### Ujwal Bharat 3 Years Achievements and Initiatives

The Government has up-scaled the target for overall renewable energy capacity by more than 5 times to 175 GW by the

year 2022 which includes 100 GW from solar, 60 GW from wind, 10 GW from bio-power and 5 GW from small hydro-power.

During the last three years the sector-wise achievements as on 31.01.2017 are as follows:

[A]	GRID INTERACTIVE POWER										
SI.	Sector	Installed	Installation	Installation	Installation	Cumulative					
No.		capacity	during	during	during	installed					
		upto	2014-15	2015-16	2016-17	capacity					
		31.03.2014									
1.	Wind Power	21042.40	2312.00	3423.05	2094.14	28871.59					
2.	Solar Power	2631.98	1112.07	3018.80	2472.39	9235.24					
3.	Small Hydro	3803.69	251.61	218.60	67.90	4341.85					
	Power										
4.	Bio-Power	4131.91	413.5	400.00	164.5	8296.08*					
	Total	31610.98	4089.18	7060.45	4798.93	50744.76					

#### [B] OFF-GRID/CAPTIVE POWER

SI. No.	Sector	Installed capacity upto 31 <sup>st</sup> March 2014	Installation during 2014-15	Installation during 2015-16	Installation during 2016-17	Cumulative installed capacity
1.	Waste to Energy	122.97	21.78	14.13	5.57	164.45
2.	Biomass (non- bagasse) Cogeneration	531.82	60.05	60.04	0.00	651.91
3.	Biomass Gasifiers	163.28	6.76	12.54	4.30	186.88
4.	Aero- Generators/Hybrid Systems	2.26	0.27	0.16	0.38	2.97

5.	SPV Systems	159.37	60.00	87.67	115.98	423.02
6.	Water mills/micro	13.21	4.00	1.50	0.10	18.81
	Hydel					
	Total	992.91	152.86	176.04	126.33	1448.04

### [C] OTHER RENEWABLAE ENERGY SYSTEMS

SI.	Sector	Installed	Installation	Installation	Installation	Cumulative
No.		capacity	during	during	during	installed
		upto 31 <sup>st</sup>	2014-15	2015-16	2016-17	capacity
		March 2014				
1.	Family Biogas	47.88	0.65	0.57	0.42	49.52#
	Plants (in					
	Lakh)					

\*Progress of Biopower has been revised to installed capacity from exportable power capacity.

#Progress upto December 2016

The Government has up-scaled the target for overall renewable energy capacity by more than 5 times to 175 GW by the year 2022

which includes 100 GW from solar, 60 GW from wind, 10 GW from bio-power and 5 GW from small hydro-power.

A cumulative capacity of **50744 MW of grid-connected power generation** capacity from renewable energy sources has been installed as on 31.01.2017 including 28871 MW from Wind power, 9235 MW from Solar power, 4342 MW from Small Hydro power and 8296 MW from Bio-Power.

A total of **7060 MW of grid-connected power generation** capacity from renewable energy sources like solar (3019 MW) and wind (3423 MW), Small Hydro Power (218 MW), Bio-Power (400 MW) has been added during 2015-16 in the country against target of 4,460 MW.

**International Solar Alliance** was launched as a special platform for mutual cooperation among 121 solar resource rich countries lying fully or partially between Tropic of Cancer and Tropic of Capricorn at COP21 in Paris on 30<sup>th</sup> November, 2015 to develop and promote solar energy, with its headquarter in India.

National Solar Mission (JNNSM) was launched on 11<sup>th</sup> January, 2010. The Mission targets include

- Deployment of 20,000 MW of grid connected solar power by 2022
- 2,000 MW of off-grid solar applications including 20 million solar lights by 2022,
- 20 million sq. m. solar thermal collector area,

Further, Government has revised the target of Grid Connected Solar Power Projects from 20,000 MW by the year 2021-22 to 100,000 MW by the year 2021-22 under the National Solar Mission and it was approved by Cabinet on 17<sup>th</sup> June 2015.

34 Solar Parks of aggregate capacity of 20,000 MW has been approved in 21 states.

As on 31<sup>st</sup> March, 2014, total installed capacities of grid connected solar projects was 2632 MW. As on 31.01.2017, total installed capacities of grid connected solar projects is 9235 MW. Thus, the total Grid connected solar Capacity added during April, 2014 to January, 2017 is 6603 MW.

Biggest ever solar power capacity addition of 3,019 MW in 2015-16 exceeding target by 116%.

