<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Double Materiality Assessment Tool</title>

<style>

body {

font-family: Arial, sans-serif;

margin: 0;

padding: 20px;

background-color: #f5f5f5;

}

.container {

max-width: 1000px;

margin: 0 auto;

background: white;

border-radius: 8px;

box-shadow: 0 2px 8px rgba(0,0,0,0.1);

padding: 20px;

}

h1 {

text-align: center;

margin-bottom: 20px;

font-size: 24px;

}

.controls {

display: flex;

gap: 20px;

margin-bottom: 20px;

}

.control-group {

flex: 1;

}

.button-group {

display: flex;

gap: 10px;

margin-bottom: 20px;

}

.button {

padding: 8px 16px;

background-color: #f0f0f0;

border: 1px solid #ccc;

border-radius: 4px;

cursor: pointer;

font-size: 14px;

}

.button.active {

background-color: #4CAF50;

color: white;

border-color: #4CAF50;

}

label {

display: block;

margin-bottom: 5px;

font-weight: bold;

font-size: 14px;

}

select {

width: 100%;

padding: 8px;

border: 1px solid #ccc;

border-radius: 4px;

}

.chart-container {

position: relative;

border: 1px solid #ddd;

border-radius: 4px;

background-color: #f9f9f9;

margin-bottom: 20px;

}

.info-panel {

position: absolute;

top: 80px;

left: 50%;

transform: translateX(-50%);

width: 70%;

background: white;

border: 1px solid #ccc;

border-radius: 4px;

padding: 15px;

box-shadow: 0 2px 10px rgba(0,0,0,0.1);

z-index: 100;

display: none;

}

.info-panel h3 {

margin-top: 0;

display: flex;

justify-content: space-between;

}

.info-panel .close {

cursor: pointer;

font-size: 20px;

}

.edit-panel {

margin-bottom: 20px;

padding: 15px;

background-color: #f0f0f0;

border-radius: 4px;

display: none;

}

.edit-grid {

display: grid;

grid-template-columns: repeat(auto-fill, minmax(300px, 1fr));

gap: 10px;

}

.edit-item {

padding: 10px;

background-color: white;

border: 1px solid #ddd;

border-radius: 4px;

}

.edit-item-title {

font-weight: bold;

margin-bottom: 8px;

}

.edit-controls {

display: grid;

grid-template-columns: 1fr 1fr;

gap: 8px;

}

.edit-label {

display: block;

font-size: 12px;

margin-bottom: 2px;

}

.edit-input {

width: 100%;

padding: 4px;

border: 1px solid #ccc;

border-radius: 3px;

}

.regulation-info {

margin-top: 10px;

padding-top: 10px;

border-top: 1px solid #eee;

display: none;

}

.footer {

font-size: 12px;

color: #666;

margin-top: 10px;

}

</style>

</head>

<body>

<div class="container">

<h1>Double Materiality Assessment Tool</h1>

<div class="controls">

<div class="control-group">

<label for="framework">Reporting Framework:</label>

<select id="framework" onchange="renderChart()">

<option value="efrag">EFRAG (EU Standards)</option>

<option value="sasb">SASB (International Standards)</option>

</select>

</div>

<div class="control-group">

<label for="sector">Industry Sector:</label>

<select id="sector" onchange="renderChart()">

<option value="energy">Energy</option>

<option value="finance">Financial Services</option>

<option value="manufacturing">Manufacturing</option>

<option value="technology">Technology</option>

<option value="healthcare">Healthcare</option>

<option value="retail">Retail</option>

<option value="food">Food & Beverage</option>

<option value="transportation">Transportation</option>

<option value="packaging">Packaging</option>

<option value="aerospace">Aerospace & Defense</option>

<option value="automotive">Automotive</option>

<option value="chemicals">Chemicals</option>

<option value="construction">Construction</option>

</select>

</div>

</div>

<div class="button-group">

<button id="editButton" class="button" onclick="toggleEditMode()">Edit Values</button>

<button id="regulationButton" class="button" onclick="toggleRegulationDisplay()">Show Regulatory Requirements</button>

</div>

<div id="editPanel" class="edit-panel">

<h3>Edit Material Topic Values</h3>

<div id="editGrid" class="edit-grid">

<!-- Edit controls will be added here dynamically -->

</div>

</div>

<div class="chart-container">

<svg id="chart" width="100%" height="500" viewBox="0 0 800 600"></svg>

<div id="infoPanel" class="info-panel">

<h3>

<span id="topicTitle">Topic Title</span>

<span class="close" onclick="hideInfoPanel()">×</span>

</h3>

<p id="topicInfo">Information about the topic will appear here.</p>

<div style="display: flex; justify-content: space-between; margin-top: 10px; font-size: 14px;">

<div>Financial: <span id="financialValue" style="font-weight: bold;">90%</span></div>

<div>Impact: <span id="impactValue" style="font-weight: bold;">90%</span></div>

<div>Risk: <span id="riskValue" style="font-weight: bold; color: #E53935;">HIGH</span></div>

</div>

<div id="regulationInfo" class="regulation-info">

<h4>Regulatory Requirements:</h4>

<p id="regulationText"></p>

</div>

</div>

</div>

<div class="footer">

<p>Click on any topic to view more information about regulatory requirements and impact considerations.</p>

<p>Data based on EFRAG ESRS and SASB Standards. This tool provides general guidance and should be customized for specific company needs.</p>

