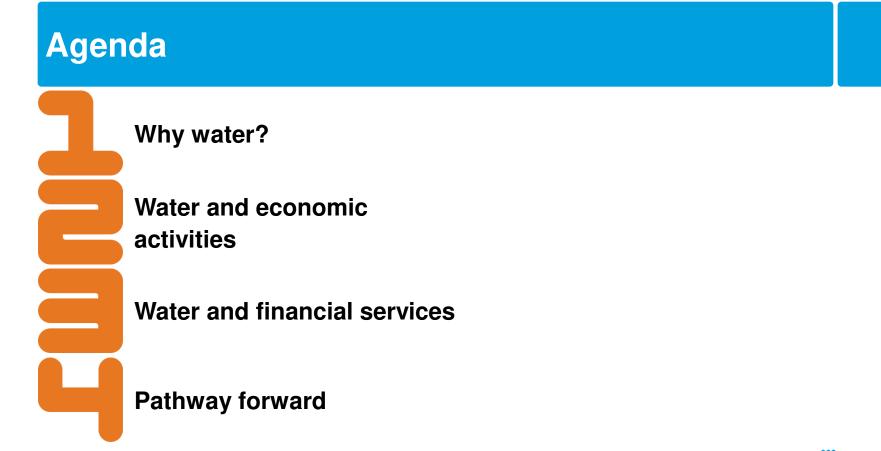
Water: The underpinning lifeforce of the global economy

Thérèse Rudebeck, PhD therese.rudebeck@wateraid.se









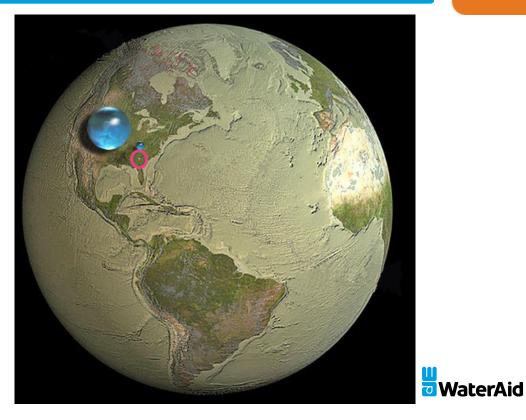
Earth: A blue planet?

- Yes... but, only 3% of the planet's water is freshwater
- Of these 3%, two-thirds is captured in glaciers and polar ice.
- Around 0.5% of the earth's water is available freshwater



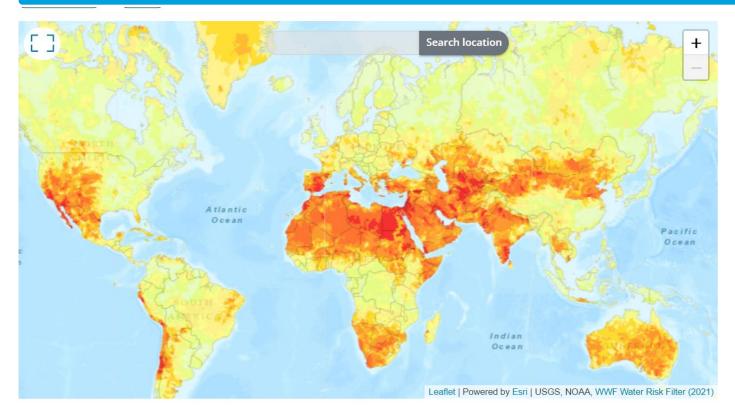


Yes – but very little is available freshwater



Around the world, we see a multifaceted global water crisis unfolding:

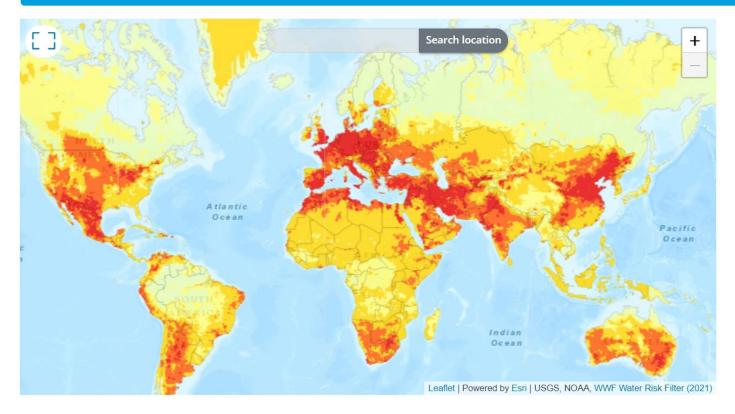




Global Water Scarcity: The Water Risk Filter risk category water scarcity integrates 7 datasets: aridity index, water depletion, baseline water stress, blue water scarcity, available water remaining, drought frequency probability, and projected change in drought occurrence.

