Welcome to your CDP Water Security Questionnaire 2019

W0. Introduction

W0.1

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

Ecolab (NYSE: ECL) is the global leader in water, hygiene and energy technologies and services. Around the world, businesses in food service, food processing, hospitality, healthcare, industrial, and oil and gas markets choose Ecolab products and services to keep their environment clean and safe, operate efficiently and achieve sustainability goals.

Founded in 1923 and headquartered in St. Paul, Minn., Ecolab's global workforce of 49,000 associates help make the world cleaner, safer and healthier by delivering comprehensive solutions and on-site service to promote safe food, maintain clean environments, optimize water and energy use, and improve operational efficiencies for customers at nearly three million locations in more than 170 countries. Ecolab's ultimate competitive advantage is found in our industry-leading sales-and-service force. Every customer challenge is unique, which is why our 27,000 field associates partner with customers in their facilities, providing on-the-ground consultation and service. Our experts employ a rigorous process to gather data, apply advanced technology, rethink processes and provide solutions to address our customers' unique economic, social and environmental challenges. Behind every field representative is a team of researchers, scientists, engineers, regulatory specialists and other experts working diligently to tackle customer challenges, develop new solutions and meet emerging needs.

For over 95 years, Ecolab has been developing solutions to help sustain a healthy world for future generations. Our Total Impact approach evaluates the full impact of each product or service we provide to help customers increase efficiency, minimize use of natural resources and reduce waste—from sourcing and manufacturing to use and disposal. In 1928, we patented our first dispenser to provide the optimal amount of chemicals and reduce waste. In 1948, we introduced the first rinse additive, reducing energy needed to dry dishes by speeding up the drying process. In 1978, we eliminated ozone-depleting substances from our cleaning products, 11 years before the Montreal Protocol went into effect. In 2018, we delivered increased sales growth while also maintaining our combined investments in R&D, systems and field technology. Always striving to do better, we are setting bolder environmental performance goals that align with our business growth strategy as we continue to decouple resource use from growth. By 2020, we aim to reduce water usage by 25 percent and greenhouse gas emissions by 10 percent across all our manufacturing plants, compared to a 2015 baseline. Further, we have set a customer impact goal, aiming to conserve 300 billion gallons of water annually by 2030 by reducing water consumption within our own and our customers' operations. This represents water conservation equaling the annual drinking needs of more than 1 billion people.

Our innovative products and services touch virtually every aspect of daily life. From the raw materials that are the building blocks of nearly every products, to production and manufacturing, to retail and service environments, Ecolab is behind the scenes working with many of the world's most recognizable brands to improve performance, meet increasing demand, and reduce environmental impact.

Further information about Ecolab is available at www.ecolab.com. The answers to the questions of the CDP prepared by Ecolab contain various forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These include statements concerning future events, future financial performance, plans, strategies, expectations, prospects, impact of climate change, laws and regulations, and supply and demand. These statements, which represent Ecolab's expectations or beliefs concerning various future events, are based on current expectations that involve a number of risks and uncertainties that could cause actual results to differ materially from those of such forward-looking statements. We caution that undue reliance should not be placed on such forward-looking statements, which speak only as of the date made. Ecolab does not undertake, and expressly disclaims, any duty to update any forward-looking statement whether as a result of new information, future events or changes in expectations, except as required by law.

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, 2018	December 31, 2018

W0.3

(W0.3) Select the countries/regions for which you will be supplying data.

Algeria
Argentina
Australia
Austria
Belgium
Brazil
Bulgaria
Canada
Chile
China
China, Hong Kong Special Administrative Region
Colombia
Costa Rica
Croatia
Czechia
Denmark
Dominican Republic
Ecuador

Egypt
Equatorial Guinea
Finland
France
Germany
Greece
Hungary
India
Indonesia
Ireland
Israel
Italy
Japan
Jordan
Kazakhstan
Kenya
Malaysia
Malta
Mexico
Morocco
Netherlands
New Zealand
Norway
Pakistan
Peru
Philippines
Poland
Portugal
Puerto Rico
Qatar
Republic of Korea
Romania
Russian Federation
Saudi Arabia
Serbia
Singapore
Slovakia
Slovenia
South Africa
Spain
Sweden
Switzerland
Taiwan, Greater China
Thailand
Turkey
Uganda
Ukraine

United Arab Emirates
United Kingdom of Great Britain and Northern Ireland
United Republic of Tanzania
United States of America
Uruguay
Venezuela (Bolivarian Republic of)
Viet Nam

W0.4

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

USD

W0.5

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

Companies, entities or groups 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?

Yes

W0.6a

(W0.6a) Please report the exclusions.

Exclusion	Please explain
Offices, Distribution & Warehouse facilities	Offices, Distribution & Warehouse facilities make up 5 percent of our total water withdrawal and effluent footprint, based on estimated and actual sources. Overall, these facilities are very small users of water and as an exclusion are not significant nor relevant sources of water withdrawal or effluent. In some cases, we lack the ability to collect actual water consumption or effluent data and have estimated their impact based on square footage and similarly sized buildings and use type. Thus, we are not able to report water withdrawal, effluent and consumption data for these sites in section 1.2b 1.2h and 1.2i because we are not able to break down water withdrawals, effluent and consumption by the sources or destinations. However, we do include 100% of our sites in our water risk assessment.

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	Vital	Although our direct operations are not water intensive, having sufficient amounts of good quality freshwater is vital to our operations, products and services. Our direct operations withdraw from surface water, groundwater, and municipal water resources, and a portion of our facilities source water from water-stressed areas. Our primary use of freshwater is for washout procedures, and we also use freshwater to make the raw materials that go into our products. Therefore, the sustainable management of water resources is fundamental to the success of our business. In terms of indirect operations, we also depend on the use of water to deliver our primary products and services to customers as water is the essential delivery mechanism to enable the outcomes our customers expect from us: cleaning, sanitation, heating and cooling. For example, our cleaning and sanitation solutions, water additives, water treatment systems, and many other technologies rely upon freshwater and many of our customers' operations are sensitive to water quality, quantity and availability. We expect that our direct and indirect freshwater use and dependency will not change, remaining vital into the future as we, nor our customers do not expect to change the way we or they use water when making our products or delivering our services with customers.
Sufficient amounts of recycled, brackish and/or	Important	Important	We do not use brackish or produced water in our direct and indirect operations and do not expect to in the future. While water use is essential to our business, Ecolab's direct operations are not water intensive and our annual water risk assessments

produced water available for use			have not identified inherent water-related risks with the potential to have a substantive financial or strategic impact on the business. Therefore, we do not currently use a substantial amount of recycled water in our direct operations. However, we do recycle and reuse water directly in some operations, such as cooling towers, and are actively pursuing projects that will increase our use of reused/recycled water over the short-term. For example, in 2018 we invested in a top of the line water reclaim system that when fully operational will save 100 million gallons of water per year. We have rated the use of recycled water as important to our direct and indirect operations. We use recycled water where appropriate and available based on the production process, and measure and report for 100% of the sites over which operational control is exercised. However, we do not require recycled water as a direct input, so have selected this aspect as 'important' for our operations. We continue to assess the potential for other large water recycling projects at facilities that are higher users of water and/or are located in water stressed regions. We understand that our value chain's use of recycled water is important to their operations, as it is often used to supplement freshwater withdrawals for cleaning and other uses related to sanitation, heating and cooling. We expect that our direct and indirect recycled water use dependency may shift to vital into the future as climate change impacts the quality and availability of freshwater and where we will expand our focus on increasing water circularity in our plants as freshwater becomes a limited resource. We expect our customers to experience this shift as well.

W1.2

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

	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	100%	Total volume of water withdrawal is measured and reported for 100% of our sites over which operational control is exercised. This includes

		water withdrawal volume collected on a monthly basis using our internal database tools and utility provider data management solutions for manufacturing facilities and corporate campuses that are within the scope of this report. We prioritize measurement, accounting and reporting for these sites, which comprise the majority of our impact. In some cases, we lack the ability to collect actual water withdrawal data (for example, when we are in the process of onboarding newly acquired sites). In these cases, we estimate water withdrawal data based on square footage, production, water use at similarly sized buildings, use type and other relevant factors.
Water withdrawals – volumes from water stressed areas	100%	Water withdrawal from water stressed areas is measured and monitored for 100% of the sites over which operational control is exercised. This includes data collected on a monthly basis using our internal database tools and utility provider data management solutions for manufacturing facilities and corporate campuses. Our annual water risk assessment assesses 100% of our operations and uses WRI's Aqueduct tool to identify facilities that may operate within water stressed regions in the near- and long-term. We then use risk criteria provided by the Aqueduct tool and financial risk insights in the Water Risk Monetizer tool to determine substantive water-related risks. In some cases, we lack the ability to collect actual water withdrawal data (for example, when we are in the process of onboarding newly acquired sites). In these cases, we estimate water withdrawal data based on square footage, production, water use at similarly sized buildings, use type and other relevant factors.
Water withdrawals – volumes by source	100%	Total volume of water withdrawal by source is measured and reported for 100% of the sites over which operational control is exercised. This includes water withdrawal volume by source collected on a monthly basis using our internal database tools and utility provider data management solutions for manufacturing facilities and corporate campuses that are within the scope of this report. We prioritize

		measurement, accounting and reporting for these sites, which comprise the majority of our impact. In some cases, we lack the ability to collect actual water withdrawal data (for example, when we are in the process of onboarding newly acquired sites). In these cases, we estimate water withdrawal data based on square footage, production, water use at similarly sized buildings, use type and other relevant factors.
Water withdrawals quality	100%	Water withdrawal quality data is measured and monitored for 100% of the sites over which operational control is exercised. This includes water withdrawal quality data collected on a monthly basis using our internal database tools and sourced by utility provider data management solutions for manufacturing facilities and corporate campuses that are within the scope of this report. We prioritize measurement, accounting and reporting for these sites, which comprise the majority of our impact. In some cases, we lack the ability to collect actual water withdrawal quality data (for example, when we are in the process of onboarding newly acquired sites). In these cases, we estimate water withdrawal quality data based on square footage, production, water quality at similarly sized buildings, use type and other relevant factors.
Water discharges – total volumes	100%	Total water discharge volume is measured and reported for 100% of the sites over which operational control is exercised. This includes water discharge volume data collected on a monthly basis using our internal database tools and utility provider data management solutions for manufacturing facilities and corporate campuses that are within the scope of this report. We prioritize measurement, accounting and reporting for these sites, which comprise the majority of our impact. In some cases, we lack the ability to collect actual water discharge data (for example, when we are in the process of onboarding newly acquired sites). In these cases, we estimate water discharge data based on square footage, production, water discharge

