

AMPLUS ENERGY SOLUTIONS



6th Floor, The Palm Square, Sector 66,
Golf Course Extension Road, Gurgaon

www.amplussolar.com

Actual Site Photo: Hilton, Shillom

Our Business: ROOFTOP

Amplus **funds, installs** and **maintains** a rooftop solar power plant for you



**Rooftop
CUSTOMER**

Amplus designs, procures, installs, commissions and maintains the solar plant on your rooftop

Amplus invests 100% of the capital required



Customer signs a long-term Power Purchase Agreement ("PPA") with Amplus

Power rate will be cheaper than current tariff, leading to significant savings to you over the project's lifetime.

What we offer?

Solar Power as a Service



Customized Solution

Guaranteed Savings



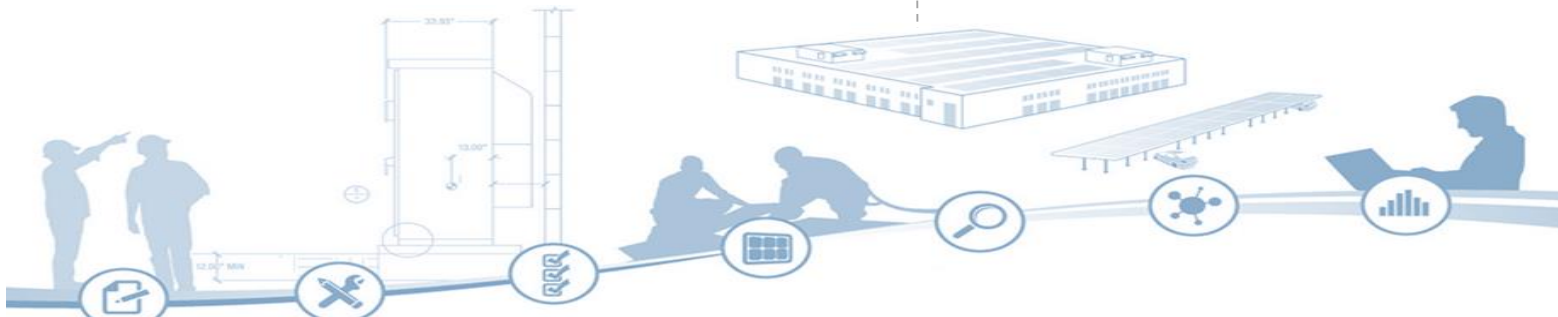
Zero Investment

Predictable Supply



Zero Maintenance

Rooftop Specialists



We offer you a solution with minimal upfront investment, Zero maintenance obligations and Guaranteed Savings from day 1

Our Business: OPEN ACCESS

Amplus **installs** and **maintains a large solar park** within the State supplying power to various Industrial and Commercial customers



**Open Access
CUSTOMER**

Amplus invests 100% of the capital required, designs, procures, installs, commissions and maintains a offsite large ground mounted

Amplus sells the power generated under open access route

Customer signs a long-term Power Purchase Agreement ("PPA") with Amplus

Power rate will be cheaper than current tariff, leading to significant savings to you over the project's lifetime.



