 emissions (metric tons CO2)**

53.1

**Gross Scope 1 methane emissions (metric tons CH4)**

6433.34

**Total gross Scope 1 emissions (metric tons CO2e)**

160887

**Comment**

**Emissions category**

Fugitives

**Value chain**

Midstream

**Product**

Gas

**Gross Scope 1 CO2 emissions (metric tons CO2)**

518.5

**Gross Scope 1 methane emissions (metric tons CH4)**

17113.79

**Total gross Scope 1 emissions (metric tons CO2e)**

428363

**Comment**

**Emissions category**

Process (feedstock) emissions

**Value chain**

Midstream

**Product**

Gas

**Gross Scope 1 CO2 emissions (metric tons CO2)**

355655.9

**Gross Scope 1 methane emissions (metric tons CH4)**

2290.44

**Total gross Scope 1 emissions (metric tons CO2e)**

412926

**Comment**

**Emissions category**

Other (please specify) (Distribution)

**Value chain**

Downstream

**Product**

Gas

**Gross Scope 1 CO2 emissions (metric tons CO2)**

39

**Gross Scope 1 methane emissions (metric tons CH4)**

0.01

**Total gross Scope 1 emissions (metric tons CO2e)**

40

**Comment**

**C7.2**

**(C7.2) Break down your total gross global Scope 1 emissions by country/region.**

Country/Region	Scope 1 emissions (metric tons CO2e)
United States of America	24558180
Americas	24558180
North America	24558180
US, Latin America and Caribbean (USLAC)	24558180

**C7.3**

**(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.**

- By business division
- By facility
- By activity

**C7.3a**

**(C7.3a) Break down your total gross global Scope 1 emissions by business division.**

Business division	Scope 1 emissions (metric ton CO2e)
DTE Electric Company	22078137
DTE Gas Company	623755
Gas Storage and Processing	1332055
Power and Industrial Projects	524234

**C7.3b**

**(C7.3b) Break down your total gross global Scope 1 emissions by business facility.**

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Belle River Power Plant	4601546	42.774371	-82.495482
Greenwood Energy Center	585439	43.105526	-82.697386
Monroe Power Plant	13062896	41.890749	-83.34523
River Rouge Power Plant	223550	42.273764	-83.112412
St. Clair Power Plant	1917220	42.763663	-82.472341
Trenton Channel Power Plant	347593	42.122172	-83.181271
Delray	688857	42.294976	-83.102101
DTE East China (Dean Peakers)	464193	42.774417	-82.481913
Renaissance Power	688857	43.186187	-84.842994
Belle River Mills Compressor Station	58541	42.788333	-82.530827
Taggart (Six Lakes) Compressor Station	37750	43.44356	-85.142801
Washington 10 Compressor Station	30766	42.767854	-83.005993
Citizens Gas Fuel Company	0	41.899792	-84.036195
DTE Energy MichCon LDC	423970	42.33375	-83.057636
Bluestone Gathering System	303111	41.821671	-75.685817
Susquehanna Gathering Company, LLC	288935	41.821671	-75.685817
DTE Appalachia Gathering, LLC	167521	39.683178	-79.92475
DTE Calvert City, LLC	189639	37.048101	-88.353361
EES Coke Battery	189802	42.281083	-83.111722
Enrico Fermi II Nuclear Power Plant	710	41.962868	-83.25762
Non-Stationary sources (DTE Electric Company)	23146		
Non-Stationary sources (DTE Gas Company)	13620		
Dearborn Energy Center	140170	42.295444	-83.231911
Milford Compressor Station	59108	42.54345	-83.56479
DTE Louisiana Gathering, LLC	572487	32.14916	-93.839981
DTE Atlantic, LLC	42656	39.3725	-74.43662
DTE St. Bernard, LLC	102137	39.175091	-84.500819

**C7.3c**

**(C7.3c) Break down your total gross global Scope 1 emissions by business activity.**

Activity	Scope 1 emissions (metric tons CO2e)
Stationary Sources (Combustion and Fugitives)	24514073
Mobile Combustion Sources (Vehicles)	43962

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

**(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4)** Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions , metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility activities	22078137	<Not Applicable>	DTE Electric Company emissions only (EU sector).
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	0	<Not Applicable>	DTE does not own or operate upstream oil and gas activities (OG sector).
Oil and gas production activities (midstream)	1531839	<Not Applicable>	DTE Gas Company & GSP emissions only (OG sector).
Oil and gas production activities (downstream)	423970	<Not Applicable>	DTE Gas Company emissions only (OG sector).
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

## C7.5

**(C7.5)** Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
United States of America	279000			
Americas	279000			
North America	279000			
US, Latin America and Caribbean (USLAC)	279000			

## C7.6

**(C7.6)** Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

By activity

### C7.6a

**(C7.6a)** Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
DTE Electric Company	279000	

### C7.6c

**(C7.6c)** Break down your total gross global Scope 2 emissions by business activity.

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Transmission and distribution line losses of purchased power on the DTE Electric Company system	279000	

**C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7**

**(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e.**

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	0	0	DTE does not own or operate upstream (exploration, development, and production) oil and gas activities.
Oil and gas production activities (midstream)			DTE owns and operates midstream (transportation and distribution of natural gas) activities. Scope 2 emissions are not yet calculated for DTE's midstream oil and gas activities.
Oil and gas production activities (downstream)	0	0	DTE does not own or operate downstream (refining, processing, distribution, and marketing of products derived) oil and gas activities.
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

**C7.9**

**(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?**

Decreased

**C7.9a**

**(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.**

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	
Other emissions reduction activities	66717	Decreased	0.27	Scope 1 emissions decreased 67,000 MT CO2e primarily due to pipeline replacement on DTE Gas Company (LDC). This accounts for a 0.3% decrease in overall Scope 1&2 emissions.
Divestment	0	No change	0	
Acquisitions	0	No change	0	
Mergers	0	No change	0	
Change in output	6089195	Decreased	25	Scope 1 emissions decreased 6,089,000 MT CO2e primarily from DTE Electric Company due mainly to market factors related to the corona virus pandemic and a decrease in operation of coal-and oil-fueled boilers. This accounts for a 25% decrease in overall Scope 1&2 emissions.
Change in methodology	1439630	Decreased	6	Due to a change in our method for calculating Scope 2 emissions that we implemented in 2021, total Scope 2 emissions decreased 1,400,000 MT CO2e in 2020 from DTE Electric Company compared to the Scope 2 emissions that we reported to CDP for 2019. This accounts for a 6% decrease in overall Scope 1&2 emissions.
Change in boundary	0	No change	0	
Change in physical operating conditions	0	No change	0	
Unidentified	0	No change	0	
Other	0	No change	0	

**C7.9b**

**(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?**

Location-based

**C8. Energy**

**C8.1**

**(C8.1) What percentage of your total operational spend in the reporting year was on energy?**

More than 55% but less than or equal to 60%

**C8.2****(C8.2) Select which energy-related activities your organization has undertaken.**

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	No
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

**C8.2a****(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.**

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	75761074	75761074
Consumption of purchased or acquired electricity	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	0	<Not Applicable>	0
Total energy consumption	<Not Applicable>	0	75761074	75761074

**C8.2b****(C8.2b) Select the applications of your organization's consumption of fuel.**

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

**C8.2c****(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.****Fuels (excluding feedstocks)**

Bituminous Coal

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

8511991

**MWh fuel consumed for self-generation of electricity**

2177528

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

&lt;Not Applicable&gt;

**MWh fuel consumed for self-generation of cooling**

&lt;Not Applicable&gt;

**MWh fuel consumed for self-cogeneration or self-trigeneration**

&lt;Not Applicable&gt;

**Emission factor**

93.28

**Unit**

kg CO2 per million Btu

**Emissions factor source**

U.S. EPA Center for Corporate Climate Leadership GHG Emission Factors - Emission Factors for GHG Inventories - (Last Modified 4/1/2021) Table 1 - Stationary Combustion - Bituminous Coal

**Comment**

DTE Energy is an energy provider (electric utility) and utilizes a number of fuels to generate electricity to provide to our customers. We cannot break down the amount of each fuel that is consumed internally for self-generation.

