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WATER AS A PUBLIC GOOD: ROOM FOR PHILANTHROPY

FONDATION
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INTRODUCTION

Prof. **Henry Peter**

Head, Geneva Centre for Philanthropy (GCP)

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Water as a public good: Room for philanthropy

Laurence Boisson de Chazournes

Professor, Faculty of Law, University of Geneva and
Geneva Water Hub

Member of the Global High-Level Panel on Water and
Peace



6 CLEAN WATER & SANITATION

Ensure availability and sustainable management of water and sanitation for all

TARGET 6-1



SAFE AND AFFORDABLE DRINKING WATER

6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all

TARGET 6-4



INCREASE WATER-USE EFFICIENCY AND ENSURE FRESHWATER SUPPLIES

6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity



Constitution de la République et canton de Genève du 14 octobre 2012

Constitution of the Republic and Canton of Geneva of 14 October 2012

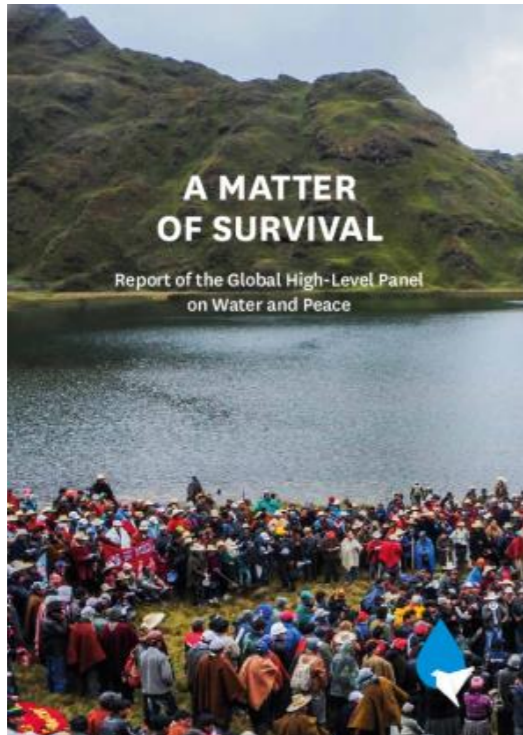
Art. 159 Eau

1. L'approvisionnement en eau est garanti en quantité et qualité suffisantes. Cette ressource doit être préservée et économisée.
2. Sous réserve des droits privés valablement constitués, le lac, les cours d'eau, les nappes d'eau principales et profondes, tels que définis par la loi, sont des biens du domaine public et doivent être sauvegardés.

Art. 159 Water

1. The water supply is guaranteed in sufficient quantity and quality. This resource must be preserved and saved.
2. Subject to validly constituted private rights, the lake, watercourses, main and deep aquifers, as defined by law, are property in the public domain and must be safeguarded.

Report of the Global High Level Panel on Water and Peace (2017)



The recent Budapest Water Summit (2016) declared that water is an ethical imperative. (...) There is no doubt of the need to effectively secure the human right to safe, clean, accessible and affordable drinking water and sanitation. Existing water scarcity, as well as the future likelihood for additional problems of accessibility and availability of safe drinking water, underscores its ethical dimension. In other words, the right to water is a human right.

Chapter 5, People's Diplomacy, Inter-Sectoral Water Management and Decision Making



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Dr. Danilo Türk

Chairman of the Global High-Level Panel on Water and Peace
and former president of Republic of Slovenia

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The Geneva List of Principles on the Protection of Water Infrastructure and the Role of the Private Sector in Peacebuilding

Dr Mara Tignino

Reader, Faculty of Law, University of Geneva
and Lead Legal Specialist, Platform for International Water Law/
Geneva Water Hub

Geneva, 11 December 2019

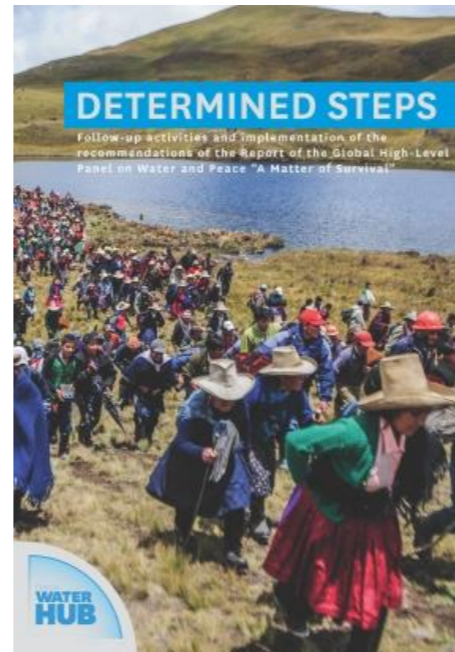
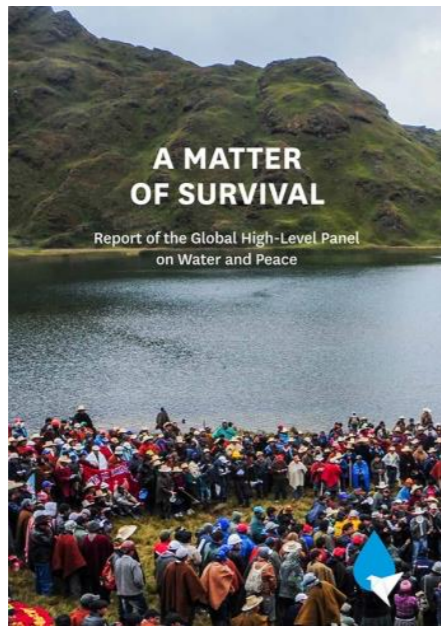


Outline

- I. Basis, features and purposes of the Geneva List on the Protection of Water Infrastructure (the Geneva List of Principles)
- II. Principles relying on areas of international law other than International Humanitarian Law (IHL)
- III. Practices on the protection of water infrastructure and water, sanitation and hygiene (WASH) services delivery

Section 1

Basis, features and purpose of the Geneva List on the Protection of Water Infrastructure



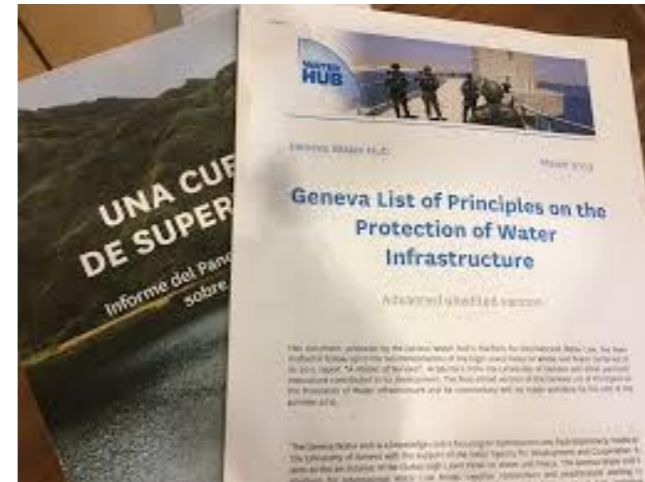
- Follow up of the recommendations of the Global High-Level Panel on Water and Peace

- Financial innovation for water cooperation
- Data driven decision-making
- People's diplomacy
- International water law and transboundary water cooperation
- Water in armed conflicts



Fourth Meeting of the Global High-Level Panel on Water and Peace, Amman, 2016

- The Geneva List of Principles on the Protection of Water Infrastructure is the first document which systematizes the law applicable to the protection of water infrastructure
- It covers the whole conflict cycle (before, during and after)
- It includes a preventive approach
- Principles derived from different areas of international law: international humanitarian law, international human rights law, international environmental law, international water law



