

**Project Report**  
**PS-1**  
**Anurag Singh**  
**2021B5A72874G**  
**Final Report**

**A PROJECT REPORT**

**On**

**ESG Capability Build**

**By: -**

**Anurag Singh**

**2021B5A72874G**

**M.Sc. Physics + B.E. Computer Science**

**AT: -**

**Crossbar Talent, Gurugram**

**Practice School-I Station of**

**BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE,**  
**PILANI**

**(May-July, 2023)**

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## **Acknowledgements**

I would like to express my heartfelt gratitude to BITS Pilani, specifically the Practice School division, for providing me with the opportunity to undertake my project on ESG (Environmental, Social, and Governance) capability building. This project has been an invaluable experience in enhancing my knowledge and skills in the field of sustainability and responsible business practices.

I would like to extend my sincere appreciation to my Practice School teacher, Ms. Woormileela Sinha, for her guidance, support, and mentorship throughout this project. Her expertise and insights have been instrumental in shaping my understanding of ESG principles and their practical implementation in the context of the business world. Her dedication and commitment to my learning have been truly inspiring.

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I am also grateful to all the employees and stakeholders of the organization who generously shared their time and knowledge with me during the project. Their insights and perspectives have enriched my understanding of the challenges and opportunities in implementing ESG practices within the fintech sector.

Additionally, I would like to acknowledge the support of my fellow students and colleagues who have provided encouragement and assistance throughout the project. Their collaboration and constructive feedback have played a significant role in refining my ideas and improving the overall outcome.

Finally, I am indebted to my family and friends for their unwavering support and encouragement throughout my academic journey. Their belief in my abilities has been a constant source of motivation.

In conclusion, I am grateful to BITS Pilani, Ms. Woormileela Sinha, Mr. Vivek Choudhary,

and all those who have contributed to my project on ESG capability building. This experience has not only enriched my academic growth but has also equipped me with the necessary skills to make a positive impact in the world of sustainable finance. I am confident that the knowledge gained from this project will serve as a strong foundation for my future endeavors in promoting ESG practices and responsible business conduct.

**BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE  
PILANI(RAJASTHAN)  
Practice School Division**

**Station:** Crossbar Talent

**Centre:** Gurugram

**Duration:** 30 May 2023 – 21 July 2023.

**Date of Start:** 30 May 2023

**Date of Submission:** 19 July 2023

**Title of the Project:** ESG Capability Build

**ID:** 2021B5A72874G

**Name:** Anurag Singh

**Discipline:** M.Sc. Physics + B.E. Computer Science

**Name of Expert:** Mr. Vivek Choudhary

**Designation:** CEO

**Name of PS faculty:** Ms. Woormileela Sinha

**Key Words:** Environment, Social, Governance, Product Management

**Project Areas:** ESG, Capability Build.

**Abstract:** This project develops a comprehensive framework for integrating ESG factors in business practices, promoting sustainability, risk management, stakeholder engagement, and ethical governance.

Anurag Singh  
Signature(s) of Student(s)

Date: 24.06.2023

Signature of PS Faculty

Date:24.06.2023

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## **Introduction: -**

In today's business landscape, organizations are increasingly recognizing the importance of integrating Environmental, Social, and Governance (ESG) factors into their operations. This project aims to develop a comprehensive ESG framework that encompasses various aspects of sustainable business practices, including training, calculators, and due diligence.

The project begins with a needs assessment to identify the target audience and specific training requirements. By understanding the knowledge gaps and skillsets of the organization, tailored ESG training content can be created to effectively educate and empower employees at all levels.

Extensive research is conducted to gather relevant ESG information and resources. This ensures that the training content is based on credible and up-to-date data, allowing participants to develop a comprehensive understanding of ESG principles and their practical applications.

