IRIS, The Alliance for Water Stewardship, and the Investor Perspective

IRIS Standards Series

February 28, 2018
Agenda

▪ Background on the Alliance for Water Stewardship (AWS)

▪ How the AWS Standard & IRIS work together

▪ How Impax Asset Management assesses water-related investments that have the potential to create impact

▪ Q&A
Housekeeping Items

• Please mute all lines

• Q&A will be held at the end of the webinar. Please use the Chat function to ask your questions throughout the webinar.

• The deck and a recording will be posted after the webinar at www.thegiin.org

• For questions about today’s content, visit the IRIS website at www.iris.thegiin.org or contact irisinfo@thegiin.org
With You Today

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Impax Asset Management

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*Associate*  
Global Impact Investing Network (GIIN)

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*Director, North America*  
Alliance for Water Stewardship (AWS)

Mabinty Koroma-Moore | *Moderator*  
Engagement Manager  
Global Impact Investing Network (GIIN)
ALLIANCE FOR WATER STEWARDSHIP

- 90+ Members
- 150+ Sites in NA
- Nestle, MillerCoors, Merck, General Mills
Global Risks Report 2018

<table>
<thead>
<tr>
<th>Top 10 risks in terms of Likelihood</th>
<th>Top 10 risks in terms of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Extreme weather events</td>
<td>1. Weapons of mass destruction</td>
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<tr>
<td>2. Natural disasters</td>
<td>2. Extreme weather events</td>
</tr>
<tr>
<td>3. Cyberattacks</td>
<td>3. Natural disasters</td>
</tr>
<tr>
<td>4. Data fraud or theft</td>
<td>4. Failure of climate-change mitigation and adaptation</td>
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<tr>
<td>5. Failure of climate-change mitigation and adaptation</td>
<td>5. Water crises</td>
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<tr>
<td>6. Large-scale involuntary migration</td>
<td>6. Cyberattacks</td>
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<tr>
<td>7. Man-made environmental disasters</td>
<td>7. Food crises</td>
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<tr>
<td>8. Terrorist attacks</td>
<td>8. Biodiversity loss and ecosystem collapse</td>
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<tr>
<td>9. Illicit trade</td>
<td>9. Large-scale involuntary migration</td>
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<td>10. Asset bubbles in a major economy</td>
<td>10. Spread of infectious diseases</td>
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Water Risk In The US: WRI AQUEDUCT

Overall Water Risk
- Low risk (0-1)
- Low to medium risk (1-2)
- Medium to high risk (2-3)
- High risk (3-4)
- Extremely high risk (4-5)
- No Data

Definition
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.

Sources: WRI Aqueduct 2014
Six Steps To Water Stewardship
Risks Companies May Face

- Quantity
- Quality
- Source water health
- Community perceptions

- Physical Risk
- Reputational Risk
- Regulatory Risk
- Financial Risk
Investors and the AWS Standard

• Transparency in supply chains
• Reporting water-related risks that are material
• Identifying and mitigating water-related risks
• CDP Water & GRI
• SDG 6 and 13
What is IRIS?

IRIS is the catalog of generally accepted performance metrics that leading impact investors use to measure and manage social, environmental, and financial success, evaluate deals, and grow the sector’s credibility.
Why Does IRIS Exist?

1. **Lack of consistency and coordination in use of metrics and definitions**
2. **Unclear incentives for impact reporting**
3. **Insufficient aggregate data to inform investment decisions and monitor performance**

Inability to understand the **full value** of impact investments
A Sample of IRIS Users

62% of impact investors use IRIS metrics

1. The State of Impact Measurement and Management Practice
IRIS Linkages Connect the ‘Alphabet Soup’
The IRIS / AWS Linkage at Work

<table>
<thead>
<tr>
<th>AWS Criteria</th>
<th>Indicator(s)</th>
<th>IRIS 4.0 Metrics</th>
<th>Alignment Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2 Identify stakeholders, their water-related challenges and the site's sphere of influence. Identify stakeholders, document their water-related challenges and explain how the stakeholders are within the site's sphere of influence.</td>
<td>2.2.1 List of stakeholders, descriptions of prior engagements and summaries of their water-related challenges</td>
<td>D2010 Community Engagement Strategy</td>
<td>Indicates whether the organization implements a strategy to manage its interactions with local communities affected by its operations.</td>
</tr>
<tr>
<td></td>
<td>2.2.2 Description of the site's sphere of influence</td>
<td>D2010 Community Engagement Strategy</td>
<td>Indicates whether the organization implements a strategy to manage its interactions with local communities affected by its operations.</td>
</tr>
<tr>
<td></td>
<td>2.2.3 List of relevant aspects of catchment plans, significant publicly led initiatives and/or relevant water-related public policy goals for the site</td>
<td>D2010 Environmental Management System</td>
<td>Indicates whether the organization has an environmental management system in place.</td>
</tr>
<tr>
<td></td>
<td>2.2.4 List, and description of relevance, of all applicable water-related legal and regulatory requirements, including legally defined and customary water rights and water-user rights.</td>
<td>D2080 Water Quality Compliance</td>
<td>Indicates whether the organization’s practices related to discharge of wastewater comply with local legal requirements.</td>
</tr>
<tr>
<td></td>
<td>2.3 Catchment water balance by temporarily relevant time unit and commentary on future supply and demand trends.</td>
<td>D2080 Water Quality Practices</td>
<td>Indicates whether the organization employs management practices for water quality protection.</td>
</tr>
</tbody>
</table>
Focused on opportunities arising from the transition to a more sustainable economy