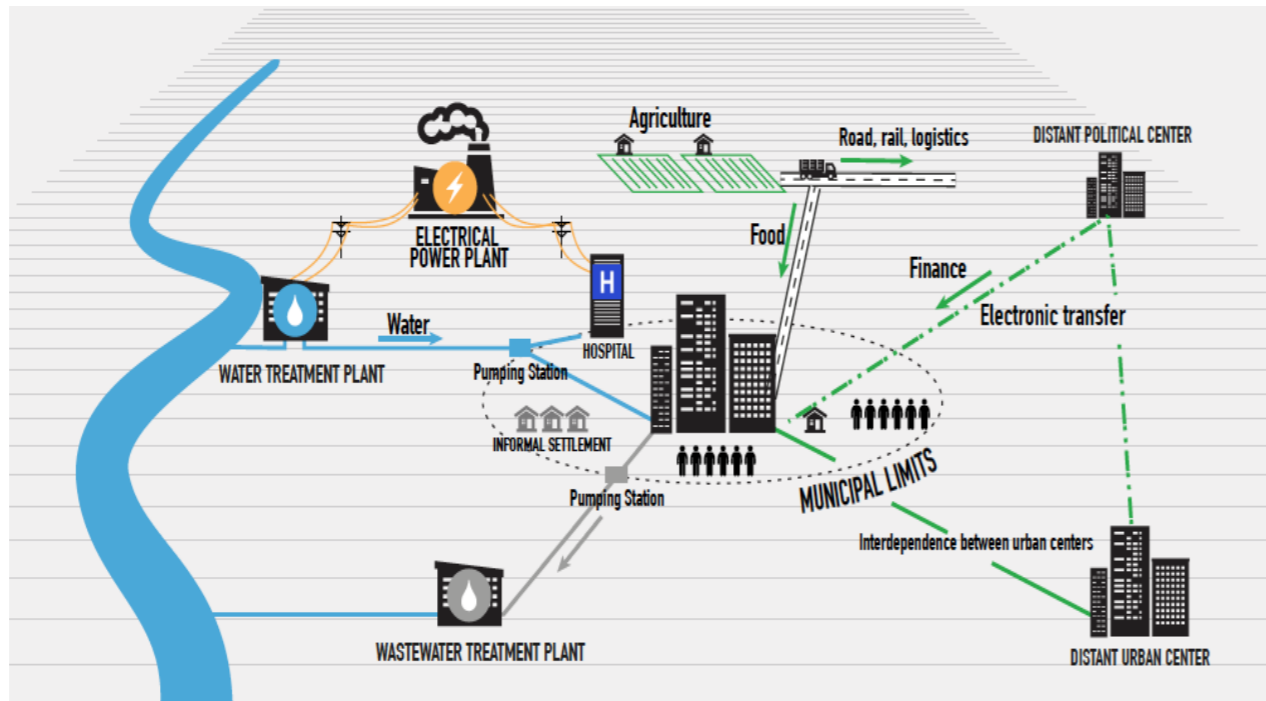
Presentation of the Geneva List of Principles at the International Peace Institute, New York, March 2019

Section 2

Principles relying on areas of international law other than International Humanitarian Law (IHL)



Human rights law, international environmental law and international water law



ICRC, *Urban services during protracted armed conflict: a call for a better approach to assisting affected people*, 2015, p.17

- Human rights to water and sanitation (principle 3)
- Protection of the environment (principle 15)
- Peace agreements (principle 19)

A comprehensive approach: before, during and after armed conflicts



Collecting water in Mostar, Bosnia-Herzegovina, 1993.
ICRC, *Urban services during protracted armed conflict: a call for a better approach to assisting affected people*, 2015, p.15

- Joint mechanisms and commissions (principle 20)
- Reconstruction, rehabilitation and repair of water infrastructure (principle 21)
- Peacekeeping operations (principle 22)

Section 3

Practices on the protection of water infrastructure and water, sanitation and hygiene services (WASH) delivery



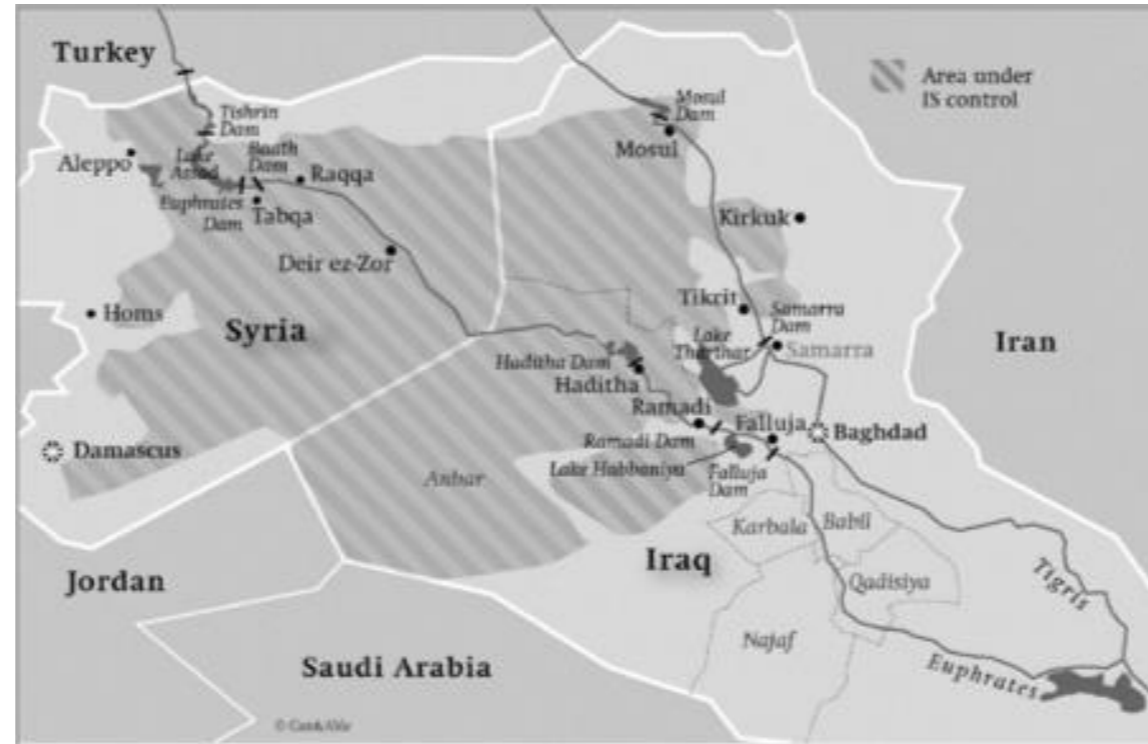
Mosul dam, AFP, 2014

Principle 13: Attacks against water infrastructure containing dangerous forces



Möhne dam, 1943

Principle 4: Use of water and water infrastructure as a means of warfare



IS and the Euphrates and Tigris Dams
T. Von Lossow, SWP Comments, 2016

- Negotiation of water ceasefire agreements
- Adoption of specific agreements on water infrastructure



UNICEF, Ukraine, Voda Donbasa, 2019



UNICEF, Ukraine, Voda Donbasa, 2019

The way forward: monitoring by international organizations (UNOSAT)

The Syria conflict observed through satellite imagery



UNITAR, *Four Years of Human Suffering. The Syria as Observed through Satellite Imagery*, 2014

The role of the private sector in peacebuilding

- Fragile and conflict-affected countries face significant financial needs: development may help to prevent the risks of conflicts and consolidate peace
- Priority should be given to social policies, in particular the provision of basic services
- Low involvement of the private sector in water infrastructure

The case of Jordan

- Jordan is hosting around 753.000 registered refugees; total is estimated at 1.3 million (www.acaps.org)
- 84% of refugees live in urban areas and 16% in refugee camps: funding needs 371,8 million dollars; funded 20% (UNHCR, 2019)
- There is a need of partnerships to bridge the gap in financing WASH services: humanitarian & development nexus; public and private sectors (UNICEF, *Water under Fire*, vol.1)

Public-private partnerships in Jordan

- Two public-private partnerships in WASH: Disi pipeline project and As-Samra wastewater project in Jordan
- Unexpected increase in energy costs passed on to the Water Authority of Jordan
- Private sector knowledge in engineering design, project management and operating skills
- Division of risk between the public and the private sectors
- The Ministry of Finance took the debt of the Water Authority (US 3.4 billion in debt)

Source: UNICEF, *Water under Fire*, 2019, vol.1.

Final remarks

- Deterioration and destruction of water and water-related infrastructure are increasingly common in armed conflicts
- Attacks against these infrastructures represent a threat to the survival and the health of the population, in particular vulnerable groups such as children
- The nexus across the humanitarian, development and peace sectors as well as partnerships between the public and private sectors may strengthen the provision of water to the population, prevent water-related tensions and ensure the rights to water and sanitation to all

Thanks!

Platform for International Water Law

www.unige.ch/droit/eau

Geneva Water Hub

www.genevawaterhub.org



Pictet-Water

PICTET ASSET MANAGEMENT

Cedric Lecamp
December 2019

Heritage & Approach

- › A pioneer in thematic equities since 1995
- › We believe in a theme-focused, global approach to owning companies whose value drivers are underpinned by the demands of an evolving society

USD 38 bn AUM

39 investment professionals

14 strategies*

Secular growth



- › Themes are pockets of economic activities underpinned by secular growth trends
- › Long term visibility allows navigation of short-term market inefficiencies

Focused



- › “*We know everything about little*”, we are experts in our concentrated universes
- › Our companies are focused, we prefer pure-play businesses with high theme exposure

Unconstrained



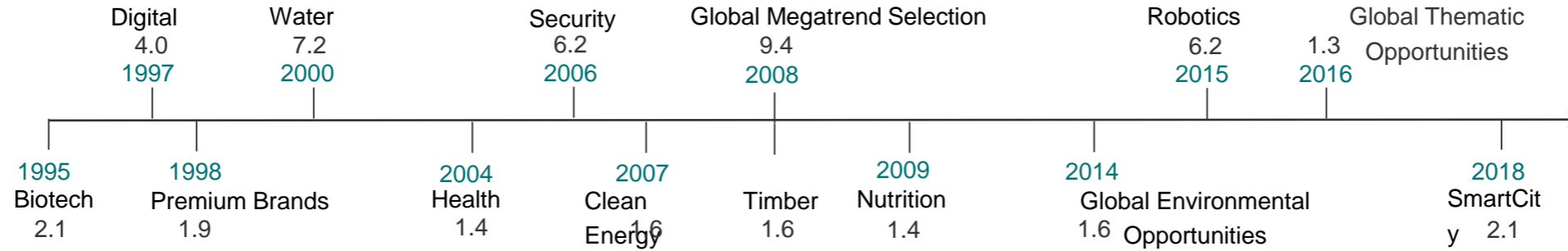
- › Our portfolio holdings are built from indepth analysis of company fundamentals
- › Being fully unconstrained by regions and sizes, our portfolios act as diversifiers

