

Deepening InvITs for Capital Recycling in Renewable Energy

August 2026

A comprehensive assessment of India's renewable energy growth and the role of InvITs in deepening capital mobilisation.

knightfrank.co.in/research



Mumbai (HO)

Knight Frank (India) Pvt. Ltd.
Paville House, Near Twin Towers,
Off. Veer Savarkar Marg, Prabhadevi,
Mumbai 400 025, India
Tel: +91 22 6745 0101

Ahmedabad

Knight Frank (India) Pvt. Ltd.
Unit No. 407 & 408, 4th Floor, Block-C
'The First', Behind ITC Hotel, Near Keshav Baug
Party Plot, Vastrapur, Ahmedabad 380 015, India
Tel: +91 79 6813 1501

Bengaluru

First Floor, Pinnacle Tower
Embassy One, #8 Bellary Road
Ganganagar, Bengaluru 560 032, India
Tel: +91 80 6818 5600

Chennai

Knight Frank (India) Pvt. Ltd.
1st Floor, Centre block, Sunny Side,
8/17, Shafee Mohammed Road,
Nungambakkam, Chennai 600 006, India
Tel: +91 44 4296 9000

Gurugram

Knight Frank (India) Pvt. Ltd.
1505-1508, 15th Floor, Tower B,
Signature Towers South City 1,
Gurugram 122 001, India
Tel: +91 124 4782700

Hyderabad

Knight Frank (India) Pvt. Ltd.
Part of 10th Floor, Atria Block, ITPH, Plot no.17,
HITECH City Rd, Software Units Layout, Madhapur,
Hyderabad, Telangana 500 081, India
Tel: +91 40 4455 4141

Indore

Knight Frank (India) Pvt. Ltd.
Unit No. 1601, 16th Floor, Skye Corporate Park,
Near Satya Sai Square, Vijay Nagar, A B Road,
Indore, Madhya Pradesh 452 010, India
Tel: +91 79 6813 1501

Kochi

No. 66/4966, SPAZEONE MG Road,
2nd floor, Alapatt Heritage,
Mahatma Gandhi Road, Padma Junction,
Kacheripady, Kochi, Ernakulam,
Keralam 682 035, India

Kolkata

Knight Frank (India) Pvt. Ltd.
PS Srijan Corporate Park
Unit Number – 1202A, 12th Floor,
Block – EP & GP, Plot Number – GP 2,
Sector – V, Salt Lake, Kolkata 700 091, India
Tel: +91 33 6652 1000

Pune

Knight Frank (India) Pvt. Ltd.
Unit No.701, Level 7, Pentagon Towers P4,
Magarpatta City, Hadapsar,
Pune 411 013, India
Tel: +91 20 6749 1500

Contents

India's Renewable Energy Sector:
Growth, Policy and Investment Landscape

Page **05**

Financing India's Renewable Energy Transition:
Investment Requirement and Capital Mobilisation

Page **09**

Infrastructure Investment Trusts: Catalyst to Capital Recycling
in India's Renewable Energy Sector

Page **12**

Current Landscape of Renewable Energy InvITs in India

Page **15**

Why Has Renewable Energy InvIT Adoption Been Limited?

Page **18**

Performance Assessment of Existing Renewable
Energy InvIT Platforms

Page **23**

Attractive Yield Proposition: Renewable InvITs as an
Income-Generating Asset Class

Page **27**

Renewable Energy InvIT Potential
– Unlocking INR 3 trn Through Capital Recycling Via Solar Assets

Page **29**

Foreword



Shishir Baijal
International Partner
Chairman & Managing Director
Knight Frank India

India's renewable energy transition has, over the past decade, largely been defined by the pace of capacity addition. Growing solar installations, competitive tariffs, and ambitious policy targets have positioned the country among the world's leading renewable energy markets. Yet, as the sector enters its next phase of growth, the conversation is beginning to shift from building capacity to financing its continued expansion more efficiently.

Achieving India's target of 500 GW of non-fossil fuel capacity by 2030 will require an estimated USD 190-215 bn of additional investment over the remainder of the decade. While debt financing, private equity, and strategic capital have played a pivotal role in developing renewable assets, they are not designed to continuously recycle capital from operational projects into new investments. Unlocking capital embedded in mature assets has therefore become an equally important imperative for sustaining the sector's long-term growth.

Infrastructure Investment Trusts (InvITs) were established to precisely tap into this opportunity. Their progress across roads, power transmission, logistics etc has demonstrated the effectiveness of the model in monetising operational infrastructure assets while providing investors with stable, yield-generating investment opportunities. Collectively, these sectors have mobilised nearly USD 20 bn since FY 2020. Renewable energy, despite possessing many of the characteristics that make infrastructure assets attractive for InvIT structures, such as including long-term contracted revenues, predictable cash flows, low operating costs, and long asset lives, continues to account for only a small share of India's InvIT market.

In our view, this gap reflects the evolution of the market rather than the suitability of the asset class. Until recently, the renewable sector's priority was accelerating capacity creation. As portfolios mature, operating histories lengthen, and asset aggregation improves, the conditions for large-scale InvIT monetisation are steadily strengthening. Evidence presented in this report, including the performance of Sustainable Energy Infra Trust (SEIT) and IndiGrid's successful integration of renewable assets, demonstrates that well-structured renewable portfolios are increasingly capable of delivering stable cash flows and competitive distributions expected by long-term institutional investors.

For developers, renewable InvITs offer a mechanism to recycle equity into the next generation of projects. For institutional investors, they represent access to a growing portfolio of operational infrastructure backed by long-term contracted revenues. With an estimated USD 32 bn of InvIT-eligible utility-scale solar assets already operational and India's renewable investment requirements continuing to rise, the opportunity to develop a deep and scalable renewable InvIT market has never been more compelling.

We hope this report contributes meaningfully to the ongoing dialogue on financing India's clean energy transition and provides valuable insights for policymakers, developers, investors, and other stakeholders seeking to shape the next phase of the country's renewable energy journey.

India's renewable energy sector has witnessed unprecedented growth over the past decade, driven by ambitious policy reforms, declining technology costs, and strong investor participation. With installed renewable energy capacity expanding rapidly and the country targeting 500 GW of non-fossil fuel capacity by 2030, the sector is expected to require investments exceeding USD 190-215 bn over the remainder of the decade. While traditional funding sources such as project debt, private equity, strategic investments, and foreign direct investment have played a pivotal role in supporting this growth, sustaining the next phase of expansion will require more efficient mechanisms for capital recycling.

Infrastructure Investment Trusts (InvITs) have emerged as a proven financing vehicle across India's transport and power transmission sectors, enabling developers to monetise mature operational assets, recycle capital into new infrastructure, and broaden access to long-term institutional capital. Despite the stable cash flows and long-term contractual characteristics of renewable energy assets, the adoption of InvITs within the sector has remained limited.

This reflects the relatively nascent stage of operational renewable portfolios, the continued availability of attractive private capital, and evolving market dynamics.

Executive Summary

This report examines the financing landscape of India's renewable energy sector and evaluates the role that InvITs can play in

addressing future capital requirements. It analyses the evolution of renewable energy financing, the regulatory framework governing InvITs, and the structural characteristics that make operational renewable assets suitable for InvIT structures. The report also assesses the monetisable universe of renewable assets, reviews leading case studies, and draws lessons from the successful adoption of InvITs in roads and power transmission.

As India's renewable energy market matures, InvITs have the potential to become an integral component of the sector's financing ecosystem by unlocking capital embedded in operational assets, diversifying funding sources, reducing reliance on sponsor balance sheets, and attracting long-term domestic and global institutional investors. The expansion of renewable energy InvITs can strengthen capital recycling, lower the cost of capital over time, and accelerate the pace of capacity addition required to achieve India's energy transition goals.

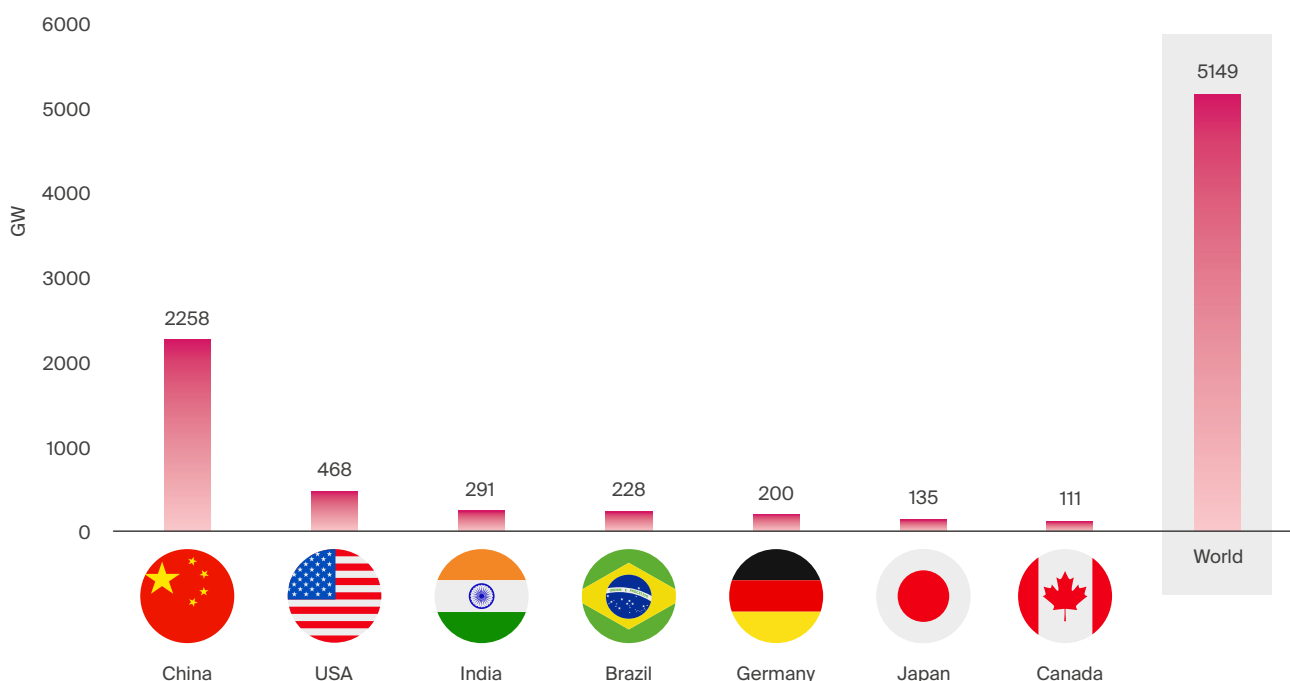
Chapter 1

India's Renewable Energy Sector: Growth, Policy and Investment Landscape

India's power sector is undergoing a structural transition characterised by the rapid expansion of renewable energy (RE) capacity, supported by sustained policy interventions, improving project economics, and increasing private sector participation. As of July 2026, India's installed renewable energy capacity stood at 291 GWs (excluding nuclear energy), establishing as the third largest renewable energy market globally, after China and the US. This remarkable growth of 4x expansion in the renewable energy capacity over the last decade underscores the accelerating pace at which the sector has been integrated into India's power system and highlights its role in the country's energy transition.