</div>

</div>

<script>

// Data for the materiality assessment by framework and sector

const materialityData = {

efrag: {

energy: [ { id: 1, name: "Climate Change", financial: 0.9, impact: 0.95, size: 30, risk: "high", info: "GHG emissions and adaptation strategies. EU CSRD mandatory, SEC Climate Rule proposed.", regulation: "EU CSRD Article 8, NFRD revision, TCFD alignment, EU Taxonomy criteria for climate change mitigation and adaptation. ESRS required KPIs: E1-5: Greenhouse Gas (GHG) emissions (Scope 1, 2, 3), E1-6: Emissions intensity (e.g., per unit of energy produced), E1-7: Renewable energy share in production" }, { id: 2, name: "Energy Management", financial: 0.85, impact: 0.9, size: 28, risk: "medium", info: "Energy consumption and efficiency measures. EU Energy Efficiency Directive applicable.", regulation: "Energy Efficiency Directive (2012/27/EU), Renewable Energy Directive (2018/2001/EU), EU Taxonomy Technical Screening Criteria. ESRS required KPIs: E1-5: Total energy consumption, E1-5: Energy consumption per unit of output, E1-5: Energy efficiency improvements" }, { id: 3, name: "Water Resources", financial: 0.65, impact: 0.8, size: 26, risk: "medium", info: "Water usage, discharge quality, and water-stressed regions impact. EU Water Framework Directive.", regulation: "EU Water Framework Directive (2000/60/EC). ESRS required KPIs: E3-1: Total water withdrawal, E3-2: Water consumption (withdrawal minus discharge), E3-3: Water intensity (per unit of output), E3-4: Water discharge quality (pollutant levels)" }, { id: 4, name: "Biodiversity", financial: 0.55, impact: 0.9, size: 27, risk: "increasing", info: "Ecosystems and species protection. TNFD voluntary reporting, CSRD E4 requirements.", regulation: "TNFD voluntary reporting, EU Biodiversity Strategy for 2030, EU Taxonomy biodiversity criteria. ESRS required KPIs: E4-1: Land use and land-use change impacts, E4-2: Impacts on protected or endangered species, E4-5: Use of biodiversity-related resources" }, { id: 5, name: "Business Ethics", financial: 0.85, impact: 0.5, size: 25, risk: "medium", info: "Anti-corruption, fair competition policies. EU Anti-corruption Directive applicable.", regulation: "EU Anti-corruption Directive, EU Anti-Money Laundering Directive, EU Corporate Sustainability Due Diligence Directive (proposed). ESRS required KPIs: G1-1: Number of corruption incidents, G1-2: Anti-corruption training completion rates, G1-4: Whistleblower cases received and investigated" } ], finance: [ { id: 1, name: "Climate Risk", financial: 0.8, impact: 0.75, size: 27, risk: "high", info: "Physical and transition risks affect loan portfolios. ECB guidelines, TCFD requirements apply.", regulation: "ECB guidelines, TCFD requirements, ECB Guide on climate-related and environmental risks, EBA Guidelines on Loan Origination and Monitoring. ESRS required KPIs: E1-8: Financed emissions (from loans and investments), E1-9: Climate-related physical and transition risks in financial portfolio, E1-10: Alignment of lending/investment with climate scenarios" }, { id: 2, name: "Data Security", financial: 0.95, impact: 0.8, size: 30, risk: "high", info: "Protection of customer financial data. GDPR, DORA, NIS2, GLBA Safeguards Rule apply.", regulation: "GDPR, DORA, NIS2, GLBA Safeguards Rule, EU General Data Protection Regulation (GDPR), Digital Operational Resilience Act (DORA), Network and Information Security (NIS2) Directive. ESRS required KPIs: No specific ESRS KPIs, but relevant to S3 (communities) due to data breach impacts. KPIs would focus on data breaches, cybersecurity incidents, etc." }, { id: 3, name: "Financial Inclusion", financial: 0.7, impact: 0.85, size: 26, risk: "increasing", info: "Access to financial services for underserved communities. CRA applicable in the US.", regulation: "CRA applicable in the US, EU Strategy for Retail Payments, European Accessibility Act (2019/882). ESRS required KPIs: S4-1: Number of clients in underserved communities, S4-2: Loan approval rates across different demographics, S4-3: Accessibility of financial products and services" }, { id: 4, name: "Business Ethics", financial: 0.9, impact: 0.7, size: 28, risk: "high", info: "Financial integrity, fraud prevention. EU AML Directive, US Bank Secrecy Act apply.", regulation: "EU AML Directive, US Bank Secrecy Act, EU Anti-Money Laundering Directives (AMLD), Market Abuse Regulation (MAR). ESRS required KPIs: G1-1: Number of fraud or financial misconduct incidents, G1-2: Compliance with AML and KYC regulations" }, { id: 5, name: "Governance", financial: 0.85, impact: 0.65, size: 27, risk: "medium", info: "Board structure and remuneration policies. CSRD G2, Corporate Governance Codes apply.", regulation: "CSRD G2, Corporate Governance Codes, Shareholder Rights Directive II (2017/828), EU Sustainable Corporate Governance Initiative. ESRS required KPIs: G2-1: Board diversity (gender, skills, etc.), G2-2: Executive compensation alignment with sustainability performance" } ], manufacturing: [ { id: 1, name: "Emissions", financial: 0.85, impact: 0.9, size: 28, risk: "high", info: "Air, water, and waste emissions. EU Industrial Emissions Directive applies.", regulation: "ESRS E1 and E2 standards, EU Industrial Emissions Directive (2010/75/EU), EU Emissions Trading System (EU ETS). ESRS required KPIs: E1-5: GHG emissions (Scope 1, 2), E2-1: Air pollutants (NOx, SOx, PM), E2-2: Waste generation and disposal" }, { id: 2, name: "Materials", financial: 0.75, impact: 0.8, size: 26, risk: "medium", info: "Raw material sourcing, waste management, circularity. EU Circular Economy Action Plan relevant.", regulation: "EU Circular Economy Action Plan, Waste Framework Directive (2008/98/EC). ESRS required KPIs: E5-1: Material use intensity (per unit of output), E5-2: Recycled input materials used, E5-3: Waste recycled and reused" }, { id: 3, name: "Labor Practices", financial: 0.8, impact: 0.7, size: 25, risk: "medium", info: "Working conditions, employee relations, diversity. ILO Standards, CSRD S1, S2 apply.", regulation: "ILO Standards, CSRD S1, S2, EU Occupational Safety and Health (OSH) Framework Directive (89/391/EEC). ESRS required KPIs: S1-1: Occupational health and safety incident rates, S1-2: Employee turnover and retention, S1-3: Diversity and inclusion metrics (gender, ethnicity, etc.)" }, { id: 4, name: "Product Safety", financial: 0.9, impact: 0.85, size: 29, risk: "high", info: "Product quality, safety standards, recalls. EU Product Safety Regulation applies.", regulation: "EU Product Safety Regulation, EU General Product Safety Regulation (GPSR), Product Liability Directive (85/374/EEC). ESRS required KPIs: S4-4: Product recalls and safety incidents, S4-5: Customer satisfaction with product safety" }, { id: 5, name: "Supply Chain", financial: 0.7, impact: 0.8, size: 26, risk: "increasing", info: "Social and environmental responsibility in the supply chain. EU Corporate Sustainability Due Diligence applies.", regulation: "EU Corporate Sustainability Due Diligence. ESRS required KPIs: S2-1: Supplier compliance with social and environmental standards, S2-2: Human rights due diligence findings" } ], technology: [ { id: 1, name: "Data Privacy", financial: 0.95, impact: 0.85, size: 30, risk: "high", info: "Data protection, privacy policies, user consent. EU GDPR, ePrivacy Regulation apply.", regulation: "EU GDPR, ePrivacy Regulation, CCPA, CPRA, EU General Data Protection Regulation (GDPR), ePrivacy Directive, proposed ePrivacy Regulation. ESRS required KPIs: No specific ESRS KPIs, but relevant to S3 (communities) due to data subject impacts. KPIs would focus on data protection measures, privacy breaches, etc." }, { id: 2, name: "Energy Efficiency", financial: 0.75, impact: 0.8, size: 26, risk: "medium", info: "Energy consumption in data centers, use of renewable energy. EU Energy Efficiency Directive applies.", regulation: "CSRD E2, EU Energy Efficiency Directive, Energy Efficiency Directive (2012/27/EU), EU Code of Conduct for Energy Efficiency in Data Centres, ESRS E2 Pollution. ESRS required KPIs: E1-5: Energy consumption in data centers, E2-3: Use of renewable energy in data centers" }, { id: 3, name: "Talent Management", financial: 0.8, impact: 0.7, size: 25, risk: "medium", info: "Employee diversity, skills development, retention. EU Pay Transparency Directive applies.", regulation: "EU Pay Transparency Directive, European Pillar of Social Rights. ESRS required KPIs: S1-1: Employee diversity and inclusion metrics, S1-2: Gender pay gap" }, { id: 4, name: "Digital Ethics", financial: 0.7, impact: 0.8, size: 26, risk: "increasing", info: "AI ethics, responsible innovation, algorithmic bias. EU AI Act applies.", regulation: "EU AI Act, Digital Services Act, EU Ethics Guidelines for Trustworthy AI. ESRS required KPIs: G1-3: AI fairness and bias assessments, G1-4: Responsible AI development and deployment practices" }, { id: 5, name: "Innovation", financial: 0.85, impact: 0.65, size: 27, risk: "medium", info: "Investment in R&D, new technologies, and sustainable solutions. EU Digital Strategy applies.", regulation: "EU Digital Strategy, European Digital Strategy, EU Digital Decade policy program. ESRS required KPIs: G2-3: R&D investment in sustainable technologies" } ], healthcare: [ { id: 1, name: "Access to Healthcare", financial: 0.7, impact: 0.9, size: 26, risk: "increasing", info: "Affordability and availability of healthcare products and services. EU Pharmaceutical Strategy applies.", regulation: "EU Pharmaceutical Strategy, European Pillar of Social Rights. ESRS required KPIs: S4-1: Availability and affordability of healthcare products/services" }, { id: 2, name: "Product Safety", financial: 0.95, impact: 0.85, size: 30, risk: "high", info: "Safety and efficacy of medical products and devices. EU Medical Device Regulation, FDA requirements apply.", regulation: "EU Medical Device Regulation, FDA requirements, EU Medical Devices Regulation (2017/745), In Vitro Diagnostic Medical Devices Regulation (2017/746). ESRS required KPIs: S4-4: Adverse events and product recalls, S4-5: Patient safety incident rates" }, { id: 3, name: "Data Security", financial: 0.9, impact: 0.8, size: 28, risk: "high", info: "Protection of patient health information. GDPR, HIPAA apply.", regulation: "GDPR, HIPAA, EU Health Data Space, GDPR requirements for health data, European Health Data Space proposal. ESRS required KPIs: No specific ESRS KPIs, but relevant to S3 (communities) due to patient data sensitivity. KPIs would focus on data breaches, privacy compliance, etc." }, { id: 4, name: "Ethical Marketing", financial: 0.8, impact: 0.7, size: 25, risk: "medium", info: "Responsible marketing practices for healthcare products and services. EFPIA/PhRMA Codes apply.", regulation: "EFPIA/PhRMA Codes, European Federation of Pharmaceutical Industries and Associations (EFPIA) Code. ESRS required KPIs: S3-1: Compliance with marketing ethics codes, S3-2: Patient complaints related to marketing practices" }, { id: 5, name: "Clinical Trials", financial: 0.75, impact: 0.8, size: 26, risk: "medium", info: "Ethical conduct and transparency in clinical trials. EU Clinical Trials Regulation applies.", regulation: "EU Clinical Trials Regulation, ICH GCP, EU Clinical Trials Regulation (536/2014), International Council for Harmonisation (ICH) Good Clinical Practice guidelines. ESRS required KPIs: S4-6: Clinical trial participant safety and well-being, S4-7: Compliance with clinical trial regulations and ethics" } ], retail: [ { id: 1, name: "Supply Chain", financial: 0.75, impact: 0.8, size: 26, risk: "increasing", info: "Social and environmental responsibility in the supply chain. EU Corporate Sustainability Due Diligence applies.", regulation: "EU Corporate Sustainability Due Diligence, EU Corporate Sustainability Due Diligence Directive proposal, EU Deforestation Regulation. ESRS required KPIs: S2-1: Supplier compliance with labor and human rights standards, S2-2: Traceability of supply chain (e.g., for deforestation-free products)" }, { id: 2, name: "Product Quality", financial: 0.85, impact: 0.75, size: 27, risk: "medium", info: "Product quality, safety, and labeling. EU Product Safety Regulation applies.", regulation: "EU Product Safety Regulation, EU General Product Safety Regulation, Product Liability Directive (85/374/EEC). ESRS required KPIs: S4-4: Product recalls and safety incidents, S4-5: Customer satisfaction with product quality" }, { id: 3, name: "Labor Practices", financial: 0.8, impact: 0.7, size: 25, risk: "medium", info: "Fair wages, working conditions, and employee development. EU CSRD S1 applies.", regulation: "EU CSRD S1, ILO Standards, EU Directive on transparent and predictable working conditions, Working Time Directive. ESRS required KPIs: S1-1: Employee wages and working hours, S1-2: Employee training and development" }, { id: 4, name: "Packaging", financial: 0.7, impact: 0.8, size: 26, risk: "increasing", info: "Sustainable packaging, waste reduction, and recycling. EU Packaging Directive applies.", regulation: "EU Packaging Directive, Plastics Strategy, EU Packaging and Packaging Waste Directive, Single-Use Plastics Directive (2019/904). ESRS required KPIs: E5-1: Packaging waste generated, E5-2: Recycled content in packaging, E5-3: Use of reusable or refillable packaging" }, { id: 5, name: "Energy Consumption", financial: 0.65, impact: 0.7, size: 24, risk: "medium", info: "Energy efficiency in stores and operations. EU Energy Efficiency Directive applies.", regulation: "EU Energy Efficiency Directive, CSRD E2, Energy Efficiency Directive (2012/27/EU), Energy Performance of Buildings Directive (2010/31/EU), ESRS E2 Pollution. ESRS required KPIs: E1-5: Energy consumption per square meter of retail space, E1-5: Renewable energy use in retail operations" } ],

