



Renewables

Date: February 23, 2021

To

BSE Limited
P J Towers,
Dalal Street,
Mumbai – 400 001
Scrip Code: 541450

The National Stock Exchange of India Limited
“Exchange Plaza”,
Bandra – Kurla Complex,
Bandra (E), Mumbai – 400 051
Scrip Code: ADANIGREEN

Dear Sir,

Sub: Intimation of Analysts / Institutional Investors Meeting

Dear Sir,

Pursuant to Regulation 30 of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, we would like to inform you that the Company is scheduled to participate in the events / meetings, as under:

Date of Meeting	Type of Interaction	Organised By
February 24, 2021	Investor Meeting with GIC, Singapore	N.A.
February 25, 2021	Investor Meeting with East Capital, Sweden	N.A.
March 03, 2021	Debt Conference	JP Morgan
March 22 & 23, 2021	Equity Conference	Credit Suisse

The presentation for the conferences is enclosed herewith and also being uploaded on website of the Company www.adanigreenenergy.com.

You are requested to take the same on your records.

Thanking You

Yours Faithfully,

For, Adani Green Energy Limited

Pragnesh Darji
Company Secretary

Adani Green Energy Limited
Adani Corporate House, Shantigram,
Nr Vaishno Devi Circle, S G Highway
Khodiyar, Ahmedabad 382 421
Gujarat, India
CIN: L40106GJ2015PLC082007

Tel +91 79 2555 5555
Fax +91 79 2555 5500
investor.agel@adani.com
www.adanigreenenergy.com



Adani Green Energy Limited

← →
O&M Excellence through ENOC

Feb 2021

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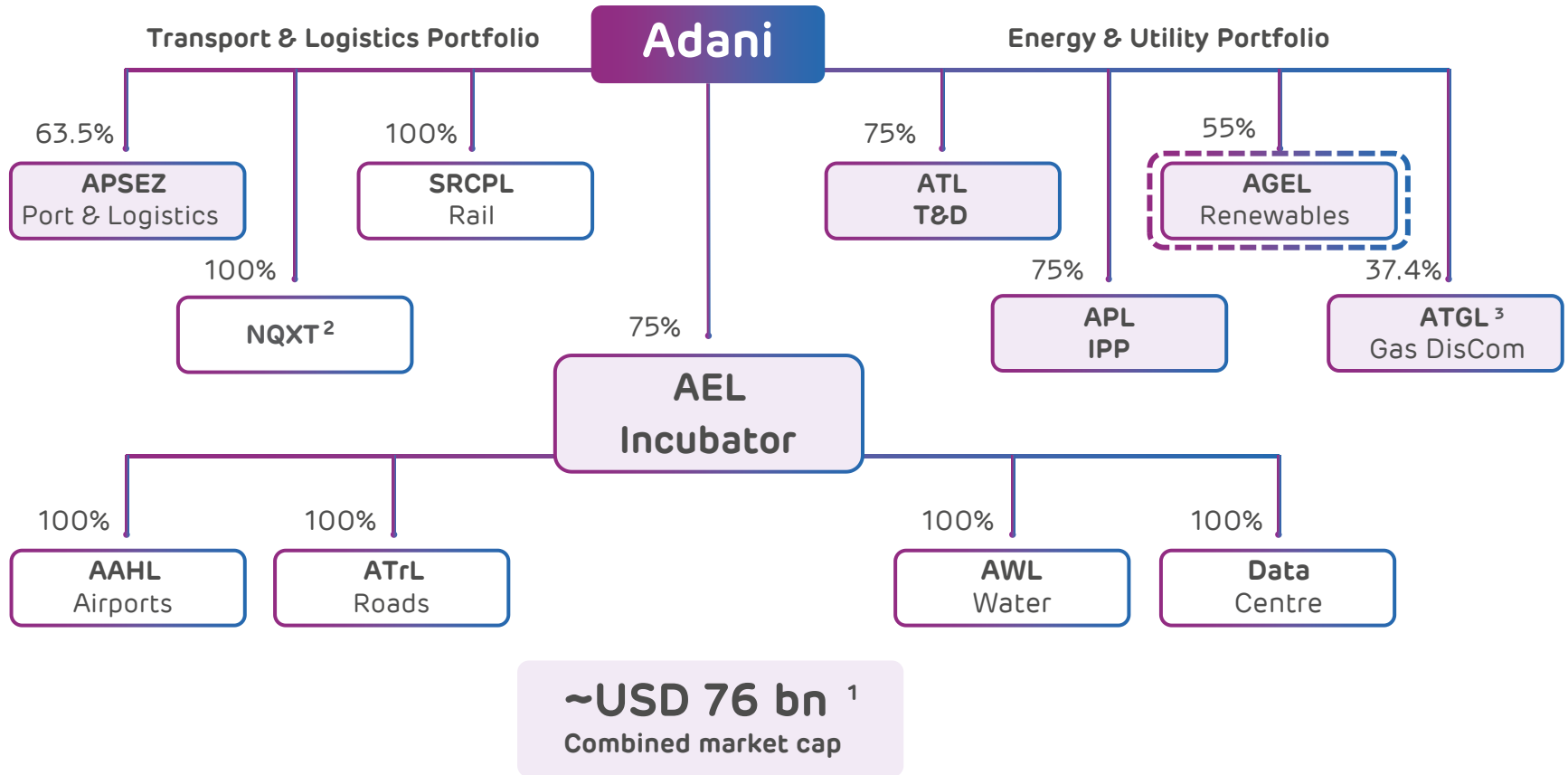
1 Adani Group