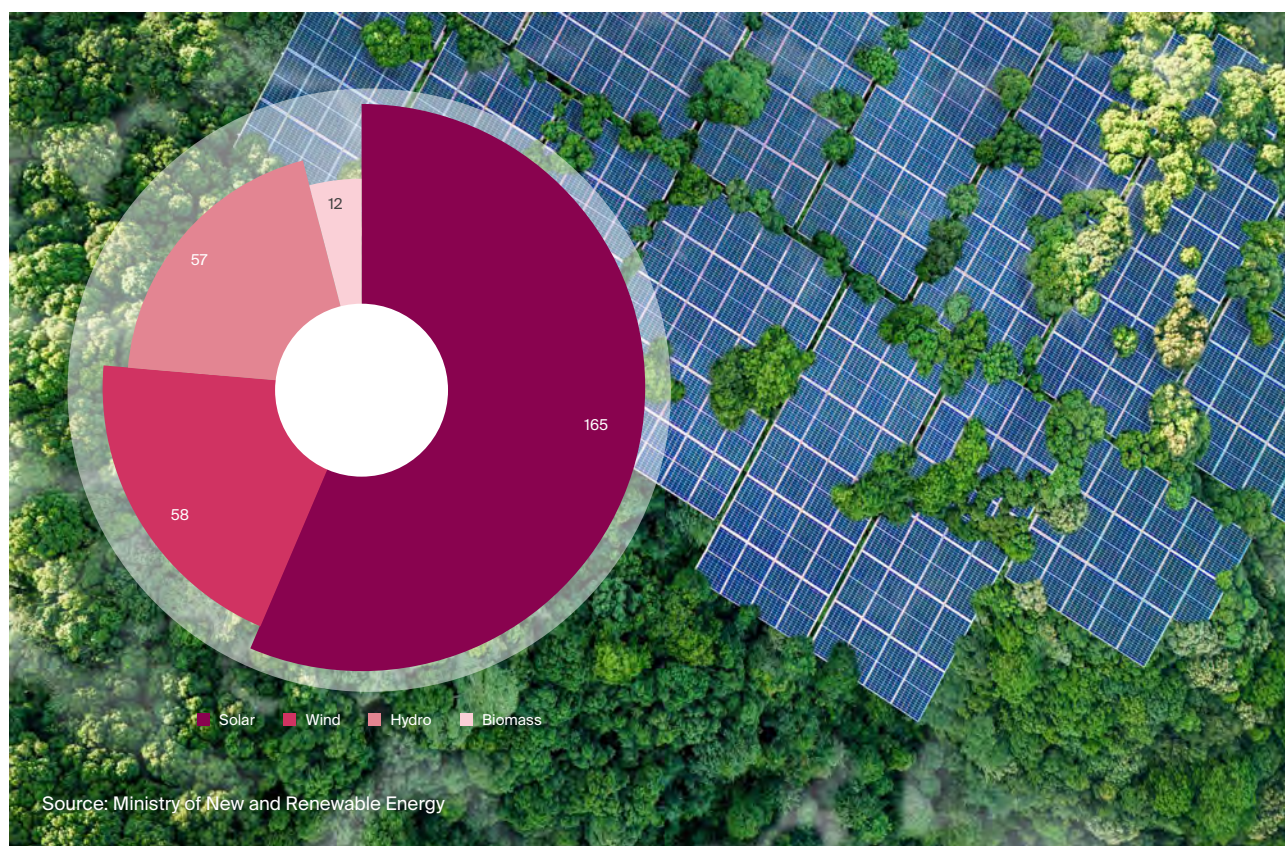
The expansion in renewable capacity has translated into a steadily increasing contribution to India's electricity supply. While renewable energy technologies, particularly solar and wind, operate at lower capacity utilisation factors than conventional thermal generation, their contribution to electricity generation has increased as well over the past decade. Fossil fuels, largely consisting of renewable energy currently account for ~29% of India's total electricity generated, a growth from approximately 15% to 16% a decade ago. In the near term, the Central Electricity Authority (CEA) projects renewable energy to contribute around 32% of India's electricity generation by 2030. With the continued addition of renewable capacity, energy storage systems, and transmission infrastructure, non-fossil fuel sources are expected to account for nearly half of India's total electricity generation by the end of the decade.

Total Renewable Energy Installed Capacity (GW)



Source: International Renewable Energy Agency (IRENA), Knight Frank Research
 Note: Data as of July 2026

Solar Comprise More Than 50% of Installed Renewable Energy Capacity



Solar power has been the primary driver of this transition. Existing installed solar capacity at 165 GWs has increased by nearly 13 times since 2016, supported by declining technology costs, competitive tariff discovery, improvements in project execution, and favourable regulatory measures. Solar now accounts for more than half of India's renewable energy capacity, while wind, hydro, biomass, and other renewable technologies continue to provide diversification within the generation mix. Consequently, renewable energy has evolved from a supplementary source of power to a core component of India's electricity infrastructure.

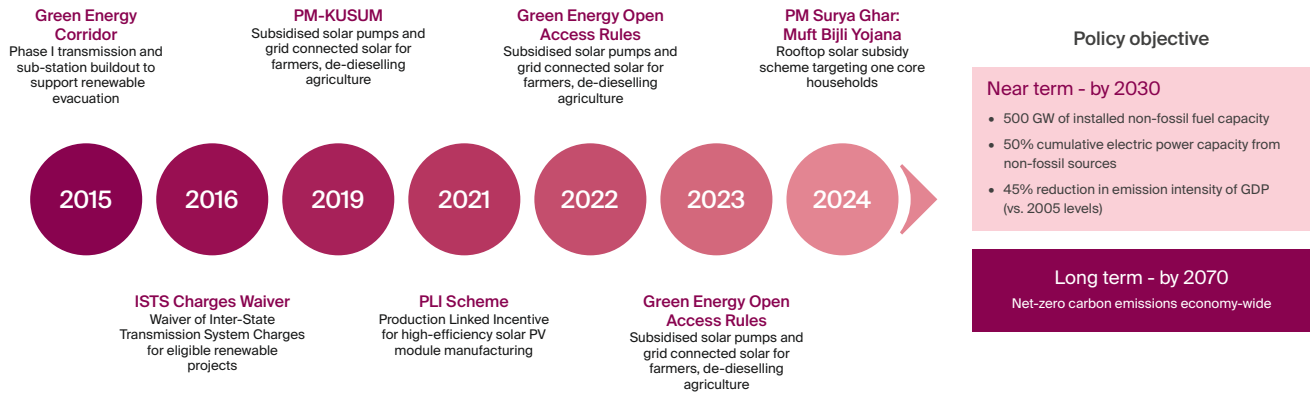
The expansion has been underpinned by a progressively evolving policy framework. India has committed to achieving 500 GW of installed non-fossil fuel-based electricity capacity by 2030, as part of its broader commitment to achieve net-zero emissions by 2070. These long-term goals are complemented by intermediate targets, including a 45% reduction in the emissions intensity of GDP from 2005 levels and the production of 5 mn tonnes of green hydrogen annually by 2030. These milestones indicate that renewable energy deployment has remained broadly aligned with the country's decarbonisation trajectory.

Policy support has also expanded beyond capacity addition to strengthening the broader renewable

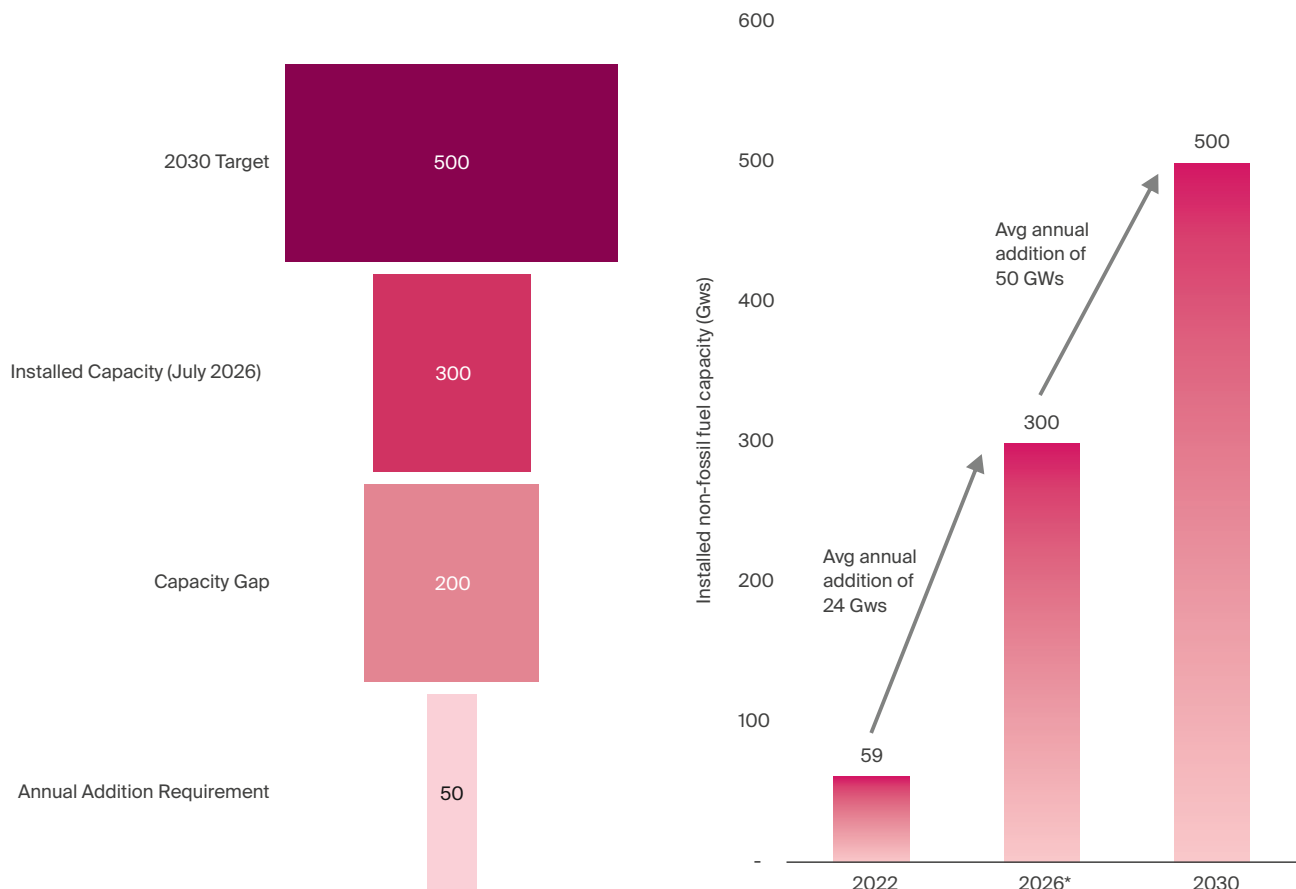
energy ecosystem. Initial interventions centred on competitive bidding, renewable purchase obligations (RPOs), accelerated depreciation benefits, and fiscal incentives to improve project viability. More recently, policy measures have focused on addressing structural constraints across the renewable energy value chain. Initiatives such as the Production Linked Incentive (PLI) Scheme for high-efficiency solar photovoltaic modules, the National Green Hydrogen Mission, the Green Energy Corridor Programme, waiver of Inter-State Transmission System (ISTS) charges for eligible renewable energy projects, viability gap funding for battery energy storage systems, and the PM Surya Ghar: Muft Bijli Yojana have supported domestic manufacturing, strengthened transmission infrastructure, promoted distributed generation, and enhanced grid readiness. In parallel, reforms such as the Green Energy Open Access Rules, integrated transmission planning under the PM Gati Shakti National Master Plan, and continued investments in interstate transmission networks have improved renewable energy evacuation and facilitated greater integration of variable renewable energy into the grid. Collectively, these measures have strengthened project bankability and reduced regulatory uncertainty, thereby improving the investment environment.

