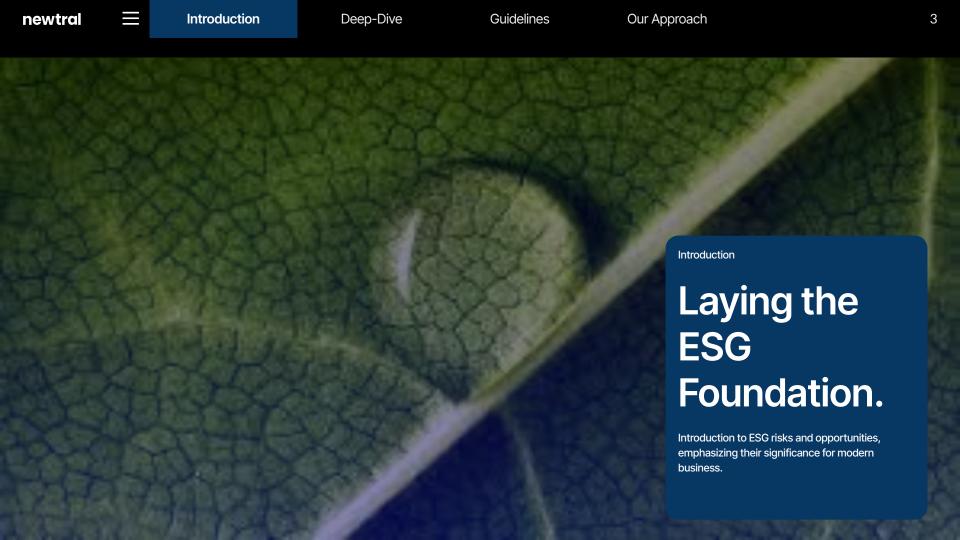


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# Laying the **ESG Foundation**

Introduction to ESG risks and opportunities, emphasizing their significance for modern business.



#### 1.1 Definition of ESG (Environmental, Social. **Governance) Risk and Opportunity**

ESG Risk refers to potential negative impacts that environmental, social, and governance factors can have on a business's operations, reputation, and financial performance. These risks can arise from issues such as:

- Environmental: Climate change, resource depletion, pollution, and biodiversity loss.
- Social: Poor labor practices, human rights violations, lack of diversity, and unsafe working conditions.
- Governance: Lack of transparency, unethical leadership, data privacy breaches, and weak internal controls.

ESG Opportunity, on the other hand, involves the potential benefits businesses can unlock by addressing these ESG challenges proactively. These opportunities may include:

- Environmental: Energy efficiency improvements, renewable energy adoption, waste reduction.
- Social: Building a diverse workforce, improving employee well-being, and community development.
- Governance: Strengthening board diversity, enhancing compliance frameworks, and increasing transparency.

By managing ESG risks and capitalizing on ESG opportunities, businesses can build long-term value, foster stakeholder trust, and ensure operational resilience.

#### 1.2 Importance of ESG Risk Assessment in Modern Business

ESG risk assessment is no longer optional—it's essential for businesses aiming to thrive in today's global marketplace. Companies that fail to identify and manage ESG risks face significant consequences, including regulatory penalties, damaged reputation, and financial losses.

#### Why ESG Risk Assessment Matters:

- Financial Stability: ESG issues like climate-related disasters or governance failures can disrupt supply chains, impact revenue streams, and increase operational costs.
- Investor Confidence: Modern investors prioritize sustainability and ethical practices. ESG assessments help businesses meet the criteria for sustainable investment portfolios, increasing access to capital.
- Reputation Management: Consumers and stakeholders expect businesses to act responsibly. Poor ESG performance can lead to negative press, customer boycotts, and a tarnished brand image.
- Regulatory Compliance: Global frameworks (like ISSB, SASB, and CSRD) mandate ESG disclosures. ESG risk assessments help businesses stay compliant with evolving regulations.
- Operational Resilience: Understanding ESG risks allows businesses to identify vulnerabilities early, develop mitigation strategies, and strengthen long-term resilience.