For more details on our thematic approach, see <https://www.am.pictet/en/globalwebsite/global-articles/2016/insights/equities/in-depth/thematicstocks-jun2016>

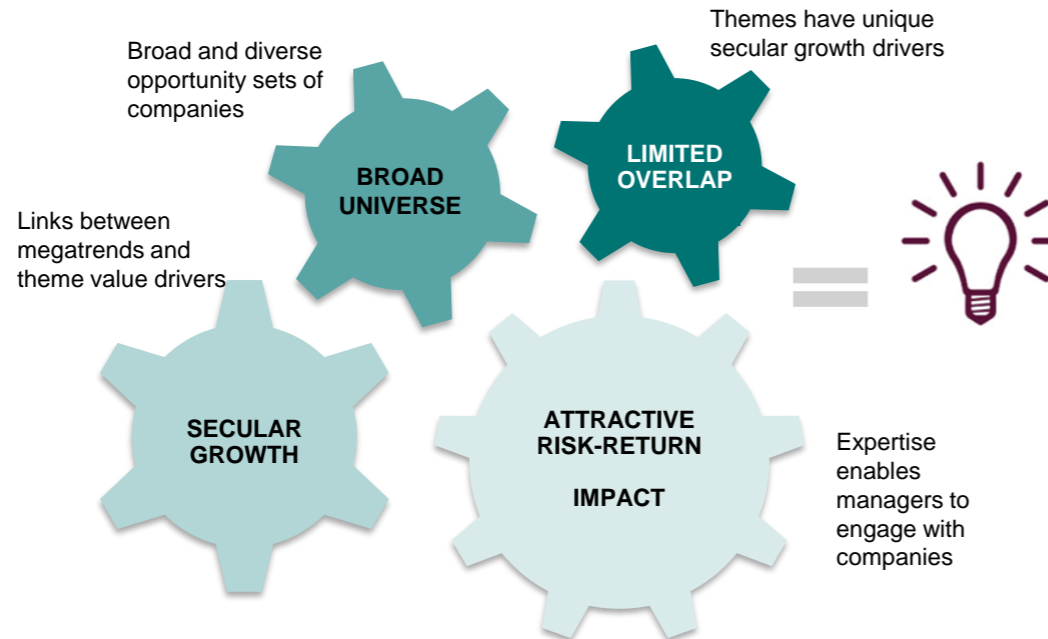
* As at 31.10.19

IDENTIFYING AND MAINTAINING THEMES

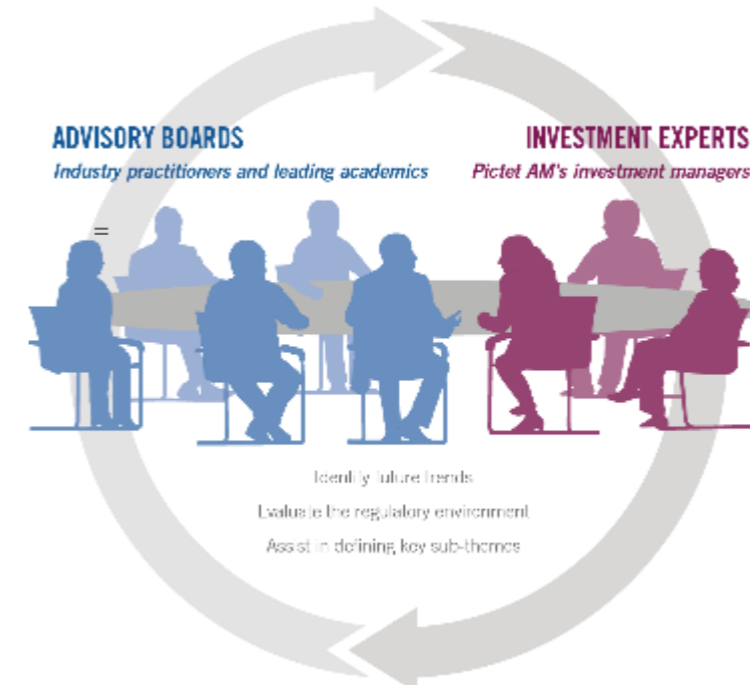
Timeline of Themes Launches at Pictet AM



Identifying Themes

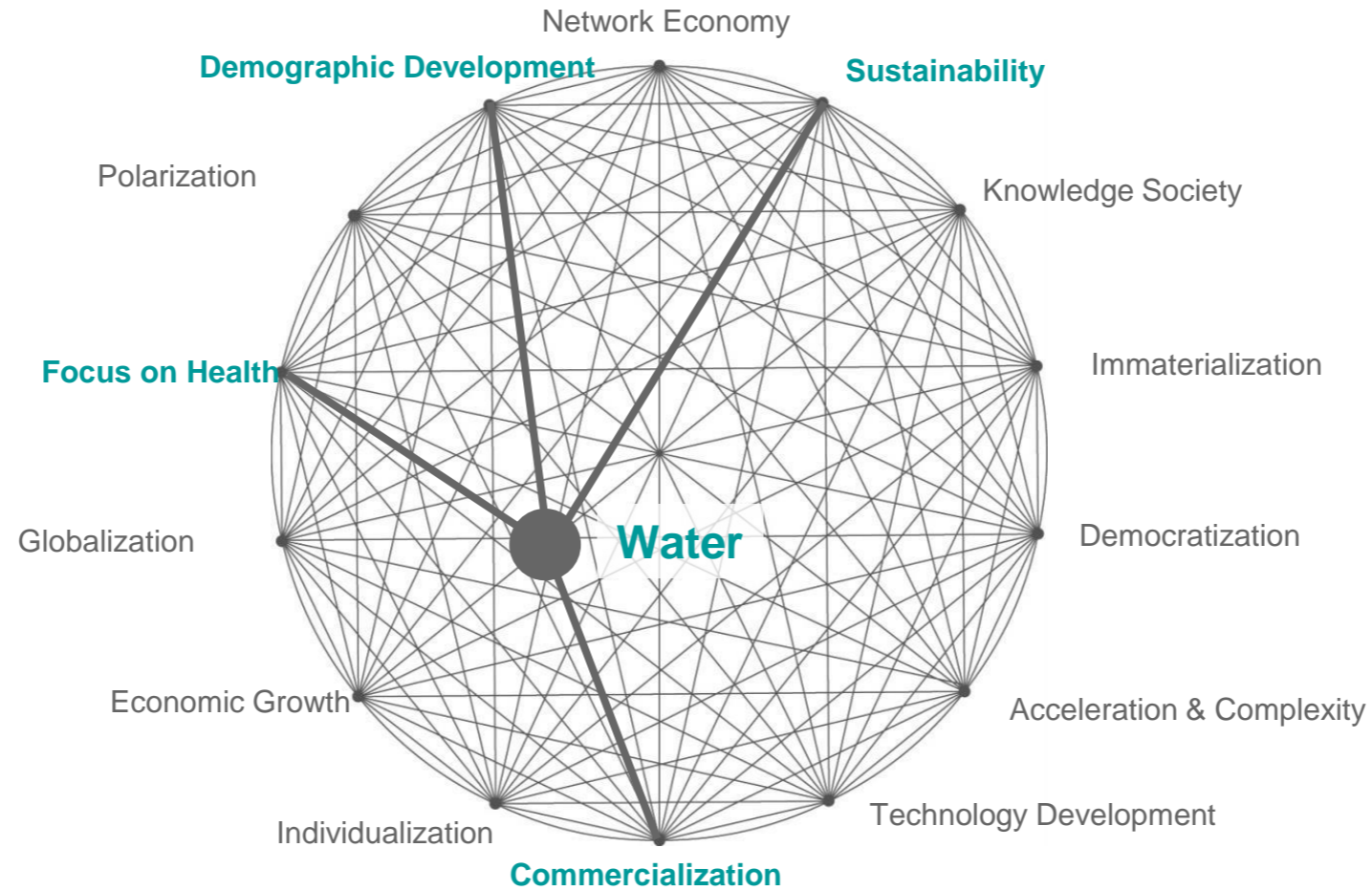


Maintaining Themes



* As at 31.10.2019. Note: All AuM in billion of USD; Premium Brands repositioned in 2005, Health repositioned 2015, Digital repositioned in 2008. Environmental Opportunities repositioned in 2014, Nutrition repositioned in 2017

