

A hand is shown holding a miniature, self-contained scene of renewable energy. The scene includes two white wind turbines, a blue solar panel, and green trees, all set on a small patch of green grass. The background is a bright blue sky with a large, glowing yellow sun and scattered white clouds. The overall image conveys a message of sustainable and clean energy.

# Renewable Energy Project's

Presentation by: Raj Overseas.

# Message from the Partner

RAJ Overseas is an organization with a rich legacy of responsible stewardship. While, it is built on a strong foundation of time tested values, it continues to remain modern in both outlook and decisions & Keeping pace with the accelerated need for sustainability across the globe, we took large and rapid strides to make our operations more sustainable .



*With immense pride, I would like to share with you that every single day we are moving one step closer to becoming completely energy efficient organization.*

**Yours Sincerely,  
Sumeet Nath**

## Raj - Vision & Mission Towards Sustainability

**Our Mission:** Our aim is to accelerate the adoption of renewable energy to conserve our environment and provide an environmentally friendly, *sustainable* and conflict-free *power* supply. *Sustainable* global economic development requires reliable, cost-effective and quickly scalable *energy* solutions, thereby reducing carbon footprint.

**Our Vision:**  
*To become an organization that will be first to use the sustainable energy and be carbon neutral in 2050.*

# Key Renewable Energy Sources



## Solar Power

- Photovoltaic
- Solar-thermal



## Wind Power

- Onshore
- Offshore

# Solar Power Generation System

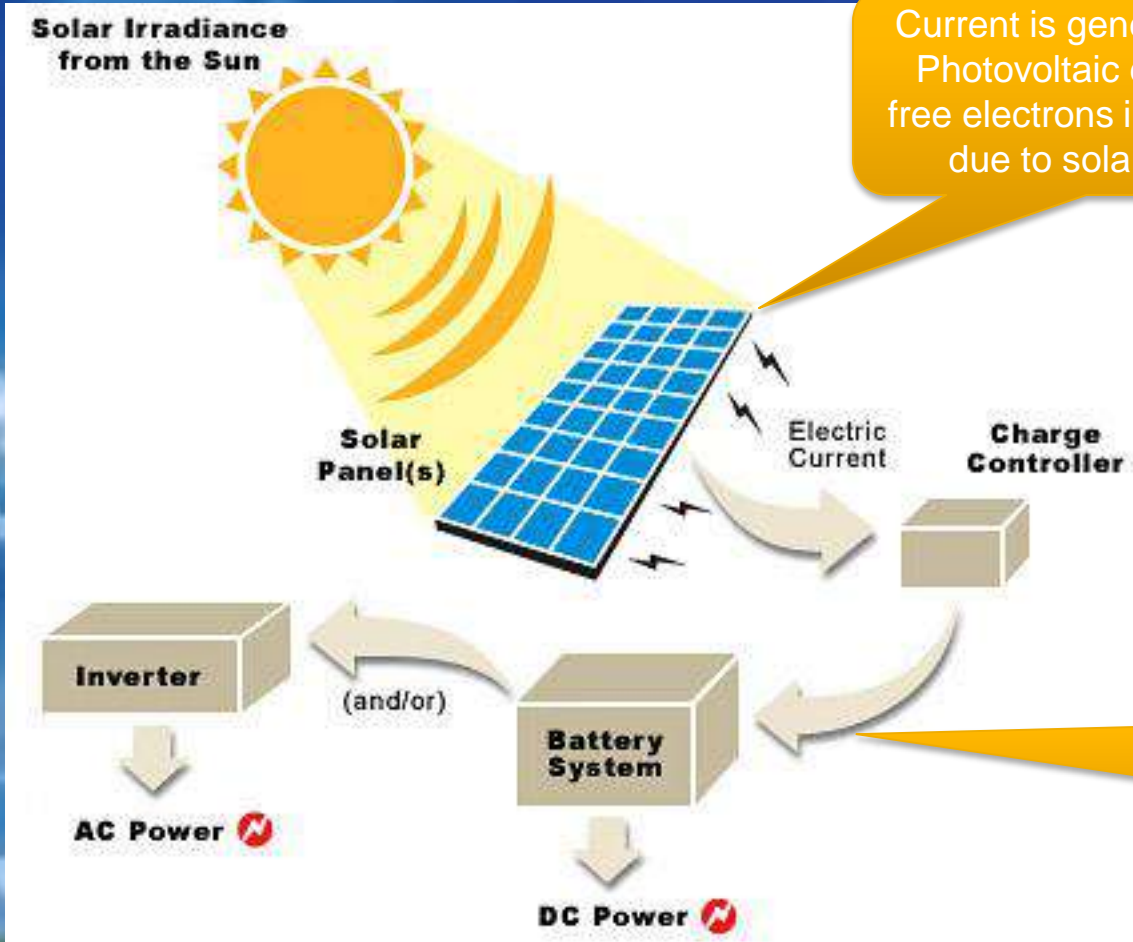
Solar Energy Is Generally Captured In Two Forms:-

