

06

STANDING COMMITTEE ON ENERGY

(2020-21)

SEVENTEENTH LOK SABHA

MINISTRY OF NEW AND RENEWABLE ENERGY

**DEMANDS FOR GRANTS
(2021-22)**

SIXTH REPORT



**LOK SABHA SECRETARIAT
NEW DELHI**

March, 2021/Phalguna, 1942 (Saka)

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MINISTRY OF NEW AND RENEWABLE ENERGY

DEMANDS FOR GRANTS
(2021-22)

Presented to the Lok Sabha on March 08, 2021

Laid in the Rajya Sabha on March 08, 2021



LOK SABHA SECRETARIAT
NEW DELHI

March, 2021/Phalguna, 1942 (Saka)

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COMPOSITION OF THE STANDING COMMITTEE ON ENERGY (2020-21)

LOK SABHA

Shri Rajiv Ranjan Singh *alias* Lalan Singh - Chairperson

2. Smt. Sajda Ahmed
3. Shri Gurjeet Singh Aujla
4. Shri Chandra Sekhar Bellana
5. Dr. A. Chellakumar
6. Shri Harish Dwivedi
7. Shri S. Gnanathiraviam
8. Shri Sanjay Haribhau Jadhav
9. Shri Kishan Kapoor
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11. Shri Ramesh Chander Kaushik
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13. Shri Praveen Kumar Nishad
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16. Shri Jai Prakash
17. Shri Dipsinh Shankarsinh Rathod ^
18. Shri N. Uttam Kumar Reddy
19. Shri Shivkumar Chanabasappa Udasi
20. Shri P. Velusamy
21. Shri Akhilesh Yadav

RAJYA SABHA

22. Shri Ajit Kumar Bhuyan
23. Shri T. K. S. Elangovan
24. Shri Muzibulla Khan
25. Shri Maharaja Sanajaoba Leishemba
26. Shri Jugalsinh Mathurji Lokhandwala
27. Shri Surendra Singh Nagar
28. Dr. Sudhanshu Trivedi
29. Shri K.T.S. Tulsi
30. Vacant *
31. Vacant #

SECRETARIAT

1. Shri R.C. Tiwari Joint Secretary
2. Shri R.K. Suryanarayanan Director
3. Shri Kulmohan Singh Arora Additional Director
4. Ms. Deepika Committee Officer

^ Nominated as Member of the Committee w.e.f. 28.12.2020

** Vacant vice Shri Javed Ali Khan retired from Rajya Sabha on 25.11.2020*

Vacant since constitution of the Committee.

LIST OF ABBREVIATIONS	
AJAY	Atal Jyoti Yojana
BE	Budget Estimates
BLF	Biogas Liquid Fertilizer
BOS	Balance of System
BPGTP	Biogas Power (off-grid) Generation and Thermal Application Programme
CAPEX	Capital Expenditure
CASE	Commission for Additional Sources of Energy
CBG	Compressed Biogas
CEA	Central Electricity Authority
CFA	Central Financial Assistance
Ckm	Circuit Kilometers
Committee	Standing Committee on Energy (2020-21)
CPSU	Central Public Sector Undertaking
CST	Concentrated Solar Thermal
DBT	Direct Benefit Transfer
DCR	Domestic Content Requirement
DISCOM	Distribution Companies
DPR	Detailed Project Report
EAP	Externally Aided Projects
FDI	Foreign Direct Investment
FiT	Feed in Tariff
GBI	Generation Based Incentive
GBS	Gross Budgetary Support
GCCA	Grants for Creation of Capital Assets.
GEC	Green Energy Corridor
GW	Giga-watt
IEBR	Internal and Extra-Budgetary Resource
IREDA	Indian Renewable Energy Development Agency
IREP	Integrated Rural Energy Programme
ISTS	Inter State Transmission System
KWh	Kilo Watt hour
LPG	Liquefied Natural Gas
MH	Major Head
MNRE	Ministry of New and Renewable Energy
MVA	Mega Volt Amperes
MSW	Municipal Solid Waste
MW	Megawatt
NER	North-East Region
NCLT	National Company Law Tribunal
NIBE	National Institute of Bio Energy
NISE	National Institute of Solar Energy
NIWE	National Institute of Wind Energy
NNBOMP	New National Biogas and Organic Manure Programme
NPA	Non-Performing Assets
NSM	National Solar Mission
NTPC	National Thermal Power Corporation
OMC	Oil Marketing Companies
PAT	Profit after tax

PESO	Petroleum and Explosives Safety Organization
PGCIL	Power Grid Corporation of India Limited
PLI	Productivity Linked Incentive
PM-KUSUM	Pradhan Mantri Kisan Urja SurakshaevamUtthaanMahabhiyan
PPA	Power Purchase Agreement
PPP	Public Private Partnership
RDD	Rural Development Departments
RD&D	Research, Development and Demonstration
RE	Revised Estimates
RESCO	Renewable Energy Service Company
RoW	Right of Way
RTS	Roof-top Solar
SBF	Solid Biogas Fertilizer
SC	Scheduled Caste
SECI	Solar Energy Corporation of India
SHP	Small Hydro Power
SNAs	State Nodal Agencies
SPV	Solar Photo Voltaics
SSL	Solar Street Light
ST	Scheduled Tribe
STU	State Transmission Utility
T&D	Transmission and Distribution
TSP	Tribal Sub Plan
UTs	Union territories
VGF	Viability Gap Funding

INTRODUCTION

I, the Chairperson, Standing Committee on Energy, having been authorized by the Committee to present the Report on their behalf, present this Sixth Report of the Committee on 'Demands for Grants (2021-22) of the Ministry of New and Renewable Energy'.

2. The Committee examined the Demands for Grants under Rule 331E(1)(a) of the Rules of Procedure and Conduct of Business in Lok Sabha.

3. The Committee took oral evidence of the representatives of the Ministry of New and Renewable Energy on 22nd February, 2021. The Committee wish to express their thanks to the representatives of the Ministry for appearing before the Committee for evidence and furnishing the desired information in connection with the issues relating to the subject.

4. The Report was considered and adopted by the Committee at their sitting held on 2nd March, 2021.

5. The Committee place on record their appreciation for the assistance rendered to them by the officials of the Lok Sabha Secretariat attached to the Committee.

6. For the facility of reference and convenience, the observations and recommendations of the Committee have been printed in bold letters in Part-II of the Report.

New Delhi
March 02, 2021
Phalguna 11, 1942 (Saka)

Shri Rajiv Ranjan Singh *alias* Lalan Singh
Chairperson,
Standing Committee on Energy

REPORT
PART I
NARRATION ANALYSIS

CHAPTER I
INTRODUCTORY

1.1 The Ministry of New and Renewable Energy (MNRE) is the nodal Ministry of the Government of India for all matters relating to renewable energy resources. Under the Allocation of Business Rules, the MNRE has been assigned the following specific items:

- Research and development of biogas and programmes relating to biogas units;
- Commission for Additional Sources of Energy (CASE);
- Solar Energy including Solar Photovoltaic (SPV) devices and their development, production and applications;
- All matters relating to small/mini/micro hydel projects of, and below, 25 MW capacity,
- Programmes relating to improved chulhas and research and development thereof;
- Indian Renewable Energy Development Agency;
- Research and development of other non-conventional/renewable Sources of energy and programmes relating thereto;
- Tidal Energy;
- Integrated Rural Energy Programme (IREP);
- Geothermal Energy.

1.2 Keeping in view our commitment to a healthy planet and Nationally Determined Contributions as per the Paris Accord on climate change, India has made a pledge that by 2030, 40% of her installed power generation capacity shall be based on non-fossil fuel based resources. Accordingly, the Government has set an ambitious target of installing 175 GW of renewable energy capacity by 2022. This includes 100 GW from solar, 60 GW from wind, 10 GW from bio-power and 5 GW from small hydro power. As on 31st January, 2021, a cumulative total of only 92.54 GW of renewable energy capacity has been installed, that is little more than 50% of the target, with just

a year and half to go for the scheme. India is also committed to further increase its renewable energy capacity addition target to 450 GW as a part of a stronger climate action plan.

1.3 Status regarding installation of Renewable Energy as on 31st January, 2021 is given below:

Sector	Target (GW)	Installed capacity (GW)	Under Implementation (GW)	Tendered (GW)	Total Installed/ Pipeline (GW)
Solar Power	100	38.79	36.03	23.87	98.69
Wind power	60	38.68	8.68	1.20	48.56
Bio Energy	10	10.31	0.00	0.00	10.31
Small Hydro	5	4.76	0.44	0.00	5.20
Wind Solar Hybrid	-	0	2.55	0.00	2.55
Round the clock (RTC) Power	-	0	1.60	2.50	4.10
Total	175	92.54	49.30	27.57	169.41

CHAPTER II

DEMANDS FOR GRANTS OF THE MINISTRY FOR 2021-22

2.1 The Ministry of New and Renewable Energy presented Demand No. 70 to the Parliament for the financial year 2021-22 on 11th February, 2021. The voted provisions made in the Revenue and the Capital Heads of the demand are as under:

			(Rs. in crore)
	Revenue	Capital	Total
Charged	---	---	---
Voted	5743.00	10.00	5753.00

2.2 A statement showing the details of the Budget Estimates for the year 2021-22 *vis-à-vis* Budget Estimates (BE) and Revised Estimates (RE) of 2020-21 and Actual expenditure during 2019-20 is given at **Annexure-I**.

2.3 Regarding the allocations sought for the year 2019-20, 2020-21 and 2021-22 and the amount actually sanctioned by the Ministry of Finance, the Ministry stated as under:

			(Rs. in crore)
Financial Year	BE proposed by Ministry	Approved BE	
2019-20	6731.93	5254.83	
2020-21	9523.04	5753	
2021-22	9254.77	5753	

2.4 When asked whether the allocation made for the year 2021-22 would be sufficient to achieve the physical targets, the Ministry stated as under:

“As record low tariffs have been achieved in a recent renewable energy auctions, Grid connected Renewable Energy has achieved grid parity. Therefore requirement for Viability Gap Funding (VGF) support has drastically reduced during the past 2-3 years. Most of the grid connected renewable energy projects in the Country are being implemented by the private sector developers selected through transparent competitive bidding process.

