



### Adani Green Energy Limited

**Investor Presentation - ESG Focus** 

**Sep 2021** 

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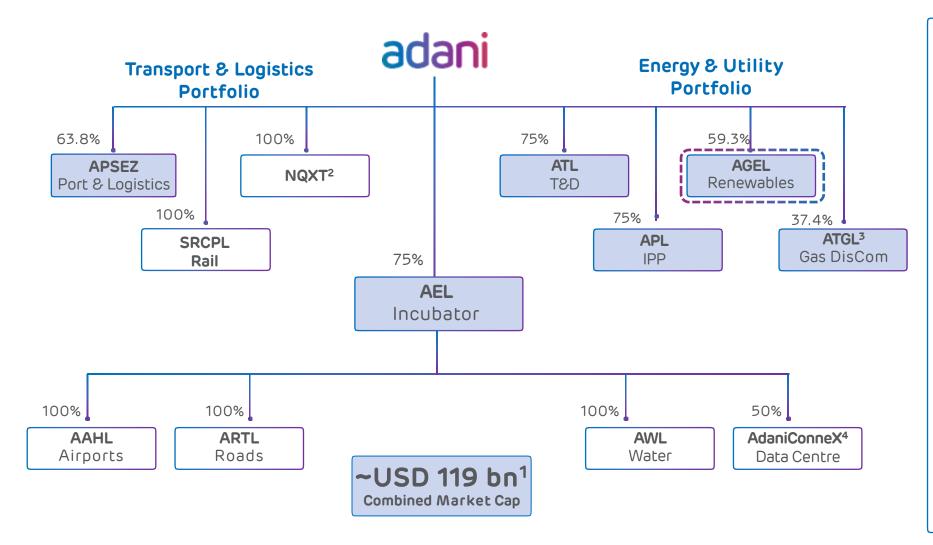


# Adani Group



#### Adani Group: A world class infrastructure & utility 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 -
  - Transport & Logistics -Airports and Roads
  - Energy & Utility –
     Water and
     Data Centre

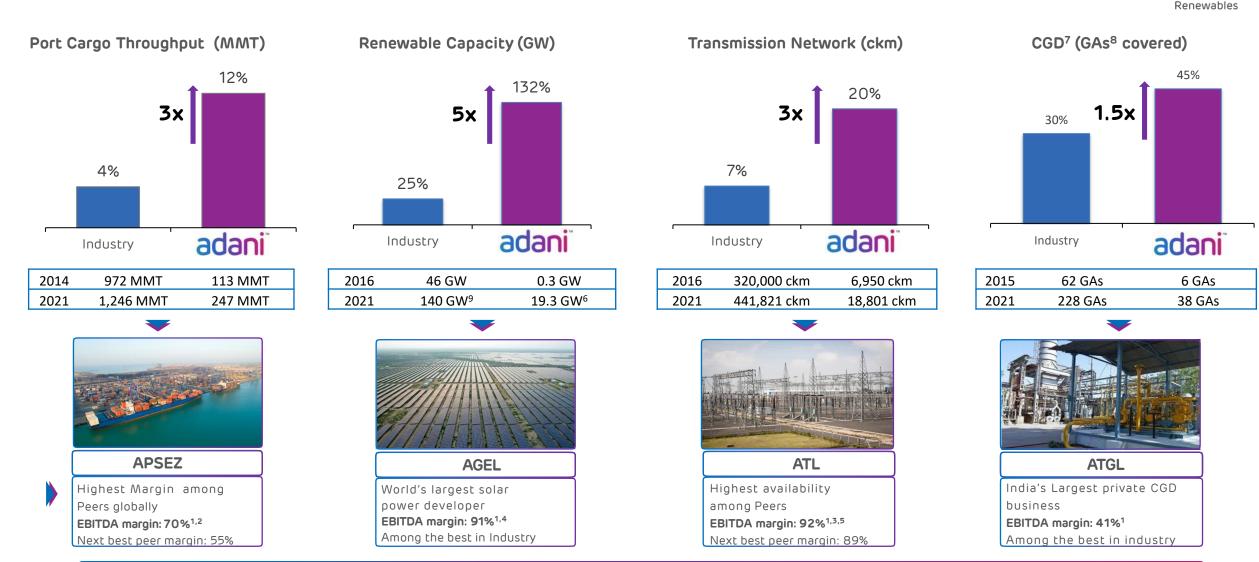
Opportunity identification, development and beneficiation is intrinsic to diversification and growth of the group.

