Discovery Challenge: When NGOs Sue the EU for “Green” Planes and Ships

The Puzzle

- Nov 2023: EU adds aviation/shipping to taxonomy
- 100% of Ryanair, easyJet, Wizz Air orders: “Best-in-class”
- 90% of Airbus order books could qualify as green
- Ships/planes running on fossil fuels eligible
- August 2024: NGOs file lawsuit (Court of Justice)
- Greenpeace also sued over gas & nuclear (2023)

Questions This Raises

- How can fossil fuel transport be “sustainable”?
- Is the taxonomy being watered down?
- What happens to taxonomy credibility?
- Can investors trust EU green labels?
- What’s the legal basis for inclusion?
- How do you define “substantial contribution”?

[Discovery 1] This puzzle will be resolved by Goal 1—EU Taxonomy structure and criteria

Learning Goal 1

Master the EU Taxonomy Framework

theoretical — Foundation - Establishes classification system

The EU Taxonomy: A Classification System for Sustainability

What is the EU Taxonomy?
The EU Taxonomy (Regulation 2020/852) is a classification system establishing a list of environmentally sustainable economic activities.

Purpose:

- Provide common language for sustainability
- Prevent greenwashing
- Channel capital to sustainable activities
- Support EU Green Deal objectives

Key Features

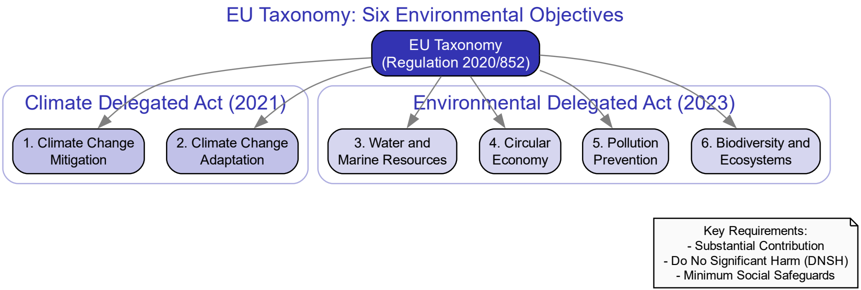
- Science-based criteria
- Activity-level classification
- Binary: aligned or not aligned
- Mandatory reporting for large companies
- Foundation for other EU regulations

Scope:

- Financial market participants
- Large companies (NFRD/CSRD scope)
- EU Member States

[Goal 1] The EU Taxonomy is the cornerstone of EU sustainable finance regulation

Six Environmental Objectives



[Goal 1] Activities must substantially contribute to at least one objective without harming others

Climate Objectives vs. Environmental Objectives

Climate Delegated Act (2021)
Objectives 1 and 2: Climate focus

1. **Climate Change Mitigation**
    - Reducing GHG emissions
    - Renewable energy generation
    - Energy efficiency improvements
    - Clean transportation
    - Carbon capture and storage
2. **Climate Change Adaptation**
    - Increasing resilience to physical risks
    - Climate-proofing infrastructure
    - Adaptation solutions

Environmental Delegated Act (2023)
Objectives 3-6: "Taxo4" expansion

3. **Water and Marine Resources**
    - Sustainable water use
    - Marine ecosystem protection
4. **Circular Economy**
    - Resource efficiency
    - Waste prevention and recycling
5. **Pollution Prevention**
    - Reducing emissions to air, water, land
6. **Biodiversity and Ecosystems**
    - Ecosystem restoration
    - Sustainable land use

[Goal 1] Taxo4 objectives became applicable for eligibility reporting from January 2024

Technical Screening Criteria (TSC)

What are TSCs?
Technical Screening Criteria define the performance thresholds that economic activities must meet to be considered sustainable.

TSC Components:

- Quantitative thresholds (e.g., g CO_2/kWh)
- Process requirements
- Certification requirements
- Best available technology standards

Key Principle:
TSCs are science-based and technology-neutral where possible.

