342-16/3/2025-HRD

Government of India

Ministry of New and Renewable Energy Human Resource Development Division

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Subject: Invitation for Request for Proposal (RFP) for conducting the Evaluation for

implementation of Human Resource Development Programme of Ministry of New and

Renewable Energy from the Financial Year 2021-22 to 2025-26.

Ministry of New and Renewable Energy (MNRE) intends to engage national / international level

reputed Consultancy Firms having registered office in India to undertake evaluation of Human Resource

Development Programme of this Ministry as per Terms of Reference (ToR) given in the Annexure III.

1. Background for Evaluation

The objective of the Human Resource Development Programme of the Ministry is to

institutionalize the renewable energy education and training to cater the requirement of trained and

qualified manpower in the country. MNRE has been sponsoring short-term training programmes mainly

in areas of construction/manufacturing, installation, operation & maintenance and entrepreneurship of

Renewable Energy Systems under its HRD Programme as well as other programmes. The trained

manpower under these programmes are expected to undertake installation and post installation service

of the systems installed in nearby areas of their operation. In addition some of the trainees would have

been engaged by renewable energy industries, project developers, system integrators, entrepreneurs

etc. Through its National Renewable Energy Fellowship component of HRD programme, Ministry is

also promoting higher studies/research courses in R&D/academic institutions by providing

scholarships/fellowships to students for pursuing higher studies in renewable energy to meet the

demand of highly qualified manpower for implementation of various programmes of MNRE. The R&D/

research/engineering/academic institutions are encouraged and financially supported to initiate higher

studies/research courses as M.Sc, M.Tech., Ph.D. in renewable energy sector by strengthening the RE

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based infrastructure facilities through upgrading laboratory facilities in the area of renewable energy education and research. Ministry has also been providing Internship facility to students of engineering, Science, Management and other streams to understand various activities of the Ministry with the objective to become researchers/managers in renewable energy area. The HRD Progremme being implementing vide OM No. 342-16/2/2021-HRD dated 07th December 2021 is enclosed for reference is given in Annexure I.

The Ministry intends to carry out the evaluation of all the components of HRD programme including the education, research and short term training programmes in-terms of utility of the qualified and trained manpower, assessment of penetration of various renewable energy systems in selected areas, employment generated during execution/installation of the projects as well as in O&M and providing after sales service of these systems by the suppliers/installers and utility of the trained manpower in such activities. Ministry also intends to assess the availability of in-house training mechanism of RE companies/system integrators/ installers / suppliers etc. Further, Ministry aims to assess the effectiveness of the fellowship and internship programmes for developing qualified manpower and strengthening of RE based infrastructure facilities in the institutions engaged in RE education and Research. During the period from 2021-22 to 2025-26, the HRD Programme of the Ministry has following components:

- Short term training programmes / skill development programmes like Suryamitra, Varunmitra, Vayumitra and other training programmes.
- National Renewable Energy Fellowship scheme
- Enhancement/establishment of RE based infrastructure facilities.
- National Renewable Energy Internship Scheme
- Renewable Energy Chair

A template for Evaluation of Human Resource Development Programme in New and Renewable Energy is given in **Annexure II.** 

#### 2. Eligibility

Reputed organizations/institutions/consulting organisations etc with technical capability having an experience of at least five (5) years in conducting such assignments and an annual turnover of Rs.50 lakhs (Rupees Fifty Lakhs) during the last three years will be eligible. The organisation should have specific experience and in-house capability to manage the assignment. The firm should not be black-listed by central and any state Government / Public sector undertaking in India.

### 3. Submission of Expression of Interest

National and Internationally reputed consultancy firms having registered office in India with adequate and specific expertise in conducting such assignments are invited to submit the Expression of Interest to carry out this evaluation study to Ms. Gitanjali Virmani, Under Secretary, Ministry of New and Renewable Energy, Atal Akshay Urja Bhawan, New Delhi - 110003 latest by 1600 hours by 15<sup>th</sup> July, 2025 in a sealed cover superscripting "Request For Proposal" for Evaluation of Human Resource Development scheme of MNRE". The proposals received after the due date and time shall not be considered. The proposal will contain three separate envelopes (sealed) i.e. (i) Technical proposal, (ii) Financial proposal and (iii) Earnest Money Deposit (EMD) duly superscribed and these sealed covers to be put in a bigger cover which should also be sealed and duly superscribed. Any offer containing both the technical and financial proposal in the same envelope and not found strictly as per the guidelines, shall be outrightly rejected. The incomplete proposal will be rejected.

- **3a. Technical Proposal** The Technical Proposal document containing the following information be submitted in a separate sealed cover along with RFP duly superscribed (as mentioned in section 3 above).
- Full particulars of the Constitution, ownership, organizational structure and main activities of the prospective consultant, including details of full time professionals.
- Unabridged annual reports or audited financial accounts for the last three years.
- Understanding of the TOR (from the perspective of the proposer).
- Plan Approach & Methodology: A detailed plan indicating how it proposes to carry out evaluation study should be indicated. The Plan shall include the rationale behind the intended methodology.
   The Consultancy Agency shall be required to provide details in respect of: (a) Documentation

- review (desk study); (b) Interviews and/or consultations; (c) Field visits, if any; (d) Questionnaires, if any proposed to be used and (e) Participation of stakeholders. The questionnaires shall be vetted by MNRE in due course.
- The technical proposal should be submitted with the details of the approach and methodology for undertaking the study and the task-wise activities to be involved as per the terms of reference (TOR) for the study as given in the **Annexure III**. This RFP document, duly signed should also be submitted along with proposal.
- Names and short CVs of the full time and part time researchers, including field of specialization
  of each of the proposed key personal to be deployed on the assignment (the CVs would need
  to be backed by written commitment of the person of availability of his/her service). The CVs
  must be accurate, complete and signed by an authorized official of the consultant/consulting
  firm and the individual proposed.
- Implementation schedule
- **3b. Financial proposal** The financial proposal indicating task-wise price for the tasks mentioned in the technical proposal with full details/instructions be submitted along with RFP in a sealed envelope by the proposer in separate covers duly superscribed (as mentioned in section 3 above). The total amount including taxes applicable should be clearly mentioned along with breakup of GST or other taxes in the format given in **Annexure IV**.
- **3c. Earnest Money Deposit** The Earnest Money Deposit (EMD) of Rs.40,000/- should accompany the technical proposal by Demand Draft drawn in favour of DDO, MNRE, New Delhi and payable at New Delhi. The EMD would be forfeited if the proposer withdraws his/her proposal during the validity period. RFP/Proposal received without EMD shall not be considered.

### 4. Evaluation of RFP

All incoming expressions of interest will be examined thoroughly. Shortlisted applicants would be required to personally discuss and make a presentation on their credentials and the proposal before the Consultancy Evaluation Committee (CEC) constituted by the Ministry. The exact date, time and venue for the discussion and presentation would be communicated separately. The Technical and

Financial proposals of only those firms would be accepted which are found suitable to conduct the study and shortlisted by the CEC.

The Ministry would not reimburse any of the expenses incurred by the Consultancy / Agency towards preparation of the RFP document, travelling cost, boarding and lodging incurred by it for attending any preproposal discussion or proposal meeting or visiting the Ministry for making the presentation. The Ministry shall in no case be responsible for any such costs whatsoever, regardless of the outcome of the RFP/bidding process.

**4a. Criteria for evaluation of firms** - The applicant firms / parties shall be shortlisted based on their past experience of 'handling similar type of studies in RE sector, strength of their manpower and financial strength. The firms will be evaluated/assessed broadly on the following criteria:

S. No.	Criteria	Marks
1	Annual Turnover	14
	50 lakhs –	7
	50 -100 lakhs	11
	Above 100 lakhs	14
2	Experience	20
	a. General similar experience	
	1 mark per study up to maximum 5 evaluation studies	5
	b. Evaluation studies in RE sector	
	3 marks per study up to maximum 5 evaluation studies	15
3	Deployment of team	22
	In-house core team (Ph.D – 3 marks, Post graduate -2 mark)	15
	Hired team (Ph.D – 3 marks, Post graduate -2 mark)	7
4	Time period for evaluation	14
	1.5 months	14
	2 months	10
	Total (a)	70
	Presentation by short listed RFP (b)	
5	Presentation for Methodology and approach	30
	Grand total	100

The decision regarding adequacy of the work experience/capacity of the organisation etc. will solely be at the discretion of the MNRE.

- **4b. Preliminary Examination** After receipt of the bids along with RFP, MNRE at its discretion may invite any or all the applicants for discussions with a view to sort out any minor inconsistencies and seek clarifications on the bids received.
- **4c. Evaluation of Technical Proposal** The shortlisted technical bids will be evaluated by the duly constituted Consultancy Evaluation Committee (CEC) based on technical presentation. While evaluating the proposal the CEC will take into account (i) the consultants relevant experience for the assignment including the experience with Government sector. (ii) the quality of the methodology proposed, (iii) the qualifications of the key staff proposed and (iv) time frame for different activities (v) capability for transfer of knowledge with the firm on the subject. The technical Proposal will be evaluated for the above criteria by awarding marks as per the requirement of the study.
- **4d. Evaluation of Financial Proposal**: Financial Proposal will be given a weightage of 30 marks on percentile basis.

#### 5. Final Evaluation.

The RFP will be evaluated by the Consultancy Evaluation Committee (CEC), considering the following mechanism:

- I. Stage 1- The shortlisted proposer will have to make a technical presentation on his proposal for evaluation before the CEC.
- II. Stage 2- The financial proposal of only those firms will be opened who secures the minimum 60% marks in the evaluation/presentation of the technical proposal (Stage-1).
- III. The CEC will adopt the Quality and Cost Based Selection (QCBS) mechanism as per the General Financial Rule. Under this, the RFPs received will be evaluated on technical and financial terms and 70% weightage will be given to technical capability and 30% to financial proposal.

### 6. Period of validity of Proposals

Proposal shall remain valid for a period of six months after the deadline date for proposal submission. A proposal valid for a shorter period shall be rejected by the Ministry as non-responsive. The MNRE may request the proposer to extend the period of validity for a specified additional period in exceptional circumstances. During this time/period the Proposers will maintain without change, the personnel proposed for the assignment and the proposed price.

### 7. Time schedule

The final report of the study is to be completed within **two months'** time from the award of work including the pre submission consultations in the Ministry. The following schedule needs to be adhered to:

- The consultancy firm shall make a presentation of the inception report of the study to the MNRE with in 15 days.
- ii. The first draft report of the study shall be submitted to the MNRE within one and half month from the date of award of the study after taking note of the points raised during the presentation.
- iii. The final report shall be submitted within 15 days after receiving the comments from the MNRE on the Draft final report/ presentation by the party.

