

# ESG for Budgeting, Financial Reporting and Risk Management

10-Day Intermediate Training Programme

10 Days | 8 Hours/Day | 80 Hours Total | Koenig Solutions

## Table of Contents

### Day 1: ESG Foundations and the Business Case for Sustainability

#### Module 1: Understanding ESG: Environmental, Social and Governance Pillars

- What ESG means in a financial and business context: defining Environmental, Social, and Governance factors and how each pillar affects organisational value and risk
- The evolution of ESG: from corporate social responsibility (CSR) to integrated sustainability — how ESG has moved from voluntary reporting to a core business and investment consideration
- Key ESG frameworks and standards: an overview of GRI, SASB, TCFD, ISSB, UN SDGs, and the UN Principles for Responsible Investment — what each covers and who uses them
- ESG stakeholder landscape: how investors, regulators, rating agencies, customers, employees, and civil society use ESG information to make decisions

#### Lab Exercises:

1. Lab 1: Review the ESG reports of two companies in the same sector — compare how each organisation defines its material ESG issues, which frameworks they reference, and what metrics they disclose — produce a one-page comparison summary
2. Lab 2: Using a provided ESG materiality matrix template, identify the top 5 material ESG issues for a fictional manufacturing company by mapping stakeholder concern against business impact — justify each selection

#### Module 2: The Business Case for ESG: Value Creation, Risk, and Financial Impact

- How ESG factors affect financial performance: evidence linking strong ESG performance to lower cost of capital, reduced operational risk, improved employee retention, and enhanced brand value
- ESG as a risk management tool: how environmental risks (climate, water, biodiversity), social risks (labour practices, supply chain), and governance risks (board quality, corruption) translate into financial risk
- ESG and access to capital: how institutional investors, development finance institutions, and green bond markets use ESG performance to make lending and investment decisions
- Regulatory drivers of ESG adoption: mandatory reporting requirements, taxonomy regulations, supply chain due diligence laws, and central bank climate risk guidelines shaping corporate ESG agendas

#### Lab Exercises:

1. Lab 1: Analyse a fictional company's ESG risk exposure — using a provided risk register template, identify and rate 6 ESG-related financial risks (2 environmental, 2 social, 2 governance), assign probability and impact scores, and calculate a risk priority ranking
2. Lab 2: Review a real-world case study of a company that suffered a financial loss due to a preventable ESG failure (e.g. an environmental incident, governance scandal, or supply chain collapse) — identify the ESG warning signs that preceded the event and what controls could have mitigated the financial impact

### Day 2: ESG Reporting Frameworks and Disclosure Standards

### **Module 3: GRI, SASB and ISSB: Core Reporting Frameworks in Depth**

- GRI Standards: structure of Universal Standards, Sector Standards, and Topic Standards — how GRI is used to report impacts on the economy, environment, and people for a broad stakeholder audience
- SASB Standards: industry-specific disclosure topics and accounting metrics — how SASB focuses on ESG issues that are financially material for investor decision-making in 77 industry classifications
- ISSB Standards (IFRS S1 and IFRS S2): the new global baseline for sustainability-related financial disclosures — sustainability-related risks and opportunities (S1) and climate-specific disclosures (S2)
- Selecting the right framework: how organisations choose between or combine GRI, SASB, and ISSB based on audience, jurisdiction, and reporting purpose

#### **Lab Exercises:**

1. Lab 1: Using the GRI Standards index, identify which GRI Topic Standards are relevant for a fictional financial services company — map 5 material topics to the correct GRI disclosure numbers and document what data would need to be collected for each disclosure
2. Lab 2: Using the ISSB IFRS S1 framework, identify the sustainability-related risks and opportunities a fictional bank must disclose — complete a structured disclosure template covering governance, strategy, risk management, and metrics and targets sections

