

adani  
Transmission

# Adani Transmission Limited Adani Energy Day

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December 2019



# Table of Contents

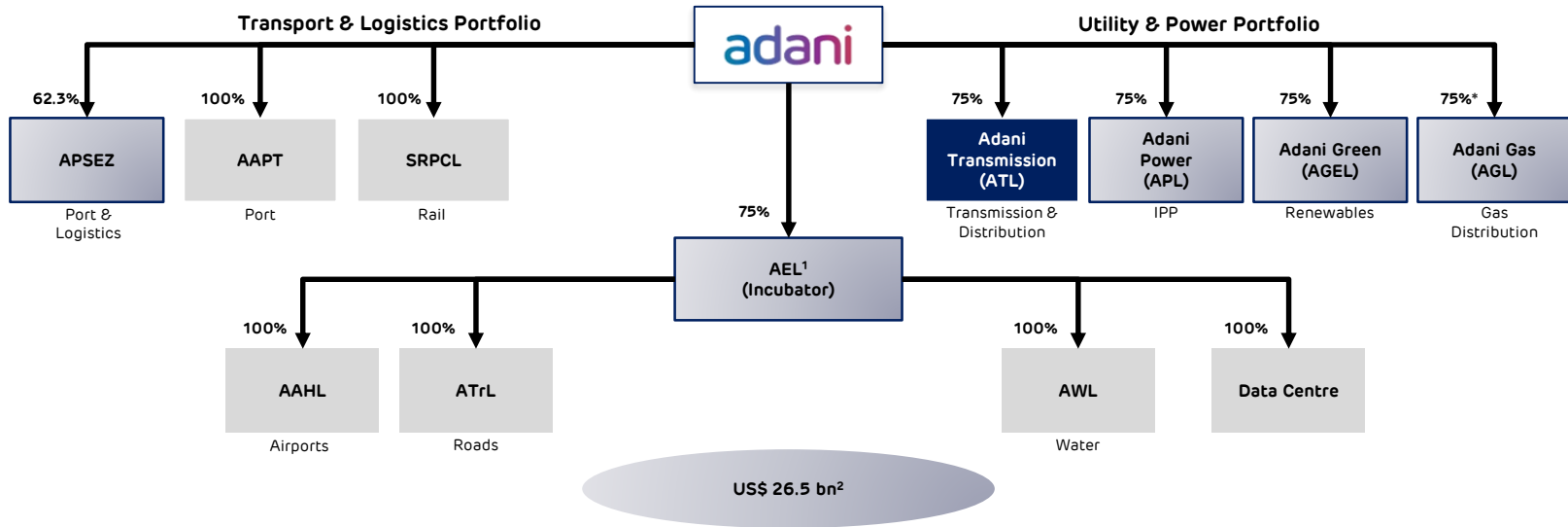
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- A Introduction to Adani Group
- B Introduction to ATL and Growth Levers
- C Value Creation through Capital Management
- D ESG Showcase
- E ATL: A Compelling Investment Proposition



## A) Introduction to Adani Group

# Adani: Leading Infrastructure and Utility Portfolio







adani

- No 1 in Ports, Transmission & Distribution and IPP (Thermal and renewables) in India
- Independent verticals with independent boards - Integrating ESG into value creation
- Addressable market size (customers): ~12mn in Adani Transmission, ~10mn in Adani Gas & ~125mn in Airports

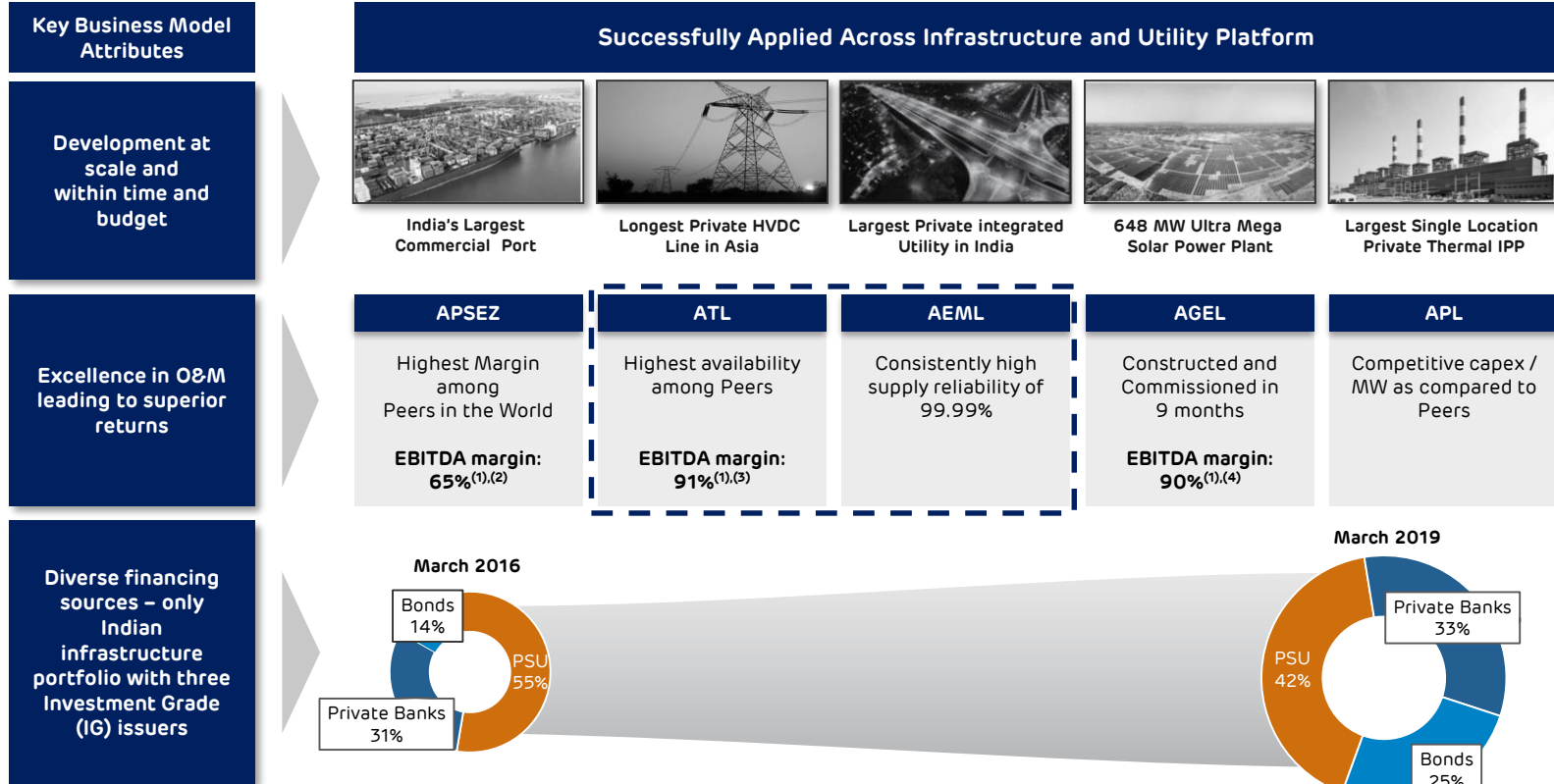
Notes: APSEZ: Adani Ports and Special Economic Zone Limited; AAPT: Adani Abbot Point Terminal Pty Ltd; SRPCL: Sarguja Rail Corridor Private Limited; ATL: Adani Transmission Limited; APL: Adani Power Limited; AGEL: Adani Green Energy Limited; AGL: Adani Gas Limited; AAHL: Adani Airports Holdings Limited; ATrL: Adani Transport Limited; AWL: Adani Water Limited Note: (1) Part of Adani Enterprises Limited (AEL) which is a listed entity; (2) Market Cap. as on October 31, 2019 \* Adani Family shareholding as of 30 Sept 2019

