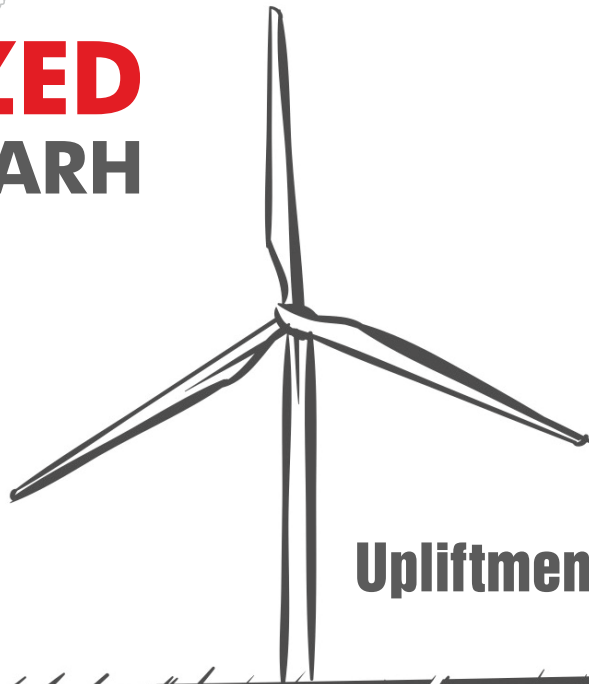
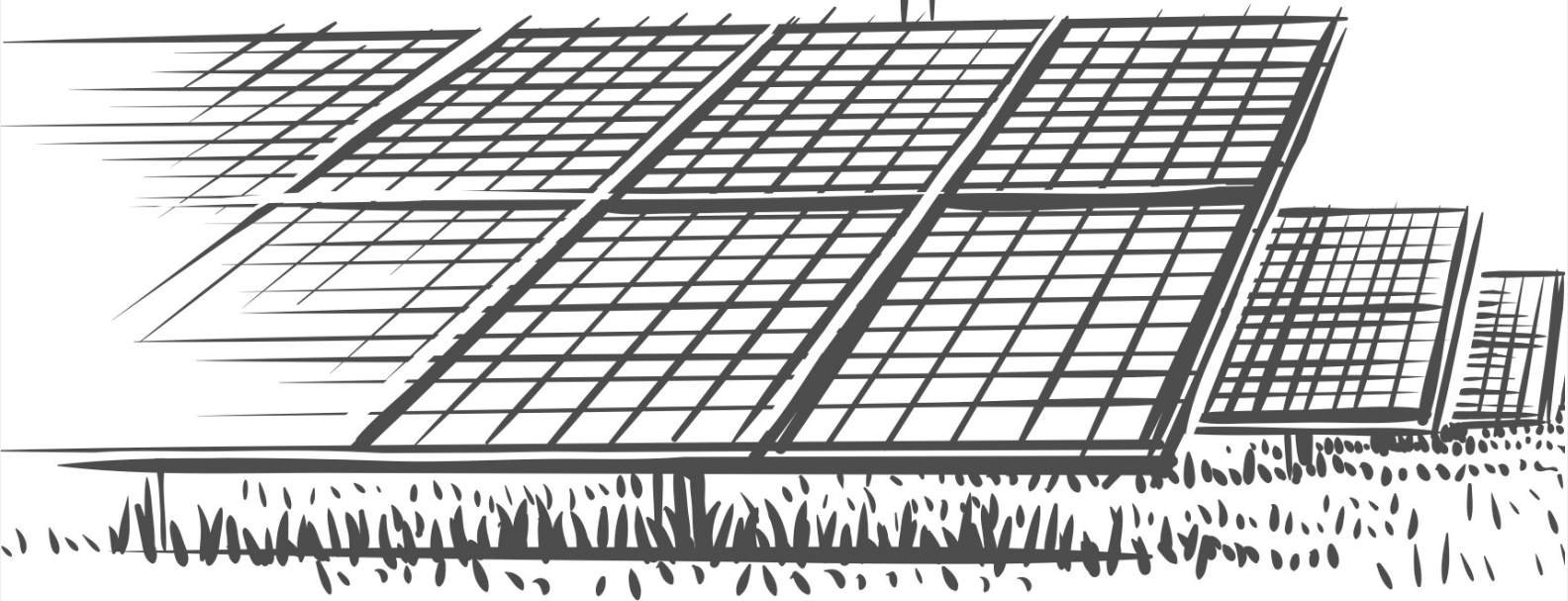