Simultaneously, the project team works on creating ESG calculators. These calculators play a vital role in quantifying and assessing the impact of ESG factors on business operations. By identifying relevant ESG metrics and reliable data sources, the calculators provide organizations with valuable insights into their environmental and social performance, enabling them to make informed decisions and set meaningful sustainability goals. The project team also focuses on developing engaging training materials, including presentations, handouts, and assessments. These resources ensure that the training sessions are comprehensive, interactive, and effectively convey the essential concepts of ESG.

Thorough testing is conducted to refine and finalize the ESG calculators, ensuring accuracy, reliability, and user-friendliness. The result is a robust tool that enables organizations to track and evaluate their progress towards ESG goals.

Furthermore, the project includes the development of an ESG due diligence framework. This framework assists organizations in assessing the environmental and social impacts of their operations, as well as the governance structures in place. By implementing this framework, organizations can identify areas for improvement, mitigate risks, and enhance their overall ESG performance.

Through the successful completion of these project milestones, organizations will be equipped with the necessary tools and knowledge to integrate ESG factors into their business practices, fostering sustainability, responsible decision-making, and long-term

value creation.

## Main Text

**ESG Training Content Creation:** Developing educational materials and resources is crucial to equip individuals with the necessary knowledge and skills to embrace ESG principles, sustainability frameworks, and responsible investment practices. These materials should cover a wide range of topics, including:

a) **ESG Principles:** Introducing the fundamental concepts of ESG and highlighting their importance in driving sustainable business practices.

b) **Sustainability Frameworks:** Exploring various frameworks such as the Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB), and Task Force on Climate-related Financial Disclosures (TCFD). These frameworks help organizations define and measure their sustainability goals and report on their progress.

c) **Responsible Investment Practices:** Educating individuals on strategies for integrating ESG factors into investment decision-making, such as impact investing, socially responsible investing, and sustainable finance.

The educational materials can take the form of online courses, webinars, interactive workshops, and educational toolkits to cater to diverse learning styles and preferences. Case studies and real-life examples should be incorporated to illustrate successful ESG implementation across different industries.

**ESG (Environmental, Social, and Governance) risk management** : is an essential aspect of corporate sustainability and responsible investing. Implementing an ESG risk management framework helps organizations identify, assess, mitigate, and monitor potential ESG risks and opportunities. Here are the key points to consider when developing a comprehensive ESG risk management framework:

- **Governance Structure:** Establish a dedicated governance structure with clear roles and responsibilities for overseeing ESG risk management. This may include a sustainability committee or board-level oversight.
- **Policy and Strategy:** Develop an ESG policy and strategy that outlines the organization's commitment to addressing ESG risks and integrating sustainability into decision-making processes. This should align with the organization's overall

business strategy.

- Risk Identification: Identify and prioritize the key ESG risks relevant to the organization's industry, operations, and stakeholders. This may include risks related to climate change, resource scarcity, labor practices, human rights, data privacy, diversity and inclusion, and more.
- Risk Assessment: Assess the potential impact and likelihood of identified ESG risks. This involves collecting relevant data, conducting scenario analysis, and utilizing appropriate tools to evaluate risks in financial, operational, reputational, and regulatory dimensions.
- Risk Mitigation: Develop mitigation strategies and action plans to address identified ESG risks effectively. This may involve setting targets, defining performance indicators, implementing controls and processes, and integrating sustainability considerations into decision-making frameworks.
- Integration and Alignment: Integrate ESG risk management into existing risk management processes, such as enterprise risk management or operational risk frameworks. Ensure alignment between ESG objectives and the organization's overall risk appetite.
- Stakeholder Engagement: Engage with internal and external stakeholders to understand their ESG expectations, concerns, and perspectives. This helps in identifying emerging risks, improving transparency, and building trust.
- Monitoring and Reporting: Establish robust monitoring mechanisms to track the effectiveness of ESG risk mitigation measures and evaluate progress towards sustainability goals. Regularly report on ESG performance to stakeholders, using relevant frameworks and standards such as GRI (Global Reporting Initiative) or SASB (Sustainability Accounting Standards Board).
- Continuous Improvement: Foster a culture of continuous improvement by regularly reviewing and updating the ESG risk management framework. Stay informed about evolving ESG trends, regulations, and best practices to ensure the framework remains relevant and effective.
- Collaboration and Partnerships: Seek opportunities for collaboration and partnerships with industry peers, NGOs, and other stakeholders to address common ESG challenges, share knowledge, and drive collective action towards sustainable development.

