

18

STANDING COMMITTEE ON ENERGY

(2015-16)

SIXTEENTH LOK SABHA

MINISTRY OF NEW AND RENEWABLE ENERGY

**[Action Taken on the recommendations contained in the
Sixth Report (16th Lok Sabha) on Demands for Grants of
the Ministry of New and Renewable Energy for the year
2015-16**

EIGHTEENTH REPORT



**LOK SABHA SECRETARIAT
NEW DELHI**

May, 2016/Vaisakha, 1938 (Saka)

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STANDING COMMITTEE ON ENERGY
(2015-16)**

(SIXTEENTH LOK SABHA)

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**[Action Taken on the recommendations contained in the Sixth Report
(16th Lok Sabha) on Demands for Grants of the Ministry of New and
Renewable Energy for the year 2015-16]**

Presented to Lok Sabha on 10.05.2016

Laid in Rajya Sabha on 10.05.2016



**LOK SABHA SECRETARIAT
NEW DELHI**

May, 2016/Chaitra, 1938 (Saka)

COE NO. 273

Price: Rs.

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Published under Rule 382 of the Rules of Procedure and Conduct of Business in Lok Sabha (Sixteenth Edition) and Printed by _____

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**COMPOSITION OF THE STANDING COMMITTEE ON ENERGY
(2015-16)**

LOK SABHA

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3. Shri M. Chandrakasi
4. Shri Ashwini Kumar Choubey
5. Shri Harish Chandra alias Harish Dwivedi
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RAJYA SABHA

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- | | | |
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| 2 | Shri N.K. Pandey | Director |
| 4 | Smt. L.Nemjalhing Haokip | Under Secretary |

@Nominated as member of the Committee w.e.f 13.04.2016 *vice* Shri P.A. Sangma
expired on 04.03.2016

INTRODUCTION

I, the Chairperson, Standing Committee on Energy having been authorized by the Committee to present the Report on their behalf, present this Eighteenth Report on the action taken by the Government on the recommendations contained in 6th Report of the Standing Committee on Energy on Demands for Grant (2015-16) of the Ministry of New and Renewable Energy.

2. The 6th Report was presented to the Lok Sabha on 27th April, 2015 and was laid in Rajya Sabha on the same day. Replies of the Government to all the recommendations contained in the Report were received on 4th January, 2016.

3. The Report was considered and adopted by the Committee at their sitting held on 27th April, 2016

4. An Analysis on the Action Taken by the Government on the recommendations contained in the 6th Report of the Committee is given at Appendix-II.

5. For facility of reference and convenience, the observations and recommendations of the Committee have been printed in bold letters in the body of the Report.

NEW DELHI
05 May, 2016
Vaisakha 15, 1938 (Saka)

Dr. Kirit Somaiya,
Chairperson,
Standing Committee on Energy

CHAPTER – I

This Report of the Standing Committee on Energy deals with the action taken by the Government on the Recommendations/Observations contained in their Sixth Report (Sixteenth Lok Sabha) on the Demands for Grants of the Ministry of New and Renewable Energy for the year 2015-2016

2. The Sixth Report was presented to Lok Sabha on 27th April, 2016 and was laid on the Table of Rajya Sabha on the same day. The Report contained 8 Recommendations/Observations.

3. Action Taken Notes in respect of all the Recommendations/Observations contained in the Report have been received from the Government. These have been categorized as follows:

- | | | |
|-------|---|-------------------------|
| (i) | Recommendations/Observations which have been accepted by the Government: | |
| | Serial Nos. 1,2,4,5,7 and 8 | Total -06
Chapter-II |
| (ii) | Recommendation/Observation which the Committee do not desire to pursue in view of the Government's replies: | |
| | Serial Nos.3 and 6 | Total-02
Chapter-III |
| (iii) | Recommendations/Observations in respect of which the replies of the Government have not been accepted by the Committee and which require reiteration: | |
| | Nil | Total-00
Chapter-IV |
| (iv) | Recommendation/Observation in respect of which the final replies of the Government are still awaited: | |
| | Nil | Total - 00
Chapter-V |

4. The Committee desire that Action Taken Notes on the Recommendations/Observations/Comments contained in Chapter-I of the Report may be furnished to the Committee within three months of the presentation of this Report.

A. Demands for Grants of MNRE for 2015-16

(Recommendation SI.No. 2)

5. The Committee had noted that against the Gross Budgetary Support sought to the tune of Rs. 6500 crore for the year 2015-16 by the MNRE, an amount of Rs, 2787.67 crore (BE) was allocated. As the allocated amount was much lower than the projected amount, the Committee were apprehensive that unless additional allocation is made, implementation of various programmes of the Ministry will be affected leading to low achievement. The Committee had therefore recommended that the Ministry of New and Renewable Energy should make all out efforts to mobilize additional funds from internal and Extra Budgetary Resources (IEBR), National Clean Energy Fund (NCEF) and other renewable energy development agencies so that the targets set for the year are fully achieved.

6. The Ministry of New and Renewable Energy in their Action Taken Reply has stated as under:

"During 2014-15, the actual expenditure was Rs 2502.49 crore against the BE of 2519.00 crore (99.34%) while actual mobilization of resources was Rs 2922.45 crore against the BE of Rs 3346.58 crore. Thus the total expenditure/disbursement was Rs 5424.94 crore which was 92.5% of budgeted plan outlay (Rs 5865.58 crore). The Committee is right in its observation that total plan outlay for FY 2015-16 was Rs 6160.73 crore (comprising of Rs 2787.67 crore as support to Ministry's programmes and Rs 3373.06 crore as IEBR to be mobilized through IREDA) witnessed an increase of only Rs.295.15 crore over RE-2014-15. However, Ministry is happy to report that during 2015-16 (i) Rs 1500 crore have been mobilized from NCEF for specific projects in first and second supplementary demand for grants, (ii) approval has been obtained from Ministry of Finance for raising funds by issuing tax-free bonds of Rs 2000 crore through IREDA. Thus at the close of the current financial year, total plan funds likely to be available at the disposal of the Ministry and IREDA would Rs

9660.73 crore during FY 2015-16 which would be about 65% higher than the BE-2014-15".