However, implementation of Decentralized programs such as Solar Off-grid Program, Pradhan Mantri Kisan Urja Suraksha evam

Utthaan Mahabhiyan (PM-KUSUM) Scheme, etc. where Central Financial Assistance is provided may be impacted because of reduction of funds. However additional funds will be sought at RE stage after reviewing the progress of these programmes.”

2.5 The financial allocations & physical targets for various schemes/programmes for 2021-22, as furnished by the Ministry, are given below:

Detailed Statement of Budget Estimates 2021-22 and Capacity Likely to be commissioned			
(Rs. in crores)			
I	Grid Interactive Renewable Power	BE 2021-22	Capacity Likely to be commissioned
1	Wind Power	1100.00	2000 MW**
2	Hydro Power	90.00	100 MW*
3	Bio Power	120.00	200
4	Solar Power	2369.13	13653
5	KUSUM	221.00	1000 MW
6	Green Energy Corridors	300.00	Cumulative transmission lines target is 9000 ckm
7	Interest Payment and issuing Expenses on the Bonds	124.35	-NA-
Total - Grid Interactive Renewable Power		4324.48	--
II	Off-Grid/Distributed and Decentralised Renewable Power	BE 2021-22	Capacity Likely to be commissioned
1	Hydro Power	2.00	Same as provided under Grid Interactive Hydro Power
2	Bio Power	70.00	53.789
3	Solar Power	237.00	23.75
4	KUSUM	776.30	1000 MW
5	Biogas Programme	95.00	43,000 (Nos.)
6	Other Renewable Energy Applications (Solar Cities, Green Buildings, Demonstration of Renewable Energy Applications, Cookstoves, etc.)	0.20	To cater pending Liability
Total- Off-Grid/Distributed and Decentralised Renewable Power		1180.5	--

*Presently no SHP Programme is being implemented. Budget is kept for projects sanctioned in the past.

**Funds are being utilized for fulfilling liabilities under wind GBI Scheme which was operational till March 2017

CHAPTER III
REVIEW OF PAST PERFORMANCE OF THE MINISTRY

I. BUDGET ALLOCATION AND UTILIZATION

3.1 Major head-wise budgetary allocations (BE and RE) and actual expenditure of the Ministry during the last five years are given below:

Ministry of New and Renewable Energy															
(Rs. in Crores)															
	MH-3451			MH-2810			MH-2552			MH-4810			MH-3601		
FY	BE	RE	Actu als	BE	RE	Actu als	BE	RE	Actu als	BE	RE	Actu als	BE	RE	Actu als
2019 -20	43. 38	40. 34	37.0 4	465 3.45	340 5.40	345 4.09	513 .00	375 .00	0.00	45. 00	71. 00	70.9 7	-	-	-
2018 -19	40. 03	42. 06	37.6 0	456 1.67	455 9.64	442 2.81	504 .53	504 .53	0.00	40. 40	40. 40	17.3 9	-	-	-
2017 -18	36. 54	39. 40	36.8 2	487 1.30	364 5.60	360 6.80	525 .00	394 .00	0.00	90. 00	51. 00	51.0 0	-	-	-
2016 -17	34. 19	36. 53	34.6 1	450 5.60	389 5.60	378 3.72	496 .00	413 .00	0.00	100 .00	115 .00	110. 63	45. 00	0. 00	0.00
2015 -16	24. 53	28. 07	27.8 1	261 3.68	407 6.78	408 4.20	29 29	24. 65	0.00	95. 00	94. 77	94.5 2	41	37 .8	38.2 5

3.2 The details of the year-wise allocation (BE/RE) along with expenditure regarding GBS and IEBR for the years 2018-19, 2019-20 and 2020-21 are given below:

(Rs. in crore)									
	2018-19			2019-20			2020-21		
	BE	RE	Actual Exp	BE	RE	Actual Exp	BE	RE	Actual Exp (as on 31.01.2021)
GBS	5146.63	5146.63	4476.20	5254.83	3891.74	3562.14	5753.00	3591.00	2505.79
IEBR	10316.84	10835.14	10459.15	12353.81	12466.32	10450.85	13726.74	10089.38	4614.69
Total	15463.47	15981.77	14935.35	17608.64	16358.06	14012.99	19479.74	13680.38	7120.48

3.3 When asked about the reasons for variations in the BE/RE and actual expenditure during the last three years, the Ministry stated that:

"The expenditure during 2018-19 was 86.97%. These shortfalls were due to not receiving adequate proposals from any of North Eastern states under various schemes. Research and development projects are continuous efforts in nature with duration of generally

three to four years. Funds are released after completion of various milestones achieved and proper evaluation of the ongoing projects. As a result there was a shortfall in the actual expenditure as some of the milestones/evaluation could not be completed in time.

The expenditure during 2019-20 was 91.53% of RE. These shortfalls were due to not receiving adequate proposals from any of North Eastern states under various schemes.

During of 2020-21, as on 31.01.2021 an expenditure of Rs. 2505.79 crore has been made against a RE of Rs. 3591.00 crore which is 69.78% of RE. The Ministry is making all out efforts to utilize 100% RE. However, there may be some shortfall due to delay in implementation of projects due to COVID-19 pandemic and lack of adequate proposals from North East."

3.4 Quarter-wise utilization of budgetary allocations during the last three years, as submitted by the Ministry, are given below:

(Rs. In Crores)							
FY	BE	RE	Actual exp.	Quarter			
				1 st	2 nd	3 rd	4 th
2018-19	5146.63	5146.63	4476.20	1337.57	1242.20	949.94	946.49
2019-20	5254.83	3891.74	3562.14	875.74	1861.40	304.29	520.71
2020-21	5753.00	3591.00	2505.79 (as on 31.01.2021)	854.90	855.62	692.59	102.68 (as on 31.01.2021)

3.5 On being asked about the reasons for uneven expenditure in each quarter and if the quarterly expenditure during these years was as per the plan and norms, the Ministry stated that:

"Quarterly expenditure is broadly in line with the Ministry of Finance norms. A periodical monitoring mechanism is already in place to ensure that phasing of expenditure is as per the norms prescribed by the Ministry of Finance."

II PHYSICAL TARGETS AND ACHIEVEMENTS

3.6 In response to a query about the physical achievement *vis-a-vis* targets during the previous years, the Ministry furnished the following:

PHYSICAL TARGETS AND ACHIEVEMENT DURING 2017-18, 2018-19, 2019-20 and 2020-21									
S. No.	Programme/ System	2017-18		2018-19		2019-20		2020-21 (Upto 31.01.2021)	
		Target	Ach.	Target	Ach.	Target	Ach.	Target	Ach.
GRID POWER (Capacities in MW)									
1	Wind Power	4000	1865.23	4000	1480.97	3000	2117.78	3000	939.90
2	Small Hydro	100	105.95	100	107.35	100	90.00	100	75.29
3	Bio Mass	340	519	250	402.00	250	97.00	250	270.61
4	Waste to Power (Indstl./Urban)	5	24.00	5	0	2	9.34	30	21.00
5	Solar Power	10000	9362.64	11000	6529.20	8500	6447.14	9000	4166.28
OFF - GRID/DECENTRALISED POWER (Capacities in MWeq)									
6	Waste to Power	15	11.5	15	6.58	10	19.09	10	10.34
7	SPV Systems	100	155.50	200	244.20	400	62.78	500	122.09
OTHER RENEWABLE ENERGY SYSTEMS									
8	Family Type Biogas Plants (No. in lakh)	0.65	0.44	1.00	0.27	0.76	0.30	0.60	0.08

III GREEN ENERGY CORRIDOR (GEC)

3.7 The Ministry stated that the Inter-State Transmission System (ISTS) component of GEC consisted of total length of 3200 ckm transmission lines and 17000 MVA substations. The project has been implemented by Ministry of Power (MoP) through Power Grid Corporation of India Ltd (PGCIL) and completed in March 2020. The Intra-State component of GEC project is implemented by the State Transmission Utilities (STUs) of the respective States and has been divided into total 84 packages by the States. As of 31.12.2020, a total of 7365 ckm of transmission lines have been constructed out of total target of 9700 ckm, and a total of 9976 MVA substations have been charged out of total target of 22600 MVA.

3.8 The year-wise financial allocation vis-à-vis utilization during the last three years regarding GEC, as furnished by the Ministry are given below:

Financial Year	2017-18	2018-19	2019-20
Budget Estimates in Rs. Crore	500.00	600.00	500.00
Revised Estimated in Rs. Crore	500.00	500.00	52.61
Fund disbursed in Rs. Crore	499.97	500.00	52.61

3.9 When asked about the reasons for non-utilization of allocated funds, the Ministry stated that:

- a) "Some projects were retendered due to low bid turnout, hence delay in award of work (Maharashtra, Himachal Pradesh and Madhya Pradesh).
- b) Some projects had to be cancelled as the planned renewable energy generation projects did not come up (Rajasthan). Accordingly, alternate projects were planned and sanctioned. These projects are under implementation.
- c) Some projects were cancelled due to no bid turnout (Maharashtra and Himachal Pradesh).
- d) Some projects were cancelled by the State (Andhra Pradesh).
- e) The States are yet to submit their proposals for obtaining 30% balance grant for most of the projects which have been commissioned."

3.10 About the physical targets and achievements under GEC Programme during the last three years, the Ministry stated that the Inter-State Transmission System (ISTS) portion of GEC has been completed in March, 2020. In case of Intra-State portion of GEC, the year-wise physical targets vis-à-vis achievement during last three years and the current year are as follows:

Financial Year	2017-18	2018-19	2019-20	2020-21 (till 31.12.2020)
Transmission lines target (ckm)	650	2000	2500	1600
Transmission lines constructed (ckm)	742	2300	2900	965
Substations capacity target (MVA)	-	4750	2000	6140
Substations charged (MVA)	-	4757	2055	3164

3.11 In response to a query about the reasons for delay in completion of Green Energy Corridor, the Ministry stated as under:

"There was no delay in the Inter-State Transmission System (ISTS) portion of GEC. However, the Intra-State portion of GEC project has been delayed in all the States due to various reasons such as Right of Way (RoW) issues, delay in issuing tenders, delay in substation land acquisition, delay in award of works due to low bid turnout in various projects which resulted in retendering several times, court cases, forest clearances, etc. The commissioning schedule of GEC project was first extended till 31.12.2020 upon the requests from the State Governments

and then further extended up to 31.05.2021 due to disruption of works because of COVID-19."