# Adani: Repeatable, Robust and Proven business model

Phase	Development			Operations	Post operations
	Origination	Site development	Construction	O&M and technology	Capital management
Activity	<ul style="list-style-type: none"> <li>Return based disciplined bidding strategy</li> <li>Target off-taker mix</li> <li>Target fuel mix</li> </ul>	<ul style="list-style-type: none"> <li>Resource assessment</li> <li>Connectivity permits</li> <li>Land acquisition</li> </ul>	<ul style="list-style-type: none"> <li>Template based design</li> <li>Strong project management skills</li> <li>Strong vendor engagement</li> </ul>	<ul style="list-style-type: none"> <li>RONC based analytics and intelligence</li> <li>Real-time diagnostics</li> <li>Cluster based management</li> </ul>	<ul style="list-style-type: none"> <li>Reduction of cost of debt</li> <li>Project life-cover based debt funding</li> <li>Investor reporting and engagement</li> </ul>
Performance	<ul style="list-style-type: none"> <li>Portfolio with high quality sovereign equivalent off-takers</li> <li>Diversified fuel mix</li> </ul> 	<ul style="list-style-type: none"> <li>Successfully developing large scale remote site locations</li> </ul> 	<ul style="list-style-type: none"> <li>Complex developments on time &amp; budget e.g. Kamuthi Solar</li> </ul> 	<ul style="list-style-type: none"> <li>Best-in-class performance</li> </ul> 	<ul style="list-style-type: none"> <li>Operations phase funding consistent with asset life</li> </ul> <p><b>APSEZ, ATL and AGEL - only private sector Infrastructure assets in India with IG rating</b></p>

Low capital cost, time bound & quality completion providing long term stable cashflow & enhanced RoE

# ...Applied Consistently to Drive Value



Notes: 1. Data for FY19; 2. Excludes forex gains/losses; 3. EBITDA = PBT + Depreciation + Net Finance Costs – Other Income; 4. EBITDA Margin represents EBITDA earned from power sales and excludes other items



## B) Introduction to ATL and Growth Levers

# ATL manifests Adani's Infrastructure Excellence in T&D business...

## Execution Strength and Pan India Presence



3 million+  
Retail Electricity Households



AEML - One of the best-run 93-year  
old integrated utility catering to  
gateway city of Mumbai



765 KV, 400 KV, 220 KV EHT  
AC Pan-India network & only  
private sector co. to operate  
500 KV HVDC in S-E Asia

## Predictable and Annuity Returns



54%/ 46%  
ROA / TBCB (2)



31 years/ 17 years  
Avg. Residual Concession Life  
(Transmission/ Distribution)<sup>(4,5)</sup>



INR 281 Bn/ US\$ 4.0Bn  
Total Regulated Asset base<sup>(1)</sup>  
(Fully built)

## Robust Financial performance and strong Balance Sheet



91%  
EBITDA Margin  
(FY19)



~99.84 %  
Availability  
(FY19)



INR 117 bn / US\$ 1.7 bn  
Approved Tariff Order  
(Fully Built)<sup>(1)</sup>



BBB- / Baa3  
International Investment  
Grade Rating<sup>(5)</sup>

Notes: US\$/INR: 70; (1) Fully built estimate based on regulatory approved tariff and bid based tariff profile of operational, under-construction and under-acquisition projects of Transmission and Distribution business. No upsides have been assumed on account of operational efficiencies; (2) Including under-construction and under-acquisition assets on project cost basis and existing assets on book value basis; RTM - Regulated Tariff Mechanism; (3) S&P: BBB- / Fitch: BBB- / Moody's: Baa3; (4) Average residual concession life for Transmission assets is as of FY19; (5) Operational History of 93 years