		at similarly sized buildings, use type and other relevant factors.
Water discharges – volumes by destination	100%	Water discharge by destination is measured and reported for 100% of the sites over which operational control is exercised. This includes water discharge by destination data collected on a monthly basis using our internal database tools and utility provider data management solutions for manufacturing facilities and corporate campuses that are within the scope of this report. We prioritize measurement, accounting and reporting for these sites, which comprise the majority of our impact. In some cases, we lack the ability to collect actual water discharge data by destination (for example, when we are in the process of onboarding newly acquired sites). In these cases, we estimate water discharge data based on square footage, production, water discharge by destination at similar buildings or similar regions, and other relevant factors.
Water discharges – volumes by treatment method	76-99	Water discharge by treatment method data is measured at more than 76% of Ecolab manufacturing facilities and corporate campuses that are within the scope of this report. Water discharge data by treatment method is collected on a monthly basis using our internal database tools and utility provider data management solutions. We prioritize measurement, accounting and reporting for sites where we provide primary wastewater treatment on-site, which comprises the majority of our water effluent impact. Sites that are not monitored do not generate material amounts of wastewater requiring treatment.
Water discharge quality – by standard effluent parameters	76-99	Ecolab measures and reports biochemical oxygen demand (BOD) and total suspended solids (TSS) at relevant global supply chain manufacturing facilities on a monthly basis using our internal database tools and utility provider data management solutions. We prioritize measurement, accounting and reporting for sites where discharge quality issues have been identified. In 2018, 68% of supply chain manufacturing water discharge

		was represented in our total reported BOD volume, and 61% was represented in our total reported TSS volume. Sites that are not monitored do not have a material impact. In addition, we monitor the pH of our water effluent before discharging to third party destinations. This includes wastewater hauled off-site and water treated at industrial wastewater treatment plants, which comprise 83% of our water discharge by destination. Together, we measure water discharge quality by standard effluent parameters at more than 76% of our global sites.
Water discharge quality – temperature	Not relevant	We do not monitor water discharge quality by temperature and do not expect to in the future as Ecolab facilities do not produce a material amount of thermal effluent and do not expect this water aspect to be relevant in the future.
Water consumption – total volume	76-99	We measure and monitor water consumption at 88% of Ecolab's sites. The majority of our water consumption results from the incorporation of water into our products, or water lost to the atmosphere through evaporation. This data is carefully tracked at our global manufacturing facilities on a monthly basis using our internal database tools and utility provider data management solutions. We prioritize measurement, accounting and reporting for our global manufacturing facilities, which comprise the majority of our impact. In some cases, we lack the ability to collect actual water consumption or effluent data (for example, when we are in the process of onboarding newly acquired sites). In these cases, we estimate the impact of water consumption based on square footage, production, water consumed at facilities of similar size and type, and other relevant factors.
Water recycled/reused	100%	Water recycled and reused is measured and reported for 100% of the sites over which operational control is exercised. This includes data on water recycling and reuse that is collected on a monthly basis using our internal

		database tools and utility provider data management solutions for manufacturing facilities and corporate campuses that are within the scope of this report. We prioritize measurement, accounting and reporting for sites where we currently recycle and reuse water. In some cases, we lack the ability to collect actual water recycle/reuse data (for example, when we are in the process of onboarding newly acquired sites). In these cases, we do not include an estimate; we only report known instances of water recycling and reuse.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Ecolab is committed to upholding the principles of water stewardship within 100% of our own operations, in alignment with the Alliance for Water Stewardship Standard: upholding good water governance, achieving a sustainable water balance, maintaining good water quality status, protecting or restoring important water-related areas, and providing safe water, sanitation, and hygiene (WASH) for all. We recognize the human right to water. We are committed to aligning with UN Sustainable Development Goal (SDG) #6 to “Ensure availability and sustainable management of water and sanitation for all” and have endorsed the UN Global Compact’s CEO Water Mandate. As stated in Ecolab’s Water Stewardship Position, we are committed to providing access to WASH facilities in 100% of our operations, and working to improve access to WASH facilities in local communities. We monitor the provision of fully-functioning, safety managed WASH services on an annual basis using our internal database tools.

W1.2b

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

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain

Total withdrawals	9,222	About the same	Ecolab's total water withdrawals increased by 5% from 2017 to 2018. We consider this to be 'About the same' as it is less than a 10% change from the previous year. However, our water intensity (measured as water withdrawal per million dollar sales) increased by only 0.15% in the same time period as we also experienced an increase in total production and global sales (global sales, which is used for tracking progress against our intensity goal, increased by 3%). As noted, the scope of our water withdrawal data consists of global supply-chain manufacturing facilities and headquarters/RD&E facilities. Ecolab is committed to reducing its total water withdrawals and has set a target to reduce water use by 25% by 2020 normalized to sales from a 2015 baseline. Accordingly, we expect future water withdrawal volumes to be significantly lower in the future.
Total discharges	6,697	About the same	Ecolab's total water discharges increased by 5% from 2017 to 2018. We consider this to be 'About the same' as it is less than a 10% change from the previous year. The slight increase was not unexpected given the increase we realized in total production and global sales (global sales, which is used for tracking progress against our intensity goal, increased by 3%). As noted, the scope of our water discharge data consists of global supply-chain manufacturing facilities and headquarters/RD&E facilities. Ecolab is committed to reducing its total water withdrawals, which in turn will reduce total water discharges, and has set a target to reduce water use by 25% by 2020 normalized to sales from a 2015 baseline. Accordingly, we expect future water withdrawal and discharge volumes to be lower in the future.
Total consumption	2,525	About the same	We measure and monitor water consumption, defined by Ceres as the "amount of water that is used but not returned to its original source, including water that has evaporated, transpired, has been incorporated into products, crops or waste, consumed by man or livestock or otherwise removed from the local source," at 88% of Ecolab's sites. However, we are currently unable to estimate all impacts related to

			evaporation, transpiration and total quantity of water incorporated into products to derive a true water consumption figure. Therefore, we currently report water consumption as the difference between total water withdrawal and total water discharge, as per the guidance in GRI Standard 303: Water and Effluents. As such, the figures reported in this table balance with the sum of what is reported in 1.2h and 1.2i. Based on this scope, where Water Consumption = Water Withdrawal – Water Discharge, our Water Consumption decreased by less than 0.01% from 2017 to 2018. As noted, the scope of water withdrawal and water discharge data consists of global supply-chain manufacturing facilities and headquarters/RD&E facilities. Ecolab is committed to reducing our total water withdrawals, which in turn will reduce total water consumption, and has set a target to reduce water use by 25% by 2020 normalized to sales from a 2015 baseline. Accordingly, we expect future water consumption to be lower in the future.

W1.2d

(W1.2d) Provide the proportion of your total withdrawals sourced from water stressed areas.

	% withdrawn from stressed areas	Comparison with previous reporting year	Identification tool	Please explain
Row 1	52	About the same	WRI Aqueduct	Ecolab undertakes an annual water-risk assessment. The analysis uses WRI's Aqueduct tool to identify facilities that may operate within water stressed regions, both in the near- and long-term. We then combine our operational water withdrawal and effluent footprint and production metrics with water risk inputs and financial cost valuations from the Water Risk Monetizer (WRM) tool to inform decisions at an operational level. Both tools are used based on their ability to evaluate current and future climate-related water risks against multiple climate scenarios (e.g. IEA 450 and

				IPCC RCP 8.5). In 2018, we started by evaluating 100% of our direct operations. We then removed facilities where we estimate water withdrawal data and are otherwise very small users of water (including an estimated 5% of water withdrawal and effluent from Offices, Distribution, Warehouses, Flex/R&D and related facilities), and refined our assessment to focus on the remaining 139 manufacturing and campus/technology center facilities, which represent 95% of our total global water withdrawal and effluent footprint. Using GRI's definition of water stress (i.e. baseline water stress is high (40-80%) or extremely high (>80%) according to the Aqueduct tool), 52% of Ecolab's total water withdrawal is sourced from areas with current baseline water stress. As our facility locations did not change significantly from 2017 to 2018, these results are in line with the previous reporting year. To further evaluate our current and future water risk and focus in on strategically important sites, we then assessed these sites against the following criteria: 1. Production intensity (i.e. percentage of each sites' production out of total production) is >1%, 2. 10-year potential Revenue at Risk is >10% (based on WRM tool), and 3. Future baseline water stress is expected to remain the same or increase (based on IEA 450 climate scenario to 2030 in WRI's Aqueduct Water Risk Atlas). Based on these criteria, only 3 of our strategically important sites representing 8.2% of total production volume, and 27% of total water withdrawal have been identified as operating in river basins with current and/or future water stress.

W1.2h

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	744	Lower	Fresh surface water, including rainwater, withdrawal is relevant to Ecolab because it is one of many sources of water that we rely on for our daily operations and manufacturing based on the specific watersheds in which we operate, and it represented 8% of our total water withdrawal by source in 2018. In some locations where municipal water is not available we use fresh surface water, such as at our Freeport, TX facility. Fresh surface water withdrawals decreased by 10% from 2017 to 2018, which we interpret as 'Lower' as it represents a 10% or greater change from the previous year. This decrease is due to overall variability in production and water withdrawal by source from across our global manufacturing and headquarters/ RD&E portfolio. Ecolab is committed to reducing its total water withdrawals, and has set a target to reduce water use by 25% by 2020 normalized to sales from a 2015 baseline. Accordingly, we expect future water withdrawal volumes to be lower in the future.
Brackish surface water/Seawater	Not relevant			We do not source any of our water from brackish surface water/seawater in our direct or indirect operations due to

				our facility locations and our operational requirements to use freshwater. We do not anticipate that this source will become relevant to Ecolab in the future.
Groundwater – renewable	Relevant	1,165	About the same	Groundwater withdrawal is relevant to Ecolab because it is one of many sources of water that we rely on for our daily operations and manufacturing based upon the specific watersheds in which we operate, and it represented 13% of our total water withdrawal by source in 2018. In some locations where municipal water is not available we use groundwater, such as at our Cisterna, Italy facility. Renewable groundwater withdrawals decreased by 3% from 2017 to 2018, which we interpret as 'About the same' as it is less than a 10% change from the previous year. This slight decrease is due to overall variability in production and water withdrawal by source from across our global manufacturing and headquarters/ RD&E portfolio. Ecolab is committed to reducing its total water withdrawals, and has set a target to reduce water use by 25% by 2020 normalized to sales from a 2015 baseline. Accordingly, we expect future water withdrawal volumes to be lower in the future.
Groundwater – non-renewable	Not relevant			We do not source any of our water from non-renewable groundwater sources. As per

				our Water Stewardship Position Statement, Ecolab is committed to the sustainable management of water resources and non-renewable water resources are not considered environmentally, socially or economically sustainable. We do not anticipate that this source will become relevant to Ecolab in the future.
Produced/Entrained water	Not relevant			We do not source any of our water from produced/entrained sources as we do not have operations that produce water as a result of the extraction, processing, or use of raw materials. We do not anticipate that this source will become relevant to Ecolab in the future.
Third party sources	Relevant	7,313	About the same	Third party municipal water is relevant to Ecolab because it is the primary source that we rely on for our daily operations and manufacturing based upon the specific watersheds in which we operate, and it represented 79% of our total water withdrawal by source in 2018. Third party municipal water withdrawals increased by 5% in 2018, which we interpret as 'About the same' as it is less than a 10% change from the previous year. This slight increase is due to overall variability in production and water withdrawal by source from across our global manufacturing and headquarters/ RD&E portfolio. Ecolab is committed to reducing its total water

				withdrawals, and has set a target to reduce water use by 25% by 2020 normalized to sales from a 2015 baseline. Accordingly, we expect future water withdrawal volumes to be lower in the future.