The Ministry launched the scheme in January 2015 to set up 1000 MW of Grid Connected Solar PV Power Project by CPSUs and Govt. Organizations with VGF.

MNRE had allocated 1037.26 MW capacity to 16 CPSUs/Govt. Organizations within the sanctioned funds of Rs.1000 Crore for this scheme. Out of the total sanctioned capacity of 1037.26 MW, solar projects of 261.50 MW capacity have already been commissioned so far.

A massive Grid Connected Solar Rooftop Programme launched with 40 GW target. State Electricity Regulatory Commissions of **36** States/UTs notified regulations for net-metering/feed-in-tariff mechanism. Rs. 5000 crore approved for solar rooftops.

Bank loans for solar rooftop systems to be treated as a part of home loan/ home improvement loan with subsequent tax benefits

A total sanction of 1300 million dollars has been received from World Bank, KFW, ADB and NDB through which the SBI, PNB, Canara Bank and IREDA will be in the position to fund at the rate of less than 10%.

Ministry has tied up with ISRO for Geo tagging of all the Rooftop plants using ISRO's VEDAS Portal.

A special programme for 100,000 solar pumps launched of which 31,472 Solar Pumps installed in 2015-16, higher than total number of pumps installed during last 24 years i.e. since beginning of the programme in 1991. So far, more than **1 lakh solar** pumps have been installed in the country.

Surya Mitra scheme launched for creating **50,000 trained personnel in 5 years**. **Over 6600 Surya Mitra's have been trained so far** and more than 4000 are undergoing training. About 8400 Surya Mitra would be trained in FY 2016-17.

Coal cess has been increased upto 8 times from Rs. 50 to Rs. 400/ton in last two years (2014-15) which will make available around Rs. 40,000 crore/year for supporting and incentivizing development Clean Energy projects in the country.

At the end of FY 2013-14 i.e on 31.03.2014 the total wind power installed capacity in the country was 21042 MW. The targets for capacity addition could not be achieved for last two years i.e FY 13 & FY 14 because both AD and GBI were discontinued from 01.04.2012. Though the GBI was restored in September 2013, the new government in its first budget announced in July 2014 restored the AD benefit to wind energy sector.

Largest ever wind power capacity addition of 3423 MW in 2015-16 exceeding target by 42%.

The wind power potential of the country was reassessed by the National Institute for Wind Energy (NIWE). In September 2015, NIWE launched Wind Energy Resources Map of India at 100 meter above ground level on online Geographic Information System platform.

The Ministry in August 2016 released Policy for Repowering of Wind Power Projects with an objective to promote optimum utilisation of wind energy resources by creating facilitative framework for repowering.

For optimal and efficient utilization of transmission infrastructure and land, reducing the variability in renewable power generation and thus achieving better grid stability, draft wind-Solar Hybrid Policy was issued in June 2016. The policy provides a framework for promotion of large grid connected wind-solar PV hybrid systems. The goal of the policy is to reach wind-solar hybrid capacity of 10 GW by 2022 and it policy aims to encourage new technologies, methods and way-outs involving combined operation of wind and solar PV plants. The Policy is under process of approval.

The National Offshore Wind Energy Policy has been notified on 6 October 2015. The policy will provide a level playing field to all investors/beneficiaries, domestic and international.

To enable Discoms of the non-windy States to fulfil their non-solar RPO obligation, through purchase of wind power at a tariff determined by transparent bidding process, a Scheme was sanctioned. Under the Scheme, 1000 MW wind power projects are envisaged to be set-up in windy States. The Scheme will be implemented by SECI. The e-reverse auction under the Scheme was held on 23 February 2017 and the bid was closed at the record low tariff Rs. 3.46 per unit.

Ministry issued new Guidelines incorporating requirement of site feasibility, type and quality certified wind turbines, micrositing criteria, compliance of grid regulations, real time monitoring, online registry and performance reporting, health and safety provisions, decommissioning plan, etc. to ensure healthy and orderly growth of wind power sector in the country.

The National Institute of Wind Energy (NIWE), Chennai has undertaken forecasting and scheduling exercise in the State of Tamil Nadu. As a result the State evacuated over 11 BU of wind energy in 2016-17 as compared to just 7 BU in the previous year.

Ministry has announced scheme for development of Small Hydro Power Projects upto 25 MW station capacity vide Administrative Approval No. 14(03)2014-SHP dated 02.07.2014. The scheme is applicable to all states and UTs in the country. Allotment of SHP projects is under the purview of State Governments.