3.12 In response to a query about the strategy of the Ministry to integrate the 175 GW of intermittent renewable energy into the Grid and need to promote storage based renewable projects, the representatives of the Ministry deposed during the evidence as under:

"...regarding the integration of 175 gigawatts of renewable power by 2022, Ministry of Power has got its study done by Lawrence Berkeley Laboratory of USA under the project 'Greening the Grid'. According to that report, we do not require any storage for integrating 175 gigawatts of renewable energy. We can manage with the existing grid without any instability. Yes, for integrating 450 gigawatts renewable energy by 2030, the report prepared by CEA indicates that it will require 34 gigawatts hour of storage capacity. So, immediately, we do not have any requirement of storage. But, certainly after 2023-24, we will require storage as we increase the share of renewable energy in our energy basket."

3.13 Further explaining the problems in integration of Renewable Energy into the Grid, the representatives of the Ministry deposed during the evidence as under:

"...grid integration is going to be a huge technical issue. It is going to take us everything we have to address this issue.there is a problem because there are two Ministries. Grid integration is basically within the purview of the Power Ministry. While we look after generation, we do not look after grid stability, grid safety, how much grid absorbs etc. So, there is an issue there."

IV. RESEARCH, DESIGN, DEVELOPMENT AND DEMONSTRATION IN RENEWABLE ENERGY SECTOR

3.14 When asked about the budgetary allocation and the actual expenditure incurred on research, design and development in New & Renewable Energy during the last three years, the Ministry furnished the following:

Amount in crores			
Year	Budget Estimate (BE)	Revised Estimate (RE)	Expenditure
2017-18	144.00	81.00	52.98
2018-19	94.00	43.00	25.43
2019-20	60.00	15.00	15.00
2020-21	20.00	49.00*	17.60 till date)

*RE-2020-21 was enhanced due to committed liabilities in R&D projects and fund will available in last week of March, 2021

3.15 On a query regarding low utilization of funds during the previous years, the Ministry stated that:

"R&D projects are generally with duration of three to four years and the associated efforts are continuous in nature. The Funds are released after compilation of various milestones achieved and proper evaluation of the ongoing projects. The fund has been utilized effectively and subsequently demanded additional fund under Revised Estimate (RE) for 2020-21 for smooth implementations of the ongoing R&D projects."

CHAPTER IV

POWER FROM RENEWABLES: GRID INTERACTIVE AND OFF-GRID RENEWABLE POWER

4.1 Allocation of Rs. 4324.48 crores for the Grid Interactive Renewable Power and Rs. 1180.50 crores for Off-Grid/Distributed and Decentralized Renewable Power have been made for the year 2021-22.

4.2 When asked about the details of financial utilization vis-à-vis allocation during the previous years under Grid-interactive and Off-Grid Renewable Power, the Ministry furnished as given below:

Grid-interactive Renewable Power			
(Rs. In Crores)			
Year	BE	RE	Actual Expenditure
2017-18	4034.50	2574.32	2505.52
2018-19	3762.50	3963.14	3621.72
2019-20	4272.15	3089.64	2811.07
2020-21	4350	2689.48	2123.18 (as on 31.01.2021)
Off-Grid Renewable Power			
2017-18	904.00	1084.26	986.27
2018-19	1025.48	937.31	669.45
2019-20	688.00	550.36	494.12
2020-21	1184.20	557.93	169.42 (as on 31.01.2021)

(A) WIND POWER

4.3 The Ministry stated that the estimated wind power potential in the Country is 695.50 GW at 120 meter and 302.25 GW at 100 meter above ground level. Against the overall target of 60 GW, the cumulative installed capacity of Wind Power is 38683.65 MW as on 31.01.2021.

4.4 On a query about the fund utilization *vis-à-vis* allocation during the last three years, the Ministry furnished the following:

Year	Funds allocated (in Crores)	Funds utilized (in Crores)
2017-18	750	750
2018-19	950	950
2019-20	1026	1026
2020-21	1059.35	1013.11 (as on 10.02.2021, the remaining funds are likely to utilized by March 2021)

However, it may kindly be noted that these are liabilities of wind GBI scheme which was closed in March 2017.

4.5 Regarding physical targets and achievements in wind power sector during the previous years, the Ministry furnished the following:

Year	Target (in MW)	Achievements (in MW)
2017-18	4000	1865.23
2018-19	4000	1480.97
2019-20	3000	2117.78
2020-21	3000	939.90 (till 31.01.2021)

4.6 When asked to explain the reasons for non-achievement of targets, the Ministry stated that:

"The capacity additions till 2017 (i.e. 32.27 GW) were through Feed in Tariff (FiT) mechanism. Subsequently, the tariff regime shifted from Feed-in-Tariff (FiT) to bidding route, which disrupted the installation of projects. Further, recently the projects have been delayed due to COVID-19 pandemic."

4.7 Regarding physical target and financial allocation for the year 2021-22, the Ministry stated as under:

"It may be noted that there is no linkage between capacity commissioned and budgetary allocation. A budget of Rs 1100 crore has been allocated for 2021-22 for clearing the past liabilities under GBI scheme which was operational till March, 2017. The funds are sufficient for the financial year. The new wind power projects are being set up by private developers based on techno-economic viability of the project. Government is not providing any direct central financial assistance for installing new wind power project."

(B) SOLAR POWER

4.8 As per the Ministry, the estimated solar power potential in the Country is 748.98 GW. Against the overall target of 100 GW, the installed capacity is 38794.03 MW as on 31.01.2021.

4.9 The Ministry stated that most of the investment in solar energy sector comes from private sector including from some CPSUs like SECI, NTPC etc. and the Government has allowed 100% FDI in Renewable Energy Sector through automatic route. Budgetary allocation and actual expenditure under Solar Power Programme during previous years, as furnished by the Ministry are given below:

(in Rs. Crore)			
Year	BE	RE	EXP.
2017-18	2259.00	1003.12	1001.33
2018-19	2045.25	2157.24	1903.76
2019-20	2479.90	1789.49	1529.28
2020-21	3517.60	1776.24	991.59

4.10 When asked about the physical achievements vis-a-vis targets with respect to the Solar Power Programme, the Ministry furnished as under:

Year	Yearly Target (MW)	Capacity added during year (MW)	Cumulative capacity (MW)
2018-19	11000	6529.20 MW	28180.66 MW
2019-20	8500	6447.14 MW	34627.79 MW
2020-21	9000	4166.28 MW (as on 31.1.2021)	38794.03 MW (as on 31.1.2021)

(B)(i) SOLAR ROOF-TOP

4.11 The Ministry stated that, the National Institute of Solar Energy (NISE) has estimated solar rooftop potential of 42.83 GW in the Country. Against the overall target of 40 GW, an aggregate capacity of 3.73 GW of grid connected rooftop systems has been installed in the country as on 31.12.2020.

4.12 In response to a query regarding the reasons for slow progress of Rooftop Solar Programme, the Ministry stated as under:

“The major issues faced during implementation of Ph-I of RTS Programme are as follows:

- Multiple tenders by different agencies and subsequently considerable delay in tendering.
- Involvement of multiple agencies viz. SNAs, DISCOMs, PSUs, Developers etc.
- Lack of uniform regulation/mandatory notification for rooftop solar
- Lack of awareness among the prospective beneficiaries.
- DISCOMs apprehension to lose revenue

To address the issues faced during implementation of Ph-I, and especially the fact that the consumer had to approach multiple agencies for getting a RTS plant installed, it has been decided to implement the programme by making the DISCOMs and its local offices as the nodal points for implementation of the RTS programme.”

(B)(ii) OFF-GRID/DECENTRALIZED SOLAR PROGRAMME

4.13 When asked about the actual expenditure vis-a-vis allocation regarding the major off-Grid/decentralized schemes, the Ministry furnished the following:

(Rs. in crores)		
Year	B.E	Actual Expenditure
2017-18	685.00	884.25
2018-19	840.50	603.94
2019-20	518.00	455.13

4.14 Given below are the physical achievements *vis-a-vis* targets with respect to off-grid applications as furnished by the Ministry:

S. No	Applications	Target 2017-18	Ach 2017-18	Target 2018-19	Ach 2018-19	Target 2019-20	Ach 2019-20	Target 2020-21	Ach. 2020-21*
1	SPV Systems (MW)	150	217	200	120	400	103	500	122
2	Solar Lights	100000	441668	100000	125229	300000	61940	200000	113186
3	Solar Pumps	40000	56350	50000	65892	75000	19036	60000	20605
4	Solar Power Packs	10	9	10	2	5	2.5	2	1.8
5	Study lamps	2000000	1070052	5000000	3445950	3000000	1705655	1000000	362668

*Achievement of 2020-21 till 31.01.2021

4.15 On being asked about the reasons for non-utilization of allocated funds and short-fall in achievement of physical targets, the Ministry stated that:

"During 2018-19, Off-grid and Decentralized solar PV Applications Programme was launched on 07.08.2018. Thereafter, it took some time to aggregate the demand from State agencies. Further, centralized tender was conducted for procurement of solar street lights and solar study lamps. Sanctions for solar street lights and solar study lamps were issued on 25.09.2019. Sanction for off-grid solar power plants were issued on 05.03.2019. Therefore, funds for these projects were released in 2019-20.

4.16 The Ministry stated that there were minor savings under Off-grid and Decentralized Applications Programme during 2019-20 on following accounts:

“(i) Savings of Rs. 46.19 Crore under Off-grid Solar NER head (2552.00.318.02): Allocation for year under this head was high as compared to demand. Further due to rough terrain and harsh working conditions projects in NER States typically take more time than the General category States. Also under PM-KUSUM Scheme, sanctions were issued to the States of Meghalaya, Tripura and Manipur (attached), however, due to delay in placement of work order, eligible advance of 40% of CFA could not be released to these States. This was to some extent due to slow down in the month of March 2020 due to COVID-19.

