



BUSINESS PLAN · INDIA

Small Renewable-Power Developer

Wind and small-hydro generation

ENERGY

AISEVAK.IN · BY ABL DIGITAL TECHNOLOGIES

August 2026

This document is confidential and prepared for planning purposes. All financial figures are illustrative model assumptions for an Indian MSME context and must be validated against live quotes, local rates and professional advice before any investment or borrowing decision.

1. Executive Summary

This plan sets out a **Small Renewable-Power Developer** in India — an Independent Power Producer (IPP) that develops, builds, owns & operates small wind and/or small-hydro generation assets, selling electricity under long-term **Power Purchase Agreements (PPAs)** to DISCOMs, C&I open-access buyers or the exchange. It earns **tariff × generation** over a ~25-year asset life, monetising India's renewable-energy push & RE targets — a **capex-very-heavy, long-gestation, PPA/tariff-, resource (wind/hydrology)- & PLF-driven, project-financed** business where DSCR & resource assessment are everything.

India's renewable-energy targets, open-access & C&I green-power demand, RE policies & falling technology costs support small wind & small-hydro development. A small RE developer is a **capital-intensive infrastructure business**: heavy upfront capex, long development & build gestation, then a stable ~25-year annuity of generation revenue — but success hinges on **resource assessment (wind speed/hydrology — the #1 risk), Plant Load Factor (PLF)/generation, firm offtake (PPA/tariff), grid connectivity/evacuation, project finance/DSCR & O&M**. Revenue is **tariff × generation (PLF × capacity)**; success rests on resource, PLF, offtake, connectivity, capital/DSCR & O&M — it is capex-, resource-, offtake- & PLF-driven, long-gestation.

This is a capital-intensive IPP — funded by promoter/sponsor equity plus substantial term/project-finance debt. This plan models a small RE project (illustratively a few MW) requiring **₹30 crore** (₹9 crore equity + ₹21 crore project-finance debt), generating stabilised revenue of **₹5 crore** in the first full operating year scaling with capacity/PLF. (*Small wind/small-hydro IPP; tariff × generation over ~25yr, capex/resource/offtake/PLF/DSCR-driven, long-gestation — figures illustrative.*)

2. Business Description, Vision & Legal Structure

Concept: A small renewable-power developer/IPP - develop, build, own & operate small wind/small-hydro, selling power under long-term PPA/tariff over ~25 years.

Vision: To add clean, reliable renewable generation to India's grid, profitably.

Mission: Develop well-sited, high-PLF renewable assets with firm offtake, sound project finance & disciplined O&M.

Legal structure

- **Private Limited / SPV** — standard for an IPP (project finance, PPA, ring-fenced).
- **Project finance:** sponsor equity + non-recourse/limited-recourse term debt on the SPV.

Regulatory anchor: a small RE IPP operates within CERC/SERC tariff/open-access regulations, PPA with DISCOM/C&I, grid-connectivity/evacuation & CEA norms, MNRE/state RE policy & incentives, environmental/land/water (hydro) clearances, & project-finance/DSCR covenants. Resource assessment, PLF/generation, offtake (PPA/tariff), connectivity, capital/DSCR & O&M determine success; it is capex-, resource-, offtake- & PLF-driven, long-gestation.

3. Promoter & Ownership

Led by a sponsor/promoter with renewable-energy, power, infrastructure or project-finance expertise & equity capital. The team includes development (resource/land/clearances/PPA), project/construction, O&M, and finance (project structuring/DSCR); build & O&M often via EPC/O&M contractors. Resource, PLF, offtake & project finance are the differentiators. Ownership, equity & any investors are editable inputs.

4. Market Analysis — India

India's aggressive RE targets, open-access & C&I green-power demand, RPO obligations, RE policies & competitive tariffs support renewable generation, including small wind & small-hydro in resource-rich sites. Demand is RE-target-/green-power-/policy-driven & offtake-backed. The market rewards resource quality, PLF, firm offtake (PPA/tariff), connectivity, capital/DSCR & O&M; it is resource-, offtake-, capex- & policy-sensitive, met with siting, offtake, finance & O&M.