food: [ { id: 1, name: "Food Safety", financial: 0.9, impact: 0.85, size: 29, risk: "high", info: "Food safety standards, hygiene, and traceability. EU Food Safety Regulation applies.", regulation: "EU Food Safety Regulation, HACCP protocols, EU General Food Law Regulation (178/2002), Food Hygiene Regulations, HACCP requirements. ESRS required KPIs: S4-4: Food safety incidents and product recalls, S4-5: Compliance with food safety standards and certifications" }, { id: 2, name: "Water Management", financial: 0.7, impact: 0.8, size: 26, risk: "medium", info: "Water use in agriculture and food processing. EU Water Framework Directive applies.", regulation: "CSRD E3, EU Water Framework Directive, EU Water Framework Directive (2000/60/EC), Nitrates Directive (91/676/EEC). ESRS required KPIs: E31: Total water withdrawal, E3-2: Water consumption (withdrawal minus discharge)" }, { id: 3, name: "Packaging", financial: 0.65, impact: 0.75, size: 25, risk: "increasing", info: "Sustainable packaging and waste reduction. EU Packaging Directive, Single-Use Plastics Ban apply.", regulation: "EU Packaging Directive, Single-Use Plastics Ban, EU Packaging and Packaging Waste Directive, Single-Use Plastics Directive (2019/904). ESRS required KPIs: E5-1: Packaging waste generated, E5-2: Recycled content in food packaging" }, { id: 4, name: "Sourcing", financial: 0.7, impact: 0.8, size: 26, risk: "increasing", info: "Sustainable and ethical sourcing of ingredients. EU Deforestation Regulation applies.", regulation: "EU Deforestation Regulation, Farm to Fork Strategy, Organic Farming Regulation (2018/848). ESRS required KPIs: S2-1: Sustainable sourcing of agricultural raw materials, S2-2: Compliance with deforestation-free supply chains" }, { id: 5, name: "Nutrition", financial: 0.75, impact: 0.7, size: 25, risk: "medium", info: "Nutritional value and labeling of food products. EU Food Information Regulation applies.", regulation: "EU Food Information Regulation, Nutri-Score, EU Food Information to Consumers Regulation (1169/2011), EU Code of Conduct for Responsible Food Business and Marketing Practices. ESRS required KPIs: S4-8: Nutritional value of food products, S4-9: Compliance with food labeling regulations" } ],

