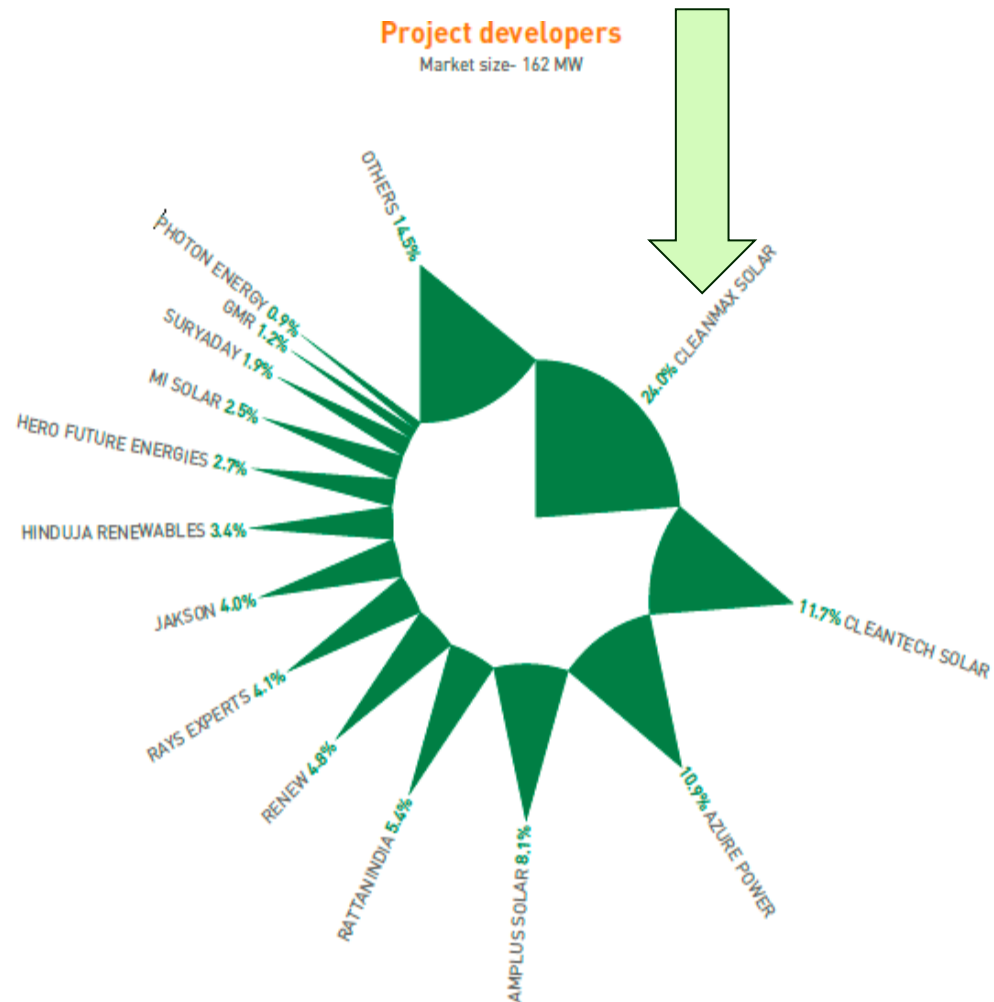


CleanMax Solar is India's largest developer of rooftop solar

CleanMax Ranked #1 Onsite Solar Developer since the inception of Bridge to India's "India Solar Rooftop Map"

CleanMax' fleet of installed Solar Plants exceeds **200+ rooftops**, amounting to more than **85 MWp**

300+ MWp of grid connected solar for corporate PPAs



Market size: 162 MW (as of Apr 2017)

<http://www.bridgetoindia.com/reports/>

A variety of onsite installation types have been used in India at client sites

RCC Roof Installations



RCC Installation
(Bajaj Auto, Pune, 1.2 MWp)

Metal Sheet Roof Installations



Metal Roof Installation
(Konecranes India, Pune, 730 kWp)

Ground Mount Installations



Tracker System (ground mount)
(NBC Bearings, Jaipur, 443 kWp)

