

Suncor Energy Inc. - Water Security 2023



W0. Introduction

W0.1

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

Suncor is an integrated energy company headquartered in Calgary, Alberta, Canada. Suncor's long-life, low-decline asset base, strong balance sheet and integrated model, with our connection to end consumers through our retail network, sets us apart from our peers. These advantages are complemented by our long-standing approach to sustainability, operational excellence, capital discipline, technology and innovation. Suncor's integrated operations include oil sands development and upgrading, offshore oil and gas production, petroleum refining and product marketing under the Petro-Canada™ brand. As Canada's leading integrated energy company, we believe environmental and social progress and economic performance are intertwined and integral to our success.

The terms "Suncor" or "the company" in these responses are used herein for simplicity of communication and only mean that there is an affiliation with Suncor Energy Inc., without necessarily identifying the specific nature of the affiliation. The use of such terms in any response herein does not mean that they apply to Suncor Energy Inc. or any particular affiliate, and does not waive the corporate separateness of any affiliate. For further clarity, Suncor Energy Inc. does not directly operate or own assets in the United States.

W-OG0.1a

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

Upstream
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.

Canada
United States of America

W0.4

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

CAD

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 over which operational control is exercised

W0.6

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

No

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	CA8672241079
Yes, a Ticker symbol	XTSE: SU
Yes, a CUSIP number	867224107

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	<p>Water is an integral component of Suncor's operations to extract, upgrade and refine our oil & gas products. Our operations use fresh water, saline water, recycled wastewater and industrial storm water run-off for water make-up. The primary use of fresh water in Suncor operations is for utilities.</p> <p>Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To continue improving our environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.</p>
Sufficient amounts of recycled, brackish and/or produced water available for use	Vital	Important	<p>Approximately 93% of the water used by our mining and extraction operations (Base Plant, Fort Hills and Syncrude) in 2022 was recycled water.</p> <p>Produced water in thermal in situ oil sands facilities primarily consists of condensed steam injected for oil recovery. The hot oil/water emulsion is treated to separate the oil for sales and to reuse the water for steam. Reuse rates at Suncor in situ facilities are approximately 98%.</p> <p>Our Edmonton refinery's primary water supply is reused municipal waste water from the local treatment facility. In 2022, approximately 44% of the total water used was from recycled wastewater supplied from the Gold Bar Wastewater Treatment Plant, in Edmonton.</p> <p>We anticipate that continued monitoring of the watersheds will help us adapt and continue to take appropriate actions to reduce our water footprint. Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To continue improving our environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.</p>

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%	Yearly	At a corporate level we collect this data point annually.	Total water withdrawal volumes are measured and monitored at our operating facilities as a regulatory requirement. We also publicly disclose water performance including annual withdrawal volumes in our Report on Sustainability. This helps us to track and report our withdrawal volumes for better performance and also to increase transparency with our stakeholders. Suncor complies with provincial and federal regulatory standards for water monitoring which typically requires monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.
Water withdrawals – volumes by source	100%	Yearly	At a corporate level we collect this data point annually.	Total water withdrawal volumes by source are metered at all of our operating facilities. As a regulatory requirement, we report the volumes we withdraw from each source. We also publicly disclose water performance including annual withdrawal volumes in our Report on Sustainability. This aids with performance tracking and increases transparency with our stakeholders. Suncor complies with provincial and federal regulatory standards for water monitoring which typically requires monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.
Entrained water associated with your metals & mining and/or coal sector activities - total volumes [only metals and mining and coal sectors]	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Produced water associated with your oil & gas sector activities - total volumes [only oil and gas sector]	100%	Yearly	At a corporate level we collect this data point annually.	Produced water in thermal in situ oil sands facilities primarily consists of condensed steam injected for oil recovery. The hot oil/water emulsion is treated to separate the oil for sales and to reuse the water for steam. Reuse rates at Suncor in situ facilities are approximately 98%. Total produced water volumes are measured and monitored at Suncor In-Situ facilities. As a regulatory requirement, we report the volumes we withdraw to regulatory agencies. Suncor complies with provincial and federal regulatory standards for water monitoring which typically requires monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices
Water withdrawals quality	51-75	Please select		Suncor measures and monitors our surface water withdrawal quality. The monitored quality is aligned with water discharge quality effluent parameters.
Water discharges – total volumes	100%	Yearly	At a corporate level we collect this data point annually.	The total water discharge volumes are measured and monitored. We are required to report to the regulators the volume of water we discharge (return) back to the environment. Suncor also reports this volume annually to our stakeholders in our Report on Sustainability. Suncor complies with provincial and federal regulatory standards for water monitoring which typically requires monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices
Water discharges – volumes by destination	100%	Yearly	At a corporate level we collect this data point annually.	The total water discharge volumes by destination are measured and monitored. We are required to report to the regulators the volume of water we discharge (return) back to the environment and where we discharge the water. Suncor complies with provincial and federal regulatory standards for water monitoring which typically requires monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.
Water discharges – volumes by treatment method	100%	Please select		The water discharge volumes by treatment method are both measured and monitored. We are required to report this information to regulatory bodies
Water discharge quality – by standard effluent parameters	100%	Please select		Suncor measures and monitors our water discharge quality effluent parameters. We are regulated in our operating approvals on the quality of water we discharge back to the environment. This requires that we analyze for specific parameters and report these results to the regulators on a monthly and/or annual basis.
Water discharge quality – emissions to water (nitrates, phosphates, pesticides, and/or other priority substances)	Please select	<Not Applicable>	<Not Applicable>	
Water discharge quality – temperature	1-25	Please select		Suncor measures and monitors our water discharge quality effluent parameters required by regulators and those parameters do not include the water temperature.
Water consumption – total volume	100%	Yearly	At a corporate level we collect this data point annually.	Suncor measures and monitors our water consumption volumes for all of our facilities. We report these volumes annually to our stakeholders in our Report on Sustainability.
Water recycled/reused	100%	Yearly	At a corporate level we collect this data point annually.	Suncor measures and monitors our water consumption volumes for all of our facilities. Suncor complies with provincial and federal regulatory standards for water monitoring which typically requires monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Please select		Suncor's operations are in developed countries which all have requirements for worker health and safety as well as water and sanitation provision. Monitoring is required at both the global/national level and at the facility level as per national policies and standards for WASH. The standards cover: water quality, water quantity, water facilities and access to water, wastewater treatment and disposal and other environmental issues.

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	168473	About the same	Other, please specify (Not applicable, comparison was about the same)	Please select	Please select	<p>In 2022, Suncor's total water withdrawal was approximately the same as in 2021 (5% lower).</p> <p>Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/Much high (>11%). Data reported is sourced from direct measurements. Total water withdrawal is the removal or purchase of water from any source, permanently or temporarily. Fresh and non-fresh water included. Data reported is sourced from direct measurements.</p> <p>Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.</p> <p>The reported figures satisfy the equation: $W = D + C$ Where, W= total withdrawals D= total discharges C= total consumption</p> <p>Total withdrawal does not include produced/processed water in this case. Produced water in thermal in situ oil sands facilities and Syncrude primarily consists of condensed steam injected for oil recovery. The hot oil/water emulsion is treated to separate the oil for sales and to reuse the water for steam. Reuse rates at Suncor in situ facilities are approximately 98%.</p> <p>This comparison includes Syncrude for 2021.</p>
Total discharges	79996	Much lower	Increase/decrease in business activity	Please select	Please select	<p>In 2022, Suncor's total water discharge volume was 11% lower than in 2021 mainly due to improved water management and more accurate tracking systems at Base Plant; reduced water being discharged to sedimentation ponds at Syncrude; zero ocean water intake at Terra Nova; relatively consistent discharge at our refining and logistics operations.</p> <p>Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/Much high (>11%). Data reported is sourced from direct measurements. Total water return is water leaving organization's boundary and released to surface water, groundwater or to third parties. Data reported is sourced from direct measurements.</p> <p>Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.</p> <p>The reported figures satisfy the equation: $W = D + C$ Where, W= total withdrawals D= total discharges C= total consumption</p> <p>This comparison includes Syncrude for 2021.</p>
Total consumption	100326	Lower	Increase/decrease in business activity	Please select	Please select	<p>In 2022, Suncor's total water consumption volume was 6% lower than in 2021. This was mainly due to a 8% reduction at our upstream sites from a reduced water requirements for operations at Fort Hills and Syncrude; improved water management and more accurate tracking systems at Base Plant; reduced water being discharged to sedimentation ponds at Syncrude; zero ocean water intake at Terra Nova. This was slightly counter acted by an 11% increase at our refining and logistics sites, which was due to higher precipitation rates in Montreal and Edmonton; and more accurate water accounting with flowmeter corrections.</p> <p>Our consumption of fresh and non-fresh water for 2020 was 57 million cubic metres, 15% lower than 2019 performance. Our absolute freshwater consumption decreased by 40% and freshwater consumption intensity decreased by approximately 40% compared to 2019 performance.</p> <p>Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/Much high (>11%). Data reported is sourced from direct measurements. Water consumption is the total water withdrawn minus water returned and reflects quantity of water used and not returned to its proximate source or no longer available in its original form. Data reported is sourced from direct measurements.</p> <p>Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.</p> <p>The reported figures satisfy the equation: $W = D + C$ Where, W= total withdrawals D= total discharges C= total consumption</p> <p>This comparison includes Syncrude for 2021.</p>

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 - upstream	116493	Lower	Increase/decrease in business activity	Please select	Please select	<p>Suncor's operations include oil sands extraction and upgrading, offshore oil and gas production, petroleum refining and product marketing under the Petro-Canada™ brand. Suncor upstream operations includes: Mining, In Situ, and Exploration & Production.</p> <p>Suncor 2022 upstream total water withdrawal volume was 8% lower than 2021 mainly due to reduced water requirements for operations at Fort Hills and Syncrude; improved water management and more accurate tracking systems at Base Plant; zero ocean water intake at Terra Nova.</p> <p>Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/ Much high (>11%).</p> <p>Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.</p> <p>This comparison includes Syncrude for 2021.</p>
Total discharges – upstream	35220	Much Lower	Other, please specify (A more accurate tracking system at Base Plant)	Please select	Please select	<p>Suncor's operations include oil sands extraction and upgrading, offshore oil and gas production, petroleum refining and product marketing under the Petro-Canada™ brand. Suncor upstream operations includes: Mining, In Situ, and Exploration & Production.</p> <p>Suncor 2022 upstream total water discharge volume is 23% lower than 2021 mainly due to improved water management and more accurate tracking systems at Base Plant; reduced water being discharged to sedimentation ponds at Syncrude; zero ocean water intake at Terra Nova.</p> <p>Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/ Much high (>11%).</p> <p>Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level. This comparison includes Syncrude for 2021.</p>
Total consumption – upstream	93124	Lower	Increase/decrease in business activity	Please select	Please select	<p>Suncor's operations include oil sands extraction and upgrading, offshore oil and gas production, petroleum refining and product marketing under the Petro-Canada™ brand. Suncor upstream operations includes: Mining, In Situ, and Exploration & Production.</p> <p>Suncor 2022 upstream total water consumption volume is 8% lower than 2021 mainly due to reduced water requirements for operations at Fort Hills and Syncrude; improved water management and more accurate tracking systems at Base Plant; reduced water being discharged to sedimentation ponds at Syncrude; zero ocean water intake at Terra Nova.</p> <p>Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/ Much high (>11%).</p> <p>Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.</p> <p>This comparison includes Syncrude for 2021.</p>
Total withdrawals - midstream/downstream	51979	About the same	Other, please specify (Not applicable, comparison was about the same)	Please select	Please select	<p>Suncor's operations include oil sands extraction and upgrading, offshore oil and gas production, petroleum refining and product marketing under the Petro-Canada™ brand. Suncor downstream operations includes our four refineries located in Edmonton, Alta.; Sarnia, Ont.; Montreal, Que. and Commerce City, Colo. Downstream operations also includes our Burrard Terminal, St. Clair Ethanol Plant the Montreal Sulphur Plant.</p> <p>Suncor 2022 downstream total water withdrawal volume is about the same as in 2021 (3% increase) due to higher precipitation rates in Montreal and Edmonton; and more accurate water accounting with flowmeter corrections. We continue to explore and implement local initiatives that will result in more efficient water use.</p> <p>Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/ Much high (>11%).</p> <p>Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.</p>
Total discharges – midstream/downstream	44776	About the same	Other, please specify (Not applicable, comparison was about the same)	Please select	Please select	<p>Suncor's operations include oil sands extraction and upgrading, offshore oil and gas production, petroleum refining and product marketing under the Petro-Canada™ brand. Suncor downstream operations includes our four refineries located in Edmonton, Alta.; Sarnia, Ont.; Montreal, Que. and Commerce City, Colo. Downstream operations also includes our Burrard Terminal, St. Clair Ethanol Plant the Montreal Sulphur Plant.</p> <p>Suncor 2022 downstream total water discharge volume is about the same as in 2021 (2% increase) due to higher precipitation rates in Montreal and Edmonton; and more accurate water accounting with flowmeter corrections. We continue to explore and implement local initiatives that will result in more efficient water use.</p> <p>Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/ Much high (>11%).</p> <p>Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.</p>
Total consumption – midstream/downstream	7203	Much higher	Other, please specify (Higher precipitation and more accurate flowmeters)	Please select	Please select	<p>Suncor's operations include oil sands extraction and upgrading, offshore oil and gas production, petroleum refining and product marketing under the Petro-Canada™ brand. Suncor downstream operations includes our four refineries located in Edmonton, Alta.; Sarnia, Ont.; Montreal, Que. and Commerce City, Colo. Downstream operations also includes our Burrard Terminal, St. Clair Ethanol Plant the Montreal Sulphur Plant.</p> <p>Suncor 2022 downstream total water discharge volume is 11% higher than 2021 due to higher precipitation rates in Montreal and Edmonton; and more accurate water accounting with flowmeter corrections. We continue to explore and implement local initiatives that will result in more efficient water use.</p> <p>Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/ Much high (>11%).</p> <p>Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.</p>

