



adani

Renewables

Adani Green Energy Limited

Showcase Presentation

← →
Project Development Excellence

April 2021

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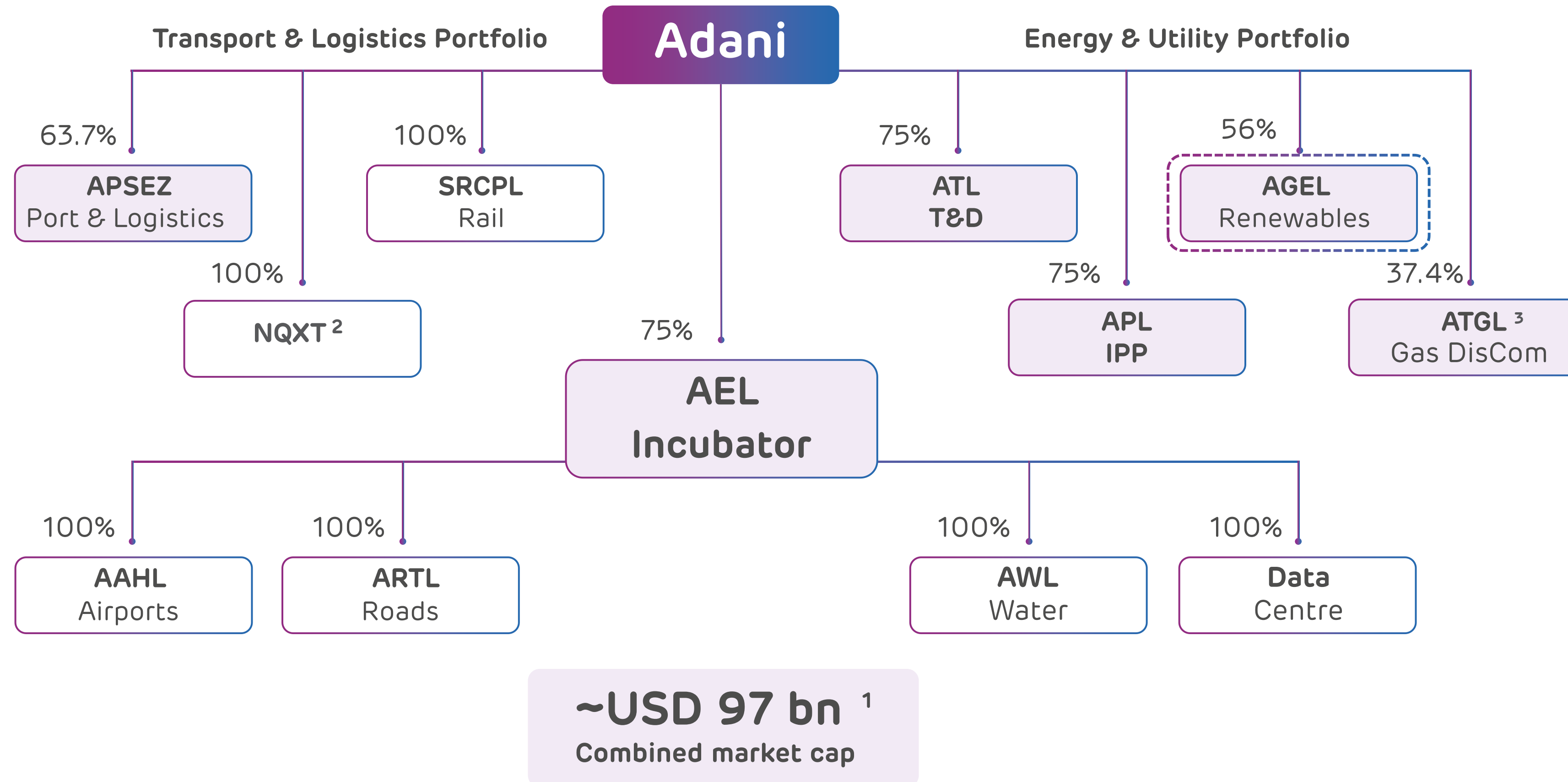
Annexure 1: Revolving Construction Facility

Annexure 2: ESG



Adani Portfolio





Adani

- **Marked shift from B2B to B2C businesses -**
- **ATGL** - Gas distribution network to serve key geographies across India
- **AEML** - Electricity distribution network that powers the financial capital of India
- **Adani Airports** - To operate, manage and develop eight airports in the country
- **Locked in Growth 2020 -**
 - Transport & Logistics - Airports and Roads
 - Energy & Utility – Water and Data Centre (JV with EdgeConneX)

Opportunity identification, development and beneficiation is intrinsic to diversification and growth of the group

1. As on Apr 1, 2021, USD/INR – 73.1 | Note - Percentages denote promoter holding
 2. NQXT – North Queensland Export Terminal | Light purple color represent public traded listed verticals
 3. ATGL – Adani Total Gas Ltd

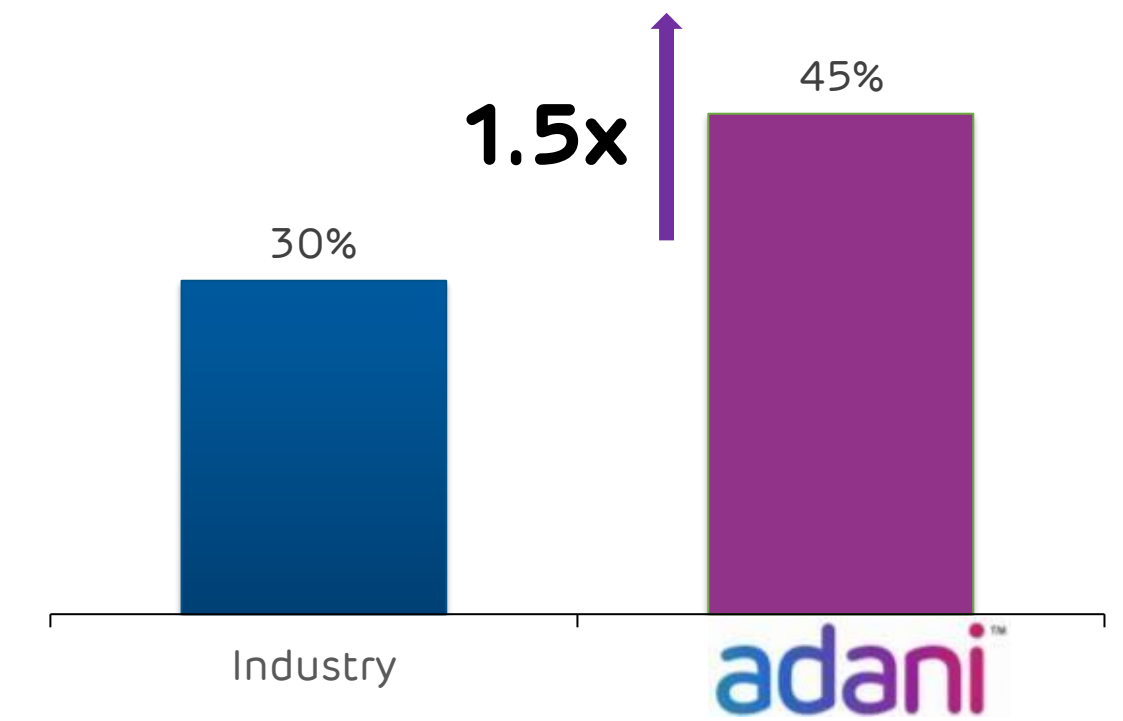
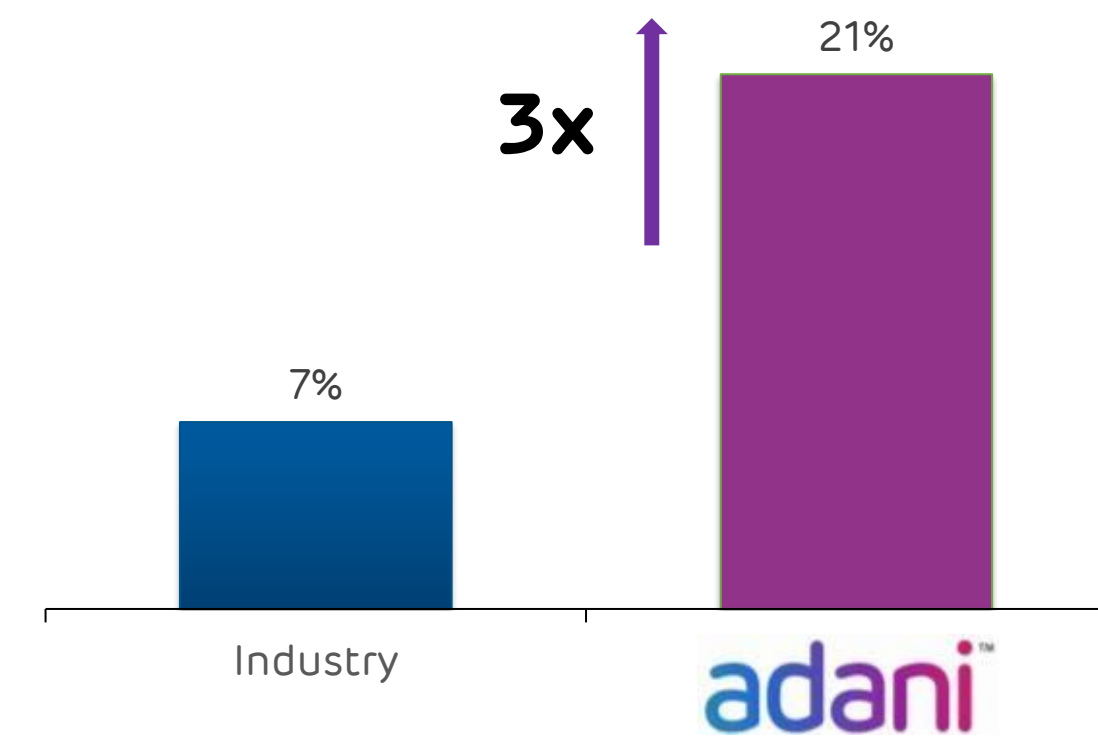
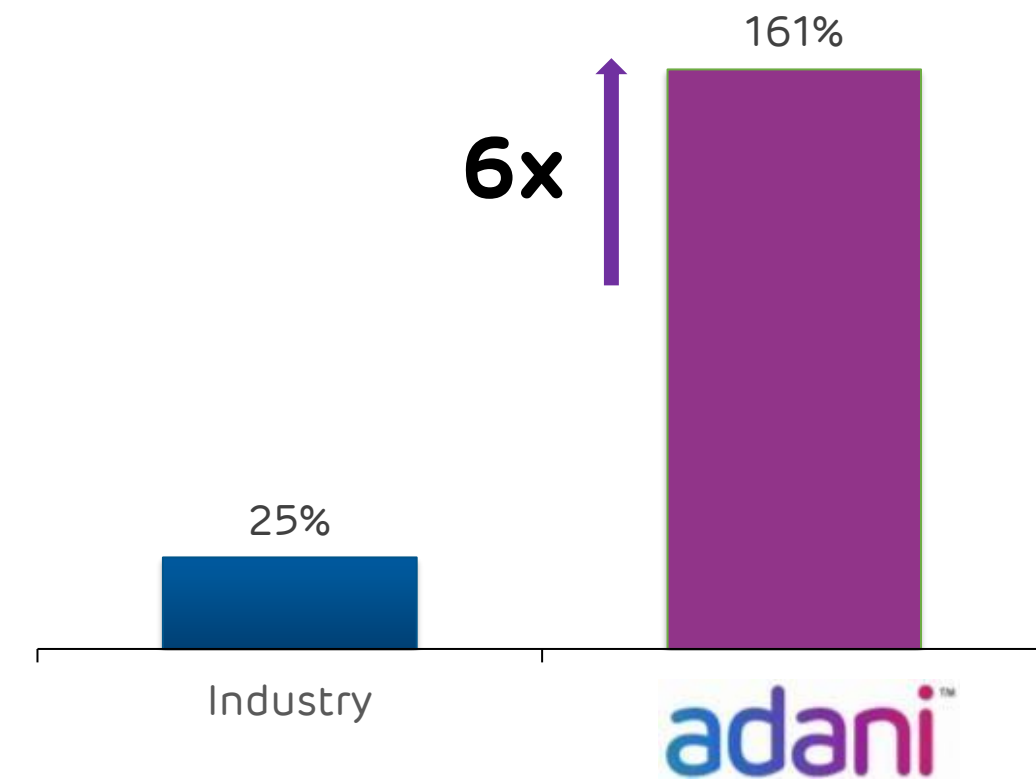
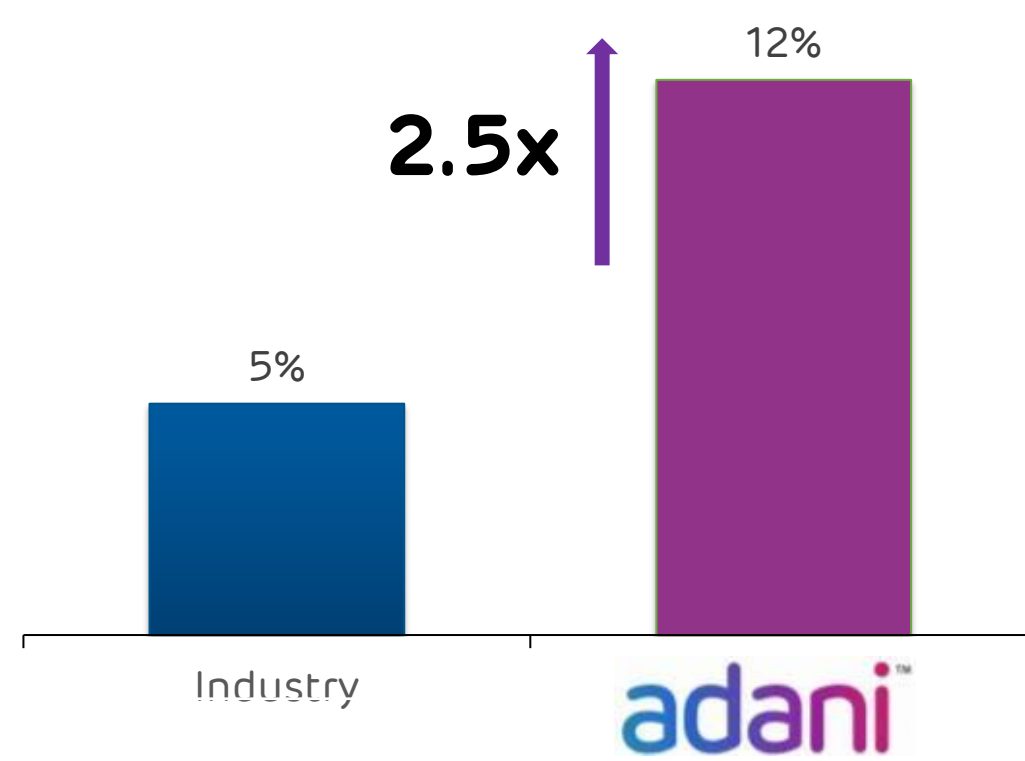
Adani Group : Decades long track record of industry best growth rates across sectors