SOLARIZED **CHHATTISGARH**



Upliftment of Villages



Chhattisgarh State Renewable Energy Development Agency

(Dept. of Energy, Govt. of Chhattisgarh)

CHHATTISGARH FACTS FILE



- Area of 1,37,000 Sq. kms. (Ninth largest State)
- 32.2 million Population (16th in India)
- Population density of 490 per Square Mile (Half of the National Average)
- 44% area under Forest cover
- Centrally located
- Fifth Best Gender Ratio (991) amongst all Indian States
- Per Capita energy consumption twice (2016 kWh) the national per capita consumption
- Mineral Rich State – 1st in Coal & Dolomite and 2nd in Iron Ore
- Tribal Population in the State – 9.86 Million (30.62%)

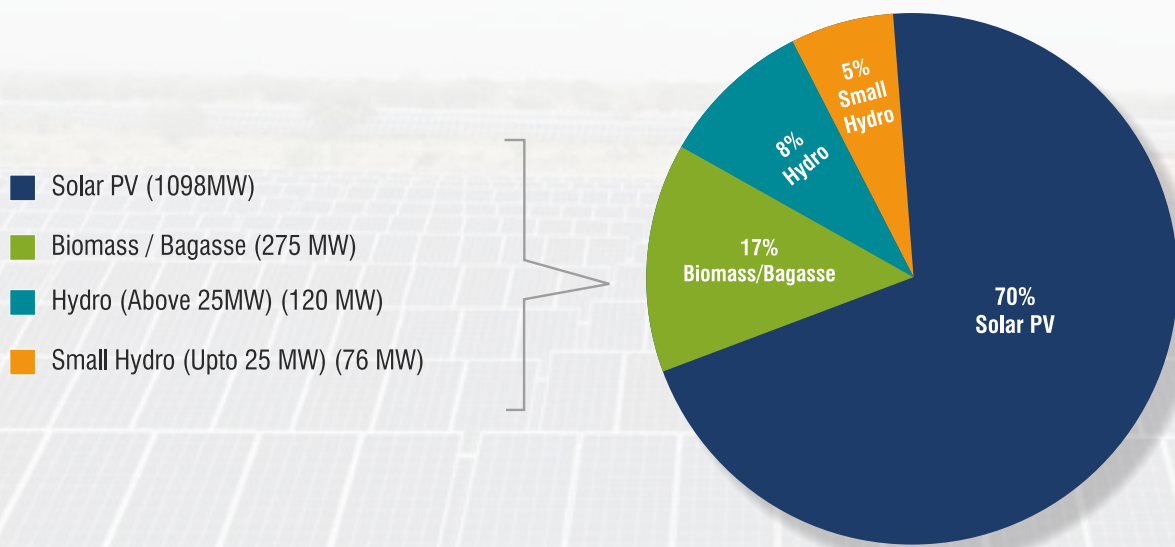
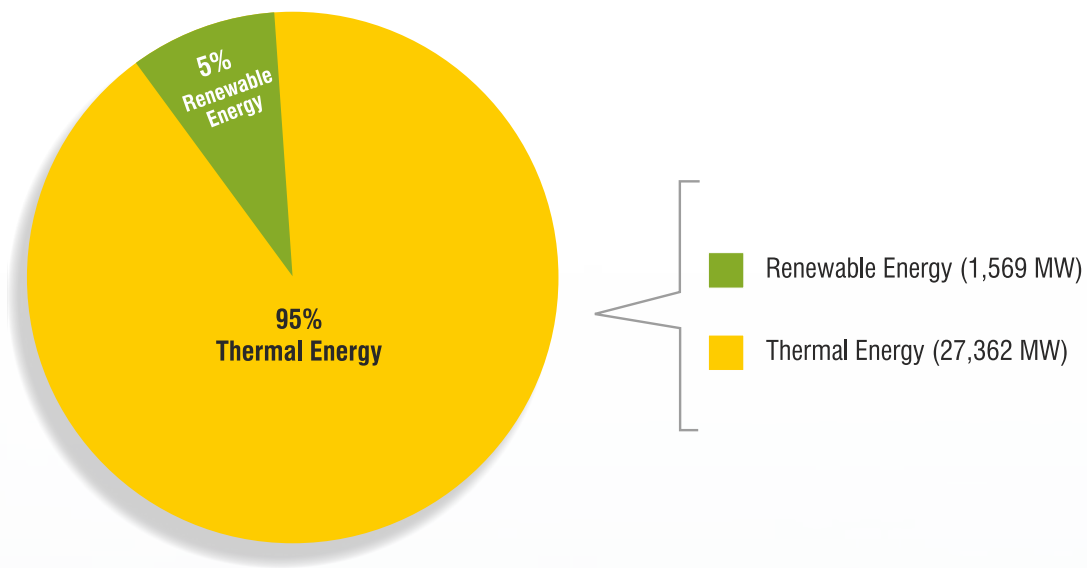