	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 – chemicals	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Total discharges – chemicals	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Total consumption – chemicals	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Total withdrawals – other business division	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Total discharges – other business division	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Total consumption – other business division	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>

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	% withdrawn from areas with water stress	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five year forecast	Primary reason for forecast	Identification tool	Please explain
Row 1	No	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	WRI Aqueduct WWF Water Risk Filter Other, please specify (IPIECAs Global Water Tool for Oil and Gas)	<p>There are a variety of tools available to assess water stress and risk across our diverse assets, including IPIECAs Global Water Tool for Oil and Gas, the World Wildlife Funds Water Risk Filter Tool, and the World Resources Institutes Aqueduct Water Risk Atlas. Suncor has non-operated assets in the United Kingdom, North Africa, and the Middle East that are located in basins of high water stress (less than 1700m3/yr), however, since Suncor is not the operator of these assets, they are not included for consideration for this submission.</p> <p>Locally, regulators and governments also track water availability. For instance, the Alberta Energy Regulator provides public information showing water-short, potentially water-short and locally constrained areas in Alberta: High-resolution map</p> <p>None of Suncor's assets operate in areas of high risk of water stress (<40% ratio of withdrawals to supply). However, Suncor's Commerce City refinery in Colorado operates in a region that is classified as moderate risk (medium-high stress, 20-40% ratio of withdrawals to supply) according to the World Resources Institute's Aqueduct Water Risk Atlas. Water management is a priority at Suncor and we will continue to monitor the status of the basin going forward while focusing on implementing industry-leading innovation at our facilities to reduce, recycle, reuse and return water.</p>

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	153973	About the same	Other, please specify (Not applicable, comparison was about the same)	In 2022, Suncor's fresh water withdrawal volume remained about the same as in 2021 (5% lower). Threshold: About the same (0%-5%). Total water withdrawal is the removal or purchase of water from any source, permanently or temporarily. Data reported is sourced from direct measurements. If runoff water is not measured, estimate precipitation volume using surface area of operated facility X by the annual precipitation depth. Fresh water is characterized by low TDS content for which limits are defined by regulation in the jurisdiction. Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 yr outlook on a corporate and facility level. The comparison to 2021 includes Syncrude.
Brackish surface water/Seawater	Relevant	0	About the same	Other, please specify (Not applicable, comparison was about the same)	In 2022, Suncor's non-fresh water withdrawal volume was the same as 2021 due to no water use at Terra Nova. Production at Terra Nova has been shut in since the fourth quarter of 2019. Threshold: About the same (0%-5%). Total water withdrawal is the removal or purchase of water from any source, permanently or temporarily. Non-fresh water included. Data reported is sourced from direct measurements. Fresh water is characterized by low TDS content for which limits are defined by regulation in the jurisdiction. Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 yr outlook on a corporate and facility level.
Groundwater – renewable	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	Suncor does not use renewable groundwater in operations.
Groundwater – non-renewable	Relevant	7465	Much lower	Increase/decrease in business activity	In 2022, Suncor's groundwater withdrawal volume was 15% lower than 2021 due to less water being required at Fort Hills and Syncrude for on site operations and . Threshold: Much low/Much high (>11%). Total water withdrawal is the removal or purchase of water from any source, permanently or temporarily. Fresh and non-fresh water included. Data reported is sourced from direct measurements. Fresh water is characterized by low TDS content for which limits are defined by regulation in the jurisdiction. Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 yr outlook on a corporate and facility level. The comparison to 2021 includes Syncrude.
Produced/Entrained water	Relevant	44229	About the same	Other, please specify (Not applicable, comparison was about the same)	Produced water in thermal in situ oil sands facilities primarily consists of condensed steam injected for oil recovery. The hot oil/water emulsion is treated to separate the oil for sales and to reuse the water for steam. As a result of high recycle rates, the produced water volume of 44 million m3 is not a new withdrawal. In 2022, produced water at the upstream in situ sites (Firebag and MacKay River) and Syncrude remained about the same as in 2021 (2% decrease). Produced water recycling rate was 96.6% at our Firebag in-situ operations and 99.7% at our MacKay River in-situ operations. At Terra Nova, produced water was zero as the asset remained offline in 2022. Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 yr outlook. The comparison to 2021 includes Syncrude.
Third party sources	Relevant	7035	About the same	Other, please specify (Not applicable, comparison was about the same)	In 2022, Suncor's water withdrawal volume from third party sources was about the same as in 2021 (4% higher). Thresholds: About the same (0%-5%). Data reported is sourced from direct measurements. Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 yr outlook on a corporate and facility level. The comparison to 2021 includes Syncrude.

W1.2i

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water	Relevant	66385	Much higher	Other, please specify (A more accurate tracking system at Base Plant)	In 2022, Suncor's total fresh surface water discharges increased by 11% mainly due to more accurate tracking systems at Base Plant and high pumpoff volumes at one of our In Situ facilities (Firebag). Thresholds: Much low/Much high (>11%). Data reported is sourced from direct measurements. Total water return is water leaving organization's boundary and released to surface water. Fresh water is characterized by a low TDS content for which limits are defined by regulation in the jurisdiction. Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level. The comparison to 2021 includes Syncrude.
Brackish surface water/seawater	Relevant	379	Much lower	Increase/decrease in business activity	In 2022, Suncor's total non-fresh water discharges was 26% lower compared to 2021 due to less water being needed for site activities at one of our downstream operations (Burrard Terminal) and no water use at Terra Nova. Thresholds: Much low/Much high (>11%). Data reported is sourced from direct measurements. Total water return is water leaving organization's boundary and released to surface water. Non-fresh water included. Fresh water is characterized by a low TDS content for which limits are defined by regulation in the jurisdiction. Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.
Groundwater	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	Suncor does not discharge groundwater in operations.
Third-party destinations	Relevant	13232	Much lower	Other, please specify (Less water being transferred between sites, and a more accurate tracking system at Base Plant)	In 2022, Suncor's water discharge volume from third party sources was 39% lower than 2021, due to less water being transferred between sites and a more accurate tracking systems at Base Plant. Threshold: Much low/Much high (>11%). Total water return is water leaving organization's boundary and released to third parties. Data reported is sourced from direct measurements. Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 yr. outlook on a corporate and facility level. The comparison to 2021 includes Syncrude.

W1.2j

(W1.2) 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	Relevant	3883	About the same	Other, please specify (Not applicable, comparison was about the same)	1-10	Suncor has monitored all water treatment activities for years; compared to 2021, the amount of water sent for tertiary treatment was 3% higher in 2022. Tertiary treatment involves the additional treatment needed to remove suspended, colloidal and dissolved constituents (nutrients, heavy metals, inorganic and other contaminants) remaining after secondary treatment through a number of processes, including granular media filtration, biological nitrification-denitrification, biological phosphorus removal, chlorination, etc. Tertiary treatment follows secondary treatment, further treatment and filtration. Our Sarnia Refinery uses Granular Activated Carbon (GAC) filters, the GAC help to remove the remaining trace of toxicity from the water. Our Commerce City Refinery uses Ultrafiltration (UF) and starting in 2022, installed a GAC treatment plan to remove PFAS from the process water stream. The UF helps to remove the final traces of solids, including arsenic and mercury, to meet our regulatory requirements. Commerce City will be using additional tertiary treatment in the future. Suncor has developed models and tools used to anticipate future trends in areas such as freshwater withdrawal, water recycled/ reused, and wastewater production. Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10-year outlook on a corporate and facility level.
Secondary treatment	Relevant	5718	About the same	Other, please specify (Not applicable, comparison was about the same)	1-10	Suncor has monitored all water treatment activities for years; compared to 2021, the amount of water sent to secondary treatment was 1% lower in 2022. Secondary treatment involves the degradation of organic matter and reduction of solids through biological treatment. The removal of nutrients (nitrogen and/or phosphorus) can also be achieved at this level of treatment using a combination of chemical and biological treatments. Secondary treatment follows primary treatment. Suncor uses micro biosystems for secondary treatment. Our Montreal, Sarnia and Commerce City Refineries and Burrard Terminal use secondary treatment systems such as activated sludge, Moving Bed Bio Reactor (MBBR) and Membranes bioreactor (MBR). These technologies help to remove some of the oil and grease, nitrates, phosphates, phenols and toxicity from the water. Suncor has developed models and tools used to anticipate future trends in areas such as freshwater withdrawal, water recycled/ reused, and wastewater production. Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10-year outlook on a corporate and facility level.
Primary treatment only	Relevant	57320	About the same	Other, please specify (Not applicable, comparison was about the same)	81-90	Suncor has monitored all water treatment activities for years; compared to 2021, the amount of water sent to primary treatment was 2% lower in 2022. Primary treatment involves the physical removal of suspended solids and floating material, typically by sedimentation. A preliminary treatment may often be applied involving the physical removal of large debris, large particles, oils, and grease, typically through screens and grit chambers. Suncor's has settling ponds for primary treatment, where water is diverted to a pond to allow the settling of particles and testing prior to discharge. This is mainly used for uncontaminated surface runoff water (rainfall, snowmelt, etc.). This method of treatment is applicable for numerous Suncor sites. Suncor also uses APIs and Dissolved or Induced air/gas flotation (IGF/DAF/DGF) system to remove TSS and hydrocarbon from the water prior to the secondary (biological) treatment. Suncor has developed models and tools used to anticipate future trends in areas such as freshwater withdrawal, water recycled/ reused, and wastewater production. Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10-year outlook on a corporate and facility level.
Discharge to the natural environment without treatment	Not relevant	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	Wastewater discharge sent for deep-well disposal at Suncor's in situ site (Firebag) and Edmonton Refinery is classified as waste and is reported accordingly
Discharge to a third party without treatment	Relevant	1091	Much higher	Other, please specify (Increased water sent to domestic waste to the city)	1-10	Suncor has monitored all water treatment activities for years; compared to 2021, the amount of water sent to third parties was 35% higher in 2022. Discharge to a third party without treatment is a domestic waste to the city. There are a few Suncor sites where domestic sewage is sent to city sewer systems just like homes and office buildings. Suncor has developed models and tools used to anticipate future trends in areas such as freshwater withdrawal, water recycled/ reused, and wastewater production. Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10-year outlook on a corporate and facility level.
Other	Relevant	540	Much higher	Other, please specify (Increased water being transferred between sites)	Less than 1%	Suncor has monitored all water treatment activities for years; compared to 2021, the amount of water sent to primary treatment was 46% higher in 2022. Firebag and MacKay River in situ sites use recycled wastewater from our oil sands upgrading and utilities operations, surface run-off water collected within the facility boundary and from groundwater wells. As a result, most of the water used at the site is recycled. In addition, Base Plant also sent water to other sites for treatment and reuse. Suncor has developed models and tools used to anticipate future trends in areas such as freshwater withdrawal, water recycled/ reused, and wastewater production. Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10-year outlook on a corporate and facility level.