Port Cargo Throughput (MT)

Renewable Capacity (GW)

Transmission Capacity (ckm)

CGD⁷ (GAs⁸ covered)

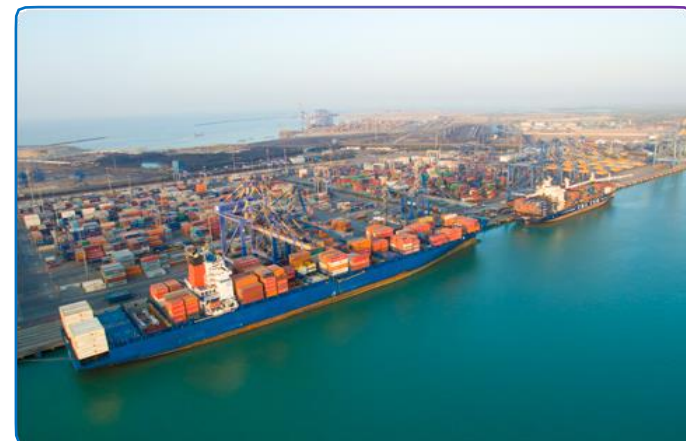


2014	972 MT	113 MT
2020	1,339 MT	223 MT

2016	46 GW	0.3 GW
2020	114 GW	14.8 GW ⁶

2016	320,000 ckm	6,950 ckm
2020	423,000 ckm	14,739 ckm

2015	62 GAs	6 GAs
2020	228 GAs	38 GAs



APSEZ

Highest Margin among Peers globally
EBITDA margin: 70%^{1,2}
 Next best peer margin: 55%



AGEL

World's largest developer
EBITDA margin: 89%^{1,4}
 Among the best in industry



ATL

Highest availability among Peers
EBITDA margin: 92%^{1,3,5}
 Next best peer margin: 89%



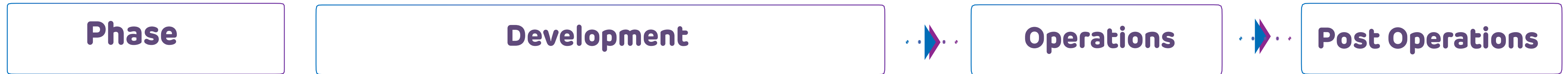
ATGL

India's Largest private CGD business
EBITDA margin: 31%¹
 Among the best in industry

Transformative model driving scale, growth and free cashflow

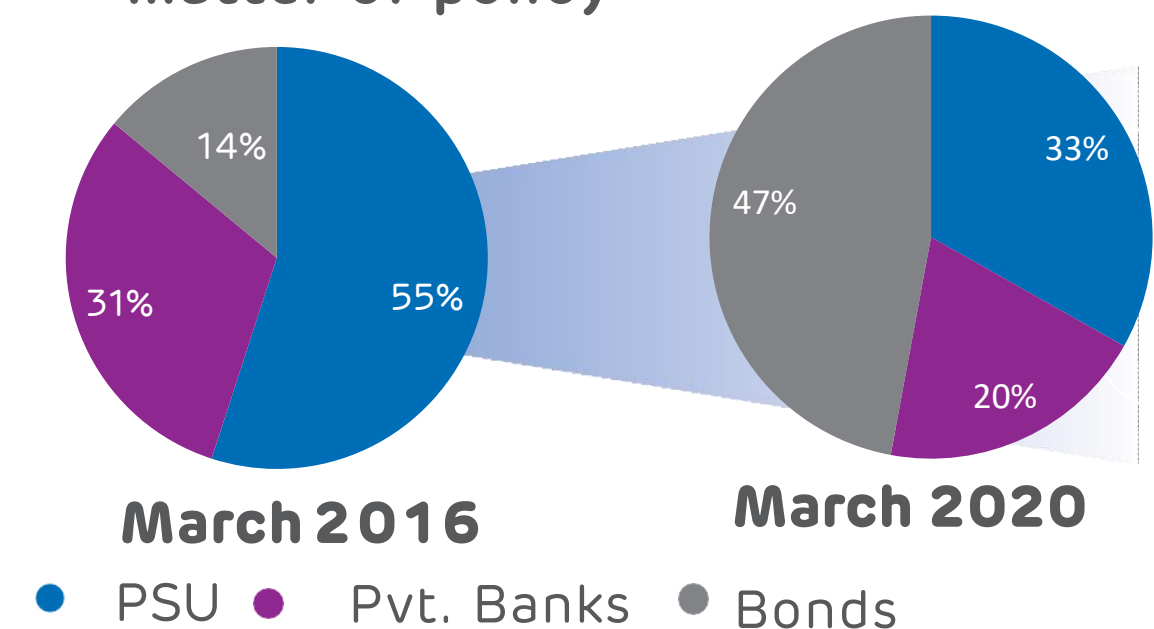
Note: 1 Data for FY20; 2 Margin for ports business only, Excludes forex gains/losses; 3 EBITDA = PBT + Depreciation + Net Finance Costs – Other Income; 4 EBITDA Margin represents EBITDA earned from power sales and exclude other items; 5. EBITDA margin of transmission business only, does not include distribution business. 6. Contracted & awarded capacity 7. CGD – City Gas distribution 8. Geographical Areas - Including JV | Industry data is from market intelligence

Adani Group : Repeatable, robust & proven transformative model of investment

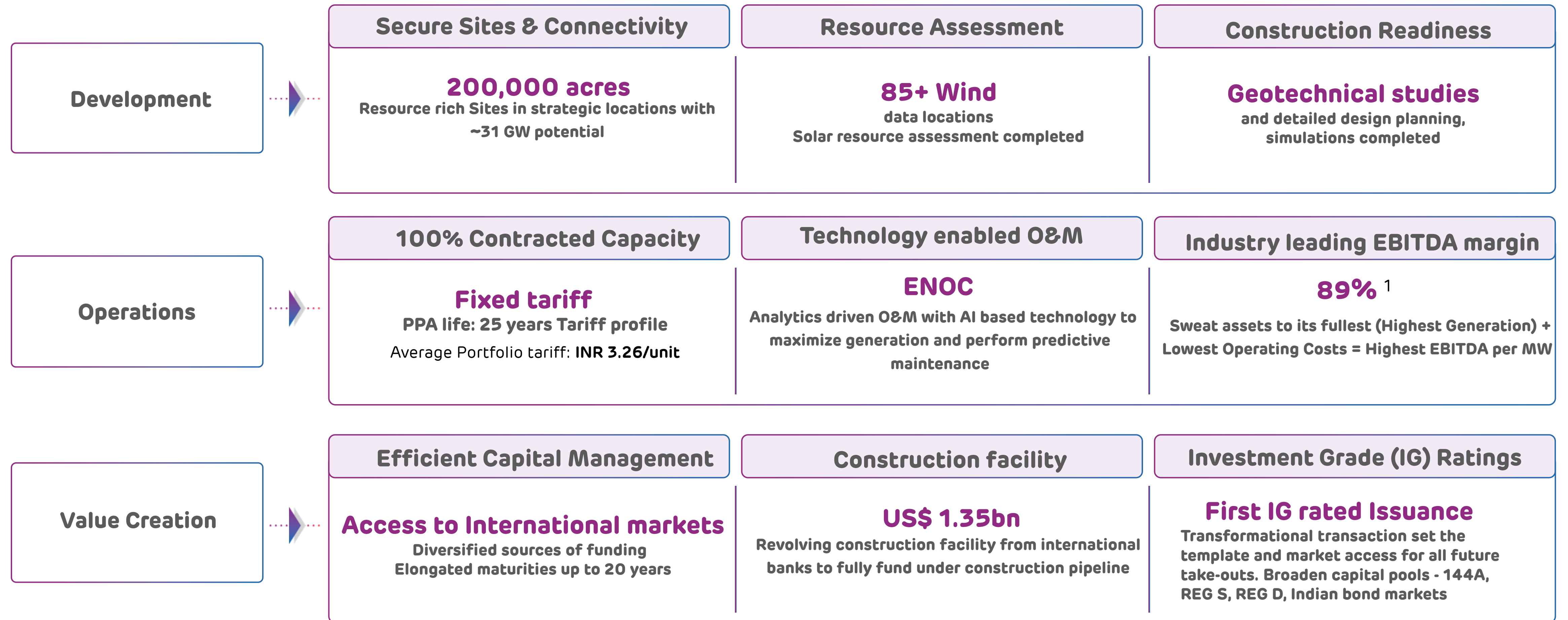


Activity	Origination	Site Development	Construction	Operation	Capital Mgmt
	<ul style="list-style-type: none"> Analysis & market intelligence Viability analysis Strategic value 	<ul style="list-style-type: none"> Site acquisition Concessions and regulatory agreements Investment case development 	<ul style="list-style-type: none"> Engineering & design Sourcing & quality levels Equity & debt funding at project 	<ul style="list-style-type: none"> Life cycle O&M planning Asset Management plan 	<ul style="list-style-type: none"> Redesigning the capital structure of the asset Operational phase funding consistent with asset life

Performance	Origination	Site Development	Construction	Operation	Capital Mgmt
	<p>India's Largest Commercial Port (at Mundra)</p> <p>Highest Margin among Peers</p>	<p>Longest Private HVDC Line in Asia (Mundra – Mohindergarh)</p> <p>Highest line availability</p>	<p>648 MW Ultra Mega Solar Power Plant (at Kamuthi, Tamilnadu)</p> <p>Constructed and commissioned in nine months</p>	<p>Energy Network Operation Center (ENOC) enables centralized continuous monitoring of solar and wind plants across India on a single cloud based platform</p>	<p>In FY20 issued seven international bond issuances across the yield curve totalling ~USD4Bn</p> <p>AGEL's issuance of \$1.35Bn revolving project finance facility will fully fund its entire project pipeline</p> <p>All listed entities maintain liquidity cover of 1.2x- 2x as a matter of policy</p>



AGEL : Replicating Group's Transformational Growth Profile



Note:

1. EBITDA margin from power supply in FY20

PPA - Power Purchase Agreement ; ENOC: Energy Network Operations Centre ; EBITDA: Earnings before Interest, tax, depreciation & amortization;

Adani Green Energy Limited

Company Profile

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Renewables

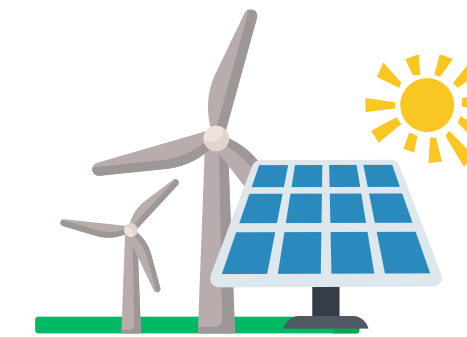


AGEL: Transformational Renewable Company



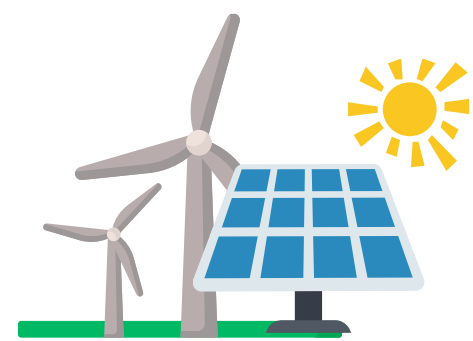
Largest Listed Renewable Company in India

3,470 MW – Operational
+ 2,870 MW – execution in 12 months



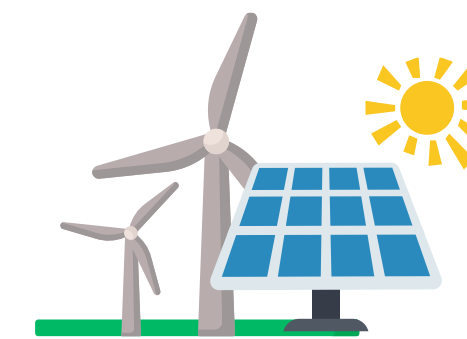
Site Plan

Over 30 GW sites identified & under acquisition



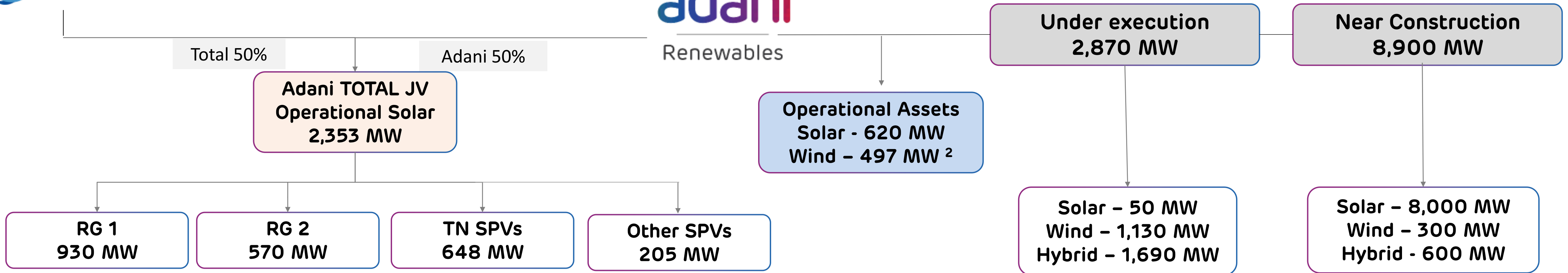
Near Construction

8,900 MW



Tender Pipeline

4,800 MW - Emerged L1 bidder¹
~ 7,000 MW - Upcoming tenders



Business and asset development philosophy mirrors Group's focus on Quality Development, Operational Efficiency and Robust Capital Management

