WATER AS A PUBLIC GOOD: ROOM FOR PHILANTHROPY
INTRODUCTION

Prof. Henry Peter
Head, Geneva Centre for Philanthropy (GCP)
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
6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all

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.
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.
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*
Dr. Danilo Türk
Chairman of the Global High-Level Panel on Water and Peace
and former president of Republic of Slovenia
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

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.

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

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

ICRC, Urban services during protracted armed conflict: a call for a better approach to assisting affected people, 2015, p.17
A comprehensive approach: before, during and after armed conflicts

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

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
Section 3

Practices on the protection of water infrastructure and water, sanitation and hygiene services (WASH) delivery
Principle 13: Attacks against water infrastructure containing dangerous forces
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
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)

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
A PIONEER IN THEMATIC EQUITIES

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


* As at 31.10.19
Timeline of Themes Launches at Pictet AM

1.4 6.2 4.0 7.2 9.4 6.2 1.3 1.9 2.1 1.6 2.1 1.4 1.6

Identifying Themes

- Broad and diverse opportunity sets of companies
- Limited overlap
- Global universe
- Secular growth
- Attractive risk-return impact
- Themes have unique secular growth drivers
- Expertise enables managers to engage with companies

Maintaining Themes

- Advisory boards: Industry practitioners and leading academics
- Investment experts: Pictet AM’s investment managers

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

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: GWI, Growing Blue Initiative

Source: Water Resource Institute, Aqueduct 2014
FINANCING SDG 6 – THE CHALLENGE OF UNIVERSAL ACCESS

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

<table>
<thead>
<tr>
<th>TYPE OF SERVICE</th>
<th>GLOBAL POP. PENETRATION</th>
<th>ANNUAL RATE OF GROWTH</th>
<th>ESTIMATED YEAR AT 100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking Water</td>
<td>51%</td>
<td>0.49%</td>
<td>2117</td>
</tr>
<tr>
<td>Waste Water</td>
<td>43%</td>
<td>0.63%</td>
<td>2107</td>
</tr>
</tbody>
</table>

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

Idea generation
- Identification of companies with relevant theme-related activities (advisory boards, industry networks, research providers)
- Identification of new sub-themes and trends
- Formal review of the investment universe each year
- Exclusion of controversial weapons (1)

Thematic screen
- Analysis of opportunity set for net sales, EBIT, EBITDA to determine the proportion of enterprise value (EV) related to the theme
- EV (2) must be > 20% on a stock basis

Scored list
- Analysis of investable universe for purity, trading liquidity and share price volatility to determine initial portfolio weights
- Determine company score for all stocks with initial weights > 0 (Core candidates)
- For companies with initial weights ≤ 0 (Opportunities), apply value and momentum screen to scores top quartile companies
- Determune company score for all stocks with initial weights ≤ 0

Portfolio construction
- Individual company scores include fundamental business franchise analysis, management quality, ESG factors and equity attractiveness (valuation & momentum)
- Select best stocks within scored list
- Positions above 0.5%

Active ownership
- Proxy voting for 100% of actively managed equity strategies at Pictet AM
- Using ISS services and applying ESG voting policy
- Engagement with companies through GES
- Semi-annual quality review by CIO integrates ESG metrics

Note: (1) Pictet black list confirmed by Sustainability Board (M. Buffe 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

- TECHNOLOGY 55%
- SUPPLY 33%
- SERVICES 10%
- CASH 2%

- CONSUMER
- DIV INDUSTRIAL
- MONITORING
- MUNICIPAL INFRASTRUCTURE
- AGRICULTURE
- CONSULTING
- WASTE MANAGEMENT
- REGULATED UK
- REGULATED US
- CONCESSIONS EUROPE
- CONCESSIONS EMERGING
- CASH

Geographic breakdown by domicile

- NORTH AMERICA 61%
- EUROPE 25%
- DEVELOPED ASIA PACIFIC 2%
- EMERGING MARKETS 2%
- CASH 10%

Source: PAMFolio, as of 31.10.2019

Pictet-Water
Pictet Asset Management
For professional investors only
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Investment examples
INVESTMENT EXAMPLE - WATER SUPPLY

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


Danaher
Global Water treatment and testing / monitoring solutions provider
Market cap of EUR 88.7 billion
FOUR DIMENSIONS OF WATER GOVERNANCE

http://www.watergovernance.org/governance/four_dimensions-governance/
Appendix: 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.
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

- CLIMATE CHANGE (TCO2/MN$)
- OCEAN ACIDIFICATION (KMOL H2O-MN$)
- OZONE DEPLETION (KG CFC-11EQ/MN$)
- EUTROPHICATION (KG NEQ/MN$)
- FRESHWATER (KG/MN$)
- LAND USE (KHA/MN$)
- BIODIVERSITY (EXTINCTIONS/MSY/MN$)
- AEROSOLS (NKGAE/MN$)
- CHEMICAL POLLUTION (NKGCP/MN$)

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PANEL
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Cédric Lecamp
Senior Investment Manager – Thematic Equities, Pictet-Water Fund
CONCLUSION
Prof. Laurence Boisson de Chazournes
UPDATE ON THE GENEVA CENTRE FOR PHILANTHROPY

Laetitia Gill
Executive Director, Geneva Centre for Philanthropy
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)

  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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