(ii) Savings of Rs. 3.57 Crore under Off-grid Solar GCCA head (2810.00.101.02): Savings of Rs. 3.56 Crore were due to slow progress by states particularly for solar power plants. Projects were sanctioned in March, 2019 and states per expected to complete tender and placement of work order within 2-3 months. However there were huge delays. Taking a serious view on this, Ministry had cancelled the projects wherein there were huge delays. Further, to avoid such delays in future, Ministry has decided to implement solar power plants in RESCO mode. In the new guidelines, projects can be tendered through a central PSU and these projects will have shorter implementation period.

(iii) Savings of Rs. 27.8 lakh under Off-grid Solar SC head (2810.00.789.01): Only a small amount could not be utilized due to non-availability of release case of similar amount. It may be noted that additional allocation of Rs. 7 Crore at RE stage was also utilized with small savings of Rs. 27.8 lakh.

(iv) Savings of Rs. 87.43 lakh under Off-grid solar TSP head (2810.00.796.02): Only a small amount could not be utilized due to non-availability of release case of similar amount."

(B)(iii) PM KUSUM SCHEME

4.17 Regarding the PM KUSUM (Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan) Scheme, the Ministry stated that the scheme aims to add a solar capacity of 30.8 GW by 2022. The total central financial support provided under the scheme would be Rs. 34,035 crore. The Scheme consists of following three components:

Component A	10,000 MW of Decentralized Ground Mounted Grid Connected Renewable Power Plants.
Component B	Installation of 20 lakh standalone Solar Powered Agriculture Pumps.
Component C	Solarisation of 15 Lakh Grid-connected Solar Powered Agriculture Pumps.

4.18 Cumulative sanctioned capacity and targets for FY 2020-21, as furnished by the Ministry are shown below:

Component	Targets (2020-21)	Sanction
Component-A	5000 MW	4910 MW
Component-B	7 lakh diesel pumps	3.74 lakh solar pumps
Component-C	4 lakh GC pumps	0.80 Lakh pumps 4.4 lakh (Feeder Level)

4.19 Achievement against projects sanctioned under PM-KUSUM Scheme during 2019-20 as on 31.12.2020, as furnished by the Ministry is given below:

S. No.	State	Component-A (MW)		Component-B (Nos.)		Component-C (Nos.)	
		Sanction	Achievements	Sanction	Achievements	Sanction	Achievements
1	Haryana	25	LoA issued	15000	3721	468	No progress reported
2	Chhattisgarh	-	-	20000	Cancelled on request of State	-	-
3	Delhi	10	No progress reported	-	-	-	-
4	Gujarat	40	Applications	4000	2	18500	No

			being invited				progress reported
5	Himachal Pradesh	10	LoA issued	550	9	-	-
6	Jharkhand	10	No progress reported	10000	130	500	No progress reported
7	Karnataka	50	No progress reported	6000	15	-	-
8	Kerala	10	Applications invited	-	-	-	-
9	Madhya Pradesh	100	Applications being invited	25000	5343	15000	No progress reported
10	Maharashtra	300	No progress reported	30000	Yet to issue LoA	9000	No progress reported
11	Manipur	-		20	0	80	Cancelled on request of State
12	Meghalaya	10	No progress reported	1700	0	60	No progress reported
13	Mizoram	-		200	No progress reported	-	-
14	Odisha	-		2500	48	-	-
15	Punjab	30	No progress reported	4500	250	3900	No progress reported
16	Rajasthan	325	LoA issued	25000	5248	12500	24
17	Tamil Nadu	-		17500	830	20000	No progress reported
18	Tripura	5	No progress reported	1300	0	1300	No progress reported
19	Uttar Pradesh	75	No progress reported	8000	950	1000	No progress reported
Total		1000	0	171270	16546	82308	24

4.20 During the evidence, in response to a query about low utilization of funds and non-achievement of targets under KUSUM Scheme, the representative of the Ministry deposed as under:

“The scheme guidelines were framed in 2019 and after that, there was interaction with the States to know their demands and that took

some time. By the time the scheme reached a stage where it could be implemented, it was affected by COVID-19. Component B has been a problem because of the financial position of the States. They have not been able to commit their contribution of 30 per cent of their share. Maharashtra has not issued any letter of award so far. Some States have been better. I do not think that we will see a very speedy progress in Component B unless States come on board and there are some signs that the pace is picking up. But we are very hopeful of Component C. There has been a huge demand from States and that demand is more than four to five times of what we can allocate and that is because of the fact (that) States will not have to contribute 30 per cent of subsidy for solarisation of agriculture. So, we are hopeful that what we are not able to do in Component B, we will be able to make up by good performance in Component C.”

(B)(iv) MANUFACTURING IN SOLAR SECTOR

4.21 Regarding status of Domestic Manufacturing in the Solar Sector, the representatives of the Ministry, during the evidence, deposed as under:

“.....manufacturing capacities are limited, only 2.5 gigawatt for solar cell and 9-10 gigawatt for solar module. Our demand is 30 gigawatt every year.”

4.22 Regarding Productivity linked Incentive (PLI) Scheme to facilitate domestic manufacturing in Solar Sector, the Ministry furnished the following:

PLI schemes to create manufacturing global champions for an AtmaNirbhar Bharat have been announced for 13 sectors including manufacturing of ‘High Efficiency Solar PV Modules’. The government has committed nearly Rs. 1.97 lakh crores, over 5 years starting FY 2021-22 including Rs. 4500 crore for ‘High Efficiency Solar PV Modules’ which will be implemented by Ministry of New & Renewable Energy (MNRE). It will help bring scale and size in Solar PV manufacturing.”

4.23 During the evidence, in response to a query about cost difference between domestic and imported solar modules/cells and whether the proposed custom duty will be able to off-set this difference, the representatives of the Ministry deposed as follows:

“..the cost difference between (domestic) solar cells and solar module vis-à-vis imported is 21 to 22 per cent. The safeguard duty

which is currently available is less than 15 per cent. It is not helpful for domestic manufacturers and they are not willing to put new plants."

4.24 When asked about the rationale behind imposition of custom duty/safeguard duty when the same gets covered under 'change in law' clause of the PPA, the representatives of the Ministry, during the evidence, deposed as under:

".....we faced this kind of problem when safeguard duty was imposed. This time we do not want to repeat such kind of thing. So, we have proposed to the Government to impose Basic Custom Duty with a future date i.e. April, 2022 so that all existing projects can be commissioned before that."

(C). BIOMASS POWER AND BAGASSE CO-GENERATION PROGRAMME

4.25 In response to a query regarding the budgetary allocation *vis-à-vis* utilization for the previous years under Biomass Power/Bagasse Cogeneration Programme, the Ministry furnished the following:

Year	Allocation (R.E.) (in Rs Crores) (including both Biomass Power and Waste to Energy)	Utilization (in Rs Crores) (including both Biomass Power and Waste to Energy)
2018-19	8.50	6.83
2019-20	4.68	4.50
2020-21	14.15	0 (as on 09.02.2021)
For off-grid non-bagasse cogeneration projects:		
2018-19	39.50	3.34
2019-20	10.03	0.96
2020-21	14.23	3.80 (as on 09.02.2021)

4.26 When asked about the reasons for non-utilization of funds in the previous years, the Ministry stated that:

"As per the provisions of the scheme, prior sanction for CFA is required. Subsequent to the sanction, the funds are released after successful commissioning and receipt of performance inspection of the plants which includes three months continuous operation data with minimum 72 hours at 80 % rated capacity.

The performance inspection of the plants got delayed in FY 2020-21 on account of COVID pandemic. The inspections have started from

the month of October- November 2020 and reports are now being submitted."

4.27 When asked about the physical achievements *vis-à-vis* targets under Biomass Power/Bagasse Cogeneration Programme during the previous years, the Ministry furnished:

Year	Target (MW) (includes both grid connected and off-grid)	Achievement* (MW) (includes both grid connected and off-grid)
2018-19	250	402.00
2019-20	250	97.00
2020-21	250	270.61 (as on 31.01.2021)

*As reported by SNAs

4.28 Regarding reasons for non-achievement of the physical targets, the Ministry stated that the Biomass Power/Bagasse Cogeneration sector has been facing problems such as lack of working capital and non-availability of biomass at adequate prices which resulted in slow progress.

(D) SMALL HYDRO PROGRAMME (SHP)

4.29 The Ministry stated that the identified potential of Small Hydro Power generation capacity in the country is 21133.62 MW from 7133 identified sites. Against the overall target of 5 GW, installed small hydro power capacity as on 31.01.2021 is 4758.46 MW.

4.30 Details regarding Utilization of funds *vis-a-vis* allocation for the previous years under SHP, as furnished by the Ministry, are given below:

S.No.	Year	Financial support (Rs. In Crore)		
		BE	RE	Expenditure
1	2017-18	138	123.50	123.92+23.57(from IREDA Bond Money) =147.49
2	2018-19	218.50	218.50	137.36
3	2019-20	190.90	94.14	77.28

4.31 In reply to a question about reasons for non-utilization of allocated budget, the Ministry stated that:

"In the year 2018-19, allocation of Rs 90 crore was towards NE States and during 2019-20, it was 28 crore. No new projects could be sanctioned after the lapse of SHP Scheme 2014 on 31.03.2017, resulting in non-utilization of Rs.75.46 crore in 2018-19 and Rs. 16.55 from NER head, which forms the major chunk of the un-utilized budget. Only old liability, created for projects commenced prior to 31st March 2017, is being cleared from the budget allocation."

4.32 On being asked about the physical targets and achievements under SHP programme during the previous years, the Ministry furnished the following:

S.No.	Year	Target (MW)	Achievement (MW)
1	2017-18	100	105.95
2	2018-19	100	107.35
3	2019-20	100	90.00
4	2020-21	100	75.29 (as on 31.01.2021)

4.33 When the Committee queried about the non-achievements of target in 2019-20, the Ministry replied as under:

"During 2019-20, the achievement was short by 10 MW. Reasons for the non-achievement of target are the difficult locations of SHP projects, short working season in hilly areas and natural calamities such as flash floods."