### **Module 4: TCFD, Climate Disclosure and Scenario Analysis**

- TCFD framework overview: the four pillars of Task Force on Climate-related Financial Disclosures — Governance, Strategy, Risk Management, and Metrics and Targets
- Physical and transition climate risks: understanding the difference between physical risks (floods, droughts, extreme heat) and transition risks (policy changes, technology shifts, market changes) and their financial implications
- Climate scenario analysis: using IPCC and IEA scenarios to assess how different climate pathways affect an organisation's financial position — 1.5°C, 2°C, and 3°C+ scenarios
- Integrating TCFD into financial reporting: where climate risk disclosures sit in annual reports, how auditors and regulators are treating TCFD compliance, and the link between TCFD and IFRS S2

#### **Lab Exercises:**

1. Lab 1: For a fictional energy company, complete a TCFD disclosure template — identify 2 physical risks and 2 transition risks, assess the financial impact of each under a 2°C scenario, and document the governance structure overseeing climate risk management
2. Lab 2: Conduct a simplified climate scenario analysis for a fictional real estate company — use provided scenario parameters for a 1.5°C and a 3°C world, estimate the impact on asset values and operating costs under each scenario, and produce a one-page scenario analysis summary

## **Day 3: ESG Integration into Budgeting and Financial Planning**

### **Module 5: Embedding ESG into the Budgeting Process**

- Why ESG must be integrated into budgeting: how sustainability investments, carbon costs, energy efficiency savings, and regulatory compliance costs affect the annual budget
- ESG budget line items: identifying where ESG-related expenditure appears in the budget — capital expenditure for green infrastructure, operational costs for compliance, social investment, and governance programmes

- Carbon pricing in budgeting: incorporating internal carbon prices, carbon tax obligations, and emissions trading costs into financial planning and project appraisal
- ESG-linked budget allocation: how organisations allocate resources to ESG initiatives, prioritise competing sustainability investments, and track ESG spend versus outcomes

**Lab Exercises:**

1. Lab 1: Using a provided annual budget template for a fictional manufacturing company, identify all existing ESG-related line items, add 3 missing ESG budget categories (carbon tax provision, renewable energy transition capex, and supply chain audit costs), and recalculate the total operating cost impact
2. Lab 2: Build a 3-year ESG investment plan for a fictional company — prioritise 5 ESG initiatives by return on investment (cost savings, risk reduction, regulatory compliance), estimate the capex and opex for each, and present the plan in a simple prioritisation matrix

**Module 6: ESG Cost-Benefit Analysis and Capital Expenditure Appraisal**

- Applying cost-benefit analysis to ESG investments: how to quantify the financial benefits of sustainability projects including energy cost savings, avoided regulatory fines, reduced insurance premiums, and improved staff retention
- Net Present Value (NPV) and Internal Rate of Return (IRR) for ESG projects: adjusting standard financial appraisal tools to capture ESG-specific costs and benefits over longer time horizons
- Shadow pricing for ESG factors: assigning monetary values to carbon emissions, water use, biodiversity impact, and social outcomes to make ESG costs and benefits comparable with financial returns
- ESG considerations in capital allocation decisions: how boards and finance committees weigh ESG performance alongside financial returns when approving capital expenditure

**Lab Exercises:**

1. Lab 1: Conduct a cost-benefit analysis for a fictional company's proposed solar energy installation — calculate the upfront capex, annual energy cost savings, carbon cost avoidance, maintenance costs, and NPV over 10 years using a provided financial model template
2. Lab 2: Apply shadow carbon pricing to a fictional company's 3 largest carbon-emitting operations — calculate the shadow cost at USD 50 and USD 100 per tonne of CO<sub>2</sub>, identify which operation has the highest financial exposure, and recommend which should be prioritised for decarbonisation investment

**Day 4: ESG Financial Reporting: Metrics, Measurement and Disclosure**

**Module 7: ESG Metrics and Key Performance Indicators for Financial Reporting**

- Environmental metrics for financial reporting: Scope 1, Scope 2, and Scope 3 greenhouse gas emissions, energy consumption, water withdrawal, waste generation, and biodiversity impact
- Social metrics for financial reporting: employee health and safety rates, living wage compliance, gender pay gap, supply chain labour standards, and community investment
- Governance metrics for financial reporting: board diversity, executive pay ratios, anti-corruption policies, whistleblower mechanisms, and audit committee independence
- Selecting the right ESG metrics: how to choose metrics that are material, measurable, comparable, and linked to the organisation's strategy and financial performance