# ...Repeatable, Robust and Consumer-centric Business Model...

Phase	Development		Consumer-centric Operations		
	Origination	Construction	O&M and Technology	Consumer Engagement	Capital Mgmt
Activity	<ul style="list-style-type: none"> <li>Return based disciplined bidding strategy</li> <li>Healthy off-taker mix</li> <li>Moving towards benign fuel mix</li> </ul>	<ul style="list-style-type: none"> <li>In-house tailor-made design capabilities</li> <li>Strong project management skills</li> <li>Strong vendor engagement</li> </ul>	<ul style="list-style-type: none"> <li>Remote operation of pan-India assets being pursued for enhanced efficiency and higher availability</li> <li>High Focus on reliability of the supply demonstrated by <b>SAIDI</b>, <b>SAIFI</b> and distribution losses</li> </ul>	<ul style="list-style-type: none"> <li>Time-bound Consumer Redressal Mechanism</li> <li>Integrating Consumer Service through Web, Chat-bot, Mobile App and Social Media</li> <li>Consumer Data Analytics to improve process efficiency</li> </ul>	<ul style="list-style-type: none"> <li>Reduction of cost of debt</li> <li>Project life-cover based debt funding</li> <li>Investor reporting and engagement</li> <li>AEML: Investing significantly towards network strengthening</li> </ul>
Performance	<ul style="list-style-type: none"> <li>54% of total Transmission portfolio EBITDA with high quality sovereign equivalent off-takers</li> </ul>	<ul style="list-style-type: none"> <li>Longest Private HVDC Line (<math>\pm</math> 500 DC) in Asia ~ 1,980 ckms from Mundra-Mohindergarh</li> </ul>	<ul style="list-style-type: none"> <li>Availability higher than national avg. and AT&amp;C losses well below national avg.</li> <li>AEML – Robust network with supply reliability of 99.99%</li> <li><b>Consistent improvement in AT&amp;C losses, SAIDI and SAIFI metrics resulting into lower outage</b></li> </ul>	<ul style="list-style-type: none"> <li>AEML emerging as a 'supplier of choice' for consumers</li> <li>Enabled AEML as a significant power off-taker under parallel licensing in Mumbai</li> </ul>	<ul style="list-style-type: none"> <li>Ops phase funding consistent with asset life</li> </ul> <p><b>ATL only private sector transmission and distribution company in India with International IG Rating</b></p>

Efficient project execution, high quality asset management, consumer-centricity translating to enhanced RoE & lower cost of capital

...Delivered ~2.5x EBITDA Growth over 3.5 years

**A platform well-positioned to leverage growth opportunities in the market**

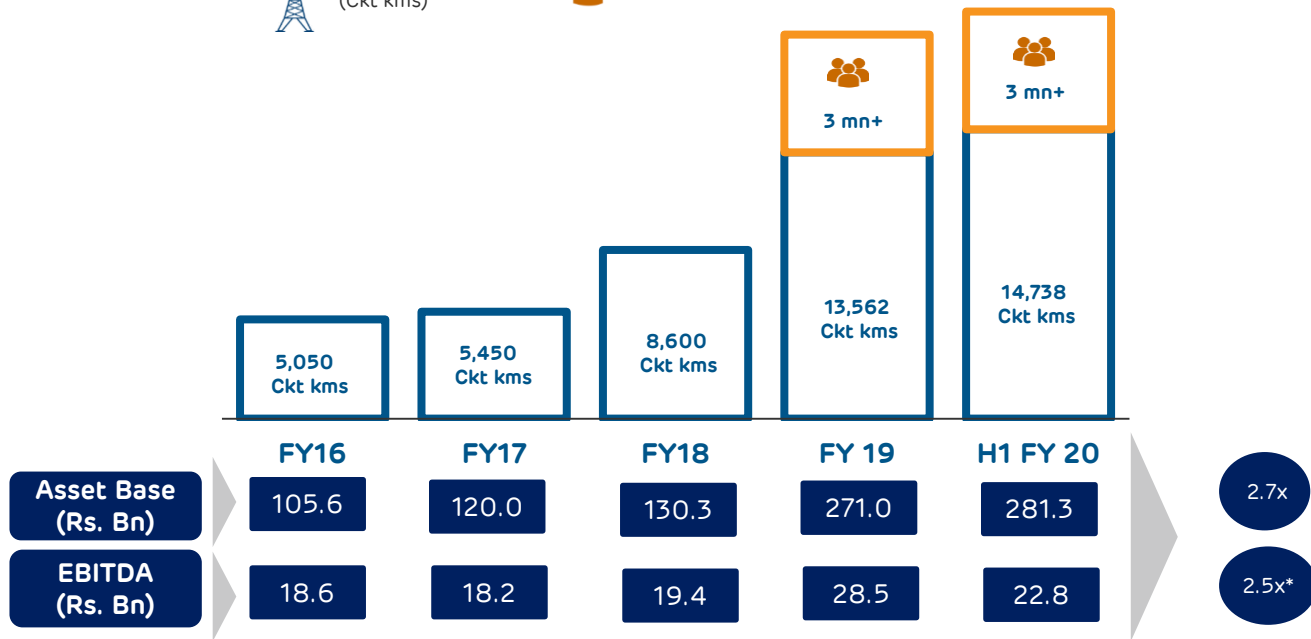
**ATL's "Grid-to-Switch" Integrated Platform**



Transmission Line  
(Ckt kms)