Examples of TSCs

Electricity Generation:

- Solar/wind: Automatically aligned
- Gas plants: $<$100g CO_2e/kWh lifecycle

Buildings:

- New: Top 10% energy performance
- Renovation: 30% energy reduction

Transportation:

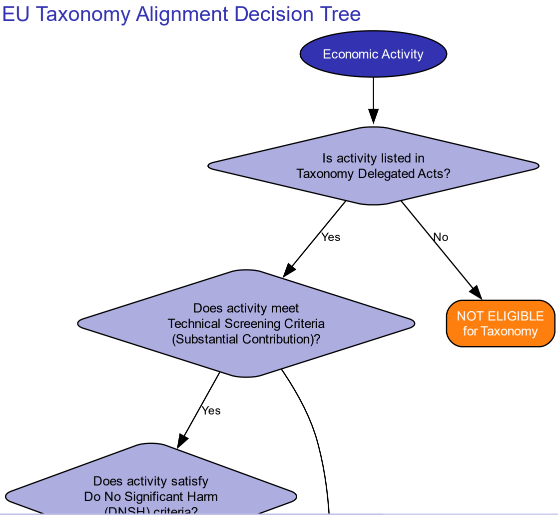
- Cars: 0g CO_2/km (zero emission)
- Rail: Electric or $<$50g CO_2/pkm

Manufacturing:

- Steel: $<$0.97 tCO_2e/t for BF-BOF
- Cement: $<$0.469 tCO_2e/t clinker

[Goal 1] TSCs are updated periodically to reflect technological progress and scientific advances

Taxonomy Alignment Decision Tree



Do No Significant Harm (DNSH) and Minimum Safeguards

Do No Significant Harm (DNSH)
An activity cannot qualify as sustainable if it causes significant harm to any of the other five environmental objectives.

DNSH Criteria Examples:

- Climate adaptation: Physical risk assessment
- Water: Water footprint analysis
- Circular economy: Waste management plans
- Pollution: Emission limit compliance
- Biodiversity: Environmental impact assessment

Why DNSH Matters:

- Prevents burden-shifting between objectives
- Ensures holistic environmental benefit

Minimum Social Safeguards
Companies must demonstrate compliance with:

International Standards:

- OECD Guidelines for MNEs
- UN Guiding Principles on Business and Human Rights
- ILO Core Conventions
- International Bill of Human Rights

Due Diligence Areas:

- Human rights
- Labor rights
- Anti-corruption and bribery
- Fair competition
- Taxation

[Goal 1] DNSH and social safeguards ensure activities are sustainable holistically, not just in one dimension

Taxonomy Eligibility vs. Taxonomy Alignment

Taxonomy Eligibility

Definition:
An activity is *eligible* if it is described in the Taxonomy Delegated Acts, regardless of whether it meets the criteria.

What It Shows:

- Potential for sustainability
- Coverage of activity in Taxonomy
- First step in assessment

Reporting:

- Required from FY 2022
- Taxo4 eligibility from FY 2024

Taxonomy Alignment

Definition:
An activity is *aligned* if it meets all four criteria: substantial contribution, DNSH, minimum safeguards, and TSC compliance.

What It Shows:

- Verified sustainability
- Full compliance with criteria
- "Green" classification