As on 31<sup>st</sup> March, 2014, total installed capacities of small hydro power projects was 3804 MW. As on 31.01.2017, total installed capacities of small hydro power projects is 4342 MW.

First Renewable Energy Global Investors Meet (Re-Invest) held. Received total commitments of 266 GW by Power Producers in the solar, wind, small hydro and bio energy sectors and 41 GW by Manufacturers in the solar and wind energy sectors.

Rs.38,000 crore Green energy corridor being set up to ensure evacuation of renewable energy.

In order to facilitate integration of large scale renewable generation capacity addition, Cabinet Committee of Economic Affairs (CCEA) approved creation of Intra-state Transmission system in the states of Andhra Pradesh, Gujarat, Himachal Pradesh, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and Tamil Nadu, rich in renewable resource potential and where large capacity renewable power projects are planned, at an estimated cost of Rs 10,141.68 crore with Government of India contribution from National Clean Energy Fund (NCEF) of Rs 4056.67 crore. The activities envisaged under the project includes

- Establishment of 48 new Grid sub-stations of different voltage levels
- Total transformation capacity around 17100 MVA (Mega Volt Ampere)

• Installing over 8553 ckt-kms (Circuit kilometres) of transmission lines in these eight states.

The project is proposed to be completed by FY 2019-20, with costs proposed to be met through KfW loan (40 percent of the total cost), NCEF grant (40 percent of total cost) and the remaining 20 percent as State contribution.

Creation of an Intra-State Transmission System will facilitate evacuation of renewable power from generation stations to load centres.

Ministry of New & Renewable Energy										
Scheme /	Details of	Eligibility	Target	Target	Total Outlay	Benefits	Whether			
Policy Name	Scheme /	Criteria	Beneficiary	Achieved	(Budget	accrued to	initiative			
	Objectives			(Current Status)	Details –year	Citizens	linked to any			
	(Not more				wise)		other			
	than 100				-		Central			
	words)						Scheme			
Pilot-cum-	Setting up of	State Power	State Power	Based on the	Central	Solar PV	No			
demonstration	solar PV	Generation	Generation	requests	Financial	power plants				
project for	power plants	Companies/	Companies/	received from	Assistance	set up on				
development	on canal-tops	State	State	various States,	(CFA of Rs.	canal-tops				
of grid	and canal-	Government	Government	full targeted	228 crores	and canal-				
connected	banks to	Utilities/ any	Utilities/ any	capacity of 50	approved in	banks				
solar PV	achieve	other State	other State	MW canal-top	2014-15.					
power plants	gainful	Government	Government	and 50 MW		Reduction in				
on canal	utilization of	Organization/	Organization/	canal-bank solar	CFA of Rs.	evaporation				
banks and	the unutilized	PSUs/ Gol	PSUs/ Gol	PV power	69.0 crore	loss from				
canal tops.	area on top of	PSUs or Gol	PSUs or Gol	projects have	already	canal-waters.				
	Canals and	organisations,	organisations	been allotted to 8	released in					
	also the	provided that	operating in	different States	2014-15.					

## Subject: Performance in last three years (2014-17) and performance during UPA Government (2011-14).

					1
vacant	they are	power or	(Andhra		
Government	operating in	irrigation	Pradesh,	Balance CFA	
land along the	power sector	sector.	Karnataka,	of Rs. 159	
banks of	or own canal		Kerala, Gujarat,	crores to be	
Canals.	svstems. i.e.		Puniab.	released in	
	are into		Uttarakhand.	2016-17.	
Provision of	irrigation, are		Uttar Pradesh	2017-18 and	
Central	eligible for		and West	2018-19	
Financial	benefits under		Bengal).		
Assistance	this scheme		Dongal		
(CFA) of upto			3 MW canal-top		
Rs 3 crore			SPV power		
ner MW			project and 16		
for canal-ton			MW canal-bank		
SP\/ nower					
projects and			projects bave		
unto Re 15			hoon		
croros por			commissioned		
MW for concl					
honk SDV			as 011		
Dallk SPV			20.02.2017.		
power					
projects.					