Project bus bar to substation of Transmission / Distribution Company



Transmission, Wheeling & Banking through Utility network



DISCOM to Consumers as per existing arrangement

Amplus does not novate project ownership to third parties

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Rooftop Specialists

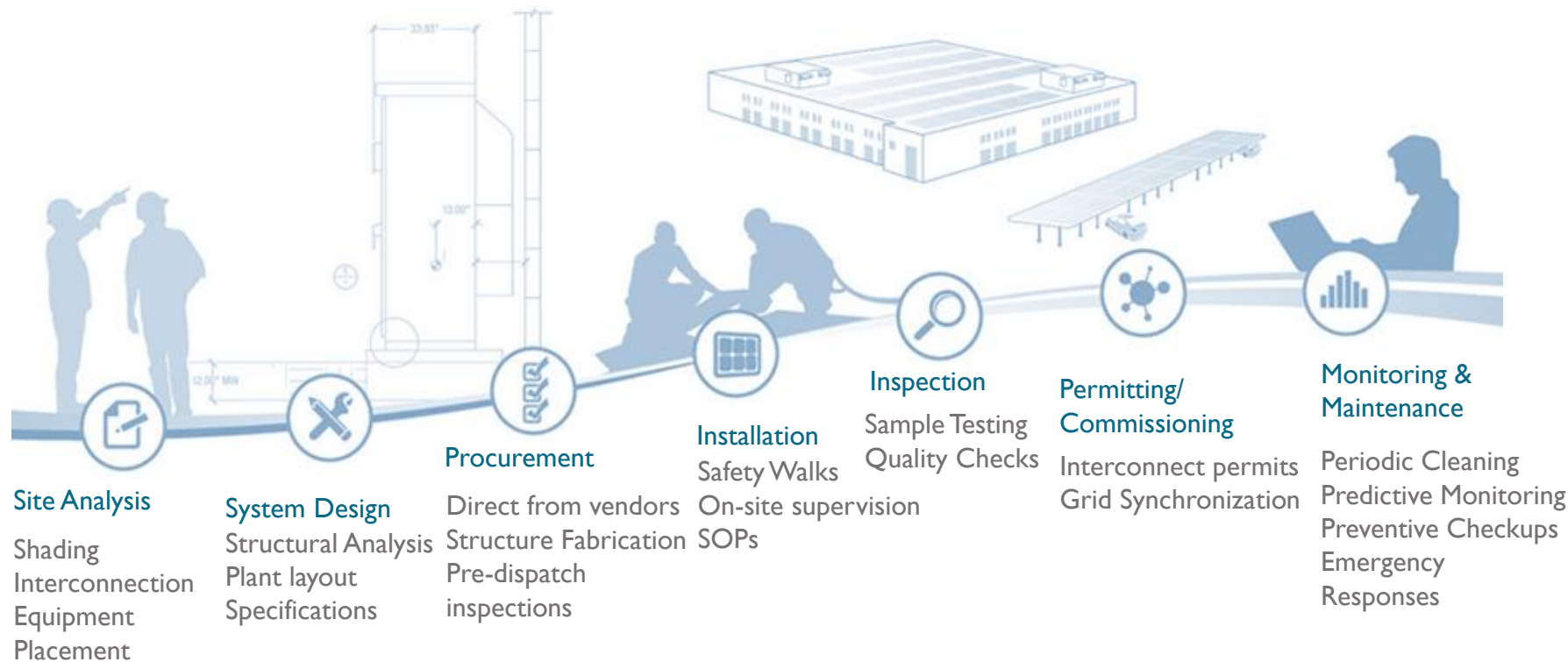


We offer you a solution with minimal upfront investment, Zero maintenance obligations and Guaranteed Savings from day 1



Solar Power As A Service (SPAAS)

SPAAS is an **innovative** and **competitive** business model where end to end construction, delivery and maintenance of Solar system is covered



BENEFITS OF SPAAS

- 1 Promising **end-to-end delivery** of Solar plant
- 2 Techno-Financial and Commercial **Risk Protection** for Clients
- 3 **Guaranteed savings** through reduction in electricity bills
- 4 Allowing clients to have **Zero upfront investment**
- 5 Providing **Hassle-free maintenance**

100% comprehensive, fully-integrated design, procurement, installation, project management, commissioning, maintenance and monitoring solution provided by Amplus

World Class Solar Company

1

INR 1,000 Crore of Equity to Invest

I Squared Capital, a US\$ 3 Billion global private equity fund has invested in Amplus



2

High Quality Components

We only work with Tier 1 component suppliers, ensuring high system reliability



3

World Class Design

International validation of mounting structures design and remote monitoring system



4

Pan Asia Focus

Amplus is looking to develop multiple projects across Asia



WORLD-CLASS SUPPLIERS:



EQUITY BACKING:



ISQUARED CAPITAL

New York, Houston, London, Hong Kong, Singapore, New Delhi

TIER I CREDIT - WORTHY CUSTOMERS :



INDUSTRY ASSOCIATIONS:



PROJECT RATINGS:





BACKED BY A \$3 BN INFRASTRUCTURE FUND

I Squared Capital has over 55 professionals based in New York, Houston, London, Hong Kong, New Delhi and Singapore and has 9 platform companies globally

District Energy (US)

CoolCo
Cincinnati



Kendall
Cambridge



MAS Energy
Atlanta and Ponte Vedra



Power Generation (Europe)

Viridian
Ireland



Utilities (China)

China Cube Water
China



Power Generation (US)

Oregon Clean Energy
Ohio



Midstream (US)

Cube Midstream
New Mexico



Wind and Solar (US)

Lincoln Clean Energy
New Jersey / Texas



Hydropower (US)

Cube Hydro
Mid-Atlantic



Solar (India)

Amplus Solar
India

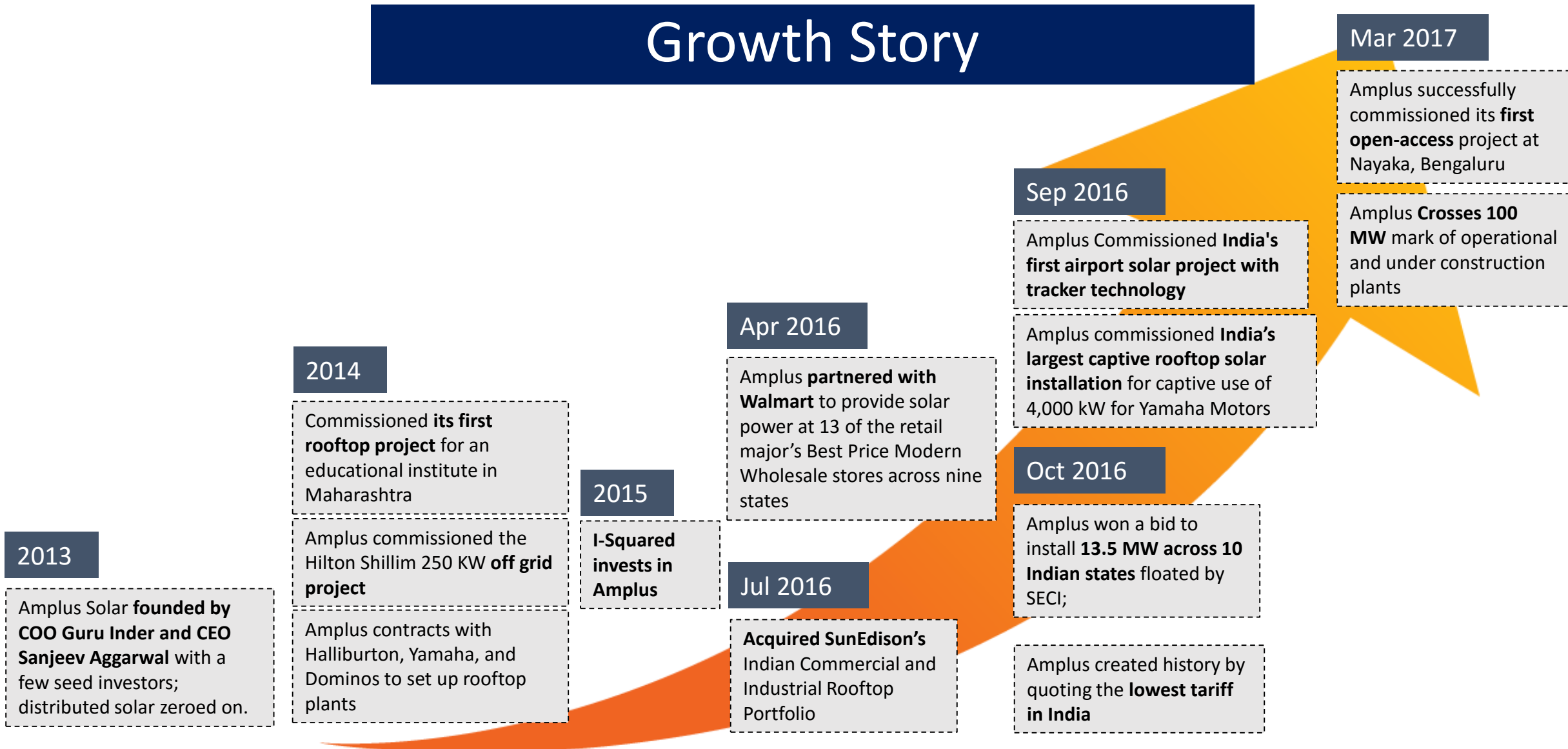


Tollroads and Logistics (India)