W1.2i

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

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water	Relevant	539	Much lower	Fresh surface water discharges are relevant because it is one destination we use for our daily operations and manufacturing based on the specific watersheds and utility infrastructure in which we operate, and it represented 8% of total water discharge by destination in 2018. In some locations, we discharge to surface water where typical sewer to treatment facility processes are unavailable, such as at our Biebesheim, Germany facility. Fresh surface water discharges decreased by 44% from 2017 to 2018, which we consider to be 'Much lower' as it is greater than a 20% change from the previous year. This decrease is due to overall variability in production and water discharge by source across our global manufacturing and headquarters/ RD&E portfolio. Ecolab is committed to reducing water withdrawals which will reduce water discharges, and has set a target to reduce water use by 25% by 2020 normalized to sales from a 2015 baseline. Accordingly,

				we expect discharges to be lower in the future.
Brackish surface water/seawater	Not relevant			Due to our facility locations and our operational requirements to use freshwater, we do not source any of our water from brackish surface water/seawater, and therefore do not discharge water into brackish surface water/seawater so this source is not relevant. We do not anticipate that this source will become relevant to Ecolab in the future.
Groundwater	Relevant	137	Lower	Groundwater discharge, which Ecolab defines as deep well injection, is relevant to Ecolab because it is a small, but critical destination that we rely on for our Energy and Water services business, and it represented 2% of our total water discharge by destination in 2018. Groundwater discharges decreased by 12% from 2017 to 2018, which we consider to be 'Lower' as it is greater than a 10% change from the previous year. This decrease is due to overall variability in production and water discharge by source from across our global manufacturing and headquarters/ RD&E portfolio. Ecolab is committed to reducing its water withdrawals which in turn will reduce water discharges, and has set a target to reduce water use by 25% by 2020 normalized to sales from a 2015 baseline. Accordingly, we expect future discharge volumes to be lower in the future. In addition, the spin-off of our Upstream Energy business in 2020 will significantly reduce our groundwater discharges by deep well injection.

Third-party destinations	Relevant	6,020	Higher	Third party destinations, which includes municipal destinations, wastewater hauled off-site and industrial wastewater treatment plants, is relevant because it is the primary destination that we rely on for our daily operations and manufacturing based upon the specific watersheds and utility infrastructure in which we operate. In 2018, third party destinations represented 90% of our total water discharge by destination. Third party discharges increased by 12% from 2017 to 2018, which we consider to be 'Higher' as it is greater than a 10% change from the previous year. This increase is due to overall variability in production and water discharge by source from across our global manufacturing and headquarters/ RD&E portfolio. We are committed to reducing water withdrawals which will reduce water discharges, and have set a target to reduce water use by 25% by 2020 normalized to sales from a 2015 baseline. Accordingly, we expect future discharge volumes to be lower in the future.

W1.2j

(W1.2j) What proportion of your total water use do you recycle or reuse?

	% recycled and reused	Comparison with previous reporting year	Please explain
Row 1	1-10	About the same	Ecolab's total water recycled and reused is calculated as a percent of total water withdrawal. The majority of the water that we recycle and reuse is captured through washout procedures. In many plants, the first rinse of our washouts is captured and stored until another batch of that same chemical is made. We then reuse that first rinse water as an ingredient in the new batch. Our recycling and reuse rate remained steady from

			1.48% in 2017 to 1.43% in 2018 as the number of facilities that recycle and reuse water for washout procedures did not change. We consider this to be 'About the same' as it is less than a 10% change from the previous year. Our use of recycled and reused water helps to reduce the amount of freshwater, groundwater, and municipal water withdrawals that we rely on for our daily operations and manufacturing activities, and therefore reduces our dependence on freshwater. We anticipate that we will increase the total volume and proportion of recycled and reused water in our operations in the future as climate change impacts the quality and availability of water and we continue to expand our focus on increasing water circularity in our plants. For example, in 2018 our Clearing, Illinois plant installed a top of the line water reclaim system that when fully operational will save 100 million gallons of water per year. In addition, we invested in a large water recycle system at our Biebesheim, Germany plant that will be implemented in 2020. We continue to assess the potential for other large water recycling projects at facilities that are higher uses of water and/or are located in water stressed regions.

W1.4

(W1.4) Do you engage with your value chain on water-related issues?

Yes, our suppliers

Yes, our customers or other value chain partners

W1.4a

(W1.4a) What proportion of suppliers do you request to report on their water use, risks and/or management information and what proportion of your procurement spend does this represent?

Row 1

% of suppliers by number

26-50%

% of total procurement spend

26-50

Rationale for this coverage

Raw materials suppliers are engaged on water-related issues including their risks, consumption and product development related information because they represent our core foundation for developing the products and services which we formulate and sell to customers. They are selected for reporting through our procurement organization with

the top tier (7 suppliers) representing 19% of our Raw Materials spend participating in our Strategic Supplier Initiative. They are incentivized to participate in reporting because we co-innovate with them on projects, products, and services which reduce their operating costs and lower their environmental footprint. This is realized through our direct engagement process where we identify raw material purchasing needs and explore their manufacturing processes to identify opportunities to increase efficiency and reduce impacts in their processes. Many of these suppliers are also our customers creating additional incentives to collaborate.

Impact of the engagement and measures of success

Impacts of our engagement result in the generation of new product launches which enables sales growth where more than 10% of our R&D pipeline is sourced from these initiatives. We collect product performance KPIs covering energy, water, emissions, as well as supplier operational impacts. This data is used by product R&D teams to inform efficiency projects with suppliers at the product development level and/or manufacturing level. Success is measured by: the number of projects per year, the cumulative savings of energy and water projects delivered from a base case, that we co-deliver. Because many strategic suppliers are also key customers, customer account managers use this data to report savings from energy, water, waste impacts in their operations. For example, Ecolab engaged with key suppliers Dow and BASF to deploy its 3D TRASAR technology for cooling water which reduced the water footprint for our purchased goods from these two suppliers by 3 billion gallons, a 71% reduction.

Comment

W1.4b

(W1.4b) Provide details of any other water-related supplier engagement activity.

Type of engagement

Innovation & collaboration

Details of engagement

Encourage/incentivize innovation to reduce water impacts in products and services

% of suppliers by number

26-50

% of total procurement spend

26-50

Rationale for the coverage of your engagement

Raw materials, Equipment & Packaging suppliers are engaged on water-related issues including their risks, consumption and product development related information because these suppliers represent our systems engineering approach to providing unique chemistry solutions and services to our customers. They are selected for reporting through our procurement organization and are incentivized to participate in reporting

because we co-innovate with them on projects, products, and services which reduce their operating costs and lower their environmental footprint. This is realized through our direct engagement process where we identify raw material purchasing needs and explore their manufacturing processes to identify opportunities to increase efficiency and reduce impacts in their processes. Many of these suppliers are also our customers creating additional incentives to collaborate.

Impact of the engagement and measures of success

Impacts of our engagement result in the generation of new product launches which enables sales growth where more than 10% of our R&D pipeline is sourced from these initiatives. We collect product performance KPIs covering energy, water, emissions, as well as supplier operational impacts. This data is used by product R&D teams to inform efficiency projects with suppliers at the product development level and/or manufacturing level. Success is measured by: the number of projects per year, the cumulative savings of energy and water projects delivered from a base case, that we co-deliver. For example, we engaged with Dow, a key raw materials supplier, to identify solutions to reduce water consumption at a facility in Spain facing water stress. Through our co-innovation process, we evaluated their operational data through our supplier program and deployed solutions that enable Dow to now use 40% reclaimed water, reducing freshwater withdrawal by 22% and effluent discharge by 49%.

Comment

W1.4c

(W1.4c) What is your organization's rationale and strategy for prioritizing engagements with customers or other partners in its value chain?

Customers: Ecolab's method and strategy for engagement is realized through our eROI platform which engages customers to quantify: Improved Performance, Operational Efficiency, Sustainable Impact. The outcome of this process is a clearly defined value that aligns with customers' key performance indicators. Our rationale for prioritizing engagement is that customers drive the success of our business and sales, and specifically our ability to engage with them to deliver improved performance is a strategic competitive advantage and key to our success. Accordingly, sales growth by sector, and by eROI product platform/ technology are key and direct success measures.

Non-governmental organizations: Partnerships with NGOs strengthen our understanding and ability to impact global challenges facing our business, customers and communities. We are a signatory of the UN Global Compact and CEO Water Mandate, and an active member of the Corporate Eco Forum. Partnerships with the World Wildlife Fund and The Nature Conservancy help advance water conservation and stewardship initiatives in priority regions including China, Mexico and the United States. Ecolab is a founding partner of the Alliance for Water Stewardship's International Water Stewardship Standard, a globally consistent and locally adaptable framework to inform decisions and encourage collective action to promote

sustainable freshwater use. We have implemented the framework at 3 of our own facilities (China and California), including providing training to other local water users. We also collaborated with companies in the watershed to implement the Standard within their facilities and to identify ways to work together to further reduce our collective impacts. The rationale for engagement with these partners is to advance water stewardship globally. Success is measures by the number (and rate of change year-on-year) of Ecolab facilities certified to the AWS standard, and number of AWS certified sites globally.

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?

No

W3. Procedures

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.

Direct operations

Coverage

Full

Risk assessment procedure

Water risks are assessed as part of other company-wide risk assessment system

Frequency of assessment

Annually

How far into the future are risks considered?

