Welcome to your CDP Water Security Questionnaire 2023

W0. Introduction

W0.1

(W0.1) Give a general description of and introduction to your organization.

DTE Energy (NYSE:DTE) is a Detroit-based diversified energy Company involved in the development and management of energy-related businesses and services nationwide. Its operating units include an electric Company serving 2.3 million customers in Southeast Michigan and a natural gas Company serving 1.3 million customers in Michigan. The DTE portfolio includes energy businesses focused on custom energy solutions, renewable energy generation and energy marketing and trading. Through our commitment to cleaner energy, DTE Electric plans to reduce CO2 emissions by 90% to produce cleaner energy while keeping it safe, reliable and affordable. DTE Electric and Gas aspire to achieve net zero carbon emissions by 2050. DTE is committed to serving with its energy through volunteerism, education and employment initiatives, philanthropy and economic progress.

Information about DTE is available at dteenergy.com, empoweringmichigan.com, twitter.com/dte_energy and facebook.com/dteenergy.

W-EU0.1a

(W-EU0.1a) Which activities in the electric utilities sector does your organization engage in?

Electricity generation
Distribution

W-EU0.1b

(W-EU0.1b) For your electricity generation activities, provide details of your nameplate capacity and the generation for each technology.

	Nameplate capacity (MW)	% of total nameplate capacity	Gross electricity generation (GWh)
Coal – hard	5,660	43	23,052
Lignite	0	0	0
Oil	1,998	15	1,011
Gas	1,947	15	5,623
Biomass	0	0	0
Waste (non-biomass)	0	0	0
Nuclear	1,141	9	6,649
Fossil-fuel plants fitted with carbon capture and storage	0	0	0
Geothermal	0	0	0
Hydropower	1,122	8	0
Wind	1,342	10	4,074
Solar	67	1	83
Marine	0	0	0
Other renewable	0	0	0
Other non-renewable	0	0	0
Total	13,277	100	39,991

W-OG0.1a

(W-OG0.1a) Which business divisions in the oil & gas sector apply to your organization?

Midstream/Downstream

W0.2

(W0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date
Reporting year	January 1, 2022	December 31, 2022

W0.3

(W0.3) Select the countries/areas in which you operate.

United States of America

W0.4

(W0.4) Select the currency used for all financial information disclosed throughout your response.

USD

W0.5

(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.

Companies, entities or groups in which an equity share is held

W0.6

(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?

Yes

W0.6a

(W0.6a) Please report the exclusions.

Exclusion	Please explain
Electric Generation Operations	DTE Energy is reporting on its facilities that operate under National Pollutant Discharge Elimination System (NPDES) permits and/or local sanitary sewer permits. The water usage data is adjusted based on the DTE ownership percentage of each facility. (e.g. 81.39% Belle River Power Plant, 49% Ludington Pump Station.) DTE Energy's largest water withdrawal is from our steam electric power generating stations within the DTE Electric organization. DTE Electric facilities that are included are: Belle River Power Plant, Blue Water Energy Center, Fermi II Nuclear Power Plant, Greenwood Energy Center, Monroe Power Plant, River Rouge Power Plant, Saint Clair Power Plant, Sibley Quarry, Trenton Channel Power Plant, and various electric manholes/vaults that discharge to the sanitary sewer within our service territory. DTE Energy does not track and therefore, is not including, water inputs and outputs from facilities unless specifically monitored as part of a NPDES permit or local sanitary sewer permit. Also, DTE Energy is not including information from local sanitary sewer permits required as part of a short term, less than 1 year, construction project. The water withdrawal for general use and short-term permitted construction projects is significantly less than that of the steam electric power generating stations which are included in this report. All of the DTE Electric facilities included in this report are located in Michigan.
Gas Distribution and Transmission Operations	DTE Energy is reporting on its facilities that hold National Pollutant Discharge Elimination System (NPDES) permits and/or local sanitary sewer permits based on ownership of that facility. The only DTE Gas facility that is included is the Taggart Compressor Station. The company does not track all types of water inputs and outputs for its gas distribution, transmission and storage operations, which are generally not included in this report. The water withdrawal at these types of facilities is significantly less than that of

	the steam electric power generating stations which are included in this report. The one exception to this exclusion is Taggart Compressor Station. This facility holds a NPDES Permit and therefore is included in the disclosure. All of the DTE Gas facilities included in this report are located in Michigan.
Service Centers, Call Centers and Office Buildings	DTE Energy is reporting on its facilities that operate under National Pollutant Discharge Elimination System (NPDES) permits and/or local sanitary sewer permits based on ownership of that facility. The company does not track all types of water inputs and outputs for its service centers, call centers and office buildings, which are generally not included in this report with the exception of the Warren Service Center which has a sanitary sewer permit. The water withdrawal at these types of facilities is significantly less than that of the steam electric power generating stations. In general, the source of water at these facilities is purchased from local municipalities. All of the DTE Electric and DTE Gas facilities included in this report are located in Michigan.
Non-Utility Operations	DTE Energy is reporting on its facilities that hold National Pollutant Discharge Elimination System (NPDES) permits and/or local sanitary sewer permits based on ownership of that facility. DTE Vantage Facilities that are included are: Birnamwood Renewable Energy, East Dakotas Renewable Energy, Kewaunee Renewable Energy, New Chester Renewable Energy, Rosendale Renewable Energy, EES Coke, and DTE Northwind. DTE Energy does not track and therefore, is not including, water inputs and outputs from facilities unless specifically included as part of a NPDES permit or local sanitary sewer permit. All other non-utility operation water usage is not reported. The DTE Vantage facilities included in this report are located in Michigan, Wisconsin, and South Dakota.
Other Utility Operations	DTE Energy is a minority owner of a pumped storage facility, Ludington Pump Storage Hydroelectric Power Plant, in Michigan. DTE Energy does not track and therefore, is not including, water inputs and outputs from this facility unless specifically monitored as part of a NPDES permit. The water usage data is adjusted based on the DTE ownership percentage. (e.g. 49% Ludington Pump Station.) This facility is located in Michigan.

W0.7

(W0.7) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization.	Provide your unique identifier
Yes, an ISIN code	2333311072

W1. Current state

W1.1

(W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital	Important	Direct: Sufficient amounts of good quality freshwater are vital for non-contact cooling at our steam electric generating plants as currently designed. We could not supply sufficient electricity, an essential product for customers, without this resource. Additionally, water quality is a significant concern, as certain chemicals in water can affect operations through pipe and condenser tube corrosion. We have measures in place to resolve issues related to small changes in water quality. For example, DTE uses certain polymers to reduce conductivity of water before it is used in steam electric generating plants. In the future, with the transition of the power generation base, including the reduction in coal power generation, and the increase in renewable power generation, the importance of direct use of water will decrease from vital to important. Indirect: Sufficient amounts of good quality freshwater are required at facilities throughout the DTE Energy organization. Municipal water supply for employee use is necessary to support all our operations. Additionally, freshwater is necessary for the production and processing of fuel used for the company's power generating plants.

			In terms of DTE's supply chain, reduction in the company's use of coal as a fuel source in the future (2023 - 2032) will make water a less important aspect of the fuel supply process.
Sufficient amounts of recycled, brackish and/or produced water available for use	Vital	Neutral	Direct: Sufficient amounts of recycled water are required for non-contact cooling at two of our steam electric generating plants (Fermi 2 and Greenwood). In 2022 the amount of water that these two facilities recycled was equivalent to approximately 38% of DTE Energy's total water withdrawal, giving it the direct use rating of "vital". Indirect: Although the indirect use of recycled, brackish and/or produced water has not been formally evaluated, it is estimated that this water input is not a significant part of the value chain for DTE. Freshwater availability is not a concern, giving recycled water an importance rating of "neutral."

W1.2

(W1.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water withdrawals – total volumes	100%	Other, please specify Monitoring frequency varies based on permit requirements.	Total withdrawals are calculated from withdrawal pump nameplate capacity and pump run time for surface water and groundwater sources and/or through metering for municipal water sources.	Of the 20 facilities included in this disclosure, 100% are measured and monitored for withdrawal volumes. The majority of the water withdrawn from the various sources is in the form of noncontact cooling water for our electric generating facilities. These freshwater withdrawals are measured and monitored for monthly NPDES reporting, as well as annual water use reporting for the state of Michigan. Many of

				the smaller volume water withdrawals may be monitored and measured for semi-annual and annual reporting to the local municipalities. For all of the facilities that hold a water related permit, we issue reports on withdrawal as required by federal, state and/or local regulations.
Water withdrawals – volumes by source	76-99	Other, please specify Monitoring frequency varies based on permit requirements.	Total withdrawals are calculated from withdrawal pump nameplate capacity and pump run time for surface water and groundwater sources and/or through metering for municipal water sources.	Of the 20 facilities included in this disclosure, up to 99% are measured and monitored for withdrawal volumes. The majority of the water withdrawn from the various sources is in the form of noncontact cooling water for our electric generating facilities. These freshwater withdrawals are measured and monitored for monthly NPDES reporting, as well as annual water use reporting for the state of Michigan. Many of the smaller volume water withdrawals may be monitored and measured for semi-annual and annual reporting to the local municipalities. Other surface water withdrawals are made for dust control purposes, primarily at electric generation and coal processing facilities. These withdrawals are typically not measured or monitored. Other withdrawals are from ground water, rainwater and municipal water

				supplies; these withdrawals may not be measured, and account for <1% of the total.
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	Not relevant			DTE does not own or operate any facilities that have produced water associated with oil and gas activities.
Water withdrawals quality	76-99	Other, please specify Monitoring frequency varies based on permit requirements.	The analytical methods required under the various permits are performed according to 40 CFR Part 136.	Of the 20 facilities included in this disclosure, up to 99% are measured and monitored for water withdrawals quality. We monitor water withdrawal quality at the facility level in accordance to the federal, state, and/or local water related permit. For example, per NPDES permit requirements, at all our power plants, we measure temperature of intake waters continuously. In addition to pH, total suspended solids (TSS), oil and grease, and total residual chlorine (TRC), some of our facilities monitor mercury as specified in the site's mercury Pollutant Minimization Program (PMP. Many of our facilities that withdraw water related to dewatering activities may only need to monitor for pH and oil and grease. Some of our facilities are only required to monitor and measure flow.