CHHATTISGARH STATE RENEWABLE ENERGY DEVELOPMENT AGENCY

- State Nodal Agency for harnessing Renewable Energy Sources
- Agency for propagating Energy Conservation
- To implement various RE schemes
- To provide Technical and Financial support to develop RE projects
- Create awareness about RE & Energy Conservation and encourage usage
- To promote R&D and Capacity Building

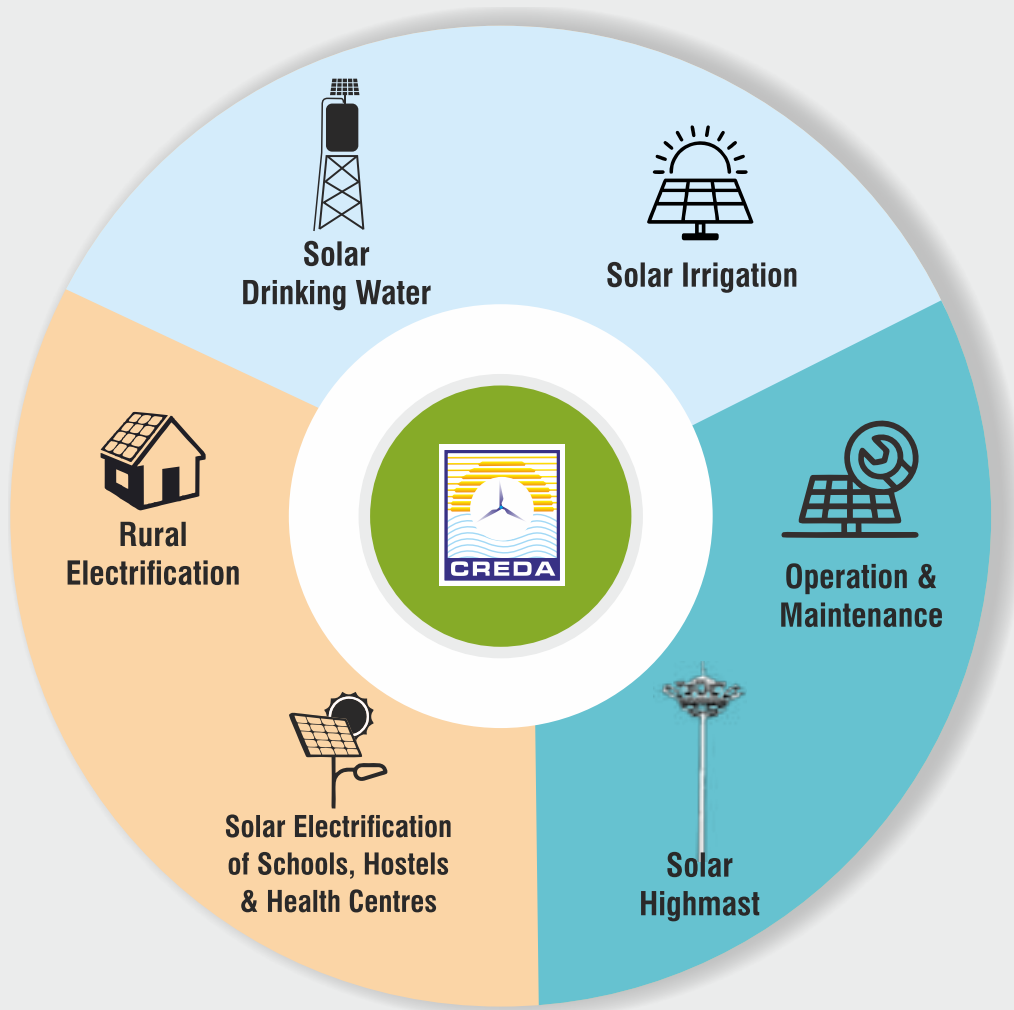
STATE POWER SCENARIO

Capacity



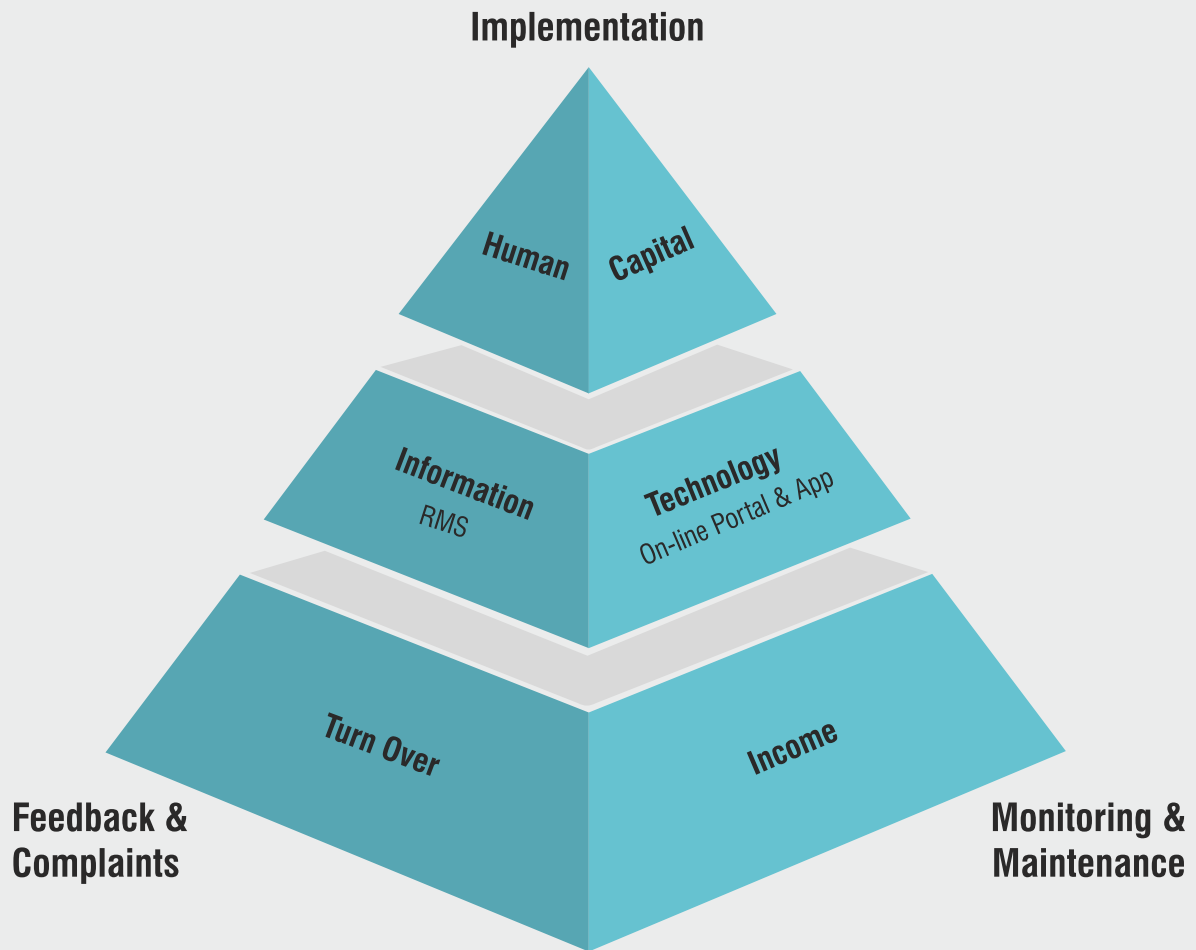
CORE COMPETENCE

COVE COWBLENCE



On-line Management System

TRIANGLE OF SUCCESS



- Annual turnover and income is increasing substantially.
- Annual administrative expenditure is decreasing in respect of turn over.
- Increase in transparency and accountability.

