



# भारत के विद्युत क्षेत्र का 1947 से 2015 तक का संवर्धन

Growth of Electricity Sector  
in India From 1947-2015



अप्रैल, 2015  
APRIL, 2015

भारत सरकार,  
Government of India,

विद्युत मंत्रालय  
Ministry of Power

केन्द्रीय विद्युत प्राधिकरण,  
Central Electricity Authority,

नई दिल्ली  
New Delhi

## Highlights of Power as on 31st March 2015

With March 2015 having gone by just now, three years of the 12th FYP have also been completed. These three years were quite eventful for the Indian power sector. Major achievements in the Power Sector during the month of March 2015 and the period April 2014 – March 2015 as per the information available in the CEA are as under:

### (A) Capacity addition:

- Record capacity addition of **6630.9 MW** achieved during **March 2015**.
- **22566.31 MW** of generation capacity was added during **April 2014–March 2015** exceeding the target of **17830.3 MW**
- Generation capacity of **61014.12 MW** has been added upto **31.03.2015** against the target of **88536.6 MW** for the entire 12th FYP. This is **68.9%** of the target.

### (B) Transmission system addition:

- Against a target of adding 20,882 Ckms of **transmission lines**, 22,101 Ckms have been commissioned/ready for commissioning during **April–March 2015** which is **105.84%** of the target.
- Also, **55,956 Ckms** of **transmission lines** have been added upto **31.03.2015** against the target of 1, 07, 440 Ckms for the 12th FYP which is 52% of the target.
- Further, 65,554 MVAs of **transformation capacity** has been added during **April–March 2015**, against the target of 47,871 MVA, which is **136.94%** of the target.
- Target for addition of **transformation capacity** for the 12th FYP is 2, 82, 750 MVA against which 1, 86,549 MVAs have been added upto **31.03.2015** which is 65.98% of the target.

### (C) Generation & PLF:

- The Power Generation during **March 2015** was 86100.64 MU which is **96.12%** of the target of 89573.4 MU and **101.73%** of the actual during the month of **March 2014**. Generation during **April 2014–March 2015** was 1048.40 BU against the target of 1023 BU, which is **102.48%** of the target.
- All India PLF during the month of **March 2015** was 62.99% against the target of 68.23%.
- All India PLF during **April–March 2015** was 65.11% against the target of 65.52%.

### (D) Power Supply position:

Power Supply position in the country has generally improved during 2014-15. The gap between requirement & availability of energy reduced from 3.6% during **March 2014** to 2.1% during **March 2015** and from 4.2% during **April, 2013 - March, 2014** to 3.6% during **April 2014 - March 2015**. The gap between peak demand & supply also reduced from 4.7% during **March 2014** to 3.2% during **March 2015**. However, gap between peak demand & supply increased from 4.5% during **April 2013 - March 2014** to 4.7% during **April - March 2015**.

### (E) Power System Development Fund (PSDF):

For improving power system operation and enhancing security of the national electricity grid, Ministry of Power has already approved total five schemes submitted by Kerala, West Bengal, Rajasthan & POWERGRID and sanctioned a grant of Rs 618 Crore from PSDF for execution thereof. Eight more such schemes with an overall estimated cost of about Rs.1,161 Crore submitted by the states of Assam, Karnataka, Nagaland, Odisha, Bihar, UP (2 schemes) and Gujarat have been approved by the Ministry of Power in March 2015 and sanctioned grant of about Rs.803 Crore therefor from PSDF. Sanctioned grant will be released in phases based on achievement of prescribed milestones during execution of the schemes.

### (F) Other achievements:

- The CEA gave concurrence to two HE schemes during 2014-15, namely: **Chhatru HEP (126 MW)** in HP and **Kalai – II HEP (1200MW)** in Arunachal Pradesh. Further, three HE schemes were also appraised by the CEA during the year, namely: **Arun -3 HEP (900 MW)** in Nepal, **Chamkhaschhu –I HEP (770MW)** in Bhutan and **New Gandarbal HEP (93 MW)** in J&K.
- The CEA granted prior approval under section 68 of the EA 2003 for construction of **seven transmission schemes** during **March 2015**.
- The All India per capita consumption for the year **2014-15** is 1010 kWh (provisional) as against target of 1000 kWh.
- As per the directions of the Cabinet Secretariat's Project Monitoring Group for digitization of clearances, a portal, namely "[ceaclearance.gov.in/ei](http://ceaclearance.gov.in/ei)" has been launched on 18th March, 2015 providing online facility for getting clearance from Electrical Inspectorate Division of Central Electricity Authority.