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	6303800000	168473	374172.716102877	We continue to operate well below our annual water licences, withdrawing less water than we're regulated to withdraw. We continue to explore and implement local initiatives that will result in more efficient water use, with less fresh water drawn from local water sources. Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production.

W-OG1.3

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

Yes

(W-OG1.3a) Provide water intensity information associated with your activities in the oil & gas sector.**Business division**

Upstream

Water intensity value (m3/denominator)

1.22

Numerator: water aspect

Total water withdrawals

Denominator

Other, please specify (m3 of bitumen, synthetic crude and offshore crude)

Comparison with previous reporting year

Much lower

Please explain

In 2022, Suncor upstream total water withdrawal intensity is 13% lower than 2021 mainly due to improved water management, along with more accurate tracking systems at Base Plant; less water being required for site activities at Fort Hills, Syncrude and the in situ sites; zero ocean water intake at Terra Nova.

Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/ Much high (>11%). Data reported is sourced from direct measurements. Total water withdrawal is the removal or purchase of water from any source, permanently or temporarily. Fresh and non-fresh water included. Data reported is sourced from direct measurements.

This metric is used to monitor our water use and success of process optimization strategies (ie. recycling, reuse, return strategies). Unit of production has been updated to the sum of our bitumen production, synthetic crude production and offshore crude production. The 2022 value and comparison to 2021 includes Syncrude.

Business division

Upstream

Water intensity value (m3/denominator)

0.8

Numerator: water aspect

Total water consumption

Denominator

Other, please specify (m3 of bitumen, synthetic crude and offshore crude)

Comparison with previous reporting year

Much higher

Please explain

In 2022, Suncor upstream total water consumption intensity was 11% higher than 2021 mainly due to increased bitumen and synthetic crude production and a decrease in withdrawal as described above; zero consumption at Terra Nova.

Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/ Much high (>11%). Data reported is sourced from direct measurements. Water consumption is the total water withdrawn minus water returned and reflects quantity of water used and not returned to its proximate source or no longer available in its original form. Fresh and non-fresh water included. Data reported is sourced from direct measurements.

This metric is used to monitor our water use and success of process optimization strategies (ie. recycling, reuse, return strategies). Unit of production has been updated to the sum of our bitumen production, synthetic crude production and offshore crude production. The 2022 value and comparison to 2021 includes Syncrude.

Business division

Midstream/Downstream

Water intensity value (m3/denominator)

1.88

Numerator: water aspect

Total water withdrawals

Denominator

Other, please specify (m3 of refined liquid hydrocarbon production and renewable fuels production (ethanol))

Comparison with previous reporting year

About the same

Please explain

In 2022, Suncor's downstream total water withdrawal intensity remained about the same (3% lower) compared to 2021.

Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/ Much high (>11%). Data reported is sourced from direct measurements. Total water withdrawal is the removal or purchase of water from any source, permanently or temporarily. Fresh and non-fresh water included. Data reported is sourced from direct measurements.

This metric is used to monitor our water use and success of process optimization strategies (ie. recycling, reuse, return strategies). Unit of production has been updated to the sum of our refined liquid hydrocarbon production and renewable fuels production (ethanol).

Business division

Midstream/Downstream

Water intensity value (m3/denominator)

0.26

Numerator: water aspect

Total water consumption

Denominator

Other, please specify (m3 of refined liquid hydrocarbon production and renewable fuels production (ethanol))

Comparison with previous reporting year

About the same

Please explain

In 2022, Suncor's downstream total water consumption intensity remained about the same (5% higher) compared to 2021.

Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/ Much high (>11%). Data reported is sourced from direct measurements. Water consumption is the total water withdrawn minus water returned and reflects quantity of water used and not returned to its proximate source or no longer available in its original form. Fresh and non-fresh water included. Data reported is sourced from direct measurements.

This metric is used to monitor our water use and success of process optimization strategies (ie. recycling, reuse, return strategies). Unit of production has been updated to the sum of our refined liquid hydrocarbon production and renewable fuels production (ethanol).

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	Yes	<Not Applicable>

W1.4a**(W1.4a) What percentage of your company's revenue is associated with products containing substances classified as hazardous by a regulatory authority?**

Regulatory classification of hazardous substances	% of revenue associated with products containing substances in this list	Please explain
List of substances (Canadian Environmental Protection Act)	More than 80%	Our refined hydrocarbon products are hazardous, being both hazardous and flammable.

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

	Engagement	Primary reason for no engagement	Please explain
Suppliers	Yes	<Not Applicable>	<Not Applicable>
Other value chain partners (e.g., customers)	No	Please select	

W1.5a**(W1.5a) Do you assess your suppliers according to their impact on water security?****Row 1****Assessment of supplier impact**

No, we do not assess the impact of our suppliers and have no plans to do so within the next two years

Considered in assessment

<Not Applicable>

Number of suppliers identified as having a substantive impact

<Not Applicable>

% of total suppliers identified as having a substantive impact

<Not Applicable>

Please explain

Suncor gathers data from our suppliers related to water risk in our Sustainability Supplemental, the response is weighted against other criteria, the evaluation does not limit who we award work to based on this information alone. Suncor engages with our suppliers on their sustainability performance by assessing sustainability practices as part of prequalification, awarding of work, and ongoing supplier performance. Gathering data to understand the effects of our supply chain helps us make more informed decisions, evaluate sustainability risks and opportunities in our value chain and building relationships with like-minded suppliers to accelerate innovation and sustainability performance.

W1.5b

(W1.5b) Do your suppliers have to meet water-related requirements as part of your organization's purchasing process?

	Suppliers have to meet specific water related requirements	Comment
Row 1	No, and we do not plan to introduce water-related requirements within the next two years	Maturing relationships with a diverse range of suppliers is important. Where sustainability opportunities exist Suncor aims to grow strategic relationships. Working together with our vast supply chain network, we are attempting to leverage our collective strengths to amplify innovation and drive sustainability performance through our Supplier Management Program. These discussions also contribute to a different way of assessing our suppliers' service offerings. Suncor remains committed in working with and advancing business with suppliers and will endeavor to make the right business and social decisions at every opportunity.

W1.5d

(W1.5d) Provide details of any other water-related supplier engagement activity.

Type of engagement

Other

Details of engagement

Other, please specify (Collect water management information at least annually from suppliers, and collect information on water-related risks at least annually from suppliers.)

% of suppliers by number

1-25

% of suppliers with a substantive impact

<Not Applicable>

Rationale for your engagement

Suncor's supplier risk identification process begins with a pre-screening process through our prequalification tool, Ariba. This process ensures current and potential Contractors meet Suncor's minimum requirements in EH&S and regulatory; business ethics, compliance and bribery; human rights; quality and finance. In 2022 Suncor moved its prequalification platform from Avetta to Ariba, the intent is to have 90% of Suncor's suppliers qualified through this new system.

As part of go-to-market activities Suncor's request for proposals include a Sustainability Supplemental; a set of questions posed to the Supplier, the answers to which are evaluated in the qualification and selection process. A weighted score, as part of the overall commercial evaluation, assesses the suppliers' responses related to:

1. Indigenous business
2. Greenhouse gases, climate change, and water risk
3. Community investment
4. Inclusion & diversity
5. Human Rights & Business Ethics

Impact of the engagement and measures of success

In 2022, Suncor had 6,636 suppliers. It is our intention to have 90% of Suncor's suppliers subscribed to Suncor's prequalification program. Due to prequalification tool change in 2022 Suncor is currently in the process of re-prequalifying all applicable suppliers. We continue to engage with our key suppliers and industry partners to accelerate innovation and sustainability performance. Suncor and our key suppliers share best practices to achieve continuous improvement in sustainability performance throughout the value chain.

Comment

Working together with our vast supply chain network, we are attempting to leverage our collective strengths to amplify innovation and drive sustainability performance through our Supplier Management Program. These discussions also contribute to a different way of assessing our suppliers' service offerings. Suncor remains committed in working with and advancing business with suppliers and will endeavor to make the right business and social decisions at every opportunity.

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	No	<Not Applicable>	

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	Please explain
Row 1	Yes, we identify and classify our potential water pollutants	<p>Potential pollutants of concern are identified and monitored as per our approval conditions (i.e. Alberta's Environmental Protection and Enforcement Act or the US Environmental Protection Agency). Suncor also identifies and classifies potential water pollutants through Environmental Impact Assessments (EIAs) that are completed for projects, along with regional monitoring and reporting requirements. During an EIA, all potentially detrimental pollutants are identified and managed throughout the life of the project. Additionally, Suncor follows the Canadian Council of Ministers of the Environment (CCME) Environmental Quality Guidelines for all upstream authorizations.</p> <p>The method used to identify potential water pollutants is based on established reporting and monitoring standards, along with published research on baseline and/or natural levels of pollutants in the regions where we operate.</p> <p>Potentially impacted parties could include:</p> <ul style="list-style-type: none"> • Communities in the region of operation • Municipalities • Employees • Wildlife and aquatic species <p>The potential water-related impacts on ecosystems and human health caused by potential pollutants are managed through risk assessments along with established monitoring and reporting requirements. Impacts are assessed in terms published toxicity levels or baseline metrics. Water sources/water supplies in regions of operations are monitored regularly to test for various metrics (pollution).</p>	<Not Applicable>

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, please specify (Hydrocarbons)

Description of water pollutant and potential impacts

I.e. Natural gas and fuels / petroleum products

There is a potential for contamination of surface and/or groundwater from spills and releases into water bodies near the operations where hydrocarbons are used and/or extracted/produced/refined (i.e. organic and inorganic compounds, metals, etc as listed in our regulatory permits).

The scale and magnitude of impact is dependent upon various factors, such as the size, location, concentration, etc. of the pollutant (hydrocarbon) and existing mitigation measures.

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

Implementation of integrated solid waste management systems

Industrial and chemical accidents prevention, preparedness, and response

Provision of best practice instructions on product use

Water recycling

Reduction or phase out of hazardous substances

Requirement for suppliers to comply with regulatory requirements

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

Upgrading of process equipment/methods

Procedure(s) under development/ R&D

Other, please specify (Monitoring and notification practices for downstream water users)

Please explain

Suncor complies with regulatory requirements such as effluent quality standards in each region of operation established by the regulator as well as the National Pollutant Release Inventory (NPRI). We are required to report all spills and releases as per approval conditions and conduct monitoring under requirements in the Oil Sands Monitoring Program.

The Environmental Health and Safety department has Spill Response Plans and Policies in place for each business unit, where applicable.

The Stakeholder relations group is required to contact and inform key stakeholders that are relevant in situations where they may be or are potentially impacted.

Crisis management and communications preparedness is controlled by the Environmental Health and Safety Group. They maintain a risk registry, which is part of the Suncor's Operational Excellence Management System. The management team is made up of members from the executive leadership team with various roles that tie different business areas together. Each functional business area also has a response team with defined roles and responsibilities

Water pollutant category

Other, please specify (Chemicals)

Description of water pollutant and potential impacts

I.e. Metals

Upstream & Downstream: chemical pollutants from each business unit would have similar impacts on water ecosystems and human health. The scale and magnitude is

dependent upon various factors, such as the size, location, concentration, etc. of the pollutant (chemical).

