Jus Corpus Law Journal

Open Access Law Journal – Copyright © 2025 – ISSN 2582-7820

Editor-in-Chief – Prof. (Dr.) Rhishikesh Dave; Publisher – Ayush Pandey

Mergers and Acquisitions in India's Renewable Energy and Clean Tech Sector: Drivers, Regulatory Incentives, and Pitfalls

Satirtha Basak[a]

[a]University of Delhi, Delhi, India

Received 27 October 2025; *Accepted* 27 November 2025; *Published* 01 December 2025

Fueled by ambitious climate targets and the need for decarbonization, the renewable energy and clean technology sector in India has been growing at a rapid pace. This article examines emerging trends in mergers and acquisitions within the sector, focusing particularly on key drivers, regulatory incentives, and legal risks that influence these deals. Pressures related to ESG concerns, national clean energy targets, and substantial private capital inflows have led to faster consolidation and increased foreign investment. The study identifies various policy incentives, including production-linked incentives and renewable purchase obligations, that have spurred growth. It also enumerates legal challenges, such as issues with enforcing power purchase agreements, payment delays, and hurdles in the land acquisition process. With comparisons drawn from international experience, the article makes recommendations on strengthening investor protection, dispute resolution mechanisms, and policy stability to help the Indian renewable transition.

Keywords: *renewables, decarbonization, incentives, risks.*

INTRODUCTION

India's renewable energy and clean technology sector has expanded dramatically over the past decade. This surge is driven by ambitious climate goals and the need to decarbonise a fast-growing economy. Installed renewable capacity reached about 125 GW by March 2023

(around 30 % of total power capacity)[1], and India is now targeting 500 GW of non-fossil fuel capacity by 2030.[2] In fact, India achieved 50% of its installed power capacity from non-fossil sources by mid-2025, five years ahead of its Paris Agreement target. Meeting these goals will require massive investment on the order of hundreds of billions of dollars and the efficient allocation of capital and assets. Mergers and acquisitions have become a crucial avenue for scaling up projects and consolidating fragmented holdings. They also facilitate foreign capital inflows into India's clean energy space.

This article examines the evolution of M&A in India's renewables and clean-tech sector and analyses the key drivers, regulatory incentives, and legal pitfalls that shape such deals. Part 2 charts the growth of renewable M&A in India over time. Part 3 identifies major drivers of M&A, including environmental, social and governance (ESG) pressures, national clean energy targets, and the influx of private capital. Part 4 evaluates the policy and regulatory incentives provided by the Indian government, from production-linked incentives (PLI) and renewable purchase obligations (RPO) to viability gap funding (VGF), tariff bidding frameworks, and tax benefits and how these have spurred investment. Part 5 discusses the legal and regulatory risks that can complicate renewable projects and deals, such as power purchase agreement (PPA) enforcement issues, subsidy rollbacks, grid connectivity delays, land acquisition hurdles, and the financial weakness of distribution companies (discoms). Part 6 outlines common deal-structuring techniques used to allocate these risks in M&A contracts (indemnities, material adverse change clauses, earn-outs, change-in-law provisions, etc.). Part 7 offers a comparative perspective, examining how other jurisdictions incentivise renewables (e.g. U.S. tax credit models, EU feed-in tariff experiences) and the lessons from international arbitration disputes under treaties like the Energy Charter Treaty (ECT) and UNCITRAL rules when regulatory changes upset investor expectations. Part 8 provides recommendations for reform in India, emphasising policy stability, stronger legal enforceability, investor protections and payment security mechanisms to foster a more robust investment climate. We conclude in Part 9 with reflections on the implications for law, policy,

[1] 'Renewable Energy: Sustained Growth Amidst Execution Challenges' (*CareEdge*, 2023) <https://www.careratings.com/uploads/newsfiles/1686290016_Renewable%20Energy%20-%20Sustained%20Growth%20Amidst%20Execution%20Challenges.pdf> accessed 20 October 2025

[2] 'India hits 50% non-fossil power milestone ahead of 2030 clean energy target' *Reuters* (14 July 2025) <https://www.reuters.com/business/energy/india-hits-50-non-fossil-power-milestone-ahead-2030-clean-energy-target-2025-07-14/> accessed 20 October 2025

and the sustainable energy transition.

EVOLUTION OF M&A IN INDIA'S RENEWABLES AND CLEAN TECH SECTOR

In the early stages of India's renewable energy expansion (mid-2000s to early 2010s), the market was characterised by a large number of small developers and pilot projects, often supported by feed-in tariffs or state-level initiatives. Wind energy took off first, aided by incentives like accelerated depreciation, followed by solar power, which gained momentum after the launch of the National Solar Mission in 2010.[3] Early policy rollbacks, such as the withdrawal of accelerated depreciation and generation-based incentives in 2012, caused wind capacity additions to plummet from 3,200 MW in FY 2011–12 to 1,700 MW in FY 2012–13 before incentives were reinstated. The **Jawaharlal Nehru National Solar Mission** was launched in January 2010 under the National Action Plan on Climate Change and initially aimed to deploy 20 GW of grid-connected solar power by 2022, later revised to 100 GW. During this period, mergers or acquisitions were relatively limited; growth came mainly from Greenfield development backed by policy targets and tax benefits. The few notable transactions were driven by strategic investors acquiring early wind portfolios (for example, Tata Power's purchase of Nelco's wind assets in 2013) and private equity funds seeding new renewable platforms.

As the sector matured in the mid-2010s, the scale of projects grew and so did corporate interest. The government's announcement in 2015 of a target to reach 175 GW of renewables by 2022 (100 GW solar, 60 GW wind, plus others) marked a new wave of investment. This period saw the rise of dedicated renewable energy companies such as ReNew Power, Greenko, and Acme, often backed by international private equity and infrastructure funds. These companies expanded both organically and through acquisitions. A landmark deal was ReNew Power's acquisition of Ostro Energy (a 1.1 GW wind–solar portfolio) from Actis in 2018, reportedly valuing Ostro at ₹10,800 crore. Similarly, Greenko (backed by GIC and ADIA) acquired the assets of Orange Renewable (about 0.9 GW) in 2019. Such deals established these platforms as major consolidators. By the late 2010s, an active secondary market had emerged for operational renewable projects, with IPPs (independent power

[3] 'Indian Renewable Energy Industry Data Analytics' (*S&P Global*) <https://www.spglobal.com/esg/s1/topic/indian-renewable-energy-data-analytics.html> accessed 20 October 2025

producers) selling assets to recycle capital into new development.

The pace of M&A accelerated into the 2020s. Despite a brief slowdown in early 2020 due to the COVID-19 pandemic, deal-making rebounded strongly by 2021–22[4]. Industry analyses show that a record 2.7 GW of renewable capacity was transacted in H1 2020 (a 94% jump year-on-year) as portfolio owners sought to optimise their holdings.[5] A notable trend was financially strong investors, including global pension funds, oil & gas majors, diversifying into clean energy, and Indian corporate groups purchasing projects from cash-constrained developers. IPPs found that selling operational assets at attractive valuations provided liquidity to pay down debt and fund new construction, especially as tariff caps in auctions squeezed project returns.

By 2022–2023, India saw several multibillion-dollar renewable M&A deals that reshaped the sector's ownership landscape. Adani Green Energy's acquisition of SB Energy from SoftBank and Bharti in 2021 (for an enterprise value of $3.5 billion) gave Adani a 5 GW portfolio overnight, in what was then the largest renewables deal in India. In 2022, Tata Power Renewable acquired 100% of CRC Evans' 400 MW solar assets, and Malaysia's Petronas acquired Amplus Solar (rooftop solar developer). The entry of oil companies was marked by Shell's purchase of Sprng Energy in 2022 for US$1.55 billion, reflecting global energy companies' pivot to clean assets. 2023 witnessed JSW Neo Energy (part of JSW Group) buying a 4.7 GW portfolio from Mytrah and from O2 Power (a platform owned by EQT and Temasek)[6], and the exit of some foreign investors like Italy's Enel, which sold its India renewables business to the domestic firm Waaree Energies.

