iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 12 **Issue:** XII **Month of publication:** Dec 2024

DOI:

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Conference 'Technology and Knowledge Based Entrepreneur for Sustainable Industrial Development', held at Sridevi Women's Engineering College, Dec 2024

A Study on Sustainable Financing Frameworks of Banks in India Automobile Industry

B Sudhakar Reddy[1], Dr. J.S.V. Gopala Sarma[2]
[1]*Research Scholar,* [2]*Professor, School of management and Commerce, Malla Reddy University, Hyderabad, Telangana*

Abstract: ***Now day's Sustainable finance plays crucial role for the environment protection. Green finance is the new buzzy word in the dynamic business competition world. Especially when we talk about the automobile industry is always emphasizing the negativity towards the environment protection, even though the automobile industry contributions 9% to GDP, and it provide 19 million employments direct or indirect. The research objective is to evaluate framework of Sustainable finance or green loans in the automobile industry in India. The explorative study of green loans was top four banks were analyzed. All the four banks reports, rate of interest and initiatives for lending green loans to the automobile industry.***
The Indian automobile industry was accelerating towards the third largest economy. The research identifies the frameworks to the consumers for lending green loans. The study observes the green loans are essential for environmental protection and zero emissions. Companies and banking sector were working towards sustainability. The financial sector embraces massive power in fetching responsiveness to issues of sustainability and funding related green loan programs.
Keywords: Sustainable Finance, Financing frameworks, Environmental protection.

I. INTRODUCTION

Sustainable finance is the way dreaming towards environmental protection due to climatic changes in the nature. The financial sector plays crucial role for developing of any country, the mobilization and utilization of investments in protecting the environment is very important for future generations to have healthy life. The eco-friendly investments leads to growing demand of EV vehicles, biofuels shows the innovative mobility and solutions to the need of sustainable finance has now become, meanwhile the investor is focusing more on green loans.

Process of investment in eco-friendly projects where in the important factor we need to consider is to protect the environmental, social and governance. Green finance provides green transportation like bio fuels buses and electric vehicles, green logistics. In the present scenario most of the individuals and companies and large scale industries are looking towards green loans, because everyone associated with Mother Nature to have eco-friendly environment and transparency and accountability towards the society.

Sustainable finance encourages the innovation, improvement and accomplishment of financial instruments which are Eco-friendly, environmentally sound and profit-oriented. Finance is the backbone of any organization and it plays a crucial role in the smooth functioning of any organization. Thus, the research on sustainable finance initiatives in banking sector .Automobile industry played climatic role in the development of the society by bringing zero carbon emissions vehicles and will be a key part of the society in the future. Consequently, the research topic based on the gap identified is Sustainable Finance in the Automobile Industry.

The Indian financial sector is gradually moving towards incorporating sustainable finance/climate transition, both in terms of risks and opportunities. On the regulatory front, there has been much traction. The Journal of Indian Institute of Banking & Finance over the couple of years. The Ministry of Finance has been instrumental in setting up the Taskforce on sustainable finance in 2021, with focus on 4 elements - (I) Sustainable Finance Roadmap (II) Taxonomy (III) Regulatory Framework for Sustainable Finance (Regulations, Resilience and Disclosures) and (IV) Development of Report on Global and Domestic Best Practices on Sustainable Finance - essentially involving all relevant ministries. The taskforce involved various ecosystem players, to understand the existing landscape and eventually emerge with a common unified approach to sustainable finance. Capital market regulator led ESG disclosures through Business Responsibility and Sustainability Reporting (BRSR) that has laid emphasis on a level of transparency and quantification. It mandates disclosure of material ESG risks and opportunities, financial implications and approaches to mitigate or adapt to the risks. These mandatory sustainability disclosures are required to obtain reasonable assurance for listed entities on 49 core KPIs within BRSR Core, which was introduced in a phased approach from FY2023-24 and is slated to enhance the quality of disclosures.