<sup>1.</sup> As on Aug 31, 2021, USD/INR – 73 | Note - Percentages denote promoter holding & Light blue color represent public traded listed verticals

<sup>2.</sup> NQXT - North Queensland Export Terminal | 3. ATGL - Adani Total Gas Ltd | 4. Data center, JV with EdgeConneX

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





#### Transformative model driving scale, growth and free cashflow

Note: 1 Data for FY21; 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 supply 5.

Operating EBITDA margin of transmission business only, does not include distribution business. 6. Contracted & awarded capacity 7. CGD – City Gas distribution 8. GAs - Geographical Areas - Including JV | Industry data is from market intelligence 9. This includes 17GW of renewable capacity where PPA has been signed and the capacity is under various stages of implementation and 29GW of capacity where PPA is yet to be signed.





#### **Phase**

#### Development



#### **Operations**



#### **Post Operations**

Capital Mgmt

# Activity

# Performan

#### Origination

- Analysis & market intelligence
- Viability analysis
- Strategic value

Site Development

Concessions and regulatory

Investment case development

• Site acquisition

agreements

- Construction
- Engineering & design
- Sourcing & quality levels
- Equity & debt funding at project

- Operation
- Life cycle O&M planning
- · Asset Management plan
- Redesigning the capital **structure** of assets
- Operational phase funding consistent with asset life

India's Largest Commercial Port (at Mundra)

Highest Margin among Peers

Longest Private HVDC Line in Asia

(Mundra – Mohindergarh)

Highest line availability

648 MW Ultra Mega Solar Power Plant

(at Kamuthi, Tamil Nadu)

Constructed and Commissioned in nine months

**Energy Network Operation Center** (ENOC)



Centralized continuous monitoring of solar and wind plants across India on a single cloud based platform

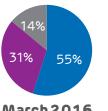


Revolving project finance facility of \$1.35Bn at AGEL - fully funded project pipeline

First ever GMTN<sup>1</sup> of USD 2Bn by an energy utility player in India - an SLB<sup>2</sup> in line with COP26 goals - at AEML

Issuance of 20 & 10 year dual tranche bond of USD 750 mn - APSEZ the only infrastructure company to do so

#### Debt structure moving from PSU banks to Bonds





March 2016

**March 2021** 

Pvt. Banks Bonds







#### AGEL: Replicating Group's Simple yet Transformational Business Model



Secure Sites & Connectivity Resource Assessment **Construction Readiness** 200.000 acres ~ 31 GW potential Geotechnical studies Development 85+ Wind data locations and detailed design planning, Resource rich Sites in strategic locations Solar resource assessment completed simulations completed Technology enabled O&M 100% Contracted Capacity<sup>1</sup> Industry leading EBITDA margin **ENOC 91%** <sup>3</sup> Fixed tariff **Operations** Analytics driven O&M with AI based technology PPA life: 25 years Tariff profile Sweat assets to its fullest (Highest Generation) + to maximize generation and perform predictive Average Portfolio tariff: INR 3.13/unit <sup>2</sup> Lowest Operating Costs = Highest EBITDA per MW maintenance Investment Grade (IG) Ratings **Efficient Capital Management** Fully Funded Growth US\$ 1.35bn Value Creation First IG rated Issuance Access to International markets Revolving construction facility from international