**Lab Exercises:**

1. Lab 1: Using a provided data collection template, calculate Scope 1 and Scope 2 greenhouse gas emissions for a fictional company from raw energy consumption data — apply the correct emission factors, check the calculations, and produce a GHG inventory summary table

2. Lab 2: Design an ESG KPI dashboard for a fictional bank — select 10 KPIs (4 environmental, 3 social, 3 governance), define the measurement methodology, set a baseline and target for each, and specify which reporting framework each KPI aligns to

## **Module 8: Integrating ESG into the Annual Report and Financial Statements**

- Where ESG disclosures appear in financial reports: integrated reporting, standalone sustainability reports, notes to financial statements, and management commentary sections
- Integrated reporting (IR Framework): combining financial and non-financial information to tell a coherent story about how an organisation creates value across financial, manufactured, intellectual, human, social, and natural capital
- ESG assurance and verification: why ESG data is increasingly subject to external assurance, what limited and reasonable assurance mean, and how to prepare ESG data for audit
- Common ESG reporting mistakes and how to avoid them: cherry-picking metrics, inconsistent boundary definitions, lack of prior-year comparatives, and unsubstantiated claims (greenwashing)

### **Lab Exercises:**

1. Lab 1: Review the sustainability section of a publicly available annual report and assess it against a greenwashing checklist — identify 3 statements that lack supporting data or methodology, and recommend how each should be strengthened to meet assurance standards
2. Lab 2: Draft a 1-page integrated reporting narrative for a fictional company covering the reporting year — using the IR Framework capitals model, describe how the company created or eroded value across financial, human, social, and natural capital, supported by 6 key metrics

## **Day 5: Green Finance, Sustainable Bonds and ESG Investment**

### **Module 9: Green Bonds, Social Bonds and Sustainability-Linked Finance**

- Green bond market overview: size, growth, key issuers, and how green bonds finance environmental projects — the Green Bond Principles and the role of the Climate Bonds Initiative
- Social bonds and sustainability bonds: how social bonds finance projects with positive social outcomes and how sustainability bonds combine both environmental and social objectives
- Sustainability-linked bonds and loans: how financing terms (interest rates) are tied to the issuer's ESG performance targets — KPI selection, target-setting, and consequences of missing targets
- Use of proceeds vs performance-based structures: the difference between green bonds (where funds must be used for specific green projects) and sustainability-linked bonds (where funds can be used for any purpose but terms adjust based on ESG performance)

### **Lab Exercises:**

1. Lab 1: Review the framework document for a real-world green bond issuance — assess whether the eligible project categories, use of proceeds reporting, and external review meet the Green Bond Principles requirements — produce a compliance assessment with findings
2. Lab 2: Design a sustainability-linked loan structure for a fictional manufacturing company — select 2 ESG KPIs with measurable targets, define the margin adjustment mechanism for achieving or missing each target, and calculate the potential interest cost saving or penalty under 3 performance scenarios

### **Module 10: ESG Integration in Investment Analysis and Portfolio Management**

- How institutional investors integrate ESG into investment decisions: negative screening, positive screening, ESG integration, thematic investing, and impact investing
- ESG rating agencies and data providers: how CDP (Carbon Disclosure Project), the publicly available GRI Sustainability Disclosure Database, and company annual reports score companies on ESG performance — methodology differences, limitations of ESG ratings, and how rating

disagreements affect investment decisions

- ESG due diligence for credit risk: how lenders assess ESG risks in loan origination, covenant design, and ongoing monitoring — the Equator Principles for project finance
- Stewardship and shareholder engagement: how institutional investors use voting rights and engagement to improve the ESG performance of portfolio companies

**Lab Exercises:**

1. Lab 1: Conduct an ESG due diligence assessment for a fictional loan application from a mining company — using a provided ESG due diligence checklist, assess environmental impact, community relations, governance structure, and regulatory compliance — produce a credit recommendation with ESG conditions
2. Lab 2: Compare the ESG ratings of 3 companies in the same sector using publicly available CDP questionnaire responses and company sustainability reports — identify the key drivers of rating differences, assess which company presents the lowest ESG risk for a lender, and justify the assessment