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

Resource recovery

Beyond compliance with regulatory requirements

Industrial and chemical accidents prevention, preparedness, and response

Provision of best practice instructions on product use

Water recycling

Reduction or phase out of hazardous substances

Requirement for suppliers to comply with regulatory requirements

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

Upgrading of process equipment/methods

Procedure(s) under development/ R&D

Please explain

Suncor complies with National Pollutant Release Inventory Reporting (NPRI) Standards.

The Stakeholder relations group is required to contact and inform key stakeholders that are relevant in situations where they may be or are potentially impacted.

The Environmental Health and Safety department has Spill Response Plans and Policies in place for each business unit where applicable.

Crisis management and communications preparedness is controlled by the Environmental Health and Safety Group of Suncor. They maintain a risk registry, which is part of the Operation Excellence Management System. The management team is made up of members from the executive leadership team with various roles that tie different business areas together. Each functional business area also has a response team with defined roles and responsibilities

Water pollutant category

Other, please specify (Drilling fluids)

Description of water pollutant and potential impacts

I.e. Synthetic-based fluid

Upstream: potential leaching into groundwater/aquifer and contaminating water.

The scale and magnitude is dependent upon various factors, such as the size, location, concentration, etc. of the pollutant (chemical).

Value chain stage

Other, please specify (Upstream direct operations)

Actions and procedures to minimize adverse impacts

Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience

Resource recovery

Beyond compliance with regulatory requirements

Implementation of integrated solid waste management systems

Industrial and chemical accidents prevention, preparedness, and response

Provision of best practice instructions on product use

Water recycling

Reduction or phase out of hazardous substances

Requirement for suppliers to comply with regulatory requirements

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

Upgrading of process equipment/methods

Procedure(s) under development/ R&D

Please explain

Suncor is required to describe drilling fluids in project applications (i.e. Environmental Protection and Enhancement Act under the Provincial Regulator).

The regulation also requires an operator to describe drilling fluid, waste disposal and surface runoff management.

The Environmental Health and Safety department has Spill Response Plans and Policies in place for each business unit where applicable.

Crisis management and communications preparedness is controlled by the Environmental Health and Safety Group of Suncor. They maintain a risk registry, which is part of the Operational Excellence Management System. The management team is made up of members from the executive leadership team with various roles that tie different business areas together. Each functional business area also has a response team with defined roles and responsibilities.

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

Full

Risk assessment procedure

Water risks are assessed as part of an established enterprise risk management framework

Frequency of assessment

Annually

How far into the future are risks considered?

More than 6 years

Type of tools and methods used

Enterprise risk management

International methodologies and standards

Tools and methods used

Enterprise Risk Management

ISO 31000 Risk Management Standard

Environmental Impact Assessment

Other, please specify (WWF Water Risk filter, materiality assessment, internal company methods)

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

NGOs

Regulators

Suppliers

Water utilities at a local level

Other water users at the basin/catchment level

Comment

As part of Suncor's Water Management-Stakeholder Engagement Plans, customers are considered as a component of overall water risk assessment. A potential risk that has been considered in this assessment is reputational risk (part of the Enterprise Risk Management process) on Suncor's brand with regards to water has been evaluated as a component of the overall water risk assessment file. Customers, employees, investors, local communities, and other stakeholders are informed of water-related risks through the annual Report on Sustainability and various third-party Environmental, Social and Governance (ESG) disclosure platforms. Regulators have been identified and included in Suncor's water risk assessment for the majority of our major operational sites. Outside of water risk assessment, Suncor has extensive contact with regulators about all our operations. We engage with a wide range of diverse stakeholders to consider their issues and concerns about our operations and the effects of proposed development. This includes working together to mitigate potential social, environmental, and economic impacts, and ensuring that local communities benefit from development. We engage with stakeholders in multiple ways, including meetings, workshops, and conferences. Indigenous communities have been identified as key stakeholders and included in Suncor's overall water risk assessment. Beyond commitments outlined in our policies, we also have agreements with Indigenous communities near our operations, including the Regional Municipality of Wood Buffalo in Alberta and Sarnia, Ontario. These agreements reflect how we work together on a range of matters from project consultation to realizing the benefits of commercial and business opportunities, as well as supporting skills, employment and training programs.

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	Suncor has an established Enterprise Risk Management Program, an Operational Excellence Management System, and an Asset Development and Execution Model, all of which support effective and efficient risk management across the org. These help address both the strategic risks and operational risks inherent to the energy industry. This requires ongoing identification, assessment, treatment and monitoring of risks inherent to our assets, activities and operations. Our risk management program is aligned with the ISO 31000 Risk management. The guidelines provide principles, framework and process for managing risk. Our risk management practice is governed by our Risk Management Policy and supported through tools such as Risk Management Standards and a Risk Assessment Matrix to effectively identify and assess risk across the enterprise. Principal risks are generally considered those that have the potential to materially impact our ability to meet or support our business strategy, which can be assessed on a short-term (1-3 yrs) or long-term (> 10 yrs) horizon. Once identified, risks are entered into a third-party tool (Enablon) and are assessed and evaluated in terms of magnitude of impact and likelihood using a risk-matrix tool. This allows employees to consistently assess risks and evaluate consequence and likelihood of risk events. It helps assign different levels of residual risk based on the following health and safety, environment, regulatory, reputational and financial impact.	To ensure holistic development and sustainment of physical assets, we incorporate environmental and social aspects such as water use, air emissions, energy use, human rights, stakeholder and Indigenous relations into new projects. Additional context considered includes regulatory requirements and emerging policies, long-term trends in the energy market, social expectations, and cumulative environmental effects.	While many of the operational risks pertain to employee safety within Suncor’s operations, there are strategic and operational risks that both could impact stakeholders around Suncor’s facilities and could be influenced by external stakeholders. External stakeholders considered in Suncor’s risk assessment process include adjacent communities, governments (municipal, First Nations, provincial, federal), suppliers and vendors, industry neighbors (both energy industry and other industry such as forestry), academia and technology development communities, investors and lenders, and ecological communities. Guidance around which stakeholders to include is provided in documentation within Enterprise Risk Management Program, Operational Excellence Management System, and Asset Development and Execution Model. Finally, these stakeholder maps are documented in risk assessments, project documentation, regulatory approvals, etc.	Part of the risk assessment process includes identifying the potential consequences and the likelihood of those consequences for each risk in the absence of any mitigations or controls. Next the process requires the identification of controls that reduce the consequences or likelihood of the risk, as well as any treatment plans for further controls that could be developed. The risk is then re-evaluated with these controls in place (“residual risk”), and with the proposed controls in place (“future residual risk”). Based on the results of these residual risk ratings, decision makers in Suncor can then determine if the project, activity, etc. Is acceptable to proceed, given the potential benefits and risks. Risks must be signed off at various levels within the organization depending on the level of the risk rating. The highest rated risks (“principal risks”) must be accepted by the executive leadership team and the board of directors.

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, only within our direct operations

W4.1a

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

Suncor uses an enterprise-wide risk management system (ERM) to assess and define risk. Like most ERM systems it uses a matrix that determines the consequence of a risk and the likelihood of it occurring. There are six (6) consequence and likelihood categories. The ERM assign risks a ranking from I to IV for economic, environmental and social. Social is further broken down into health & safety, reputation and regulatory with guidance. Suncor defines substantive risks that are risked rank at II or I; to define substantive change for the purpose of this assessment; an economic value of \$10M was used. This includes direct financial costs and lost opportunity value (LOV). Examples of impacts considered include regulatory, environment, health and safety, reputation, and financial.

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	13	100	For more information on Suncor’s operations please visit: https://www.suncor.com/en-ca/what-we-do

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

Canada	Mackenzie River
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Number of facilities exposed to water risk

5

% company-wide facilities this represents

26-50

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

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

<Not Applicable>

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

26-50

% company's total global revenue that could be affected

41-50

Comment

These facilities make up our primary oil sands operations and include:

- Oil sands Base plant
- Oil sands Fort Hills
- Oil sands Syncrude
- In situ operations; Firebag & MacKay River

Country/Area & River basin

Canada	St. Lawrence
--------	--------------

Number of facilities exposed to water risk

4

% company-wide facilities this represents

26-50

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

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

<Not Applicable>

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

26-50

% company's total global revenue that could be affected

51-60

Comment

These facilities make up the majority of our Refining & Logistics operations and include:

- Sarnia Refinery
- Montreal Refinery
- Montreal Sulphur Plant
- St. Clair Ethanol Plant

Country/Area & River basin

Canada	Nelson River
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Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

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

<Not Applicable>

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

1-25

% company's total global revenue that could be affected

Less than 1%

Comment

This facility is one of the refineries included in our Refining & Logistics operations; Edmonton Refinery.

Country/Area & River basin

Canada	Other, please specify (Atlantic Ocean)
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Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

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

<Not Applicable>

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

1-25

% company's total global revenue that could be affected

1-10

Comment

This facility is our offshore operation; situated off the east coast of Canada, we operate the Terra Nova Floating Production Storage and Offloading vessel. Production at Terra Nova has been shut in since the fourth quarter of 2019 but is expected to return to operations by the end of 2023.

Country/Area & River basin

United States of America	Mississippi River
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Number of facilities exposed to water risk

1

% company-wide facilities this represents

1-25

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

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

<Not Applicable>

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

1-25

% company's total global revenue that could be affected

Less than 1%

Comment

This facility is one of the refineries included in our Refining & Logistics operations; Commerce City Refinery.

Country/Area & River basin

Canada	Fraser River
--------	--------------

Number of facilities exposed to water risk

1

% company-wide facilities this represents

Less than 1%

Production value for the metals & mining activities associated with these facilities

<Not Applicable>

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

<Not Applicable>

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

Less than 1%

% company's total global revenue that could be affected

Less than 1%

Comment

Suncor's Burrard Terminal is located in Port Moody, British Columbia. This facility is included in our Refining & Logistics operations.

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

Canada	Mackenzie River
--------	-----------------

Type of risk & Primary risk driver

Regulatory	Regulatory uncertainty
------------	------------------------

Primary potential impact

Increased operating costs

Company-specific description

In order to achieve mine closure and progress reclamation opportunities, a process for the safe release of treated water back to the environment is required to accomplish timely mine closure (operational total fluids containment and long-term closure water quality). We require both federal regulations and provincial regulatory approval to release treated oil sands mine water to the environment within a certain timeframe. Indigenous communities and stakeholders have increased sensitivity about water release, concerns over water quality and quantity, health impacts, and impacts to local biodiversity. The lack of certainty increases risk to long term closure plans as currently constructed and the ability to manage both quantity and quality of water during operational phase of the projects.

Timeframe

4-6 years

Magnitude of potential impact

High

Likelihood

Likely

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

1000000000

Potential financial impact figure - maximum (currency)

2000000000

Explanation of financial impact

If there is no water release policy and regulatory framework in place we are unable to treat and release oil sands mine water by our containment pinch-point which would require: \$2B-\$1B in investment in other water management projects, such as construction a water treatment plant, sub-surface injection options or building additional containment/water storage. This would also extend the timeframe for reclamation and impact extraction efficiencies resulting in additional costs.

Primary response to risk

Other, please specify (Engage with regulators/policymakers, local communities, NGOs and the general public, improve monitoring and increase investment in new technologies and management alternatives.)

Description of response

Work with provincial and federal government and other stakeholders to ensure policy and Work with provincial and federal government and other stakeholders to ensure policy and regulation tools and mechanisms are in place to allow for the release of treated tailings water and help identify and fill gaps as required. Suncor along with 6 other operators has been engaging both Federal and Provincial technical and policy leaders for years to drive discussion towards certainty of regulatory tools for water return to the Athabasca River. Suncor and the other operators through Canada's Oil Sands Innovation Alliance have also been executing projects that will provide technical input into development of policy framework.

There is ongoing investment focused on optimizing water reduction and recycling opportunities, reducing the amount of water retained in tailings and confirming technical understanding and managing all water related impacts. Suncor's own water R&D as well as the technology sharing by 9 oil sands companies on water R&D through the Canadian Oil Sands Innovation Alliance (COSIA) is laying the foundation for further breakthroughs for the region on environmental performance. COSIA members have invested \$592 million in 273 contributed water technologies since 2012. In 2020, 86 active projects were underway through COSIA at a cost of \$319 million. As a result of this work, these projects have reduced freshwater use intensity at in situ operations by 44% and reduced net water use intensity from the Athabasca River at mining operations by 22% – all since 2012 and we continue to work on these numbers.