#### **Key Example:**

A company operating in the energy sector faces climate-related physical risks, such as extreme weather events. Without an ESG risk assessment, it might overlook critical vulnerabilities in its supply chain. However, a thorough ESG evaluation can reveal areas for renewable energy investments, reducing both risk and long-term costs



#### 1.3 Purpose of the Handbook and Who It's For

The purpose of this handbook is to serve as a **comprehensive guide** for understanding, identifying, and managing ESG risks and opportunities across industries. It is designed to help businesses make informed decisions by providing a structured approach to ESG risk assessment.

#### This Handbook is Designed For:

- Sustainability Officers & ESG Professionals: To guide ESG strategies and improve reporting practices.
- Business Leaders & Executives: To align ESG considerations with business goals and stakeholder expectations.
- Risk & Compliance Teams: To identify and manage ESG-related vulnerabilities and regulatory risks.
- Investors & Financial Analysts: To assess ESG performance as part of investment decision-making.
- Small, Medium, and Large Enterprises: To help businesses of all sizes embed ESG principles into their operations.

#### Objectives of the Handbook:

- Break down complex ESG concepts into simple, actionable insights.
- Provide a step-by-step approach for conducting ESG risk assessments.
- Highlight global ESG regulations and frameworks for compliance.
- Offer practical strategies to leverage ESG opportunities for business growth.

# 1.4 Brief Overview of ESG Risk Factors (Environmental, Social, Governance)

To understand ESG risk assessment better, it's crucial to break down each component:

#### 1. Environmental Risks and Factors:

- Climate Change Impact: Rising temperatures, extreme weather events.
- Carbon Emissions: Greenhouse gas emissions and energy use.
- Resource Depletion: Water scarcity, deforestation, and unsustainable material use.
- Pollution: Air, water, and soil pollution affecting communities and ecosystems.

**Opportunities:** Energy efficiency projects, waste management innovations, and circular economy practices.

#### 2. Social Risks and Factors:

- Labor Practices: Unsafe working conditions, child labor, wage gaps.
- Human Rights Violations: Supply chain issues, lack of fair treatment.
- Diversity and Inclusion: Lack of gender, racial, or disability representation.
- Community Relations: Negative impact on local communities.

**Opportunities:** Implementing inclusive hiring practices, improving worker safety, and contributing to community development.



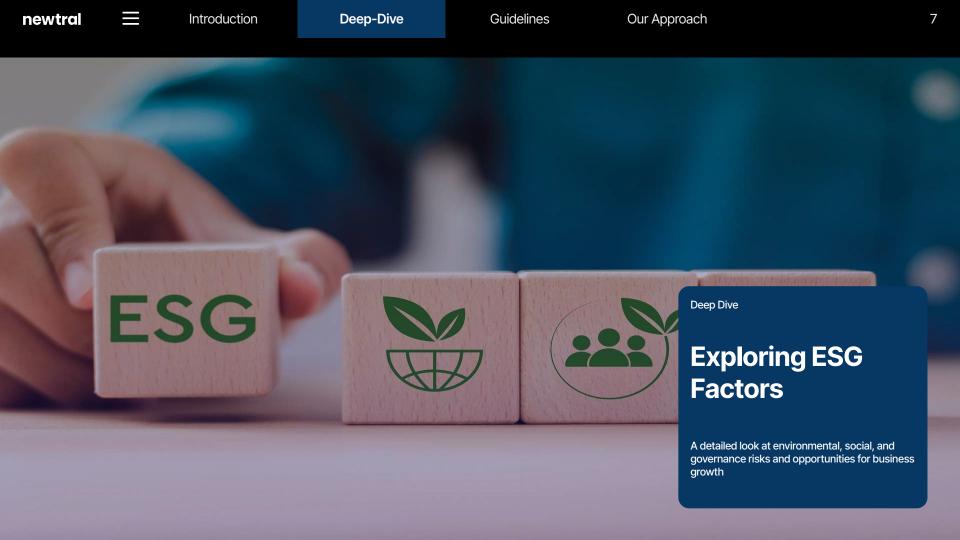
#### 3. Governance Risks and Factors:

- Board Composition: Lack of diversity in leadership.
- Unethical Leadership: Fraud, corruption, or misleading reporting.
- Data Security Risks: Breaches in data privacy and poor cybersecurity practices.
- Executive Compensation Misalignment: Pay structures not tied to sustainability performance.