Demand drivers

- **RE targets & RPO** obligations.
- **C&I open-access & green-power** demand.
- **RE policy & competitive tariffs.**
- **Resource-rich sites** (wind/hydro).
- **Decarbonisation & ESG.**

Market sizing (illustrative framing)

Layer	Definition	Indicative scale
TAM	Renewable generation in India	Very large & policy-driven
SAM	Small wind/hydro & region	Site-dependent
SOM (Yr 1-3)	MW developed / generation	Project-based

Offtake / customers

- DISCOMs (PPA/tariff).
- C&I open-access (green power).
- Power exchange (merchant, selectively).
- Group-captive arrangements.

5. Competition & Competitive Advantage

Landscape: large RE developers/IPPs, solar (often cheaper), other wind/hydro developers & utilities. The developer competes on resource/site quality, PLF, tariff-competitiveness, offtake tie-ups, execution & cost of capital.

The business's edge

- **Resource/site quality & PLF (the core).**
- **Firm offtake (PPA/tariff).**
- **Grid connectivity/evacuation.**
- **Project finance & cost of capital/DSCR.**
- **Execution & O&M/availability.**

6. Products & Revenue Model

Stream	Model	Basis
--------	-------	-------

PPA power sales (DISCOM/C&I)	Tariff × generation (~25yr)	Core annuity
Open-access / group-captive	Tariff/negotiated	Core (C&I)
Merchant / exchange (selective)	Market price × generation	Variable
RECs / green attributes (if applicable)	Certificate sales	Upside
Carbon credits	Credit sales	Upside

Revenue is **tariff × generation (PLF × capacity)** under a long-term PPA — a stable ~25-year annuity once operational; RECs/carbon add upside. Economics = generation × tariff – O&M – debt service, geared by heavy capex/project-finance; resource/PLF, offtake/tariff, connectivity & DSCR drive it — the decisive IPP levers (capex-heavy, long-gestation, resource-critical).

7. Go-to-Market — Development & Offtake

- **Site/resource identification** & assessment (wind data/hydrology).
- **Offtake tie-up** (PPA/DISCOM/C&I/open-access).
- **Connectivity/evacuation** & clearances.
- **Project finance** (equity + debt/DSCR).
- **Execution & O&M** (PLF/availability).

Approach

Identify resource-rich site & assess resource (the make-or-break) → secure offtake (PPA/tariff) & connectivity → arrange project finance (DSCR) → build & commission → operate at target PLF with O&M → earn the ~25-year annuity. Resource, offtake, connectivity, finance & O&M build the asset; long gestation demands patient capital & disciplined development.

8. Operations Plan (capex-heavy IPP)

- **Development:** resource assessment (wind masts/hydrology), land, clearances, PPA, connectivity — the risk-laden pre-build phase.
- **Construction:** EPC (turbines/civil/hydro works/grid), commissioning — heavy capex.
- **Operations & O&M:** generation, availability/PLF, maintenance, grid compliance.
- **Offtake & settlement:** PPA billing, DISCOM/C&I payment, scheduling.
- **Finance:** project-finance debt, DSCR, covenants, insurance.

Project workflow

Stage	Activity	Metric
Assess	Resource/site	Resource/PLF estimate
Secure	PPA/connectivity/finance	Offtake/DSCR
Build	EPC/commission	Capex/on-time
Operate	Generate/O&M	PLF/availability
Earn	PPA sales/settle	Generation revenue/DSCR

9. Regulatory, Licences & Compliance (India)

- **Tariff/offtake:** CERC/SERC; PPA; open-access; RPO.
- **Grid:** connectivity/evacuation; CEA; scheduling.
- **Clearances:** land; environment; water (hydro); MNRE/state RE policy.
- **Finance:** project finance/DSCR; SPV; insurance.

10. Organisation & Manpower Plan

Role	Dev/Build	Operating Yr 1	Operating Yr 3
Sponsor / leadership	2	2	3
Development & project	5	3	4
O&M & plant operations	2	8	12
Finance, offtake & admin	3	3	5
Total	12	16	24

Note: build/O&M often via EPC/O&M contractors; team is lean, asset is the business.