#### World's largest solar power developer 4, well positioned for industry leading growth

banks to fully fund under construction pipeline

US\$ 750 mn - 4.7x Oversubscription

HoldCo green bonds to meet Equity needs at SPVs

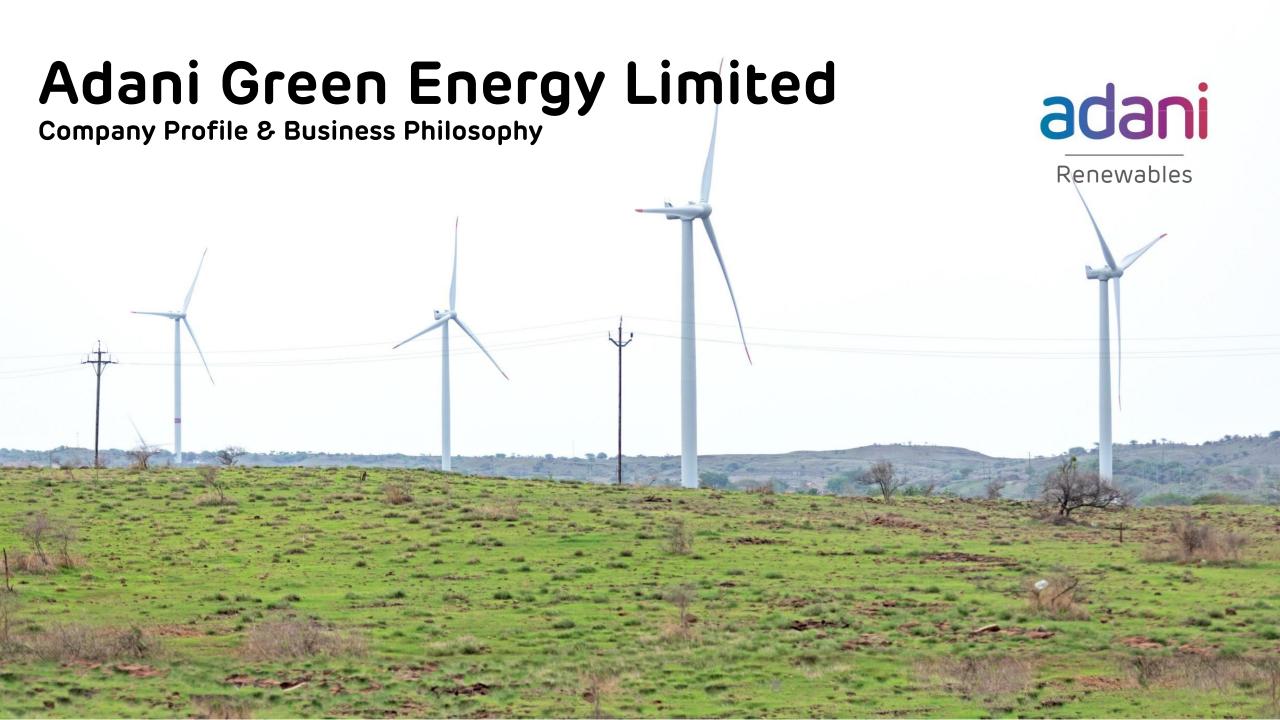
- 1. Excluding a small merchant solar capacity of 50 MW
- 2. Average tariff for locked-in growth of 19.8 GW
- 3. EBITDA margin from power supply in FY21
- 4. As per ranking by Mercom Capital

At OPCO level

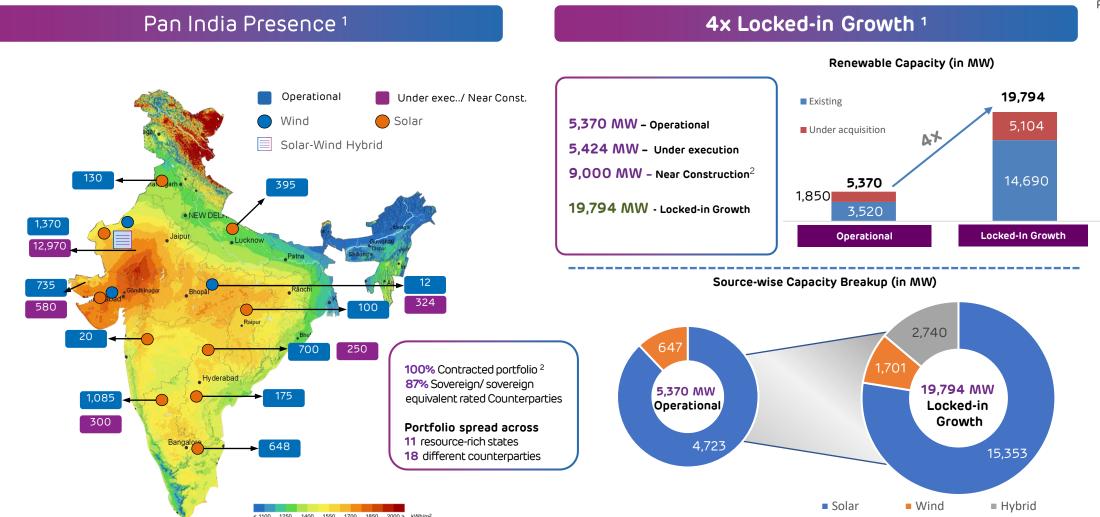
Broaden capital pools - 144A, REG S, REG D. Indian bond markets