- A) Photovoltaic cells for electricity generation
- B) Thermal panels for heating purposes

Raj Has Adopted the Photovoltaic Cells Technology



# Solar Power - Photovoltaic



Current is generated through Photovoltaic effect -flow of free electrons in Silicon Panel due to solar irradiance

Direct current (DC) is generated which can be stored in a battery or converted to Alternating Current (AC)

# Installation of Solar power panels of 160KWH in Raj Overseas, Plot no 300,Sector 29,Panipat

Installed By: Rays Power Expert Private Limited

Project completion date

10<sup>th</sup> March 2017

Resource savings achieved in  
2017



138073 KWH

**Remarks:-**

**Through the installation of the rooftop solar panel of 165 KWH, we are able to meet our 50% daily electricity requirement. As well as reduces 50% carbon emission and promote the usage of clean energy.**

**Resource saved  
in an year-  
138073KWH**

**Installation of Solar Power Panels of 100KWH in Raj Overseas, Plot no 150, Sector 25, Panipat**

<b>Installed By</b>	<b>Rays Power Expert Private Limited</b>
<b>Project completion date</b>	<b>13<sup>th</sup> April 2017</b>
<b>Resource savings achieved</b>	<b>89898 KWH</b>
 <p data-bbox="156 886 743 1248"><b>Resource saved in an year- 89898KWH</b></p>	<p data-bbox="763 606 1000 649"><b>Remarks:-</b></p> <p data-bbox="763 721 1858 996"><b>Raj Overseas has implemented the Solar power panels of 100KWH in roof top project which reduces the purchase energy usage upto 20% and reduces the carbon emission 20% and promote the usage of clean energy.</b></p> 



