Financing Infrastructure in the 21st Century

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Fitch Ratings

Fitch Background

- Global rating agency dedicated to providing value beyond the rating through independent and prospective credit opinions

- Over 1,200 analysts in more than 50 offices worldwide, rating 14,000 entities and 290,000 securities

- Rating Sectors
  - Structured Finance
  - Corporates
  - Global Infrastructure & Project Finance
  - Public Finance
  - Insurance
  - Financial Institutions
  - Sovereigns

Role of a Rating Agency

- Provides independent opinions on the ability of a securities issuance to meet financial commitments, such as interest and principal payments
- Provides investors an assessment of relative risk
- Reviews information provided
  - Asset-level financials; Company Financials; Public & Private Information
- Analyzes original transaction
- Monitors transaction post-closing

Rating Categories

Investment Grade Ratings

'AAA' – 'BBB'

Non – Investment Grade Ratings

'BB' – 'D'

- + or – are Indications of Relative Differences

Challenges & Opportunities in Infrastructure

➢Challenges:

- Significant Need – aging plant, deferred investment; evolving demands; greater resilience
- Inefficient Delivery – not always outcome/performance based (cost/schedule/efficiency)
- Uncertain Ability and Willingness to Pay

➢Opportunities:

- New methods of procurement provide a way to expand capacity to deliver improved infrastructure
- Performance-based contracting provides the ability to have better outcomes (faster/cheaper)
- Lifecycle asset management focus provides for more reliable maintenance and a greater useful life
- Core infrastructure (water/transportation/power) has the demonstrated ability to support the investment (through user-fees or taxes)
- Multiplier effect of increased government and infrastructure investment
- Deep pool of US municipal and private placement investors

Global PPP Scorecard

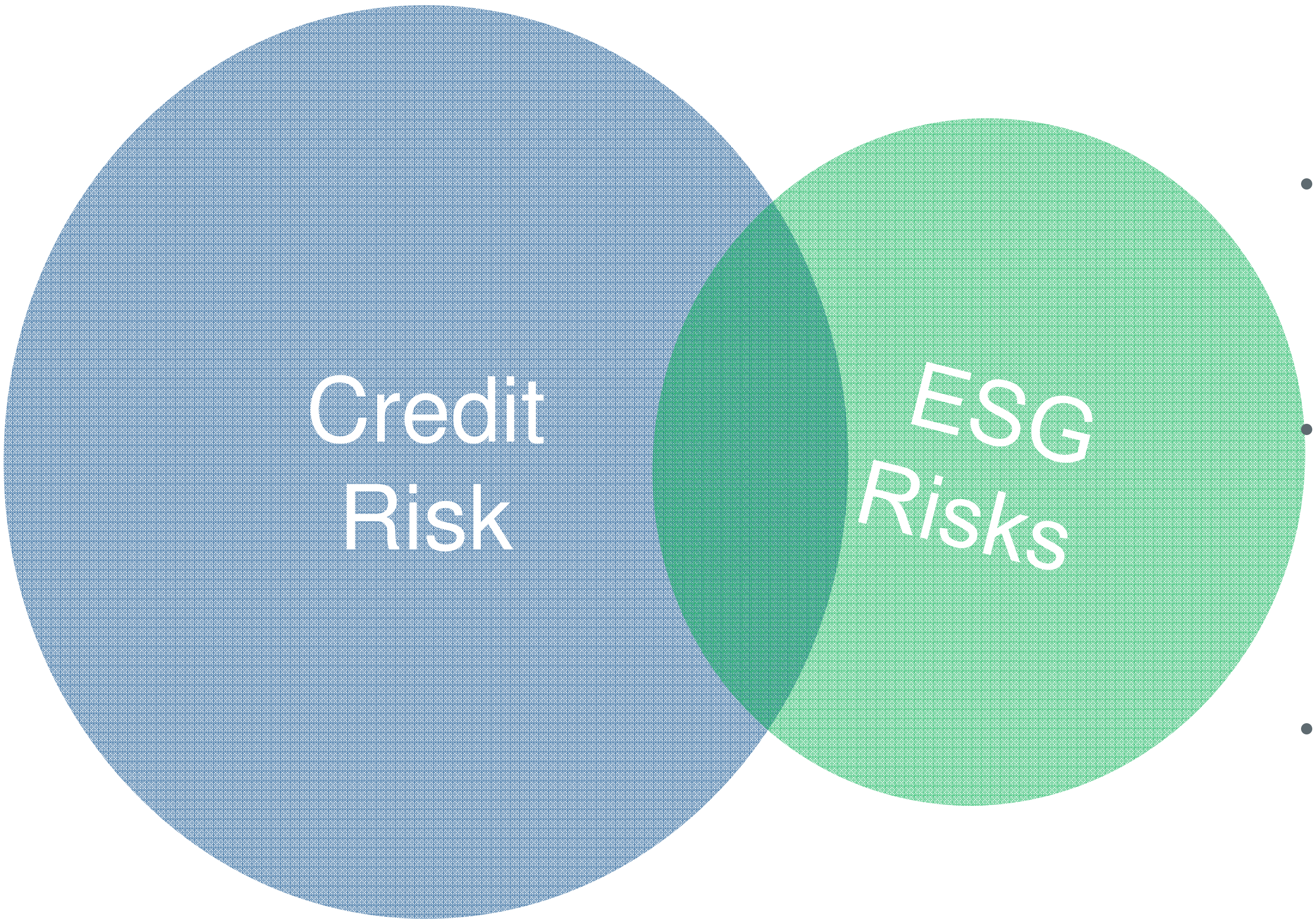
- **Success:** Is mixed world-wide
- **Failure:** Often the case but usually due to unanticipated conditions, unrealistic objectives, unachievable benefits, unclear benchmarks
- **Planning:** Success usually due to a cautious approach, development of desired objectives, understanding of benefits and disciplined monitoring
- **Partnership:** Problems do occur, so long-term success a function of the nature of the arrangement; both parties ability and willingness to adjust to changing conditions and public expectations