### 8. Payment Terms and Conditions

The payment terms for the consultancy will be as under:

- 30% of the total consultancy to be paid upon submission/presentation of an inception report/synopsis (To be released against the applicable security/Bank Guarantee for equal amount valid up to two months beyond the contracted time for the submission of final report);
- 30% of the total consultancy to be paid on submission of first draft of the evaluation report; and
- 40% to be paid on the finalization and submission of the report draft based on feedback and acceptance by MNRE.

### 9. Data, services and facilities to be provided by the MNRE

Data available with MNRE will be provided to the organisation by MNRE. Any facilities like office space, rest house, transport, computer, photocopying facilities and typing/stenographic assistance etc. would not be provided by the Ministry to the organisation.

#### 10. Output (i.e. Reports etc.) required by Ministry

- Inception report/synopsis;
- Soft Copy of the data and information;
- 15 copies of final report in coloured printing;
- Coloured photographs of the Programme visited / evaluated;
- Presentation to MNRE upon preparation of final report.

#### 11. Non Disclosure Agreement

The entire report and data will be the property of MNRE and the organisation will ensure that under no circumstances, the data will be used by them in any manner. A Non Disclosure Agreement will be signed and submitted by the organisation to MNRE

#### 12. Conflict of Interest:

The agency evaluating the programme should not have been involved in implementation of any of its components during the review period.

#### 13. Miscellaneous

The ministry reserves the right to accept or reject any or all RFPs without assigning any reasons thereof. In case, any ambiguity is observed in RFP/Documents, Ministry reserves the right to interpret the same and decision of the Ministry shall be final and binding. The contract for engaging consultant as per the above terms and conditions shall be governed by and constructed in accordance with the law of India.

For any clarification, pl. contact **Dr. Vansant V Thakur, Scientist E**, **Ministry of New and Renewable Energy, Atal Akshay Urja Bhawan, New Delhi - 110003 (Tele: 011 – 20849067, Email: vasanta.thakur@nic.in)**.

# No.342-16/2/2021-HRD Government of India Ministry of New and Renewable Energy (Human Resources Development Division)

Block No.14, CGO Complex Lodhi Road, New Delhi -110003

Dated: 7<sup>th</sup> December, 2021

To
The Pay and Accounts Officer,
Ministry of New and Renewable Energy
New Delhi-110003.

Subject: Administrative Approval for continuation of the Human Resource Development Programme in New and Renewable Energy for the period of FY 2021-22 to 2025-26.

Sir,

I am directed to convey sanction of the President for the continuation of the Human Resource Development Programme of the Ministry with total financial outlay of Rs. 200 crore for the period of FY 2021-22 to 2025-26. The details of the scheme are given as follows:

**Objective:** - The objective of the Ministry's Human Resource Development programme is to institutionalize the renewable energy education and training to meet the requirement of qualified and trained manpower in the country.

### 2.0 Components of the Scheme:

- 2.1 Short term trainings and skill development in renewable energy
- 2.2 Fellowships for higher studies and research in renewable energy
- 2.3 Enhancement of Renewable Energy education and training infrastructure.
- 2.4 Renewable Energy Chair
- 2.5 National Renewable Energy Internship Programme

### 2.1 Short term Trainings and skill development in renewable energy

### 2.1.1 <u>Training of technicians for system design, installation, operation,</u> maintenance and repair of renewable energy systems at grass root level:

Skilled/trained technicians are required for proper installation, operation and maintenance of RE projects. Ministry intends to impart training to technicians on system design, installation, operation, maintenance and repair of renewable energy systems at grass root level.

### I. Solar PV technician (Suryamitra Skill Development) Programme

One of the skill development programmes viz.Solar PV technician (Suryamita) training was initiated in 2015 to create a work force to meet the demand of solar energy sector. 48,742 no.of Suryamitras were trained till September 2021. A total number 20000 suryamitras will be trained during the current scheme period i.e from 2021-22 to 2025-2026. Suryamitra training programme will be implemented on pan India basis with focus on solar energy potential areas / installed solar projects. The brief details of the programme are as under:

- i. **Implementing Institute:** National Institute of Solar Energy (NISE), Gurugram through training centres / institutes selected by NISE on the basis of infrastructure, faculty strength and past training experience in solar and other renewable energy technologies.
- ii. **Duration of the programme:** The duration of programme is three months (residential)/600 hours including classroom training, lab practical, SPV plant exposure, on the job training, soft skills and entrepreneurship skills etc.
- iii. **Target participants:** Min. 10th Pass + ITI in Electrician/ Wireman/ Electronics Mechanic/Fitter/Sheet Metal.
- iv. **Funding Pattern**: Funding for trainings would be as per Ministry of Skill and Entrepreneur Development (MSDE) and the periodical changes will be in accordance with MSDE revision of the norms. The current funding norms of MSDE are given at Annexure-I.
- v. **Assessment and certification:** by Skill Council of Green Jobs (SCGJ) / any other MSDE approved institutions.
- vi. **Other details**: The details regarding the Suryamitra programme can be referred at mnre.gov.in and https://suryamitra.nise.res.in/

### II. Skill Development in other RE technologies:

Skill development activities in new and renewable energy will be expanded to create 9000 skilled workforce in other areas like Wind Energy (Vayumitra), Solar Water Pumping (Varunmitra), Biogas & Biomass (Biomitra), Small Hydro Power as per the requirement of manpower in the sector. The skill development programmes in Solar water pumping, Wind energy and Bio-energy will be implemented through MNRE institutions, National Institute of Solar Energy (NISE), Gurugram National Institute of Wind Energy (NIWE), Chennai and National Institute of Bioenergy (NIBE), Kapurthala, Punjab respectively. In the area of Small Hydro Power, skill development programmes will be implemented through Department of Hydro and Renewable Energy (HRED), (Formerly Alternate Hydro Energy Centre), Indian Institute of Technology (IIT) Roorkee. These technician training programmes will be conducted as per MSDE guidelines. In case of any deviation in MSDE guidelines in view of nonavailability of qualification packs and programmes with additional/new elements like training of trainers, master trainers, assessors etc. which have not been covered in MSDE funding norms will be considered for support with the approval of Secretary, MNRE.

### 2.1.2 Supervisory Training

Ministry will support the training programmes to train 1000 no. of candidates at supervisory/managerial level implemented by educational institutions / training institutions / leading industries, reputed NGOs etc. having necessary infrastructure and expertise to undertake training activities in resource assessment, technology, performance, Detailed Project Report (DPR) preparation, project appraisal etc.in different areas of RE technologies for graduate professionals, management graduates, engineers, post graduates, working professionals etc. The participants would include officers of SNAs, project developers, implementers etc. engaged in RE sector. These training programmes would be supported partially or fully in the form of short-term trainings/ workshops. A strong institutional network will be supported through different organisations such as IITs, reputed engineering colleges, MNRE institutions (NISE, NIWE and NIBE), skill development centres, ITIs. Trainings with innovative approach and dealing with new areas related to renewable energy, women oriented programmes, specific to some subject areas leading to livelihood. training in specific regions like rural areas and NER and the area where National Skill Qualification Framework (NSQF) qualification packs are not available would be supported with the approval of Secretary, MNRE.

The proposals for trainings will be invited through open advertisement/direct submission mode. The institutes/organisations to impart short term training courses will be selected based on their preparedness for conducting such courses, course material, lab facility for practical training, qualified faculty, selection process of

trainees etc. This also be done by open advertisement on annual basis/submitted directly to ministry and the constituted committee will look after this aspect. The funding norms for these programmes are given at para 8.0. Funds will be released to implementing organization in 3 instalments (i.) 50% as advance along with sanction letter (ii.) 40% funds on submission of UC / SoE (iii.) balance 10% on submission of completion report and final UC/SoE. The guidelines and the proforma for submission of training proposals are given in Annexure–II.

### 2.1.3 Training of MNRE/SNAs and other Officials

Ministry will support training and Higher studies in renewable energy for all officers from Scientist B level/ Under Secretaries to Scientist G/Joint Secretary in MNRE and its Institutions, officers of SNAs and State Energy Department/DISCOM, officers from other concerned Ministries/Departments/ Institutions involved in policy making /guidelines for implementation of Renewable Energy projects including officers from regulatory institutions to provide exposure to the latest development in technology, implementation, monitoring, human resource and financial appraisal of RE projects etc. The training programmes will be supported both in domestic and international institutions. Short term training will be one / two weeks to one month duration while long term training could be in terms of sponsorship to higher studies in India or Overseas for M. Tech / MS/M.BA in RE. Provisions will be made for special grants in the scheme for strengthening in house capabilities.

### 2.1.4 Augmenting training facilities in ITIs

Skill development activity in new and renewable energy will be expanded to ITIs. Training institutes near the project locations (proximity to existing / prospective small hydro projects, wind farm and solar installations etc.) will be considered if they are having adequate infrastructure facilities and faculty strength as per the requirement of the training courses. ITIs will be strengthened by providing support to infrastructure for RE education, upgradation of facilities including experts from industry as faculties etc. The same support may be extended to National Skill Training Institutes (NSTIs). The officials of Directorate General of Training (DGT) will be included as members of the committee to formulate the eligibility criteria for selection of ITIs.

ITIs will be augmented during the current plan period for the following activities.

- i. Training of Instructors<sup>#</sup>
- ii. Creating necessary facilities by way of providing Support for tools, models, panels and other RE equipment for imparting education and training on RE project/system/devices in 25 ITIs. An amount of Rs 10 lakh per ITI would be provided for this purpose.
- iii. Facilitating introduction of full time RE course in ITIs including preparation of course material in consultation with the RE industry<sup>#</sup>
- iv. Training of candidates / students in the renewable energy courses run by ITIs<sup>#</sup>
  #The support for items no.(i),(iii) and (iv) above would be met from the provisions under short term training component (para 2.1.1 to 2.1.2).

### 2.1.5 <u>Development of Course material including pedagogy through expert(s) / expert institution(s)</u>

Ministry will engage the services of experts /expert institutions in developing the qualification packs/ course modules/ syllabus/study materials from time-to time both for short term and regular certificate / degree and training courses related to renewable energy. The financial assistance for developing training course/modules would be provided upto Rs.5.0 lakh per course.

### 2.2 Fellowships for higher studies & research in New and Renewable Energy

The fellowship programme is broadly divided in to two categories i.e National Renewable Energy Fellowships and National Renewable Energy Science Fellowships (NRESF). The details are as under;

### 2.2.1 National Renewable Energy Fellowship scheme:

Fellowships will be provided for pursuing higher studies in renewable energy viz. M.Sc, M. Tech, Ph.D in renewable Energy technologies. Research Associates, Post-Doctoral Fellows will be provided financial support in MNRE institutions and other key institutions to pursue advanced research. Ministry would be guided by the norms of CSIR/DST/UGC for eligibility of the candidates for JRF/SRF/RA/PDF, AICTE guidelines for M.Tech and Department of Biotechnology norms for M.Sc in renewable energy. Fellowship programs are directly aligned to the overall requirement of renewable energy, research thrust areas identified by MNRE, identification technology readiness of levels and focus on commercialization. The technology areas will not be of generic nature but should involve frontier edge research in technology development with focused approach. A NREF committee comprising of very senior academicians will be constituted to review the progress of the programs.