Cube Highways and Logistics
India



Growth Story



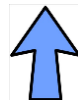
2016
YEAR

30+ MW



2017
YEAR

120+ MW



270% Growth is a testimony to Amplus' dedication to its commitment

India's Most Awarded Solar Company

AWARDS



Best Renewable Energy company in Asia- 2016



For a better life on a greener planet

Gold category of EEF Global Awards 2016



सत्यमेव जयते
Ministry of New and Renewable Energy
Government of India

National Excellence Award 2016



Rooftop Solar – Project Developer



Best Green Energy Industrial Solutions Provider India 2017 Award



Global CEO Award 2016



Innovative Project – Rooftop Scale



Green Energy Provider 2016



Commercial Rooftop Installation 2016



Best Project Development 2016



National Energy Circle 2017

INDUSTRY LEADERSHIP



Heading the FICCI Committee on Rooftop Solar interacting with MNRE on behalf of the industry

Core Team Member of India's First Distributed Generation Association



Member, Advisory Council, Renewable Energy World Conference

Member of the BRICS Business Forum representing India's views on distributed solar



Member of the World Bank Consultation Group on rooftop solar financing

Member of India German Energy Forum (IGEF) representing distributed solar industry from India



"Amplus strives to be industry leaders – and is forever committed to solve energy needs of its clients"

- Sanjeev Aggarwal, MD & CEO – Amplus

Privileged and Confidential

Project Delivery Framework

Amplus takes **100% responsibility of Project Execution** and follows a well-laid process to deliver high quality projects within timelines.

Project Handover to PM Team	Comprehensive document checklist and protocols followed while transferring the project from Business Development Team to Project Management Team.
Project Team	Project execution team is created consisting of: A Project Manager, LE – Electrical, LE-Structures, Buyer, Regulatory Engineer and Construction Manager
Site Surveys	Site visits are conducted for surveying and collecting site data to do basic and detailed engineering
Project	Schedule for PV Solar Project is typically between 4 to 5 months depending on size and complexity in terms of interconnection voltage (LT or MV).
HSE	Amplus has a strict HSE Policy and Procedure which is mandatorily implemented at all Project Sites. Amplus also ensures fulfillment of any additional HSE requirements that the client may have.
Performance Guarantees	Amplus adheres to all performance guarantees which it promises to its clients while signing PPAs.

Procurement

*Amplus procures equipment and supplies for its projects from **Tier 1 supplier** to ensure **high quality***

Centralized

Amplus follows centralized procurement which gives Improved control over the suppliers and contracts.

Global Procurement

Amplus follows Global Procurement which helps in meeting the challenges of new markets and staying abreast with global competition. It also increases organizational learning of Amplus about new technologies coming up globally.

Strategic Purchase

Focused on the Total Cost of Ownership (TCO) model. Amplus endeavors to procure best product at best value

Intensive Supplier Assessment

Amplus' suppliers undergo intensive assessment on following parameters: material quality, potential, manpower, technologically sound equipment facility and environment friendly facility.

Minimum Inventory

Amplus maintains minimal stock for equipment by identifying safety stock levels. Procurement of additional equipment is carried out based on the project design & required specification.

Quality and EHS Team

Amplus has a dedicated team which ensures Quality in procurement, execution coupled with the world class environmental, health and safety standards.