11. Implementation Timeline & Milestones

Phase	Timeline	Milestone
Develop	Month 0-12	Resource assessment, land, PPA, connectivity, clearances, financial close
Build	Month 12-24	EPC construction, commissioning, grid sync
Operate	Year 3+	Generation at target PLF, PPA revenue, ~25yr annuity

Note: long gestation — development + build commonly 18-30 months before generation revenue; the P&L below is shown from the first full operating year.

12. Financial Plan (Illustrative — first full operating year onward)

All figures are illustrative model assumptions for an Indian context, shown so the promoter can replace them with live rates. They are not projections of guaranteed results. A small RE IPP is capex-very-heavy & long-gestation; resource/PLF & tariff drive revenue; project-finance debt service (DSCR) is the key constraint; asset life ~25 years.

12.1 Project cost & means of finance

Capital requirement	₹
EPC — turbines/hydro works, civil & grid	25,00,00,000
Development, land, clearances & connectivity	3,00,00,000
Financing, DSRA & contingency	2,00,00,000
Total project cost	30,00,00,000

Sponsor equity	9,00,00,000
Project-finance debt (~70%)	21,00,00,000

12.2 Projected Profit & Loss (3 operating years)

Particulars	Op Year 1	Op Year 2	Op Year 3
Generation revenue (tariff × PLF)	4,80,00,000	5,00,00,000	5,10,00,000
RECs / carbon / other	20,00,000	25,00,000	30,00,000
Total revenue	5,00,00,000	5,25,00,000	5,40,00,000
O&M, insurance & operations	80,00,000	85,00,000	90,00,000
Interest (project-finance)	1,80,00,000	1,60,00,000	1,40,00,000
Depreciation	1,50,00,000	1,50,00,000	1,50,00,000
Overheads & other	25,00,000	27,00,000	28,00,000
Total expenses	4,35,00,000	4,22,00,000	4,08,00,000
Net profit (before tax)	65,00,000	1,03,00,000	1,32,00,000
Net margin	13%	19.6%	24.4%

12.3 Unit economics & key ratios

- **Generation (PLF × capacity) × tariff:** revenue is capacity × PLF × 8,760h × tariff; PLF (driven by resource quality — wind speed/hydrology — & availability) & tariff are the make-or-break; a small PLF miss materially cuts revenue & DSCR.
- **DSCR & capital:** heavy project-finance debt means DSCR (cash vs. debt service) is the binding constraint; conservative resource estimates, firm PPA & O&M protect it; equity returns come over the long asset life.
- **Long life, stable annuity:** once operational, a ~25-year PPA gives a stable annuity; margins improve as debt amortises; resource & offtake certainty underpin bankability.

12.4 Projected Cash Flow — Operating Year 1 (quarterly, illustrative)

Particulars (₹)	Q1	Q2	Q3	Q4
Opening balance	50,00,000	48,00,000	50,00,000	52,00,000
Generation collections (PPA)	1,20,00,000	1,35,00,000	1,30,00,000	1,15,00,000
O&M, interest & debt service	1,22,00,000	1,33,00,000	1,28,00,000	1,15,00,000
Closing balance	48,00,000	50,00,000	52,00,000	52,00,000

A RE IPP is capex-very-heavy & long-gestation; generation is seasonal (wind/hydrology) & DISCOM-payment timing varies. Firm PPA, conservative PLF, DSRA, O&M/availability, seasonal-cash planning & DSCR discipline manage cash; the key risks are resource/PLF shortfall (the #1 risk), DISCOM-payment/offtake, capex/gestation overrun, grid/evacuation & interest-rate/DSCR — met with resource assessment, firm offtake, DSRA & O&M.

12.5 Key Performance Indicators to Monitor

- **Resource & generation:** PLF; availability; generation vs. P50/P90.

- **Offtake:** PPA tariff; DISCOM/C&I payment; curtailment.
- **Finance:** DSCR; debt amortisation; equity IRR.
- **O&M:** availability; downtime; O&M cost.