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Adani Group



Adani

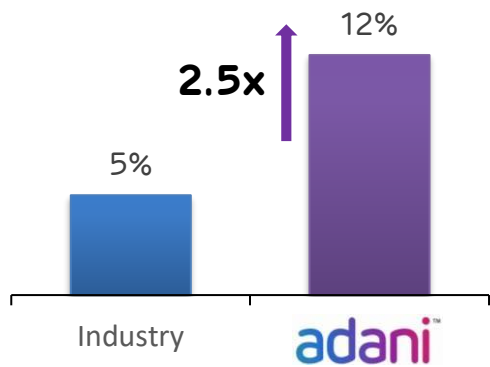
- **Marked shift from B2B to B2C businesses -**
- **ATGL** - Gas distribution network to serve key geographies across India
- **AEML** - Electricity distribution network that powers the financial capital of India
- **Adani Airports** - To operate, manage and develop eight airports in the country
- **Locked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

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

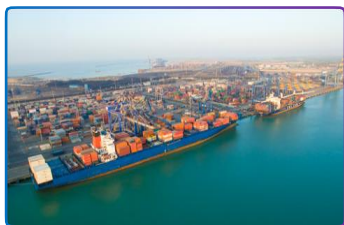
1. As on Feb 19, 2021, USD/INR – 72.6 | Note - Percentages denote promoter holding
 2. NQXT – North Queensland Export Terminal | Light purple color represent public traded listed verticals
 3. ATGL – Adani Total Gas Ltd

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

Port Cargo Throughput (MT)



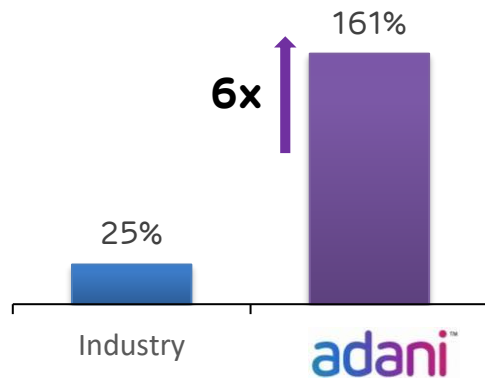
2014	972 MT	113 MT
2020	1,339 MT	223 MT



APSEZ

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

Renewable Capacity (GW)



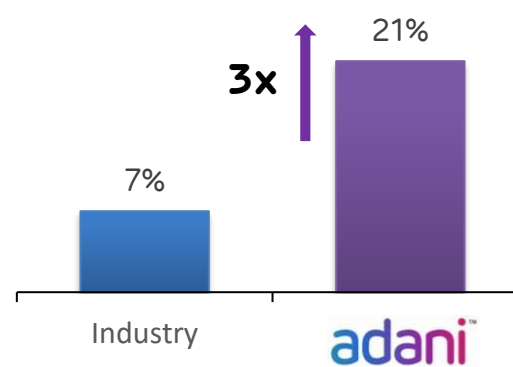
2016	46 GW	0.3 GW
2020	114 GW	14.8 GW ⁶



AGEL

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

Transmission Capacity (ckm)



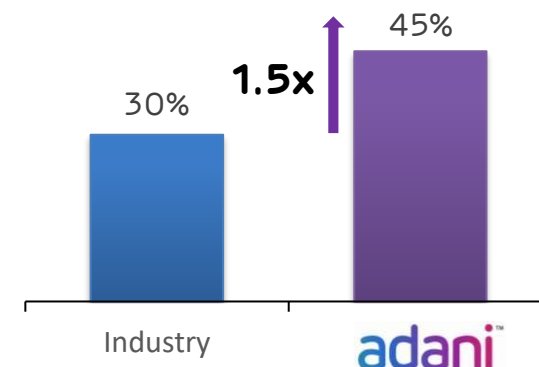
2016	320,000 ckm	6,950 ckm
2020	423,000 ckm	14,739 ckm



ATL

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

CGD⁷ (GAs⁸ covered)



2015	62 GAs	6 GAs
2020	228 GAs	38 GAs



ATGL

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

Transformative model driving scale, growth and free cashflow

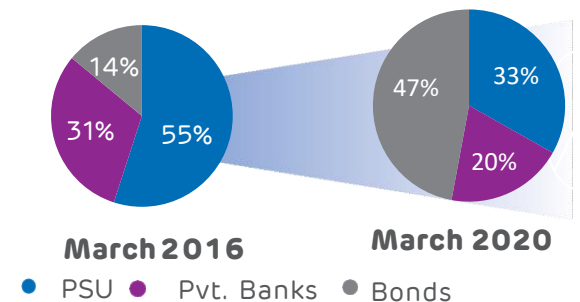
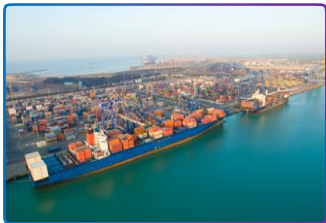
Note: 1 Data for FY20; 2 Margin for ports business only, Excludes forex gains/losses; 3 EBITDA = PBT + Depreciation + Net Finance Costs – Other Income; 4 EBITDA Margin represents EBITDA earned from power sales and exclude other items; 5. EBITDA margin of transmission business only, does not include distribution 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