1. Declared L1 bidder for projects including (i) solar tender for 3000 MW with green-shoe option for 1,500 MW from Andhra Pradesh Green Energy Corporation Ltd. (iii) Solar tender for 150 MW with green-shoe option for 150 MW from Torrent Power Ltd

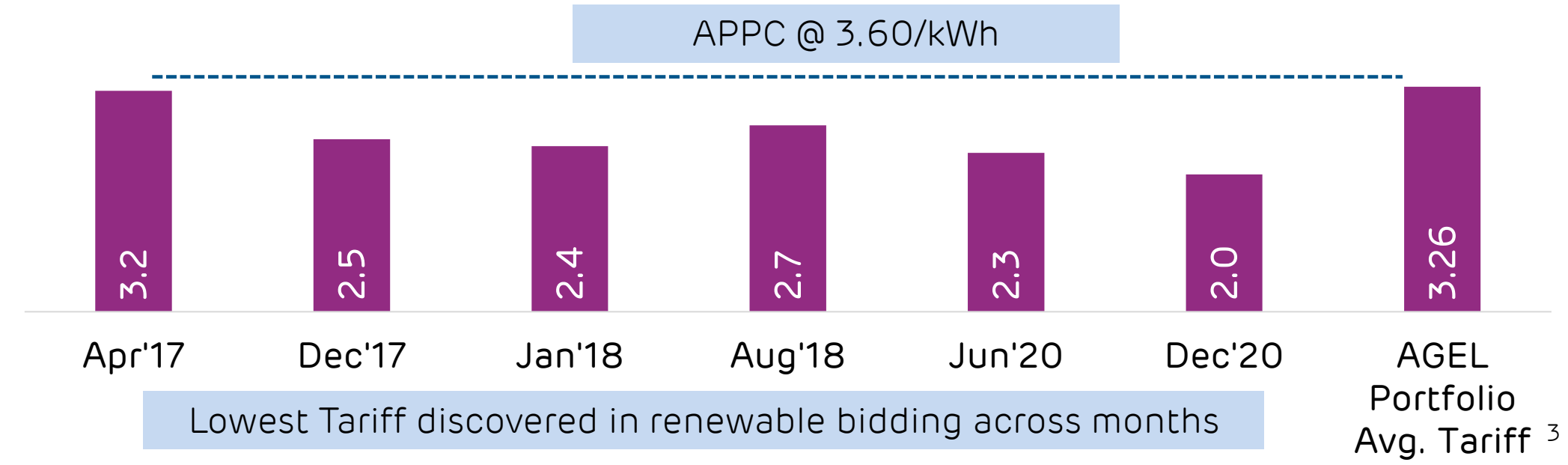
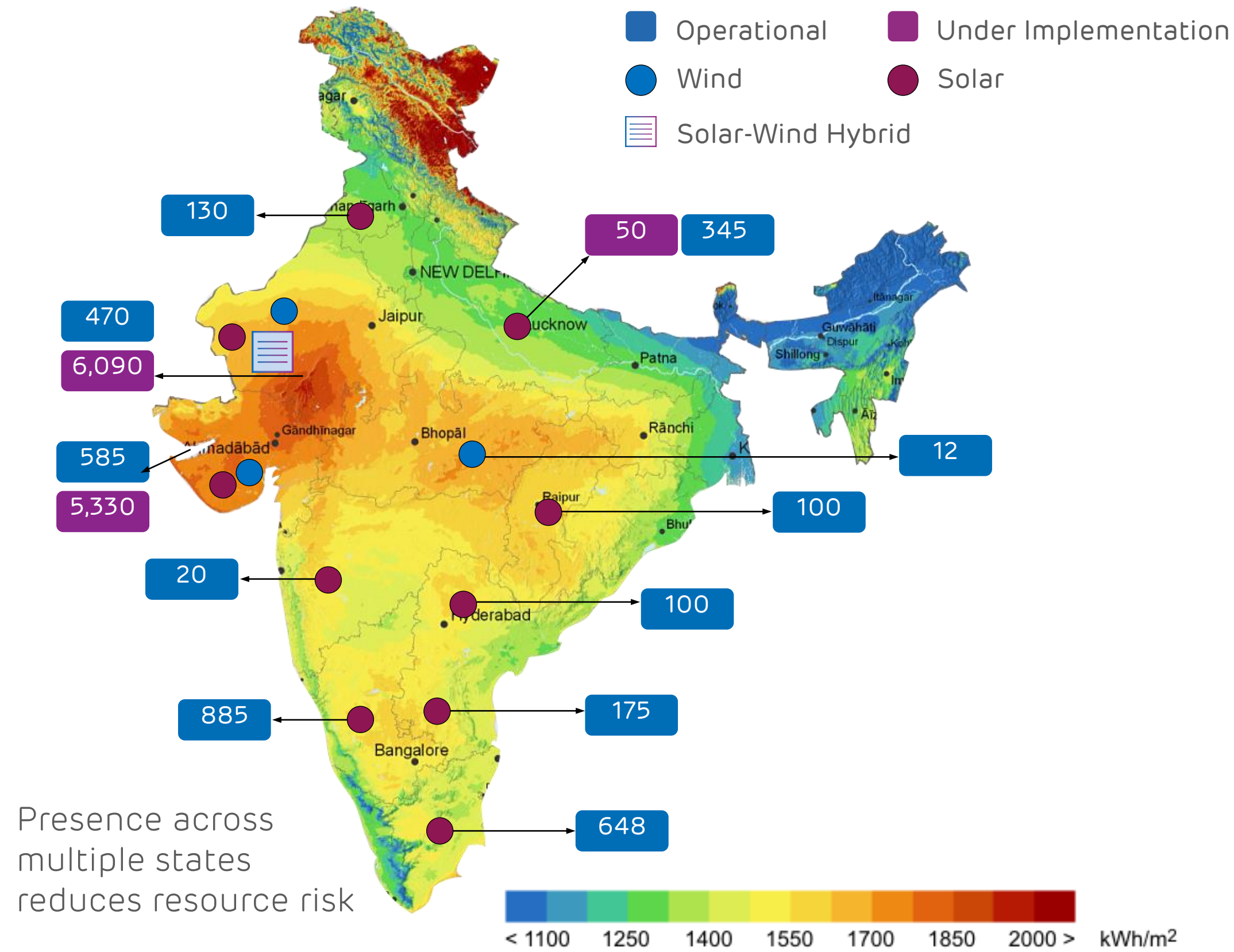
2. Includes 150 MW wind assets under acquisition from Inox

RG1: Restricted Group 1, RG2: Restricted Group 2 ; SPV: Special Purpose Vehicle

AGEL: Large, Geographically Diversified Portfolio

15,240 MW Portfolio¹ | 3,470 MW operational

Average AGEL tariff below APPC²



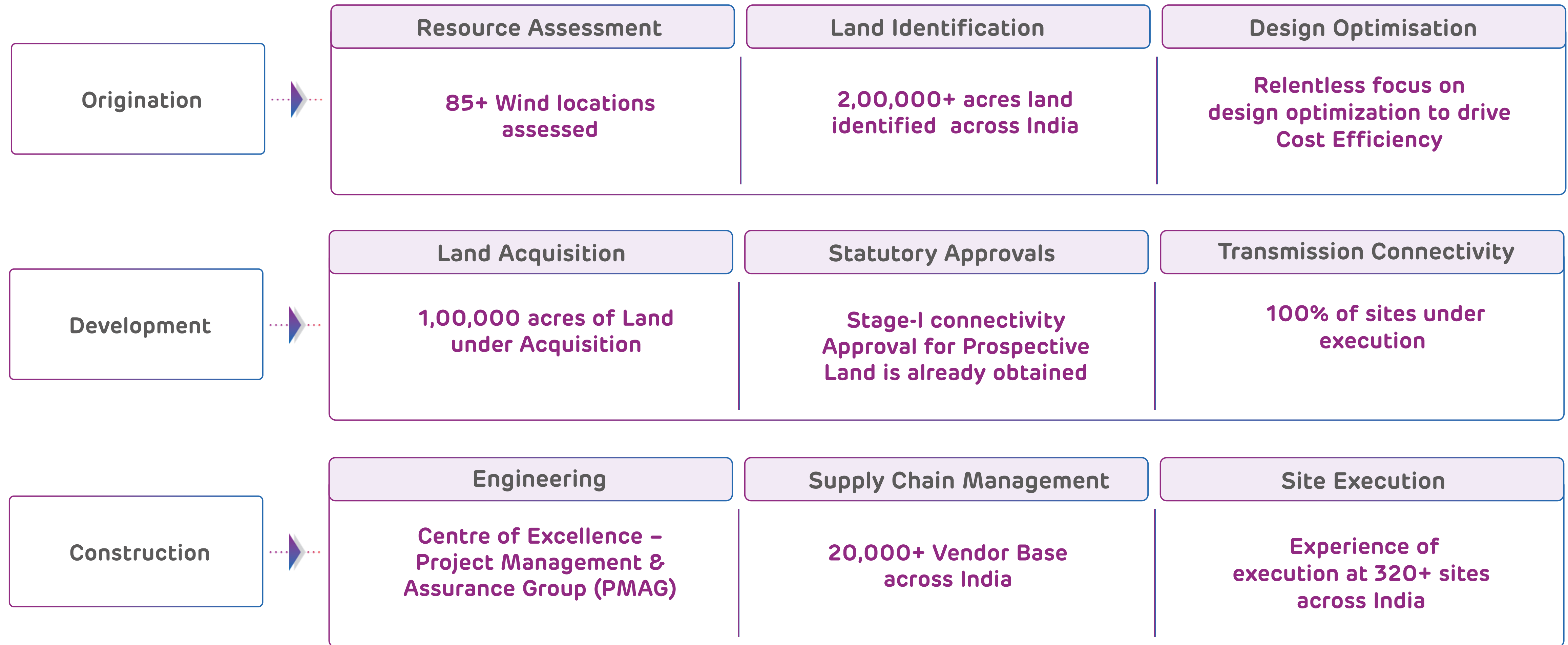
- 78% Sovereign Counterparties
- Resource and Counterparty Diversification
- Presence across 11 resource-rich states and 14 different counterparties
- 100% Contracted portfolio
- Fully Contracted Portfolio
- 25-year fixed tariff PPAs

Ranked as Largest Solar Power Developer in the World by US based MERCOR Capital

1. Includes 150 MW wind assets under acquisition from Inox
 2. APPC: National average power purchase cost
 3. Average portfolio tariff for overall renewable portfolio of 15.2 GW

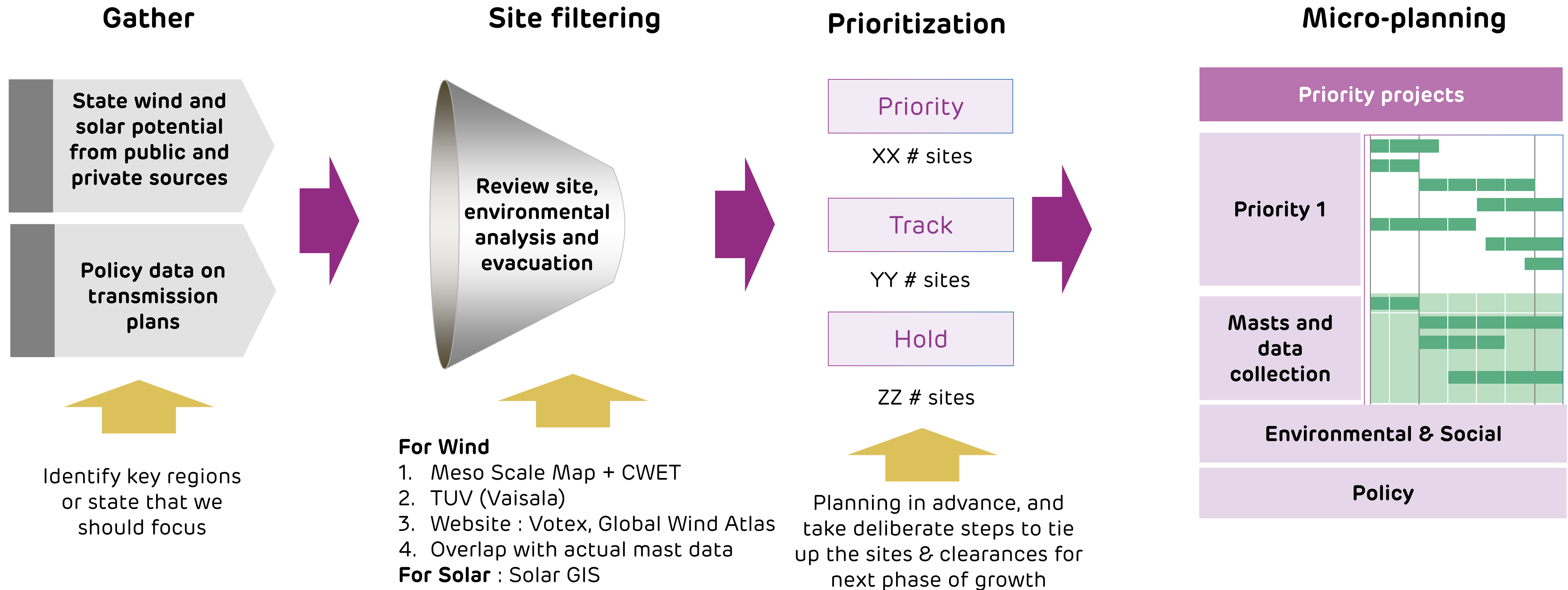
Project Development Excellence





Advance de-risking for potential pipeline with focus on most critical resource – Strategic Sites