Policy Mapping

India's Renewable Energy Key Policy Evolution



Strong Pipeline: 500 GW non-fossil fuel target by 2030, implies an aggressive annual addition of 50 GW capacity each year



Source: Ministry of New and Renewable Energy
Note: Includes Nuclear Energy, Data as of July 2026

Source: Ministry of New and Renewable Energy;
Note: Includes Nuclear Energy, Data as of July 2026



The investment landscape of India's renewable energy sector has evolved in tandem with its operational growth. Private developers dominate India's renewable energy landscape, accounting for ~90%+ of renewable capacity, creating an attractive market for domestic and foreign institutional capital. Large renewable energy platforms have attracted investments from sovereign wealth funds, pension funds, global infrastructure funds, private equity investors, development finance institutions, and strategic utilities through platform acquisitions, joint ventures, and asset-level investments

As renewable energy deployment has accelerated, policy priorities have progressively shifted beyond capacity addition towards strengthening the enabling infrastructure required to support higher renewable energy penetration. The increasing share of variable renewable energy in India's generation mix has elevated the importance of investments in transmission networks, battery energy storage systems (BESS), pumped hydro storage, and grid modernisation to maintain system reliability and operational flexibility. As per the Ministry of Power's National Electricity Plan (Transmission) around 47 GW of Battery Energy Storage Systems (BESS) has been considered for integration by 2031-32, reflecting the policy emphasis on firming renewable power and improving grid resilience. In parallel, the Green Energy Corridor Programme, expansion of interstate transmission infrastructure, and viability gap funding for battery storage projects are expected to facilitate greater renewable energy evacuation and support the

integration of significantly larger volumes of renewable generation into the national grid.

The continued expansion of renewable energy will, however, require an unprecedented scale of investment over the remainder of this decade. Achieving the country's target of 500 GW of non-fossil fuel-based installed capacity by 2030 will require sustained investments not only in renewable generation but also in transmission infrastructure, energy storage systems, and grid balancing assets.

Against this backdrop, financing requirements are expected to increase substantially, creating a greater need for efficient capital allocation and recycling. While conventional sources of financing, which includes project finance, bank lending, infrastructure debt, green bonds, private equity etc will continue to play an important role, developers will increasingly require mechanisms that unlock capital embedded in operational assets and facilitate its redeployment into new renewable energy projects. As renewable portfolios mature and institutional investor appetite for stable, yield-generating infrastructure assets continues to strengthen, InvITs are emerging as an important capital market instrument capable of bridging this financing requirement. By enabling the monetisation of operational renewable energy assets while providing investors with access to predictable, long-term cash flows, InvITs have the potential to improve capital efficiency, deepen infrastructure financing markets, and accelerate the next phase of India's renewable energy transition.

Chapter 2

Financing India's Renewable Energy Transition: Investment Requirement and Capital Mobilisation



India's renewable energy ambitions are entering a significantly more capital-intensive phase. The scale of investment is also reflected in the pace of annual capacity additions. India added over 55 GW of non-fossil power capacity during FY2025-26, the highest annual addition to date, with renewable energy accounting for most of the new generation capacity. To achieve a target of 500 GW of non-fossil fuel capacity, India would need to add 50 GWs each year, an achievable scale, although higher than the historical average. Thus, reinforcing the need for efficient financing mechanisms capable of supporting sustained deployment.

The investment requirement would be widespread through an unprecedented scale of investment across generation, transmission, and energy storage infrastructure. As mentioned above adding renewable generation capacity, investments will increasingly be directed towards enabling infrastructure, including battery energy storage systems (BESS), pumped hydro storage, interstate transmission corridors, and grid modernisation to support higher renewable energy penetration while maintaining system reliability.

Therefore, the investment requirement has consequently expanded well beyond project-level financing. As per estimates by International Energy Agency (IEA) and other industry assessments, India will require cumulative investments of approximately USD 190-215 bn between 2026 and 2030 to achieve its renewable energy ambitions. This translates into an annual investment requirement of approximately USD 48-54 bn, significantly higher than the estimated USD 13-18 bn currently being invested annually in the renewable energy sector.

2.1 Institutional Capital is Increasingly Driving Renewable Energy Investments

The financing profile of India's renewable energy sector has undergone a structural transformation over the past decade. While commercial banks and public financial institutions initially accounted for the majority of project financing, the sector has progressively diversified its capital base through increasing participation from sovereign wealth funds, pension funds, infrastructure funds, private equity investors, multilateral institutions, global utilities, and strategic investors.

A diverse pool of long-term investors has demonstrated growing confidence in India's renewable energy market through platform investments, portfolio acquisitions, and strategic partnerships. Supportive policy reforms, improving operational performance, and the stable revenues generated under long-term power purchase agreements have enhanced the attractiveness of renewable energy assets as long-duration infrastructure investments.

Over the past decade, India's renewable energy sector has attracted nearly USD 40 bn in private equity investments, accounting for around 10% of the country's total private equity inflows during the period. In addition, the sector has received approximately USD 20 bn in foreign direct investment (FDI). The sustained inflow of foreign capital reflects growing investor confidence in India's policy framework, improving market fundamentals, and long-term growth prospects. As renewable energy portfolios continue to mature and scale, the expanding base of operational assets is creating a sizeable pipeline for capital recycling through InvITs and other asset monetisation platforms.

Consequently, renewable energy has emerged as one of India's largest infrastructure investment themes. The growing participation of patient institutional capital has enabled developers to rapidly expand their portfolios while reducing dependence on traditional bank financing. However, as operational asset portfolios continue to increase in size, developers require efficient mechanisms to recycle invested equity into new projects without materially increasing leverage. In this context, InvITs offer a scalable solution by unlocking capital from operational assets while supporting the next phase of renewable energy capacity expansion.

2.2 Capital Recycling is Central to Renewable Energy Financing

With over 291 GWs of commissioned renewable energy capacity, the financing challenge is gradually shifting from funding individual projects to mobilising capital

for the next wave of capacity expansion. As the operational asset base continues to grow, improving the efficiency with which capital is redeployed has become increasingly important.

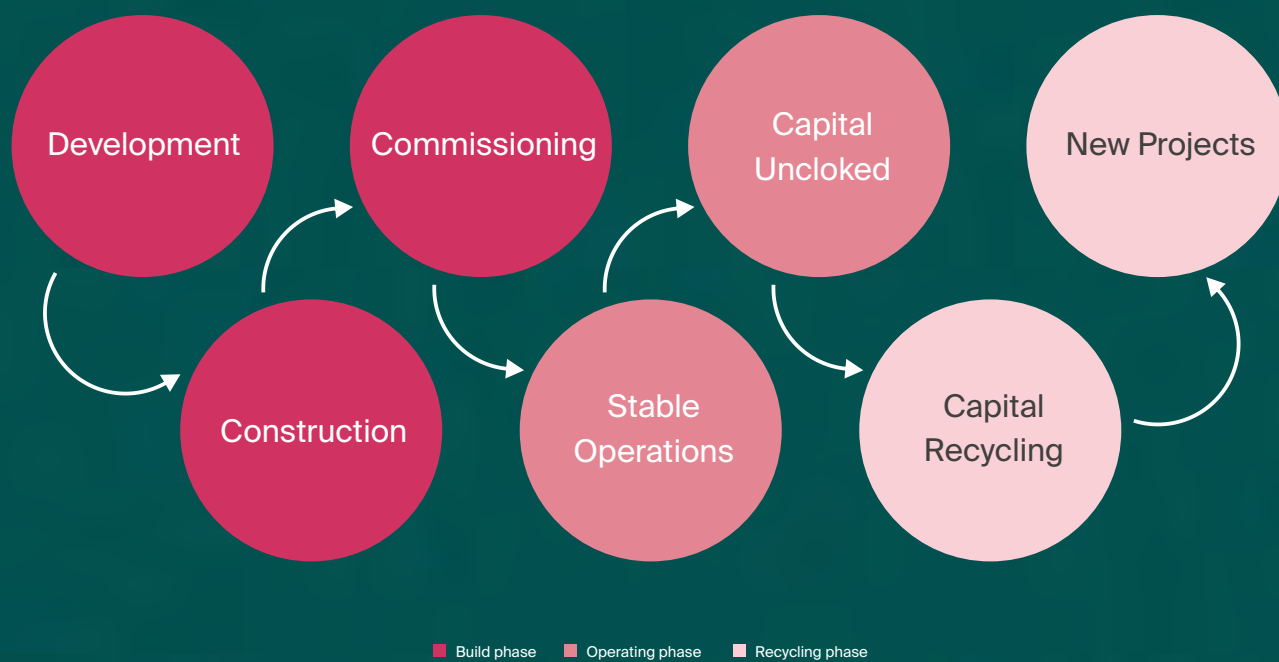
Utility-scale renewable energy projects are characterised by high upfront capital requirements, with nearly 70-80% of project costs incurred during construction. Consequently, a significant proportion of developer equity remains invested in operational assets for over two decades. With India targeting 500 GW of non-fossil fuel capacity by 2030, requiring more than 200 GW of additional capacity over the next four years, continuously committing fresh capital is required to support the necessary pace of investment. The financing requirement extends beyond generation assets to transmission networks, battery energy storage systems, pumped hydro storage and grid modernisation, further increasing overall capital demand.

Although the renewable energy financing ecosystem has broadened considerably, with commercial banks, infrastructure funds, sovereign wealth funds, pension funds, private equity investors, green bonds and multilateral institutions all playing an important role, these sources predominantly finance new projects or refinance existing debt. They do not provide an efficient mechanism for releasing equity already invested in mature operating assets. As a result, developers often face a trade-off between retaining stable cash-generating assets and redeploying capital into new projects.

This financing gap is particularly relevant for renewable energy assets, whose investment characteristics are well suited to asset monetisation. Long-term power purchase agreements, low operating expenditure, limited commodity price exposure and asset life exceeding 25 years provide stable and predictable cash flows that closely align with the investment objectives of long-term institutional investors seeking yield-oriented infrastructure assets.