This evolutionary trajectory from scattered small projects to consolidation by large-scale platforms has been underpinned by growing investor confidence in the sector's regulatory framework and long-term prospects. The last two years saw *over 13 GW* of renewable assets acquired in India[7], indicating that the market for secondary asset transfers is now robust. Global renewable funds (from Canada, Europe, the US, the Middle East, etc.) have been

[4] Renewable Energy: Sustained Growth Amidst Execution Challenges (n 1)
[5] Indian Renewable Energy Industry Data Analytics (n 3)
[6] Ruchira Singh, 'Indian energy firms step up renewable power M&A ahead of hydrogen push' (*S&P Global*, 16 April 2025) <https://www.spglobal.com/commodity-insights/en/news-research/latest-news/energy-transition/041625-indian-energy-firms-step-up-renewable-power-m-ampa-ahead-of-hydrogen-push> accessed 20 October 2025
[7] Indian Renewable Energy Industry Data Analytics (n 3)

active buyers, often entering via joint ventures or by taking controlling stakes in Indian companies. For example, the joint venture of state-owned NTPC and Oil India (ONGC) acquired a majority stake in the 4.1 GW portfolio of **Ayana Renewable Power** in 2023[8]. These developments point to a maturing industry where asset recycling and consolidation are normal. The evolution of India's renewable M&A thus mirrors trends seen in other markets: as the sector scales up, early entrants cash out, new capital rotates in, and ownership concentrates in the hands of fewer, larger entities with the financial strength to undertake multi-gigawatt investments.

KEY DRIVERS OF RENEWABLE ENERGY M&A IN INDIA

Several driving forces are propelling the surge of M&A activity in India's clean energy sector:

ESG Imperatives and Climate Goals: Environmental, social, and governance (ESG) considerations have become paramount for investors and corporations worldwide. Acquiring renewable energy assets is a fast track for companies to improve their carbon footprint and for investors to align with sustainable mandates. India's stated policy goals, such as achieving 500 GW of non-fossil capacity by 2030 and net-zero emissions by 2070, send a strong signal that clean energy will be a growth sector in the long run.[9] Large Indian conglomerates (in oil & gas, power, steel, etc.) are increasingly pursuing renewables acquisitions to meet internal ESG targets and hedge against future carbon regulations. For example, JSW's acquisition of solar/wind capacity aligns with its goal of powering its steel production with green energy.[10] Likewise, state-owned companies like NTPC and ONGC have formed renewable subsidiaries that are actively buying existing projects to quickly scale up green portfolios. The growing pool of climate-focused global capital, including pension funds, sovereign wealth funds, and green infrastructure funds, views India as an attractive destination due to its huge renewable energy market and relatively stable returns under long-term PPAs. These ESG-driven investors often prefer acquiring operating assets (with established cash flows and environmental benefits) rather than taking on development risk from scratch, leading to more buyouts of commissioned projects.

National Targets and Policy Support: Ambitious government targets and policy support

[8] Singh (n 6)
[9] India hits 50% non-fossil power milestone ahead of 2030 clean energy target (n 2)
[10] Singh (n 6)

mechanisms serve as a strong incentive for consolidation. With India missing its 175 GW by 2022 target (actual RE capacity was ~120 GW)[11] but now aiming even higher, there is pressure on both public agencies and private players to accelerate deployment. Achieving installation targets is easier when experienced firms with deep pockets aggregate projects and execute them at scale. Policymakers have welcomed consolidation as it tends to create better-capitalised entities that can absorb risks and ensure project completion. Additionally, some policy benefits in India favour larger players; for instance, certain solar park allocations or manufacturing-linked projects are awarded in multi-hundred-MW tranches, effectively requiring bidders to have significant capital. By merging, companies increase their net worth and borrowing capacity to meet such thresholds. The introduction of production-linked incentives and mega-auctions (discussed in Part 4) also encourages firms to join forces or acquire niche technology providers to capture the full value chain. In essence, India's clean energy push has created a "race to scale," and M&A is a vehicle to achieve rapid scale in time to meet government-imposed timelines.

Access to Private Capital and Financing: The renewable sector's capital-intensive nature means continuous access to financing is critical. M&A can be driven by the need of developers to raise funds and by the appetite of investors for stable yield-generating assets. Many early-stage renewable developers in India were entrepreneur-led or backed by private equity with a finite fund life. As projects matured, these investors sought exits. Simultaneously, large institutional investors (global utilities, yieldcos, infrastructure funds) that favour lower but steady returns have been keen to enter. This dynamic has led to transfers of assets from 'build-to-sell' developers to 'buy-and-hold' investors. For example, several IPPs sold operational projects to reduce debt and free capital for new bids[12]. The relatively low interest rate environment globally in the late 2010s also made India's renewable yields attractive. Even as interest rates fluctuate, the fundamental driver remains: operational solar and wind projects in India typically have 25-year PPAs with government-backed entities, offering predictable cash flow that appeals to long-term investors (including foreign ones who can often absorb the currency risk through hedging or by structuring through foreign currency loans). Thus, a steady pipeline of assets for sale has met a deep pool of capital looking for sustainable infrastructure investment. The result is increasing deal flow,

[11] India hits 50% non-fossil power milestone ahead of 2030 clean energy target (n 2)
[12] Indian Renewable Energy Industry Data Analytics (n 3)

often at robust valuation multiples (Indian renewables deals in recent years have commonly seen enterprise value to EBITDA multiples around 8–10×, reflecting strong demand)[13][14].

POLICY AND REGULATORY INCENTIVES FOR RENEWABLES M&A IN INDIA

The Indian government and regulators have introduced a suite of policies and incentives to promote renewable energy, many of which indirectly facilitate investment and consolidation in the sector. Key measures include:

100% FDI under Automatic Route: The government permits *foreign direct investment up to 100%* in renewable energy generation and related sectors under the automatic route (i.e. without prior government approval).[15] This liberalised investment regime has been fundamental in enabling foreign companies and funds to acquire stakes or assets in India's clean energy companies. Overseas investors can freely repatriate capital and profits, subject to standard tax regulations, making India an open market for cross-border M&A. The absence of equity caps or stringent approval requirements in renewables (unlike some other sectors) signals policy stability and encourages the inflow of global capital crucial for large acquisitions.

Production-Linked Incentive (PLI) Scheme: To boost domestic manufacturing of clean energy technology, India launched a generous PLI program for high-efficiency solar photovoltaic modules. Tranche-II of the PLI for solar manufacturing was allocated ₹19,500 crore (approximately $2.6 billion), aiming to support the creation of 65 GW per annum of new module manufacturing capacity. India's PLI scheme has already led to 18.5 GW of module capacity, 9.7 GW of solar cell capacity and 2.2 GW of ingot-wafer capacity being established as of June 2025, with a total of 48 GW of module manufacturing capacity awarded. While the PLI is targeted at manufacturers rather than project operators, its presence has spillover effects on M&A: it has attracted joint ventures and acquisitions in the solar manufacturing space (e.g. Reliance Industries' acquisition of REC Solar and partnerships with foreign firms to set up factories) and promises to reduce import dependence, thus improving long-term supply stability for project developers. By securing

[13] Renewable Energy: Sustained Growth Amidst Execution Challenges (n 1)
[14] *Ibid*
[15] 'Government of India takes several steps to promote renewable energy in the country' (*Press Information Bureau,* 03 February 2023) <https://www.pib.gov.in/Pressreleaseshare.aspx?PRID=1896066> accessed 25 October 2025

a domestic supply chain for solar equipment, project acquirers can be more confident about managing costs and compliance with local content rules. Additionally, the *National Programme on High-Efficiency Solar PV Modules* under PLI anticipates large employment generation and technology transfers, making the renewable sector more robust and integrated. In sum, while PLI directly incentivises manufacturing, it indirectly bolsters investor confidence in the broader clean tech ecosystem, thereby supporting valuations in M&A deals.