transportation: [ { id: 1, name: "GHG Emissions", financial: 0.8, impact: 0.9, size: 28, risk: "high", info: "Greenhouse gas emissions from transportation activities. EU CO2 Standards for Vehicles apply.", regulation: "EU CO2 Standards for Vehicles, EU CO2 emission performance standards for cars and vans, EU Regulation on monitoring CO2 from heavy-duty vehicles. ESRS required KPIs: E1-5: GHG emissions from transportation fleet, E1-6: Emissions per ton-kilometer or passenger-kilometer" }, { id: 2, name: "Fuel Efficiency", financial: 0.75, impact: 0.85, size: 27, risk: "medium", info: "Fuel consumption and efficiency of vehicles. EU Alternative Fuels Infrastructure Directive applies.", regulation: "EU Alternative Fuels Infrastructure Directive, Alternative Fuels Infrastructure Regulation (AFIR), Renewable Energy Directive II (RED II). ESRS required KPIs: E1-5: Fuel consumption per vehicle or unit of transport, E1-5: Use of alternative fuels (e.g., biofuels, electricity)" }, { id: 3, name: "Safety", financial: 0.9, impact: 0.8, size: 28, risk: "high", info: "Safety of passengers, employees, and the public. EU Road Safety Policy Framework applies.", regulation: "EU Road Safety Policy Framework, EU Road Safety Policy Framework 2021-2030, General Safety Regulation (2019/2144). ESRS required KPIs: S4-10: Accident rates and safety incidents" }, { id: 4, name: "Labor Relations", financial: 0.7, impact: 0.7, size: 24, risk: "medium", info: "Working conditions and employee relations. EU Mobility Package applies.", regulation: "EU Mobility Package, CSRD S1, EU Mobility Package, Directive on Transparent and Predictable Working Conditions. ESRS required KPIs: S1-1: Driver working hours and rest periods" }, { id: 5, name: "Air Quality", financial: 0.65, impact: 0.75, size: 25, risk: "increasing", info: "Air pollution from transportation activities. EU Air Quality Directives apply.", regulation: "EU Air Quality Directives. ESRS required KPIs: E2-1: NOx, SOx, and particulate matter emissions" } ], packaging: [ { id: 1, name: "Circular Economy", financial: 0.7, impact: 0.85, size: 26, risk: "increasing", info: "Packaging waste, recycling, and reuse. EU Circular Economy Action Plan applies.", regulation: "EU Circular Economy Action Plan, EU Packaging and Packaging Waste Directive. ESRS required KPIs: E5-1: Packaging waste generation and recycling rates, E5-2: Use of reusable or refillable packaging" }, { id: 2, name: "Plastics Usage", financial: 0.65, impact: 0.8, size: 25, risk: "increasing", info: "Reduction of single-use plastics and microplastics. EU Plastics Strategy applies.", regulation: "EU Plastics Strategy, Single-Use Plastics Directive (2019/904). ESRS required KPIs: E5-3: Reduction in single-use plastic packaging" }, { id: 3, name: "Materials Sourcing", financial: 0.6, impact: 0.7, size: 23, risk: "medium", info: "Sustainable sourcing of packaging materials. EU Timber Regulation applies.", regulation: "EU Timber Regulation. ESRS required KPIs: E5-4: Sustainable sourcing of packaging raw materials (e.g., paper, aluminum)" }, { id: 4, name: "Carbon Footprint", financial: 0.75, impact: 0.75, size: 26, risk: "medium", info: "Greenhouse gas emissions from packaging production and transport. No specific EU regulation.", regulation: "No specific EU regulation. ESRS required KPIs: E1-5: GHG emissions from packaging production and transport" }, { id: 5, name: "Chemical Safety", financial: 0.8, impact: 0.7, size: 25, risk: "medium", info: "Use of hazardous chemicals in packaging. EU REACH Regulation applies.", regulation: "EU REACH Regulation. ESRS required KPIs: E2-4: Use of hazardous chemicals in packaging" } ], aerospace: [ { id: 1, name: "Climate Impact", financial: 0.85, impact: 0.9, size: 29, risk: "high", info: "Greenhouse gas emissions and climate change impacts. EU ETS applies.", regulation: "EU ETS. ESRS required KPIs: E1-5: GHG emissions from aircraft operations, E1-6: Use of sustainable aviation fuels (SAF)" }, { id: 2, name: "Supply Chain", financial: 0.7, impact: 0.75, size: 25, risk: "increasing", info: "Social and environmental responsibility in the supply chain. EU Conflict Minerals Regulation applies.", regulation: "EU Conflict Minerals Regulation. ESRS required KPIs: S2-1: Responsible sourcing of critical minerals, S2-2: Human rights due diligence in the supply chain" }, { id: 3, name: "Innovation", financial: 0.8, impact: 0.65, size: 26, risk: "medium", info: "Investment in R&D and sustainable aviation technologies. EU Horizon Europe program applies.", regulation: "EU Horizon Europe program. ESRS required KPIs: G2-3: R&D investment in sustainable aviation technologies" }, { id: 4, name: "Safety & Quality", financial: 0.95, impact: 0.85, size: 30, risk: "high", info: "Safety and quality of aircraft and operations. EU Aviation Safety Agency (EASA) regulations apply.", regulation: "EU Aviation Safety Agency (EASA) regulations. ESRS required KPIs: S4-10: Aviation safety incident rates" }, { id: 5, name: "Noise Pollution", financial: 0.6, impact: 0.7, size: 23, risk: "medium", info: "Noise pollution from aircraft operations. EU Noise Directive applies.", regulation: "EU Noise Directive. ESRS required KPIs: E2-5: Noise levels around airports and flight paths" } ], automotive: [ { id: 1, name: "Electrification", financial: 0.8, impact: 0.85, size: 28, risk: "high", info: "Transition to electric vehicles and charging infrastructure. EU CO2 Standards for Vehicles apply.", regulation: "EU CO2 Standards for Vehicles. ESRS required KPIs: E1-11: Electric vehicle (EV) sales share, E1-12: EV charging infrastructure availability" }, { id: 2, name: "Emissions", financial: 0.85, impact: 0.9, size: 29, risk: "high", info: "Greenhouse gas emissions and air pollution. EU Emissions Trading System (EU ETS) applies.", regulation: "EU Emissions Trading System (EU ETS). ESRS required KPIs: E2-1: Tailpipe emissions (NOx, PM), E1-5: Lifecycle GHG emissions of vehicles" }, { id: 3, name: "Materials", financial: 0.7, impact: 0.75, size: 25, risk: "medium", info: "Sustainable materials and resource efficiency. EU End-of-Life Vehicles Directive applies.", regulation: "EU End-of-Life Vehicles Directive. ESRS required KPIs: E5-1: Recycled content in vehicles, E5-5: Battery recycling and reuse" }, { id: 4, name: "Battery Supply Chain", financial: 0.65, impact: 0.8, size: 26, risk: "increasing", info: "Social and environmental responsibility in the battery supply chain. EU Battery Regulation applies.", regulation: "EU Battery Regulation. ESRS required KPIs: S2-1: Responsible sourcing of battery raw materials (e.g., cobalt, lithium)" }, { id: 5, name: "Vehicle Safety", financial: 0.95, impact: 0.85, size: 30, risk: "high", info: "Vehicle safety standards and crash test performance. EU General Safety Regulation applies.", regulation: "EU General Safety Regulation. ESRS required KPIs: S4-10: Vehicle safety ratings and crash test performance" } ], chemicals: [ { id: 1, name: "Chemical Safety", financial: 0.9, impact: 0.9, size: 30, risk: "high", info: "Safe handling and use of chemicals. EU REACH Regulation applies.", regulation: "EU REACH Regulation. ESRS required KPIs: E2-4: Use and release of hazardous chemicals" }, { id: 2, name: "Emissions", financial: 0.8, impact: 0.85, size: 28, risk: "high", info: "Air, water, and soil pollution. EU Industrial Emissions Directive applies.", regulation: "EU Industrial Emissions Directive. ESRS required KPIs: E2-1: Air, water, and soil pollution from chemical processes" }, { id: 3, name: "Water Management", financial: 0.7, impact: 0.75, size: 25, risk: "medium", info: "Water consumption and wastewater treatment. EU Water Framework Directive applies.", regulation: "EU Water Framework Directive. ESRS required KPIs: E3-1: Water consumption and wastewater discharge" }, { id: 4, name: "Circular Economy", financial: 0.65, impact: 0.7, size: 24, risk: "medium", info: "Resource efficiency and waste reduction. EU Circular Economy Action Plan applies.", regulation: "EU Circular Economy Action Plan. ESRS required KPIs: E5-1: Resource efficiency and waste reduction" }, { id: 5, name: "Process Safety", financial: 0.95, impact: 0.8, size: 29, risk: "high", info: "Safety of chemical processes and operations. EU Seveso III Directive applies.", regulation: "EU Seveso III Directive. ESRS required KPIs: S1-1: Process safety incident rates" } ], construction: [ { id: 1, name: "Carbon Footprint", financial: 0.75, impact: 0.85, size: 27, risk: "high", info: "Embodied carbon and lifecycle emissions of buildings. EU Energy Performance of Buildings Directive applies.", regulation: "EU Energy Performance of Buildings Directive. ESRS required KPIs: E1-5: Embodied carbon in building materials, E1-5: Lifecycle GHG emissions of buildings" }, { id: 2, name: "Energy Efficiency", financial: 0.8, impact: 0.8, size: 27, risk: "medium", info: "Energy performance of buildings and building materials. EU Energy Efficiency Directive applies.", regulation: "EU Energy Efficiency Directive. ESRS required KPIs: E1-5: Energy performance of buildings" }, { id: 3, name: "Materials", financial: 0.7, impact: 0.7, size: 24, risk: "medium", info: "Sustainable and resource-efficient building materials. EU Construction Products Regulation applies.", regulation: "EU Construction Products Regulation. ESRS required KPIs: E5-1: Use of sustainable building materials" }, { id: 4, name: "Worker Safety", financial: 0.9, impact: 0.75, size: 28, risk: "high", info: "Occupational health and safety on construction sites. EU Occupational Safety and Health (OSH) Framework Directive applies.", regulation: "EU Occupational Safety and Health (OSH) Framework Directive. ESRS required KPIs: S1-1: Occupational health and safety incident rates" }, { id: 5, name: "Waste Management", financial: 0.65, impact: 0.7, size: 24, risk: "medium", info: "Waste reduction and recycling in construction. EU Waste Framework Directive applies.", regulation: "EU Waste Framework Directive. ESRS required KPIs: E5-1: Construction and demolition waste recycling rates" } ] },

sasb: {

energy: [

{ id: 1, name: "GHG Emissions", financial: 0.9, impact: 0.85, size: 30, risk: "high", info: "Direct and indirect emissions. SEC Climate Rule proposed, California Climate requirements.", regulation: "SEC Climate-Related Disclosures Proposal, California's Climate Corporate Accountability Act, SASB EM-EP-110a.1, EM-EP-110a.2, EM-EP-110a.3" },

{ id: 2, name: "Air Quality", financial: 0.7, impact: 0.9, size: 28, risk: "medium", info: "NOx, SOx, and particulates. Clean Air Act, EPA regulations.", regulation: "EPA New Source Performance Standards, National Ambient Air Quality Standards, SASB EM-EP-120a.1" },

{ id: 3, name: "Water Management", financial: 0.75, impact: 0.8, size: 26, risk: "increasing", info: "Freshwater consumption. Clean Water Act and state regulations.", regulation: "Clean Water Act NPDES permits, state water withdrawal requirements, SASB EM-EP-140a.1, EM-EP-140a.2" },

{ id: 4, name: "Community Relations", financial: 0.6, impact: 0.8, size: 27, risk: "medium", info: "Social license to operate. Indigenous consultation, local permitting.", regulation: "BLM and NEPA requirements for consultation, state permitting requirements, SASB EM-EP-210b.1, EM-EP-210b.2" },

{ id: 5, name: "Safety & Risk", financial: 0.85, impact: 0.7, size: 25, risk: "high", info: "Process safety, emergency preparedness. OSHA PSM, EPA RMP, BSEE regulations.", regulation: "OSHA Process Safety Management Standard, EPA Risk Management Plan Rule, BSEE SEMS Rule, SASB EM-EP-320a.1, EM-EP-540a.1" }

],

finance: [

{ id: 1, name: "Data Security", financial: 0.95, impact: 0.7, size: 30, risk: "high", info: "Protection of financial data. SEC Cybersecurity rules, GLBA applicable.", regulation: "SEC cybersecurity disclosure rules, Gramm-Leach-Bliley Act Safeguards Rule, state data breach notification laws, SASB FN-CB-230a.1, FN-CB-230a.2" },

