

CITIZEN CHARTER

GOA ENERGY DEVELOPMENT AGENCY,PATTO, PANAJI-GOA.

The Goa Energy Development Agency (GEDA) was established and made operational from April 1996 exclusively to undertake all programmes in the field of Non-conventional and Renewable Energy Sources. Apart from implementing the state programmes on Renewable Energy Sources, GEDA is also a Nodal Agency to the Ministry of New and Renewable Energy (MNRE), Government of India, to implement the centrally funded and sponsored schemes. GEDA is also the State Designated Agency (SDA) to undertake the work of installation of Solar Rooftop Projects for Government Department, Autonomous bodies etc.

The Agency is fully committed to boost the use of Non Conventional and Renewable Energy Sources through the following steps.

The Agency promotes Renewable Energy activities through its approved schemes are as under:-

- 1) New and Renewable Sources of Energy (NRSE)
- 2) Integrated Rural Energy Programme (IREP)
- 3) Solar Photo-Voltaic (SPV) +(Wind) Hybrid projects
- 4) Wind Power Programme
- 5) Solar Roof Top Scheme
- 6) Implementation of Rural Village Electrification (RVE) Programme.
- 7) Kitchen Waste Bio Gas plant
- 8) Biomass Briquetting

New and Renewable Sources of Energy (NRSE)

Renewable energy source have emerged as a viable option to achieve the goal of sustainable development. The new and renewable energy sources available for various applications are Solar Energy, Wind Energy, Tidal Energy, Biomass, Small Hydro Energy from Urban and Industrial Waste, etc.

Thermal Technology includes Solar Water Heaters, Solar Stills, Solar Driers, Dish type Solar Cookers, Box Type Solar Cookers, etc.

Solar Photovoltaic Technology includes of Solar Street Lights, Solar Home Lighting Systems, etc.

Integrated Rural Energy Programme (IREP)

Under this programme an optimum mix use of all type of energy sources locally available is provided to the rural people for meeting their energy needs for domestic and productive activities. The programme is having an area based approach outside the Municipal Limit.

Solar Water Heating Scheme

Goa Energy Development Agency has formulated the Solar Water Heating Scheme to promote use of solar power for water heating systems and reduce electrical power consumption. The Solar Water Heating Systems (SWHS) is renewable energy device which substitute electricity under the scheme.

Wind Power Programme

Under this programme, Goa Energy Development Agency (GEDA) has undertaken the Wind Resource Assessment Study in order to determine the wind profile of Goa in collaboration with the Centre for Wind Energy Technology (C-WET), Chennai. The study is partly sponsored by the Ministry of New and Renewable Energy, Govt. of India, for assessing the possible commercial use of Wind Energy. As per the report submitted by C-WET wind power density is not sufficient for the generation of wind energy from large wind turbines, however small wind turbines can be installed as per the report.

Phase II of Solar Rooftop System

Scheme For Promotion Of Grid Connected Solar Rooftop System With Net Metering System.

Grid Connected (also known as grid-intertied, utility-interactive, or on grid) system are solar systems that are intended to operate in parallel with an electric utility.

Goa Government has notified the scheme for promotion of grid connected solar Roof top installations. Consumer can install a grid connected Solar Power plant on their roof top of the building and generate the power. The power generated will be consumed for the internal consumption of the consumer premises and surplus if any will be fed into the grid. The generated power will be recorded in the meter called solar meter. The existing meter of the consumer will be replaced by Net meter which will be installed by Electricity Department. The net meter will record power imported from the grid and solar power exported to the grid. At the end of every month Electricity Department will issue the monthly net bill by adjusting the import of power and export of solar power and net bill will be prepared. The surplus of solar power exported to the grid, if any, will be carried out the next billing cycle. At the end of settlement period i.e. on 31st March settlement of the surplus power will be done by the Electricity Department and net supplies energy will be paid to the consumer at the tariff signed during the Power Purchase Agreement by Electricity Department.

Eligibility for availing benefits under the scheme:-

- (i) All the buildings/Houses/Educational Institutions/Industrial /commercial establishments which are registered with Panchayat or Municipality having permanent Electricity connections are eligible for subsidy under the scheme.

