

MARKET ENTRY STRATEGY: INDIA C&I ROOFTOP SOLAR (2024–2030)

Prepared for: Solar EPC Startup
Shivkanya Balamurugan

EXECUTIVE SUMMARY

Recommendation: Enter through a hybrid CAPEX–RESCO model, phased over 3 years, targeting manufacturing and warehousing customers first.

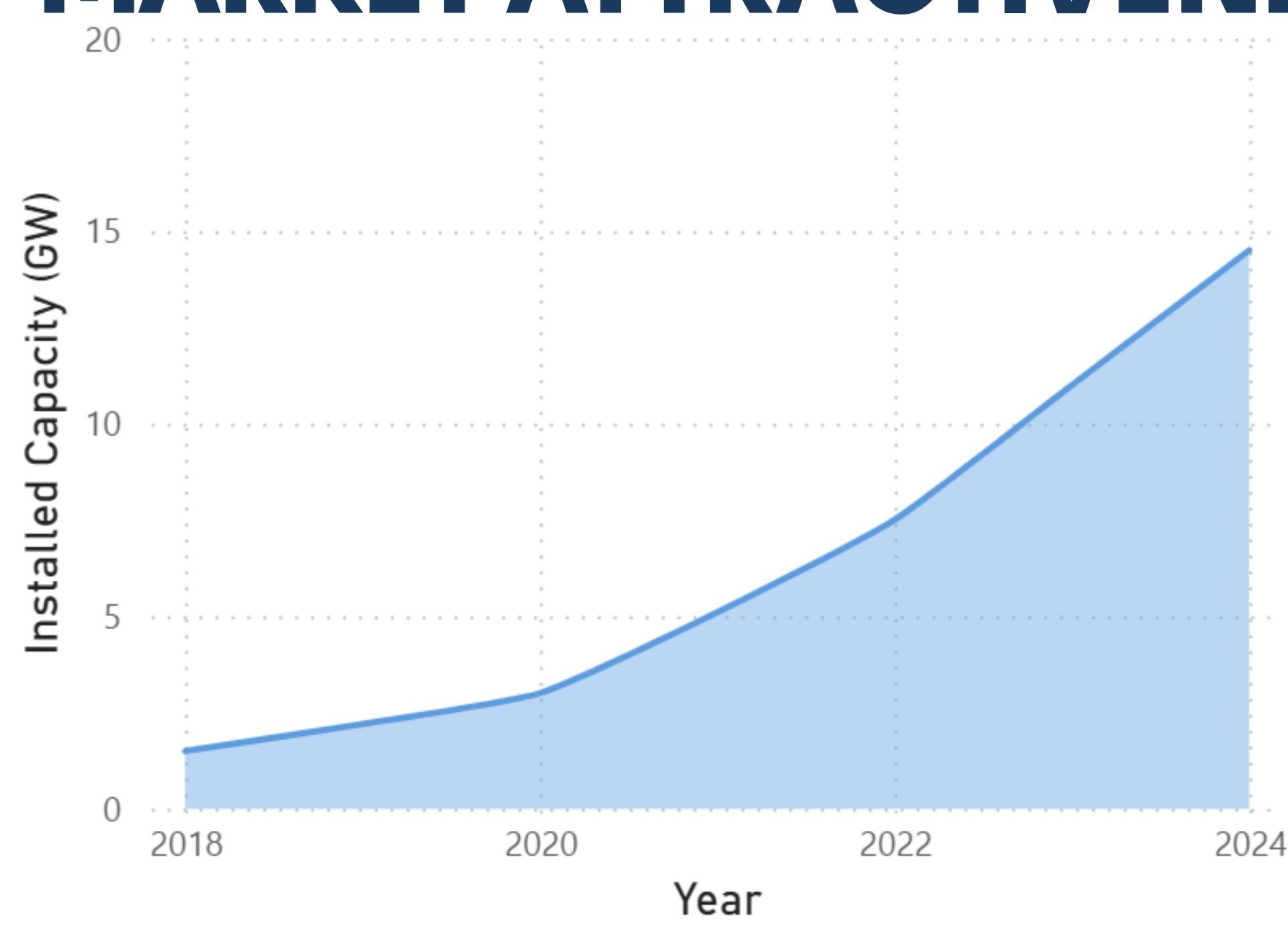
Why:

- Attractive market: 18–28% CAGR
- Strong unit economics: 3–4 year payback
- Fragmented competition → whitespace
- MSMEs (15 GW potential) unlocked via financing

Outcome:

100 MW by Year 3, ₹400 crore revenue, 15% EBITDA margin.

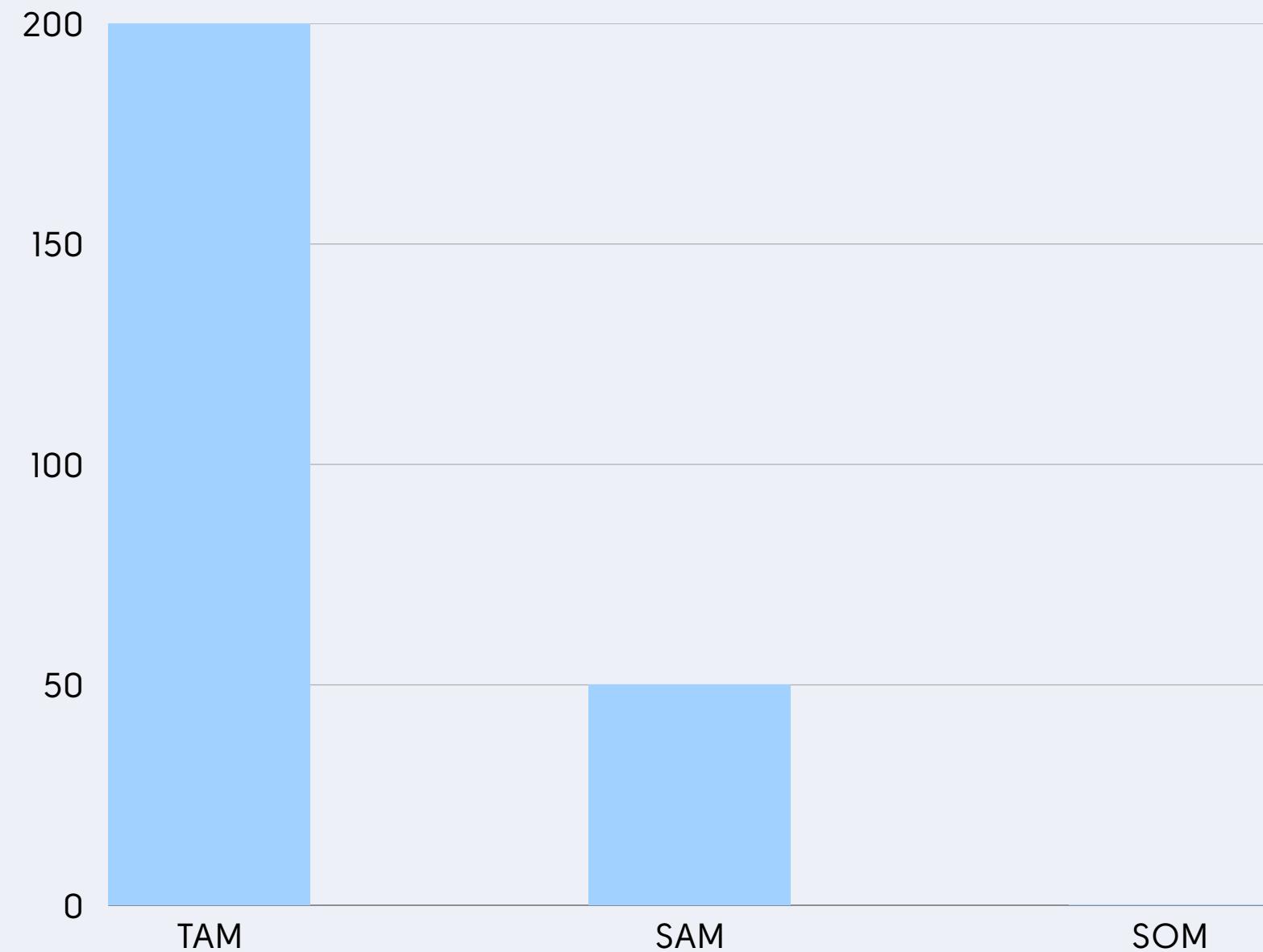
MARKET ATTRACTIVENESS



- Current rooftop capacity: 13.7–16.5 GW
- 2024 installations: 3.2–4.9 GW
- C&I share: 60–75%
- Market value: ₹197–446 billion

Key takeaway: High-growth, structurally attractive sector.