©IJRASET: All Rights are Reserved

A. Research Objectives

1) To understand the framework of Sustainable finance in Indian automobile industry.
2) To analyze explorative study of Sustainable finance framework of four banks.
3) To evaluate rate of interest and initiatives for lending green loans to the automobile industry

B. Research Questions

Q1) what are the various Sustainable finance frameworks of activities in the Indian Automobile Industry?
Q2) what is the view of Sustainability finance frame works in different banking sectors towards the Indian Automobile industry?
Q3) Is Automobile industries in India are doing incredible works in the improvement of Sustainable Financial frameworks?
Q4) what are the challenges for Sustainable Finance framework in the Automobile Industry in India?

C. Research hypothesis

On the basis of the above model, various hypotheses have been formed so that it can be tested further to focus on the study. Following are the hypotheses of the study.
H1: Sustainability finance framework initiatives have the positive relationship with the banker's performance and consumers consuming ratio increases.
H2: Green loans initiatives have the positive relationship with the sustainability financial frame work.

D. Research Methodology

The paper is based on empirical research practices and performances are based on the systematic literature review. There is a theoretical, analytical, statistical and graphical study strategy as well as empirical data in the research paper. This article is based on secondary sources data, most of the data is collected through the website, books, journals and research paper.

II. LITERATURE REVIEW

From the past decade the various studies on the interest of researchers, academics and industry professionals has increased exponentially, in the analysis and discussion of Sustainability finance framework, since it is considered by various researchers and academics as one of the fundamental factors in the investigation of solutions that optimize the use of natural resources in industrial production
The World Commission on the Environment and Development in 1987 termed sustainability as "development which meets the needs of the present without conceding the ability of future generations to meet their own needs" (Ashby et al., 2012).
One of the papers bounded the mythical improvements which are trendy in the fields of financial stability and financial sustainability
(Dhaheri & Nobanee 2020). This paper was a review on available literature in the field of Sustainable Finance. Several papers have accessible its implications in a circular economy and decentralized system. One such paper deliberates a proposal that integrates the circular economy concept and financial evaluation through real options.
(Rodrigo-González, Grau-Grau, & Bel-Oms, 2021, p. 7973). This paper was only in the context of Europe and the scenarios considered were not in relation with India. One of the papers tried to found the relationship between surviving Corporate Social Responsibility practices and Sustainability which best part the major differences between the two and how the rating agencies are viewing the two
(Liang & Renneboog, 2021). The review of the above literature gave me an insight that there is a lack of papers studying the condition of Sustainability and Green finance in India.
In 2022-2023 The Departments of Economic Affairs, Ministry of Finance, Government of India has designed a 'Green Bond Framework' in line with the Green Bond Principles of International Capital Market Association (ICMA). The principles include: use of proceeds, project evaluation and selection, management of proceeds and reporting (Framework for Sovereign Green Bonds, GoI, 2022). Further, the ICMA recommended two things to ensure transparency which includes: a) the issuer set out a Green Bond Framework which is accessible to the investor, and b) advises the issuer to consider for an external review.
Green Banking is a policy and a form of banking activity wherein the banks undertake initiatives and daily activities as a conscious entity in the society by considering in-house and external environmental sustainability.

©IJRASET: All Rights are Reserved

The banks who perform such kind of banking activities are known as socially responsible and a 'sustainable bank' or 'green bank' or 'ethical bank' (Hossain et al., 2020; Zhixia et al., 2018).

State Bank of India being the largest commercial bank taken a lead in setting higher standards of sustainability and undertook foremost step towards 'green banking' initiative. SBI is the first bank to inaugurate wind farm project in Coimbatore in this regard. The green banking initiatives include: green loans, green financing, green mortgages, loans for green construction, loans for eco-friendly vehicles, etc.