Therefore, capital recycling through InvITs address this requirement by enabling developers to monetise operational assets while continuing to participate in their long-term value creation. By unlocking equity tied up in mature portfolios, InvITs improve capital efficiency, strengthen balance sheets and facilitate the recycling of capital into new renewable energy projects. As India's renewable energy sector continues to scale, InvITs are expected to become an increasingly important financing mechanism, supporting both asset monetisation and the mobilisation of long-term capital required for the country's energy transition.

Renewable Asset Lifecycle



Source: Ministry of New and Renewable Energy

Chapter 3

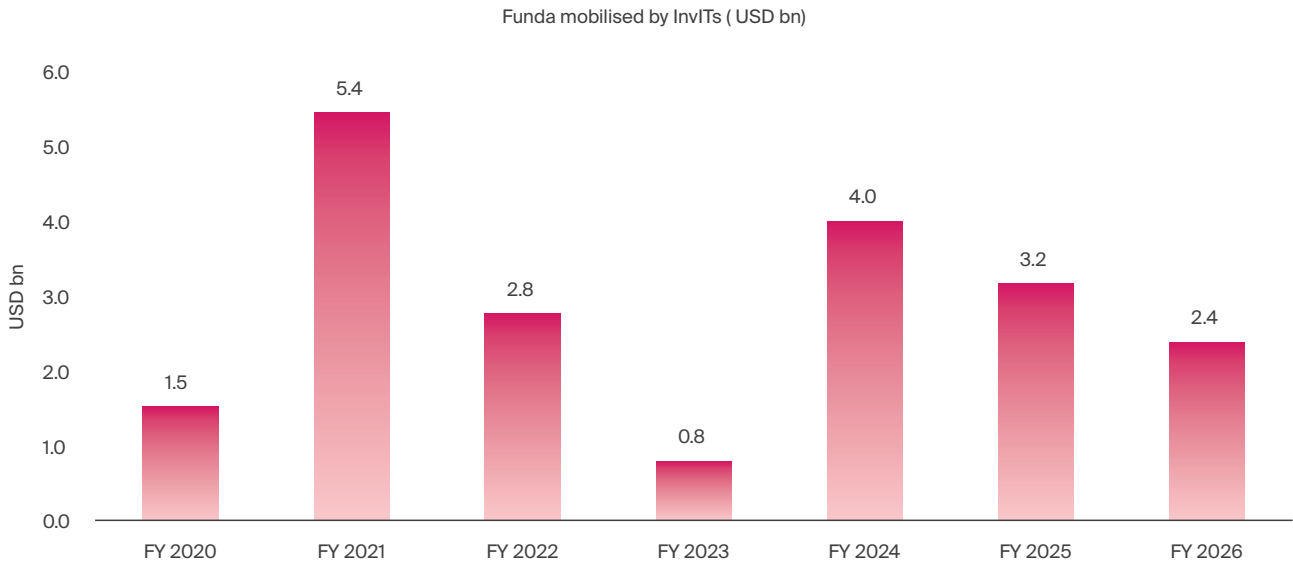
Infrastructure Investment Trusts: Catalyst to Capital Recycling in India's Renewable Energy Sector



Infrastructure development is inherently capital intensive, requiring substantial upfront investments with long asset lives and extended payback periods. Historically, infrastructure projects in India have relied predominantly on bank financing and sponsor equity. However, as infrastructure investment requirements expanded across sectors such as transportation, energy, telecommunications and urban infrastructure, conventional financing models became increasingly constrained by limited long-term debt availability, rising leverage among developers, and asset-liability mismatches within the banking system.

Recognising the need to diversify infrastructure financing, the Securities and Exchange Board of India (SEBI) introduced the Infrastructure Investment Trust (InvIT) Regulations in 2014, creating a market-based platform for monetising operational infrastructure assets. Modelled on internationally established infrastructure trust structures and yieldcos, InvITs enable sponsors to transfer revenue-generating infrastructure assets into professionally managed investment vehicles while providing investors with access to stable, income-generating infrastructure portfolios. Since their introduction, InvITs have evolved into an important component of India's infrastructure financing ecosystem, supporting capital mobilisation across sectors including roads, power transmission, telecommunications, pipelines and renewable energy. The first InvIT was registered with SEBI in FY 2016. Since then, the InvIT market has expanded steadily, with a cumulative 26 InvITs registered as of FY 2026. Between FY 2020 and FY 2026, InvITs collectively mobilised nearly USD 20 bn, reflecting investor confidence in the asset class and its growing role as a long-term infrastructure financing and capital recycling platform.

USD 20 bn mobilised via InvITs since FY 2020



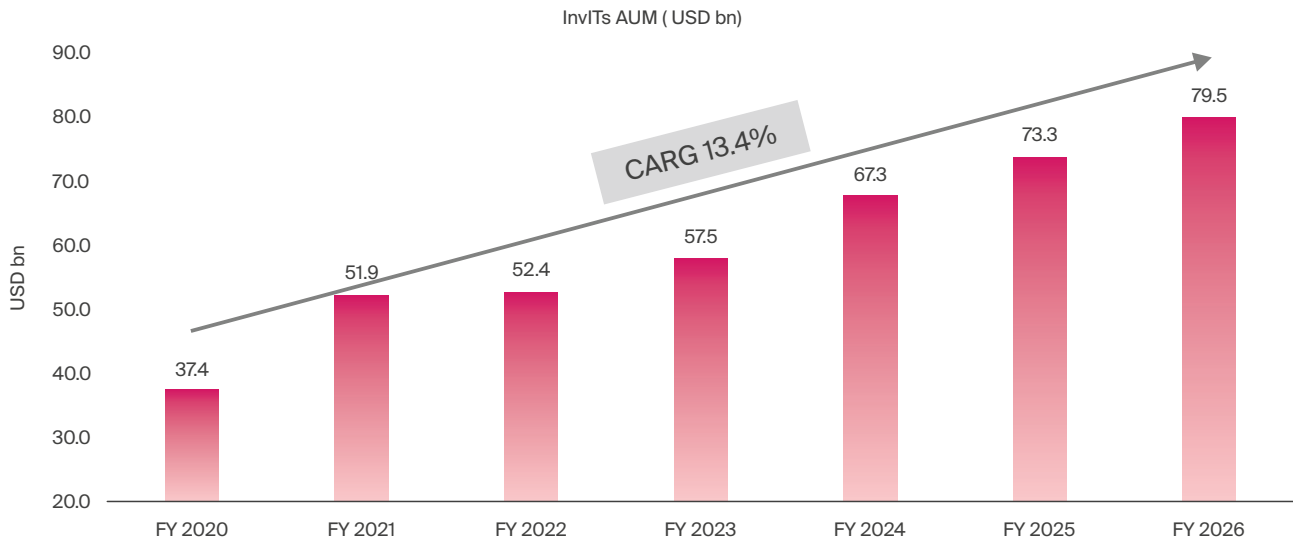
Source: SEBI, Knight Frank Research

Growth of India's InvIT Market

Over the past decade, the Indian InvIT market has witnessed steady expansion in both scale and sectoral diversification. As of 2026, the market comprises over 26 registered InvITs, including both publicly listed and privately placed vehicles, spanning roads, power transmission, telecommunications, gas pipelines, warehousing and renewable energy. Collectively, these platforms represent infrastructure assets have mobilised substantial domestic and international institutional capital.

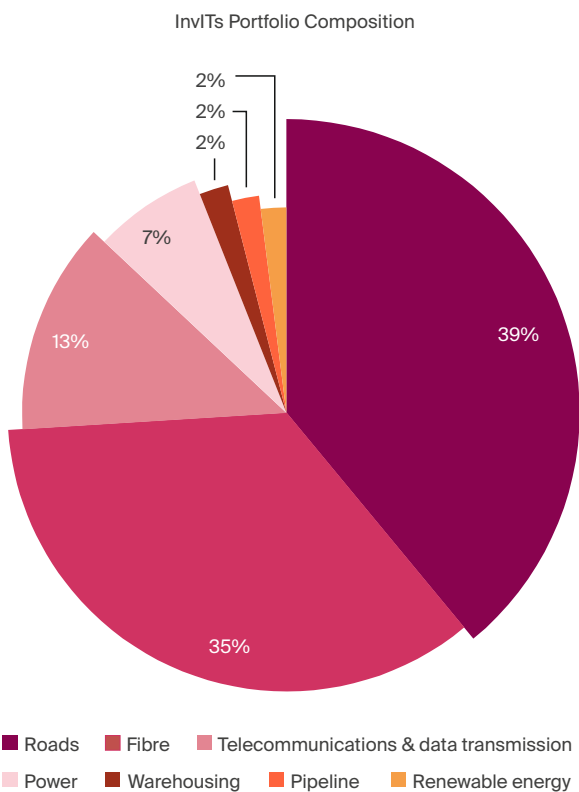
While transportation and power transmission continue to account for a significant share of operational InvIT assets, the presence of renewable energy is still nascent despite a rapid expansion of operational renewable portfolios and increasing investor appetite for sustainable infrastructure investments. The diversification of InvITs across infrastructure sectors demonstrates the increasing maturity of India's infrastructure capital markets and the growing acceptance of InvITs as an effective capital recycling platform.

InvITs AUM grew by a CAGR of 13.4% between FY 2020-26



Source: Company reports, Knight Frank Research

Road dominates InvITs AUM with a share of 39%



Source: Company reports, Knight Frank Research, Note: As of FY 2026

Investment Proposition of InvITs

InvITs offer a distinct value proposition for both infrastructure developers and investors. For developers, they provide an efficient mechanism to monetise operational assets, reduce leverage, strengthen balance sheets, and recycle capital into new infrastructure projects without relinquishing operational expertise. For investors, InvITs offer access to diversified portfolios of operational infrastructure assets capable of generating relatively stable cash flows and periodic distributions, while also providing exposure to India's long-term infrastructure growth story.

The investment characteristics of InvITs are particularly attractive to pension funds, sovereign wealth funds, insurance companies and infrastructure-focused institutional investors, whose investment mandates prioritise long-duration assets with predictable income streams. Consequently, InvITs have emerged as an important bridge between India's infrastructure financing requirements and the growing pool of global long-term capital seeking stable, yield-generating investment opportunities.