Ministry of New & Renewable Energy										
Scheme / Policy Name	Details of Scheme / Objectives (Not more than 100 words)	Eligibility Criteria	Target Beneficiary	Target Achieved (Current Status)	Total Outlay (Budget Details – year wise)	Benefits accrued to Citizens	Whethe r initiativ e linked to any other Central Schem e			
Scheme for selection of 3000 MW grid – connected solar PV power projects under NSM, Phase-II, Batch-II, "State- specific Bundling Scheme"	This Scheme envisages setting up of 3000 MW capacity of grid- connected solar PV power projects based on bundling of solar power (3000 MW) with unallocated thermal power (1500 MW) in the ratio of 2:1 (in MW terms) to facilitate fulfilment of	Solar Power Developers having Net Worth greater than or equal to Rs. 1.5 Crores per MW of the project capacity are eligible for bidding for projects under the Scheme. The selection of solar power developers is through an open, transparent, competitive, e- bidding process involving reverse auction. Selection of	<ul> <li>a. Solar Power Developer s (SPDs) (for setting up of solar power plants on BOO basis and getting PPA for 25 years)</li> <li>b. State Governme nt Utilities (for purchase of solar power for fulfilment of RPO)</li> </ul>	Based on the requests for allocation received from various States, following allocations have been made: Andhra Pradesh (1250 MW) Karnataka (600 MW) Rajasthan (650 MW) Telangana (400 MW) Uttar Pradesh (100 MW) Uttar Pradesh (100 MW) As on 28.02.2017, status is as follows: NIT published : 3000 MW Reverse Auction over: 2750 MW PSA signed with Discom : 2750 MW Lol issued to SPD: 2750 MW	The Scheme does not involve any budgetar y support.	On completion, this Scheme will create 3000 MW capacity of grid-connected solar PV power projects, mainly in private sector with largely private investment and will also generate direct and indirect employment opportunities and give an impetus to the local economy in the regions where these plants are being set up. Lowest bid for solar power under this Scheme is Rs. 4.34/unit; received for solar PV power	No			

3000 MW Grid – Connected Solar PV Power Projects under NSM Phase-II, Batch-II, "State Specific Bundling Scheme"

RPO requirement of the obligated entities.	bidders is based on the lowest quoted levellised tariff.	PPA signed 2750 MW	with SPD:	projects to be set up at Bhadla solar Park in Rajasthan	

# Ministry of New & Renewable Energy (Biogas Technology Development Division)

Details of schemes under MNRE, Biogas Technology Development Division

Scheme	De	tails of	Eligibility	Target	Target	Total Out	lay (Year	wise)	Benefit	Whether
Name	Sc	heme(Objectives)	Criteria	Beneficiar	Achieved	(Rs. in C	r.)		accrued to	initiative
				У	(Current	2014-15	2015-16	2016-17	citizens	s linked
					Status)					to any
					Nos.					other
										Central
										Scheme
National	i.	To provide clean	An Individual	Families of	-Installed	126.00	130.00	108.00	-During the	No
Biogas		gaseous fuel	household	remote,					previous 2	
and		mainly for cooking,	beneficiary	rural and	84882 nos.			For	years 2014-	
Manure		lighting and	having at least	Semi-	of Biogas			NBMMP	15 & 2015-16	
Manage		organic manure to	2-3 cattle and	urban	plants			out of	and current	
ment		rural and semi-	some space for	areas.	during			the total	year 2016-17,	
Program		urban households.	setting up		2014-15,			142.00	about 2.00	
me	ii.	To mitigate	biogas plant of		74705 nos.			cr.	lakh family	
(NBMMP)		drudgery of rural	family size.		of plants			under	type Biogas	
		women, reduce	(1 m <sup>3</sup> to 6 m <sup>3</sup> )		during			Biogas	plants have	
		pressure on			2015-16			program	been set up	
		forests and			and 47304*			me	to 28.02.2017	
		accentuate social			nos. of				benefiting as	
		benefits.			biogas				many	
	iii.	To improve			plants				numbers of	
		sanitation in			during				families.	
		villages by linking			2016-17					
		sanitary toilets			(upto				-Total	
		with cattle dung			28.02.2017)				estimated	
		based biogas			•				biogas	
		plants.							generation:	
	iv.	To provide bio-			-Cumulative				about 4.00	
		digested slurry as			total about				lakh cubic	
		a source of			49.5 lakh				meters per	

