



#### **GOVERNMENT OF KERALA**

#### **Abstract**

Power Department - Plan Proposals of ANERT for the year 2021-22 - Administrative Sanction accorded - Orders issued.

## **POWER (PS) DEPARTMENT**

G.O.(Rt)No.91/2021/POWER Dated, Thiruvananthapuram, 12/07/2021

- Read 1 Letter No: ANERT-TECH/79/2021-S(PK) dated 04.05.2021 from the General Manager, ANERT
  - 2 Minutes of the Working Group Meeting held on 08.06.2021

#### **ORDER**

As per the letter read as 1st paper above, the General Manager, ANERT has requested Administrative Sanction for the implementation of the following plan propoals by utilizing the grant-in-aid provision available in the current year's budget. An amount of Rs. 4313 lakhs has been earmarked in the budget estimate for the year 2021-22 under annual plan projects.

- 2. An amount of Rs. 469.45 lakhs under the head of account 2810-00-800-90(06) for the implementation of the project on "Programmes on Renewable Energy" and an amount of Rs.567.31 lakhs under the head of account 2810-00-800-90(08) for the implementation of the project on "ANERT as Knowledge Hub Technology development /demonstration and training in respect of ANERT" were posted in e-Lams.
- 3. 4. The Departmental Working Group Meeting held on 08.06.2021 examined the project proposals in detail with reference to the plan write up. After detailed discussion, the Working Group recommended approval for the plan schemes, which are detailed below;

Sl No:		Activities/Project Total (Rs. in lakhs)				
A. Programmes on Renewable Energy H/A:- 2810-00-800-90(06)						
I		Solar Power Plants in Public buildings				
1	A.1(a)	EPC mode-Partnering Public Buildings consuming energy	300.00			
2	A.1(b)	ANERT as RESCO (Continuing scheme)	290.00			
3	A.1(d)	Changing of off grid SPV power plants in Govt. buildings to on grid power plants (continuing scheme)	255.00			

4	A1.(e)	Solar Thermal CST Drier/Biomass Steam Generation systems (continuing scheme)	230.00
II	<u>A.2</u>	Solar Power Plant in Private buildings/lands	
5	A.2(a)	IPP Mode	270.00
6	A.2(b)	Urja Kerala Mission - Roof top solar Programme (Soura)	80.00
III	<u>A.3</u>	e-Mobility	
7	A.3(a)	Solar EV Charging Stations (continuing scheme)	81.00
8	A.3(b)	Electric cars on hire project (continuing scheme)	35.00
IV	<u>A.4</u>	Promotion of Renewable Energy systems	
9	A.4(a)	Renewable Energy Systems for Relief camps (continuing scheme)	35.00
10	A4.(b)	Soura Suvidha Kits (continuing scheme)	30.00
11		Component B of PM-KUSUM - Stand alone solar pumping scheme for farmers (MNRE support)	35.00
12	\ /	Component C of PM-KUSUM - Solarisation of exixting agricultural pumps for farmers (MNRE support)	35.00
13	A4.(c) (iii)	Small Stand - alone Solar pumping scheme for farmers	50.00
14	A4(d)	Biogas and Biomass Projects (New Scheme)	30.00
		Total:-	1756 lakhs
B. Ren	ewable ]	Energy Public Engagement, Outreach H/A:- 2810-00-80	00-90(07)
15		Promotional and Outreach Programmes (continuing scheme)	130.00
16	B1.(b)	Kerala State Renewable Energy Award 2021 (continuing scheme)	55.00
17		Supporting System for implementing RE projects at district level (New Scheme)	140.00
18	B2.(a)	e-marketplace-updation and maintenance (continuing scheme)	23.00