Diversified sources of funding

Elongated maturities up to 20 years





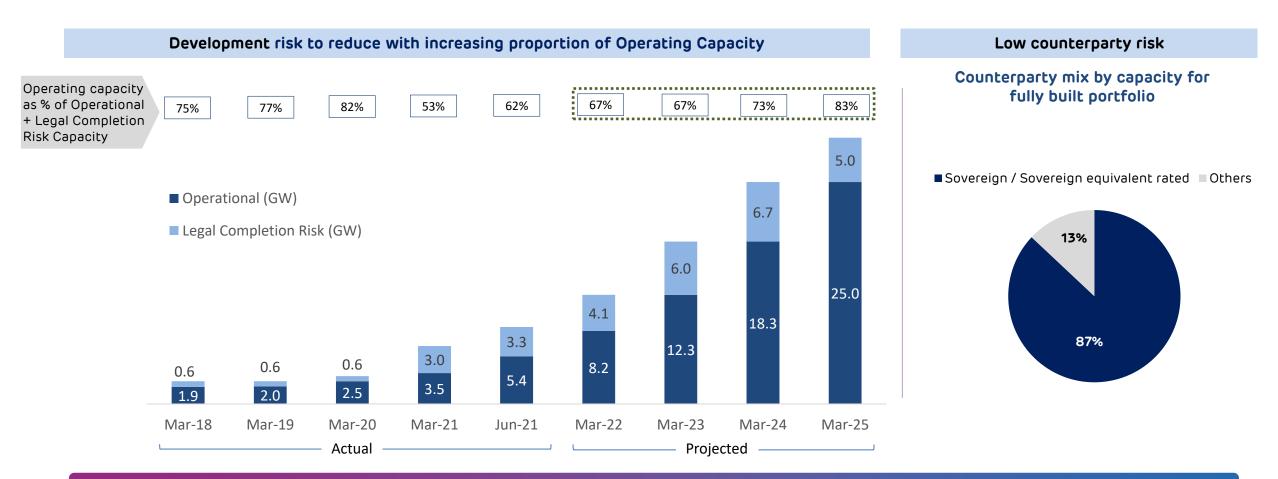


#### Ranked as Largest Solar Power Developer in the World by US based MERCOM Capital

- 1. The capacities include (i) SB Energy's 5 GW portfolio which is under acquisition (Operational: 1,700 MW, Under-execution: 2,554 MW, 700 MW const. pipeline) (ii) 150 MW operational wind assets under acquisition from lnox
- 2. Letter of Award received and PPA to be signed
- 3. Excluding a small merchant solar capacity of 50 MW



Assets contracted under 25 year PPA, 87% of capacity contracted to sovereign / sovereign equivalent rated counterparties



#### High quality portfolio with low development & counterparty risk

Note:

The capacities shown in the diagram include SB Energy assets which are under acquisition

<sup>&#</sup>x27;Legal Completion Risk' includes under construction projects which are projected to be commissioned within next 12 months



#### **Project Development Excellence**

De-risked project pipeline through Advance resource estimation, design & supply chain planning

Origination

**Development** 

Construction

85+ Wind data locations under active assessment

2,00,000+ acres of resource rich land identified across India

Relentless focus on design optimization to drive Cost Efficiency Land tied-up for entire project pipeline

Stage-I connectivity
Approval for
Prospective Land is
already obtained

Evacuation for 100% of the sites under execution

Centre of Excellence
- Project
Management &
Control Group
(PMCG) ensuring
Engineering
excellence