A. Data Analysis

The data analysis part here, I have taken the case studies and reports of a few top four banks to understand the Sustainable Financing frameworks Initiatives. The report will include detailed analysis of the Sustainability financing framework of banking sector towards automobile industry**.**

B. Sustainable financing framework:

1) Introduction: The Imperial bank of India is the oldest bank and largest commercial bank in India and was subsequently renamed and nationalized as the State Bank of India (SBI) in 1955. It is strengthening the nation's economy and serving the aspirations of its vast population in terms of assets, deposits, profits, branches, number of customers and employees, relishing the continuing reliance of millions across the social spectrum.

2) Sustainable Financing frame work: SBI is aware of the accountability that accompanies the opportunity of being India's largest public sector bank towards sustainable development. SBI has several frameworks and policies to support ESG including and not limited to a Climate Change Risk Management Policy, Renewable Energy Policy, Sustainability and Business Responsibility Policy, Corporate Social Responsibility Policy, Code of Ethics etc. India is striving towards the 2030 agenda for sustainable development laid down by the United Nations. SBI has come up with several products and services.

3) Finance for Biofuel Projects: - SBI provides loans for corporates that are interested in replacing the existing feedstock coal or other fossil fuels with biomass. The Bank helps meet capital expenditure requirements through this loan.

4) Compressed biogas ("CBG") under SATAT Scheme: - SBI provides loans for CBG plants under the sustainable alternative towards affordable transportation scheme.

5) Green car loan: - IT promotes cleaner mobility through the green car loan scheme by offering a longer repayment period of up to eight years and a concession of 20 basis points (bps) on the interest rate, compared to a regular car loan.

C. HDFC Bank Sustainable financing framework

1) Introduction: HDFC Bank is one of the first leading private banks among to receive approval from the Reserve Bank of India (RBI) to setup a private sector bank in 1994. The goal of the Bank is to be the preferred provider of financial services to its customers in India across metro, urban, semi-urban and rural markets. Its strategy is to provide a comprehensive range of financial products and services to its customers through multiple distribution channels, with what the Bank believes is high-quality services, advanced technology platforms and superior execution.

2) Sustainable financing framework: HDFC Bank's Sustainable Financing Framework, interpreted by way of this document (hereinafter referred to as the "framework"), is proposed as a basis for HDFC Bank's future Sustainable Financing.

3) Clean Transportation

Developing/ manufacturing or acquisition of low-carbon passenger and freight transportation or related infrastructure, including:
Electric and Hybrid Vehicles

- Non-public transportation, e.g. Passenger vehicles and hybrid vehicles, such as cars and commercial vehicle either with zero directs emissions.
- Public transportation (e.g., light rail transit, metro, tram, trolleybus, bus and rail) either with zero direct emissions (fully electric and hydrogen)
- For freight transportation, including rail17, tailpipe emissions at or below
- Infrastructure for zero direct emission transport such as batteries and hydrogen fuelling facilities Setup of clean transportation infrastructure - Charging Stations
- Late-stage R&D related to development and energy efficiencies for electric and hydrogen vehicles

©IJRASET: All Rights are Reserved | SJ Impact Factor 7.538 | ISRA Journal Impact Factor 7.894 |

- Incorporating green technology in transportation infrastructure such as Transport/Public transport control centers

D. Axis Bank Sustainable Financing Framework

1) Introduction: Axis Bank is one of the leading private sector banks in India, offering a wide range of products and services to corporate, government and retail customers through a variety of delivery channels. The Bank commenced operations with the opening of its first branch in Ahmedabad in April 1994 and since then has emerged as one of India's leading financial conglomerates with a presence across diverse segments of the economy.

2) For over 27 years, Axis Bank has strived to stand by its customers and other stakeholders as a trustworthy and supportive partner, helping them fulfil their financial aspirations and realising their personal ambitions. Axis Bank has presence across 28 states and 8 union territories in India, operating 4,594 branches and extension counters in 2,596 centres in 667 districts, as on 31st March 2023.