CHAPTER V
RENEWABLE ENERGY FOR RURAL & URBAN APPLICATIONS

(A) RENEWABLE ENERGY FOR RURAL APPLICATIONS

5.1 Under Renewable Energy for Rural Applications, the Ministry has been implementing the National Biogas and Manure Management Programme (NBMMP) which is now renamed as New National Biogas and Organic Manure Programme (NNBOMP). It aims at setting up of family type biogas plants for meeting cooking energy and lighting needs of mainly rural and semi-urban households of the country. Since inception of the National Biogas Programme, a cumulative total of about 50.60 lakh (5.06 million) family type biogas plants have been installed in the country up to 31st December, 2020.

5.2 When asked about the budgetary allocation and actual expenditure under New National Biogas and Organic Manure Programme (NNBOMP) during the previous years, the Ministry furnished the following:

(Rs. In Crore)											
Yr. 2017-18			Yr. 2018-19			Yr. 2019-20			Yr. 2020-21		
BE	RE	Actual Exp	BE	RE	Actual Exp	BE	RE	Actual Exp	BE	RE	Actual Exp
134	93.50	67.70	135	78	42.72	100	51	34.68	60	46.50	28.00 (upto December 2020)

5.3 On being asked about the physical achievements *vis-à-vis* targets during the previous years, the Ministry furnished:

(in numbers)							
Yr. 2017-18		Yr. 2018-19		Yr. 2019-20		Yr. 2020-21	
Physical Target	Achievement	Physical Target	Achievements	Physical Target	Achievements	Physical Target	Achievement
65180	43887	100000	26980	76000	29714	60000	8483 (upto 31.01.2021)

5.4 When asked about the reasons for continuous non-achievement of targets, the Ministry stated that:

- "The increase in costs of construction of biogas plant mainly due to increase in prices of cement, sand, bricks and steel and balance of equipment and accessories which are the major contributors in total cost of a biogas plant, have resulted in lower installations of household biogas plant. The upfront threshold limit of investment for biogas plants by the potential beneficiaries/ households has thus been reduced drastically. The subsidy support also came down below 30% of the total cost of plant installation.
- In order to see the impact of increased cost of installation and consider the same, the States Government Departments/ SNAs etc. have been asked to have re-estimate of the unit costs of various size biogas plants as approved under the NNBOMP so as to assess the required level of support.
- Though, a biogas plant also helps in giving organic enriched bio-manure but the beneficiaries compare it with only cooking fuel. When it comes with cooking, then the LPG is an increasing challenge on account of its easy availability and very less upfront cost to be borne by the beneficiary as compared to a biogas plant and also comparatively more comfort in operation & maintenance. The extensive campaigning for the domestic LPG by rich Oil Marketing Companies (OMCs) and their wider dealer networks is also a positive side for LPG, which is not there for Biogas Plants.
- Financial help in first registration of LPG connection in some States also distanced the potential biogas plant beneficiaries' from opting biogas plants.
- Some of the States, though have good potential but lacked in priority for the Central Sector Scheme, NBMMP.
- Impact of Ujjwala Scheme
- Back-ended subsidy/CFA support & problem faced in DBT mode of Scheme implementation.
- The NNBOMP was launched w.e.f. 01.04.2018 by designating all the States/ UTs Rural Development Departments (RDDs) as new implementing agencies considering that their wide ground network will help in upscaling the numbers, but many of Rural Development Departments of the States and UTs did not start the implementation during the year 2018-19.
- Most of the newly designated State Programme Implementing Agencies mainly the State Rural Development Departments could not initiate the implementation during 2019-20 also and Ministry has taken the matter with the States/UTs."

(B) RENEWABLE ENERGY FOR URBAN, INDUSTRIAL AND COMMERCIAL APPLICATIONS

5.5 Under Renewable Energy for Urban, Industrial and Commercial Applications, the Ministry has been implementing the programme on Energy from Urban, Industrial, Agricultural Wastes/Residues and Municipal Solid Waste. The main objective of the programme is to promote setting up of projects for recovery of energy from municipal solid waste, urban, industrial and agricultural wastes and to create conducive conditions and environment to develop, demonstrate and disseminate utilization of wastes and residues for recovery of energy.

5.6 The Ministry furnished that as of now, 221 waste-to-energy plants based on Municipal Solid Waste (MSW), Urban, Industrial and agricultural waste / residues for generation of power and biogas to meet thermal and electrical energy needs of industries and for production of Bio-CNG for transportation as well as cooking fuel etc have been installed in India. These plants have been established involving industries and private sector following Public Private Partnership (PPP) model.

5.7 In response to a query about physical and financial achievements vis-a-vis targets during last three years under Waste to Energy programme, the Ministry furnished as under:

Year	Physical Targets of Waste to Energy (WTE) projects (MWeq)		Financial Targets of Bio Power (Both Waste to Energy and Biomass projects) (Rs in Cr)	
	Target	Achieved	R.E.	Achieved
2017-18	25	29.5	35	15.07
2018-19	20	6.58	48	10.17
2019-20	12	28.4	14.71	5.46
2020-21	40	31.3 (as on 31.01.2021)	28.38	3.79 (as on 31.01.2021)

5.8 When asked about non-achievement of targets and low utilization of funds, the Ministry stated that:

“The major reasons for non-achievement of target for year 2018-19 and low utilization of funds are as given below:

i) **Non-achievement of targets:** Long delays in obtaining all statutory clearances by project developer from various agencies such as delays in obtaining approval from State Pollution Control Board, loan approvals from the banks and Appraisal Note, approval for filling & storage of CBG/BioCNG from Petroleum and Explosives Safety Organisation (PESO), etc. and delay in signing of PPA, procurement of equipment, construction, lead to the delay in project commissioning and successful operational trial.

ii) **Low utilization of fund:** The CFA is released to the eligible developer after successful commissioning and plant inspection as per the provisions of the Scheme guidelines. There have been instances of delay in commissioning, non-achievement of plant performance and delay in inspection results in lower utilisation of fund. For the FY 2020-21, the reason for lower utilisation of funds is Covid-19 Pandemic.”

CHAPTER VI

RENEWABLE ENERGY FOR NORTH-EASTERN STATES AND SCs/STs

6.1 When asked about the programmes being implemented by the Ministry in North-Eastern States, the Ministry furnished as under:

"Ministry is implementing various programmes/schemes for promoting deployment of grid connected solar, bio-power and small hydro power plants and off-grid/decentralized solar PV systems, biogas plants, etc. in the North-Eastern region."

6.2 In response to a query about financial expenditure vis-a-vis allocation during the previous years in the North-Eastern States, the Ministry furnished as under:

Year	B.E.	R.E.	(in Rs Crores)
			Expenditure*
2015-16	29.00	24.65	21.86
2016-17	496.00	413.00	204.93
2017-18	525.00	394.00	167.99
2018-19	504.53	504.53	122.41
2019-20	513.00	375.00	128.0850
2020-21	565	335.00	29.9644 (upto January 2021)

*Major Head 2522 for NE is non functional Head through which no expenditure can be incurred directly. It is re-appropriated into corresponding functional Head i.e. Major Head 2810 for this Ministry.

6.3 When asked about the physical achievements *vis-à-vis* targets during the previous years in the North-Eastern States, the Ministry furnished the following:

Renewable Energy Capacity addition during the last three years in NE region				
Grid Connected (in MW)				
	2017-18	2018-19	2019-20	2020-21 (upto Jan 2021)
Solar power	6.44	13.74	26.17	2.97
Small Hydro Power	0	28.0	0	0
Off-grid/Decentralized (in No.)				
	2017-18	2018-19	2019-20	2020-21 (upto Jan 2021)
Home lighting systems	65895	23150	-	-

Solar Pumps	-	-	-	53
Solar Street lights	20547	6132	3264	42792
Solar Study Lamps	55427	466910	192152	341546
Biogas Plants	6784	441	615	435

6.4 When the Committee wanted to know the reasons for non-achievement of targets and low utilization of fund in North-Eastern States, the Ministry stated that:

- “The potential for solar & wind energy in North-eastern region is much less in comparison to other states, thus making solar & wind power produced in these areas non-remunerative. This has resulted in reluctance of state governments as well as private sector for setting up of solar & wind power projects in this region.
- Due to low solar insolation and wind power density, the output of such projects is less and cost is relatively high due to remoteness, etc. This results in higher tariff and it becomes unviable for DISCOMs to purchase. Even scheme with subsidy and VGF specially designed for these region find few takers as it is cheaper for utilities to purchase cheaper power from other states than to produce in their own state.
- Both wind & solar power projects are land intensive requiring large flat tracts of shadow free contiguous land with accessibility which is difficult to find in north eastern region.
- Non-receipt of adequate number of proposals from state governments for setting up of grid connected solar & wind power projects in this region make achievements of targets much difficult.”

6.5 During the evidence, in response to a query about low utilization of funds allocated for North-Eastern Region, the representatives of the Ministry deposed as under:

“You pointed out underutilization of funds particularly in the North-East. That is a fact. We are trying to improve the situation as far as the North-East is concerned and we had extended the off-grid scheme only for the North East but unfortunately, still we have not got enough proposals. We will see what we can do in the coming year and I assure that we will do all we can to ensure that there is greater utilization of funds in the North East.

The problem in the North East is that we do not get enough demand for KUSUM or roof top or solar park scheme or other schemes. The only place where we get demand is off grid which is solar lanterns and solar street lights but we had put some emphasis in the last few

months on having more proposals in the off grid particularly for standalone power plants in isolated areas. Hopefully, we will be able to do something in that.”

6.6 Given below are the financial expenditure vis-a-vis allocation by the Ministry during the last five years for SCs and STs:

(Rs. in Crores)						
FY	SC Allocation			ST Allocation		
	BE	RE	Actuals	BE	RE	Actuals
2019-20	426.00	311.00	284.88	441.00	322.00	279.92
2018-19	217.00	217.00	122.01	217.00	217.00	188.18
2017-18	184.00	143.00	139.53	92.00	73.00	71.05
2016-17	173.00	144.00	122.63	87.00	72.00	69.49
2015-16	10	8.63	7.08	0.00	0.00	0.00

CHAPTER VII

PSUs/INSTITUTIONS UNDER THE MINISTRY OF NEW AND RENEWABLE ENERGY

7.1 To support this Ministry, there are five institutions i.e. two Public Sector Undertakings - Indian Renewable Energy Development Agency (IREDA) and Solar Energy Corporation of India (SECI) and three autonomous bodies- National Institute of Solar Energy (NISE), National Institute of Wind Energy (NIWE), and National Institute of Bio Energy (NIBE).