{ id: 2, name: "Financial Inclusion", financial: 0.7, impact: 0.85, size: 27, risk: "medium", info: "Access to financial products. Community Reinvestment Act.", regulation: "Community Reinvestment Act, proposals for CRA modernization, SASB FN-CB-240a.1, FN-CB-240a.2" },

{ id: 3, name: "ESG Integration", financial: 0.8, impact: 0.9, size: 28, risk: "increasing", info: "ESG factors in lending. SEC disclosures, DOL ESG rule.", regulation: "DOL Final Rule on ESG Considerations in ERISA plans, SEC ESG disclosure requirements for funds, SASB FN-CB-410a.1, FN-CB-410a.2" },

{ id: 4, name: "Business Ethics", financial: 0.9, impact: 0.65, size: 29, risk: "high", info: "Anti-corruption, fraud prevention. AML laws, FCPA, Bank Secrecy Act.", regulation: "Bank Secrecy Act, Anti-Money Laundering Act, Foreign Corrupt Practices Act, SASB FN-CB-510a.1, FN-CB-510a.2" },

{ id: 5, name: "Systemic Risk", financial: 0.85, impact: 0.6, size: 26, risk: "high", info: "Financial system stability. Dodd-Frank Act, Basel III.", regulation: "Dodd-Frank Act stress testing requirements, Basel III capital and liquidity requirements, SASB FN-CB-550a.1, FN-CB-550a.2" }

],

manufacturing: [

{ id: 1, name: "Energy Management", financial: 0.8, impact: 0.75, size: 27, risk: "medium", info: "Energy consumption, efficiency. DOE efficiency standards.", regulation: "DOE energy efficiency standards, ISO 50001 certification, state energy benchmarking, SASB RT-IG-130a.1" },

{ id: 2, name: "Waste Management", financial: 0.7, impact: 0.85, size: 26, risk: "medium", info: "Hazardous waste, recycling. RCRA, EPA waste management.", regulation: "Resource Conservation and Recovery Act (RCRA), EPA hazardous waste generator requirements, SASB RT-IG-150a.1, RT-IG-150a.2" },

{ id: 3, name: "Product Safety", financial: 0.9, impact: 0.8, size: 30, risk: "high", info: "Product quality and safety. CPSC requirements, safety standards.", regulation: "Consumer Product Safety Improvement Act (CPSIA), industry-specific safety standards, SASB RT-IG-250a.1, RT-IG-250a.2" },

{ id: 4, name: "Labor Practices", financial: 0.75, impact: 0.75, size: 25, risk: "medium", info: "Employee health & safety. OSHA regulations, labor laws, EEO.", regulation: "OSHA workplace safety standards, Fair Labor Standards Act, EEO/anti-discrimination laws, SASB RT-IG-320a.1" },

{ id: 5, name: "Materials Sourcing", financial: 0.8, impact: 0.7, size: 28, risk: "increasing", info: "Supply chain sustainability. Conflict minerals rules.", regulation: "Dodd-Frank Act Section 1502 on conflict minerals, California Transparency in Supply Chains Act, SASB RT-IG-440a.1, RT-IG-440b.1" }

],

technology: [

{ id: 1, name: "Hardware Security", financial: 0.9, impact: 0.75, size: 29, risk: "high", info: "Product security features. FTC safeguards, NIST standards.", regulation: "FTC Security by Design principles, NIST security frameworks, state IoT security laws, SASB TC-HW-230a.1" },

{ id: 2, name: "Data Privacy", financial: 0.95, impact: 0.8, size: 30, risk: "high", info: "User data protection. CCPA, CPRA, state privacy laws.", regulation: "California Consumer Privacy Act (CCPA), other state privacy laws (VCDPA, CPA, CTDPA), SASB TC-SI-220a.1, TC-SI-220a.2" },

{ id: 3, name: "Employee Engagement", financial: 0.85, impact: 0.75, size: 27, risk: "medium", info: "Talent recruitment, diversity. EEO-1 reporting, pay transparency laws.", regulation: "EEO-1 Component 1 reporting, state pay transparency laws, SASB TC-SI-330a.1, TC-SI-330a.2, TC-SI-330a.3" },

{ id: 4, name: "IP Protection", financial: 0.9, impact: 0.6, size: 28, risk: "medium", info: "Intellectual property protection. USPTO requirements, FTC oversight.", regulation: "Patent enforcement actions, intellectual property protection, FTC fair competition oversight, SASB TC-SI-520a.1" },

{ id: 5, name: "Energy Management", financial: 0.7, impact: 0.85, size: 26, risk: "increasing", info: "Data center energy consumption. EPA Energy Star, state reporting.", regulation: "EPA ENERGY STAR for Data Centers, state energy benchmarking and disclosure laws, SASB TC-SI-130a.1, TC-SI-130a.2, TC-SI-130a.3" }

],

healthcare: [

{ id: 1, name: "Drug Safety", financial: 0.95, impact: 0.9, size: 30, risk: "high", info: "Product safety and monitoring. FDA requirements, pharmacovigilance.", regulation: "FDA post-marketing surveillance requirements, FDA Adverse Event Reporting System (FAERS), SASB HC-BP-250a.1, HC-BP-250a.2, HC-BP-250a.3" },

{ id: 2, name: "Access & Affordability", financial: 0.8, impact: 0.9, size: 28, risk: "high", info: "Drug pricing and patient access. Inflation Reduction Act, state pricing laws.", regulation: "IRA Medicare drug price negotiation provisions, state drug price transparency laws, SASB HC-BP-240a.1, HC-BP-240a.2" },

{ id: 3, name: "Patient Privacy", financial: 0.9, impact: 0.85, size: 29, risk: "high", info: "Protection of patient data. HIPAA, state health privacy laws.", regulation: "HIPAA Privacy and Security Rules, state medical privacy laws, OCR enforcement, SASB HC-BP-230a.1" },

{ id: 4, name: "Counterfeit Drugs", financial: 0.85, impact: 0.8, size: 27, risk: "medium", info: "Supply chain integrity. DSCSA requirements, FDA track-and-trace.", regulation: "Drug Supply Chain Security Act (DSCSA) implementation requirements, FDA serialization requirements, SASB HC-BP-260a.1" },

{ id: 5, name: "Ethical Marketing", financial: 0.8, impact: 0.75, size: 26, risk: "medium", info: "Promotional practices. PhRMA Code, OIG guidance, False Claims Act.", regulation: "PhRMA Code on Interactions with Healthcare Professionals, OIG compliance guidance, False Claims Act enforcement, SASB HC-BP-270a.1, HC-BP-270a.2" }

],

retail: [

{ id: 1, name: "Data Security", financial: 0.9, impact: 0.75, size: 29, risk: "high", info: "Customer data protection. PCI DSS requirements, state data breach laws.", regulation: "PCI DSS compliance requirements, state data breach notification laws, SASB CG-MR-230a.1, CG-MR-230a.2" },

{ id: 2, name: "Labor Practices", financial: 0.75, impact: 0.8, size: 27, risk: "medium", info: "Employee working conditions. DOL regulations, state labor laws.", regulation: "Fair Labor Standards Act, state scheduling and labor laws, SASB CG-MR-310a.1, CG-MR-310a.2" },

{ id: 3, name: "Product Sourcing", financial: 0.85, impact: 0.85, size: 30, risk: "high", info: "Supplier monitoring. Conflict minerals rules, forced labor prohibitions.", regulation: "UFLPA forced labor import restrictions, California Transparency in Supply Chains Act, SASB CG-MR-410a.1, CG-MR-410a.2, CG-MR-410a.3" },

{ id: 4, name: "Product Quality", financial: 0.9, impact: 0.7, size: 28, risk: "medium", info: "Product safety. CPSC requirements, product liability standards.", regulation: "CPSC reporting requirements, product recalls, safety standards, SASB CG-MR-250a.1, CG-MR-250a.2" },

{ id: 5, name: "Energy Management", financial: 0.7, impact: 0.8, size: 26, risk: "medium", info: "Store energy usage. Energy benchmarking laws, building efficiency standards.", regulation: "State and local energy benchmarking ordinances, building energy efficiency standards, SASB CG-MR-130a.1" }

],

food: [

{ id: 1, name: "Food Safety", financial: 0.95, impact: 0.85, size: 30, risk: "high", info: "Product safety, quality. FDA FSMA requirements, GFSI certification.", regulation: "Food Safety Modernization Act (FSMA) rules, GFSI certification standards, SASB FB-PF-250a.1, FB-PF-250a.2, FB-PF-250a.3, FB-PF-250a.4" },