13. Funding Requirement & Bankability

This IPP is **capital-very-intensive**: ₹30 crore funded ~30:70 **equity:debt** (₹9 crore sponsor equity + ₹21 crore project-finance debt) on an SPV. Bankability rests on **resource assessment (P50/P90), firm PPA/offtake, tariff, connectivity, EPC/O&M & DSCR** — lenders scrutinise resource certainty, offtake & DSCR above all. Long gestation means no revenue until commissioning; thereafter a stable ~25-year annuity with improving margins as debt amortises. Resource/PLF, offtake, capital/DSCR & O&M underpin the model. (*Business model, not investment advice; CERC/SERC, grid, clearances & project finance are prerequisites.*)

13.1 Funding utilisation (₹30 crore)

Use of funds	₹	% of total
EPC — turbines/hydro works, civil & grid	25,00,00,000	83.3%
Development, land, clearances & connectivity	3,00,00,000	10%
Financing, DSRA & contingency	2,00,00,000	6.7%
Total	30,00,00,000	100%

14. Risk Analysis & Mitigation

Risk	Mitigation
Resource / PLF shortfall (the #1 risk)	Rigorous resource assessment (P50/P90), conservative estimates, good siting
Offtake / DISCOM payment	Firm PPA, creditworthy offtaker/C&I, DSRA, payment security
Capex / gestation overrun	EPC contract, project management, contingency
Grid / evacuation / curtailment	Connectivity, scheduling, grid compliance
DSCR / interest-rate / finance	Conservative gearing, DSCR discipline, hedging, DSRA

15. SWOT Analysis

Strengths Long ~25yr stable annuity; RE-target/policy tailwind; ESG/green demand; asset-backed; improving margins as debt amortises.	Weaknesses Capex-very-heavy & long-gestation; resource/PLF-critical; DSCR-constrained; DISCOM-payment & grid risk.
Opportunities RE targets/RPO; C&I open-access/green power; RECs/carbon; resource-rich sites; hybrid/storage.	Threats Resource variability; DISCOM-payment/curtailment; solar cost-competition; interest-rate/DSCR; policy/tariff shifts.

16. Recommended AiSevak Tools for This Business

This RE developer would use AiSevak's Energy vertical tools in delivery:

- **Project ops:** resource/PLF-assessment & generation, PPA/offtake & grid-connectivity, O&M/availability tools.
- **Finance & compliance:** project-finance/DSCR & DSRA, CERC/SERC-tariff & clearance/RPO tools (with Finance & Legal verticals).
- **Practice:** Business Plan, PLF/tariff/generation and DSCR/IRR modelling tools to plan & monitor the project.

17. Key Assumptions & Notes

- Small RE IPP: develop/build/own/operate small wind/small-hydro, selling power under long-term PPA/tariff over ~25 years; capex-very-heavy, long-gestation, project-financed.
- Generation (PLF × capacity) × tariff decisive; resource assessment (the #1 risk), PLF, firm offtake, connectivity & DSCR are the levers; stable annuity once operational.
- Funded ~30:70 sponsor-equity:project-finance-debt on an SPV; CERC/SERC, grid/CEA, land/environment/water clearances, MNRE/state RE policy apply; no revenue until commissioning.
- Resource/PLF, offtake/tariff, capital/DSCR & O&M drive economics; figures illustrative (first full operating year onward); business model, not investment advice.

► Use these tools now — free on AiSevak

Every tool referenced in this plan is available on aisevak.in. Open the [Energy toolkit](https://aisevak.in/verticals/energy) to browse and use them all at <https://aisevak.in/verticals/energy> — or go straight to any specific tool at <https://aisevak.in/service/<tool-name>>. No signup needed to explore; each tool guides you step by step.

Prepared by AiSevak.in — a product of ABL Digital Technologies. AI-powered business services for India. This is AI-assisted guidance; figures are illustrative and not a guarantee of results. Verify all numbers, licences and regulatory requirements with a qualified professional before relying on this plan for binding decisions. © 2026 ABL Digital Technologies Private Limited.