Climate Resiliency Important to Investors

- UN-backed Principles for Responsible Investment
- Hundreds of entities with trillions in assets under management have expressed interest
- Enter the term ESG, which refers to Environmental, Social and Governance factors
- Over US$20 trillion in ESG related investment assets under management globally*
- Entities have been created to provide investors with an assessment of sustainable performance for real assets, including infrastructure
- The vast majority of the ESG assets under management now receive an external assessment
- These assessments factor into investment decisions and ultimately into their pricing
- One component of these assessments is “Resilence” which assess the ability to handle adverse social and environmental events.
- Resilience assessments usually link to scenarios created by the Task Force on Climate Related Financial Disclosures (physical, financial and climate risks)

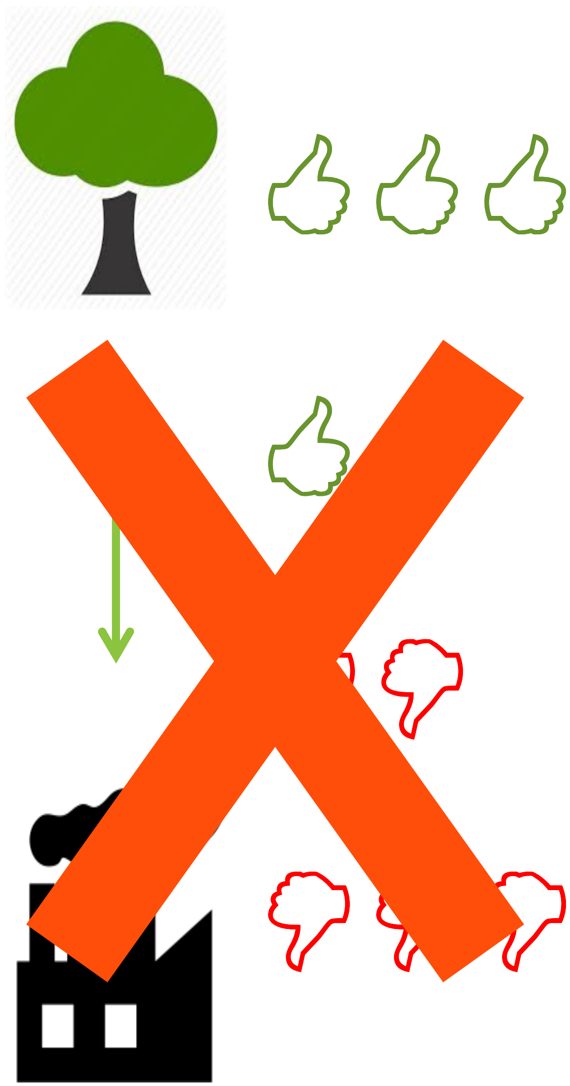
Source: * Forbes

Fitch Measures Which ESG Risks Appear in Our Ratings



- Which specific ESG risks are potentially relevant for each issuer's credit profile.
- Which ESG risks are relevant for different sectors, and even countries or regions.
- Which ESG risks have risen to a level where we they are an active factor in the rating decision, on an issuer-by-issuer basis.
- Which ESG risks actually led to a rating change.

We Are NOT Measuring ESG Risk Itself



How Are We Defining Relevance?

Relevance Score	Definition
5	Highly relevant, a key rating driver that has a significant impact on the entity rating on an individual basis. Equivalent to 'Higher' relative importance on a credit Navigator
4	Relevant to rating, but not a key rating driver, but has an impact on the entity rating in combination with other factors. Equivalent to 'Moderate' importance within a credit Navigator
3	Minimally relevant to rating, either very low impact or actively managed in a way that results in no impact on the entity rating. Equivalent to 'Lower' Relative Importance within Navigator
2	Irrelevant to the entity rating, but relevant to the sector
1	Irrelevant to the entity rating and irrelevant to the sector

Water & Wastewater Management

One of five environmental issues scored for relevance to the assigned credit rating

Higher relevance scores (4s and 5s) were assigned to 8 corporate entities (0.5% of issuers)

All of the impacted entities are categorized in the same sector- EMEA Regulated Networks

Environmental (E)

General Issues	E Score	Sector-Specific Issues	Reference	Overall E Score
GHG Emissions & Air Quality	3	Regulatory risk - engine emission standards	Technology Leadership, Diversification, Business Stability, Financial Flexibility	5
Energy & Fuel Management	1	Energy use in manufacturing and operations	Business Stability, Profitability	4
Water & Wastewater Management	1	Water usage and effluents in manufacturing process	Technology Leadership, Profitability	3
Waste & Hazardous Materials Management; Biodiversity Impacts	3	Manufacturing waste, disposal and recycling; materials sourcing	Technology Leadership, Market Position & Size, Profitability	2
Exposure to Environmental Impacts	1	PPE and inventory exposure to extreme weather events	Business Stability, Financial Flexibility	1

Examples of Higher Relevance Scores for Water & Wastewater Management

Greensands UK Ltd (5) - High relevance for the ratings as OpCo's (Southern water) operational underperformance is expected to lead to performance-related penalties of c. GBP41m, all of which will reduce free cash flow during next price control (in nominal terms). Greensands' parent is under investigation by the Environment Agency and Ofwat regarding the serviceability and quality of its outcome delivery incentives reporting.

Kelda Finance (No.2) Limited (+4) - High relevance for the ratings as OpCo's (Yorkshire water) middle-ranking operational performance is expected to add c. GBP105m performance-related rewards to free cash flow during next price control (in nominal terms).