7. In tune with their recommendation to make all out efforts to mobilize additional funds from Internal and Extra Budgetary Resources (IEBR), National Clean Energy Fund (NCEF) and other renewable energy development agencies, the Committee are happy to note that the Ministry could mobilize Rs.1500 crore from NCEF and have also obtained approval from the Ministry of Finance for raising funds by issuing tax-free bonds of Rs.2000 crore through IREDA. With the financial year 2015-16 ending, the Committee believe that the Ministry would have raised the required funds, as approved. Although the corresponding physical achievements are not available, the Committee are optimistic that the Ministry might have achieved their physical targets during the year 2015-16.

B. Research, Design, Demonstration and Development in New and Renewable Energy (RDD & D)

8. The Committee had noted a continuous reduction in the allocation under RDD&D for the last three years, both at BE and RE stages and that the reduced amount could not be fully utilised. The Committee had found a much lesser allocation of Rs. 90 crore for 2015-16 which include only Rs. 32.75 crore for RDD&D, and the remaining budget was for MNRE institutions, namely, the National Institute of Solar Energy (NISE), Gurgaon, National Institute of Wind Energy, Chennai, and National Institute of Renewable Energy, Kapurthala. Regarding the RDD&D activities during the last three years, the Committee were informed that the projects taken up had facilitated strengthening of R&D capacity of the R&D institutions, industries, etc. to take up R&D projects for technology development and demonstration with commercial potential in long term. For the year 2015-16, the Committee had noted that the RDD&D efforts were to focus on development of materials

and technologies to achieve higher efficiency and cost effectiveness. The RDD&D being the most crucial and prime factor for development of renewable energy sources, the Committee felt that this sector should not suffer for want of funds. Keeping in view the importance of the sector for research and development activities for overall development of renewable energy sources in the country, the Committee had recommended adequate allocation of funds for RDD&D so that uninterrupted and smooth implementation of all the RDD&D projects could be ensured. The Committee had also recommended that the Ministry of New and Renewable Energy should focus on full utilization of the allocated funds so that more funds for this head could be sought at the time of RE. The Committee had also recommended that the Ministry should make all out efforts on development of materials and technologies which were most efficient and cost effective and to ensure a result-oriented manner monitoring of all the RDD&D projects with a view to evaluating their functioning.

9. In their reply, the Ministry of New and Renewable Energy has stated as under:

"The plan outlay for research, Design and Development of renewable Energy Systems and Devices including for promoting Research, Development and Testing of Solar, Wind and Geothermal programmes is allocated keeping in view the research projects sanctioned in previous years and the projected demand for such projects in the ensuing year. Keeping in view the prime importance of Research and Development (R&D) for advancement of renewable energy, the requirement of funds for R&D projects is fully met in the previous years and will also be met in full in ensuing years. Further, the Ministry is making all out efforts to ensure that the R&D Sector may not suffer for want of funds.

Keeping in view the importance of sector the MNRE is revising its policy and guidelines for RD&D, for developing good projects for technology development and demonstration for large scale promotion of New and Renewable Energy in cost effective manner in the country. It involves project preparation with detailed assessment and analysis for scalability and bankability of the products proposed to be developed, detailed evaluation of project proposals by experts, monitoring of ongoing projects and appraisal & review by R&D Advisory Committee. A single window clearance by R&D Advisory Committee will facilitate proper appraisals and expeditious clearance of R&D projects. The draft revised RD&D policy and guidelines are under submission for approval. The Ministry is also considering holding a "Brain Storming Consultation Meeting" for

drawing action plan and thrust areas for R&D in new & renewable energy. It is expected that more funds will be needed once thrust areas are finalized and they will subsequently be provided during the year 2016-17.

Concurrently, the Ministry has initiated an activity for bringing out a document on “**National Lab Policy**” for Testing, Standardization and Certification for renewable energy. The policy will help to maintain quality of renewable energy systems in field and also take the growing demand of testing in view of enhanced renewable energy targets.

10. The Committee note the efforts of the Ministry under the R&D sector for ensuring proper utilization of funds and also to meet the requirement of funds for R&D projects. The Committee were earlier apprised about revision of the policy and guidelines for RD&D. They are pleased to note that the draft revised RD&D policy and guidelines are under submission for approval. The Committee are also informed that a “Brain Storming Consultation Meeting” for drawing up an action plan and thrust areas for R&D in new & renewable energy is being organized and that the Ministry has also initiated an activity for bringing out a document on “National Lab Policy“ for Testing, Standardization and Certification for renewable energy. The Committee would like to be apprised of the development regarding the afore said initiatives viz. revision of the policy and guidelines for RD&D sector, outcomes of the “Brain Storming Consultation Meeting” and status of the document on “National Lab Policy. While acknowledging the initiatives of the Ministry in the RD&D sector, the Committee would also like to re-emphasize their recommendation that the Ministry should

**make all out efforts on development of materials and technologies
which are most efficient and cost effective.**

CHAPTER II
OBSERVATIONS/ RECOMMENDATIONS WHICH HAVE BEEN
ACCEPTED BY THE GOVERNMENT

**Status of implementation of the recommendations of the Committee
contained in Sixth Report, under Direction 73A of the 'Directions by the
Speaker'**

Mid Term Appraisal of Twelfth Five Year Plan

(Recommendation No.1)

The Committee find that against the budgetary allocation of Rs. 19133 crore for the entire 12th Plan, an amount of Rs. 5407.68 crore has been actually allocated for the first three years of the Plan period, leaving Rs. 13705.32 crore for utilization in the remaining last two years. The total actual expenditure of the first three years of the plan period as on 29th February, 2015 was Rs. 4985.98 crore which accounts to 26 percent of the GBS allocation for the 12th Plan. As the first three years of the plan period is over, the Ministry were expected to utilize major part of the total budget allocated for the 12th Plan, moreover against the physical target of 29800 MW Grid power capacity addition for 12th Plan, only 9466.67 MW power capacity have been achieved i.e. 32 percent of the Plan target. As the utilization of funds and achievements of physical target are correlated, low utilization of budget has resulted in low achievement of Physical targets. The Committee would like to emphasize maximum utilization of allocated funds for the 12th Plan period so that the stipulated physical targets can be achieved.