20,000+ Vendor
Base across India to
ensure efficient
supply chain
management

Rich Experience of execution over 320+ sites across India

#### **O&M Excellence**

Predictive Analytics leading to cost efficient O&M and high performance

World-class Energy Network Operations
Centre connected to Solar & Wind plants
across 11 States



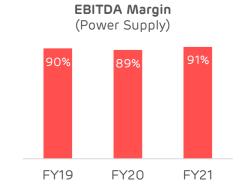
Renewable plants feed millions of datapoints which are processed, enabling informed decision making, resulting in:

- ✓ Reduced mean time to repair (MTTR) & Optimized mean time between failure (MTBF)
- ✓ Improved plant availability leading to increased electricity generation
- ✓ Targeted maintenance leading to lower O&M costs



FY 20

FY 21



FY 19







Ranked 3<sup>rd</sup> best in Indian Electric Utility sector ESG benchmarking of DJSI-SP Global & MSCI assigned ESG Rating of 'A'

Renewables Guiding principles United Nations Global Sustainable Development **SBTi** Goals Compact Disclosure Standards **TCFD GRI Standards** CDP disclosure Policy Structure Focus Area - UNSDG - Biodiversity Policy - Energy & Emissions as part of IMS policy E - Role in climate Action through de-- Water Stewardship Commitment carbonization of Grid - Responsible Consumption and - Guidelines on Human Rights Production - Corporate Social Responsibility Policy - Safety & well-being - Occupational Health & Safety as part of IMS Policy Quality Education Board Diversity - Sustainable cities & communities - Code of Conduct G

#### **Our Commitment**

- To be in Top 10 companies of the world in ESG benchmarking of electric utility sector by 2025
- To become Single-use-Plastic-Free (SuPF) company by 2024
- To become Zero-Waste-to-Landfill (ZWL) company by 2025
- Committed to Health and Safety of workforce with Zero Harm and Zero Leak objective
- Inclusive growth by sustaining communities to ensure social license to operate

- Related Party Transaction Policy



**Awareness** 

Readiness

#### **Carbon Emission Reduction**

- Supporting low carbon Economy
- Improving Carbon Efficiency
- Supporting newer and more efficient renewable technologies

- 25 GW renewable target by 2025
- Improving energy efficiency with Energy Network Operation Center
- Early adoption of new and efficient technologies such as bifacial modules/ trackers
- Disclosure on Climate
   Change of Carbon Disclosure
   Project (CDP)
- Contributing to UN SDG 7 & 13
- DJSI Corporate Sustainability Assessment
- Committed to SBTi
- GRI Standards

#### **Natural Resource Conservation**

- Reduce freshwater withdrawal and water conservation initiatives
- Land use and cover management
- Circular Economy

- Single Use Plastic free sites by 2024
- Zero waste to landfill by 2025
- Net-Water neutrality for plant capacity >200 MW by 2025

- DJSI Corporate
   Sustainability Assessment
- Supporting TCFD recommendations
- GRI Standards

#### **Biodiversity Management**

- Biodiversity Management Plan
- Green landscaping at operating locations
- Use of barren/ non-cultivated land for plant development
- Critical Habitat Assessment, Bird & Bat Monitoring & various Environment studies at project development stage
- Implementation of initiatives identified through above studies
- Environment Social Impact Assessment as per IFC Performance Standards
- India Business & Biodiversity Initiative (IBBI)
- DJSI Corporate
   Sustainability Assessment
- Signatory to IBBI
- GRI Standards

#### Alignment



#### **United Nations Sustainable Development Goals 2030**



















6 CLEAN WATER AND SANITATION

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#### **Key Focus Areas**









#### Our Key Social Initiatives mapped to UNSDG

:	Education 4. Quality Education	Gujarat	<ul> <li>Enhancing quality of education through adoption of government primary schools</li> </ul>
	Health 3. Good Health & Well Being	Rajasthan & other Locations	<ul> <li>Winterwear distribution to underprivileged children, distribution of sports material to schools, COVID relief activities, improving health/ sanitization etc</li> </ul>
	Livelihood  8. Decent Work & Economic Growth	Multiple Locations	<ul> <li>Opportunities given to local talent</li> <li>Inclusive growth of employees / workers along with the organization</li> <li>NIL lost time injury frequency rate in FY21</li> </ul>