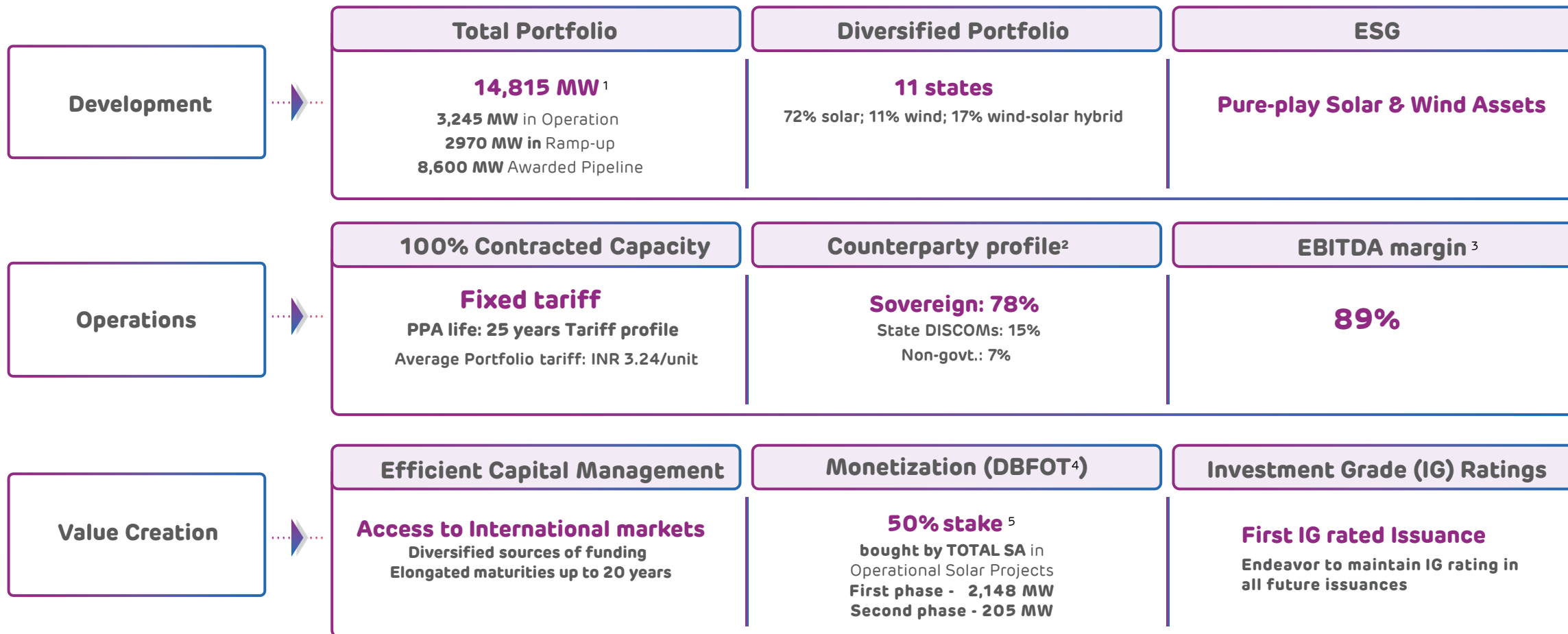
Activity	Origination	Site Development	Construction	Operation	Capital Mgmt
	<ul style="list-style-type: none"> Analysis & market intelligence Viability analysis Strategic value 	<ul style="list-style-type: none"> Site acquisition Concessions and regulatory agreements Investment case development 	<ul style="list-style-type: 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>Largest Single Location Private Thermal IPP (at Mundra)</p> <p>High declared capacity utilization of 89%¹</p>	<p>648 MW Ultra Mega Solar Power Plant (at Kamuthi, TamilNadu)</p> <p>Constructed and Commissioned in nine months</p>	<p>In FY20 issued 7 international bonds across the yield curve totalling~USD4Bn</p> <p>All listed entities maintain liquidity cover of 1.2x- 2x as a matter policy</p>



1. FY20 data for commercial availability declared under long term power purchase agreements

AGEL : Replicating Group's Transformational Growth Profile



Note:

1. Includes 50*3 MW of wind projects under-acquisition from Inox and 20 MW solar power plant under acquisition from Hindustan Powerprojects

2. Based on estimated revenue-mix on fully built-up basis for overall portfolio of 14.8 GW

3. EBITDA margin from power supply in FY20

4. Design Build Finance Operate Transfer

5. TOTAL SA invested INR 3707 Cr in the first phase and INR 310 Crore in the second phase towards 50% stake and other instruments in the JV that houses these assets