7.2 Details regarding budgetary allocation for the year 2021-22 for PSUs/Institutions under MNRE, as furnished by the Ministry, are given below:

S.No.	Institution	Objective/Focus Areas	BE 2021-22 (Rs in crores)
1	Solar Energy Corporation of India	It is section 3 company under the Companies Act. It functions as the implementing and executing arm for the National Solar Mission.	-
2	Indian Renewable Energy Development Agency (IREDA)	It is a Non-Banking Financial Institution. It provides term-loans for renewable energy projects	-
3	National Institute of Solar Energy (NISE)	It serves as the technical focal point for solar energy research & development.	19.50
4	National Institute of Bio Energy (NIBE)	It focuses on research & development in Bio energy	8.33
5	National institute of Wind Energy (NIWE)	It serves as the technical focal point for wind power research & development.	20.84

(A) INDIAN RENEWABLE ENERGY DEVELOPMENT AGENCY (IREDA)

7.3 When asked about the performance of IREDA during the previous years, the Ministry furnished the following:

(Rs. In Crores)			
	2017-18	2018-19	2019-20
Loan Sanctions	12,130.01	11,941.87	12,696.11
Loan Disbursements	8,328.38	9,385.37	8,785.31
Total Income	1,813.18	2,022.21	2,372.38
Profit before Tax	538.97	310.95	241.11
Profit after Tax	370.44	249.91	214.55

7.4 The Ministry stated that as on 31.03.2020, IREDA had outstanding foreign currency loan of Rs. 8,857.20 crore guaranteed by the Government of India for which IREDA had also paid the guarantee fee as given below:

Detail of Guarantee Fee paid	INR
2019-20	96,23,15,712.00
2020-21	1,18,23,86,364.99

7.5 As per the Ministry, IREDA has Non-performing Assets of Rs. 69.2237 crore in Biomass Sector (11 projects) and 628.4256 crore in Small Hydro Sector (9 Projects).

(B) SOLAR ENERGY CORPORATION OF INDIA (SECI)

7.6 On being asked about the financial allocation vis-à-vis utilization during the previous years, the Ministry furnished the following details:

Equity support received from MNRE		
Year	Allocation	Utilization
FY 2017-18	Rs. 50 Cr.	the funds received have been utilized for CAPEX activities & to meet the working capital requirements.
FY 2018-19	NIL	
FY 2019-20	NIL	

(C) NATIONAL INSTITUTE OF SOLAR ENERGY (NISE)

7.7 The Ministry furnished the following details regarding financial allocation vis-à-vis utilization during the previous years:

Financial Year	Budget (BE) (Rs. in crore)	Budget (RE) (Rs. in crore)	Expenditure (Rs. in crore)
2017-18	20.00	14.64	15.21
2018-19	18.00	18.00	18.11
2019-20	15.00	13.00	16.47

(D) NATIONAL INSTITUTE OF WIND ENERGY (NIWE)

7.8 On being asked about financial allocation vis-à-vis utilization during the previous years, the Ministry furnished the following:

Year	Budget Estimate (in Crores)	Revised Estimate (in Crores)	Funds utilized (in Crores)
2018-19	20	0	0
2019-20	17	23	23
2020-21	1.5	13.5	1.5 (as on 10.02.2021, the remaining funds has been made available through re-appropriation in December 2020 and the same are likely to utilized by March 2021)

(E) NATIONAL INSTITUTE OF BIO ENERGY (NIBE)

7.9 Details regarding financial allocation vis-à-vis utilization during the previous years, as furnished by the Ministry are given below:

Year	Grant Received (Rs in lakhs)	Grant Utilized (Rs in lakhs)	Remarks
2017-18	100.00	100.00	The actual expenditure was Rs 204.03 lakhs. The amount of Rs 104.03, which was over and above the grants, was utilized from the Carried forward grant of previous year (Rs 531.02 lakhs). The balance excess of Rs 426.98 (including Bank interest of Rs 51.45 lakhs) was carried forwarded to next year

2018-19	100.00	100.00	<p>The actual expenditure was Rs 285.11 lakhs. The amount of Rs 185.11, which was over and above the grants, was utilized from the Carried forward grant of previous year (Rs 426.98 lakhs).</p> <p>The balance excess of Rs 241.86 plus Bank interest of Rs 40.39 lakhs, i.e. a total of Rs 282.25 lakh was surrendered to the Govt.</p>
2019-20	70.00	66.00	<p>Rs. 4.00 lakhs in GIA capital could not be utilized as the same was released at the fag end of the year.</p> <p>However, the actual expenditure was Rs 169.14 lakhs under General and Salary head. Thus, the excess amount of Rs 103.14 was utilized over and above the grants.</p> <p>The Bank interest was Rs 1.50 lakhs, and the excess expenditure of Rs 101.64 lakhs was adjusted from the interest of Corpus Fund (which was Rs 185.47 lakhs during FY 2018-19) after the approval of Governing Council.</p>

PART -II

OBSERVATIONS/RECOMMENDATIONS OF THE COMMITTEE

DEMANDS FOR GRANTS OF THE MINISTRY FOR 2021-22

1. The Committee note that the Ministry of New and Renewable Energy (MNRE) is the nodal Ministry of the Government of India for all matters relating to renewable energy sources. The Ministry had projected the budgetary requirements of Rs. 9254.77 crores for the financial year 2021-22 but only Rs. 5753.00 crores have actually been allocated which is equivalent to the BE allocation of the Ministry for the financial year of 2020-21. Notwithstanding the reduction of about 38% against the BE proposed by the Ministry, it has been given a huge responsibility of installing 175 GW of renewable energy by the year 2022 which includes 100 GW of solar power, 60 GW of wind power, 10 GW of bio-power and 5 GW of small hydro power in accordance with our commitment to a healthy planet and Nationally Determined Contributions as per the Paris Accord on climate change.

The Committee observe that as on 31st January, 2021, cumulative 92.54 GW of renewable energy capacity has been installed which is a little more than 50 % of the target. It means the remaining 82.46 GW capacity have to be installed in just one and a half year with gainful utilization of funds. However, the past trends reflect that the Ministry has not been able to fully utilize its budgetary allocations during the previous years. In such a situation, the Committee are apprehensive that any laxity on the part of the Ministry in achieving the assigned target may amount to renegeing on our commitment. The Committee, therefore recommend that the Ministry should not only scientifically plan the expenditure of their allocated budget but also take up the work on mission mode so that the target of 175 GW is successfully achieved by the year 2022.

BUDGET ALLOCATION AND UTILIZATION

2. The Committee note that Gross Budgetary Support to the Ministry was substantially decreased at the time of revised estimates. The allocation was reduced by about 26 % during the year 2019-20 and about 38 % for 2020-21. The Committee observe that the Ministry has not been able to fully utilize even the decreased allocations during the previous years. It could utilize 86.97%, 91.53 % and 69.78% of revised budgetary allocations during the years 2018-19, 2019-20 and 2020-21 (upto January, 2021) respectively. The Committee find it very strange that funds are un-spent in such an important and dynamic sector with a huge target of 175 GW to be achieved by the year 2022. Non-utilization of budgeted funds are unacceptable in a Country where budgetary resources are limited and so many dream projects are to be completed with prudent financial planning and therefore it is of utmost importance that the budgetary allocations are fully and properly utilized. The Budgetary allocations approved by the Parliament for a particular financial year cannot be left to remain only on paper as these are scarce lapsable funds which are meant to be properly spent and fully utilized within the prescribed budgetary time-frame well before the close of the particular financial year. The Committee are of the opinion that variation in budgetary allocations at the stage of revised estimates and low utilization of even the decreased allocated amounts under various Heads are symptomatic of poor financial planning by the Ministry. The Committee, therefore, recommend that the Ministry should streamline its budget formulation process and increase its fund absorption capacity, as continuous shortfall in utilization of the allocated funds will have adverse impact on the demand of budgetary allocations of the Ministry for subsequent financial years.

PHYSICAL TARGETS AND ACHIEVEMENTS

3. The Committee are concerned to note that the Ministry has continuously failed to achieve its yearly physical targets. For the years 2018-19 and 2019-20, against the Grid connected Renewable Energy target of 15,355 MW and 11,852 MW, the Ministry could achieve only 8,519.52 MW and 8,761.26 MW respectively. There was shortfall of about 45 % and 26 % during these years. Similarly, during the year 2020-21 (upto January, 2021), 5473.08 MW could be installed against the target of 12,380 MW. The Committee feel that with continuous non-achievement of the assigned yearly physical targets, the Ministry may find it extremely difficult to achieve 175 GW by 2022. Against such gross under-achievement, the Committee expect the Ministry to significantly improve its target fulfillment in the financial year 2021-22 and recommend that the Ministry should ensure continuous real-time monitoring of the working of the implementing agencies, support them vigorously in sorting out the glitches and take corrective action, wherever required without any delay so that the physical targets set for the financial year 2021-22 under various Heads of the Grant are successfully achieved.

GREEN ENERGY CORRIDOR (GEC)

4. The Committee observe that the Green Energy Corridor Project aims at synchronizing electricity produced from renewable sources, such as solar and wind, with conventional power stations in the Grid. For evacuation of large-scale renewable energy, Intra State Transmission System project was sanctioned by the Ministry in the year 2015-16. The project is being implemented by eight renewable-rich states of Tamil Nadu, Karnataka, Andhra Pradesh, Maharashtra, Gujarat, Madhya Pradesh, Rajasthan and Himachal Pradesh through their respective State Transmission Utilities (STUs). Its regular monitoring is done by the

Ministry and it is understood that a Project Appraisal Committee in the Ministry also monitors the project and recommends on the disbursement of the central grant to the STUs. The Committee are however, pained to observe that despite having well placed mechanism, the project has not marched at the desired pace and the construction of cumulative 7365 ckm transmission lines and commissioning of 9976 MVA capacity substations during the last 5 years' period (as on 31.12.2020) have been far from satisfactory and much below the target fixed which was 9700 ckm transmission lines and 22600 MVA substations. In the Committee's opinion, among the various factors stated to be responsible for the slow pace in the progress of Green energy Corridor Project, the inadequate monitoring by the Ministry and lack of the priority which the project deserved to be given, have also contributed a lot in missing the target. The Committee are concerned about the already delayed implementation of the intra state Green Energy Project. The Committee observe that to meet the given target, 2335 ckm of transmission lines have to be installed and substations of aggregate capacity of 12624 MVA have to be charged by May 2021 so as to meet even the extended deadline, which seems highly unlikely seeing the track of past performance. The Committee observe that for the year 2021-22, Rs. 300 crores have been allocated at BE stage. Keeping in view the importance of the project for evacuation of power from renewable energy rich States and its integration with the Grid, the Committee would like to know the action plan now prepared by the Ministry and recommend the Ministry to work on mission mode to earnestly pursue the matter with the States concerned and get the Green Energy Corridor ready within the given time frame in order to avoid grid congestion and to facilitate evacuation of large scale renewable power capacity.