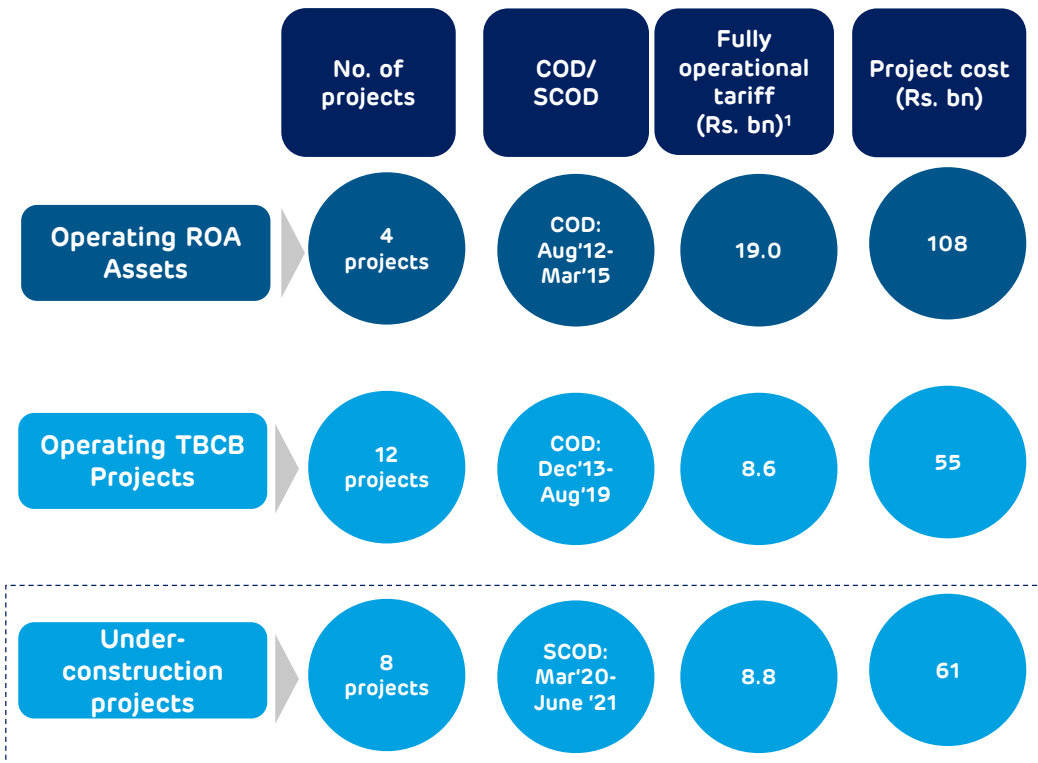


Distribution Households

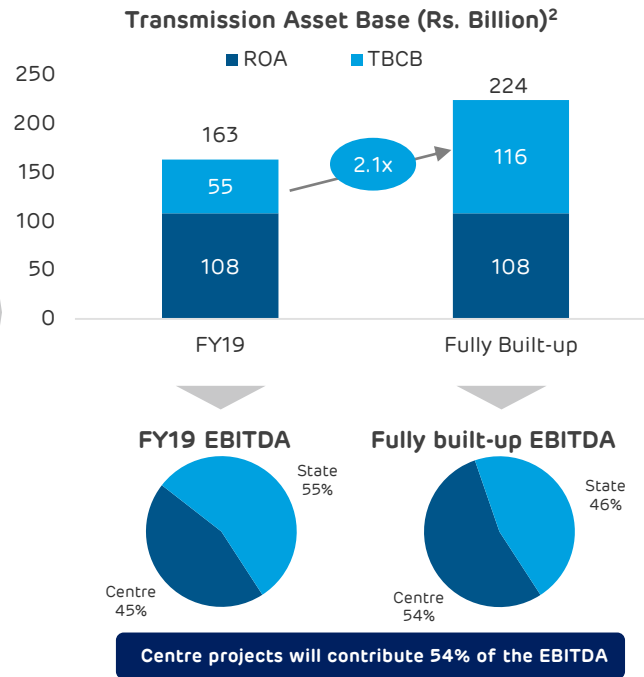


Note: \*2.5x growth based on EBITDA for H1FY20 being annualized; Asset base includes ROA and TBCB assets

# ATL: Growth through TBCB pipeline



## Transmission: ROA and TBCB Assets



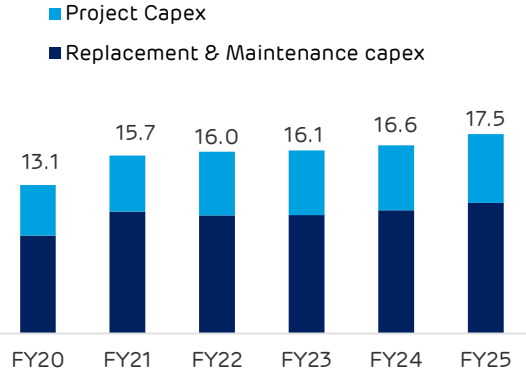
**Further growth in Transmission from strong TBCB pipeline**

Notes: 1) Fully Operational Tariff for Operating ROA as of FY19 and Operating TBCB and Under-construction projects is fully operational first year tariff.  
 2) Transmission Asset Base comprises projects based on regulatory tariff order, and includes fully-built, under-construction projects;  
 3) SCOD - Scheduled Commercial Operation Date, COD - Commercial Operation Date

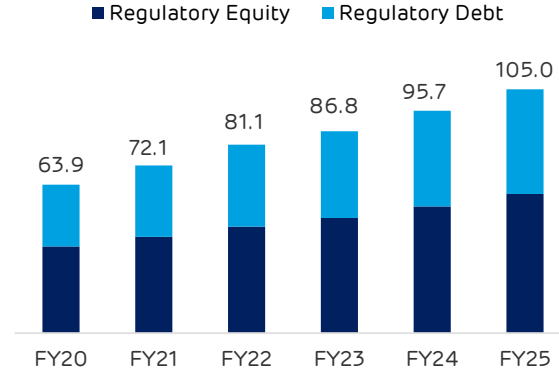
# AEML: Utility Business Growth

## AEML regulated growth opportunities

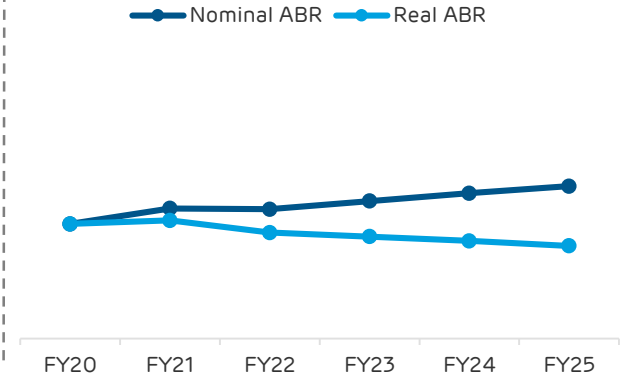
### Capex Schedule (Rs. bn)