WAY FORWARD

An attempt to be different...

- CREDA submitted proposal for Carbon Credit / Financing for 81,000 Solar Irrigation Pumps (2016 to 2020) to Global Carbon Council. CREDA is expected to get about 4 Lacs Annual Carbon Credits for next 10 years.
- In addition to it, CREDA is also submitting proposal for further 55,000 Solar Irrigation Pumps, projects under Rural Electrification System, Solar Power Drinking Systems and Solar High Mast for Carbon Financing to the various Carbon Offset Platforms.
- CREDA will act as State Implementing Agency for purchase / procurement of power in RESCO mode for the Obligated Entities to meet their RPO.
- Establishment of testing facilities for Solar Modules and Electronic Equipments of Solar Systems.
- First to use Mono Crystalline Solar Panel in the State scheme and mandatory use of Mono Crystalline Solar Panel in all the state operated scheme after March 2023.

SOLAR PUMP FOR IRRIGATION

Saur Sujla Yojna

Individual Irrigation Pumps - 1,31,260

Area Irrigated - 1,70,639 Hectare

Electric Pump		Diesel Pump		Solar Pump		% of Solar Pumps
No.	Estimated Irrigated Land (Ha)	No.	Estimated Irrigated Land (Ha)	No.	Estimated Irrigated Land (Ha)	
4,98,007	7,47,011	1,13,500	79,000	1,31,260	1,70,639	17.40

*The land is being irrigated by multiple sources of irrigation. Therefore area of irrigated land may differ.

SOLAR COMMUNITY IRRIGATION

Total Projects	- 228
Total Pumps	- 334
Benefited Farmers	- 2,639
Area Irrigated	- 2,749 Hectare

- The scheme facilitates lifting of water from rivers/anicuts to provide nearby agricultural fields of farmer groups.
- Solar Irrigation pumps of capacity ranging from 7.5 Hp to 20 HP can be installed under this scheme.
- This scheme basically encourage the use of surface water for agricultural purpose which helps to maintain the ground water level.

INDIRA GAON GANGA YOJNA

Pond Filling

Projects Completed - 23

Ponds Filled - 35

- **New Scheme launched in 2021**
- Pumping of water from rivers or anicuts through Solar Pumps into ponds of near by villages for *Nistari* needs, irrigation and water recharge.
- Within one year 33 pond filling works have been completed and 13 pond filling works are in progress.

SOLAR DRINKING WATER SCHEME

Drinking Water Solar Pumps	- 18,342
Habitations Benefited	- 18,342
Solar Water Purification Systems	- 326
Families Benefited	- 3.79 Lacs

JAL JEEVAN MISSION by Solar Energy

Installed System	Village Covered (No.)	Village Covered (%)	Benefited Family (No.)
4,834	3,222	16.11%	2,17,530

- **6 meter**
1HP/900Wp/6Mtr Staging/5,000Ltr. Water Tank
- **9 meter**
1HP/1200Wp/9Mtr. Staging/10,000Ltr. Water Tank
- **12 meter**
1HP/1200Wp/12Mtr. Staging/10,000Ltr. Water Tank

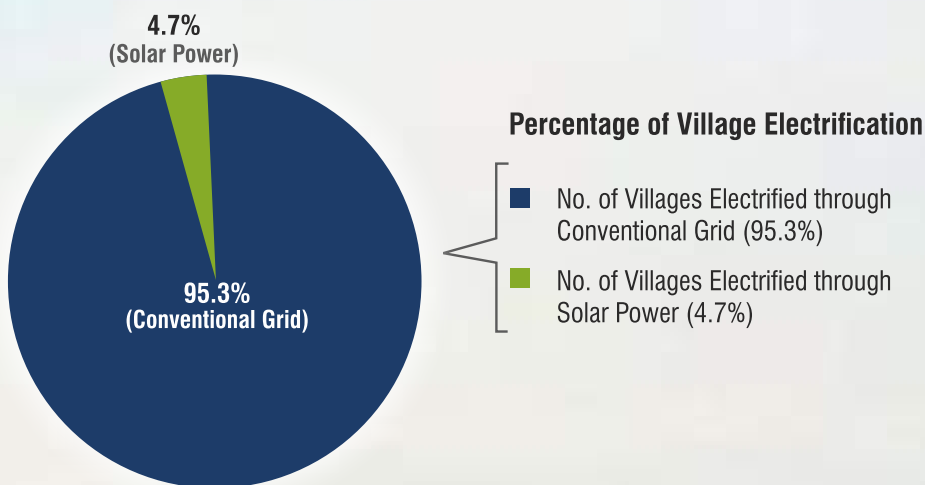
- CREDA is the sole source of 16% household drinking water supply in the State.
- In next two years CREDA will install about 12,000 Solar Drinking Water Systems under Jal Jeevan Mission. Thereby covering 30% of the households for drinking water supply in the State.