>6 years

Type of tools and methods used

Tools on the market
International methodologies
Other

Tools and methods used

Ecolab Water Risk Monetizer
WRI Aqueduct
Alliance for Water Stewardship Standard
External consultants

Comment

Annual analysis includes an assessment of 100% of Ecolab's direct operations to determine which sites are located in water-stressed areas and evaluate potential risk based on location, water withdrawal, production volume, and other key financial factors identified by the Ecolab Water Risk Monetizer tool. In addition, as a founding partner of the Alliance for Water Stewardship (AWS) Standard, we have pilot tested the AWS standard at several Ecolab facilities and three of our plants have achieved AWS certification, which involves understanding and mitigating water risk at the site level.

Supply chain

Coverage

Full

Risk assessment procedure

Water risks are assessed in an environmental risk assessment

Frequency of assessment

Annually

How far into the future are risks considered?

>6 years

Type of tools and methods used

Tools on the market
Other

Tools and methods used

Ecolab Water Risk Monetizer
WRI Aqueduct
Other, please specify
Internal company methods

Comment

Ecolab uses the WRI Aqueduct tool, Water Risk Monetizer tool, and other internal company methods to directly engage with our suppliers, evaluate water-related risks in their operations, and identify any opportunities to deploy our products and services to reduce their risks and impacts.

Other stages of the value chain

Coverage

Partial

Risk assessment procedure

Water risks are assessed in an environmental risk assessment

Frequency of assessment

Six-monthly or more frequently

How far into the future are risks considered?

>6 years

Type of tools and methods used

Tools on the market
Other

Tools and methods used

Ecolab Water Risk Monetizer
WRI Aqueduct
Other, please specify
Internal company methods

Comment

Ecolab uses the WRI Aqueduct tool, Water Risk Monetizer tool, and other internal company methods to directly engage with our customers, assess water-related risks in their operations, and identify opportunities to deploy our products and services to reduce their risks and impacts.

W3.3b

(W3.3b) Which of the following contextual issues are considered in your organization's water-related risk assessments?

	Relevance & inclusion	Please explain
Water availability at a basin/catchment level	Relevant, always included	Water availability at a basin/catchment level is relevant for our operations as freshwater is an essential raw material input into many of our products, and the essential delivery mechanism to enable the outcomes our customers expect from us: cleaning, sanitation, heating and cooling. Ecolab uses the WRI Aqueduct and Water Risk Monetizer tools to evaluate water availability at the local level. We anticipate that water availability will continue to be relevant for us in the future.
Water quality at a basin/catchment level	Relevant, always included	Water quality at a basin/catchment level is relevant for our operations as good quality, freshwater is an essential raw material input into many of our products, and the essential

		delivery mechanism to enable the outcomes our customers expect from us: cleaning, sanitation, heating and cooling. Ecolab uses the WRI Aqueduct and Water Risk Monetizer tools to evaluate water quality parameters at the local level. We anticipate that water quality will continue to be relevant for us in the future.
Stakeholder conflicts concerning water resources at a basin/catchment level	Relevant, always included	Stakeholder conflicts concerning water resources at a basin/catchment level is relevant for our business as water is essential to our operations, products and services. Given our dependence on water access and impact on water resources in areas in which we operate, we recognize our responsibility to practice good water management and collaborate with local communities to ensure the availability and sustainable management of water and sanitation for all. To assess the potential for stakeholder conflicts concerning water resources, Ecolab uses the WRI Aqueduct and Water Risk Monetizer tools to identify sites located within water stressed areas. We also augment this analysis with insights from Ecolab's corporate regulatory affairs organization on any existing stakeholder conflicts concerning water resources at the local level. In areas where we identify environmental and social water risks, we monitor stakeholder issues at the local level and incorporate this information into our final water risk ranking analysis to determine if there is any substantive risk for an individual, or grouping of facilities. We anticipate that stakeholder conflicts concerning water resources will continue to be relevant for us in the future.
Implications of water on your key commodities/raw materials	Relevant, always included	This issue is relevant for our operations as water is an essential raw material input into many of our products, and the essential delivery mechanism to enable the outcomes our customers expect from us: cleaning, sanitation, heating and cooling. We assess this risk through our company-wide Enterprise Risk Management process, which incorporates the inputs from our annual water risk assessment at the site level utilizing the Water Risk Monetizer toolset. We also assess and address implications on our raw materials through our strategic supplier program where we engage our top chemical suppliers in joint projects. More than 60% of these projects are directly related to sustainability, including reducing water consumption. We anticipate that implications of water on our raw materials will continue to be relevant for us in the future.

Water-related regulatory frameworks	Relevant, always included	Water-related regulatory frameworks are relevant and in some locations a regulatory requirement, as water is essential in our operations, and in the delivery of our products and services. Ecolab uses the Water Risk Monetizer tool, which evaluates water regulatory frameworks and potential taxes and tariffs with additional inputs via the WRI Aqueduct tool to consider regulatory risks at the watershed level. This analysis is augmented with local, state, federal and/or national regulatory tracking through Ecolab's corporate regulatory affairs organization. Water issues are monitored at the local level in select regions where we have identified water risks. For example, water withdrawal restrictions issued by the State of California during the drought through 2018, have influenced our sites in the State and was a precursor to getting two sites certified to the Alliance for Water Stewardship Standard. These types of current and pending legislation and related regulatory frameworks are incorporated into our final water risk ranking tool and analysis to determine if there is any substantive risk for an individual or grouping of facilities. We anticipate that water-related regulatory frameworks will continue to be relevant for us in the future.
Status of ecosystems and habitats	Relevant, always included	The status of ecosystems and habitats is relevant as having operations in environmentally sensitive or protected areas may lead to regulatory, operational and/or reputational risks. This issue is managed through our global SH&E policies. We investigate our global sites to determine if any are located near internationally protected areas. Ecolab only owns one manufacturing facility in Garyville, Louisiana that has protected wetlands on its property. This is the only known operational site that is in or adjacent to protected areas or areas of high biodiversity value. We use the WRI Aqueduct and Water Risk Monetizer tools to evaluate the status of ecosystems and habitats at the local level. Compliance with wastewater discharge regulations associated with our operations limits our impact to local ecosystems. We anticipate that the status of ecosystems and habitats will continue to be relevant for us in the future.
Access to fully-functioning, safely managed WASH services for all employees	Relevant, always included	Ecolab is committed to upholding the principles of water stewardship within our own operations, in alignment with the Alliance for Water Stewardship Standard, which includes providing safe water, sanitation, and hygiene (WASH) for all. Accordingly, we have set a company-wide goal to provide access to WASH facilities in 100% of our operations, and work to improve access to WASH facilities in local communities. We monitor the provision of fully-functioning,

		safety managed WASH services on an annual basis using our internal database tools. This goal is important to our company as it aligns with Ecolab's efforts to advance sustainable water solutions around the world through partnerships with our customers, nongovernmental organizations, suppliers and other stakeholders to help ensure sustainable water management. WASH access is evaluated in a separate assessment tool and program managed by our Supply Chain organization, but is considered as a part of our wider enterprise-level water risk assessment. To assess progress, we monitor the percent of operations and sites with audited WASH facilities in place. We anticipate that access to fully-functioning, safely managed WASH services for all employees will continue to be relevant for us in the future.
Other contextual issues, please specify	Not considered	

W3.3c

(W3.3c) Which of the following stakeholders are considered in your organization's water-related risk assessments?

	Relevance & inclusion	Please explain
Customers	Relevant, always included	Our relationships with many of the world's biggest brands give us a unique perspective on the risks and opportunities facing a wide range of industries all around the world. We learn from our customers — the challenges they face and the results they desire — and we use this knowledge to drive innovation and help them achieve their business and sustainability goals. Specific risks that we consider related to customers include reputation and brand management, tied to the performance and efficacy of our products and services to realize environmental savings in-use for our customers. Through our eROI value capture approach, we also engage directly with our customers to undertake water-related risks assessments of their operations using the Water Risk Monetizer, which helps us to tailor specific solutions that address their water risks. We also engage directly with our customers every day and on-site through our 25,000 sales and service associates where we partner with customers to help them do more with less — while achieving their business goals. Our proprietary eROI value capture approach measures the economic, operational and environmental impact of our solutions. With performance outcomes uncompromised, we credibly deliver and document this exponential value to our customers and is captured through our water stewardship goal

		to conserve 300 billion gallons of water annually by 2030 by reducing water consumption in our customers' operations as well as our own.
Employees	Relevant, always included	We strive to make Ecolab a place where talented and capable people are inspired, motivated and fully engaged in their work. We include employees in our water-related risk assessments because our associates drive innovation, support business growth and provide personally delivered service and on-the-ground support to more than three million customer locations – they are critical to our business success. We engage employees through bi-annual surveys that monitor and evaluate employee engagement overall and on topics specific to sustainability including water issues, which are critical to our success and inform our business strategy. We challenge our employees to engage our manufacturing facilities managers and teams to reduce water withdrawal and improve plant efficiency growth and use our sales processes to get employees to engage with customers to undertake water-related risk assessments of their own operations to understand their risks and consider how reductions in water withdrawal (as delivered with Ecolab products and services) can reduce their exposure.
Investors	Relevant, always included	As a publicly traded company, we place a priority on the opinions of our shareholders. We engage in direct dialogue with our stakeholders each year at our annual shareholder meeting, and we also engage with the investor community via disclosures, surveys and rankings from inventor led indices. Specifically, we use data sets and criteria provided from investor-led organizations to inform our own water-related risk assessments and engage in dialogue with these groups to share results and shape our strategy.
Local communities	Relevant, always included	We engage a diverse set of stakeholders to assess the materiality of sustainability-specific issues, inclusive of a targeted stakeholder engagement process that includes employees, customers, investors and relevant external groups including local communities. Ecolab actively seeks to improve water stewardship within our own operations and within the watersheds in which we operate, thus considering the needs, expectations and concerns from local communities within which we operate is critical to conducting a rigorous and comprehensive water-related risk assessment program. Specific risks that we consider related to local communities include reputation and brand management, as well as evaluating specific water-related risks in these communities using tools development by Ecolab including the Water Risk Monetizer, to inform water stewardship programs and initiatives. An example

