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Weathering the Storm – Assessing/Mitigating Environmental Risks including Natural Disasters

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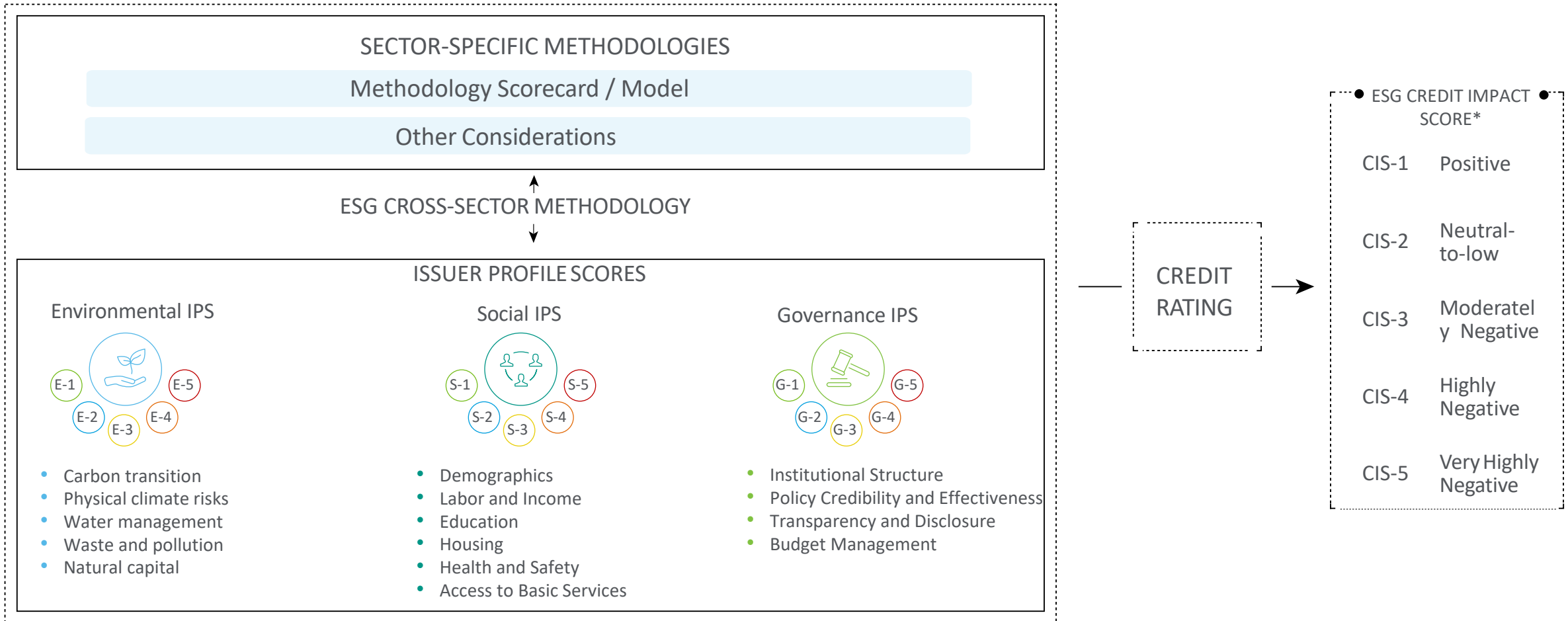
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ESG Integration Into Credit Analysis – Public Sector



Our rating analysis considers all material credit considerations, including ESG








The ESG credit impact score (CIS) is an output of the rating process that more transparently communicates the impact of ESG considerations on the rating of an issuer or transaction.