Systematic Approach to identify resource rich sites in order to de-risk future development



Locking-in Strategic Sites → Nurture specific sites into projects by Central Project Management Assurance Group

Project Management & Assurance Group

End-to-end Integration from Origination to Execution with Centralized PMAG

Realtime monitoring with Integrated Project Management tool
developed in-house with single source of truth concept

Stage 1 - Site Origination

- Land identification
- Stakeholder identification
- Resource assessment
- Evacuation feasibility
- Site accessibility
- Plant design
- Construction resource availability

Stage 2 - Site Development

- Land acquisition
- Statutory approvals
- Site infrastructure
- Transmission line route survey
- Site geo-tech survey
- Stakeholder management
- Approach road


Stage 3 - Execution

- Detailed engineering
- Supply chain management
- Project construction
- Quality assurance
- HSE excellence
- Risk mitigation
- O&M readiness

PMAG has delivered complex renewable power projects in past and continues to enable accelerated growth



- Developed **648 MW**, then the world's largest solar power plant at a single location, in Kamuthi, Tamil Nadu
- Mammoth execution undertaken in **less than 9 months**, of which 2 months featured the worst floods in recent history of Tamil Nadu
- Featured on **National Geographic special – Megastructures – India's Solar Power House** [<https://www.youtube.com/watch?v=gM-0lrlxCnE&t=1697s>]

 Acquired **2,340 acres** of private land, project executed over area of 15 sq. km

 **380,000 foundations** constructed on site


 2.5 mn solar modules

 **8,500 personnel deployed** at site during peak hours

 Handled **6,000 containers** from 9 countries in 6 months

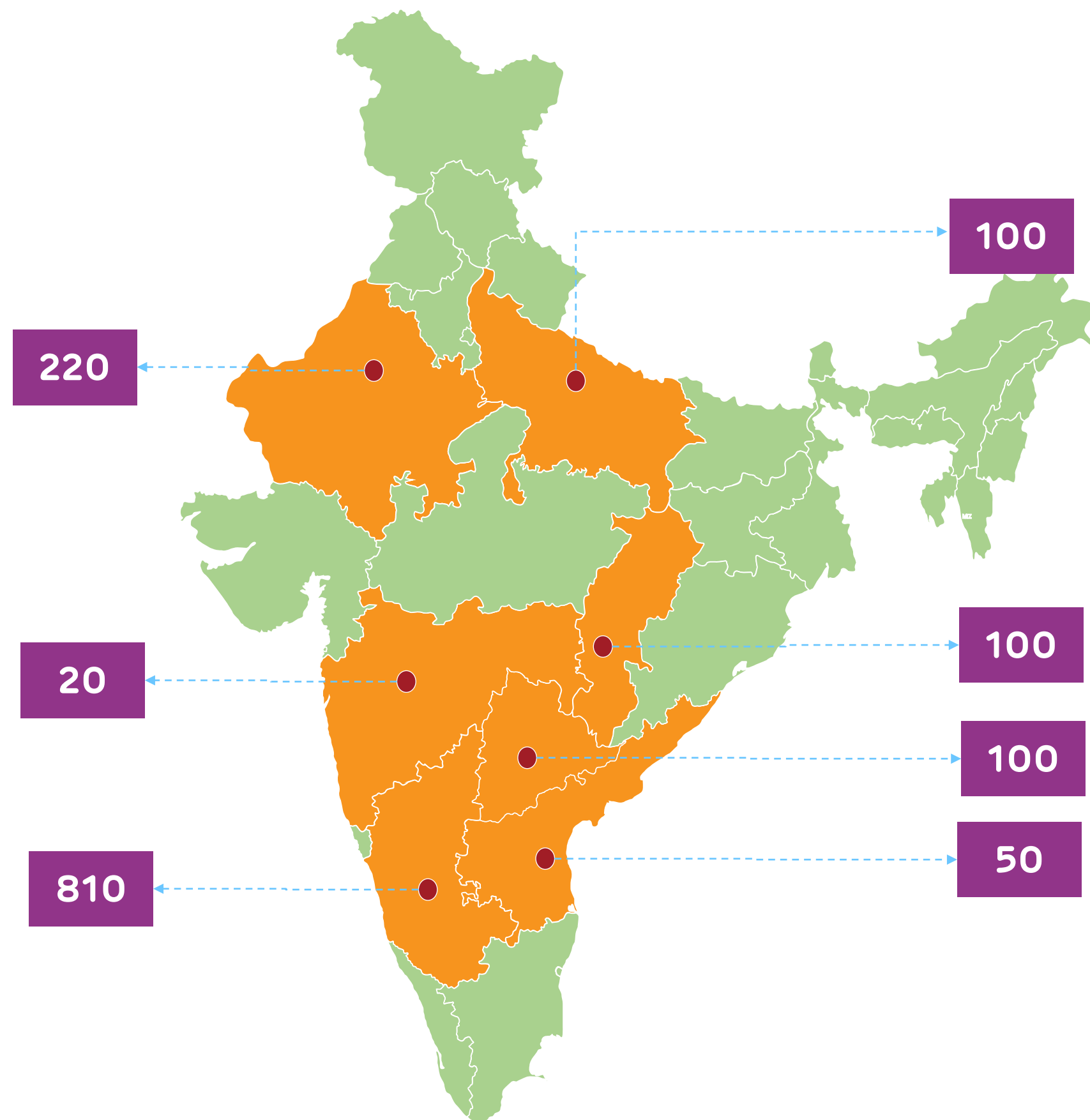
 **30,000 Tonnes of cement consumed**, perimeter fencing of 62 km

 550 inverters

 Readiness of 216 MW switchyard from ground breaking to commissioning achieved in 49 days

World's largest solar plant development at a single location in record time of 9 months featured in National Geographic

Projects across Diversified Geographic Locations

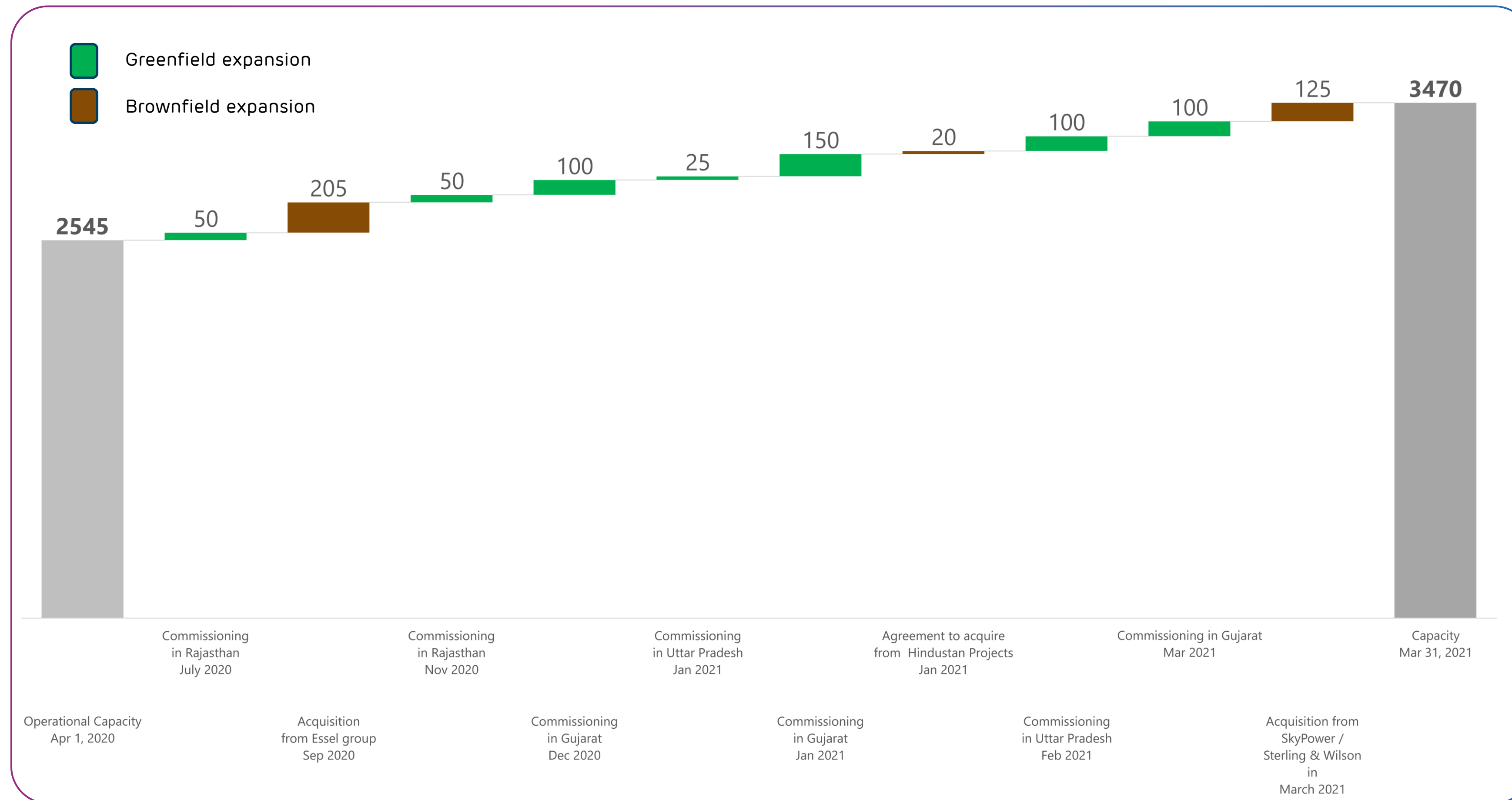


- **33 projects executed simultaneously across 7 states in India despite disruptions like:**
 - **GST** (July 2017): Uncertainty in GST implementation led to delay in dispatch of equipment by vendors
 - **Demonetization** (Nov 2016): Site acquisitions were on standstill because of uncertainty amongst sellers regarding transactions
- **Executed projects on time despite the challenges** working relentlessly with multiple stakeholders including vendors and site acquisition dealers to help them overcome the issues
- **Varying topography, terrain and soil conditions at each site** addressed effectively through our engineering and design capability
- **High quality standards maintained** leading to superior plant availability and generation

Demonstrated execution capabilities by executing 33 projects amidst two largest economic disruptions

AGEL: Capacity Addition 925 MW in FY21 despite ongoing pandemic

(All figures in MW AC)



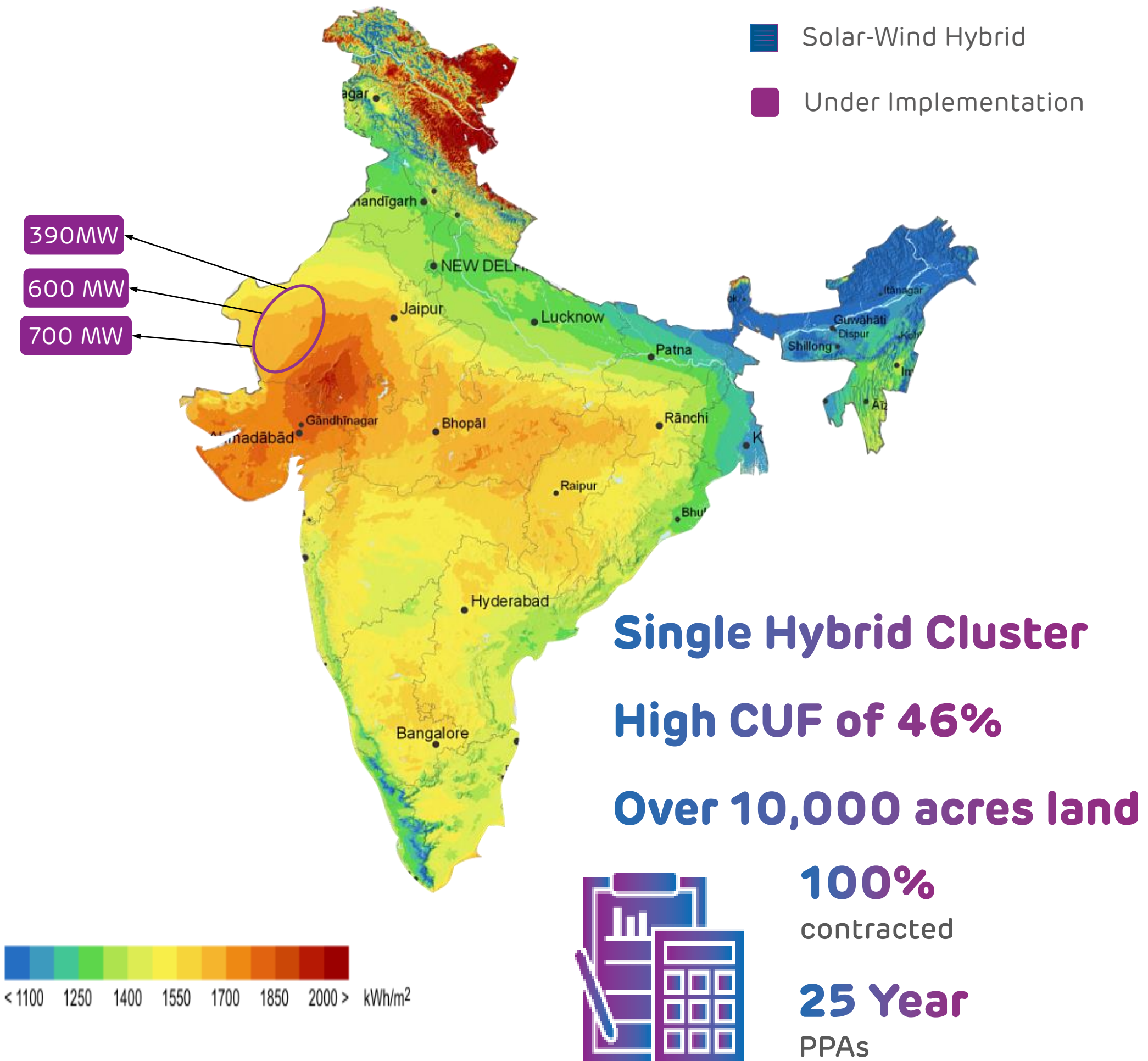
- ✓ Despite Covid pandemic related disruption & lockdown AGEL added 575 MW projects within timelines
- ✓ Above projects commissioned up-to 160 days ahead of scheduled COD
- ✓ Ensured 100% adherence to modified EHS guidelines for COVID