# भारत के विद्युत क्षेत्र का 1947 से 2015 तक का संवर्धन

## GROWTH OF ELECTRICITY SECTOR IN INDIA FROM 1947-2015

भारत सरकार  
GOVERNMENT OF INDIA  
विद्युत मंत्रालय  
MINISTRY OF POWER  
केन्द्रीय विद्युत प्राधिकरण  
CENTRAL ELECTRICITY AUTHORITY  
नई दिल्ली  
NEW DELHI  
अप्रैल, 2015  
April, 2015





ਮੇਜਰ ਸਿੰਹ

ਅਧਿਕਾਰੀ

ਕੇਨ੍ਦ੍ਰੀਯ ਵਿਦ੍ਯੁਤ ਪ੍ਰਾਧਿਕਰਣ  
ਭਾਰਤ ਸਰਕਾਰ

### ਪ੍ਰਾਕਕਥਨ

ਕੇਨ੍ਦ੍ਰੀਯ ਵਿਦ੍ਯੁਤ ਪ੍ਰਾਧਿਕਰਣ ਦੀਆਂ ਵਾਰ਷ਿਕ ਰੂਪ ਸੇ ਪ੍ਰਕਾਸ਼ਿਤ ਪੁਸ਼ਟਿਕਾ 'ਭਾਰਤ ਮੈਂ ਵਿਦ੍ਯੁਤ ਕੇਂਦ੍ਰ ਕੀ ਸ਼ਾਮਲੀ' ਵਿਭਿੰਨ ਵਰਗੋਂ ਮੈਂ ਭਾਰਤੀਯ ਵਿਦ੍ਯੁਤ ਕੇਂਦ੍ਰ ਕੀ ਸ਼ਾਮਲੀ ਦਾ ਵਿਸ਼ਵਾਸਾਂਕ ਪ੍ਰਦਾਨ ਕਰਾਂਦਾ ਹੈ। ਪ੍ਰਾਂਤੀਕ ਸੂਚਨਾ ਔਰਟ ਸਾਂਖਿਕੀ ਆਲੋਖਾਂ, ਪਾਈ-ਚਾਰਟ, ਮਾਨਚਿਤ੍ਰਾਂ ਅਤੇ ਸਾਰਣਿਆਂ ਦੇ ਰੂਪ ਮੈਂ ਪ੍ਰਸ਼ੰਸਨ ਕੀ ਗਈ ਹਨ। ਪੱਚਾਂਵਾਂ ਵਰਗ ਯੋਜਨਾਵਾਰ ਵਿਕਾਸ ਕੇ ਆਂਖਾਂ ਹੋਨੇ ਦੇ ਬਾਵਜੂਦ ਸੇ ਭਾਰਤੀਯ ਵਿਦ੍ਯੁਤ ਕੇਂਦ੍ਰ ਨੇ ਬਹੁਤ ਪ੍ਰਗਤਿ ਕੀ ਹੈ। ਯਹ ਪ੍ਰਕਾਸ਼ਨ ਮਹਤਵਪੂਰਣ ਵਿਕਾਸ ਸੰਕੇਤਾਂ ਜਾਂ ਸਥਾਪਿਤ ਵਿਦ੍ਯੁਤ ਉਤਪਾਦਕ ਕਾਰੋਬਾਰ, ਵਿਦ੍ਯੁਤ ਊਰਜਾ ਉਤਪਾਦਨ, ਪਾਰੋਣਾ ਅਤੇ ਸਾਂਵਿਤਰਣ ਨੇਟਵਰਕ, ਕੈਨਿੱਗ ਵਿਦ੍ਯੁਤ ਸੰਧਾਨਾਂ ਅਤੇ ਵਿਦ੍ਯੁਤ ਖਪਤ ਦੇ ਪੈਟਨ ਆਦਿ ਦੀ ਸ਼ਾਮਲੀ ਦਿੰਦਾ ਹੈ।

ਇਸ ਪ੍ਰਕਾਸ਼ਨ ਦੇ ਲਿਏ ਆਂਕਡੇ, ਸਮੀਕਿਸ਼ਾਵਾਂ, ਅਤੇ ਗੈਰ-ਯੁਟਿਲਿਟੀਆਂ ਦੇ ਪ੍ਰਾਪਤ ਕਿਏ ਗਏ ਹਨ। ਪ੍ਰਤਿ ਵਿਕਿ ਵਿਦ੍ਯੁਤ ਖਪਤ, ਖਪਤ ਦੀ ਵਿਭਿੰਨ ਸ਼੍ਰੇਣੀਆਂ ਦੀ ਪ੍ਰਤਿਸ਼ਤਾਂ ਦਿੰਦੀਆਂ ਹਨ। ਆਸਾ ਹੈ ਕਿ ਯਹ ਪੁਸ਼ਟਿਕਾ ਭਾਰਤੀਯ ਵਿਦ੍ਯੁਤ ਕੇਂਦ੍ਰ ਪਰ ਸ਼ਾਮਲ ਹੋਵੇਗੀ।