E, S and G Issuer Profile Scoring Scale

Assessed on a five-point scale from positive to negative exposure








	Score	Definition
 POSITIVE	E-1 S-1 G-1	<p>Issuers or transactions with a Positive E or S issuer profile score typically have exposures to E or S issues that carry material credit benefits.</p> <p>For G, issuers or transactions typically have exposure to G considerations that, in the context of their sector, positions them strongly, with material credit benefits.</p>
 NEUTRAL-TO-LOW	E-2 S-2 G-2	<p>Issuers or transactions with a Neutral-to-Low E or S issuer profile score typically have exposures to E or S issues that are not material in differentiating credit quality. In other words, they could be overall slightly credit-positive, credit-neutral, or slightly credit-negative. An issuer or transaction may have a Neutral-to-Low score because the exposure is not material or because there are mitigants specifically related to any E or S risks that are sufficient to offset those risks.</p> <p>Issuers or transactions with a Neutral-to-Low G issuer profile score typically have exposure to G considerations that, in the context of their sector, positions them as average, and the exposure is overall neither credit-positive nor negative.</p>
 MODERATELY NEGATIVE	E-3 S-3 G-3	<p>Issuers or transactions with a Moderately Negative E or S issuer profile score typically have exposures to E or S issues that carry moderately negative credit risks. These issuers may demonstrate some mitigants specifically related to the identified E or S risks, but they are not sufficiently material to fully offset the risks.</p> <p>Issuers or transactions with a Moderately Negative G issuer profile score typically have exposure to G considerations that, in the context of the sector, positions them below average and the exposure carries overall moderately negative credit risks.</p>
 HIGHLY NEGATIVE	E-4 S-4 G-4	<p>Issuers or transactions with a Highly Negative E or S issuer profile score typically have exposures to E or S issues that carry high credit risks. These issuers may demonstrate some mitigants specifically tied to the E or S risks identified, but they generally have limited effect on the risks.</p> <p>Issuers or transactions with a Highly Negative G issuer profile score typically have exposure to G considerations that, in the context of their sector, positions them weakly and the exposure carries overall highly negative credit risks.</p>
 VERY HIGHLY NEGATIVE	E-5 S-5 G-5	<p>Issuers or transactions with a Very Highly Negative E or S issuer profile score typically have exposures to E or S issues that carry very high credit risks. While these issuers or transactions may demonstrate some mitigants specifically related to the identified E or S risks, they are not meaningful relative to the magnitude of the risks.</p> <p>Issuers or transactions with a Very Highly Negative G issuer profile score typically have exposure to G considerations that, in the context of their sector, positions them very poorly and the exposure carries overall very high credit risks.</p>

Source: Moody's Investors Service

ESG Credit Impact Score (CIS) Scale



	Score	Definition
 <p>POSITIVE</p>	CIS-1	For an issuer scored CIS-1 (Positive), its ESG attributes are overall considered as having a positive impact on the rating. The overall positive influence from its ESG attributes on the rating is material.
 <p>NEUTRAL-TO-LOW</p>	CIS-2	For an issuer scored CIS-2 (Neutral-to-Low), its ESG attributes are overall considered as having a neutral-to-low impact on the current rating; i.e., the overall influence of these attributes on the rating is non-material.
 <p>MODERATELY NEGATIVE</p>	CIS-3	For an issuer scored CIS-3 (Moderately Negative), its ESG attributes are overall considered as having a limited impact on the current rating, with greater potential for future negative impact over time. The negative influence of the overall ESG attributes on the rating is more pronounced compared to an issuer scored CIS-2.
 <p>HIGHLY NEGATIVE</p>	CIS-4	For an issuer scored CIS-4 (Highly Negative), its ESG attributes are overall considered as having a discernible negative impact on the current rating. The negative influence of the overall ESG attributes on the rating is more pronounced compared to an issuer scored CIS-3.
 <p>VERY HIGHLY NEGATIVE</p>	CIS-5	For an issuer scored CIS-5 (Very Highly Negative), its ESG attributes are overall considered as having a very high negative impact on the current rating. The negative influence of the overall ESG attributes on the rating is more pronounced compared to an issuer scored CIS-4.