---

**Fuels (excluding feedstocks)**

Subbituminous Coal

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

49745499

**MWh fuel consumed for self-generation of electricity**

2177528

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Emission factor**

97.17

**Unit**

kg CO2 per million Btu

**Emissions factor source**

U.S. EPA Center for Corporate Climate Leadership GHG Emission Factors - Emission Factors for GHG Inventories - (Last Modified 4/1/2021) Table 1 - Stationary Combustion - Sub-bituminous Coal

**Comment**

DTE Energy is an energy provider (electric utility) and utilizes a number of fuels to generate electricity to provide to our customers. We cannot break down the amount of each fuel that is consumed internally for self-generation.

---

**Fuels (excluding feedstocks)**

Petroleum Coke

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

2122889

**MWh fuel consumed for self-generation of electricity**

2177528

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Emission factor**

102.41

**Unit**

kg CO2 per million Btu

**Emissions factor source**

U.S. EPA Center for Corporate Climate Leadership GHG Emission Factors - Emission Factors for GHG Inventories - (Last Modified 4/1/2021) Table 1 - Stationary Combustion - Petroleum Coke (Solid)

**Comment**

DTE Energy is an energy provider (electric utility) and utilizes a number of fuels to generate electricity to provide to our customers. We cannot break down the amount of each fuel that is consumed internally for self-generation.

---

**Fuels (excluding feedstocks)**

Fuel Oil Number 2

---

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

229625

**MWh fuel consumed for self-generation of electricity**

2177528

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Emission factor**

73.96

**Unit**

kg CO2 per million Btu

**Emissions factor source**

U.S. EPA Center for Corporate Climate Leadership GHG Emission Factors - Emission Factors for GHG Inventories - (Last Modified 4/1/2021) Table 1 - Stationary Combustion - Distillate Fuel Oil No. 2

**Comment**

DTE Energy is an energy provider (electric utility) and utilizes a number of fuels to generate electricity to provide to our customers. We cannot break down the amount of each fuel that is consumed internally for self-generation.

---

**Fuels (excluding feedstocks)**

Fuel Oil Number 6

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

165

**MWh fuel consumed for self-generation of electricity**

2177528

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Emission factor**

75.1

**Unit**

kg CO2 per million Btu

**Emissions factor source**

U.S. EPA Center for Corporate Climate Leadership GHG Emission Factors - Emission Factors for GHG Inventories - (Last Modified 4/1/2021) Table 1 - Stationary Combustion - Residual Fuel Oil No. 2

**Comment**

DTE Energy is an energy provider (electric utility) and utilizes a number of fuels to generate electricity to provide to our customers. We cannot break down the amount of each fuel that is consumed internally for self-generation.

---

**Fuels (excluding feedstocks)**

Natural Gasoline

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

13868860

**MWh fuel consumed for self-generation of electricity**

2177528

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

---

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Emission factor**

53.06

**Unit**

kg CO2 per million Btu

**Emissions factor source**

U.S. EPA Center for Corporate Climate Leadership GHG Emission Factors - Emission Factors for GHG Inventories - (Last Modified 4/1/2021) Table 1 - Stationary Combustion - Stationary Combustions - Natural Gas

**Comment**

DTE Energy is an energy provider (electric utility) and utilizes a number of fuels to generate electricity to provide to our customers. We cannot break down the amount of each fuel that is consumed internally for self-generation.

**Fuels (excluding feedstocks)**

Coke Oven Gas

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

1092200

**MWh fuel consumed for self-generation of electricity**

2177528

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Emission factor**

46.85

**Unit**

kg CO2 per million Btu

**Emissions factor source**

U.S. EPA Center for Corporate Climate Leadership GHG Emission Factors - Emission Factors for GHG Inventories - (Last Modified 4/1/2021) Table 1 - Stationary Combustion - Coke Oven Gas

**Comment**

DTE Energy is an energy provider (electric utility) and utilizes a number of fuels to generate electricity to provide to our customers. We cannot break down the amount of each fuel that is consumed internally for self-generation.

**Fuels (excluding feedstocks)**

Blast Furnace Gas

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

11361

**MWh fuel consumed for self-generation of electricity**

2177528

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Emission factor**

274.32

**Unit**

lb CO2 per million Btu

**Emissions factor source**

U.S. EPA Center for Corporate Climate Leadership GHG Emission Factors - Emission Factors for GHG Inventories - (Last Modified 4/1/2021) Table 1 - Stationary

Combustion - Blast Furnace Gas

**Comment**

DTE Energy is an energy provider (electric utility) and utilizes a number of fuels to generate electricity to provide to our customers. We cannot break down the amount of each fuel that is consumed internally for self-generation.

---

**Fuels (excluding feedstocks)**

Solid Biomass Waste

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

2177528

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Emission factor**

105.51

**Unit**

kg CO2 per million Btu

**Emissions factor source**

U.S. EPA Center for Corporate Climate Leadership GHG Emission Factors - Emission Factors for GHG Inventories - (Last Modified 4/1/2021) Table 1 - Stationary Combustion - Solid Byproducts

**Comment**

DTE Energy is an energy provider (electric utility) and utilizes a number of fuels to generate electricity to provide to our customers. We cannot break down the amount of each fuel that is consumed internally for self-generation.

---

**Fuels (excluding feedstocks)**

Wood

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

2177528

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Emission factor**

93.8

**Unit**

lb CO2 per million Btu

**Emissions factor source**

U.S. EPA Center for Corporate Climate Leadership GHG Emission Factors - Emission Factors for GHG Inventories - (Last Modified 4/1/2021) Table 1 - Stationary Combustion - Wood and Wood Residuals

**Comment**

DTE Energy is an energy provider (electric utility) and utilizes a number of fuels to generate electricity to provide to our customers. We cannot break down the amount of each fuel that is consumed internally for self-generation.

---

**Fuels (excluding feedstocks)**

Motor Gasoline

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

85494

**MWh fuel consumed for self-generation of electricity**

2177528

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Emission factor**

70.22

**Unit**

lb CO2 per million Btu

**Emissions factor source**

U.S. EPA Center for Corporate Climate Leadership GHG Emission Factors - Emission Factors for GHG Inventories - (Last Modified 4/1/2021) Table 1 - Stationary Combustion CO2 - Motor Gasoline

**Comment**

DTE Energy is an energy provider (electric utility) and utilizes a number of fuels to generate electricity to provide to our customers. We cannot break down the amount of each fuel that is consumed internally for self-generation.