Solar Car Port Systems



Carport Structure with metal sheet
(Mahindra & Mahindra, Nashik, 300 kWp)

CleanMax is well funded post its recent USD 100 million equity funding from Warburg Pincus

Economic Times, 13 July 2017

Warburg Invests ₹700 cr in CleanMax

Global fund to hold significant minority stake in rooftop solar developer; co to use funds to expand in global markets

Sneha.Shah@timesgroup.com

Mumbai: Global private equity fund Warburg Pincus has invested ₹700 crore in CleanMax Solar, a rooftop solar developer for the corporate sector. The global fund will have a significant minority stake in the company, a senior company official said.

"CleanMax will use the funds to continue its rapid growth in the rooftop and open access solar power markets in India, while pursuing growth in select international markets (Middle East and South-East Asia), and growing the nascent, yet promising energy storage solutions business," said Kuldeep Jain, founder, CleanMax Solar, in an exclusive interview with ET.

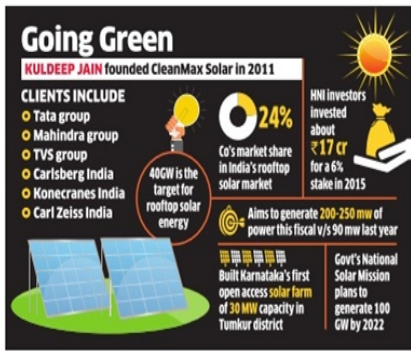
Jain, the former head of energy at McKinsey India, founded CleanMax Solar in 2011. The company serves corporate clients such as the Tata group, Mahindra group, TVS group, Carlsberg India, Konecranes India, Carl Zeiss India, Manipal Education and Me-

dical Group, SKF India, Mindtree and Alkem Laboratories.

The company that was funded by a group of high networth individuals in 2015 has cornered around 24% market share in the country's rooftop solar market. The HNI investors invested about ₹17 crore for a 6% stake in 2015, valuing it at about ₹283 crore.

The company has installed more than 200 projects for over 50 corporates in sectors such as automobiles, education, pharmaceuticals, food & beverages, and information technology, with a combined on-site capacity of more than 100 MW. According to Jain, the company aims to generate around 200-250 MW of power in the current financial year as against 90 MW it generated last year. It develops projects on a turnkey basis, providing power on a per-kWh basis, under long-term Power Purchase Agreements, at rates cheaper than prevailing grid.

"Today, solar power can provide savings of up to 30% on a customer's electricity bills with no in-



vestment from the customer," he said. "Warburg Pincus' investment will enable us to pursue additional growth opportunities beyond India, and provide next generation solutions to our customers through a combination of rooftop solar and energy storage."

The company has built Karnata-

ka's first open access solar farm of 30 MW capacity in the Tumkur district, and operates multiple solar farms to supply electricity to corporate consumers on an open access basis across Karnataka and Tamil Nadu, with a combined capacity more than 60 MW.

For Warburg Pincus, one of the

oldest global private equity investors, 2017 has been the busiest year. The fund has committed more than a billion in the current year with investments in ICICI Lombard, Tata Technologies and Princeton Growth Ventures. The fund has invested approximately \$4 billion in over 50 Indian companies till now.

"CleanMax Solar is a leader in the Indian solar rooftop market, providing customers with cost-efficient and environmentally-friendly solutions to meet their energy requirements. We believe that CleanMax is well poised to benefit from the strong growth tailwinds in the sector," said Saurabh Agarwal, managing director, Warburg Pincus.

The National Renewable Energy Mission aims to produce 175 GW of renewable energy by 2022, while the National Solar Mission plans to generate 100 GW by the same time, out of which 40GW is the target for rooftop solar energy. The estimated cost per MW is ₹4.5 crore for the rooftop solar segment.

Mint, 14 July 2017

Warburg Pincus to invest up to \$100 mn in CleanMax Solar

BY UTPAL BHASKAR
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NEW DELHI

In one of the largest overseas investments in the Indian rooftop solar space, Warburg Pincus LLC will invest up to \$100 million in CleanMax Solar, the on-site rooftop solar power developer said in a statement on Thursday.