Water discharges – total volumes	100%	Other, please specify Monitoring frequency varies based on permit requirements.	Discharge is calculated by subtracting estimated total consumption from estimated total withdrawals.	Of the 20 facilities included in this disclosure, 100% are measured and monitored for water discharge volumes. Most of the total water discharged is in the form of noncontact cooling water from our electric generating facilities. These discharges from our power plants are measured and monitored for monthly NPDES reporting, as well as annual water use reporting for the state of Michigan. Our various other facilities are measured and monitored semi-annually and/or annually in accordance with the related water discharge permit. Reports are required by federal, state and /or local regulations. For example, the Belle River Power Plant can discharge a maximum of 964.6 MGD of treated processed water and an unspecified amount of stormwater through the main outfall. The NPDES permit requires routine monitoring of this flow.
Water discharges – volumes by destination	100%	Other, please specify Monitoring frequency varies based on permit requirements.	Discharge is calculated by subtracting estimated total consumption from estimated total withdrawals.	Of the 20 facilities included in this disclosure, 100% are measured and monitored for water discharge volumes by destination. Most of the water discharged by DTE Energy is in the form of noncontact cooling water from our electric generating facilities to surface waters. These discharges are returned to surface waters, and are measured and monitored for monthly NPDES reporting, as

				well as annual water use reporting for the state of Michigan. All permitted water discharges are reported as required by federal, state and local regulations.
Water discharges – volumes by treatment method	76-99			On Site Treatment: Of the 20 facilities included in this disclosure, most of the water discharged (76-99%) is associated with our electric generating facilities, and are treated on site with various methods (e.g. chemical clarification, plain clarification, oil/water separation). Off Site Treatment: The remaining discharges are largely associated cooling and/or dewatering needs at our facilities and are either discharged without treatment, if not contaminated, or if potential to be contaminated, the wastewater is collected and hauled to an independent off-site municipal treatment plants or private treatment storage & disposal facilities (TSDF) to be treated. These discharges are measured/monitored by the offsite facility.
Water discharge quality – by standard effluent parameters	76-99	Other, please specify Monitoring frequency varies based on permit requirements.	The analytical methods required under the various permits are performed according to 40 CFR Part 136.	On Site Treatment: Water quality standards for most discharges are provided in the NPDES permits associated with DTE facilities. Of the 20 facilities included in this disclosure, 76-99% of the water discharge is

				covered by an NPDES permit. The NPDES program is administered by the state in which the discharge occurs. Off Site Treatment: Water quality standards for the remaining discharges are governed by the permits associated with the municipal treatment plants or private TSDFs, as applicable
Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)	Not relevant			
Water discharge quality – temperature	26-50	Other, please specify Monitoring frequency varies based on permit requirements.	The analytical methods required under the various permits are performed according to 40 CFR Part 136.	Of the 20 facilities that hold a water permit, only 8 facilities are monitored for temperature at our water source and/or at one or more of our water discharge point(s) at a facility.
Water consumption – total volume	26-50	Other, please specify The inputs for the water consumption due to evaporation are monitored according to the NPDES permit requirements, but water consumption is reported annually.		Water consumption due to evaporation is calculated for 8 of the DTE facilities that hold a water related permit and reported annually to the State of Michigan. Consumption for these operations is neither measured nor monitored directly. However, measured and monitored data is used in the formulas for calculating water consumption, which is

				accepted industry practice. The figures reported to the State of Michigan represents the evaporative loss, which is calculated for each facility using average monthly heat input, and regional and seasonal coefficients for evaporative loss; these values are then added and reported as total consumption for the facility. The consumption volume is not associated with other operations such as potable water needs, groundwater withdrawal/discharges, and dust control, which we do not monitor.
Water recycled/reused	1-25	Daily	Recirculation pump capacity is multiplied by the number of hours of operation to determine the amount of water recycled/reused.	Cooling water is recycled at two of our steam electric generating plants (Fermi 2 and Greenwood). Recirculation pump capacity is multiplied by the number of hours of operation to determine the amount of water recycled/reused.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Unknown		Fully functioning Water Supply, Adequate Sanitation and Hygiene (WASH) is provided for all workers throughout the organization. Our operations are located in well-developed areas with modern facilities where WASH is readily available. WASH services are metered for billing purposes, which are mainly provided by local municipalities.

W-EU1.2a

(W-EU1.2a) For your hydropower operations, what proportion of the following water aspects are regularly measured and monitored?

	% of sites/facilities/operations measured and monitored	Please explain
Fulfilment of downstream environmental flows		DTE Energy is a minority owner of a pumped storage facility in Michigan; this plant generates electricity and is regulated. Operations and water reporting for this facility is performed by the majority owner. DTE Energy does not monitor this aspect.
Sediment loading		DTE Energy is a minority owner of a pumped storage facility in Michigan; this plant generates electricity and is regulated. Operations and water reporting for this facility is performed by the majority owner. DTE Energy does not monitor this aspect.
Other, please specify		

W1.2b

(W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, how do they compare to the previous reporting year, and how are they forecasted to change?

	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Please explain
Total withdrawals	3,595,000	About the same		Lower	Facility closure	The thresholds for comparison to previous years are as follows: >50% change = “Much Lower”/”Much Higher”, 25-50% change = “Lower”/”Higher”, and <25% change = “About the Same.” Total withdrawals are calculated from circulation pump nameplate capacity and pump run time for surface water sources, and through metering for

						municipal water sources. The amount of withdrawal in 2022 was approximately 5% lower than in 2021. DTE Energy commenced operation of Blue Water Energy Center and retired two additional coal fired power plants (St. Clair Power Plant and Trenton Power Plant) in 2022. DTE Energy is the process of ceasing operation of its coal fired generation plants. DTE Energy is expected to end all coal fired power plants in 2032.
Total discharges	3,526,000	About the same		Lower	Facility closure	Discharge is calculated by subtracting estimated total consumption from estimated total withdrawals. The amount of discharge in 2022 was approximately 5% lower than in 2021. DTE Energy commenced operation of Blue Water Energy Center and retired two additional coal fired power plants (St. Clair Power Plant and Trenton Power Plant) in 2022. DTE Energy is the process of ceasing operation of its coal fired generation plants, which will result in less total future withdrawals in the company's operations. DTE Energy is expected to end all coal fired power plants in 2032.
Total consumption	68,000	About the same		About the same		This figure represents the evaporative loss, which is calculated for each facility using average monthly heat input, and regional and seasonal coefficients for evaporative loss; these values are then added and reported as total consumption for the company. The amount of consumption in 2022 was approximately 7% lower than in 2021. Major changes to total consumption are not anticipated in the near future.

W-OG1.2c

(W-OG1.2c) In your oil & gas sector operations, what are the total volumes of water withdrawn, discharged, and consumed (by business division), how do they compare to the previous reporting year, and how are they forecasted to change?

	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Please explain
Total withdrawals - midstream/downstream	7,645	About the same				DTE Energy does not track all types of water inputs and outputs for its gas distribution, transmission and storage operations. The water withdrawal at these types of facilities is significantly less than that of the steam electric power generating stations. DTE Energy does, however, track the water usage at Taggart Compressor Station and various dewatered manholes. These facilities hold a NPDES or POTW Permit and are included in this disclosure. The thresholds for comparison to previous years are as follows: >50% change = "Much Lower"/"Much Higher", 25-50% change = "Lower"/"Higher", and <25% change = "About the Same." The amount of withdrawal in 2022 was approximately 9% higher than in 2021.
Total discharges – midstream/downstream	7,428	About the same				The thresholds for comparison to previous years are as follows: >50% change = "Much Lower"/"Much Higher", 25-50% change =

						"Lower"/"Higher", and <25% change = "About the Same." The amount of discharge in 2022 was approximately 11% higher than in 2021.
Total consumption – midstream/downstream	237	About the same				The only DTE Gas facility where water consumption is tracked is at the Taggart compressor station. The thresholds for comparison to previous years are as follows: >50% change = "Much Lower"/"Much Higher", 25-50% change = "Lower"/"Higher", and <25% change = "About the Same." The amount of consumption in 2022 was approximately 19% lower than in 2021.

W1.2d

(W1.2d) Indicate whether water is withdrawn from areas with water stress, provide the proportion, how it compares with the previous reporting year, and how it is forecasted to change.

	Withdrawals are from areas with water stress	Identification tool	Please explain
Row 1	No	WRI Aqueduct	DTE used the Water Risk Atlas tool and location coordinates from the 20 facilities included in this report to assess the water stress. The model showed that 90% of the facilities were located in low water stress and the other 10% of the facilities were located in low-medium water stress. The two facilities that are in the "Low-Medium" category are Kewaunee Renewable Energy, LLC and New Chester Renewable Energy, LLC. These two facilities are located in Wisconsin.

			Based on the WRI Aqueduct future analysis and knowledge that DTE is moving away from coal-fired power generation, DTE expects that the water stress will remain unchanged.

W1.2h

(W1.2h) Provide total water withdrawal data by source.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	3,593,000	About the same		Sufficient amounts of good quality freshwater are relevant because they are used for non-contact cooling at our steam electric generating plants as currently designed. We could not supply electricity, an essential product for customers, without this resource. Water withdrawal is determined through a calculation involving river or lake intake, which is estimated from pump capacity and run time. For example, the Monroe Power Plant withdraws water from Lake Erie and Raisin River, the magnitude of which is not directly measured, but calculated through this method. The amount of fresh surface water withdrawal in 2022 was approximately 5% higher than in 2021 . The values remained about the same because DTE Energy commissioned Blue Water Energy Center and decommissioned Trenton Channel Power Plant and St. Clair Power Plant in 2022. DTE is in the process of retiring several coal-fired power plants, which is expected to result in less fresh surface water withdrawals in the company's operations.

Brackish surface water/Seawater	Not relevant				Withdrawal from brackish surface water/seawater is not part of our operations, and we do not expect it to be part of our operations in the future
Groundwater – renewable	Relevant	2,000	About the same		The amount of groundwater withdrawn in 2022 was approximately the same as in 2021. Withdrawal from most of the groundwater is calculated from pump capacity and run time, the balance is calculated from a direct measurement of the hauling container.
Groundwater – non-renewable	Not relevant				Withdrawal from groundwater - non-renewable sources is not part of our operations, and we do not expect it to be part of our operations in the future.
Produced/Entrained water	Not relevant				Withdrawal from produced/entrained water is not part of our operations, and we do not expect it to be part of our operations in the future.
Third party sources	Relevant	1,000	About the same		Greenwood Energy Center withdrawals city water to provide makeup water to the cooling loop. This use is monitored and reported according to the requirements for Water Use Reporting to the State of Michigan. Trenton Channel withdrawals city water at its facility and is monitored and reported according to the POTW permit held at the facility.

W1.2i

(W1.2i) Provide total water discharge data by destination.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison	Please explain

				with previous reporting year	
Fresh surface water	Relevant	3,525,000	About the same		Discharge by destination is calculated by subtracting the estimated fresh surface water consumption from the estimated water withdrawn. The amount of discharge in 2022 was approximately 5% lower than in 2021. The values remained about the same because DTE Energy commissioned Blue Water Energy Center and retired Trenton Channel Power Plant and St. Clair Power Plant. As water withdrawals decrease in the company's future due to diversifying DTE's power generation fleet, discharges are also expected to decrease.
Brackish surface water/seawater	Not relevant				Discharge to brackish surface water/seawater is not part of our operations. DTE does not project including this as part of our operations in the future.
Groundwater	Not relevant				Discharge to groundwater is not accounted for as part of our operations. DTE does not project including this as part of our operations in the future.
Third-party destinations	Relevant	1,000	About the same		While many DTE facilities discharge to municipal/industrial wastewater treatment systems, only the wastewater accounted for in the facilities POTW permit that is sent to a municipal/industrial wastewater treatment system is included in this disclosure. The amount of discharge reported in 2022 is approximately the same amount as discharged in 2021. In the future, it is expected that municipal/industrial discharges will remain about the same as we continue to follow our company-wide water use reduction strategy.