Source: WWF Water Risk Filter





Water Quality Risk: The Water Risk Filter risk category water quality considers parameters such as biological oxygen demand (BOD) as a widely used umbrella proxy for overall water quality; electrical conductivity (EC) as proxy for salinity balance and pH alteration; and nitrogen, to capture nutrient loading in water bodies.

Source: WWF Water Risk Filter



Inadequate WASH (Water, Sanitation & Hygiene) is widespread

- 3.6 bn people lack safely managed **sanitation** services
- 2.3 bn people lack access to basic hygiene practices (handwashing facilities with soap), compounding the effects on people's health
- 4.4 bn people lack access to safely managed **drinking water** services, more than double than previously estimated



Water is the primary medium through which climate change influences the Earth's ecosystems.

- Adaptation to climate change is therefore mainly about better water management.
- → Improved WASH services is a cornerstone of building climate resilience
 - → Increased water storage provides a buffer in times of water scarcity
 - → Resilient infrastructure that is adapted to a changing climate, and can deliver services in times of water stress
 - → The combined benefits of improved water supply, sanitation and hygiene reduce the overall disease burden



1. Climate mitigation measures depend on freshwater resources.

2. Climate mitigation measures impact freshwater.

3. Water and sanitation management can reduce GHG emissions.

4. Nature-based Solutions to mitigate climate change can deliver multiple benefits for people and the environment.

Access the report here:



REPORT

SIWI

THE ESSENTIAL DROP TO REACH NET-ZERO: Unpacking Freshwater's Role in Climate Change Mitigation

Freshwater can make or break our ability to successfully implement many climate change solutions. This report presents why, where, and how freshwater should be integrated into climate change mitigation plans and activities.





Bookholm Healthean Garter





30,283,294,272,000 litres



Figure 4. General value chain Clothing Distribution of the textiles and apparel Fibre Marketing and Apparel Consumer and sector and associated water Production Processing and Sales Warehousing production intensity and pollution. Shops Agricultural Weaving Confection Transport Washing Key value chain step and petroof clothing Knitting Stock man-Marketing chemical and apparel May be operated by textile agement suppliers Dyeing Advertiseand apparel company in case and fabric ment of vertical integration Yarn/fibre finishing production, spinning mills Water Intensity Consumption 52% 43% 1% 4% 0% no data Withdrawls 46% 47% 1% 6% 0% no data Water Pollution 8% 66% 2% 0% Ecotoxicity 24% no data 4% 26% 1% 0% Acidification 69% no data 65% 33% 1% 0% 0% Eutrophication no data

Source: WWF, 2014



Figure 9. Ger chain of the mir and associ intensity an

 General value ne mining sector associated water sity and pollution 	Exploration	Mining	Processing	Transport	Market	Consumer
	Location and valuation of new resources	Build mine pit Mine Internal transport	Sorting Breaking Initial chemical processes		Trading Market Consumer support	
Water Intensity	۵	44	666	٥		
Consumption Withdrawls	4% 5%	40% 55%	50% 35%	6% 5%	no data no data	no data no data
Water Pollution	٥	44	۵	۵		
Ecotoxicity Acidification Eutrophication	20% 3% 49%	33% 50% 20%	28% 10% 22%	20% 37% 9%	no data no data no data	no data no data no data
Lutophication	-370	2070	22 /0	370	no data	no uata

Source: WWF, 2014



THE WALL STREET JOURNAL. \equiv TECH

- f TECHNOLOGY
- Intel Cuts Its Outlook
- Giant Blames Thai Flood for \$1 Billion Drop in Sales Goal



The effects of flooding in Thailand continue to reverberate across the tech sector, as intel cuts its fourth-quarter outlook due to short supplies of hard disk drives, Shara Tibken reports on Markets Hub.

