



Nabil Carbon Disclosure Report 2024



Carbon Disclosure Report

As a part of commitment letter signed by Nabil Bank as one of the PCAF (Partnership for Carbon Accounting Financials) signatories in 2021, Nabil disclosed its first GHG emissions from its loan and investments under one of its SBU loan portfolio, i.e., Infrastructure and Project Financing (IPF) Division, in March 2023. The disclosure made was under the scope 3 category 15 emissions reported using The Global GHG Accounting and Reporting Standard Part A: Financed Emissions developed by PCAF.

This is the second year in row that bank is publishing data related to its carbon footprint under the financed portfolio of IPF division. The first year (base year) disclosure by bank was based on GICS sector codes with the emission factors (EFs) available for Asia Pacific-Rest of the World from the PCAF data base. As country specific data for Nepal is still not available, this disclosure continues to take the reference of updated economic emission factors based on the Exiobase EEIO (extended input output) data from the PCAF database. Further, as the PCAF Exiobase Methodology advises using regional averages for financed emissions calculations, the regional average EFs for emerging economies have been considered in this disclosure.

The IPF portfolio which is being covered under this reporting represented 10.13% of bank's total LDO as of FY 2022/23 end, i.e., 15th July 2023 and the portfolio comprises exposure to business sectors like energy, cement, airlines & telecommunication services that come under the asset class of "Project Finance" as per the PCAF Standard.

Attribution to Emissions

For attribution, the total equity and debt of borrowing entities are referred from their latest audited financial statements of FY 2022/23. Consequently, the productions and revenue of these entities for FY 2022/23 has been considered to derive absolute emissions based on PCAF based emission factor.



References to Calculation Methodology:

The disclosure here is based on the following:

Classification Type	Exiobase Sector Classification
Emission Factor type	Emissions Generated for other sectors and Avoided Emissions for renewable sectors
Emission Factor Options	-Physical Activity Based, i.e., Option 2 (Energy produced annually in Mega Watt hour in FY 2022/23) -Economic Activity Based, i.e., Option 3 (Company Revenue in the financials of FY 2022/23)
Country	Emerging Economies Emission Factors data as Nepal specific data are not available
Source	PCAF Database 2019
References	The Global GHG Accounting & Reporting Standard (PART A) PCAF Database User Briefing (February 2024) Further Information on Exiobase data (Database Methodology) January 2023
Currency Conversion	Exchange rate of USD/131.60 NPR of the reporting date (15th July 2023) considered. For emission factors expressed in Euro, the cross rate for conversion is based on Euro/148.20 on reporting date





Disclosure Results:

ABSOLUTE EMISSIONS FROM LOANS AND INVESTMENTS OF IPF PORTFOLIO (other than Energy)

S. N.	NACE/ Exiobase Code	Industry Classification (NACE 2 Description)	Absolute Emission tCO ₂ e		Total Absolute Emission tCO ₂ e (Scope 1 & 2)	Bank's Exposure in USD Million	Data Quality Score
			Scope 1 tCO ₂ e	Scope 2 tCO ₂ e			
1	23.51/p26.d	Manufacturing (Cement)	165,204.42	6,710.21	171,914.63	54.86	Score 4, Option 3 (3a)
2	51.1/p62	Air Transport	6,164.64	223.51	6,388.15	14.61	Score 4, Option 3 (3a)
3	61/S15	Telecommunications	316.73	198.95	515.68	25.80	Score 2, Option 1 (1b)
		Total	171,685.80	7132.67	178,818.46	95.27	

Note: Weighted data quality score for above calculation is 3.46 where score of 1 indicates high data quality and score of 5 indicates low data quality.

Total Absolute Emissions (Scope 1 & 2) = 178,818.46 tCO₂e from total loan exposure of USD 95.27 million
Emission Intensity (tCO₂e/\$ Million Loaned) = 1,877.03 tCO₂e per million \$ loaned

Though the IPF portfolio increased by 8.34% from the previous reporting period, the growth in non-energy sectors above is actually negative by 13.31% as the major growth and thrust of SBU has been towards energy sector financing. Yet the emission noted above had sharply risen from its first disclosure despite de-growth in the sector. This is due to the revised emission factor which is updated by PCAF based on most recent information available and compilation of latest data by PCAF where continuous works are ongoing for improving the physical and economic emission factor data.

