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Asset Monetization for Transmission Assets

Oct 30, 2023

FLOW OF DISCUSSION

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- Asset Monetization in Transmission
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- Advantages & Risks to MPPTCL
- Financial Analysis
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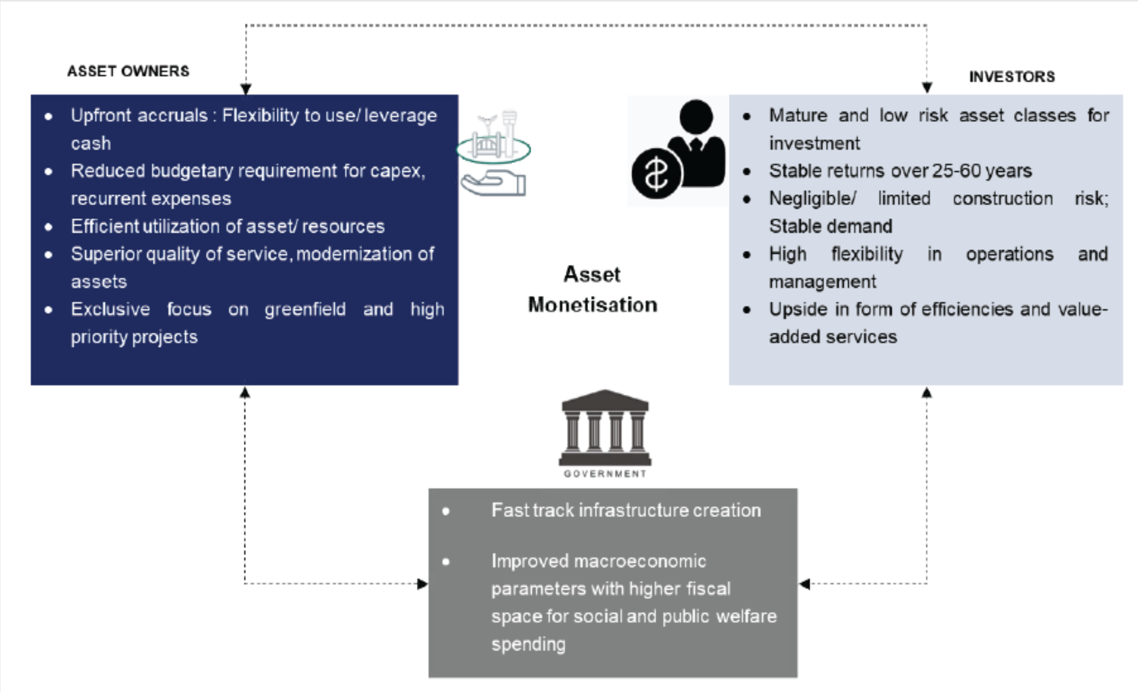
- Asset Valuation
- InvITs structure and Case studies
- Way Forward

Asset Monetization

Asset Monetisation - Concept

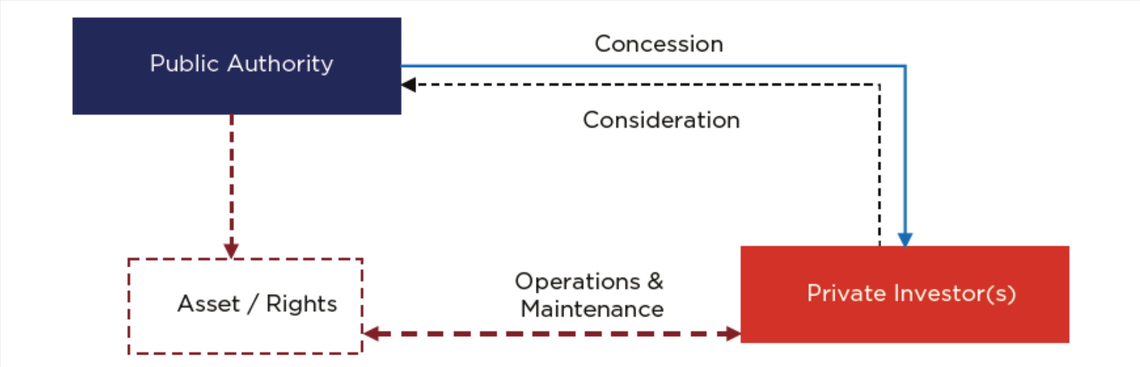
Strategic objective of Asset Monetization is to unlock the value of investments in public sector assets by tapping private sector capital and efficiencies, which can thereafter be leveraged for augmentation/greenfield infrastructure creation.



<u>Concept</u>

- Involves limited period transfer of performing assets to unlock "idle" capital
- Reinvesting capital in other assets or projects that deliver improved or additional benefits.
- Govt. organizations can adopt this concept to meet the capital needs for future infrastructure creation

Asset Monetisation - Structure



Major highlights of the structure

- Entails a limited period license/ lease of an asset, owned by the government to a private sector entity for an upfront or periodic consideration.
- Transfer of such rights defined by a well-defined concession/ contractual framework.
- Enables a balanced risk sharing framework between the public authority and private party.
- The private entity expected to operate and maintain the asset based on the terms of the contract
- Funds received by govt. entity are reinvested in new infrastructure or deployed for other public purposes.
- Provision for transfer of asset back to the public authority at end of contract.