WIND POWER

5. The Committee note that against the target of 60 GW of installed Wind Power to be achieved by the year 2022, a total capacity of 38.68 GW has been installed as on January 31, 2021. The Committee observe that the Ministry could not achieve its physical targets during the previous three years as shortfall of 53%, 63% and 30% were noticed respectively in the years 2017-18, 2018-19, 2019-20. For the year 2020-21, against the target of 3000 MW, the Ministry has been able to achieve only 939.90 MW till January 31, 2021. Despite under-achievement of the physical targets, the Committee find it paradoxical that the funds allocated for the previous years have reportedly been fully utilized. In this regard, the Committee are informed that there is no linkage between capacity commissioned and budgetary allocations which is rather strange and unacceptable. A budget of Rs 1100 crores has been allocated for the financial year 2021-22 for only clearing the past liabilities under GBI scheme which was operational till March, 2017 and now the Government has not been providing any direct central financial assistance at all for installing new wind power project. The Committee are astonished to note that the Government is no longer supporting the installation of wind power projects in the Country when more than 35% of the overall target of 60 GW of wind energy is yet to be achieved. For promotion of renewable power in the Country, the Committee recommend that the Ministry should continue to financially support wind power projects and also facilitate private players in order to ensure achievement of targets of 60 GW Wind Energy by the year 2022 which will give a much needed boost to the renewable energy sector.

SOLAR POWER – ROOF TOP

6. The Committee note that more than 60% Budget of the Ministry is allocated for development of Solar Power including PM-KUSUM Scheme.

However, even here, the Ministry has not been able to achieve its yearly solar energy targets. It missed its target for the years 2018-19 and 2019-20 with a shortfall of about 40 % and 25% respectively. During the year 2020-21, the Ministry could achieve as low as 46% of its target till January, 2021.

The Committee are also concerned with the weak performance of the Ministry in solar roof-top programme since against the target of 40 GW of installed roof-top solar power by 2022, only an aggregate capacity of 3.73 GW has been installed as on December 31, 2020, that is, target achievement of less than even 10%. It is observed that the roof-top systems are not proving to be attractive for the consumers due to time consuming and complicated procedures for setting it up and delays in disbursement of subsidy, etc. The Committee believe that given the performance of the Ministry in this Sector till date, the Roof-top Solar target of 40 GW by 2022 is highly unlikely to be achieved with the present pace of progress. In the Committee's view, one major reason for such a tardy progress is lack of awareness about this scheme amongst the masses. The Committee thus recommend that:

- i) The Ministry should widely advertise the benefits of having roof-top solar power system and also about the incentives being provided by the Government for the same in all vernacular print and electronic media so as to spread awareness among the masses.
- ii) Single Window Clearance System should be put in place, in the first phase, in all District headquarters in the country to provide all assistance/services/information to the customers and facilitate them in getting roof top solar system installed in hassle free manner.
- iii) The process of subsidy disbursement should be made transparent, simpler and faster through the aforesaid Single

Window Clearance System and preferably a digital platform be developed for this purpose to reduce the human interface in the process.

PM-KUSUM

7. The Committee note that PM - KUSUM is one of the major central sector schemes of the Ministry. An allocation of Rs. 1000 crores was made under this scheme for 2020-21 which has been reduced to Rs. 210 crores at the stage of Revised Estimates i.e. a massive reduction of about 80%. Against the target of 10,000 MW under Component A, the Ministry has sanctioned only 1000 MW and the achievement is zero as on 31st December, 2020. Under component B, against the target of 20 lakh stand alone solar water pumps, the Ministry has sanctioned only 1,71,270 and the achievement is 16,546. Under component C, against the target of 15 lakh Grid-connected Solar Powered Agriculture Pumps, the Ministry has sanctioned only 82,308 and the achievement is a miserable 24. The Committee are extremely disappointed with the performance of the Ministry under such a cutting-edge scheme touching the lives of rural masses. The Committee, therefore recommend that the Ministry should coordinate and hold consultations with the State Governments and actively encourage them to participate in the Scheme.

MANUFACTURING IN SOLAR SECTOR

8. The Committee note that domestic manufacturing capacity in solar sector is limited and only 2.5 GW of solar cells and 9 to 10 GW of solar modules are manufactured in the Country against the annual demand of 30 GW in general and 100 GW in the context of achieving the target of 175 GW Solar Energy by the year 2022. A Productivity Linked Incentive (PLI) Scheme has been announced in the Budget in order to encourage manufacturing of 'High Efficiency Solar PV Modules' with an outlay of Rs 4500 crores over 5 years. The Committee feel that though it took more

than 5 years to formulate a dedicated scheme for encouraging domestic manufacturing in solar sector but nonetheless it is a welcome initiative taken by the Government. This assumes more significance in the wake of the “Atmanirbhar Bharat” mission. The Committee hope that the Ministry will implement this scheme in all sincerity so that it yields the desired results which in turn will substantially reduce our dependence on import and thereby our precious foreign exchange will be preserved.

The Committee observe that during examination of the subject, the Ministry had submitted that the cost difference between domestic and imported solar cells/modules is about 21-22% whereas the safeguard duty currently available is less than 15% and as stated by the Ministry, it is not helpful for domestic manufactures and they are not willing to put new plants. As informed to the Committee, it has been proposed to the Government to impose basic Custom Duty with a future date i.e. April, 2022 so that all existing projects can be commissioned before that. The Committee would expect that while considering the proposal for imposition of basic custom duty on imports related to solar sector, the Government must deeply analyze various ramifications taking into account the facts like availability of solar cells/modules in the domestic market, likelihood of rise in prices of imported products resulting in discouragement to potential customers, impact on achieving 100 GW solar energy target by the year 2022 etc. The Committee desire that structured efforts need to be taken by the Government for incentivizing the domestic manufacturing of all solar energy related products to achieve the “Atmanirbhar Bharat” mission in real sense.

RENEWABLE ENERGY FOR RURAL APPLICATIONS

9. The Committee note that the budgetary allocations for New National Bio-Gas and Organic Manure Programme (NNBOMP) since the year 2017-18 has been considerably reduced and the Ministry has

consistently failed to utilize even the reduced financial allocation. The physical targets under this scheme also remain unachieved. The Committee are informed that the non-achievement of targets is due to increase in cost of construction, low priority given to this scheme at the State level, impact of Ujjwala Scheme etc. The Committee observe that apart from electricity generation, Bio-Gas Plants not only meet the cooking fuel requirements of rural folks but also provide them organic bio-manure. The Committee, therefore, recommend that the Ministry should widely publicise the benefits of this scheme and work towards providing affordable lending facilities for meeting the upfront cost for installation of Bio-Gas Plants.

WASTE TO ENERGY

10. The Committee observe that 221 waste-to-energy plants based on Municipal Solid Waste (MSW), Urban, Industrial and agricultural waste/residues for generation of power and biogas to meet thermal and electrical energy needs of industries and for production of Bio-CNG for transportation have been installed in the Country. The Committee note that the Ministry has more or less, been able to achieve the physical targets under waste to energy programme but the fund utilisation has been poor as it could not utilise the full allocated amount. It can thus be inferred that there is scope to increase the physical target under this programme extending its reach further. The Committee also believe that use of agricultural waste/residue to produce energy may also help in reducing stubble burning and thereby addressing the problem of air pollution. The Committee, therefore recommend that the Ministry should encourage setting up of waste to energy plants in consultation with local bodies for better waste-management in urban as well as rural areas.

RENEWABLE ENERGY FOR NORTH EASTERN STATES

11. The Committee note that the Ministry has not been able to fulfil its obligation regarding utilization of 10% of its annual budget for development of renewable energy in the North-Eastern Region. It is submitted by the Ministry time and again that adequate proposals have not been received from North-East States, due to which there is substantial shortfall in fund utilization. It is also submitted that the potential for solar & wind energy in North-Eastern Region is much less in comparison to other states, thus making solar & wind power produced in these areas non-remunerative. But we are aware that the north-eastern region has substantial potential for small hydro power; however its capacity addition since 2017-18 has been zero except for minimal addition in 2018-19. Keeping in view the fact that the north-eastern states are more interested in off-grid and decentralised schemes of the Ministry, the Committee recommend that the Ministry should give priority to North-Eastern States in implementation of off-grid and decentralised application programme of the Ministry and specificities of this region should be kept in mind while formulating the schemes.