### Regulated Asset Base (Rs. bn)



### Average Billing Rate (ABR) – Rs. /unit<sup>1</sup>



Capex plan of ~Rs.95 bn for FY20-25

Self-contained growth in AEML through capex while maintaining affordable tariffs through optimum power purchase, consumer growth and best O&M practices

## AEML unregulated growth opportunities

Efficient Appliances and Demand side Management (DSM)

Smart Home Products

E-security and Entertainment on-demand

Fiber-to-Home

Safety and Energy Audit at places of congregation and consumers

One Adani-One Service



## C) Value Creation through Capital Management

# ATL: Value Creation through capital management

## Capital management philosophy

Raising **project finance debt** for under-construction assets from Indian / Foreign banks on non-recourse basis

**Refinancing** of operating project debt for

- Lower cost
- Longer maturity
- Distribution friendly covenants
- Infra capital management has released equity for growth requiring no additional capital

Strategic divestment of minority stake in operating assets

## Leading to prudently levered structure

Total debt  
Rs. 258 bn

RAB  
Rs. 309 bn

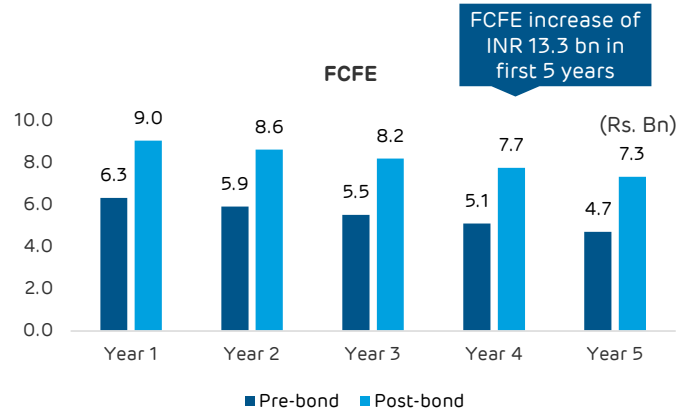
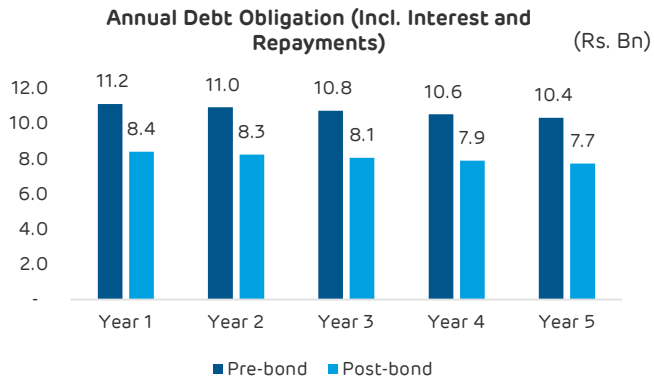
Total Debt to Regulated Assets<sup>(1)</sup>

0.84x

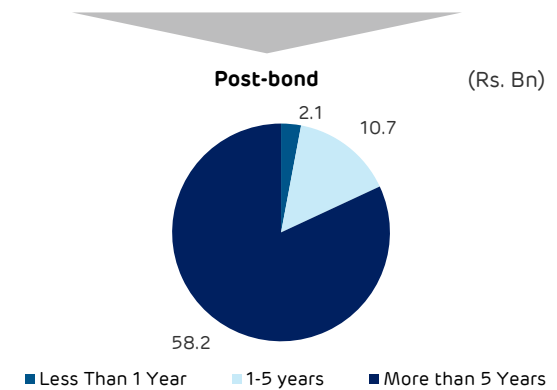
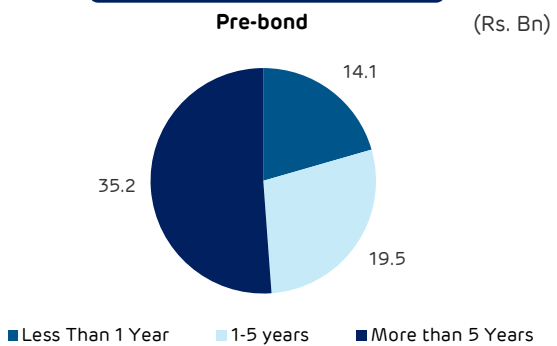
- **Prudently levered** portfolio with a huge runway for growth
- Enabling **self-funded value accretive growth**

# Case Study 1: ATL Obligor Group US\$ Bonds

**Extinguished capital refinancing risk by long-term US\$500mn 4.25% 16.5yr Amortizing Senior Secured Bond issued in November 2019**