RURAL ELECTRIFICATION

State Scenario

S.No.	Details	Numbers	% of Village Electrification
01	No. of Villages Electrified in Chhattisgarh	19,567 House Holds - 63.72 Lacs	100% (As per State Data)
02	No. of Villages Electrified through Conventional Grid	18,647 House Holds - 62.40 Lacs	95.3%
03	No. of Villages Electrified through Solar Power	920 House Holds - 1.32 Lacs	4.7%



Village: Kokadi, Dist. Gariyaband

SOLAR ELECTRIFICATION OF HEALTH CENTERS

Total Health Centers	- 6,168
Health Centers Solarized	- 1,488
Cumulative Capacity of Solar System	- 4,734 kWp

S.No.	Institutes	Numbers	Installed SPV System	% of Health Centers Solarised
01	District Hospitals	28	26	92
02	Community Health Centers	169	165	98
03	Primary Health Centers	785	785	100
04	Sub Health Centers	5,186	512	10
	TOTAL	6,168	1,488	24



Village: Dhanora, Dist. Narayanpur

EDUCATION SECTOR

Schools Electrified	- 1,126
Students Benefited	- 1.51 lac
Solarization of Hostels & Residential Campus	- 1,924
Students Benefited	- 1.63 lac



Village: Chandeli, Dist. Kanker

SOLAR STREET LIGHT

through SPV Power Plants

Total Villages Covered	- 917
Cumulative capacity of Solar Systems	- 2,623 kWp

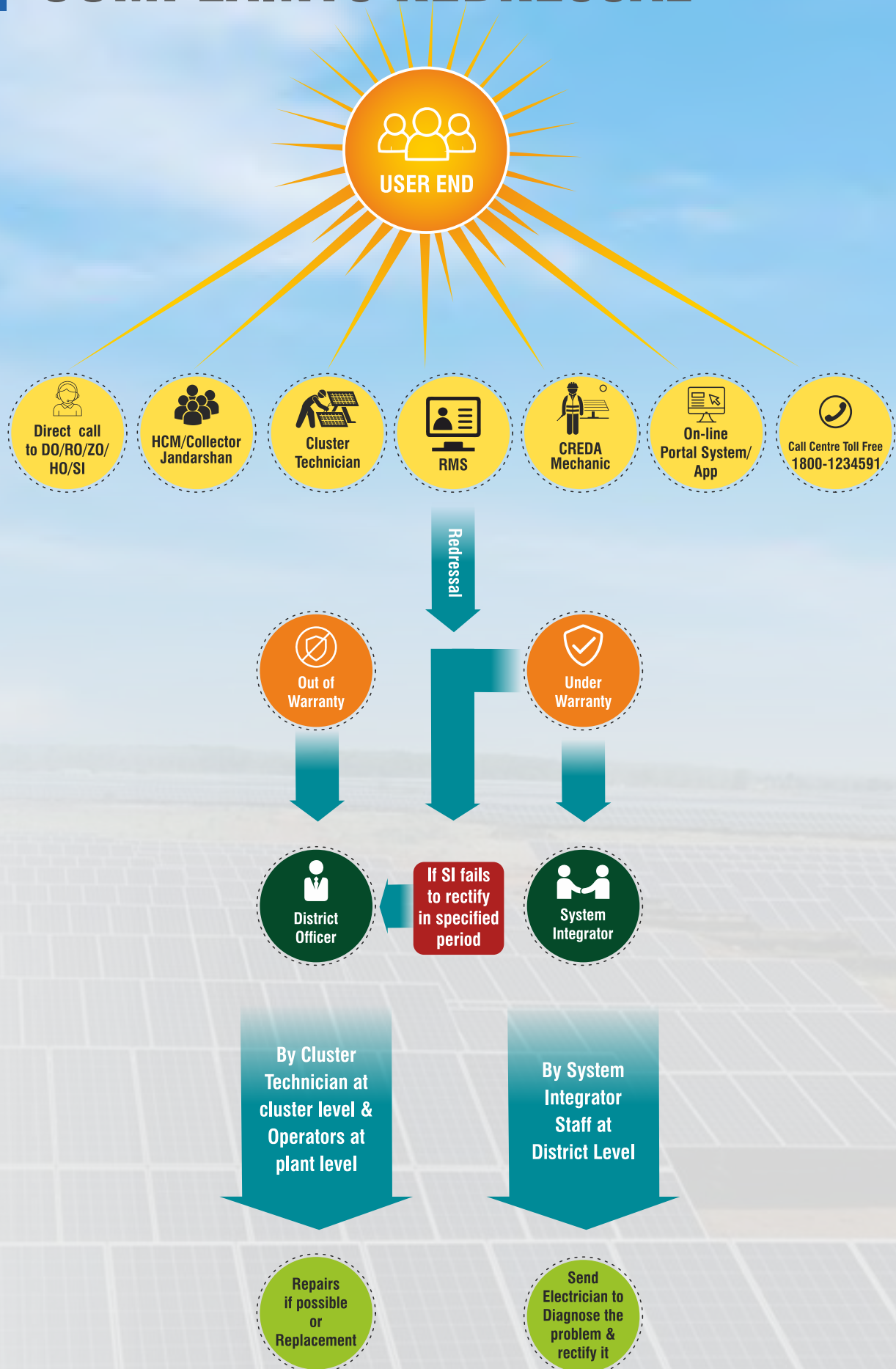
- Solar Power Plant of 1 kWp to 20 kWp capacity have been installed as per requirement of the village.
- About 10 nos. of LED street lights of 25 Wp capacity are operated through Off-grid solar power plants of 01 kWp.

SOLAR HIGH MAST

Solar High Mast Installed	- 5,103
No. of Villages	- 4,665

- **6 meter**
6M High/300Wp SPV Module/12.8V/90Ah
LFP Battery/20W x 03 nos. LED Luminary.
- **9 meter**
9M High/900 Wp SPV Module/12.8V/90Ah x 06 nos.
LFP Battery/30W x 06 nos. LED Luminary.
- **12 meter**
12M High/1200 Wp SPV Module/12.8V/90Ah x 06 nos.
LFP Battery/30W x 06 nos. LED Luminary