PPA - Power Purchase Agreement ; AGEL: Adani Green Energy Limited

Adani Green Energy Limited

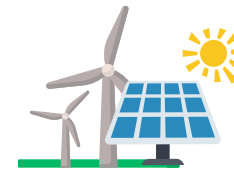
Company Profile

AGEL: Transformational Renewable Company



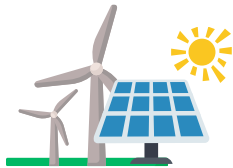
Largest Listed Renewable Company in India

3,245 MW – Operational
+ 2,970 MW – ramp up in 5-12 months



Site Plan

Over 30 GW sites identified & under acquisition



Development Pipeline

8,000 MW Solar
600 MW Hybrid

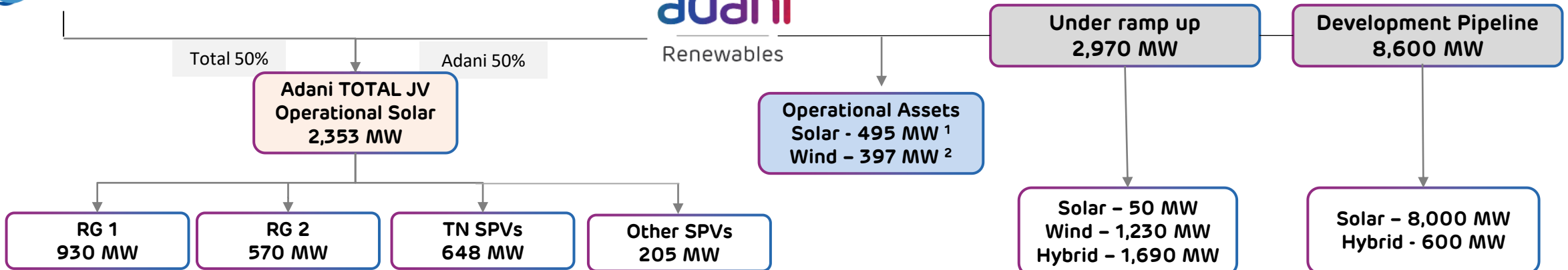


Upcoming Tenders

Over 11,000 MW in pipeline



Renewables



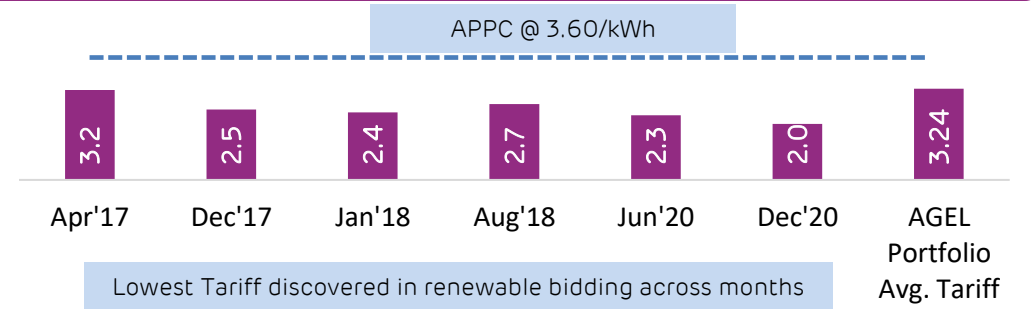
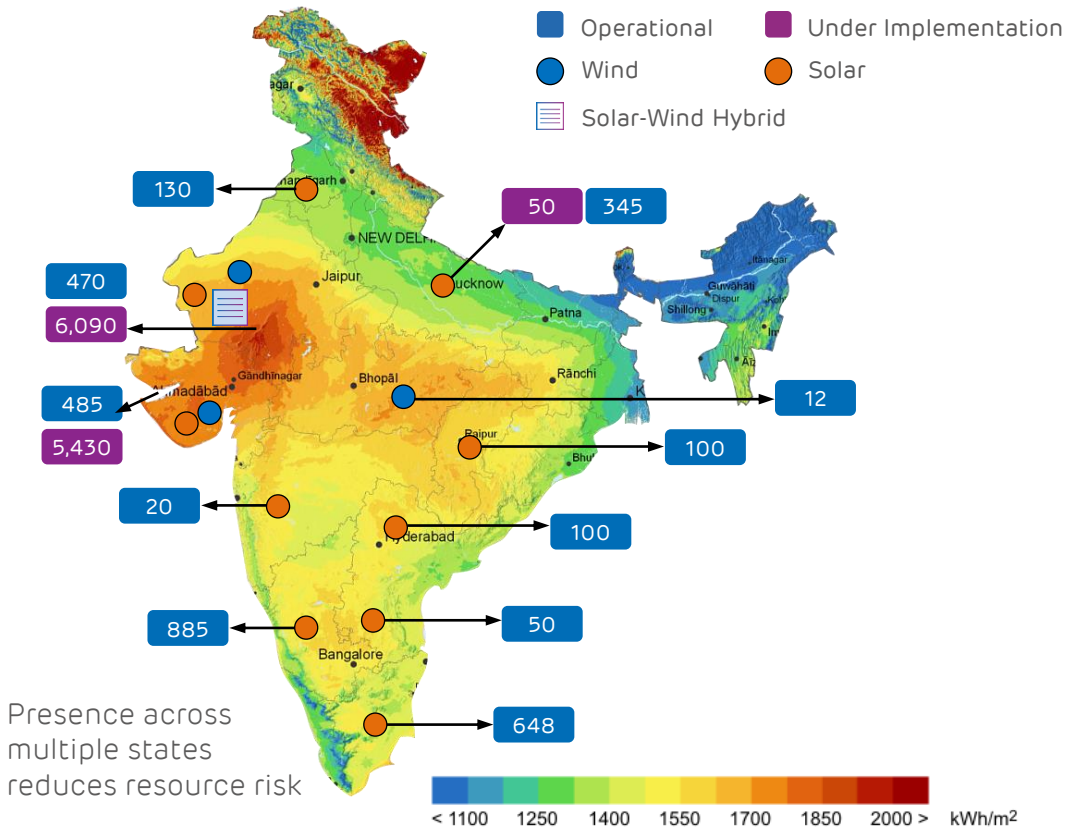
Business and asset development philosophy mirrors Group's focus on Quality Development, Operational Efficiency and Robust Capital Management