19	B2.(b)	Extending Insurance coverage for RE systems installed through "buymysun", RE systems installed by ANERT under deposit work and consultancy schemes and systems installed during the last five years and registered through "souraveedhi" mobile application of ANERT (continuing scheme under the head 'RE Public engagement, Outreach, Studies and Development')	11.50		
20	B2.(c)	Accreditation of Vendors/Vendor registration Process	25.00		
21	B2.(d)	Infrastructure upgradation for project implementation	60.00		
		Total:-	444.5 lakhs		
C. ANERT- Knowledge Hub for Renewable energy H/A:- 2810-00-800-90(08)					
22		Renewable Energy Park, Ramakkalmedu-Phase II continuation (continuing scheme)	430.00		
23	C1.(b)	Evaluation of new technologies in RE and inhouse R&D projects (continuing scheme)	280.00		
24		Micro-grid and multiple renewable sources, small wind/hybrid, floating solar studies including in-house R&E projects (continuing scheme)	180.00		
25	C1.(d)	Resource assessment, micrositing and related activities	123.05		
26	C1.(e)	Supporting R D and innovation (continuing scheme)	170.00		
27	C2(a)	Laboratory for Test Certification (continuing scheme)	300.00		
28	C2(b)	Integrated Renewable energy Knowledge Hub, Kuzhalmannam-Incubation hub	60.00		
29	C3(a)	Training programes (continuing scheme)	179.00		
30		Development of New business models and commercialisation of new technology (continuing scheme)	40.00		
Total:-1762.05lakhs					

5. Government have examined the recommendation of the Working Group in detail and are pleased to accord Administrative Sanction for the above plan schemes of ANERT at an estimated cost of Rs. 3962.55 Lakhs, subject to the availability of funds.

(By order of the Governor) **Dr B Ashok I A S Secretary** 

To:

The Chief Executive Officer, ANERT, Vikas Bhavan.P.O, Tvpm
The Chief I&I Division, State Planning Board, Pattom, Tvpm
The Accountant General(A&E), Kerala, Tvpm
The Principal Accountant General(Audit), Kerala, Tvpm
The Finance Department
The I&PR(web & new media) Department
Stock file/Office copy

Forwarded /By order

Section Officer

## **Appendix**

## DETAILS OF PLAN SCHEMES APPROVED AS RECOMMENDED BY THE WORKING GROUP

**A.Programmes on Renewable Energy (2810-00-800-90(06))** 

#### A.1.(a) Solar Power Plants in public buildings - EPC mode

The objective of the scheme is to establish solar Roof top/Ground Power Plants in Public/Government Buildings with 10 % financial support and the rest by the respective institutions. Targeting a minimum of 1.5 MW aggregate Capacity during 2021-22. The total expenditure of Rs. 300 lakh shall be debited to the budget head 2810-00-800-90(06) as project cost of Rs. 255 lakh and Rs. 45 lakh as project overhead expenses including man power of ANERT for implementing the project.

#### A.1.(b) ANERT as RESCO

In this programme ANERT will act as RESCO. Installation of aggregate capacity of 0.5 MW solar power plant at the public sector undertakings TRACO Cable Company Limited, Ernakulam under RESCO model. The total expenditure of Rs. 290 lakh shall be debited to the budget head 2810-00-800-90(06) as project cost of Rs. 246.5 lakh and Rs. 43.5 lakh as project overhead expenses including man power of ANERT for implementing the project.

## A.1.(d). Changing of off grid SPV power plants in Govt. buildings to on grid power plants.

Off grid SPV power plants installed under ANERT's demonstration programme and deposit programme and for which the warranty period has expired will be considered for this programme. A minimum Aggregate Capacity of 140 kW shall be converted to on Grid. The total expenditure of Rs. 255 lakh shall be debited to the budget head 2810-00-800-90(06) as project cost of Rs. 216.75 lakh and Rs. 38.25 lakh as project overhead expenses including man power of ANERT for implementing the project.

### A.1(e) Solar Thermal CST / Drier / Biomass Steam Generation systems

The objective of the continuing scheme is to popularise the application of the advanced Solar Concentrator Technology Systems in the State. It can be used for the purpose of community cooking or industrial steam generation applications or for solar drying.