INFORMATION FLOW - COMPLAINTS REDRESSAL



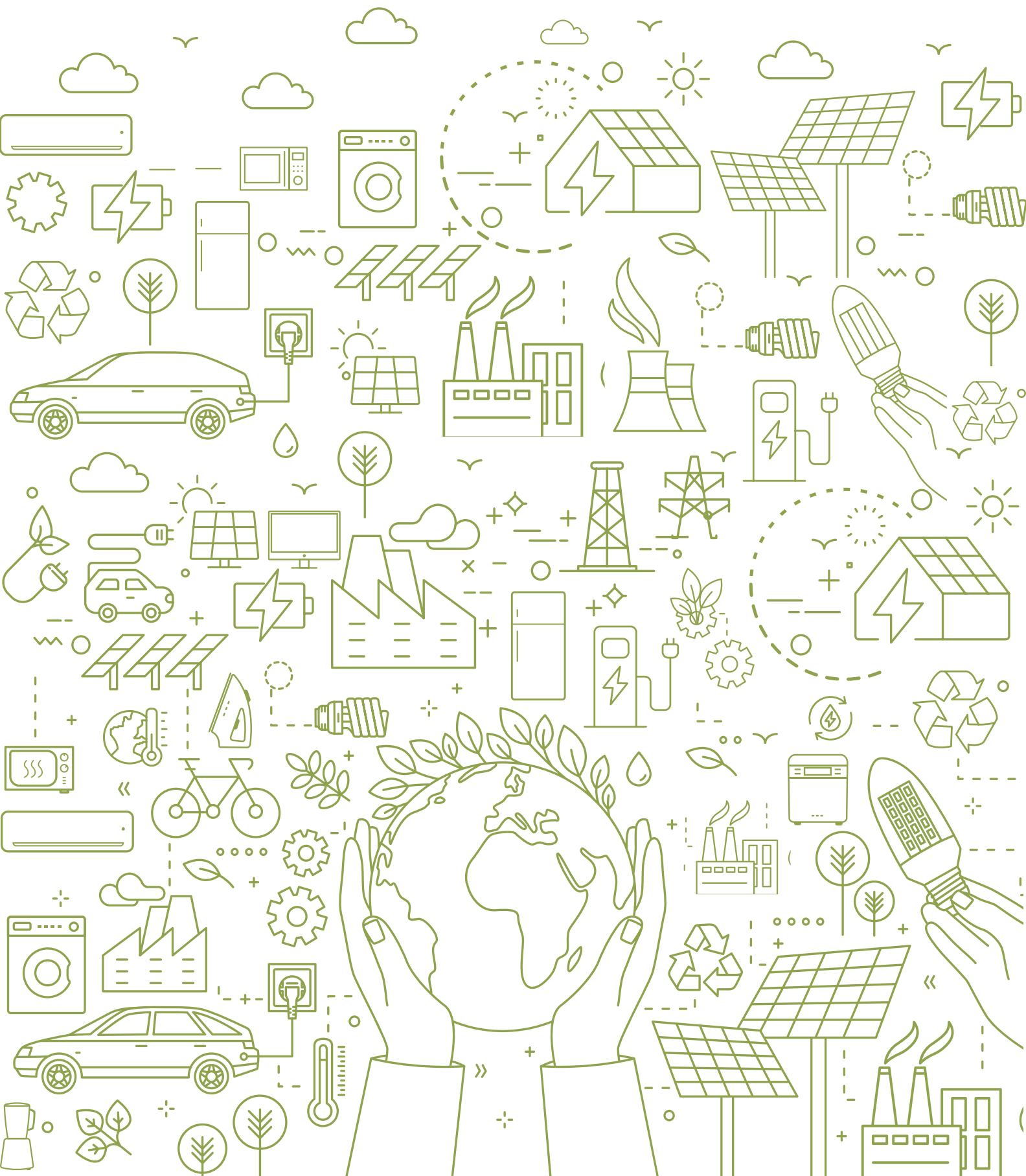
Awards & Achievements - 2022-23



- CREDA awarded as Star SDA at National Level by Society of Energy Engineers and Managers (SEEM) on 16.09.2022.
- CREDA won National level award in the field of Renewable energy sector by Association of Renewable Energy Agency of States (AREAS) for its outstanding performance as - **Best Performing State Nodal Agency & Installation of Highest number of Solar irrigation pumps.**
- First time after 75 years of independence, Saur Sujla Yojna a Government initiative Scheme reached Abujmarh, Dist. Narayanpur (C.G.) installed and maintained by CREDA.
- By use of Solar Pumps, water of Rivers/Anicut are now used to fill ponds under State Government initiative scheme “**Indira Gaon Ganga Yojana**”.
- CREDA completed installation of One Lakh Solar Pumps on 26th January 2022 (Republic Day).
- Chhattisgarh received Second position under PAT Scheme in field of Renewable-Non Renewable Energy sectors.
- CREDA installed 2500 Solar High Mast Lighting systems in Chhattisgarh in the last 3 years.
- With the help of On-grid and Off-grid Solar Power Plants installed by CREDA, large Number of State Hospitals and Hostels are now energized by reliable and clean energy.
- Solar-powered Lift irrigation system, installed by CREDA is helping farmers to irrigate fields in months when water is scarce.



For a sustainable future. Conserve Energy



Switch off,
when not in use!





Alok Katiyar
CEO

Chhattisgarh State Renewable Energy Development Agency

(Dept. of Energy, Govt. of Chhattisgarh)

V.I.P. (Airport) Road, Near Energy Education Park, P.O. Deopuri, Raipur - 492 015, Chhattisgarh

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