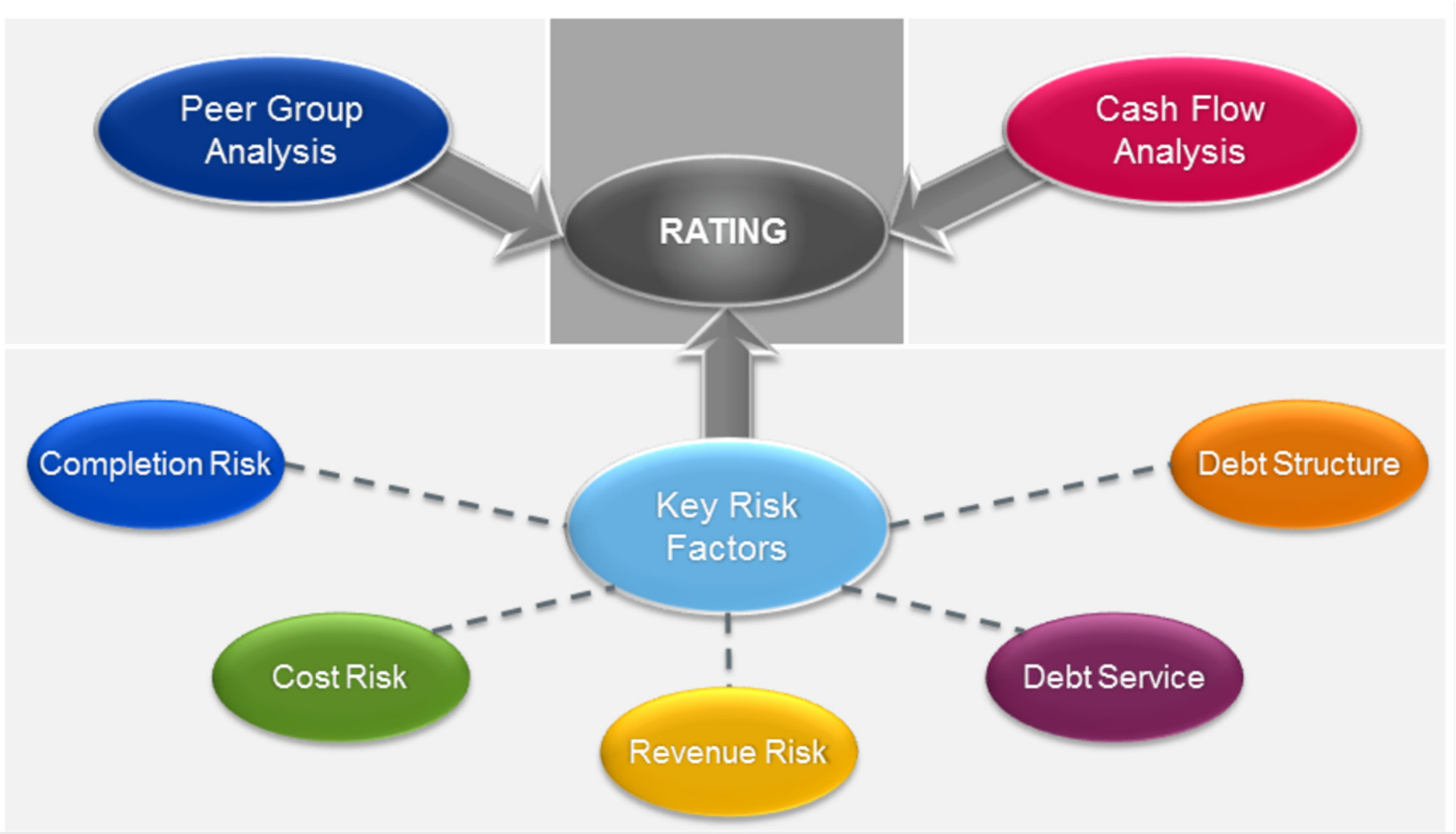
Kemble Water Finance Limited (5) - High relevance for the ratings as OpCo's (Thames water) operational underperformance is expected to lead to an overspend of GBP394m on capex and opex in FY16-FY20 and performance-related penalties of c. GBP230m, of which GBP188m will reduce free cash flow during next price control (in nominal terms). Kemble's parent was fined for underperformance on leakage.

Fitch Rating Criteria for Municipal Enterprises

➢ **Key Rating Drivers:**

- Revenue Defensibility (**demand**, pricing, volatility, ability to respond)
- Operating Risks (**cost predictability/volatility, life cycle/capital renewal risks, key resource cost**, ability to manage growth)
- Financial Profile (**financial flexibility to sustain stress**es, use metrics such as operating margin, liquidity profile, overall leverage)
- Legal & Regulatory (**events leading to enforcemen**t, corrective action plan, timeline for completion)
- Debt structure (fixed/variable rate debt, swaps, additional debt/rate covenants)
- Management and governance (practices and policies on **rate/cost planning/management**, environmental compliance, **pro-active investment**, etc.)

Fitch Rating Criteria in Project Finance



Key Takeaways:

- Aging infrastructure is a challenge but there also are opportunities to bridge the gap
- The options include on and off-balance sheet finance with a deep pool of investors
- Investors increasingly care about responsible and sustainable investing and are focused on climate resilience
- Fitch's ESG approach is designed to highlight those risks
- As the tools to assess these risks and the nature and consistency of reporting improve, we will increasingly provide greater distinctions based on these risks

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