3) Sustainable Financing Framework: Axis Bank's Sustainable Financing Framework ("The Framework") was developed with the objective of reinforcing Axis Bank's capabilities in financing green projects. Axis Bank has already issued a Green Bond in 2016 under its Green Bond Framework, and now aims to create a Sustainable Financing Framework in order to raise investments for financing/ refinancing environmental and Social Projects, as well as projects with both social and environmental impact. Through this new Framework, Axis Bank aims to mobilize investors to contribute capital towards the realization of the UN SDGs.

4) Clean Transportation:

- All infrastructure, infrastructure upgrades, rolling stock and vehicles for electrified public transport, including electrified rail, trams, trolleybuses and cable cars. Buses with no direct emissions (electric and hydrogen).
- Bus Rapid Transit (BRT) Systems- Components13 of any BRT project meeting Bronze, Silver or Gold score under the BRT Standard14 as developed by the Institute of Transportation and Development Policy.
- Development, manufacture and acquisition of low-carbon land transport such as passenger cars and commercial vehicles - zero tailpipe emission vehicles (e.g., hydrogen, fuel cell and electric vehicles) and hybrid vehicles with tailpipe CO2 emissions below 75 gCO2 per passenger-kilometre (pkm).
- Development of infrastructure for low-carbon land transport (private and public) - projects related to capacity or energy efficiency improvement (e.g., station upgrade, improved signaling equipment), electric charging stations, and electricity grid connection upgrade
- Infrastructure for zero direct emission.

E. Canara Bank Sustainable financing Framework

Introduction

Canara Bank has adopted a proactive approach to address environmental and social impacts that could result from its lending activities by assimilating E&S risks. Bank has formed ESG Committee & Working Group to reduce negative impacts elicited due to emerging risks such as climate risk

F. Sustainable Financing Framework By Canara Bank

Canara Green Wheels: Under this initiative, the Bank offers loans specifically for electric vehicles (EVs). By encouraging the adoption of EVs, the Bank contributes to reducing air pollution and promoting sustainable transportation.

Carbon Emissions: Reduce Emissions, Renew Our World the Bank monitors and tracks energy resources it uses in its operations, undertakes measures to minimize its consumption and reports its progress on an annual basis. Given the nature of banking operations, the Bank's environmental impacts come from its Scope 1 and Scope 2 GHG emissions, as part of operating a pan India physical and digital presence of 10,209 ATMs, 9,604 Branches and 25 major offices including circle offices and Head office. Additionally, the Bank is currently developing a strategy to compute an inventory of relevant Scope 3 emission categories.

Canara Bank demonstrates its commitment to reducing emissions through various initiatives: Rooftop Solar Power Systems:. Electric Vehicle Charging Infrastructure: The Bank installed charging stations for electric vehicles at its head offices. These efforts reflect Canara Bank's commitment to sustainability and responsible operations.

©IJRASET: All Rights are Reserved | SJ Impact Factor 7.538 | ISRA Journal Impact Factor 7.894 |

Greenhouse gas emissions Energy-Efficient Air Conditioning Units: Canara Bank shifted to energy efficient air conditioning systems, minimizing energy consumption.

Energy-Efficient Buildings: Canara Bank invests in energy-efficient building designs and technologies Diesel Generator Phase-Out: Canara Bank replaced diesel generators with inverters in 868 branches.

Virtual Meetings and Video Conferencing: The Bank promotes virtual meetings to minimize air travel, showcasing an integrated strategy for emissions reduction. Parameter Total Scope 1 emissions Total Scope 2 emissions Total Scope 1 and Scope 2 emission intensity Unit MtCO2 e MtCO2 e MtCO2 e/INR Crore FY 24 35,296.13 1,95,643.45 1.81 Bank's commitment to resource efficiency extends beyond minimizing carbon emissions to reduce consumption of tangible resources and minimize waste throughout own operation.