Cost of response

400000000

Explanation of cost of response

The estimated cost for the containment strategy is ~\$400 million of infrastructure investment. The execution of this strategy has resulted in a reduction of oil sands water withdrawal by 58% since 2007. There is ongoing investment focused on optimizing water reduction and recycling opportunities, reducing the amount of water retained in tailings and confirming technical understanding and managing all water related impacts.

Country/Area & River basin

United States of America	Mississippi River
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Type of risk & Primary risk driver

Acute physical	Other, please specify (Increased water stress)
----------------	--

Primary potential impact

Increased operating costs

Company-specific description

According to the definition provided of water-stressed areas none of Suncor's assets operate in areas of high risk of water stress (<40% ratio of withdrawals to supply). However, Suncor's Commerce City refinery in Colorado operates in a region that is classified as moderate risk (medium-high stress, 20-40% ratio of withdrawals to supply) according to the World Resources Institute's Aqueduct Water Risk Atlas. The World Wildlife Fund's Water Risk Filter Tool and the World Resources Institute's Aqueduct Water Risk Atlas are tools Suncor uses to evaluate overall physical, regulatory and reputational risks at the watershed level. Both indicate that our Commerce City refinery in Colorado exists within a "medium-high" water stress region of the Mississippi River Basin. Water management is a priority at Suncor and we will continue to monitor the status of the basin going forward while focusing on implementing industry-leading innovation at our facilities to reduce, recycle, reuse and return water.

Timeframe

1-3 years

Magnitude of potential impact

High

Likelihood

More likely than not

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

500000000

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

In order to be compliant with water regulations in the area of operation, the facility would have to update water permits and decrees.

Primary response to risk

Other, please specify (Establish site-specific targets and infrastructure investment)

Description of response

Ongoing assessment and updating water permits in the area of operations.

Our Commerce City refinery uses both city water and collected groundwater for steam production and cooling, as well as to wash out the natural contaminants in crude oil, like salts and minerals, to prevent corrosion in our processing units. Much of this water is recycled for reuse at our facility, and the remaining portion is treated and discharged to local waterway, Sand Creek, under a permit issued by the Colorado Department of Public Health and Environment (CDPHE). In September 2012, stricter compliance criteria were set on the refinery discharge water, which became effective in January 2018. To meet the new criteria, the Commerce City refinery commissioned a \$65 million upgrade to our existing wastewater treatment facility. The upgrade was completed in December 2017 and leverages a unique technology called membrane ultrafiltration to treat and filter the water. Our facility is one of the first in North America to use this technology in treating refinery wastewater streams. Ongoing and future construction phases will enable us to strive to continuously improve our environmental performance as well as meet increasingly tightening regulations related to wastewater treatment and discharge.

Cost of response

6000000

Explanation of cost of response

Suncor is undertaking a process that provides correct definition-assessment of this water risk. As this process progresses understanding of the potential issues, the impact and mitigation will be determined. Costs associated with definition have been estimated at \$6M for the facility.

Country/Area & River basin

Canada	Other, please specify (All basins where we operate)
--------	---

Type of risk & Primary risk driver

Regulatory	Increased difficulty in obtaining withdrawals/operations permit
------------	---

Primary potential impact

Constraint to growth

Company-specific description

Increasing expectations from stakeholders on water management, operational requirements and performance may lead to the development or revision of provincial and federal water policy and regulation which may add additional restrictions and requirements for Suncor resulting in reputational and regulatory impacts. There is growing awareness about the need for responsible industrial water management and concerns with potential effects on local watersheds (water quality and quantity). Locally, communities are becoming concerned with the cumulative impacts of large industrial operations on local watersheds, local drinking water quality and overall preservation of the aquatic ecosystems. More specifically, water is an important human right and an important element of Traditional Land Use expectations for Indigenous communities. Federal and provincial water quality/quantity policies and regulations are regularly reviewed and are increasing in rigour.

Timeframe

Current up to one year

Magnitude of potential impact

Medium

Likelihood

More likely than not

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure - minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact

N/A

Primary response to risk

Engage with regulators/policymakers

Description of response

Engage with regulators/policymakers, local communities and other stakeholders on the development of water related policies and regulations.

Cost of response

Explanation of cost of response

W4.2c

(W4.2c) Why does your organization not consider itself exposed to water risks in its value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact?

	Primary reason	Please explain
Row 1	Evaluation in progress	<p>We engage and build relationships with our suppliers and assess their sustainability performance as part of prequalification and through gathering data seeking to understand the effects of our supply chain, which helps us make more risk and opportunity informed decisions.</p> <p>Our enterprise risk register includes supply chain management related sustainability risks, which outlines all mitigation controls. The prequalification assessment platform on Ariba, our Supplemental included with RFP's and our sustainability assessment of our top suppliers provides Suncor with a robust foundation of data and information as we progress our broader supply chain management strategy. We have undertaken a deeper assessment of our suppliers in the top 50% of our spend, including a review of supplier's ESG and sustainability disclosures, Supplier Codes of Conduct and response to the CDP. This assessments has indicated sustainability-related strengths and weaknesses within our supply chain.</p> <p>In addition to our Vendor Audit work, Suncor has a robust EH&S audit program as a part of our contractor EHS execution plans across operating facilities. As part of our internal management systems we meet with onsite contractors on a regular basis. We hold worksite audits and inspections, lodge inspections and provide toolbox meeting kits to guide EHS discussions with suppliers performing services on our sites. Suncor's senior leadership demonstrate commitment to safety at our sites through the regular participation in safety discussions with contractors, staff and suppliers. Safety reporting is included in our Supplier Performance Management tool.</p> <p>Suncor's Operational Excellence Management System (OEMS) is the framework of controls designed to eliminate the causes of unplanned events and incidents. The OEMS includes a guideline on Contractor Management which establishes the processes and requirements for implementing a systematic contractor management program and a process for the management of goods and services. The objective of this guideline is to ensure that all purchased goods meet quality standards while ensuring all services are conducted in a safe, environmentally sound and cost effective manner.</p>

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

Suncor's tactical water strategy for oil sands and in situ has resulted in a major improvement in water efficiency. All the projects executed reduced water use or make large quantities of water available for reuse. There is a Water Strategy Leadership Team that focuses on an integrated water management strategy for each of our mine sites (Base Plant, Syncrude and Fort Hills) that addresses excess water stored in tailings and establishes water management principles and guidelines for water management. There is ongoing collaboration with industry partners to test drive multiple water technologies concurrently, enabling the partners to conduct more pilots than each could on their own, while sharing the risks and costs. An example of this work is The Water Technology Development Center (WTDC). Convened under COSIA, Suncor and the WTDC partners, Canadian Natural, Cenovus Energy Inc. (through its subsidiary Husky Oil Operations Ltd.) and CNOOC International developed the \$140 million Water Technology Development Centre, a first-of- its-kind demonstration site for oil sands project partner companies to test water treatment technologies at a commercial scale.

Estimated timeframe for realization

More than 6 years

Magnitude of potential financial impact

Low-medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact

The improvement in water efficiency essentially allows Suncor to consistently use less than half of our annual water license allotment from the Athabasca River. Continuous improvement measures leverage an economic incentive to use less water.

Type of opportunity

Other

Primary water-related opportunity

Other, please specify (Collective active innovation)

Company-specific description & strategy to realize opportunity

Suncor has been a leader in improving collaboration among industry peers through organizations such as COSIA. The SAGD produced water treatment pilot project with COSIA involves testing new water treatment technologies at Suncor's MacKay River steam assisted gravity drainage facility. There is a potential to improve the reliability and efficiency of in situ water treatment operations in an effort to reduce water usage.

Estimated timeframe for realization

4 to 6 years

Magnitude of potential financial impact

Medium-high

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact

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)

Oil Sands Base Plant

Country/Area & River basin

Canada	Mackenzie River
--------	-----------------

Latitude

57.0033

Longitude

-111.4661

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

Upstream

Total water withdrawals at this facility (megaliters/year)

31760304

Comparison of total withdrawals with previous reporting year

Much lower

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

30889

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

871

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

13866

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

13634

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

232

Total water consumption at this facility (megaliters/year)

17894.1

Comparison of total consumption with previous reporting year

Much lower

Please explain

Suncor's oil sands mining operations are located near Fort McMurray in Alberta. In 2022, Base Plant total water consumption was 12% lower than 2021. Water withdrawal decreased by 11% and water discharge decreased by 9%, these decreases were due to improved water management, along with more accurate tracking systems. Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/ Much high (>11%). Data reported is sourced from direct measurements. Total water withdrawal is the removal or purchase of water from any source, permanently or temporarily. Fresh and non-fresh water included. Total water return is water leaving organization's boundary and released to surface water, groundwater or to third parties. Fresh water is characterized by a low TDS content for which limits are defined by regulation in the jurisdiction. Water consumption is the total water withdrawn minus water returned and reflects quantity of water used and not returned to its proximate source or no longer available in its original form. Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.

Facility reference number

Facility 2

Facility name (optional)

In Situ Firebag

Country/Area & River basin

Canada	Mackenzie River
--------	-----------------

Latitude

57.2297

Longitude

-110.8325

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

Upstream

Total water withdrawals at this facility (megaliters/year)

3658

Comparison of total withdrawals with previous reporting year

Much higher

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

2630

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

954

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

74

Total water discharges at this facility (megaliters/year)

2825

Comparison of total discharges with previous reporting year

Lower

Discharges to fresh surface water

2500

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

325

Total water consumption at this facility (megaliters/year)

833

Comparison of total consumption with previous reporting year

Much higher

Please explain

Suncor's oil sands in situ operations are located near Fort McMurray in Alberta. In 2022, Firebag total water consumption was much higher (369%) compared to 2021. Water withdrawal increased by 35% and water discharges decreased by 6% due to an increase of spring and fall pumpoff volumes into site. Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/ Much high (>11%). Data reported is sourced from direct measurements. Total water withdrawal is the removal or purchase of water from any source, permanently or temporarily. Fresh and non-fresh water included. Produced water is not included. Total water return is water leaving organization's boundary and released to surface water, groundwater or to third parties. Fresh water is characterized by a low TDS content for which limits are defined by regulation in the jurisdiction. Water consumption is the total water withdrawn minus water returned and reflects quantity of water used and not returned to its proximate source or no longer available in its original form. Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 yr. outlook on a corporate and facility level.

Facility reference number

Facility 3

Facility name (optional)

In Situ MacKay River

Country/Area & River basin

Canada	Mackenzie River
--------	-----------------

Latitude

57.03347

Longitude

-111.88712

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

Upstream

Total water withdrawals at this facility (megaliters/year)

345

Comparison of total withdrawals with previous reporting year

Much lower

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

69

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

276

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

49

Comparison of total discharges with previous reporting year

Much higher

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

49

Total water consumption at this facility (megaliters/year)

296

Comparison of total consumption with previous reporting year

Much lower

Please explain

Suncor's oil sands in situ operations are located near Fort McMurray in Alberta. In 2022, MR total water consumption was 23% lower than 2021. Water withdrawal was 13% lower due to less groundwater required for site operations. The sites discharge increased by 386% due to water being transferred between sites. Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/ Much high (>11%). Data reported is sourced from direct measurements. Total water withdrawal is the removal or purchase of water from any source, permanently or temporarily. Fresh and non-fresh water included. Produced water is not included. Total water return is water leaving organization's boundary and released to surface water, groundwater or to third parties. Fresh water is characterized by a low TDS content for which limits are defined by regulation in the jurisdiction. Water consumption is the total water withdrawn minus water returned and reflects quantity of water used and not returned to its proximate source or no longer available in its original form. Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 yr. outlook on a corporate and facility level.