The investment by the US-based private equity firm indicates the deal-making focus on the rooftop solar space given the race to the bottom of solar power tariffs for grid-connected utility-scale projects.

Mint had reported on Warburg Pincus's investment plans on Thursday.

Confirming that it has secured equity financing of up to \$100 million from an affiliate of Warburg Pincus, a statement from the solar power developer said the company "will use the funds to continue its rapid growth in the rooftop and open access solar power markets in India, while pursu-



According to CleanMax Solar, it is India's largest on-site solar power provider with a combined capacity of around 100MW.

ing international markets (Middle East and South-East Asia), and growing the nascent, yet promising energy storage solutions business."

The deal will provide dry powder to the firm at a time when financing at low costs has become key to success. According to CleanMax Solar, it is India's largest on-site solar power provider with a combined on-site capacity of around 100 megawatts (MW).

in CleanMax Solar stems from India's ambitious clean energy target of adding 175 gigawatts (GW) by 2022. Of this, 40GW is to come from rooftop solar projects.

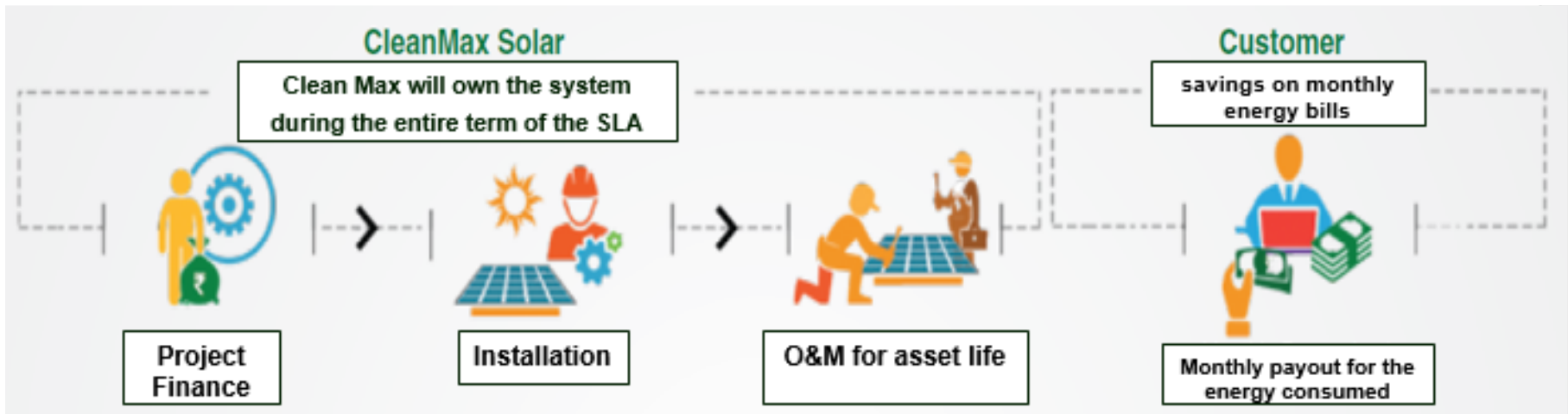
"CleanMax Solar is a leader in the Indian solar rooftop market, providing customers with cost-efficient and environmentally friendly solutions to meet their energy requirements," Saurabh Agarwal, a Warburg Pincus managing

CleanMax honoured with National Excellence Award for rooftop solar developer in India by the Indian Government