WATER THEME UNDERPINNED BY FOUR MEGATRENDS



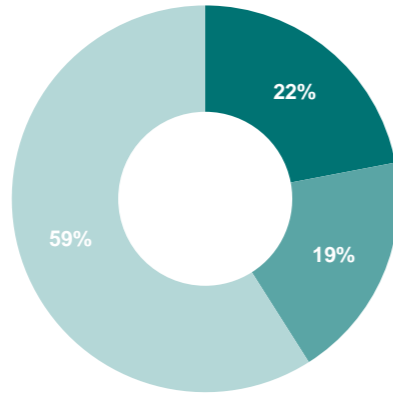


1 The global water challenge

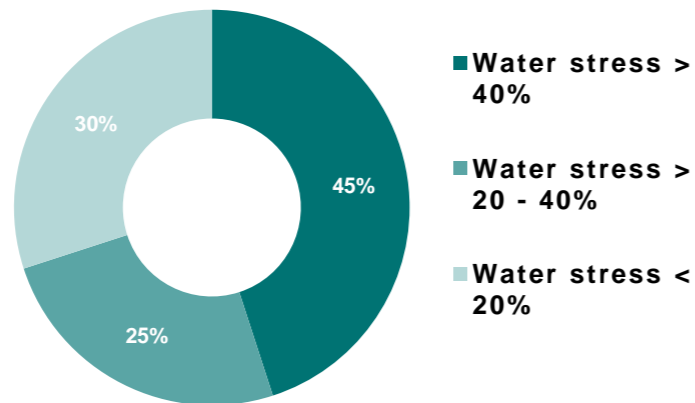
THE WATER CHALLENGE – INCREASING WATER STRESS

How scarcity will affect GDP by 2050

%GDP by level of water stress today



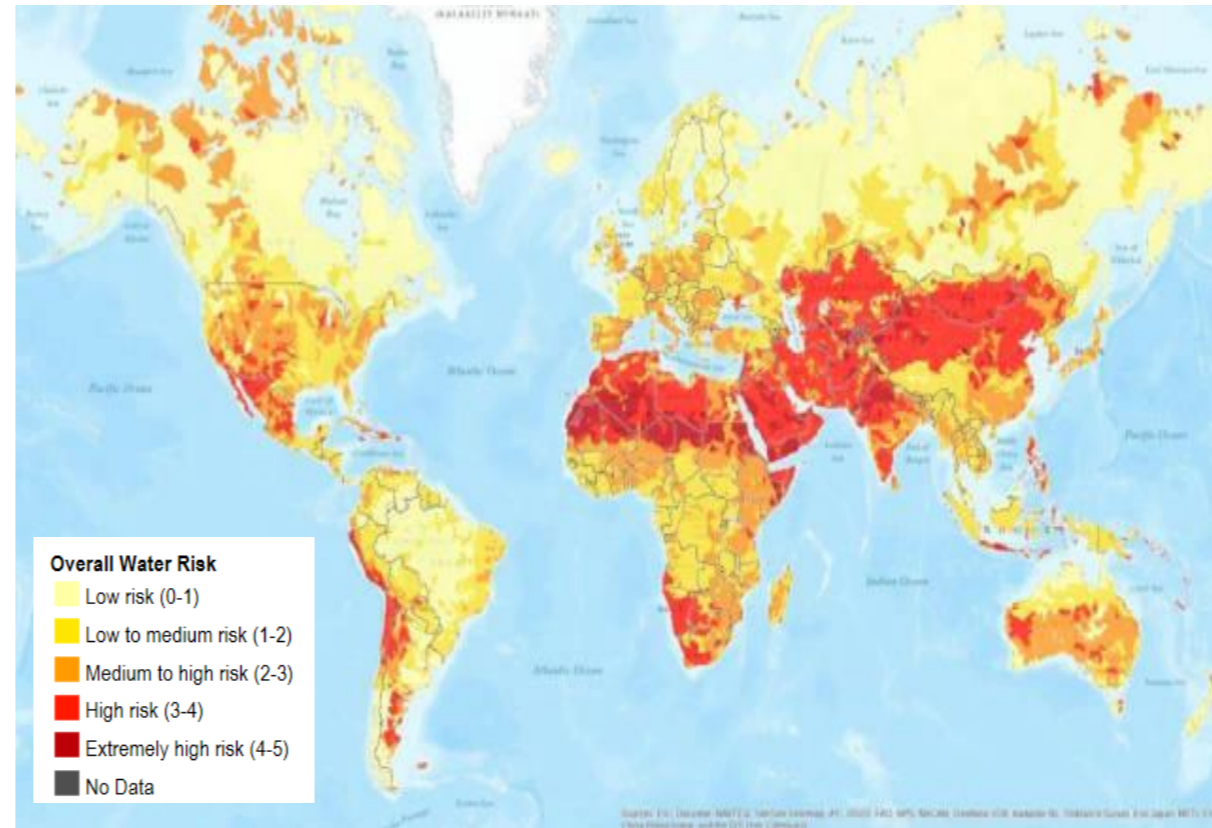
%GDP by level of water stress 2050 business as usual



Source: GWI, Growing Blue Initiative

Global Water risk

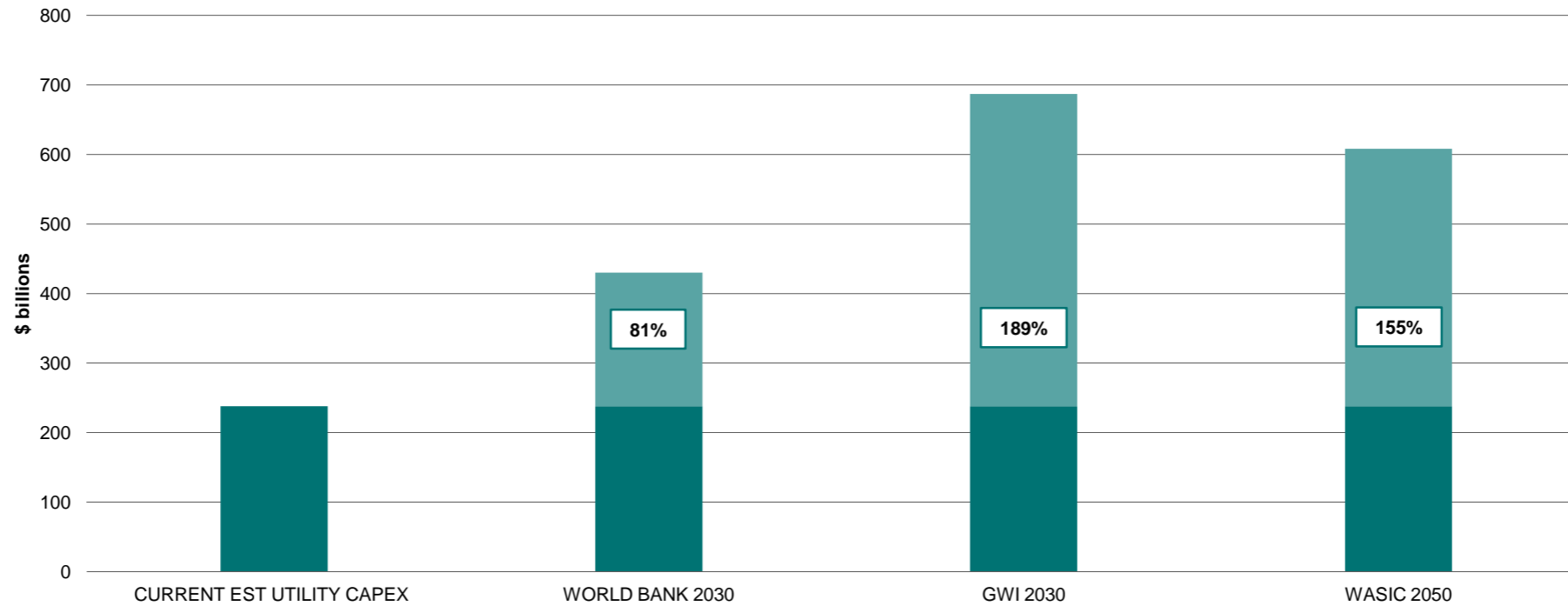
Overall water risk identifies areas with higher exposure to water-related risks and is an aggregated measure of all selected indicators from the Physical Quantity, Quality and Regulatory & Reputational Risk categories.