**Opportunities:** Enhancing transparency, adopting strong cybersecurity measures, and ensuring ethical leadership.

# Comprehensive ESG Risk and Opportunity Overview







# **Exploring ESG Factors**

A detailed look at environmental, social, and governance risks and opportunities for business growth



#### 2.1 Environmental Risks & Opportunities

#### 1. Climate Change Impact and Carbon Emissions

#### Risks:

- Rising global temperatures causing physical risks like extreme weather events, floods, and wildfires.
- Regulatory risks due to tightening climate policies such as carbon pricing and emission caps.
- Operational disruptions due to changing weather patterns affecting supply chains and infrastructure.

#### Opportunities:

- Implementing energy efficiency measures and renewable energy sources to reduce carbon footprints.
- Participation in carbon credit markets and climate-positive initiatives.
- Innovation in low-carbon technologies and green products.

#### 2. Resource Depletion and Energy Management

#### Risks:

- Overconsumption of natural resources leading to raw material shortages and increased costs.
- High energy consumption impacting operational efficiency and sustainability goals.
- Water scarcity issues in manufacturing and agriculture.

#### Opportunities:

- Implementing energy management systems for optimal energy usage.
- Adopting circular economy principles to minimize resource extraction.
- Water recycling and rainwater harvesting technologies.

#### 3. Biodiversity Loss and Pollution

#### Risks:

- Deforestation, habitat destruction, and ecosystem degradation impacting supply chains.
- Pollution liabilities from hazardous waste, air, and water emissions.
- Reputational damage due to unsustainable sourcing practices.

- Partnering with biodiversity conservation initiatives.
- Using eco-friendly production techniques and reducing hazardous waste.
- Sustainable land use strategies and regenerative agriculture practices.





#### 4. Circular Economy and Sustainable Practices

#### Risks:

- Linear production models leading to excessive waste and environmental harm.
- Non-compliance with waste management regulations.

#### Opportunities:

- Designing products for recyclability and reusability.
- Adopting closed-loop production models.
- Reducing material waste through innovations in packaging and manufacturing.

#### 5. Renewable Energy Integration

#### Risks:

- High upfront costs for transitioning to renewable energy sources.
- Grid dependency issues in regions with inconsistent renewable energy availability.

#### Opportunities:

- Solar, wind, and hydropower adoption for long-term cost reduction.
- Investing in battery storage and smart grids.
- Government incentives and subsidies for renewable energy projects.

#### 2.2. Social Risks & Opportunities

#### 1. Labor Practices and Human Rights

#### Risks:

- Poor working conditions leading to health hazards.
- Violations of labor rights, including child labor and forced labor.
- Legal risks due to non-compliance with labor laws.

#### Opportunities:

- Fair wage policies and ethical recruitment practices.
- Improving workplace conditions and employee well-being programs.
- Partnering with certified ethical suppliers.

#### 2. Diversity, Equity, and Inclusion (DEI)

#### Risks:

- Lack of representation in leadership and workforce.
- Discrimination lawsuits and reputational harm.
- Limited innovation due to homogeneous teams.

- Implementing DEI training and leadership programs.
- Establishing inclusive hiring policies.
- Promoting diverse supplier networks and partnerships.





## 3. Community Impact and Stakeholder Relations

## Risks:

- Negative impact on local communities due to environmental harm.
- Displacement or exploitation of vulnerable populations.
- Lack of stakeholder engagement leading to conflict.