{ id: 2, name: "Health & Nutrition", financial: 0.85, impact: 0.8, size: 28, risk: "medium", info: "Nutritional content and claims. FDA labeling requirements.", regulation: "FDA Nutrition Facts labeling requirements, claims regulations, SASB FB-PF-260a.1, FB-PF-260a.2" },

{ id: 3, name: "Packaging Lifecycle", financial: 0.7, impact: 0.85, size: 27, risk: "increasing", info: "Packaging materials. State extended producer responsibility laws.", regulation: "State packaging EPR laws (CA, ME, OR, CO), plastic reduction targets, SASB FB-PF-410a.1, FB-PF-410a.2, FB-PF-410a.3, FB-PF-410a.4" },

{ id: 4, name: "Supply Chain", financial: 0.8, impact: 0.75, size: 26, risk: "high", info: "Agricultural sourcing practices. FSMA supply chain provisions.", regulation: "FSMA Foreign Supplier Verification Program, supply chain traceability requirements, SASB FB-PF-430a.1, FB-PF-430a.2" },

{ id: 5, name: "Ingredient Sourcing", financial: 0.85, impact: 0.8, size: 29, risk: "medium", info: "Raw material sourcing. Organic standards, sustainable certifications.", regulation: "USDA Organic standards, sustainable palm oil certifications, other ingredient certifications, SASB FB-PF-440a.1, FB-PF-440a.2" }

],

transportation: [

{ id: 1, name: "GHG Emissions", financial: 0.85, impact: 0.9, size: 29, risk: "high", info: "Fleet emissions. EPA emissions standards, NHTSA CAFE standards.", regulation: "EPA GHG emissions standards, SmartWay Transport Partnership, SASB TR-AF-110a.1, TR-AF-110a.2, TR-AF-110a.3" },

{ id: 2, name: "Fuel Economy", financial: 0.9, impact: 0.85, size: 30, risk: "high", info: "Fuel efficiency metrics. CAFE standards, ZEV mandates.", regulation: "NHTSA/EPA CAFE standards, California ZEV mandates, SASB TR-AU-410a.1, TR-AU-410a.2, TR-AU-410a.3" },

{ id: 3, name: "Materials Efficiency", financial: 0.8, impact: 0.7, size: 27, risk: "medium", info: "Resource use in manufacturing. EPA waste regulations.", regulation: "EPA waste regulations, end-of-life vehicle recycling, SASB TR-AU-440a.1, TR-AU-440b.1, TR-AU-440b.2, TR-AU-440b.3" },

{ id: 4, name: "Accident & Safety", financial: 0.9, impact: 0.75, size: 28, risk: "high", info: "Passenger safety. NHTSA safety standards, crash test reporting.", regulation: "NHTSA Federal Motor Vehicle Safety Standards, crash test requirements, SASB TR-AU-250a.1, TR-AU-250a.2, TR-AU-250a.3" },

{ id: 5, name: "Labor Practices", financial: 0.75, impact: 0.8, size: 26, risk: "medium", info: "Working conditions for drivers. DOT hours of service, labor standards.", regulation: "DOT Hours of Service regulations, driver qualification requirements, SASB TR-AF-310a.1, TR-AF-310a.2" }

],

packaging: [

{ id: 1, name: "Product Lifecycle", financial: 0.85, impact: 0.9, size: 30, risk: "high", info: "End-of-life product management, recyclability, and extended producer responsibility.", regulation: "State EPR programs (CA, ME, OR, CO), recycled content mandates, SASB RT-CP-410a.1, RT-CP-410a.2, RT-CP-410a.3" },

{ id: 2, name: "Sustainable Packaging", financial: 0.9, impact: 0.85, size: 29, risk: "high", info: "Design for sustainability, material reduction, and recyclable/compostable alternatives.", regulation: "State packaging bans on non-recyclable materials, plastic bag bans, recycled content laws, SASB RT-CP-410a.1" },

{ id: 3, name: "Raw Materials Sourcing", financial: 0.8, impact: 0.8, size: 28, risk: "increasing", info: "Sustainable fiber sourcing, responsible procurement policies for paper and forestry products.", regulation: "Lacey Act amendments for forest products, sustainable forestry certifications like FSC and SFI, SASB RT-CP-430a.1, RT-CP-430a.2" },

{ id: 4, name: "Energy Management", financial: 0.75, impact: 0.75, size: 26, risk: "medium", info: "Energy consumption in manufacturing operations, renewable energy use, and efficiency projects.", regulation: "EPA ENERGY STAR for plants, state energy efficiency standards, SASB RT-CP-130a.1" },

{ id: 5, name: "Product Safety", financial: 0.85, impact: 0.7, size: 27, risk: "medium", info: "Food-contact materials safety, chemical migration, and compliance with food packaging standards.", regulation: "FDA food contact regulations, PFAS restrictions in food packaging, SASB RT-CP-250a.1, RT-CP-250a.2" }

],

aerospace: [

{ id: 1, name: "Fuel Economy", financial: 0.85, impact: 0.9, size: 30, risk: "high", info: "Aircraft fuel efficiency, emissions per passenger mile, and fleet fuel management.", regulation: "ICAO CO2 emissions standards for aircraft, FAA NextGen program requirements, SASB TR-AE-110a.1, TR-AE-110a.2" },

{ id: 2, name: "Hazardous Materials", financial: 0.8, impact: 0.75, size: 27, risk: "medium", info: "Management of hazardous waste from manufacturing, maintenance operations, and product design.", regulation: "EPA hazardous waste generator standards, RCRA regulations, SASB TR-AE-150a.1, TR-AE-150a.2" },

{ id: 3, name: "Product Safety", financial: 0.95, impact: 0.85, size: 29, risk: "high", info: "Aircraft design safety, defect management, and compliance with safety regulations.", regulation: "FAA airworthiness certification requirements, defect reporting rules, SASB TR-AE-250a.1, TR-AE-250a.2, TR-AE-250a.3" },

{ id: 4, name: "Supply Chain Management", financial: 0.85, impact: 0.7, size: 28, risk: "increasing", info: "Management of critical materials, supplier quality, and supply chain resilience.", regulation: "Defense contract supply chain security requirements, conflict minerals reporting, SASB TR-AE-440a.1" },

{ id: 5, name: "Business Ethics", financial: 0.9, impact: 0.65, size: 26, risk: "high", info: "Anti-corruption measures, particularly in international sales and government contracting.", regulation: "Foreign Corrupt Practices Act, defense contracting ethics regulations, SASB TR-AE-510a.1, TR-AE-510a.2, TR-AE-510a.3" }

],

automotive: [

{ id: 1, name: "Fuel Economy", financial: 0.9, impact: 0.85, size: 30, risk: "high", info: "Vehicle fuel efficiency, fleet emissions, and compliance with standards.", regulation: "NHTSA/EPA CAFE and GHG emissions standards, ZEV mandates, SASB TR-AU-410a.1, TR-AU-410a.2, TR-AU-410a.3" },

{ id: 2, name: "Materials Sourcing", financial: 0.8, impact: 0.75, size: 28, risk: "increasing", info: "Critical minerals for batteries, conflict minerals use, and responsible sourcing.", regulation: "Dodd-Frank Section 1502 on conflict minerals, proposed battery material disclosure requirements, SASB TR-AU-440a.1, TR-AU-440b.1" },

{ id: 3, name: "Product Safety", financial: 0.95, impact: 0.8, size: 29, risk: "high", info: "Vehicle safety features, recalls, and compliance with safety standards.", regulation: "NHTSA safety standards, recall reporting requirements, SASB TR-AU-250a.1, TR-AU-250a.2, TR-AU-250a.3" },

{ id: 4, name: "Labor Practices", financial: 0.75, impact: 0.8, size: 26, risk: "medium", info: "Employee safety, labor relations, and working conditions in manufacturing facilities.", regulation: "OSHA workplace safety standards, NLRB regulations, EEO requirements, SASB TR-AU-310a.1, TR-AU-310a.2" },

{ id: 5, name: "Materials Efficiency", financial: 0.7, impact: 0.85, size: 27, risk: "medium", info: "Resource use in manufacturing, recyclability, and end-of-life recovery.", regulation: "EPA hazardous waste regulations, state recycling requirements, SASB TR-AU-440b.2, TR-AU-440b.3" }

],

chemicals: [

{ id: 1, name: "Emissions", financial: 0.85, impact: 0.9, size: 30, risk: "high", info: "Air emissions from operations, including GHGs and hazardous air pollutants.", regulation: "Clean Air Act Title V permits, EPA GHG reporting rule, SASB RT-CH-110a.1, RT-CH-110a.2, RT-CH-120a.1" },