1

Companies which assist on the Quality control of the equipment used in the projects



2

Safety Gear accessories



3

Technical Due Diligence for new acquisitions



4

Special trainings and workshops on World environment day and National safety day



1

Regular Trainings: Safety, Product related, Technical & toolbox talks

2

Safety: Detailed safety guidelines & procedures. Awareness through celebration of National Safety day & Fire Service Week

3

Health: Training sessions & twice a week yoga sessions to promote health & lifestyle management

4

Quality: Comprehensive vendor evaluation; pre-dispatch, online and field quality checks

5

Environment: Broken modules stores as per manufacturers guidelines & re-cycled

Hassle Free Operations & Maintenance

*Dedicated 12 member professional projects team
and a three-tier Operations and Maintenance process to ensure **High Uptime***



Predictive Maintenance

- Remote Monitoring System
- CCTV surveillance
- Cost effective cleaning Cycles



Preventive Maintenance

- Periodic equipment testing
- Monitoring regular wear & tear
- Quick response teams



Corrective Maintenance

- 24X7 on-call maintenance
- Dedicated project manager
- Monitoring system alerts
- Toll Free number for complaints

Modules before and after cleaning

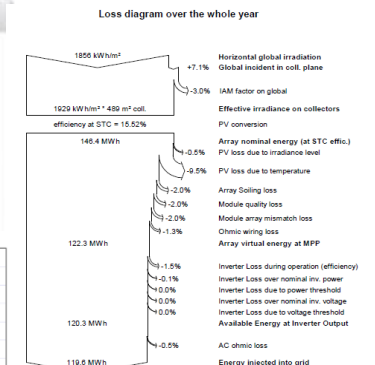
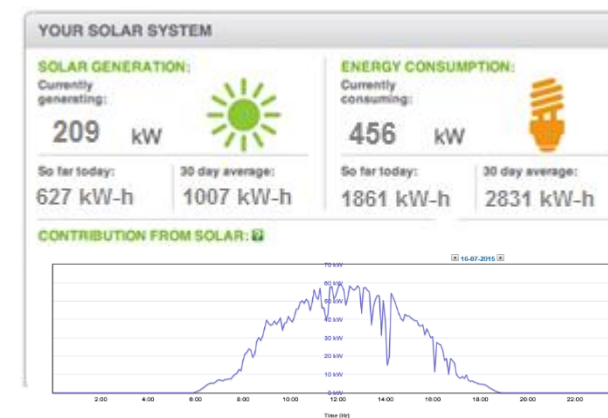
Before