However, for comparability of this year's disclosure from the last one, though detailed guidance on (re)baselining is waited from PCAF, we have just reassessed/restated our base year emissions again with the same emission factors now considered here for this year's disclosure and hence arrived at following results:

Total Absolute Emissions (Scope 1 & 2) = 318,851.28 tCO₂e from total loan exposure of USD 104.02 million (for last year 2021/22)

Emission Intensity (tCO₂e/\$ Million Loaned) = 3,065.28 tCO₂e per million \$ loaned (for last year 2021/22)



The major difference noted due to new economic emission factor is on manufacturing sector (i.e., cement) where total absolute emission (scope 1&2) reported for last period (as at FY 2021/22 closing) was 75,884.43 tCO₂e while the emission for same period based on new EF is seen at 302,611.49 tCO₂e vis-à-vis the absolute emission of 171,914.63 tCO₂e only as at this reporting period (i.e., FY 2022/23 closing).

The emission reporting for the Telecommunication sector is based on score 2, option 1 (1b) data which is the primary data reported by the borrowing entity in their latest available sustainability disclosure report of year 2021 published on their official website. Though disclosure of latest year has not been available from the borrower, the industry being service nature, their base stations primarily powered by national electricity grids in most places and increasing penetration of electricity grids in the country every year, it is reasonable enough to believe that such emission has not markedly increased. Hence, the reported data has been still considered over the regional economic activity based EFs for the entity.

Scope 3 Emissions

For reports published 2023 onwards, PCAF requires disclosure of Scope 3 emissions of borrowers for NACE level 2(L2) sectors which includes Cement (NACE 2 code - 23.51) under manufacturing sector. Hence, to this requirement, bank has disclosed the scope 3 emission as below:



AVOIDED EMISSIONS FROM LOANS & INVESTMENTS IN ENERGY & RENEWABLES (OPERATIONAL PROJECTS)

Apart from financed emission that bank is responsible for, the clean energy generated from operational hydropower and solar projects financed by bank have undoubtedly avoided some of the GHG emissions.

Bank has a sizeable loan commitment in energy sector comprising both hydropower and solar projects under construction and operation. The loan outstanding under energy sector totaled 63% of the total portfolio of IPF on the reporting date (15th July 2023) while the exposure stood around 6.65% of bank's total LDO on the reporting date.

The lending to Energy sector is a directed lending requirement of Central Bank (Nepal Rastra Bank) wherein commercial banks are required to progressively lend 6.5%, 7%, 8% and 10% of their overall lending portfolio in this FY 2023/24 (mid-July 2024) and successive fiscal years respectively as per the existing directive. Nabil Bank being one of the leading banks that ventured into the energy sector not only intends to adhere to these requirements but also internalizes the significance attached to these prescriptions by regulator which is intended towards harnessing the untapped power potential of country which can bring about a turnaround shift in the economy at the same time help comply with country's net zero commitments and the aspirations to align with Paris Agreement.

The energy projects financed by IPF division majorly comprises run of river scheme projects and grid solar projects. The carbon avoidance by these projects may be relative to the actual replacement of other energy mix available in the combined grid while Nepal's grid electricity is mainly hydropower based. The market mechanisms like CDM (Clean Development Mechanism) and CER (Certified Emission Reduction) trading are yet to shape up in Nepal lacking which these avoided emission disclosures have not seen developer's interest yet. Considering the orientation there and to underpin bank's contribution also towards avoiding emissions through financing of these green and renewable projects, the disclosure for avoided emissions is continued. However, as the physical activity based emission factor in the new database is not available, the avoided emissions are derived based on the electricity produced in MWh for FY 2022/23 and considering the same physical activity based EF for Nepal which was considered for the base year disclosure. The avoided emissions disclosure is thus arrived as below:

