

National Association of Municipal Advisors

Hot Topics in the Muni Market

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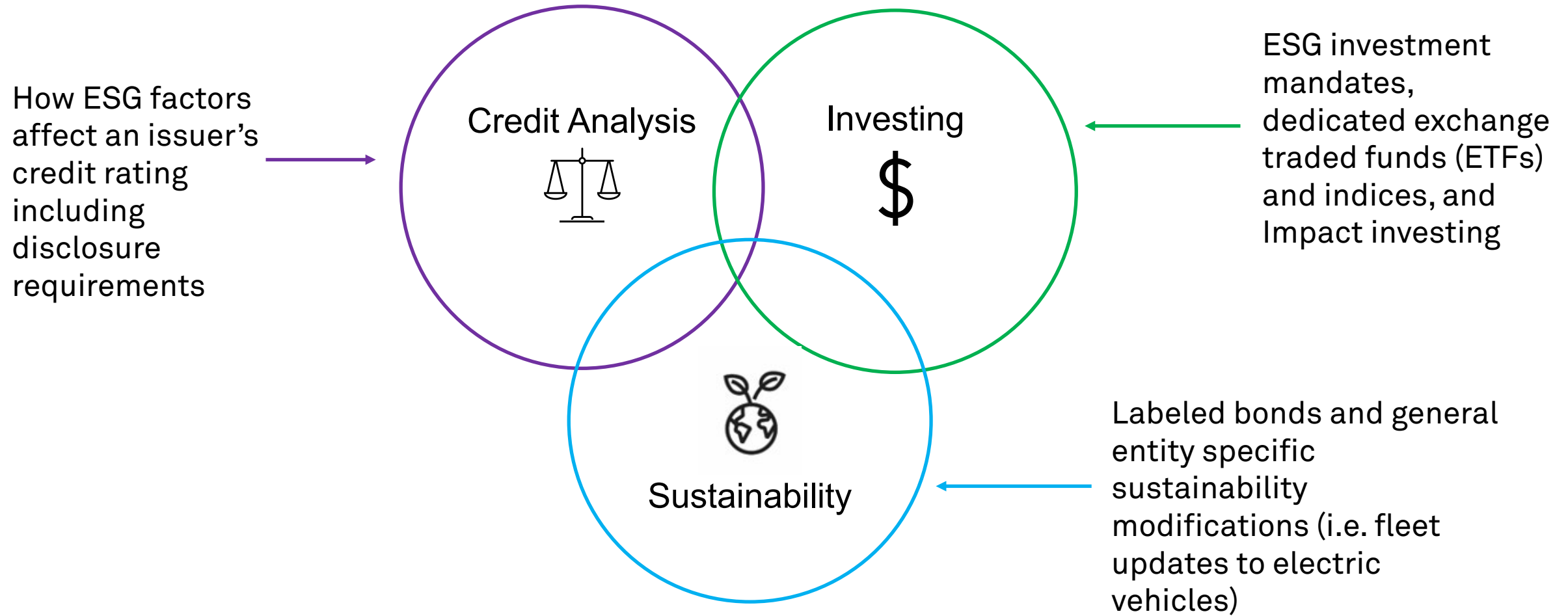
S&P Global
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Agenda

- ESG in the Municipal Market
- ESG Within S&P Global Ratings' Credit Rating Analysis
 - ESG Principles in Credit Ratings Criteria
 - Sector specific criteria articles
- S&P Global Ratings' ESG Thought Leadership

ESG in the Municipal Market

What is ESG in the Municipal Market? **An Overview**



ESG in Credit Ratings

S&P's view of how ESG risks and opportunities are reflected in our credit ratings

ESG Principles Criteria: **General Principles of ESG Factors & Ratings**

Environmental factors



Climate transition risks



Physical risks



Natural capital



Waste and pollution



Other environmental factors

Social factors



Health and safety



Social capital

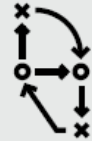


Human capital



Other social factors

Governance factors



Governance structure



Risk management, culture, and oversight



Transparency and reporting



Other governance factors

Principle One

Our long-term issuer credit ratings do not have a pre-determined time horizon.