Renewable Purchase Obligations (RPOs) and Renewable Energy Certificates: RPOs mandate that electricity distribution companies and certain large consumers purchase a minimum percentage of their power from renewable sources. The Electricity Act 2003 empowered State Commissions to set RPO targets, and recent policy has made these targets more ambitious and uniform nationally[16][17]. In 2022, the Union government issued updated RPO trajectories up to 2029–30 (with sub-targets for solar, wind, hydro, and energy storage) and provided for penalties on shortfalls. Strong RPO enforcement creates assured demand for renewable energy, which in turn underpins the long-term PPAs critical to project finance and M&A attractiveness. For instance, if discoms are required by law to buy, say, 25% renewable power by 2025, they must honour PPAs or procure Renewable Energy Certificates (RECs) to cover any gap. The existence of a compliance market via RECs (tradeable credits for renewable generation) also provides an extra revenue stream or exit option for projects. While in the past, RPO compliance was lax (average fulfilment was ~65% in FY2020[18] due to weak penalties), the proposed amendments to the law would impose fines up to ₹0.50 per kWh for RPO shortfalls. Tighter RPO enforcement is an incentive for discoms to sign and stick to PPAs, which reduces revenue risk for generators. Consequently, investors are more willing to invest in or acquire renewable projects, knowing that demand is policy-backed. Additionally, the introduction of a *Hydro Purchase Obligation* (HPO) and *Energy Storage Obligation* for grid-scale storage further broadens the clean tech market, spurring acquisitions in those segments as well. To strengthen grid reliability, the government has also launched a ₹5,400 crore (US$616 million) Viability Gap Funding scheme for 30 GWh of battery energy storage systems, which is expected to attract investments of about ₹33,000 crore and support

[16] *Ibid*
[17] The Electricity (Amendment) Bill 2022
[18] Indian Renewable Energy Industry Data Analytics (n 3)

renewable integration.

Tax Incentives and Financial Support: Tax policy has been used to incentivise renewable investments. Historically, *accelerated depreciation* (AD) allowed renewable energy investors (especially in wind and solar) to write off up to 80% of asset value in the first year, which was a major attraction for profitable companies to invest in renewables for tax shielding. Although AD benefits were scaled back for solar after 2017, they remain for certain sectors and can still improve project IRRs. The government also offers a concessional 15% corporate tax rate for new domestic manufacturing companies, which would include new renewables manufacturing (e.g. solar module factories).[19] On the indirect tax side, the introduction of the Goods and Services Tax (GST) initially created uncertainty, but renewables equipment was given relatively favourable GST rates (5% initially on most components). Even when GST on renewables equipment was increased to 12% or 18% in 2021, the government ensured through CERC orders that this would qualify as a "change in law" for existing PPAs, allowing developers to claim compensation[20]. This assurance of pass-through for new taxes or levies (including a customs duty on imported solar modules imposed in 2021) has been critical. It means acquirers of projects can underwrite that unforeseen tax changes during the PPA term will be adjusted, rather than destroying project economics. The government has also waived *interstate transmission system (ISTS) charges* for wind and solar projects commissioned by June 2025[21], effectively subsidizing transmission costs and improving returns for many projects another factor that enhances asset value for M&A. Finally, India's public financial institutions like the Indian Renewable Energy Development Agency (IREDA) and Power Finance Corporation (PFC) provide low-cost loans or refinancing for renewable projects, which can facilitate leveraged buyouts or refinancing post-acquisition.

LEGAL AND REGULATORY RISKS AND PITFALLS

Despite the strong policy push, investors in India's renewable sector face a range of legal and regulatory risks that can affect project value and thus are central to M&A due diligence. Key pitfalls include:

[19] Indian Renewable Energy Industry Data Analytics (n 3)
[20] Melvin Mathew, 'CERC Grants ₹20 Million Compensation to Solar Developer for GST Hike' (*Mercom,* 06 February 2025) <https://www.mercomindia.com/cerc-grants-%E2%82%B920-million-compensation-to-solar-developer-for-gst-hike> accessed 25 October 2025
[21] Government of India takes several steps to promote renewable energy in the country (n 15)

PPA Enforcement and Tariff Renegotiation: The sanctity of power purchase agreements, typically 25-year contracts, is vital for investor confidence. In recent years, this sanctity was tested when the state of Andhra Pradesh in 2019 attempted to renegotiate or cancel signed PPAs with wind and solar producers, claiming the tariffs (agreed via earlier auctions) were too high and burdening discom finances[22]. The Andhra Pradesh government issued orders to review and reduce tariffs, and even directed the grid operator to curtail renewable power dispatch due to pressure on generators. Generators challenged this in the Andhra Pradesh High Court. In a landmark decision in March 2022, a division bench of the High Court emphatically upheld the inviolability of concluded PPAs and quashed the state's actions. The High Court held that tariffs discovered through competitive bidding under Section 63 of the Electricity Act 2003 *cannot be unilaterally revised* by the procurer or even by the regulator. It struck down the single judge's earlier order that had allowed interim lower payments, and directed the discoms to pay all pending dues at the original PPA tariff within 6 weeks. The court further castigated the state's load dispatch curtailments as illegal since they were done for 'extraneous' reasons (i.e. to force tariff reduction). This judgment **AP High Court, 15 March 2022,** was a significant victory for renewable IPPs, reinforcing that concluded contracts must be honoured in full. It set a precedent that the financial difficulties of discoms are not valid grounds to reopen PPAs. For the M&A context, this episode and ruling were critical. Before the court's intervention, the Andhra saga had injected uncertainty, causing some investors to reassess India's risk. The High Court's decision (and the absence of any contrary Supreme Court ruling, as the state did not successfully appeal) reassured investors that Indian courts would uphold contractual sanctity for competitively bid renewables. Nonetheless, the risk of attempted PPA renegotiation has not vanished entirely; it remains a cautionary tale. M&A agreements now commonly include specific covenants or price adjustments to address any regulatory attempts to alter tariff terms. Investors also closely scrutinise the identity of off-takers; PPAs with financially stronger or central government-backed entities (like SECI or NTPC) are preferred since state discoms with poor finances are more likely to seek renegotiation or default.

Payment Delays and Discom Financial Health: India's state-owned electric distribution

[22] 'No Renegotiation of Tariff under Concluded PPAs: A Win for Clean Energy Power Generators' (*AZB & Partners*, 31 March 2022) <https://www.azbpartners.com/bank/no-renegotiation-of-tariff-under-concluded-ppas-a-win-for-clean-energy-power-generators/> accessed 25 October 2025

companies (discoms) have long suffered from poor financial health, with cumulative losses of around ₹3 trillion between 2017–2021[23]. This leads to chronic payment delays for power generators. Renewable IPPs often face months of overdue receivables, incurring significant working capital costs and uncertainty. As of mid-2022, outstanding dues from discoms to generators (including renewables) exceeded ₹1.4 trillion.[24] Such delays reduce project cash flows and can trigger debt service issues, a serious concern for investors acquiring projects. In response, the central government and regulators have taken steps to enforce payment discipline. The Electricity (Amendment) Bill 2022 proposes that electricity dispatch to a discom can be halted if it has not provided adequate payment security (such as a letter of credit). Moreover, a Late Payment Surcharge (LPS) rule now obliges discoms to pay interest on delays beyond 45 days, and a recent scheme in 2022 forced discoms to restructure and clear old dues in instalments, with defaults leading to cut-offs. These measures had some effect by January 2024, discom overdues reportedly fell to under ₹500 billion. Additionally, many renewable PPAs (especially with central agencies) now include *payment security funds* or escrow accounts as a backstop. For M&A deals, persistent payment risk means buyers often insist on robust *receivables' warranties* or escrowed portions of purchase price, and may price in a discount for assets tied to the most indebted discoms. Contractually, some deals include provisions that if payments are delayed beyond a threshold, the seller compensates the buyer or assists in enforcing remedies. The overarching solution improving discom finances via tariff reforms and reducing losses is a work in progress (e.g. schemes for smart metering, loss reduction). The law also now gives regulators power to treat contract performance issues: the Amendment Bill would empower electricity regulators to adjudicate contract-related disputes and enforce contracts like a civil court, which could allow quicker resolution of payment disputes than approaching regular courts. Until discom finances are sustainably fixed, however, this remains a core risk factor for any renewable energy investment in India.