The following programmes are included in this scheme. A). To conduct technical feasibility study and to prepare DPR for the installation of community solar steam cooking systems in institutions such as Kochi Shipyard, MILMA Chilling plants etc. - Rs.10 Lakh, B). Financial incentive @ Rs. 25,000/- per m² of solar concentrator area used for the construction of the solar concentrator based steam generation systems or 50% of the total cost of the system, whichever is lower. The target is to install 680 m² of solar concentrator area - Rs. 170 lakh, C). Installation of community biomass steam generation systems in Govt. and Govt. aided institutions for cooking food for minimum 200 persons daily with financial incentive @ Rs. 4 lakh per system or 50% of the total cost of the system, whichever is lower. The target is to install five biomass steam cooking systems - Rs. 20 lakh. The total expenditure of Rs. 230 lakh shall be debited to the budget head 2810-00-800-90(06) as project cost of Rs. 200 lakh and Rs. 30 lakh as project overhead expenses including man power of ANERT for implementing the project.

#### A.2(a). Solar Power Plant in private buildings/lands - IPP Mode

Proponents having energy requirement having difficult terrains or requires addition cost for implementation can be motivated to install solar power plants by providing viability gap to match the market rate. 10% of the cost will be provided as viability gap funding. ANERT will act as solution provider for this project. Total capacity of 5 MW or more. The total expenditure of Rs. 270 lakh shall be debited to the budget head 2810-00-800-90(06) as project cost of Rs. 229.50 lakh and Rs. 40.50 lakh as project overhead expenses including man power of ANERT for implementing the project.

#### A.2(b). Urja Kerala Mission- Rooftop solar Programme (Soura)

Urja Kerala Mission announced by Govt of Kerala proposed as a joint Venture between ANERT and KSEB has targeted 1000MW from Solar Power Plants by 2021. ANERT Proposes to implement a 15 MW of Solar Projects on EPC Mode and RESCO for which Promotion & Publicity campaign, user education, site feasibility, inspection charges, interim monitoring are proposed under this head. The total expenditure of Rs. 80 lakh shall be debited to the budget head 2810-00-800-90 (06) as project cost of Rs. 68 lakh and Rs. 12 lakh as project overhead expenses including man power of ANERT for implementing the project.

#### A.3(a). e-Mobility - Solar EV Charging Stations

The following programmes are included in this continuing scheme. A). Capital Subsidy of 50 % of the value of on grid/ off grid/ hybrid solar power plant up to max 50 Kw (Rs. 20,000/kW for on grid solar power plant and Rs. 30,000/kW for off grid solar power plant and hybrid solar power plant). - Rs. 41 lakh, B). Implementation of public EV charging stations with the support of EESL and Govt. Departments (Installation of 100 kVA Transformer, Installation of Display boards, Installation of CCTV cameras in public EVCS, providing security cum technician in public Charging stations etc and all other works related to installation of public EVCS - Rs. 29.43 lakh.

The total expenditure of Rs. 81 lakh shall be debited to the budget head 2810-00-800-90(06) as project cost of Rs. 70.43 lakh and Rs. 10.57 lakh as project overhead expenses including man power of ANERT for implementing the project.

## A.3(b). e-Mobility - Electric Cars on hire project

The following programmes are included under this continuing scheme. A). Promotional activities and lease contract of 3 Models of E Cars including publicity and demonstration purpose – Rs. 23.75 lakh, B). Development of Software for E Portal for registration, Lease Management of E Cars and Management of public EV Charging Stations – Rs. 5.68 lakh, C). Promotional activities for lease contract of E Carspublicity, awareness, brochures, video documentaries, Social Media & AIR Publicity – Rs. 1 lakh. The total expenditure of Rs. 35 lakh shall be debited to the budget head 2810-00-800-90(06) as project cost of Rs. 30.43 lakh and Rs. 4.57 lakh as project overhead expenses including man power of ANERT for implementing the project.

# A.4(a). Promotion of Renewable Energy Systems – Renewable Energy Systems for Relief camps

The objective of the scheme is to install Solar Hybrid/Off-Grid PV Plants in selected Disaster Relief Camps in the State as part of this programme. The total expenditure of Rs. 35 lakh shall be debited to the budget head 2810-00-800-90(06) as project cost of Rs. 29.75 lakh and Rs. 5.25 lakh as project overhead expenses including man power of ANERT for implementing the project.