- (ii) Benefit under this scheme shall be disbursed on first come first serve bases.
- (iii) The installations eligible for subsidy on bench mark cost of MNRE or as per the derived cost by GEDA whichever is lower.

Financial status

- (i) The Central Financial Assistance for the residential sector under this scheme shall be provided as per operational guidelines for implementation of Phase II of Grid Connected Rooftop Solar Programme issued by Ministry of New and Renewable Energy (MNRE), Govt. of India vide no. 318/331/2017-Grid Connected Rooftop dated 20th August 2019.

The beneficiary will have option of installing solar rooftop systems through empanelled vendor(empanelled as per the guidelines of Phase – II of solar rooftop programme of MNRE,GOI by GEDA) at the net of CFA amount i.e. making payment to the vendors after deducting the eligible CFA amount.

- (ii) The State Financial Assistance for the Installation of Grid Connected Solar Rooftop system with Net Metering shall be restricted to LT level i.e. 1kW up to 90 kW connections only.

The State Government shall provide subsidy restricting to 10% for the prosumers of Residential, Group Housing Societies / Residential Welfare Associations (GHS/RWA Educational Institutions (non profit making), upto LT level i.e. having solar plants upto 90kW size, on the capital cost or the benchmark cost provided by MNRE or cost arrived through tendering process by GEDA whichever is lower.

Subsidy incentives :-

- A. Residential: All consumers of Dept. of Electricity in the State having service connection under residential category.

Capacity	Central	State subsidy
1KW - 3 KW	40%	10%
3KW- 10KW	20%	10%
above 10KW	nil	10%

- B. For Group Housing Societies/Residential Welfare Associations (GHS/RWA).

Capacity	Central Subsidy	State subsidy
10 kWp per house and total not more than 500 kWp	20%	10%

- (iii) The State Government shall provide subsidy restricting to 10% for the prosumers of Educational Institutions (non profit making), Commercial /industrial establishments upto LT level i.e. having solar plants upto 90kW size, on the capital cost or the benchmark cost provided by MNRE or cost arrived through tendering process by GEDA whichever is lower.

Capacity	Central Subsidy	State subsidy
1-90 KW	Nil	10%

- (iv) The benchmark cost shall vary time to time as per MNRE guidelines.

Scheme for Implementation of the Rural Village Electrification (RVE) programme in the State of Goa.

Rural Village Electrification scheme is prepared for providing Solar Photo Voltaic (SPV) based standalone systems for un-electrified households located in remote and inaccessible villages/habitations, where grid extension is not feasible or not cost effective. An un-electrified villages/hamlets/wadas having population of less than 50 subject to certifications from the Village Panchayat that the house/households is in existence; certificate from the Electricity Department, Goa, that the villages/hamlets/wadas is un-electrified and is not being taken up for electrification under State/Central programmes.

100% financial assistance will be provided to household of maximum limit of Rs. 90,000/- per household for 500Wp solar system (including transport, installation and the cost of Annual Maintenance Contract (AMC) for 5 years). Electricity charges as determined by Government on monthly basis be charged from each households (depend on number of units consumed) to create corpus fund (village wise/hamlet wise) which can be used for maintenance of the systems after expiry of AMC period.

Kitchen Waste Biogas Plant Scheme

The Scheme is promoting 1-10 cum capacity for installation. 1 cum generates 400 gms gas which can be used for 2-2.5 hrs. for cooking purpose. Generated slurry can be used as manure.

The 1-3 CUM for domestic customers

The 4-10 CUM for institutions, hotels, residential schools, complexes etc.

Sr. no	year	No. of beneficiaries	Capacity in cum	Subsidy released (In Rs.)
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1	2020- till date	17	03	1.40 lakh
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- 1) Installed Biogas 6 cum Biogas Plant based on staff canteen waste at GSPCB, Saligao to treat 20-25 kg wet waste.
- 2) Installed 1 cum Biogas at official Residence of Secretary (Power) and Chief Secretary.
- 3) 3 cum Biogas Plant installed at Raj Bhawan, Goa.