Curtailment and Grid Integration Risks: Renewable power is 'must-run' by regulation, yet there have been instances of curtailment, i.e., grid operators instructing solar/wind farms to back down generation even when available. Some curtailment is for technical reasons (grid safety if supply exceeds demand at certain times), but there have been allegations of

[23] The Electricity (Amendment) Bill 2022
[24] Singh (n 6)

'*commercial curtailment*', where discoms back down expensive renewable power to buy cheaper power elsewhere or simply to avoid paying for surplus energy. This violates the must-run rule, but enforcement historically was weak. As noted, in Andhra Pradesh, some renewables were curtailed under the guise of grid security during the 2019 dispute.[25] In Tamil Nadu, a state with surplus wind, developers litigated frequent curtailments a few years ago. The Appellate Tribunal for Electricity (APTEL) in 2019 directed Tamil Nadu's discom and SLDC to pay compensation for proven unjustified curtailment, reinforcing that must-run is a binding rule. Moreover, the central rules of 2021 now clearly disallow curtailment for reasons other than grid safety, and even then, require a written explanation to the regulator.[26] Nonetheless, grid integration of renewables remains challenging as penetration increases, there are real technical constraints in balancing, and grid upgrade delays can force curtailment. For M&A, curtailment risk affects projected generation (and revenue). Buyers analyse historical plant load factors and curtailment records. Some PPA contracts or state regulations are beginning to include generation compensation clauses if backing down exceeds a threshold. Strategically, projects in states with better grid infrastructure or with storage/hybrid capabilities are valued more, as they can mitigate curtailment. A related risk is *grid connectivity delay*: many projects have been ready on time but had to wait for the transmission network to be in place (e.g., delays in the Green Energy Corridor lines). If a project cannot inject power due to grid unavailability, revenues are lost, and often PPAs do not fully compensate for that (although some newer contracts have deemed generation clauses). Such issues are often considered force majeure. Buyers during due diligence check the status of evacuation infrastructure and any notices of force majeure or claims on that account. Regulatory orders have sometimes granted partial relief (for example, state regulators allowing extension of commissioning deadlines if the grid was delayed). In extreme cases, prolonged grid unavailability could trigger termination rights. Thus, grid-related risks, while not always headline news, are factored into the risk allocation of M&A deals (through conditions precedent that transmission be ready, price adjustments for lower output, etc.).

Land Acquisition and Environmental Clearance: Renewable energy projects, especially large solar parks and wind farms, require significant land, often in rural or semi-arid areas.

[25] No Renegotiation of Tariff under Concluded PPAs: A Win for Clean Energy Power Generators (n 22)
[26] Government of India takes several steps to promote renewable energy in the country (n 15)

Land acquisition in India can be fraught with legal complexities, unclear titles, a need for consent from numerous small landowners, state land use regulations, and potential opposition from local communities. While solar parks developed by government agencies offer land to developers in a plug-and-play model, many private projects had to assemble land parcels themselves. Delays in land acquisition have been a leading cause of project lag. More seriously, some projects have faced litigation over land rights (e.g., allegations of tribals' land being misappropriated, or needing conversion of agricultural land use). Wind projects in states like Gujarat encountered court cases regarding the legality of using certain categories of revenue land. Acquirers of projects need to verify that the land title is clean, leases are in place for the full term, and there are no pending disputes. Title insurance for renewable projects is nascent but is being explored.

The other related aspect is environmental and wildlife clearances. A prominent example was the *Great Indian Bustard* case: the Supreme Court in **M.K. Ranjitsinh & Ors. v Union of India (2021)** considered the impact of overhead power lines on the critically endangered Great Indian Bustard in Rajasthan and Gujarat. Initially, the Supreme Court ordered all high-voltage transmission lines in identified bustard habitats to be laid underground to protect the birds[27]. This order alarmed renewable developers because retrofitting underground cables would impose exorbitant costs and could even make some projects unviable. Following expert committee recommendations, the Supreme Court in 2023 modified this blanket order, opting for a case-by-case approach and mitigation measures (like bird diverters on lines). The Court recognised the need to balance wildlife protection with climate and energy needs, noting that renewable energy is a "fundamental necessity" for reducing emissions. Nonetheless, the episode underscored the environmental compliance risks: projects near eco-sensitive zones or involving forest diversion can face additional conditions or litigation. Investors must assess if any project to be acquired runs such risks, for instance, wind projects in Kutch or solar in the Thar region may come with bird/diversion issues; some hydro or hybrid projects might need forest clearance.

Any failure to secure necessary clearances or adverse court orders can halt operations or

[27] Tulika Gupta et al., 'The Great Indian Judgment: What Supreme Court's Discussion on Climate Change Means' (*Council on Energy, Environment and Water,* 23 May 2024) <https://www.ceew.in/blogs/what-does-supreme-court-ruling-on-protecting-great-indian-bustard-species-mean-for-climate-change-legislation> accessed 25 October 2025

require costly modifications. M&A agreements, therefore, include representations and indemnities regarding compliance with environmental laws, absence of outstanding violation notices, and, in some cases, specific indemnities for known issues (e.g., a project lying in a potential wildlife corridor may have a seller indemnity for any future cost of mitigation structures). Environmental PILs (public interest litigations) are not uncommon in India, and renewable projects have started featuring in them (beyond the bustard case, solar parks have been challenged for land use in some instances). Thus, while renewables are generally seen as environmentally beneficial, they are not immune to environmental law risks.

Uncontracted Capacity and Policy Uncertainty: A significant portion of India's pipeline still lacks power sale agreements (PSAs). CareEdge reports that PSAs for more than 8 GW of renewable capacity remain unsigned, creating revenue uncertainty for developers and acquirers. The unresolved status of the Great Indian Bustard case in Rajasthan and Gujarat has also introduced a policy overhang, and corporate and industrial open-access projects frequently face opposition from state discoms that fear revenue loss. These factors underscore that regulatory delays and ambiguous policy can materially affect project cash flows and, therefore, M&A valuations.

DEAL STRUCTURING TECHNIQUES IN RENEWABLE ENERGY M&A

Given the risks outlined, parties in renewable energy M&A transactions employ various deal structuring techniques to allocate risk and protect their interests. Some common contractual provisions and structures include:

Representations, Warranties, and Indemnities: The seller of a renewable asset or company is typically required to give *robust representations and warranties* about the project's status including that all permits (environmental clearances, grid connectivity, land title) are in place and valid; that the PPA and other key contracts are legally binding and no default or dispute is ongoing; that the plant meets performance standards; and that there are no undisclosed liabilities or litigation. These reps serve to flush out any issues pre-sale and allocate liability to the seller if something was misrepresented. *Indemnities* are a crucial tool, especially for known or specific risks identified in diligence. For example, if a land title for part of the project is under litigation, the seller might indemnify the buyer for any loss arising from that

case (up to a cap or purchase price adjustment). Indemnities are also common for potential tax or duty exposures, e.g., if a project faces a potential GST claim or property tax demand for past periods, the seller would indemnify the buyer if those crystallise. Another negotiated indemnity is for PPA tariff or offtake risk: in some deals, sellers have indemnified buyers against retrospective tariff cuts or curtailment losses up to a limit, particularly if the deal is happening in the shadow of an ongoing issue (such as during Andhra's PPA saga, any sale in that state would likely entail seller bearing the risk of an adverse outcome). Generally, indemnity survival periods and caps are heavily discussed. Buyers want longer survival (to cover the 25-year PPA term for critical risks), whereas sellers try to limit duration and quantum (perhaps 12-36 months and a fraction of the price, except for fundamental title or fraud issues). Warranty & indemnity insurance is just beginning to appear in India as a way to backstop the seller's obligations, though not yet widespread in renewables deals[28].