Facility reference number

Facility 4

Facility name (optional)

Montreal Refinery

Country/Area & River basin

Canada	St. Lawrence
--------	--------------

Latitude

45.50806

Longitude

-73.57111

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)

6513

Comparison of total withdrawals with previous reporting year

Much higher

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

6343

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

170

Total water discharges at this facility (megaliters/year)

4641

Comparison of total discharges with previous reporting year

Much higher

Discharges to fresh surface water

4472

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

170

Total water consumption at this facility (megaliters/year)

1871

Comparison of total consumption with previous reporting year

Much higher

Please explain

Suncor operates refineries in Alberta, Ontario and Quebec, Canada, and in Colorado, USA. In 2022, Montreal refinery total water consumption was 77% higher, explained by a flowmeter default in 2021. Water withdrawal increased by 24% due to the flowmeter correction and increased precipitation. Water discharges increased by 11% due to an increase in site workers at site. Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/ Much high (>11%). Data reported is sourced from direct measurements. Total water withdrawal is the removal or purchase of water from any source, permanently or temporarily. Fresh and non-fresh water included. Total water return is water leaving organization's boundary and released to surface water, groundwater or to third parties. Fresh water is characterized by a low TDS content for which limits are defined by regulation in the jurisdiction. Water consumption is the total water withdrawn minus water returned and reflects quantity of water used and not returned to its proximate source or no longer available in its original form. Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.

Facility reference number

Facility 5

Facility name (optional)

Sarnia Refinery

Country/Area & River basin

Canada	St. Lawrence
--------	--------------

Latitude

42.9306

Longitude

-82.4433

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)

36309

Comparison of total withdrawals with previous reporting year

About the same

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

35003

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

3

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

1303

Total water discharges at this facility (megaliters/year)

36278

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

36278

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

31

Comparison of total consumption with previous reporting year

Much higher

Please explain

Suncor operates refineries in Alberta, Ontario and Quebec, Canada, and in Colorado, USA. In 2022, Sarnia refinery total water consumption increased from 0 megaliters/year to 31 megaliters/year due to improve calculation methodology. Both, Water withdrawal and discharge was about the same (2% increase and 4% decrease, respectfully). Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/ Much high (>11%). Data reported is sourced from direct measurements. Total water withdrawal is the removal or purchase of water from any source, permanently or temporarily. Fresh and non-fresh water included. Total water return is water leaving organization's boundary and released to surface water, groundwater or to third parties. Fresh water is characterized by a low TDS content for which limits are defined by regulation in the jurisdiction. Water consumption is the total water withdrawn minus water returned and reflects quantity of water used and not returned to its proximate source or no longer available in its original form. Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.

Facility reference number

Facility 6

Facility name (optional)

Renewables - St. Clair Ethanol Plant

Country/Area & River basin

Canada	St. Lawrence
--------	--------------

Latitude

42.9294

Longitude

-82.4381

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)

982

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

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

982

Total water discharges at this facility (megaliters/year)

99

Comparison of total discharges with previous reporting year

Much higher

Discharges to fresh surface water

99

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

883

Comparison of total consumption with previous reporting year

About the same

Please explain

Suncor operates Canada's largest ethanol facility — the St. Clair Ethanol Plant in the Sarnia-Lambton region of Ontario. In 2022, the St. Clair Ethanol Plant total water consumption increased by 3%. Water withdrawal increased by 3% and discharge increased by 11% due to changes in utilization rates and an increase in production (4%). Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/ Much high (>11%). Data reported is sourced from direct measurements. Total water withdrawal is the removal or purchase of water from any source, permanently or temporarily. Fresh and non-fresh water included. Total water return is water leaving organization's boundary and released to surface water, groundwater or to third parties. Fresh water is characterized by a low TDS content for which limits are defined by regulation in the jurisdiction. Water consumption is the total water withdrawn minus water returned and reflects quantity of water used and not returned to its proximate source or no longer available in its original form. Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.

Facility reference number

Facility 7

Facility name (optional)

Edmonton Refinery

Country/Area & River basin

Canada

Nelson River

Latitude

53.55558

Longitude

-113.33275

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)

3961

Comparison of total withdrawals with previous reporting year

Lower

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

2177

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

1784

Total water discharges at this facility (megaliters/year)

1032

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

874

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

158

Total water consumption at this facility (megaliters/year)

2929

Comparison of total consumption with previous reporting year

Lower

Please explain

Suncor operates refineries in Alberta, Ontario and Quebec, Canada, and in Colorado, USA. In 2022, Edmonton refinery total water consumption decreased by 8%. Water withdrawal decreased by 6% and water discharge remained about the same (2% decrease) due to less water being required for site operations. Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/ Much high (>11%). Data reported is sourced from direct measurements. Total water withdrawal is the removal or purchase of water from any source, permanently or temporarily. Fresh and non-fresh water included. Total water return is water leaving organization's boundary and released to surface water, groundwater or to third parties. Fresh water is characterized by a low TDS content for which limits are defined by regulation in the jurisdiction. Water consumption is the total water withdrawn minus water returned and reflects quantity of water used and not returned to its proximate source or no longer available in its original form. Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.

Facility reference number

Facility 8

Facility name (optional)

Terra Nova FPSO

Country/Area & River basin

Canada

Other, please specify (Atlantic Ocean)

Latitude

46.2831

Longitude

-48.2851

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

Upstream

Total water withdrawals at this facility (megaliters/year)

0

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

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

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

0

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

0

Comparison of total consumption with previous reporting year

About the same

Please explain

Suncor Energy operates Terra Nova located offshore approximately 350 kilometres southeast of Newfoundland and Labrador. Production at Terra Nova has been shut in since the fourth quarter of 2019, therefore no water use in 2022. Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/ Much high (>11%). Data reported is sourced from direct measurements. Total water withdrawal is the removal or purchase of water from any source, permanently or temporarily. Fresh and non-fresh water included. Produced water is not included. Total water return is water leaving organization's boundary and released to surface water, groundwater or to third parties. Fresh water is characterized by a low TDS content for which limits are defined by regulation in the jurisdiction. Water consumption is the total water withdrawn minus water returned and reflects quantity of water used and not returned to its proximate source or no longer available in its original form. Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.

Facility reference number

Facility 9

Facility name (optional)

Commerce City Refinery

Country/Area & River basin

United States of America

Mississippi River

Latitude

39.80168

Longitude

-104.94698

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)

3400

Comparison of total withdrawals with previous reporting year

About the same

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

30

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

870

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

2500

Total water discharges at this facility (megaliters/year)

2110

Comparison of total discharges with previous reporting year

About the same

Discharges to fresh surface water

2110

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

1290

Comparison of total consumption with previous reporting year

About the same

Please explain

Suncor operates refineries in Alberta, Ontario and Quebec, Canada, and in Colorado, USA. In 2022, Commerce City refinery total water consumption, water withdrawal and water discharged remained about the same (4%, 3% and 2%, respectively). Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/ Much high (>11%). Data reported is sourced from direct measurements. Total water withdrawal is the removal or purchase of water from any source, permanently or temporarily. Fresh and non-fresh water included. Total water return is water leaving organization's boundary and released to surface water, groundwater or to third parties. Fresh water is characterized by a low TDS content for which limits are defined by regulation in the jurisdiction. Water consumption is the total water withdrawn minus water returned and reflects quantity of water used and not returned to its proximate source or no longer available in its original form. Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.

Facility reference number

Facility 10

Facility name (optional)

Montreal Sulphur Plant

Country/Area & River basin

Canada

St. Lawrence

Latitude

45.639381

Longitude

-73.515457

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)

177

Comparison of total withdrawals with previous reporting year

About the same

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

146

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

31

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

0

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

177

Comparison of total consumption with previous reporting year

About the same

Please explain

Suncor operates its Montreal Sulphur Plant in Quebec, Canada. In 2022, the Sulphur plant total water consumption and withdrawal remained about the same (3% increase). Water discharge remained the same at 0. Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/ Much high (>11%). Data reported is sourced from direct measurements. Total water withdrawal is the removal or purchase of water from any source, permanently or temporarily. Fresh and non-fresh water included. Total water return is water leaving organization's boundary and released to surface water, groundwater or to third parties. Fresh water is characterized by a low TDS content for which limits are defined by regulation in the jurisdiction. Water consumption is the total water withdrawn minus water returned and reflects quantity of water used and not returned to its proximate source or no longer available in its original form. Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.

Facility reference number

Facility 11

Facility name (optional)

Oil Sands Fort Hills

Country/Area & River basin

Canada

Mackenzie River

Latitude

57.39207

Longitude

111.56791

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

Upstream

Total water withdrawals at this facility (megaliters/year)

17440

Comparison of total withdrawals with previous reporting year

Lower

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

15750

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

1690

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

2250

Comparison of total discharges with previous reporting year

Much higher

Discharges to fresh surface water

2120

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

130

Total water consumption at this facility (megaliters/year)

15190

Comparison of total consumption with previous reporting year

Much lower

Please explain

Suncor's oil sands mining operations are located near Fort McMurray in Alberta. In 2022, Fort Hills water consumption was 14% lower than 2021. Water withdrawal decreased by 6% due reduced baseline well withdrawal needed for site operations. Water discharges increased by 124% due to higher precipitation. Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/Much high (>11%). Data reported is sourced from direct measurements. Total water withdrawal is the removal or purchase of water from any source, permanently or temporarily. Fresh and non-fresh water included. Total water return is water leaving organization's boundary and released to surface water, groundwater or to third parties. Fresh water is characterized by a low TDS content for which limits are defined by regulation in the jurisdiction. Water consumption is the total water withdrawn minus water returned and reflects quantity of water used and not returned to its proximate source or no longer available in its original form. Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.

Facility reference number

Facility 12

Facility name (optional)

Burrard Terminal

Country/Area & River basin

Canada

Fraser River

Latitude

49.283

Longitude

-122.85

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)

566

Comparison of total withdrawals with previous reporting year

Much lower

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

389

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

188

Total water discharges at this facility (megaliters/year)

548

Comparison of total discharges with previous reporting year

Much lower

Discharges to fresh surface water

0

Discharges to brackish surface water/seawater

379

Discharges to groundwater

0

Discharges to third party destinations

170

Total water consumption at this facility (megaliters/year)

18

Comparison of total consumption with previous reporting year

Much higher

Please explain

Suncor's Burrard Terminal is located in Port Moody, BC. In 2022, Burrard water consumption decreased by 139%. Water withdrawal decreased by 23% and water discharges decreased by 30% due to less precipitation on site. Thresholds: About the same (0%-5%), Low/High (6%-10%), Much low/Much high (>11%). Data reported is sourced from direct measurements. Total water withdrawal is the removal or purchase of water from any source, permanently or temporarily. Fresh and non-fresh water included. Total water return is water leaving organization's boundary and released to surface water, groundwater or to third parties. Fresh water is characterized by a low TDS content for which limits are defined by regulation in the jurisdiction. Water consumption is the total water withdrawn minus water returned and reflects quantity of water used and not returned to its proximate source or no longer available in its original form. Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.

Facility reference number

Facility 13

Facility name (optional)

Oil Sands Syncrude

Country/Area & River basin

Canada

Mackenzie River

Latitude

51.0481

Longitude

-114.0633

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

Upstream

Total water withdrawals at this facility (megaliters/year)

63290

Comparison of total withdrawals with previous reporting year

Lower

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

60490

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

2800

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

0

Total water discharges at this facility (megaliters/year)

16230

Comparison of total discharges with previous reporting year

Much lower

Discharges to fresh surface water

4230

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

12000

Total water consumption at this facility (megaliters/year)

58910

Comparison of total consumption with previous reporting year

Lower

Please explain

Suncor's oil sand mining operations are located near Fort McMurray in Alberta. In 2022, Syncrude's water consumption decreased in 7%. Water withdrawal decreased by 8% due to less groundwater being diverted to site due to mining activities. Water discharge decreased by 38% due to less water needing to be discharged from sedimentation ponds. Thresholds: About the same(0%-5%), Low/High (6%-10%), Much low/Much high (>11%). Data reported is sourced from direct measurements. Total water withdrawal is the removal or purchase of water from any source, permanently or temporarily. Fresh and non-fresh water included. Total water return is water leaving organization's boundary and released to surface water, groundwater or to third parties. Fresh water is characterized by a low TDS content for which limits are defined by regulation in the jurisdiction. Water consumption is the total water withdrawn minus water returned and reflects quantity of water used and not returned to its proximate source or no longer available in its original form. Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.