The financial assistance will be given to the “Biogas Plant based on Kitchen/Organic waste” purchased from the registered manufacturers/dealers of GEDA.

Sr . No.	Capacity of the Plant	Subsidy amount	Beneficiary
1	Cat. I (1Kg to 5 Kg waste)		Domestic Household
	1 Cum	10,000/-	
	1.5 Cum	12,000/-	
	2.0 Cum	14,000/-	
2	Cat. I (>5 Kg to 10 Kg waste)		
	2.5 Cum	20,000/-	
	3.0 Cum	26,000/-	
3	Cat. II (>10 Kg to 50 Kg waste)		
	4 Cum	24,000/-	
	4.5 Cum	27,000/-	
	6.0 Cum	34,500/-	
	7.5 Cum	40,000/-	
	8.0 Cum	40,000/-	
	9.0 Cum	40,000/-	
10.0 Cum	40,000/-		

Biomass Briquette Manufacturing Facility

40 TPD Biomass Briquette Manufacturing Facility

Setting up of 40 TPD Biomass Briquette Manufacturing Plant at Saligao, Bardez – Goa on Design, Built, Operate, Finance and Transfer Basis (**DBOFT**) for a period of 20 (twenty) years on revenue sharing basis.

Work Order has been issued to the selected bidder for the establishment of Biomass Briquette manufacturer. The bidder (PRESPL) will be sharing

Rs.600/ton of briquette production to GEDA as well as Rs.600/ton to Biomass Supplier. The estimated annual income to GEDA would be **Rs.72.00 lakhs** at full capacity operation of the plant.

The plant will be commissioned by November 2022.

Biogas Plant based on Cattle Dung, Piggery Dung and Poultry Litter

Scheme will be promoted through Cattle farm, Piggery Farm and Poultry Farm in the State of Goa.

Scheme for promotion of Electric Vehicles in the State of Goa

The Consumer can opt to purchase Electric Vehicle directly from dealer and avail benefits from Government of Goa however for such purchase the financial assistance from CESL will not be available.

Objectives of the scheme are as follows:

- (a) To promote the adoption of Electric two wheelers, three wheelers, four wheelers and buses in the State of Goa.
- (b) To promote conversion of ICE Vehicles to EV.
- (c) To provide financial assistance in form of subsidy for conversion or purchase of Electrical two wheelers, three wheelers and four wheelers in the State of Goa by providing subsidy.
- (d) To provide scrapping incentives for Two Wheeler, Three Wheeler and Four Wheeler towards the purchase of EV Vehicles.
- (e) To improve the air quality by reduction in green house gas emissions, reduction in noise levels and also use of fossil fuels.
- (f) To promote local manufacturing of Electric Vehicles in Goa.
- (g) To promote employment opportunities to skilled persons in Goa in field of Electric Vehicle servicing.

Financial assistance will be provided in form of subsidy, as mentioned below:

Sr. no.	Scheme	Implementation of Scheme		Quantum of Subsidy	
1)	Fame –II	Government of India		As applicable	
2)	EV Vehicle Scheme	Government of Goa			
i)	Financial Year	2 Wheeler	3 Wheeler	4 Wheeler	
	2021-2022	₹10,000 /kWh	₹10,000 /kWh	₹10,000 /kWh	
	2022-2023	₹8,000/kWh	₹8,000/kWh	₹8,000/kWh	

	2023-2024	₹6,000/kWh	₹6,000/kWh	₹6,000/kWh
	2024-2025	₹4,000/kWh	₹4,000/kWh	₹4,000/kWh
	2025-2026	₹2,000/kWh	₹2,000/kWh	₹2,000/kWh
ii)	Capping of State Subsidy	Not exceeding ₹30,000/	Not exceeding ₹ 60,000/	Not exceeding Rs ₹3,00,000/
iii)	Number of Vehicle per Year for which Subsidy will be provided	3000/Year	50/Year	300/Year
3)	Other Contribution for Scrapping of Vehicle by OEM/CESL	₹5,000/-	NIL	NIL
4)	Goa Government Incentive for Scrapping of vehicle	₹5,000/-	₹10,000/-	₹10,000/-
5)	Manufactured in Goa	₹5,000/-	₹10,000/-	₹15,000/-