Principle Two

The current and potential future influence of ESG credit factors on creditworthiness can differ by industry, geography, and entity.

Principle Three

The direction of and visibility into ESG credit factors may be uncertain and can change rapidly.

Principle Four

The influence of ESG credit factors may change over time, which is reflected in the dynamic nature of our credit ratings.

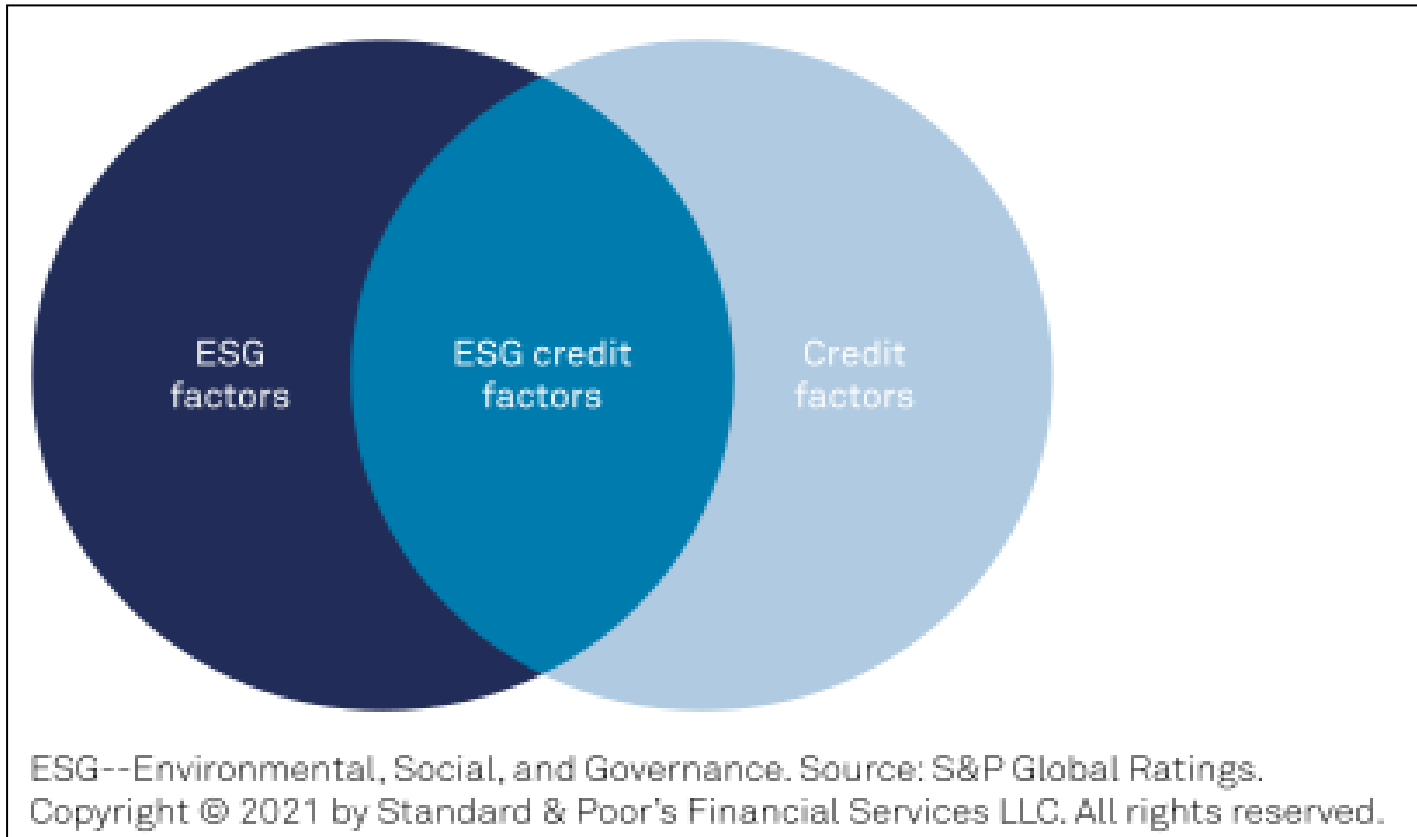
Principle Five

Strong creditworthiness does not necessarily correlate with strong ESG credentials and vice versa.