Source: Water Resource Institute, Aqueduct 2014

FINANCING SDG 6 – THE CHALLENGE OF UNIVERSAL ACCESS

Annual financing requirements for SDG 6 (Clean Water and Sanitation)

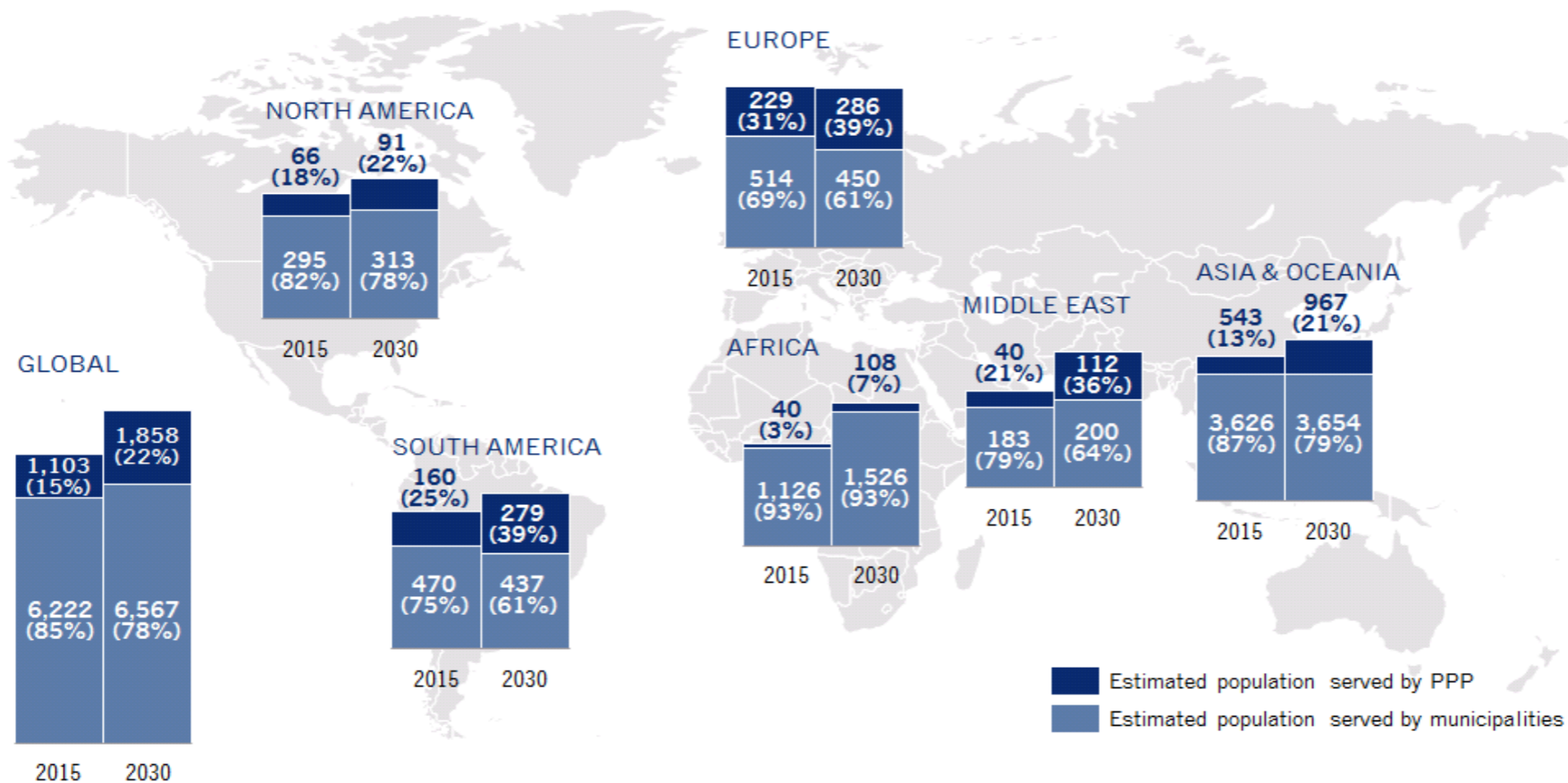


Current trajectory for achieving SDG 6

TYPE OF SERVICE	GLOBAL POP. PENETRATION	ANNUAL RATE OF GROWTH	ESTIMATED YEAR AT 100%
Drinking Water	51%	0.49%	2117
Waste Water	43%	0.63%	2107

Source: JMP 2019, using 2017 baseline data

Growth in world population served by the private water sector

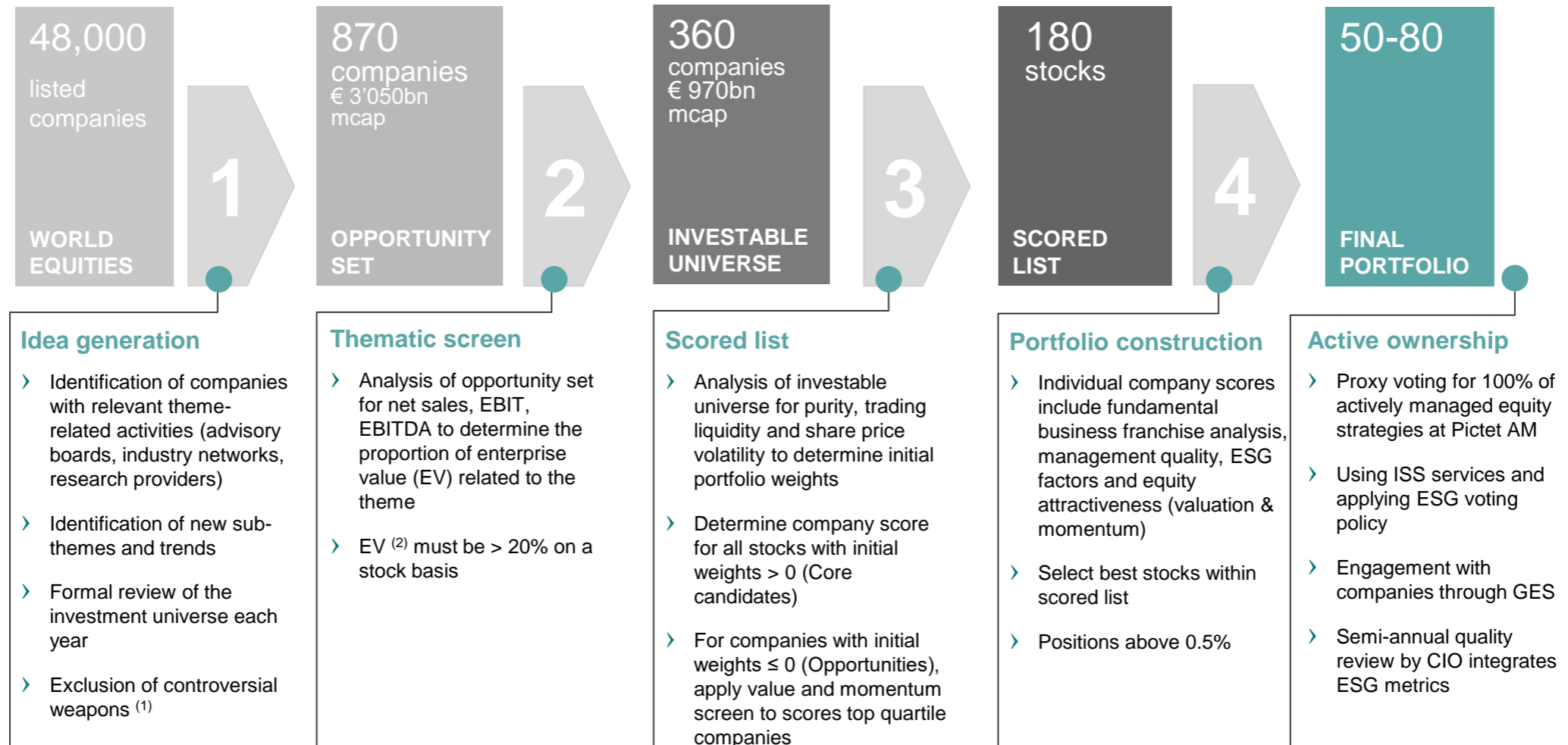


Source: Envisager, 2015



2 Investment process

WATER INVESTMENT PROCESS OVERVIEW



Note: (1) Pictet black list confirmed by Sustainability Board (M. Buffle member of SB); (2) Not including bottled water

OUR WATER INVESTMENT UNIVERSE

WATER TECHNOLOGY

Companies that develop the tools and systems to improve the quality and efficiency with which we use water



Consumer Technology



Industrial Technology



Monitoring



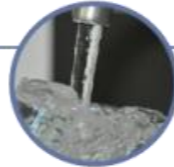
Municipal Infrastructure



Agriculture

WATER SUPPLY

Companies serving the society through the supply and storage of drinking water



Regulated Utilities



Concessions Europe



Concessions Emerging

ENVIRONMENTAL SERVICES

Companies that offer solutions for wastewater treatment and waste management to provide ecological and environmental protection