Environmental Considerations for Regional/Local Govts

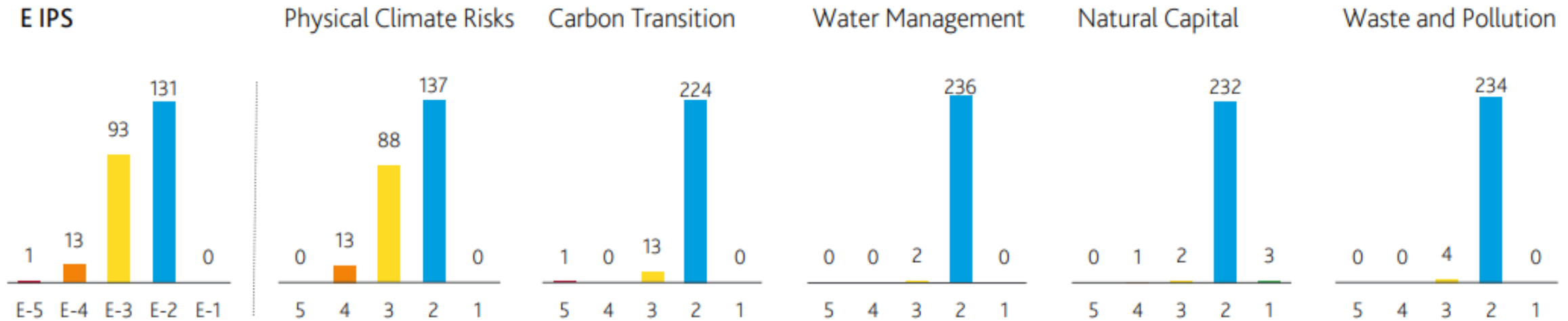


Risk categories	General Considerations
Carbon Transition	<p>Importance of hydrocarbon resources or carbon-intensive industry (e.g. oil severance taxes, property taxes on coal-fired power plant)/renewable energy industry on an RLG's revenue</p> <p>Importance of hydrocarbon resources or carbon-intensive industry (e.g. oil severance taxes, property taxes on coal-fired power plant)/renewable energy industry for an RLG's economic base</p>
Physical Climate Risks	<p>Concentration of economic activity exposed to climate hazards</p> <p>Concentration of population and key infrastructure in areas subject to climate hazards</p> <p>Impact of environmental long-term trends on productivity, health related issues, energy demand and overall economic growth</p> <p>Hardening of assets subject to physical climate risks</p> <p>Presence of specific financial protections (e.g. dedicated reserves)</p>
Water Management	<p>Reliance of RLG's major economic sectors on water resources</p> <p>Water availability, consumption, efficiency of use, access, quality, treatment and pollution</p> <p>Policies and strategies for demand reduction, wastewater treatment, integrated water management system</p>
Waste and Pollution	<p>Types and production levels of non-GHG air pollutants and land-based waste and pollution</p> <p>Incidence and clean-up costs related to RLG's non-GHG and land-based pollution issues</p> <p>Long-term planning for waste and pollution control</p>
Natural Capital	<p>Reliance of the local economy on natural assets</p> <p>Sustainability of natural resources</p> <p>Policies related to strategic natural resources protections or of development of alternative resources</p>

County Environmental Risks



Exposure to environmental issues is either neutral to low or moderately negative for most large US counties
 Distribution of environmental issuer profile scores and category scores for US counties with at least \$100 million in outstanding debt



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Collier County, Florida

- Largest County in Florida by land area
- Current population of 390K
- County's Net Position as of 9.30.21 is \$3.2Bn
- General Fund Unrestricted Balance as of 9.30.21 is \$117M
 - About 28% of total annual operating costs
- Debt per capita of \$1,750
- Contains the cities of Naples and Marco Island

FEMA is

- Authorized to provide public assistance funding to
 - Save lives;
 - Protect public health and safety;
 - Protect improved property;
 - Eliminate or lessen an immediate threat of additional damage
- Payer of last resort
 - Government entities to exhaust other forms of insurance and reimbursement BEFORE seeking reimbursement from FEMA

What FEMA Covers

- Emergency Work
 - Category A: Debris removal
 - Category B: Emergency protective measures
- Permanent Work
 - Category C: Roads and Bridges
 - Category D: Water control facilities
 - Category E: Public buildings and contents
 - Category F: Public utilities
 - Category G: Parks, recreational and other facilities
 - Category Z: Grant management costs

FEMA Potential Pitfalls

- Operation of shelters
- Policies and procedures related to disaster management
- Documentation required for reimbursement
- De-obligation of funding
- Document retention timeframe
- Denials/appeals process

Collier FEMA Reimbursements – Last Five Years

- Hurricane Irma - \$87.5M
 - Made landfall in Collier in September 2017 as Category 3 storm
 - Primary impacts were widespread power outages and debris, coastal flooding and some beach erosion
 - To date County has spent more than \$110M on recovery
- Tropical Storm Debby - \$660K
 - Caused beach erosion issues on Marco Island

De-obligation Stories

- During FY-2012 FEMA de-obligated \$11.2M in beach sand replacement costs related to 2005 Hurricane Wilma, previously reimbursed to Collier County
 - Collier appealed this decision and by FY-2015 the de-obligation was reduced to \$1.6M
- Palm Beach County had a \$1M de-obligation due to disposal of payroll records