ESG--Environmental, social, and governance, Source: S&P Global Ratings.
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ESG In Credit Ratings: **Materiality Is Key**

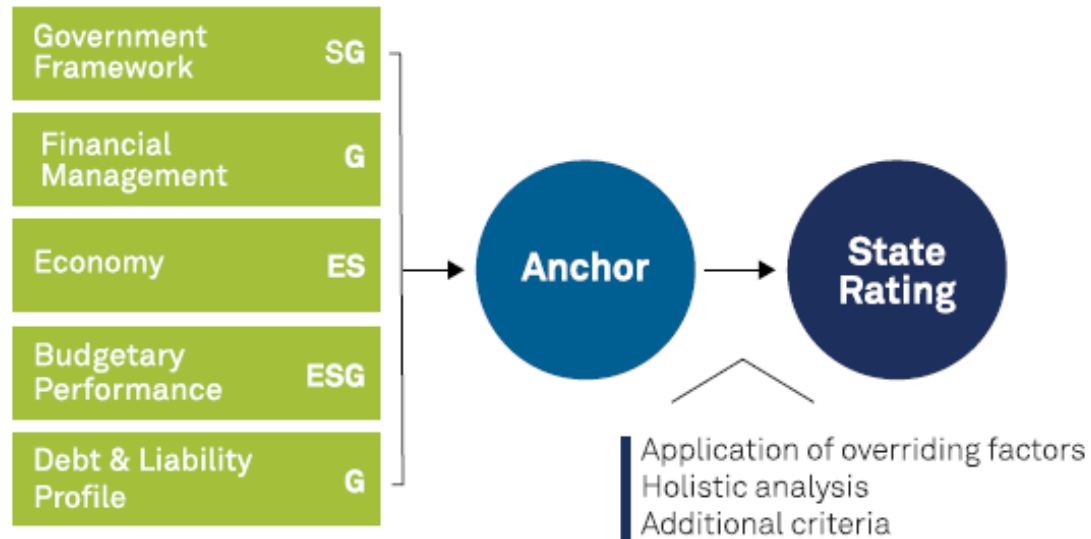
The materiality of ESG factors varies by sector and region and may or may not be relevant in our rating analysis



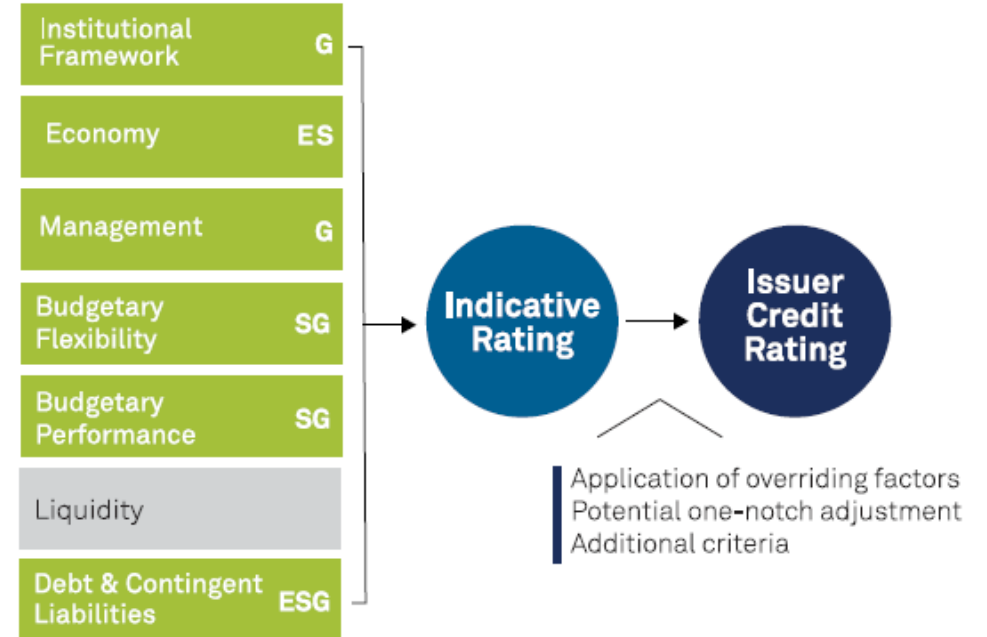
- ESG factors incorporate an entity's impact from, and effect on the natural and social environment and the quality of its governance.
- **Not all ESG factors materially influence creditworthiness.**
- **ESG credit factors** are those ESG factors that can **materially influence the creditworthiness** of a rated entity and for which we have **sufficient visibility and certainty** to include in our rating analysis.