#### A.4 (b). Promotion of Renewable Energy Systems - Soura Suvidha Kits

The objective of the continuing programme is to make available a Solar Power Pack which is capable of catering to the minimum energy demand of a household during flood /natural calamities or other disasters. The device is a solar emergency lamp cum solar charger unit with power back up and Radio facility. Minimum of 5000 such systems are planned this year. Soura Suvidha Kit will be distributed through the e-Marketplace – <a href="https://www.buymysun.com">www.buymysun.com</a> established by ANERT. 10% incentive will be provided for purchase of such systems through this on line platform. The total expenditure of Rs. 30 lakh shall be debited to the budget head 2810-00-800-90(06) as project cost of Rs. 25.50 lakh and Rs. 4.50 lakh as project overhead expenses including man power of ANERT for implementing the project.

## A.4 (c)(i) Component B of PM –KUSUM- Stand-alone solar pumping scheme for farmers (MNRE support)

Under Component B of PM KUSUM project of MNRE, Govt. of India, individual farmers will be supported to install stand-alone solar agriculture pumps of capacity from 1HP to 7.5 HP or replacement of existing diesel agriculture pumps / irrigation systems in off-grid areas, where grid supply is not available. Pumps of capacity higher than 7.5 HP may be allowed, however, subsidy will be limited to the CFA applicable for pump of 7.5 HP. CFA would be 30% and State Government will have to give a subsidy of 30% and the remaining 40% will be provided by the farmer.

The expenditure for the programme is as follows. a). 30 % State subsidy for installation of 100 Nos stand-alone agricultural solar pumps in un-electrified areas or replacement of existing diesel pumps - Rs. 27 lakh, b) Media Publicity, awareness classes, leaflet printing, feasibility study, inspection, video shooting, inaugural function expenses etc - Rs. 2.75 lakh. The total expenditure of Rs. 35 lakh shall be debited to the budget head 2810-00-800-90(06) as project cost of Rs. 29.75 lakh and Rs. 5.25 lakh as project overhead expenses including man power of ANERT for implementing the project.

## A.4 (c) (ii). Component C of PM –KUSUM - Solarisation of existing agricultural pumps for farmers (MNRE support)

Under PM-KUSUM project (component C) of MNRE, Govt. of India individual farmers having grid connected agriculture pump will be supported to solarize pumps. The farmer will be able to use the generated solar power to meet the irrigation needs and the excess solar power will be sold to DISCOM. CFA would be 30% and State Government will have to give a subsidy of 30 %; and the remaining 40 % will be provided by the farmer.

The expenditure for the programme is as follows. a). 30 % state subsidy for solarization of 100 Nos existing agricultural pumps of capacity ranging from 1HP to 10 HP - Rs. 27 lakh, b) Media Publicity, awareness classes, leaflet printing, feasibility study, inspection , Video shooting, inaugural function expenses etc. - Rs. 2.75 lakh.

The total expenditure of Rs. 35 lakh shall be debited to the budget head 2810-00-800-90(06) as project cost of Rs. 29.75 lakh and Rs. 5.25 lakh as project overhead expenses including man power of ANERT for implementing the project.

#### A.4 (c) (iii). Small Stand-alone Solar pumping scheme for farmers

Installation of standalone pump of capacity 0.5 HP is sufficient for the irrigation of 10 cents to 100 cent land. The expenditure for the programme is as follows. a). Subsidy of 300 Nos. of 0.5 HP Stand-alone solar pump@ Rs. 10,000/- Rs. 30 lakh, b) Media Publicity, awareness classes, leaflet printing, banners, Video shooting, Inaugural Function Expenses etc., - Rs. 5.50 lakh, c). Feasibility study & inspection – Rs. 7 lakh. The total expenditure of Rs. 50 lakh shall be debited to the budget head 2810-00-800-90(06) as project cost of Rs. 42.5 lakh and Rs. 7.5 lakh as project overhead expenses including man power of ANERT for implementing the project.