### Maturity Profile



Releasing Equity to Pursue Future Growth

Short-term balance refinance obligation is less than 5% of EBITDA

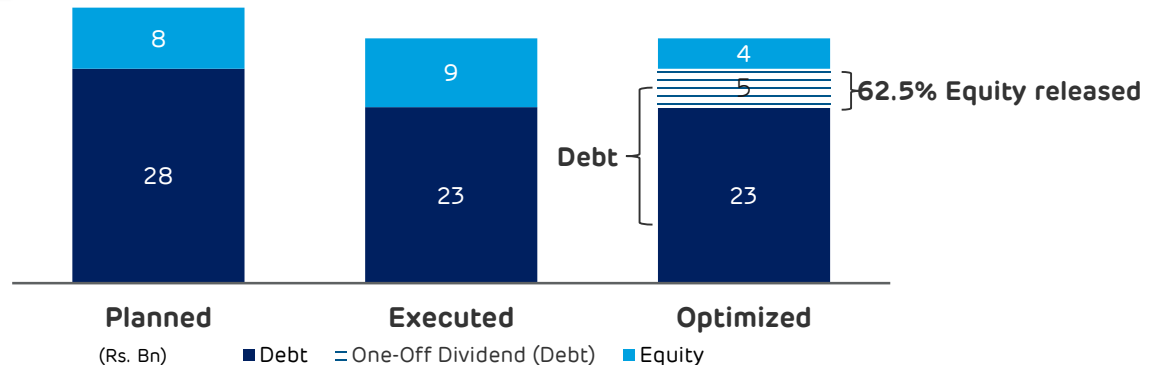
Extended Maturity, Back-ended Repayment

Note: (1). Total Debt – For Operational projects as per FY 19 Financials and for Under Construction projects based on D:E ratio. Regulated Assets are projects based on regulatory tariff order

# Case Study 2: Leveraging Group's Infra Philosophy – Execution, O&M and Capital Management to create immense shareholder value

## Fully funded Value Creation by Capital Management releasing Equity for Growth Commanding Higher Multiples

Phase	Development	Operations	Capital Mgmt.
Original	<ul style="list-style-type: none"> <li>Original Est. Project Cost Rs. 36 bn</li> </ul>	<ul style="list-style-type: none"> <li>Original Est. Cost Rs. 0.5 bn</li> </ul>	<ul style="list-style-type: none"> <li>Planned RoE &lt;21%</li> <li>Executed RoE of 21%</li> </ul>
Performance	<ul style="list-style-type: none"> <li>Actual Project Cost Rs. 32 bn</li> </ul>	<ul style="list-style-type: none"> <li>Actual Cost Rs. 0.32 bn</li> </ul>	<ul style="list-style-type: none"> <li>Optimized RoE of 55%</li> </ul>







## D) ESG Showcase



- Reduction of carbon footprint
  - **Increase in Renewable procurement for the distribution business** to be compliant with the Paris Accord at company level and also promotion of Roof Top Solar
  - Rooftop Solar power of 1.83 MW for aux consumption at all substations of ATL
- Resource Management
  - Rain water harvesting at substations
  - Compact substations in distribution business (Elevated & Underground substations)
- Waste Management
  - **100% fly ash utilization at Dahanu plant**



- ATL in association with Adani Foundation participates in various social upliftment activities
  - Education – Adani Vidya Mandir and Adani Public school provide subsidized education
  - **Community Development - Association with NABARD** covering 11 villages of Dahanu ,1000 land owning families, Creation of self help groups for women
- Safety for employees - HT / LT Arc Flash suits, Cable Avoidance Tool and other modern equipment provided to field employees → **0 Fatalities in FY19**
- Safety for 12 mn consumers – awareness through Electrical Safety Week , Electrical safety Video; Safety Audit of places of congregation; #SafetyCulture
- Skilling for needy women through **Indian Institute of Women Skills**



- **Bankruptcy Remote Structure for 8 SPVs including AEML**
- **ATL** has board independence at listed company level including Audit committee of only independent directors (5 SPVs incl. AEML have independent directors as well)
- Rigorous audit process followed
  - Quarterly audit conducted on 15 parameters across all subsidiaries
  - Key Issues are brought to the management's notice and resolution timelines are decided regarding the same
- Stricter implementation of related party transactions policy

<p><b>Climate Awareness</b></p>	<p>ATL recognizes that below environment related factors have major impact on its business model</p>		
<p><b>Climate Readiness</b></p>	<p><b>Carbon Emissions</b></p> <p><b>Reduction in Carbon Footprint</b></p> <p>➤ <b>Technology Driven :</b></p> <ul style="list-style-type: none"> <li>✓ Increase in Renewable procurement for the distribution business</li> <li>✓ Promotion of Roof Top Solar at Mumbai</li> <li>✓ Rooftop Solar power of 1.83 MW for aux consumption at all ATL substations</li> </ul>	<p><b>Resource Management</b></p> <p><b>Resource Management</b></p> <ul style="list-style-type: none"> <li>➤ <b>Water</b> – Rainwater harvesting at substations</li> <li>➤ <b>Land</b> – Compact substations in distribution business (Elevated &amp; Underground substations)</li> </ul>	<p><b>Waste Management</b></p> <p><b>Waste Management</b></p> <ul style="list-style-type: none"> <li>➤ <b>Fly ash</b> –100% fly ash utilization at Dahanu plant</li> <li>➤ "5S" at all locations</li> </ul>
<p><b>Climate Alignment</b></p>	<p>We are moving into the next stage of sustainability journey with more ambitious plans and targets related to <b>Preserving environment and measuring GHG emissions</b></p> <ul style="list-style-type: none"> <li>– <b>Evaluating &amp; planning for climate change driven adversities</b></li> <li>– <b>Efficient Energy Solutions for 12 mn Mumbai consuming population</b></li> </ul> <p>The company has aligned its business plan and is investing in below activities for sustainable growth</p> <ul style="list-style-type: none"> <li>– <b>Research &amp; Development for Design driven Efficiency</b></li> <li>– <b>Biodiversity Management &amp; Conservation</b></li> <li>– <b>Optimization of water &amp; energy consumption</b></li> </ul>		

# AEML Dahanu Plant Case Study

## Climate management system amongst the best in the country

Climate Awareness and Climate Readiness

>100% fly ash utilization

Amongst the **tallest chimneys** in India (~ 275m)

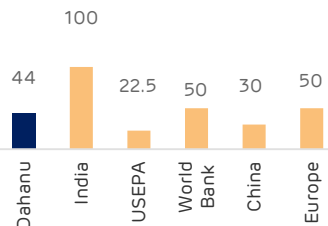
**1<sup>st</sup> in India** to install FGD to prevent sulphur emissions / acid rain