Types of asset monetisation models

Comparison parameter	Direct Contractual Approach	Structured financing models
Concept	Concession/ contract between a public entity and identified private sector developer(s)/ investor(s)	Structured instruments for long-term fund generation via capital markets or through a pool of investors
Transaction	Asset OR rights over such assets are transferred by way of defined contractual frameworks	Partnership interest in the asset OR rights over such assets, granted to a pool of investors
Target Investor Class	Infrastructure developers, strategic investors with direct involvement in operations	Institutional investors such as sovereign wealth funds, global/domestic insurance funds, pension funds and retail investors
Prevalent Structures	PPP concessions like Toll-operate-transfer (TOT), Operate-maintain- transfer (OMT), Operate-maintain-develop (OMD) etc.	Infrastructure Investment Trust (InvIT), Real Estate Investment Trust (REIT), Asset-back securitisation (ABS)
Examples	Mumbai-Pune Expressway, Highways under Golden Quadrilateral	PowerGrid InvIT, Mindscape REIT

Asset Monetization in Transmission

Need of Asset monetisation for MPPTCL

Capital requirements to increase with focus shifting towards clean energy

- Increasing investments in clean energy in the state – pumped storage, wind, solar, BESS etc requiring robust intra state system
- Large investments in Inter state transmission system, necessitate investments in intra state system for efficient absorption of power – 8480 Cr investment required by FY24.
- Present RE capacity ~1780 MW, RE capacity by FY24 ~9700 MW, and RE mix 50% by FY30

Investor interest

- Transmission projects are low-risk and have steady predictable cashflows
- Operational projects have a lower risk perception (from investors perspective), hence, valuations shall be higher
- Long term investors (15-20 years) can be onboarded

Others

- Reduced dependence on state government for funds
- Use of existing government resources on social causes/projects
- Returns shall be available instantaneously i.e no gestation period

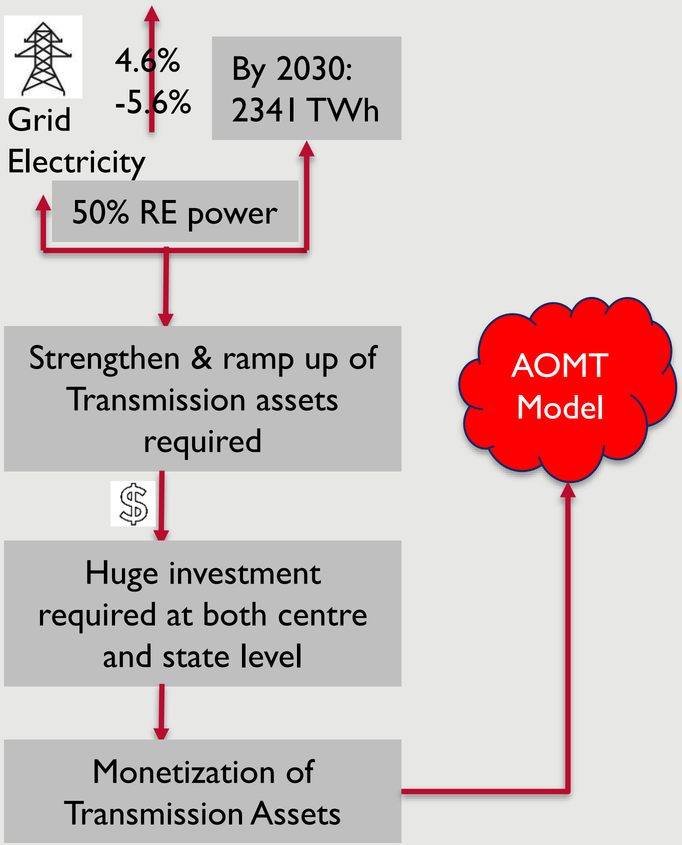
Proposed models for asset monetisation of transmission

Acquire, Operate, Maintain and transfer (AOMT) → Suggested by Ministry of Power through its notified guidelines

Infrastructure Investment Trust (InvITs → Suggested by Niti Aayog through National Monetisation plan

Acquire, Operate, Maintain and transfer (AOMT)

Introduction to AOMT model



Source: Brookings, MoP

AOMT based Public Private Partnership model

- MoP notifed "Guiding Principles for Monetization of Transmission Assets in the Public Sector“ for transmission companies desirous of undertaking monetization of transmission assets.

