(W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, how do they compare to the previous reporting year, and how are they forecasted to change?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	In 2022, Suncor's total water withdrawal was approximately the same as in 2021 (5% lower). 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. 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 reported figures satisfy the equation: W = D + C Where, W= total withdrawals D= total discharges C= total consumption 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%. This comparison includes Syncrude for 2021.
Total discharges	79996	Much lower	Increase/decrease in business activity	Please select	Please select	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. 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. 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 reported figures satisfy the equation: W = D + C Where, W= total withdrawals D= total discharges C= total consumption This comparison includes Syncrude for 2021.
Total consumption	100326	Lower	Increase/decrease in business activity	Please select	Please select	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. 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. 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. 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 reported figures satisfy the equation: W = D + C Where, W= total withdrawals D= total discharges C= total consumption This comparison includes Syncrude for 2021.

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?

(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 reamined 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 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

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

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	Primary reason for comparison with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	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-yearr 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	63038000000	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

(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.

(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%, 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 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 being 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 1	Company-wide	Other, please specify (This is incorporated within the Report on Sustainability under Water Stewardship and Tailings management.)	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. 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: 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. 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.

W6.2

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

(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>

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.

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>
Plastic packaging used		Please select	<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>	

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)

SW. Supply chain module

SW0.1

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

Row 1	62907000000

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

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