{ id: 2, name: "Energy Management", financial: 0.8, impact: 0.75, size: 27, risk: "medium", info: "Energy consumption in operations, energy efficiency, and renewable energy use.", regulation: "EPA ENERGY STAR for chemicals, state energy benchmarking, SASB RT-CH-130a.1" },

{ id: 3, name: "Water Management", financial: 0.75, impact: 0.85, size: 28, risk: "high", info: "Water use, wastewater discharge quality, and water stress management.", regulation: "Clean Water Act NPDES permits, state water withdrawal permits, SASB RT-CH-140a.1, RT-CH-140a.2, RT-CH-140a.3" },

{ id: 4, name: "Hazardous Waste", financial: 0.8, impact: 0.9, size: 29, risk: "high", info: "Generation and management of hazardous chemical waste from operations.", regulation: "RCRA hazardous waste regulations, EPA Waste Minimization Program, SASB RT-CH-150a.1" },

{ id: 5, name: "Safety & Risk", financial: 0.9, impact: 0.8, size: 28, risk: "high", info: "Operational safety, process safety incidents, and emergency management.", regulation: "OSHA Process Safety Management, EPA Risk Management Plan, SASB RT-CH-320a.1, RT-CH-320a.2, RT-CH-540a.1, RT-CH-540a.2" }

],

construction: [

{ id: 1, name: "Project Impacts", financial: 0.8, impact: 0.9, size: 29, risk: "high", info: "Environmental impacts from construction projects, including pollution prevention and mitigation.", regulation: "EPA construction stormwater permits, NEPA/state environmental assessments, SASB IF-EN-160a.1, IF-EN-160a.2" },

{ id: 2, name: "Workforce Safety", financial: 0.9, impact: 0.85, size: 30, risk: "high", info: "Worker health & safety, incident prevention, and safety culture.", regulation: "OSHA construction industry standards, reporting requirements, SASB IF-EN-320a.1" },

{ id: 3, name: "Lifecycle Impacts", financial: 0.75, impact: 0.8, size: 27, risk: "increasing", info: "Design for sustainability, energy efficiency, and green building certifications.", regulation: "Green building standards (LEED, Energy Star), local green building codes, SASB IF-EN-410a.1, IF-EN-410a.2" },

{ id: 4, name: "Business Ethics", financial: 0.85, impact: 0.6, size: 26, risk: "high", info: "Anti-corruption, fair bidding practices, and ethical business conduct.", regulation: "Federal contracting ethics requirements, Foreign Corrupt Practices Act, SASB IF-EN-510a.1, IF-EN-510a.2, IF-EN-510a.3" },

{ id: 5, name: "Climate Impacts", financial: 0.8, impact: 0.75, size: 28, risk: "increasing", info: "Climate change risks and resilience in project planning and execution.", regulation: "Climate risk disclosure rules, flood zone construction requirements, SASB IF-EN-410b.1, IF-EN-410b.2, IF-EN-410b.3" }

]

}

};

// Variables to track editing mode and regulations display

let editMode = false;

let showRegulations = false;

// Helper functions

function mapX(val) {

return 100 + val \* 600;

}

function mapY(val) {

return 500 - val \* 400;

}

function getColor(financial, impact) {

if (financial >= 0.7 && impact >= 0.7) return "#4CAF50"; // High-High: Green

if (financial >= 0.7) return "#FFC107"; // High financial: Amber

if (impact >= 0.7) return "#2196F3"; // High impact: Blue

return "#FF9800"; // Lower priority: Orange

}

function getRiskColor(risk) {

switch(risk) {

case "high": return "#E53935";

case "increasing": return "#FF9800";

case "medium": return "#FFC107";

default: return "#9E9E9E";

}

}

// Toggle edit mode

function toggleEditMode() {

editMode = !editMode;

const editButton = document.getElementById('editButton');

const editPanel = document.getElementById('editPanel');

if (editMode) {

editButton.classList.add('active');

editPanel.style.display = 'block';

populateEditPanel();

} else {

editButton.classList.remove('active');

editPanel.style.display = 'none';

}

}

// Toggle regulation display

function toggleRegulationDisplay() {

showRegulations = !showRegulations;

const regulationButton = document.getElementById('regulationButton');

const regulationInfo = document.getElementById('regulationInfo');

if (showRegulations) {

regulationButton.classList.add('active');

if (regulationInfo) {

regulationInfo.style.display = 'block';

}

} else {

regulationButton.classList.remove('active');

if (regulationInfo) {

regulationInfo.style.display = 'none';

}

}

}

// Populate edit panel with form controls

function populateEditPanel() {

const framework = document.getElementById('framework').value;

const sector = document.getElementById('sector').value;

const topics = materialityData[framework][sector];

const editGrid = document.getElementById('editGrid');

// Clear existing controls

editGrid.innerHTML = '';

// Create edit controls for each topic

topics.forEach(topic => {

const editItem = document.createElement('div');

editItem.className = 'edit-item';

const title = document.createElement('div');

title.className = 'edit-item-title';

title.textContent = topic.name;

editItem.appendChild(title);

const controls = document.createElement('div');

controls.className = 'edit-controls';

// Financial materiality input

const financialGroup = document.createElement('div');

const financialLabel = document.createElement('label');

financialLabel.className = 'edit-label';

financialLabel.textContent = 'Financial Materiality';

const financialInput = document.createElement('input');

financialInput.className = 'edit-input';

financialInput.type = 'number';

financialInput.min = '0';

financialInput.max = '1';

financialInput.step = '0.05';

financialInput.value = topic.financial;

financialInput.dataset.topic = topic.id;

financialInput.dataset.field = 'financial';

financialInput.addEventListener('change', function() {

updateTopicValue(this.dataset.topic, this.dataset.field, this.value);

});

financialGroup.appendChild(financialLabel);

financialGroup.appendChild(financialInput);

// Impact materiality input

const impactGroup = document.createElement('div');

const impactLabel = document.createElement('label');

impactLabel.className = 'edit-label';

impactLabel.textContent = 'Impact Materiality';

const impactInput = document.createElement('input');

impactInput.className = 'edit-input';

impactInput.type = 'number';

impactInput.min = '0';

impactInput.max = '1';

impactInput.step = '0.05';

impactInput.value = topic.impact;

impactInput.dataset.topic = topic.id;

impactInput.dataset.field = 'impact';

impactInput.addEventListener('change', function() {

updateTopicValue(this.dataset.topic, this.dataset.field, this.value);

});

impactGroup.appendChild(impactLabel);

impactGroup.appendChild(impactInput);

controls.appendChild(financialGroup);

controls.appendChild(impactGroup);

editItem.appendChild(controls);

editGrid.appendChild(editItem);

});

}

// Update topic value when edited

function updateTopicValue(topicId, field, value) {

const framework = document.getElementById('framework').value;

const sector = document.getElementById('sector').value;

const topics = materialityData[framework][sector];

const numValue = parseFloat(value);

if (isNaN(numValue) || numValue < 0 || numValue > 1) return;

// Find and update the topic

const topicIndex = topics.findIndex(t => t.id == topicId);

if (topicIndex !== -1) {

topics[topicIndex][field] = numValue;

renderChart(); // Redraw the chart with updated values

}

}

// Show the info panel when a topic is clicked

function showInfoPanel(topic) {

const infoPanel = document.getElementById('infoPanel');

document.getElementById('topicTitle').textContent = topic.name;

document.getElementById('topicInfo').textContent = topic.info;

document.getElementById('financialValue').textContent = (topic.financial \* 100).toFixed(0) + '%';

document.getElementById('impactValue').textContent = (topic.impact \* 100).toFixed(0) + '%';

const riskElement = document.getElementById('riskValue');

riskElement.textContent = topic.risk.toUpperCase();

riskElement.style.color = getRiskColor(topic.risk);

// Update regulation info

const regulationInfo = document.getElementById('regulationInfo');

const regulationText = document.getElementById('regulationText');

if (topic.regulation) {

regulationText.textContent = topic.regulation;

regulationInfo.style.display = showRegulations ? 'block' : 'none';

} else {

regulationInfo.style.display = 'none';

}

infoPanel.style.display = 'block';

}

// Hide the info panel

function hideInfoPanel() {

document.getElementById('infoPanel').style.display = 'none';

}

// Render the chart

function renderChart() {

const framework = document.getElementById('framework').value;

const sector = document.getElementById('sector').value;

const svg = document.getElementById('chart');

const topics = materialityData[framework][sector];

// Clear the SVG

svg.innerHTML = '';

// Add Title

const title = document.createElementNS("http://www.w3.org/2000/svg", "text");

title.setAttribute("x", "400");

title.setAttribute("y", "40");

title.setAttribute("font-size", "20");

title.setAttribute("font-weight", "bold");

title.setAttribute("text-anchor", "middle");

title.textContent = "Double Materiality Assessment";

svg.appendChild(title);