III. CHALLENGES

1) Lack of clarity over long-term regulatory frameworks and policy pathways towards carbon neutrality and climate adaptation.
2) Lack of collective understanding among investors of the full potential of technological improvements across the whole landscape of climate change mitigation. c. Effective practices for the appropriate allocation of risk between public and private actors at the earliest stages of climate technology readiness are not well understood or shared.
3) Uneven and uncertain domestic policy and regulatory environments within and across jurisdictions.
4) Lack of a clear scale up pathway from prototype to full-scale demonstration, especially for large unit size technologies that require new standards and institutional frameworks, and which often encounter "valley of death" funding famines between projects.
5) Limited data and evaluation on the effectiveness and scalability of climate technology accelerators and incubators, which is more pronounced in developing countries.

IV. SUGGESTIONS

1) The automobile industry striving towards the sustainability, Government should play an influential role in growth in impetus towards sustainable practices and sustainable financing frame works.
2) The Government of India should liberalize the policies to the entire banking sector to promote sustainability finance regarding reduction in carbon emissions which would give a push to Automobile industry to work more efficiently.
3) The consumer perception should transit towards green loans; they should belief those alternatives like EVs would ensure a better future for mankind.
4) Automobile industry should focus on Research and Development latest technologies to reduce carbon emissions recycle them, shift to renewable resources.
5) India should start adapting the sustainability finance. Automobile industry is accelerating towards the third largest economy should revolutionize into sustainable finance.

