



Stuck in the Past

Coal Ties Hinder Indian Banks' Energy Transition



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India’s ambitious renewable energy targets, driven by its Net Zero goals, are rapidly transforming the energy landscape. Renewable energy capacity additions have significantly outpaced coal in India,¹ and this trend is set to continue. This transition to renewable energy from coal is visible in the global financial markets too. Over 200 Financial Institutions (FIs)² worldwide—including more than 80 banks—have adopted coal exclusion policies to align with decarbonisation and Net Zero goals. In India, only Federal Bank, RBL Bank, and Suryoday Small Finance Bank appear to have acknowledged the risks that continued coal financing poses to their portfolios—these are the only banks that have adopted coal exclusion or phase-out policies.

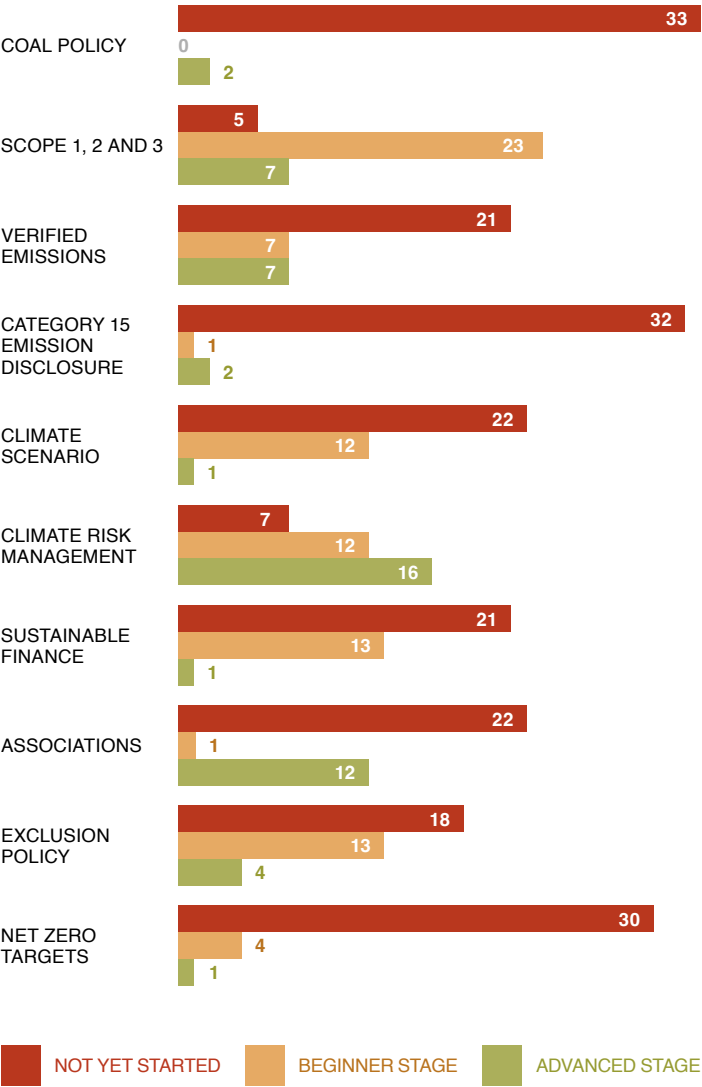
Federal Bank has committed to end funding for new or expanded coal mines and coal-fired power plants, and aims to phase out existing coal-related sub-project exposures by December 2030. RBL Bank has restricted exposure to coal-based thermal power generation to 2.5% of total exposure until FY 2026–27, and has committed to eliminate coal-based thermal power generation financing by FY 2033–34.

However, most Indian banks remain heavily exposed to carbon-intensive sectors, with approximately 25–35% of their loan books (as of October 2023) tied to coal.³



The Disconnect: Improving Climate Risk Preparedness while Prolonging Coal Financing