ਅਪ੍ਰੈਲ, 2015

ਮੇਜਰ (ਸੰਚਾਰ)  
(ਮੇਜਰ ਸਿੰਹ)



**Major Singh**  
**Chairperson**  
**Central Electricity Authority**  
**Govt. of India**

#### **FOREWORD**

The booklet "Growth of Electricity Sector in India" published annually by Central Electricity Authority provides panoramic view of growth of the Indian Power Sector over the years. The relevant information and statistics have been presented in the form of graphs, pie-charts, maps and tables. The Indian Electricity sector has come a long way ever since 5 year plan wise development was initiated. This publication provides details of the growth of vital development indicators like installed electricity generating capacity, electrical energy generation, transmission and distribution network, captive power plants and pattern of electricity consumption etc.

The data for this publication has been sourced from all utilities and non -utilities. The important statistics like per capita electricity consumption, percentage share of different categories of consumption, transmission and distribution losses, etc., have been compared with the data of some of the developed and developing nations. I hope that this booklet will be very helpful in providing concise & useful information on the Indian Electricity Sector.

**Dated: April, 2015**

*Major Singh*  
(Major Singh)



चंद्र शेखर

मुख्य अधिकारी ( डी एम एल एफ )

केंद्रीय विद्युत प्राधिकरण

भारत सरकार

### प्रस्तावना

स्वतंत्रता के पश्चात से भारत में विद्युत क्षेत्र में स्थापित विद्युत उत्पादन क्षमता और पारेषण व वितरण (टी एंड डी) प्रणाली दोनों में उल्लेखनीय वृद्धि हुई है। कुल विद्युत उत्पादन क्षमता (यूटिलिटी और गैर-यूटिलिटी की) 1947 में मात्र 1362 मेगावाट से बढ़कर मार्च अंत, 2015 में 267 गीगा वाट हो गई। प्रतिवर्त्ति बिजली की खपत जो 1947 में केवल 16.3 के यूनिट थी 2014–15 में बढ़कर 1010 के यूनिट हो गई है। इसके बावजूद, बिजली की मांग में वृद्धि विद्युत आपूर्ति से ज्यादा बढ़ गई है और हमारा देश वर्षों के साथ-साथ हुई कई गुना वृद्धि के बावजूद अधिकतम विद्युत मांग के दौरान विद्युत की कमी का समाना कर रहा है। भारत सरकार ने टी एंड डी हानि में कमी तथा सीमित संसाधनों के सर्वोत्तम उपयोग के लिए मांग पक्ष प्रबंधन पर विशेष बल दिया है। टैरिफ आधारित बोली पर विद्युत परियोजनाओं का विकास नई जल नीति, पारेषण क्षेत्र में निजी क्षेत्र की भागीदारी बढ़ी हुई ऊर्जा कार्यकुशलता पर राष्ट्रीय मिशन, नवीकरणीय ऊर्जा स्रोतों (आर ई एस) के विकास और अल्ट्रा मेंगा विद्युत परियोजनाओं (यूएमपीपी) के विकास पर सकेंद्रण जैसे नीति प्रारंभों के माध्यम से मांग और आपूर्ति के अंतर को समाप्त करने के लिए संयुक्त प्रयास जारी हैं। के.वि.प्रा. ने इस संबंध में अग्रणी भूमिका निभाई है तथा विभिन्न विशिष्ट क्षेत्रों में जैसे कि नई प्रौद्योगिकियों को आरंभ करना, परियोजनाओं को तकनीकी-आर्थिक स्वीकृति प्रदान करना, हरित ऊर्जा कॉर्पोरेशन सहित उत्पादन और पारेषण योजना तथा परियोजनाओं के प्रचालन और निर्माण की मॉनिटरिंग करना, डाटा व सूचना का डिजाइन, तथा इंजीनियरिंग एवं प्रसार में विद्युत क्षेत्र के विकास के राष्ट्रीय प्रयास में अत्यधिक योगदान दिया है।

के.वि.प्रा. द्वारा प्रकाशित वर्तमान पुरितका एक नियमित प्रस्तुति है जिसमें ग्राफ, पाई-चार्ट, नक्शों और सारणियों के रूप में महत्वपूर्ण सूचना अंतर्निहित है। सूचना में विभिन्न महत्वपूर्ण संकेतकों जैसे संस्थापित विद्युत उत्पादक क्षमता, जल विद्युत क्षमता, देश की बिजली की मांग की राज्यवार पूर्वानुमान तथा प्रमुख आहरणों की बिजली की मांग का पूर्वानुमान, बिजली ऊर्जा उत्पादन पारेषण व संवितरण नेटवर्क, विद्युत आपूर्ति की रिस्ति, कैटिव पॉवर प्लॉन्ट्स, देश की बिजली की खपत तथा प्रति व्यक्ति उपयोग पैटर्न के लिए निष्पादित वृद्धि का योजनावार पैटर्न शामिल है। पुरितका में राज्यवार स्थापित विद्युत उत्पादन क्षमता को दर्शाने वाले नक्शे भी सम्मिलित हैं, इस प्रकार यह हमारे देश का एक विशाल परिवृद्धि प्रस्तुत करती हैं।