Conditions Precedent (CP) and Price Adjustments: Deals often include CPs that must be satisfied before closing. In renewables, typical CPs are obtaining any required *regulatory approvals* for transfer (for instance, some states require state electricity regulatory commission approval if there's a change in ownership of a generation asset or if the PPA has a change-in-control consent clause), **discom consent** to assignment of the PPA (if required by contract), clearance of any overdue receivables or other liabilities, and completion of punch-list items in construction (for an under-construction asset). If a CP is not met, either the deal doesn't close, or the parties agree on cure measures/escrows. Often, a portion of the purchase price might be kept in escrow to cover any pending issue that will be resolved post-closing (e.g., a land lease formal renewal or final subsidy claim processing). Price adjustment mechanisms are also used to handle operational risks: for example, the final price may be adjusted based on the plant's demonstrated generation or CUF (capacity utilisation factor) in a recent period, or based on final net working capital or debt on books at closing.[29] In solar portfolios, it's common to adjust the price if the actual energy output or performance ratio is lower than what was represented. This incentivises the seller to hand over a well-performing asset or compensate the buyer for any shortfall. For pipeline (yet-to-be-built) projects being acquired,

[28] Nandini Seth, 'Warranty and Indemnity Insurance for M&A Transactions: Frequently Asked Questions' (*JSA*, 07 May 2024) <https://www.jsalaw.com/jsa-live/warranty-and-indemnity-insurance-for-ma-transactions-frequently-asked-questions//> accessed 25 October 2025

[29] 'Mastering Price Adjustments & Earn-outs in Indian M&A: Key Legal & Tax Insights' (*TAXMANN*, 30 November 2023) <https://www.taxmann.com/post/blog/mastering-price-adjustments-earn-outs-in-indian-ma-key-legal-tax-insights/> accessed 25 October 2025

earn-outs are employed: the buyer may pay a certain amount now and additional amounts as each project reaches commissioning or achieves certain tariffs. This structure mitigates risk for the buyer by aligning payment with actual project delivery.

Material Adverse Change (MAC) Clauses: MAC clauses give the buyer an option to walk away or renegotiate if a significant adverse event occurs between signing and closing[30]. In renewable deals, buyers seek MAC outs for events like: a change in law that directly impacts the project (e.g., if between signing and closing, the government were to announce a cap on renewable tariffs or new duty that isn't compensated, significantly affecting project cash flows), or any drastic policy shift (like cancellation of the project's PPA or withdrawal of a key incentive). Sellers try to tailor MAC definitions to exclude industry-wide changes or those that could have been anticipated. For instance, if a change in law is already proposed or somewhat expected (say a known possible increase in customs duty next budget), the seller might negotiate that it shouldn't trigger a MAC if it happens within a certain band. During the Andhra PPA renegotiation crisis, any deal in that state would certainly have included a MAC if the court or regulator outcome went badly for generators. More routinely, MAC clauses cover disasters that damage the asset or the revocation of key permits. Essentially, they protect the buyer from being forced to close a deal on an asset whose value has been materially undermined in the interim period.

Change-in-Law Allocation in Contracts: As noted, most PPAs have change-in-law provisions, but these define how the offtaker compensates the generator. In an M&A context, the sale-purchase agreement may also allocate pending or future change-in-law claims between buyer and seller. For example, suppose a project has an outstanding claim for compensation (for GST or safeguard duty) filed with CERC, and the deal is signed before resolution[31]. Parties often use an *"if/as/when"* formula: if the award or order comes after closing, the seller may get a specified share of it (if it pertains to periods when the seller owned the asset), or the price at closing might be net of the claimed amount, with the buyer paying the seller later the realised compensation. Future change-in-law events are harder to allocate, but sometimes, if a known policy change is on the horizon (e.g., expectations of a

[30] 'Renewed Spotlight on Material Adverse Effect Clauses' (*S&R Associates*, 29 August 2022) <https://www.snrlaw.in/wp-content/uploads/2022/09/SR-Insights-Renewed-Spotlight-on-Material-Adverse-Effect-Clauses.pdf> accessed 25 October 2025

[31] Central Electricity Regulatory Commission Order Petition No 213/MP/2019

new tax), the agreement might stipulate a sharing of the economic burden above a threshold. Another angle is **insurance**: political risk insurance or breach of contract insurance can sometimes be obtained from entities like the World Bank's MIGA for certain risks (like a government offtaker not honouring payment or a change in law without compensation), and a buyer might require that such cover is arranged or assignable.

In essence, the M&A contracts in this sector are designed to anticipate and allocate the known risks of the industry. The above techniques show how legal drafting is used as a risk management tool: whether through conditionality, shifting risk back to the seller, or creating flexible price mechanisms. Sophisticated investors also conduct extensive due diligence to uncover any land, regulatory, or technical issues before signing, often engaging law firms, technical consultants, and even forensic auditors if needed (for example, checking that generation data hasn't been manipulated). Insurance for specific risks (like title insurance or breach of warranty insurance) is an emerging supplement. Ultimately, the goal is to ensure that when the ownership transfers, both parties are clear on who bears what risk going forward, so that there are no unpleasant surprises that would lead to disputes or losses that could have been contractually mitigated.

COMPARATIVE PERSPECTIVES: INTERNATIONAL APPROACHES AND DISPUTES

India's experience with renewable energy M&A and regulation can be illuminated by comparing it with international regimes:

United States Tax Credit-Driven Investment: In the U.S., the renewable energy boom (especially wind and solar) has been propelled by federal tax incentives rather than long-term PPAs alone. The two primary incentives are the Production Tax Credit (PTC) and the Investment Tax Credit (ITC). The PTC, established in the U.S. tax code (26 U.S.C. §45), provides a dollar-for-dollar reduction in tax liability based on electricity produced historically at around 2.6 cents per kWh for wind projects, guaranteed for the first 10 years of operation. The ITC, by contrast, is a one-time credit equal to a percentage of the capital investment in the project (currently 30% for solar and certain wind projects)[32]. These credits have made renewable projects very attractive to investors with a tax appetite; they can shelter

[32] 'ITC v PTC credits: What's the difference?' (*Crux,* 19 December 2024) <https://www.cruxclimate.com/insights/itc-vs-ptc> accessed 25 October 2025

significant income through these credits. The structure of deals in the U.S. often involves "tax equity" financing, where a bank or corporate investor provides capital in exchange for most of the tax benefits. M&A in the U.S. renewables space thus often revolves around the availability and monetisation of these credits. The recent *Inflation Reduction Act (IRA) of 2022* extended and expanded these credits for a decade, adding bonus credits for domestic content and projects in energy communities and even making credits transferable or refundable for entities that cannot use them directly. This has injected long-term certainty. The result is a surge in investment, and consolidation companies are acquiring portfolios to maximise tax benefits and scale. For example, large yieldcos emerged (e.g., NextEra Energy Partners), which acquire operational projects and pass-through stable cash flows (often benefiting from PTC/ITC). The U.S. model shows how stable incentives and financing innovation can drive M&A: instead of the focus on PPAs as in India, the focus is on optimising tax efficiency and financing. From a risk perspective, U.S. projects face less off-taker risk since many use virtual PPAs with corporates or merchant sales with hedges, but they have exposure to tax policy. Historically, periodic expiry of PTCs caused boom-bust cycles in wind investment; however, unlike India's PPA renegotiation risk, once a project qualified, its tax credit was locked in (except for the political risk of Congress not renewing the program). The stable extension under the IRA now mimics a commitment akin to India's firm policy targets.