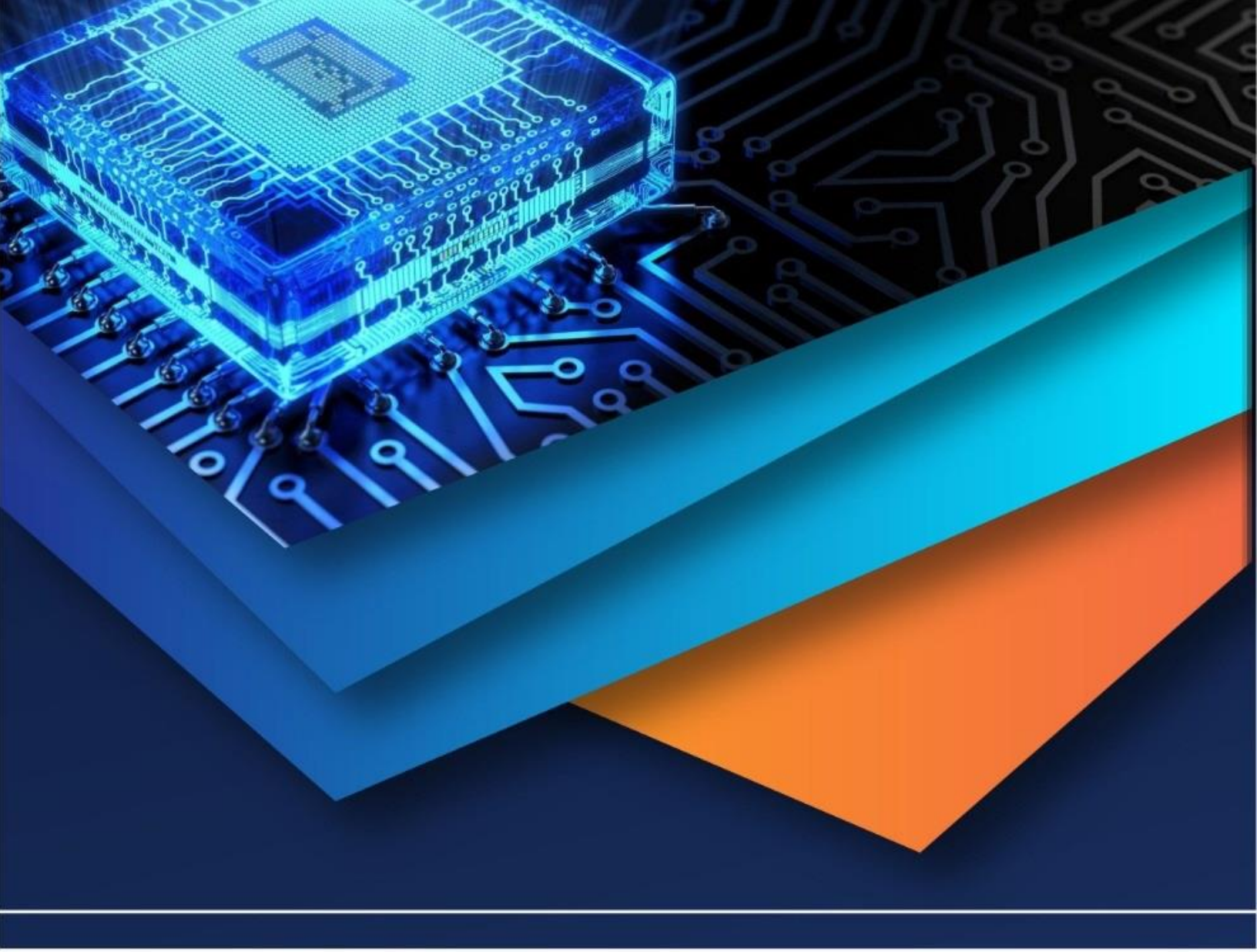
V. CONCLUSION

In essence, interpreting sustainable finance and climate risks for Indian banks involves implementation a model swing that aligns banking practices with the constraints of a rapidly changing world. As financial institutions change to meet the challenges posed by climate change, adopting a proactive and integrated approach becomes not only a necessity but also an opportunity for innovation and leadership. By incorporating these comprehensive recommendations, Indian banks can fortify their resilience to climate related risks and serve as key contributors to sustainable development. This transformative journey would further safeguard the financial sector from emerging threats and ensure a positive impact on the environment, society and the broader economy. In demystifying the complexities of sustainable finance, Indian banks have the potential not just to adapt but to thrive in an era where sustainability and financial viability go hand in hand.

REFERENCES

[1] Dhaheri, A.A and Nobanee, H. (2020). Financial Stability and Sustainable Finance: A Mini-Review. SSRN. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3538328
[2] Rodrigo-González, A., Grau-Grau, A., & Bel-Oms, I. (2021). Circular Economy and Value Creation: Sustainable Finance with a Real Options Approach. Sustainability, 13(14), 7973. https://doi.org/10.3390/su13147973

[3] https://sbi.co.in/documents/17836/3726866/ESG+Financing+Framework+2023.pdf/ab4d507d-c354-d4d0-b2e5-3cbbe1f75e0a?t=1674120824966.
[4] Schumacher, K., Chenet, H., & Volz, U. (2020). Sustainable Finance in Japan. Taylor& Francis Online. https://www.tandfonline.com/doi/full/10.1080/20430795.2020.1735219 .
[5] https://www.axisbank.com/docs/default-source/default-document-library/axis-bank-sustainable-financing-framework.pdf .
[6] https://www.icicibank.com/ms/aboutus/annual-reports/2022-23/icici-esg/sustainable-financing.html.
[7] Amui, L.B.L.; Jabbour, C.J.C.; de Sousa Jabbour, A.B.L.; Kannan, D. Sustainability as a Dynamic Organizational Capability: A Systematic Review and a Future Agenda toward a Sustainable Transition. J. Clean. Prod. **2017**,142, 308–322. [CrossRef]
[8] Baviera-Puig, A.; Gómez-Navarro, T.; García-Melón, M.; García-Martínez, G. Assessing the Communication Quality of CSR Reports. A Case Study on Four Spanish Food Companies. Sustainability **2015**, 7, 11010–11031.
[9] Falle, S.; Rauter, R.; Engert, S.; Baumgartner, R.J. Sustainability Management with the Sustainability Balanced Scorecard in Smes: Findings from an Austrian Case Study.Sustainability **2016**, 8, 545.[CrossRef]
[10] Klewitz, J.; Hansen, E.G. Sustainability-oriented innovation of SMEs: A Systematic Review. J. Clean. Prod **2014**, 65, 57–75. [CrossRef]



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)