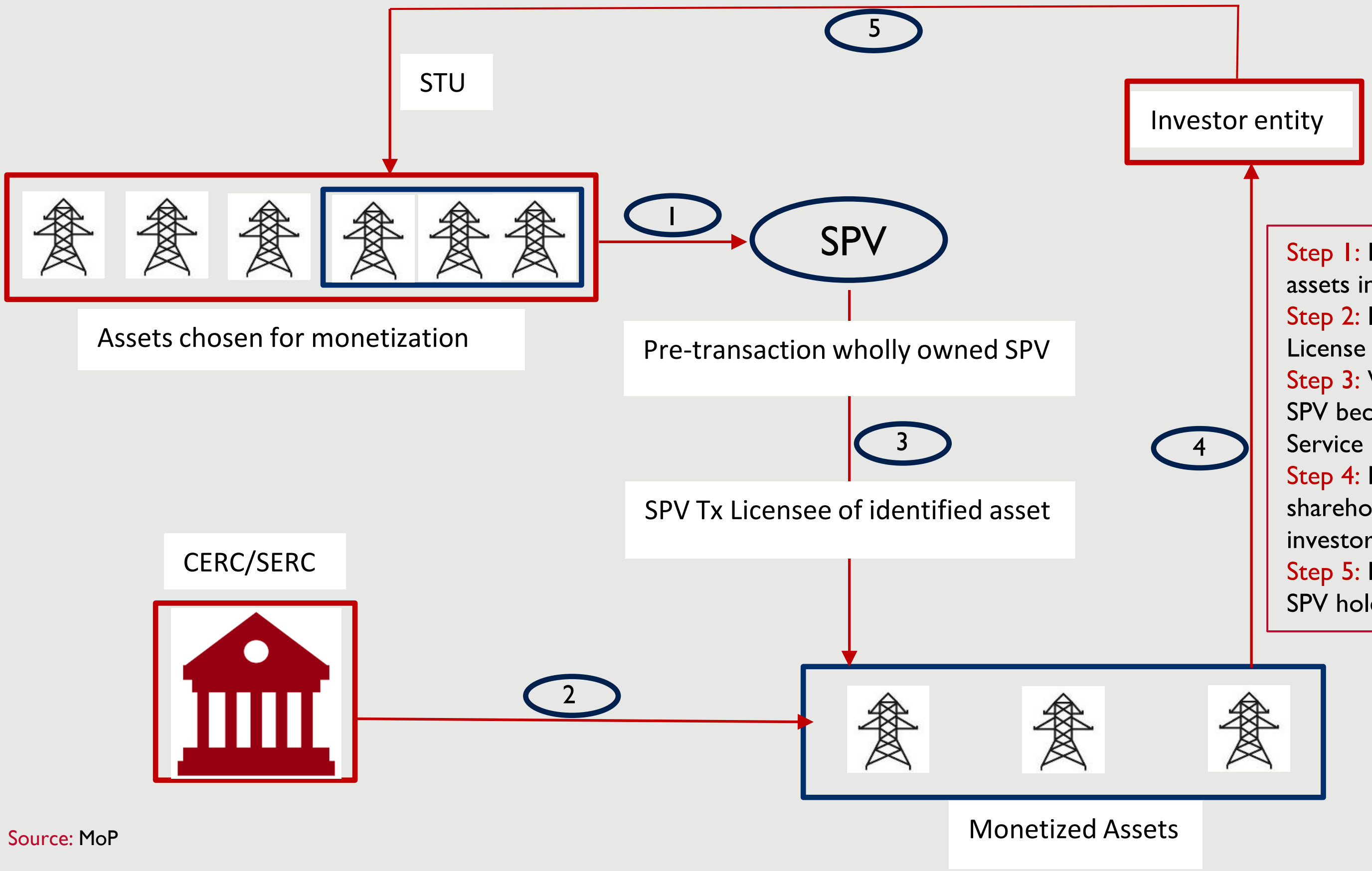
Specific objectives of these "guiding principles"

- Creation of capital source for new investment.
- Facilitate transparency, consistent approach and efficiency in monetization processes.
- Enable proficient project preparation and planning activities
- Enable sharing of good practices and models

Scope of these "guiding principles"

- Enable implementation of monetization program for identified transmission assets of both state & central transcos

Structure and steps under AOMT model



Step 1: Demerger of identified assets into a new SPV
Step 2: Issue of Transmission License to new SPV
Step 3: Wholly owned subsidiary SPV becomes Transmission Service Provider
Step 4: Limited period shareholding transfer of SPV to investor entity (RfP/RfQ bidding)
Step 5: Mandatory buyback of SPV holding STU

Source: MoP

Legal and Regulatory Framework

Transmission asset selection criteria and contract terms

Types of Transmission Asset (TA) considered for monetization

RTM Asset:

- Substations and/or transmission lines of 220 kV and above
- Transmission assets maintained by Transco where tariffs are determined by the concerned SERC.
- Included in the balance sheet of the Transco

TBCB Asset:

- ➢ Substations and/or transmission lines of 220 kV and above
- ➢ Transmission asset built through tariff based competitive bidding.

Selection Criteria for TA

- ➢ Vintage of the asset (preferable<10 yrs), availability factor and associated maintenance cost
- ➢ Future capex requirements
- ➢ Possibility of scaling of such TA

TSA* & AOMT tariff for the investor

RTM Asset:

- ➢ Pre-existing TSA applicable for SPV/investor.
- ➢ Pre-existing Tariff adopted by the concerned SERC.

TBCB Asset:

- ➢ Tripartite agreement with Transco, new SPV & Investor Entity.
- ➢ Concerned SERC may specify a premium, which may be provided over and above the prevailing return on long term government securities (5 yr G-Sec) to arrive at RoE rate applicable for the tenure of the TSA.

*TSA: Transmission Service Agreement

Source: MoP

Regulatory approvals from stakeholders

GO from State Govt

There should be order/Policy from State Govt adopting MoP Asset Monetization guidelines.

Role of SERC

Approval of SERC for Asset Monetization policy is required, new SPV formation also requires SERC approval

Approval of AOMT scheme

Approval of SERC also required for adoption of AOMT scheme and mechanism with any changes if required

Bidding document

Approval for the bidding document and selection mechanism is required from the state govt/SERC. Even while adopting MoP order, state govt may notify bidding guidelines.

Regulatory Permissions for Transmission Licensee

- Transmission license by the CERC/SECR under Section 14, read with 15 (1) of the Electricity Act for grant of transmission license to undertake the business of establishing, commissioning, operating and maintaining transmission systems for transmission lines
- Tariff order issued by the CERC/SERC under Section 63 of the Electricity Act for adoption of transmission charges.
- Approval issued by CEA, under Regulation 43 of CEA (Measures relating to Safety and Electric Supply) Regulations, 2010, as amended, for energization.