European Union Feed-in Tariffs and Retrospective Cuts: Many EU countries kick-started renewables with generous feed-in tariffs (FITs) in the 2000s. Developers got fixed above-market tariffs, often with inflation indexing, guaranteed for 15–20 years by law. This led to a gold rush of investments, including yield-driven acquisitions for solar PV in Spain, Italy, the Czech Republic, and wind in countries like Germany. However, during the Eurozone financial crisis and as technology costs plummeted, some governments became victims of their policy success; the subsidy burdens ballooned. Spain is a notorious example: it enacted Royal Decree 661/2007, granting a fixed premium or FIT for renewable generators for the life of the plant[33], which attracted massive investment (including foreign investors acquiring Spanish solar plants). But starting 2012–2013, Spain enacted a series of measures drastically altering the regime: it imposed a 7% generation tax, eliminated the FIT and replaced it with

[33] Trishna Menon, 'Spain found to have breached the Energy Charter Treaty in award by ICSID tribunal' *Investment Treaty News* (17 October 2028) >https://www.iisd.org/itn/2018/10/17/spain-found-to-have-breached-the-energy-charter-treaty-in-award-by-icsid-tribunal-trishna-menon/> accessed 25 October 2025

a much lower "reasonable return" framework, and even applied some changes retroactively. This had a whiplash effect on investors, many of whom saw their expected revenues slashed. In domestic courts, these cuts were largely upheld as sovereign acts. But international investors turned to arbitration under bilateral investment treaties and the Energy Charter Treaty (ECT). Dozens of claims were filed against Spain (and similarly against Italy, which also retrospectively cut solar tariffs in 2014). Arbitration tribunals delivered mixed outcomes. Initially, the first award, **Charanne v Spain (2016)** (an UNCITRAL arbitration) denied the claim, finding the changes not entirely unforeseeable and not a total annihilation of the investment expectation[34]. However, subsequent cases like **Eiser v Spain (ICSID, 2017)** and **Antin v Spain (ICSID, 2018)** found Spain liable for breaching the Fair and Equitable Treatment (FET) standard of the ECT. In *Antin*, the tribunal held that investors are entitled to a fundamental stability in the essential characteristics of the regulatory regime that was relied on for the investment. While a state can change schemes, it cannot *eliminate* the core features that induced investment without breaching investor expectations. Spain's complete overhaul was found to violate this: the tribunal ruled that the retroactive withdrawal of RD 661/2007's benefits, which had been offered as an incentive, frustrated legitimate expectations and thus breached the ECT's FET obligation. Consequently, Spain has been ordered to pay damages in numerous cases (though enforcement is tangled due to intra-EU issues and Spain's resistance). The key lesson for India or any country is that *policy stability and honouring commitments are paramount*. India, notably, has so far avoided anything as draconian as Spain's retroactive cuts. Indian state attempts (like Andhra's) were stopped by courts, and at the central level, policy changes (GST, duties) have generally come with compensation. But the European experience stands as a caution: abrupt adverse changes can dry up investment and lead to legal liability. It also illustrates the role of international law, something Indian projects could invoke if foreign investors structure through BIT-protected jurisdictions, although India has exited many BITs and is not in the ECT. Still, India may face similar arbitration if, for example, a foreign investor in a renewable project claims expropriation or unfair treatment (there was an arbitration threat by some investors during Andhra's issue under the India-UK BIT before it was settled). The EU, after these experiences,

[34] Maximilian Schmidl, 'The Renewable Energy Saga from Charanne v Spain to The PV Investors Spain: Trying to See the Wood for the Trees' (*Kluwer Arbitration Blog*, 01 February 2021) <https://legalblogs.wolterskluwer.com/arbitration-blog/the-renewable-energy-saga-from-charanne-v-spain-to-the-pv-investors-v-spain-trying-to-see-the-wood-for-the-trees/> accessed 25 October 2025

moved towards auction systems and **Contracts for Difference (CfD)** or feed-in premiums to minimise public burden and avoid fixed tariff promises that could become unsustainable.

Investor-State Dispute Settlement (ISDS) and Energy Charter Treaty Reform: The backlash from the renewable arbitration saga in Europe has led to broader reflections on the conflict between investment protection and climate policy. The Energy Charter Treaty, which many renewable investors used to sue Spain and others, is now seen by some European states as an impediment to aggressive climate action (since it could also be used by fossil fuel investors to claim compensation for phase-outs). In 2022–2023, major countries like Spain, France, Germany, the Netherlands, Poland, and even the entire European Union decided to **withdraw from the ECT**[35][36]. They signalled that the ECT in its current form is incompatible with the fast regulatory changes needed for climate goals. The ECT is undergoing a modernisation attempt, but many states have lost patience. This has two implications: one, a recognition that states want flexibility to adjust renewable support schemes as technology costs fall; and two, remaining investors may lose a potent enforcement tool as the treaty network recedes. UNCITRAL, through its Working Group III on ISDS reform, is also grappling with how to balance states' right to regulate for climate change with investor rights. A possible solution being floated is explicit carve-outs in treaties for bona fide climate measures, or mechanisms like state-state consultations before arbitration.

From India's perspective, India was not part of ECT and had already terminated most of its BITs, replacing them with a restrictive Model BIT in 2016 (which narrows FET and excludes tax measures, etc.). This means foreign investors in Indian renewables today may have limited ISDS recourse (unless covered by one of the few surviving BITs or a narrow window of the older BITs' sunset clauses). Therefore, the primary remedies lie in Indian courts and tribunals, which, as discussed, have been a mixed bag but are trending in favour of protecting contracts. In contrast, the international cases underscore a more absolute notion of investor protection that radical policy shifts can breach *international* obligations. Notably, the Antin

[35] 'The Energy Charter Treaty (ECT) is a huge obstacle for the clean energy transition. Demand from European governments to withdraw!' (*CAN Europe*) <https://caneurope.org/exitect/> accessed 25 October 2025

[36] Lukas Schaugg, 'Why Coordinated Withdrawal From the Energy Charter Treaty Remains Essential for Effective Climate Action' (*International Institute for Sustainable Development,* 30 June 2025) <https://www.iisd.org/articles/insight/coordinated-energy-charter-treaty-withdrawal-essential> accessed 25 October 2025

tribunal's articulation of the need for stability[37] reads almost like a caution to policymakers considering retroactive changes.

US/EU Support v India's Support: A comparative note on incentives: The U.S. and many EU nations effectively subsidise renewables (via tax credits, direct subsidy or above-market tariffs), whereas India has taken pride in rapidly achieving very low, unsubsidized tariffs (apart from some viability funding for specific schemes). Indian renewables developers operate on thinner margins as a result, which arguably makes them more sensitive to any adverse changes (since there is little fat to absorb shocks). However, it also means the sector is fundamentally market-driven now, with less contingent liability on government budgets. M&A valuations in India reflect market-based returns, whereas in Europe, in the FIT era, valuations were priced in generous state payouts (which is why cuts were so painful). Going forward, Europe is moving to competitive auctions like India did, aligning the systems. The U.S., via the IRA, however, has chosen a path of massive public expenditure to drive renewables (expected $369 billion in climate investments). This may spur even more deal activity as firms rush to invest with public support footing part of the bill. It's a different model from India's auction-driven model, but both aim to de-risk investment: one by boosting returns (tax credits), the other by securing long-term contracts and lowering the cost of capital.

Arbitration Standards Fair and Equitable Treatment (FET): In investment arbitration, the FET standard has been the linchpin for renewable cases. Tribunals have differed on their interpretation. Some have been deferential to states (emphasising investors cannot freeze regulations), others more investor-friendly (emphasising stability of inducements). For example, **Charanne** (UNCITRAL, 2016) said no specific promise of no-change was made, so moderate changes didn't breach FET; whereas **Eiser** (ICSID, 2017) found Spain's changes "totally transform" the regulatory regime and thus breached FET. For the legal community, these cases are now a rich source of guidance on how far a state can go in altering support schemes. A consensus seems to be that *proportionate, gradual changes* that leave investors a reasonable rate of return may pass muster, but *retroactive or wholly unpredictable changes* that undermine fundamental features will breach FET[38]. Applying this to India: if India were to,

[37] Menon (n 33)
[38] *Ibid*

say, impose a one-time windfall tax on solar project revenues or invalidate existing PPAs' tariffs in favour of lower rates, that could (if BIT protections applied) be seen as violating legitimate expectations. Conversely, routine changes like requiring better forecasting, minor grid code changes, or even taxing profits normally, likely would not cross the FET line if done transparently. As India formulates new policies (for instance, introducing carbon credit obligations, or market-based mechanisms for RE), keeping consistency for existing investments is important to avoid not just legal issues but also investor wariness.