#### A.4 (d). Biogas and Biomass Projects

The objective of the new scheme is to install Community biogas plants in the institutions of Government /Public sector/ LSGs. The expenditure for the programme is as follows. a). Preparation of Feasibility Reports, Supervisions and Inspection – Rs. 1.1 lakh, b) Financial assistants for installation of 125 cubic meter biogas plants (@ Rs. 20,000.- per cubic metre) in the institutions of Government /Public sector/ LSGs – Rs. 25 lakh. The total expenditure of Rs. 30 lakh shall be debited to the budget head 2810-00-800-90(06) as project cost of Rs. 26.1 lakh and Rs. 3.9 lakh as project overhead expenses including man power of ANERT for implementing the project.

## B. Renewable Energy Public Engagement, Outreach, Studies and Development (2810-00-800-90-(07))

#### **B.1(a). Promotional and Outreach Programmes**

The following programmes are included as part of this continuing scheme:

1). To conduct Awareness Classes - Rs. 5.00 lakh, 2. Participation & conduct of exhibitions - Rs.20.00 lakh, 3). Establishing Helpdesk facility - Rs. 20.00 lakh, 4). Publicity for promotion of Urjamithra Centres - Rs. 10 lakh, 5). Providing Faculties for training/awareness programmes of various institutions - Rs. 5.00 lakh, 6). To publish 'SouraVeedhi' Newsletter, Printing Brochures & Booklets on Renewable Energy - Rs. 5.00 lakh, 7). Promotion of Malayalam language- Rs. 3.00 lakh, 8). Publishing Renewable Energy Schemes through various Publications/ Medias - Rs. 45.00 Lakh. The total expenditure of Rs. 130 lakh shall be debited to the budget head 2810-00-800-90(07) as project cost of Rs. 113 lakh and Rs. 17 lakh as project overhead expenses including man power of ANERT for implementing the project.

## **B.1(b). Kerala State Renewable Energy Award 2021**

Kerala State Renewable Energy Awards would recognise selected enterprises, organizations and individuals who have made systematic and serious attempts for efficient utilization of Renewable Energy, and Research & promotion of Renewable Energy Technologies. The qualifying period for the Renewable Energy Awards of this particular year would be the 2019-20 & 2020-21. The expenditure for the programme is as follows. a). Award prize money – Rs. 13 lakh, b). Cost for plaques – Rs. 10 lakh, c). Site Visits and Documentation – Rs. 5 lakh, d). Award function/ related events and advertisement – Rs. 19 lakh, The total expenditure of Rs. 55 lakh shall be debited to the budget head 2810-00-800-90(06) as project cost of Rs. 47 lakh and Rs. 8 lakh as project overhead expenses including man power of ANERT for implementing the project.

## B.1(c). Supporting system for implementing RE Projects at District level

The expenditure for the new scheme is as follows. 1). Technical man

power support for preparation of Feasibility Reports, Supervisions and Inspection of RE Projects including the services of Urjamithra Centres - Rs. 28 lakh, 2). Rent of District Offices - Rs. 19.80 lakh, 3). Hire charge of Vehicles - Rs. 33.60 lakh, 4). Contingent Expenses - Rs. 8.40 lakh, 5). Infrastructure Facility - Rs. 25.20 lakh, 6). Publicity, Printing Brochures and Meetings – Rs. 7 lakh. The total expenditure of Rs. 140 lakh shall be debited to the budget head 2810-00-800-90(07) as project cost of Rs. 122 lakh and Rs. 18 lakh as project overhead expenses including man power of ANERT for implementing the project.

#### B.2(a). eMarketplace – updation and maintenance

More features would be required to be added to the ANERT mobile apps and the software already developed. The expenditure for the continuing scheme is as follows. 1). Annual security audit of software - Rs. 2 lakh, 2). Feature addition and update of software including mobile apps, AMC – Rs. 18 lakh. The total expenditure of Rs. 23 lakh shall be debited to the budget head 2810-00-800-90(07) as project cost of Rs. 20 lakh and Rs. 3 lakh as project overhead expenses including man power of ANERT for implementing the project.

