Decarbonization Policy Global Outlook



Tiffany HuaResearch Analyst, Team Captain



IN 2022, INDUSTRIAL PROCESSES EMITTED

GTONNE OF CO₂ 9,150,000,000 TONNE IN 2022, INDUSTRIAL PROCESSES EMITTED

27%
OF TOTAL
EMISSIONS

Emissions climbed in the past 2 decades

2005

Kyoto Protocol enters into force

EU Emissions Trading
System (ETS)

2010

EU Industrial Emissions
Directive (VED)

2015

The Paris Climate

Agreement at COP21

2019

Establishment of the UN's Sustainable Development Goals

EU Green Deal

2003

U.S. Clear Air Acc

2009

EU Renewable Energy
Directive

American Recovery and Reinvestment Act

2014

EU issues ESG Directive 2017

China's carbon market

Navigating the next decade of decarbonization policy

EU Fit for 55
Package

2023

What makes this decade different?

2020 COVID

U.S. Inflation Reduction Act (IRA)

Source: International Energy Agency ("CO₃ Emissions In 2022")

THE LUX POLICY COMPASS

⊘ EVOLVING

POLICY LIKELIHOOD: LOW BUSINESS IMPACT: HIGH

POLICY LIKELIHOOD: LOW BUSINESS IMPACT: LOW

Policy A Policy B IMPACT **BUSINESS** Policy C POLICY LIKELIHOOD

DISRUPTIVE (!)

POLICY LIKELIHOOD: HIGH BUSINESS IMPACT: HIGH

MANAGEABLE (1)

POLICY LIKELIHOOD: HIGH BUSINESS IMPACT: LOW

THE LUX POLICY COMPASS



BUSINESS IMPACT

The business impact score represents how a policy affects the six major aspects of the industrial sector and its value chains, including:

- Input
- Process
- End of life
- Product and service
- Transparency
- Demand





POLICY LIKELIHOOD

The likelihood of a policy or regulation to materialize, from ideation to implementation. Key considerations include:

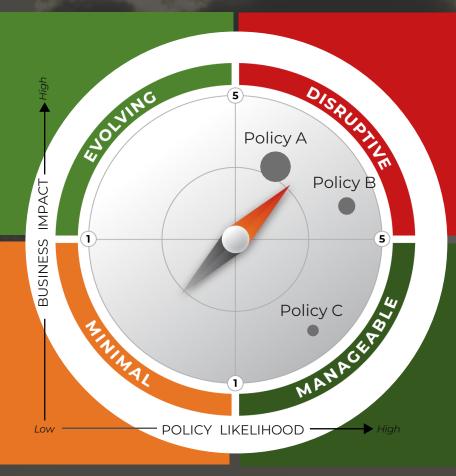
- Policy's current status
- Governmental approval
- External approval
- Political volatility
- Policy instruments

THE LUX POLICY COMPASS

EVOLVING

POLICY LIKELIHOOD: LOW BUSINESS IMPACT: HIGH

POLICY LIKELIHOOD: LOW BUSINESS IMPACT: LOW



DISRUPTIVE (!)

POLICY LIKELIHOOD: HIGH BUSINESS IMPACT: HIGH

MANAGEABLE (I)
POLICY LIKELIHOOD: HIGH
BUSINESS IMPACT: LOW

Let's look at decarbonization policy through 3 key mechanisms:

Emissions Restrictions

Fostering Innovation

C climeworks

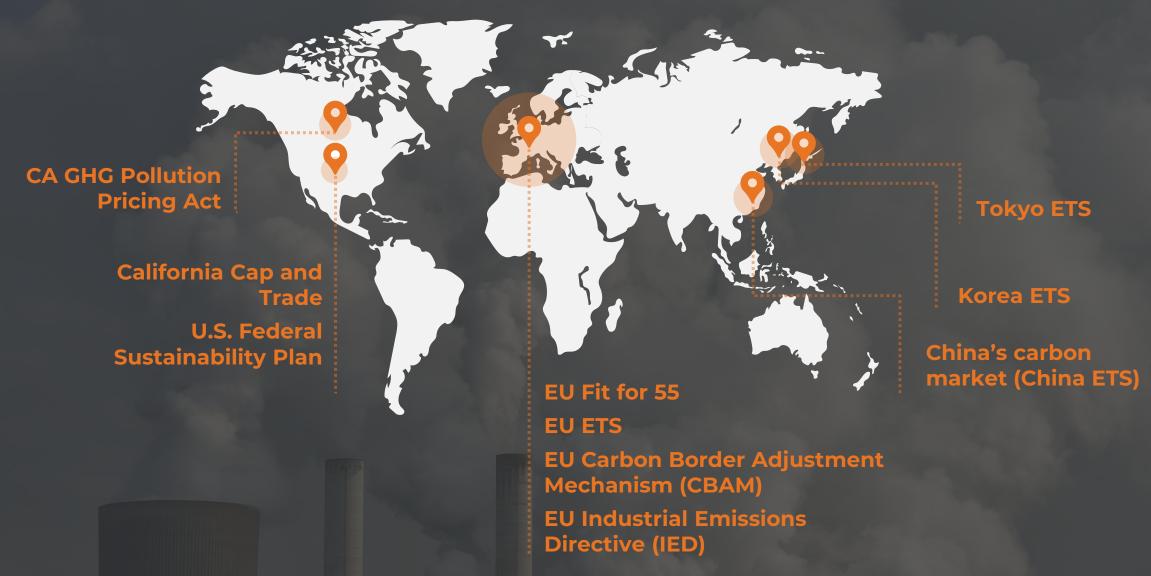
Reporting and Disclosures



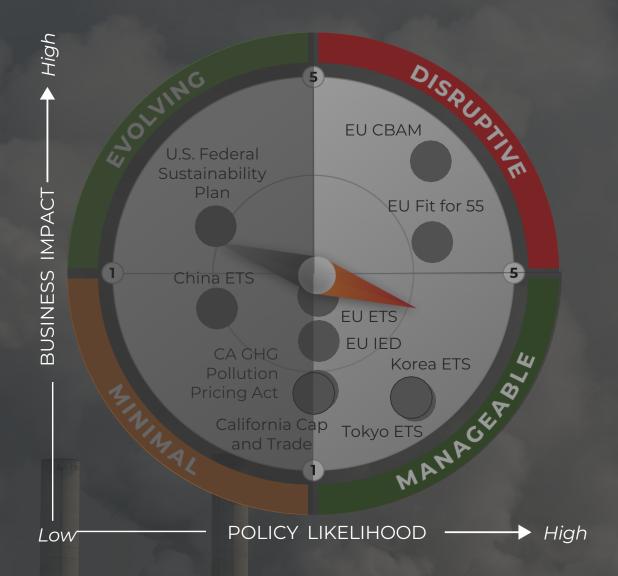


Reporting and Disclosures

Policies on Emissions Restrictions



Policies on Emissions Restrictions



The EU CBAM

CBAM entered into force in October 2023. The mechanism was initially proposed in July 2021.

The mechanism exists to address the carbon leakage of ETS.

CBAM levies an import tax that is directly related to the carbon emissions associated with the production of imported goods.

Its implementation will be seen in the next several years as the mechanism and the existing ETS are harmonized.

The goal is to level the playing field and equalize the emission costs of goods and services in the EU despite their origins.



CBAM will force the industrial sector to pay attention to carbon usage, which will be disruptive if companies aren't prepared. Industry must be ready to monitor CBAM's implementation.

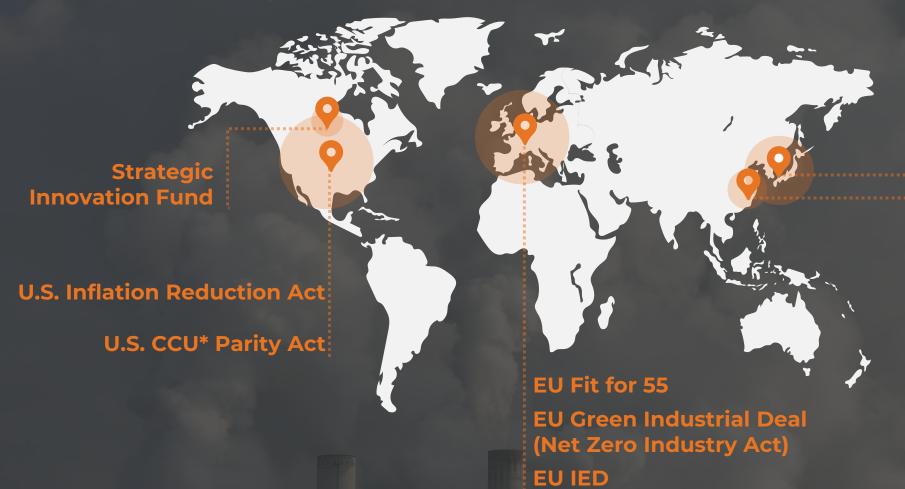








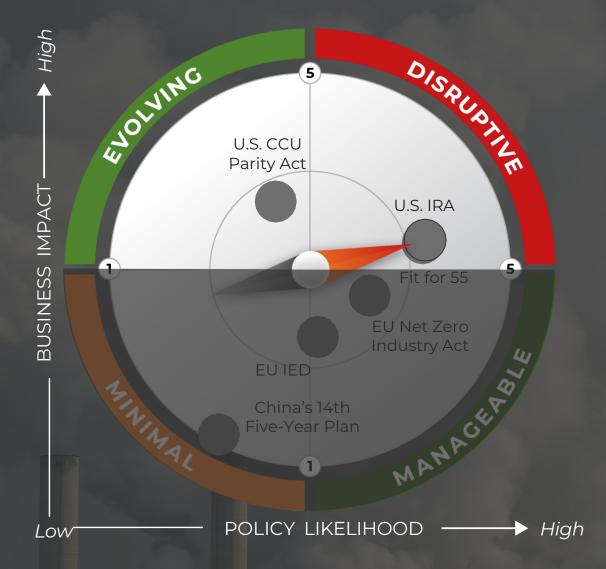
Policies Fostering Innovation



Japan Green Growth
Strategy
Japan Green
Innovation Fund

China's 14th Five-Year Plan

Policies Fostering Innovation



U.S. CCU Parity Act

The CCU Parity Act was introduced in late February 2023 to the U.S. Congress.