W1.2j

(W1.2j) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	Primary reason for comparison with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Not relevant					
Secondary treatment	Not relevant					
Primary treatment only	Relevant	3,525,000	About the same		91-99	Of the total wastewater discharged from our 20 facilities included in this disclosure, the majority of the wastewater discharged is associated with our electric generating facilities, and is treated on site with various methods (e.g. sedimentation, chemical clarification, plain clarification, oil/water separation.). The amount of discharged water that underwent Primary Treatment in 2022 was 5% lower than in 2021 . The thresholds for comparison to previous years are as follows: >50% change = “Much Lower”/”Much Higher”, 25-50% change = “Lower”/”Higher”, and <25% change = “About the Same.” We

						anticipate that the amount of water undergoing Primary Treatment will decrease as we begin to retire our coal power plants.
Discharge to the natural environment without treatment	Relevant	200	Much lower		Less than 1%	At our Fermi 2 Power Plant we discharged groundwater, not process water, that was withdrawn as a result of project construction to surface water without treatment. The amount of water that was discharged without treatment in 2022 was 53% lower than in 2021. The thresholds for comparison to previous years are as follows: >50% change = “Much Lower”/”Much Higher”, 25-50% change = “Lower”/”Higher”, and <25% change = “About the Same.” We anticipate that the amount of water discharged without treatment will vary depending on rainfall and water levels in the surrounding areas.
Discharge to a third party without treatment	Relevant	800	Higher		Less than 1%	These discharges are largely associated with the discharges from our facilities due to dewatering events, e.g electric and gas manholes, and/or process wastewater discharged via a POTW permit. This wastewater is treated by independent off-site municipal treatment plants or private treatment storage & disposal facilities (TSDF). These

						discharges are returned to surface waters in most cases, and are measured/monitored by the offsite facility. The amount of water that discharged to a third party without treatment in 2022 was 38% higher than in 2021. The thresholds for comparison to previous years are as follows: >50% change = “Much Lower”/”Much Higher”, 25-50% change = “Lower”/”Higher”, and <25% change = “About the Same.” In the future, it is expected that municipal/industrial discharges will remain about the same despite an increase in 2022.
Other						

W1.3

(W1.3) Provide a figure for your organization’s total water withdrawal efficiency.

	Revenue	Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend
Row 1	19,200,000,000	3,595,000	5,340.7510431154	The revenue reported is for the total company. The total water withdrawal is only for the scope as defined in W0.6a of this disclosure. The total water withdrawal efficiency is expected to increase as we retire coal-fired power plants, thus reducing the total water

				withdrawal volume, and continue to rely on a more environmentally sustainable generation portfolio.

W-EU1.3

(W-EU1.3) Do you calculate water intensity for your electricity generation activities?

Yes

W-EU1.3a

(W-EU1.3a) Provide the following intensity information associated with your electricity generation activities.

Water intensity value (m3/denominator)	Numerator: water aspect	Denominator	Comparison with previous reporting year	Please explain
90	Freshwater withdrawals	MWh	About the same	Water intensity is calculated using the total water withdrawn from surface water sources for DTE Electric (m3), and total electric energy produced from DTE Energy (MWh). Water intensity decreased 6% in 2022 compared to the previous year. Water intensity is expected to decrease with DTE's strategy of retiring coal-fired power plants and replacing them with less water-intensive generation units. This intensity metric is used internally to determine the efficiency of electric generation facilities in terms of water.

W-OG1.3

(W-OG1.3) Do you calculate water intensity for your activities associated with the oil & gas sector?

No, and we have no plans to do so in the next two years

W1.4

(W1.4) Do any of your products contain substances classified as hazardous by a regulatory authority?

	Products contain hazardous substances	Comment
Row 1	No	

W1.5

(W1.5) Do you engage with your value chain on water-related issues?

	Engagement	Primary reason for no engagement	Please explain
Suppliers	No		
Other value chain partners (e.g., customers)	No		

W2. Business impacts

W2.1

(W2.1) Has your organization experienced any detrimental water-related impacts?

No

W2.2

(W2.2) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

	Water-related regulatory violations	Fines, enforcement orders, and/or other penalties	Comment

Row 1	Yes	Enforcement orders or other penalties but none that are considered as significant	DTE Electric reported 8 NPDES permit non-compliance events. Three of these non-compliance events were related to one or more exceedance of a daily permit limit. Three of these events were related to one or more daily uncharacteristic discharge observations due to system upsets at our Trenton Channel Power Plant. The remaining non-compliance events in 2022 were related to an unauthorized wastewater bypass and a missed sample.

W3. Procedures

W3.1

(W3.1) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health?

	Identification and classification of potential water pollutants	How potential water pollutants are identified and classified
Row 1	Yes, we identify and classify our potential water pollutants	Water pollutants are identified and classified as part of the application process for the National Pollutant Discharge Elimination System (NPDES) permits and the POTW permits which is part of DTE's established standard. As part of the permitting process the permit authority requires us to assess water quality parameters specific to our industry and local treatment limitations. We must also comply with regulatory requirements related to accidental spills and other incidents related to release of hazardous materials at our facilities. In addition, DTE follows an established standard in conducting environmental impact assessments as part of our NPDES licensing process for plants to identify and classify potential water pollutants associated with business activity that could have a detrimental impact on water ecosystems or human health. For example, a potential detrimental impact considered in DTE's assessments is thermal discharge. DTE categorizes pollutants into two groups based on toxicity level (i.e., toxic pollutants and other pollutants). The assessment of overall impact includes chronic/acute toxicity, persistence, and bioaccumulation. DTE Energy updates thresholds based on changes to permit requirements.

W3.1a

(W3.1a) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities.

Water pollutant category

Other physical pollutants

Description of water pollutant and potential impacts

Coal combustion residuals (CCR) consist of fly ash, bottom ash, boiler slag, and flue gas desulfurization (FGD) solids produced at power plants burning fossil fuel. Potential impacts to surface waters include changes in pH and increased Total Suspended Solids (TSS), which can affect the health of aquatic life that live optimally under certain pH conditions. Additionally, the CCR may contain heavy metals, such as mercury, arsenic, lead, cadmium, chromium, and selenium, which can impact human health if ingested.

Value chain stage

Direct operations
Product use phase

Actions and procedures to minimize adverse impacts

Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience
Industrial and chemical accidents prevention, preparedness, and response
Upgrading of process equipment/methods

Please explain

We comply with NPDES permits, develop and implement Storm Water Pollution Prevention Plans (SWPPP), Spill Prevention, Control & Countermeasure (SPCC) Plans, and other incident response plans. These procedures manage risks of impacts by applying treatment methodologies appropriate for controlling TSS and pH. The effectiveness of these procedures is evaluated by regular monitoring of discharges after treatment.

DTE has prepared an Emergency Action Plan (EAP) for the Monroe Power Plant Fly Ash Basin (FAB) and the Inactive Bottom Ash Impoundment (BAI). These EAPs were prepared in accordance with the United States Department of Homeland Security Presidential Policy Directive 8, the National Incident Management System, and the United States Environmental Protection Agency final rule for the regulation and management of Coal Combustion Residuals (CCR) under the Resource Conservation and Recovery Act §257.73 (the CCR Rule). The primary goals of these EAPs are to safeguard lives and reduce the potential for damage to public resources and private property by mitigating potential or ongoing failure impacts and completing the actions necessary to efficiently transition from an emergency response to the post-response phase.

DTE supplies dry fly ash, bottom ash, and gypsum (a by-product of the FGD process) to market for beneficial reuse. Lastly, DTE has initiated compliance with the new CCR rules by closing unlined CCR units.

Water pollutant category

Other, please specify

Radiation

Description of water pollutant and potential impacts

During normal operations, nuclear power plants release small amounts of radiation that are strictly regulated by the US Nuclear Regulatory Commission (NRC). The regulatory system for radioactive materials is designed to prevent the possibility that anyone could receive an exposure even close to the levels that might inflict short-term damage. Radiation can adversely impact aquatic life, as well as human health, by altering genetics and interfering with reproduction.

Value chain stage

Direct operations

Actions and procedures to minimize adverse impacts

Industrial and chemical accidents prevention, preparedness, and response

Water recycling

Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

Please explain

Annual radiological testing has shown that, during normal operations, nuclear power plants typically release only a small fraction of the radiation allowed by the NRC's established limits. The radioactive material that fuels a nuclear power plant is contained in ceramic fuel pellets that are capable of withstanding thousands of degrees of heat. These fuel pellets are then encased in hollow metal rods that help keep the material from interacting with the water that cools the reactor. In addition, the reactor's thick metal walls and piping, as well as a massive reinforced concrete containment structure, are designed to keep the coolant, fuel, and associated radiation isolated from the environment.

Our nuclear power plant, Fermi 2, adheres to stringent regulations of the U.S. Nuclear Regulatory Commission (NRC), in addition to robust internal standards and procedures. The NRC reviews a reactor license application to address detrimental environmental impacts. NRC publishes this in its Environmental Impact Statement and provides ways to mitigate these impacts. DTE ensures that Fermi 2 complies with radiation dose limitations and monitors radiation release; reports can be found by the general public on the NRC website. The procedures identified manage risk by minimizing radiation released to the environment through compliance measures. As stated, the effectiveness of these procedures is evaluated by regular monitoring of discharges.

Water pollutant category

Other physical pollutants

Description of water pollutant and potential impacts

Cooling water systems are used to remove waste heat from the process to the environment. Circulating pumps move the cooled water through a piping circuit that includes heat exchangers, reactor jackets, and other critical pieces of process equipment and then back to either the surface water (once-through system) or the cooling tower (closed-cycle system). Cooling water has the potential to degrade ecosystems by increasing the temperature of surface waters in the mixing zone. Health and liveability can be reduced for aquatic species that only thrive under certain temperatures.
Since large volumes of air pass through a cooling tower to enable cooling, potential biological impacts must be controlled.

Thermal pollution from our cooling water systems is considered to be any deviation from the natural temperature in a habitat and can range from increased temperatures associated with industrial cooling activities to discharges of cold water into streams. This can detrimentally impact aquatic ecosystems by affecting biological activities of organisms and decreasing oxygen supply.

Value chain stage

Direct operations

Actions and procedures to minimize adverse impacts

Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience
Beyond compliance with regulatory requirements
Industrial and chemical accidents prevention, preparedness, and response

Please explain

The risk of cooling water contamination is mitigated by following operation and maintenance procedure and complying with NPDES permit limits and specifications. These procedures manage risk by limiting contamination. The effectiveness of these procedures is evaluated by regular monitoring of discharges.

For example, chlorine is used in cooling water systems to control biological growth, and total residual chlorine is monitored on a regular basis.

Thermal effluents are regulated because heat is defined as a pollutant under Clean Water Act (CWA) Section 502(6). DTE has performed thermal plume studies for power plants with identified risk. We comply with NPDES permits that authorize any thermal effluent discharge. This compliance manages risk by monitoring the potential negative impacts thermal pollution can have on aquatic ecosystems and determining if action is needed to minimize the pollution. The effectiveness of these procedures is evaluated by regular monitoring of discharges.

Water pollutant category

Oil

Description of water pollutant and potential impacts

At our DTE facilities, there is a risk of potential release of hydrocarbons into the water in case of an oil spill. The Clean Water Act identifies permissible pollution levels in water for Oil and Grease that must be complied with to protect human health, fish, and wildlife. The EPA Oil Pollution Prevention regulations require facilities to develop and implement plans to prevent oil discharges.

Value chain stage

Direct operations

Actions and procedures to minimize adverse impacts

Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience
Beyond compliance with regulatory requirements
Industrial and chemical accidents prevention, preparedness, and response
Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

Please explain

We comply with NPDES permits that establish monitoring requirements and limits for oil and grease. We have also developed and implemented Spill Prevention Control and Countermeasure plans at our facilities. These procedures manage risks utilizing best management practices, routine inspections, containments around large oil storage devices, and the use of oil separation devices for the applicable wastewater streams.