Advantages & Risks to MPPTCL

Associated Risks

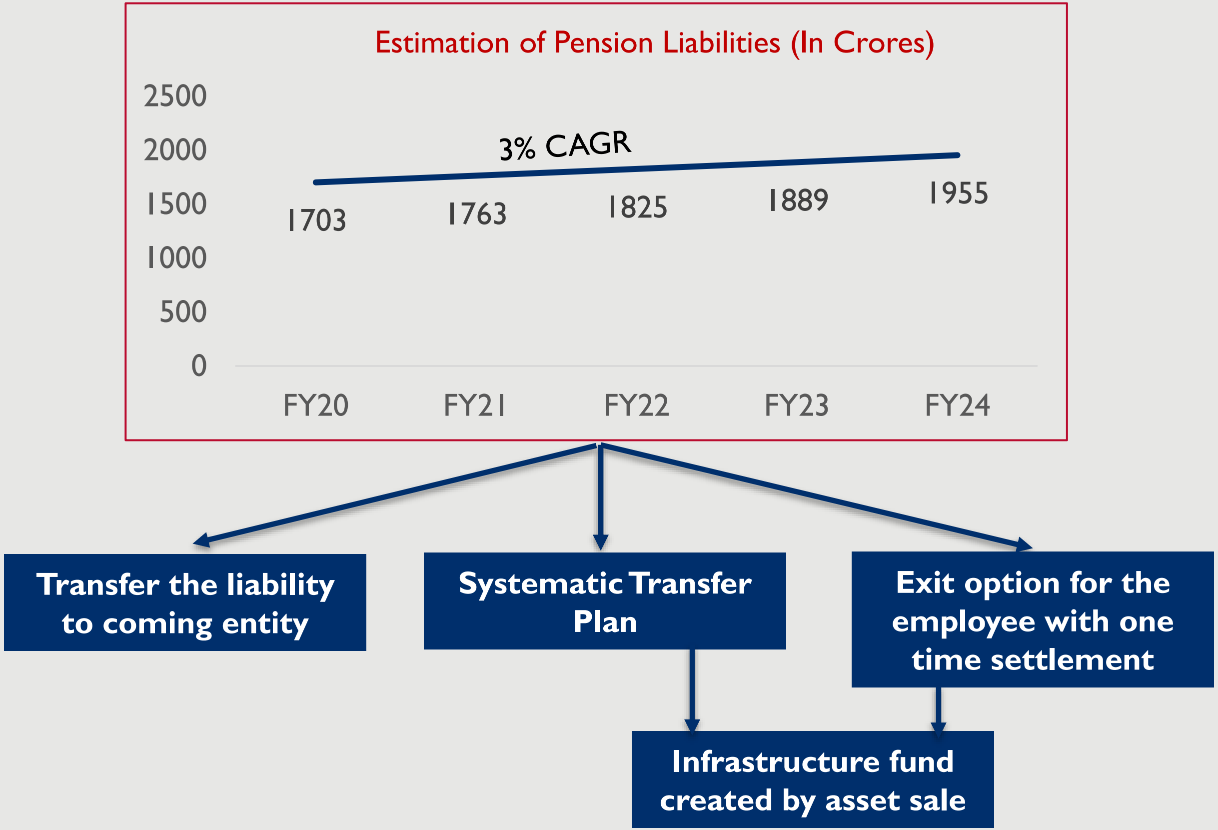
Risks to MPPTCL

- The is a new model and does not have an established operating history, which will make it difficult to accurately assess our future growth prospects.
- We may be unable to operate and maintain our power transmission projects to achieve the prescribed availability.
- The valuation projections are subject to significant business, economic, competitive, industry, regulatory, market and financial uncertainties and contingencies, that could cause actual results to differ materially from those projected
- If we are unable to adapt to technological changes, our business and financial performance could suffer.
- Increased price to customers: there may be sudden demand from the SPV (licensee) with their reasons that may be due to various operational reasons, could have a material adverse effect on our business, future prospects, etc.

Advantages to MPPTCL

- Faster execution of green field projects as the proceeds of capital are available for immediate deployment
- Operational projects have lower risks, hence higher valuations
- Reduction of debt and early realisation of equity returns
- Reduced dependence on government for fund, which can be deployed in other areas

Pension Liability



Source: MoP

Financial Analysis

Effect of Asset Monetization on MPPTCL financials

Impact of Financial Accounting and Reporting

- Determine the book value, or worth, of the asset on the date of the monetization. Book value is determined by subtracting the asset's Accumulated Depreciation credit balance from its cost, which is the debit balance of the asset.
- Compare its book value to the value of what you get for in return for the asset to determine if you breakeven, have a gain, or have a loss.
- Since MPPTCL monetizes assets by selling with gain, the gain should be reported on the P&L statement
- Fixed assets that have been monetized must cease to be included in the assets of the MPTCL. The assets of the company must be reduced by the amount of the fixed asset that has been sold.
- The monetization simultaneously entails an exit and an entry in the balance sheet but in different lines.
- Any accumulated depreciation existing at the date of the monetization should not be credited to the profit and loss statement.
- The amount that was received from monetization is shown under investing activities.
- Depreciation Expense should be removed. Also, the current assets and current liabilities should not change.
- There was no change in short-term loans payable, long-term liabilities, or owner's equity (other than the loss on monetization of its asset).