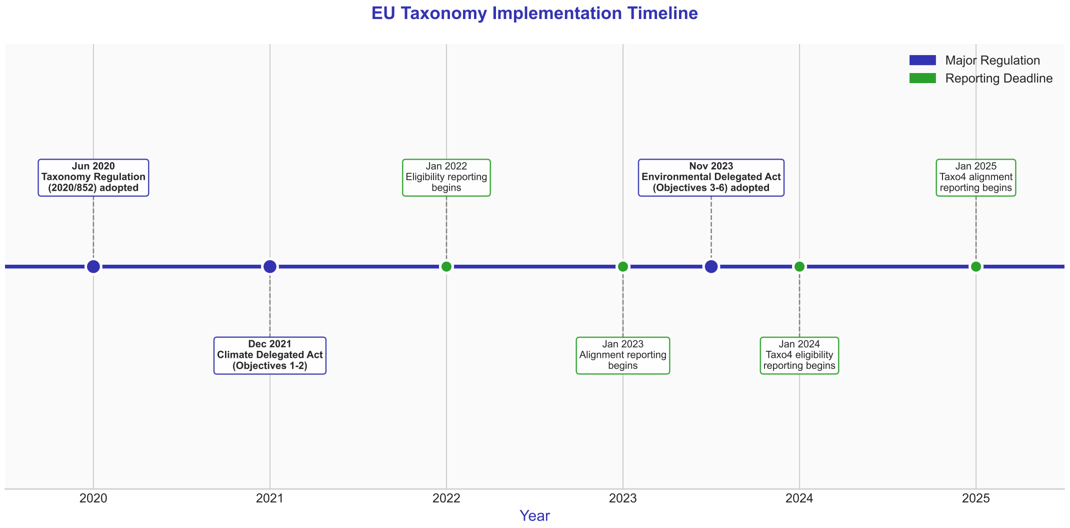
Reporting:

- Required from FY 2023
- Taxo4 alignment from FY 2025

Key Insight:
Eligibility $\neq$ Alignment
High eligibility with low alignment indicates transition potential.

[Goal 1] Companies typically report higher eligibility than alignment, revealing the gap between potential and verified sustainability

EU Taxonomy Implementation Timeline



[Goal 1] The Taxonomy continues to evolve with new activities and updated criteria

Discovery Challenge: The Great Article 9 Downgrade Wave

The Puzzle

- 70% of Article 9 ETFs reclassified to Article 8
- 40% of Article 9 AUM downgraded (several months)
- Amundi: EUR 45B reclassified from Article 9 to 8
- Article 9 passive market share: 24.1% to 5.1% (Sep 2022 to Jan 2023)
- Robeco, NN IP, Kempen, Invesco, Pimco followed
- 90% of downgraded assets were equity funds

Questions This Raises

- Why such massive reclassification?
- Were Article 9 criteria unworkable?
- Did managers misunderstand requirements?
- What about investor trust?
- Is SFDR fit for purpose?
- How do you define "100% sustainable"?

[Discovery 2] This puzzle will be resolved by Goal 2—SFDR Article 8/9 requirements

Learning Goal 1: Summary

What We Achieved

- ✓ Understood the purpose and structure of EU Taxonomy
- ✓ Learned all six environmental objectives
- ✓ Mastered eligibility vs. alignment distinction
- ✓ Understood TSC, DNSH, and safeguards
- ✓ Reviewed implementation timeline

Can You Now...

- Explain why the Taxonomy was created?
- List the six environmental objectives?
- Apply the decision tree to an activity?
- Distinguish eligibility from alignment?
- Identify which Delegated Act applies?

Key Takeaway:
The EU Taxonomy provides the classification foundation for all EU sustainable finance regulation.

[Goal 1] Achieved - Foundation established for SFDR and CSRD implementation in Goal 2

Learning Goal 2

Implement SFDR and CSRD Disclosure Requirements

quantitative — Build - Develops compliance and reporting skills

Sustainable Finance Disclosure Regulation (SFDR)

What is SFDR?
SFDR (Regulation 2019/2088) requires financial market participants to disclose sustainability-related information.