## Installation of Solar power panels of 1MW in Village –Sarah Kisnayat, Tehsil-Kolayat, District-Bikaner

Installed By

Rays Power Expert Private Limited

Project completion date

31<sup>th</sup> March 2013

Resource savings achieved

110,000KWH/Month

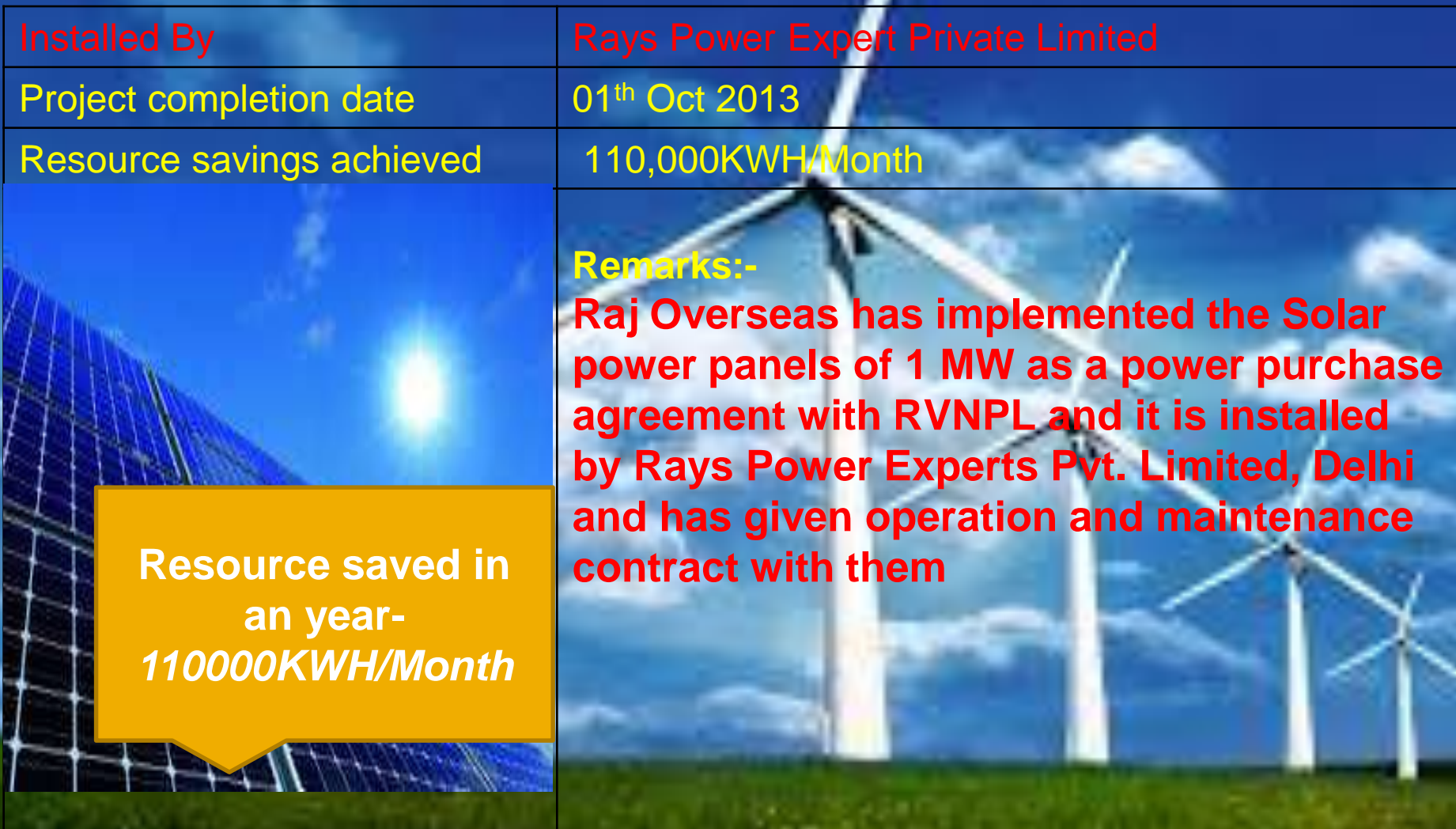
Remarks:-

Raj Overseas has implemented the Solar power panels of 1 MW and signed a MOU of power purchase with RVNPL. The plant was installed by Rays Power Experts Pvt. Limited, Who are a Delhi.

