

NAS Panel: Firm- and Industrial-Level Responses to Decarbonization Goals

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Responses to Decarbonization Goals:

Policy nudges behavior

Increased Expectations to Decarbonize

U.S. Policy Accelerators

- ➔ 1. EO 14008 – Tackling the Climate Crisis at Home and Abroad
- ➔ 2. EO 14030 – Climate-related Financial Risk
- ➔ 3. EO 14037 – Strengthening American Leadership in Clean Cars and Trucks
- ➔ 4. U.S. Inflation Reduction Act
- ➔ 5. U.S. SEC Proposed Rule for Climate Related Disclosures
- ➔ 6. California Climate Disclosure Laws (SB 253, 261)
- ➔ 7. U.S. Federal Acquisition Regulation Rule on Sustainable Procurement
- ➔ 8. U.S. GSA Federal Advisory Committee on Embedding Sustainability into Federal Acquisitions

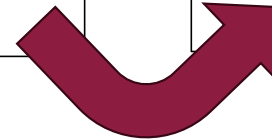
Global Policy Accelerators

- ➔ 1. EU Procurement for a Circular Economy
- ➔ 2. EU Sustainable Public Procurement and Ecolabelling Project
- ➔ 3. EU Corporate Sustainability Reporting Directive
- ➔ 4. UN's Sustainable Development Goals
- ➔ 5. OECD's Green Public Procurement Initiative
- ➔ 6. Canada – Standard on the Disclosure of Greenhouse Gas Emissions and the Setting of Reduction Targets
- ➔ 7. Japan – Act on Promoting Green Purchasing
- ➔ 8. S. Korea -- Act on the Promotion of Purchase of Green Products

Supply Chain Impacts

...the Federal Government shall use its scale and procurement power to achieve... net-zero emissions from Federal procurement

Increased focus on sustainability standards and reporting



Sustainability Reporting

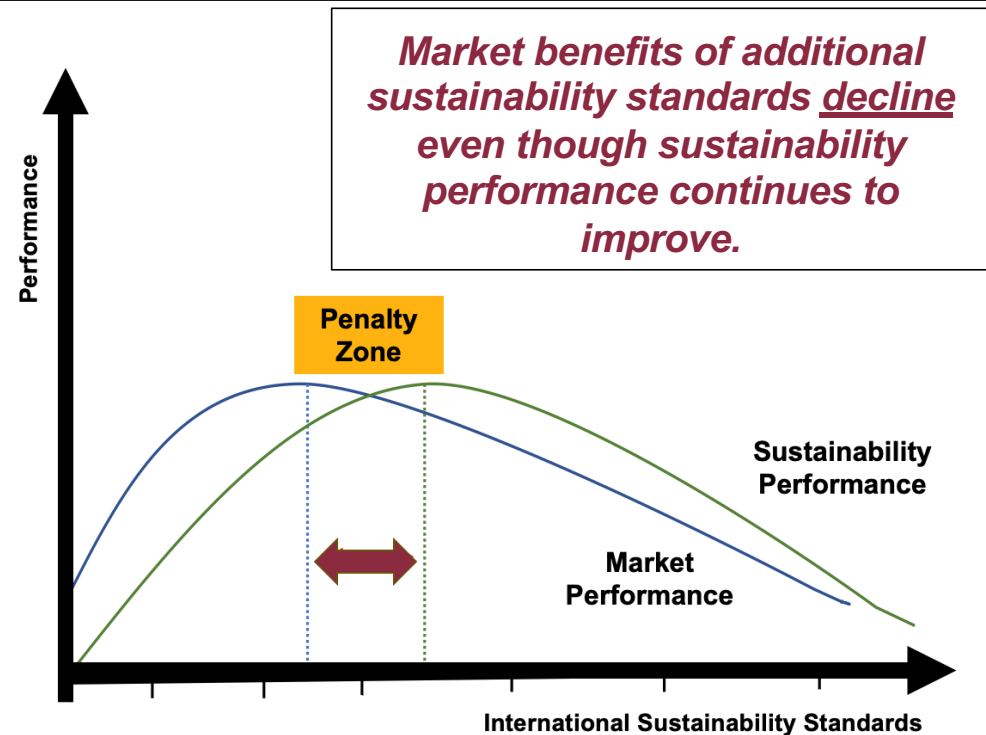
- Emphasis is on disclosure
- Limited focus on:
 - Actual performance
 - Monitoring and conformance expectations
 - Discouraging greenwashing
- Small and medium sized firms are exempt
- Scope 3 (procurement) emissions not part of firms' net zero pledges

Why Focus on Sustainability Standards + Reporting?

Rationale: Leverage the Market!

Firms' actual sustainability performance improvements that come with increased use of sustainability standards will be rewarded equivalently in the market.

Darnall N, Iatridis K, Kesidou E, Snelson-Powell A. 2023. Penalty zones in international sustainability standards: where sustainability doesn't pay. *Journal of Management Studies*. DOI: 10.1111/joms.12975.



Firm- and Industrial-Level Responses to Decarbonization Goals...

Topics, Questions, Data Needs

Learning how firms...

Engage supply chains to...

- Reduce barriers to address Scope 3 emissions?
- Encourage the sourcing of reliable data?
- Develop stronger partnerships that facilitate data integration across the supply chain?

Accelerate internal organizational change to...

- Shift internal cultures towards a sustainability mindset?
- Shift internal incentive structures to encourage bolder risk taking and innovation?
- Encourage systems thinking beyond typical reporting expectations?
- Amplify their use of more robust analytic tools for better decisions (e.g., LCA)?

Learn from the leaders

92% of organizations' carbon emissions are due to their procurement decisions (CDP, 2022)

How do we encourage...

Social Science Solutions that...

- Reduce the penalty zone?
- Focus on performance outcomes rather than process conformance?
- Have practical relevance and can be scaled? (e.g., socially embedded research)
 - Integrate engineering models and social science models
 - Climate technologies only reduce climate emissions if they are put into use

Visit: sustainability-innovation.asu.edu/SPRI

Questions?

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Thank You