Three of our facilities also have developed and implemented a more detailed Facility Response Plan (FRP). These plans are approved by the EPA and require routine drills on a quarterly basis as well as an annual tabletop emergency drill for one of three types of emergency scenarios up to and including a worst-case spill. The FRP will be revised periodically to incorporate updated or more detailed information and improvements based on discrepancies or corrective actions found during the quarterly and annual drills.

Water pollutant category

Other, please specify
Mercury

Description of water pollutant and potential impacts

Mercury is another relevant water pollutant for DTE. The Clean Water Act identifies acceptable pollution levels in water for mercury that must be complied with to protect human health, fish, and wildlife. Mercury impacts aquatic ecosystems, including fish, by increasing toxicity in organisms. This can have a potential impact for humans consuming these organisms.

Value chain stage

Actions and procedures to minimize adverse impacts

Industrial and chemical accidents prevention, preparedness, and response
Discharge treatment using sector-specific processes to ensure compliance with regulatory requirements

Please explain

We comply with NPDES permits that establish monitoring requirements and limits for mercury. We also developed and implement Pollution Minimization Plans (PMPs) for mercury as required by a facility NPDES permit. These procedures manage risks by reviewing the sources on a semi-annual basis and controlling mercury sources as feasible . The effectiveness of these procedures is evaluated by regular monitoring and reporting of discharges.

W3.3

(W3.3) Does your organization undertake a water-related risk assessment?

Yes, water-related risks are assessed

W3.3a

(W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.

Value chain stage

Direct operations

Coverage

Partial

Risk assessment procedure

Water risks are assessed as a standalone issue

Frequency of assessment

Annually

How far into the future are risks considered?

3 to 6 years

Type of tools and methods used

Tools on the market
International methodologies and standards
Other

Tools and methods used

Other, please specify
Michigan Withdrawal Assessment Tool

Contextual issues considered

Water availability at a basin/catchment level
Water quality at a basin/catchment level
Stakeholder conflicts concerning water resources at a basin/catchment level
Implications of water on your key commodities/raw materials
Water regulatory frameworks
Status of ecosystems and habitats
Access to fully-functioning, safely managed WASH services for all employees

Stakeholders considered

Customers
Employees
Investors
Local communities
Regulators

Comment

Water availability is important to our operations, particularly for cooling water use; however, we operate in a region where water is readily available. DTE uses the MI Withdrawal Assessment Tool when evaluating new large quantity withdrawal projects (withdrawal greater than

100,000 gal/day in any consecutive 30 day period as defined by section 327 of Natural Resources and Environmental Protection Act) to determine the potential impact on nearby water resources. The MI Withdrawal Assessment Tool assesses water availability risk depending on location, weather, and industry type.

Source water quality is relevant to operations because DTE aims to reduce environmental impact and maintain compliance when discharging water. Water quality risk is assessed by referencing regulatory requirements (such as the Clean Water Act and Natural Resources and Environmental Protection Act 451 of 1994, and Effluent Limitation Guidelines) and maintaining compliance. For example, DTE monitors mercury and Total Suspended Solids (TSS) for incoming and discharged water to manage the risk of regulatory noncompliance.

DTE aims to be community-minded and considers all stakeholders and water uses when using water resources. On an as-needed basis, we will engage with stakeholders on water issues, as a risk assessment tool. For example, DTE engages with stakeholders by responding to complaints from the public regarding potential water impacts.

Water regulatory risk is a key driver for our operations. Regulations shape the nature of our power generation fleet. DTE tracks new and changing water-related regulations and develops policies and procedures based on these regulations. For example, DTE tracked the anticipated changes to the 2015 Effluent Limitation Guidelines (ELG) and has developed a compliance strategy that seeks to avoid risk of noncompliance with fly ash/flue gas desulfurization/bottom ash wastewater requirements.

Impacts on ecosystems are included in permit applications, as required, at project initiation. Permitting requirements are generally used as means of assessing risk. For example, the Company adjusts the design of new projects to avoid or mitigate impacts on wetlands.

Employee safety is a priority for the company and providing access to fully functioning safety requirements related to water is essential. DTE's safety department assesses water needs and strives to provide water at our facilities that adheres to drinking water standards.

Value chain stage

Supply chain

Coverage

Partial

Risk assessment procedure

Water risks are assessed as a standalone issue

Frequency of assessment

Annually

How far into the future are risks considered?

3 to 6 years

Type of tools and methods used

Other

Tools and methods used

Internal company methods

Other, please specify

The sustainability Project (TSP) Supplier Tool

Contextual issues considered

Implications of water on your key commodities/raw materials

Stakeholders considered

Customers

Employees

Local communities

Comment

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. Water use for suppliers is self-reported via The Sustainability Project (TSP) supplier survey tool, which was launched in 2018. Survey questions vary by industry and are used to assess water-related risks for our supply chain. DTE uses this information to measure success of actions and identify opportunities for improvement across

the Company's supply chain. Coverage is partial because the TSP survey is sent to only a portion of our suppliers, as identified in section W1.4a.

W3.3b

(W3.3b) Describe your organization's process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.

	Rationale for approach to risk assessment	Explanation of contextual issues considered	Explanation of stakeholders considered	Decision-making process for risk response
Row 1				

W4. Risks and opportunities

W4.1

(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes, both in direct operations and the rest of our value chain

W4.1a

(W4.1a) How does your organization define substantive financial or strategic impact on your business?

The risks to our company include compliance with evolving regulations; however, DTE is mitigating these risks through transitioning its electricity generation fleet to less water intensive technologies, such as renewables and combined cycle natural gas. DTE defines substantive impact as a legislative, regulatory, or physical change in water supply that would reduce our ability to withdraw the amount of water needed to consistently produce an adequate and consistent amount of electricity for our customers. Additionally, the definition extends to any financial and strategic impact on both supply chain and operations that an investor would deem substantive, and DTE aims to maintain a reputation of sound risk assessment and

management among its investors. This definition applies to our direct operations. For example, extreme weather conditions are identified as a risk in our 2022 10-K Annual Report, as these conditions, can lead to material unplanned expenses if they caused damage to the electric distribution system infrastructure and power generation facilities at DTE Electric, they can negatively impact DTE Energy's reputation and customer satisfaction, result in increased regulatory oversight and litigation risk, and DTE Gas could experience higher than anticipated expenses from potentially required emergency repairs on its gas distribution infrastructure . Recovering from these setbacks would result in increased costs from unforeseen maintenance to our power generation facilities to improve water usability, therefore potentially negatively impacting the financial performance of the company. DTE does not define specific numerical thresholds for substantive water-related impact.

W4.1b

(W4.1b) What is the total number of facilities exposed to water risks with the potential to have a substantive financial or strategic impact on your business, and what proportion of your company-wide facilities does this represent?

	Total number of facilities exposed to water risk	% company-wide facilities this represents	Comment
Row 1	10	26-50	DTE considers the following a facility: All DTE owned/partially owned sites that hold NPDES, POTW, and/or GLWA permits (the 20 sites included in this disclosure). A facility exposed to water risk is defined as one that observed a water discharge over 100,000 gallons of water per day (GPD), has a permit to discharge wastewater to surface water or municipality. There are seven electric generating stations, one hydroelectric pumping station, one natural gas compressor station, and one coke battery facility that withdraw fresh water within the St. Lawrence watershed and are exposed to physical water risks. All 10 of these facilities are located in an area that has an overall low water risk rating according to the WRI Aqueduct tool. The water risk related to physical quantity for DTE Energy is lower despite periodic drought conditions, because DTE Energy draws water from the Great Lakes for nine out of the ten higher risk facilities. The Great Lakes water level has not dropped significantly below the long-term annual average for the past 50+ years per the US Army Corps of Engineers water level data.

W4.1c

(W4.1c) By river basin, what is the number and proportion of facilities exposed to water risks that could have a substantive financial or strategic impact on your business, and what is the potential business impact associated with those facilities?

Country/Area & River basin

United States of America

St. Lawrence

Number of facilities exposed to water risk

10

% company-wide facilities this represents

26-50

% company's annual electricity generation that could be affected by these facilities

51-75

% company's global oil & gas production volume that could be affected by these facilities

% company's total global revenue that could be affected

Comment

All 10 facilities that DTE Energy has identified that may be exposed to substantive water risk discharge water to the surface waters within the St. Lawrence watershed. This represents 50% of the 20 facilities included in this disclosure. Given these facilities' reliance on surface water, a significant decrease in the water level within the watershed could put some or all of these facilities at risk of damage or losing production. DTE estimates that the amount of generation or production capacity lost by a significant change in the water level within the watershed could range from 0% to 74% depending on the nature of the event or situation. For example, a significant drop in water level in the Great Lakes could result

in the loss of cooling water, and therefore generation or production, at one to eight of the facilities. The electric generation percentage is calculated by dividing the power generation from the 8 facilities that would be affected by lower water levels in the Great Lakes by the power generation from DTE's entire generation fleet including renewable energy, natural gas, and hydroelectric power. Great Lakes water levels have risen and fallen several times on a cyclical basis over several decades according to the data recorded by the US Army Corps of Engineers. In 2020, they were at an all-time high (for periods recorded by US Army Corps of Engineers for 1918-2023) but were at record lows in 1930s (as recorded by US Army Corps of Engineers for 1918-2023). DTE has adjusted to these cyclical fluctuations by incorporating measures, such as dredging of intakes during low water levels to counteract these changes.

W4.2

(W4.2) Provide details of identified risks in your direct operations with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

Country/Area & River basin

United States of America
St. Lawrence

Type of risk & Primary risk driver

Acute physical
Other, please specify
Effects of climate change and drought

Primary potential impact

Increased cost of capital

Company-specific description

Changing water levels could require restructuring of cooling water intake structures (CWIS) and plant discharge structures. Unpredictable variations in temperature and weather patterns because of climate change can adversely impact operations through alternating levels of precipitation and potential drought. Secondary impacts could include changes in financial distribution leading to monetary stressors on the

organization through unintended remediation, process inefficiency, and unplanned outages. Great Lakes water levels fluctuate over time according to the data recorded by the US Army Corps of Engineers . In 2020, they water levels were at an all-time high, but were at record lows in 1930's (as recorded by US Army Corps of Engineers for 1918-2023). DTE has adjusted to these fluctuations by incorporating measures, such as dredging of intakes during low water levels to counteract these changes.

Timeframe

Unknown

Magnitude of potential impact

Low

Likelihood

Likely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact

The financial impact has not been quantified financially. For DTE’s operations, the major financial impact would be from the company’s response to changing water levels at plant intakes and discharges.

Primary response to risk

Engage with regulators/policymakers

Description of response

DTE would engage with public policy makers and would increase capital expenditure to address infrastructure that is inadequate for the new conditions. By updating infrastructure, the company can be better prepared to mitigate water risk as it pertains to electric production for customers. Engagement and response to changes in water availability is immediate. Although water availability concern due to climate change is apparent in other parts of the U.S., we do not expect a large impact in the Great Lakes region and we do not expect a need for a response to this risk in the immediate future. Engaging with policy makers would strengthen our process of managing future impacts through identifying potential impacts, planning, and applying best practices.

Cost of response

Explanation of cost of response

The cost of response is not quantified at the corporate level. DTE expects that the major costs would be related to updating infrastructure to account for new conditions. Increased engagement with policy makers would not have significant cost but could be very effective in sharing best practices for the power generation industry and for working to reduce costs to our customers.