Reply of the Government

During the first three years of 12th Five Year (2012-17), plan outlay allocated to the Ministry was Rs 5407.68 crore against which the actual expenditure had been Rs 5228.3 crore which was about 99.68 of allocated

funds. It is also to be noted that plan outlay of the Ministry flows from two streams viz. from gross budgetary support and National Clean Energy Fund. Initially, funds from NCEF were allocated for specific projects but from FY 2013-14, burden of funding ongoing schemes/programmes of the Ministry is gradually shifted to NCEF. This shift in the sources of funds has in fact enhanced the plan outlay of the MNRE, i.e. from Rs 1385 crore in 2012-13 to Rs 1519 crore in 2013-14 and Rs 2519 crore in 2014-15. During FY 2015-16, plan outlay of the Ministry has sharply increased to Rs 4287.62 crore which inclusive of Rs 1500 crore provided for specific projects in supplementary demand for grants. The Ministry hopes that in the ensuing years, plan outlay of the Ministry will witness a sharp increase over the previous years. This increasing plan outlay support would result in achievement of physical targets. It is pertinent to note that actual capacity addition during the first three years of the Plan was 10892 MW, additional capacity likely to be added during 2015-16 will be 4460 MW resulting in cumulative capacity addition of 15252 MW. Keeping in view the trajectory of the revised target of grid connected renewable energy 175000 MW by 2022, it is expected that actual achievement at the end of 2016-17 (terminal year of the 12th Plan) will exceed the target set for the 12th Plan.

[Ministry of New and Renewable Energy

O.M. No. 8/1/2015-P&C dated: 04 /01 / 2015]

Demands for Grants of MNRE for 2015-16

(Recommendation No. 2)

The Committee find that the Plan Outlay of Rs. 5519 crore (BE) during the year 2014-15 was enhanced to Rs. 5865.58 core at RE stage. This include provisions of Rs. 1978 crore form national Clean Energy Fund (NCEF) and Rs. 3346.58 crore from internal and Extra Budgetary Resources (IEBR). The Committee appreciate the Ministry's effort to mobilize supplementary Demands for Grants at RE stage. However, the actual

expenditure is Rs. 4442.08 crore (as on 28.02.2015) during the year 2014-15 which is only 75.73 percent of the enhanced budget. For the year 2015-16, the Committee note that the Ministry had sought a Gross Budgetary Support to the tune of Rs. 6500 crore in their annual plan. However, an amount of Rs, 2787.67 crore (BE) was allocated. The Committee note that there is an increase of only Rs. 268.67 crore in the budgetary Support (BE) for the year 2015-16 over the Revised estimates of previous year's Gross budgetary Support of Rs. 2519 crore. The Committee are aware that the physical targets for 2015-16 were fixed keeping in view the budget provided in the BE stage. However, as the allocated amount (Rs.2787.67crore) is much lower than the projected amount (Rs. 6500crore), the Committee are apprehensive that unless additional allocation is made, implementation of various programmes of the Ministry will be affected leading to low achievement. The Committee note that for the year 2015-16, the Ministry are availing fund under National Clean Energy Fund (NCEF) and mobilizing internal and Extra Budgetary Resources (IEBR)to the tune of Rs. 2500 crore and Rs. 3373.06 crore respectively. The Committee trust that the Ministry with all its effort would manage to mobilize additional funds from NCEF and IEBR to meet the physical targets. The Committee, therefore recommend that the Ministry of New and Renewable Energy make all out efforts to mobilize additional funds from internal and Extra Budgetary Resources (IEBR), National Clean Energy Fund (NCEF) and other renewable energy development agencies so that the targets set for the year are fully achieved.

Reply of the Government

During 2014-15, the actual expenditure was Rs 2502.49 crore against the BE of 2519.00 crore (99.34%) while actual mobilization of resources was Rs 2922.45 crore against the BE of Rs 3346.58 crore. Thus the total expenditure/disbursement was Rs 5424.94 crore which was 92.5% of budgeted plan outlay (Rs 5865.58 crore). The Committee is right in its observation that total plan outlay for FY 2015-16 was Rs 6160.73 crore

(comprising of Rs 2787.67 crore as support to Ministry's programmes and Rs 3373.06 crore as IEBR to be mobilized through IREDA) witnessed an increase of only Rs.295.15 crore over RE-2014-15. However, Ministry is happy to report that during 2015-16 (i) Rs 1500 crore have been mobilized from NCEF for specific projects in first and second supplementary demand for grants, (ii) approval has been obtained from Ministry of Finance for raising funds by issuing tax-free bonds of Rs 2000 crore through IREDA. Thus at the close of the current financial year, total plan funds likely to be available at the disposal of the Ministry and IREDA would Rs 9660.73 crore during FY 2015-16 which would be about 65% higher than the BE-2014-15.