After

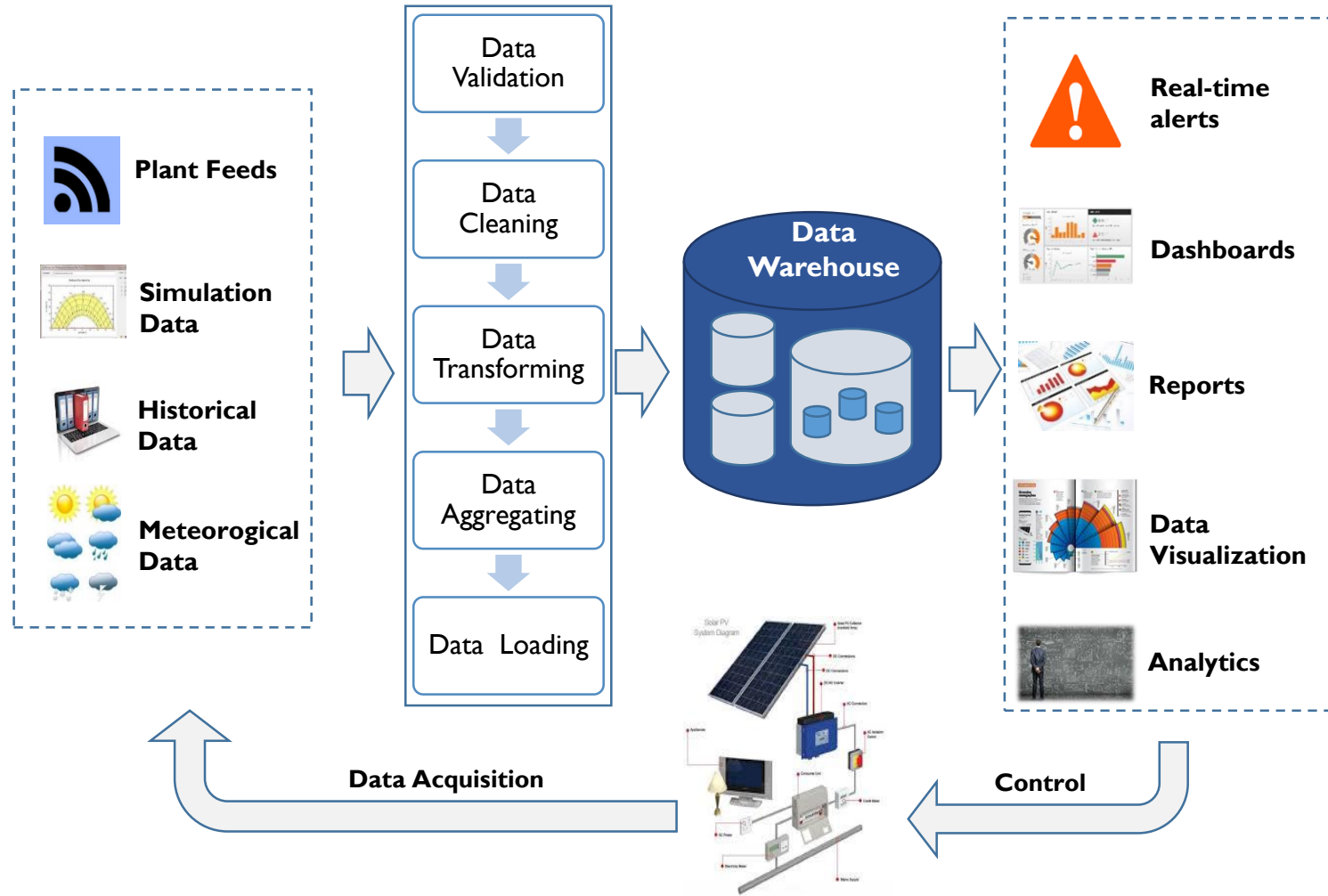


Monitoring System Display



Robust In-house RMS and Analytics

What makes this SPAAS different from others?



1. Pioneers in using dedicated state-of-art remote monitoring system
2. In-house dedicated Analytics team
3. String level data monitoring
4. Assured Zero Downtime

This In-house remote monitoring and analytics system makes Amplus' SPAAS stand out amongst the competitors

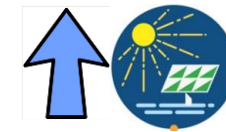
Amplus ensures operation of its plants at the highest possible generation level through this remote monitoring system

Case studies – Business Case

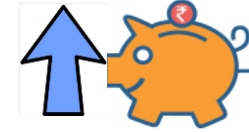


5 MW Solarizing 13 sites in 9 states

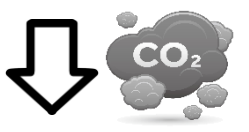
To help Walmart India's pledged to meet 50% of energy needs through renewables, Walmart has signed a PPA with Amplus Energy
13 Best Price wholesale outlets of Walmart across 6 states
Walmart will save INR 839 million over the life of the plant (46% over the variable grid cost of electricity)



Generation of
solar power
5200000
units per annum



Savings
INR
839 Million
over life of plant



Reduction in
emissions
172500
MT of CO₂ (1)



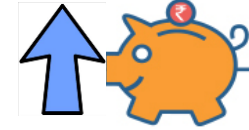
4 MW India's First tracker based plant at an Airport

This plant is spread over an area of 23 Acres adjacent to the runway at HAL Airport, Bengaluru

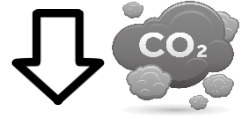
It helps Meets 7% of the total electricity requirement of HAL



Generation of
solar power
6000000
units per annum



Savings
INR
896 Million
over life of plant



Reduction in
emissions
138000
MT of CO₂



4 MW India's largest captive solar plant on a rooftop

- High strength 550mpa YST steel used
- 1.5mm Thick sections to Optimize roof loading
- Customized Aluminium clamps for the Roof after proper pullout test as it is standing seam profile from Japan Metal



200 kw Superstructure on top of a mall

- 10m High Superstructure on the 6th Floor of a Mall
- Up to 24m pillar-less span to have a football court below the same



5 MW Solarizing 13 sites in 9 states

- High strength 550mpa YST steel used
- 1mm Thickness Galvalume Steel
- Robust design with a mix of Steel & Aluminium as rail to have easy installation

Open Access Solar Park - Karnataka

Amplus has Commissioned 30 MWp of the 42 MWp Open Access Solar Park at Chitradurga, Karnataka.