Country/Area & River basin

United States of America

St. Lawrence

Type of risk & Primary risk driver

Regulatory

Mandatory water efficiency, conservation, recycling or process standards

Primary potential impact

Increased operating costs

Company-specific description

The company may have to change its operations (e.g., reduce intake and output) in order to meet mandatory requirements. DTE is already in the process of transitioning from coal-fired generation to more generation from renewable sources and natural gas. As this transition occurs, water withdrawal is expected to decrease, keeping in line with any potential water conservation measures in the future.

Timeframe

Unknown

Magnitude of potential impact

Unknown

Likelihood

Unlikely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact

This impact has not been quantified financially.

Primary response to risk

Develop drought emergency plans

Description of response

The company would endeavor to negotiate favorable limits, but would ultimately comply with the regulatory requirements, which may result in increased operating costs.

Cost of response

Explanation of cost of response

This response is not quantified. Cost of negotiations would be minimal; however, major changes to infrastructure to meet regulatory requirements would require significant capital. Operating costs would increase as the company would endeavor to reduce water withdrawal magnitude and output.

Country/Area & River basin

United States of America
St. Lawrence

Type of risk & Primary risk driver

Regulatory
Regulation of discharge quality/volumes

Primary potential impact

Increased compliance costs

Company-specific description

Clean Water Act regulations related to 316(b) for protecting fish and fish larvae at cooling water intake structures, and effluent limitation guidelines (ELG) for wastewater discharges, will require substantive physical and operational changes at our steam electric generating stations.

Timeframe

4-6 years

Magnitude of potential impact

High

Likelihood

Virtually certain

Are you able to provide a potential financial impact figure?

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact

It is estimated that capital expenses associated with ELG and 316(b) compliance will increase as DTE Energy continues to modify the plants to comply with existing rules. ELG compliance costs are related to changes in systems handling the bottom ash transport water, fly ash transport water, and FGD wastewater. It is estimated that we will spend $423 million in expenditures through 2027 for CCR and ELG. Compliance for 316(b) is currently an operating cost and will not be a capital cost until 2024 at the earliest.

Primary response to risk

Comply with local regulatory requirements

Description of response

The company has engaged with public policy makers, has engaged with suppliers to evaluate new technologies, increased capital expenditure, and increased investment in new technology to be able to comply with the regulatory requirements.

Cost of response

Explanation of cost of response

Strategies to address the revised 316(b) rules and the revised ELGs are underway. Increased expenditure to explore new technologies is the main cost associated with this response, which may be substantial as DTE implements these technologies to comply with regulations. The costs to respond to this risk are already built into existing company programs and are difficult to quantify.

Country/Area & River basin

United States of America

St. Lawrence

Type of risk & Primary risk driver

Regulatory

Increased difficulty in obtaining withdrawals/operations permit

Primary potential impact

Increased operating costs

Company-specific description

The company may have to change its operations (e.g. reduce water withdrawal) in order to meet revised limits to water withdrawal.

Timeframe

Unknown

Magnitude of potential impact

Unknown

Likelihood

Likely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact

Although a specific financial impact figure is unknown, DTE expects that the greatest financial impact would be related to rethinking, redesigning, and implementing power generating processes to minimize the use of water (i.e., DTE's response to the risk). Further financial impact would result from supplementing surface water withdrawals with withdrawals from municipal sources. Direct financial impact because of permit obtainment difficulties is not anticipated but cannot be ruled out.

Primary response to risk

Comply with local regulatory requirements

Description of response

DTE foresees this as a potential future risk, but does not consider it an immediate risk at this time. The company would endeavor to negotiate favorable limits/allocation, but would ultimately comply with the regulatory requirements, which may result in increased operating costs.

Cost of response

Explanation of cost of response

Complying with regulatory requirements would include rethinking current processes to reduce water withdrawal, and implementing those solutions. The cost of the response would mainly be associated with upgrades, additions, and restructuring of our current power generating processes. Additionally, if DTE were to supplement surface water withdrawals with withdrawals from municipal sources, this would also increase costs.

Country/Area & River basin

United States of America

St. Lawrence

Type of risk & Primary risk driver

Acute physical

Flood (coastal, fluvial, pluvial, groundwater)

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

Changing water levels could require restructuring of cooling water intake structures (CWIS) and plant discharge structures. Unpredictable variations in temperature and weather patterns because of climate change can adversely impact operations through alternating levels of precipitation and potential flooding. Secondary impacts could include changes in financial distribution leading to monetary stressors on the organization through unintended remediation, process inefficiency, and unplanned outages. Great Lakes water levels fluctuate over time according to the data recorded by the US Army Corps of Engineers . In 2020, they were at an all-time high, but were at record lows in 1930's (as recorded by US Army Corps of Engineers for 1918-2023).

DTE has planned for and adjusted to these cyclical fluctuations in its operations.

Timeframe

Unknown

Magnitude of potential impact

Low

Likelihood

Likely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact

This impact has not been quantified financially.

Primary response to risk

Develop flood emergency plans

Description of response

In response to a noncompliance due to flooding, the Company notifies the state and emergency response management while coordinating with contractors to remediate any impact. Flooding can result in process inefficiency, infrastructure damage, and unplanned outages, which could disrupt production capacity.

Cost of response

Explanation of cost of response

Cost of response not quantified at corporate level.

Country/Area & River basin

United States of America

St. Lawrence

Type of risk & Primary risk driver

Chronic physical
Ecosystem vulnerability

Primary potential impact

Reduction or disruption in production capacity

Company-specific description

DTE considers ecosystem vulnerability a risk to disruption of production capacity. For example, at the Monroe Power Plant, water temperature of discharged waters is a concern as it relates to aquatic life. This risk is mitigated through NPDES permit obligations by monitoring and reporting for water temperature.

Timeframe

4-6 years

Magnitude of potential impact

High

Likelihood

Virtually certain

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact

The cost of response is not quantified at corporate level; however, DTE expects that the implementation of upgraded/new technologies will be the main cost associated with this risk.

Primary response to risk

Other, please specify

Conduct studies monitoring impact on aquatic ecosystem

Description of response

The Company conducts studies that monitor the impact of operations on aquatic species and uses this data to inform its decisions.

Cost of response

Explanation of cost of response

The cost of response is not quantified at corporate level; however, DTE expects that the implementation of upgraded/new technologies will be the main cost associated with this risk.

Country/Area & River basin

United States of America

St. Lawrence

Type of risk & Primary risk driver

Regulatory

Tighter regulatory standards

Primary potential impact

Increased compliance costs

Company-specific description

A final EPA rule for the disposal of coal combustion residuals (CCR), commonly known as coal ash, became effective in October 2015, and was revised in October 2016, July 2018, September 2020, and November 2020. The rule is based on the continued listing of coal ash as a non-

hazardous waste and relies on various self-implementation design and performance standards. DTE Electric owns and operates three permitted engineered coal ash storage facilities to dispose of coal ash from coal-fired power plants and operates a number of smaller impoundments at its power plants subject to certain provisions in the CCR rule. At certain facilities, the rule required ongoing sampling and testing of monitoring wells, compliance with groundwater standards, and the closure of impoundments.

On September 28, 2020, the CCR rule "A Holistic Approach to Closure Part A: Deadline to Initiate Closure and Enhancing Public Access to Information" (Part A Rule) was published in the federal register and established April 11, 2021, as the new deadline for all unlined impoundments (including units previously classified as "clay-lined") to initiate closure. For plants that cease coal fired boiler operation and can complete closure of their impoundment by October 2023 or 2028 depending on the size of the impoundment, the Part A Rule allows utilities to submit requests to EPA to extend the April 11, 2021, deadline. Additionally, the rule amends certain reporting requirements and CCR website requirements. On November 12, 2020, an additional revision to the CCR Rule "A Holistic Approach to Closure Part B: Alternate Demonstration for Unlined Surface Impoundments" was published in the Federal Register that provides a process to determine if certain unlined impoundments have an alternative liner system that may be as protective of groundwater as the current liners specified in the CCR rule, and therefore may continue to operate. DTE Electric submitted applications to the EPA that supported continued use of all active unlined impoundments through their respective power plant's coal fueled operations. EPA responded with a proposed denial of these applications, DTE has taken steps to close or begin closure of theses CCR impoundments and landfills by the end of 2023. Water related capital expenditure specific to CCR regulations are captured under implementation of the ELG compliance strategy.

Timeframe

1-3 years

Magnitude of potential impact

High

Likelihood

Virtually certain

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact

The financial impact would include the closure of bottom ash basins from St. Clair Power Plant, Monroe Power Plant, River Rouge Power Plant, and Belle River Power Plant. The closure of the Monroe Fly Ash Basin would also need to be included in these impacts. It is estimated that we will spend $423 million in expenditures through 2027 for CCR and ELG.

Primary response to risk

Comply with local regulatory requirements

Description of response

The company has engaged with public policy makers, and has engaged with consultants and contractors to evaluate and implement closure options, and increased capital expenditure to be able to comply with the regulatory requirements.

Cost of response

Explanation of cost of response

While the estimated capital cost to implement closure of the CCR units may be upwards of $400 million, the costs to respond to this risk are already built into existing company programs and difficult to quantify. The company has evaluated the impact of the CCR rules and is in the process of executing its compliance strategy. The financial impact of the CCR rule has not been quantified for water-related expenses, which are mainly related to capital expenses associated with ELG compliance. However, the anticipated capital expenditures for physical closure of the company's CCR surface impoundments are detailed in this section.

W4.2a

(W4.2a) Provide details of risks identified within your value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact on your business, and your response to those risks.

Country/Area & River basin

United States of America

St. Lawrence

Stage of value chain

Supply chain

Type of risk & Primary risk driver

Acute physical

Other, please specify

Increased Water Scarcity

Primary potential impact

Supply chain disruption

Company-specific description

Water scarcity could contribute to a potential decrease in fuel supply (e.g., from coal mining or natural gas production) required for power generation. This decrease could disrupt DTE's supply chain.

Timeframe

Unknown

Magnitude of potential impact

Medium

Likelihood

Very unlikely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact

Although a specific financial impact figure is unknown, DTE expects that the greatest financial impact would be related to rethinking, redesigning, and implementing power generating processes to minimize reliance on fuel sources affected by water scarcity. DTE expects that costs for fuel in this instance would increase, creating further financial impact.

Primary response to risk

Supplier engagement

Promote investment in infrastructure and technologies for water saving, re-use and recycling among suppliers

Description of response

DTE does not foresee water scarcity as an anticipated risk to our fuel supply chain in the near future; however, we would respond by implementing alternative solutions for fuel supply in power generation operations. For example, further investment in renewable energy sources would reduce reliance on coal, as well as the risk of water scarcity as it affects our supply chain.

Cost of response

Explanation of cost of response

The cost of the response would mainly be associated with upgrades, additions, and restructuring of our current power generating processes.

Country/Area & River basin

United States of America
St. Lawrence

Stage of value chain

Supply chain

Type of risk & Primary risk driver

Chronic physical
Seasonal supply variability/inter annual variability

Primary potential impact

Increased operating costs

Company-specific description

Seasonal variability affects water levels, which in turn impacts fuel supply. Water regulations may change related to the coal and natural gas industries as a result. As a result of decreased fuel supply, cost of fuel could potentially increase.