Chapter 4

Current Landscape of Renewable Energy InvITs in India

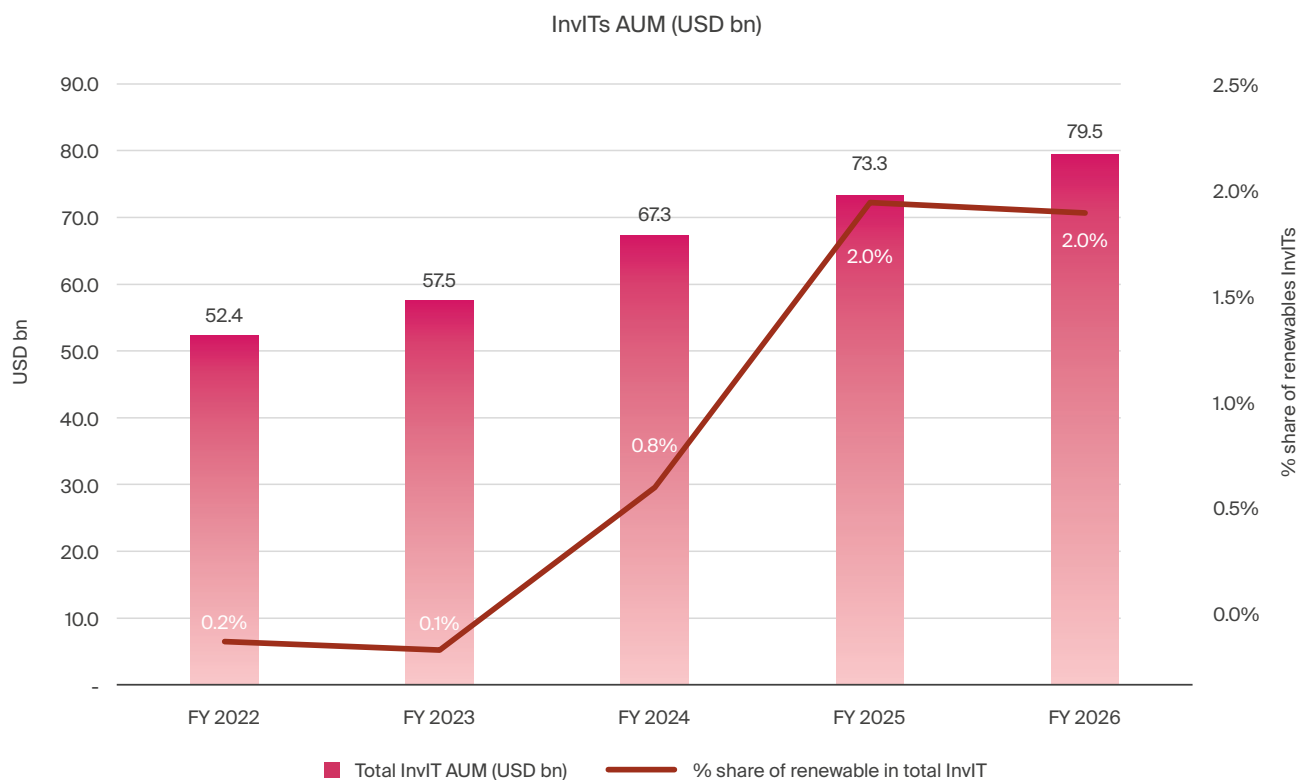


The adoption of InvITs for the renewable energy sector is still at an early stage despite India emerging as one of the world's largest renewable energy markets. Although the existing InvIT is limited, the renewable energy assets possess many of the characteristics that make infrastructure assets suitable for InvIT structures, including long operational lives, stable contracted revenues, low operating expenditure, and predictable cash flow generation.

As of June 2026, India has an installed renewable energy capacity of 291 GW (excluding large hydro). However, only a ~3.6 GW of solar assets, equivalent to 2.7% of the operational utility scale solar assets has been monetised through InvIT structures, indicating considerable untapped potential. The limited penetration of renewable InvITs does not reflect a lack of suitable assets; rather, it reflects the relatively recent maturation of renewable portfolios, evolving regulatory frameworks, and the continued preference of many developers to retain operational assets on their balance sheets.

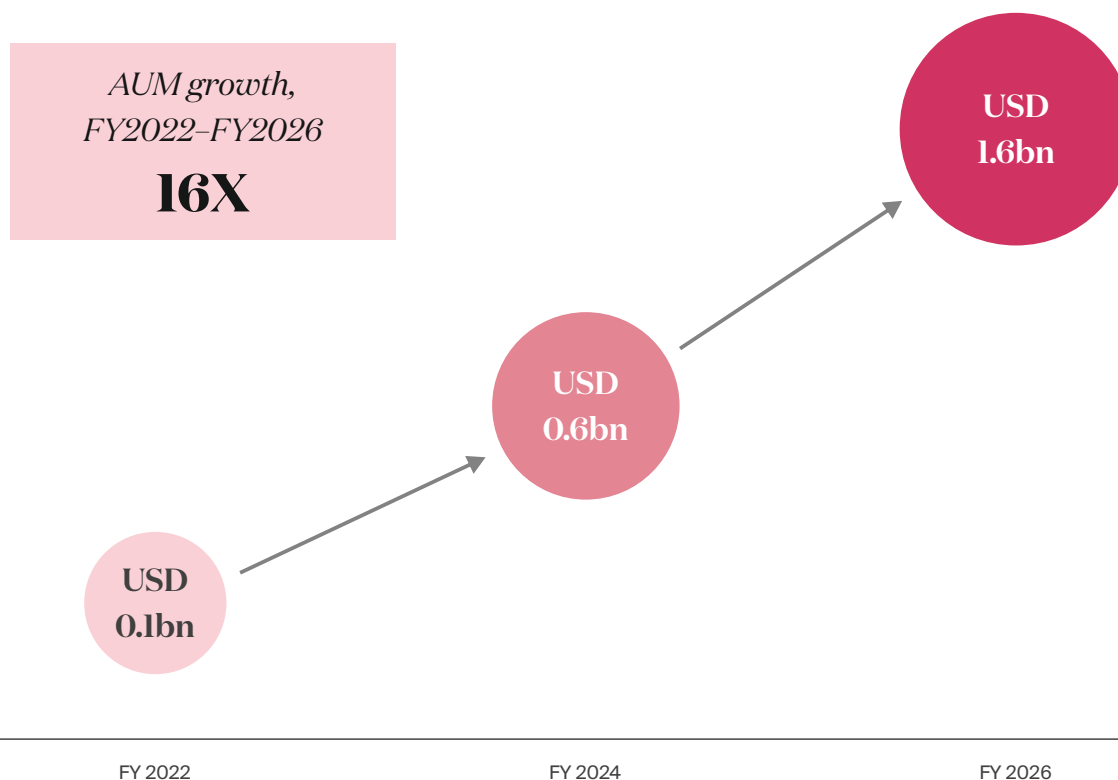
The gradual evolution of renewable InvITs is therefore best viewed as a function of market maturity. During the initial phase of renewable energy development, developers prioritised rapid portfolio expansion supported by project finance and private equity capital. As these portfolios have matured, financing priorities have shifted towards balance sheet optimisation, deleveraging, and capital recycling, creating favourable conditions for increased adoption of InvIT structures.

Renewables Comprise merely 2% of total InvITs AUM



Source: Company Reports, Knight Frank Research

Although Still Negligible, Renewable InvITs AUM has Grown Multifold Between FY 2022-26



Source: Company Reports, Knight Frank Research

~3.6 GW of solar assets, equivalent to 2.7% of the operational utility scale solar assets has been monetised through InvITs.

Comprising only solar assets, the existing renewable InvITs comprise utility scale projects backed by long-term power purchase agreements (PPAs) with central government agencies such as SECI and NTPC, or with state distribution companies. The contracted nature of revenues, coupled with relatively low operating expenditure, makes operational renewable assets well suited for yield-oriented investment structures. While SEIT is the only pure renewable energy in India, IndiGrid Infrastructure Trust, originally established as power transmission InvITs has expanded its portfolio through acquisitions of operational solar assets alongside its transmission business, illustrating the

growing convergence between transmission and renewable infrastructure. As of FY 2026, trust's portfolio comprised 15% of solar assets reflecting investor appetite for diversified energy infrastructure platforms.

More recently, market interest in renewable infrastructure investment platforms has continued to strengthen. Strategic investors and existing InvITs have actively evaluated acquisitions of large operational renewable portfolios, indicating that competition for mature renewable assets is increasing as the operational asset base expands. This suggests that the market is gradually transitioning from isolated transactions towards a broader ecosystem of capital recycling through both InvITs and private infrastructure investment vehicles.

However, the limited presence of assets in InvITs highlights the substantial untapped opportunity for capital recycling as renewable portfolios mature and developers increasingly seek efficient mechanisms to redeploy capital towards new investments.

Key Renewable Energy Investment Platforms in India

Parameter	 IndiGrid Infrastructure Trust*	 Sustainable Energy Infrastructure Trust (SEIT)	 Anzen India Energy Trust
Sponsor	IndiGrid	Mahindra Susten / Ontario Teachers'	Sekura Energy / Edelweiss Alternatives
Structure	Listed InvIT	Private InvIT	Private InvIT
Primary assets	Transmission + renewable assets	Operational renewable assets	Transmission + renewable assets
Technology	Transmission, solar	Solar	Transmission, solar
Status	Operational	Operational	Operational

Chapter 5

Why Has Renewable Energy InvIT Adoption Been Limited?



Despite the rapid expansion of India's renewable energy sector and the strong alignment between renewable assets and the InvITs framework, the adoption of renewable energy InvITs has remained relatively limited compared with infrastructure sectors such as roads, power transmission and telecommunications. This disparity is not reflective of the underlying quality of renewable assets, but rather of the evolutionary stage of the sector and the financing preferences that have characterised its growth over the past decade.

The development of India's renewable energy industry has largely been driven by an imperative to rapidly expand generation capacity in support of national decarbonisation objectives. Consequently, developers have prioritised portfolio creation and capacity expansion over asset monetisation, while abundant availability of institutional capital reduced the immediate need to access public capital markets through InvITs structures. As the sector matures, however, financing priorities are gradually shifting from capital mobilisation towards capital optimisation and recycling, creating a more favourable environment for InvITs adoption. However, some of the primary reasons causing limited InvITs adoption of renewable assets include.

(i) Fragmented Asset Ownership Increases Portfolio Aggregation Complexity

The scale and composition of asset portfolios required for successful InvITs monetisation vary considerably across infrastructure sectors, reflecting differences in asset size, revenue models, enterprise values and cash flow characteristics. In sectors such as roads and power transmission, individual assets are typically large, generate predictable revenues and command high valuations, allowing InvITs to achieve the necessary scale with a relatively limited number of assets. Road InvITs, for instance, can be established with a portfolio of a few large toll or Hybrid Annuity Model (HAM) concessions, while transmission InvITs aggregate a modest number of regulated transmission Special Purpose Vehicles (SPVs) that benefit from stable, availability-based tariffs.

Renewable energy portfolios, however, are inherently more fragmented. Utility-scale solar and wind assets are generally developed as multiple project SPVs across different states, each varying in capacity, commissioning period, tariff structure, counterparty profile and resource characteristics. Although these assets generate predictable cash flows under long-term Power Purchase Agreements (PPAs), their relatively smaller project sizes require the aggregation of a substantially larger number of operational assets to create an investment-grade portfolio of sufficient scale.

Beyond achieving scale, portfolio aggregation also plays a critical role in mitigating concentration risks. A diversified renewable portfolio reduces exposure to site-specific generation variability, single-offtaker risk, tariff concentration, technology-specific risks and asset performance fluctuations. Consequently, successful renewable InvITs are typically built around large, geographically diversified portfolios rather than a handful of individual projects.

This structural requirement for greater portfolio aggregation partly explains why renewable energy InvITs have evolved more gradually than their counterparts in the roads and transmission sectors. Developers must first accumulate sizeable operational portfolios before assets can be monetised efficiently through the InvIT route, making scale an important prerequisite for successful listing and long-term investor confidence.