#### Opportunities:

- Community engagement programs and participatory decision-making.
- Ethical land use and community development projects.
- Transparent communication with local stakeholders.

### 4. Health, Safety, and Well-being

## Risks:

- Workplace hazards and unsafe environments. Mental health issues among employees.
- Non-compliance with health and safety regulations.

## Opportunities:

- Employee wellness programs and health benefits. Implementation of advanced safety training and protective equipment.
- Stress management initiatives and mental health support.

## 5. Philanthropy and Community Development

## Risks:

Our Approach

Greenwashing claims if philanthropy efforts are insincere or disconnected from core operations.

10

Misaligned initiatives that don't address actual community needs.

#### Opportunities:

- Impact-driven CSR programs aligned with business values.
- Education, skill-building, and infrastructure support initiatives.
- Transparent reporting of philanthropic contributions.

#### 2.3. Governance Risks & Opportunities

#### 1. Board Diversity and Ethical Leadership

#### Risks:

- Lack of diverse perspectives in leadership leading to poor decision-making.
- Unethical behavior at the executive level damaging reputation and stakeholder trust.

- Establishing diversity quotas and mentorship for underrepresented groups.
- Implementing ethical leadership training. Independent board oversight and audit committees.



#### 2. Anti-Corruption and Whistleblower Protections

#### Risks:

- Legal penalties due to bribery and corruption.
- Lack of whistleblower protection leading to suppressed ethical concerns.

#### Opportunities:

- Strong anti-corruption policies and zero-tolerance enforcement.
- Anonymous reporting channels for whistleblowers.
- Third-party audits and transparent financial disclosures.

#### 3. Executive Compensation and Accountability

#### Risks:

- Excessive executive pay unrelated to company performance.
- Poor linkage between ESG performance and executive rewards.

#### Opportunities:

- Linking executive compensation with sustainability KPIs.
- Clear disclosure of pay structures and performance metrics.
- Periodic reviews of executive compensation frameworks.

#### 4. Data Privacy and Cybersecurity

#### Risks:

- Data breaches causing legal penalties and reputational harm.
- Mismanagement of customer data and poor cybersecurity protocols.

#### Opportunities:

- Investing in advanced cybersecurity infrastructure.
- Regular data audits and compliance checks.
- Transparent data privacy policies and consumer education initiatives.

#### 5. Transparency in Financial Reporting

#### Risks:

- Misleading financial disclosures and hidden liabilities.
- Non-compliance with global reporting standards.

- Clear, consistent ESG and financial disclosures.
- Adoption of globally recognized standards (e.g., ISSB, SASB, GRI).
- Regular third-party audits for accountability.



## Building a Resilient Future Through ESG Risk Management

Social Risks

labor practices, diversity,

## Emphasizes improving

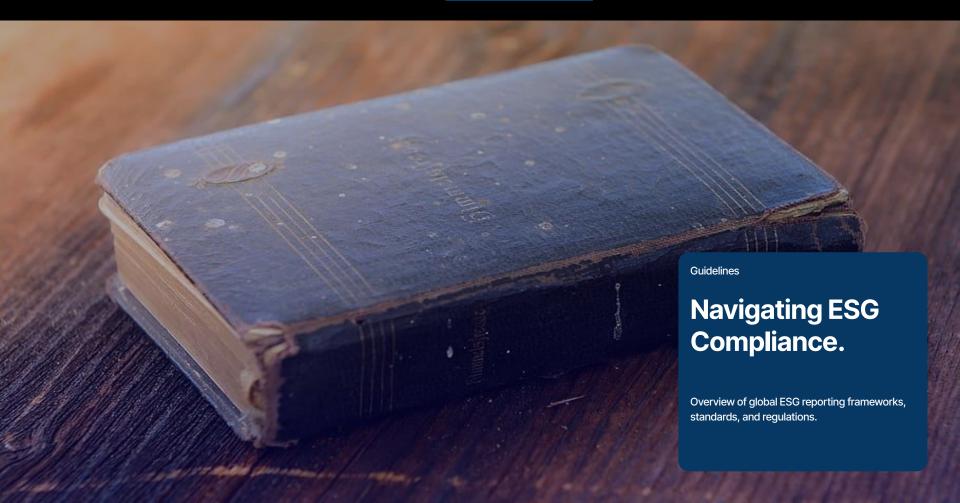
Environmental Risks

Focuses on identifying and mitigating environmental threats and leveraging sustainability opportunities.