		of how we engage in the community is through Solutions for Life, a philanthropic program launched in 2014, which enhances our mission to conserve water and improve hygiene around the world. The program aims to address urgent challenges with innovative solutions, strategic partnerships and employee volunteerism. Through Solutions for Life, Ecolab supports the work of two strategic global nonprofit partners: The Nature Conservancy and the Project WET Foundation, both of which directly engage with and benefit local communities, where in turn we are able to integrate identified risks and concerns from these stakeholders into our water-related risk assessments. Educators and Ecolab associates around the world have downloaded the materials to share in their communities. In 2015 for example, the Clean and Conserve program helped educate more than 24,000 people.
NGOs	Relevant, always included	Our ability to provide and protect clean water, safe food, abundant energy and healthy environments is strengthened through our partnerships with reputable global NGOs. Through these partnerships, we further our understanding of global trends impacting our business, customers and communities around the world, and use their insights to inform our water-related risk assessments. Annually, we actively engaged with relevant organizations through one-to-one meetings, hosting workshops and sponsoring conferences, and these partnerships influence our assessment of our company's water-related risks and opportunities related to our operations and customer solutions. NGO partnerships include the UN Global Compact and CEO Water Mandate, Corporate Eco Forum, World Wildlife Fund, Alliance for Water Stewardship, The Nature Conservancy, World Resources Institute, Corporate Executive Board, the Sustainability Consortium and Corporate Eco Forum. Specific risks that we consider related to NGOs include reputation and brand management, tied to the performance and efficacy of our products and services to realize environmental savings in-use for our customers, and related to our performance in NGO-led surveys, rankings and disclosures.
Other water users at a basin/catchment level	Relevant, always included	We employ a multi-faceted process to determine our company's material issues in order to align materiality with our company and customers' key business drivers and to analyze risks and opportunities specific to sustainability. We engage a diverse set of stakeholders to assess the materiality of sustainability-specific issues, inclusive of a targeted stakeholder engagement process that includes employees, customers, investors and relevant external groups, which includes other water users in watershed basins where we operate or undertake philanthropic activities. For example, through our Solutions for Life initiative

		with The Nature Conservancy (TNC), we continued our 25 year partnership with a $2 million investment over three years in support of TNC's "Securing and Restoring Water Sources Around the Globe," initiative. Ecolab has directly engaged with the Minnesota Headwaters Fund, established to protect clean water in Minnesota's lakes and rivers for the benefit of nature, people and business. The Fund will support protection and conservation work throughout the Upper Mississippi River basin, including 5,000-6,000 acres of easements, 20-40 miles of stream bank and floodplain restoration, and other projects that prevent pollutants from increased agricultural use, such as nitrates and sediment, from entering key rivers and lakes. Specific risks that we consider related to other water users in watershed basins include a broad set of water quality, quantity, and baseline/future water stress risks, as well as financial risks through the use of our Water Risk Monetizer tool. Results are used to inform water stewardship programs and initiatives with these other users such as with TNC and Minnesota Headwaters Fund.
Regulators	Relevant, always included	Ecolab takes a holistic approach to sustainability, including economic, environmental, and social responsibility activities. Engaging with policymakers is one means of furthering our sustainability objectives. We communicate with policymakers in proactive policy discussions, bringing our market segment and scientific expertise to the table on energy, water, waste, food safety and customer health issues. We engage with federal and state legislative and regulatory bodies, industry and customer trade associations around the globe and non-government organizations that provide a forum for environmental policy discussion relevant to our industry. This includes a diverse set of stakeholders which focus on key climate mitigation and adaptation issues and potential risks such as product design for energy efficiency and material safety, energy management in business and manufacturing operations and industry collaboration to influence climate policy and water stewardship issues, standards and policy adoption.
River basin management authorities	Relevant, always included	We employ a multi-faceted process to determine our company's material issues in order to align materiality with our company and customers' key business drivers and to analyze risks and opportunities specific to sustainability. We engage a diverse set of stakeholders to assess the materiality of sustainability-specific issues, inclusive of a targeted stakeholder engagement process that includes employees, customers, investors and relevant external groups such as river basin management authorities. For specific sites where our water risk assessment may have identified water risks such as current baseline water

		stress, we have and continue to engage with river basin management authorities, amongst other local level organizations to incorporate their concerns and ideas into our water management strategies. For example, we engaged with and considered water risk inputs from local river basin authorities as a part of our piloting of the Alliance for Water Stewardship's (AWS) International Water Stewardship Standard certification at our Taicang manufacturing plant.
Statutory special interest groups at a local level	Relevant, always included	We employ a multi-faceted process to determine our company's material issues in order to align materiality with our company and customers' key business drivers and to analyze risks and opportunities specific to sustainability. We engage a diverse set of stakeholders to assess the materiality of sustainability-specific issues, inclusive of a targeted stakeholder engagement process that includes employees, customers, investors and relevant external groups such as statutory special interest groups at a local level. For example, in 2015, Ecolab support enabled The Nature Conservancy to explore nature-based solutions to help secure water for China's rapidly growing cities. Specific water-related risks that were included in our assessment for this project included current baseline water stress and a projected future change in baseline water stress for specific watersheds in China facing rapid development. This support included meeting with Chinese experts and applying the global Urban Water Blueprint approach to the unique attributes of the Chinese landscape. The resulting research indicates that investment in nature could help improve water quality for more than 148 million people in China.
Suppliers	Relevant, always included	Through our strategic supplier initiative, we actively engage with suppliers whose products and services we rely upon to develop our own products & services. As a part of this program, we undertake assessments for a subset of raw material strategic suppliers to assess and understand their potential water-related risks, including current water withdrawal quantity at-risk and in the future using a 2DS scenario, which could impact the development and manufacture of our own products and services.
Water utilities at a local level	Relevant, always included	Ecolab evaluates specific water withdrawal and effluent risks for each our manufacturing sites and correspondingly develops management plans for sites with identified risks through our annual Water Risk Assessment. Water utilities and suppliers are engaged on an as needed basis via direct consultation and in some cases to solicit direct feedback in the development of these management plan programs, in particular where we have identified a potential future price increase in the cost of water

		through our WRM tool and/or where the site has an overall water risk score above the global average via the WRI Aqueduct tool.
Other stakeholder, please specify	Not considered	

W3.3d

(W3.3d) 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.

We conduct an annual water risk assessment, aligned with our Annual Enterprise Risk Assessment, of our potential physical and transition risks to our operations and suppliers, in the near- and long-term. Data inputs include water withdrawal, effluent, and production metrics with water risk inputs and financial cost valuations from the Water Risk Monetizer (WRM). We use this tool because it is publicly available, global, uses best-in class local water basin datasets (WRI Aqueduct, WWF, etc.), and scientific methodologies to monetize water-specific business risks. Time horizons are based on the 2DS and RCP 8.5 scenarios built into the tools on a current year (various risk criteria), 2020, 2030 and 2040 basis (e.g. change in future water stress), where 2020 is the year for our internal water target, and 2030 the year of our customer impact water stewardship goal. This approach was selected so that we can demonstrate our own tools in assessing risk through scenario analysis on our own operations, supply chain and with customers. Coverage is 100 percent of our direct operations and suppliers. Our risk-response decision making process consider the results of this analysis and directly informs our business strategy to prioritize our water conservation and efficiency efforts across the business and with suppliers. For example, two of our sites that exceeded criteria thresholds have now completed Alliance for Water Stewardship Certification and another has just launched a water recycling project that will reduce consumption by more than 20%. We define water risks that have a substantive financial or strategic impact on our business as risks affecting total production volume by greater than 10%. Corporate risk, including supplier risk evaluation, is considered substantive if it can impact greater than 5% of operating income, either as an isolated event or combination of factors that may impact our corporate strategy and business continuity.

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?

No

W4.1a

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

When assessing water risk in our direct manufacturing operations, we measure the impact on our total production volume (MT) to determine substantive impacts on the business. We define risks that have a 'substantive financial or strategic impact' as having a total (isolated or combined) >10% production capacity impact on Ecolab's annual total production in our direct manufacturing operations. For example, if one or more sites experienced a prolonged shutdown due to a loss of operating capacity which could affect greater than 10% of our global production capacity for a product line with no alternative production means, this would be considered as substantive impact. When assessing water risk in supply chain and more broadly across our corporate level Enterprise Risk Management (ERM) process, we define risks that have a 'substantive financial or strategic impact' as having an impact of greater than 5% of operating income, either as an isolated event or combination of factors that may impact our corporate strategy and business continuity. For example, if one or more of our suppliers experience a prolonged shutdown due to a loss of operating capacity and we were unable to source the same raw materials or the cost of which was equal to or greater than 5% of our operating income, this would be considered a substantive impact. This assessment and its criteria are reviewed annually and incorporated into our annual business risk assessment and reporting processes. Criteria that we consider in this assessment include, for example, the current baseline water stress as scored by the WRI Aqueduct tool, the future predicted change in baseline water stress using the IEA 450 climate scenario to 2030, and the business-as-usual IPCC RCP8.5 climate scenario to 2030.

W4.2b

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

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	We conduct an annual water risk assessment using the WRI Aqueduct Tool to evaluate our global facilities operating within water stressed regions. Using Ecolab's Water Risk Monetizer tool, we build upon this analysis to further evaluate water risks and their relation to our business growth by considering production volume at sites and potential revenue-at-risk. Additional financial analysis then incorporates incoming and outgoing water quality and quantity to provide a Risk Premium relative to the price of water score for each site, which enables Ecolab to assess whether any individual sites or a combination of sites could expose the company to water risks, either current and/or future that could generate a substantive change to our business, operations, revenue or expenditure. In 2018, we identified 3 facilities, representing 27% of our total water withdrawal and 8.2% of our production volume, that operate in river basins with current and/or future defined water stress and may be affected by Ecolab's water withdrawal; however no single, nor combination of sites exceed our

		production impact threshold of 10%, therefore we believe we do not have inherent water risks with the potential to have a substantive financial or strategic impact on our business operations. With regards to managing risks identified at these three sites, two of our sites that exceeded criteria thresholds have completed Alliance for Water Stewardship Certification and another has just launched a water recycling project that will reduce consumption by more than 20%. Related, we did not identify any substantive risks in our supply chain that exceed our threshold.

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	Risks exist, but no substantive impact anticipated	Based on our assessment, our supply chain is not exposed to significant physical, regulatory or any other risks related to water that could have a substantive financial or strategic impact, i.e. impact >5% of operating income. We purchase more than 10,000 raw materials, with the largest single raw material representing less than 3% of raw material purchases. Our raw materials, with the exception of a few specialized chemicals which we manufacture, are generally purchased on an annual contract basis and are ordinarily available in adequate quantities from a diverse group of suppliers globally. When practical, global sourcing is used so that purchasing or production locations can be shifted to control product costs at globally competitive levels. Key commodities and raw material purchasing activities are included in the scope of both our company-wide Enterprise Risk Management process and our Strategic Supplier Initiative (SSI), where we engage our top tier (7 suppliers) representing 19% of our Raw Materials spend. To date, substantive water related risks have not been identified. The SSI and more broadly, our supply chain procurement organization, conducts reviews which include a formal process that identifies critical suppliers (e.g. high volume suppliers, suppliers of critical raw materials, or those with non-substitutable formulas). Risk management plans including changes in source of supply and potential alternative raw materials formulations are in place for those suppliers that have identified potential water-related risks. For example, where we have identified raw material sourcing risks for an individual supplier, we ensure that we have multiple suppliers that we can procure from in the event that any one supplier may be impacted by a market driven or supply chain-related disruption, which may include climate-related risks. However, none of these individually nor in total exceed our 5% operating income impact threshold for substantive supply chain risk.