By SHARA	TH	BIK	EN
December	13, 3	20	11

Intel Corp, warned its fourth-quarter revenue will fall about 81 billion below its own targets, making the technology company the latest to pin lower sales on supply

Gap Cuts Forecast

Cotton futures in New York as much as doubled in the past year, touching a record \$2.197 a pound on March 7, as adverse weather lowered output in China, the world's biggest consumer and producer. San Francisco-based Gap, the largest U.S. apparel chain, cut its full-year profit forecast by 22 percent in May, citing higher costs, while Polo Ralph Lauren Corp. posted a 36 percent decline in net income in the quarter ended April 2.



TECHNOLOGY

Tesla's first European factory needs more water to expand. Drought stands in its way

NOVEMBER 3, 2022 · 6:22 AM ET

Investing in community water security and healthy ecosystems

Water security is an issue that goes beyond our operations, and it's not something we can solve alone. In partnership with others, we'll invest in community projects that replenish 120% of the water we consume, on average, across all Google offices and data centers, and that improve the health of the local watersheds where our office campuses and data centers are located.

PepsiCo Announces "Net Water Positive" Commitment

Pledges to Replenish More than 100% of Water Used in High-Risk Areas by 2030

The PepsiCo Foundation Expands \$53 Million+ Safe Water Access Program with Its First Investment in Sub-Saharan Africa to Combat Impacts of COVID-19 Pandemic



Facebook

Restoring More Water Than We Consume by 2030

August 19, 2021



- Within what 'scope' are commitments made?
 - Operations? Value chains? (Coca-Cola)
 - Specific geographical 'high risk' areas? (PepsiCo)
- Water efficiency goals
 - Are they absolute or relative?
- Water footprint is not the same as carbon footprint
 - Water is localised



Water and Financial Services

- The financial services sector is connected to these economic activities as e.g. an investor, a lender, or an insurer of these companies.
- By extension exposed to the risks and impacts through e.g:
 - A company's **default in repaying** the bank loan
 - A total loss of investment if the company's **assets become "stranded**", i.e. unusable given e.g. water shortages
 - A **reduced return** on equity investments
 - In addition, the financial institution may face reputational risks if they invested in/ gave loans to companies that significantly negatively impact society and/ or the environment.



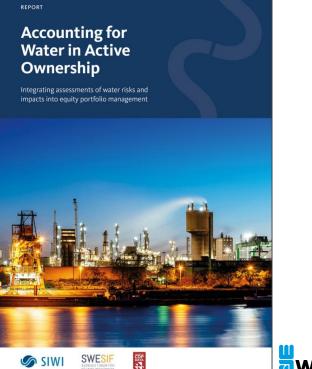
Pathway forward: How can Swesif members contribute to positive impact?

- Support improved disclosure
 - Financial institutions may request more data from the companies around their water risk exposure and/ or requesting them to disclose water risks (e.g. via CDP)
- Recognise that at the moment:
 - There are substantial data gaps, and inconsistencies amongst reporting standards
 - Data is not yet available at local scale (supply chains)
 - Indicators are not yet rich enough
- Great Opportunities to drive more transparency with CSRD & CSDDD
 - 'Water & Sanitation' explicitly mentioned in CSRD and "Prohibition to restrict workers access to adequate (...) water and sanitation in the workplace" explicitly mentioned in CSDDD
 - There are also implicit links "Health & safety"; "Gender equality" (CSRD) and "The prohibition to restrict workers access to adequate housing if its workforce is housed in accommodation provided by the company" (CSDDD)
 - Disclosures requirements on Water and WASH related topics depend almost entirely on the results of the materiality assessment – and requires knowledge!



Pathway forward: How can Swesif members contribute to positive impact?

- Map water risks and impacts in your own portfolio
- Have dialogues with and put pressure on companies that are identified as high risk/high impact to mitigate risks and impacts



SIWI



Key messages

- Water is a material issue, underpinning most economic activities. No water, no business.
- Water is also intrinsically interlinked with all other ESG issues. Not just climate but biodiversity, food security, health, gender equality etc.
- Water is localised and cannot be addressed with a 'one-size fits all' approach → Water is not carbon
- The financial service sector has a vital role to play: To achieve water security, financial flows need to support sustainable water management.

