IDFC FIRST Bank

Green Fixed Deposits Impact Assessment Report for FY 2024-25

Executive Summary

IDFC FIRST Bank, launched its Green Fixed Deposits initiative in June 2024. The Bank has engaged with a third party to prepare a Green Deposit Impact Assessment Report for FY25. The Bank has allocated funds raised through issuance of such deposits, towards funding clean transportation activities i.e. providing loans for 2-wheeler electric vehicles in line with the list of eligible activities/projects as prescribed in the RBI circular: DOR.SFG.REC.10/30.01.021/2023-24.

In alignment with the circular and its requirements, the third party has assessed the impact generated through this funding. Based on the analysis of this impact generated, electric 2-wheeler financing demonstrates substantial environmental benefits through quantifiable greenhouse gas emission reductions with the impact quantified through savings generated in the form of emissions avoided, monetary savings in fuel cost and per-km monetary savings for the borrowers. This comprehensive impact assessment, based on actual loan portfolio data and emissions calculation methodology, reveals significant environmental value creation through the Bank's sustainable finance initiatives. The analysis compares emissions from electric 2-wheelers against equivalent internal combustion engine (ICE) vehicles.

This analysis indicates that IDFC FIRST Bank's electric 2-wheeler financing portfolio has avoided emissions, with the electric vehicles preventing approximately 609,178.20 $kgCO_2$ equivalent emissions each year. This figure pertains to the assets tagged to the green deposits and the electric 2-wheeler loans provided by the Bank for the fiscal year 2024-25.

Based on the Bank's current financing scale, this translates to meaningful contributions towards India's climate commitments while delivering tangible economic benefits to customers through reduced fuel costs and maintenance expenses. The approach established for calculating the emissions that are avoided, and the financial savings achieved from fuel expenses and ownership savings provides a robust foundation for the Bank's green finance reporting and stakeholder communication.

Methodology And Framework

The environmental impact assessment employs a comparative emissions analysis framework that evaluates greenhouse gas emissions from electric 2-wheelers against internal combustion engine vehicles. The methodology is grounded in established emission calculation protocols and utilizes India-specific emission factors to ensure accuracy and relevance to local conditions. The assessment framework considers both direct emissions from vehicle operation and emissions from electricity used for charging the electric vehicles, providing a comprehensive view of environmental

impact. This analysis is based on the calculations done for the assets that are tagged against the green fixed deposits issued by the Bank.

Factors Considered/Assumptions Taken:

The baseline comparison utilizes a representative of a 125cc petrol 2-wheeler as the internal combustion engine benchmark, with average vehicle cost of INR 1,10,000[1], fuel efficiency of 50 kilometers[2] per liter of fuel (petrol) consumption and covering 18,000 kilometers annually. This baseline assumptions were based on typical market conditions and consumer usage patterns for conventional 2-wheelers in India. The electric vehicle comparison considers an average electric 2-wheeler cost of INR 137,536 reflecting the average price of electric vehicles that were funded by the bank. Annual electricity consumption is calculated based on vehicle efficiency ratings and charging patterns, with emissions computed using the Central Electricity Authority's grid emission factor of 0.727 kg CO2e/kWh[3].

Electric vehicle emissions are calculated based on electricity consumption patterns, charging efficiency rates of 98%[4], and grid emission factors that account for India's current electricity generation mix. The methodology ensures conservative estimates by incorporating realistic operational assumptions and avoiding optimistic projections that might overstate the benefits claimed.

Impact Indicators Considered

Eligible Project Category	Impact Indicators	Value
Clean Transportation	GHG emissions avoided per year (measured in $kgCO_2$ equivalent, **$kgCO_2e$**)	**609,178.20**
	Number of Vehicles (Assets) Financed (**Units**)	**4,774**

Emissions Calculation and Baseline Analysis

The emissions analysis demonstrates significant environmental advantages for electric 2-wheelers compared to conventional petrol vehicles. The assumption was made based on distance travelled by a 2 – wheeler in India i.e., 18,000 kms annually. Based on this assumption a comparative analysis has been performed on fuel consumed by ICE and electric 2 – wheeler vehicles. The calculation of grid emission factor for electricity incorporates upstream extraction and refining impacts, providing a comprehensive assessment of fuel consumed.