Ministry will provide 150 new fellowships/scholarships in the field of renewable energy every year in addition to existing fellowships awarded since 2017-21 (which will continue till their entire tenure). Periodic review and monitoring of the fellowships will be done by MNRE. The total number of fellowships to be supported during the period is given in table below:

Course	Duration of course/	Intake every	For Five	Fellowshi			ip	
	Fellowship/	year	years	1 <sup>st</sup> Year	2 <sup>nd</sup> Year		4 <sup>th</sup> year	5 <sup>th</sup> year
	scholarship			2021-22	2022-23*	onward	2024-25	2025-26
						2023-24		
1	2	3	4	5	6	7	8	9
					(5+6)	(6+7)	(7+8)	(8+9)
						Ongoir	ng + new	
M.Tech	2 year	35	175	35	` _ ′	` ,	(35+35)=7	` ,
@					0	=70	0	70
M.Sc	2 year	10	50	10	` _ ′	` ,	(10+10)=2	` ,
@					0	=20	0	20
JRF	2 year+ 3ye	20	100	20	(20+20)=	` ,	` ,	` ,
\$	ar SRF				40	=60	80	100
SRF	3 year	5	25	5	(5+5)=	` ,	(10+5)=15	(10+5)=15
(direct)^					10	15		
RA/PDF	3 year	5	25	5	(5+5)=	` ,	(10+5)=15	(10+5)=15
^^					10	15		
TOTAL 7		75	375	75	150	180	200	220

<sup>\*</sup> Liability for fellowships sanctioned during 2022-23 onwards will spill over beyond the scheme period as per their fellowship duration.

<sup>@</sup> The fellowship provided/sanctioned for M.Tech / M.Sc (2 yr course) during a given year will comprise the number sanctioned during that year plus the continued from previous year. For example M. Tech (2 yrs course), if fellowship in the year 2022-23 is sanctioned x no and from previous year 2021-22 y no. has continued, so total fellowship during 2022-23 would be X+Y. The fellowship duration of course for a student should not exceed 2 yrs.

<sup>\$</sup> JRF will lead to PHD degree (2 yrs JRF+ 3 yrs SRF) not exceeding 5 yrs. Therefore, fellowship would be provided to a student, who enters at JRF level and completes the course up to PHD i.e maximum 5 yrs (2 yrs for JRF +3 yrs for SRF)

- ^ This is direct route for considering fellowship at the entry level SRF for attaining PHD not exceeding 3 yrs.
- ^ RA/PDF is post-doctoral 3 yr research.
- \*\*The principle of providing fellowships would be same in each category i.e as mentioned @.
- \*\*\*The number of fellowships in each of the category above are interchangeable which will depend on no. of applications received quality of research work proposed demand from the Industry etc.

### Selection criteria of the Institutes under NREF

The institutes/universities for NREF programme will be selected as per the procedure given below:

- i. Under fellowship programme, JRF/SRF/RA/PDF will be open for Universities, Technical Institutions, National Laboratories having facilities for research in the identified thrust areas of RE, institutes having M.Tech./ Integrated M.Sc. courses in energy studies/ renewable energy with specialization in any branch of renewable energy. Ministry will publish advertisement on annual basis inviting applications from the interested universities/institutes for fellowships for higher education and research in renewable energy identified thrust areas.
- ii. Institutes / universities engaged in renewable energy education and research may apply for allocation of fellowship slots against advertisement to the Ministry. The institutes will be selected by a committee chaired by eminent scientist/professor, two experts of the rank of professors from repute academic institutions, DG, NISE, NIWE and NIBE, Group Head, HRD as members. Scientist-in-charge, HRD will act as convener.
- iii. Only those institutes will be considered for allocation of fellowship slots which are in Top 100 institutes under National Institutional Ranking Framework (NIRF), faculty for required expertise in relevant areas of RE and infrastructure facilities available at such institutes for RE education and research in RE etc. Ministry will sanction the fellowship slots to Institutes selected by the committee as per the availability of the fellowship slots.

### Selection criteria of candidates for Fellowships under NREF

The students/candidates for NREF programme will be selected as per the procedure given below:

i. The selected institutes will forward the details of NREF fellows selected by their Research /administrative committees in accordance with the eligibility criteria and as per AICTE/CSIR/MHRD/DST norms. These Institutions will select the students for M.Tech /Ph.D Courses through GATE Score or CSIR Score or CSIR-JRF /AICTE/NET Qualified Score Only. M.Sc fellowships will be provided to only to students pursuing M.Sc in renewable energy qualified

- with NET. The students without these qualifications will not be eligible for these fellowships. These Fellowships will exclusively be awarded for Courses on Renewable Energy related subjects only.
- ii. The Institutes selected for the fellowship slots will forward the details of the students every year against the sanctioned no. of fellowships to that Institute. Ministry will award the fellowships based on their eligibility by names of the students/candidates.
- iii. These fellowships will come into effect from the Date of Joining of the candidates. The Institute/University will keep the Ministry appraised about their selection process.
- iv. Fellowships will be disbursed on monthly basis through beneficiary Bank Accounts. Monthly disbursement of fellowship will be done by ministry through DBT mode on receipt of continuation/ attendance from the host institutions.

### Funding pattern for fellowships under NREF

The funding pattern for fellowship for JRF/SRF/RA/PDF will be as per DST/MHRD/CSIR guidelines. For M.Tech and M.Sc., guidelines of AICTE and Department of Biotechnology respectively would be followed. These fellowship rates would automatically get revised as and when the CSIR/AICTE/DST revises the rates. The present fellowship rates are as follows:

Category	Fellowship (Rs/month)	HRA	Contingency (Rs/annum)	Duration
JRF	Rs. 31000/-	As per central govt. norms	Rs. 20000/-PM	2 years
SRF	Rs. 35000/-	-do-	-do-	3 years
PDF/RA	I - Rs. 47,000/- II - Rs. 49,000/- III - Rs. 54,000/-	-do-	-do-	3 years
M.Tech/M.S	Rs. 12,400/-	-		20-24 months (as per institutes norm)
M.Sc (Renewable Energy)	Rs. 4000/-	-	-	24 months (as per institute norms)

### 2.2.2 National Renewable Energy Science Fellow (NRESF)

In view of the fast developments in renewable energy, Ministry supports National Renewable Energy Science Fellowship (NRESF) to provide a platform to young scientists to pursue advanced research in development of frontier RE technologies/systems. The targeted beneficiaries will be Ph.D degree holders in the field of science / engineering with specialization in RE/ and renewable energy sciences, with outstanding track record with experience of at least ten years. Under this programme, fellowship@ Rs. 1.2 lakh (including tax) per fellow / per month would be provided to five (5) fellows for a period of five years. In addition, they would be eligible for a research grant upto Rs. 15 lakh / annum and contingent grant of Rs. 5 lakh / annum to undertake research work in cutting edge areas of renewable energy. The fellows will pursue in advanced research areas as identified thrust areas for R&D by MNRE. Nominations will be invited for award of NRESF every year. A high level Fellowship Management Committee under the chairmanship of eminent expert/scientist will be constituted in the ministry to decide the award of fellowship and monitor the work of fellows. The procedural guidelines for application, selection and implementation of this fellowship is given at Annexure-III.

### 2.3 Enhancement /Establishment of Renewable Energy Infrastructure Facilities - Support to institutions for Laboratory upgradation for RE education

In order to encourage the institutions to include education/training renewable energy courses, the support for laboratory up-gradation will be provided to enhance their capacity for conducting M. Sc., M.Tech., Ph.D courses in NRE. A total of ten (10) R&D/academic institutions will be strengthened by providing financial support by way of one time grant of upto Rs. 50 lakh to each institute to upgrade the teaching facilities by lab upgradation. The provision of support for upgradation of facilities is aimed to enable the institutions to give regular hands on experience by practicals to the students. This provision is however not for undertaking any new construction, but can be utilized for modifying lab for installations of any new equipment/teaching aid for imparting RE education.

Ministry will invite proposals preferably through open advertisement method once in a year, wherein Universities/Institutions will submit their application in prescribed proforma elaborating their capability and willingness to undertake Renewable Energy courses at M.Sc. & M.Tech levels, requirement of fellowships M.Sc/M.Tech/JRF/SRF /RA/PDF for pursuing education and research in Renewable Energy areas. The selection of the institutes will be made through a committee chaired by eminent scientist/professor, two experts of the rank of professors from repute academic institutions, DG, NISE & NIWE, Group Head, HRD as members. Scientist-in-charge, HRD will act as convener. The criteria for selection of the institutes and other guidelines are given at annexure – IV.

Only those institutes will be considered for providing one time grant for laboratory upgradation which are in Top 100 institutes under National Institutional

Ranking Framework (NIRF), availability of faculty with required expertise in relevant areas of RE and infrastructure facilities for imparting education and research in RE.

### 2.4 Renewable Energy Chair

The renewable energy chairs has been conceived with a view to create technical Focal Points for renewable energy education/technology development in the institutions of national repute and eminence. To facilitate long term sustenance of the chairs, a total grant of Rs.1.5 crore will be provided i.e (i) One time support for establishment of chair - Rs. 1.00 crore as seed money (ii) Support based on performance/outcome of RE chair - Rs.50 lakh in 5 years (Rs.10 lakh after submitting the details of the RE chair candidate selected by the Institute to MNRE and Rs.10 lakh each year for next 4 years on receipt of annual RE promotional activity report including the Statement of Expenditure (SoE). The one-time grant will facilitate these institutions to meet the requirement of annual remuneration and contingent requirement for NRE chairs. The chair will in addition to acting as focal point for RE education, may look into aspects like technology development, preparation of course curriculum, policy framework aspects of renewable energy etc. The chair institution will submit annual report including the RE promotional activities every year to the Ministry. RE chair for Small Hydro power sanctioned to IIT Roorkee in FY 2014-15 will be continued for scheme period. Another 5 no. chairs will be instituted in the area of Solar energy, Wind Energy, Hydrogen, Biomass Power and Biogas area (one chair each) in reputed institutions engaged in RE education. The Ministry will invite proposals once in a year through open advertisement. An MOU between Ministry and Institution will be signed for this purpose. The guidelines are given in Annexure – V.

### 2.5 National Renewable Energy Internship scheme (NREI):

In order to facilitate students of engineering, Science, Management and other streams to undertake internship in the Ministry and in organizations under its agies to understand the various activities of the Ministry in renewable energy area, internship facilities will be provided. The selected interns will be attached with the senior level officers of the Ministry and its Institutions. Internship will be provided to 20 no. students/persons every year. The duration of internship will be preferably 2-6 months. A stipend amount of Rs.15,000/- per month will be provided for physical internships only. For virtual internships stipend will not be provided. The guidelines of Internship programme are given in Annexure - VI.