In conclusion, the international experience both offers reassurance and caution. Reassurance that India is not alone in facing the challenges of integrating renewables economically, other countries have dealt with similar growing pains (and in some cases, far more disruptive policy shifts). Caution that investor confidence, once broken by policy U-turns, can have long-lasting negative effects and even legal repercussions. The best practices that emerge are: provide stable and transparent incentives, avoid retroactivity, uphold contracts or compensate if changes are unavoidable, and maintain an efficient dispute resolution system to resolve issues that do arise. India's relatively independent judiciary and regulators are a strength (as evidenced by the AP High Court decision and CERC's proactive change-in-law rulings) compared to some jurisdictions where investors had no local recourse except ISDS. Going forward, as climate action accelerates, India might also consider joining global initiatives for climate-aligned investment protection, e.g., crafting new bilateral treaties that protect renewable investors while reserving space for legitimate regulation (something UNCITRAL and others are contemplating).

REFORM RECOMMENDATIONS FOR INDIA

To solidify India's position as a leading destination for renewable energy investment and M&A, certain reforms and best practices should be pursued:

Ensure Policy Stability and Predictability: The government should steadfastly avoid retroactive changes or ad hoc interventions that undermine existing investments. Any major policy shifts (such as significantly altering the renewable tariff regime or imposing new charges on existing projects) should be done prospectively and with stakeholder consultation. The cautionary tales of Spain's FIT cuts and Andhra Pradesh's attempted PPA revisions highlight that stability is paramount. Investors price long-term infrastructure on

the assumption that today's rules will broadly remain or evolve reasonably. Thus, if India contemplates changes (for instance, moving from fixed tariffs to market-linked pricing for renewables in the late 2020s), it must grandfather or compensate existing projects. Enshrining the **principle of non-retroactivity** in legislation or regulatory practice would be beneficial. In this vein, the draft National Renewable Energy Act (periodically discussed) could include a commitment that tariff orders and contracts under government programs will not be altered adversely ex post facto. Stability could also be enhanced by building a transparent review mechanism: for example, if off-take costs become a concern, instead of unilateral tariff cuts, the government could create a fund to subsidise discoms or invite voluntary renegotiations with adequate incentives. The bottom line is: avoid surprises. By providing investors a predictable trajectory of RPO increases, subsidy phase-outs, etc., India can reduce the risk premium and attract lower-cost capital.

Strengthen Contractual Enforcement and Legal Remedies: While the AP High Court judgment was reassuring, not all investors want to rely on going to court for relief. The power sector's dispute resolution forums need strengthening. One welcome proposal is to give electricity regulators (CERC and SERCs) explicit jurisdiction to adjudicate PPA disputes and other contract performance issues, armed with civil court powers.[39] If implemented, this could create specialised fora for quicker enforcement of contracts (as opposed to generators filing writ petitions or civil suits). These commissions can order specific performance, payment of dues, etc., more efficiently. Another idea is establishing *fast-track courts or tribunals* for infrastructure contract enforcement. The government recently set up a dedicated *Renewable Energy Dispute Resolution Committee* (REDRC) under MNRE to amicably settle disputes between solar/wind developers and government agencies (like SECI, NTPC). This is a positive step for pre-litigation resolution. It could be institutionalised and expanded. Additionally, India's Arbitration and Conciliation Act (based on UNCITRAL Model Law) already provides a framework for arbitration; the key is to encourage contract drafters to make use of it. Government agencies should be willing to agree to arbitration in their contracts (with appropriate domestic or international seats), which would assure investors of a neutral forum. Finally, on enforcement of judgments/awards: if a regulator or arbitrator orders a discom to pay, ensuring compliance is critical. Mechanisms like *escrow of discom*

[39] The Electricity (Amendment) Bill 2022

revenues or central government guarantees for payment obligations could be considered for projects of national importance. The central government has mooted a *payment security fund* maintained by a financial intermediary to ensure at least 2-3 months of payments for renewable PPAs; operationalising and expanding that would greatly boost confidence.

Improve DISCOM Financial Viability and Creditworthiness: Many of the sector's risks (payment delays, curtailment due to DISCOMs avoiding purchase, attempts at renegotiation) stem from the poor financial condition of state DISCOMs. Sustainable resolution of this issue will remove a large discount factor that investors apply. Reform measures should include: timely pass-through of power purchase costs to consumer tariffs (reducing the regulatory asset buildup), better targeting of subsidies (direct benefit transfers to eligible farmers etc. instead of suppressing tariffs across the board), reducing AT&C losses through network upgrades and anti-theft measures, and exploring privatization or public-private partnerships in distribution as was done successfully in Delhi and some other cities. The Electricity (Amendment) Bill 2022 seeks to enable multiple discoms in one area (injecting competition) and mandates a *Cross-Subsidy Balancing Fund* to transparently manage subsidy burdens[40]. If passed and implemented, these could gradually improve efficiency. Meanwhile, the practice of the central government adjusting state dues (like using the RBI to deduct amounts from state accounts for power dues) should continue to enforce payment discipline. Further, credit enhancement for discom obligations could be instituted: for example, the PFC-led Payment Security Mechanism, where letters of credit and state government guarantees secure renewable PPAs, should be standard for all new contracts. If discoms become bankable off-takers, many investors' fears dissolve, and the need for complex contractual protections in M&A diminishes.[41] In essence, discom reform is the single most impactful long-term fix, albeit challenging given political economy issues.

Augment Grid Infrastructure and Streamline Land Processes: To mitigate curtailment and integration issues, India must invest heavily in grid expansion and smart management. The Green Energy Corridor project and new transmission schemes for renewable zones need speedy completion. Policymakers should ensure transmission planning stays ahead of

[40] *Ibid*

[41] 'Government amends Electricity (Late Payment Surcharge and Related Matters) Rules, 2022 to ensure optimum utilization of available power generating capacity' (*PIB,* 01 March 2024) <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2010570&reg=3&lang=2> accessed 25 October 2025

generation addition, perhaps by directing a central authority (like CTU) to build "transmission backbones" to potential renewable-rich areas even before auctions (some of this is underway with plans for 66 GW additional corridors[42]). On land, the government can adopt models like solar parks (where land is acquired or pooled by a government entity and infrastructure is provided) to de-risk land acquisition for developers. Recent solar park tenders (e.g., in Rajasthan, Gujarat) have helped, but more such zones are required for the 500 GW vision. Reforming land acquisition laws might be beyond the power sector's scope, but using renewable energy park policies, land pooling schemes with annuity to landowners, and clearer zoning (earmarking wasteland for renewables, for instance) will help. Digitisation of land records and faster mutation processes in states like Gujarat and Karnataka have eased some solar project development; these best practices should spread. Environmental clearance processes should also be made more efficient: perhaps a *single-window clearance* system for renewable projects above a certain size that coordinates forest, wildlife, civilian aviation (for tall wind masts), etc., would expedite development and give investors certainty that all clearances are in hand. Some states have indeed created renewable facilitation cells. A national GIS mapping of least-conflict sites (low environmental impact, good resources, available grid) can guide developers to areas that won't later be caught in litigation. This proactive planning prevents future legal tangles that scare investors.