Figure 1
Criteria-wise Performance of Banks in Climate-risk Preparedness



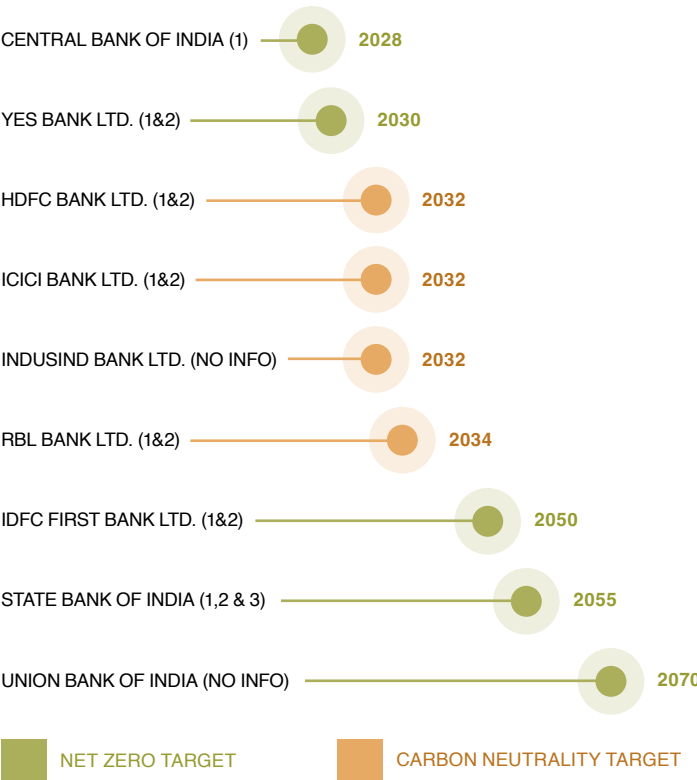
Source: Authors’ analysis using Unprepared III, Climate Risk Horizons, 2024, with incorporation of recent updates.

1. Institute for Energy Economics and Financial Analysis. (2021, February 12). IEEFA: India may face unbudgeted energy transition risk of nearly \$9 billion. <https://ieefa.org/resources/ieefa-india-may-face-unbudgeted-energy-transition-risk-nearly-9-billion>.
2. Institute for Energy Economics and Financial Analysis. (2023, May 4). 200 and counting: Global financial institutions are exiting coal. <https://ieefa.org/resources/200-and-counting-global-financial-institutions-are-exiting-coal>.
3. Kalra, J., & Nayak, S. (2023, October 12). Indian banks assess carbon risk of loan book amid investor, central-bank push, sources say. Reuters. <https://www.reuters.com/sustainability/sustainable-finance-reporting/indian-banks-assess-carbon-risk-loan-book-amid-investor-cenbank-push-sources-2023-10-12/>.



Other than the blind spot around coal, Indian banks are slowly waking up to the climate crisis. Banks are going beyond acknowledging climate change as an abstract challenge and trying to understand its tangible impact on their operations and portfolios. A growing number of Indian banks, both public and private, have started adopting sustainable finance practices, which include integrating climate risk management policies at the board level, financing Renewable Energy (RE) projects, actively measuring scope emissions and more—especially after the Reserve Bank of India’s (RBI) introduction of the Draft Disclosure Framework on Climate-related Financial Risks in 2024.

Figure 2
Net Zero and Carbon Neutrality Targets by Banks (Scope Emissions)



Source: Unprepared III, Climate Risk Horizons, 2024.

In 2024, Climate Risk Horizons assessed the climate preparedness of India’s top 35 banks.⁴ 9 of these 35 banks have set goals for achieving Net Zero emissions or carbon neutrality. A few public sector banks have Net Zero targets, though they vary in terms of scope emissions covered and target years. Most leading private banks, however, have focused on pledging carbon neutrality⁵ targets rather than adopting a more comprehensive Net Zero goal. Meeting these goals is difficult, if not impossible, as long as banks continue to finance coal. Despite these green commitments, Indian banks remain significant financiers of the coal industry. From January 2016 to December 2023, Indian banks disbursed approximately USD 15,218 million in coal loans and provided USD 13,560.4 million in coal underwriting services.⁶ Roughly 2.3% of total global coal financing between 2021 to 2023 came from India,⁷ making it one of the top 7 countries contributing to coal financing during this period.

4. Das, A., & Asapur, S. (2024, December). *Unprepared III: India’s banks moving too slowly in the face of climate crisis*. Climate Risk Horizons. https://climateriskhorizons.com/research/indian_banks_moving_slowly_in_the_face_of_climate_crisis.pdf

5. Carbon neutrality often relies on carbon offsets and removals, which face significant challenges regarding technical viability, permanence, and the risk of leakage. For instance, a bank might claim carbon neutrality across all emission scopes by purchasing offsets. However, this approach does not necessitate actual reductions in the bank’s own emissions and can result in continued or even increased emissions over time.