Scope:

- Asset managers
- Insurance companies
- Pension funds
- Investment advisors
- Banks (investment products)

Disclosure Levels:

- Entity-level (firm-wide)
- Product-level (each fund)

Key Requirements

Entity-Level:

- ESG integration policies
- Principal Adverse Impacts (PAI)
- Remuneration policies

Product-Level:

- Pre-contractual disclosures
- Periodic reports
- Website disclosures

Implementation:

- Level 1: March 2021
- Level 2 (RTS): January 2023

[Goal 2] SFDR creates a disclosure framework linking to EU Taxonomy for product classification

SFDR Fund Classification: Article 6, 8, and 9

Article 6 Funds

- No sustainability characteristics promoted
- Must disclose how ESG risks are integrated
- "Mainstream" funds
- 40% of EU fund market (2024)

Article 8 Funds ("Light Green")

- Promote environmental/social characteristics
- May include sustainable investments
- Binding ESG criteria in investment process
- 56% of EU fund market (2024)

Article 9 Funds ("Dark Green")

- Sustainable investment as objective
- All investments must be sustainable
- Most stringent requirements
- 4% of EU fund market (2024)

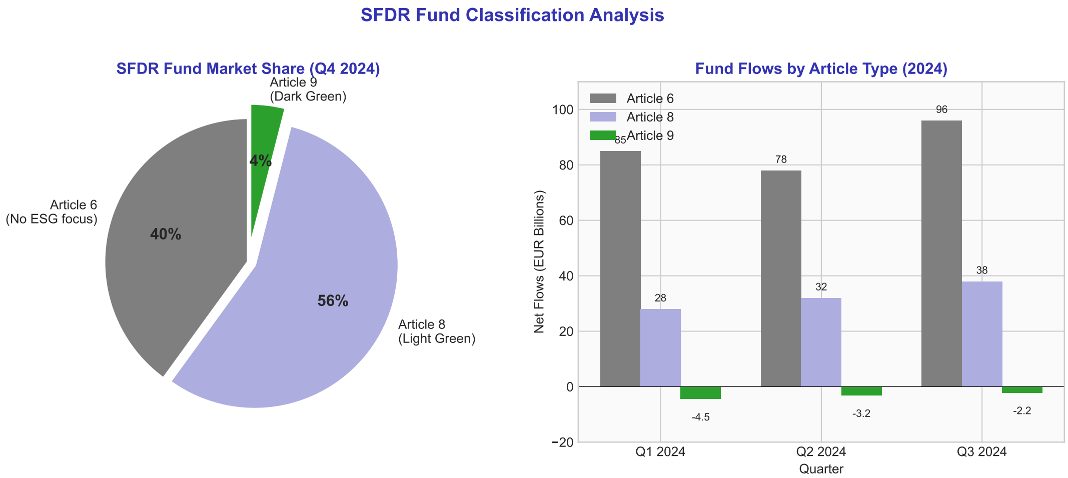
Key Distinction:

- Art. 8: ESG as *characteristic*
- Art. 9: Sustainability as *objective*

Trend:
Many funds downgraded from Art. 9 to Art. 8 in 2023 due to stricter interpretation.

[Goal 2] Article 8 and 9 funds represent 60% of the EU fund market, holding approximately 6 trillion EUR

SFDR Fund Classification and Flows (2024)



[Goal 2] Article 8 funds saw record inflows in Q3 2024 while Article 9 experienced continued outflows

Principal Adverse Impact (PAI) Indicators

What are PAIs?
PAIs measure the negative impacts of investment decisions on sustainability factors.

Reporting Requirement:

- Mandatory for firms >500 employees
- "Comply or explain" for smaller firms
- Published annually by 30 June

18 Mandatory Indicators:

- 9 climate/environmental
- 5 social (human rights, labor)
- 2 for sovereigns
- 2 for real estate

Key Environmental PAIs

- GHG emissions (Scope 1, 2, 3)
- Carbon footprint
- GHG intensity
- Fossil fuel exposure
- Energy consumption intensity
- Biodiversity impact