PSUs/INSTITUTIONS UNDER THE MINISTRY

12. The Committee note that Indian Renewable Energy Development Agency Limited (IREDA) is a Mini Ratna (Category-I) Government of India Enterprise under the administrative control of Ministry of New and Renewable Energy. It is the only non-banking financial institution exclusively engaged in promoting, developing and extending financial assistance for setting up projects relating to renewable sources of energy. The Committee observe that IREDA has outstanding foreign currency loan of Rs. 8,857.20 crores guaranteed by the Government of India, for which it has also paid the guarantee fee of more than Rs. 96 crores in 2019-20 and Rs. 118 crores in 2020-21. The Committee feel

that the guarantee fee should not be levied on atleast those enterprises which are 100% owned by the Government of India. Further, it has also been submitted that IREDA has Non-performing Assets of Rs. 69.2237 crore in Biomass Sector and Rs. 628.4256 crores in Small Hydro Sector. The Committee specifically recommend the following:

- i) The Ministry should explore the possibility of exempting IREDA from payment of Guarantee fee which have been levied by the Government in lieu of extending sovereign guarantee which will help bolster its balance sheet;**
- ii) IREDA should gear up its machinery towards reducing its NPAs in accordance with norms of the RBI; and**
- iii) The details of the loans write-off made in the last three years may be furnished to the Committee.**

**New Delhi
March 02, 2021
Phalguna 11, 1942 (Saka)**

**Shri Rajiv Ranjan Singh *alias* Lalan Singh
Chairperson,
Standing Committee on Energy**

ANNEXURE-I

Detailed statement showing the Budget Estimates for 2021-22 vis-à-vis the Budget Estimates (BE) and Revised Estimates (RE) of 2020-21 and actual expenditure during 2019-20

		(Rs. in crores)			
		Actuals	BE	RE	BE
		2019-20	2020-21	2020-21	2021-22
A.	Non-Scheme Component				
I	Establishment Expenditure				
3451	Secretariat Economic Services	37.04	46.5	45.44	49.05
4810	Office Buildings	70.97	52	170.00	10
II	Other Central Expenditure				
	Autonomous Bodies/CPSEs				
2810	National Institute of Wind Energy	23.00	1.5	13.50	20.84
2810	National Institute of Bio Energy	0.70	1.5	4.85	8.33
2810	National Institute of Solar Energy	13.00	5	14.00	19.50
	Total - Autonomous Bodies/CPSEs	36.7	8	32.35	48.67
	TOTAL- Establishment Expenditure	144.71	106.50	247.79	107.72
B.	Scheme Component				
I	Grid Interactive Renewable Power				
2810	Wind Power	1026.00	1299.35	1059.35	1100.00
2810	Hydro Power	75.25	100	47.50	90.00
2810	Bio Power	4.50	75	14.15	120.00
2810	Solar Power	1535.35	2149.65	1254.10	2369.13
2810	KUSUM	0.00	300	30.00	221.00
2810	Green Energy Corridors	52.61	300	160.00	300.00
2810	Externally Aided Projects	0.40	1	0.00	0.00
2810	Interest Payment and issuing Expenses on the Bonds	124.35	125	124.38	124.35
	Total- Grid Interactive Renewable Power	2818.46	4350	2689.48	4324.48
II	Off-Grid/Distributed and Decentralised Renewable Power				
2810	Wind Power	0.00	3.01	3.01	0.00
2810	Hydro Power	2.02	2	2.00	2.00
2810	Bio Power	0.97	53	14.23	70.00
2810	Solar Power	460.32	366.14	312.14	237.00
2810	KUSUM	0.00	700	180.00	776.30
2810	Biogas Programme	35.93	60	46.50	95.00
2810	Other Renewable Energy Applications (Solar Cities, Green Buildings, Demonstration of Renewable Energy Applications, Cookstoves, etc.)	0.22	0.05	0.05	0.20

Total- Off-Grid/Distributed and Decentralised Renewable Power		499.46	1184.2	557.93	1180.5
III	Research and Development Activities				
2810	Research and Development	15.00	20	49.00	75.00
Total - Research and Development Activities		15	20	49	75
IV	Supporting Programmes				
2810	Monitoring/Evaluation and Other Studies	0.00	0.3	0.10	0.30
2810	Information Technology/e-Governance and other initiatives	0.54	0	0	0.00
2810	Information, Education and Communication	5.46	10	4.70	8.00
2810	International Relations - International Co-operation including Investment Promotion and assistance to International Solar Alliance-Building and Secretarial Establishment	16.36	22	22.00	20.00
2810	Human Resources Development and Training	62.11	60	20.00	37.00
Total - Supporting Programmes		84.47	92.3	46.8	65.3
Total - Scheme Component		3417.39	5646.5	3343.21	5645.28
Grand Total - MNRE		3562.10	5753.00	3591.00	5753.00

STANDING COMMITTEE ON ENERGY

**MINUTES OF SIXTH SITTING OF THE STANDING COMMITTEE ON ENERGY
(2020-21) HELD ON 22nd FEBRUARY, 2021, IN COMMITTEE ROOM 'D',
PARLIAMENT HOUSE ANNEXE, NEW DELHI
The Committee met from 1345 hrs to 1520 hrs**

LOK SABHA

Shri Rajiv Ranjan Singh alias Lalan Singh - Chairperson

2. Shri Gurjeet Singh Aujla
3. Shri Harish Dwivedi
4. Shri Kishan Kapoor
5. Shri Ramesh Chander Kaushik
6. Shri Praveen Kumar Nishad
7. Smt. Anupriya Patel
8. Shri Jai Prakash
9. Shri Shivkumar Chanabasappa Udasi

RAJYA SABHA

10. Shri Ajit Kumar Bhuyan
11. Shri Jugalsinh Mathurji Lokhandwala
12. Dr. Sudhanshu Trivedi

SECRETARIAT

1. Shri R.C. Tiwari - Joint Secretary
2. Shri R.K. Suryanarayanan - Director
3. Shri Kumohan Singh Arora - Additional Director

WITNESSES

MINISTRY OF NEW AND RENEWABLE ENERGY

- | | |
|-------------------------------------|------------------------------|
| 1. Shri Indu Shekhar Chaturvedi | Secretary |
| 2. Shri Aniruddha Kumar | Additional Secretary |
| 3. Shri Vimalendra Anand Patwardhan | Joint Secretary |
| 4. Shri Bhanu Pratap Yadav | Joint Secretary |
| 5. Shri Amitesh Kumar Sinha | Joint Secretary |
| 6. Shri Dinesh Dayanand Jagdale | Joint Secretary |
| 7. Shri J. Rajesh Kumar | Economic Adviser |
| 8. Shri Arvind Kumar | Chief Controller of Accounts |

PUBLIC SECTOR UNDERTAKINGS/AUTONOMOUS BODIES

- | | |
|-----------------------------|------------|
| 9. Shri Jatindra Nath Swain | CMD, SECI |
| 10. Shri Pradip Kumar Das | CMD, IREDA |

2. At the outset, the Hon'ble Chairperson welcomed the Members of the Committee and the representatives of the Ministry of New and Renewable Energy to the sitting and informed that the sitting had been called for evidence in connection with examination of Demands for Grants (2021-22) of the Ministry. The Chairperson also apprised them about the provisions of Directions 55(1) and 58 of the Directions by the Speaker.

3. During the discussion, a power-point presentation was made on the subject which, *inter-alia*, covered Mission 175 GW Renewable Energy by 2022, Status of Renewable Energy Projects, Growth in Renewable Energy Installed Capacity and Generation, Renewable Energy Tariff Trend, Measures to promote Renewable Energy, Measures taken to mitigate impact of Pandemic, Solar Park Scheme, CPSU Scheme Phase –II, Roof-top Solar Programme, PM-KUSUM, Transmission for Renewable Energy, Support for Solar PV

Manufacturing, Carbon Neutral Ladakh, Wind Power, Bio Energy, R &D Programme, Suryamitra Training Programme, etc.

4. The Committee, *inter-alia*, deliberated upon the following points with representatives of the Ministry of New and Renewable Energy:

- a) Need to increase fund absorption capacity of the Ministry;
- b) Need to ensure time-bound achievement of the stipulated targets;
- c) Issues related to cancellation/renegotiation of PPAs;
- d) Need to utilize funds allocated for North-Eastern Region;
- e) Need to widely publicize the Solar Roof-top Scheme;
- f) Need to complete the Green Energy Corridor as early as possible;
- g) Need to increase Indigenous manufacturing of solar cells and modules and the issues related to imposition of proposed Basic Custom Duty with prospective date;
- h) Need to facilitate the participation of private players in Renewable Energy Sector;
- i) Need to encourage local bodies to come up with the proposal for setting up of Waste to Energy plants;
- j) Need to encourage States to participate in the PM-KUSUM Scheme;
- k) Need to ensure that all tendered Solar Projects have PPA;
- l) Need to prepare action plan for Integration of 175 GW of Renewable Energy into Grid;
- m) Need to waive off guarantee fee charged by Government from IREDA;
- n) Need to utilize agricultural residues and stubble for generation of Power.

5. The Members also sought clarifications on various other issues relating to the subject and the representatives of the Ministry responded to the same. The Committee directed the representatives of Ministry of New and Renewable Energy to furnish written replies to those queries which could not be readily responded to by them within seven days.

The Committee then adjourned.

The verbatim proceedings of the sitting have been kept for record.

STANDING COMMITTEE ON ENERGY

MINUTES OF THE SEVENTH SITTING OF THE STANDING COMMITTEE ON ENERGY (2020-21) HELD ON 2nd MARCH, 2021 IN COMMITTEE ROOM 'D', PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee met from 1200 hrs. to 1235 hrs.

LOK SABHA

Shri Rajiv Ranjan Singh alias Lalan Singh - Chairperson

2. Shri Chandra Sekhar Bellana
3. Shri Harish Dwivedi
4. Shri Kishan Kapoor
5. Shri Ramesh Chander Kaushik
6. Shri Praveen Kumar Nishad
7. Smt. Anupriya Patel
8. Shri Jai Prakash
9. Shri Dipsinh Shankarsinh Rathod
10. Shri Shivkumar Chanabasappa Udasi
11. Shri P. Velusamy

RAJYA SABHA

12. Shri Muzibulla Khan
13. Dr. Sudhanshu Trivedi

SECRETARIAT

1. Shri R.C. Tiwari - Joint Secretary
2. Shri R.K. Suryanarayanan - Director
3. Shri Kumohan Singh Arora - Additional Director

2. At the outset, the Chairperson welcomed the Members and apprised them about the agenda of the sitting. The Committee then took up the following draft Reports for consideration and adoption:-

- a) Demands for Grants (2021-22) of the Ministry of New and Renewable Energy.
 - b) Demands for Grants (2021-22) of the Ministry of Power.
3. After discussing the contents of the Reports, the Committee adopted the aforementioned draft Reports without any amendment/modification. The Committee also authorized the Chairperson to finalize the above-mentioned Reports and present the same to both the Houses of Parliament in the second part of the current Budget Session starting from March 08, 2021.

The Committee then adjourned.