6. Urgewald e.V. (2024). Still banking on coal. <https://stillbankingoncoal.org/>

7. Urgewald e.V. (2024). *Still banking on coal: Where is the money coming from?* <https://stillbankingoncoal.org/view-report>

Indian Banks Continue to Finance Coal

Figure 3

Coal Loans and Coal Underwriting Services (in USD million) Between 2016 and 2023

Coal Loans Between 2016–23

STATE BANK OF INDIA	5,844.4
PUNJAB NATIONAL BANK	1,442.9
BANK OF BARODA	1,182.8
ICICI BANK LTD.	959.0
IDBI BANK LTD.	785.6
HDFC BANK LTD.	652.6
BANK OF INDIA	646.2
UNION BANK OF INDIA	629.5
INDIAN BANK	442.9
CANARA BANK	420.7
AXIS BANK LTD.	389.5
YES BANK LTD.	335.8
INDUSIND BANK LTD.	222.9
UCO BANK	214.1
IDFC FIRST BANK LIMITED	199.7
INDIAN OVERSEAS BANK	192.1
BANK OF MAHARASHTRA	176.8
PUNJAB & SIND BANK	170.4
CENTRAL BANK OF INDIA	146.6
RBL BANK LIMITED	81.1
SOUTH INDIAN BANK LTD.	33.0
KARNATAKA BANK LIMITED	24.6
FEDERAL BANK LTD.	21.9
JAMMU & KASHMIR BANK	2.6
KOTAK MAHINDRA BANK LTD.	0

Coal Underwriting Between 2016–23

AXIS BANK LTD.	4319.7
ICICI BANK LTD.	3091.2
STATE BANK OF INDIA	1497.9
YES BANK LTD.	1388.7
HDFC BANK LTD.	909.1
KOTAK MAHINDRA BANK LTD.	900.7
PUNJAB & SIND BANK	579.4
IDFC FIRST BANK LIMITED	266.5
INDUSIND BANK LTD.	227.6
IDBI BANK LTD.	185.6
BANK OF BARODA	178.1
RBL BANK LIMITED	15.8
UNION BANK OF INDIA	0
CANARA BANK	0
FEDERAL BANK LTD.	0
INDIAN BANK	0
BANK OF INDIA	0
SOUTH INDIAN BANK LTD.	0
INDIAN OVERSEAS BANK	0
UCO BANK	0
KARNATAKA BANK LIMITED	0
BANK OF MAHARASHTRA	0
CENTRAL BANK OF INDIA	0
PUNJAB & SIND BANK	0
JAMMU & KASHMIR BANK	0

Note: From January 2016 to December 2023. Source: Urgewald, (2024).⁸

8. Only includes banks that feature in the list of top 1000 companies as on 31 March 2024 based on market capitalisation.

Banks finance coal operations primarily through two channels: loans and underwriting services for bond and share issuances.

Loans

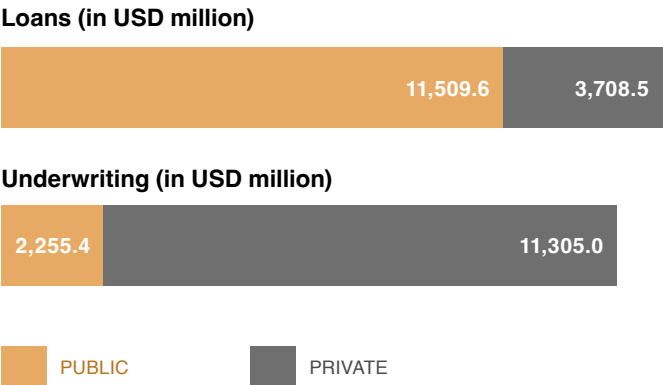
In this approach, banks extend loans directly to coal companies, utilising their own capital. These loans are recorded on the bank’s balance sheet, and the bank retains the associated credit risk. This constitutes a direct exposure, as the bank’s financial health is tied to the borrower’s ability to repay.

Underwriting

Alternatively, banks may assist coal companies in raising funds by underwriting debt or equity schemes. In this role, the bank structures the issuance and sometimes temporarily purchases the security before selling them to investors. While the bank may assume short-term risk during the underwriting process, the long-term financial exposure is transferred to the investors who purchase the securities.

It’s important to note that while underwriting does not result in long-term balance sheet exposure for the bank, it still plays a significant role in facilitating capital for coal companies. This indirect involvement can have reputational implications and may be scrutinised in assessments of a bank’s environmental, social, and governance commitments.