## **Day 6: ESG Risk Management: Frameworks, Identification and Assessment**

### **Module 11: ESG Risk Management Frameworks and Integration into Enterprise Risk**

- Integrating ESG risks into the enterprise risk management (ERM) framework: where ESG risks sit alongside financial, operational, strategic, and compliance risks in the risk register
- ESG risk taxonomy: structuring environmental risks (climate, resource scarcity, pollution), social risks (human rights, community relations, health and safety), and governance risks (corruption, board failures, executive misconduct)
- Double materiality: assessing both the impact of ESG risks on the organisation's financial performance and the organisation's impact on the environment and society — required under EU CSRD
- ESG risk appetite and tolerance: how organisations define acceptable ESG risk exposure, set limits, and escalate breaches to board level

**Lab Exercises:**

1. Lab 1: Build an ESG risk register for a fictional bank using a provided template — identify 10 ESG risks (4 environmental, 3 social, 3 governance), rate each on likelihood and financial impact, assign ownership, and define a mitigation action for each
2. Lab 2: Conduct a double materiality assessment for a fictional food and beverage company — for each of 6 ESG topics, rate both the financial impact on the company and the company's impact on society and the environment — produce a double materiality matrix and identify the top 3 priority topics

### **Module 12: Climate Risk Assessment: Physical and Transition Risk Modelling**

- Physical climate risk assessment: identifying and quantifying acute risks (floods, storms, wildfires) and chronic risks (sea level rise, temperature increase, water stress) for assets, operations, and supply chains
- Transition risk assessment: evaluating exposure to carbon pricing, stranded asset risk, technology disruption, and changing consumer preferences under different decarbonisation pathways
- Climate Value-at-Risk (Climate VaR): a quantitative approach to estimating the financial loss exposure from physical and transition climate risks under different scenarios
- Climate risk in financial institutions: how banks, insurers, and asset managers assess climate risk in their lending portfolios, underwriting books, and investment portfolios

**Lab Exercises:**

1. Lab 1: Conduct a physical climate risk assessment for a fictional infrastructure company with assets in 3 locations — use provided climate hazard data to score flood, heat stress, and water scarcity risk for each location — rank locations by overall physical risk exposure
2. Lab 2: Calculate a simplified Climate Value-at-Risk for a fictional bank's loan portfolio — using provided sector exposure data and transition risk loss rates under a 2°C scenario, estimate the potential credit loss from transition risk and identify the 3 highest-risk sectors in the portfolio

**Day 7: Supply Chain ESG Risk and Social Risk Management****Module 13: Supply Chain ESG Due Diligence and Risk Management**

- Why supply chain ESG risk matters: how environmental and social failures in the supply chain create financial, reputational, and legal risk for the buying organisation
- Supply chain due diligence regulations: EU Corporate Sustainability Due Diligence Directive (CSDDD), German Supply Chain Act, and US forced labour import restrictions — compliance obligations and penalties
- Supplier ESG assessment: designing supplier questionnaires, conducting supplier audits, using third-party data providers for supply chain risk screening, and managing findings
- Scope 3 emissions in the supply chain: why Scope 3 is the largest source of emissions for most organisations, how to measure it, and how to engage suppliers to reduce upstream and downstream emissions

**Lab Exercises:**

1. Lab 1: Design a supplier ESG due diligence questionnaire for a fictional retail company — include 15 questions covering environmental compliance, labour standards, health and safety, anti-corruption, and climate reporting — define the scoring methodology and risk threshold for supplier approval
2. Lab 2: Calculate Scope 3 Category 1 (purchased goods and services) emissions for a fictional company using provided spend data and emission factors — identify the top 3 spend categories by carbon intensity and recommend engagement actions to reduce Scope 3 emissions