	upgraded organic	plants as on	day,	
	enriched bio-	28.02.2017	replacing	
	manure to reduce		annually an	
	and /or		estimated	
	supplement the		about 44.10	
	use of chemical		lakh numbers	
	fertilizers.		of LPG	
	v. Meet "lifeline		cylinders of	
	energy" needs for		domestic size	
	cooking as		(14.2 kg).	
	envisaged in		( 3)	
	"Integrated Energy		-Side by side	
	Policy" of the		producing	
	National Institution		about 18.2	
	for Transforming		lakh tonnes	
	India (NITI) Ayog		of organic	
	(erstwhile		enriched bio-	
	Planning		manure per	
	Commission).		year, which is	
N	vi. To help in		equivalent to	
	mitigation and		19300 tonnes	
	combating climate		of Urea	
	change by		equivalent	
	preventing		per annum.	
	emission of Green			
	House Gases		-In terms of	
	(GHGs) such as		felling of	
	Carbon Dioxide		trees the	
	and Methane into		installed	
	the atmosphere.		plants of	
			2014-15 &	
			2015-16	
			saving about	
			4.9 lakh	
			tonnes of fuel	
			wood per	

				annum.	
				-Preventing an estimated emission of about 9.00 lakh tonnes of carbon dioxide annually into the atmosphere.	

[\*fig. are to be firmed up.]

#### MINISTRY OF NEW AND RENEWABLE ENERGY

(R&D AND HRD Division)

Material regarding Quality Control of Renewable Energy Systems and Suryamitra in the Ready Reckoner Handbook', containing the latest information on Schemes, Programmes, Policies and Initiatives taken by the Government for Citizen benefit in the last Two and Half Year

Activity 1: The MNRE in 2015-16 initiated to bring out National Lab Policy for Testing and Standardisation for renewable energy sector for quality assurance of products. The said lab policy is under process of finalisation. In addition, the MNRE has also initiated bringing out technical regulation for quality control of SPV Systems, devices and components. The said regulation is in the process of notification. The said regulation involves making standards and performance testing as per Indian standard mandatory before deployment of product.

Activity 2: Suryamitra Training Programme and Fellowships for research.

Scheme and policy name	Details of the scheme and objectives	Eligibility criteria	Target benefici arv	Target so far	Achievement	Total budg et	Benefit accrued to public	Whether initiative linked to	Remark
				Year	No.	outla y		any central	
								scheme	

Surya-mitra	Surya-mitra	The	Youths	Target		Rs	The	The	In addition to
Skill	Skill	trainee	with ITI	2015-16	2000	250cr	trained	scheme is	Suryamitra,
Development	Development	should be	certificat	2016-17	7000		personnel	being run	Ministry under
Programme	Programme	10 <sup>th</sup> pass	е	2017-18	12000		will	as per the	HRD programme
	falls under	and ITI for	wanting	2018-19	14000		provide	Common	runs fellowship
	Short term	undergoin	to go in	2019-20	15000		after sale	norms	schemes for
	training	g training	the field	<u>Achievement</u>			service to	developed	MTech/MSc/PhD
	programme	under this	of solar	2015-16	2592		the	by the	programmes and
	component of	programm	energy				people	MSDE for	supports
	the Human	e.	either	2016- 17	4073		who have	supporting	organisation of
	Resources		as an	(till			adopted	Skilling	training
	Development		employe	28/02/2017)			solar	programm	programme for
	Programme		e or self				devices	e and thus	various target
	of the MNRE.		employe				for	confirms	groups through
	It aims to		d				various	to norms	Barefoot College
	train 50000		worker				applicatio	of Skill	Tilonia (for
	persons as		in				ns. This	India	illiterate/semiliterat
	technicians		installati				will also	Mission	e women on solar
	for as per		on,				improve		lighting systems
	NCVI		O&M,				the		assembling, repair
	approved		sales				quality of		and maintenance),
	REN-5		and				the		Central
	module on		after				Installatio		Electronics
	renewable		sale				n.		Limited Sahibabad
	energy (now		service						for graduate
	adopted by		of solar						engineers on SPV
	Skill Council		systems						systems,
	for Green		and						Gandnigram Rurai
	JOD) ON		devices						Institute IN and
	installation,		inciudin						
	operation &		g solar						Bengaluru On
	maintenance		power						ainterent RE

and after sale	projects			systems	and	
service of	at kW			devices.		
solar PV	range.					
systems and	Ũ					
devices						
including roof						
top and other						
solar power						
projects.						
Besides						
technical						
content the						
programme						
has						
communicati						
on and						
entrepreneur						
ship						
development						
component						
also so that						
the trainee if						
so wishes						
can open a						
small						
business of						
solar devices						
all across the						
country						
000mm			1			

VGF Scheme for setting up of 750 MW Grid-connected solar PV Projects under JNNSM Phase-II, Batch-I VGF Scheme for setting up of 2000 MW Grid-connected solar PV Projects under JNNSM Phase-II, Batch-III VGF Scheme for setting up of 5000 MW Grid-connected solar PV Projects under JNNSM Phase-II, Batch-IV Rooftop PV & Small Solar Power Generation Programme (RPSSGP) Scheme Demonstration Solar GBI Scheme