Portfolio Impact Assessment

IDFC FIRST Bank's electric 2-wheeler financing portfolio demonstrates substantial aggregate environmental impact through its scale and market reach. Based on the tagged assets against the

[1] https://www.bikewale.com/honda-bikes/shine/price-in-mumbai/

[2] https://www.bikewale.com/honda-bikes/shine/mileage/

[3] https://cea.nic.in/wp-content/uploads/2021/03/User_Guide_Version_20.0.pdf

[4] https://www.sae.org/publications/technical-papers/content/2017-01-1697/

green deposits, there are a total of 4774 vehicles that were funded against the green fixed deposits worth INR 510,982,171 issued by the Bank. The emission reduction from these assets is considered as impact generated by the Bank which is translated into benefit and captured in this report.

The portfolio's environmental impact extends beyond carbon emissions to include broader air quality benefits through reduced local pollutant emissions. Unlike electric vehicles that concentrate emissions at power generation facilities (often located away from population centers), internal combustion engines emit pollutants that directly impact human health. The transition to electric 2-wheelers financed through the Bank's initiative eliminates direct emissions of nitrogen oxides, particulate matter, carbon monoxide, and unburned hydrocarbons in the environment. This will lead to contribution of improved air quality, and reduction in noise pollution. Furthermore, electric vehicles exhibit a higher efficiency in fuel utilization, achieving considerably better energy conversion rates than ICE. The optimized electricity use further reduces the dependency on conventional sources of energy and thereby reducing emissions.

Environmental Impact Analysis

The net emissions avoidance calculation demonstrates that 4,774 tagged electric 2-wheelers financed through Bank's green deposits initiative amounting to INR 510,982,171 has cumulatively prevented 609,178.20 kg CO_2e for the year with an overall financial savings in fuel cost of INR 46,024,968 for FY 2024-25.

Financial And Economic Impact Analysis

The environmental benefits of Bank's electric 2-wheeler financing program are complemented by substantial economic value creation for customers and society. Electric vehicle owners achieve an average fuel cost savings, with annual petrol costs of INR 37,080 replaced by an average electricity cost of INR 3,375, generating net average annual savings of INR 33,705 per vehicle. These savings represent approximately 29% of the vehicle's purchase price recovered annually through reduced running costs when compared with the ICE engine in comparison, making electric mobility financially attractive for customers while delivering environmental benefits.

Maintenance cost advantages further enhance the economic case for electric 2-wheelers, with five-year maintenance costs[5] of INR 12,847 compared to INR 13,947 for internal combustion engine vehicles. While the absolute difference appears modest, the reduced maintenance requirements reflect electric vehicles' simpler mechanical systems and lower servicing needs. Combined with fuel savings, the total economic advantage for electric 2-wheeler owners amounts to substantial household income enhancement while contributing to environmental sustainability goals.

The aggregate economic impact across IDFC FIRST Bank's portfolio demonstrates significant value creation, with 4,774 financed electric vehicles generating cumulative annual fuel savings of INR 46,024,968. This economic value represents direct household income enhancement while supporting the Bank's social impact objectives through financial inclusion and sustainable mobility

[5] https://theicct.org/wp-content/uploads/2021/12/cost-compare-india-ice-2ws-ldvs-nov21.pdf

access. The economic benefits create positive feedback loops that encourage continued electric vehicle adoption and support the initiatives's long-term sustainability and growth potential.

Social Impact based on Economic Impact: Per-Kilometer Savings Analysis

The social impact of IDFC FIRST Bank's financing for electric 2-wheelers goes beyond just total savings, showcasing significant economic advantages per kilometer for customers. Analysis indicates that owners of electric 2-wheelers save around INR 1.12 for every kilometer traveled when compared to traditional petrol vehicles. This calculation is based on the differences in operational costs over an annual usage of 18,000 kilometers. Consequently, this results in an annual savings of INR 20,160 for the household. This calculation also takes into account the price difference a customer pays while purchasing an EV, instead of an ICE vehicle.