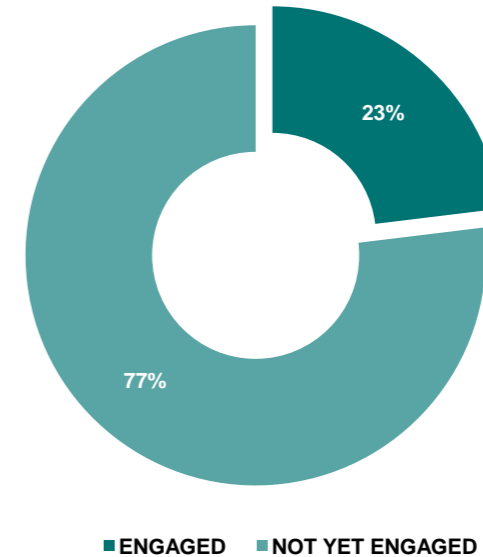
Engineering & Consulting



Waste Management

PICTET ACTIVE OWNERSHIP & GOVERNANCE

1. Environment, Social & Governance (ESG) in investment process
2. Active Proxy voting
3. Active Engagement

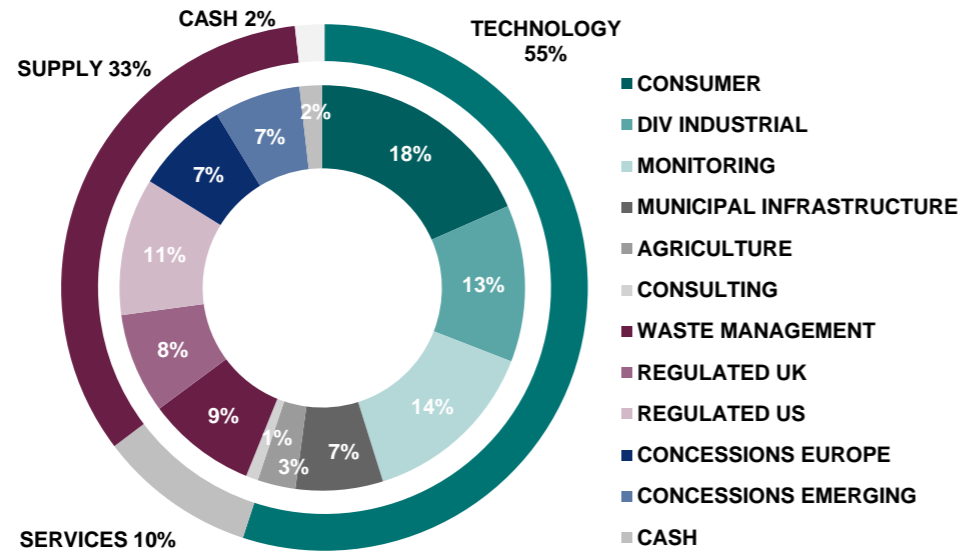


Example of Active Ownership – August 2019

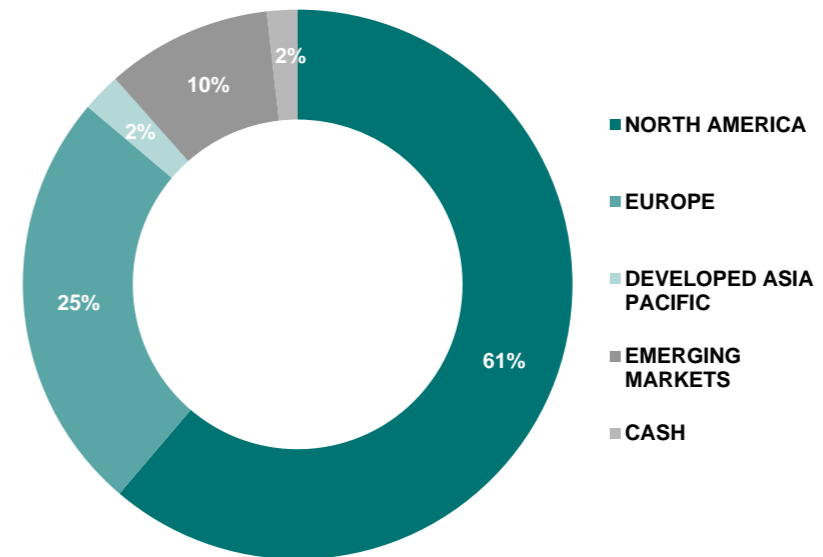
- › Present our view to the Board of Directors of an American water utility
- › Ownership position – 19 years / 2.5% of the company
- › Suggestions
 - › Increase disclosure - Environmental Policy / Environmental Management / Water Management
 - › Align compensation to tangible targets

PORTFOLIO BREAKDOWNS

Segment breakdown



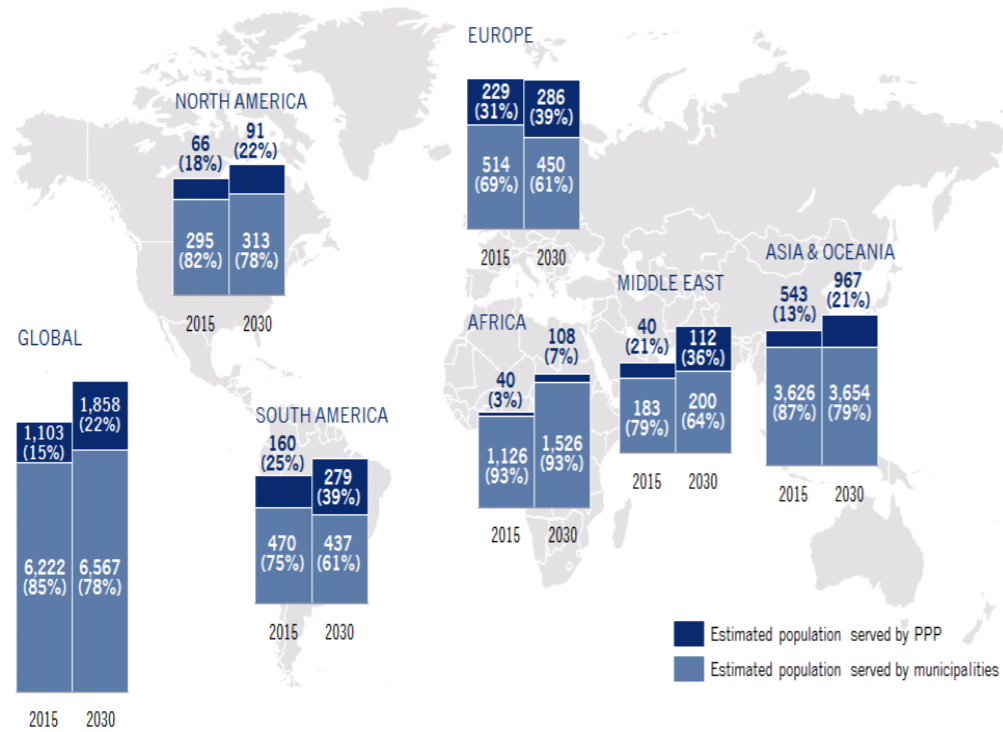
Geographic breakdown by domicile





3 Investment examples

Growth in world population served by the private water sector



Source: Envisager, 2015

Sabesp



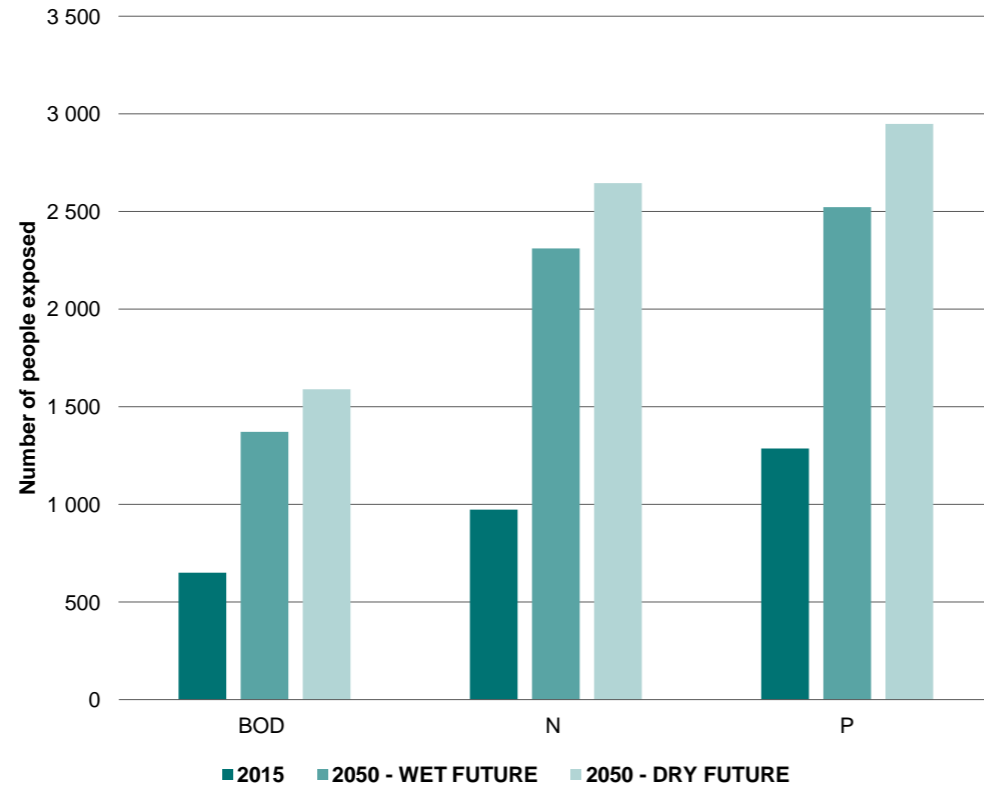
Largest water utility in Latin America based on number of clients