	Ministry of New & Renewable Energy Grid-connected Solar Power Programme											
Scheme / Policy Name	Details of Scheme / Objectives (Not More than 100 words)	Eligibility Criteria	Target Beneficiary	Target Achieved (Current Status)	Total Outlay (Budget Details – year wise)	Benefits accrued to Citizens	Whether initiative line to any other Central Scheme					
VGF Scheme for Setting up of 750 MW Grid- connected solar PV Projects under JNNSM Phase- II, Batch-I	<ul> <li>Viability Gap funding is provided to Solar Power Developers.</li> <li>Total capacity is divided into 2 categories: Domestic Content (375 MW) &amp; Open (375 MW). VGF support of upto Rs. 2.5 Crore per MW (or 30% of Project cost, whichever is lower) will be</li> </ul>	Solar Power Projects of minimum 10 MW capacity	Solar power developers	680 MW of grid connected solar power projects installed.	Rs. 1120 Crore (50% in the first year and 10% every subsequent year for 5 years).	Cheap power generated from solar projects is provided to Citizens through Distribution Companies in various States.	Other VGF Scheme announced by MNRE					

	provided. Power is purchased by SECI @ Rs. 5.45/kWh and sold to buying utilities @ Rs. 5.50/kWh, with a trading margin of Rs 0.05 per unit.						
VGF Scheme for Setting up of 2000 MW Grid- connected solar PV Projects under JNNSM Phase- II, Batch-III	<ul> <li>Viability Gap funding is provided to Solar Power Developers.</li> <li>Total capacity is divided into 2 categories: Domestic Content (250 MW) &amp; Open (1750 MW).</li> <li>VGF support of upto Rs. 1.31 Crore per MW (DCR) and Rs. 1 Crore per MW (DCR) and Rs. 1 Crore per MW (Open) will be provided.</li> <li>Power is purchased by SECI @ Rs.</li> </ul>	Solar Power Projects of minimum 10 MW capacity	Solar power developers	SECI has issued RfS for 2510 MW capacity in 7 states/UTs. LoIs have been issued for 2395 MW. PPAs have been signed for 2395 MW. PSA for sell of power to Discoms have been signed for 2425 MW.	Rs. 2100 Crore (50% in the first year and 10% every subsequent year for 5 years). 1% of the VGF as administrative charges to SECI.	Cheap power generated from solar projects is provided to Citizens through Distribution Companies in various States.	Other VGF Scheme announced by MNRE

	4.50/kWh and sold to buying utilities @ Rs. 4.43/kWh, with a trading margin of Rs 0.07 per unit.						
VGF Scheme for Setting up of 5000 MW Grid- connected solar PV Projects under JNNSM Phase- II, Batch-IV	<ul> <li>Viability Gap funding is provided to Solar Power Developers.</li> <li>Project will be implemented in four years (i.e 1250 MW in each year)</li> <li>VGF support of upto Rs. 1.25 Crore per MW (DCR) and Rs. 1.00 Crore per MW (Open) will be provided.</li> <li>Power will be purchased by SECI @ Rs. 4.43/kWh and will be sold by SECI to buying utilities @ Rs. 4.50/kWh, with a trading margin of</li> </ul>	Solar Power Projects of minimum 10 MW capacity	Solar power developers	RfS have been issued for 2900 MW capacity in 6 states. Lol has been issued for 1020 MW. PPAs have been signed for 970 MW.	Rs. 5050 Crore (100% on commissioning of a project) phased over 4 years i.e. Rs 1250 Crore per year and 1% of the VGF as administrative charges to SECI.	Cheap power generated from solar projects is provided to Citizens through Distribution Companies in various States.	Other VGF Scheme announced by MNRE

	7 paisa/kWh the first year.	in					
Rooftop PV & Small Solar Power Generation Programme (RPSSGP) Scheme	<ul> <li>To give a th to Rooftop development small s power generation plants (100 to 2 MW) being provi GBI to projects registered du 2010-11.</li> </ul>	rust PV PV olar volar kW are ded the ring	Small solar power developers	A total of 72 projects of 91.8 MW in 13 states, are registered and commissioned under the scheme. Scheme is now closed for new registrations.	Rs. 180 Crore per year for 25 years.	Cheap power generated from solar projects is provided to Citizens through Distribution Companies in various States.	Other Generation Based Incentive (GBI) Schemes of MNRE.
	<ul> <li>The Ind Renewable Energy Development Agency (IREDA), designated the Implementing Agency for Scheme.</li> <li>Under scheme, GB provided for</li> </ul>	dian is as this the I is 25					
	years from date commissionir	the of ng.					