(ii) Greater Complexity in Asset Valuation

Renewable energy assets require considerably more granular valuation than many traditional infrastructure sectors. While projects generally operate under long-term PPAs, their enterprise value depends on several

technical and commercial variables that differ from one project to another.

For solar assets, valuation is influenced by factors including contracted tariff levels, remaining PPA tenure, off-taker credit quality, historical generation performance, capacity utilisation factors (CUFs), solar irradiation, module degradation and curtailment risks. Consequently, two projects with identical installed capacities may exhibit materially different cash flow profiles and valuations.

For instance, two 100 MW solar projects may have similar installed capacities, but a project backed by a 25-year SECI PPA, operating at a CUF of 24–25%, with timely payment realisation is likely to command a higher valuation than a project selling power to a financially weaker state DISCOM under a lower tariff with prolonged receivable cycles.

In comparison, road and transmission assets generally benefit from more standardised valuation methodologies. An annuity road project derives revenues through predetermined contractual payments from the concessioning authority, while regulated transmission assets earn returns linked to approved capital expenditure and prescribed availability norms. The relatively uniform nature of these revenue models reduces valuation uncertainty and facilitates investor due diligence.



Comparison of InvIT Readiness Across Infrastructure Sectors

Parameter	Roads	Power transmission	Renewable energy
Primary revenue model Agreements (PPAs)	Toll / Annuity concessions	Regulated tariff (TBCB / RTM)	Long-term Power Purchase
Cash flow predictability	High	Very High	High, subject to PPA quality and plant performance
Revenue variability	Traffic-dependent (toll) or fixed (annuity)	Minimal	Influenced by CUF, resource availability and curtailment
Portfolio aggregation	Mature, large concession portfolios	Mature network portfolios	Multiple project aggregation across SPVs
Asset ownership structure	Concentrated among large concessionaires	Concentrated among utilities and transmission developers	Relatively fragmented across IPPs and developers
Valuation methodology	Standardised DCF based on traffic/annuity	Standardised regulated cash flows	Asset-specific, depending on tariffs, CUF, PPA, offtaker quality and remaining asset life
Due diligence requirements	Moderate	Low to Moderate	High (technical, operational and contractual assessment)
Availability of benchmark transactions	High	High	Limited
Current InvIT market maturity	Mature	Mature	Emerging
Capital recycling through InvITs	Widely adopted	Widely adopted	Limited but expanding

The Case for Scaling Renewable Energy InvITs in India

While the past decade was characterised by rapid capacity creation supported by project finance, strategic equity investments and policy incentives, the next phase will require financing mechanisms capable of sustaining significantly larger capital deployment. As renewable portfolios mature and investment requirements extend beyond generation assets to include storage, transmission and green hydrogen infrastructure, capital recycling will become increasingly critical. In this context, InvITs can play a pivotal role by mobilising long-term institutional capital, improving capital efficiency and supporting the next cycle of renewable energy investments.

(i) Bridging India's Renewable Energy Financing Gap

Meeting India's objective of 500 GWs installed fossil fuel capacity by 2030 will require substantial capital mobilisation. According to estimates by the International Energy Agency (IEA) and other industry assessments, India will require cumulative investments of approximately USD 190-215 bn between 2026 and

2030 to achieve its renewable energy ambitions. This translates into an annual investment requirement of approximately USD 38-43 bn, significantly higher than the estimated USD 13-18 bn currently being invested annually in the renewable energy sector. As a result, India faces an annual renewable financing gap of nearly USD 35 bn, underscoring the need for additional sources of long-term capital. The estimated financing

includes investments in not merely energy generation but also storage capacity which is more crucial.

While bank lending, project finance and strategic equity investments will continue to remain important funding channels, they are unlikely to be sufficient on their own. InvITs can complement these financing sources by unlocking capital embedded in operational renewable assets and attracting long-term institutional

investors seeking stable infrastructure investments. Expanding the renewable InvITs market can therefore play an important role in narrowing India's renewable financing gap without increasing leverage across the sector.

India's fossil fuel financing requirement (2026-2030)

Capacity build-out

500 GW installed

~200 GW to be added

66% of the way to the 500 GW target for 2030

Investment requirement

USD 190–215 bn

Total investment required, 2026–2030

48 - 54 bn

Required annual investment

USD 13–18 bn

Current annual investment

USD 35–36 bn

Estimated annual financing gap

Source: International Energy Agency, Knight Frank Research

(ii) Enabling Capital Recycling for Faster Capacity Addition

The rapid expansion of India's renewable energy sector has resulted in the creation of a large base of operational infrastructure assets. These assets continue to generate stable cash flows under long-term power purchase agreements, but they also represent substantial amounts of developer capital that remain tied up in mature projects.

India has a substantial solar asset base of 135 GW, representing a significant pool of operational infrastructure assets with considerable potential for capital recycling and monetisation. Given that renewable projects are typically financed through a 70:30 debt-equity structure, developers have a significant amount of equity capital locked within operational assets that could potentially be redeployed into new investments.

InvITs provide an efficient mechanism to unlock this embedded capital. By transferring operational assets into an InvIT, developers can monetise mature portfolios, recycle equity and reinvest the proceeds

into new renewable generation, battery energy storage systems, hybrid projects and transmission infrastructure. Unlike outright asset sales, InvITs also enable sponsors to retain strategic ownership while diversifying their funding sources.

The importance of capital recycling will continue to increase as India's renewable energy programme expands beyond conventional solar and wind projects towards integrated clean energy ecosystems.

(iii) Lowering the Cost of Capital

Financing costs remain one of the most significant determinants of renewable energy competitiveness. According to the International Energy Agency (IEA), the weighted average cost of capital for renewable energy projects in India is estimated at 8.5–10%, compared with approximately 4–6% in advanced economies. This implies that financing renewable energy projects in India remains nearly 80% more expensive than in mature international markets.

Higher financing costs directly affect project economics by increasing debt servicing obligations

and raising the levelised cost of electricity. As renewable energy tariffs continue to remain highly competitive, reducing financing costs has become increasingly important for maintaining project viability and sustaining future investments.

InvITs can contribute to lowering the overall cost of capital by broadening access to long-term institutional investors such as pension funds, sovereign wealth funds, insurance companies and infrastructure funds. These investors typically seek stable, income-generating assets and are willing to accept lower return expectations than traditional private equity investors. As the renewable InvITs market deepens and secondary market liquidity improves, greater institutional participation could contribute to a gradual reduction in financing costs across the renewable energy sector.

(iv) Expanding Access to Long-Term Institutional Capital

India's renewable energy sector has already demonstrated its ability to attract global institutional capital. Between 2020 and 2025, the sector attracted USD 32 bn in private equity from domestic and global institutional investors. Additionally, the InvITs market as well demonstrates that once operational infrastructure assets are packaged into transparent, yield-generating investment vehicles, they are capable of attracting substantial domestic and international institutional capital. This is particularly evident in the power sector, where IndiGrid has expanded to an AUM of INR 293 bn, and the platform raised INR 20 bn through equity issuances, including a INR 15 bn Qualified Institutional Placement (QIP) that was oversubscribed two times in FY 2026. The issue witnessed broad institutional participation, with foreign institutional investors contributing around 12%, alongside domestic insurance companies and mutual funds.

The experience of SEIT further demonstrates the investment appeal of operational renewable assets. Since its listing, SEIT has expanded its portfolio while consistently delivering a cash distribution yield of approximately 10.5% to investors. The platform validates that utility-scale renewable assets, supported by long-term Power Purchase Agreements (PPAs), can generate stable and predictable cash flows suitable for long-term institutional investment.

Beyond foreign institutional investors, India possesses a significant pool of domestic long-term capital that can support infrastructure financing. Institutions such as the Employees' Provident Fund Organisation (EPFO), the Life Insurance Corporation of India (LIC), other insurance companies, National Pension System (NPS)

funds and mutual funds collectively manage assets exceeding INR 180 trn. The investment appetite of these institutions for infrastructure assets has already been demonstrated through the InvITs market. In March 2025, EPFO made its first investment in an InvITs by committing INR ~20 bn to the fourth fundraising round of the National Highways Infra Trust (NHIT). The transaction also witnessed participation from domestic insurance companies, mutual funds and leading global pension funds, underscoring the confidence of long-term institutional investors in the InvITs structure.

The success of NHIT highlights that the availability of patient capital is not the principal constraint for India's infrastructure financing ecosystem. Rather, the challenge lies in creating a sufficiently large pipeline of investable assets. As operational renewable energy portfolios continue to mature and more renewable InvITs are brought to market, they are well positioned to attract a similar mix of domestic and international institutional investors. By providing a regulated, listed and yield-generating investment vehicle, renewable InvITs can unlock India's substantial domestic savings while broadening the investor base supporting the country's clean energy transition.



Chapter 6

Performance Assessment of Existing Renewable Energy InvIT Platforms

While the strategic rationale for renewable energy InvITs is well established, the effectiveness of the model is best assessed through the performance of existing platforms. Although the renewable InvIT market in India remains at a nascent stage, the operational experience of early platforms provides valuable evidence on their ability to mobilise capital, recycle developer equity, optimise capital structures and deliver stable returns to investors. The performance of these InvITs also offers insights into the commercial viability of renewable assets as long-term yield-generating infrastructure investments. This section evaluates the financial and operational performance of India's leading renewable energy InvIT platforms and highlights the key lessons that can inform the future expansion of the renewable InvIT ecosystem.



Case Study 1

Sustainable Energy Infra Trust (SEIT) - India's only pure-play renewable InvIT

Sustainable Energy Infra Trust (SEIT), sponsored by Mahindra Susten, is India's first dedicated renewable energy Infrastructure Investment Trust. Established to monetise operational solar assets, SEIT demonstrates how mature renewable energy projects can be transferred into an InvIT structure, enabling developers to recycle capital while providing investors with access to stable, yield-generating infrastructure assets.

Portfolio overview

Sponsor	Mahindra Susten
Asset class	Utility-scale solar
Operational capacity	~1.5 GW*
Revenue source	Long-term power purchase agreements
Typical PPA tenure	15–25 years
Primary offtakers	Central agencies and state DISCOMs

Capital mobilisation

Since its establishment, SEIT has progressively diversified its funding sources beyond sponsor equity. During FY2025-26, the Trust raised capital through privately placed listed Non-Convertible Debentures (NCDs) and refinanced a portion of its existing borrowings, strengthening its debt profile and reducing refinancing risk.

INR 15 bn

Raised via privately placed listed NCDs,
FY 2025-26

INR 6.4 bn

Existing borrowings refinanced,
strengthening the debt profile

These transactions demonstrate the ability of renewable InvITs to access debt capital markets efficiently while supporting future portfolio expansion.

Financial performance

As of March 2026, SEIT continued to maintain stable operating performance and cash generation.

Indicator	FY2025	Fy2026
Assets under management	INR 69.0 bn	INR 69.6 bn
Net asset value per unit	INR 111.85	INR 115.31
Net distributable cash flow	INR 3.33 bn	INR 3.47 bn
Distribution per unit	INR 10.27	INR 10.70
Net debt / asset value	44.35%	44.35%

Year-on-year change, FY2025 Fy2026

+0.9% AUM growth, FY2025 FY2026	+3.1% NAV per unit growth	+4.2% NDCF growth	+4.2% DPU growth
--	--	-----------------------------	----------------------------

Leverage headroom

44.35% net debt / asset value	Headroom to 70% regulatory ceiling
--------------------------------------	---

The increase in distributable cash flows and NAV reflects the resilience of the underlying renewable asset portfolio while maintaining prudent leverage levels well below the regulatory ceiling of 70%.