[Ministry of New and Renewable Energy
O.M.No. 8/1/2015-P&C dated: 04/ 01/ 2016]

Wind Energy

(Recommendation No. 4)

The Committee note that wind power potential in the country at the height of 80 metre has been estimated to be more than '1,00,000 MW. Against this, a total capacity of 22645 MW has been reportedly installed as on February, 2015. The Committee find the last three years' performance unsatisfactory. In 2012-13 and 2013-14, against the targets of 2500 MW each, a wind capacity addition of 1700 MW and 2079 MW has been achieved with reportedly full utilization of budget. The withdrawal of Accelerated Depreciation Benefits and Generation Based Incentive scheme has been held responsible for the low achievement of the targets during this period. During the year 2014-15, in spite of the reintroduction of Generation Based Incentive (GBI) and reinstallation of the Accelerated Depreciation (AD) and reduced target, the achievement is not reasonable, although the budgetary allocation of Rs. 578 crore was fully utilized. Against the target of 2000 MW during 2014-15, a capacity addition of only 1513 MW is achieved (as on February, 2015). For the year 2015-16, the Committee were informed that a

physical target of 2400 MW has been set with a budgetary allocation of Rs. 314 crore. When the Ministry could not achieve a physical target of 2000 MW with an allocation of Rs. 578 crore in 2014-15, the Committee are apprehensive about achievement of enhanced target with a reduced allocation. The Committee, therefore, recommend that every effort should be made to achieve the target for the current year. The Committee would also like the Ministry to approach the Ministry of Finance to allocate more funds at the time of revised estimates so that smooth and time bound implementation of the projects can be ensured and that work does not suffer for want of funds. The Ministry should also give due publicity for the incentives available to the industry.

Reply of the Government

The wind power installed capacity in the country as on 31.03.2015 was 23,444 MW. During the year 2014-15, against the target of 2000 MW capacity addition, 2312 MW wind power capacity has been added, which is 15.6% higher than the target. The allocation of more funds amounting to Rs 578 crore were made to Wind Energy mainly due to the fact an additional amount of Rs 299 crore were received in supplementary demand for grants under this mainly to meet the liabilities of the previous years. During the current year i.e. 2015-16 against the target of 2400 MW wind power capacity addition, 1234.11 MW capacity has been added till October, 2015 and balance is likely to be achieved during remaining part of the current financial year. Out of Rs. 314 crore allocated this year, which is a normal allocation in a year, an amount of Rs. 272 crore has already been utilised.

Apart from uploading the details of incentives available to the industry, the following publicity activities are currently underway for promotion of renewable energy including wind energy:

- A programme on “AkshayUrja” through Doordarshanw.e.f. 21.2.2015 involving production of 52 TV episodes (on different RE technologies/ programmes/schemes) of half an-hour duration on renewable energy for

telecasting on weekly basis on DD National Channel. A total of 40 episodes have already been telecasted by Doordarshan.

- It has been decided to start an awareness and publicity campaign of on Lok Sabha TV (30 seconds spot) for duration from 1.1.2016 to 31.3.2016 during the year 2015-16 through DAVP.
- MNRE has prepared creatives/artworks on Bio-gas, Small Hydro, Biomass Bagasse, Biomass Gasifier, Solar Rooftop, Solar off-Grid, Unnat Chulha, Canal Top, Wind Energy, Hydrogen & Fuel Cells, SADP Scheme, Waste to Energy, Solar Water Heating, Solar Park and Investment Promotion. These creatives/artworks are being released through DAVP.
- A Radio Sponsored Programme (RSP) of 15 minutes duration in Hindi and 19 regional languages through NFDC for which proposal has been sought from NFDC is being undertaken. This RSP is proposed to be broadcasted from 28 FM channels, 12 VividhBharati Station and 70 primary channels of All India Radio.

[Ministry of New and Renewable Energy]

O.M. No. 8/1/2015-P&C dated: 04/01/2016]

Small Hydro Power

(Recommendation No. 5)

The Committee find that the estimated potential for power generation in the country from small hydro projects (upto 25 MW capacity) is around 20,000 from 6474 identified sites all over the country. Against this estimated potential, cumulative capacity of 4025.35 MW capacity has been installed as on February, 2015. The Committee find the performance during 2013-14 quite disappointing. Against the target of 300 MW, a capacity addition of only 171.42 MW has been installed which is 57 percent of the target. However, the fund allocation during this period has been fully utilized. During the year 2014-15 against budgetary allocation of Rs. 108 crore, Rs. 104.03 crore could be spent as on 28th February, 2015 which is quite satisfactory. However, against a physical target of 250 MW, 221.60 MW

could be achieved. The Committee observe that during the years, although the allocated budgets were fully utilized, the physical targets were never achieved. For the year 2015-16, the physical target is set for 250 MW capacity with a financial allocation of Rs. 100 crore which is lesser than 2014-15 allocation. The Committee were apprised that the private sector is not finding the setting up of small hydro projects as an attractive business as costs of setting up projects are incrementally increasing and the tariffs are not that attractive. Taking note of the statement of the Ministry that the National Mission on Small Hydro is being finalized for approval, the Committee believe this new project of the Ministry would revamp the small hydro activity in the country. The Committee also recommend that the Government may critically review its performance under the SHP sector and ensure that the factors which hindered the growth of the sector are addressed. Needless to say, the Ministry may also undertake adequate publicity for the incentives available to the industry.

Reply of the Government

The utilization of plan outlay allocated under the scheme depends on the claims submitted by the implementing agencies, pending utilization certificates and in accordance with the guidelines of the scheme. Therefore, utilization of funds in a year may be close to BE despite the fact that physical targets are not fully met mainly on account of releasing the funds for the claims submitted for the projects sanctioned in the previous years. During 2013-14, actual achievements were far less than the targets set for the year can be attributed to the natural calamity in Uttarakhand, restriction imposed by High Court on hydro projects in Uttarakhand and Karnataka, saturation of power purchase from small hydro projects in Himachal Pradesh, the tariff for power generated from SHP projects, low rate of average pool power purchase rate in Himachal Pradesh and non-sale of Renewable Energy Certificates in the open market.

The Ministry has vigorously monitored the progress of Small Hydro Projects by (i) holding frequent meetings with State Governments and SHP developers, (ii) visits by MNRE officers for on the site monitoring of SHP projects and (iii) visits by the technical team of Alternate Hydro Energy Centre (AHEC), established in Indian Institute of Technology, Roorkee, to provide on the spot technical advice to SHP developers. As a result of these efforts, the installed capacity of SHP project has gone up to 251 MW during 2014-15, which exceeded the target of 250 MW set for the year. The capacity installed during 2014-15 (251 MW) was also higher than the capacities installed during 2013-14 (171 MW) and 2012-13 (236 MW). Notwithstanding the close monitoring by the MNRE, generic constraints being faced in implementation of SUP projects in States include delays in obtaining the statutory clearances from state governments, forest clearance from MOEF which in turn causes not only delay in implementation of the project but escalate the cost of the projects. To overcome such delays, MNRE has time and again approached/requested state governments and MOEF to set up a time line for providing all statutory clearances.