Commissioned solar & wind plants ahead of scheduled COD despite the pandemic

Case Study: India's largest Hybrid Cluster Development



Strategically located near Jaisalmer, Rajasthan



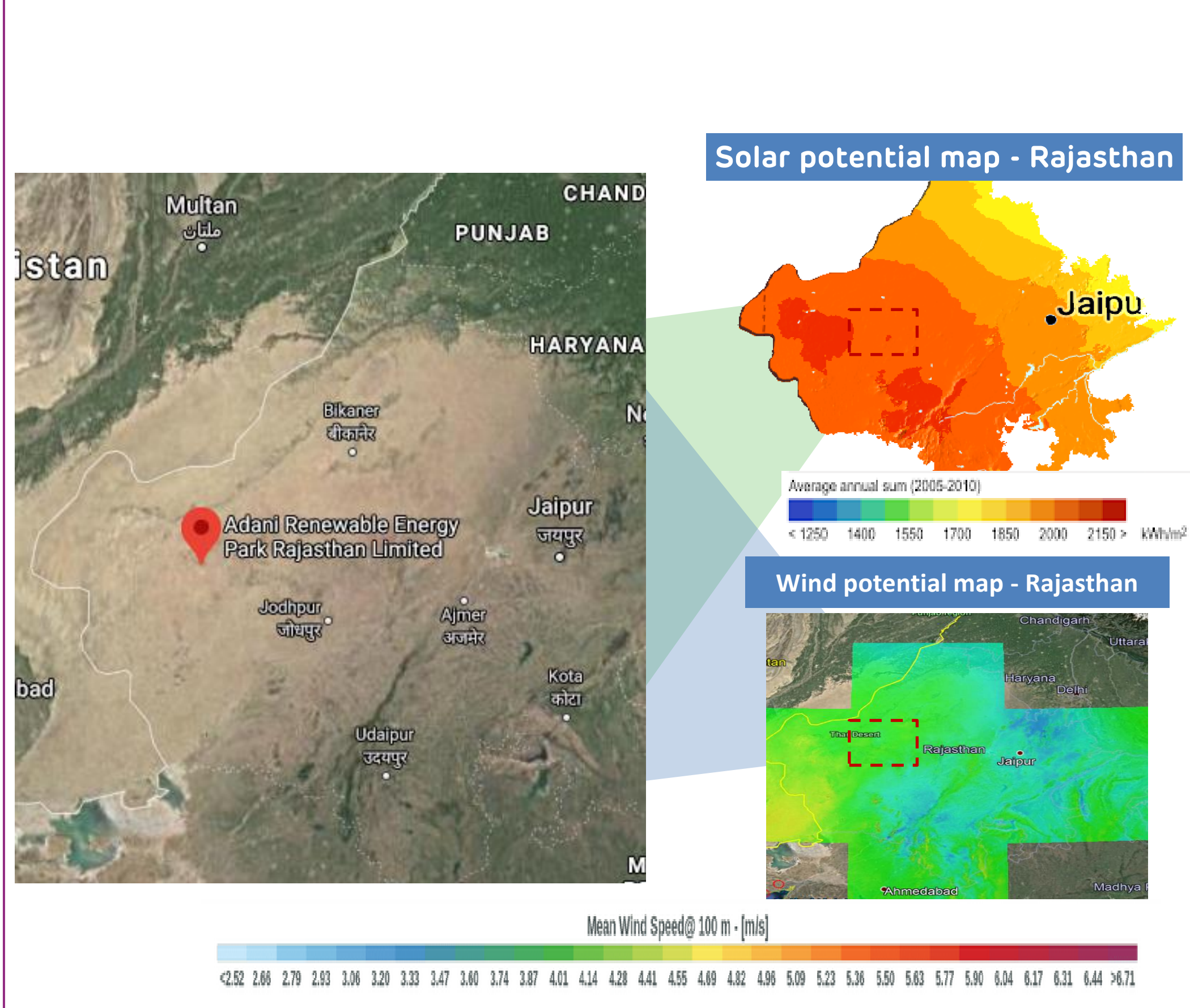
Project Snapshot

Particulars	Project 1	Project 2	Project 3	Total
PPA Capacity (MWac)	390	600	700	1,690
Solar (MWac)	360	600	600	1,560
Wind (MWac)	101	151	510	762
Counterparty	SECI	SECI	AEML	
Counterparty Type	Sovereign	Sovereign	Sovereign equivalent rated	
Solar Module make	Longi	Longi & Jinko	Jinko	
Wind Turbine Generator make	Suzlon	Suzlon	Siemens Gamesa & Suzlon	

Largest Hybrid Cluster in India spread over 10,000 acres of land

Stage 1: Site Origination fully de-risked well in advance

Strategically identified Ideal location for both Solar & Wind



Source : Solar GIS, Global Wind Atlas

Perfect location for Hybrid

Solar irradiation of **2000 kWh/ sqm** – top 5 in India
 Ideal Wind speed of **7 meters/ second**
 Ample availability of **Non-agricultural Barren land**

Cluster based approach

All projects in a **Single Cluster** around Fatehgarh
 Enabling **Significant scale efficiencies**

Well planned Evacuation

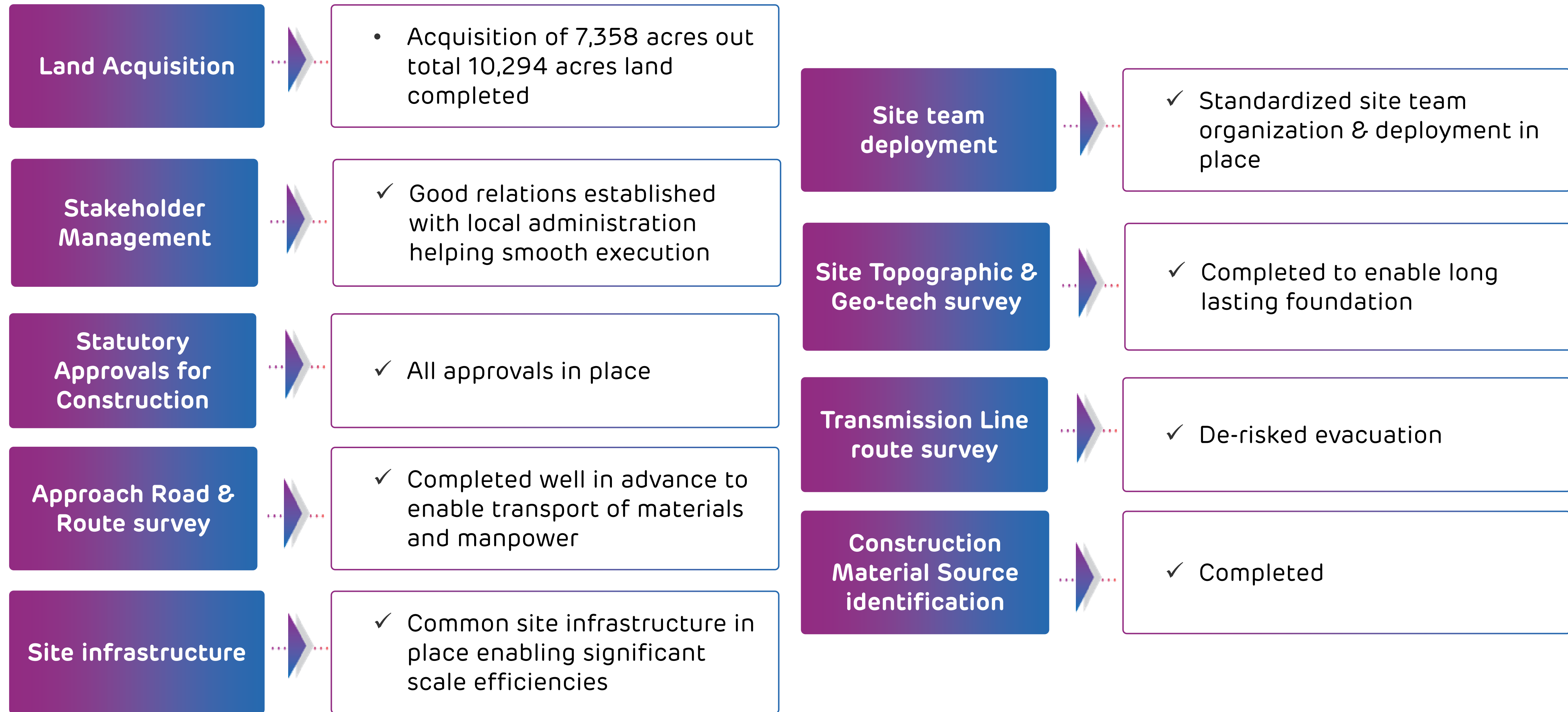
Connected to Central Grid
 Distributing Power across India through **High-capacity transmission lines including 765kV**

All site origination activities completed in advance

- ✓ Land Identified
- ✓ Stakeholders Identified
- ✓ Resource Assessment completed
- ✓ Evacuation Feasibility completed
- ✓ Site Accessibility in place
- ✓ Plant Design & Optimization completed
- ✓ Site Suitability Report in place
- ✓ Construction Resource Availability ascertained
- ✓ Logistic Feasibility & Route Survey Walkthrough in place
- ✓ Construction Material Source Identification completed

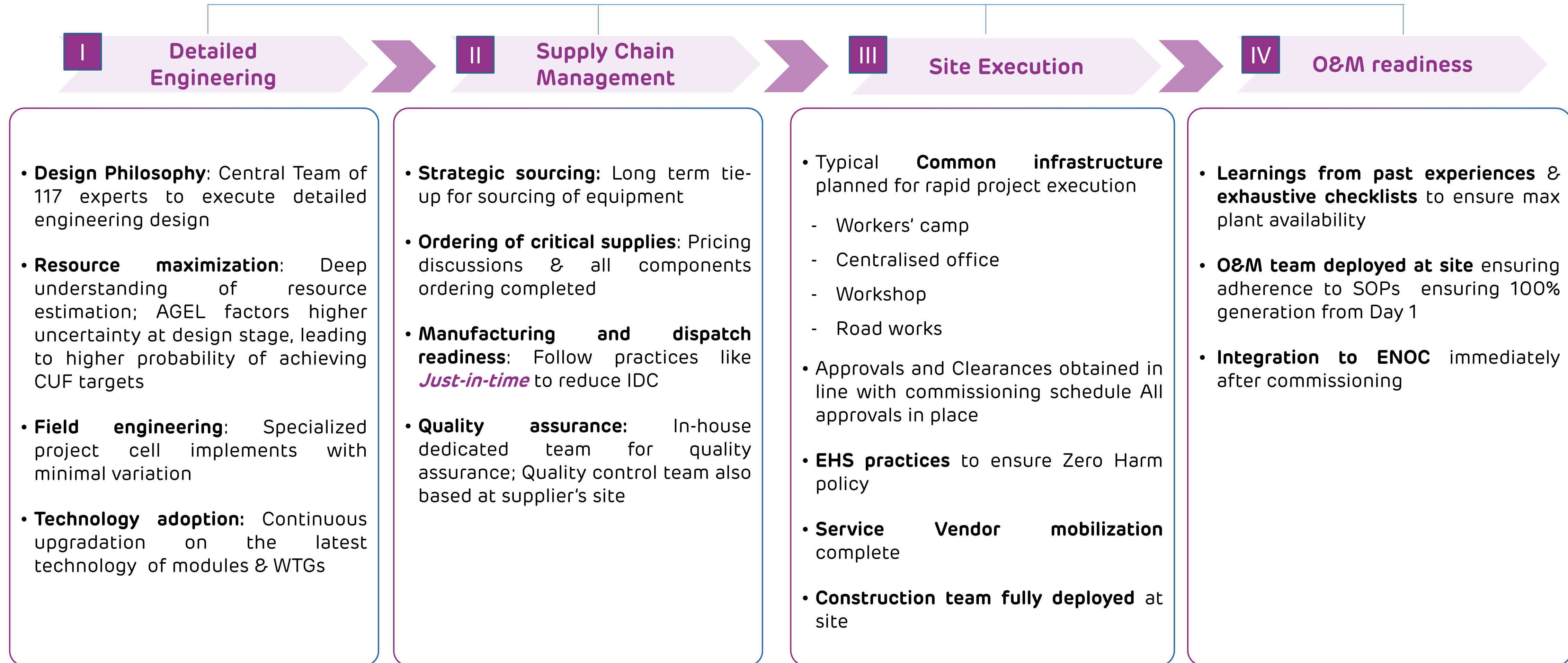
De-risked project development with 3 years of advance resource estimation