Registered owner of two wheeler (i.e., two wheeler eligible for the Purchase Incentive) shall also be eligible for a Scrapping Incentive for scrapping and de-registering old ICE 2W, 3W & 4W registered in Goa up to ₹5,000/- for 2W and ₹10,000/- for 3W & 4W respectively. The incentive shall be reimbursed by the GEDA to the registered owner of 2W EV, 3W EV and 4W EV subject to confirmation of scrapping and de-registration of the ICE vehicle by the RTO.

Purchase Incentive for conversion of Old ICE vehicle into EV vehicle by retrofitting kit subject to approval by the RTO, will be provided to the registered owner of the EV as per the capacity of the battery or maximum upto capping of the State subsidy whichever is lower

Eligibility and Modalities for availing benefits under the scheme:-

Permanent residents of Goa having Aadhar Card and Driving License issued in Goa are entitled for the benefits under this scheme.

Grid Connected Solar Rooftop Power Systems on Government Buildings FY-2019-20

The Solar PV grid connected rooftop installations executed are as below;

Sr. No.	Capacity	Location
1.	20kW	V.P. Camorlim, Salcete
2.	410kW	15 Nos. of Sub-station of Electricity Department
3.	30kW	Govt. College, Borda, Margao
4.	5kW	High Court Judge Residence Bungalow, Altinho

5.	185kW	National Centre for Polar Ocean & Research, Vasco
Total	650kW	

FY 2020-21

The Solar PV grid connected rooftop installations executed are as below;

Sr. No.	Capacity	Location
1.	4kW	Fire Station, Pilerne, Bardez
2.	20kW	Postal Department, Patto, Panaji
3.	45kW	GSPCB, Saligao
4.	605kW	Goa University, Bambolim
5.	50kW	ITI Cacora
6.	80kW	Government Polytechnic Panaji
Total	804kW	

FY 2021-22

The Solar PV grid connected rooftop installations executed are as below;

Sr. No.	Capacity	Location
1.	14kW	GEDA Office, Panaji.
2.	40kW	Secretariat Building, Porvorim.
3.	20kW	Primary Health Centre, Quepem.
4.	50kW	Government Polytechnic Curchorem, Cacora.
5.	14kW	Dept. of Planning Statistic & Evaluation, Porvorim
6.	15kW	Municipal Office Building, Sanguem
7.	10kW	Municipal Office Building, Bicholim
8.	22kW	Municipal Waste Treatment Plant, Bicholim
9.	3kW	New Market Building, Bicholim
10.	4kW	New Market Building, Bicholim
11.	30kW	Municipal Community Hall Building, Cuncolim
12.	9kW	Municipal Fish Market Building, Cuncolim
13.	10kW	Municipal Office Building, Quepem
Total	253kW	

Pilot Solar Laboratories

The work of 02 nos. of Pilot solar laboratories have commenced for ITI Bicholim and ITI, Curcholem.

Electric Charging Stations

Three nos. of charging stations are installed at Mapusa, Secretariat and Patto-Panaji. Expression of Interest has been issued. 39 locations has been finalized

Awareness Programme

The total 110 awareness generation programme were conducted at various village panchayats, institutions, schools, colleges etc.

Installation of Solar Drier

A demonstration project of Solar drier of 600 sq.ft. capacity is already installed on February 2022 at Fisheries Training Centre, Ela Dhauji, Old Goa.

Convergence with CESL

The Government has signed an Mou with CESL for installation of 110 mw solar power plant with the State of which one plant of one mw is already commissioned at Cuncolim sub station. Two plants at Xeldem and Valpoi of 1.7 mw and 0.8 capacity are in progress.

The said Mou also includes providing about 11000 five star rated pumps to farmers and 16 lakh led bulbs to households free of cost.

Under the central Govt scheme the farmers will be allowed to install 500 KW to maximum 2 mw solar power plants with the total capacity of 50 MW.

200 solar pumps with 90 percent subsidy will be provided to farmers.