Market capitalization: EUR 8.3 billion



INVESTMENT EXAMPLE - WATER TECHNOLOGY

People exposed to water pollutants 2015-50



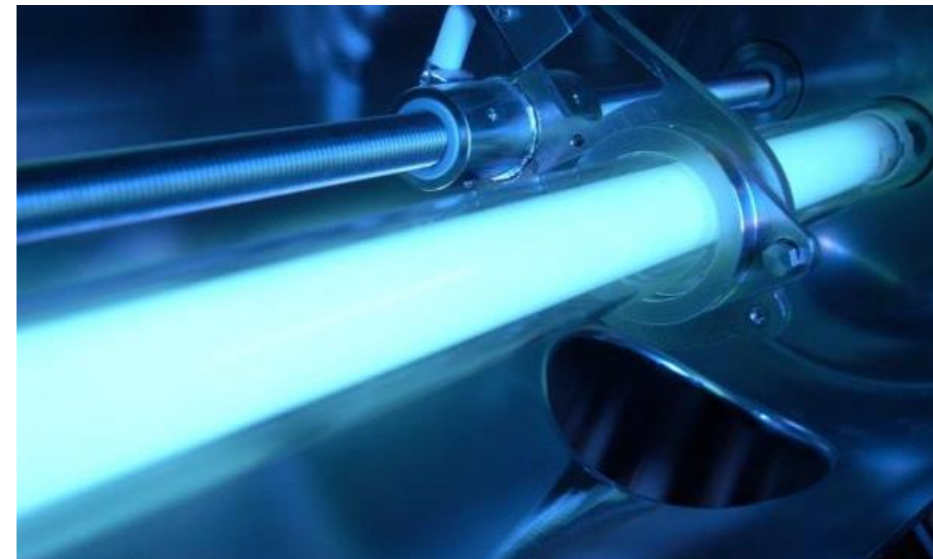
Source: IFPRI and Veolia, *The murky future of global water quality*, 2015. Source uses constant "medium" socio-economic growth assumptions, with climate change scenario as variable.

Danaher

Global Water treatment and testing / monitoring solutions provider



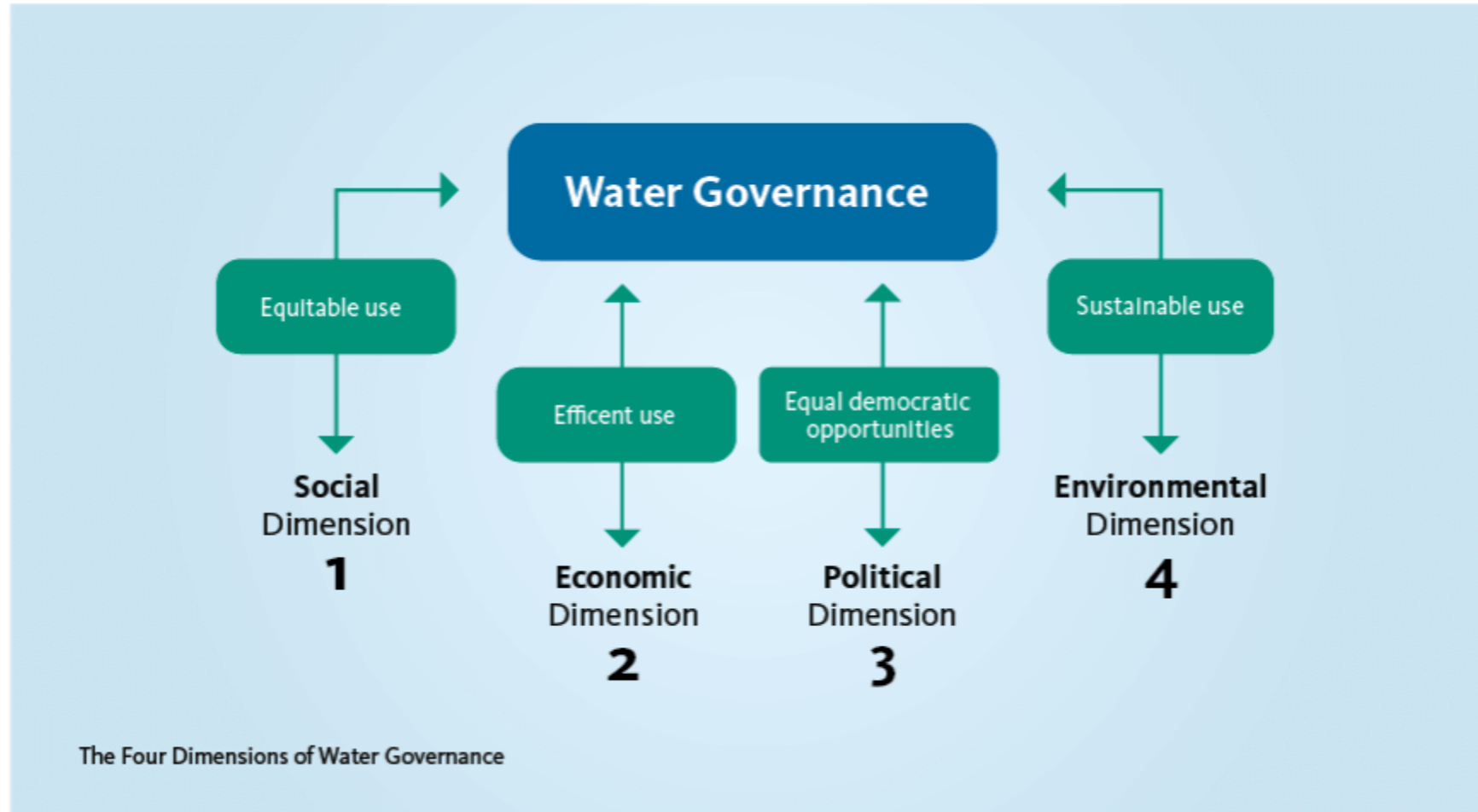
Market cap of EUR 88.7 billion





4 Conclusion

FOUR DIMENSIONS OF WATER GOVERNANCE



<http://www.watergovernance.org/governance/four-dimensions-governance/>

5

Appendix: water use efficiency

BEYOND WATER INVESTMENTS: WATER USE EFFICIENCY

1. Sustainable Development Goal 6.4 aims to “substantially increase water-use efficiency across all sectors ...” by measuring:

- “change in water-use efficiency over time” and
- “level of water stress: freshwater withdrawal...”

2. Water Use Efficiency (WUE) can be useful:

- calculates the gross value-added economic activity per unit of water consumed
- enables us to compare the value generated from water between countries, industries and companies and over time.



Example of WUE across companies: Carlsberg & Heineken

- › Carlsberg and Heineken are both in the Beverages sector, with respective WUEs of \$1,850 and \$270 per m³.
- › Carlsberg consumes about two litres of water per litre of beer brewed, and has a WUE six times greater than its rival Heineken, which is at an earlier stage of the water efficiency drive and has a water-to-beer production ratio of around 10.