CleanMax Value proposition to Dubai based large rooftops

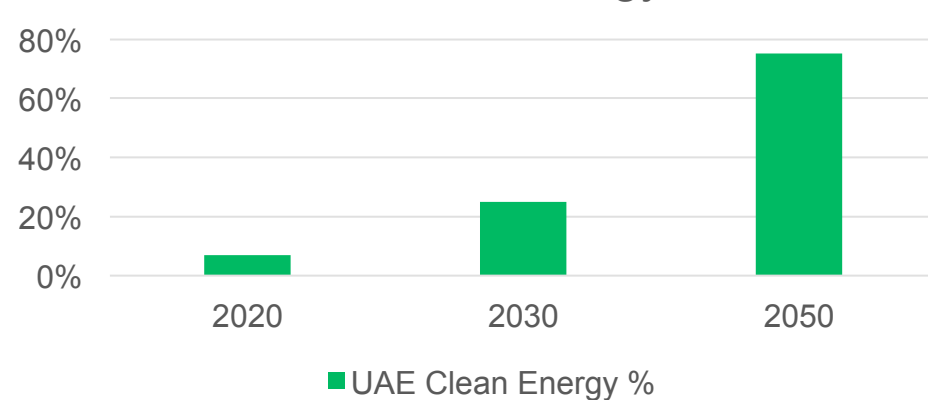
- **Zero Capex** As pioneers of the 'opex' or BOOT model, Clean Max shall invest in, build, own, operate and maintain a solar power system on the consumer's premises. Consumers merely contract to pay for each kWh energy unit produced from the system thereby avoiding the tedium of capex approval cycles, and also avoids capex deployment on a non-core asset with longer-term payback & IRR realization
- **Energy Cost Savings:** Clean Max solar tariffs range around 20% to 30% cheaper than grid power (size of 500 kwp or above) in the UAE, thereby creating a direct impact on the consumer's bottom line, without any upfront cost.
- **Outsourced solution:** Since the consumer pays only for the energy units produced from the system, it is protected from exposure to weather risk (lower than expected solar radiation), downtime risk, O&M cost variation risk etc.
- **Green Incentives & Attributes:** Any green incentives and attributes to be shared equally by Clean Max and Consumer



Shams Dubai: UAE's solar inflexion point

- Creates provision for export of surplus solar power to grid
- 'Net Metering' arrangements such as this are a tested concept, proven to proliferate solar installations in markets such as Germany, India
- MBR solar park ramping up capacity, 110MWp already installed, total capacity 3000MWp targeted by 2030