Facility reference number

Facility 14

Facility name (optional)

Pipelines and Terminals

Country/Area & River basin

Canada

Other, please specify (Municipality)

Latitude

39.1779

Longitude

-108.78052

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)

71

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

67

Withdrawals from brackish surface water/seawater

0

Withdrawals from groundwater - renewable

0

Withdrawals from groundwater - non-renewable

0

Withdrawals from produced/entrained water

0

Withdrawals from third party sources

4

Total water discharges at this facility (megaliters/year)

67

Comparison of total discharges with previous reporting year

This is our first year of measurement

Discharges to fresh surface water

67

Discharges to brackish surface water/seawater

0

Discharges to groundwater

0

Discharges to third party destinations

0

Total water consumption at this facility (megaliters/year)

4

Comparison of total consumption with previous reporting year

This is our first year of measurement

Please explain

Suncor's pipelines and terminals are a system that spans North America for transportation of products between facilities or to market. Thresholds: About the same(0%-5%), Low/High (6%-10%), Much low/Much high (>11%). Data reported is sourced from direct measurements. Total water withdrawal is the removal or purchase of water from any source, permanently or temporarily. Fresh and non-fresh water included. Total water return is water leaving organization's boundary and released to surface water, groundwater or to third parties. Fresh water is characterized by a low TDS content for which limits are defined by regulation in the jurisdiction. Water consumption is the total water withdrawn minus water returned and reflects quantity of water used and not returned to its proximate source or no longer available in its original form. Suncor has developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. To advance Suncor's goal to continue improving environmental performance, Suncor uses a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level.

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

76-100

Verification standard used

This data is assured by Ernst & Young LLP as part of the publication of Suncor's sustainability disclosure Their limited assurance procedures were planned and performed in accordance with the Canadian Standard for Assurance Engagements ('CSAE') 3000, Attestation Engagements Other Than Audits or Reviews of Historical Financial Information ('CSAE 3000'), and Canadian Standard on Assurance Engagements on Greenhouse Gas Statements ('CSAE 3410'). The assurance statement can be found on suncor.com.

In addition, Suncor complies with provincial and federal regulatory standards for water monitoring which typically require monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.

Please explain

<Not Applicable>

Water withdrawals – volume by source

% verified

Not verified

Verification standard used

<Not Applicable>

Please explain

This data is not subject to assurance by a third-party independent assurer but does undergo internal review as part of our quality assurance for publication in our Report on Sustainability. Suncor complies with provincial and federal regulatory standards for water monitoring which typically require monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.

Water withdrawals – quality by standard water quality parameters

% verified

Not verified

Verification standard used

<Not Applicable>

Please explain

This data is not subject to assurance by a third-party independent assurer, but does undergo internal review as part of our quality assurance. Suncor measures and monitors our water withdrawals quality from the surface. The monitored quality is aligned with water discharge quality effluent parameters. Suncor complies with provincial and federal regulatory standards for water monitoring which typically require monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.

Water discharges – total volumes

% verified

Not verified

Verification standard used

<Not Applicable>

Please explain

This data is not subject to assurance by a third-party independent assurer but does undergo internal review as part of our quality assurance for publication in our Report on Sustainability. Suncor complies with provincial and federal regulatory standards for water monitoring which typically require monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.

Water discharges – volume by destination

% verified

Not verified

Verification standard used

<Not Applicable>

Please explain

This data is not subject to assurance by a third-party independent assurer but does undergo internal review as part of our quality assurance for publication in our Report on Sustainability. Suncor complies with provincial and federal regulatory standards for water monitoring which typically require monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.

Water discharges – volume by final treatment level

% verified

Not verified

Verification standard used

<Not Applicable>

Please explain

This data is not subject to assurance by a third-party independent assurer but does undergo internal review as part of our quality assurance for publication in our Report on Sustainability. Suncor complies with provincial and federal regulatory standards for water monitoring which typically require monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.

Water discharges – quality by standard water quality parameters

% verified

Not verified

Verification standard used

<Not Applicable>

Please explain

This data is not subject to assurance by a third-party independent assurer but does undergo internal review as part of our quality assurance for publication in our Report on Sustainability. Suncor complies with provincial and federal regulatory standards for water monitoring which typically require monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.

Water consumption – total volume

% verified

Not verified

Verification standard used

<Not Applicable>

Please explain

This data is not subject to assurance by a third-party independent assurer but does undergo internal review as part of our quality assurance for publication in our Report on Sustainability. Suncor complies with provincial and federal regulatory standards for water monitoring which typically require monthly and/or annual reporting to regulatory agencies. The standards mandate specific technical methods and monitoring boundaries consistent with best practices.

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.

Row	Company-	Other, please specify (This is incorporated within the Report on Sustainability under Water Stewardship and Tailings management.)	<p>Our Environmental Health and Safety Policy states our belief that a resilient environment and vibrant communities are foundational to business success and our aim to minimize our impact on water. We believe water is a shared and precious resource. It must be managed wisely using a balanced, integrated and sustainable approach.</p> <p>Water is an essential part of Suncor's operations, so it's important we find ways to continuously improve our water use efficiency (including limiting water withdrawals and maximizing optimizing recycling) and safely release water across our business units. Recognizing our role in managing water responsibly, our water strategy principles focus on:</p> <ol style="list-style-type: none">1. Shared value of water: Understanding that water is a valuable natural resource that holds environmental, social, cultural and economic value.2. Watershed management: Understanding our water use in the context of the watershed where we operate, taking into consideration all values, stakeholders, and users in the watershed.3. Reduce-Reuse-Release: A truly sustainable integrated water management approach must simultaneously balance water reduce-reuse and release considerations.4. Integrated options analysis: Ensuring we balance the trade-offs inherent in managing water and understanding water as one aspect of an interconnected ecosystem. <p>Aligned with our purpose, our culture of operational discipline and continuous improvement guides how we manage our water use, reduce our impacts, and protect the environment. Suncor is committed to water stewardship in the areas where we operate and we continue to develop a framework that will allow us to more align with our strategic objectives and meaningfully focus our future water management efforts on those specific to each asset and the watersheds within which they operate.</p>
1	wide		

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.

Board-level committee One of the Board's major duties is to review with management Suncor's objectives and goals and the strategies and plans for achieving them. The Board also monitors Suncor's progress toward its strategic goals and plans, and revises Suncor's direction where warranted.

The Board oversees Suncor's Enterprise Risk Management Program (the "ERM Program"). In accordance with this program, the CEO and senior management undertake an enterprise-wide process to identify, assess and mitigate significant risks. The Board undertakes an annual review of those risks identified by the ERM program as principal risks. The Board monitors risk management actions for these risks throughout the year. In addition to Board oversight of risk management efforts, each principal risk is mapped to a Board Committee or full Board, as appropriate. Environmental issues are mapped to the Environment, Health, Safety and Sustainable Development Committee of the Board, and this committee receives quarterly reports from management. The Board is also responsible for ensuring Suncor has an effective strategic planning process, and on an annual basis reviews Suncor's annual business plan (including Suncor's annual capital budget) and in doing so endorses the strategies reflected in Suncor's long range plan.

W6.2b

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

Row 1	Scheduled - some meetings	Monitoring implementation and performance Overseeing and guiding public policy engagement 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 Reviewing innovation/R&D priorities Setting performance objectives	One of the Board's major duties is to review with management Suncor's objectives and goals and the strategies and plans for achieving them. The Board also monitors Suncor's progress toward its strategic goals and plans, and revises Suncor's direction where warranted.	The Board oversees Suncor's Enterprise Risk Management Program (the "ERM Program"). In accordance with this program, the CEO and senior management undertake an entity-wide process to identify, assess and mitigate significant risks. The Board undertakes an annual review of those risks identified by the ERM program as principal risks. The Board monitors risk management actions for these risks throughout the year. In addition to Board oversight of risk management efforts, each principal risk is mapped to a Board Committee or full Board, as appropriate. Environmental issues are mapped to the Environment, Health, Safety and Sustainable Development Committee of the Board, and this committee receives quarterly reports from management.	The Board is also responsible for ensuring Suncor has an effective strategic planning process, and on an annual basis reviews Suncor's annual business plan (including Suncor's annual capital budget) and in doing so endorses the strategies reflected in Suncor's long range plan. The Governance Committee provides assistance to the Board by annually assessing Suncor's planning and budgeting process.
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W6.2d

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

Row	Yes	Environment, Social and Governance (ESG) is embedded in director recruitment, board evaluation and committee representation through the inclusion of EHS as part of Suncor's board skills matrix. The board's skills matrix was revised in 2021. One of the competencies and skills is in Environment Health and Safety (EHS), which is described as: significant experience in the areas of environment (including climate risk management), health and safety, including knowledge of industry regulations and a commitment to best practices for workplace safety. Twelve board members have competence in EHS. Suncor's board practices regarding performance evaluation and compensation consider ESG factors by:	<Not Applicable>	<Not Applicable>
1		<ul style="list-style-type: none"> •evaluating senior executive performance annually against goals that support and reinforce our business objectives, including climate performance •considering our performance against enterprise-wide sustainability goals related to safety, environmental (including greenhouse gas emissions), to determine the annual incentive payment amounts for the CEO and the rest of the executives. 		

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)

Chief Sustainability Officer (CSO)

Water-related responsibilities of this position

- Assessing water-related risks and opportunities
- Managing water-related risks and opportunities
- 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

Frequency of reporting to the board on water-related issues

Quarterly

Please explain

The Chief Sustainability Officer (CSO) reports directly to the CEO and President of Suncor. They have a direct link to the Environmental, Health, and Safety & Sustainable Development (EHS&SD) Committee of the Board of Directors, which includes quarterly meetings and reports.

The CSO is the highest-level management position below the board level where the most significant water-related issues ultimately are managed. The CSO has a direct link to the EHS&SD Committee, which is a committee of the Board of Directors. The EHS&SD Committee is in place to monitor the effectiveness and integrity of Suncor's internal controls as they related to operational risks of the corporation's physical assets, including water related risks, and other matters of the environment, health, safety and sustainable development. The EHS&SD Committee is also responsible for the review of the policies and practices of the Corporation respecting operational risks.

W6.4

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

Row	1	Yes	Currently tracked in Environmental Regulatory Incidence.
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W6.4a

(W6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues (do not include the names of individuals)?

Monetary reward	<ul style="list-style-type: none"> Chief Executive Officer (CEO) Chief Financial Officer (CFO) Chief Sustainability Officer (CSO) Other C-suite Officer (All C-suite Officers) General Counsel Other, please specify (All employees who are eligible to receive an annual incentive award.) 	Reduction of water pollution incidents
Non-monetary reward	Please select	Please select

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
- Yes, other

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?

Suncor has created an integrated policy and regulatory issues management (PRIM) process which drives a disciplined approach to manage direct and indirect activities to influence policies and ensure they are consistent with our water policy and water commitments. PRIM is a coordinated, anticipatory approach for identifying, monitoring and managing the environmental, economic, and social issues considered most critical to Suncor and its external stakeholders. This includes a number of subcommittees, councils, forums and networks to prioritize and steer the right work across the company, influencing many decisions and actions Suncor takes on a daily basis. Our Environmental Health and Safety Policy states our belief that a resilient environment and vibrant communities are foundational to business success and our aim to minimize our impact on water. Our production currently requires water use, and there is global concern about how water is used and managed. The current water focus is on integrated water management (water use, withdrawal and return). We use four principles to guide our integrated water management approach, include: Shared value of water, Watershed management , Reduce-Reuse-Release, Integrated options analysis.

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)
- 2022-annual-report-en.pdf

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?