---

**Fuels (excluding feedstocks)**

Kerosene

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

0

**MWh fuel consumed for self-generation of electricity**

2177528

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Emission factor**

75.2

**Unit**

kg CO2 per million Btu

**Emissions factor source**

U.S. EPA Center for Corporate Climate Leadership GHG Emission Factors - Emission Factors for GHG Inventories - (Last Modified 4/1/2021) Table 1 - Stationary Combustion - Kerosene

**Comment**

DTE Energy is an energy provider (electric utility) and utilizes a number of fuels to generate electricity to provide to our customers. We cannot break down the amount of each fuel that is consumed internally for self-generation.

---

**Fuels (excluding feedstocks)**

Bioethanol

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

68

**MWh fuel consumed for self-generation of electricity**

2177528

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

---

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Emission factor**

68.44

**Unit**

kg CO2 per million Btu

**Emissions factor source**

U.S. EPA Center for Corporate Climate Leadership GHG Emission Factors - Emission Factors for GHG Inventories - (Last Modified 4/1/2021) Table 1 - Stationary Combustion - Ethanol

**Comment**

DTE Energy is an energy provider (electric utility) and utilizes a number of fuels to generate electricity to provide to our customers. We cannot break down the amount of each fuel that is consumed internally for self-generation.

**Fuels (excluding feedstocks)**

Compressed Natural Gas (CNG)

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

7

**MWh fuel consumed for self-generation of electricity**

2177528

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

<Not Applicable>

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Emission factor**

53.06

**Unit**

kg CO2 per million Btu

**Emissions factor source**

U.S. EPA Center for Corporate Climate Leadership GHG Emission Factors - Emission Factors for GHG Inventories - (Last Modified 4/1/2021) Table 1 - Stationary Combustion - Natural Gas Converted from MMBtu/scf to MMBtu/gallon

**Comment**

DTE Energy is an energy provider (electric utility) and utilizes a number of fuels to generate electricity to provide to our customers. We cannot break down the amount of each fuel that is consumed internally for self-generation.

**C8.2d**

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	31291551	2177528	1957293	0
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

**C-EU8.2d**

(C-EU8.2d) For your electric utility activities, provide a breakdown of your total power plant capacity, generation, and related emissions during the reporting year by source.

**Coal – hard****Nameplate capacity (MW)**

6035

**Gross electricity generation (GWh)**

21304

**Net electricity generation (GWh)**

19527

**Absolute scope 1 emissions (metric tons CO2e)**

20153676

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

1032.1

**Comment****Lignite****Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

Not applicable.

**Oil****Nameplate capacity (MW)**

325

**Gross electricity generation (GWh)**

1922

**Net electricity generation (GWh)**

1890

**Absolute scope 1 emissions (metric tons CO2e)**

58044

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

30.72

**Comment****Gas****Nameplate capacity (MW)**

2946

**Gross electricity generation (GWh)**

3607

**Net electricity generation (GWh)**

3504

**Absolute scope 1 emissions (metric tons CO2e)**

2175245

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

620.84

**Comment**

**Biomass****Nameplate capacity (MW)**

321

**Gross electricity generation (GWh)**

490

**Net electricity generation (GWh)**

490

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

Biomass emissions are assumed to be carbon neutral resulting in zero Scope 1 emissions.

**Waste (non-biomass)****Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

Not applicable.

**Nuclear****Nameplate capacity (MW)**

1161

**Gross electricity generation (GWh)**

6376

**Net electricity generation (GWh)**

6071

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

There are zero emissions from the nuclear power plant. Therefore Scope 1 emissions intensity is 0 metric tons CO2e per GWh.

**Fossil-fuel plants fitted with CCS****Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

Not applicable.

**Geothermal**

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

Not applicable.

**Hydropower**

**Nameplate capacity (MW)**

1088

**Gross electricity generation (GWh)**

25

**Net electricity generation (GWh)**

25

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

There are zero emissions from the Ludington Pumped Storage Facility. Therefore Scope 1 emissions intensity is 0 metric tons CO2 per GWh.

**Wind**

**Nameplate capacity (MW)**

1236

**Gross electricity generation (GWh)**

3698

**Net electricity generation (GWh)**

3698

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

There are zero emissions from wind energy sources. Therefore Scope 1 emissions intensity is 0 metric tons CO2e per GWh.

**Solar**

**Nameplate capacity (MW)**

65

**Gross electricity generation (GWh)**

91

**Net electricity generation (GWh)**

91

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

There are zero emissions from solar energy sources. Therefore Scope 1 emissions intensity is 0 metric tons CO2e per GWh.

**Marine**

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

Not applicable.

**Other renewable**

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

Not applicable.

**Other non-renewable**

**Nameplate capacity (MW)**

0

**Gross electricity generation (GWh)**

0

**Net electricity generation (GWh)**

0

**Absolute scope 1 emissions (metric tons CO2e)**

0

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

0

**Comment**

Not applicable.

**Total**

**Nameplate capacity (MW)**

13177

**Gross electricity generation (GWh)**

37512

**Net electricity generation (GWh)**

35295

**Absolute scope 1 emissions (metric tons CO2e)**

22386964

**Scope 1 emissions intensity (metric tons CO2e per GWh)**

634

**Comment**

**C-EU8.4**

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**(C-EU8.4) Does your electric utility organization have a transmission and distribution business?**

Yes

**C-EU8.4a**

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**(C-EU8.4a) Disclose the following information about your transmission and distribution business.**

**Country/Region**

United States of America

**Voltage level**

Distribution (low voltage)

**Annual load (GWh)**

42049

**Annual energy losses (% of annual load)**

3.49

**Scope where emissions from energy losses are accounted for**

Scope 2 (location-based)

**Emissions from energy losses (metric tons CO2e)**

279000

**Length of network (km)**

76330

**Number of connections**

2200000

**Area covered (km2)**

52620

**Comment**

DTE Electric Company has approximately 2.2 million residential, commercial, and industrial customers in southeastern Michigan. Scope 2 emissions are reported for energy losses from purchased power that travels through the DTE distribution system. Emissions are calculated using US EPA's eGRID2019 CO2e emission factor for RFC Michigan (published 2/23/2021).

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**C9. Additional metrics**

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**C9.1**

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**(C9.1) Provide any additional climate-related metrics relevant to your business.**

**Description**

Waste

**Metric value**

24.6

**Metric numerator**

Amount of waste in current year (2020)

**Metric denominator (intensity metric only)**

Amount of waste in base year (2017)

**% change from previous year**

7.9

**Direction of change**

Increased

**Please explain**

This metric measures the cumulative percentage of solid municipal landfill waste reduction measured in tons compared to the 2017 baseline. The goal is to increase solid waste reduction efforts 30 percent by 2022 from a 2017 baseline. The cumulative percentage increase in 2020 was 24.6 percent which is 7.9 percent higher than the 16.7 percent cumulative waste reduction achieved in 2019.