#### B.2(b). Extending insurance coverage for RE systems

Extending insurance coverage for RE systems installed through 'buymysun', RE systems installed by ANERT under deposit work and consultancy schemes and systems installed during the last five years and registered through "Souraveedhi" mobile application of ANERT. The total expenditure of Rs. 11.5 lakh shall be debited to the budget head 2810-00-800-90(07) as project cost of Rs. 10 lakh and Rs. 1.5 lakh as project overhead expenses including man power of ANERT for implementing the project.

#### B.2(c). Accreditation of Vendors / Vendor Registration Process

The total expenditure of Rs. 25 lakh shall be debited to the budget head 2810-00-800-90(07) as project cost of Rs. 21.25 lakh and Rs. 3.75 lakh as project overhead expenses including man power of ANERT for implementing the project.

#### B.2(d). Infrastructure upgradation for project implementation

The expenditure item for the scheme is as follows. 1). KSWAN connectivity expenses - 2.50 lakh, 2). Update/replacement of desktops, laptops, printers, etc - Rs. 22 lakh, 3). Mobile Connectivity Expenses and update of devices - Rs. 5.50 lakh, 4). Smart building infrastructure update - Rs. 16 lakh, 5). Infrastructure in districts - Rs. 7 lakh. The total expenditure of Rs. 60 lakh shall be debited to the budget head 2810-00-800-90(07) as project cost of Rs. 53 lakh and Rs. 7 lakh as project overhead expenses including man power of ANERT for implementing the project.

## C.ANERT – Knowledge Hub for Renewable Energy (2810-00-800-90-(08))

## C.1(a). Renewable Energy Park, Ramakkalmedu – Phase II continuation

As part of this continuing scheme for installation of Renewable Energy Park at Ramakkalmedu, the amount earmarked is to prepare the necessary reports and to initiate the installation of storage for integrating with the Solar Generator and for evacuation of the generated/stored energy and balance payment of Phase I. The total expenditure of Rs. 430 lakh shall be debited to the budget head 2810-00-800-90(08) as project cost of Rs. 380 lakh and Rs. 50 lakh as project overhead expenses including man power of ANERT for implementing the project.

#### C.1(b). Evaluation of new technologies in RE and in-house R&D projects

The objective of the scheme is to initiate pilot project on hydrogen vehicles. The following programmes are included as part of this scheme: a). Study, Experimentation and Implementation of HFCVs in Kerala, b) Preparation of DPR/feasibility on hydrogen generation at Vizhinjam. The total expenditure of Rs. 280 lakh shall be debited to the budget head 2810-00-800-90(08) as project cost of Rs. 245 lakh and Rs. 35 lakh as project overhead expenses including man power of ANERT for implementing the project.

# C.1(c). Micro-grid and multiple renewable sources, small wind/ hybrid, floating solar – studies including in-house R&D projects

The expenditure item for the scheme is as follows. 1). ANERT share for Marayur Micro-grid project for remote tribal electrification with multiple Renewable Energy Sources in association with CDAC and EMC - Rs. 50 lakh, 2) Operation, maintenance and upkeep of existing power plant at Puravayal Tribal hamlet in Marayur Grama Panchayth - Rs. 10 lakh, 3). Demonstration of floating Solar hybrid Plants with various available technology of modules and floats. - Rs. 47 lakh, 4). Installation of Micro grids utilising Small Wind Energy and Solar Hybrid Systems for selected sites at Ponmudi Hill Station in Thiruvananthapuram District and Detailed Project Report (DPR) and associated initiating expenses of a Virtual Power Plant (VPP) in Ponmudi - Rs. 50 lakh. The total expenditure of Rs. 180 lakh shall be debited to the budget head 2810-00-800-90(08) as project cost of Rs. 157 lakh and Rs. 23 lakh as project overhead expenses including man power of ANERT for implementing the project.

#### C.1(d). Resource assessment, micrositing and related activities

The following programmes are included as part of this scheme: a). Wind Resource Assessment utilising Wind Masts with technical help of NIWE – Rs. 60 lakh 2) Purchasing WindPro and Windographer software including training and remuneration for Project Assistants and establishing Wind Energy Lab setup – Rs. 30 lakh, 3). Updation of PV Syst software and purchasing Meteonorm Software for Resource Assessment – 2 lakh, 4). Maintaining SRRA Stations – Rs. 15 lakh. The total

expenditure of Rs. 123.05 lakh shall be debited to the budget head 2810-00-800-90(08) as project cost of Rs. 107 lakh and Rs. 16.05 lakh as project overhead expenses including man power of ANERT for implementing the project.