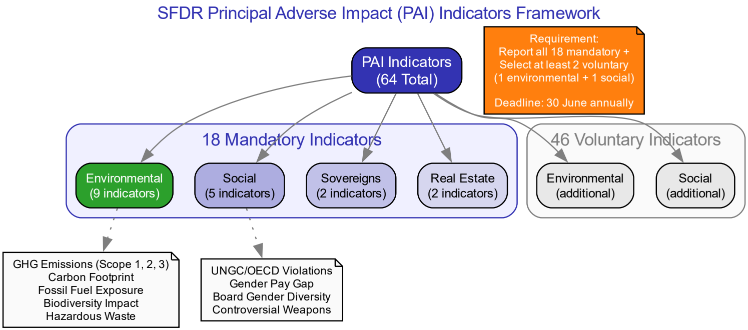
Key Social PAIs

- UNGC/OECD violations
- Unadjusted gender pay gap
- Board gender diversity
- Controversial weapons exposure

Voluntary: 46 additional indicators (select at least 2: 1 environmental + 1 social)

[Goal 2] PAI reporting creates standardized metrics for comparing sustainability impacts across investments

PAI Indicator Framework



[Goal 2] Financial market participants must report all 18 mandatory PAIs plus selected voluntary indicators

Corporate Sustainability Reporting Directive (CSRD)

What is CSRD?
CSRD (Directive 2022/2464) replaces NFRD and significantly expands corporate sustainability reporting requirements.

Scope Expansion:

- NFRD: ∼11,700 companies
- CSRD: ∼50,000 companies

Key Features:

- Mandatory ESRS standards
- Double materiality assessment
- Limited assurance requirement
- Digital tagging (XBRL)

Phased Implementation

Phase 1 (FY 2024):

- Large companies already under NFRD
- Reports due in 2025

Phase 2 (FY 2025):

- Large companies meeting 2 of 3 criteria
- >250 employees, >25M balance sheet, >50M turnover

Phase 3 (FY 2026):

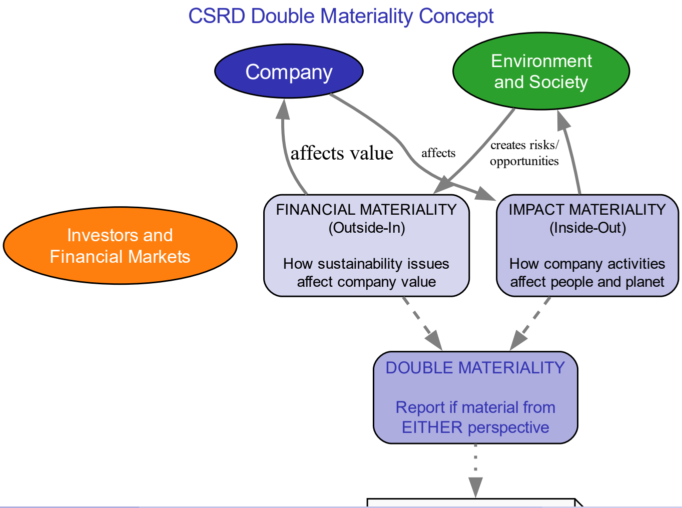
- Listed SMEs (opt-out until 2028)

Phase 4 (FY 2028):

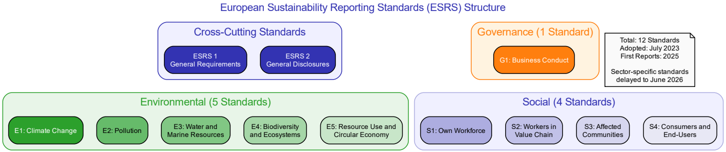
- Non-EU companies with EU operations

[Goal 2] CSRD creates a comprehensive corporate reporting framework aligned with EU Taxonomy

Double Materiality: The CSRD Approach



European Sustainability Reporting Standards (ESRS)



[Goal 2] ESRS provides 12 standards covering environmental, social, and governance topics

Discovery Challenge: Regulatory Arbitrage in Sustainable Finance

The Puzzle

- EU: Strict SFDR + Taxonomy requirements
- UK: Sustainability Disclosure Requirements (SDR) differ
- US: SEC Names Rule (80% requirement only)
- Asia: Multiple competing frameworks (Singapore, HK, Japan)
- Same fund can be "sustainable" in one market, not another
- Greenwashing investigations up exponentially

Questions This Raises

- Why no global standard?
- Can managers exploit differences?
- Which jurisdiction has toughest rules?
- How do you comply across markets?
- What about extra-territorial reach?
- Will regulations converge?