Financial and Tax analysis

Guidelines related to financial incentive and tax implications

- **Tax neutral provision for demerger**: The Finance Act 2021, has added an explanation to the Section 2 (19AA) of the Income Tax Act, 1961, stating that the reconstruction or splitting up of a public sector company into separate companies shall be deemed to be a demerger provided that the process involves transfer of asset to the resultant company, and the resultant company is a public sector company. The demerger of companies as defined under this Section 2 (19AA) is considered as tax neutral and hence avoids any capital gains tax implication.
- **Stamp duty exemption** on asset transfer from one Government-owned entity to another such entity.
- **Incentive Mechanism for Capital Expenditure by State Governments**: As an incentive for asset monetization, additional allocation equivalent to 33% of value of assets realized and deposited in State consolidated funds or in account of State public sector enterprises owning the assets.
- **Budget 2021-22 has provided clarification**: Dividend payment to REIT and InvIT will be exempt from TDS.
- Since the trusts are not considered as 'legal person' under the extant regulations, **the IBC regulations not applicable for InvIT loans**. But lenders are protected under the Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 ("SARFAESI Act") and the Recovery of Debts and Bankruptcy Act, 1993 (the "RDB Act"), the provision of recourse under IBC regulations will bring comfort for the investors.

Case studies : Asset Monetization

Asset monetisation - International

1

Peru concession Model

- Acciona got this from MoEM (Energy & Mines), include 2x220 kV line & substations
- Will operate for next 30 years
- Valuation: €119.6 mn

2

Philippines concession model

- 25-year concession of National Transmission Corporation (Transco) operational assets by NGCP.
- Valuation: $3.95 bn, 21,000 cktkm lines

3

Africa

- Cameroon, Mali,Senegal, Cote d'Ivoire tried transmission asset privatisation.
- SONATREL, Cameroon Transco sold to AES corporation in 2001

4

Chile: Celeo Redes Transmission Lines

- Refinancing through project bonds with maturity of 10 years.
- 30 years tariff agreement, size $ 593 mn

5

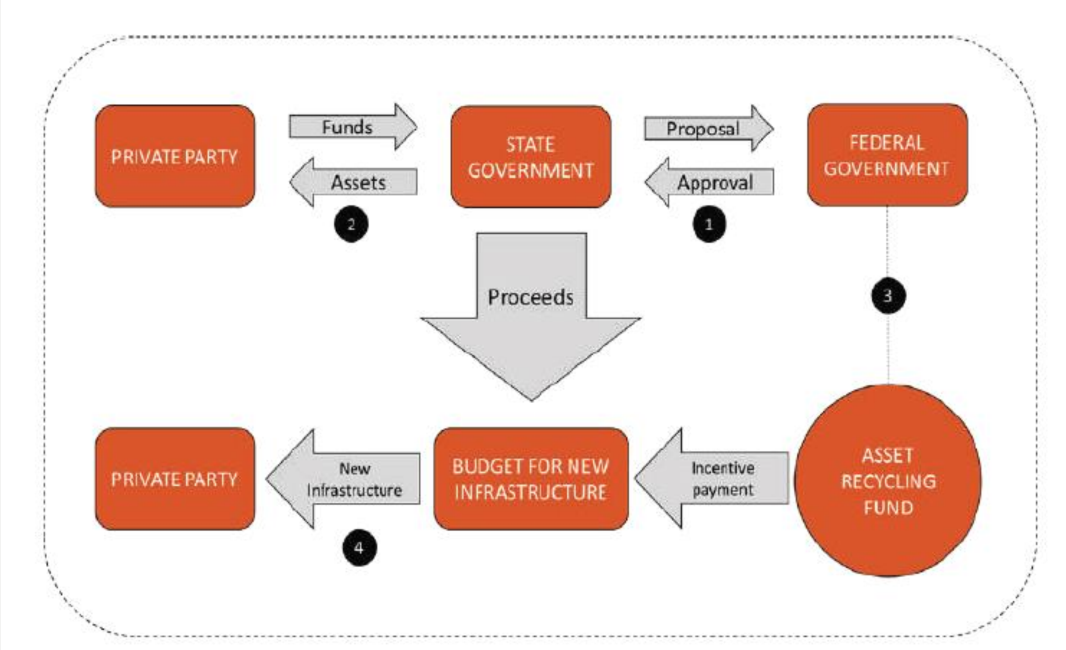
Oman

- Nama, has sold a 49% stake in Oman Electricity Transmission Co. to State Grid Corporation of China, raising around $1 billion

Source: ACCIONA, World Bank, CIB, Reuters

Asset Recycling Initiative (ARI) – Australia (1/2)

- Helped in unlocking over USD 17 billion in new infrastructure development across Australia.
- Initiative helped in enhanced investments on new infrastructure
- Asset classes such as ports, electricity generation, transmission and distribution and roads were leased / sold



Illustrative structure

Asset Recycling Initiative (ARI) – Australia (1/2)

Monetised assets

TransGrid	Port of Melbourne	Endeavour Energy
2015	2016	2017
Asset: Transmission	Asset: Port	Asset: Distribution network
100% lease, 99 yrs Proceeds: 10,273 mn A$	50 year lease Proceeds: 9,700 mn A$	50.4% lease, 99 yrs Proceeds: 7,624 mn A$
New South Wales	Victoria	New South Wales

Victorian Land Registry Services	Landbridge Darwin Port	Ausgrid
2017	2015	2016
Asset: Titling & Registry business of land & property	Asset: Port	Asset: Transmission
40 year concession Proceeds: 2,600 mn A$	99 year lease Proceeds: 506 mn A$	50.4% lease, 99 yrs Proceeds: 16,200 mn A$
Victoria	Northern Territory	New South Wales

Participating investors

Sovereign Wealth Funds / Government owned Investment Cos.