### 3.0 <u>Advisory and Monitoring Committee and other miscellaneous</u> <u>Activities:</u>

An HRD Advisory and Monitoring Committee comprising of experts from academia and industry will be constituted to guide and monitor the HRD activities. The Committee will advise the policy reforms related to all components of HRD programme, measures to enhance employment of skill development programmes, formulation of programmes, ideas to attain physical and financial progress, preparation of reports/coarse structures, skill gaps etc.. In addition, for monitoring and review purposes, meetings and workshops would be organized, which include Convention of National Renewable Energy Fellows, convention of RE Chair Professors and National Renewable Energy Science Fellows, consultation meetings of the Institutes being supported under HRD Programme etc.

### 4.0 Summary of the financial assistance for HRD scheme

The financial assistance for organizing trainings would be upto 100%. The following norms would be followed:

S.No	Name of the component	Funding pattern		
1.	Short term training programmes			
1.1	such as solar PV technician (Suryamitra), Solar pump technicians (Varunmitra), Wind energy technicians (Vayumitra) in Small Hydro Power Technicians	Wherever the training programmes with new elements like training of trainers, master trainers, assessors etc. which have not been covered for		
1.2		nes in RE to engineers, supervisors, s, Entrepreneurs, technicians, semi		
1.2.1	State level training Programme	Maximum 10 lakh per programme (50 trainees for one week).		
1.2.2	National level training programme	Maximum Rs.20 lakh/programme (50 trainees for one week).		

1.2.3	Short-term programme for technicians	Rs. 1.5 lakh/programme (30 technicians for one week)			
2.	Fellowships				
2.1	Fellowships	As per AICTC/MHRD UGC/ DST/ CSIR/ DBT norms and would be revised as and when they revises the rates.			
2.2	National Renewable Energy Science Fellowships (NRESF)	Fellowship@ Rs. 1.2 lakh (including tax) per month+ research grant upto Rs. 15 lakh / annum and contingency grant of Rs. 5 lakh / annum.			
3.	Renewable Energy Chair	Total grant of Rs.1.5 crore per Chair **			
4.	Support to ITIs for training the students in RE technologies	Rs.10 lakh per ITI			
5.	Support for Laboratory upgradation in higher educational institutes(one time grant-in-aid)/Labs	· · · · · · · · · · · · · · · · · · ·			
6.	Assistance for developing course materials	Upto Rs. 5.0 lakh only			
7.	Internship Remuneration	Rs.15,000/- per month (for physical internships only)			

<sup>\*</sup> Funds will be released to implementing organization in 3 instalments (i.) 50% as advance along with sanction letter (ii.) 40% funds on submission of UC / SoE (iii.)balance 10% on submission of completion report and final UC/SoE.

#The proposed financial support should be clearly spell out with the justification for each head. The provisions of various heads under which financial support can be proposed by the applicant organisation are course-fee, course kit, honorarium, study tour/visits, travel, venue cost, boarding & lodging, content development, Institute cost, miscellaneous etc.

### 5.0 Budget :

The financial out lay of the scheme is Rs.200 crore for the period of FY 2021-22 to 2025-26. Year wise component wise break up is as under:

<sup>\*\*</sup> a total grant of Rs.1.5 crore will be provided i.e (i) One time support for establishment of chair – Rs.1.00 crore as seed money (ii) Support based on performance/outcome of RE chair – Rs.50 lakh in 5 years (Rs.10 lakh after submitting the details of the RE chair candidate selected by the Institute to MNRE and Rs.10 lakh each year for next 4 years on receipt of annual RE promotional activity report including the Statement of Expenditure (SoE).

(year wise fund, Rs. in crore)

Components	2021-22	2022-23	2023-24	2024-25	2025-26	Total
Short Term Trainings including skill development programmes	18.60	23.50	31.50	32.90	33.50	140.00
Fellowships (M.Sc, M.Tech., Ph.D, RA, PDF)	1.20	6.42	10.38	10.00	10.00	38.00
National Renewable Energy Science Fellowship (NRESF)	-	0.68	1.32	1.70	1.30	5.00
Support to ITIs for tools, models, panels and other RE equipment for imparting education and training to the students in RE technologies	-	0.40	0.70	0.40	0.50	2.00
Laboratory upgradation in higher educational institutions	-	1.00	1.50	1.40	1.10	5.00
Renewable Energy chair	-	5.50	0.60	0.70	0.70	7.50
Others (support for preparation of course structure for ITI or any other RE course, review of projects, remuneration of interns, seminars / workshops conducted by MNRE and its institutions for RE promotion, other Administrative expenses, Professional Charges for evaluation/assessment/survey studies/reports, MNRE / SNA officers training fees for National/ International trainings)	0.20	0.50	0.60	0.60	0.60	2.50
Total	20.00	38.00	46.60	47.70	47.70	200.00

6.0 This issues in exercise of delegated powers of this Ministry with the approval of Competent Authority and with the concurrence of IFD vide Dy. No **219** dated **07.12.2021**.

Yours Faithfully

(Dr. Vasanta V Thakur) 2/202)

Scientist 'D', HRD

### Copy for information and necessary action to :

- i. PS to Minister (NRE)
- ii. PS to MOS (NRE)
- iii. PPS to Secretary (MNRE)
- iv. PS to JS&FA
- v. All Group Heads, MNRE
- vi. ADV (HRD)
- vii. US/IFD
- viii. Director (PF-II), Ministry of Finance, Department of Expenditure, North Block, New Delhi -110 001
- ix. Sanction folder

### MINISTRY OF SKILL DEVELOPMENT AND ENTREPRENEURSHIP NOTIFICATION

New Delhi, the 1st January, 2021

**No. H-22011/2/2014-SDE (Vol. IV):** In exercise of the powers conferred by Clause 4 of the Notification No. H-22011/2/2014-SDE-I dated 15.07.2015 concerning Common Norms for Skill Development Schemes of the Government of India, the Common Norms Committee constituted for the purpose makes the following changes further to amend the Schedules of Annexure-1 of the Notification No. H-22011/2/2014-SDE (Vol.IV) dated 11.11.2020, namely:-

1. These amendments may be called Common Norms for Skill Development Schemes Fifth Amendment, 2021.

#### Amendments:

- (1) The following sub-clause 1.2 is added to Clause 1 of SCHEDULE-I of Annexure-1:-
- 1.2 The base cost for different sectors is increased at 5%, rounded off to the next 10 paisa, of the amounts mentioned in Clause 1.1 of SCHEDULE-I with effect from **01.01.2021**

The base cost for the different sectors will be as under with effect from 01.01.2021:-

- (i) Rs. 49.00 per hour of training for trades/sectors listed in Category I of SCHEDULE-II.
- (ii) Rs. 42.00 per hour of training for trades/sectors listed in Category II of SCHEDULE-II.
- (iii) Rs. 35.10 per hour of training for trades/sectors listed in Category III of SCHEDULE-II.
- (2) The following sub-clauses 1.3 and 1.4 shall be added below clause 1.2 of SCHEDULE-I of Annexure-1 regarding mobilization cost, namely:-
- 1.3 Cost of mobilization will be given to the agency undertaking mobilization activity. This mobilization cost is part of the training cost, and in case it is given to an agency different from the Training Partner, then the training cost would reduce by an equivalent amount.
- 1.4 In cases where training target is greater than 1,000, 3% will be the mobilization cost and where training target is less than 1,000, 4% will be the mobilization cost. If the Training Partner assists the mobilizing agency in reducing a long list given by the mobilization agency to the actual numbers taken in the batch, then the Training Partner will be entitled to receive 1% out of this 3% or 4% mobilization cost, as the case may be. That is, where the mobilization cost is 3%, it will receive one-third of the mobilization cost and where it is 4%, it will receive one-fourth of the mobilization cost. In case part of the total mobilization target is done by one agency and part by another, the mobilization cost would be shared proportionately between the two agencies.
  - (3) For clause 3 of SCHEDULE-I of Annexure-1, the following shall be substituted:
  - 3. Boarding and Lodging Costs

For:

- (a) Residential training, and/or
- (b) In respect of all skill development training programmes where trainees from Special Areas (as defined in clause 5.1 of SCHEDULE-I) are trained outside these Special Areas, and/or

(c) Training programmes, anywhere in the country where women trainees and Persons with Disabilities have to travel more than 80 kms from their homes to reach the nearest training centre (or 40 kms in case of Special Areas) and who are availing of boarding and lodging arrangements made for them.

Ministries will reimburse Boarding & Lodging Costs up to a maximum per trainee per day as per table below:

i.	X Category Cities/ Town per day per Trainee	Rs.375/-
ii.	Y Category Cities/Town per day per Trainee	Rs.315/-
iii.	Z Category Cities/Town per day per Trainee	Rs.250/-
iv.	Rural Areas and any Area not notified as a municipal/town area	Rs.220/-

(The List of categories of cities is given at SCHEDULE-III)

SHAKIL ALAM, Economic Adviser

### Ministry of New and Renewable Energy HRD Division

Subject: Guidelines for providing financial support for organizing shortterm training programmes for Supervisors, policy makers, project developers, Entrepreneurs, technicians, semi educated personnel and others.

The enhanced targets of 450 GW Renewable Energy by 2030 has given significant impetus to solar and wind grid power development. Various reports dealing with assessment of the job potential in renewable energy sector estimated that around 1.5 and 3.6 million jobs may be created in renewable energy sector by FY 2022 and 2030 respectively. Majority of these jobs were estimated to be in system integration, installation, operation and maintenance and repair of renewable energy systems and devices. To meet the massive requirement of manpower in this segment, Ministry has been supporting universities, technical institutes, training institutes, State Nodal Agencies, reputed NGOs with Pan-India jurisdiction, active in renewable energy areas for significant time, with necessary infrastructure and core capacity to organize such training programmes.

- 2. In view to bring clarity to support proposals of Institutes, industry organizations, NGOs and private companies, following guidelines have been prepared.
- i. The organization should submit the proposal in prescribed proforma annexed herewith (Annexure II-A).
- ii. The organization should have in-house capacity/core competence to conduct such training programme and that should be supported by documentary evidence.
- iii. The organization should have carried out necessary survey/assessment of the area for their requirement of training need so that the trainees may be benefitted with the possible employment.
- iv. The organization should have developed the pedagogy, course contents including practicals for the course and should be shared with the Ministry alongwith the proposal.
- 3.0 The proposals received will be preliminarily scrutinized by the HRD Division to assess if all the information sought have been provided. This would then be submitted to a committee constituted in the Ministry. The Committee may call the proposer to make a presentation on the proposal. Based on the recommendations of the Committee, the proposal will be processed by the HRD Division for necessary approvals.