[Ministry of New and Renewable Energy
O.M.No. 8/1/2015-P&C dated: 04/01/ 2016]

Renewable Energy for Urban, Industrial and Commercial Applications

(Recommendations No. 7)

The Committee note that there is a consecutive reduction of budget both at BE and RE stage under waste to energy sector during the last three years. The BE of Rs. 32.05 crore in 2012-13, Rs. 33 crore in 2013-14 and Rs. 20.50 crore in 2014-15 has been reduced to Rs. 12.71 crore, Rs. 10 crore and Rs. 9.07 crore respectively at RE stage. The allocated budget (RE) has been fully utilized. Although, the physical target for 2013-14 has been fully achieved, the performance in 2012-13 and 2014-15 are not satisfactory

i.e. against the target of 40 MW in 2012-13 and 30 MW in 2014-15 a capacity addition of 20.23 MW and 20.13 MW could be achieved respectively. The Committee are aware that the activities under waste to energy are now under the Ministry of Urban Development. The physical as well as financial performance under biomass (non-bagasse) co-generation is quite satisfactory. Under the programme Renewable Energy for Urban, Industrial and Commercial Applications, the Committee note an allocation of Rs. 4.62 crore for 2015-16 which include Rs. 2 crore for Green Buildings, Rs. 2 crore for Solar Cities and Rs. 0.62 crore for Alternate Fuel for Surface Transport. The Committee are informed that the outlay for Alternate Fuel for Surface Transport programme is mainly to meet past liabilities. Regarding target for 2015-16, the Committee note that the Ministry have proposed to take up 5 new solar cities. Under Green Buildings and Solar Cities the proposed activities include Awards focusing on awareness creation/promotional activities, national level workshops/regional seminars, training and capacity building activities etc. The Committee also note the provisions of financial assistance for power generation from Urban, Industrial and Commercial Applications for renewable energy. The Committee, therefore, urge the Ministry to give due importance to the proposed activities during the current financial year with a view to facilitate promotion and development of Solar Cities and Green Buildings. The Committee also recommend publicity of the financial assistance available under this sector.

Reply of the Government

MNRE's Programme on Energy Recovery from Municipal Solid Waste (MSW)

In accordance with the directions of the Hon'ble Supreme Court vide its judgement dated 15th May 2007, Ministry of New and Renewable Energy (MNRE) under its Programme on 'Energy Recovery from Municipal Solid

Waste (MSW)' is implementing only five pilot projects with an aggregate capacity of 57 MW. A central financial assistance of Rs. 2.0 crore per MW subject to a maximum of Rs. 10.0 crore per project is provided for projects on power generation from MSW. In addition to this, the plant & machinery, equipment, instruments etc. used for initial setting up of power projects are also eligible for concessional custom and central duty exemption excise duty exemptions. Out of these five demonstration projects, one plant at Okhla Delhi is operational while another one at Ghazipur, Delhi is under commissioning. As the remaining 3 projects could not be completed due to paucity of funds/technical reasons, the funds could not be released to them and therefore the outlay under the programme was allocated accordingly in subsequent years.

Development of Solar cities:

MNRE has approved 56 solar cities under "Development of Solar Cities Programme" of which sanctions have been issued for 50 cities. So far, Master Plans of 49 cities have been prepared; Stake-holder's Committees have been constituted in 50 cities and Solar City Cells have been created in 30 solar cities. Solar PV projects with aggregate capacity of 8069.16 kWp and Solar Water Heating Systems with aggregate capacity of 7894 meter square collector area have been sanctioned to 12 Solar Cities. Each solar city has been provided upto Rs. 20.00 lakh for organizing promotional activities in the city to create wide publicity.

Under the programme Rs. 1.32 crore has been released up to November, 2015 in the FY 2015-16. Narsapur Town of West Godavari District of Andhra Pradesh is included in the solar city programme. Master plan of Allahabad, Trivandrum, Kochi and Bhopal finalised in this financial year. In addition, Municipal Corporations of Surat, Pune and Thane cities have been awarded for taking leading role in the renewable energy installations in their cities.

Energy Efficient Solar/Green Buildings programme:

Under the “Energy Efficient Solar/Green Buildings “programme following initiatives have been taken to promote green building construction in the country.

- A GRIHA rating system has been developed in collaboration with The Energy and Resources Institute (TERI) and an independent registered society ADaRSH (Association for Development and Research for Sustainable Habitats) created which works as GRIHA Secretariat. So far aggregate 22 million sq.m built-up-areas have been covered for acquiring GRIHA rating.
- 97 building projects of Govt. with 3.05 million sq. m built-up area have been sanctioned for the exemption from the registration cum rating fees for acquiring GRIHA rating.
- About 210 capacity building programmes including trainings, seminar, conferences, workshops for Evaluators and Trainers on GRIHA Ratings and awareness programmes on Green Buildings/GRIHA Ratings/Green Architecture were organized across the country by various technical institutions.
- About 970 GRIHA evaluators and trainers were developed under the programme
- A GRIHA manual containing a set of five volumes has been prepared and published by TERI under the scheme.
- The guidelines for green large area developments/campuses/townships were also been prepared by ADaRSH under the programme.

Under the programme Rs. 0.14 crore has been released, as on 30.11.2015, towards reimbursement of different capacity building programme in the FY 2015-16. The awards for the urban local bodies, buildings having maximum renewable energy installations and architects/consultants are under finalisation. In addition awards have been given to State Nodal

Agencies of Chhattisgarh, Chandigarh, Haryana, Mizoram and Assam for adopting renewable energy systems in their office buildings.