- ADIA
- الهيئة العامة للإستثمار Kuwait Investment Authority
- WHI Wren House Infrastructure
- QIC

Pension / Superannuation Funds

- CDPQ
- AustralianSuper
- aware super
- OMERS

General Fund Management

- ifm investors
- AMP Capital
- Macquarie
- Global Infrastructure Partners

Post Monetization: Utilization of fund

Utilization of funds from Asset Monetization

Total CAPEX plan in Transmission Infra Development Rs 8,480 Cr (FY20-FY24)

Total O&M investment plan in Transmission Infra Rs 3,266 Cr (FY20-FY24)

Terminal Liabilities i.e. Pension + Gratuity Rs 10,079 Cr (FY20-FY24)

Total Asset Liabilities Rs 6,000 Cr (FY19), estimated 4,000 Cr (FY24); Interest 9%

Total Interest on Working Capital + Financing charges Rs 2,100 Cr (FY20-FY24); Interest 12%

Existing and planned responsibilities

Other things monetization brings

Strengthening the existing infra with efficiency

Bidding in Greenfield Transmission Projects under TBCB

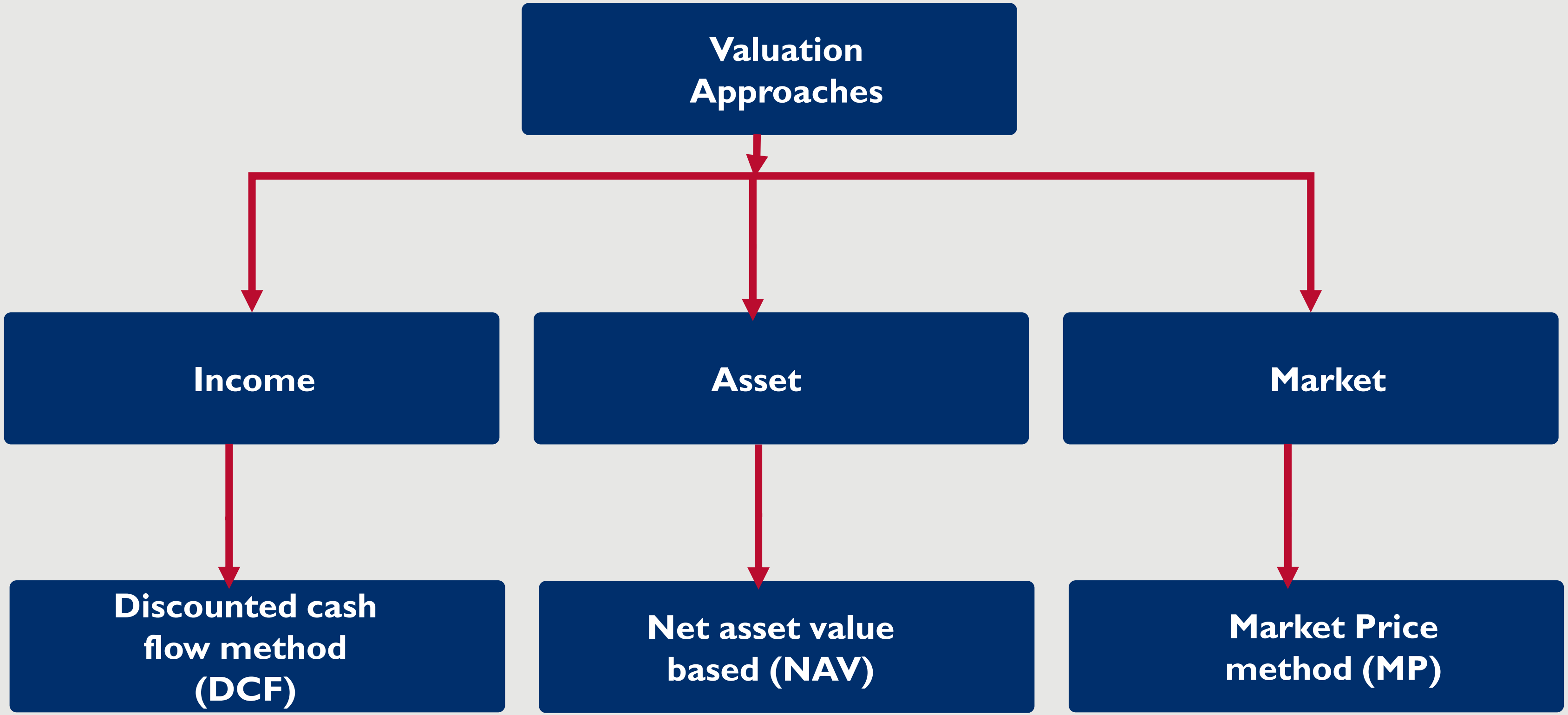
Enhanced credit ratings, potentially lowering the cost of funding

Increasing Investor pool to fund new projects

Creation of Transmission Fund

Asset Valuation

Asset valuation methods



Asset valuation for transmission asset

DCF Method: Valuation based on the present value of future earnings of cash:

- Estimating a NPV of the "forecasted cash flow stream of the business" and "terminal value at the end of the forecast period“
- Length of Forecast period :to enable the business to achieve a stabilized level of earnings.
- Discount rate is Weighted Average Cost of Capital ("WACC").