// Add Subtitle

const subtitle = document.createElementNS("http://www.w3.org/2000/svg", "text");

subtitle.setAttribute("x", "400");

subtitle.setAttribute("y", "65");

subtitle.setAttribute("font-size", "14");

subtitle.setAttribute("text-anchor", "middle");

subtitle.setAttribute("fill", "#666");

subtitle.textContent = framework.toUpperCase() + " Framework - " + sector.charAt(0).toUpperCase() + sector.slice(1) + " Sector";

svg.appendChild(subtitle);

// Add Axes

const xAxis = document.createElementNS("http://www.w3.org/2000/svg", "line");

xAxis.setAttribute("x1", "100");

xAxis.setAttribute("y1", "500");

xAxis.setAttribute("x2", "700");

xAxis.setAttribute("y2", "500");

xAxis.setAttribute("stroke", "#333");

xAxis.setAttribute("stroke-width", "2");

svg.appendChild(xAxis);

const yAxis = document.createElementNS("http://www.w3.org/2000/svg", "line");

yAxis.setAttribute("x1", "100");

yAxis.setAttribute("y1", "500");

yAxis.setAttribute("x2", "100");

yAxis.setAttribute("y2", "100");

yAxis.setAttribute("stroke", "#333");

yAxis.setAttribute("stroke-width", "2");

svg.appendChild(yAxis);

// Add Axis Labels

const xLabel = document.createElementNS("http://www.w3.org/2000/svg", "text");

xLabel.setAttribute("x", "400");

xLabel.setAttribute("y", "540");

xLabel.setAttribute("font-size", "14");

xLabel.setAttribute("text-anchor", "middle");

xLabel.textContent = "Financial Materiality";

svg.appendChild(xLabel);

const yLabel = document.createElementNS("http://www.w3.org/2000/svg", "text");

yLabel.setAttribute("x", "50");

yLabel.setAttribute("y", "300");

yLabel.setAttribute("font-size", "14");

yLabel.setAttribute("text-anchor", "middle");

yLabel.setAttribute("transform", "rotate(-90, 50, 300)");

yLabel.textContent = "Impact Materiality";

svg.appendChild(yLabel);

// Add Scale Markers for X-axis

[0, 0.25, 0.5, 0.75, 1].forEach(value => {

const x = mapX(value);

// Tick mark

const tick = document.createElementNS("http://www.w3.org/2000/svg", "line");

tick.setAttribute("x1", x);

tick.setAttribute("y1", "500");

tick.setAttribute("x2", x);

tick.setAttribute("y2", "505");

tick.setAttribute("stroke", "#333");

tick.setAttribute("stroke-width", "1");

svg.appendChild(tick);

// Label

const label = document.createElementNS("http://www.w3.org/2000/svg", "text");

label.setAttribute("x", x);

label.setAttribute("y", "520");

label.setAttribute("font-size", "10");

label.setAttribute("text-anchor", "middle");

label.textContent = (value \* 100) + "%";

svg.appendChild(label);

});

// Add Scale Markers for Y-axis

[0, 0.25, 0.5, 0.75, 1].forEach(value => {

const y = mapY(value);

// Tick mark

const tick = document.createElementNS("http://www.w3.org/2000/svg", "line");

tick.setAttribute("x1", "100");

tick.setAttribute("y1", y);

tick.setAttribute("x2", "95");

tick.setAttribute("y2", y);

tick.setAttribute("stroke", "#333");

tick.setAttribute("stroke-width", "1");

svg.appendChild(tick);

// Label

const label = document.createElementNS("http://www.w3.org/2000/svg", "text");

label.setAttribute("x", "85");

label.setAttribute("y", y + 4);

label.setAttribute("font-size", "10");

label.setAttribute("text-anchor", "end");

label.textContent = (value \* 100) + "%";

svg.appendChild(label);

});

// Add Grid Lines

const horizontalGrid = document.createElementNS("http://www.w3.org/2000/svg", "line");

horizontalGrid.setAttribute("x1", "100");

horizontalGrid.setAttribute("y1", "300");

horizontalGrid.setAttribute("x2", "700");

horizontalGrid.setAttribute("y2", "300");

horizontalGrid.setAttribute("stroke", "#ccc");

horizontalGrid.setAttribute("stroke-width", "1");

horizontalGrid.setAttribute("stroke-dasharray", "5,5");

svg.appendChild(horizontalGrid);

const verticalGrid = document.createElementNS("http://www.w3.org/2000/svg", "line");

verticalGrid.setAttribute("x1", "400");

verticalGrid.setAttribute("y1", "100");

verticalGrid.setAttribute("x2", "400");

verticalGrid.setAttribute("y2", "500");

verticalGrid.setAttribute("stroke", "#ccc");

verticalGrid.setAttribute("stroke-width", "1");

verticalGrid.setAttribute("stroke-dasharray", "5,5");

svg.appendChild(verticalGrid);

// Add Legend

const legend1 = document.createElementNS("http://www.w3.org/2000/svg", "rect");

legend1.setAttribute("x", "580");

legend1.setAttribute("y", "460");

legend1.setAttribute("width", "200");

legend1.setAttribute("height", "120");

legend1.setAttribute("fill", "white");

legend1.setAttribute("stroke", "#ccc");

legend1.setAttribute("rx", "5");

svg.appendChild(legend1);

const legendTitle = document.createElementNS("http://www.w3.org/2000/svg", "text");

legendTitle.setAttribute("x", "590");

legendTitle.setAttribute("y", "480");

legendTitle.setAttribute("font-size", "14");

legendTitle.setAttribute("font-weight", "bold");

legendTitle.textContent = "Priority Legend:";

svg.appendChild(legendTitle);

// Legend items

const legendItems = [

{ color: "#4CAF50", text: "High Impact & Financial", y: 500 },

{ color: "#FFC107", text: "High Financial Priority", y: 520 },

{ color: "#2196F3", text: "High Impact Priority", y: 540 },

{ color: "#E53935", text: "High Regulatory Risk", y: 560 }

];

legendItems.forEach(item => {

const dot = document.createElementNS("http://www.w3.org/2000/svg", "circle");

dot.setAttribute("cx", "600");

dot.setAttribute("cy", item.y);

dot.setAttribute("r", "6");

dot.setAttribute("fill", item.color);

svg.appendChild(dot);

const text = document.createElementNS("http://www.w3.org/2000/svg", "text");

text.setAttribute("x", "615");

text.setAttribute("y", item.y+4);

text.setAttribute("font-size", "12");

text.textContent = item.text;

svg.appendChild(text);

});

// Add Topics

topics.forEach(topic => {

// Create group for topic

const group = document.createElementNS("http://www.w3.org/2000/svg", "g");

group.setAttribute("cursor", "pointer");

group.onclick = function() { showInfoPanel(topic); };

// Add circle

const circle = document.createElementNS("http://www.w3.org/2000/svg", "circle");

circle.setAttribute("cx", mapX(topic.financial));

circle.setAttribute("cy", mapY(topic.impact));

circle.setAttribute("r", topic.size);

circle.setAttribute("fill", getColor(topic.financial, topic.impact));

circle.setAttribute("fill-opacity", "0.7");

circle.setAttribute("stroke", "#333");

circle.setAttribute("stroke-width", "1");

group.appendChild(circle);

// Add risk indicator if applicable

if (topic.risk === "high" || topic.risk === "increasing") {

const riskIndicator = document.createElementNS("http://www.w3.org/2000/svg", "circle");

riskIndicator.setAttribute("cx", mapX(topic.financial) + 15);

riskIndicator.setAttribute("cy", mapY(topic.impact) - 15);

riskIndicator.setAttribute("r", "8");

riskIndicator.setAttribute("fill", getRiskColor(topic.risk));

riskIndicator.setAttribute("stroke", "#fff");

riskIndicator.setAttribute("stroke-width", "1");

group.appendChild(riskIndicator);

}

// Add label text

const text = document.createElementNS("http://www.w3.org/2000/svg", "text");

text.setAttribute("x", mapX(topic.financial));

text.setAttribute("y", mapY(topic.impact));

text.setAttribute("font-size", "11");

text.setAttribute("font-weight", "bold");

text.setAttribute("text-anchor", "middle");

text.setAttribute("fill", "#333");

text.textContent = topic.name;

group.appendChild(text);

svg.appendChild(group);

});

// Update edit panel if in edit mode

if (editMode) {

populateEditPanel();

}

}

// Initialize the chart on page load

document.addEventListener('DOMContentLoaded', renderChart);

</script>

</body>

</html>