Major Activities for Information, Awareness and Publicity

- A programme on “AkshayUrja” through Doordarshan w.e.f. 21.2.2015 involving production of 52 TV episodes (on different RE technologies/ programmes/schemes) of half an-hour duration on renewable energy for telecasting on weekly basis on DD National Channel. A total of 40 episodes have already been telecasted by Doordarshan.
- It has been decided to start an awareness and publicity campaign on Lok Sabha TV (30 seconds spot) for duration from 1.1.2016 to 31.3.2016 during the year 2015-16 through DAVP.
- MNRE has prepared creatives/artworks under various programmes of the Ministry these creatives/artworks are being released through DAVP.
- A Radio Sponsored Programme (RSP) of 15 minutes duration in Hindi and 19 regional languages through NFDC for which proposal has been sought from NFDC is being undertaken. This RSP is proposed to be broadcasted from 28 FM channels, 12 Vividh Bharati Station and 70 primary channels of All India Radio.

[Ministry of New and Renewable Energy

O.M. No.8/1/2015-P&C dated: 04/01/2016]

Research, Design, Demonstration and Development in New and Renewable Energy (RDD & D)

(Recommendations No. 8)

The Committee note that the allocation under RDD&D for the last three years has been reduced both at BE and RE stage. Moreover, the reduced amount could not be fully utilised. In 2012-13, the BE of Rs. 192 crore was reduced to Rs. 126 crore and the actual expenditure was Rs. 108.90 crore. In 2013-14 and 2014-15, the BE of Rs. 158 crore and Rs. 149.50 crore were reduced to Rs. 148 crore and Rs. 128 crore at RE stage with actual expenditure of Rs. 136.97 crore and Rs. 113.52 crore respectively. The continuous reduction of budgetary allocation and the non-

utilization of the reduced amount indicate the non-seriousness of the Government towards RDD&D an important component of the programme under new and renewable energy sector. The Committee are surprised to find a much lesser allocation of Rs. 90 crore for 2015-16 which includes only Rs. 32.75 crore for RDD&D, and the remaining budget is for MNRE institutions, namely, National Institute of Solar Energy (NISE), Gurgaon, National Institute of Wind Energy, Chennai and National Institute of Renewable Energy, Kapurthala. Regarding the RDD&D activities during the last three years, the Committee are informed that the projects taken up has facilitated strengthening of R&D capacity of the R&D institutions, industries, etc. to take up R&D projects for technology development and demonstration with commercial potential in long term. For the year 2015-16, the Committee note that the RDD&D efforts are to focus on development of materials and technologies to achieve higher efficiency and cost effectiveness. The Committee note that the RDD&D is the most crucial and prime factor for development of renewable energy sources and feel that this sector should not suffer for want of funds. Keeping in view the importance of the sector for research and development activities for overall development of renewable energy sources in the country, the Committee recommend adequate allocation of funds for RDD&D so that uninterrupted and smooth implementation of all the RDD&D projects can be ensured. The Committee also recommend that the Ministry of New and Renewable Energy should focus on full utilization of the allocated funds as soon as possible so that at the time of RE, more funds for this head can be sought. Needless to say, the Ministry should also put all out efforts on development of materials and technologies which are most efficient and cost effective. Further, close in a result-oriented manner monitoring of all the RDD&D projects should be ensured with a view to evaluate their functioning in a result-oriented manner.

Reply of the Government

The plan outlay for research, Design and Development of renewable Energy Systems and Devices including for promoting Research, Development and Testing of Solar, Wind and Geothermal programmes is allocated keeping in view the research projects sanctioned in previous years and the projected demand for such projects in the ensuing year. Keeping in view the prime importance of Research and Development (R&D) for advancement of renewable energy, the requirement of funds for R&D projects is fully met in the previous years and will also be met in full in

ensuing years. Further, the Ministry is making all out efforts to ensure that the R&D Sector may not suffer for want of funds.

Keeping in view the importance of sector the MNRE is revising its policy and guidelines for RD&D, for developing good projects for technology development and demonstration for large scale promotion of New and Renewable Energy in cost effective manner in the country. It involves project preparation with detailed assessment and analysis for scalability and bankability of the products proposed to be developed, detailed evaluation of project proposals by experts, monitoring of ongoing projects and appraisal & review by R&D Advisory Committee. A single window clearance by R&D Advisory Committee will facilitate proper appraisals and expeditious clearance of R&D projects. The draft revised RD&D policy and guidelines are under submission for approval. The Ministry is also considering holding a “Brain Storming Consultation Meeting” for drawing action plan and thrust areas for R&D in new & renewable energy. It is expected that more funds will be needed once thrust areas are finalized and they will subsequently be provided during the year 2016-17.

Concurrently, the Ministry has initiated an activity for bringing out a document on “**National Lab Policy**” for Testing, Standardization and Certification for renewable energy. The policy will help to maintain quality of renewable energy systems in field and also take the growing demand of testing in view of enhanced renewable energy targets.

[Ministry of New and Renewable Energy

O.M. No. 8/1/2015-P&C dated: 04/01/2016]

CHAPTER III

OBSERVATION/ RECOMMENDATION WHICH THE COMMITTEE DO NOT DESIRE TO PURSUE IN VIEW OF THE GOVERNMENT'S REPLIES

Solar Energy

(Recommendations No. 3)

The Committee note that the target of the Jawaharlal Nehru National Solar Mission launched in 2010, aims deployment of 20,000 MW of grid connected solar power and 2,000 MW of off-grid solar applications including 20 million solar lights by 2022. The Mission is being implemented in three phases. Phase-I (2010 to 2013) has concluded in March, 2013. The achievement under Phase-I is satisfactory vis-a-vis target, i.e. against the physical target of 1100 MW capacity addition of grid connected solar power generation, a total capacity of 1684.43 MW has been commissioned and under Off-grid solar applications, against a target of 200 MWp, 252.5 MWp off-grid solar photovoltaic system equivalent capacity has been installed. However, keeping in view the low target kept for Phase-I, the achievement is not laudable. Regarding Phase-II (2013-2017), the Committee note a target of 10,000 MW grid connected solar power capacity addition and 1000 MWp capacity equivalent Off-grid solar applications has been fixed. Against this, as on February, 2015, 3382.78 MW grid connected solar power and 357.18 MWp Off-grid solar applications have been commissioned. As such, during the remaining period of Phase-II (2015-17), the Ministry are required to achieve 6617.22 MW grid power and 642.82 MWp off grid solar applications. The Committee are also informed that under the JNNSM, the Ministry has desired to scale up Grid connected Solar Power Projects from 20,000 MW to 1,00,000 MW by 2022 subject to availability of finance, demand from States to buy renewable energy and up gradation of grid capacity. While appreciating the ambitious targets of the Ministry under JNNSM, the Committee recommend that the Ministry may make serious

efforts during the remaining period of Phase-II so that the required targets are achieved.