Demonstration Solar GBI Scheme	<ul> <li>To develop &amp; demonstrate mega-watt capacity grid interactive solar power generation in the country, Demonstration Solar GBI Scheme was announced in January, 2008.</li> </ul>	Solar power projects of minimum capacity of 1 MW to a maximum of 5 MW capacity.	Solar power developers	A total of 6 projects of 18 MW are registered under the Scheme is now closed for new registrations.	Rs. 32 Crore per year for 10 years.	Cheap power generated from solar projects is provided to Citizens through Distribution Companies in various States.	Other Generation Based Incentive (GBI) Schemes of MNRE.
	<ul> <li>GBI up to Rs.12/- per KWh is given for the electricity generated and fed to the grid from a Grid Interactive Solar PV Power Plant.</li> </ul>						
	Under the Scheme, GBI is provided for 10 years from the date of commissioning.						

Subject: Performance in last three years (2014-17) and performance during UPA Government (2011-14).

Scheme for setting up 1000 MW of Grid Connected Solar PV Power Project by CPSUs and Govt. Organizations with VGF support under DCR category.

	Ministry of New & Renewable Energy											
Scheme / Policy Name	Details of Scheme / Objectives (Not more than 100 words)	Eligibility Criteria	Target Beneficiary	Target Achieved (Current Status)	Total Outlay (Budget Details –year wise)	Benefits accrued to Citizens	Wheth er initiativ e linked to any other Central Schem e					

ſ	Scheme for	This Scheme	(1) The project	CPSUs/Govt.	MNRE has	No outlay is	On	No
	setting up	was launched	has to be	organisation	allocated 1037.26	fixed on year-	completion,	
	1000 MW of	in January	owned by	<b>s</b> (for setting	MW capacity to 15	wise basis	this Scheme	
	Grid	2015 for	CPSUs/Govt.	up of solar	CPSUs/Govt.	under the	will create	
	Connected	setting up of	Organizations;	power plants	Organisations	scheme.	more than	
	Solar PV	1000 MW	(2) Govt. will	on BOO basis	within the	VGF of	1037 MW	
	Power	solar power	provide VGF (i)	for captive	sanctioned funds of	Rs.375.00	capacity of	
	Projects by	projects with	@ Rs.1 Cr. /MW,	use( Self	Rs.1000 Crore for	Crore and	grid-	
	CPSUs and	an objective	if Cells and	use)/3rd Party	this scheme.	<mark>Rs.75.00</mark>	connected	
	Govt.	to motivate	Modules are	sale/Merchant	Out of the total	Crore is	solar PV	
	Organizations	CPSUs to	procured for the	sale and	sanctioned capacity	expected to	power	
	with VGF.	procure	project from	getting PPA	of 1037.26 MW,	be released	projects,	
		equipment	indigenous	for 25 years)	solar projects of	during FY	mainly by	
		from domestic	source and (ii)		<mark>441.50</mark> MW	2017-18 and	CPSUs/ Govt.	
		manufacturer	@ Rs.50 Lakh		capacity have	2018-19	organisations	
		s of cells and	/MW, if only		already been	respectively	and will	
		modules.	Modules are		commissioned so		encourage	
			procured for the		far.		domestic cell	
			project from		Total VGF of		and module	
			indigenous		Rs.450.55 Cr has		manufacturer	
			source.		been released so		s, thereby	
					far. <mark>Rs.90 Cr is also</mark>		promoting	
					been released this		Make-in-	
					<mark>week. Thus the</mark>		India.	
					total release would		This also will	
					become Rs.549.55		help in	
					Cr.		abatement of	
							CO2	
							emission.	

List of CPSUs/Govt. of India organisations who have been sanctioned solar power project capacity under the MNRE's CPSUs Scheme for setting up of 1000 MW grid connected solar power projects with VGF support.