Timeframe

Unknown

Magnitude of potential impact

Unknown

Likelihood

Very unlikely

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure - minimum (currency)

Potential financial impact figure - maximum (currency)

Explanation of financial impact

Although a specific financial impact figure is unknown, DTE expects that the greatest financial impact would be related to rethinking, redesigning, and implementing power generating processes to minimize reliance on fuel supply affected by seasonal variability (e.g., DTE's response). DTE expects that costs for fuel in this instance would increase, creating further financial impact.

Primary response to risk

Supplier engagement

Promote investment in infrastructure and technologies for water saving, re-use and recycling among suppliers

Description of response

DTE does not foresee seasonal variability as a major risk in the near future; however, we would respond by implementing alternative solutions for fuel supply in power generation operations. As the company moves toward closing down coal-fired plants and exploring alternative fuel sources, we expect to reduce this risk even further.

Cost of response

Explanation of cost of response

The cost of the response would mainly be associated with upgrades, additions, and restructuring of our current power generating processes.

W4.3

(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes, we have identified opportunities, and some/all are being realized

W4.3a

(W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.

Type of opportunity

Efficiency

Primary water-related opportunity

Improved water efficiency in operations

Company-specific description & strategy to realize opportunity

Water efficiency in operations is expected to increase as DTE pursues the opportunity of diversifying its generation fleet. The company closed one coal burning power plant in 2021 and closed two additional coal burning power plants in 2022. The company is increasing the percentage of renewable energy sources. A diversified energy portfolio increases renewable energy sources and provides an energy source with minimal environmental impacts.

Estimated timeframe for realization

More than 6 years

Magnitude of potential financial impact

High

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

DTE costs for water for power generation are relatively low; however, diversifying our generation fleet will decrease both capital expenditure and fuel costs in the long term, causing moderate water related financial impact. Implementing the solution, however, will result in a high financial investment associated with the solar and wind energy infrastructure and investments.

Type of opportunity

Efficiency

Primary water-related opportunity

Improved water efficiency in operations

Company-specific description & strategy to realize opportunity

The new Blue Water Energy Center combined cycle plant began commercial operation in June 2022. It includes an approximately 1,150-megawatt state-of-the-art natural gas fired 2 x 1 combined cycle power plant with two combustion turbines/heat recovery steam generator trains; and one steam turbine. The maximum expected water withdrawal for the plant is approximately 10 MGD (~14,000 ML per year). The discharge rate was approximately 125 ML for 2022. This discharge volume is less than 1% of what is required for the same production for a coal fired power plant.

Estimated timeframe for realization

Current - up to 1 year

Magnitude of potential financial impact

High

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

DTE costs for water for power generation are relatively low; however, diversifying our generation fleet and including technologies more environmentally friendly will decrease environmental compliance costs associated with ELG and CCR rules. The initial high capital investment causes high financial impact.

W5. Facility-level water accounting

W5.1

(W5.1) For each facility referenced in W4.1c, provide coordinates, water accounting data, and a comparison with the previous reporting year.

Facility reference number

Facility 1

Facility name (optional)

Belle River Power Plant

Country/Area & River basin

United States of America

St. Lawrence

Latitude

42.773888

Longitude

-82.495833

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Coal - hard

Oil & gas sector business division

Not applicable

Total water withdrawals at this facility (megaliters/year)

666,000

Comparison of total withdrawals with previous reporting year

Higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

666,000

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

659,000

Comparison of total discharges with previous reporting year

Higher

Discharges to fresh surface water

659,000

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

6,500

Comparison of total consumption with previous reporting year

About the same

Please explain

The withdrawal and discharge volumes were higher in 2022 compared to 2021. The consumptive use of water was about the same in 2022 compared to 2021. The thresholds for comparison to previous years are as follows: >50% change = “Much Lower”/”Much Higher”, 25-50% change = “Lower”/”Higher”, and <25% change = “About the Same.” The Belle River Power Plant is expected to convert from base loaded coal plant to gas powered peaking unit to be used during peak load periods by 2026; therefore, withdrawals, consumption, and discharge will significantly reduce in the future. DTE owns 81% of the Belle River Power Plant and the values reported are adjusted for ownership.

Facility reference number

Facility 3

Facility name (optional)

Fermi 2 Power Plant

Country/Area & River basin

United States of America
St. Lawrence

Latitude

41.9625

Longitude

-83.25833

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Nuclear

Oil & gas sector business division

Not applicable

Total water withdrawals at this facility (megaliters/year)

53,000

Comparison of total withdrawals with previous reporting year

About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

52,900

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

200

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

32,800

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

32,800

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

20

Total water consumption at this facility (megaliters/year)

20,300

Comparison of total consumption with previous reporting year

About the same

Please explain

Water withdrawal and consumption shows about the same in 2022 compared to 2021. Discharge was 25% lower in 2022 than in 2021. The Fermi 2 Power Plant is expected to remain at current levels in its water use in the future.

Facility reference number

Facility 4

Facility name (optional)

Monroe Power Plant

Country/Area & River basin

United States of America
St. Lawrence

Latitude
41.893173

Longitude
-83.346132

Located in area with water stress
No

Primary power generation source for your electricity generation at this facility
Coal - hard

Oil & gas sector business division
Not applicable

Total water withdrawals at this facility (megaliters/year)
2,238,000

Comparison of total withdrawals with previous reporting year
About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes
2,238,000

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable
10

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

2,206,000

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

2,206,000

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

10

Total water consumption at this facility (megaliters/year)

32,000

Comparison of total consumption with previous reporting year

About the same

Please explain

Withdrawal, discharge, and consumptive water use have remained about the same in 2022 compared to 2021. Withdrawals, consumption, and discharge are not expected to change significantly until 2 units are retired in 2028. Water withdrawal is expected to approach zero after the final two units are retired in 2032.

Facility reference number

Facility 5

Facility name (optional)

River Rouge Power Plant

Country/Area & River basin

United States of America
St. Lawrence

Latitude

42.2738

Longitude

-83.1117

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Coal - hard

Oil & gas sector business division

Not applicable

Total water withdrawals at this facility (megaliters/year)

300

Comparison of total withdrawals with previous reporting year

Much lower

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

300

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

300

Comparison of total discharges with previous reporting year

Much lower

Discharges to fresh surface water

300

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

0

Comparison of total consumption with previous reporting year

Much lower

Please explain

Withdrawal, discharge, and consumption all decreased in 2022 compared to 2021. River Rouge did not operate in 2022. The River Rouge Power Plant remaining flow is from storm water and wastewater treatment systems that need to stay in place until the decommission of this facility is completed. DTE expects that the flows will remain about the same until the decommissioning is completed.

Facility reference number

Facility 6

Facility name (optional)

St. Clair Power Plant

Country/Area & River basin

United States of America

St. Lawrence

Latitude

42.762777

Longitude

-82.472222

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Coal - hard

Oil & gas sector business division

Not applicable

Total water withdrawals at this facility (megaliters/year)

440,000

Comparison of total withdrawals with previous reporting year

Lower

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

440,000

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

439,000

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

439,000

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

1,000

Comparison of total consumption with previous reporting year

Much lower

Please explain

Water withdrawal, discharge, and consumption levels were all lower in 2022 compared to 2021. The St. Clair Power Plant retired in 2022. Withdrawals, consumption, and discharge will continue to reduce and/or cease once the plant is retired.

Facility reference number

Facility 7

Facility name (optional)

Sibley Quarry Landfill

Country/Area & River basin

United States of America

St. Lawrence

Latitude

42.158009

Longitude

-83.187871

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Not applicable

Oil & gas sector business division

Not applicable

Total water withdrawals at this facility (megaliters/year)

2,000

Comparison of total withdrawals with previous reporting year

About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

2,000

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

2,000

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

2,000

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

Comparison of total consumption with previous reporting year

Please explain

Sibley Quarry is a Coal Combustion Residual (CCR) Landfill that once was a stone quarry. This facility must treat and dewater ground water to maintain operations. Withdrawal and discharge remained about the same in 2022 compared to 2021. DTE expects that the flows will remain about the same into the future.

Facility reference number

Facility 8

Facility name (optional)

Taggart Compressor Station

Country/Area & River basin

United States of America
St. Lawrence

Latitude

43.442612

Longitude

-85.143392

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Not applicable

Oil & gas sector business division

Midstream/Downstream

Total water withdrawals at this facility (megaliters/year)

7,600

Comparison of total withdrawals with previous reporting year

About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

7,600

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

7,400

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

7,400

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

200

Comparison of total consumption with previous reporting year

About the same

Please explain

In 2022, water withdrawal, discharge, and consumption were all about the same as 2021. W.C. Taggart Compressor Station provides natural gas to the market areas in Detroit, Mt. Pleasant, Carson City, Greenville, Lakeview, Vine, Muskegon, Ludington, and Belding. It is expected that the water use will remain the same in the future.

Facility reference number

Facility 9

Facility name (optional)

Trenton Channel Power Plant

Country/Area & River basin

United States of America

St. Lawrence

Latitude

42.123024

Longitude

-83.181633

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Coal - hard

Oil & gas sector business division

Not applicable

Total water withdrawals at this facility (megaliters/year)

178,000

Comparison of total withdrawals with previous reporting year

About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

178,000

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

200

Total water discharges at this facility (megaliters/year)

178,000

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

178,000

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

200

Total water consumption at this facility (megaliters/year)

1,000

Comparison of total consumption with previous reporting year

Lower

Please explain

Water withdrawal and discharge both remained about the same in 2022 compared to 2021. Water consumption decreased approximately 28% from 2022 to 2021. The plant ceased operation in 2022. The Trenton Channel Power Plant water withdrawals, consumption, and discharge will continue to reduce and/or cease as the plant is decommissioned.

Facility reference number

Facility 10

Facility name (optional)

Blue Water Energy Center

Country/Area & River basin

United States of America
St. Lawrence

Latitude

Longitude

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Gas

Oil & gas sector business division

Not applicable

Total water withdrawals at this facility (megaliters/year)

8,800

Comparison of total withdrawals with previous reporting year

This is our first year of measurement

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

8,800

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

100

Comparison of total discharges with previous reporting year

This is our first year of measurement

Discharges to fresh surface water

100

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

5,700

Comparison of total consumption with previous reporting year

This is our first year of measurement

Please explain

Blue Water Energy Center is a natural gas combined cycle power plant that began operation in 2022. DTE Energy expects that the water withdrawal, consumption, and discharge will increase for 2023 but will remain about the same for future years.

Facility reference number

Facility 11

Facility name (optional)

Greenwood Energy Center

Country/Area & River basin

United States of America

St. Lawrence

Latitude

43.10713

Longitude

-82.69786

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Gas

Oil & gas sector business division

Not applicable

Total water withdrawals at this facility (megaliters/year)

700

Comparison of total withdrawals with previous reporting year

About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

700

Total water discharges at this facility (megaliters/year)

0

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

Total water consumption at this facility (megaliters/year)

1,000

Comparison of total consumption with previous reporting year

Lower

Please explain

The Greenwood Energy Center (GWEC) generates electric power utilizing an oil and gas fired boiler, steam driven turbine, and generators. DTE Energy expects that the water withdrawal, consumption, and discharge will remain the same for future years

Facility reference number

Facility 12

Facility name (optional)

Various DTE Electric Manholes

Country/Area & River basin

United States of America

St. Lawrence

Latitude

Longitude

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Not applicable

Oil & gas sector business division

Not applicable

Total water withdrawals at this facility (megaliters/year)

30

Comparison of total withdrawals with previous reporting year

Much higher

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

30

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

30

Comparison of total discharges with previous reporting year

Much higher

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

30

Total water consumption at this facility (megaliters/year)

Comparison of total consumption with previous reporting year

Please explain

DTE must dewater electric manholes prior to completing work on underground conduit systems. DTE expects that this was use will remain low in the future.