Reply of the Government

As on 31st March, 2015 the total installed grid- interactive solar power generation capacity in the country has reached 3743.96 MW. In the last nine months more than 922.69 MW of grid connected solar power plants has been further commissioned taking the total cumulative generation upto 4666.65 MW as on 30th November, 2015. This is also a fact that the Government of India has up-scaled the National Solar Mission target of Grid Connected Solar Power projects from 20,000 MW to 100,000 MW by 2022. This capacity is proposed to be achieved through deployment of 40,000 MW of Rooftop Solar projects and 60,000 MW Medium & Large Scale Solar projects.

Keeping in view the trajectory of the revised target of grid connected renewable energy 175000 MW by 2022, as given below, it is most likely that the target of cumulative grid connected solar power capacity of 10,000 MW will be achieved during the remaining period of Phase-II (2015-17) of JNNSM.

Year	Rooftop	Ground Mounted Solar Power Projects	Total (in MW)
2015-16	200	1,800	2,000
2016-17	4,800	7,200	12,000
2017-18	5,000	10,000	15,000
2018-19	6,000	10,000	16,000
2019-20	7,000	10,000	17,000
2020-21	8,000	9,500	17,500
2021-22	9,000	8,500	17,500
Total	40,000	57,000	97,000 *

*3,743 MW commissioned upto 31.03.2015

[Ministry of New and Renewable Energy
O.M. No. 8/1/2015-P&C dated: 04 / 01 / 2016]

Renewable Energy for Rural Applications

(Recommendation No.6)

The Committee note that for the year 2015-16, a budgetary allocation of Rs. 160 crore has been made for different renewable energy systems and devices such as biogas plants, improved cook stoves and solar cookers which include Rs. 5 crore for Remote Village Electrification Programme (RVEP). The Committee were, however, informed that no physical target was set under RVEP for 2015-16 as the scheme is discontinued. The Committee could not understand an allocation of Rs. 5 crore when the scheme is not existing. The Committee feel the sudden discontinuation of such an important scheme would badly affect the people living in the remote areas in terms of basic lighting. Further scrutiny of the data supplied by MNRE under biogas, improved cook stoves and solar cookers during the last three years reveal a declining performances both in physical and financial terms. The financial allocations as well as the physical targets have been reduced over the years. So was with the achievements. Under Improved Cook stoves, the target during 2014-15 was 7.5 lakhs, however, achievement is still awaited from States which shows apathy of the Ministry towards this programme. For the year 2015-16 the target has been reduced to 3.5 lakhs. Regarding biogas plants, the targets are low and the achievements are also not satisfactory. The Committee were informed that non achievement of biogas targets was due to high cost of installation of biogas plants and improved supply of LPG of rural areas. The Committee find that apart from electricity generation and power saving, the application of these technologies viz. biogas plant, improved cookstoves and solar cookers has benefitted millions of rural folk by meeting their cooking and other energy requirements in an environmentally benign way. The Committee, therefore, recommend that the Ministry may revisit the feasibility, affordability and availability of the technologies in the rural areas so as to provide opportunity for economic activities at village level ultimately improving their standard of living in remote area of the country.

Reply of the Government

The Ministry is implementing Remote Village Electrification (RVE) Programme for providing financial support for lighting/basic electricity using renewable energy sources in those un-electrified remote census villages, un-electrified hamlets of electrified census villages where grid connectivity is either not feasible or not cost effective & not covered under RGGVY for grid electrification. The Ministry provides to the state implementing agencies a subsidy of up to 90% of the costs of installation of various renewable energy devices/systems subject to pre-specified maximum amounts. Till date, 13,059 remote un-electrified census villages and un-electrified hamlets of electrified census villages have been sanctioned for providing basis lighting facilities under the RVE programme.

Government of India launched a Deendayal Upadhyaya Gram Jyoti Yojna” (DDUGJY) on 3.2 2014 for rural areas for (i) separation of agriculture and non-agriculture feeders facilitating judicious restoring of supply to agricultural & non-agriculture consumers in the rural areas; (ii) strengthening and augmentation of sun-transmission & distribution infrastructure in rural areas, including metering of distribution transformers/ feeders/consumers, and (iii) rural electrification for completion of the targets laid down under RGGVY for 12th and 13th Plans by carrying forward the approved outlay for RGGVY to DDUGJY. Under renewable energy component of DDUGJY, there is a provision of capital subsidy for Decentralized Distributed Generation (DDG) projects during 12th and 13th plans, which are basically for those un-electrified villages/ hamlets where grid connectivity is either not feasible or not cost effective. These projects may be based on conventional or renewable or nonconventional sources such as biomass, bio fuel, bio gas, mini hydro, geothermal and solar etc. During 12th & 13th Plan, DDG projects have also been extended to those grid connected areas where power supply is available less than six hours a day.

Keeping in view the launch of the new scheme DDUGJY, Government decided not to expand the RVEP and new proposals received from may be considered as per its existing norm. However, government was committed to meet the liabilities emerging from the proposals sanctioned in previous years. A budget of Rs 5 Crores was allocated during 2015-16 under Energy Access (Remote village Electrification earlier) programme to meet out the estimated liabilities for the projects sanctioned during previous years under RVEP. The estimated liabilities under the programme amount to Rs 90 crores and funds are allocated to meet such liabilities being raised by the States/UTs.