TAM-SAM-SOM



- **TAM:** 150–200 GW potential
(Total C&I rooftop potential across India based on feasible rooftop area and irradiation)
- **SAM:** 40–60 GW
(Practical, policy-enabled C&I market in high-readiness states)
- **SOM:**
 - Y1: 20 MW
 - Y2: 50 MW
 - Y3: 100 MW
(Achievable market share through phased rollout)

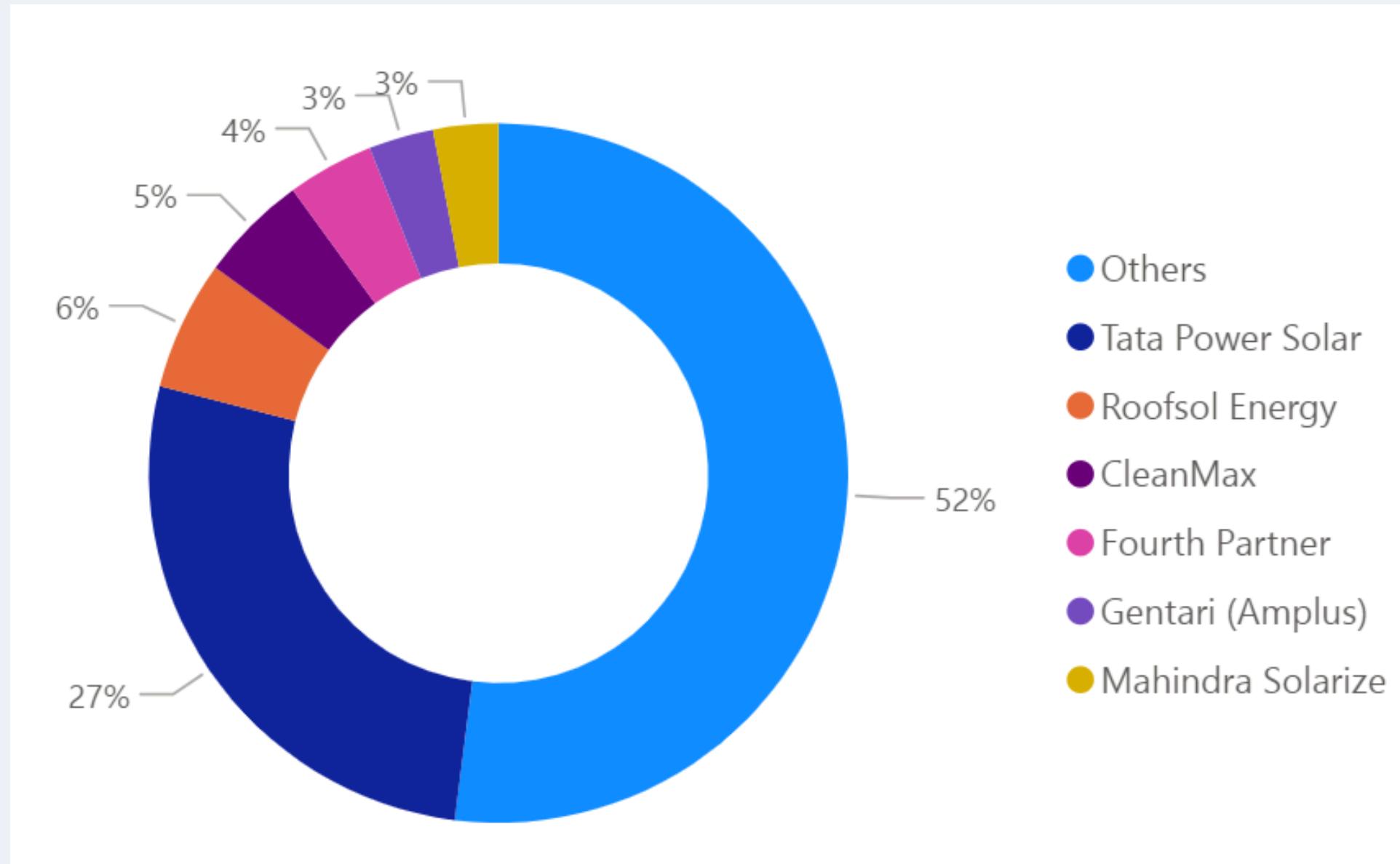
CUSTOMER SEGMENTATION & PRIORITY TIERS

| Tier | Segment | Size | Payback | Why Attractive |
|------|---------------|-------------|---------|----------------------------|
| 1 | Manufacturing | 500 kW–5 MW | 3–4 yrs | High tariffs, simple roofs |
| 1 | Warehousing | 300 kW–1 MW | 2–3 yrs | Daytime load, large area |
| 2 | IT Parks | 200 kW–2 MW | 3–5 yrs | ESG-driven |
| 2 | Retail/Malls | 500 kW–2 MW | 3–4 yrs | HVAC-heavy |
| 3 | MSMEs | 50–300 kW | 3–5 yrs | Financing gap |

Sales cycles

(Manufacturing 6-9 months, Warehousing 4-6 months, IT 9-12 months)