## C.1(e). Supporting R&D and Innovation

The objective of the continuing scheme is to promote R&D and innovative ideas and to pilot new models in RE sector, The expenditure item for the scheme is as follows. 1). Supporting R&D and Innovation 2021-22 – 47.83 lakh, 2). Release of further instalments under SRI 2018-19 and SRI 2020-21 - Rs. 100 lakh. The total expenditure of Rs. 170 lakh shall be debited to the budget head 2810-00-800-90(08) as project cost of Rs. 147.83 lakh and Rs. 22.17 lakh as project overhead expenses including man power of ANERT for implementing the project.

#### C.2(a). Laboratory for Test and Certification

The objective of the continuing scheme is to set up phase 2 of STIC-ANERT Solar Test Facility. The total expenditure of Rs. 300 lakh shall be debited to the budget head 2810-00-800-90(08) as project cost of Rs. 265 lakh and Rs. 35 lakh as project overhead expenses including man power of ANERT for implementing the project.

## C.2(b). Integrated Renewable Energy Knowledge Hub, Kuzhalmannam – Incubation hub

The objective of the scheme is to prepare DPR partnering with Reputed Institutions like ULCC/EMC/ KESNIK/ KSEBL etc for establishing innovation hub in ANERT land at Kuzhalmannam to promote start-ups and support the entrepreneurs in RE Sector by providing testing and certification facilities. The total expenditure of Rs. 60 lakh shall be debited to the budget head 2810-00-800-90(08) as project cost of Rs. 51 lakh and Rs. 9 lakh as project overhead expenses including man power of ANERT for implementing the project.

### C.3(a). Training Programmes

The expenditure for the continuing scheme is as follows. 1). ANERT – KASE Accreditation of Installers and Inspectors (6 Batches) including infrastructure and tools - Rs. 50 lakh, 2). Skill Upgrading Training For Electricians and ITI electrical qualified youths (10 Batches) - Rs. 7 lakh, 3). Awareness and skill support programme for MSME– Rs. 3 lakh, 4). Skill Upgradation Training Programme for Resource Persons, Faculties of Training Partners and TOT Training - Rs. 7 lakh, 5). Training Programmes in Renewable Energy for LSGD Institutions, Education Institutions, Builders & Architects - Rs. 25 lakh, 6). Training for ANERT Officers and trainees on skill up gradation in design and project preparation of RE Projects - Rs. 10 lakh, 7). Participation of ANERT Staff in Management Development Programmes and workshop organized by various Agencies - Rs. 10.00 lakh, 8). Training and Capacity Building

Programmes for Urjamithra Entrepreneurs and Technicians - Rs. 20.00 lakh, 9). Improvement of library facilities, Purchase of books and subscription of magazines and journals - Rs. 20.00 lakh, 10.) Providing accident insurance coverage for Renewable Energy Technicians - Rs. 4.00 lakh. The total expenditure of Rs. 179 lakh shall be debited to the budget head 2810-00-800-90(08) as project cost of Rs. 156 lakh and Rs. 23 lakh as project overhead expenses including man power of ANERT for implementing the project.

# C.3(b). Development of new business models and commercialisation of new technology

The expenditure for the scheme is as follows. 1). Procurement of identified products and technology for field deployment and evaluation - Rs. 17 lakh, 2). Deployment, field evaluation , testing and certification and performance monitoring - Rs. 8 lakh, 3). Publicity and promotion of branded products through media - Rs. 8 lakh, 4). Other unforeseen expenses – Rs. 1 lakh. The total expenditure of Rs. 40 lakh shall be debited to the budget head 2810-00-800-90(08) as project cost of Rs. 34 lakh and Rs. 6 lakh as project overhead expenses including man power of ANERT for implementing the project.