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

Products and services

Primary water-related opportunity

Increased sales of existing products/services

Company-specific description & strategy to realize opportunity

All industries that Ecolab serves rely on water for their operations making the delivery of water-efficient products and services strategic to our business success. As climate change impacts the availability and price of water and fossil-based energy, customers are increasingly looking for solutions that improve their operational efficiency and cost savings, including reducing water use and the energy required to pump, heat or cool water. In the European regulatory market alone, there is potential for increased market share and access of up to $4 billion of competitively-held water treatment applications.

By 2030, Ecolab aims to conserve 300 billion gallons of water per year by reducing consumption in its own operations and those of its customers. We invest in R&D activities to produce a portfolio of products that reduce customer water use, such as our APEXTM Warewashing System, Formula 1 laundry program, DryExxTM conveyor lubricant, and no-rinse hard surface solutions. By meeting customer demand for these solutions, we will realize significant revenue growth. For example, we partnered with our customer Archer Daniels Midland, one of the largest agricultural producers in the world, to achieve their goal of reducing water use intensity by 15% by 2018, implementing 212 projects together since 2012 to save 2.3 billion of water. We use an eROI program to measure and communicate cost and environmental savings for customers which enhances our value proposition and drives sales.

Estimated timeframe for realization

Current - up to 1 year

Magnitude of potential financial impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

4,000,000,000

Potential financial impact figure – maximum (currency)

88,000,000,000

Explanation of financial impact

Nearly every product or service we sell impacts our customers' water efficiency, for example, all of our Nalco Water customers rely on water for their production processes. Developing and expanding our resource efficient products and services presents opportunities for increased growth rate, market share and profitability. We have identified many opportunities in our target markets, including food & beverage processing and commercial buildings, to gain a competitive advantage through our water and energy optimizing solutions. Specific to water-related regulatory opportunities, there is the potential for increased market share and access of up to $4 billion of competitively-held water treatment applications in our European markets alone (this was estimated based on our existing market share in the European market for water treatment applications, against the total available market share). At a global level, Ecolab's market growth opportunity represents approximately an $88 billion spread across all our primary business units (this was estimated based on our existing market share in food & beverage processing and commercial buildings, against the total available market share).

Type of opportunity

Products and services

Primary water-related opportunity

Other, please specify

Expansion into new markets

Company-specific description & strategy to realize opportunity

Climate change will cause increased risks to water availability and quality, even as population growth rises particularly in BRIC regions. There is an opportunity for us to develop new products and services and expand our existing portfolio of conservation, reuse, recycle, and zero liquid discharge technologies that improve water efficiency in a more tightly regulated markets facing water risks.

Our goal to annually reduce 300 billion gallons of water withdrawal by 2030 in our customers and own operations strategically positions us to invest in two tools, the Water Risk Monetizer and the Smart Water Navigator, to help customers identify water risks, whether regulatory, quality or availability and to drive greater operational water efficiency. These tools allow us to enter into new markets with our customers by partnering with them to use these tools to inform their potential risks and to identify how our products and services can be used to mitigate those risks. For example, we used

the Water Risk Monetizer to help a steel client in India – a very water intensive industry in a water-stressed region facing increased regulatory frameworks – identify and save 380 million gallons of water through smart water management, digital technologies like our 3D TRASAR Technology and operational management services.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

375,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

For example, according to a 2019 market research report by Grand View Research on the global water and waste water treatment market size, there is the potential for increased market share and access of up to $1.5 billion in water treatment applications in the MEA market alone, which is seeing CAGR of 4.08% from 2019 to 2025. The region is characterized by the presence of a large number of water and wastewater treatment plants due to the absence of significant freshwater sources combined with rising per-capita consumption of water and a rapid population growth due to increased immigration. If we are able to increase our market share to 25% of the MEA region alone this would represent $375 million in revenues.

W6. Governance

W6.1

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

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

W6.1a

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

	Scope	Content	Please explain
Row 1	Company-wide	Description of business dependency on water	Ecolab's publicly available Water Stewardship Position formalizes our global commitment to undertake

		Description of business impact on water Description of water-related performance standards for direct operations Reference to international standards and widely-recognized water initiatives Company water targets and goals Commitment to align with public policy initiatives, such as the SDGs Commitments beyond regulatory compliance Commitment to water-related innovation Commitment to stakeholder awareness and education Commitment to water stewardship and/or collective action Acknowledgement of the human right to water and sanitation Recognition of environmental linkages, for example, due to climate change	responsible water stewardship for our company and customers. Our Position is company-wide in scope, so we apply the principles of this policy to all our operations, as well as across our value chain. The aim of the Position is to hold Ecolab accountable to upholding principles of water stewardship and supporting global progress towards achieving SDG Goal #6: Ensure availability and sustainable management of water and sanitation for all. The Position is incorporated into our Office of Sustainability for application across our business, and includes the following content: 1) Description of business dependency and business impact on water; 2) Description of water-related performance standards, international standards and widely-recognized water initiatives, including the Alliance for Water Stewardship Standard; 3) Description of company water targets and goals; 4) Commitment to align with public policy initiatives, including UN SDG Goal #6, and target #6.4 to "substantially increase water-use efficiency across all sectors"; 5) Commitments beyond regulatory compliance; 6) Commitments to water related innovation, including addressing water risks in innovation processes and partnering with customers to help them achieve their water goals; 7) Commitment to stakeholder awareness and education, including commitments to collaborate and engage with stakeholders to reduce risks and impacts and develop effective and sustainable solutions; 8) Commitment to water stewardship and/or collective action, including promoting stewardship of natural resources and environmental protection; 9) Acknowledgement of the human right to water and sanitation; and 10) Recognition of environmental linkages, including the importance of the food-energy-water nexus and climate change impacts on water availability and quality. 1

[1]Ecolab Water Stewardship Position_pdf.pdf

W6.2

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

Yes

W6.2a

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

Position of individual	Please explain
Board-level committee [1]	While the full Board of Directors monitors the Company's progress on sustainability, the Safety, Health and Environment (SHE) Committee of the Board has the highest level of direct responsibility for all sustainability matters, including water-related issues. Responsibility for water has been assigned to this Committee as it falls within the scope of safety, health and environmental matters that are part of the principle responsibilities and duties of the Committee. As stated in its Charter, the SHE Committee is responsible for reviewing and overseeing the Corporation's SHE policies, programs and practices that affect, or could affect, the Corporation's employees, customers, stockholders, and neighboring communities. This Committee reports to the Board of Directors and provides updates to the Board on the company's implementation of and progress against its sustainability goals, including water-related goals (for example, Ecolab's goals to reduce water use by 25% per million sales by 2020 from a 2015 baseline, and to conserve 300 billion gallons of water annually by 2030 by reducing water consumption in our customers' operations as well as our own).

[1] Safety, Health and Environment (SHE) Committee of the Board

W6.2b

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

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring implementation and performance Overseeing acquisitions and divestiture Overseeing major capital expenditures Reviewing and guiding annual budgets	Ecolab's Corporate Sustainability Team monitors the risks and opportunities related to water, as well as the company's overall sustainability performance by collaborating with our global SHE, supply chain, regulatory, and corporate risk departments. The Safety, Health and Environment (SHE) Committee of the Board of Directors receives regular updates on the implementation of and progress against sustainability and water-related goals and activities from the CSO/Vice President, Corporate Responsibility who chairs the Corporate

		Reviewing and guiding business plans Reviewing and guiding major plans of action Reviewing and guiding strategy Reviewing and guiding corporate responsibility strategy Reviewing innovation/R&D priorities Setting performance objectives	Sustainability team. The Board of Directors then receives an annual presentation from the SHE Committee on the company's progress against its sustainability goals, and implementation of projects and related activities, which includes management of potential climate-related issues including water, as appropriate. Accordingly, the SHE Committee discusses with the Board elements of each of the governance mechanisms selected, including guiding company strategy, approving performance objectives, guiding major plans of action and business plans, monitoring performance and progress towards Ecolab's water-related targets, overseeing acquisitions and other capital expenditures which impact the annual budgeting cycle, and reviewing innovation / R&D priorities. These activities consequently contribute to the Board's oversight of and responsibility for review and guidance of water-related issues.

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)

Responsibility

Both assessing and managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

Annually

Please explain

Our Chief Sustainability Officer/ Vice President, Corporate Responsibility leads Ecolab's Corporate Sustainability program in support of Ecolab's business strategy, which include water-related issues. This person's water-related responsibilities include:
• development and execution of water strategy globally,
• integrating water stewardship principles and commitment across the company,
• execution and support of water value propositions across Ecolab's commercial sectors,
• collaborating with the CEO and executive leadership on Ecolab's long-term plan,
• corporate reporting and disclosure including producing Ecolab's annual corporate sustainability report and CDP Water response, and
• diverse stakeholder engagement and management.

The CSO/ Vice President, Corporate Responsibility reports to the CEO and sits on the Sustainability Executive Advisory Team which is made up of 10 members of the company's executive leadership team and governs sustainability strategy. The SEAT meets with the Corporate Sustainability Team on a quarterly basis and have responsibility for operationalizing sustainability (including water-related issues) across the company; coordinating and communicating company policy and decision-making related to sustainability; setting annual goals and metrics for key sustainability priorities; sustainability outlook assessment; and risk management. Outputs of these quarterly meetings are reported by the CSO/ Vice President, Corporate Responsibility to the SHE Committee of the Board, of which the CEO is a member, on an annual basis.

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, trade associations

Yes, funding research organizations

W6.5a

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

Ecolab maintains a formal process to manage all direct and indirect engagement with policy makers and related organizations to ensure we have a common approach that is also consistent with our business strategy. This process covers the scope and business impact of specific policy issues and is integrated into the annual business continuity and risk management assessment process so that any activities that influence policy are evaluated for their alignment with Ecolab's strategic corporate business strategy, including, but not limited to water-related aspects. If inconsistency is discovered, these are immediately flagged for action by the Government Affairs organization. One example is the extended drought in California in 2015 and the governors mandate on water reduction. The CA Water Board opted not to place any new stringent water efficiency requirements on the Commercial Industrial and Institutional (CII) sectors and leave more of the onus on residents and Ag. While Ecolab would have preferred to influence for new, more rigorous water use restrictions on our customers (CII) we chose not to do so - even though it would have helped Ecolab's business. We did so in the best interest of our customers.