## **ESG research on Framework and parameters for financial companies:**

- **Regulatory Guidelines:** Examine the regulatory guidelines and requirements specific to the financial industry in the target jurisdiction. Financial regulators often provide frameworks or guidelines that outline ESG expectations and reporting standards for financial institutions.
- **International Standards and Frameworks:** Familiarize yourself with internationally recognized ESG frameworks and standards that are widely adopted in the financial sector. Some prominent examples include the Task Force on Climate-related Financial Disclosures (TCFD), Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB), and Principles for Responsible Investment (PRI).
- **Materiality Assessment:** Conduct a materiality assessment to identify ESG issues that are most relevant and significant for financial companies. Consider both industry-specific ESG risks, such as climate change, customer data privacy, and financial inclusion, as well as broader sustainability issues.
- **ESG Integration:** Explore how financial companies integrate ESG considerations into their decision-making processes, risk management frameworks, and investment strategies. Look for evidence of ESG integration in areas such as lending practices, investment selection and analysis, and corporate governance.
- **ESG Metrics and Reporting:** Evaluate the ESG metrics and indicators that financial companies use to measure and report their ESG performance. This may include data on carbon emissions, diversity and inclusion, community investments, sustainable finance products, and more. Assess the level of transparency and alignment with reporting frameworks like GRI or SASB.
- **ESG Risk Assessment:** Investigate how financial companies assess and manage ESG risks within their portfolios. This could involve examining methodologies for evaluating climate-related risks, social risks tied to customer behavior or labor practices, and governance risks associated with board effectiveness and ethics.
- **Stakeholder Engagement:** Consider the extent and quality of engagement with stakeholders, including clients, investors, employees, and communities. Look for evidence of dialogue and responsiveness to stakeholder concerns and expectations related to ESG issues.

- Best Practices and Case Studies: Explore case studies and best practices within the financial industry that demonstrate effective ESG integration and risk management. This could include examples of innovative products and services, successful impact investments, or efforts to promote financial literacy and inclusion.
- Emerging Trends: Stay up-to-date with emerging trends in ESG for financial companies. This may include developments in sustainable finance, green bonds, impact measurement, fintech innovations for ESG integration, and regulatory changes that impact ESG risk management.
- Industry Collaboration: Investigate collaborative initiatives within the financial industry aimed at advancing ESG practices, sharing knowledge, and setting common standards. Examples include industry associations, sustainability networks, and partnerships with other sectors to address systemic ESG challenges.

### **Developing Python Program for Questionnaire and Analyzing the data:-**

- The ESG Monitoring and Questionnaire project has been developed as a Python program using the Tkinter library for the graphical user interface (GUI).
- The program enables users to assess and monitor the environmental, social, and governance (ESG) aspects of companies.
- It includes a set of questions covering various ESG factors, such as carbon emissions, energy consumption, renewable energy sourcing, waste management capital, labor conditions, community engagement, ESG assessments, reporting frameworks, decision-making considerations, data security, employee satisfaction and diversity, environmental and social standards, communication of ESG strategy, and risk management of emerging technologies/business models.
- The program prompts users with each question and expects their input for analysis.
- It segregates the outputs based on the size of the company (small, medium, or large) and calculates specific metrics accordingly.
- The program categorizes the assessment results for carbon emissions, energy consumption, renewable energy sourcing, waste management capital, labor conditions, and community engagement based on predefined thresholds for

different company sizes.