Case Study 2

IndiGrid Post-Virescent Acquisition

A case of a diversified InvIT

Established in 2016 as India's first listed power sector Infrastructure Investment Trust, IndiGrid has evolved from a transmission-focused platform into one of the country's largest diversified energy infrastructure InvITs. While transmission assets continue to constitute a significant portion of its portfolio, the Trust has progressively expanded into renewable energy generation and battery energy storage systems (BESS), positioning itself as an integrated energy infrastructure platform. The acquisition of Virescent Renewable Energy Trust (VRET) in 2023 marked a significant milestone, strengthening IndiGrid's renewable portfolio and demonstrating how mature renewable assets can be successfully integrated within the InvIT framework.

Portfolio evolution

The acquisition of VRET represented one of the largest renewable energy transactions undertaken by an Indian InvIT. Through this transaction, IndiGrid acquired approximately 537 MW of operational solar assets spread across multiple states under long-term power purchase agreements. The acquisition diversified the Trust's revenue base beyond regulated transmission assets and established renewable energy as an important growth segment within its portfolio.

~537 MW

Operational solar assets acquired through
the VRET transaction

2016

Year IndiGrid listed as India's first
power sector InvIT

Since listing, IndiGrid has expanded through a combination of strategic acquisitions, brownfield additions and diversification into emerging asset classes such as battery energy storage systems, creating a scalable platform aligned with India's evolving power sector.

Capital mobilisation and portfolio expansion

A defining characteristic of IndiGrid has been its ability to consistently access both equity and debt capital markets to finance portfolio expansion while maintaining investor confidence. Since its listing, the Trust has undertaken multiple capital raises through Qualified Institutional Placements (QIPs), preferential allotments and debt issuances, attracting participation from domestic institutional investors, foreign portfolio investors, insurance companies and pension funds.

INR 20 bn

Mobilised through equity issuances,
FY 2025-26

INR 338 bn+

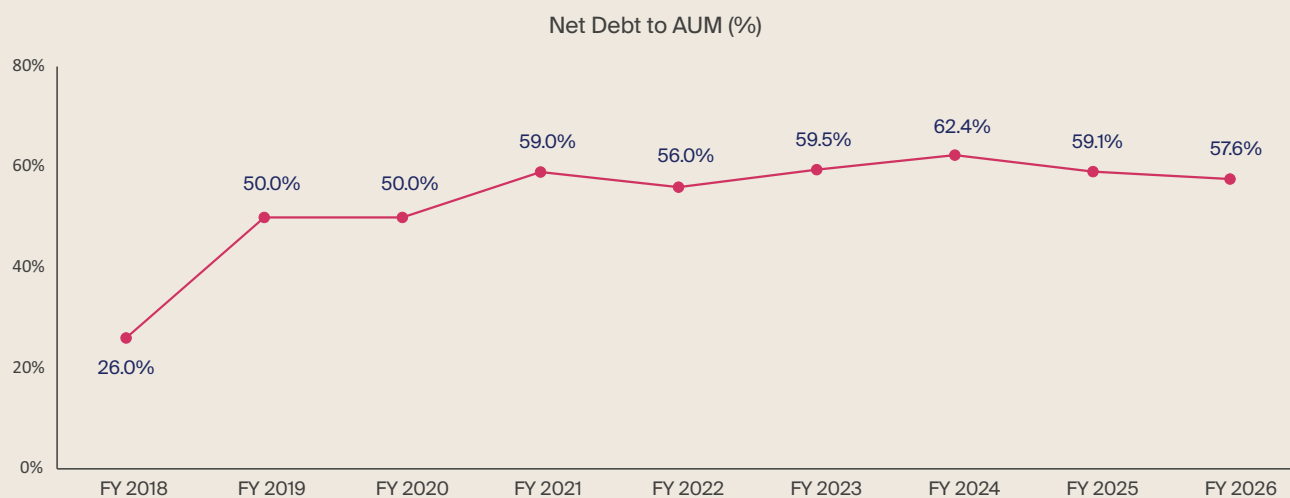
Assets under management, making IndiGrid
one of India's largest listed InvITs

The ability to repeatedly access institutional capital has enabled the Trust to pursue an acquisition-led growth strategy without relying exclusively on debt financing.

Leverage evolution

A key indicator of IndiGrid's financial resilience has been its disciplined management of leverage during periods of rapid portfolio expansion. The acquisition of Virescent Renewable Energy Trust in 2023 temporarily increased the Trust's Net Debt-to-AUM ratio from approximately 60% prior to the transaction to 65% immediately following the acquisition, reflecting the financing requirements associated with a large-scale asset purchase.

IndiGrid: Net Debt to AUM Trend



However, rather than allowing leverage to remain elevated, IndiGrid subsequently strengthened its balance sheet through equity mobilisation, refinancing initiatives and continued growth in Assets Under Management. As a result, the Net Debt-to-AUM ratio declined to 59% by FY 2025 and stabilised at approximately 57.6% by FY 2026, despite continued expansion of the asset portfolio.

This trend demonstrates that acquisition-led growth under the InvIT model need not result in sustained leverage expansion. Instead, disciplined capital management and timely access to equity markets enabled IndiGrid to replenish borrowing capacity while maintaining financial flexibility for future acquisitions.

Source: Company Reports



Chapter 7

Attractive Yield Proposition: Renewable InvITs as an Income-Generating Asset Class

One of the defining characteristics of InvITs is their ability to convert operational infrastructure assets into stable, income-generating investment products. In the renewable energy sector, this proposition is particularly compelling as utility-scale solar and wind assets typically operate under long-term Power Purchase Agreements (PPAs), generating predictable cash flows over asset lives of 20–25 years. These contractual revenue streams enable renewable InvITs to distribute a significant proportion of their operating cash flows to investors, making them attractive to institutions seeking long-duration, yield-oriented investments.

The performance of Sustainable Energy Infra Trust (SEIT) illustrates this investment proposition. The trust offers an indicative distribution yield of 10.5%, outperforming several conventional fixed-income investment alternatives. The yield compares favourably with 5-year bank fixed deposits (7.0%), AAA-rated corporate bonds (7.3%), 10-year Government Securities (6.8%), and even the Employees' Provident Fund (EPF) interest rate of 8.3%. Within the InvIT segment as well, SEIT's distribution yield is comparable to the average yield offered by large road InvITs, which stands at ~10.2%, and is higher than IndiGrid's yield of around 9%, despite IndiGrid comprising a portfolio of both transmission and solar assets. This highlights the competitive yield potential of renewable energy assets within the InvIT framework and demonstrates their ability to generate stable, income-oriented returns comparable to established infrastructure asset classes.

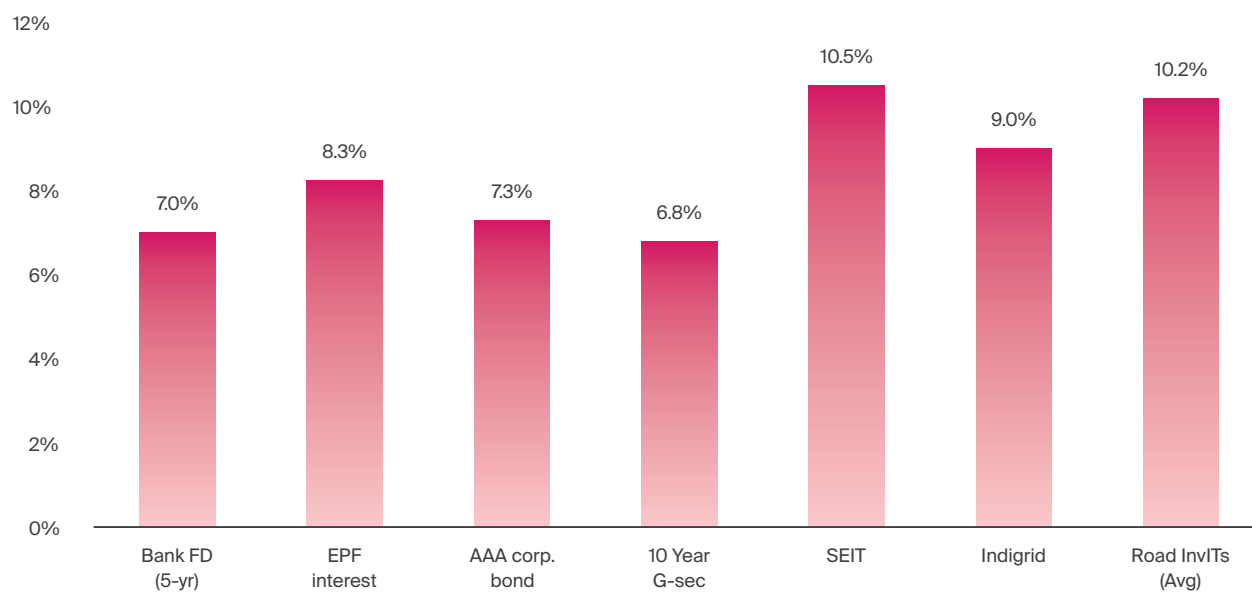
The ability to deliver a double-digit distribution yield reflects the underlying economics of mature renewable energy assets. Once commissioned, solar projects have relatively low operating and maintenance costs, while long-term PPAs provide visibility over future revenues. The InvIT structure monetises these stable cash flows and distributes them to investors after meeting operating expenses, debt servicing obligations and statutory reserve requirements. Consequently, investors gain access to infrastructure-backed cash flows without assuming greenfield development or construction risks.

From a capital markets perspective, this enhances the attractiveness of renewable InvITs for long-term institutional investors such as pension funds, insurance companies, sovereign wealth funds and family offices, whose investment strategies prioritise stable income generation over long investment horizons. The availability of higher distribution yields relative to traditional fixed-income instruments also broadens the investor base for renewable infrastructure, facilitating greater mobilisation of domestic and global capital into the sector.

However, unlike fixed-income securities, distributions from renewable InvITs remain linked to the operational performance of the underlying assets. Factors such as plant availability, solar irradiation or wind resource conditions, counterparty payment discipline, and the overall quality of the asset portfolio continue to influence cash flows and distributions. As a result, investors typically evaluate the quality of PPAs, sponsor credibility, portfolio diversification and financial leverage alongside distribution yields when assessing investment opportunities.

The SEIT experience demonstrates that operational renewable assets can deliver competitive risk-adjusted returns while maintaining relatively stable cash distributions. As India's renewable energy asset base expands and more operational portfolios become available for monetisation, renewable InvITs have the potential to emerge as an important investment avenue for long-term income-seeking capital.