### Performa for submission of proposal for short-term training programme

- a. Name of the organization:
- b. Name of the proposer along with contact details:
- c. Background/history of the organization, its activities in RE development, especially capacity building (to be supported by necessary documents)
- d. Technology area for the proposed training programmes
- e. Objective of the programme
- f. Target group to be addressed in proposed training programmes
- g. Geographical Area of operation
- h. Assessment of skilled manpower requirement in the area of operation based on projects implemented/systems installed as also the potential growth of penetration of renewable energy systems in the area of operation.
- i. Number of trainees proposed to be trained in one year (this should be based on assessment done in the area of operation)
- i. Selection criteria of trainees
- k. Core competence of the organization in conducting the training programme
  - i. faculty
  - ii. Infrastructure (training tools particularly to cover practical training and other aspects)
  - iii. course material
  - iv. methodology of imparting training (both theory and practical) including pedagogy
- In case guest faculty is to be engaged to cover specific aspects, in which the organization lacks core competence, then the detail of the guest faculty to be given along with the consent letter from the guest faculty
- m. Percentage of time devoted by core faculty and guest faculty in a particular training programme
- n. In case of off-campus programmes, tie-up with local organization for venue and other infrastructure to be clearly spelt out.
- o. If the organization has tied up with some industry, system integrators, installers, EPC etc. for engaging the trained manpower, the same may be spelt out.
- p. The proposed financial support should be clearly spell out with the justification for each head. The provisions of various heads under which financial support can be proposed by the applicant organisation are course-fee, course kit, honorarium, study tour/visits, travel, venue cost, boarding & lodging, content development, Institute cost, miscellaneous etc.
- q. If any fee is being charged from the trainees, that may also be indicated.
- r. Anticipated impact of the training programme on life of trainees as well as in quality improvement of RE programme

- s. Financial proposal with detailed break-up and the support expected from the Ministry.
- t. MSDE qualification pack is available for the proposed course
- u. In case of NGO, Darpan ID No.

### Ministry of New and Renewable Energy HRD Division

### Sub: Guidelines for National Renewable Energy Science Fellowship programme

The National Solar Science Fellowship programme of the Ministry of New & Renewable Energy was launched in February, 2011 and is continued as National Renewable Energy Science Fellowship Programme for the Period, 2017-18 to 2020-21. The details of the fellowship programme are as follows:-

- 2. Aims & Objectives:- The programme is meant for an Indian Scientist desirous of working in the forefront areas of Renewable energy science, engineering and technology with focus on science, technology and product development in collaboration with selected prestigious institutions in India. The aim of the National Renewable Energy Science Fellowship Programme is to provide a platform to top quality scientists and engineers in the area of solar energy research, to use and expand the resources available at the identified schools/ institutions in the country and abroad to address the complex problems of renewable energy utilization for various end use including power generation. The Renewable Energy Science Fellows will work for a period of three years at their chosen host institution to undertake research in the thrust areas identified by the Fellowship Management Committee while also strengthening connections across the participating schools/institutions.
- 3. Host Institutions: Only those institutes will be considered for allocation of fellowships which are in Top 100 institutes under National Institutional Ranking Framework (NIRF), faculty for required expertise in relevant areas of RE and infrastructure facilities available at such institutes for RE education and research in RE. The criteria for selection of institutions may be amended by the Fellowship Management Committee, constituted for the implementation of the programme, from time to time. These institutions will sign a MOU with the MNRE. The topics of research to be undertaken in the identified thrust areas of the Ministry under this fellowship programme shall also be decided by the Fellowship Management Committee constituted by the Ministry for this purpose.
- **4. Fellowship Management Committee**: A Fellowship Management Committee will be constituted under the Chairmanship of the eminent scientist comprising of four eminent scientists/experts/professors, Group heads of the Ministry as members and Group Head dealing with the HRD activities will be the convener.

The Fellowship Management Committee will decide the areas of research to be undertaken under this programme. The Committee will also be recommending the institutions for taking part in the Fellowship Programme.

- **5. Number of Fellowships:** The total number of Fellowships will be limited to five (5) only.
- **6. Duration of Fellowship:** Duration of the Fellowship will be initially for two years which may be extended for another three more years on year to year basis depending upon the progress of the work done by the Fellow.
- 7. Targeted Scientists:-The programme is open to all Scientists working in the field of Renewable energy sciences, engineering and technology including those currently employed in Government of India/ State Government/Public Institutions and those who are not currently associated with any public institution but are working in the area and eager to pursue a specific research that is beneficial to the Government of India.
- 8. Eligibility Criteria for Selection:-The applicant should be Indian or of Indian origin and should possess a doctorate in the field of science/engineering with specification in renewable energy sciences, research with experience in the area of renewable energy of at least ten years with outstanding track record including the period spent while undertaking research work for Ph.D. However M.Tech or M.S degree holder with good published work and lab/industry experience will also be considered as a special case provided Fellowship Management Committee feels that the proposals submitted by such candidates are worth considering. A comprehensive proposal should be submitted by all the candidates for the National Renewable Energy Science Fellowship for the consideration of the Fellowship Management Committee.
  - i. The applicant should have an appropriate background in academics and experience in R&D in the area of renewable energy and other related areas that are directly or indirectly involved in renewable energy sciences, engineering and technology.
  - ii. Although there will be no age bar for the Programme, the applicants in the age- group 35-40 will be preferred.
  - iii. The Fellowship Management Committee will have the right to suitably amend the eligibility criteria.

### 9. Selection Procedure:-

i. Applications from talented scientists having proven record in any field of renewable energy science, engineering will be invited through open

- advertisement. The applicants shall submit their applications in the prescribed proforma (Annexure-III-A).
- ii. The applicant will attach a R&D proposal with his/her application in the R&D thrust areas identified by the Fellowship Management Committee of the MNRE with emphasis on potential impact of proposed research project on solving problems encountered in renewable energy technology and systems. The application should be as per the instructions for filling up the proforma given in the Guidelines.
- iii. The Fellowship Management Committee headed by Eminent Scientist with other eminent scientists as members will scrutinize the applications and the research project and select up to five (5) no. National Renewable Energy Science Fellows in accordance with the Guidelines and as per prescribed procedure.

### 10. Fellowship Details:-

- i. Each selected Fellow will receive a total annual grant of up to 34.4 lakhs comprising of Fellowship@ Rs. 1.2 lakh (including tax) per month+ research grant upto Rs. 15 lakh / annum and contingency grant of Rs. 5 lakh / annum.
- ii. The emolument and contingencies will be provided to the candidate directly through Direct Benefit Transfer (DBT) method and the research grant will be released to the host institution. The host institution will also be responsible for submission of utilisation certificate and audited Statement of Expenditure.
- iii. The Fellow may also raise additional resources from other sources such as the host Institution, grant providers, grant-in-aid Institutions etc. for the purpose of carrying out his/her research.

### 11. Other Conditions:-

- On selection, the Fellow will be attached to one of the selected schools/institutions. This would however, be finalized in consultation with the fellow and the Institute.
- ii. Selected Fellows shall commit to work at the host institution for the full tenure of the fellowship and shall submit a bond to the host institution.
- iii. The host institution will enter into a MOU (Annexure III-B) with MNRE especially with regard to provision of office space, laboratory facilities, access to publications, basic administrative support etc. In this regard all the guidelines prescribed by the Government of India for release of grants to Government/Non-Governmental institutions including furnishing of Utilization Certificates, Expenditure Statement, periodic progress reports etc. would also

- be applicable, over and above the provisions of the MOU given in these Guidelines.
- iv. The Fellow must submit quarterly progress reports and a final technical report to the Fellowship Management Committee. The Fellowship Management Committee may from time to time, seek updates from the Fellow and provide inputs and guidance to the project of the Fellows so that the project remains relevant to the Government of India agenda and can be successfully completed on time.
- v. An annual conference of the Fellows will be held, where the Fellows will be expected to present their findings to the Fellowship Management Committee and other invitees and share knowledge and learning and discuss areas for further collaboration and practical application of their research.

### 12. Deliverables/Outcomes of the Programme:-

- i. A pool of top quality and motivated Scientists would be available to undertake need based research in emerging fields of Renewable Energy.
- ii. There would be a visible improvement in the quality of the renewable energy technology through application of innovative solutions/technologies on the field arising out of the research under the programme.
- iii. The resources in terms of manpower and infrastructural facilities available at various schools/institutions of the country would be enhanced/ strengthened
- iv. Interaction among the Scientists working in different institutions of the country would be promoted and enhanced. This would enable multi and inter disciplinary approach to address complex problems of renewable energy.

### Proforma for submission of application under the National Renewable Energy Science Fellows Programme

- 1. Name of applicant:
- 2. Date of Birth:
- 3. If employed in GOI/State Govt./Public Institution, name and address of the current employer and salary drawn:
- 4. In case not employed at present, address for communication:
- 5. Academic Background: (details from undergraduate level onwards may be provided including name of Institutions/Universities, special achievements/distinctions obtained etc.)
- 6. Area(s) of specialization: (Please link it up with the R&D thrust areas identified by the Management Committee)
- 7. Details of Scientific/technical papers published in the relevant subject area: (only list to be provided. Abstracts/full copies of papers need not be enclosed at this stage) Details of books published, if any: (only list to be provided)
- 8. Details of films/audio-visuals produced, if any:
- 9. Details of original, innovative and pioneering research work carried out in the area mentioned at S. No. 6 (up to one page):
- 10. Details of research scholars successfully guided and those currently pursuing M.Phil/ Ph.D under your supervision:
- 11. Details of any awards/recognition received in the subject area at the National / international level:
- 12. Please describe in your own words why you should be selected as a National Renewable Energy Science Fellow and how the proposed research project will benefit the GOI in finding solutions to the practical problems of solar energy science, engineering and technology and their application at the field level: (up to one page)
- 13. Are you willing to give a commitment to work at the selected host institution(s) the full tenure of the fellowship granted and submit a bond in this regard to the host institution?
- 14. References: Please provide up to three (3) references with complete contact details.
- 15. Please indicate the proposed institution, group, professor with whom the project is to be undertaken along with proposed time line, methodology and outputs.

## Memorandum of Understanding between the Host Institution and MNRE in respect of the National Renewable Energy Science Fellowship Programme.

A MC	OU has be	en re	ached t	his_	day of	Two Thous	sand be	etween
the	Ministry	of	New	&	Renewable	Energy,	Governmer	nt of
India	(hereinafte	er ref	erred to	as N	MNRE) and (Na	me of Instit	ution/Organiz	ation),
(here	inafter refe	erred	to as t	he I	Host Institution	with resp	ect to hostin	g (the
name	of the Fe	ellow)	, select	ed a	as the National	Renewabl	e Energy Sc	iences
Fellov	w vide Mini	stry's	letter_		dated	_•		

It is clarified that all the terms & conditions contained in Administrative Approval of the National Renewable Energy Science Fellowship Programme as also the R&D Policy of the Ministry shall apply to the National Renewable Energy Science Fellows Programme and the Research Project to be implemented by the selected National Renewable Energy Science Fellow at the Host Institution.