- The GUI provides a user-friendly interface with an input field for answering each question and a submit button to process the input.
- The outputs are displayed in a separate label on the GUI, indicating the assessment results based on the user's inputs.
- Once all the questions are answered, the program displays a final output message informing the user that their inputs have been sent for further research and they will receive additional insights in due course.
- To access the code and run the program, users can clone or download the project from a repository hosting platform like GitHub.
- Python 3.6 or above must be installed on the system, and Tkinter library should be available.
- Running the program involves executing the **esg\_monitoring.py** file using the Python interpreter.
- The GUI will appear, allowing users to answer the questions and view the assessment outputs accordingly.
- The project is released under the MIT License, permitting users to modify and distribute the code.

## **Conclusion**

In order to advance sustainability, organizations must adopt a comprehensive approach that encompasses four key initiatives.

Firstly, developing educational materials and resources is crucial for training individuals on ESG principles, sustainability frameworks, and responsible investment practices. By providing a deep understanding of these concepts, organizations can foster a culture of sustainability and responsible decision-making.

Secondly, creating ESG calculators enables organizations to measure and quantify their ESG performance. These tools allow for the assessment of environmental, social, and governance impacts, aiding in the identification of areas for improvement. By tracking and analyzing data, organizations can set meaningful targets and benchmarks to drive continuous progress.

Thirdly, establishing an ESG due diligence framework is essential when evaluating potential investments, acquisitions, or partnerships. This framework ensures that organizations consider ESG risks and opportunities, such as climate change impacts, supply chain practices, and governance issues. By systematically assessing these factors, organizations can make informed decisions that align with their sustainability goals.

Lastly, developing an ESG program management framework provides a strategic roadmap for planning, implementing, and monitoring ESG initiatives within an organization. This framework ensures that ESG goals are clearly defined, responsibilities are assigned, and performance is regularly measured and reported. By embedding ESG considerations into decision-making processes, organizations can drive meaningful change and demonstrate their commitment to sustainability.

## **References:-**

Global Reporting Initiative (GRI): <https://www.globalreporting.org/>

Sustainability Accounting Standards Board (SASB): <https://www.sasb.org/>

Task Force on Climate-related Financial Discl (TCFD): <https://www.fsb-tcfd.org/>

United Nations Global Compact (UNGC): <https://www.unglobalcompact.org/>

Please note that these websites provide comprehensive information and resources related to ESG and sustainability practices.



## **Glossary: ESG and Sustainability Terminology**

1. ESG (Environmental, Social, and Governance): A framework used to assess the environmental, social, and governance practices of an organization. ESG factors are considered when evaluating the sustainability and ethical impact of investments or business operations.
2. Sustainability: The practice of meeting present needs without compromising the ability of future generations to meet their own needs. It involves balancing economic, social, and environmental considerations to ensure long-term well-being.
3. ESG Reporting: The process of disclosing an organization's ESG performance and impact. It involves providing transparent information on environmental, social, and governance practices to stakeholders, investors, and the public.
4. ESG Integration: The incorporation of ESG factors into investment analysis, decision-making processes, and risk assessments. It aims to improve investment outcomes by considering the sustainability and ethical implications of investments.
5. Sustainability Frameworks: Guidelines and standards that help organizations measure, manage, and report on their sustainability performance. Examples include the Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB), and Task Force on Climate-related Financial Disclosures (TCFD).
6. Responsible Investment: The practice of making investment decisions that consider both financial returns and ESG factors. It involves selecting investments that align with sustainability goals and promote positive environmental and social impacts.
7. ESG Risk Assessment: The evaluation and identification of potential environmental, social, and governance risks that could impact an organization's financial performance or reputation. It involves analyzing factors such as climate change, supply chain practices, labor standards, and governance structures.