## Governance Risks

Concentrates on enhancing board diversity, ethical leadership, and transparency in governance.





#### 3.1 Global ESG Reporting Frameworks

#### 1. ISSB (IFRS S1 & S2)

The International Sustainability Standards Board (ISSB) developed the IFRS S1 and IFRS S2 standards to create a global baseline for sustainability reporting.

- IFRS S1: Focuses on sustainability-related financial disclosures beyond climate, including social and governance factors that could impact enterprise value.
- IFRS S2: Specifically addresses climate-related disclosures, aligning closely with the TCFD framework and emphasizing risks, opportunities, and climate impact.

#### **Key Disclosure Areas:**

- Governance of ESG risks and opportunities.
- Climate-related physical and transition risks.
- Metrics and targets for tracking ESG performance.

## 2. TCFD (Task Force on Climate-Related Financial Disclosures)

The **TCFD**, now integrated into ISSB standards, provides recommendations for climate-related financial disclosures aimed at improving transparency around climate risks and their financial impact.

#### **Core Elements:**

- Governance: Board oversight on climate risks.
- Strategy: Impact of climate-related risks on business strategy.
- Risk Management: Processes for identifying and managing climate risks.
- Metrics and Targets: Climate performance indicators and reduction targets.

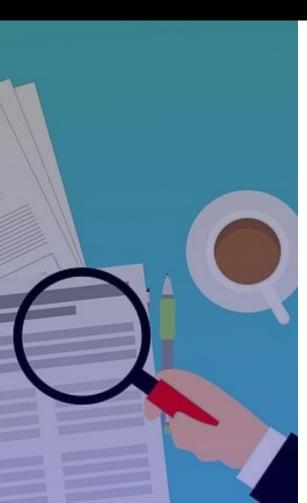
**Transition to ISSB:** TCFD's recommendations have been consolidated into **IFRS S2**, streamlining climate risk reporting globally.

#### 3. SASB (Sustainability Accounting Standards Board)

The **SASB Standards** offer industry-specific guidance for ESG disclosures, focusing on financially material sustainability issues across 77 industries.

#### Key Features:

- Tailored metrics for each industry.
- Focus on financial materiality and investor-centric disclosures.
- Integration compatibility with ISSB and other frameworks.



#### 4. GRI (Global Reporting Initiative) Standards

The **GRI Standards** emphasize broader sustainability impacts, focusing on how a company's activities affect the environment, society, and the economy.

#### **Key Features:**

- Covers all three ESG dimensions: Environmental, Social, and Governance.
- Designed for multi-stakeholder reporting, not just investors
- Encourages double materiality, emphasizing both financial impact and broader societal impact.

#### 5. CDP Reporting (and its Integration with ISSB)

The CDP (formerly Carbon Disclosure Project) helps organizations disclose their environmental impact, with a strong focus on climate change, water security, and deforestation.

#### **CDP Key Focus Areas:**

- Climate Change Impact.
- Water Management.
- Deforestation and Biodiversity.

**Integration with ISSB:** CDP has aligned its climate disclosure questionnaire with **IFRS S2**, ensuring consistency in climate reporting.

### 3.2 Regional ESG Regulations

#### 1. SEC Climate Disclosure Requirements (USA)

The **Securities and Exchange Commission (SEC)** proposed climate disclosure rules mandating public companies to disclose:

- Climate-related risks and their material financial impact.
- Greenhouse gas (GHG) emissions, including Scope 1, 2, and 3 emissions.
- Climate risk governance practices and mitigation strategies.