- Specialist manager, 20 years’ experience in Global Equities and Real Assets
- Pax acquisition adds decades of experience in Fixed Income, US Equities and Smart Beta
- 52 experienced investment team members (UK, US and HK)
- Global distribution and client relations; direct and via partnerships
- High quality investment solutions for institutional and retail clients

£11.3bn AUM

- £476m Real Assets
- £947m Thematic Equities
- £844m Fixed Income
- £1.3bn US Equities
- £7.8bn Smart Beta

As at 31 December 2017. Assets under advice represent ~3%. Total of asset classes may differ due to rounding.
Powerful drivers for environmental products and services

- Increasing population
- Rising living standards
- Infrastructure deficit
- Finite natural resources
- Pollution

- New Energy
- Water
- Sustainable Food, Agriculture & Forestry
- Waste/Resource Recovery
Impax’s classification of Environmental Markets

New Energy
- Energy Efficiency
  - Power Network
  - Industrials
  - Buildings
  - Transport
  - Consumer
- Alternative Energy
  - Developers/IPP
  - Solar
  - Wind
  - Biofuels
  - Other

Sustainable Food, Agriculture & Forestry
- Sustainable & Efficient Agriculture
- Logistics, Food Safety & Packaging
- Sustainable Forestry
- Nutrition

Water
- Water Infrastructure/Technologies
  - Infrastructure
  - Treatment
  - Utilities
- Pollution Control
  - Pollution Control Solutions
  - Testing & Gas Sensing
  - Public Transportation

Waste/Resource Recovery
- Waste Management & Technologies
  - Tech Equipment
  - Recycling & Processing
  - Hazardous
  - General
- Environmental Support Services
  - Consultancies
  - Carbon & Asset Trading
  - Diversified Environmental

Adopted by FTSE as a basis for Environmental Technologies and Environmental Markets index series since 2007
Diverse set of investment opportunities in water

- Moves across end-markets from consumer to industrial
- Captures cyclical and defensive business models, early to late cycle
- Regional allocation from developed to emerging countries

<table>
<thead>
<tr>
<th>WATER SECTOR</th>
<th>CATEGORIES</th>
<th>GROWTH AREA</th>
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</table>
| Water Infrastructure | • Network Equipment  
  • Buildings and industry equipment  
  • Infrastructure services  
  • Irrigation | • Infrastructure upgrades  
  • Smart applications  
  • Drought resiliency |
| Water Treatment | • Filtration and advanced solutions  
  • Traditional treatment  
  • Efficiency  
  • Monitoring and testing | • Tightening regulation  
  • Pollution mitigation  
  • Water reuse |
| Utilities | • Europe and UK  
  • US  
  • RoW | • Energy efficiency  
  • Infrastructure investment  
  • Desalination |
Evolving landscape of solutions requires a specialised focus

<table>
<thead>
<tr>
<th>Water reuse</th>
<th>Desalination</th>
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<tbody>
<tr>
<td>Treated waste water used to refill depleted aquifers easing groundwater stress</td>
<td>Efficient and more cost effective conversion of seawater into fresh water</td>
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<tr>
<th>Leak detection</th>
<th>Flow measurement</th>
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<tbody>
<tr>
<td>Technological advances in leak detection: less water lost, longer pipe life, lower operating costs</td>
<td>Hardware and software applications for improved measurement and distribution efficiency</td>
</tr>
</tbody>
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<table>
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<th>Flow efficiency</th>
<th>Smart irrigation</th>
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<tr>
<td>New technologies disrupting pump markets; utilities investing for energy savings</td>
<td>Increased crop yields and efficiency of water use; use of solar power</td>
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<th>Treatment, testing and diagnostics</th>
<th>Water conservation</th>
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<td>UV disinfection, ozone treatment, handheld instrumentation</td>
<td>New systems reduce consumer water use: home technologies including dual flush</td>
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<th>Automated meter reading</th>
<th>Data and software</th>
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<td>Improved water management and real time monitoring; encouraging more efficient use</td>
<td>Water industry using big data to map inefficiencies and to develop solutions</td>
</tr>
</tbody>
</table>
Impact measurement and environmental metrics

FOCUS ON FOUR ENVIRONMENTAL METRICS:

- Net CO$_2$ emissions (tonnes of CO$_2$ emitted vs tonnes of CO$_2$ avoided)
- Renewable energy (MWh generated)
- Water (megalitres provided, saved or treated)
- Materials (tonnes recovered, waste treated)

CLEAR INVESTMENT
Environmental impact of £10m investment

- Net CO₂ emissions avoided: 7,740 tCO₂
- Water provided/saved or treated: 3,030 megalitres
- Renewable energy generated: 2,920 MWh
- Materials recovered/Waste treated: 780 tonnes

Impact of £10m invested for one year. Methodology has been assured by Ernst & Young LLP. For further explanation of our impact methodology (which is based on equity value) please see http://www.impaxam.com/about-us/impact-investing
Water impact: a few observations

• General water data challenges

• Specific water impact data issues

• Company engagement regarding water

• Hierarchy of water impact metrics

• Localised water issues to consider

Impact of £10m invested for one year. Methodology has been assured by Ernst & Young LLP. For further explanation of our impact methodology (which is based on equity value) please see http://www.impaxam.com/about-us/impact-investing
Q+A

Have thoughts or feedback? Email us: iris@thegiin.org

Find additional guidance materials on the linkage at www.iris.thegiin.org/metrics/sets

Find the full AWS Standard at www.a4ws.org

Learn more about Impax Asset Management at www.impaxam.com

Find more information on impact measurement & management www.thegiin.org/imm
Important information

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