Facility reference number

Facility 13

Facility name (optional)

Ludington Pump Storage

Country/Area & River basin

United States of America
St. Lawrence

Latitude

43.8923

Longitude

-86.44476

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Hydropower

Oil & gas sector business division

Not applicable

Total water withdrawals at this facility (megaliters/year)

350

Comparison of total withdrawals with previous reporting year

This is our first year of measurement

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

350

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

350

Comparison of total discharges with previous reporting year

This is our first year of measurement

Discharges to fresh surface water

350

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

Comparison of total consumption with previous reporting year

Please explain

DTE Energy owns 49% of Ludington Pump Storage Station. The water withdrawal and discharge information is adjusted to describe only the portion that DTE Energy owns. This is the first year that DTE Energy is including this water information in this disclosure.

Facility reference number

Facility 14

Facility name (optional)

Warren Service Center

Country/Area & River basin

United States of America

St. Lawrence

Latitude

42.34496

Longitude

-83.12879

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Not applicable

Oil & gas sector business division

Not applicable

Total water withdrawals at this facility (megaliters/year)

Comparison of total withdrawals with previous reporting year

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

Total water discharges at this facility (megaliters/year)

5

Comparison of total discharges with previous reporting year

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

5

Total water consumption at this facility (megaliters/year)

Comparison of total consumption with previous reporting year

Please explain

Warren Service Center collects and discharges stormwater from containment areas in accordance with the water quality conditions of the POTW permit for this facility. This is the first year that this facility is reported within this disclosure. DTE Energy expects that this value will remain low and change based on precipitation conditions for the reporting year.

Facility reference number

Facility 15

Facility name (optional)

Various Gas Manholes

Country/Area & River basin

United States of America

St. Lawrence

Latitude

Longitude

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Not applicable

Oil & gas sector business division

Midstream/Downstream

Total water withdrawals at this facility (megaliters/year)

1

Comparison of total withdrawals with previous reporting year

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

1

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

1

Comparison of total discharges with previous reporting year

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

1

Total water consumption at this facility (megaliters/year)

Comparison of total consumption with previous reporting year

Please explain

DTE must dewater gas manholes prior to completing work on underground gas pipelines. DTE expects that this use will remain low in the future.

Facility reference number

Facility 16

Facility name (optional)

Birnamwood Renewable Energy, LLC

Country/Area & River basin

United States of America

St. Lawrence

Latitude

44.92147

Longitude

-89.08939

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Biomass

Oil & gas sector business division

Not applicable

Total water withdrawals at this facility (megaliters/year)

0

Comparison of total withdrawals with previous reporting year

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

Total water discharges at this facility (megaliters/year)

0

Comparison of total discharges with previous reporting year

Discharges to fresh surface water

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

Total water consumption at this facility (megaliters/year)

Comparison of total consumption with previous reporting year

Please explain

This facility would only discharge wastewater. This facility did not operate in 2022. It is expected that any discharge in the future will be less than 10 ML/year

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Facility reference number

Facility 17

Facility name (optional)

East Dakotas Renewable Energy, LLC

Country/Area & River basin

United States of America

Mississippi River

Latitude

43.1786

Longitude

-96.84605

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Biomass

Oil & gas sector business division

Not applicable

Total water withdrawals at this facility (megaliters/year)

0

Comparison of total withdrawals with previous reporting year

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

Total water discharges at this facility (megaliters/year)

0

Comparison of total discharges with previous reporting year

Discharges to fresh surface water

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

Total water consumption at this facility (megaliters/year)

0

Comparison of total consumption with previous reporting year

Please explain

This facility would only discharge wastewater. This facility did not require a discharge in 2022. It is expected that any discharge in the future will be less than 10 ML/year

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Facility reference number

Facility 18

Facility name (optional)

Kewaunee Renewable Energy, LLC

Country/Area & River basin

United States of America
Mississippi River

Latitude

44.61642

Longitude

-87.63395

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Biomass

Oil & gas sector business division

Not applicable

Total water withdrawals at this facility (megaliters/year)

0

Comparison of total withdrawals with previous reporting year

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

Total water discharges at this facility (megaliters/year)

0

Comparison of total discharges with previous reporting year

Discharges to fresh surface water

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

Total water consumption at this facility (megaliters/year)

0

Comparison of total consumption with previous reporting year

Please explain

This facility would only discharge wastewater. This facility did not discharge greater than 1ML/year in 2022. It is expected that any discharge in the future will be less than 10 ML/year

---

Facility reference number

Facility 19

Facility name (optional)

New Chester Renewable Energy , LLC

Country/Area & River basin

United States of America
Mississippi River

Latitude

43.88169

Longitude

-89.68

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Biomass

Oil & gas sector business division

Not applicable

Total water withdrawals at this facility (megaliters/year)

0

Comparison of total withdrawals with previous reporting year

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

Total water discharges at this facility (megaliters/year)

0

Comparison of total discharges with previous reporting year

Discharges to fresh surface water

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

Total water consumption at this facility (megaliters/year)

0

Comparison of total consumption with previous reporting year

Please explain

This facility would only discharge wastewater. This facility did not discharge greater than 1ML/year in 2022. It is expected that any discharge in the future will be less than 10 ML/year

Facility reference number

Facility 20

Facility name (optional)

Rosendale Renewable Energy, LLC

Country/Area & River basin

United States of America

Mississippi River

Latitude

43.86789

Longitude

-88.71796

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Biomass

Oil & gas sector business division

Not applicable

Total water withdrawals at this facility (megaliters/year)

0

Comparison of total withdrawals with previous reporting year

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

Total water discharges at this facility (megaliters/year)

0

Comparison of total discharges with previous reporting year

Discharges to fresh surface water

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

Total water consumption at this facility (megaliters/year)

0

Comparison of total consumption with previous reporting year

Please explain

This facility would only discharge wastewater. This facility did not discharge greater than 1ML/year in 2022. It is expected that any discharge in the future will be less than 10 ML/year

---

Facility reference number

Facility 21

Facility name (optional)

EES Coke

Country/Area & River basin

United States of America

St. Lawrence

Latitude

42.28117

Longitude

-83.11168

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Not applicable

Oil & gas sector business division

Not applicable

Total water withdrawals at this facility (megaliters/year)

900

Comparison of total withdrawals with previous reporting year

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

900

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

900

Comparison of total discharges with previous reporting year

Discharges to fresh surface water

300

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

600

Total water consumption at this facility (megaliters/year)

Comparison of total consumption with previous reporting year

Please explain

This is the first year that EES Coke has reported within this disclosure. DTE Energy expects that this value will remain about the same in the future.

Facility reference number

Facility 22

Facility name (optional)

Renaissance

Country/Area & River basin

United States of America

St. Lawrence

Latitude

43.18659

Longitude

-84.84293

Located in area with water stress

No

Primary power generation source for your electricity generation at this facility

Gas

Oil & gas sector business division

Not applicable

Total water withdrawals at this facility (megaliters/year)

3

Comparison of total withdrawals with previous reporting year

About the same

Withdrawals from fresh surface water, including rainwater, water from wetlands, rivers and lakes

0

Withdrawals from brackish surface water/seawater

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

Withdrawals from produced/entrained water

Withdrawals from third party sources

3

Total water discharges at this facility (megaliters/year)

3

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

3

Discharges to brackish surface water/seawater

Discharges to groundwater

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

Comparison of total consumption with previous reporting year

Please explain

Renaissance is a peaking facility. There is no consumption for the water used to aid in generation.

W5.1a

(W5.1a) For the facilities referenced in W5.1, what proportion of water accounting data has been third party verified?

Water withdrawals – total volumes

% verified

Not verified

Please explain

Water withdrawals at our DTE electric power plants, excluding Greenwood Energy Center, and Taggart Compressor station are reported to Michigan Environment, Great Lakes, and Energy Department (EGLE) annually through water use reports to comply with the state Water use Program. The withdrawals are not verified by an external party but are subject to state inspection.

Water withdrawals – volume by source

% verified

Not verified

Please explain

Water withdrawals at our DTE electric power plants, excluding Greenwood Energy Center, and Taggart Compressor station are reported to Michigan Environment, Great Lakes, and Energy Department (EGLE) annually through water use reports to comply with the state Water use Program. The withdrawals are not verified by an external party but are subject to state inspection.

Water withdrawals – quality by standard water quality parameters

% verified

1-25

Verification standard used

Water withdrawals are reported to Michigan Environment, Great Lakes, and Energy Department (EGLE) annually through water use reports to comply with the state Water Use Program. The withdrawals are not verified by an external party but are subject to state inspection.

Water discharges – total volumes

% verified

Not verified

Please explain

Water discharges for all facilities are reported to Michigan Environment, Great Lakes, and Energy Department (EGLE) and/or local permitting authority as specified in the NPDES or POTW permit. The discharges are not verified by an external party but are subject to state inspection.

Water discharges – volume by destination

% verified

Not verified

Please explain

Water discharges at our DTE electric power plants, excluding Greenwood Energy Center, and Taggart Compressor station are reported to Michigan Environment, Great Lakes, and Energy Department (EGLE) annually through water use reports to comply with the state Water use Program. The discharges are not verified by an external party but are subject to state inspection.

Water discharges – volume by final treatment level

% verified

Not verified

Please explain

Water discharges – quality by standard water quality parameters

% verified

76-100

Verification standard used

The value of 76-100% verification represents analytical data provided by external laboratories used on a portion of the effluent parameters required by NPDES permits. The rest of the effluent parameters/data are measured by internal resources. All DTE electric power plants, excluding Greenwood Energy Center, and Taggart Compressor station participate in annual Discharge Monitoring Reports Quality Assurance (DMRQA) studies conducted by third parties.

Water consumption – total volume

% verified

Not verified

Please explain

Water consumption at our DTE electric power plants, excluding Greenwood Energy Center, and Taggart Compressor station are reported to Michigan Environment, Great Lakes, and Energy Department (EGLE) annually through water use reports to comply with the state Water use Program. The consumptions are not verified by an external party.

W6. Governance

W6.1

(W6.1) Does your organization have a water policy?

Yes, we have a documented water policy that is publicly available

W6.1a

(W6.1a) Select the options that best describe the scope and content of your water policy.

	Scope	Content	Please explain
Row 1	Select facilities, businesses, or geographies only		DTE Energy's Water Policy is a company-wide policy that includes components that specifically address water issues. The Water Policy is available here: https://dte.my.workfront.com/proof/review/d7b1a067d8fd41b5891ee9d92bd3a43a-tbH6RWOSuR2H88PdehjbktCfO4hqidCC-tf298c0e68cd0fecd2d Extensive time and effort is being expended to comply with the revised rules related to water. For example: • revised Effluent Limitation Guideline (ELG) requirements to cease discharge of bottom ash transport water fly ash transport water; • perform enhanced treatment of flue gas de-sulfurization (FGD) wastewater; • tighter operational performance standards for cooling water intake structures (CWIS) per 316(b) rules). The company has also incorporated water usage strategy as part of an internal sustainability initiative.

W6.2

(W6.2) Is there board level oversight of water-related issues within your organization?

Yes

W6.2a

(W6.2a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for water-related issues.

Position of individual or committee	Responsibilities for water-related issues
Board-level committee	At DTE, the ultimate oversight of our company's sustainability efforts – including risk management – rests with the Board of Directors and permeates all levels of corporate executive leadership.