W6.6

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

No, but we plan to do so in the next two years

W7. Business strategy

W7.1

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

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	11-15	The following water-related issues are included in Ecolab's long-term business planning objectives: water withdrawals, water discharge and water consumption in our operations, upstream and downstream; and water-related risks as affected by a changing climate. Operationally, Ecolab integrates water-related consumption issues, and water-related risks into its operational goal setting strategy as well as business continuity planning activities. Water-related risks and business continuity issues are addressed by the Annual Assessment of Significant Business Risks where the summarized results from our annual water risk assessment, are raised to the Enterprise Risk Team for consideration as a part of the broader business risk assessment. This influences key decisions such as the future siting of facilities, as well as where to deploy capital for efficiency improvements or enhance resilience of our operations in water-stressed regions. An example of this process at work has been the identification, management and implementation of the AWS Standard at a two plants in California's Central Valley facing severe drought conditions. Our time horizon extends 11-15 years based on our long-lived assets and long-term business objectives that we have committed to, including our 2030 customer impact goal. The view extends to partnerships like Project WET Foundation and The Nature Conservancy, with the UN SDG 6 in view as a primary outcome for our water stewardship journey.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	11-15	The following water-related issues are included in Ecolab's strategy for achieving long- our business objectives: water withdrawals, water discharge and water consumption in our operations, upstream and downstream; and water-related risks as affected by a changing climate. Our 2020 goals reflect commitment to

			continuous improvement across our global footprint. From our water risk assessment each year, we identify vulnerable sites due to climate change and have adopted both mitigation and adaptation strategies proactively at several Ecolab manufacturing sites: we have adopted the Alliance for Water Stewardship and certified 3 sites as a key strategy for achieving our long-term business objectives – Taicang, China, City of Industry and Carson, California. At our largest water use plant in Clearing, Illinois, we have adopted a mitigation strategy to reduce our water withdrawal sourced from Lake Michigan, which is experiencing current water stress due to quality (e.g. nutrient load). Using tools including the Water Risk Monetizer developed by Ecolab, we decided to proactively invest in a water reclaim system that will reduce the plant's water use by 30%. Our time horizon extends 11-15 years based on our long-lived assets and long-term business objectives that we have committed to, including our 2030 customer impact goal. The extended view helps us to ensure our own production/ business continuity and evaluate water-related risks that may emerge beyond a 10 year timeframe.
Financial planning	Yes, water-related issues are integrated	11-15	The following water-related issues are included in Ecolab's financial planning activities: water withdrawals, discharge and consumption in our operations, upstream and downstream; and water-related risks as affected by a changing climate. We integrate water consumption and water-related risks into its financial planning activities through the annual capital and operational expenditure planning cycle, and in our Create and Maintain Value program which deploys capital to our most material manufacturing plants to increase operational efficiency. Water-related risks and business continuity issues are addressed by the Annual Assessment of Significant Business Risks where results from our water risk assessment are raised to the Enterprise Risk Team for consideration in the financial planning process such as the future siting of plants, and increasing or adjusting insurance policies for sites with known or predicted future water risks, for example physical risks related to severe weather. An example of this process at work has been the identification, management and implementation of the AWS Standard at two plants in California's Central Valley facing severe drought conditions. Our time horizon extends 11-15

			years based on our long-lived assets and long-term business objectives that we have committed to, including our 2030 customer impact goal. The extended view helps us to ensure we have sufficient financial resources for managing risks that may emerge beyond a 10 year timeframe.

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)

0.6

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

0.45

Water-related OPEX (+/- % change)

0.05

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

0.25

Please explain

Through our Create & Maintain Value (CMV) program, we employ our expertise and technology to save water, energy and wastewater and prolong equipment life throughout our facilities. By investing our capital through the CMV program at specific facilities, we are able to realize a slower rate of growth in our operational expenses related to water. In 2018 we increased our investments in water efficiency projects to enable progress against our 2020 25% water withdrawal reduction goal.

W7.3

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

	Use of climate-related scenario analysis	Comment
Row 1	Yes	

W7.3a

(W7.3a) Has your organization identified any water-related outcomes from your climate-related scenario analysis?

Yes

W7.3b

(W7.3b) What water-related outcomes were identified from the use of climate-related scenario analysis, and what was your organization's response?

	Climate-related scenario(s)	Description of possible water-related outcomes	Company response to possible water-related outcomes
Row 1	IEA 450 RCP 2.6 Other, please specify RCP 8.5	As a specialty chemicals company, Ecolab faces less exposure to climate-related risks than its raw material chemical industry peers. In fact, the opportunities that a changing climate may present to Ecolab are significant, and positive, due to our company's position in the value chain and the profile of the products and services which deliver energy, emissions, water and related savings to its customers. However, we believe that climate change impacts on water availability and pricing presents a material risk to our company. Therefore, our climate-related scenario analysis focuses on conducting an annual water-risk assessment and scenario analysis to evaluate our operational physical risks. This assessment is completed in alignment with the Annual Enterprise Risk Assessment, to evaluate our global facilities that may operate within water stressed regions, both in the near- and long-term, and are potentially affected by climate change. In 2018, we identified that 52% of our global manufacturing sites are location in regions with a current baseline water stress of High or Higher, aligned with the WBCSD (<1700 m3/(person*year)) threshold for High (40%-80%) Baseline Water Stress. However, less than 27 percent of our total water withdrawal and 8.2 percent of our production volume, is from facilities that operate in river basins with current and/or future defined water stress and that may be affected by Ecolab's withdrawal of water or specific water-related risks.	The annual water risk assessment results help us prioritize where to focus our water conservation and efficiency efforts across the business. For example, two of our sites that exceeded criteria thresholds have completed Alliance for Water Stewardship Certification and another has just launched a water recycling project that will reduce consumption by more than 20%. We believe our risk threshold overall remains low and below our defined substantive risk threshold, and is diversified across our global portfolio of production facilities. Ecolab is continuing to consider, and will include other physical and transition risks and opportunities into its annual scenario analysis and enterprise risk evaluation processes in the future.

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

We apply the outputs from the Water Risk Monetizer tool to assess the true cost of water to sites that have been identified as having high current baseline water stress, and use the risk premium and potential revenue-at-risk metrics to support business case for investing in water saving projects. For example we recently evaluated a project that would reclaim 30% of the water used by the site. This has since been implemented and is saving over 100 million gallons of water per year. As more businesses and other water users begin to operationalize a risk-adjusted cost of water, they are more equipped to reduce their water use, especially in water-scarce areas where it's needed most. This, in turn, helps the communities in which tool users operate by reducing demand for a scarce and critical resource. Our shared goal is to drive more businesses to use data to inform actionable plans to save, reduce and recycle water.

W8. Targets

W8.1

(W8.1) Describe your approach to setting and monitoring water-related targets and/or goals.

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	Company-wide targets and goals Business level specific targets and/or goals Site/facility specific targets and/or goals Brand/product specific targets and/or goals	Targets are monitored at the corporate level Goals are monitored at the corporate level	Ecolab's approach to target setting and goal setting incorporates the following aspects: 1) evaluating prior impact and performance; 2) evaluating benchmarks and industry best practices; 3) engaging with key internal stakeholders for input into understanding key risks and opportunities, as well as the recommended scope, ambition, timeframe and feasibility of targets and goals; 4) engaging with key external stakeholders to validate potential scope, ambition, and timeframe of targets and goals; 5) working with subject matter experts and functional and business leads to determine strategy/tactics for achieving targets and goals; 6) developing the business case for environmental and

			financial metrics and determining investments required to achieve targets and goals; and 7) validating proposed goals and targets to Ecolab's Sustainability Executive Advisory Team (SEAT) which is made up of 10 members of the company's executive leadership team and governs our sustainability strategy. The SEAT meets with the Corporate Sustainability Team on a quarterly basis and is responsible for operationalizing sustainability across the company including evaluating goals and targets and monitoring performance. Corporate-wide targets are then submitted for consideration and approval by the Safety, Health and Environment (SHE) Committee of the Board which has the highest level of direct responsibility for all sustainability matters, including water-related issues, and the setting of targets and goals. The SHE Committee of the Board approved Ecolab's current goals to reduce water use per million dollar sales by 25% by 2020, and to conserve 300 billion gallons of water annually by reducing water consumption within our own and our customer's operations by 2030.

W8.1a

(W8.1a) Provide details of your water targets that are monitored at the corporate level, and the progress made.

Target reference number

Target 1

Category of target

Water withdrawals

Level

Company-wide

Primary motivation

Reduced environmental impact

Description of target

Reduce water use by 25% by 2020 from a 2015 baseline, normalized per million dollar sales

Quantitative metric

% reduction per revenue

Baseline year

2015

Start year

2016

Target year

2020

% achieved

5.6

Please explain

In 2018, Ecolab realized a slight increase in total water withdrawals but also increased its annual revenues to offset the absolute change in water withdrawal. This resulted in a 1.4% reduction in water withdrawal per million dollar sales compared to our 2015 baseline, representing a 5.6% achievement of our goal to date. This goal is relevant to achieving the goal of water security as it is focused on reducing water withdrawal demand.

Target reference number

Target 2

Category of target

Product water intensity

Level

Brand/product

Primary motivation

Sales of new products/services

Description of target

By 2030, Ecolab aims to conserve 300 billion gallons of water per year by reducing consumption in its own operations and those of its customers.

Quantitative metric

Other, please specify

Absolute reduction in customer water withdrawals as a result of using our products and services

Baseline year

2015

Start year

2016

Target year

2030

% achieved

63

Please explain

Alongside our 2020 sustainability goals introduced in 2015, we set a customer impact goal around water to measure the impact we deliver to our customers, because water is vital to our customers operations (indirect). In 2018, we helped our customers to save 188 billion gallons of water, equivalent to the annual drinking watter needs of more than 650 million people. This exceeded our 2018-in-year goal of 165 billion and is tracking ahead of our planned goal trajectory to achieve 300 billion gallons saved annually by 2030. Every year, we measure our progress against this goal using the eROI Customer Impact Counter, which included all the technologies that track savings delivered to customers with established and 3rd party audited methodologies. In addition to tracking how much water we save our customers, we also track energy, air and waste savings in the eROI counter.

W8.1b

(W8.1b) Provide details of your water goal(s) that are monitored at the corporate level and the progress made.

