

No. 223/90/2017 - R&D
Government of India
Ministry of New and Renewable Energy
(R&D Coord.)

Block No.14, CGO Complex,
Lodhi Road, New Delhi-110003
Dated: 28th July, 2020

To,

Pay and Accounts Officer
Ministry of New and Renewable Energy
Block-14, C. G. O Complex, Lodi Road
New Delhi-110003

Subject: Administrative Approval for continuation of the Renewable Energy Research and Technology Development Programme for the year 2020—21

I am directed to convey the sanction of the President for continuation of the MNRE's Renewable Energy Research and Technology Development Programme till 31st March, 2021 or till date the recommendations of the 15th Commission come to effect, whichever is earlier. The original sanction of the programme was issued *vide* MNRE order even no dated 21.02.2019.

2. This issues with concurrence of IFD dated 14.07.2020 and approval of Competent Authority.

Yours faithfully



(Anil Kumar)
Scientist D

E-mail: anil.kumar.mnre@nic.in

Copy for information and necessary action to:-

1. PS to Hon'ble Minister (NRE)
2. Sr. PPS to Secretary, MNRE
3. PPS to Additional Secretary, MNRE
4. PS to AS&FA
5. PPS to All Joint Secretary, MNRE
6. All Group Head, MNRE
7. All State Nodal Agency/R&D institutions/IITs
8. Director (PF II), M/o Finance, Department of Expenditure, North Block, New Delhi
9. DG NISE/NIWE/NIBE
10. Sanction Folder

No. 223/90/2017 - R&D
Government of India
Ministry of New and Renewable Energy
(R&D Coord.)

Block No.14, CGO Complex,
Lodhi Road, New Delhi-110003
Dated: 21st February, 2019

ORDER

Subject: Administrative Approval for continuation of the Renewable Energy Research and Technology Development Programme for the period from 2017-18 to 2019-20.

Sanction of the President of India is hereby accorded for continuation of the **Renewable Energy Research and Technology Development (RETD)** Programme of the Ministry of New and Renewable Energy (MNRE) for implementation during the period 2017-18 to 2019-20 at a total cost of Rs. 175.87 crore. The scheme aims at scaling up R&D effort for "**Renewable Energy Research and Technology Development**" during the said period for promoting indigenous technology development and manufacture for wide spread applications of new and renewable energy in efficient and cost effective manner across the country. The programme will strengthen research and innovation capacity of the country and will be implemented in accordance to policy and guidelines issued from time to time and thrust areas identified by MNRE.

2. The details of the scheme are as follows;

A. Objectives

The objective of the scheme is to support the R&D projects for technology development and demonstration in various areas of new and renewable energy such as solar thermal systems, solar photovoltaic systems, biogas systems, waste to energy systems, wind energy systems, hybrid systems, storage systems, hydrogen and fuels cells, geothermal, etc. with the ultimate aim of increasing share of renewables in the energy mix in the country. The R&D efforts are expected to make industry competitive and renewable energy generation supply self-sustainable/ profitable. The technology development and demonstration will be supported for manufacture of new and renewable energy systems/devices/components for different applications including transportation, portable and stationary applications for rural, urban, industrial and commercial sectors through:-

i. Technology Mapping and Benchmarking;

- ii. Research, Development, Demonstration and Manufacture needs and facilitate implementation of the same;
- iii. Encouraging innovation and start-ups.
- iv. Laying down standards, specifications and performance parameters at par with international levels and facilitate industry in attaining the same;
- v. Testing, standardization and certification and appropriate international level quality assurance accreditation and facilitate industry in obtaining the same;
- vi. Aligning costs of new and renewable energy products and services with international levels and facilitate industry in attaining the same;
- vii. Facilitation of industry in becoming internationally competitive.
- viii. Carrying out Renewable Energy Resource Survey, Assessment and Mapping.
- ix. Providing sustained feed-back to manufacturers on performance parameters of new and renewable energy products and services with the aim of effecting continuous up-gradation so as to attain international levels in the shortest possible time span;
- x. Providing cost-competitive, new and renewable energy supply options.
- xi. International collaboration for joint technology development and demonstration, testing and standardization.

B. Components

The scheme has been structured to support technology development and demonstration, validation, testing and standardization, innovation start-ups, field evaluation, study, etc. for entire renewable energy sector which includes solar thermal systems, solar photovoltaic systems, biogas systems, waste to energy systems, wind energy systems, hybrid systems, storage systems, control and integration systems, hydrogen and fuel cell systems, geothermal, etc. The details of the components of the scheme are given in table below:

| Components | Year 1 (2017-18) | Year 1 (2018-19) | Year 2 (2019-2020) | Total |
|--|---------------------------------------|---------------------------------------|---|--|
| | Physical | Physical | Physical | Physical |
| 1. Support for R&D for Technology/Process/Development & Demonstration and Performance Testing and Standardization. | (i) 20 Nos. of new projects in thrust | (i) 40 Nos. of new projects in thrust | (i) 40 Nos. of new projects in thrust areas and support | (i) 100 Nos. of New projects. Completion of on-going |