Figure 4
Coal Loans and Coal Underwriting services (in USD million) between 2016 and 2023 by Public and Private Banks

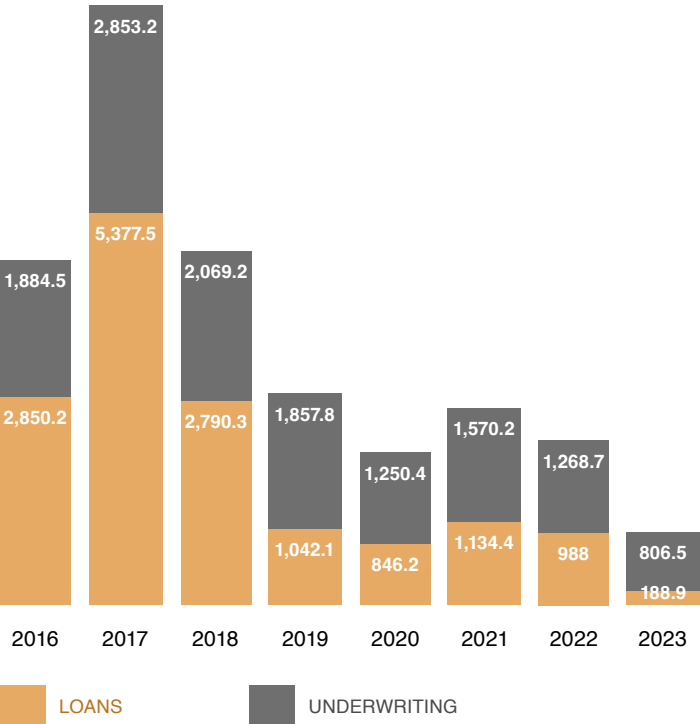


Source: Authors’ analysis using Urgewald data (2024).

Between January 2016 and December 2023, public banks led in coal loans, accounting for approximately 75.6% (USD 11,509.6 million) of total amount lent (USD 15,218 million), while private banks dominated underwriting, making up about 83.36% (USD 11,305 million) of total coal finance underwriting (USD 13,560.4 million). Overall, private banks slightly outpaced public banks in total coal financing by around 4 percentage points.

Public banks provided almost triple the amount of coal loans extended by private banks, while their underwriting involvement remained modest. This suggests that private banks prefer to provide guarantees to or facilitate securities offerings by coal companies, rather than extend direct loans to them.

Figure 5
Coal Loans and Coal Underwriting Services (in USD million) Trend Between 2016 and 2023



Source: Urgewald (2024).

Over this eight-year period, coal loans experienced notable fluctuations, with 2017 marking the peak at almost USD 5.4 billion, and 2023 recording the lowest figure at around USD 189 million. In contrast, coal underwriting by Indian banks remained relatively stable during that period, averaging roughly USD 1.7 billion per year. The higher indirect coal financing in recent years, especially by private banks, potentially reflects a lower risk approach, while continuing to cash in on coal's ongoing, albeit diminishing, dominance in the Indian power sector.

This trend is noticeable worldwide—it is evident from the Global Coal Exit List 2022 report⁹ that underwriting has become the dominant channel for coal financing. Between 2019 and 2021, 484 commercial banks provided USD 1.2 trillion in coal-related funding through underwriting alone.¹⁰ Even in Germany, where the government announced a coal phase-out, banks increased their underwriting activities for coal companies following the exit decision.

Financing Coal is No Longer Profitable

India's traditional reliance on coal stems predominantly from the need to provide a growing economy and large population with cheap energy. Coal provides more than half of the country's energy needs, even as energy demand continues to grow.¹¹ This dependency is reinforced by the traditional perceptions that coal power projects are the cheapest available option and are financially stable investments.

However, given the technology and policy developments in the renewable energy sector, coal is no longer cost-effective. Renewable energy is now firmly established as the cheapest new source of electricity in India.

While electricity tariffs for coal plants under construction range from ₹6.19/kWh to ₹7.24/kWh, round-the-clock (RTC) power from renewables with storage is now available at ₹3.5 to ₹4.5/kWh.¹² In fact, RTC renewable energy auctions in 2019 have yielded bids as low as ₹2.9/kWh.¹³ Leveraging existing land and grid infrastructure at old coal plants for renewables could further cut costs significantly—by approximately 32% for standalone solar PV and solar PV with battery storage. This would reduce the Levelised Cost of Energy (LCOE) to ₹1.87/kWh and ₹2.69/kWh for solar PV and solar PV with battery, respectively.¹⁴

Despite this, approximately 28 GW of coal power capacity was under construction as of January 2025,¹⁵ and as much as 27 GW have been announced in India.¹⁶ New coal plants are financially remunerative only if state DISCOMs sign long-term Power Purchase Agreements (PPAs) that cover fixed costs and guarantee a return on equity irrespective of actual power offtake. This model transfers the financial risk to DISCOMs in case demand falls short of projections, as has often happened.¹⁷ Surplus PPAs with high fixed cost burdens are among the reasons for the poor financial performance of discoms in states like Tamil Nadu and Maharashtra.