1. Includes 20 MW solar plants under acquisition from Hindustan Powerprojects
2. Includes 150 MW wind assets under acquisition from Inox

AGEL: Large, Geographically Diversified Portfolio

14,815 MW Portfolio¹ | 3,245 MW operational

Average AGEL tariff below APPC²



- 78% Sovereign Counterparties
- Resource and Counterparty Diversification
- Presence across 11 resource-rich states and 13 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 and 20 MW solar plants under acquisition from Hindustan Powerprojects
² APPC: National average power purchase cost

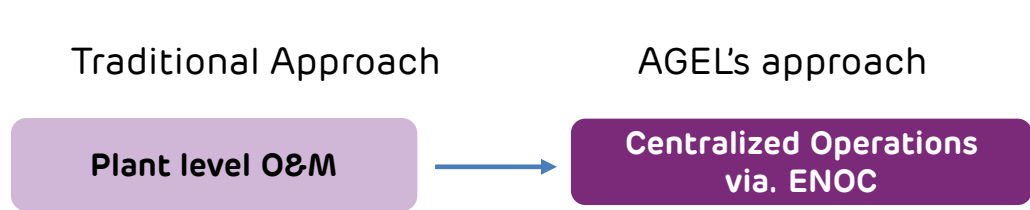
AGEL: O&M Excellence through ENOC

Best in Class O&M Policies

- AGEL is currently operating 80+ plants spread across 11 states. Portfolio managed by O&M team of 630 personnel
- Cluster based governance model: Personnel spread across Central office → Cluster teams → Site personnel
- Enables smooth governance allowing efficient utilization of manpower and spares across multiple project sites

Centralized monitoring & Diagnostics	Operational Philosophy	Maintenance Philosophy	Spares Management
<ul style="list-style-type: none"> Scalable operations with centralized monitoring and diagnostics Seamless integration of technology with ENOC Dust Detection System (DDS) for measuring the soiling loss and optimizing module cleaning cycle String monitoring for operational efficiency improvement Drone survey & IV curve scan for monitoring module health Surveillance cameras to ensure security & safety compliance 	<ul style="list-style-type: none"> Lean site organization structure Optimized module cleaning cycle by comparing revenue loss due to soiling against the cost of module cleaning Atomization of water cleaning through compressed air to reduce water consumption during module cleaning Vegetation management, table tilting Ongoing repowering to compensate module degradation losses 	<ul style="list-style-type: none"> Equipment and maintenance strategy classified based on criticality In-house O&M capabilities Warranty management for inverters & modules and AMC for transmission lines SAP based scheduling of plant maintenance Root Cause Analysis (RCA) framework decided based on severity, frequency and financial impact Cluster based governance model 	<ul style="list-style-type: none"> Time based inventory management system Tier1: Site specific store (indoor & outdoor) for replacement items and consumables Tier 2: High value spares (Transformer, switchyard breaker, gear box, generator, etc.) being maintained at cluster level Min/ max level set in stringent manner ensuring optimum inventory

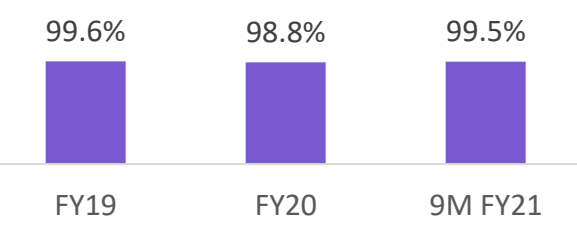
Operational Excellence driving Value



Predictive O&M process leading to reduction in:

- ✓ Frequency of scheduled maintenance,
- ✓ On-site labor costs
- ✓ Overall O&M cost

Solar Plant Availability



Note:
1. O&M – Operations and Maintenance; ENOC – Energy Network Operation Center