Indicative yield across asset classes



Source: Company Reports, Knight Frank Research



Chapter 8

Renewable Energy InvIT Potential – Unlocking INR 3 trn Through Capital Recycling Via Solar Assets

India's renewable energy sector comprises a diversified mix of solar, wind, hydro, biomass and other clean energy technologies. However, the current capital recycling opportunity through renewable energy InvITs is primarily concentrated in solar assets as they represent the largest and most mature segment of India's renewable energy market, accounting for over 55% of the country's installed renewable energy capacity (excluding large hydro). Solar also has the deepest pipeline of operational assets developed under standardized project structures, long-term power purchase agreements (PPAs), and competitive bidding frameworks, making it the most suitable asset class for InvIT monetisation.

In contrast, other renewable technologies such as wind and hybrid projects continue to exhibit greater heterogeneity in project characteristics, resource profiles and contractual structures. While these technologies also present significant monetisation opportunities, the availability of standardised project-level information and comparable valuation benchmarks remains relatively limited. Consequently, the present analysis is confined to utility-scale solar assets, which provide the most representative and scalable opportunity for assessing India's renewable InvIT potential.

India's rapid expansion in utility-scale solar capacity has created a sizeable pool of mature operational assets capable of being monetised InvITs. As the sector transitions from capacity creation to capital optimisation, the ability to recycle capital from operational assets will become increasingly important in financing the next phase of renewable energy deployment.

As of June 2026, India has an installed solar capacity of 165 GW, of which 135 GW comprising utility-scale projects. However, not all operational assets are immediately suitable for InvITs monetisation. Applying asset maturity, operational performance and portfolio scale filters, we estimate that approximately 43 GW of utility-scale solar capacity currently constitutes the InvITs-eligible universe.

Based on prevailing valuation benchmarks for operational solar assets, this eligible portfolio represents an estimated gross market value of approximately USD 34 bn (Rs 3.2 trn). This demonstrates that India has already created a substantial inventory of operational renewable assets capable of supporting large-scale capital recycling through InvITs structures.

Unlike traditional refinancing, monetisation through InvITs enables developers to unlock equity embedded in operational projects while retaining the ability to reinvest proceeds into new capacity additions. Consequently, the existing operational asset base represents a strategic financing resource rather than merely an installed generation asset.

India's InvIT-eligible utility-scale solar universe

From total installed solar capacity to the InvIT-eligible, monetisable pool (as of July 2026)



Expanding the Role of InvITs in India's Renewable Energy Sector

To widen the scope of renewable energy InvITs in India, several enabling measures need to be undertaken. While the sector has attracted substantial private equity, strategic investments, and foreign capital over the past decade, often at attractive valuations that have reduced the immediate need for InvIT-based monetisation, the long-term relevance of InvITs as a capital recycling mechanism remains significant. As renewable energy portfolios continue to scale and mature, developers will increasingly require efficient avenues to unlock capital from operational assets and redeploy it into new capacity additions.

The sector has a few structural challenges, such as variability in asset generation, grid integration constraints, and transmission bottlenecks, which can affect revenue stability and investor confidence. However, the prevalence of long-term PPAs, low operating costs, and sustained institutional investor participation demonstrate that operational renewable assets possess the stable cash flow characteristics required for InvIT structures.

Given India's target of achieving 500 GW of non-fossil fuel capacity by 2030 and an estimated investment requirement of USD 190-215 bn over the remainder of the decade, expanding the renewable energy InvIT ecosystem presents a significant opportunity to mobilise long-term private capital, improve capital efficiency, and accelerate the development of new renewable energy assets.

(i) Create larger, diversified renewable asset platforms

A key constraint to the growth of renewable InvITs is the fragmented ownership of operational assets. Many renewable projects continue to be held as individual SPVs with capacities ranging from 50 MW to 250 MW, which are often below the scale preferred by institutional investors. Aggregating operational solar, wind and hybrid projects into diversified portfolio-scale InvITs can improve cash flow stability by reducing technology, geographical and off-taker concentration risks. Larger platforms also benefit from operational efficiencies, lower portfolio-level financing costs and improved liquidity in capital markets. As India's renewable asset base continues to mature, portfolio aggregation will be critical for creating investable platforms comparable to those seen in the roads and transmission sectors.

(ii) Improve asset standardisation and disclosure

Unlike listed infrastructure sectors where asset performance is relatively standardised, renewable assets are evaluated using varying assumptions regarding generation, degradation, resource availability and contractual risks. This increases due diligence costs and creates valuation uncertainty. Developing standardised disclosure frameworks covering historical generation, CUF (Capacity Utilisation Factor), plant availability, PPA tenure and tariffs, counterparty payment performance, receivable cycles, ESG metrics and asset-level financial performance would significantly improve transparency. Greater disclosure consistency would reduce information asymmetry, improve valuation efficiency and enhance investor confidence, thereby lowering the cost of capital for renewable InvITs.

(iii) Expand participation of long-term institutional investors

Renewable InvITs generate predictable, inflation-linked cash flows under long-term PPAs, making them well aligned with the investment mandates of pension funds, insurance companies, sovereign wealth funds and global infrastructure investors. India possesses a substantial domestic institutional capital base through organisations such as EPFO, LIC and the National Pension System, while international pension and sovereign funds have already demonstrated significant appetite for Indian infrastructure through investments in roads, transmission and renewable platforms. Creating a deeper pipeline of investment-grade renewable InvITs could channel a larger share of this patient capital into operational renewable assets, reducing dependence on bank financing and foreign currency borrowings.

(iv) Strengthen the renewable asset recycling ecosystem

India's renewable developers are expected to commission a significant additional capacity over the next decade, requiring continuous access to equity capital. InvITs can become an efficient capital recycling mechanism by allowing developers to monetise mature, operational assets and redeploy proceeds into new renewable generation, hybrid projects, battery energy storage systems (BESS) and transmission infrastructure. This model has already demonstrated success in the roads sector, where InvITs have accelerated capital recycling while reducing pressure on public finances. Extending a similar ecosystem to renewable energy would improve balance sheet flexibility for developers and support faster capacity addition.

(v) Improve the bankability of underlying renewable assets

The scalability of renewable InvITs ultimately depends on the quality of the underlying cash flows. Although payment discipline among DISCOMs has improved over recent years through initiatives such as the Late Payment Surcharge (LPS) Rules and the Revamped Distribution Sector Scheme (RDSS), receivable cycles remain uneven across states. Continued improvements in payment security mechanisms, enforcement of contractual obligations, standardisation of PPAs and reduction in regulatory uncertainty would strengthen revenue visibility and reduce perceived investment risk. Higher-quality operating assets would command better valuations, expand the pool of eligible InvIT assets and improve investor participation.





Outlook

India's renewable energy sector is moving towards a phase where efficient capital mobilisation will be as important as capacity creation. While significant investments have supported the development of renewable assets, scaling towards the 500 GW non-fossil fuel capacity target by 2030 will require innovative financing mechanisms that can unlock capital from operational projects.

InvITs can emerge as an important enabler of this transition by transforming mature renewable assets into institutional-grade investment platforms. By providing developers with an avenue to monetise operational assets and reinvest capital into new generation capacity, storage and hybrid projects, InvITs can improve capital efficiency across the renewable ecosystem.

The growth of renewable InvITs, however, will depend on the creation of larger asset portfolios, greater transparency in asset performance and valuation, and increased participation from long-term institutional investors. As the renewable asset base matures, the availability of operational assets with long-term contracted cash flows will create a stronger pipeline of InvIT-ready opportunities.

A well-developed renewable InvIT market can also diversify the sources of infrastructure financing beyond traditional bank lending, enabling greater participation from pension funds, insurance companies and global infrastructure investors. Over time, this can contribute to reducing financing constraints, improving asset valuations and strengthening investor confidence in India's renewable energy sector.

With supportive regulatory frameworks and improved market maturity, InvITs can evolve from being an emerging financing instrument to a critical component of India's renewable energy investment ecosystem, bridging the gap between ambitious capacity targets and the availability of long-term capital.

AUTHOR

Shilpa Shree
Vice President - Research
shilpa.shree@in.knightfrank.com

DESIGN & GRAPHICS

Nitin More
Assistant Vice President - Design and Graphics
nitin.more@in.knightfrank.com

KEY CONTACTS

Shishir Bajjal

International Partner
Chairman & Managing Director
shishir.bajjal@in.knightfrank.com

ADVISORY & VALUATION

Gulam Zia

International Partner
Senior Executive Director
Research, Advisory, Infrastructure and Valuation
gulam.zia@in.knightfrank.com

Rajeev Vijay

Executive Director
Government and Infrastructure Advisory
rajeev.vijay@in.knightfrank.com

Saurabh Mehrotra

Executive Director
Valuation & Advisory
saurabh.mehrotra@in.knightfrank.com

Pradeep Gandhi

Executive Director
Valuation and Advisory
pradeep.gandhi@in.knightfrank.com

CAPITAL MARKETS

Viral Desai

International Partner
Senior Executive Director
Occupier Strategy & Solutions, Industrial & Logistics
Capital Markets and Retail Agency
viral.desai@in.knightfrank.com

Harry Chaplin-Rogers

Director of International Capital Markets – India
harry.cr@in.knightfrank.com

We like questions, if you've got one about our research, or would like some property advice, we would love to hear from you.

Knight Frank Research Reports
are available to download at
knightfrank.com/research

India Real Estate
- Office and Residential Market
Jan-Mar 2025



Think India Think Retail
Value Capture Unlocking Potential
- 2025



Flex Space
Occupier Intelligence
- 2025



India Warehousing
Market Report
- 2025



RESEARCH

Ankita Sood

National Director - Research
ankita.sood@in.knightfrank.com

Vivek Rathi

National Director - Research
vivek.rathi@in.knightfrank.com

CORPORATE - MARKETING & PUBLIC RELATIONS

Piyali Dasgupta

National Director - Corporate Marketing &
Public Relations
piyali.dasgupta@in.knightfrank.com



The statements, information, data and opinions expressed or provided herein are provided on "as is, where is" basis and concerned parties clients are required to carry out their own due diligence as may be required before signing any binding document. Knight Frank (India) Private Limited (KFPL) makes no warranties, expressed or implied, and hereby disclaims and negates all other warranties, including without limitation, implied warranties or conditions of merchantability, fitness for a particular purpose, or non-infringement of intellectual property or other violation of rights including any third party rights. Further, KFPL does not warrant or make any representations concerning the accuracy, likely results, or reliability of the use of the statements, information and opinions as specified herein. The statements, information and opinions expressed or provided in this presentation / document by KFPL are intended to be a guide with respect to the purpose for which they are intended, but in no way shall serve as a guide with regards to validating title, due diligence (technical and financial), or any other areas specifically not included in the presentation. Neither KFPL nor any of its personnel involved accept any contractual, tortious or other form of liability for any consequences, loss or damages which may arise as a result of any person acting upon or using the statements, information, data or opinions in the publication, in part or full. The information herein shall be strictly confidential to the addressee, and is not to be the subject of communication or reproduction wholly or in part. The document / presentation is based on our understanding of the requirement, applicable current real estate market conditions and the regulatory environment that currently exists. Please note: Any change in any one of the parameter stated above could impact the information in the document/presentation. In case of any dispute, KFPL shall have the right to clarify.