**Description**

Other, please specify (Water usage reduction)

**Metric value**

42.7

**Metric numerator**

Amount of water use in current year (2020)

**Metric denominator (intensity metric only)**

Amount of water use in baseline year (2017)

**% change from previous year**

15.6

**Direction of change**

Increased

**Please explain**

This metric measures the cumulative percentage of municipal water reduction measured in gallons compared to the 2017 baseline. The goal is to increase municipal water reduction efforts 50 percent by 2022 from a 2017 baseline. The cumulative percentage increase in 2020 was 42.7 percent which is 15.6 percent higher than the 27.1 percent cumulative water reduction achieved in 2019.

**C-EU9.5a**

**(C-EU9.5a) Break down, by source, your total planned CAPEX in your current CAPEX plan for power generation.**

Primary power generation source	CAPEX planned for power generation from this source	Percentage of total CAPEX planned for power generation	End year of CAPEX plan	Comment
Other, please specify (Wind and solar renewable energy)	2000000000	66.6	2025	DTE Electric's capital investments over the 2020-2024 period are estimated \$3.0 billion for new generation.

**C-EU9.5b**

**(C-EU9.5b) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).**

Products and services	Description of product/service	CAPEX planned for product/service	Percentage of total CAPEX planned products and services	End of year CAPEX plan
Other, please specify (Infrastructure resilience and hardening)	Electric distribution infrastructure resilience and hardening, redesign, and automation and technology.	7000000000	50	2024

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

**(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?**

Investment in low-carbon R&D	Comment
Row 1 Yes	Adoption of electric vehicles (EVs) and deployment of charging infrastructure in Michigan lags that of other states. This inhibits the benefits EVs can provide to DTE customers, the grid, and Michigan. On May 2, 2019, the Michigan Public Service Commission (MPSC) approved the \$13.1 million Charging Forward program proposed by DTE. The Charging Forward program components approved by the MPSC include Customer Education and Outreach, Residential Smart Charger Support, and Charging Infrastructure Enablement. Based on feedback from shareholders since approval, additional program components have also been folded into Charging Forward activities, including an EV-Grid Impact Study, an EV-Ready Builder Rebate pilot, and a residential off-peak charging pilot (Bring Your Own Charger). After including the other EV pilots and additional program components (totaling \$1.0 million), the overall Charging Forward program now totals \$14.1 million. Additionally, DTE proposed Charging Forward eFleets through an ex-parte filing on December 3, 2020 and received approval on March 19, 2021. DTE developed eFleets, a five-year \$13.4 million program to accelerate electric fleet adoption in Michigan. The program is designed to help fleet owners reduce barriers of electrifying their fleets, efficiently integrate charger load with the DTE Electric distribution system and pilot new clean technologies. Similar to Phase I, eFleets was approved with three primary components: Education & Outreach, Advisory Services, and Charging Infrastructure Enablement for commercial fleets.

**C-CO9.6a/C-EU9.6a/C-OG9.6a**

**(C-CO9.6a/C-EU9.6a/C-OG9.6a) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years.**

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (optional)	Comment
Other, please specify (EV charging programs and infrastructure)	Pilot demonstration	≤20%	1092000	The nearly \$1.1 million investment includes total program costs of which the following pilots will be researched and tested: 1. EV-Ready Builder Rebate - Test rebates to builders or electricians to "future-proof" new homes for Level 2 EV chargers by installing the wiring for 240V outlets at a much cheaper cost than retrofitting. 2. Demand Response - Analyze customer behavior and peak demand shaving value based on different times, incentives, etc. 3. ChargeD - Learn more about fast charging station utilization and potential for use as an education and outreach platform. 4. Battery- Powered Fast Charging - Determine charge/discharge impact on battery life and business cases for use. 5. EV-Grid Impact Study - Simulate load impacts on our distribution system at varying degrees of EV adoption. 6. Extreme Fast Charging - Test and develop fast charging capabilities up to 400 kW. 7. EV-Only TOU Rate - Identify and pilot a technology capable of billing an EV-only time-of-use rate without the use of a second meter.
Renewable energy	Applied research and development	≤20%		Electric Power Research Institute (EPRI) participation in the Renewable Energy Program
Distributed energy resources	Applied research and development	≤20%		Electric Power Research Institute (EPRI) participation in the Integration of Distributed Energy Resources Program.

**C10. Verification**

**C10.1**

**(C10.1) Indicate the verification/assurance status that applies to your reported emissions.**

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	No third-party verification or assurance
Scope 3	No third-party verification or assurance

**C10.1a**

**(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.**

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Type of verification or assurance**

High assurance

**Attach the statement**

Submission Summary 2020.pdf

Submission Summary 2021.pdf

**Page/ section reference**

All pages: Summary of 2020 required submissions to U.S. Environmental Protection Agency for reporting of emissions from continuous emission monitors (CEMs) for each DTE Electric fossil generation unit required to install a CEM system under 40 CFR Part 75. These electronic submissions include a summary of emissions, required monitoring plans, and quality assurance certifications. These submissions are signed off by the Vice President of Fossil Generation, DTE's Designated Representative.

**Relevant standard**

Other, please specify (EPA Continuous Emission Monitoring (CEM), data validation and reporting requirements under 40 CFR 75)

**Proportion of reported emissions verified (%)**

90

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**C10.2**

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**(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?**

No, we do not verify any other climate-related information reported in our CDP disclosure

**C11. Carbon pricing**

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**C11.1**

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**(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?**

No, and we do not anticipate being regulated in the next three years

**C11.2**

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**(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?**

Yes

**C11.2a**

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**(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.**

**Credit origination or credit purchase**

Credit origination

**Project type**

Methane avoidance

**Project identification**

DTE Biomass Energy (DTEBE) partners with landfill owners and dairy farmers across the country to produce marketable, renewable transportation fuel by extracting and utilizing landfill and agricultural waste gas. The gas produced by DTEBE is sold to off-takers along with its low carbon attributes for use as low carbon transportation fuel. In 2020, DTEBE generated more than 120,000 metric tons of California Low Carbon Fuel Standard (LCFS) credits and more than 28 million CNG gallons of renewable fuels recorded under the U.S. Renewable Fuel Standard program as renewable Identification Numbers (RIN).

**Verified to which standard**

Other, please specify (California Low Carbon Fuel Standard (LCFS))

**Number of credits (metric tonnes CO2e)**

120097

**Number of credits (metric tonnes CO2e): Risk adjusted volume**

120097

**Credits cancelled**

Not relevant

**Purpose, e.g. compliance**

Other, please specify (End user compliance)

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**C11.3**

**(C11.3) Does your organization use an internal price on carbon?**

Yes

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**C11.3a**

**(C11.3a) Provide details of how your organization uses an internal price on carbon.**

**Objective for implementing an internal carbon price**

Other, please specify (Integrated Resource Plan scenario planning and for an internal reference case which we update annually.)

**GHG Scope**

Scope 1

**Application**

DTE Electric's Integrated Resource Plan (IRP): Carbon Price: For the 2020 IRP, the Reference scenario's starting point has a \$5.50/metric ton price for carbon in 2025, which reaches \$11/metric ton in 2040 (real \$2017). The Business as Usual (BAU), Emerging Technology (ET) and Environmental Policy (EP) scenarios' starting points have a constant \$0/ton carbon price across all years. There was a carbon-price sensitivity on the EP scenario to achieve 50 percent carbon reduction by 2030. This sensitivity applied a \$20/ton carbon price in 2030. For our most recent internal reference case updated in 2021, the carbon price was on the lower end of the range used in IRPs.