Resource saved in  
an year-  
*110000KWH/Month*

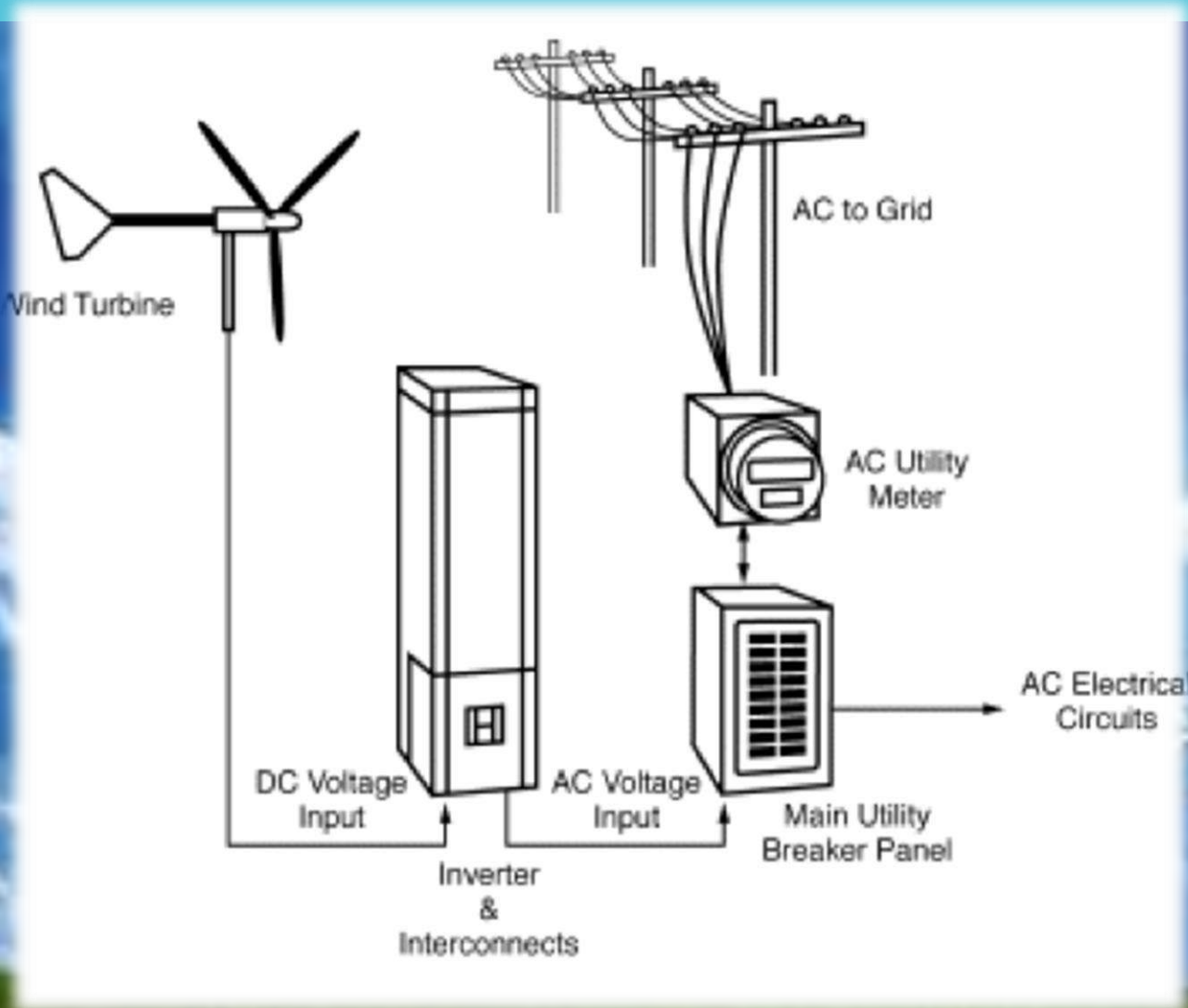
# Installation of Solar Power Panels of 1MW in Village- Sarah Bhiyanimani, Tehsil-Kolayat, Distt.-Bikaner

Installed By	Rays Power Expert Private Limited
Project completion date	01 <sup>th</sup> Oct 2013
Resource savings achieved	110,000KWH/Month
	<b>Remarks:-</b> Raj Overseas has implemented the Solar power panels of 1 MW as a power purchase agreement with RVNPL and it is installed by Rays Power Experts Pvt. Limited, Delhi and has given operation and maintenance contract with them



**Resource saved in an year-  
110000KWH/Month**

# Wind Power



# Wind Power:-



- ❖ Converts kinetic energy for wind to electrical energy
- ❖ Broadly serving as the renewable choice.
- ❖ Increased size and higher productivity have enabled wind generation to become an increasingly competitive alternative to more traditional methods of power generation.
- ❖ Uncertainty is the main problem with wind production owing to the inherent unpredictability of weather conditions.
- ❖ Utilization for wind generation is generally rather low, with most in the 25-35% utilization rate.

# Installation of Wind Power Plant of 1.25 MW in Dhule / Nandurbar Maharashtra

Installed By

Suzlon Energy Limited

Project completion date

13<sup>th</sup> Aug 2006

Resource savings achieved

125000 KWH/Month



**Remarks:-**

Raj Overseas has installed the Wind Power plant of 1.25MW in Maharashtra and signed the power purchase agreement with Maharashtra State Electricity Distribution Company Ltd.



# Solar Power

- Photovoltaic

Renewable Energy(Solar Energy) able to give the Light in the Whole area of Village –Sarah Kisnayat,Tehsil-Kolayat, District Bikaner and that is sufficient to meet the energy demand of approx.1000 Household (Families) and providing sustainable and clean energy since last half decade.

Renewable Energy(Solar Energy) able to give the Light in the Whole area of Village –Sarah Bhiyanimani,Tehsil-Kolayat, District Bikaner and that is sufficient to meet the energy demand of approx.1000 Household(Families) and gives sustainable and clean energy.

Renewable Energy(Wind Energy) able to give to light the area of Maharashtra, Dhule by the electricity generation by the 1.25MW Wind Energy plant and that is sufficient to meet the energy demand of approx.1500 Household(Families) and gives sustainable and clean energy.