Ec	cology	
7.	Affordable and Clean Energy	L

- 13. Climate Action
- 15. Life on Land

#### Multiple Locations

- Current average portfolio tariff of Rs. 3.13 per unit much lower than APPC of Rs. 3.85 per unit
- 25 GW renewable capacity targeted by 2025
- Barren/Non-cultivated land used for plants preventing impact on farmers' livelihood
- Critical Habitat Assessment, Bird & Bat Monitoring & various Environment studies at project development stage

#### Sustainable Innovation

- 9. Industry, Innovation & Infrastructure
- 11. Sustainable Cities & Communities

#### Multiple Locations

- Cost efficient operation through ENOC
- Development of semi-automatic module cleaning system to reduce water usage by 46%
- Installation of solar street lights in villages

#### Responsible Consumption & Production

- 12. Responsible Consumption & Production
- 14. Life below Water

#### Tamil Nadu

- Use of Single-use-plastic reduced to 'zero' from both supply chain and internal operation at AGEL's largest solar plant of 648 MW in Kamuthi, Tamil Nadu
- Cleaned and de-silted community water ponds to create extra water holding and ground water recharge capacity that is 1.5x of water consumption at the Kamuthi plant

Social licensing through alignment with UNSDGs with focus on renewable energy, inclusive growth & sustainable innovation



#### Policies / Commitment

- Environment Management
- Energy & Emission Commitment
- Water Stewardship Commitment
- Biodiversity Policy

- Corporate Social Responsibility Policy
- Occupational Health and Safety Policy
- Human Rights & Community Relations Policy

Related Party Transaction Policy

- Dividend Distribution Policy
- Nomination and Remuneration
- Code of Conduct
- Whistle Blower Policy
- Anti-Corruption and Bribery Policy

#### Committees

- Corporate Responsibility Committee
- Risk Management Committee

- Corporate Social Responsibility Committee
- Stakeholder Relationship Committee

- Audit Committee (100% independent directors)
- Nomination and Remuneration Committee (100% independent directors)
- Risk Management committee
- Info tech and data security committee

#### Assurance

#### Corporate Responsibility Committee (CRC)

establishment of "CRC" of the board to provide assurance for all ESG commitments

(100% Independent directors)

#### **ESG Governance Structure**

#### **ESG Apex Committee**

**ESG Mentors** 

ESG Head

#### 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



#### Water consumption reduction initiatives

Conventional Module Cleaning System (Manual)



Water Consumption / module / cycle





Semi-automatic Module Cleaning System



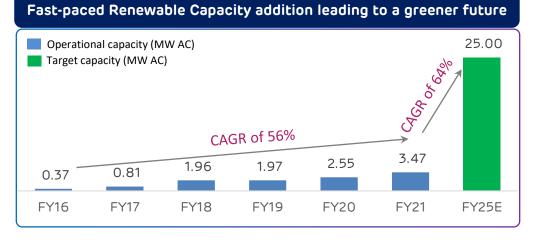


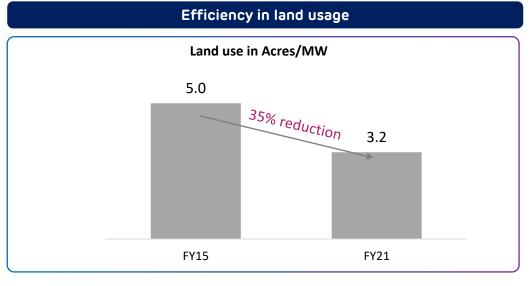


**Robotic Cleaning** 



Near Zero





Efficient land use with optimized plant design & deployment of latest technologies