Stage 2: Site Development mostly de-risked



Well-planned Site development enables Speedy & Error-free Execution

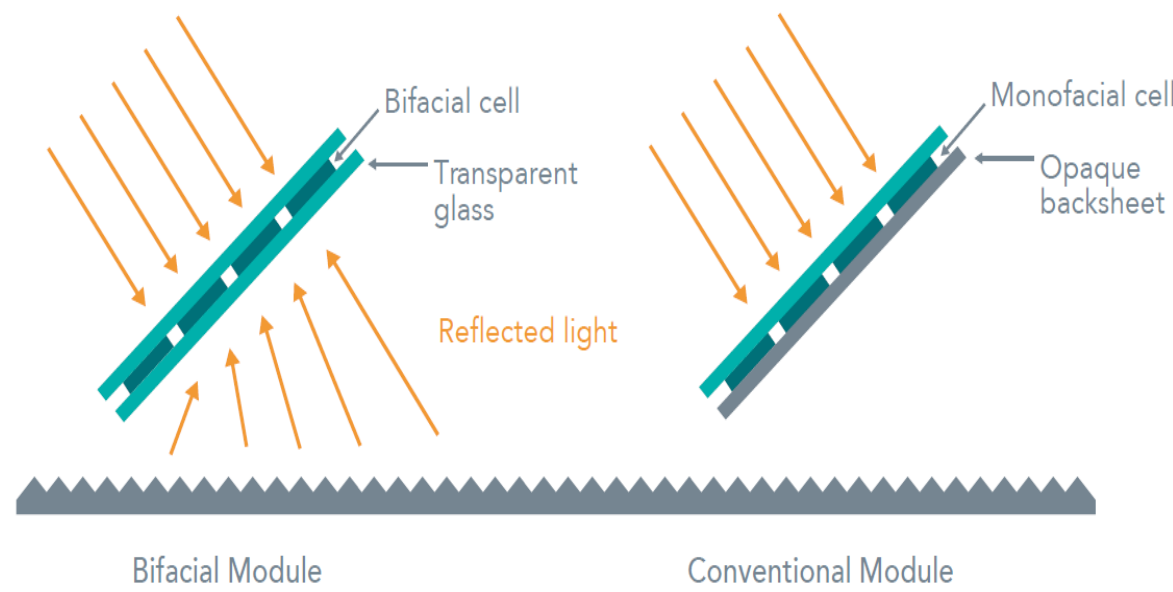
Stage 3: Execution in progress



Tightly Woven & Interlinked Disciplines With Proven Strengths, Enabling delivery of Large Projects from Plan to Operational Readiness

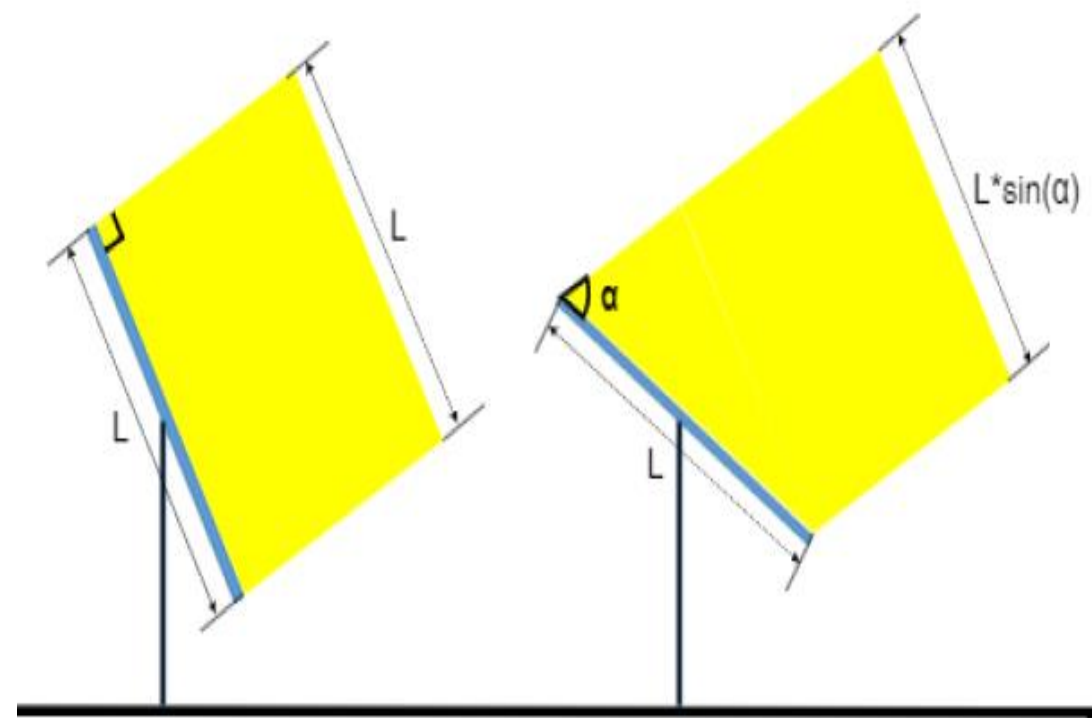
Solar – Latest Technology to enable highest CUF

Bifacial Modules



Solar power generation from both sides of the panel

Horizontal Single-Axis Tracking system



Tracks the sun throughout the day to capture optimal solar irradiation

Modules are fixed on the mounted Structure & will be rotated around a horizontal axis

Wind – Technology enhancement

Turbine on Jacket sub-structure



Turbine on jacket substructure extended by tubular tower to capture higher wind resource

High CUF
~46%

Advanced Technology adoption leading to Higher Electricity generation

Standardised ESG Practices

Study/ Assessment	Agency
Environment & Social Impact Assessment (ESIA)	
Critical Habitat Assessment (CHA)	
Human Rights Risk Assessment (HRRA)	
Climate Change Risk Assessment (CCRA)	
Environment & Social Due Diligence (ESDD)	
Bird & Bat Monitoring Report	

- Standardized ESG practices consistently implemented across all the projects
- Efforts to enhance local livelihood and support animal and bird habitats

Community Engagement & Social Initiatives

- **Winterwear distributed** to 3,500 children in the project vicinity
- **Sports kits distributed** to 14 nearby schools benefiting 2500 children
- **Health Equipment provided** and conducted activities for improvement of health & sanitation benefiting 4,500 people
- **Installed street lights** in 9 villages benefiting 15,000 people
- **Covid Relief Activities carried out** benefiting 900 people

Focus Area: Education, Community Health, Livelihood and Infrastructure Development

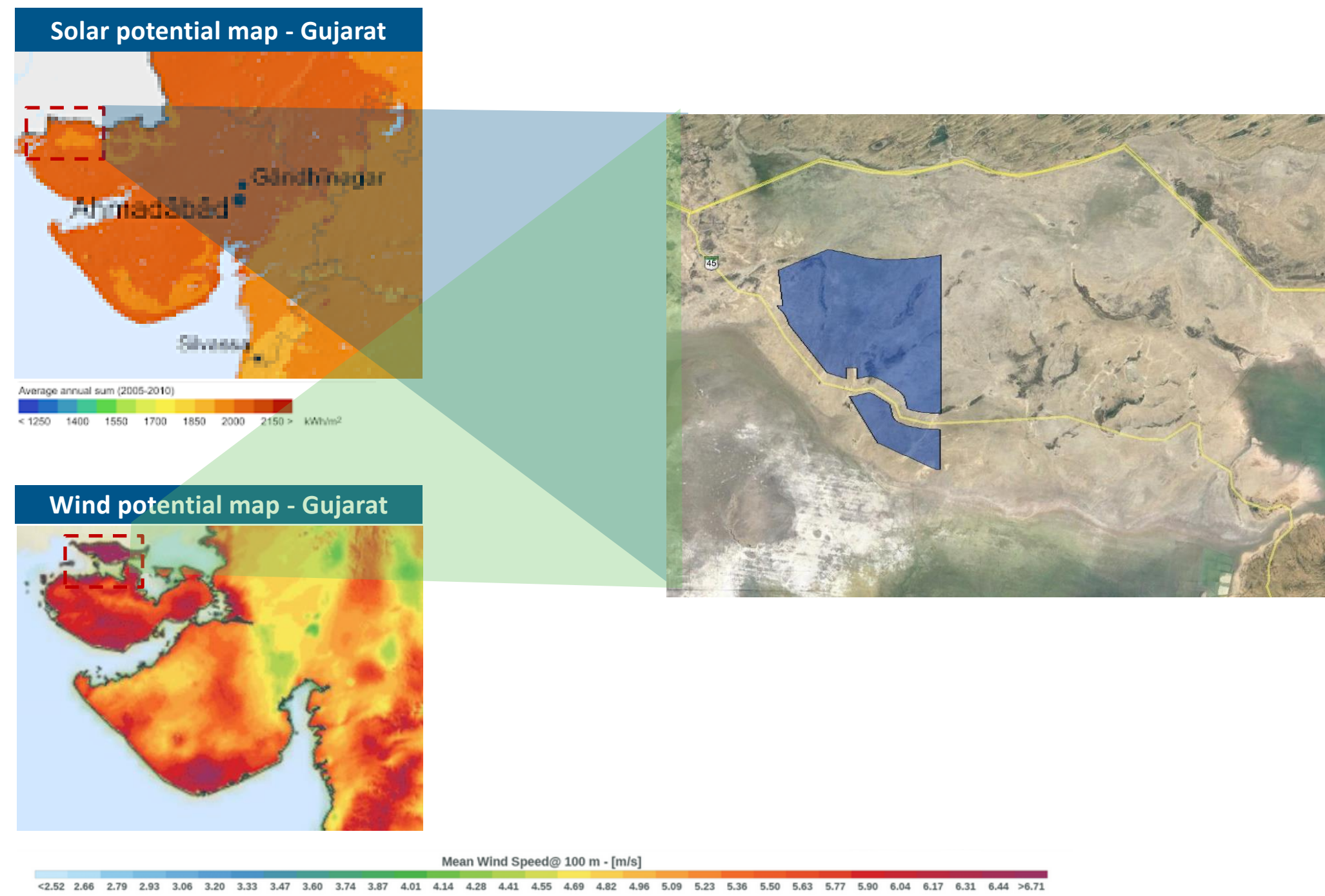


Hybrid Cluster in Rajasthan will electrify over 1.3 mn homes & avoid CO₂ emission of 5.8 mn ton

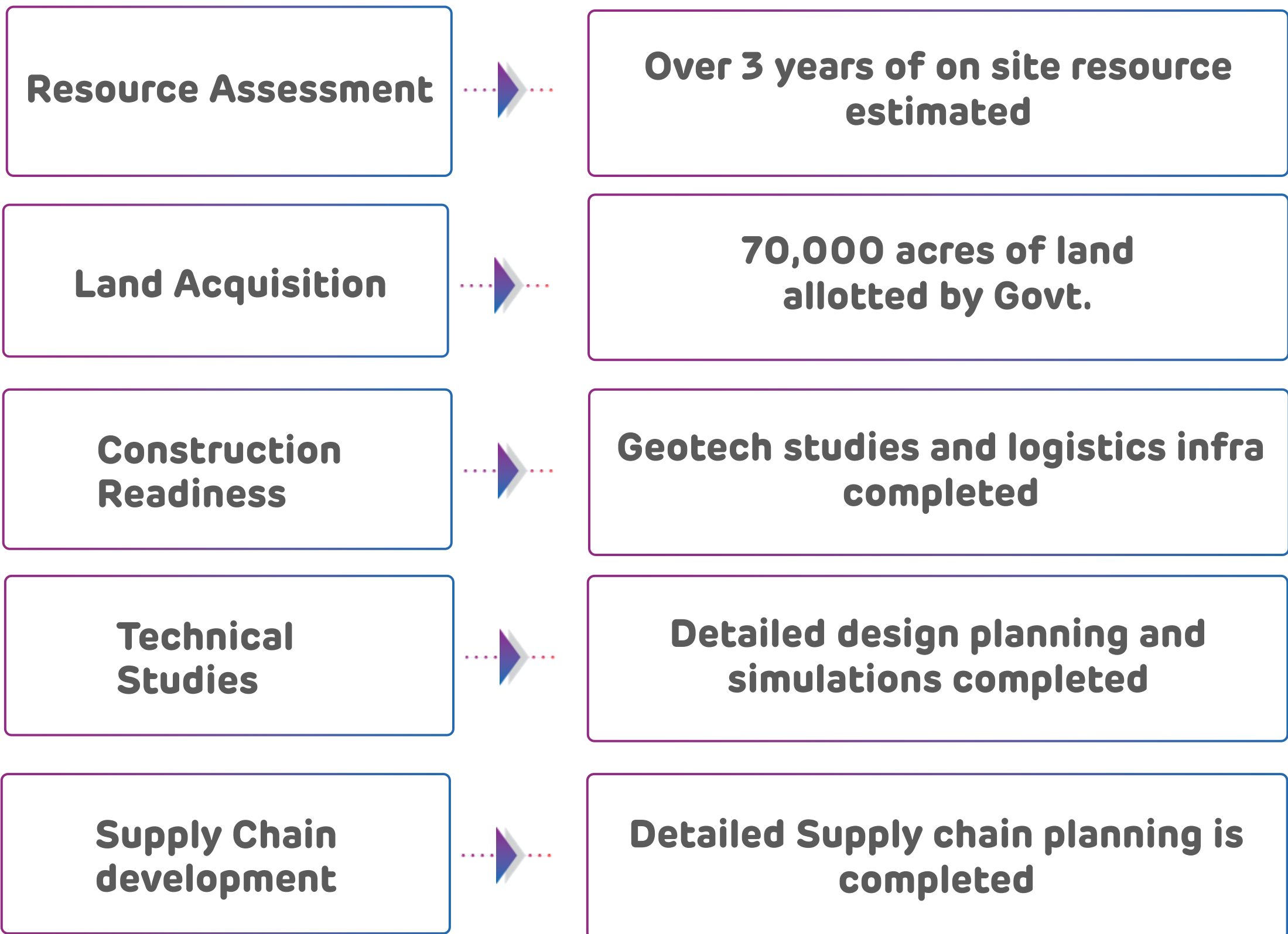
AGEL – Readiness for next phase of Growth



Site area 2.7x of Paris City



Source : Solar GIS, Global Wind Atlas; RE stands for Renewable energy



Land for ~ 15 GW tied up & additional ~ 15 GW identified to cater to future growth

Studies conducted to ensure site readiness

Geotechnical Investigation: To obtain information on the physical properties of soil earthworks and foundations for proposed structures