Regulatory Compliance and Reporting

IDFC FIRST Bank's environmental impact assessment methodology aligns with regulatory requirements under the Reserve Bank of India's Framework for Acceptance of Green Deposits, ensuring transparent and accountable use of green deposit proceeds. The methodology employs conservative assumptions and established emission factors to provide reliable and verifiable environmental impact quantification.

The assessment framework supports the Bank's compliance with emerging climate-related financial disclosure requirements, including the RBI's proposed framework for climate-related financial risk disclosure. By maintaining detailed emissions calculation methodologies and impact tracking systems, IDFC FIRST Bank is aligned to regulatory guidelines and its own Green Deposits Policy and Financing Framework.

Work Undertaken

The assignment was undertaken basis IDFC FIRST Bank’s Green Deposit Policy and Green Deposit Financing Framework. The third party has referred to a list of accounts provided by IDFC First Bank to which green deposits proceeds have been allocated. The performance of the projects has been assessed in line with the criteria defined in the RBI framework for accepting green deposits.

Strategic Implications and Recommendations

The demonstrated environmental impact of IDFC FIRST Bank's electric 2-wheeler financing program provides a strong foundation for expanded sustainable finance leadership and market development. This success creates opportunities for portfolio expansion into adjacent sustainable mobility segments, including electric three-wheelers, light commercial vehicles, and charging infrastructure financing.

Conclusion

IDFC FIRST Bank's Green Deposits initiative being utilized for electric 2-wheeler financing delivers substantial and quantifiable environmental benefits that demonstrate the institution's leadership in sustainable finance and meaningful contribution to India's climate objectives. The impact assessment methodology reveals annual emissions avoidance of 609,178.20 kgCO_2 equivalent from

the assets that are tagged against green deposits worth INR 510,982,171. issued by the Bank. This environmental impact, combined with INR 46,024,968 in annual fuel savings, demonstrates the successful integration of environmental sustainability with commercial banking objectives and a positive financial impact for the end user.

As India's electricity grid continues decarbonizing through renewable energy deployment, the environmental benefits of the initiative will compound, enhancing the long-term value proposition for green deposits and sustainable mobility financing. The demonstrated success creates a replicable model for sustainable finance innovation that balances environmental impact, social value creation, and commercial viability.

The Bank's Green Fixed Deposit initiative supports the ongoing adoption of electric vehicles which will lead to a gradual decrease in overall emissions. Additionally, with the sustained implementation of renewable energy, there will be an increase in the uptake of electric vehicles due to lower charging expenses.

The initiative's success validates the business case for environmental sustainability integration in banking operations while contributing meaningfully to national climate goals.

Portfolio-level information on the use of funds raised from green deposits:

Particulars	Current Financial Year (INR)	Previous Financial Year (INR)	Cumulative (INR)
Total green deposits raised (A)	510,982,171	-	510,982,171
Use of green deposit funds**			
(1) Renewable Energy	-	-	-
(2) Energy Efficiency	-	-	-
(3) Clean Transportation	510,982,171		510,982,171
(4) Climate Change Adaptation	-	-	-
(5) Sustainable Water and Waste Management	-	-	-
(6) Pollution Prevention and Control	-	-	-
(7) Green Buildings	-	-	-
(8) Sustainable Management of Living Natural Resources and Land Use	-	-	-
(9) Terrestrial and Aquatic Biodiversity Conservation	-	-	-
Total Green Deposit funds allocated (B = Sum of 1 to 9)	510,982,171	-	510,982,171
Amount of Green Deposit funds not allocated (C = A – B)	-	-	-
Details of the temporary allocation of green deposit proceeds pending their allocation to the eligible green activities/projects	-	-	-

Third party's Responsibilities

The third – party responsibility is limited to the extent of providing impact analysis for the Deposit allocation basis IDFC FIRST Bank's Green Deposit Policy, its Financing Framework and RBI framework for accepting green deposits based on the information provided by the Bank.

Way Forward

Expanding the Electrical Vehicle (EV) Financing Ecosystem

Based on this Impact Assessment IDFC FIRST Bank intends to strategically expand its electric vehicle financing focus beyond traditional two-wheelers to encompass the broader sustainable mobility ecosystem, including electric three-wheelers vehicles and other segments which capture evolving customer preferences and have government policy support for comprehensive electric mobility adoption while leveraging the Bank's established operational expertise.