This method considers future cash flow projections of remaining TSA period and valuation depends on the present value of future cash flow projection.

Hence recommended

NAV Method: Estimates value based on the fair value of the business assets less than fair value of its liabilities:

- Computed by adjusting the assets and liabilities to the fair market value as of the date of valuation.
- Based on a Company's net income or cash flow levels, does not capture the future earning potential of the businesses.

Valuation predetermined based on historical cost, doesn’t capture the future earning potential of the business, whereas the TSA is for 35 years,

Hence not recommended

MP Method: Valuation based on Comparable Companies multiples (CCM) & transaction multiples (CTM):

- Company value is arrived at considering its market price over an appropriate period.
- CCM/CTM: Valuation based on market multiples of publicly traded comparable companies/publicly disclosed comparable transactions (should be in the same or a similar line of business)

The projected income & cash flows primarily depend on key terms of the respective TSAs, residual tenor, project-specific characteristics, etc. which may differ in other projects.

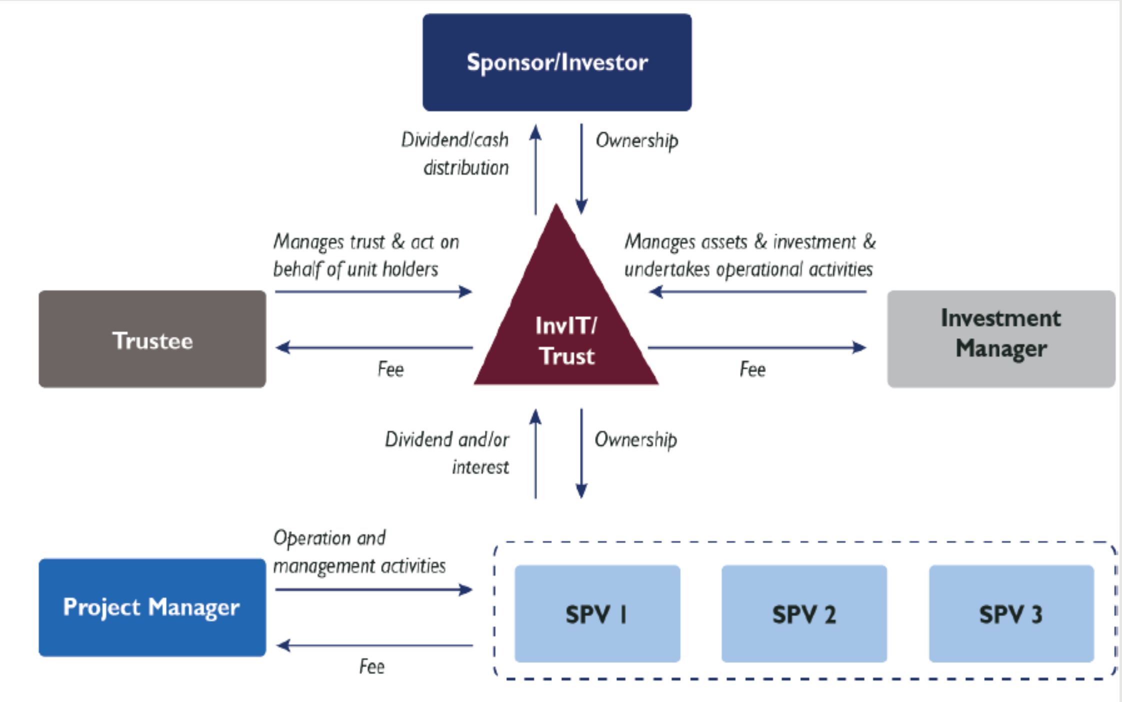
Hence not recommended

Valuation by DCF Method

Collection of data	Balance Sheet, P&L Statement, Cash flow, Share market data, Aswath Damodaran, Credit rating agency, etc
Discount factor/WACC	Ke * (E/(D + E)) + Kd * {1-T) * (D/(D + E))
Free cash flow (FCFF)	EBIT - Taxes + D&A + Working capital – Investment in fixed assets
Present value of operations (PV)	NPV of Free cash flow
Value of Firm	PV + Non-operating assets including cash
Broad level comparison/benchmarking with market standards	EV/EBITDA ratio

Infrastructure Investment Trust (InvITs)

Structure of an InvIT



Major entities

1. Sponsor - responsible for setting up InvIT including transferring the initial portfolio of assets
2. Trustee - holds InvIT assets in trust for the benefit of unit holders, in accordance with SEBI regulations
3. Investment manager - manages the assets and investments of the InvIT
4. Project manager - responsible for the execution and management of the projects. Must be the sponsor or its associate for first 3 years.