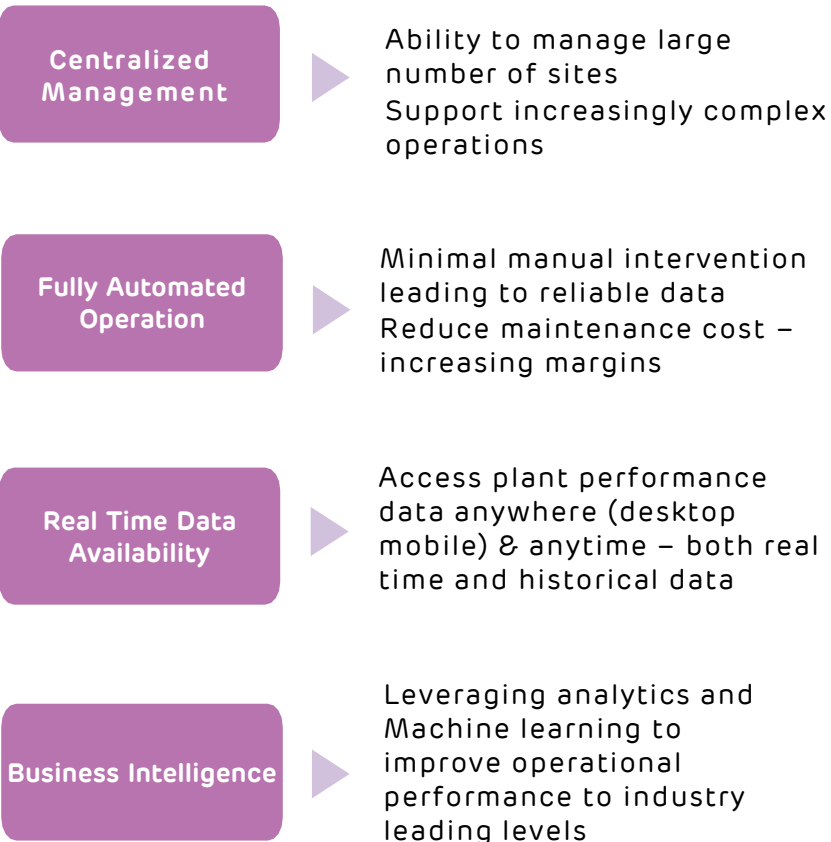
ENOC allows centralization of all operations and enables world class O&M practices

ENOC (Energy Network Operation Centre)

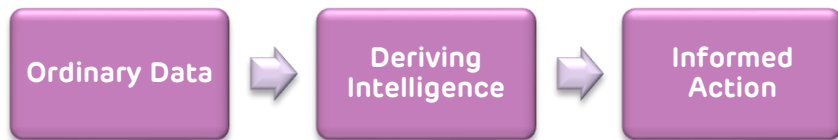
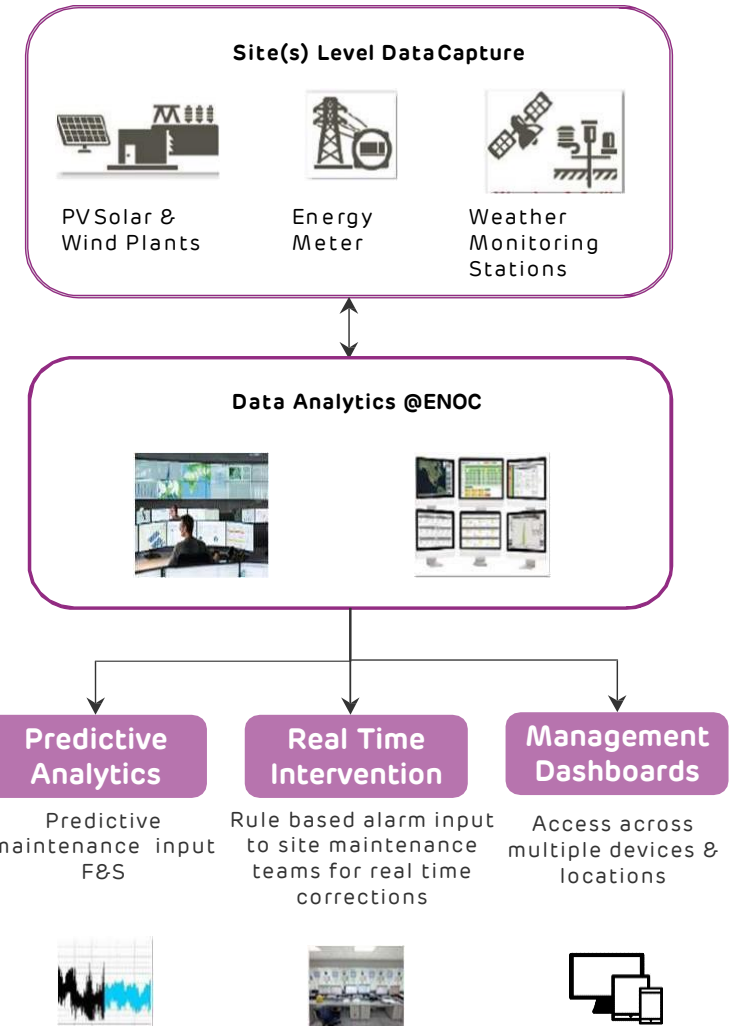
- Centralization of overall management of all Adani sites from a single location
- Data Analytics driven decision making
- Drive world class operational performance as sustainable competitive advantage
- Create potential for new business providing operations as a service to other power companies
- Sustainable & scalable platform