**Actual price(s) used (Currency /metric ton)**

3.85

**Variance of price(s) used**

We use a range of prices depending upon the scenario and/or sensitivities being modeled, for example the 2019 IRP sensitivity analysis applied prices ranging from \$5.50/ton to \$22/ton starting in 2025 (Real 2017\$/metric ton).

**Type of internal carbon price**

Shadow price

**Impact & implication**

Carbon prices may be applied to achieve a desired carbon reduction goal, such as the carbon sensitivity on the Environmental Policy scenario in the Integrated Resource plan that applied a \$22/metric ton carbon price in 2030 to achieve a 50 percent carbon reduction. Each year DTE Electric puts together an internal reference case that is updated annually. For the integrated resource plan, we use several scenarios that are required as well as our most recent internal reference case. The integrated resource plan typically has several scenarios and sensitivities. Sensitivities, as compared to scenarios, are generally designed to test one specific uncertainty. The Michigan IRP Parameters of 2016 Public Act 341 provided us with required sensitivities. Each scenario has a starting point with no sensitivities applied. Then, each sensitivity is applied to the appropriate scenarios. One sensitivity is "high carbon-price" as described below. Carbon Price: For the 2019 IRP, the Reference scenario's starting point has a \$5.50/metric ton price for carbon in 2025, which reaches \$11/metric ton in 2040 (real \$2017). The Business as Usual (BAU), Emerging Technology (ET) and Environmental Policy (EP) scenarios' starting points have a constant \$0/ton carbon price across all years. There was a "high carbon-price" sensitivity on the EP scenario to achieve 50 percent carbon reduction by 2030. This sensitivity applied a \$22/metric ton carbon price in 2030. For our most recent internal reference case updated in 2020, the carbon price has a \$43.85/metric ton price for carbon in 2025, which reaches \$8.20/metric ton in 2040 (real 2019\$).

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**C12. Engagement**

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**C12.1**

**(C12.1) Do you engage with your value chain on climate-related issues?**

Yes, our suppliers  
Yes, our customers

**C12.1a**

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**(C12.1a) Provide details of your climate-related supplier engagement strategy.**

**Type of engagement**

Information collection (understanding supplier behavior)

**Details of engagement**

Collect climate change and carbon information at least annually from suppliers

**% of suppliers by number**

40

**% total procurement spend (direct and indirect)**

40

**% of supplier-related Scope 3 emissions as reported in C6.5**

0

**Rationale for the coverage of your engagement**

The proportion of suppliers that receive surveys corresponds to approximately 40% of total procurement spend. Suppliers are selected for engagement based on the following criteria: If the supplier has a DTE Supplier Performance Management (SPM) scorecard, if they are a top 100 supplier for DTE spend, or if a DTE sustainability team member's business unit requests that the supplier take the survey. Suppliers are requested to report on energy use and emission information to measure success of actions and identify areas of improvement throughout DTE's supply chain.

**Impact of engagement, including measures of success**

DTE is part of the Electric Utility Industry Sustainable Supply Chain Alliance (EUISSCA), an organization of utilities and suppliers collaborating to advance sustainability best practices in supply chain activities and supplier networks. Energy use and emissions for suppliers are self-reported via The Sustainability Project (TSP) supplier survey tool, which was launched in 2018. Success is measured through changes in energy use and emissions reported by the supplier.

**Comment**

We do not calculate Scope 3 emissions for purchased goods and services as indicated in our response to Question C6.5.

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**Type of engagement**

Information collection (understanding supplier behavior)

**Details of engagement**

Collect climate change and carbon information at least annually from suppliers

**% of suppliers by number**

100

**% total procurement spend (direct and indirect)**

92

**% of supplier-related Scope 3 emissions as reported in C6.5**

11

**Rationale for the coverage of your engagement**

DTE Energy is taking action to encourage our natural gas suppliers to reduce their climate impacts. These actions include encouraging our suppliers and peers to report using the Natural Gas Sustainability Initiative guidelines established by the Edison Electric Institute and American Gas Association in an effort to enhance transparency and emissions reporting consistency throughout the natural gas industry. As an active member of the Natural Gas Supplier Collaborative (NGSC), DTE is also working with our industry partners to: 1. Benchmark the environmental attributes of our natural gas supply portfolios, 2. Evaluate natural gas certification programs and innovative methane measurement technologies, 3. Discuss regional policy solutions, 4. Engage Natural Gas producers and marketers to help us address the challenges with transparency throughout the gas purchasing process. In 2019, DTE surveyed our natural gas suppliers to identify their efforts to monitor and reduce methane emissions and make more informed purchasing decisions in the future. DTE is planning discussions with the Michigan Public Service Commission about incorporating supplier methane emissions levels into its gas procurement process. In March 2021, DTE Gas sent a letter to our natural gas suppliers and pipelines encouraging them to begin reporting under the newly launched NGSi protocol for reporting of methane intensity across the natural gas value chain. The estimated DTE Gas supplier emissions represent approximately 11 percent of the total Other (upstream) emissions reported in C6.5.

**Impact of engagement, including measures of success**

We received responses from 6 to 12 suppliers on our 2019 natural gas supplier survey. The 12 suppliers represent 92 percent of our gas supply costs. We utilize the NGSC sustainability performance disclosures to help us evaluate the environmental performance of suppliers, including supplier disclosures of methane emissions and/or intensity.

**Comment**

In June 2020, DTE Gas announced a holistic net zero goal that includes achieving net zero emissions from DTE's natural gas suppliers by 2050. The goal will require DTE to develop and refine a supplier tracking process to track supplier's greenhouse gas emissions.

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**C12.1b**

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**(C12.1b) Give details of your climate-related engagement strategy with your customers.**

**Type of engagement**

Education/information sharing

**Details of engagement**

Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

**% of customers by number**

47

**% of customer - related Scope 3 emissions as reported in C6.5**

0

**Portfolio coverage (total or outstanding)**

<Not Applicable>

**Please explain the rationale for selecting this group of customers and scope of engagement**

DTE Energy engages DTE Electric customers on reducing GHG emissions and related climate issues by offering numerous programs to help customers save energy and purchase clean energy. These programs are available to all customers, of which approximately 47 percent of DTE Electric customers participated in 2020. Methods for reaching customers include direct advertising, website offerings, e-mails, social media, bill inserts, event sponsorships, and free subscriptions to tailored energy publications, among others. Programs that enable customers to improve energy efficiency and reduce energy usage receive priority as they support energy efficiency goals mandated by state legislation. DTE's Energy Waste Reduction (EWR) programs are designed to help reduce customer's energy use by increasing customer awareness of energy saving possibilities, and providing products and services such as rebates, tips, tools, strategies and energy efficiency education to help customers make informed energy saving decisions. Many of the programs in 2020 were continuations of programs launched in 2009, although some minor program adjustments were implemented. DTE continually works to offer EWR programs that assure all customer segments are encouraged to participate. Programs are designed to capture both electric and natural gas savings.