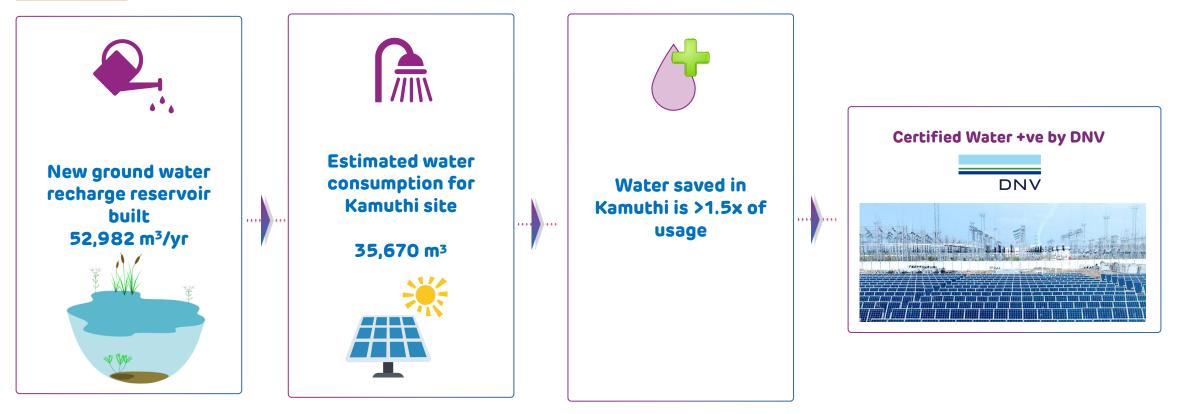
Early adoption of newer technologies leading water conservation





#### Aligning to UN Sustainable Development Goal 12

✓ Committed to water neutrality through reducing water consumption & conservation of water



First Water Positive Plant of its kind in the World







#### Aligning to UN Sustainable Goals 12 & 14

- ✓ Committed to responsible consumption by way of reducing single-use-plastic usage to 'zero' and thereby help reduce its impact on life below water
- ✓ SUP free certification to minimize waste generation under ISO 14001 being implemented.



## Eliminated SUP use from Supply-chain

- Uses identified e.g.
   wrapping/ packing material
   for equipment
- General Conditions of Contract amended
- ✓ SUP incorporated in quality checklist

## Eliminated SUP use in Internal Operations

- ✓ Identified SUPs as defined by United Nations Environmental Program and European Union
- ✓ Training of employees and IMS auditors on SUP
- Elimination of SUP items from the system



SUP Free certification at Kamuthi sets the model to be followed at large renewable plants across India



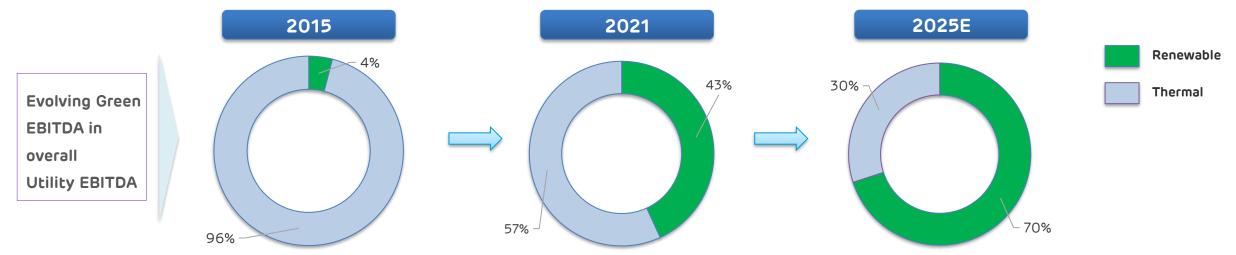


#### Adani Group: AGEL's deep green strategy to lead the group's sustainability ambitions





- Evolving into a sustainable infra asset owner.
- Utility EBITDA from green businesses to increase to 70% by 2025.



One of the few globally to have transformed from a fossil fuel dependent to renewable powered utility

- % of Green EBITDA out of total utility EBITDA and % of Green Capex out of total utility Capex
- EBITDA from non green sources increased in FY21 resulting in lower Green EBITDA (APL EBITDA in FY20 was Rs.71 bn and Rs.106 bn in FY21)