ENOC Benefits



ENOC Operational Flow



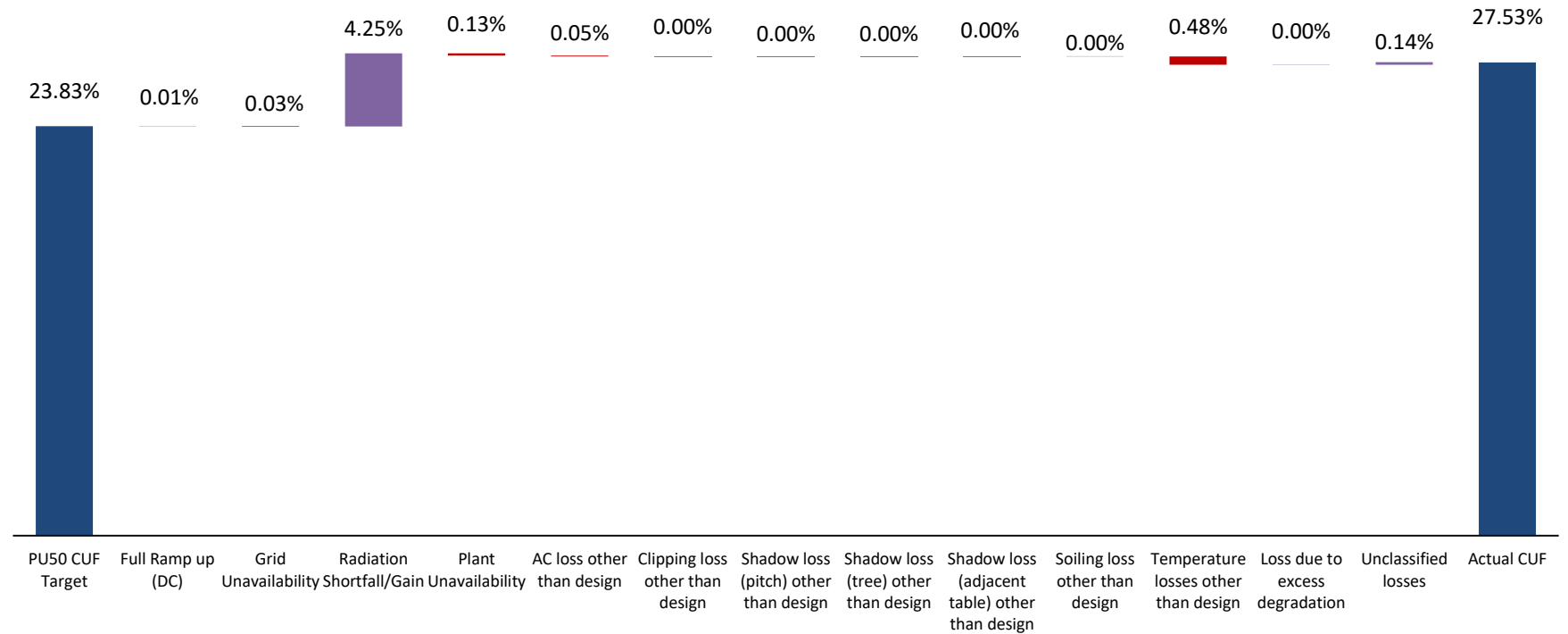
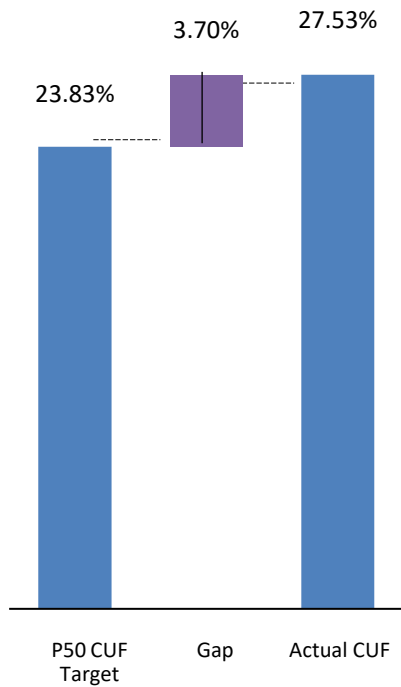
Note:
1. OnM – Operations and Maintenance

ENOC allows to identify the reasons of gap in CUF to get actionable insights

Traditional Approach

ENOC – Gap Identification at Granular Level

Solar



Note:

1. CUF – Capacity Utilisation Factor
2. ENOC - Energy Network Operations Center

Climate Awareness and Climate Readiness

Reduction in water usage for module cleaning

- AGEL has been a pioneer in adoption of latest technologies for module cleaning
- Due to these latest innovations, **AGEL will be able to reduce the water consumption in FY21 from 117 mn liters to 64 mn liters y-o-y**