**Impact of engagement, including measures of success**

The success of DTE's programs are measured by verified energy savings reported annually to the Michigan Public Service Commission. In 2020 the DTE Electric EWR programs produced verified net energy savings of 770 GWh electricity through the various program offerings. These savings were well above the minimum required by Michigan's Clean, Renewable and Efficient Energy Act, also known as Public Act 295 (PA 295), as amended by Public Act 324 of 2016. In 2020, 1,036,138 residential and industrial customers out of an approximate 2.2 million customers participated in the DTE Electric EWR program, or about 47 percent of DTE Electric customers. The 2020 avoided emissions as a result of the DTE Electric EWR programs are 544,499 metric tons. These EWR programs help to reduce Scope 1 emissions for DTE Electric.

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**Type of engagement**

Education/information sharing

**Details of engagement**

Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

**% of customers by number**

28

**% of customer - related Scope 3 emissions as reported in C6.5**

0

**Portfolio coverage (total or outstanding)**

<Not Applicable>

**Please explain the rationale for selecting this group of customers and scope of engagement**

DTE Energy engages DTE Gas customers on reducing GHG emissions and related climate issues by offering numerous programs to help customers save energy and purchase clean energy. These programs are available to all customers, of which approximately 28 percent of DTE Gas customers participated in 2020. Methods for reaching customers include direct advertising, website offerings, e-mails, social media, bill inserts, event sponsorships, and free subscriptions to tailored energy publications, among others. Programs that enable customers to improve energy efficiency and reduce energy usage receive priority as they support energy efficiency goals mandated by state legislation. DTE's Energy Waste Reduction (EWR) programs are designed to help reduce customer's energy use by increasing customer awareness of energy saving possibilities, and providing products and services such as rebates, tips, tools, strategies and energy efficiency education to help customers make informed energy saving decisions. Many of the programs in 2020 were continuations of programs launched in 2009, although some minor program adjustments were implemented. DTE continually works to offer EWR programs that assure all customer segments are encouraged to participate. Programs are designed to capture both electric and natural gas savings.

**Impact of engagement, including measures of success**

The success of DTE's programs are measured by verified energy savings reported annually to the Michigan Public Service Commission. In 2020 the DTE Gas EWR programs produced verified net energy savings of 2,240 MMcf of natural gas through the various program offerings. These savings were well above the minimum required by Michigan's Clean, Renewable and Efficient Energy Act, also known as Public Act 295 (PA 295), as amended by Public Act 324 of 2016. In 2020, 371,265 residential and industrial customers out of an approximate 1.3 million customers participated in the DTE Gas EWR program, or about 28 percent of DTE Gas customers. The 2020 avoided emissions as a result of the DTE Gas EWR programs are 118,849 metric tons. These EWR programs help to reduce Scope 1 and Scope 3 emissions for DTE Gas.

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**Type of engagement**

Other, please specify

**Details of engagement**

Other, please specify (Renewable energy offerings to customers)

**% of customers by number**

1

**% of customer - related Scope 3 emissions as reported in C6.5**

0

**Portfolio coverage (total or outstanding)**

<Not Applicable>

**Please explain the rationale for selecting this group of customers and scope of engagement**

As described in our response to Question 2.4a, DTE Energy offers clean (renewable) products to both electric and gas customers: MIGreenPower is DTE Energy's voluntary renewable energy program. These programs are available to all customers, of which approximately 1 percent of DTE customers participated in 2020. Customers that enroll in MIGreenPower support the generation of electricity from Michigan-based, renewable energy sources. MIGreenPower is a Green-e Energy certified renewable energy program. Green-e Energy™ is the nation's leading independent certification and verification program for renewable energy and greenhouse gas emission reductions in the retail market.

**Impact of engagement, including measures of success**

Enrollment in MIGreenPower at the end of 2020 was 20,784 out of 2.2 million customers. In 2020, MIGreenPower subscribers supported a total of 58.6 million kWh of renewable energy, which is the greenhouse gas benefit equivalent to planting 684,487 tree seedlings and allowing them to grow for 10 years and offsetting 41,396 metric

tons of carbon dioxide in our atmosphere. Over the next five years, DTE plans to market up to 500 MW of voluntary renewable programs. DTE doesn't report the Scope 3 emissions from electricity delivered to DTE Electric customers.

C12.3

**(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?**

- Direct engagement with policy makers
- Trade associations
- Funding research organizations
- Other

C12.3a

**(C12.3a) On what issues have you been engaging directly with policy makers?**

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Other, please specify (Cap and Trade)	Support with minor exceptions	DTE Energy participated in advocacy related to cap-and-trade legislation before the U.S. Congress in 2009 and 2010. Legislative initiatives to reduce greenhouse gases gave way to Executive Branch proposals under the Obama Administration, some of which were reversed or repealed by the Trump Administration, and are now beginning to be addressed by the Biden Administration.	DTE generally supports national policy to address the nation's energy future. This can be achieved in different ways, the details of the approach being key. The policy must provide a reasonable timeframe for transition of existing generation fleets and assure a reasonable cost on customers. It should also provide flexibility to various regions of the U.S. allowing for particular differences.
Carbon tax	Neutral	DTE Energy has tracked and monitored executive branch-level discussions as well as learning sessions by some members of Congress on the potential for a carbon tax. DTE Energy has also tracked the various proposals that have emanated from research organizations. The company will continue to be engaged as new Congressional and other proposals are presented.	DTE generally supports national policy to address the nation's energy future. This can be achieved in different ways, the details of the approach being key. The policy must provide a reasonable timeframe for transition of existing generation fleets and assure a reasonable cost on customers. It should also provide flexibility to various regions of the U.S. allowing for particular differences.
Energy efficiency	Support	DTE Energy has closely tracked energy efficiency legislation at the federal level and supports energy conservation measures. DTE Energy also monitors the research and development of efficiency technologies.	DTE generally supports national policy to address the nation's energy future. This can be achieved in different ways, the details of the approach being key. The policy must provide a reasonable timeframe for transition of existing generation fleets and assure a reasonable cost on customers. It should also provide flexibility to various regions of the U.S. allowing for particular differences.
Energy efficiency	Support	DTE Energy supported Michigan Public Act (PA) 342 of 2016, that continues the energy waste reduction requirements for electric and gas providers in Michigan that began in 2009. The standards went into effect in 2009, and ramped up gradually to the current level. The standards will remain at this level in perpetuity unless superseded by future legislation, or suspended by the Michigan Public Service Commission.	The 2016 legislation requires electric providers to achieve incremental energy savings of 1.0% to total electricity sales through 2021. Natural gas providers must achieve incremental energy savings of 0.75% per year. The policy must provide a reasonable timeframe for transition of existing fleets and assure a reasonable cost on customers.
Clean energy generation	Support with minor exceptions	DTE Energy is supportive of a national clean or renewable energy standard, as long as it allows for flexibility to match a state's renewable and clean energy potential. DTE Energy believes that renewable energy is a vital part of the energy mix to meet Michigan's future energy needs and DTE Energy has been investing in renewables to benefit DTE Energy's customers and the environment.	States are better suited to enact clean energy legislation due to state and regional differences in the availability of clean energy resources. Clean energy legislation developed at the federal level should provide delegation to states to allow for state and region specific differences and to provide flexibility. DTE generally supports national policy to address the nation's energy future. This can be achieved in different ways, the details of the approach being key. The policy must provide a reasonable timeframe for transition of existing generation fleets and assure a reasonable cost on customers. It should also provide flexibility to various regions of the U.S. allowing for particular differences.
Clean energy generation	Support	DTE Energy supported Michigan Public Act (PA) 342 of 2016, that requires the Company to obtain 15 percent of our retail sales from qualifying renewable resources by 2021. DTE Energy has already met the requirement to meet the current 10 percent renewable standard.	DTE generally prefers that states are delegated authority to implement clean energy policy solutions over national policy to address the nation's energy future. This can be achieved in different ways, the details of the approach being key. The state policy must provide a reasonable time frame for transition of existing generation fleets and assure a reasonable cost on customers. State policies provide flexibility to various regions of the U.S. allowing for particular differences.