ESG Risks and Opportunities: **Within our Criteria Frameworks**

U.S. States



U.S. Local Governments



Through the ESG Lens 2.0: A Deeper Dive Into U.S. Public Finance Credit Factors, published April 28, 2020

Focus on Thought Leadership

Transparency of how ESG Credit Factors affect credit ratings

ESG Credit Factors: Our Outlook for 2022

ESG Outlook For 2022 - What We're Watching



Climate transition risks



Physical risks



Human capital



Transparency and reporting

ESG in U.S. Public Finance Credit Ratings: 2022 Outlook and 2021 Recap, published Nov. 29, 2021

Climate Transition Risks:

- U.S. and Global policy directives towards net-zero will likely accelerate risks for U.S. Public Finance issuers, particularly public power entities.

Physical Risks:

- Climate change has led to more frequent and severe physical climate risks that challenge credit quality for muni issuers. In addition, we believe insurance costs stemming from large insurer losses will drive higher insurance costs that could dampen long-term economic growth for some regions.

Human Capital:

- The 'Great Resignation' had led to widespread labor shortages and could challenge recruitment and remuneration and higher operating costs, particularly for health care entities that were also experiencing clinician burnout as a result of the pandemic.

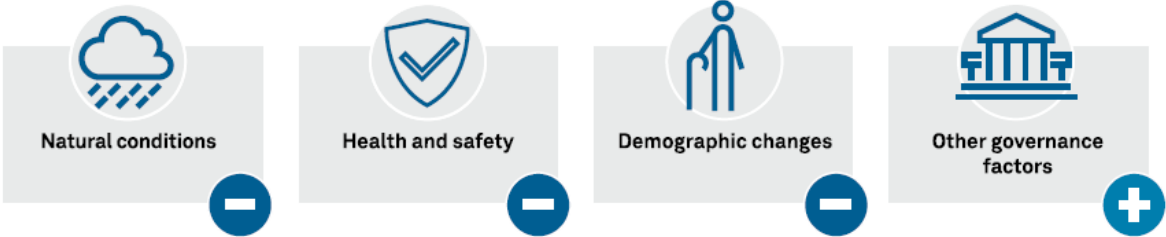
Transparency and Reporting:

- Multiple disclosure initiatives underway will likely take hold in 2022 resulting in a higher bar for climate risk disclosure for municipal issuers.