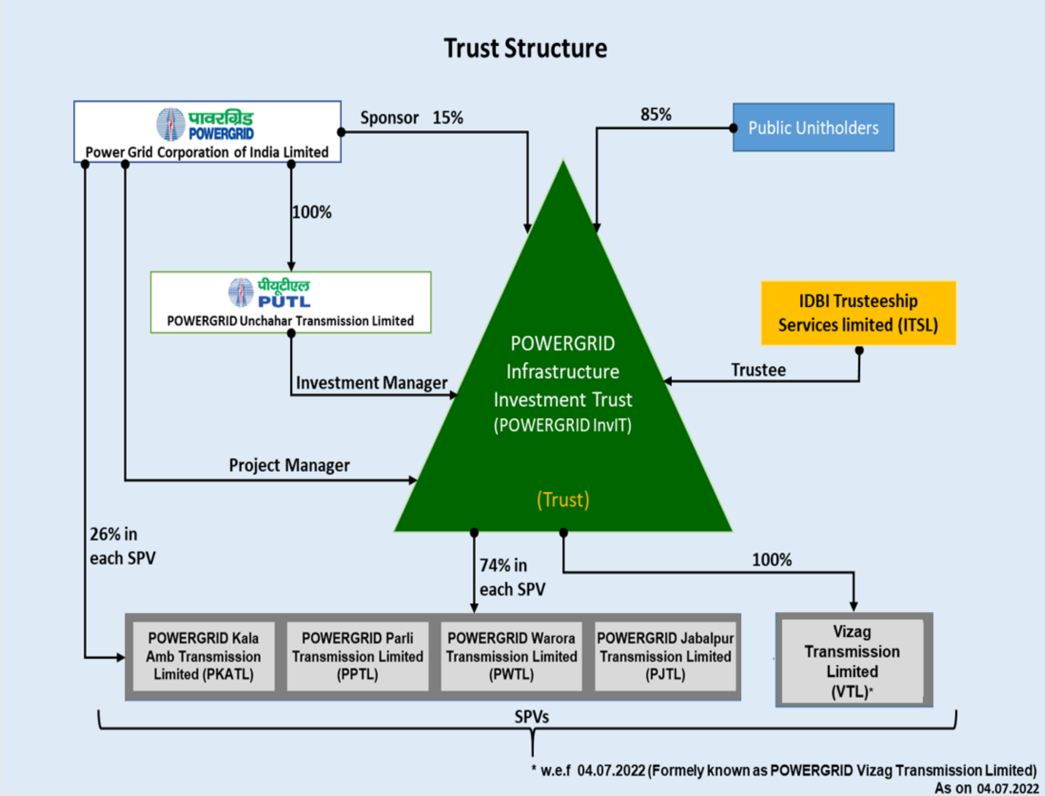
Key features of InvITs

- 80% investment in operational assets. Balance 20% can be in under-construction assets. Value of assets held by the InvIT should be greater than USD 67 Mn
- 90% of net distributable cash flow is distributed to unit investors.
- Sponsor should hold a minimum of 15% of units issued by the InvIT, with a lock-in period of three years from the date of issuance
- Maximum unit holdings limit for an investor in an InvIT is 25%
- Mode of issuance – public, private listed and private unlisted
- InvIT listed on a stock exchange can issue debt securities. Consolidated borrowing of up to 49% of asset value. Can increase to 70% on fulfilment of certain conditions
- Credit rating of AAA prior to the launch

Case studies : Asset Monetization

Asset monetization by PGCIL – InvIT model

- Monetized 5 transmission assets held in form of (SPVs) with initial share sale at INR ~7,735 crore
- Projects comprise 11 transmission lines (six 765 kV lines and five 400 kV lines), with total ~3,700 ckt km,
- Three sub-stations with 6,630 MVA aggregate transformation capacity and 1,956 km of optical ground wire
- Long-term TSA of 35 years from the scheduled COD
- Upon expiry of the TSA, application to CERC for transmission license renewal
- High visibility of potential revenue and cash flows for the InvIT
    - Availability of additional 18 projects with an investment of INR 22,500 crore as "pipeline" to the InvIT
- Valuation as of March 31, 2022 was ~USD 1.35 Bn (INR 102.3 Bn) on a discounted cash-flow basis
- Has AAA rating from CRISIL



Major investors - CPP Investments SBI Life Insurance Capital Group Tata AIG Insurance Schroders Tata AIA Life Insurance SBI Pension Funds ICICI Lombard General Insurance HDFC Mutual Fund PNB Metlife

Source: *SAREP Analysis*

Expected Valuation from asset monetisation – Indian acquisitions

S.No	Seller	Buyer	Ckt kms	Location	COD	Concession	Enterprise value (EV)	EV per ckt km
1	KEC	Adani	343	Bikaner to Sikar	04-Dec-2017	25 years	228 Cr	0.66 Crs.
2	Essar	Adani	673	Mahan to Sipat	22-Sep-2018	35 years	1913 Cr	2.84 Crs.
3	KPTL	CLP	503	Assam, Nagaland & Manipur	Dec-2020	35 years	245 Cr	0.49 Crs.
4	Sterlite	Indigrid	830	Assam, Arunachal Pradesh & Tripura	Nov-2020	35 years	4625 Cr	5.57 Crs.
	Total		**2,349**				**7,011 Cr**	**2.98 Crs.**

Major observations

- An EV per km has been assessed as INR 3 Cr per ckt km
- Niti aayog has assessed the EV for PGCIL as INR 1.58 Cr per ckt km
- EV is a function of voltage level, remaining concession period, revenue and operational costs

Way forward

Way Forward

1. Identification of transmission asset for monetisation
2. Developing scheme & timeline for asset monetisation
3. Approval of regulator/notification of guidelines by state government under EA
4. Demerger of identified asset in a SPV
5. Preparation of standard bidding documents
6. Selection of investor
7. Signing of agreement and transfer of asset

Phase I
Timeline: 6-8 months

Phase II
Timeline: 8-12 months

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