COMPETITIVE LANDSCAPE

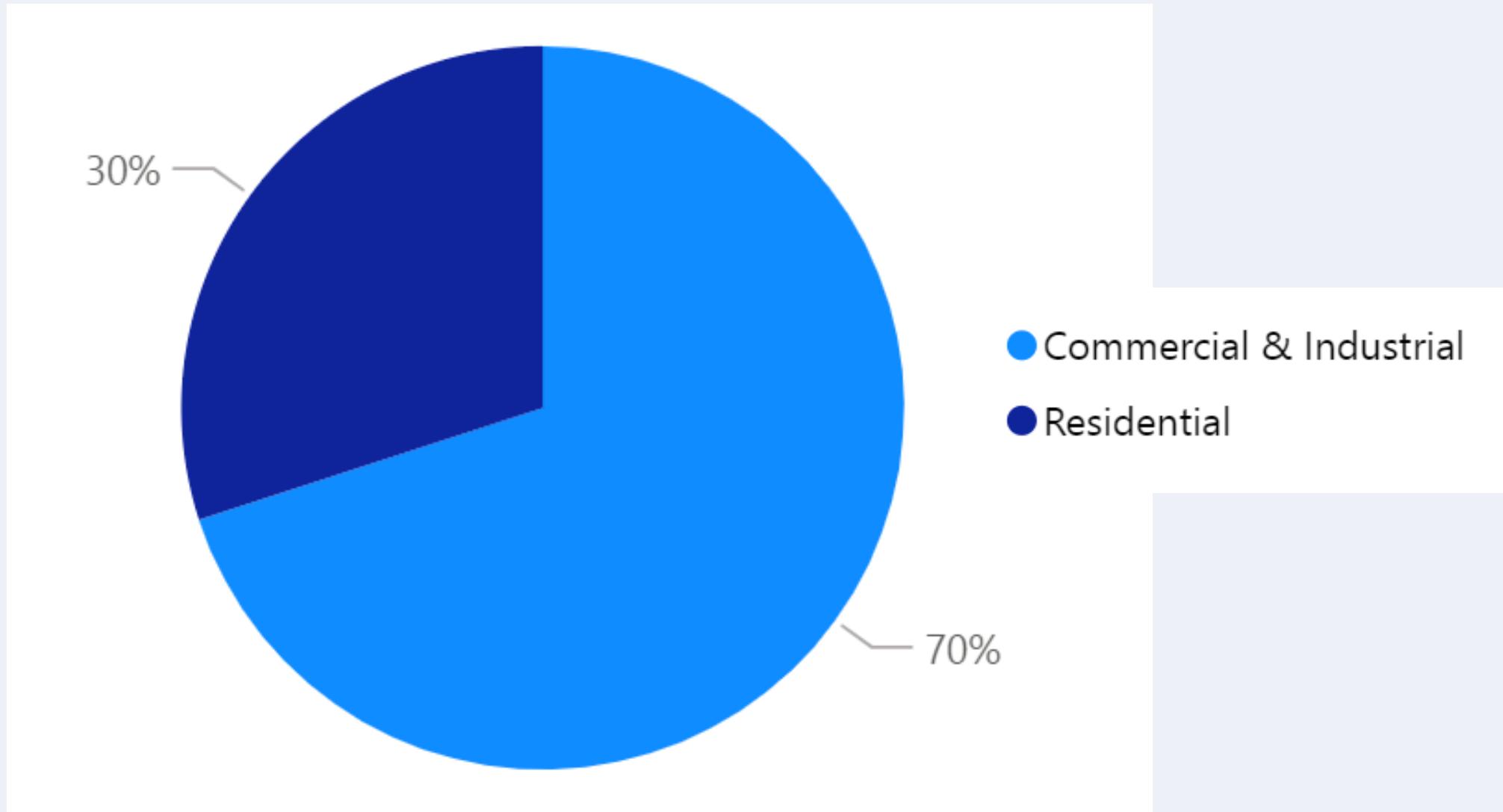


Key Players:

- Tata Power Solar (26–27%)
- Roofsol (4–7%)
- CleanMax / Fourth Partner
- Gentari (Amplus)
- Mahindra Solarize
- Local EPCs (>50% share combined)

Key takeaway: Market fragmented → mid-scale EPC has whitespace.

UNIT ECONOMICS & PRICING



- **Install cost:** ₹35,000–50,000/kW
- **LCOE:** ₹2–3/kWh
- **500 kW installation:** ₹2 crore
- **Savings:** ₹58.4 lakh/year
- **Payback:** 3-4 years

HYBRID CAPEX-RESCO MODEL

| CAPEX (Primary in Year 1) | RESCO (Scale in Years 2–3) |
|--|---|
| <ul style="list-style-type: none">• Fast cash flow• Credibility building• Lower risk | <ul style="list-style-type: none">• Unlocks MSMEs• Recurring revenue• Strong IRR (12–15%) |

3-PHASE GEOGRAPHIC ROLLOUT

| Phase | States | Rationale |
|--------|---------------------------------|---|
| 1 (Y1) | Gujarat, Maharashtra, Karnataka | Fast approvals, high tariffs, industrial base |
| 2 (Y2) | Delhi NCR, AP, Telangana | Large C&I demand, policy support |
| 3 (Y3) | TN, Rajasthan, Tier 2/3 cities | Scale + platform expansion |

3-PHASE MARKET ENTRY ROADMAP