C12.3b

**(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?**

Yes

C12.3c

**(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.**

**Trade association**

Edison Electric Institute

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

EEl member companies are committed to addressing the challenge of climate change and have undertaken a wide range of initiatives over the last 30 years to reduce, avoid or sequester GHG emissions. As of year-end 2019, the electric power sector's carbon dioxide (CO2) emissions were 33 percent below a 2005 baseline. Collectively, EEI's member companies are on a path to reduce carbon emissions at least 80 percent by 2050, compared with peak levels in 2005. An EEI CEO group has also launched a Natural Gas Supplier Initiative - an overarching framework to recognize and advance the innovative, voluntary sustainability programs for natural gas from the wellhead to the burner tip. NGSi enables the natural gas industry to measure, disclose, and recognize industry-wide progress and innovation on key sustainability metrics.

**How have you influenced, or are you attempting to influence their position?**

DTE Energy tracks the activities of all of the associations of which the company is a member. Further, we work to provide input to align trade association positions with DTE Energy's position, and we participate in their advocacy to policy makers to the extent possible.

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**Trade association**

American Gas Association

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

The American Gas Association is committed to reducing greenhouse gas emissions through smart innovation, new and modernized infrastructure, and advanced technologies that maintain reliable, resilient, and affordable energy service choices for consumers. In addition, AGA has partnered with EEI on the Natural Gas Sustainability Initiative that enables the natural gas industry to measure, disclose, and recognize industry-wide progress and innovation on key sustainability metrics.

**How have you influenced, or are you attempting to influence their position?**

DTE Energy tracks the activities of all of the associations of which the company is a member. Further, we work to provide input to align trade association positions with DTE Energy's position, and we participate in their advocacy to policy makers to the extent possible.

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**Trade association**

Nuclear Energy Institute

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

From NEI's website: We need deep decarbonization to hit our climate goals. Nuclear power can get us there. As our largest source of clean energy, nuclear power is critical to reduce carbon emissions. Wind, solar and geothermal are on the rise, but the smartest policies will ensure these technologies complement, not replace, nuclear's clean energy production. Protecting and growing our use of nuclear technologies are important ways to make a dent in greenhouse gases and help us make meaningful progress to address climate change.

**How have you influenced, or are you attempting to influence their position?**

DTE Energy tracks the activities of all of the associations of which the company is a member. Further, we work to provide input to align trade association positions with DTE Energy's position, and we participate in their advocacy to policy makers to the extent possible.

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**Trade association**

Interstate Natural Gas Association of America

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

Protecting and improving the environment is a top priority for natural gas and pipeline companies. INGAA's members deliver clean, abundant, affordable natural gas throughout North America. Natural gas is the cleanest burning fossil fuel. As demand for energy increases, expanded use of natural gas can help improve air quality across the country, especially when used to replace more polluting energy sources. Compared with other primary energy sources, natural gas emits significantly fewer pollutants that threaten our planet – and the natural gas industry continues to invest in even cleaner-burning technologies. Natural gas pipelines make these environmental benefits possible. Minimizing methane emissions remains a top priority for INGAA member companies. Many INGAA members participate in voluntary programs and initiatives focused on minimizing methane emissions, communication and collaboration across the natural gas value chain, and driving new and innovative technologies and processes. INGAA supports the prudent development of natural gas, which not only is the cleanest fossil fuel, but also is helping to support development of renewable fuels because natural gas can provide fast-ramping generation for times when renewable sources are unavailable.

**How have you influenced, or are you attempting to influence their position?**

DTE Energy tracks the activities of all of the associations of which the company is a member. Further, we work to provide input to align trade association positions with DTE Energy's position, and we participate in their advocacy to policy makers to the extent possible.

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**Trade association**

CEO Climate Dialogue

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

The CEO Climate Dialogue (CEO Dialogue) is a group of 23 companies with over \$1.4 trillion in combined annual revenue and 4 leading environmental nonprofit organizations that are committed to advancing climate action and durable federal climate policy in the U.S. Congress. The goal of the group is to urge the President and Congress to enact a market-based approach to climate change in accordance with a set of six Guiding Principles for climate legislation. We believe it is urgent that the President and Congress put in place a long-term federal policy as soon as possible to protect against the worst impacts of climate change. Acting sooner rather than later allows us to meet the climate challenge at the least possible cost and put the required investments in place in time to meet the necessary emissions targets. Adherence to the full set of the following principles can help ensure success: 1. Significantly reduce U.S. greenhouse gas emissions 2. Effective - timely and certainty 3. Market-based 4. Durable and responsive 5. Do no harm 6. Promote equity More details of the Guiding Principles are provide at [www.ceoclimatedialogue.org/guiding-principles](http://www.ceoclimatedialogue.org/guiding-principles)

**How have you influenced, or are you attempting to influence their position?**

DTE Energy's CEO has been involved since the inception of the CEO Climate Dialogue and worked to influence the six guiding principles.

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**C12.3d**

**(C12.3d) Do you publicly disclose a list of all research organizations that you fund?**

No

**C12.3e**

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**(C12.3e) Provide details of the other engagement activities that you undertake.**

DTE Energy is a member of numerous councils, organizations and collaboratives that conduct research to advance knowledge and deploy solutions in areas related to climate mitigation and adaptation. Organizations of which DTE is a participating member include:

- Carbon Capture Coalition - facilitated by the Great Plains Institute
- Center for Climate and Energy Solutions' (C2ES) Business Environmental Leadership Council (BELC)
- Electric Power Research Institute (EPRI) programs related to climate and sustainability
- Gulf Coast Carbon Collaborative - facilitated by U.S. Business Council for Sustainable Development
- Midcontinent Power Sector Collaborative - facilitated by the Great Plains Institute
- Midcontinent Transportation Electrification Collaborative - facilitated by the Great Plains Institute
- Natural Gas Downstream Initiative - facilitated by MJ Bradley
- Natural Gas Supply Collaborative - facilitated by MJ Bradley

**C12.3f**

**(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?**

Climate change policy, initiatives, and mandatory requirements are managed by the Vice President, Environmental in conjunction with other key leaders of DTE business units and the DTE Vice President, Corporate Strategy. The VP, Environmental, in conjunction with business unit peers, reports on key environmental issues to the DTE Energy President and Chief Executive Officer (CEO) during monthly (or more frequent) meetings of the Government, Regulatory, and Community (GRC) Committee. Major recommendations related to corporate environmental strategies, including climate change, are developed by this Committee. Direct and indirect activities with trade organizations, research groups, and other stakeholders that influence policy are taken into account in developing recommendations by the GRC.