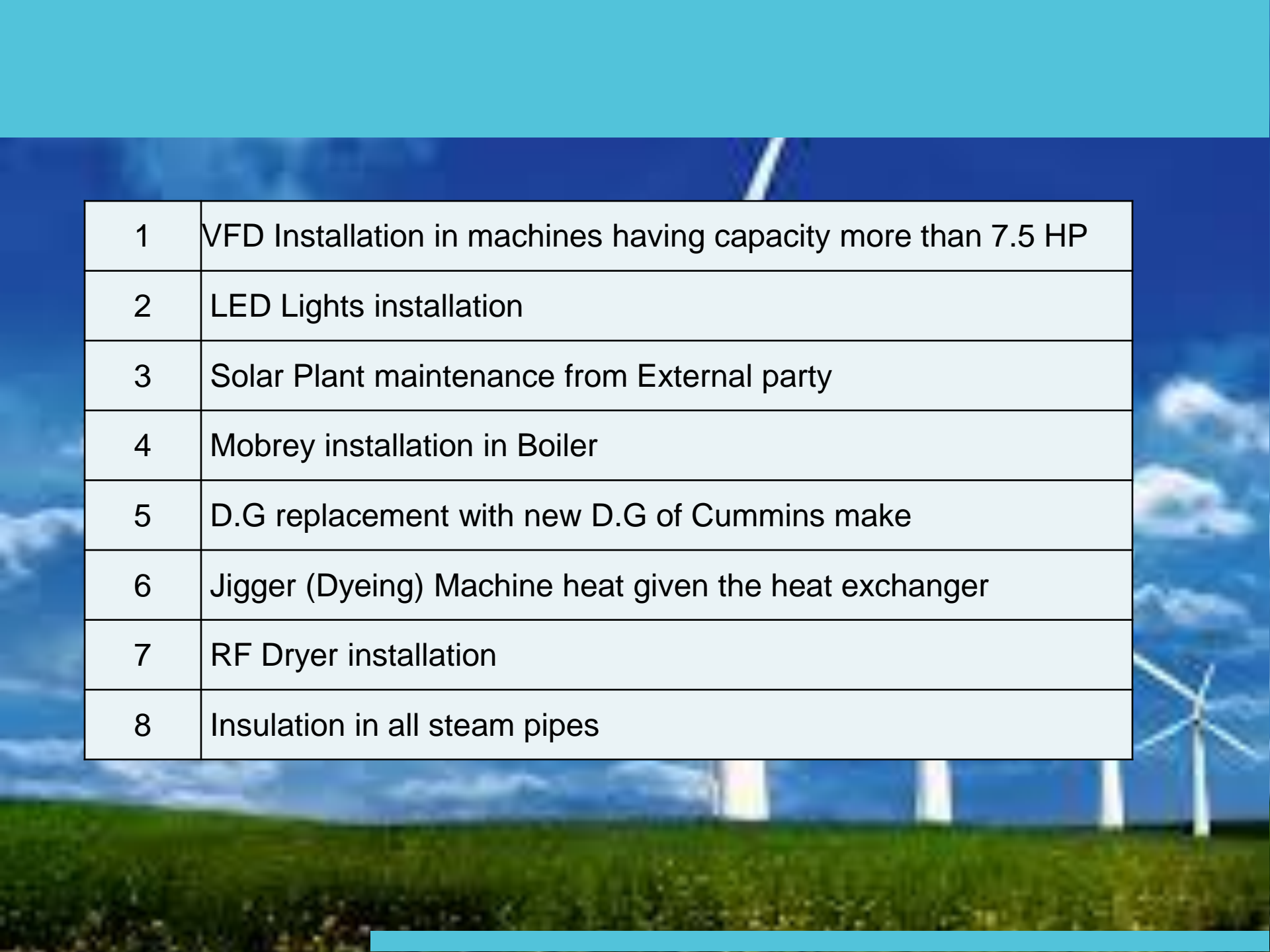


# Wind Power

- Onshore
- Offshore

# Renewable Energy Generated by the Raj Group

**Total Renewable  
energy(Solar +  
Wind Energy)  
generated through  
5 plants in the Year  
-2017 is 3330MW**



1	VFD Installation in machines having capacity more than 7.5 HP
2	LED Lights installation
3	Solar Plant maintenance from External party
4	Mobrey installation in Boiler
5	D.G replacement with new D.G of Cummins make
6	Jigger (Dyeing) Machine heat given the heat exchanger
7	RF Dryer installation
8	Insulation in all steam pipes