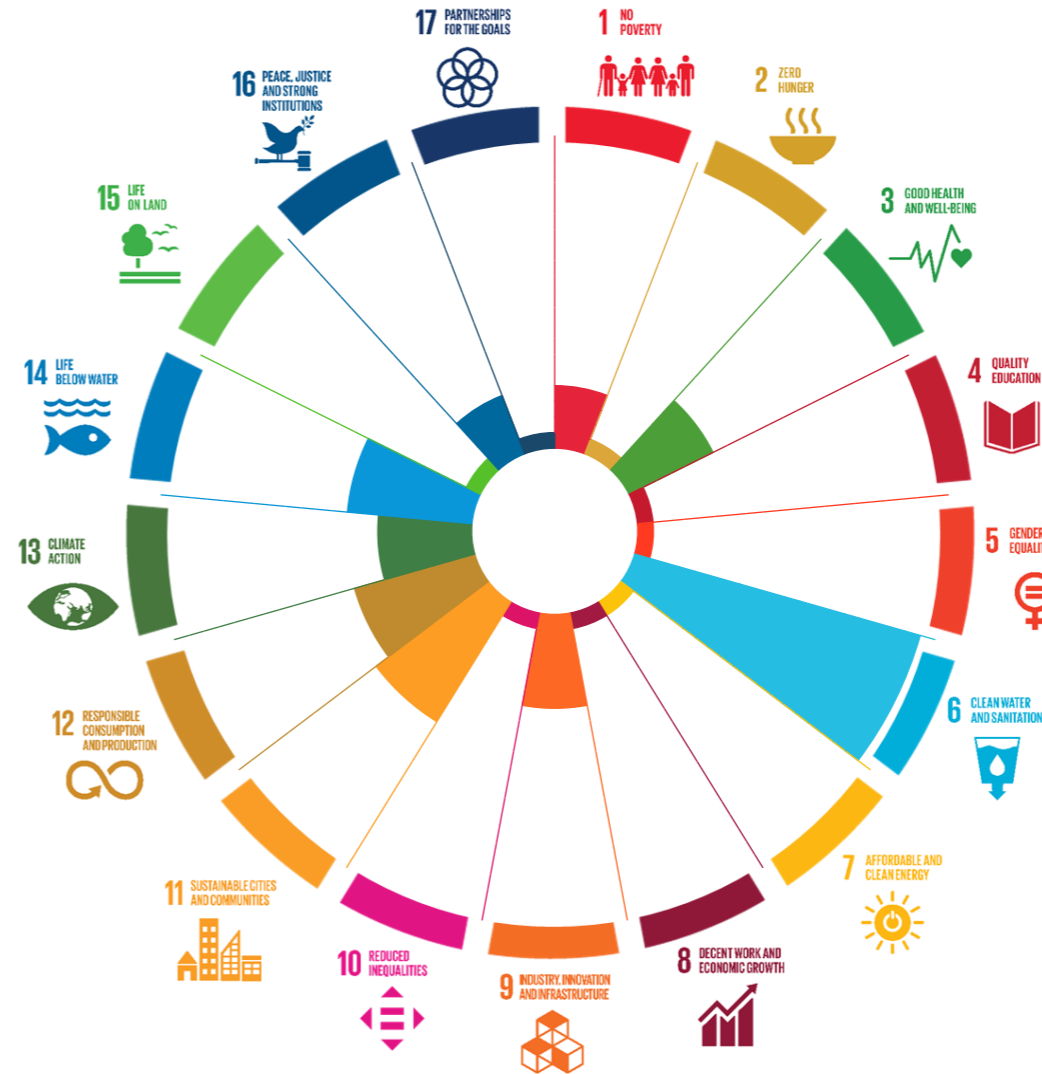
SDG EXPOSURE – PICTET-WATER

Sustainable Development Goals are 17 goals set by the United Nations in 2015.

Our SDG assessment is based on the products & services provided by the companies in our strategy.

We apply a two-fold methodology:

1. Quantitative approach to identify a companies' key operations, products and/or services. We map each company's exposure to SDGs through big data analysis and natural language processing
2. Fundamental analysis of 169 SDG targets and how the companies in our thematic universes help to reach the Sustainable Development Goals.

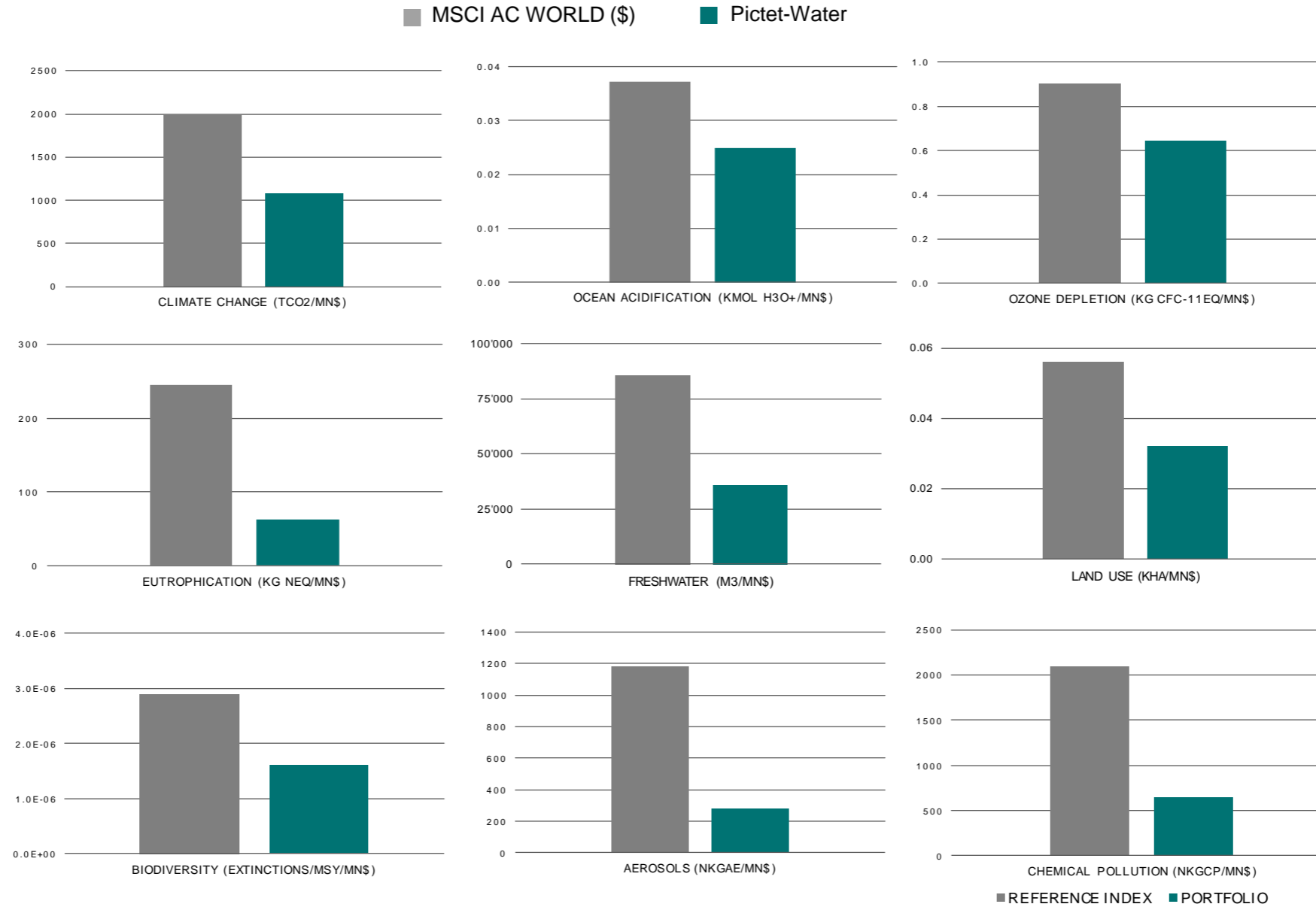


Source: Pictet Asset Management

The chart demonstrates the relative importance of the SDGs for the strategy as of September 2019 based on our own SDG methodology. We assess the impact of the companies' products and services to help achieving the SDGs. The chart has been scaled to the highest SDG exposure of this strategy. SDG exposure data below 13.9% (MSCI World average) are not shown.

Highest SDG exposure of Pictet-Water is: **SDG 6 88%**

WATER - ENVIRONMENTAL IMPACT



Source: Pictet Asset Management, as of 30.09.2019

For more information, please contact

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PANEL

MODERATED by

Prof. **Laurence Boisson
de Chazournes**

Professor, Faculty of Law, University of Geneva
and Geneva Water Hub; Member of the Global
High-Level Panel on Water and Peace

Dr. **Danilo Türk**

Chairman of the Global High-Level Panel on Water and
Peace and former president of Republic of Slovenia

Dr. **Mara Tignino**

Lead Legal Specialist, Platform for International Water
Law at the Geneva Water Hub; Reader, Faculty of Law
and Institute for Environmental Sciences,
University of Geneva

Cédric Lecamp

Senior Investment Manager – Thematic Equities,
Pictet-Water Fund

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CONCLUSION

Prof. **Laurence Boisson de Chazournes**

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UPDATE ON THE GENEVA CENTRE FOR PHILANTHROPY

Laetitia Gill

Executive Director, Geneva Centre for Philanthropy

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TEACHING

Academic courses

- *La philanthropie et ses principaux enjeux juridiques*, Dr. Neri-Castracane, Autumn 2019 (french)
- **The Ethics of philanthropy** , Dr. Tieffenbach Autumn 2019 (english)
- *La philanthropie culturelle et le droit*, Dr. Bandle, **Spring 2020** (french).

Every Wednesday, 4.15-06 p.m. from 12.2. to 23.5.2020, - Uni Mail, room 1150

Continuing education

- **Masterclass 2020**, in partnership with Swiss Philanthropy Foundation et le CEPS, 6-8.04.2020 (french)
- **Executive course** in partnership with OECD Centre on Philanthropy et Lilly Family School of Philanthropy (Indiana University), Paris, 2-3.7.2020 (english)

RESEARCH and PUBLICATIONS

Research

- ***Beyond charity: the varieties of value-driven emotions in philanthropic behavior***, Sander et Cova
- ***Philanthropy and taxation: legal and economic analysis of the efficiency of the existing legal framework and legislative proposals***, Peter et Lideikyte Huber
- ***Water, private companies and the Furtherance of the Public Good***, Boisson de Chazournes et Tignino
- **Warm Glow Effect**, «pure and impure Philanthropy» Tieffenbach
- **Philanthropy and Sport**, GCP and CISA
- **Philanthropy and SDG**
- **Foundations boards and diversity**

Publications

- **About 40 publications listed and available on our website**

NEXT EVENTS

- **06.02.2020** Philanthropy Lunch *La fondation à l'épreuve du temps (french)*, Dr. Lukas von Orelli, M. J. Pirrotta, Dr. P. Vez. Panel moderated by Dr. Loïc Pfister (french)
- **Spring 2020**, Philanthropy Lunch **Foundations: Impact of scholars support in the long run**
- **May/June 2020**, Philanthropy Lunch **Philanthropy and SDG**
- **26-27.11.2020** International Conference **Philanthropy and Taxation** in Geneva



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