This MOU is over and above the terms and conditions mentioned above and deal mainly with delineating the responsibilities of MNRE, the Host Institution and the selected National Renewable Energy Sciences Fellow, the fulfilment of which is essential for achieving the objectives of the Programme.

### II. The objectives of the National Renewable Energy Science Fellowship Programme.

- To provide a platform to top quality scientists & engineers of India or of Indian origin desirous of working at the forefront of Solar Energy sciences, engineering and technology with a focus on thrust areas identified by the Ministry in its R&D Policy.
- 2. To develop a community of researchers with diverse backgrounds, united by intellectual curiosity, top quality scholarship and drive to undertake research on important challenges facing the country today in all round development of Solar Energy utilization in the country.
- 3. To find solutions, through scientific research, to the practical problems of Solar Energy and their application in field, leading to visible improvement in the energy security of the country.

- 4. To utilize and expand the resources available in the universities/R&D institutions/and other educational institutions of the country, to address complex energy security aspects of the country.
- 5. To undertake research in the thrust area(s) identified by the Management Committee in the host institution, while also strengthening connections across the other participating universities/R&D institutions/educational institutions.
- 6. To motivate, enthuse and nurture scientists with potential and proven talents to work in emerging fields of Renewable Energy.
- 7. To utilize the knowledge/data emerging from such research work to devise strategies/solutions for large scale utilization of Renewable resource in the country.

### III. Responsibilities of MNRE

- 1. To select appropriate National Renewable Energy Sciences Fellows after following the prescribed procedure.
- 2. To facilitate in the identification and designation of a suitable Host Institution in respect of each selected Fellow, in consultation with the Host Institution and the Fellow. It shall be ensured that the Host Institution/Fellow is mutually acceptable to each other, before commencing the research project.
- 3. To issue the sanction order and release the fellowship grant earmarked to the Fellow, to the Host Institution for further transmission to the Fellow. It shall be ensured that the money is released to the Host Institution well in time, so that the Host Institution and the Fellow are not inconvenienced due to lack of funds.
- 4. To help, assist and support the Host Institution and the Fellow in every way to ensure that the objectives of the National Renewable Energy Sciences Fellows Programme are achieved.

### IV. Responsibilities of the Host Institution

- 1. To accept and allow the selected National Renewable Energy Sciences Fellows to work for the full tenure of the Fellowship at their Institution.
- 2. To provide adequate and suitable office space and support staff, if any, in the premises of the Institute, required laboratory facilities, access to the library, other publications and computerized data base of the Institution relevant to the project etc. to the Fellow to carry out the research work.

- 3. While it is not mandatory, the host institution may, if so desired by the Fellow, assist him/her in the work and evaluate/assess the progress of the project as per mutually agreed terms.
- 4. To help, assist and support the Fellow in every way to ensure that the objectives of the National Renewable Energy Sciences Fellows Programme are achieved.

### V. Responsibilities of the National Renewable Energy Science Fellow

- To give a commitment to work at the selected Host Institution for the full tenure of the Fellowship and submit a Bond in this regard to the Host Institution.
- To abide by the Rules/Regulations of the Host Institution, as well as the terms & conditions of the National Renewable Energy Sciences Fellows programme, this agreement and other relevant documents referred to in this MOU.
- 3. To conduct/carry out the Research Project duly approved by the Management Committee, sincerely, with dedication and to the best of his/her abilities.
- 4. To share with MNRE all the outcomes of the Research Project including, but not limited to, information/data/findings/new technology/publications etc.
- 5. To be willing to modify or restructure the project during the course of its implementation if so advised by the MNRE based on the mandatory periodic assessment /evaluation of the work by the Management Committee.
- 6. To ensure that the research project is completed within the prescribed tenure and that the expenditure in connection with the project is kept within the approved outlay.

#### VI. Other Terms & Conditions

- 1. The grant amount shall be released in instalments. While the first instalment shall be released immediately after joining of the fellow in the host institution, subsequent releases will depend on the submission of the requisite Utilization Certificate, Expenditure Statement & Progress Reports etc. by the Fellow/Host Institution, and their acceptance by MNRE.
- 2. In the event of the Management Committee recommending closure of the Project, this MOU shall be terminated, after giving a clear notice of one month-both to the Host Institution and to the Fellow.

- In case of termination of the MOU, all unutilized funds up to the date of termination of the agreement will have to be returned to MNRE by the Host Institution.
- 4. Due caution would be exercised both by the Host Institution and the National Solar Sciences Fellow – in dissemination/publication of any information/data/findings of a sensitive/classified nature, emanating out of the project. Responsibility of ensuring discretion and secrecy of data/findings in such cases will rest entirely with the Fellow and the Host Institution.
- 5. All disputes, disagreements etc. if any, arising out of the National Renewable Energy Sciences Fellows Programme, shall be resolved by the Fellowship Management Committee.
- 6. MNRE reserves the right to add, delete or modify from time to time, any part of this MOU. However, the decision to add, delete or modify the provisions of the MOU shall invariably be approved by the Competent Authority of MNRE.
- 7. On all aspects, where this MOU is silent, or for special cases of deviation from the provisions of this MOU or the National Renewable Energy Sciences Fellows Programme, the decision of MNRE based on the recommendation of the Management Committee shall be final.

The above MOU has been entered into and signed on behalf of MNRE and the Host Institution on the day, month and year first above written.

Head of the Host Institution	Group Head of HRD division, MNRE
(Seal of office)	(Seal of office) Witness
1	1
2	2.

## Ministry of New and Renewable Energy HRD Division

Subject: Guidelines for providing grant-in-aid support for laboratory upgradation:

- 1. Objective: The objective is to provide a one-time grant-in-aid support to educational institutions for empowering the educational institution by upgrading their laboratory facilities to provide quality education in renewable energy area with adequate practical exposure to student.
- 2. Level of Assistance: A one-time grant-in-aid support to the tune of maximum Rs. 50.00 lakhs will be provided to selected educational institutions for upgrading laboratory facilities. The grant-in-aid support will be provided mainly for:-
  - Procuring the lab equipments to cater the requirement of practicals at under graduate and post graduate level.
  - ii. Procurement of teaching aids such as cut models/working models
  - iii. Remodelling/refurnishing the existing laboratory to facilitate installation and commissioning of new equipment in the laboratory.
- **3. Number of Institutions to be supported**: Maximum 2 no. of institutions per annum.

#### 4. Selection criteria:

- 4.1 The applications will be invited through an advertisement uploaded in the Ministry's website/newspapers from time to time from universities/higher educational institutions in prescribed proforma (Annexure-IV-A), elaborating the course content, practicals being taught at B.Tech, M.Sc and M.Tech levels, elaborating their capability and willingness to improve/undertake renewable energy courses at B.Tech, M.Sc and M.Tech levels.
- 4.2 **Eligibility Criteria:-** Government Institutions fulfilling the following criteria would be eligible for applying for grant:
- i. Only those institutes will be considered for allocation of fellowship slots which are in Top 100 institutes under National Institutional Ranking Framework (NIRF), faculty for required expertise in relevant areas of RE and infrastructure facilities available at such institutes for RE education and research in RE.

- ii. The University/Institute should have a regular under graduate/post-graduate programme on Renewable Energy.
- iii. The course content of the programme should inter-alia have components of the model course curriculum developed by the Ministry.
- iv. The minimum student's intake in the M.Sc/M.Tech courses on Renewable Energy should be 15.
- v. There should be a minimum three core faculty members to undertake courses on Renewable Energy in the University/Institute.
- vi. The University/Institute should have active placement cell and should have active interaction with the Renewable Energy industry.
- vii. The University/Institute should have a clear plan of action/vision for upgradation their existing courses.
- viii. The University/Institute should be willing to put it's on funding/stake in the departments being supported by the Ministry for lab and library upgradation and should be provided all necessary support as may be needed for smooth functioning of the department.
- 4.3 The proposals fulfilling the above criteria will be submitted to a constituted Committee. The Committee will examine the proposals received vis-à-vis to the criteria listed above and the comments of HRD Division and will recommend/shortlist the institutions for providing one-time grant-in-aid support. The emphasis will be given to such institutions who have been undertaking courses on renewable energy at B.Tech, M.Tech and M.Sc level.
- 4.4 It will also be seen that the institution is ready to incorporate some of the components of the model syllabus developed by the Ministry.
- 4.5 The proposal will be submitted for approval of sanctioning the one-time grant-in-aid support to the institute and 60% of the sanctioned amount to be released along with the sanction.
- 4.6 The University and institute will have to upgrade the facility within six months of receipt the sanction and balance 40% will be released after receipt of UC of the released amount and the Statement of Expenditure clearly showing the committed liability towards balance fund by way of placing the orders/identifying the equipment.

Proforma for seeking one-time grant-in-aid support for laboratory upgradation to be submitted through the Registrar of University/Institution

#### **Part A: Institutional Details**

1.	Name of the Course :		
2.	Name of the Institution:		
3.	Name of the Department :		
4.	Coordinator of the Proposed Pr	ogramme:	
5.	Type of Institution :		University (Central/State)
			National Institute
			GC Supported (12B)
			Others (Pl. Explain)
6.	Please enclose a copy of the la	st annual repoi	rt.
7.	Year of Establishment:		
8.	Approximate Number of Studen	ıts:	

#### Part B: Details of the Course

- 9. Course being/to-be implemented:
- 10. Name and Qualification of the Faculty Members attached to the course: (Pl. attach a separate sheet)
- 11. Any Collaborative Institute: (if yes, pl. provide details)
- 12. Existing laboratory facility:(Pl. attach separate sheet)
- 13. Experience in Energy related courses:
- 14. Since when the course being run
- 15. Number of seats in each of the course
- 16. Specialization offered
- 17. If any industry collaboration is there, if so details thereof;
- 18. If placement service is being provided
- 19. Details of placement of previous students
- 20. Any other details
- 21. Sponsored Projects in the area of Energy, Environment and Renewable Energy:

#### **PART C: Financial**

22. Asked Budgetary Support

(Amount in INR in Lacs)

S.No.	Item	First Year	Second Year	Third Year	Fourth Year	Fifty Year
1	Equipment*					
2.	Cut models/system design and other related softwares*					

<sup>\*</sup>Please attached a detailed list of equipment/cut models/softwares with cost estimates

- 28. Participating Industry (if any):
- 29. Participating Institution (if any):

Certified that information given above have been verified and correct

Name and Signature of Head of Department with Seal

Name and Signature of Dean with Seal

Name and Signature of Registrar with seal.