ESP : 99.9% efficiency to collect fly ash → **minimum exposure to consumers**

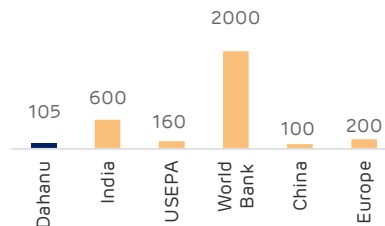
4 Ambient Air Quality Monitoring Stations keeps in check health of local consumers

### Dahanu TPP is amongst the most environmentally friendly plants in India

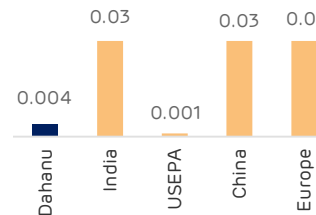
Particulate Matter (mg / Nm<sup>3</sup>)



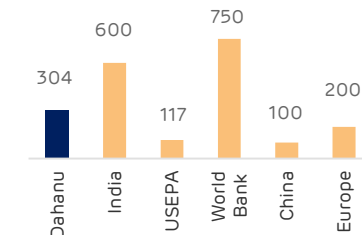
SOx Emissions (mg / Nm<sup>3</sup>)



Mercury (mg / Nm<sup>3</sup>)



NOx Emissions (mg / Nm<sup>3</sup>)



Ministry of Power Award for environment management - 2012

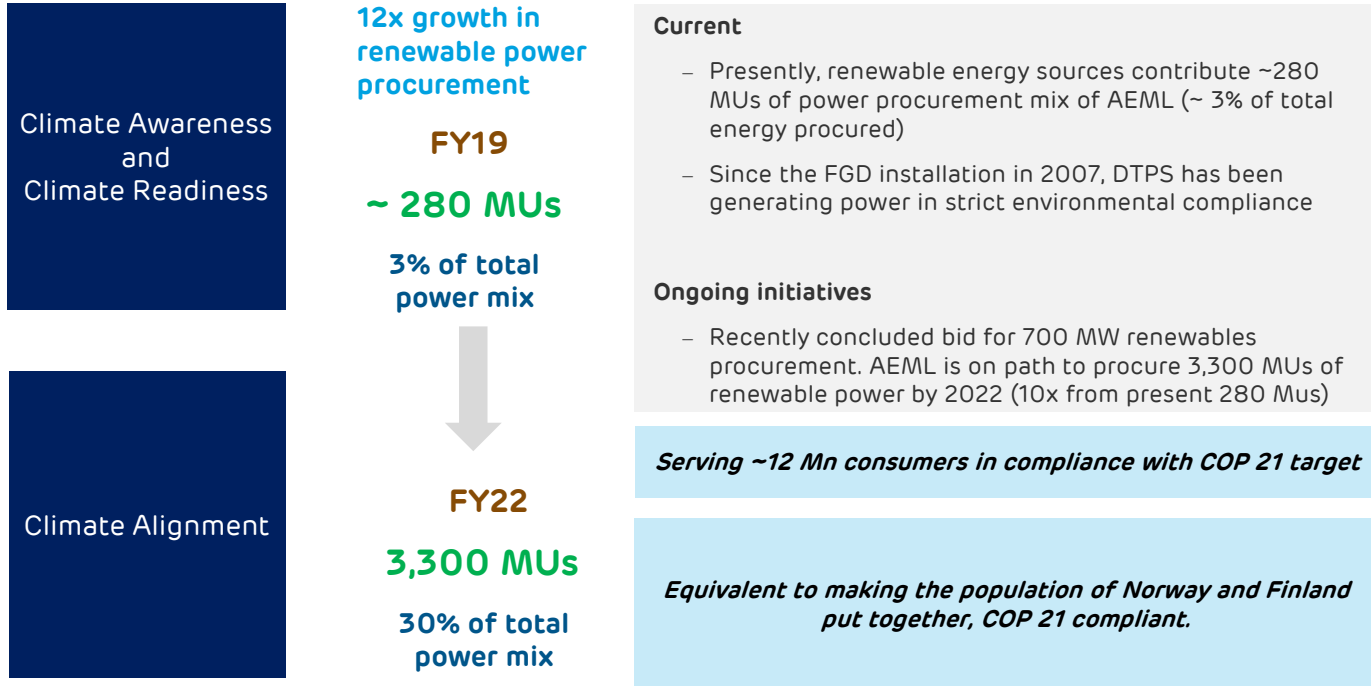
14<sup>th</sup> time National Level Energy Efficiency Award

5<sup>th</sup> time State Level Energy Efficiency Award

1<sup>st</sup> ISO 50001 Energy Management Certificate globally

# AEML to be Cop 21 compliant DISCOM by 2022

**AEML to procure 30% of power from renewable power sources, change implemented within a year of acquisition**



**AEML has taken steps for climate alignment to be compliant with the COP21 targets ahead of schedule**

# Adani Transmission – Serving Community and bettering lives

## Education

- **ATL** in association with Adani Foundation has been providing quality education to the underprivileged community
- **Adani Vidya Mandir** for free and quality education to > 2,100 students annually
- **Adani Public School** providing subsidized education

## Community Related

- Supplementary livelihood opportunity to fisherfolk community
- **Creation of self help groups for women**
- Mobile health care units, rural clinics and other medical facilities, serving more than 400,000 people annually
- Association with NABARD covering 11 villages of Dahanu ,1000 land owning families
- 835 candidates trained (773 employed in garments)



## Employee Safety

- **HT / LT Arc Flash suits** - to protect against flashover hazards
- **Cable Avoidance Tool** - to detect the depth of live underground cable
- Internal training & awareness programs
- 0 fatalities reported in FY19
- #SafetyCulture