#### 2. EU Corporate Sustainability Reporting Directive (CSRD)

The **CSRD** expands sustainability reporting requirements in the EU, requiring companies to report:

- ESG risks and performance based on double materiality.
- Supply chain sustainability data, including Scope 3 emissions.
- Alignment with European Sustainability Reporting Standards (ESRS).

Applicability: Large companies and listed SMEs within the EU.



# 3. India's BRSR (Business Responsibility and Sustainability Reporting)

The **BRSR** is a mandatory ESG reporting framework for the top 1,000 listed companies in India under SEBI.

#### **Key Focus Areas:**

- ESG performance and risks in alignment with GRI Standards.
- Human rights, labor practices, and environmental policies.
- Leadership diversity and ethical governance metrics.

#### 4. Other Emerging Market Trends and Standards

- Japan's Corporate Governance Code: Emphasizes climate risk disclosure and governance structures.
- Singapore Exchange (SGX): Mandates sustainability reporting for listed companies.
- Brazil's Novo Mercado: Encourages enhanced governance standards with ESG disclosures.

## 3.3 Key Guidelines for ESG Risk Management

#### 1. Materiality Assessment Process

A **Materiality Assessment** identifies ESG factors that significantly impact a company's financial health and stakeholder relationships.

#### **Steps to Conduct Materiality Assessment:**

- Identify potential ESG risks and opportunities.
- Engage stakeholders for input on ESG priorities.
- Prioritize issues based on financial relevance and stakeholder interest.
- Incorporate results into ESG strategy and reporting.

#### 2. Double Materiality Approach

The **Double Materiality** approach expands the traditional materiality focus by considering both:

- Financial Materiality: ESG factors affecting the company's financial performance.
- Impact Materiality: The company's broader impact on the environment and society.

#### Example:

A manufacturing company might disclose both the financial risks of carbon pricing (financial materiality) and its impact on local biodiversity (impact materiality)



#### 3. Science-Based Targets and Net-Zero Goals

**Science-Based Targets (SBTs)** are emissions reduction targets aligned with climate science to limit global warming to 1.5°C above pre-industrial levels.

#### **Steps for Setting Science-Based Targets:**

- Measure baseline emissions.
- Define short-term and long-term reduction goals.
- Align targets with Scope 1, 2, and 3 emissions.
- Regularly report progress and adjust strategies as needed.

#### **Net-Zero Goals:**

A **Net-Zero** target involves reducing emissions as much as possible and neutralizing residual emissions through carbon removal projects.

#### 4. Value Chain Considerations (Scope 1, 2, 3 Emissions)

Understanding and reporting **Scope 1, 2, and 3 emissions** is critical for ESG risk management.

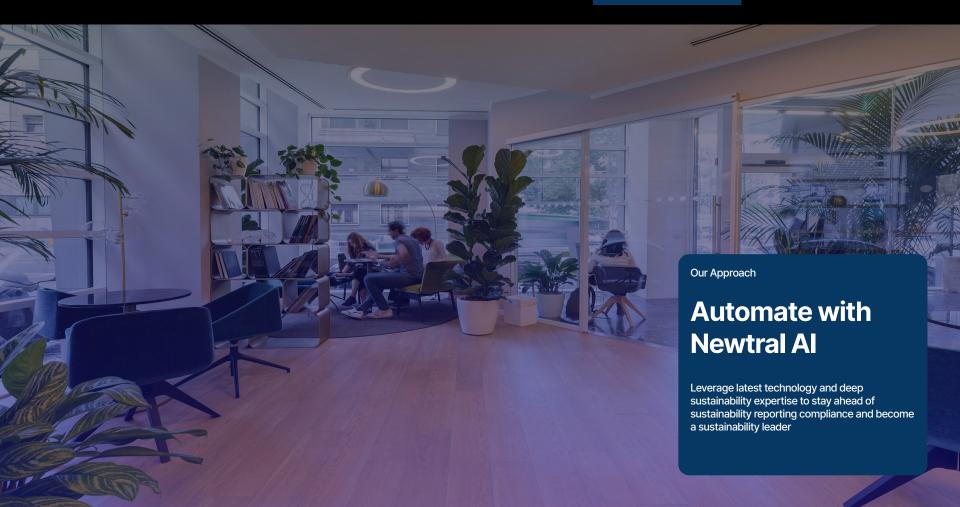
- Scope 1: Direct emissions from owned or controlled sources (e.g., company vehicles).
- Scope 2: Indirect emissions from purchased energy (e.g., electricity).
- Scope 3: All other indirect emissions in the value chain, including supplier emissions and product use.