USPF ESG Report Cards: House View of ESG Risks and Opportunities within our Credit Ratings for Governments and Not-for-Profit Enterprises

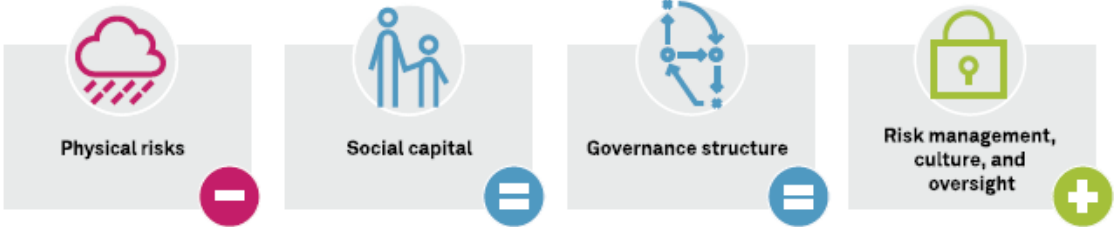
Tri-State, published Oct. 28, 2020

ESG Risks And Opportunities For The Tri-State Region



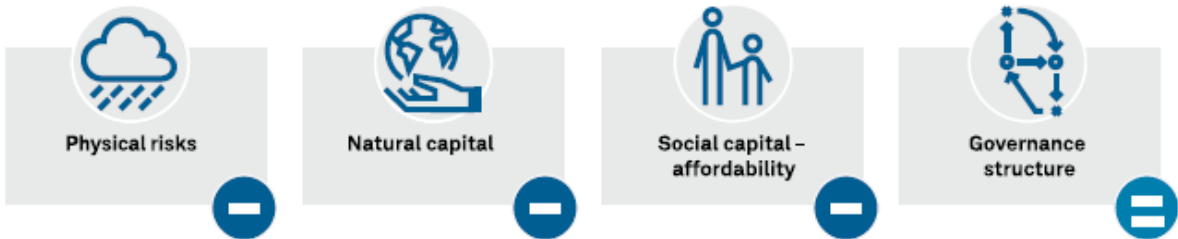
Florida, published Sept. 9, 2021

ESG Risks And Opportunities For Florida



California, published June 16, 2021

ESG Risks And Opportunities For California



Texas, published Sept. 23, 2021

ESG Risks And Opportunities For Texas



ESG Briefs: A Clear and Concise Credit View of a Specific ESG Credit Factor

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ESG Brief: Emerging Themes In U.S. Public Finance

June 3, 2021

As the health and safety crisis resulting from the pandemic wanes in the U.S., S&P Global Ratings believes U.S. public finance (USPF) issuers will face challenges adapting to a rapidly evolving environmental, social, and governance (ESG) landscape while adjusting to a sharp shift in federal policies under the Biden administration. We believe these issues will shape emerging risks or opportunities with the potential to alter USPF issuers' credit fundamentals. In this inaugural ESG Brief, we provide an overview of these themes and examples of forward-looking analytical considerations.

What We're Watching



Energy Transition Risk

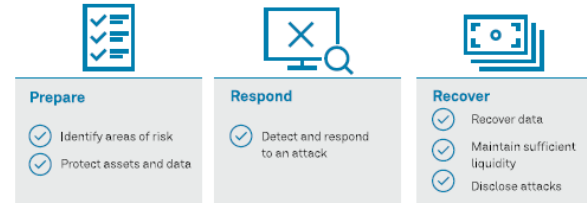
S&P Global
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ESG Brief: Cyber Risk Management In U.S. Public Finance

June 28, 2021

What We're Watching



Source: S&P Global Ratings.
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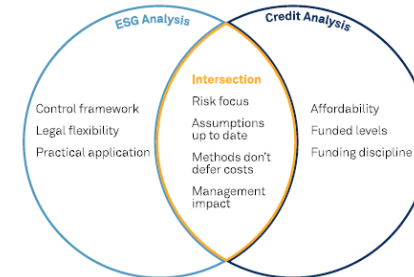
ESG Brief: ESG Pension And OPEB Analysis In U.S. Public Finance

October 7, 2021

Environmental, social, and governance (ESG) is integral to our public finance credit analysis and we continue to amplify our transparency efforts for market participants. This brief aims to identify when our view of pension analytics and governance as part of ESG intersects with credit rating analysis.

Chart 1

The Intersection Of ESG And Credit Analysis



Source: S&P Global Ratings.
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