

# Achieving Green building certification using high efficiency solar panels.



# **EXECUTIVE SUMMARY**

Chhattisgarh Government constituted Capital Area Development Authority (CADA) for planning and development of new capital city, which was later named as Naya Raipur Development Authority(NRDA). NRDA is the nodal agency for comprehensive development of this Greenfield City.

NRDA develops infrastructure, implements utility and social projects through various procurement methods such as Public Private Partnership framework, Engineering procurement contracts Percent Rate/ Item Rate/ lump sum contract etc, depending on the nature of projects.

# **QUICK FACTS**

Site Location	Composite Building, Naya Raipur (Paryavas Bhawan), Raipur (C.G.)
System Capacity	200 kwp
Installation Type	Grid interactive battery less rooftop solar PV system
Panel Type & Make	Novergy solar polycrystalline panels
Panel Capacity and Quantity	295wp / 678
Inverter Type & Make	Novergy grid connect inverters
Inverter capacity and quantity	34kwp / 1 No.



A-Site Image



B-Site Image



C-Site Image

# HIGHLIGHTS

### SCOPE

We provided them 200kwp net metered grid connected rooftop solar photovoltaic system. This system is helping NRDA in reducing their electricity bill while complying with State Govt. Norms.

Novergy scope was the full scope design, engineering, procurement and construction (EPC).

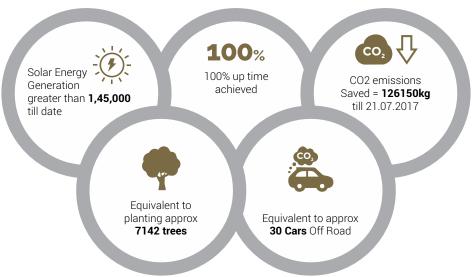
### **CHALLENGES**

The state government of Chattisgarh is keen to utilize as much solar as is possible in the new city of Naya Raipur which is now going to house the government offices of Chattisgarh (CG).

There were multiple agencies involved in this project including NRDA, CREDA and CSPDCL. This created an unique opportunity to work with multi-disciplinary teams from various agencies to achieve the solar system design and installation while meeting the expectations of various stakeholders involved.

NRDA was keen on a special design that could not only install solar system on their roof but also allow them to utilize the roof for other purposes. Novergy performed detailed site assessment, 3D modeling and simulation was done by design and engineering team and a special kind of structure design was created specifically for this project to achieve full solar capacity installation and also have space below the solar panels to be used for other purposes.

### **KEY HIGHLIGHTS**



### **BENEFITS**

- The client is now eligible to apply for Green Building certification
- 2. Further the system was installed fully meeting MNRE and CREDA as well as CSPDL norms.
- 3. Novergy has also taken care of co-ordination and liasoning work to achieve net metering.
- 4. Since the solar panels are covering the whole roof, the client is saving on power consumption for air conditioning due to reduced heat gain on the rooftop and building.

# **ABOUT NOVERGY**

Novergy has been offering a range of solar solutions across the globe since nearly 11 years. We have the best and most reliable solar technology in the industry with various International and National bodies certifying, accrediting or approving our products and company. This is also the reason that our systems deliver the best energy output for the same rating of solar capacity.

Being an integrated player that covers the total chain of design, engineering, manufacturing, supply, installation and commissioning delivers an excellent customer experience which is reflected in our project execution and performance track record.

Novergy offers a range of solar solutions that include power plants, rooftop and captive power systems, solar lighting solutions, pumping solutions, solar telecom systems, solar microgrid, solar genset hybrid systems, etc. Our team believes in carefully analyzing each project requirement and then providing the most appropriate solution in the interest of the customer.

A true test of reliability of the products and systems is seen in the fact that despite having solutions in very diverse and harsh field conditions, Novergy has a NIL replacement record for the solar modules.

We believe in thoroughly analyzing our client requirements and then providing the most appropriate and reliable solutions to our clients resulting in highest customer satisfaction.

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