Centrifuge Model Study: To check strength, stiffness and capacity of foundations

WTG Foundation Designs Optimization: To check optimal design of a wind turbine foundation

Site Specific Corrosion Studies: To check effect of surrounding environment on module mounting structure

Consultants

**CEG-Jaipur / KCT-Ahmedabad / Unique-Bhuj
Geotech-Ahmedabad**

Cambridge University

**G&P, Malaysia / Arup, UK / Royal Haskoning,
Netherlands / F&R, Germany / AMSC, Austria**

Certified NACE Consultant: M/s COPRS

Advanced studies conducted by best-in-class global consultants to ensure site readiness

Investment Rationale - AGEL

Project Development Excellence

- ✓ De-risked project pipeline through Advance resource estimation, design & supply chain planning
- ✓ Consistent & Error-free execution with:
 - Centralized coordination by Project Management & Assurance Group (PMAG)
 - Systematic and standardized development process with detailed SOPs

O&M Excellence

- ✓ Analytics driven O&M through Energy Network Operation Center (ENOC) ensures consistent Solar Plant availability of ~ 100%
- ✓ Industry leading EBITDA from Power Supply of ~ 90% backed by O&M excellence
- ✓ Ability to scale up capacities through analytics driven O&M platform

Disciplined & Transformational Capital Management

- ✓ Revolving Construction Facility of USD 1.35 bn ensures financing up to 25 GW
- ✓ First investment grade bond issuance (RG2) with maturity close to PPA term thereby giving access to wide pool of capital at finer rates and de-risking debt servicing
- ✓ Monetization of Capital Formation through Strategic Alliance with TOTAL (invested USD 2.5 bn), a global utility major, enhances AGEL/ founders' liquidity to propel future growth and incorporate best management practices

De-risked & fully funded growth up to 25 GW by 2025 thus creating immense value



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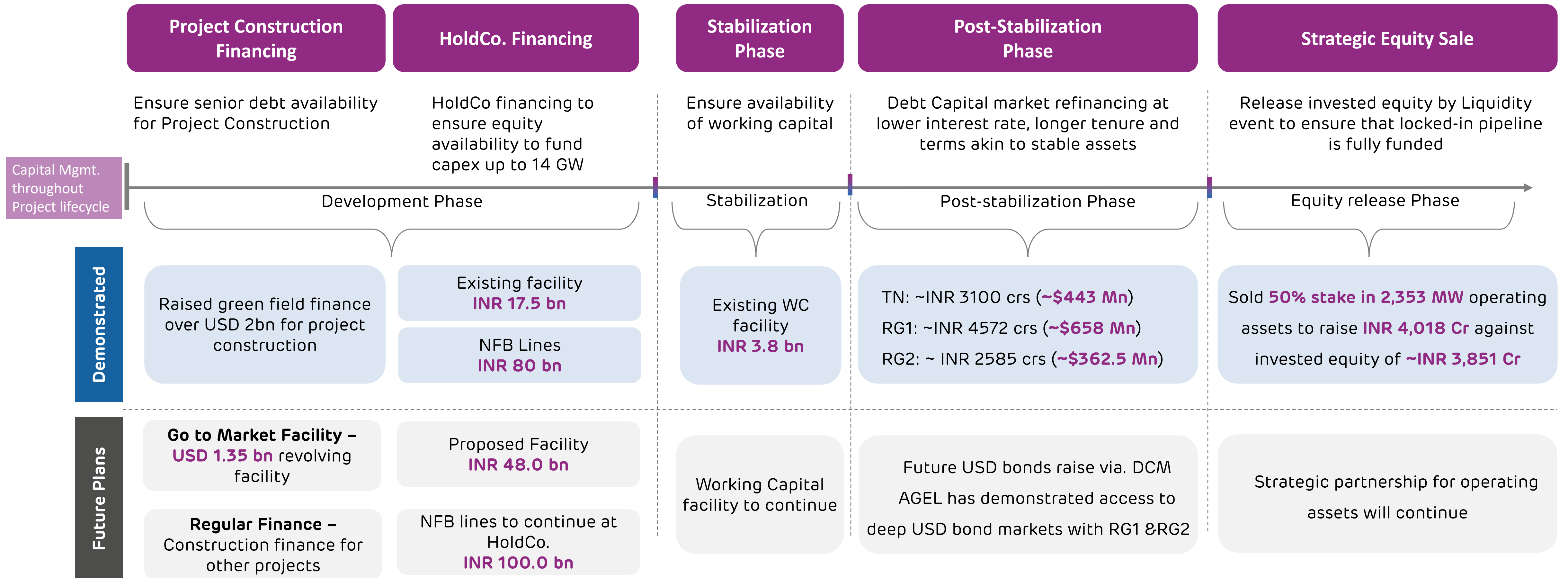
Thank You

Annexure 1

AGEL: Revolving Construction Facility



Maximize FCFE → Cash reinvested for growth → Multiply FCFE



Maximising Stakeholder Value & De-risking projects with Disciplined Capital Management

Construction Facility in Context – Largest International Project Finance Transaction in India

Activity	Agency
EYA	AWS TRUEPOWER
ESIA, CHA, Bird & Bat Monitoring	ERM
ESDD	ARCADIS <small>Design & Consultancy for natural and built assets</small>
LIA	MARSH
LIE	TRACTEBEL ENGIE
Model Audit	Deloitte.
Green Loan Advisor	KPMG
Scenario Rating	FitchRatings
Real Estate DD	am
LLC – English Law	Linklaters
LLC – Indian Law	am
ILC - English Law	LATHAM & WATKINS LLP
ILC – Indian Law	L&L PARTNERS <small>Law Offices</small>

Banks	Region	Sanction	Committed
Standard Chartered	UK	480	325
BARCLAYS	UK	50	50
MUFG	Asia	150	150
MIZUHO	Asia	80	80
SMBC	Asia	150	150
DBS	Asia	125	125
INTESA SANPAOLO	Europe	150	150
Rabobank	Europe	137	135
BNP PARIBAS	Europe	225	75
Deutsche Bank	Europe	50	50
SIEMENS	Europe	35	35
ING BANK	Europe	25	25
Grand Total		1,657	1,350

Key Highlights	
1	Largest PF transaction by international banks in India – USD 1.35b
2	Largest 12 Banks Group – (UK: 28 %, Asia: 37%, Europe: 35%)
3	First ever transaction in PF by Siemens, Barclays, DB in India
4	First ever international bank PF for Hybrid renewables (1.7 GW)
5	First “go to market facility” in renewable energy sector
6	First Unique revolver structure which fully funds AGEL’s future capex

Annexure 2

AGEL: ESG





Environment

Environment related Factors

Climate Awareness

Climate Readiness

Climate Alignment

Offsetting Carbon Emission

- Supporting low carbon Economy
- Providing low carbon energy and decarbonizing the grid

- **Focus on CO2 emission reduction (3.6 mn ton reduced in 9M FY21)**
- **Matching the load curve through hybrid (solar + wind) power plant**
- **ENOC launched** as digital monitoring platform for optimised responsiveness

- Committed to **Nationally Determined Contribution (NDC)** by Govt. of India in line with Paris Agreement for Climate Change
- Supporter of **Task Force on Climate-related Financial Disclosures (TCFD)**
- Signatory to **UN Global Compact (UNGC)**
- Disclosure as per **CDP submitted for FY20**

Conservation of Resource/ Biodiversity

- Caring and protecting biodiversity
- Optimal use and management of natural resources

- **Biodiversity conservation** to reduce impact on animals/ birds/ plants
- Water stewardship through use reduction & Water harvesting to **become Water Positive company**
- **Effective usage of unproductive land** for development

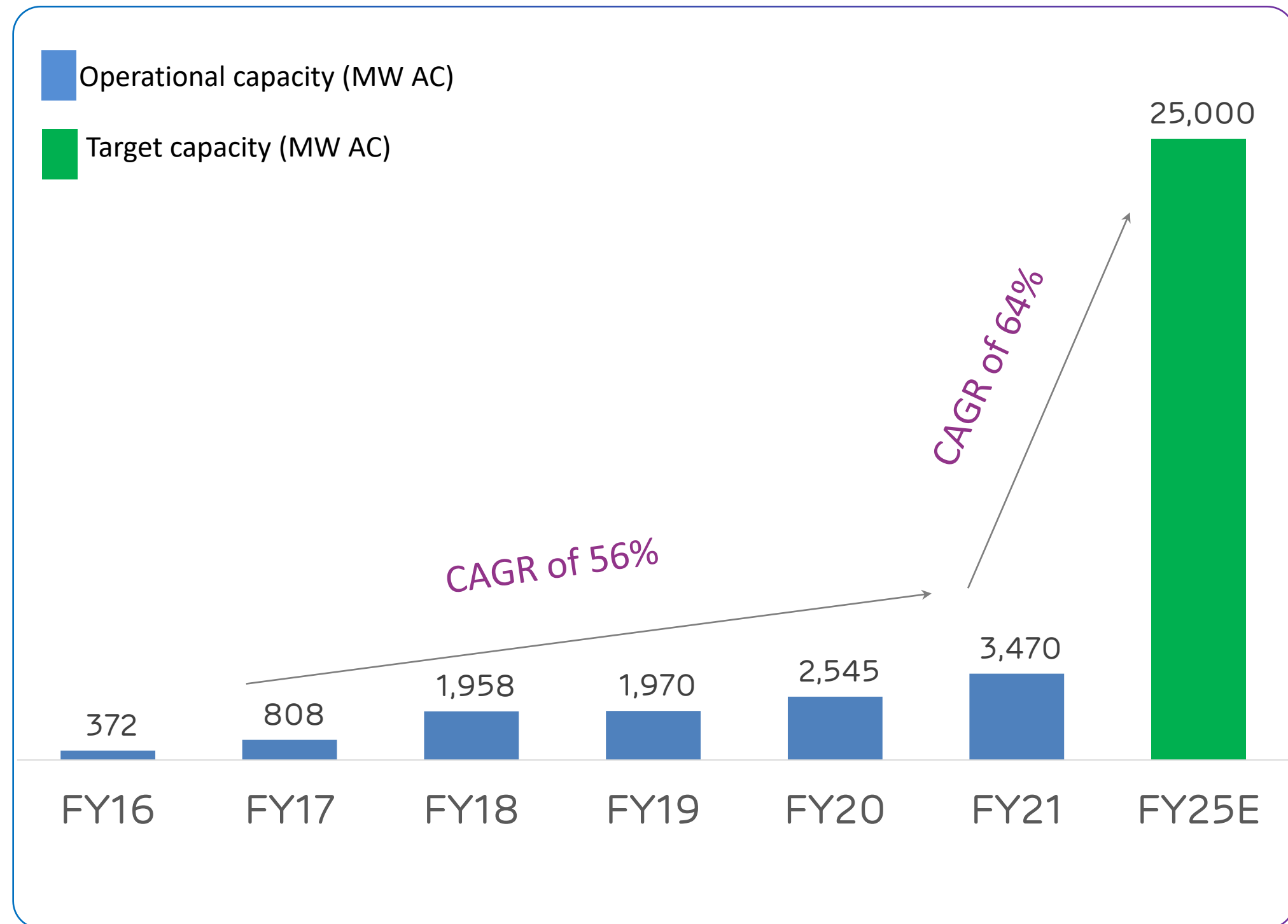
Waste Management

- Maintaining 3R (Reduce, Recycle and Reuse) for Waste management
- On path to Single Use Plastic Free Company by 2022

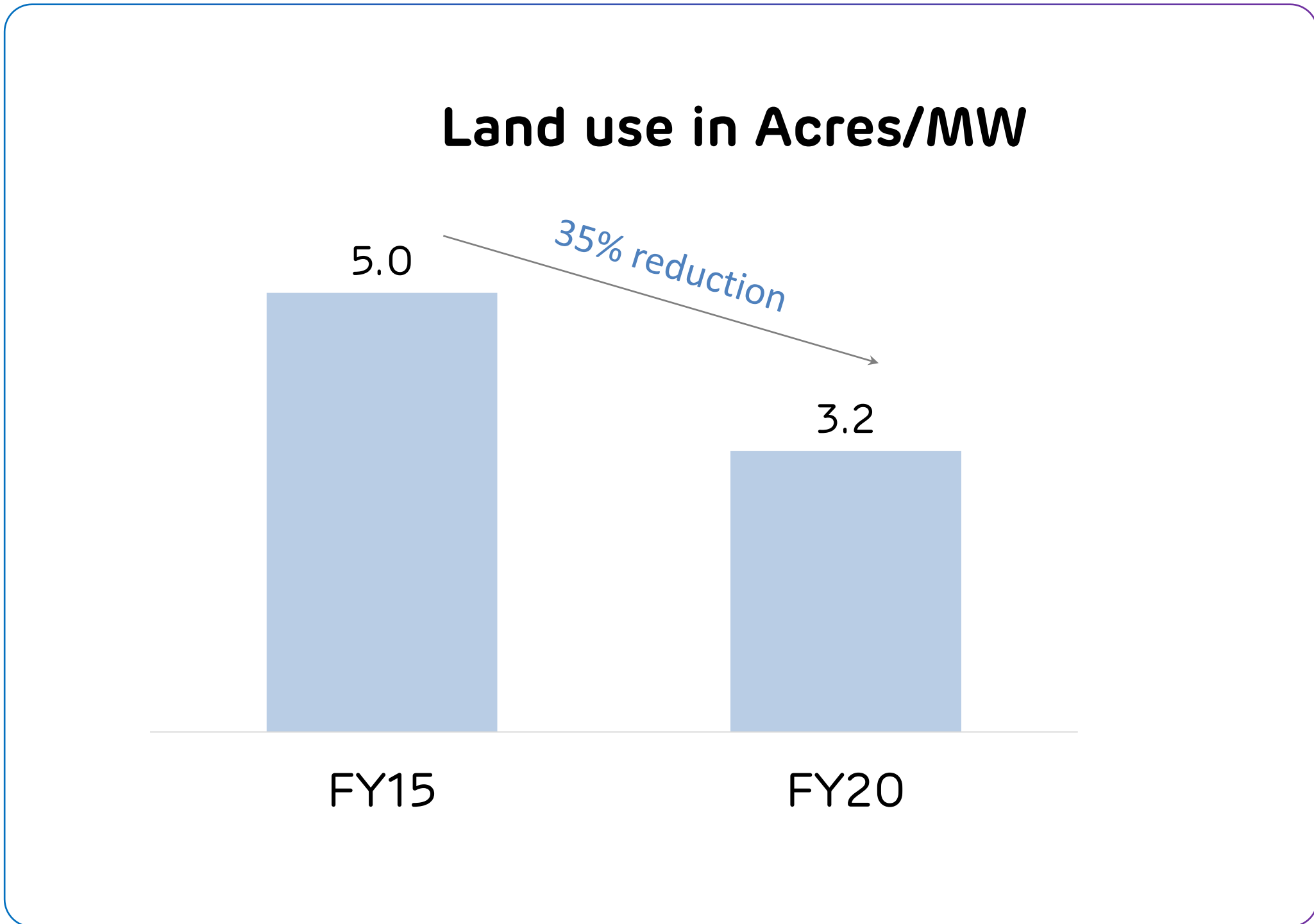
- **Zero waste to landfills** by FY23
- **Lesser utilization of steel and concrete** for structures
- **Waste module recycling** ensured at all sites
- **Zero single use plastic** by FY22