| Phase 1: Build Credibility (Year 1) | Phase 2: Scale MSME (Year 2) | Phase 3: Platform (Year 3) |
|--|---|---|
| <ul style="list-style-type: none">• Target: 20 MW• Focus: Manufacturing, Warehousing• 70% CAPEX, 30% RESCO• Deliver anchor projects | <ul style="list-style-type: none">• Target: 50 MW• NBFC partnerships (HDFC/ICICI)• Digital MSME funnel• Channel partner network | <ul style="list-style-type: none">• Target: 100 MW• Aggregator marketplace• AI site assessment• IoT-based O&M |

FINANCIAL PROJECTION (3 YEARS)



- Revenue: ₹80 → ₹200 → ₹400 crore
- EBITDA: ₹9.6 → ₹28 → ₹60 crore
- Margins: 12% → 14% → 15%

Key takeaway: Scalable and profitable trajectory.

KEY RISKS & MITIGATION

Risks

- DISCOM delays
- MSME financing gaps
- Local EPC price undercutting
- Net metering policy changes
- O&M failures

Mitigation

- Focus early on Gujarat/MH
- NBFC partnerships
- Quality differentiation (5-year guarantee)
- State diversification
- SLA-driven O&M

A hybrid model with phased expansion delivers credibility, scale, and defensibility in India's fast-growing C&I rooftop solar market.