8. Stakeholder Engagement: The process of involving and communicating with individuals or groups affected by or interested in an organization's activities. It aims to understand and address their concerns, expectations, and feedback regarding sustainability and ESG practices.
9. Impact Measurement: The process of quantifying and evaluating the positive or negative social, environmental, and economic impacts of an organization's activities. It involves assessing outcomes and tracking progress towards sustainability goals.
10. ESG Program Management: The strategic planning, implementation, and monitoring of ESG initiatives within an organization. It ensures alignment with sustainability objectives, effective execution, and ongoing performance measurement.
11. Sustainability Reporting: The communication of an organization's environmental, social, and governance performance, practices, and impacts through reports or disclosures. It provides stakeholders with information on sustainability efforts and progress.
12. ESG Due Diligence: The systematic evaluation of ESG risks and opportunities when assessing potential investments, acquisitions, or partnerships. It involves analyzing factors such as environmental impact, labor practices, human rights, and governance structures.
13. GUI: Acronym for Graphical User Interface. It is a visual interface that allows users to interact with software or applications using graphical elements, such as buttons, menus, and input fields.
14. Tkinter: A standard Python library used for creating GUI applications. It provides a set of built-in widgets and functions to develop user interfaces.
15. Carbon Emissions: The release of carbon dioxide (CO<sub>2</sub>) and other greenhouse gases into the atmosphere as a result of human activities, such as burning fossil fuels. Carbon emissions contribute to climate change.
16. Energy Consumption: The amount of energy used by a company or organization over a specific period, typically measured in megawatt-hours (MWh) per year.
17. Renewable Energy: Energy generated from renewable sources, such as solar, wind, hydro, or geothermal, which are naturally replenished and have a lower environmental impact compared to fossil fuels.
18. Waste Management Capital: The financial resources invested by a company towards managing and reducing waste, including waste disposal, recycling, and other waste

management practices.

19. Labor Conditions: The working conditions and environment provided by a company to its employees, including factors such as safety, fair wages, working hours, and employee benefits.

20. Community Engagement: The level of involvement and interaction between a company and the communities where it operates. It encompasses activities like corporate social responsibility initiatives, community development programs, and stakeholder engagement.

21. ESG Assessments: The process of evaluating a company's environmental, social, and governance performance using specific criteria and metrics. ESG assessments help measure sustainability, ethical practices, and overall corporate responsibility.

22. Reporting Frameworks: Standards or guidelines that define the requirements for reporting ESG-related information. Reporting frameworks provide a structured framework for companies to disclose their ESG performance and impacts.

23. Data Security: The practices and measures implemented by a company to protect sensitive information, including user data and financial information, from unauthorized access, breaches, or misuse.

24. Employee Satisfaction and Diversity: The efforts made by a company to ensure the well-being, satisfaction, and diversity of its workforce. It includes measures to promote inclusivity, equal opportunities, and a positive work environment.

25. Environmental and Social Standards: Set of guidelines or benchmarks that companies follow to ensure compliance with environmental regulations and social responsibilities. These standards may cover areas such as pollution control, resource conservation, human rights, and labor practices.

26. Risk Management of Emerging Technologies/Business Models: The process of identifying, assessing, and mitigating risks associated with new technologies or business models adopted by a company. This includes analyzing potential challenges, regulatory implications, and reputational impacts.

27. MIT License: A permissive open-source software license that allows users to modify, distribute, and use the code under certain conditions. It is one of the most commonly used licenses in the open-source community.

Note: This glossary provides general definitions for common ESG and sustainability terms. Terminology may vary in specific contexts and industries.

**Success Story Template:-**

**Station Name:** Crossbar Talent , Gurugram

**Project Domain:** Managing Aspects of ESG

**Project Title:** ESG Capability Build

**Student(s) Name:** Anurag Singh

**Typical benefits to PS station:**

1. Enhanced understanding of ESG principles.

2. Practical application of ESG analysis.
3. Multidisciplinary collaboration.
4. Improved data analysis and research skills.
5. Increased awareness of sustainability challenges and opportunities.
6. Familiarity with ESG reporting frameworks and standards.
7. Deeper and ethical considerations and responsible business practices.
8. Enhanced stakeholder engagement and communication skills.
9. Better understanding of regulatory and compliance requirements.
10. Ability to make informed decisions integrating ESG factors.