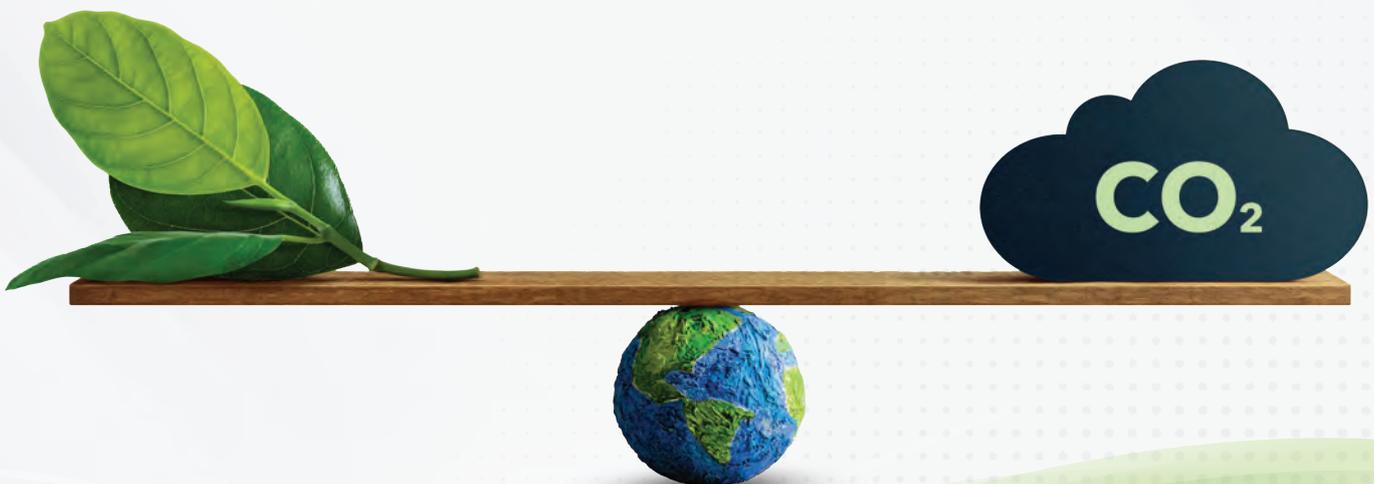




AVOIDED EMISSIONS FROM LOANS & INVESTMENTS IN ENERGY & RENEWABLES (OPERATIONAL PROJECTS)

S. N.	NACE/ Exiobase Code	Industry Classification	Emission tCO ₂ e (Avoided)	Bank's Exposure in USD Million	Data Quality Score
1	35.11/S11	Production of Electricity (Hydropower)	10,089.58	85.53	Score 3, Option 2 (2b)
2	35.11/S11	Production of Electricity (Grid Solar)	87.03	7.32	Score 3, Option 2 (2b)
Total			10,176.60	92.85	

The avoided total emissions in base year disclosure was 2,131.81 tCO₂e only from a total exposure of USD 28.05 million. Though such disclosure was made for FY 2021/22 in our first reporting, the attribution was derived based on debt and equity position of borrowing entities for the financial year 2020/21 based on availability of financial statements then and accordingly, the electricity produced (MWh) also had to be considered for FY 2020/21 itself. This had thus already omitted some of the renewable projects that had already commissioned in FY 2021/22 for the calculation of avoided emissions then. Additionally, more of the under construction projects financed by bank came to commissioning in FY 2022/23 which has brought about a good increase in total avoided emission figure in this year's disclosure.





Conclusion:

Bank further realizes the need to increase the data quality score and obtaining physical activity data from its portfolios for more reliability of these disclosures however the challenge for these data still remain. Where available and possible, bank shall also try to use more qualitative data over time through engagement with borrowers and consultants on deemed required basis. Further, the disclosure process shall be further extended to include loan portfolio under Business Loan asset class and other SBU portfolios and/or asset classes as the broader understanding is achieved.

Production: NABIL BANK LIMITED, NEPAL

Published: APRIL 2024