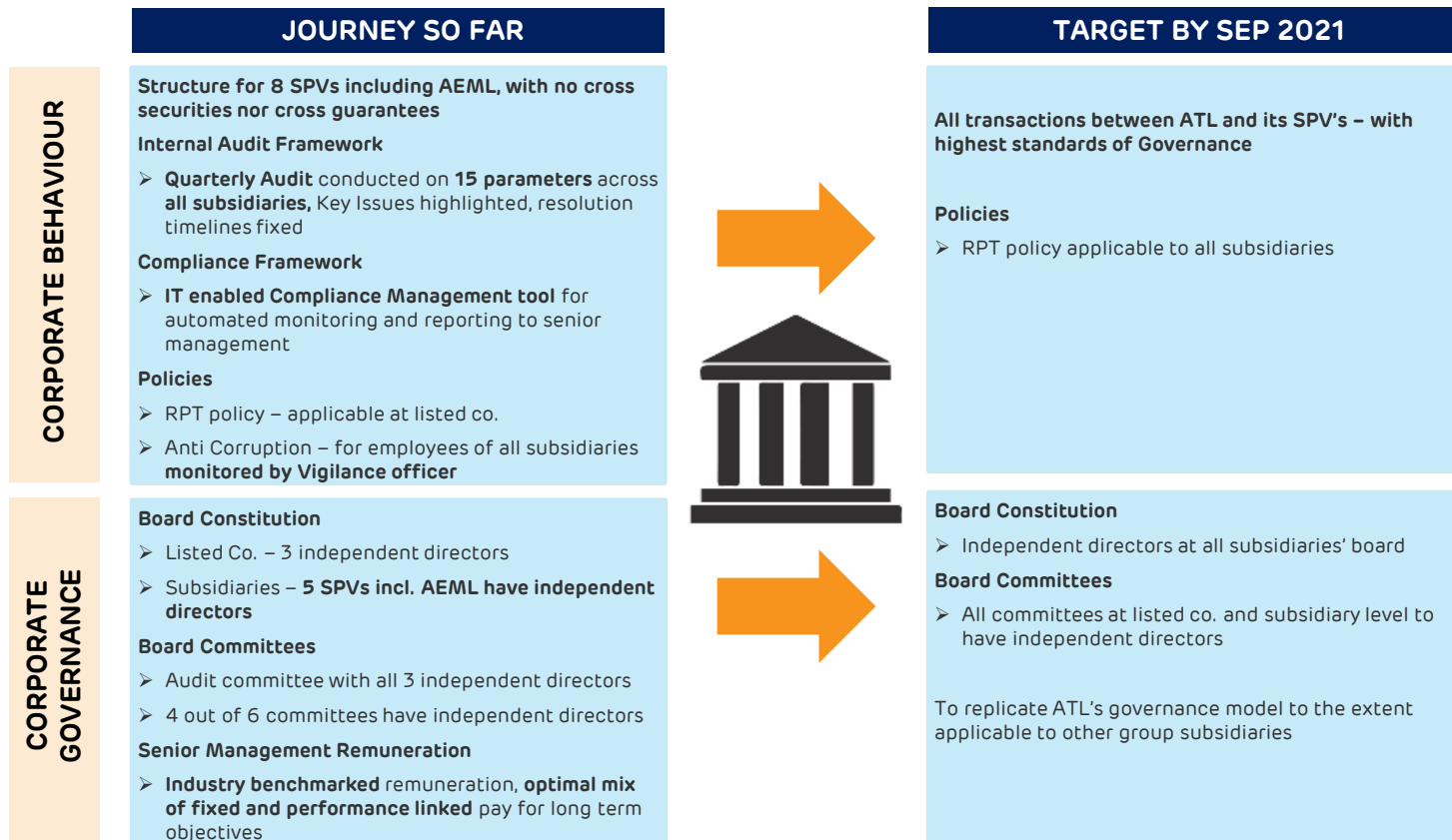
## Consumer Safety

- **Electrical Safety Week** in association with Industrial Labour & Energy department, Maharashtra
- **Mahacharcha (National Debate)** sponsored by AEML broadcasted on National Television
- **Electrical safety Video prepared by AEML** shown across the Maharashtra
- Safety Audit of all places of congregation



# ATL's Governance – Journey so far and future glide path

We have charted a glide path to internalise global best practices of governance by September 2021



# ATL Case Study

## Internal Audit enabling corporate assurance

- Depending on the quarters, audit tests are conducted on different parameters (out of total 15)
- In Q2FY20, audit test performed for effectiveness of internal controls on the following parameters
  - Operations
  - Plant Maintenance
  - Inventory Management
  - Safety

**Below are some of the issues identified in Q2FY20 audit and corresponding action plans for resolution**

Parameter	Issue	Resolution Action Plan
<b>Plant O&amp;M Related</b>	<p><b>ATIL, MEGPTCL, ATSCl and MTSCl</b></p> <ul style="list-style-type: none"> <li>➤ Mismatch in patrolling activity as per system against staff attendance records</li> <li>➤ Preventive Maintenance (PM) closed as completed without performing activity</li> </ul>	<ul style="list-style-type: none"> <li>➤ To explore locking of attendance through IT enabled application</li> <li>➤ Any deviation in the PM schedule/process, shall be approved by Head O&amp;M</li> </ul>
<b>Safety Related</b>	<p><b>ATIL, MEGPTCL, ATSCl and MTSCl</b></p> <ul style="list-style-type: none"> <li>➤ During site visit, it was noted that the gravel content was less than the required quantity at the substation area</li> </ul>	<ul style="list-style-type: none"> <li>➤ Switchyard immediately cleaned and necessary gravel level reinstated</li> </ul>





**E) ATL: A Compelling Investment Proposition**

# ATL: A Compelling Investment Proposition

Growth

Mature Business  
Delivering  
Shareholder Value

Strong Cash Flow and  
Accretive Value  
Creation

Performance



Financing Competitiveness;  
Internal Accruals Led  
Growth

Integration of In-Organic  
Ventures

Risk Management  
Capabilities

Advanced Technology

adani

Growth  
with  
Goodness

Thank You