**C12.4**

**(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).**

**Publication**

In voluntary sustainability report

**Status**

Complete

**Attach the document**

2020 DTE-ESG-and-Sustainability-Report.pdf

**Page/Section reference**

The entire document contains information pertaining to governance, strategy, risks and opportunities, emissions figures, emissions targets, and other metrics.

**Content elements**

Governance  
Strategy  
Risks & opportunities  
Emissions figures  
Emission targets  
Other metrics

**Comment**

The attached document is DTE's 2020 ESG Sustainability Report completed in accordance with the EEI/AGA ESG Template.

**Publication**

In voluntary sustainability report

**Status**

Complete

**Attach the document**

2020 DTE GRI Report.pdf

**Page/Section reference**

Pages 22-30 provide environmental figures and targets, including data for energy, water, biodiversity, emissions, effluents & waste, and environmental compliance. Governance and strategy information is included in the GRI 102: GENERAL DISCLOSURES section.

**Content elements**

Governance  
Strategy  
Risks & opportunities  
Emissions figures  
Emission targets  
Other metrics

**Comment**

The attached document is DTE's 2020 ESG and Sustainability Report completed in accordance with Global Reporting Initiative Standards.

**Publication**

In other regulatory filings

**Status**

Complete

**Attach the document**

2021 DTE 10-K.pdf

**Page/Section reference**

The entire document contains information about governance, strategy, risks & opportunities, emissions targets, and other metrics.

**Content elements**

- Governance
- Strategy
- Risks & opportunities
- Emission targets
- Other metrics

**Comment**

**Publication**

In other regulatory filings

**Status**

Complete

**Attach the document**

2019 DTE IRP summary\_v12.pdf

**Page/Section reference**

Governance, strategy, risks & Opportunities, emissions targets, and other metrics are included throughout the entire document.

**Content elements**

- Governance
- Strategy
- Risks & opportunities
- Emission targets
- Other metrics

**Comment**

The attached document summarizes the Integrated Resource Plan (IRP) that was submitted to the Michigan Public Service Commission in March, 2019.

C15. Signoff

C-FI

**(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.**

C15.1

**(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.**

	Job title	Corresponding job category
Row 1	Vice President, Environmental Management and Safety	Other, please specify (Vice President)

SC. Supply chain module

SC0.0

**(SC0.0) If you would like to do so, please provide a separate introduction to this module.**

DTE Energy provides electricity and natural gas to customers in our DTE Electric and DTE Gas service territories in Michigan. The annual average GHG emissions per KWh of electricity or per standard cubic feet (scf) of natural gas can be calculated by customers using emission factors provided by EPA. DTE Electric also provides an estimate of GHG intensity of electricity delivered to our customers in the EEI Electric Company Carbon Emissions and Electricity Mix Reporting Database which is available to customers of for use in calculating their Scope 2 emissions: <https://www.eei.org/Pages/CO2Emissions.aspx>

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	12177000000

SC0.2

(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?

Yes

SC0.2a

(SC0.2a) Please use the table below to share your ISIN.

	ISIN country code (2 letters)	ISIN numeric identifier and single check digit (10 numbers overall)
Row 1	US	2333311072

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Customer base is too large and diverse to accurately track emissions to the customer level	DTE Energy provides two commodities to customers: Electricity and Natural Gas. Emissions from customer energy use can be calculated by applying emission factors to each customer's total energy usage. We do not see a need at this time to allocate emissions to customers when estimated emissions can be calculated by the customer.

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

No

SC1.4b

(SC1.4b) Explain why you do not plan to develop capabilities to allocate emissions to your customers.

DTE Energy provides electricity and gas to our customers. The GHG emissions from the electricity delivered by DTE Electric to our customers can be calculated using EPA's e-GRID emission factors for electricity purchased off of the energy grid or by using an estimate of GHG intensity of electricity delivered to our customers in the EEI Electric Company Carbon Emissions and Electricity Mix Reporting Database which is available to customers for use in calculating their Scope 2 emissions: <https://www.eei.org/Pages/CO2Emissions.aspx>, or based on contracts and/or bilateral agreements with electricity providers such as renewable or other low-carbon energy providers.

Customers can calculate emissions from DTE Gas deliveries using the volume of gas delivered and billed by DTE Gas times an emission factor for natural gas provided by EPA or other sources.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

## SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

Yes

## SC2.2a

(SC2.2a) Specify the requesting member(s) that have driven organizational-level emissions reduction initiatives, and provide information on the initiatives.

**Requesting member**

General Motors Company

**Initiative ID**

2020-ID1

**Group type of project**

Other, please specify (Procurement of renewable energy)

**Type of project**

Other, please specify (Investment in renewable energy generation)

**Description of the reduction initiative**

Addressing climate change must be a cross-industry effort, so we've expanded our MIGreenPower program to our large business and industrial customers. Introduced in 2017, MIGreenPower is a voluntary renewable energy program that provides DTE's residential and business customers with an easy and affordable way to reduce their carbon footprint by increasing the percentage of their energy use attributable to local wind and solar energy sources, up to 100%. Participating customers see a slight increase in their monthly bill while knowing they are helping to support Michigan's clean energy future. DTE announced with our 2019 Integrated Resource Plan that we're expanding this voluntary initiative to meet the needs of our largest business and industrial customers who are working to meet their own sustainability goals, enabling them to invest in renewable energy, which will help drive our state toward an even cleaner future. The program is designed to grow and represents a progressive approach to fill market demand. In April 2020, General Motors and DTE Energy announced a deal to source 500,000 MWh of solar energy as part of DTE's MIGreenPower program. This follows an initial investment of 300,000 MWh of wind energy purchased by GM in February 2019, bringing the total amount to more than 800,000 MWh, or the amount of electricity consumed by more than 100,000 homes in an average year. GM's investment in MIGreenPower should deliver enough clean energy to supply GM's Southeast Michigan facilities by 2023, including the Renaissance Center global headquarters in Detroit, the GM Global Technical Center in Warren, the Milford Proving Ground in Milford and two local assembly plants; Orion and Detroit-Hamtramck, as well as several smaller GM sites across Southeast Michigan. This investment will fund two new DTE solar parks that are currently in development and will be the largest in the state. GM's initial MIGreenPower commitment was used to fund three wind parks scheduled to achieve operation at the end of 2020. Based on similar projects, DTE expects this investment to support approximately 1,500 clean energy jobs in Michigan during project instruction. This investment is in line with GM's accelerated renewable energy commitment to source 100% of GM's U.S. facilities with renewable energy by 2030 and global facilities by 2040.

**Emissions reduction for the reporting year in metric tons of CO2e**

**Did you identify this opportunity as part of the CDP supply chain Action Exchange?**

No

**Would you be happy for CDP supply chain members to highlight this work in their external communication?**

Yes

## SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

No, I am not providing data

## Submit your response

**In which language are you submitting your response?**

English

**Please confirm how your response should be handled by CDP**

	I am submitting to	Public or Non-Public Submission	Are you ready to submit the additional Supply Chain questions?
I am submitting my response	Investors Customers	Public	Yes, I will submit the Supply Chain questions now

**Please confirm below**

I have read and accept the applicable Terms