Long-term business objectives	Yes, water-related issues are integrated	21-30	We believe water is a shared and precious resource. It must be managed wisely using a balanced, integrated and sustainable approach. Water is an essential part of Suncor's operations, so it's important we find ways to continuously improve our water use and safely release water from our operations. Recognizing our role in managing water responsibly, our water strategy principles focus on: Shared value of water; Watershed management; Reduce-Reuse-Release; Integrated options analysis. Water management is an integral part of our strategy. Suncor's strategy: To be Canada's leading energy company by growing our business in low GHG fuels, electricity, and hydrogen while sustaining and optimizing our existing hydrocarbon business and transforming our GHG footprint; all enabled by our expertise, long-life resources, integrated business model, strong connection to customers, and world-class environment, social and governance (ESG) performance including water targets. Our strategy is underpinned by 6 strategic objectives: Grow returns on capital; Be a net-zero by 2050; Optimize our base business; Expand low emissions business; Grow our customer connection; Achieve world-class ESG performance. For more information, please visit: https://www.suncor.com/en-ca/about-us/strategy
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	21-30	We believe water is a shared and precious resource. It must be managed wisely using a balanced, integrated and sustainable approach. Water is an essential part of Suncor's operations, so it's important we find ways to continuously improve our water use and safely release water from our operations. Recognizing our role in managing water responsibly, our water strategy principles focus on: Shared value of water; Watershed management; Reduce-Reuse-Release; Integrated options analysis. Water management is an integral part of our strategy. Suncor's strategy: To be Canada's leading energy company by growing our business in low GHG fuels, electricity, and hydrogen while sustaining and optimizing our existing hydrocarbon business and transforming our GHG footprint; all enabled by our expertise, long-life resources, integrated business model, strong connection to customers, and world-class environment, social and governance (ESG) performance including water targets. Our strategy is underpinned by 6 strategic objectives: Grow returns on capital; Be a net-zero by 2050; Optimize our base business; Expand low emissions business; Grow our customer connection; Achieve world-class ESG performance. For more information, please visit: https://www.suncor.com/en-ca/about-us/strategy
Financial planning	Yes, water-related issues are integrated	21-30	We have developed models and tools used to anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production. We use a Sustainability Planning Forecast that estimates performance metrics over a 10 year outlook on a corporate and facility level. Suncor also uses an annual price planning assumption process, which summarizes our rationale for long-run pricing assumptions and is used in the business plan and all economic evaluations. Outlooks for water prices and other economic related factors which contribute to the long term business objectives. Our water strategy principles focus on: Shared value of water; Watershed management; Reduce-Reuse-Release; Integrated options analysis. Water management is an integral part of our strategy. Supporting our strategy, our Operational Excellence goals are implemented through the goal setting and business planning processes, through which the organization confirms, adjusts and aligns its business direction. Those processes include review of long term business plans, establishment of capital and operating budgets, and goals translation. The intent is to establish the requirements for setting goals and targets and to develop associated business plans. Implementation of these requirements is intended to assist in ensuring expected contributions, priorities and deliverables are understood and followed throughout the organization.

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

Suncor’s accounting system is not setup organizationally to attribute CAPEX and OPEX figures to water from across the company that meets the definitions provided by CDP in the guidance document. As such, any numbers Suncor would produce would be an estimate subject to significant error and not useful for a year over year comparison.

W7.3

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

Row Yes 1 We use three energy future scenarios to 2050 (substantially based on the IHS Markit Autonomy, Rivalry and Discord scenarios) and a 2°C scenario to 2100 to test and assess the resiliency of our business strategy against inherent uncertainty. Suncor has developed models and tools that allow us to understand available water quantity and quality at the local level. This analysis involves risk assessment, sustainability forecasting and some business unit/regional level scenario analysis, which helps inform future business planning. However, these models/tools are being developed to capture basin level projections that would better inform local water risks. Suncor is actively working on understanding and integrating water related scenario analysis in the corporate climate related scenario analysis, which will help inform business strategy.

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.

<p>Row 1</p> <p>Water-related Land-use change Other, please specify (Reclamation and closure)</p>	<p>Climate Projections: The global climate projections used here are based on the Community Earth System Model (CESM), which is a leading GCM and one of the models that the 5th IPCC Assessment Report was based on. A small ensemble of 4 independent CESM simulations was employed. Regional climate modelling was conducted using the Weather Research and Forecasting (WRF) model at 30 km resolution over North America with a refined grid at 10 km resolution over western Canada. The WRF simulations have been conducted only for the three 15-year analysis periods, whereas CESM was run continuously from pre-industrial times to 2100. Furthermore, each CESM ensemble member was used to drive two separate WRF simulations, one with the G and one with the T configuration, resulting in 8 WRF simulations per period (24 in total).</p> <p>Hydrologic Model: The hydrologic model of the Athabasca River Basin is based on the HydroGeoSphere (HGS) integrated surface-subsurface hydrologic model, which simulates overland and streamflow across the surface as well as variably-saturated 3-dimensional subsurface flow of groundwater. The model has been specifically configured and calibrated for the ARB, employing an unstructured mesh (grid) with a resolution of 1 km – 5 km and refinement to 500 m along surface water features. The subsurface represents 13 geologic units in 22 numerical layers, ranging from the major Devonian groups at the bottom to peatlands and topsoil. The land surface is dominated by boreal forests and peatlands; the latter are particularly important, as peatlands facilitate shallow groundwater flow and can limit moisture loss to evapotranspiration (ET). The WRF data used to drive the ARB model include surface radiation balance, wind, temperature and humidity to estimate ET, as well as liquid precipitation and snowmelt as water input. Snow and snowmelt were computed by the land surface model in WRF, using an energy and mass balance approach. A limited-area, high-resolution version of the model has been constructed for the Alberta Oil Sands (AOS) region, which was used to simulate the impact of small number of selected extreme climate events. The AOS model has a resolution of approximately 0.5 km – 2.5 km, but requires upstream boundary input from the large-scale ARB model.</p>	<p>Hydrogeosphere Athabasca Watershed Model-Climate Change Scenarios. The HGS model is leading edge integrated groundwater-surface water model that allow downscaling of IPCC climate change scenarios as inputs into Watershed analysis. Design of mine reclamation/closure landscapes extend for many decades where climate conditions today create uncertainty if they were extended into the future.</p>	<p>Influence our reclamation and closure plans to develop and design long term sustainment of reclaimed landscapes (upland forest, wetlands and lakes). Understanding climate change impacts improves our ability manage risk/liability and improve confidence in closure outcomes.</p>
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W7.4

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

Row 1

Does your company use an internal price on water?

Yes

Please explain

Suncor uses a Planning Price Assumption (PPA) process, which was completed in the past. This summarizes Suncor’s rationale for long-run pricing assumptions and is used in the business plan and all economic evaluations. Additionally, water prices are used in Suncor’s Water Management Program.

Water management is an integral part of our strategy. Supporting our strategy, our Operational Excellence goals are implemented through the goal setting and business planning processes, through which the organization confirms, adjusts and aligns its business direction. Those processes include review of long term business plans, establishment of capital and operating budgets, and goals translation. The intent is to establish the requirements for setting goals and targets and to develop associated business plans. Implementation of these requirements is intended to assist in ensuring expected contributions, priorities and deliverables are understood and followed throughout the organization.

W7.5

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

Row 1	No, but we plan to address this within the next two years	<Not Applicable>	Other, please specify (Need to work on internal alignment of definition for low water impact and appropriate approach in our business)	There is no common definition of what constitutes a low water impact product and/or service, so we are working on defining the criteria and threshold used for classifying products and/or services as low water impact.
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W8. Targets

W8.1

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

No, and we do not plan to within the next two years

W8.1c

(W8.1c) Why do you not have water-related target(s) and what are your plans to develop these in the future?

Row 1	Other, please specify (Please see comment.)	While we are progressing thinking towards targets and goals that align with our risks and priorities within the next several years, varying constraints have limited our ability to finalize and implement these plans.
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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?

Row 1	Not mapped – and we do not plan to within the next two years	<Not Applicable>	We do not currently have any tracking or programs in place related to plastic use specifically.
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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?

Row 1	Not assessed – and we do not plan to within the next two years	<Not Applicable>	We do not currently have any tracking or programs in place related to plastic use specifically.
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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.

Row 1	No, risks assessed, and none considered as substantive	<Not Applicable>	<Not Applicable>
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W10.4

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

Row 1	No – and we do not plan to within the next two years	<Not Applicable>	<Not Applicable>	Plastics are not a significant risk or opportunity within our business at this time.
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W10.5

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

Production of plastic polymers	No	
Production of durable plastic components	No	
Production / commercialization of durable plastic goods (including mixed materials)	No	
Production / commercialization of plastic packaging	No	
Production of goods packaged in plastics	No	
Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services)	Yes	In our retail sites (e.g. gas stations), we provide goods that use plastic packaging.

W10.8

(W10.8) Provide the total weight of plastic packaging sold and/or used, and indicate the raw material content.

Plastic packaging sold	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Plastic packaging used	Please select	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>

W10.8a

(W10.8a) Indicate the circularity potential of the plastic packaging you sold and/or used.

Plastic packaging sold	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Plastic packaging used	Please select	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>

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.

Forward-Looking Statements: These responses contain certain forward-looking statements and forward-looking information (collectively, forward-looking statements) based on Suncor's current expectations, estimates, projections and assumptions that were made by Suncor in light of information available at the time these responses were prepared. Some of the forward-looking statements may be identified by words like "expected", "will", "estimates", "could", "anticipates", "intends", "may", "forecasts", "potential", "strategy", "goal", "objective", "outlook", "target" and similar expressions. Forward-looking statements in these responses include references to: Suncor's expectation that certain models developed by it will anticipate future trends in areas such as fresh water withdrawal, water recycled/ reused, and wastewater production; the expectation that continued monitoring of the watersheds will help us adapt and continue to take appropriate actions to reduce our water footprint; the expectation that continued exploration and implementation of local initiatives will result in more efficient water use; Suncor's expectations regarding how it minimizes the adverse impacts of various potential water pollutants on water ecosystems on human health through various management procedures; the potential impacts, time frame, magnitude of potential impact, likelihood and potential financial impacts of the identified water risks (regulatory uncertainty, increased water stress, increased difficulty in obtaining withdrawals / operating permits) and the expected impact of Suncor's response thereto; Suncor's estimated timeframe and identified potential financial impact of the water related opportunities, including improved water efficiency in operations and collective action innovation; the expectation that maturing relationships with a diverse range of suppliers is important as Suncor looks to move our company and industry from supply arrangements that are transactional in nature to partnerships that are more strategic and to leverage our collective strengths to amplify innovation and drive sustainability performance; Suncor's water strategy, principles and aims; the manner in which water-related risks are integrated into Suncor's long-term strategic business plans; our strategic goal to be Canada's leading energy company by growing our business in low GHG fuels, electricity, and hydrogen while sustaining and optimizing our existing hydrocarbon business and transforming our GHG footprint and Suncor's expectation that its six strategic objectives will help achieve this strategic goal; and statements regarding Suncor's energy future scenarios and the belief that our work toward understanding and integrating water related scenario analysis in the corporate climate related scenario analysis will help inform business strategy.

Forward-looking statements are not guarantees of future performance and involve a number of risks and uncertainties, some that are similar to other oil and gas companies and some that are unique to our company. Suncor's actual results may differ materially from those expressed or implied by our forward-looking statements and you are cautioned not to place undue reliance on them. Suncor's Management's Discussion & Analysis for the second quarter of 2023 and its most recently filed Annual Information Form/Form 40-F, Annual Report to Shareholders and other documents it files from time to time with securities regulatory authorities describe the risks, uncertainties, material assumptions and other factors that could influence actual results and such factors are incorporated herein by reference. Copies of these documents are available without charge from Suncor or by referring to the company's profile on SEDAR+ at sedarplus.ca or EDGAR at sec.gov. Except as required by applicable securities laws, Suncor disclaims any intention or obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

W11.1

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

Row 1	Director, Climate, Disclosure and Integration	Other, please specify (Sustainability Director)
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SW. Supply chain module

SW0.1

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

Row 1	62907000000
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SW1.1

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

We do not have this data and have no intentions to collect it

SW1.2

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

Row 1	Yes, for all facilities	All geolocation data for our facilities is already disclosed in section W5.1
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SW1.2a

(SW1.2a) Please provide all available geolocation data for your facilities.

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

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.

No

Please confirm below

I have read and accept the applicable Terms