#### 3.4. Conclusion

The evolving landscape of ESG (Environmental, Social, and Governance) risk assessment has become a critical component of modern business strategy. As organizations face increasing pressure from investors, regulators, and stakeholders, a proactive approach to ESG risk management is no longer optional—it's essential for long-term resilience and success.

#### **Key Takeaways:**

- Holistic Risk Management: ESG risk assessment provides a comprehensive framework for identifying and mitigating risks across environmental, social, and governance factors.
- Value Creation: Beyond risk mitigation, effective ESG strategies uncover growth opportunities such as innovation in renewable energy, circular economy practices, and stronger community relations.
- Strategic Integration: Embedding ESG into core business operations helps enhance financial performance, brand reputation, and stakeholder trust.
- Data-Driven Decisions: Leveraging frameworks like ISSB, TCFD, SASB, and GRI ensures standardized reporting, enabling informed decision-making and regulatory compliance.



Our Approach

# Automate with Newtral Al

Leverage latest technology and deep sustainability expertise to stay ahead of sustainability reporting compliance and become a sustainability leader



At Newtral, we understand the challenges businesses face in navigating the complex landscape of sustainability reporting and ESG integration. That's why we've developed a cutting-edge, Al-powered sustainability platform that streamlines your entire sustainability workflow, ensuring compliance, transparency, and value creation for all stakeholders.

#### Key Features and Benefits:

Automated Sustainability Workflow:

- Our Al-driven platform automates data collection, analysis, and reporting, saving time and resources
- Seamless integration with existing systems for efficient data management
- Ensures accuracy and consistency in sustainability reporting

#### Comprehensive Concierge Services:

- Dedicated sustainability experts to guide you through every step of your sustainability journey
- Tailored strategies and actionable insights based on your unique business needs
- Continuous support and expertise to help you achieve your sustainability goals

#### ESG Supply Chain Innovation:

- Advanced tools to assess and manage ESG risks and opportunities within your supply chain
- Collaborate with suppliers to improve sustainability performance and transparency
- Gain a competitive edge by demonstrating responsible supply chain practices

#### Scope 3 Emissions Management:

- Accurately measure and report your Scope 3 emissions with our Al-powered platform
- Identify hotspots and implement targeted reduction strategies
- Demonstrate leadership in addressing indirect emissions and climate change

#### Regulatory Compliance and Transparency:

- Stay ahead of evolving sustainability regulations and disclosure requirements
- Communicate your sustainability performance effectively to investors, customers, and other stakeholders
- Build trust and credibility through transparent and reliable sustainability reporting

Take the first step towards a more sustainable future with Newtral. Our Al-powered platform and expert concierge services provide the tools and guidance you need to integrate sustainability seamlessly into your business operations. Contact us today to schedule a demo and discover how Newtral can help you create lasting value for your stakeholders while contributing to a greener, more resilient world.

#### newtral

# Newtral Al Platform- Enterprise ESG Platform for Corporates and Supply Chain

We help organizations automate their ESG metric measurements, tracking and reporting across company as well as their supply chain. Our platform solves for all corporate sustainability reporting and carbon accounting needs, visit <u>newtral.io</u> for more information.

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