**Module 14: Social Risk Management: Human Rights, Labour Standards and Community**

- Human rights due diligence in business: the UN Guiding Principles on Business and Human Rights (UNGPs) — identify, prevent, mitigate, and account for human rights impacts
- Labour standards risk in global operations: forced labour, child labour, unsafe working conditions, and discrimination — how to assess and manage these risks across direct operations and supply chains
- Community and social licence to operate: managing relationships with affected communities, conducting social impact assessments, and responding to community grievances
- Social risk in financial reporting: how human rights violations, labour disputes, and community conflicts translate into financial risk and how they should be disclosed

**Lab Exercises:**

1. Lab 1: Conduct a human rights impact assessment for a fictional mining company's new project — identify the 5 highest human rights risks for workers, local communities, and indigenous peoples, assess the severity of potential impact, and define the mitigation measures required
2. Lab 2: Review a fictional company's social risk disclosures in its annual report — assess whether the disclosures meet the UNGP reporting framework requirements, identify 3 gaps, and

draft improved disclosure language for each gap

## **Day 8: ESG Governance, Regulatory Compliance and Reporting Obligations**

### **Module 15: ESG Governance: Board Oversight, Executive Accountability and Internal Controls**

- Board-level ESG governance: committee structures for ESG oversight, director competencies in sustainability, and how boards set ESG strategy and monitor performance
- Executive accountability for ESG: linking ESG performance to executive remuneration — KPI selection, target-setting, weighting in scorecards, and disclosure requirements
- Internal controls for ESG data: data governance frameworks, data ownership, validation procedures, and internal audit of ESG reporting processes
- Whistleblowing and ethics in ESG governance: how effective whistleblower mechanisms support early identification of ESG risks and prevent governance failures

#### **Lab Exercises:**

1. Lab 1: Design an ESG governance framework for a fictional listed company — define the board committee responsible for ESG, the management ESG committee structure, the reporting line to the board, and the key decisions reserved for board approval versus management delegation
2. Lab 2: Design an ESG-linked executive remuneration scorecard for a fictional company's CEO — select 4 ESG KPIs (2 environmental, 1 social, 1 governance), assign weightings totalling 20% of the variable pay component, define targets and measurement methodology, and document the rationale

### **Module 16: ESG Regulatory Landscape: CSRD, EU Taxonomy and Global Developments**

- EU Corporate Sustainability Reporting Directive (CSRD): scope, applicability thresholds, reporting requirements under European Sustainability Reporting Standards (ESRS), and implementation timeline
- EU Taxonomy Regulation: the classification system for environmentally sustainable economic activities — the 6 environmental objectives, Do No Significant Harm (DNSH) criteria, and how companies report taxonomy alignment
- SEC climate disclosure rules and global regulatory convergence: the SEC's climate risk disclosure requirements for US-listed companies and how ISSB standards are being adopted by jurisdictions worldwide
- Preparing for mandatory ESG reporting: gap assessment against applicable standards, data collection infrastructure requirements, and external assurance readiness

#### **Lab Exercises:**

1. Lab 1: Assess a fictional company's readiness for CSRD compliance — using a provided gap assessment template, evaluate current disclosures against 5 ESRS requirements (climate, own workforce, value chain workers, business conduct, and governance) — produce a priority action plan
2. Lab 2: Assess the EU Taxonomy alignment of a fictional infrastructure company's capital expenditure — apply the 6 environmental objectives and DNSH criteria to 3 investment projects, calculate the percentage of capex that qualifies as taxonomy-aligned, and document the assessment methodology

## **Day 9: ESG Performance Management, Targets and Net Zero Strategy**

## **Module 17: Setting ESG Targets, Science-Based Goals and Net Zero Commitments**

- Science-Based Targets (SBTs): what they are, how they are set using the Science Based Targets initiative (SBTi) methodology, and why they are becoming the standard for corporate climate commitments
- Net zero strategy: the difference between carbon neutral and net zero, the role of emissions reductions versus carbon removals, and how to build a credible net zero roadmap
- Social and governance target-setting: how organisations set measurable targets for diversity and inclusion, living wage, health and safety, board composition, and anti-corruption
- Linking ESG targets to financial planning: how long-term ESG commitments drive capital expenditure plans, operating cost projections, and financial risk assessments