UAE Clean Energy %

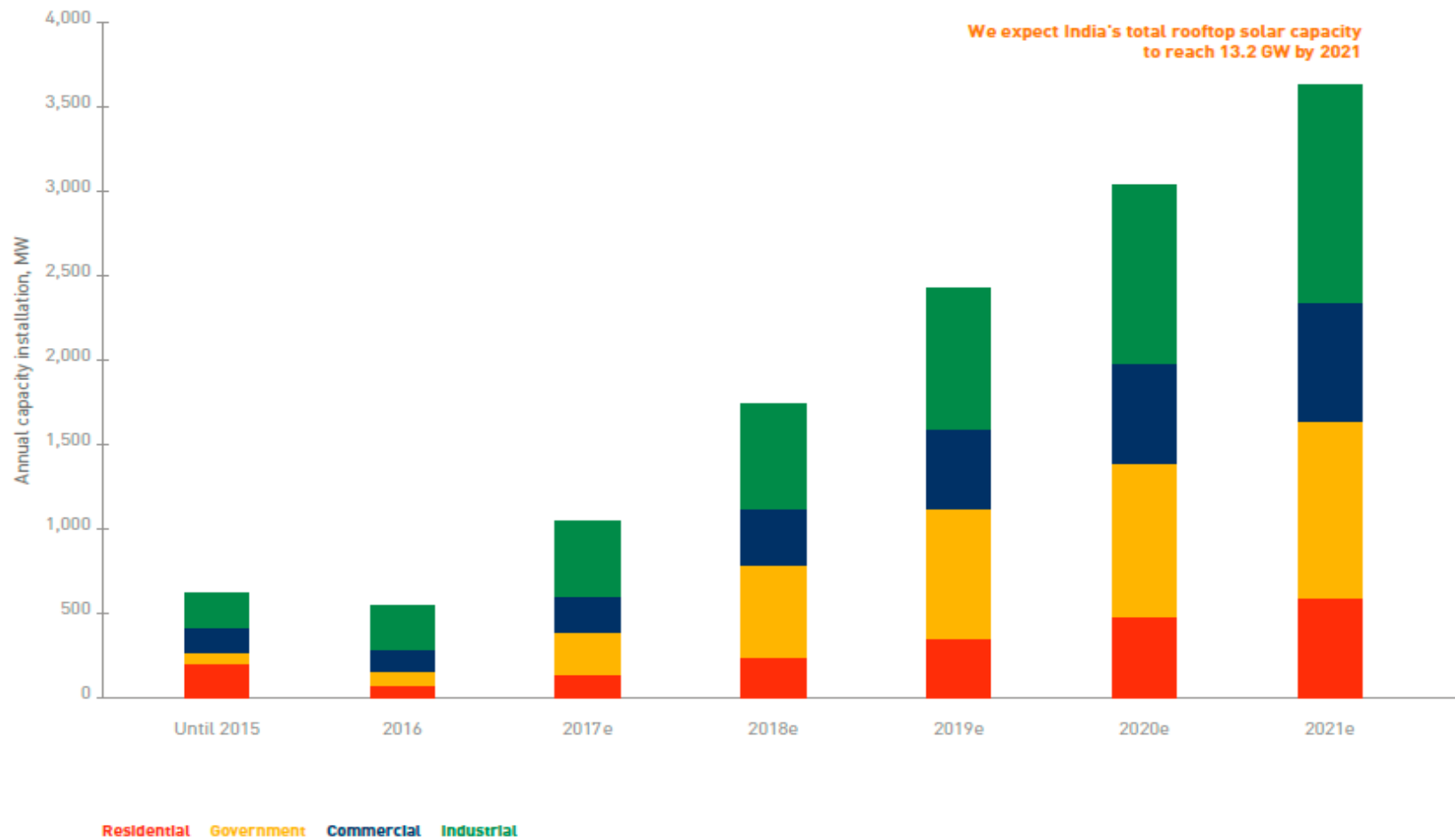


“Shams Dubai allows customers to avoid using very expensive power storage systems by connecting the PV panels to the network,”

-Saeed Al Tayer, DEWA Chief Executive

India Rooftop Solar Scenario

Projections for rooftop solar capacity⁶



Electric vehicles have shown remarkable progress

Mitsubishi's SUV vehicle covered 500 km in 2002 'UAE Desert Challenge'*



Mitsubishi Pajero Evolution/
Montero Evolution
Team Mitsubishi Ralliart
S. Peterhansel / J. P. Cottret
(Photo: LEG4)

Shows the improvement in the storage solutions' technology so far, with the coming of Google's autonomous driving



Google's electric self driving car

Self driving has been tested for more than 2 million miles

*http://www.mitsubishi-motors.co.jp/motorsports/02ccr_e/uae/index.html

As an additional benefit, improved energy storage can lead to several changes for renewables

FROM ...	TO ...
Diesel gensets	Solar plus storage plus off-peak grid
Lead acid batteries	UPS and battery replacement
Renewables as infirm power	Renewables + Storage = Firm Power plus 100% Green



Cutting edge technologies

- **Robotic cleaning**
 - Automatic cleaning systems that reduce the water requirement for system maintenance
 - Particularly useful in extreme remote location where man power is an issue and in areas where soft water is not available for cleaning
- **Remote monitoring system**
 - Over 100 parameters recorded in real time using state-of-the-art sensors
 - Data is uploaded on server every 15 min which helps reducing the turnaround time for repairs and maintenance and achieve superior performance engineering expertise
- **Solar trackers**
 - Track the movement of the sun throughout the day to improve plant generation by 15-20%
 - Makes the best use of the area of installation



CleanMax' 30 MW farm in Dindigul, Tamil Nadu with robotic arm



A quick glance at the remote monitoring portal



CleanMax' installation for NBC Bearings in Newai with solar trackers



KONECRANES®
Lifting Businesses™

CASE STUDY: ROOFTOP SOLAR FOR KONECRANES

Konecranes first facility to go solar globally!



Thank You

CleanMax Solar

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