## Ministry of New and Renewable Energy HRD division

#### Sub: Guidelines for creation of RE Chairs

- 1. **Objective:** The overall objective of instituting a Renewable Energy Chair in selected higher education institutions/universities is to mainstreaming the renewable energy education in that institute/university so as the Chair can act as focal point for renewable energy education in the institution.
- 2. **Level of assistance:** A one-time grant of Rs. 1.50 crore only to be used by the university/institute as seed money, the proceeds of which will be used to pay the remuneration of the Chair. This Chair will be over and above the regular strength of the professors in the coordinating department of the Institute.
- 3. **Total Number of Chairs**: Five (5) no. Chairs will be instituted in the area of Solar energy, Wind Energy, Hydrogen, Biomass Power and Biogas area (one chair each) in reputed institutions engaged in RE education.

#### 4. Guidelines/criteria of selection:

- **4.1 Eligibility Criteria:** Only the institutes/universities meeting the following criteria will be considered for providing RE Chair (applicable for chairs dealing with RE technology):
  - a) The University/Institute should have run a regular under graduate/post graduate programme on Renewable Energy for five years prior to applying for the RE Chair.
  - b) The course contents of the programme should be by and large on the line of the model course curriculum developed by the Ministry in their existing syllabus.
  - c) The minimum students' intake in the M.Sc/M.Tech course on Renewable Energy should be 15.
  - d) There should be a minimum five core faculty members to undertake courses on Renewable Energy in the University/Institute.
  - e) The University/Institute should have active placement cell and should have active interaction with the Renewable Energy industry.
  - f) The University/Institute should have a clear plan of action/vision for the RE Chair to be instituted.

- g) The University/Institute should be willing to put its own funding/stake in the research proposals and other mechanism which will be evolved by the Chair Professor and the Chair Professor should be provided all necessary support as may be needed for smooth functioning of the Chair.
- h) Since, the RE Chair is intended to act as focal point for Renewable Energy education in the University/Institute, the University/Institute should have a mechanism for regular interaction with the user groups/industries to enable modifying its syllabus from time to time to cater manpower requirement of industry/user groups.
- **4.2** Applications in prescribed Performa will be invited from universities/higher educational institutions (having status of deemed universities such as IITs, NITs, NLIs, IIMs, BITS etc.) for institution of a Renewable Energy Chair through an advertisement uploaded in the Ministry's website from time to time, elaborating their capability and strength in running renewable energy courses at M.Sc. and M.Tech levels, besides pursing research in renewable energy sector.
- **4.3** The proposals so received will be preliminary assessed by the Ministry on 100 point basis distributed as follows:
  - i) Duration since the RE course started in the institute/university Marks
    - a. For last 15 years 35
    - b. For last 10 years 30
    - c. For last 5 years 20
    - d. Less than 5 years 10
  - ii) Availability of Laboratory in the institute covering the following weightage:
    - a. Solar PV and Solar Thermal labs 5
    - b. Wind, Biomass, Biofuel, hydrogen and other RET labs 10
  - iii) Availability of regular faculty in the institutions involved in RE courses with Ph.D and 5-7 years' experience as well as quality research as evident from publications in international journals of repute:
    - a. 3 Professors and 2 Associate Professors 20
    - b. 2 Professors and 3 Associate Professors- 10
    - c. 1 Professor and 4 Associate Professors- 10

- iv) The institution/coordinating department should have executed R&D projects at national/international level:
  - a. 5 projects 15
  - b. 3 projects 9
  - c. 2 projects 6
- v) The faculty must have undertake industrial consultancy projects:
  - d. 5 consultancy projects -15
  - e. 3 consultancy projects 9
  - f. 2 consultancy projects 6
- vi) Willingness of the university to put it's on funding/stake in the research proposals and other mechanism which will be evolved by the Chair Professor and the Chair Professor should be provided all necessary support as may be needed for smooth functioning of the Chair 10

Total Marks - 100

Minimum required - 60

- **4.4** The proposals fulfilling the above criteria will be submitted to a Committee constituted by the Ministry under the Chairmanship of eminent scientist / professor and four experts of the rank of Professors and from Institutions of repute will be the other members. Scientist-in-charge HRD will act as convener/member secretary.
- **4.5** The Committee will examine the proposals received vis-à-vis to marks obtained and the other criteria such as
  - a. Course contents of the programme and willingness of the institute to incorporate the model course curriculum developed by the Ministry in the existing curriculum.
  - b. The minimum students' intake in the M.Sc/M.Tech courses on Renewable Energy.
  - c. Availability of active placement cell and its interaction with the Renewable Energy industry.
  - d. A clear plan of action/vision for the RE Chair to be instituted.
  - e. Since the RE Chair is intended to act as focal point for Renewable Energy education in the University/Institute, the University/Institute should have a mechanism for regular interaction with the user groups/industries to enable modifying its syllabus from time to time to cater manpower requirement of industry/user groups.

- **4.6** The Committee may also decide, if necessary, to call upon the institutions shortlisted for making a presentation before the Committee about their vision for the RE Chair before recommending the proposal.
- **4.7** The recommendations of the Committee will be put up to the Secretary for approval, followed by the concurrence of IFD.
- **4.8** After receiving the approval of Secretary and concurrence of IFD, the selected institutions will be informed to enter into an agreement/MOU with the Ministry. After receiving their consent to enter into an agreement/MOU with the Ministry, file will be submitted to the Secretary for his approval of providing a one-time grant-in-aid of Rs. 1.5 crore only to the institution for creation of the Renewable Energy Chair in the selected institutions.
- **4.9** After receipt of approval of the Secretary, the agreement will be signed by the Group Head, HRD and the Registrar of the University/Institution and the grant-in-aid will be released to the institution.
- **4.10** The institution will initiate the selection process for the Chair Professor through open advertisement. A provision of high level selection committee may be made by the university to ensure that only person of eminence are selected as a Chair Professor. The selection committee will inter alia have a member from the Ministry.

#### 5. Monitoring Mechanism:

- 5.1 The university/Institute will continuously monitor the performance of the Renewable Energy Chair for which a high level committee may be constituted under the Chairmanship of Vice Chancellor/Director of the university/institute with a representative from the Ministry.
- 5.2 As the Renewable Energy Chair is aimed to act as focal point for renewable energy education in the institution, the incumbent is expected to look after various aspects of technology development, legal and policy framework of renewable energy. He is also expected to submit his opinion on various projects/policy related aspects from time to time, whenever requested for or suo-moto such reports will be periodically submitted by him to the HRD Division of the Ministry.

## (Proforma for Institution of Renewable Energy Chair to be submitted by the Registrar of the University/Institution)

#### **Part A: Institutional Details**

1.	Name of the Institution:								
2.	Name of the Department where the Chair is to be instituted:								
3.	Type of Institution : University (Central/State)								
	National Institute(IIT/NIT/IISCER/IISc)								
	GC Supported (12B)								
	Others (Pl. Explain)								
4.	Please enclose a copy of the last annual report.								
5.	Year of Establishment:								
6.	Approximate Number of Students:								
	Part B: Details of the Academic Activities								
7.	Renewable Energy Course being/to-be implemented:								
8.	Name and qualification of								
9.	The Faculty Members attached to the course: (Pl. attach a separate sheet)								
10	. Any Collaborative Institute: (If yes, pl. provide details)								
11	Existing laboratory facility:  (Pl. attach separate sheet)								
12	Experience in Energy related courses:								
	<ul> <li>i. Since when the course being run</li> <li>ii. Number of seats in each of the course</li> <li>iii. Specialization offered</li> <li>iv. If any industry collaboration is there, if so details thereof:</li> <li>v. If placement service is being provided</li> <li>vi. Details of placement of previous students</li> </ul>								
	vii. Any other details								

- 13. Sponsored Projects in the area of Energy, Environment and Renewable Energy:
- 14. Whether courses are self-financed or govt. aided.
- 15. If self-financed what portion of the total expenses on the course are being met from the course fee

#### PART C: Financial

- 16. What are the financial arrangements for the Institution of RE Chairs:
  - A) MNRE Grant to be used for
  - B) Any contribution from the University for research grant from its own sources
  - C) Industry participation if so to what extend
  - D) Whether contingent expenses are to be met by university for the Chair Professor.
  - E) Other support which the University would provide to the Chair Professor.
- 17. Selection and Monitoring Procedure:
  - A) Whether selection process will involve Ministry representative
  - B) Whether University/Institute agrees for Ministry to undertake periodic review of the performance of Chair Professor
  - C) Whether the University/Institution will spare the Chair Professor for any specific assignment as may be given to the Chair Professor regarding preparing/developing any Report, Technology/Research Status Paper, course material and course details etc.

Certified that information given above have been verified and correct.

- i. Name and Signature of Head of Department with Seal
- ii. Name and Signature of Dean with Seal
- iii. Name and Signature of Registrar with seal

## Ministry of New and Renewable Energy HRD Division

#### Subject: Guidelines for National Renewable Energy Internship (NREI) Scheme

Ministry will provide internship opportunity to facilitate students pursuing under graduate/graduate/post graduate degrees or research scholars enrolled in recognized institutes/universities with in India or abroad, as "Interns". The students of various Engineering, Science, Management, law and other streams may undertake internship in the Ministry and in organizations under its aegis to understand various activities of the Ministry to become Researchers/Managers in renewable energy area. These interns will be attached with the senior level officers of the Ministry in various Programme Divisions. These interns can work for a period of two months to six months.

- 2. The scheme also provides opportunity to personnel engaged in projects related to policy research / promotion/demonstration and deployment of renewable energy in national and international research / institutes and financial institutions to work as Interns in the Ministry /its organisations.
- 3. A stipend amount of Rs. 15,000/- per month will be provided for physical internships only. For virtual internships stipend will not be provided.

#### 4. The scheme:

- 4.1 **Name of the scheme**: National Renewable Energy Internship (NREI) Scheme
- 4.2 **Objective:** To engage persons pursuing Graduate / Post graduate course of Engineering/Management/ Law/Science stream/Renewable energy in recognized University/institution within India or abroad, as "Interns" with the Ministry of New and Renewable Energy for mutual benefit.
- 4.3 **Purpose:** The "Interns" shall have an opportunity to know about the Ministry's functioning, programmes and policy, issues in Renewable Energy and contribute to generate inputs such as analysis, technical reports/ technology advancement/ project reports/policy papers, etc. for furtherance of the objectives of this Ministry.

#### 4.4 Details of the Scheme

(i) **Period:** Internship is available twice in the year based on the MNRE requirement.