[Discovery 3] This puzzle will be resolved by Goal 3—global regulatory comparison

Learning Goal 2: Summary

What We Achieved

- ✓ Mastered SFDR Article 6/8/9 classification
- ✓ Understood PAI indicator framework
- ✓ Learned CSRD scope and timeline
- ✓ Applied double materiality concept
- ✓ Reviewed ESRS standards structure

Can You Now...

- Classify a fund as Article 6, 8, or 9?
- Identify mandatory PAI indicators?
- Determine if a company is in CSRD scope?
- Explain double materiality?
- Navigate the ESRS standards?

Key Metrics:

- SFDR Art. 8/9: 60% of EU funds
- CSRD scope: ∼50,000 companies
- ESRS: 12 standards

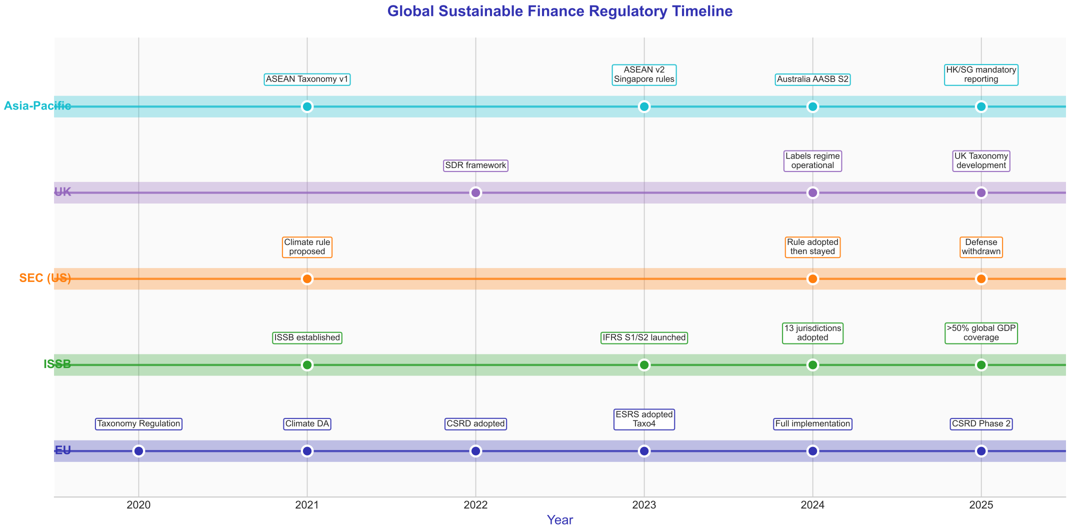
[Goal 2] Achieved - Ready to explore global regulatory landscape in Goal 3

Learning Goal 3

Navigate Global Regulatory Landscape

applied — Apply - Develops global compliance perspective

Global Sustainable Finance Regulatory Timeline



[Goal 3] The regulatory landscape is evolving rapidly across all major jurisdictions

ISSB/IFRS Sustainability Standards: The Global Baseline

What is ISSB?
The International Sustainability Standards Board creates global baseline standards for sustainability disclosures.