Mounting Structure Table Arrays



Module Mounting



Completed view of Project



On-site Team



Switchyard Construction in Progress



Control Room Construction

Amplus is also setting up another 100+ MWp park in Gadag, Karnataka to be commissioned by Jan'18

Our Satisfied Customers – 120+ MWp



500 kWp
Pitched roof
Intel India,
Bangalore



3,500 kWp
Pitched roof
Metro Cash &
Carry



30,000 kWp
HONDA
Karnataka



2,000 kWp
Reckitt
Benckiser
Karnataka



250 & 250 kWp
Hilton Shillim
Estate & Spa,
Pune, India



4,500 kWp
Wal-Mart
India Stores



4,000 kWp
Ground
mounted
HAL, Bangalore



4,700 kWp
Pitched Roof,
Noida,
Faridabad



500 kWp
PEB Roof,
Nishatpura



2,500 kWp
L&T Infotech
Karnataka



1,250 kWp
Odisha, J&K,
Uttarakhand



600 kWp
RCC roof
Vatika Group
Gurgaon



65 & 50 kWp
Fortis
Healthcare,
Gurgaon,
Faridabad



200, 200 &
126 kWp
Dominos
Commissaries



150 & 250
kWp
UPCL



2,500 kWp
India Expo
Mart, Noida



12.48 MWp
ABB India
Ltd.,
Karnataka



500 kW
Calsonic
Kansei
Motherson
Haryana



7,180 kW
Calsonic
Kansei
Motherson
Haryana



4,500 kW
IFB
Karnataka



600 kWp
Rooftop
LT Foods,
Haryana



200 kWp
Halliburton,
Maharashtra



488 kWp
RCC roof
Raisoni
Institute, Pune



700 kWp
HT Media,
Noida



500 kWp
Pitched roof
DMRC,
New Delhi



1,750 kWp
Manipal
Hospitals,
Karnataka



100 kWp
PI Industries,
Gujarat



150 kWp
Origami
Tissues,
Bangalore



650 kWp
IMS
Engineering,
Ghaziabad



300 kWp
Vulcan
Express,
Haryana



100 kWp
Scope
International,
Chennai



800 kWp
Pitched roof
Amway India,
Dindigul,
Tamil Nadu



1000 kWp
Pitched roof
Whirlpool
India, Pune,
Maharashtra



100 kWp
Kansai
Nerolac,
Krishnagiri



2200 kWp
Torrent Power,
Gandhinagar,
Gujarat



1000 kWp
TVS Motors,
Hosur, Tamil
Nadu



560 kWp
Dmart Stores
Solapur,
Kolhapur,
Maharashtra



500 kWp
Manav
Rachna,
Haryana

Tangible Positive Impact on Environment



100 kWp Solar Plant



3,450 MT CO₂ ¹



25,500 barrels of crude ²



4,300 ³ trees

Thank you !

Note: (1) Based on Central Electricity Agency (CEA) baseline average emission values in tons of CO₂/ MWh generated for the entire Indian electricity grid during FY13-14. To calculate the indicative reduction in tons of CO₂ emitted by installing a solar plant, the cumulative generation over the life of the solar plant of 25 years has been multiplied by the CEA baseline value

(2) According to U.S. Energy Information Agency (EIA), consumption of 7.4 barrels of crude oil in India produced 1 ton of CO₂

(3) According to Grow-trees, an NGO which is the official Tree Planting partner of United Nation Environment Program's Billion Tree Campaign, one tree absorbs 20 kg of CO₂ per year over a 40 year lifetime. Based on a solar project life of 25 years we arrive at an equivalent of 4,300 trees for a 100 kWp plant