The Ministry is periodically reviewing the implementation of the National Biogas and Manure Management Programme (NBMMP) both in internal meetings as well as in quarterly meetings with State Secretaries and Heads of State Nodal agencies. The available technology of biogas plants is indigenous & proven but over a period of time due to various reasons the cost of biogas plants which mainly involve construction material and balance of equipments such as, Gas Pipe Line, Biogas burner and Water removers, pressure boosters and labour cost etc. have gone up and particularly poor people and even people above the BPL line are feeling that the cost of a biogas plants are unaffordable. This has resulted in steep fall in demand for biogas plants by the States/UTs under the NBMMP. The Ministry is seeking to develop low cost plants in the same designs which are prevailing and getting tested the new innovative approach of construction, installation and also to have pre-fabricated biogas plants in various suitable materials. However, this is also fact that the funds are not allocated in line with the planning of the project each year.

The Improved Cookstove Programme (Unnat Chullah Abhiyan) was launched by the Government in June 2014 and the target was kept keeping in view the overall target set for 12th Plan. However, due to funds constraints during 2014-15, state-wise targets of 3.5 lakh improved cookstoves were communicated to States/UTs for their acceptance along with the release of

first instalment under the scheme. As the contribution from the Ministry was limited to 50% of the cost or Rs 400/- per cookstoves and a part contribution was to be made by the beneficiaries or the State governments, their response being lukewarm, performance of the programme during 2014-15 was not as expected. During 2015-16 targets are kept at the same level of 3.5 lakh, and the unfulfilled targets for 2014-15 are being carried forward and consolidated state-wise targets are worked out and communicated to States/UTs. Thus Ministry is making sincere efforts to motivate the State Governments to adopt the programme as it will benefit the households at margins especially women in improving their health by limiting their exposure to smoke and carbon dioxide etc.

[Ministry of New and Renewable Energy
O.M. No. 8/1/2015-P&C dated: 04 /01 / 2016]

CHAPTER IV

OBSERVATIONS/ RECOMMENDATIONS IN RESPECT OF WHICH THE REPLIES OF THE GOVERNMENT HAVE NOT BEEN ACCEPTED BY THE COMMITTEE AND WHICH REQUIRE REITERATION

Nil

CHAPTER V

**OBSERVATIONS/ RECOMMENDATIONS IN RESPECT OF WHICH THE
FINAL REPLIES OF THE GOVERNMENT ARE STILL AWAITED**

Nil

**New Delhi
05 May, 2016
Vaisakha 15,1938 (Saka)**

**DR. KIRIT SOMAIYA,
Chairperson,
Standing Committee on Energy**

APPENDIX I

MINUTES OF THE TWENTIETH SITTING OF THE STANDING COMMITTEE ON ENERGY (2015-16) HELD ON 27th APRIL, 2016, IN COMMITTEE ROOM 'B', PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee met from 1600 hrs to 1700 hrs

PRESENT

LOK SABHA

- Dr. Kirit Somaiya** - Chairperson
2. Shri Harish Dwivedi
 3. Shri Bhagat Singh Koshyari
 4. Dr. Pritam Gopinath Munde
 5. Smt. Krishna Raj
 6. Shri Vinayak Bhaurao Raut
 7. Shri Gutha Sukender Reddy
 8. Shri Devendra Singh alias Bhole Singh
 9. Shri Malyadri Sriram

RAJYA SABHA

10. Shri V.P. Singh Badnore
11. Shri Oscar Fernandes
12. Shri Pyarimohan Mohapatra
13. Dr. K.P. Ramalingam
14. Shri Ananda Bhaskar Rapolu

SECRETARIAT

1. Shri K. Vijayakrishnan - Additional Secretary
2. Shri N.K. Pandey - Director
3. Smt. L. Nemjalhing Haokip - Under Secretary

List of Witnesses

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

- i) Hydro Power - A Sustainable, Clean and Green Alternative
- ii) Action Taken on the recommendations contained in the 6th Report (16th Lok Sabha) on Demands for Grants of the Ministry of New and Renewable Energy for the year 2015-16.
- iii) Action Taken on the recommendations contained in the 7th Report (16th Lok Sabha) on 'Energy Conservation.
- (iv) Demands for Grants of the Ministry of Power for the year 2016-17.
- (v) Demands for Grants of the Ministry of New and Renewable Energy for the year 2016-17.

3. After discussing the contents of the Reports in detail, the Committee adopted the aforementioned draft Reports without any change. The Committee authorized the Chairperson to finalize these Reports and present the same to both the Houses of Parliament in the current Session.

4. x x x x x x x x x x x x

5. x x x x x x x x x x x x

6. x x x x x x x x x x x x

7. x x x x x x x x x x x x

8. x x x x x x x x x x x x

The Committee then adjourned.

APPENDIX II

(Vide Introduction of Report)

ANALYSIS OF ACTION TAKEN BY THE GOVERNMENT ON THE OBSERVATIONS/ RECOMMENDATIONS CONTAINED IN THE SIXTH REPORT (16TH LOK SABHA) OF THE STANDING COMMITTEE ON ENERGY

(i)	Total number of Recommendations	08
(ii)	Observations/Recommendations which have been accepted by the Government:	
	Sl.Nos. 1,2,4,5,7 and 8	
	Total:	06
	Percentage	75%
(iii)	Observations/Recommendations which the Committee do not desire to pursue in view of the Government's replies:	
	Sl.Nos. 3 and 6	
	Total:	02
	Percentage	25%
(iv)	Observations/Recommendations in respect of which the replies of the Government have not been accepted by the Committee and which require reiteration:	
	Nil	
	Total:	00
	Percentage	00%
(v)	Observations/Recommendations in respect of which final replies of the Government are still awaited:	
	Nil	
	Total:	0
	Percentage	0%