CDP - Carbon Disclosure Project
 TCFD - Task Force on Climate related Financial Disclosure
 SBTi- Science Based Target initiative
 *5R - Recycle, Reduce, Reuse, Recover, Reprocess

Fast-paced Renewable Capacity addition leading to a greener future



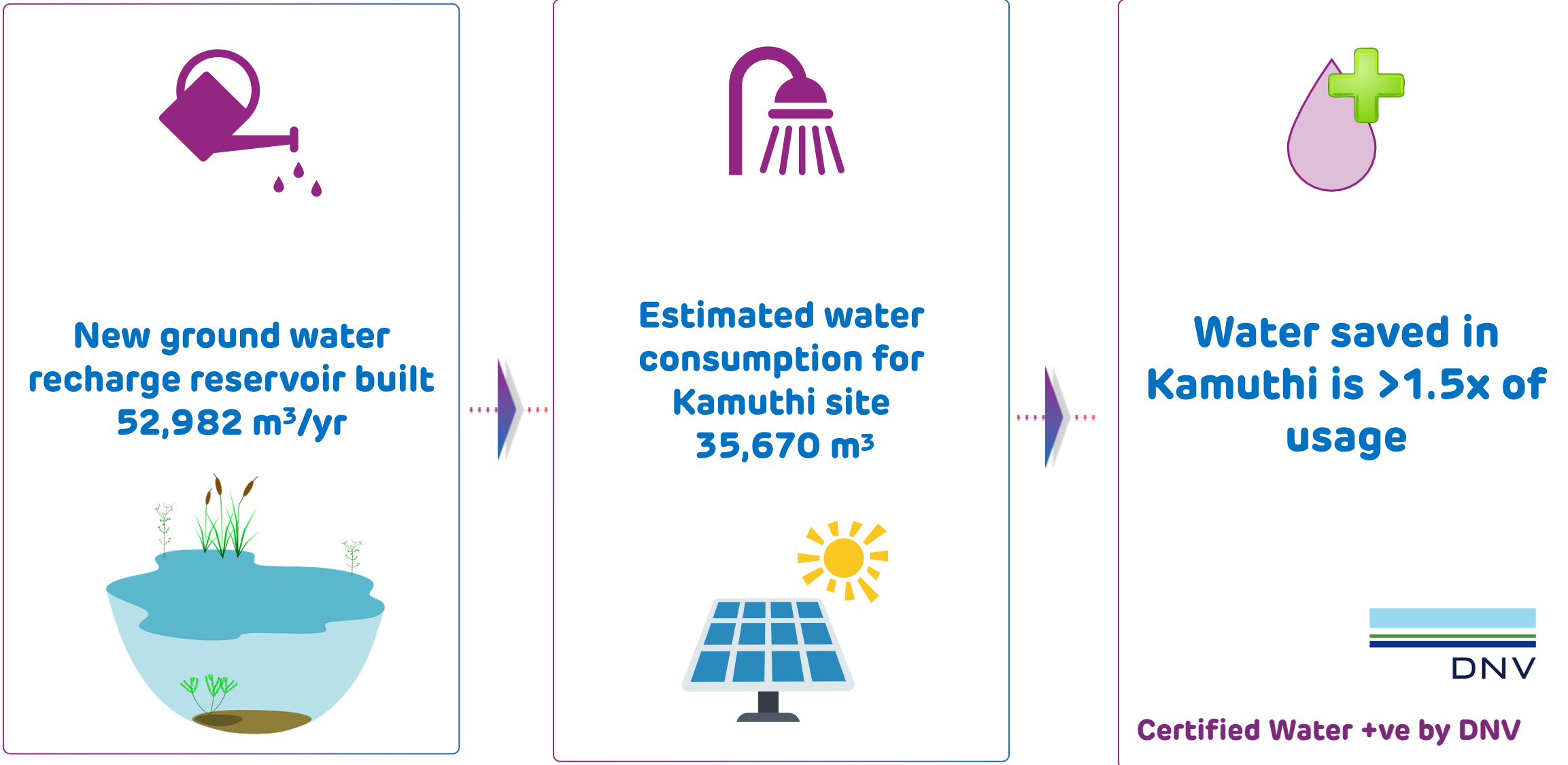
Efficiency in land usage



Latest technology deployment with design optimization has enabled reduction in land requirement



648 MW Solar Plant at Kamuthi, Tamilnadu becomes Water Positive



Reduced Water consumption

Water consumption reduction initiatives

Initiative	Water Consumption / module / cycle
Conventional Module Cleaning System (Manual)	1.3 L
Innovation in Module Cleaning System (Semi - Automatic)	0.7 L
Robotic Cleaning (Proposed)	Near Zero

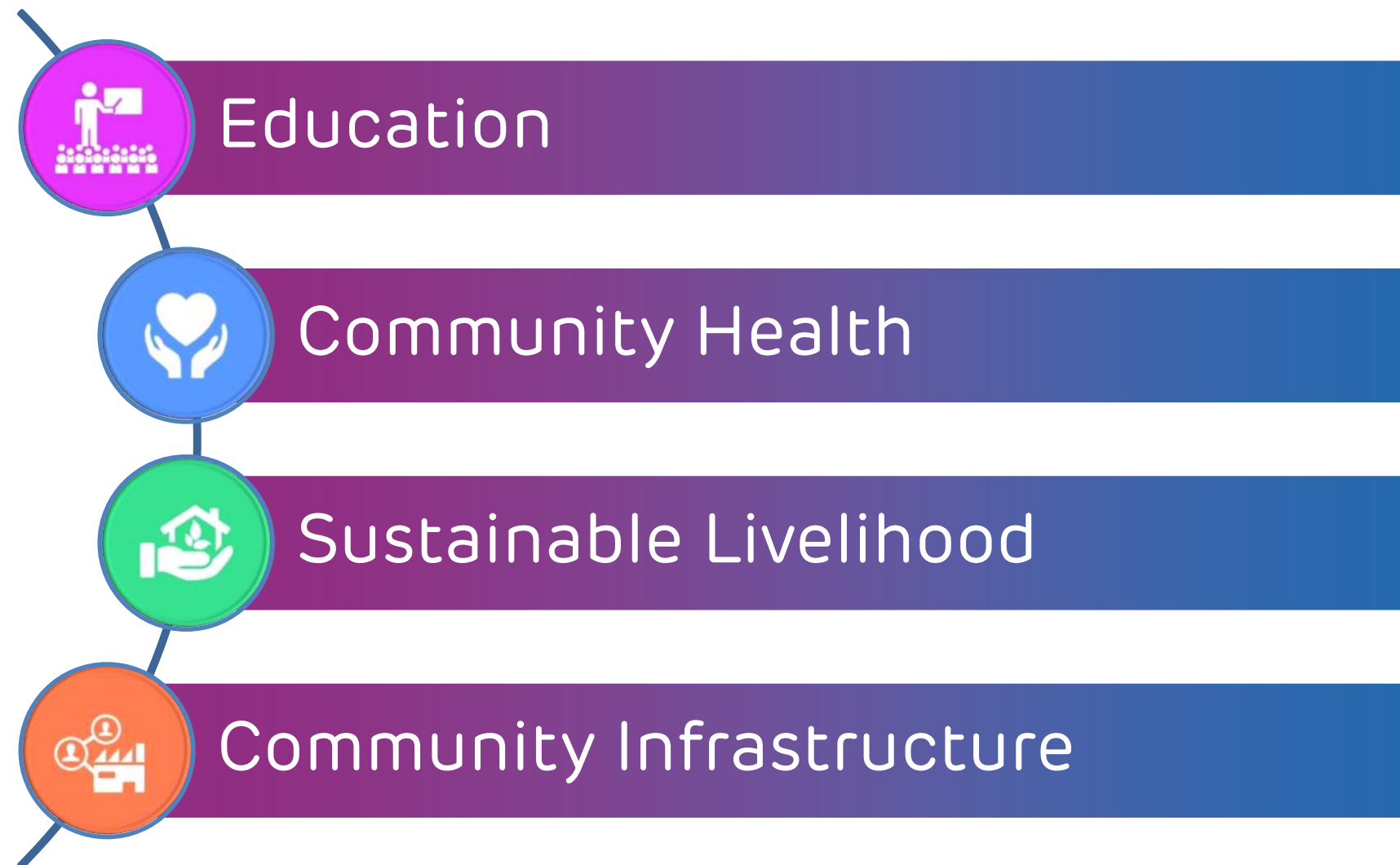
AGEL has been a pioneer in adoption of latest technologies for module cleaning purposes



First Water Positive Plant of its kind, in the World

Social Initiatives through Adani Foundation ¹: Core Areas

Social



Beneficiaries	FY17	FY20	Growth
Beneficiaries by thematic area			
Education	26,383	81,606	3x
Community Health	391,166	607,581	4x
Sustainable Livelihood	108,630	315,019	2x
Community Infra	59,466	343,472	3x

Presence in 2,315 Villages touching 3.4 mn lives

1. Adani Foundation leads various social initiatives at Adani Group level

LTIFR: Lost Time Injury Frequency Rate Project

AGEL: Local Community Engagement

Social welfare programs

Need based customized programs for the local community

Education & Sports

Support provided to local schools to promote education and sports

Water Stewardship

Rejuvenation of community water ponds and drainage system

AGEL: Inclusive Growth, Safety & Other Initiatives

- **Barren/Non-cultivated land used for plants** preventing impact on farmers' livelihood
- **Land beneficiaries compensated at market determined rates**
- **Opportunities given to local talent**
- **Inclusive growth** of employees/ workers along with the organization
- **Ensuring safety through continued training** to employees/ workers
- **Ensuring Zero LTIFR at sites**

Governance

Ethics & Integrity

- **Independent Board – implemented at AGEL & under implementation for subsidiaries:**
 - **50% of the Board** comprises of **Independent Directors**
 - **4 out of 5 Board Committees** comprise of **Majority Independent Directors**
 - **Audit Committee** headed by **Independent Director**
- **Establishment of Corporate Responsibility Committee** of the board to provide assurance for all ESG commitments
- IT enabled compliance management

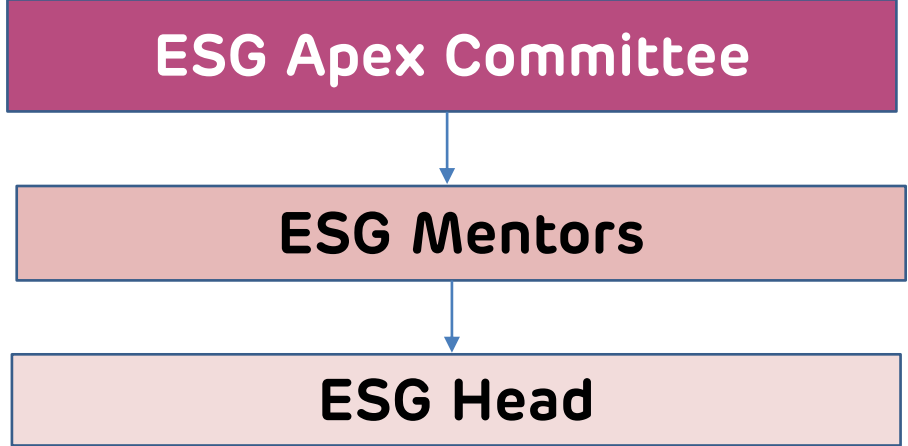
ESG-focused risk assessment and mitigation

- **Senior Management Remuneration linked to growth, sustainability and profitability of business with focus on safety and capital management**
- **Twelve Policies in place from the perspective of Good Governance**, available on AGEL website, including policies on Insider Trading, Related Party Transactions, Whistle Blower, Land acquisition and so on
- Performance review of Non-Independent Directors and Board as a Whole by independent directors
- Published 1st Integrated report in FY20

Responsible Business Partnerships

- **Greening of Supply chain** by integration of ESG aspects in vendor selection and assessment
- **Zero tolerance to Bribery & Corruption** - Policy regularly reviewed by Board and posted on employee portals & company website
- **Strategic partnership and development of local vendors**

ESG Governance Structure



Roles & Responsibilities of ESG Apex Committee

- ✓ Provide organizational vision and overall direction to ESG program
- ✓ Review and approval on public disclosures on ESG (annual report, sustainability report, special disclosures)
- ✓ Allocate resources required by ESG Core Working Group
- ✓ Implementation of ESG Strategy

Roles & Responsibilities of ESG Mentors

- ✓ Provide specific guidance and operational insights to ESG Core Working Group and ESG Champions
- ✓ Undertake quarterly review of activities led by ESG Champions