#### (ii) Eligibility:

- (a) The applicant should be pursuing graduate or post graduate degree course in Engineering/ Management/ Law/ Science stream/Renewable Energy in recognized University/institution within India or abroad.
- (b) The persons working in RE area in National, International, Non-Governmental Institutes/organisations.
- (iii) **Number:** Maximum 20 no. of interns will be provided internship per year. No intern would be allowed to repeat or extend the internship.
- (iv) **Duration:** Will be from two to six months to be counted from the day of start of internship.
- (v) **Declaration Secrecy:** Interns will be required to furnish to the Ministry of New and Renewable Energy a declaration of secrecy before reporting for the internship.
- (vi) **Logistic Support:** Ministry of New and Renewable Energy shall provide them with internet facility and other necessities as deemed fit by the concerned Heads for physical internship. Interns will be required to have their own Laptops. They shall also make their own lodging and boarding arrangements.
- (vii) **Placement:** There will be no commitment for placement of interns in the Ministry or allied/ subordinate organizations.
- (viii) **Submission of Paper**: The interns will be required to submit a Report / Paper on the allotted subject at the end of the internship to the Head of the Division. Seminar/presentation can be conducted by the HRD division in the presence of Heads of the division if, required.
- (ix) **Certificate of Internship**: Certificate will be issued to the interns on satisfactory completion of their internship and evaluation of their Report/Paper by the concerned.
- (x) **How to apply:** The students/candidates can apply on half yearly basis (preferably July and January) online only through the address link indicated at www.hrd.mnre.gov.in. Intern must clearly indicate the area of interest. (Ministry's thrust research areas & programme areas/vision can be obtained from the website). Application shall be made at least one month before the expected date of joining and not more than 3 months in advance from the date of commencement.
- (xi) **No objection Certificate:** At the time of joining after selection, applicant shall be required to produce a letter from their Supervisor/Head of Department/Principal, indicating their status in the Institution /employer and "No Objection" for allowing their student/Employ to undergo Internship program for the period for which he or she is selected/and the student will not be registered for any

course where regular attendance is required. If any discrepancy is found, the candidature of the candidate will be cancelled by the Ministry.

- (xii) **Selection:** All applications will be scrutinized by the Selection Committee constituted by the Ministry, which shall meet as frequently as required. Offers will be sent to selected interns subject to availability of slots, consent of the concerned Division and approval of the Selection Committee. The selected candidates will produce original marksheets and NOC from the college/institution at the time of joining, failing which his/her candidature shall be cancelled. HRD division will upload the list of selected candidates on MNRE website.
- (xiii) **Attendance:** The candidates should have minimum 85% attendance which they have to mark in and out on daily basis in case of physical internships.
- (xiv) The conduct of the interns and their access to data shall be the sole responsibility of the heads of the divisions where they are working.
- **4.5 Relaxation:** Secretary, MNRE will have the power to relax any of the above conditions mentioned, in respect of any deserving candidate.

\*\*\*\*\*\*

# Template for Evaluation of Central Sector Scheme: [Scheme Name] Name of Department /Name of Ministry

#### 1. EXECUTIVE SUMMARY

#### 2. OVERVIEW OF THE SCHEME

#### 2.1 Background of the Scheme

- a) Brief write up on the scheme including objectives, Implementation Mechanism, scheme architecture/ design
- b) Name of Sub-schemes/ components
- c) Year of commencement of scheme
- d) Present status with coverage of scheme (operational/ non-operational)
- e) Sustainable Development Goals (SDG) Served
- f) Alignment with Viksit Bharat 2047 Vision
- g) Fund Flow mechanism (National and sub-national level)

## 2.2 Budgetary allocation and expenditure pattern of the scheme

Sub- sche me/	[Year 1]			Year	- 2]	[Year 3]		r 3]	[Year 4]			[Year, 5]			
Comp onent	BE	RE	Actual	BE	RE	Actua 1	BE	RE	Actual	BE	RE	Actua	BE	RE	Act

## 2.3 Summary of past evaluation since inception of scheme

Year of Evaluation	Agency hired for Evaluation	Recommendations made and accepted	Recommendations made but not accepted
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#### 3. METHODOLOGY

3.1 Sample size and sample collection process- The approach should be to derive a sample size based on some key output/outcome parameter of the scheme. The States/Districts/Villages & UCBs could be graded in terms of performance of the states in these indicators and accordingly representation from each such Strata be finalized systematically. While doing so, regional representation in terms of Zones as per NSSO (consisting of States/UTs) and aspirational districts/blocks may also be kept in mind.

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- 3.2 Baseline data on Key Performance Index (KPIs): Baseline data on select KPIs (15 to 25 central to measure the effectiveness of the scheme in terms of its meeting the scheme objective to be collected: -
  - 3.2 (a) For New Scheme: Baseline data to be collected through a baseline survey from the field. This could be done anytime during the commencement of the scheme to six months of it being in operation. This data and accompanying report are to be kept safely by the M/Ds. This would be followed by a mid-line survey, ideally after 2-3 years of its operation.
  - **3.2 (b) For Existing Scheme:** Synthetic baseline data may be created using secondary and administrative data to which these KPIs are to be compared. In any case, the current evaluation data has to be stored properly to be used in the future as an anchor dataset to carry out proper analysis of the ongoing schemes.
- 3.3 Evaluation Tools used: Various evaluation tools can be used in the primary survey such as Household questionnaires, Key Informant Interviews, Focused Group Discussions, etc. This would depend on the focus and orientation of the scheme.
- 3.4 Data collection tools: Computer Assisted Personal Interview (CAPI) tools to be adopted.

#### 4. OBJECTIVE OF THE STUDY

4.1 Effectiveness of the scheme in terms of achieving its intended objectives as per the scheme guidelines (To be analysed on the Output/Outcome/Impact indicators)

#### 4.2 Additional parameters

a) Awareness and Coverage of Scheme-uptake by beneficiaries

	Sa	ate		District					
Urban		Ru	ıral	·Ur	ban	Rural			
Male	Female	Male	Female	Male	Female	Male	Female		
SC/ST	SC/ST	SC/ST	SC/ST	SC/ST	SC/ST	SC/ST	SC/ST		

- b) Assessment of implementation process and fund flow mechanism
- c) Training/ Capacity building of administrators/ facilitators, IEC activities etc.
- d) Asset/ Service creation, if any, assess adequacy and quality and & maintenance plan/recurring expenditure associated with it

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- e) Benefits (Individual, community)
- f) Convergence with scheme of own Ministry/ Department or of other Ministry/ Department and with the scheme of States/UTs.
- 4.3 Gaps in achievement of outcomes
- 4.4 Key Bottlenecks & Challenges
- 4.5 Input Use Efficiency
- 4.6 Best Practices/Case Studies
- 4.7 Most Significant Change (due to the scheme/intervention)
- 5. OBSERVATIONS AND RECOMMENDATIONS

#### 5.1 Thematic Assessment

- i. Improving <u>value for money</u> through identification of avoidable duplication and overlaps between different schemes
- ii. Assessing the continued <u>relevance</u> and their effectiveness and efficiency in achieving the intended objectives.
- iii. Reduction in avoidable overhead expenditure on consultants, programme management, administration etc.

#### 5.2 Externalities

#### 6. CONCLUSION

## 6.1 Issues & challenges (data must attempt to gather information on, but not limited to, the following)

Has the intervention caused a significant change in the lives of the intended beneficiaries?

How did the intervention cause higher-level effects (such as changes in norms or systems)?

Did all the intended target groups, including the most disadvantaged and vulnerable, benefit equally from the intervention?

Is the intervention transformative – does it create enduring changes in norms – including gender norms – and systems, whether intended or not?

Is the intervention leading to other changes, including "scalable" or "replicable" results?

How will the intervention contribute to changing society for the better?

#### 6.2 Vision for the future

Mainsol

#### TERMS OF REFERENCE (ToR)

The Terms of Reference of the Study of Impact of HRD Programme of the Ministry of New & Renewable Energy is as follows:-

- 1. Assess the impact of Human Resource Development Programme implemented during the period FY 2021-22 to 2025-26.
- 2. Assessment of the effectiveness of the following in terms of output (training) and outcome (employment) of short term training/skill development programmes funded during the period FY 2021-22 to 2025-26.
  - i. Suryamitra Skill Development Programmes in terms of Modalities adopted by SNAs/training partners for identification of trainees, interactions with all stakeholders for their feedback and suggestions from trainers, trainees and training partners/centres, employed industries and other stakeholders of the Suryamitra training programme, employability of youth in Grid / off-grid connected Solar PV projects and other power sectors or generating self-employment, and to recommend the strategies for enhancing employment /self-employment opportunities.
  - ii. Vayumitra (Wind Power Plant technician) programme conducted by NIWE and to assess the need of this programme in future.
  - iii. Jal -urjamitra (Small Hydro Power Plant Technician) conducted by IIT, Roorkee
  - iv. Training programmes conducted in other areas

(Sample size should be atleast 2% of total trainees around 18000 in about 500 training centres/institutes of all states where training programmes conducted). In these samples atleast 5% of women and NERs should be covered.

- 3. Interactions with all (12) academic/research institutions and to assess the effectiveness of the National Renewable Energy Fellowship programmes with NRE fellows (50% of 150 new and ongoing fellowships), faculty members, RE Chairs etc., employment status/opportunities of NRE fellows in RE sector /other sectors.
- 4. Assess the effectiveness of the Lab & Library Upgradation Financial Support provided by MNRE and also assessment of the need for continuation of this support. (all 4 institutes)

- 5. Assessment of the National Renewable Energy Internship programme in respect of its efficiency and relevance (about 50 interns)
- 6. Assessment of Renewable Chair component for its relevance
- 7. Suggest the skill gaps and job roles and requirement of manpower in various RE technologies including introduction of short duration skill development courses / need for introduction of long term skill development courses in renewable energy especially in ITIs in wind energy, small hydro, bio-energy technologies etc.
- 8. Estimation of job potential in RE sector and suggest actual training needs based on discussions with various stakeholders Government bodies/training institutes/trained manpower.
- 9. Assess the women participation in RE Sector, suitable job roles for women and to draw the gender specific areas gaps/levels of RE sector with adequate sampling and stakeholder consultation.
- 10. Suggest future course of action in improving the RE educational and training network/infrastructure in the country including the NER with adequate sampling and stakeholder consultation.
- 11. Suggest future actions for improving the HRD programme of the Ministry.

#### **Annexure IV**

# 342-16/4/2020-HRD Government of India Ministry of New and Renewable Energy Human Resource Development Division

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Subject: Invitation for Request for Proposal (RFP) for conducting the Evaluation for implementation of Human Resource Development Programme of Ministry of New and Renewable Energy from the Financial Year 2021-22 to 2025-26.

#### Financial Bid

SI No.		Amount (Rs. In Lakh)
	Evaluation for implementation of Human Resource Development Programme of Ministry of New and Renewable Energy	
2	GST	
3	Any other Tax (Please mention)	
	Total	

Amou	nt	in	W	ord	s.
<i>,</i>			v v	OI U	J.

Name of Authorised Person

Organisation

(Seal)