	The Board's commitment to ESG has been and continues to be effectuated through its committee structure. As further described in our proxy statement, the Public Policy and Responsibility Committee maintains primary oversight for ESG matters generally, while the Audit, Organization & Compensation, and Corporate Governance Committees oversee those matters within their expertise, and the entire Board remains committed to and updated on these matters regularly.

W6.2b

(W6.2b) Provide further details on the board's oversight of water-related issues.

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring implementation and performance Overseeing acquisitions, mergers, and divestitures Overseeing major capital expenditures Reviewing and guiding annual budgets Reviewing and guiding business plans Reviewing and guiding corporate responsibility strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding strategy	The Board of Directors meets regularly to lead our company, creating and sustaining long-term value for all stakeholders. With respect to sustainability, the Board of Directors: • Bears responsibility for oversight and risk management of plans to create long-term value for shareholders while ensuring our company operates in an environmentally and socially responsible manner • Oversees company management and assesses the effectiveness of management policies and decisions, including management's development and execution of our company's strategies • Reviews all major environmental initiatives In addition, each of the six board committees have detailed charters that define its scope, objectives and responsibilities related to oversight and risk management.

		Reviewing innovation/R&D priorities Setting performance objectives	

W6.2d

(W6.2d) Does your organization have at least one board member with competence on water-related issues?

	Board member(s) have competence on water-related issues
Row 1	

W6.3

(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).

Name of the position(s) and/or committee(s)

Other, please specify

Vice President - Environmental Management & Safety

Water-related responsibilities of this position

Assessing future trends in water demand
Assessing water-related risks and opportunities
Managing water-related risks and opportunities
Conducting water-related scenario analysis
Setting water-related corporate targets
Monitoring progress against water-related corporate targets
Managing public policy engagement that may impact water security
Integrating water-related issues into business strategy
Managing annual budgets relating to water security

Frequency of reporting to the board on water-related issues

As important matters arise

Please explain

Our VP of Environmental Management and Safety, together with other senior leaders of the company, including DTE Energy's Chairman and CEO, provide leadership and oversight of our sustainability initiatives through enterprise priority meetings and/or other leadership committees including:

• Gather/respond to input from investors, regulating bodies and other key stakeholders regarding our sustainability strategies, initiatives and priorities

• Review internal ESG data and disclosure documents in consultation with relevant business units

• Execute our company's sustainability strategies, including governance, engagement and oversight initiatives, in consultation with the Board of Directors

• Manage environmental compliance processes and carbon-reduction strategy

• Report outcomes of our sustainability initiatives to the Board of Directors

• Manage risks and opportunities associated with environmental and social initiatives

• Receive compensation tied to the achievement of company goals

W6.4

(W6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?

	Provide incentives for management of water-related issues	Comment
Row 1		

W6.5

(W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?

Yes, direct engagement with policy makers

Yes, trade associations

Yes, funding research organizations

W6.5a

(W6.5a) What processes do you have in place to ensure that all of your direct and indirect activities seeking to influence policy are consistent with your water policy/water commitments?

The ISO 14001 certified systems ensure that these facilities have processes in place to meet compliance with environmental regulations. Compliance with regulations helps to influence policy that is consistent with our overall strategy for the business, including protecting the environment. Water policy and strategy for the company is managed by the Vice President of Environmental Management & Safety. Per ISO 14001 standard, if an inconsistency is discovered, a cross-functional team identifies, problem-solves, and coordinates a corrective action and follows through completion of the countermeasure.

W6.6

(W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?

Yes (you may attach the report - this is optional)

W7. Business strategy

W7.1

(W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain

Long-term business objectives	Yes, water-related issues are integrated	5-10	Greater regulator engagement can be secured by coming into compliance with the new ELG rule and gives the Company the opportunity to engage with state regulators to craft a long-term strategy that benefits all parties. DTE holds ongoing cross-functional meetings to evaluate strategies and financial impact. Our long-term strategy incorporates the goal to maintain a reliable power generation system with affordable rates for customers. An example of this is DTE's initiative to close aging coal-fired power plants by 2032 and replace with higher efficiency combined cycle gas plant and additional renewable energy.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	5-10	Water resource considerations and EPA regulations are factored into electrical generation resource planning. In 2020, the EPA finalized the ELG Reconsideration Rule which revised the regulations from the 2015 ELG rule for flue gas desulfurization (FGD) wastewater and bottom ash transport water. In the ELG Reconsideration Rule the EPA set the applicability dates for Bottom Ash Transport Water (BATW) and FGD wastewater that must be completed no later than December 31, 2025 (BATW) or December 31, 2028 (FGD Wastewater). If a permittee decides to pursue the Voluntary Incentives Program (VIP) subcategory for FGD wastewater they must meet more stringent standards, but are allowed an extended time period to meet the compliance requirements. The Reconsideration Rule provides new opportunities for DTE Electric to evaluate existing ELG compliance strategies and make any necessary adjustments to ensure full compliance with the ELGs in a cost-effective manner. The revised 316(b) regulations of the Clean Water Act for cooling water intake structures (CWIS) was a consideration when deciding to construct Blue Water Energy Center (BWEC). The availability of water and the condition of cooling water intake structures (CWIS) components at existing facilities helped drive the final location. In addition, to increase reliability and affordability, DTE has expanded, and continues to expand, our renewable generation fleet specifically solar and wind generation.
Financial planning	Yes, water-related issues are integrated	16-20	There are increased investment opportunities related to implementing revised environmental regulations such as the 316(b). Another investment opportunity is the effort to comply with the revised effluent limitation guideline (ELG) rule for NPDES permitted discharges. The Company is in the process of implementing strategies to comply with the new rule, and those strategies will require a substantial capital investment. Furthermore, DTE is driven by the economic benefit of renewables and continues to invest in renewable generation to improve the financial outlook of the Company.

			Aligning Company goals to shut down coal-fired power plants will reduce operating costs and provide a long-term solution that is profitable for both the Company and the community. The Company mitigates financial risk by strategically selecting sites for future development to minimize impacts on natural resources, such as wetlands. DTE recognizes the fiscal advantages of adopting these solutions and considers financial impact in the Company long-term business strategy. DTE Electric has estimated the impact of the CCR and ELG rules to be $488 million of capital expenditures, including $423 million for 2023 through 2027.

W7.2

(W7.2) What is the trend in your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?

Row 1

Water-related CAPEX (+/- % change)

Anticipated forward trend for CAPEX (+/- % change)

Water-related OPEX (+/- % change)

Anticipated forward trend for OPEX (+/- % change)

Please explain

W7.3

(W7.3) Does your organization use scenario analysis to inform its business strategy?

	Use of scenario analysis	Comment
Row 1	Yes	See description of scenario modeling included in the 2022 Integrated Resource Plant (IRP) at https://dtecleanenergy.com/downloads/IRP_Executive_Summary.pdf#page=19

W7.3a

(W7.3a) Provide details of the scenario analysis, what water-related outcomes were identified, and how they have influenced your organization's business strategy.

	Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
Row 1			See description of scenario modelling included in the 2022 Integrated Resource Plant (IRP) at https://dtecleanenergy.com/downloads/IRP_Executive_Summary.pdf#page=19	

W7.4

(W7.4) Does your company use an internal price on water?

Row 1

Does your company use an internal price on water?

No, and we do not anticipate doing so within the next two years

Please explain

DTE does not plan on using an internal price on water; however the Company's water policy focuses on water reduction and reuse strategies in all projects.

W7.5

(W7.5) Do you classify any of your current products and/or services as low water impact?

	Products and/or services classified as low water impact	Please explain
Row 1		

W8. Targets

W8.1

(W8.1) Do you have any water-related targets?

Yes

W8.1a

(W8.1a) Indicate whether you have targets relating to water pollution, water withdrawals, WASH, or other water-related categories.

	Target set in this category	Please explain
Water pollution	No, and we do not plan to within the next two years	
Water withdrawals	Yes	
Water, Sanitation, and Hygiene (WASH) services	No, and we do not plan to within the next two years	
Other	No, and we do not plan to within the next two years	

W8.1b

(W8.1b) Provide details of your water-related targets and the progress made.

Target reference number

Target 1

Category of target

Water withdrawals

Target coverage

Business division

Quantitative metric

Reduction in total water withdrawals

Year target was set

2017

Base year

2005

Base year figure

5,452,000

Target year

2040

Target year figure

545,000

Reporting year figure

3,587,000

% of target achieved relative to base year

38.0069288771

Target status in reporting year

Underway

Please explain

Since 2005, DTE has reduced surface water withdrawals within DTE Electric Company by 34% by retiring coal-fired power plants (e.g. Conners Creek ,Harbor Beach, River Rouge, St. Clair, and Trenton Channel Power Plants) that utilize water for cooling, which accomplishes 86% of our 2023 interim target and 38% of our 2040 target. DTE projects that surface water withdrawals in DTE Electric Company will continue to decrease in the future, as more water efficient systems are installed and additional coal-fired power plants are retired. These water goals are aligned with the company's goals to reduce carbon emissions from electric generating facilities from a 2005 baseline. These numbers represent current projections and are subject to change in the future.

W9. Verification

W9.1

(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?

No, we do not currently verify any other water information reported in our CDP disclosure

W10. Plastics

W10.1

(W10.1) Have you mapped where in your value chain plastics are used and/or produced?

	Plastics mapping	Please explain
Row 1		

W10.2

(W10.2) Across your value chain, have you assessed the potential environmental and human health impacts of your use and/or production of plastics?

	Impact assessment	Please explain
Row 1		

W10.3

(W10.3) Across your value chain, are you exposed to plastics-related risks with the potential to have a substantive financial or strategic impact on your business? If so, provide details.

	Risk exposure	Please explain
Row 1		

W10.4

(W10.4) Do you have plastics-related targets, and if so what type?

	Targets in place	Please explain
Row 1		

W10.5

(W10.5) Indicate whether your organization engages in the following activities.

	Activity applies	Comment

Production of plastic polymers		
Production of durable plastic components		
Production / commercialization of durable plastic goods (including mixed materials)		
Production / commercialization of plastic packaging		
Production of goods packaged in plastics		
Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services)		

W11. Sign off

W-FI

(W-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.

W11.1

(W11.1) Provide details for the person that has signed off (approved) your CDP water response.

	Job title	Corresponding job category
Row 1	Shawn P. Patterson, Vice President Environmental Management & Safety	Other, please specify Vice President

SW. Supply chain module

SW0.1

(SW0.1) What is your organization's annual revenue for the reporting period?

	Annual revenue
Row 1	13,190,000,000

SW1.1

(SW1.1) Could any of your facilities reported in W5.1 have an impact on a requesting CDP supply chain member?

SW1.2

(SW1.2) Are you able to provide geolocation data for your facilities?

	Are you able to provide geolocation data for your facilities?	Comment
Row 1		

SW2.1

(SW2.1) Please propose any mutually beneficial water-related projects you could collaborate on with specific CDP supply chain members.

SW2.2

(SW2.2) Have any water projects been implemented due to CDP supply chain member engagement?

No

SW3.1

(SW3.1) Provide any available water intensity values for your organization's products or services.

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please indicate your consent for CDP to share contact details with the Pacific Institute to support content for its Water Action Hub website.

Yes, CDP may share our Main User contact details with the Pacific Institute

Please confirm below

I have read and accept the applicable Terms