### **Lab Exercises:**

1. Lab 1: Develop a net zero roadmap for a fictional company with provided Scope 1, 2, and 3 baseline emissions data — define the reduction trajectory to 2050, identify the key decarbonisation levers for each scope, set interim 2030 targets, and estimate the capital investment required
2. Lab 2: Set a 3-year ESG target framework for a fictional bank covering 6 targets (2 environmental, 2 social, 2 governance) — define each target using SMART criteria, identify the baseline, specify the measurement methodology, and explain how each target links to the bank's financial strategy

## **Module 18: ESG Performance Monitoring, Reporting Cycles and Continuous Improvement**

- ESG performance monitoring systems: data collection infrastructure, automated data feeds, manual data entry controls, and the role of enterprise sustainability management software
- Managing the ESG reporting cycle: timeline, data owners, review and approval process, external assurance engagement, and publication of the sustainability report
- Using ESG performance data for continuous improvement: how companies identify underperforming areas, root cause analysis, corrective action planning, and tracking improvement over time
- ESG benchmarking: comparing performance against sector peers, industry averages, and best-in-class companies to identify competitive positioning and set more ambitious targets

### **Lab Exercises:**

1. Lab 1: Design an ESG data collection and monitoring system for a fictional company — define the data owner, collection method, frequency, validation check, and system of record for 8 key ESG metrics — produce a data governance matrix
2. Lab 2: Analyse a fictional company's 3-year ESG performance trend data — identify 3 metrics showing improvement, 3 showing deterioration, and 2 that are off-track against target — root cause analyse the 2 off-track metrics and recommend corrective actions

## **Day 10: Applied ESG: Integration, Strategy and Capstone Project**

### **Module 19: Building an Integrated ESG Strategy Linked to Financial Performance**

- Connecting ESG strategy to business strategy: how leading organisations embed ESG into their strategic planning process, business model, and competitive positioning
- ESG and financial value creation: quantifying the financial value of ESG leadership through cost reduction, revenue growth, risk mitigation, and improved access to capital
- Communicating ESG strategy to financial stakeholders: how to present ESG strategy and performance to investors, lenders, rating agencies, and analysts in financial language

- ESG strategy pitfalls: common failures in ESG strategy including greenwashing, scope creep, lack of accountability, insufficient resourcing, and disconnect between ambition and financial planning

**Lab Exercises:**

1. Lab 1: Develop a 1-page ESG value creation narrative for a fictional company — quantify the financial impact of 3 key ESG initiatives (cost savings, risk reduction, or revenue opportunity), link each to the company's financial KPIs, and present in a format suitable for an investor presentation
2. Lab 2: Identify 3 ESG greenwashing risks in a fictional company's sustainability communications — for each risk, explain why it constitutes greenwashing, the regulatory or reputational consequence, and how the communication should be corrected to be accurate and defensible

**Module 20: Capstone: Integrated ESG Budgeting, Reporting and Risk Management Plan**

- Capstone project brief: develop a comprehensive ESG integration plan for a fictional company covering budgeting, financial reporting, and risk management — applying all frameworks and tools covered across the 10 days
- Budgeting component: ESG investment budget with cost-benefit analysis, carbon cost provisions, and 3-year ESG capex plan linked to strategic targets
- Financial reporting component: ESG disclosure aligned to ISSB IFRS S1/S2 and GRI Standards, including a GHG inventory, key ESG metrics dashboard, and integrated reporting narrative
- Risk management component: ESG risk register, double materiality assessment, climate scenario analysis summary, and supply chain due diligence findings — all linked to financial risk quantification

**Lab Exercises:**

1. Lab 1: Complete the integrated ESG plan document using a provided template — each participant submits a written plan covering the budgeting, reporting, and risk management components for the fictional company, incorporating data and tools used throughout the course
2. Lab 2 (Capstone Presentation): Each participant presents their integrated ESG plan in a 10-minute board-level presentation — covering the 3 highest-priority ESG risks, the ESG budget investment case, the reporting framework selected, and the 3 most important ESG targets — followed by trainer and peer feedback and course close