Water consumption reduction initiatives



Conventional Module Cleaning System (Manual)



Innovation in Module Cleaning System (Semi - Automatic)



Water less module cleaning (proposed)

Water Consumption / module / cycle

1.3 L

0.7 L

Near Zero

Indigenously developed module cleaning system

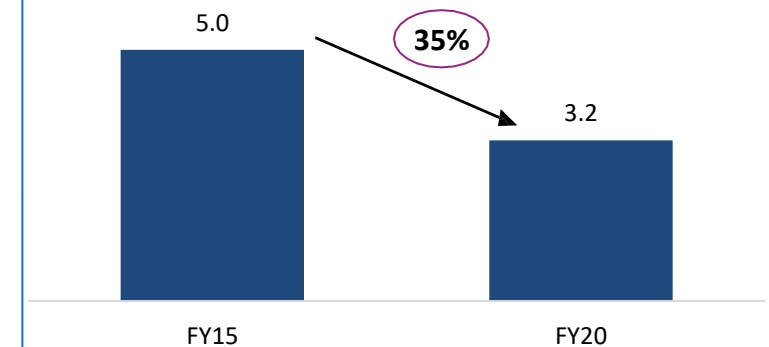


- Water consumption reduced by **46%**
- Safe operations
- Manpower cost is reduced by **75%**
- Increased efficiency
- Module cleaning cost reduced by **40%**
- Scalable system
- Implementing this system would reduce the O&M cost by **7.5%** annually across the existing portfolio

Efficiency in Land Usage

- Sites identified for setting up solar / wind projects process on waste land
- Land which cannot be utilized for agriculture
- Leveraging technology to reduce land requirement

Land use in Acres/MW



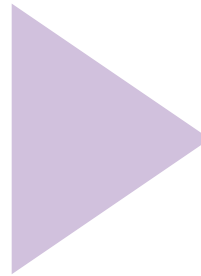
Note:
1. O&M – Operations and Maintenance;



**AGEL:
Way forward for O&M**

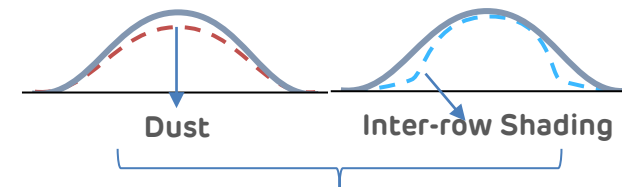
Our Current Practices (Descriptive & Predictive Analytics)

- Underperformance identification at string level (set of 22 modules)
- R tool based models for inverter performance
- Analysis of faults based on severity (generation loss) & frequency (number of occurrences)
- Tracker optimization to maximize generation gain
- OEM Benchmarking leading to procurement insights for future projects
- Plant scorecard
- Breakdown loss analysis
- Sensor accuracy analysis & correlation between sensor values
- Inverter efficiency analysis



Way Forward (Prescriptive Analytics)

- Analysis of faults based on severity & frequency using decision tree analysis
- Digital Twin based advanced analytics based on Big Data/Deep Neural Networks to identify module level underperformance



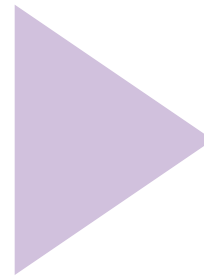
- Underperformance signatures through pattern recognition
- Development of Asset Performance Monitoring (APM) tool to ensure:
 - zero unplanned downtime
 - Maintenance only when needed
 - Ability to manage O&M costs at acceptable levels

Notes:

1. AI/ ML – Artificial Intelligence/ Machine Learning
2. O&M – Operations & Maintenance
3. R Tool – a software for analytics
4. OEM – Original Equipment Manufacturer

Our Current Practices (Descriptive & Predictive Analytics)

- Underperformance identification at Wind Turbine Generator (WTG) level
- R tool based models for WTG performance analysis
- Analysis of faults based on severity (generation loss) & frequency (number of occurrences)
- WTG performance enhancement by correcting pitch (blade) and yaw (turbine rotation) angle
- Scheduling controllable shutdowns for maintenance by analyzing Windy and non-windy hours
- OEM Benchmarking leading to procurement insights for future projects
- Breakdown loss analysis
- Sensor accuracy analysis & correlation between sensor values



Way Forward (Prescriptive Analytics)

- Analysis of faults based on severity & frequency using decision tree analysis
- IOT Based Forecasting & Scheduling (F&S) modelling to be developed in-house to enable:
 - Automatic fetching of breakdown data from the field directly
 - revision of the forecasted generation
 - resulting into reduced manual intervention & increased F&S accuracy
- Development of Asset Performance Monitoring (APM) tool to ensure:
 - zero unplanned downtime
 - Maintenance only when needed
 - Ability to manage O&M costs at acceptable levels
- Prescriptive analytics on real time basis for correcting pitch (blade) and yaw (turbine rotation) angle thereby enhancing WTG performance

Notes:

1. AI/ ML – Artificial Intelligence/ Machine Learning
2. O&M – Operations & Maintenance
3. OEM – Original Equipment Manufacturer
4. IOT - Internet of Things



adani

Renewables

Thank You