SI.	Name of PSU/Govt.	Capacity	Location of the project
No.	organisations	sanctio	
		ned	
		(MW)	
1	NTPC	680.0	(1) Anantapuramu (A.P.) (250 MW),
		0	(2) Mandsaur (MP) (229.5 MW)
			(3) Bhadla Rajasthan (180 MW)
			(4) Karnataka (20.5 MW)
2	BHEL	16.50	Trichy (TN)
			Ramachandrapuram,(Hyd.)
			l elangana)
•			Bhopal (MP)
3	Rashtriyalspat Nigam Ltd.	5.00	Visakhapatnam (A.P.)
4	Coal India Ltd.	200.0	MP
		0	
5	NHPC Ltd.	50.00	Tamil Nadu
6	NEEPCO	5.00	Assam
7	GAIL (India) Ltd	5.76	Pata (UP)
	Under		
	Ministries/Departments		
	Quota @ 1 MW each		
8	(i) Scooters India Ltd;	1.00	Lucknow (UP)
9	(ii) Sambhar Salts Ltd	1.00	Sambhar (Rajasthan)
10	(iii)Dadra Nagar Haveli	3.00	Dadra Nagar haveli (UT)
	Power Distribution		
	Corporation Ltd.		
11	(iv) PEC Ltd.	1.00	JNU Delhi
12	(v) Central Armed Police	1.00	New Delhi
	Forces Institute of		
	Medical Sciences		
	(CAPFIMS), New Delhi		
13	Paradip Port Trust	10.00	Paradip Port (Odisha)

14	Cement Corporation of India	6.00	Tandur (Telangana)
15	THDC India Ltd.	50.00	Kasargod Distt. Kerala
16	NIFTEM	2.00	Kundli, Haryana
		1037.	
	Total	26	

## Ministry of New and Renewable Energy (Biomass Cookstove Division) Information related to Unnat Chulha Abhiyan Programme (as on 28<sup>th</sup> February, 2017)

Scheme/	Details of	Eligibility	Target	Target	Total Outlay	Benefits	Whether
Policy	Scheme/	Criteria	Beneficiary	Achieved	(Budget Details-	accrued to	Initiates
Name	Objectives			(Current	year wise)	Citizens	links to
				Status)			any
							other
							Central
Lhow of	<b>4</b> To dovelop and	Nlat	A Kitabawa af	Dhunding	004445	<b>4</b> The	Scheme
Onnat	1. To develop and	NOT	1. Kitchens of	Physical	2014-15	1. Ine	NO
Chuina	deploy improved	Applicable	Mid-day Meal	l arget	B.E. R.E.	citizens who	
Abniyan	DIOMASS COOK-		(IVIDIVI) scheme,	Achievement	1* 11.75 11.75	were using	
	Stoves for		Anganwadis,	204445	2** 20.00 20.00		
Programme	providing cleaner		Forest Rest	2014-15:		inefficient	
	COOKING Energy		Houses, Iribal	Family type	2015-16	chuina for	
	solutions in rural,		Hostels and	16,487 NOS. &	B.E. R.E.	COOKING get	
	semi-urban and		small business		1* 9.75 2.79	Improved	
	urban areas using		establishments	type 799 nos.	2** 6.00 0.86	DIOMASS	
	biomass as fuel for		(road side	Improved	3*** 4.00 4.00	COOKSTOVE	
	COOKING.		dnabas, small	COOKSTOVE		With	
			notels and	disseminated	1*General Category	Government	
			restaurants and	2045 46.	2** North-East	Subsidy.	
	drudgery of		a variety of	2013-10:	Category	<b>9</b> Deduction	
	women and				3*** Schedule Caste		
	traditional abulba		toxtile dvoing	20,453 NOS. &	Category	in women	
	traditional chuina		druing of opiooo				
	IOI COOKING.		ate to to be	ippe 50 nos.	B.E Budgetary		
	2 To mitiante		eluc.) lu De		Estimate	with clear	
	J. TO MILIGALE		supplied with	diagominated	R.E Revised	couking	
	roducing the block		hiomoog	uisseminated	Budget	Solution.	
	corbon and other		DIOMASS	Financial		2 Souting in	
				Torgot	Rs. in crore	<b>J.</b> Javing In	
	from huming		complying with	Target		cooking and	
	nom burning		improved	Achievement		iuel	

biomass for cooking.	standards. <b>2.</b> Individual households in rural areas who use biomass for cooking purposes.	<b>2014-15:</b> Rs. 1.71 crore utilized against 12.68 crore CFA released as1 <sup>st</sup> instalment	<ul><li>(biomass) collection time.</li><li>4. Saving in fuel expenditure cost.</li></ul>	
		<b>2015-16:</b> Rs. 0.54 crore utilized against 2.72 crore CFA released as 1 <sup>st</sup> instalment		