The bill aims to increase tax credits for CCU incentives that support carbon capture and sequestration in the power and industrial sectors.

Specifically, the legislation establishes parity between the 45Q carbon capture tax credit for utilization and sequestration, further incentivizing a wider breadth of CCUS* in the U.S.



While the bill has only recently been introduced, it's likely to pass given its bipartisan support. Clients should incorporate this policy into innovation activities to understand opportunities.





Policies on Reporting and Disclosures

California State Bill 253:
Corporate Accountability
on Climate Data

Disclosures (TCFD)

Sustainability

Standards Board

of Japan (SSBJ)

Financial

Japan Task Force

on Climate-related

K-ESG*

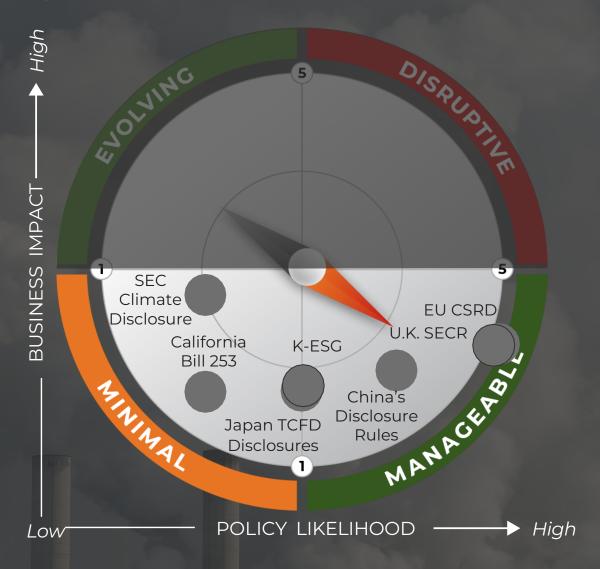
China's Environmental Information Disclosure Rules

U.S. SEC Rule on Climate Disclosures

EU Corporate Sustainability Reporting Directive (CSRD)

U.K.'s Streamlined Energy and Carbon Reporting (SECR) policy

Policies on Reporting and Disclosures



EU Corporate Sustainable Reporting Directive

In 2023, the CSRD entered into force. Proposed in 2021, the CSRD amends the 2014 EU Non-Financial Reporting Directive.

Companies listed in the EU market must report on emissions including Scope 1, Scope 2, and, where relevant, Scope 3.

The reporting requirements will also cover other ESG factors.

The directive applies to more than 50,000 EU-based companies. The new reporting requirements will apply in 2024 for report publication in 2025.



It's critical to review the CSRD and prepare, especially for those with business in the EU. The CSRD is worth closely monitoring to see how mandated disclosures and standards play out and what lessons and innovations result.





Summarizing the Global Outlook

CA GHG Pollution Pricing Act

Tokyo ETS
Japan Green
Growth Strategy
Japan TCFD
SSBJ

Korea ETS K-ESG

U.S. Federal Sustainability Plan
U.S. Inflation Reduction Act
U.S. CCU Parity Act
California State Bill 253
U.S. SEC Rule on Climate
Disclosures

EU Fit for 55
EU Green Industrial Deal
Net Zero Industry Act
CBAM
EU CSRD
U.K. SECR

China ETS
China's 14th Five-Year Plan
China's Environmental
Information Disclosure
Rules

Navigating the next decade of decarbonization policy

2023

What makes this decade different?

- 1. Cohesion of policy mechanisms
- 2. Global cross-pollination of policy
- 3. Exposure and availability of data

Source: International Energy Agency ("CO₂ Emissions In 2022")

25

Key Takeaways

The EU is the standard for its cohesive policy approach

The EU's decarbonization plan includes all three policy mechanisms and is setting the tone for the global landscape to follow, as we have seen previously.

Decarbonization policy mechanisms are diffusing globally

Expect more cross-pollination of policy ideals from Europe as discussions of counters to CBAM are signs that more aggressive and cohesive policies are coming globally.

Exposed emissions reporting will force solutions

Clients need to engage in carbon accounting, if not doing so already. Furthermore, clients must proactively investigate tools and innovations to bring forth in response.

Thank you

A link of the webinar recording will be emailed within 24–48 hours.

UPCOMING WEBINARS

NOVEMBER 30

Making Sustainability Irresistible: Unlocking the Desirability Formula DECEMBER 12

<u>Ideathons 2023 Recap:</u> Highlights from Innovator Showcases

DECEMBER 19

Putting Sustainable Manufacturing Into Practice



questions@luxresearchinc.com



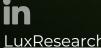
VISIT

www.luxresearchinc.com



READ

http://www.luxresearchinc.com/blog/



LuxResearch