Enhance Investor Protection in Policy and Treaties: Even though India has curtailed BIT protections, it can still signal investor-friendliness. For example, the government could provide an *option* for renewable project investors to avail conciliation under international frameworks (maybe via the Singapore Convention on Mediation, which India joined) in case of disputes with state entities.[43] India could also consider sector-specific agreements: a potential *multilateral green energy investment agreement* that India signs onto, which provides assurances against non-commercial risks for investors in clean energy, might be a way to attract foreign capital with some comfort (this could be done in partnership with groups like the International Solar Alliance or via climate financing deals). Domestically, establishing a track record of not just making policies but also not backtracking on them will itself serve as the best protection. It's notable that in global surveys of renewable attractiveness, policy

[42] '500 GW Non-fossil Fuel Target' (*Ministry of Power*, 18 September 2023) <https://powermin.gov.in/en/content/500gw-nonfossil-fuel-target> accessed 25 October 2025
[43] 'Decoding the Mediation Act, 2023' (*Nishith Desai Associates,* 04 September 2023) <https://nishithdesai.com/hotline.aspx/decoding-the-mediation-act-2023-10748> accessed 25 October 2025

consistency is a top criterion. India's rank tends to be high, but sometimes downgraded when incidents like Andhra's PPA issue occur.[44] Thus, a public commitment from the highest levels, e.g., a policy paper by MNRE or a guidance by the Ministry of Power stating that contracts will be honoured and any necessary adjustments will be made through consultative, lawful means, can go a long way.

Payment Security and Market Development: Building on earlier points, a concrete recommendation is to institutionalise a *Renewable Energy Payment Security Fund*. This could be a fund under SECI or a trustee, where a few months' worth of payments for all central scheme PPAs are maintained (funded by a small surcharge on tariff or budgetary allocation). It would automatically cover any discom default and then recover from the discom, ensuring generators (hence investors) are always paid on time. Some steps in this direction have been taken in solar tenders (SECI requires LCs and has a payment security mechanism), but expanding it nationwide would remove one of the biggest risk overhangs. Additionally, enabling more *market avenues* for developers mitigates the single-buyer risk. The Green Term-Ahead Market (GTAM) and proposed *Hydrogen purchase obligations* create more buyers for renewable power and its derivatives.[45] If a project can sell to open-access consumers or in exchange-traded green markets when a discom defaults, it is less vulnerable. The regulatory framework for *merchant renewable plants* paired with storage or flexible operation could be improved so that some projects can be truly independent of discoms (today, inter-state open access is still bureaucratic and subject to unknown future charges after ISTS waiver ends in 2025[46]). A vibrant electricity market (day-ahead, real-time, ancillary services) ultimately provides options and price discovery that reduce reliance on a single PPA contract. This can complement the long-term PPAs and make project cash flows more robust, again boosting investor confidence.

Expanding Financing Instruments: While not a legal reform per se, financial innovation helps address some risks. The introduction of *Infrastructure Investment Trusts (InvITs)* in India has allowed operational projects to be monetised by sponsors in a yield vehicle, giving

[44] *Renewable Energy Country Attractiveness Index* (63rd edn, EY, 2024)
[45] 'Indian Power Market goes Green' (*Press Information Bureau,* 01 September 2020) <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1650384&reg=3&lang=2> accessed 25 October 2025
[46] 'Waiver of inter-state transmission charges on transmission of the electricity generated from solar and wind sources of energy under Para 6.4(6) of the Tariff Policy' (*Ministry of Power*, 23 November 2021) <https://powermin.gov.in/sites/default/files/uploads/Orders/B.4.3.pdf> accessed 25 October 2025

investors a regulated, tradable product. Already, players like IRB (roads) and PowerGrid (transmission) have launched InvITs; in renewables, an InvIT by Virescent (backed by KKR) and another by Indigrid are operating.[47] Regulatory support to ease InvIT norms (such as tax pass-through status, ability for InvITs to raise bonds, etc.) will channel more pension and insurance money into the sector via acquisition of assets. Similarly, fostering green bonds and yieldcos listed abroad could facilitate lower-cost capital, which in turn makes acquisitions more viable. The law could aid this by clarifying any tax uncertainties for these vehicles. SEBI and RBI have been supportive (defining renewable infra as eligible for certain priority lending and ECB external commercial borrowing windows). Strengthening these financing avenues indirectly encourages M&A by providing more exit options to developers (knowing they can sell to an InvIT or issue a bond, refinancing and cash out).

To synthesise, the recommendations revolve around *reinforcing trust*: trust that policies won't flip-flop, that contracts will be upheld, that counterparties will pay, and that if things go wrong, there are efficient remedies. India can learn from global experiences, embracing the positive (like the US model of consistent incentives, the appeal of global arbitration best practices) and avoiding the negative (retroactive cuts, lack of enforcement). The government's role is pivotal in setting the tone. As India invites investments of the scale needed for 500 GW by 2030, implementing these reforms will reduce the cost of capital (as risk premiums fall) and accelerate deal flow as more investors feel secure entering and exiting the market.

CONCLUSION

From a legal perspective, India's experience underscores a few fundamental points. First, *the rule of law and judicial enforcement* are vital for infrastructure investments. The Andhra Pradesh PPA dispute episode, resolved in favour of generators by the High Court,[48] reaffirmed that Indian courts can act as guardians of contractual sanctity, a reassuring signal to investors compared to emerging markets. Second, regulatory institutions like CERC have played a proactive role in risk mitigation, as seen by their handling of change-in-law claims (granting compensatory tariffs for GST, duties, etc.[49]). Strengthening these institutions

[47] Virescent Renewable Energy Trust, *Annual Report 2022–23* (2023)
[48] No Renegotiation of Tariff under Concluded PPAs: A Win for Clean Energy Power Generators (n 22)
[49] Mathew (n 35)

further, and perhaps expanding their mandate to encompass contract enforcement, could fill gaps in sector-specific dispute resolution.[50] Third, India's policy framework, though not without inconsistencies, has largely moved in a one-way positive direction: toward more transparency (auctions), more consistency (standard guidelines), and better balance between developer and consumer interests (gradually reducing subsidies while improving payment security). This trajectory is important to maintain sudden reversals could have a chilling effect, evidenced by experiences abroad.

Internationally, the comparative study highlights that India has avoided some mistakes (no sweeping retroactive tariff cuts like Spain's[51]) and that investors ultimately seek similar assurances everywhere: respect for commitments and fair treatment. The ongoing global discourse on aligning investment protection with climate action is particularly relevant for India as it scales up climate investments. While India has taken a cautious approach to investment treaties, it must ensure that domestic law and practice compensate by providing equivalent confidence to foreign and domestic investors alike. In a sense, India can strive to make its own institutions, regulatory commissions, courts, and contract law so robust that recourse to external arbitration becomes unnecessary. This would mark the maturing of India's legal system, parallel to the maturing of its renewable industry.

For the investment climate, the implications are significant. If India implements reforms to enhance policy stability, enforceability, and financial viability of the sector, the cost of renewable energy will continue to fall, and required capital (much of it via M&A and refinancings) will flow at scale. Already, India ranks among the top renewable energy investment destinations; continued improvements could see even greater participation by pension funds, sovereign funds, and strategic investors who currently might be cautious. On the flip side, complacency or policy missteps could dampen the momentum. It bears remembering that the competition for global clean energy capital is intensifying with the U.S. IRA, Europe's Green Deal, and others offering incentives, so India must remain an attractive, low-risk option.

Achieving India's renewable energy ambitions will depend not only on engineering and finance but also on *legal engineering,* crafting a framework where risks are manageable and

[50] The Electricity (Amendment) Bill 2022
[51] Menon (n 33)

rewards are reasonable for all parties. The drivers, incentives, and pitfalls discussed herein show that India has many ingredients right, and the lessons from both domestic experience and international comparators provide a clear roadmap to strengthen the remaining weak links. By embracing that roadmap, India can ensure that mergers and acquisitions continue to play a constructive role in building a clean, secure, and affordable energy future, underpinned by a stable rule-of-law regime that inspires investor confidence and upholds the public interest in sustainable development.