IFRS S1: General Requirements

- Sustainability-related risks and opportunities
- Governance, strategy, risk management
- Metrics and targets
- Value chain considerations

IFRS S2: Climate Disclosures

- GHG emissions (Scope 1, 2, 3)
- Physical and transition risks
- Scenario analysis
- Climate-related targets

Global Adoption Status (Dec 2024)

Adopted/Mandatory:

- 13 jurisdictions adopted
- 22 jurisdictions planning
- >50% of global GDP covered

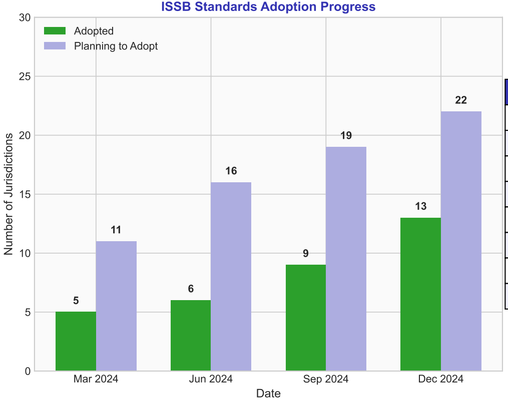
Key Adopters:

- Turkey: Mandatory from Jan 2024
- Australia: Mandatory from Jan 2025
- Singapore: From 2025
- Hong Kong: Planned 2025
- UK: From 2025

IOSCO Endorsement:
130 jurisdictions (95% of global financial markets)

[Goal 3] ISSB standards provide a global baseline that jurisdictions can build upon

Global ISSB Standards (IFRS S1/S2) Adoption



Key ISSB Adopters (2024-2025)

Jurisdiction	Start Date	Scope
Turkey	Jan 2024	Listed companies
Bangladesh	2024-27	Banks/FIs
Australia	Jan 2025	>A$500M revenue
Singapore	2025	Listed companies
Hong Kong	2025	Listed companies
UK	2025	Premium listed
Japan	2025	Listed companies
Canada	TBD	Consulting

Coverage: >50% of global GDP | IOSCO endorsement: 130 jurisdictions

[Goal 3] Adoption accelerated through 2024, with 35 jurisdictions engaged by year end

US SEC Climate Disclosure Rule: Status and Implications

Rule Overview
The SEC adopted climate disclosure rules in March 2024 (3-2 vote).

Original Requirements:

- Climate-related risks disclosure
- Material Scope 1 and 2 emissions
- Severe weather event disclosures
- Phased-in assurance requirements

Scope 3 Decision:
SEC removed mandatory Scope 3 disclosure from final rule (was in proposal).

Current Status (2025)

Legal Challenges:

- Rule stayed in April 2024
- 9 consolidated court challenges
- Eighth Circuit selected for case

March 2025:

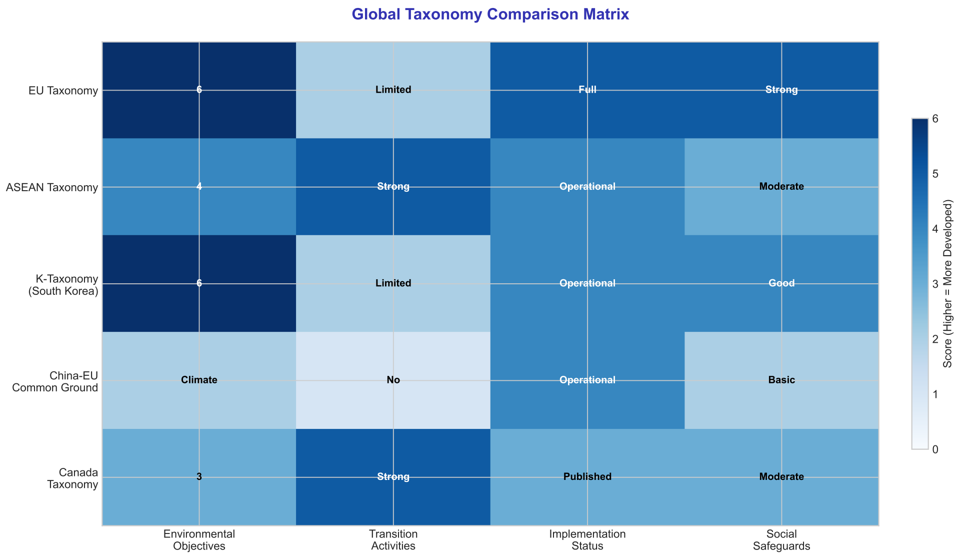
- SEC withdrew defense of rule
- Litigation paused
- Rule effectively in limbo

