RESILIENCE TO CLIMATE CHANGE IN THE UK WATER SECTOR

SIGNATORY TYPE
Asset Manager

OPERATING REGION
United Kingdom

ASSETS UNDER MANAGEMENT
£84 billion of AUM (30% in corporate debt).

Royal London Asset Management is the largest mutually-owned asset manager in the UK, with over £84 billion of assets under management, of which about 30% is in corporate debt. We believe that judicious use of ESG factors can lower risk and help identify emerging opportunities across different asset classes. We have significant holdings in UK water utilities.

The PRI’s Fixed Income Case Study series highlights examples of interesting and innovative approaches to responsible investment. Written by fixed income practitioners from around the world, the case studies cover topics such as integrating ESG, negative and positive screening, thematic investment and engagement.

Sharing these examples will enable investors to collectively build a concept of emerging good practice. The PRI aims to publish a set of these short pieces every quarter. If you would like to learn more or contribute your own case study please contact us.
WHY EXAMINE CLIMATE CHANGE’S IMPACT ON THE UK WATER SECTOR?

The ESG team surveyed the water sector for plausible risks, focusing on climate change, because of climate change’s expected impacts on extreme weather and water quality. Most of the South East of England is classed as water-stressed. The Met Office’s projections suggest drought and greater flooding will only intensify, putting greater strain on the ability of companies and agencies to deliver a high standard of service. We decided to focus on Southern England as the most stressed zone.

HOW WE EXAMINE CLIMATE CHANGE’S IMPACT ON THE UK WATER SECTOR

The ESG team identified physical impacts the sector may experience from climate change:

<table>
<thead>
<tr>
<th>PRIMARY CLIMATE CHANGE EFFECTS</th>
<th>PHYSICAL IMPACT ON WATER SECTOR</th>
<th>OUTCOMES FOR COMPANIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased flooding incidence and severity</td>
<td>Storm damage to water infrastructure, much of which is coast- or river-based</td>
<td>Increased spend on repairs and upgrades</td>
</tr>
<tr>
<td>Increased drought incidence</td>
<td>Unsustainable use of slow-accumulating underground water (‘groundwater’)</td>
<td>Regulators impose restrictions on companies abstracting groundwater</td>
</tr>
<tr>
<td>Increased evaporation</td>
<td>Reduced water supply</td>
<td>Increase in expensive supply alternatives: e.g. trucks, desalination</td>
</tr>
<tr>
<td></td>
<td>Reduced hydro power from lower reservoir levels</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECONDARY CLIMATE CHANGE EFFECTS</th>
<th>PHYSICAL IMPACT ON WATER SECTOR</th>
<th>OUTCOMES FOR COMPANIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecological changes</td>
<td>New pathogens enter water system because of increased sea temperatures</td>
<td>Increased spending on water purification and treatment</td>
</tr>
<tr>
<td>Impact on Infrastructure interdependency</td>
<td>Competition for water with thirsty electricity generation methods such as coal and nuclear</td>
<td>Capex may be skewed toward certain technologies e.g. desalination</td>
</tr>
<tr>
<td></td>
<td>Uneven rainfall would increase demand for water trading; which is expensive and energy/carbon intensive.</td>
<td></td>
</tr>
</tbody>
</table>

Our ESG and credit teams went through the following steps to create a merit order of companies that enjoyed the most benign natural conditions and best quality of management on environmental issues.

1. Identify investee companies in water-stressed zones
2. Review company literature on forward planning & climate change
3. Evaluate Ofwat’s company scoring on environment and service quality
4. Rate each company’s corporate responsibility data
5. Company engagement & enforcement of scoring

Our ESG and credit teams went through the steps above to create a merit order of companies that enjoyed the most benign natural conditions and best quality of management on environmental issues.

This included:
- overlaying water stress maps on different companies’ exclusive zones of operation
- examining their statutory 25-year water management plans for scenario planning and investment
- examining the relevant corporate responsibility KPIs for ambition, momentum and external validation

We could then broadly align our holdings with it to reduce investment risk.

WHAT THE MODEL REVEALED ABOUT COMPANIES

Overall, we agree with the view expressed to us by the Environment Agency, that “climate change is genuinely embedded” in how UK water companies plan for the future. The top operational risks that the water companies identified were climate change (in particular, flooding), population growth and prospective legal reductions in water abstraction. The order of these risks varies from company to company.

Local factors and constraints are highly relevant, making each company’s circumstances and their ability to meet their obligations very different. It was striking how on a small island like Great Britain the challenges facing a water company, including the anticipated effects of climate change, can be entirely different to one a mere hundred miles away. Our meetings with companies have helped us to understand this; something not available in a typical report from a credit ratings agency.

1. Creating a national water grid, as there is for electricity, has been promoted as a long-term requirement but water is heavy making it energy-intensive to transport over long distances and varied topography. Some water companies are in areas with regional grids, which though limited, can help to balance supply and demand.

2. Ofwat: the statutory regulator of the water and sewerage sectors in England and Wales.
## Resilience to Climate Change in the UK Water Sector

<table>
<thead>
<tr>
<th>Company</th>
<th>Outside Company Control</th>
<th>Under Company Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Environment Agency’s ‘At-Risk Region’</td>
<td>Regulator Performance Rating</td>
</tr>
<tr>
<td>Company A</td>
<td>Moderate</td>
<td>Low</td>
</tr>
<tr>
<td>Company B</td>
<td>Moderate</td>
<td>High</td>
</tr>
<tr>
<td>Company C</td>
<td>Moderate</td>
<td>Very low</td>
</tr>
<tr>
<td>Company D</td>
<td>Serious</td>
<td>High</td>
</tr>
<tr>
<td>Company E</td>
<td>Serious</td>
<td>High</td>
</tr>
<tr>
<td>Company F</td>
<td>Serious</td>
<td>Extremely high</td>
</tr>
</tbody>
</table>

### From Analysis to Integration

The rankings strongly correlated with our existing holdings, with two exceptions; one where we had a (small) holding in a high-risk company and one where we had no holding in a lower-risk company. For the higher-risk company, the small exposure and the attractive spread offered led to us to maintain the holding. We are considering taking a holding in the lower-risk company.

Our work finds that it would not be justified to use climate change as a primary factor in determining the attractiveness of a UK water company’s debt, but it has given us a window on which companies are facing the biggest operational challenges and their capacity to overcome them.

### Mispricing and Advantage

Credit rating agencies are beginning to look at ESG issues such as climate change, but how safe they think these companies are does not yet capture the often stark differences in local circumstances. As a creditor, this information can give us an advantage over a market which often defers credit analysis to credit rating agencies and ESG analysis to the equity market.

---

**Company A**

- **Gross Risk:** 6
- **Net Risk:** 10
- **Score:** 0.6

**Company B**

- **Gross Risk:** 7
- **Net Risk:** 10
- **Score:** 0.77

**Company C**

- **Gross Risk:** 5
- **Net Risk:** 5
- **Score:** 1

**Company D**

- **Gross Risk:** 8
- **Net Risk:** 7
- **Score:** 1.14

**Company E**

- **Gross Risk:** 10
- **Net Risk:** 8
- **Score:** 1.25

**Company F**

- **Gross Risk:** 8
- **Net Risk:** 5
- **Score:** 1.6