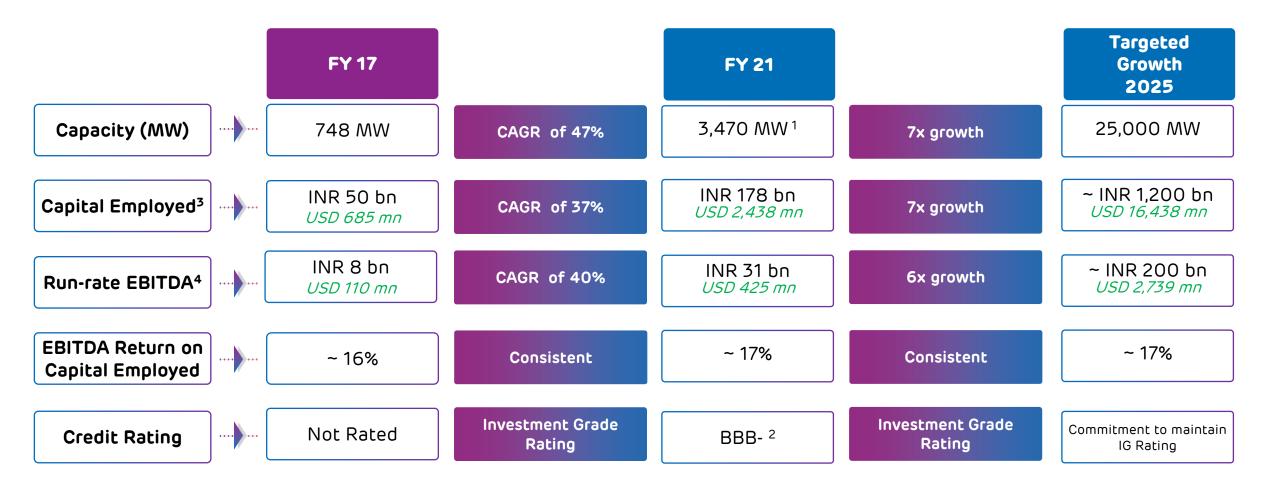
# AGEL: Value Creation through Transformative Investment Philosophy





#### AGEL: Value Creation through Transformative Investment Philosophy





#### Fast paced growth with stable returns

- 1 Includes 150 MW of wind projects under-acquisition from Inox
- Fitch Credit rating for RG2

<sup>3</sup> Capital Employed for Operational Assets. For locked-in growth the estimated project cost has been considered

<sup>4</sup> Estimated EBITDA for full year of operations; (Reported EBITDA from Power Supply for FY21 is INR 22 bn)

#### AGEL: A Compelling Investment Case

ESG Rating of 'A'



<u>'</u>	
Infrastructure lineage	<ul> <li>Pedigree of Adani Group: leader in infrastructure –transport, logistics, energy and utility space</li> <li>Proven track record of excellence in development, O&amp;M and capital management</li> </ul>
Strong Government Push	<ul> <li>India targets Renewable capacity of 175 GW by 2022 &amp; 450 GW by 2030 from 100 GW currently</li> <li>'Must-run' status to renewable plants in India ensures continuous off-take of energy</li> </ul>
Significant Growth Opportunity	<ul> <li>Targeted 5x growth from 5.4 GW currently operational to 25.0 GW by 2025</li> <li>Disciplined Capital Management with ring fenced structures such as RG1 &amp; RG2</li> </ul>
De-risked Project Pipeline	<ul> <li>200,000+ acres of land identified across India and out of this, 100,000 acres acquired / under-acquisition</li> <li>Revolving Project Financing Framework put in place for an amount of USD 1.35 bn</li> <li>In-house engineering and long term relationships with key suppliers further help de-risk the growth</li> </ul>
World-class O&M practice	<ul> <li>O&amp;M driven by Analytics &amp; Continuous monitoring with Energy Network Operation Centre</li> <li>Plant availability of ~ 100% (solar)</li> </ul>
Predictable & Stable cash-flows	<ul> <li>Long term PPA's (25 years); 87% Sovereign &amp; Sovereign equivalent rated Counterparties</li> <li>Operations continued normally even during crises situations like COVID-19</li> <li>EBITDA from Power Supply of ~90% over the past years</li> </ul>
ESG Focus	<ul> <li>AGEL's largest solar plant of 648 MW in Kamuthi became the First net water positive plant of its kind in the world and the First single-use plastic free plant of its kind in the world</li> <li>Ranked 3<sup>rd</sup> best in Indian Electric Utility sector ESG benchmarking of DJSI-SP Global &amp; Assigned MSCI</li> </ul>





# Thank You