Goal

Providing access to safely managed Water, Sanitation and Hygiene (WASH) in workplace

Level

Company-wide

Motivation

Commitment to the UN Sustainable Development Goals

Description of goal

Ecolab joined the U.N. Global Compact in 2012 and Ecolab’s Chairman and CEO also endorsed the CEO Water Mandate. Ecolab is committed to upholding the principles of water stewardship within our own operations, in alignment with the Alliance for Water Stewardship Standard, which includes providing safe water, sanitation, and hygiene (WASH) for all. Accordingly, we have set a company-wide goal to provide access to WASH facilities in 100% of our operations, and work to improve access to WASH facilities in local communities because water is vital to our direct and indirect operations. Ecolab implements the elements of its WASH program across the company-wide level through its Safety, Health, & Environment team. This goal is relevant to achieving water security as access to WASH includes safe water, adequate sanitation and hygiene education and is a key public health issue that is the focus of UN SDG Goal #6: “Ensure availability and sustainable management of water and sanitation for all.” This goal is also important to our company as it aligns with Ecolab's efforts to advance sustainable water solutions around the world through partnerships with our customers, nongovernmental organizations, suppliers and other stakeholders to help ensure sustainable water management.

Baseline year

2012

Start year

2013

End year

2030

Progress

This is an ongoing goal and forms part of our strategy around water stewardship (i.e. the end date planned is aligned with our customer impact goal out to 2030). Indicators used to assess progress include the percent of operations and sites which have audited WASH facilities in place; with our threshold being 100%, and an achievement of 100% for all locations. As of 2018, Ecolab complies with all legal requirements for WASH services where it is required at a country level.

Goal

Other, please specify

Partnering with an NGO to develop and pilot an international standard for water stewardship

Level

Site/facility

Motivation

Commitment to the UN Sustainable Development Goals

Description of goal

We joined forces with the WWF and Alliance for Water Stewardship (AWS) and set a goal to assist with the development of the AWS International Water Stewardship Standard. As part of the AWS Standard, organizations must adopt water management best practices at the site level and engage with relevant stakeholders in their water catchment. This is relevant to the goal of achieving water security as the purpose of the AWS Standard is to provide a common, credible, globally-applicable framework for major water users to understand their own water use and impacts, and to work collaboratively and transparently with others for sustainable water management within the wider water catchment context. Further, this is a strategic goal for us as freshwater is vital to our direct and indirect operations and recycled water is important to our direct and indirect operations.

We supported the development and piloting of the AWS standard at Ecolab facilities to demonstrate leadership and accountability in the area of water stewardship, and enable transparent reporting of best practices. As a leading adopter of the Standard, we continue to partner with AWS and the WWF to provide training to other local water users as part of our commitment to UN SDG Goal #6, and support further adoption of the Standard within our industry. We also collaborate with other companies in the same

watershed to implement the Standard within their facilities and identify ways to further reduce our collective impacts.

Baseline year

2014

Start year

2013

End year

2030

Progress

In September 2015, Ecolab's Taicang manufacturing plant was the first site in the world to receive the Alliance for Water Stewardship's (AWS) International Water Stewardship Standard certification. At the end of 2017, we achieved our second and third AWS certifications for Ecolab's manufacturing facilities in City of Industry and Carson, both located in water-stressed southern California. Indicators used to assess progress against our goal include: 1) completion of development and pilot testing of the AWS Standard, 2) the number of AWS certified plants Ecolab has in operation, and 3) associated water savings. Through the AWS certification process and Ecolab's own water saving technologies implemented as part of the certification process, these plants saved a combined total of more than 3 million gallons of water annually. Through 2018, we successfully completed re-certification of each site (3) against the AWS standard and selected a 4th site to start the 5-step AWS certification process (Garyville), with steps 1-4 complete and final certification expected at the end of 2019. Our thresholds for success related to this ongoing goal, is to continue to expand the program to cover a larger number of sites each year, and maintain AWS certification at all sites that have been initially certified. As of 2018, we have maintained our 3 sites being certified and increased the number of total certified sites from 3 to 4.

W9. Linkages and trade-offs

W9.1

(W9.1) Has your organization identified any linkages or tradeoffs between water and other environmental issues in its direct operations and/or other parts of its value chain?

Yes

W9.1a

(W9.1a) Describe the linkages or tradeoffs and the related management policy or action.

Linkage or tradeoff

Linkage

Type of linkage/tradeoff

Other, please specify

Energy-Water-Nexus

Description of linkage/tradeoff

The availability of water can restrict energy production of our customers in the energy and fuel production markets (e.g. oil & gas, coal) and energy production can have potential impacts on water quality. We refer to this as the Water-Energy Nexus (embedded water in energy) associated with primary energy and fuel production. Our eROI program measures the impact of this 'nexus' on our products-in-use, including environmental savings, at more than 3 million customer locations and reports the results on our website. A third party has validated the methodology and audited the data and processes to determine benefits of Ecolab's products and services. In 2018, our combined technologies saved 188 billion gallons of water, 19 trillion BTUs of energy, 2.4 billion pounds of CO2e emissions and 54 million pounds of waste. We continue to see an exponential reduction of impacts like emissions and waste generated, and increase in the energy and water savings through this platform.

Policy or action

Ecolab delivers product and service innovations that reduce water use and improve water quality in oil & gas (enhanced oil recovery, shale oil and gas, oil sands), and coal mining (dust suppression, slurry conveyance, tailings management) customer segments. For example, we leverage automation with customers who are increasingly using machine-to-machine technologies, such as interconnected sensors that collect real-time data and analyze water use. Once we understand how water and energy are used simultaneously, we help optimize processes using technologies such as our 3DT automation platform.

The Energy-Water Nexus is integrated into our strategic business planning activities. At a policy level, Ecolab's Water Stewardship Policy addresses many of the core aspects identified with this linkage. Operationally, we continue to make strategic decisions that address this linkage by bringing innovative solutions to market, including directing significant portions of our $200+ million R&D investment program into developing solutions that reduce energy and water consumption. Our eROI program enables us to quantify this linkage. By comparing our 2017 to 2018 customer impact results, we can see that the more energy we save the more water we save as well: 2017 water savings were 171 billion gallons as compared to 2018 water savings of 188 billion gallons; with 2017 energy savings of 12 BTUs of energy as compared to 2018 energy savings of 19 trillion BTUs of energy.

W10. Verification

W10.1

(W10.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1d)?

Yes

Ecolab 2018 Water Verification Statement.pdf

W10.1a

(W10.1a) Which data points within your CDP disclosure have been verified, and which standards were used?

Disclosure module	Data verified	Verification standard	Please explain
W1. Current state	Annual total water withdrawal data	ISAE3000	Bureau Veritas North America (BVNA) was engaged to conduct an independent verification of total water withdrawal reported by Ecolab Inc. (Ecolab) in calendar year 2018. The verification was carried out to provide a limited level of assurance using a materiality threshold of ±5%.

W11. Sign off

W-FI

(W-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

W11.1

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

	Job title	Corresponding job category
Row 1	Chairman of the Board of Directors and Chief Executive Officer	Chief Executive Officer (CEO)

W11.2

(W11.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate's Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].

Yes

SW. Supply chain module

SW0.1

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

	Annual revenue
Row 1	14,335,000,000

SW0.2

(SW0.2) Do you have an ISIN for your organization that you are willing to share with CDP?

No

SW1.1

(SW1.1) Have you identified if any of your facilities reported in W5.1 could have an impact on a requesting CDP supply chain member?

No facilities were reported in W5.1

SW1.2

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

No, this is confidential data

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 across its operations.

Product name

All products manufactured at our Barueri Facility

Water intensity value

0.0017

Numerator: Water aspect

Water withdrawn

Denominator: Unit of production

Volume of products produced (kg)

Comment

We calculate the water intensity of our customer's purchased products at each facility using the following equation:
Water Intensity of Purchased Products at Facility = Annual Facility Water Use (m3) / Annual Volume of Products Produced at Facility (kg)

Product name

All products manufactured at our Pilar Facility

Water intensity value

0.0009

Numerator: Water aspect

Water withdrawn

Denominator: Unit of production

Volume of products produced (kg)

Comment

We calculate the water intensity of our customer's purchased products at each facility using the following equation:
Water Intensity of Purchased Products at Facility = Annual Facility Water Use (m3) / Annual Volume of Products Produced at Facility (kg)

Product name

All products manufactured at our Greensboro Facility

Water intensity value

0.0009

Numerator: Water aspect

Water withdrawn

Denominator: Unit of production

Volume of products produced (kg)

Comment

We calculate the water intensity of our customer's purchased products at each facility using the following equation:
Water Intensity of Purchased Products at Facility = Annual Facility Water Use (m3) / Annual Volume of Products Produced at Facility (kg)

Product name

All products manufactured at our Lerma Facility

Water intensity value

0.0008

Numerator: Water aspect

Water withdrawn

Denominator: Unit of production

Volume of products produced (kg)

Comment

We calculate the water intensity of our customer's purchased products at each facility using the following equation:
Water Intensity of Purchased Products at Facility = Annual Facility Water Use (m3) / Annual Volume of Products Produced at Facility (kg)

Product name

All products manufactured at our Suzano facility.

Water intensity value

0.0024

Numerator: Water aspect

Water withdrawn

Denominator: Unit of production

Volume of products produced (kg)

Comment

We calculate the water intensity of our customer's purchased products at each facility using the following equation:

Water Intensity of Purchased Products at Facility = Annual Facility Water Use (m3) / Annual Volume of Products Produced at Facility (kg)

Product name

All products manufactured at our Tessenderlo facility.

Water intensity value

0.0011

Numerator: Water aspect

Water withdrawn

Denominator: Unit of production

Volume of products produced (kg)

Comment

We calculate the water intensity of our customer's purchased products at each facility using the following equation:
Water Intensity of Purchased Products at Facility = Annual Facility Water Use (m3) / Annual Volume of Products Produced at Facility (kg)

Product name

All of our products manufactured at our Eagan facility.

Water intensity value

0.0074

Numerator: Water aspect

Water withdrawn

Denominator: Unit of production

Volume of products produced (kg)

Comment

We calculate the water intensity of our customer's purchased products at each facility using the following equation:
Water Intensity of Purchased Products at Facility = Annual Facility Water Use (m3) / Annual Volume of Products Produced at Facility (kg)

Product name

All of our products manufactured at our Joliet facility.

Water intensity value

0.0024

Numerator: Water aspect

Denominator: Unit of production

Volumes of product produced (kg)

Comment

We calculate the water intensity of our customer's purchased products at each facility using the following equation:
Water Intensity of Purchased Products at Facility = Annual Facility Water Use (m3) / Annual Volume of Products Produced at Facility (kg)

Product name

All of our products produced at our Martinsburg facility.

Water intensity value

0.001

Numerator: Water aspect

Water withdrawn

Denominator: Unit of production

Volumes of product produced (kg)

Comment

We calculate the water intensity of our customer's purchased products at each facility using the following equation:
Water Intensity of Purchased Products at Facility = Annual Facility Water Use (m3) / Annual Volume of Products Produced at Facility (kg)

Submit your response

In which language are you submitting your response?

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