9. BankTrack. (2022, February 15). *Who is still financing the global coal industry?* https://www.banktrack.org/article/who_is_still_financing_the_global_coal_industry.
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17. Power Line Magazine. (2020, September 11). *Shift in strategy: Discoms look for greater flexibility in power procurement*. <https://powerline.net.in/2020/09/11/shift-in-strategy/>.

Research suggests that India's fleet of coal-fired power plants is expected to see its capacity utilisation drop to 47% by 2030 under conservative scenarios, and below 10% by 2035 in Net Zero models.¹⁸ This could leave a significant number of coal assets, worth up to ₹8.1 lakh crore (USD 96.5 billion), stranded by 2047,¹⁹ with impacts on lenders and investors. The bankruptcy of power projects such as Essar Power MP required lenders, including Punjab National Bank, to incur an estimated 79% "haircut" on its loans.²⁰

Between 2016 and 2020, major Indian and foreign institutional investors, including HDFC Mutual Funds and ICICI Prudential, lost USD 3 billion (₹229 billion) as coal-sector stocks underperformed the BSE Sensex by 14–32% annually. Declining returns stemmed from surplus capacity, cheaper renewables (₹2–₹3/kWh vs. coal's ₹4.39/kWh), stressed debt in the coal-power sector, and stricter environmental norms.²¹

Short-term fluctuations in market conditions might offer different results, but the longer term trend of the energy sector moving away from coal and towards cleaner options is clear.

Rethinking Coal Assets in a Climate-ready Portfolio

Given India's ambitious Nationally Determined Contributions (NDCs) and the imperative to transition to a low-carbon future, the continued financing of coal projects by Indian banks poses significant long-term risks. The current pace of progress in addressing coal exposure would appear to be driven by historical assumptions about coal's stability

and profitability that no longer apply, given the pace of technological innovation in the energy sector.

Without a clear coal exclusion policy, banks risk exacerbating financial instability, missing out on the opportunity cost of renewable investment opportunities, and lagging behind global financial trends. Major Indian banks that have failed to act on the coal front must adopt a transition plan to phase out coal investments and redirect finance to renewable energy.²² By financing solar and wind power component manufacturing, battery manufacturing, deployment of grid-scale storage projects and residential/commercial systems, banks can accelerate the deployment of renewables at the pace needed to meet national goals.

Strengthening India's energy security requires moving away from coal and building a diversified, resilient power system. Renewables backed by grid upgrades, storage, and regional links, offer stable, domestic alternatives to volatile coal imports. Strategic policies like Production-linked incentives (PLIs), concessional finance, and R&D support can localise clean energy supply chains and position India as a global leader. Framing the coal phaseout as a step toward resilience, affordability, and energy independence is key to aligning finance with national climate goals.

As banks move away from coal, a fair transition must also protect vulnerable workers and communities. This includes retraining and job creation in clean energy and other applicable sectors, engaging local stakeholders in planning, and mobilising public-private support for social protection and regional investment. Banks and regulators should embed these principles to ensure coal exit is equitable and inclusive.

18. Vaze, P., & Gilmour, A. (2024). *The Indian financial sector's exposure to coal-related stranded asset transition risks: Implications for financial institutions and the Reserve Bank of India*. ODI Working Paper. <https://media.odi.org/documents/ODI-MR-UKPACT3-WP-FINAL.pdf>.

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21. Fernandes, A. (2020). *Crash of the titans: Bets on India's coal sector have cost institutional investors US \$3 billion since 2016*. Climate Risk Horizons. https://climateriskhorizons.com/research/Crash-of-the-Titans_final.pdf.

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Climate Risk Horizons' (CRH) work highlights the systemic risks that disruptive climate change poses to investors, lenders and infrastructure investments. Through a data-driven, research-oriented approach that incorporates a holistic understanding of climate policy, energy infrastructure and regulatory processes, CRH provides advice on risk management strategies to minimise stranded, non-performing assets and economic disruption in the face of climate change.

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