State-Level Action:

- California SB 253: GHG disclosure
- California SB 261: Climate risk
- May exceed federal requirements

[Goal 3] US federal climate disclosure remains uncertain; state regulations may fill the gap

Global Taxonomy Comparison



Regional Approaches to Sustainable Finance Regulation

UK Approach

Sustainability Disclosure Requirements (SDR):

- Labels regime (from Nov 2024)
- Sustainability Focus, Improvers, Impact
- Anti-greenwashing rule
- UK Taxonomy under development

Asia-Pacific

ASEAN Taxonomy (Version 2, 2023):

- Foundation Framework + Plus Standard
- Transition activities included
- Traffic light approach (green/amber/red)

Singapore

- Singapore-Asia Taxonomy 2024
- SGX climate disclosure from 2025
- Transition activities emphasized

Other Key Jurisdictions

China:

- Common Ground Taxonomy (with EU)
- Focus on climate mitigation

South Korea:

- K-Taxonomy (6 objectives, similar to EU)
- Mandatory ESG disclosure from 2025

Canada:

- Green and Transition Finance Taxonomy (2024)
- Includes transition activities

[Goal 3] Regional variations reflect different economic contexts and transition needs

ISSB-ESRS Interoperability: Toward Convergence

Interoperability Framework
ISSB and EFRAG published joint guidance in 2024 to enable companies to report under both frameworks.

Key Principles:

- ESRS builds on and extends ISSB
- Climate disclosures largely aligned
- ESRS adds double materiality
- Report once, satisfy both

Practical Implications:

- EU companies can use ESRS as baseline
- Non-EU can start with ISSB
- Cross-referencing possible

Key Differences

Materiality:

- ISSB: Single (financial) materiality
- ESRS: Double materiality

Scope:

- ISSB: Climate focus (S2), general (S1)
- ESRS: 12 standards (E, S, G)

Requirements:

- ISSB: Proportionality built in
- ESRS: More prescriptive metrics

Convergence Trend:
Global standards converging around core climate metrics with regional variations.

[Goal 3] Interoperability reduces reporting burden for multinational companies

Practical Guidance: Multinational Compliance

Compliance Strategy

Step 1: Assess Scope

- Identify applicable jurisdictions
- Determine regulatory applicability
- Map overlapping requirements

Step 2: Build Common Foundation

- Start with ISSB as global baseline
- Add regional requirements (EU, UK)
- Develop unified data infrastructure

Step 3: Address Regional Specifics

- EU: CSRD/ESRS, Taxonomy, SFDR
- UK: SDR labels, Taxonomy
- US: State-level requirements

Key Challenges

Data:

- Scope 3 emissions across value chain
- Taxonomy alignment by activity
- PAI data from investees

Timeline:

- Different effective dates
- Phased implementation
- Evolving requirements

Best Practices:

- Centralized sustainability data
- Modular reporting approach
- Regular regulatory monitoring
- Engage with standard-setters

[Goal 3] Start with global baseline (ISSB), then add regional requirements as needed

Learning Goal 3: Summary

What We Achieved

- ✓ Reviewed global regulatory timeline
- ✓ Understood ISSB standards and adoption
- ✓ Analyzed SEC rule status
- ✓ Compared global taxonomies
- ✓ Developed multinational compliance approach

Can You Now...

- Explain ISSB global baseline approach?
- Describe SEC rule current status?
- Compare major taxonomy designs?
- Navigate ISSB-ESRS interoperability?
- Develop multinational compliance strategy?

Key Statistics:

- ISSB: 13 adopted, 22 planning (Dec 2024)
- IOSCO: 130 jurisdictions endorsed
- Global GDP coverage: $>$50%

[Goal 3] Achieved - Week 6 complete: EU Taxonomy to global regulatory navigation mastered