आशा है कि यह लघु पुरितका सभी हितधारकों के लिए उपयोगी सिद्ध होगी।

(चंद्र शेखर)

दिनांक : अप्रैल, 2015



**Chandra Shekhar**  
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**Central Electricity Authority**  
**Govt. of India**

## PREFACE

Power Sector in India has grown significantly since independence both in the installed electricity generating capacity and transmission & distribution (T&D) system. The total power generating capacity of (utilities & non utilities) has increased from meagre 1362 MW in 1947 to 267 GW at the end of March, 2015. The per capita electricity consumption which was mere 16.3 kWh in 1947 has increased to 1010 KW h in 2014-15. Despite this, the growth of electricity demand has surpassed the power supply and our country has been facing power shortages during peak electricity demand inspite of the manifold growth over the years. Government of India lays special emphasis on reduction of T&D losses and demand side management to optimally utilize the limited resources. Concerted efforts are going on to bridge the gap of demand and supply through policy initiatives, such as Development of Power Projects on Tariff based bidding, New Hydro Policy, Private Sector Participation in Transmission sector, National Mission on Enhanced Energy Efficiency, Focus on development of Renewable Energy Sources (RES) and development of the Ultra Mega Power Projects (UMPP).

CEA has taken a lead and immensely contributed in the national endeavour of development of power sector in various specific areas such as introduction of new technologies, techno-economic clearance of projects, generation & transmission planning including green energy corridor and operation & construction monitoring of projects, design & engineering and dissemination of data & information.

The present booklet brought out by CEA is the regular feature which contains vital information in the form of graphs, pie charts, maps and tables. The information covers plan wise pattern of growth accomplished for various important indicators like installed generating capacity, hydro electric potential, state-wise forecast of electricity demand of the country as well as forecast of electricity demand of mega cities, electrical energy generation, transmission & distribution network, power supply position, captive power plants, pattern of electricity consumption of the country as well as per capita consumption. The booklet also contains maps showing State-wise Installed Electricity Generating Capacity, thus affording a panoramic view of our country.

I am hopeful that this handy booklet would prove to be useful to all stakeholders.

(Chandra Shekhar)

Dated: April, 2015

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**Table 1**  
**PLAN-WISE GROWTH OF ELECTRICITY SECTOR IN INDIA**  
**UTILITIES**

Sl. No.	As on / during financial year ending with	Installed Capacity (MW)	No.of villages electrified	Length of T & D Lines (Ckt. kms.)(#)	Per Capita Consumption (kWh)(\$)
1	31.12.1947	1362	N.A.	23238	16.3
2	31.12.1950	1713	3061	29271	18.2
3	31.03.1956( End of the 1st Plan)	2886	7294	85427	30.9
4	31.03.1961( End of the 2nd Plan)	4653	21754	157887	45.9
5	31.03.1966 ( End of the 3rd Plan)	9027	45148	541704	73.9
6	31.03.1969( End of the 3 Annual Plans)	12957	73739	886301	97.9
7	31.03.1974( End of the 4th Plan)	16664	156729	1546097	126.2
8	31.03.1979( End of the 5th Plan)	26680	232770	2145919	171.6
9	31.03.1980( End of the 2 Annual Plans)	28448	249799	2351609	172.4
10	31.03.1985( End of the 6th Plan)	42585	370332	3211956	228.7
11	31.03.1990( End of the 7th Plan)	63636	470838	4407501	329.2
12	31.03.1992( End of the 2 Annual Plans)	69065	487170	4574200	347.5
13	31.03.1997( End of the 8th Plan)	85795	498836	5141413	464.6
14	31.03.2002( End of the 9th Plan)	105046	512153	6030148	559.2
15	31.03.2007 (End of 10th Plan )	132329	482864	6939894	671.9
16	31.03.2012 (End of 11th Plan )	199877	556633	8726092	883.6
17	31.03.2013(End of 1st year of 12th Plan)	223343	560552	9080556	914.4
18	31.03.2014(End of 1Ind year of 12th Plan)	245259	572414	9534584*	957.0
19	31.03.2015(End of IIInd year of 12th Plan)	271722	577629*^	10558177@	1010

N.A. Not Available. (\*) Provisional.

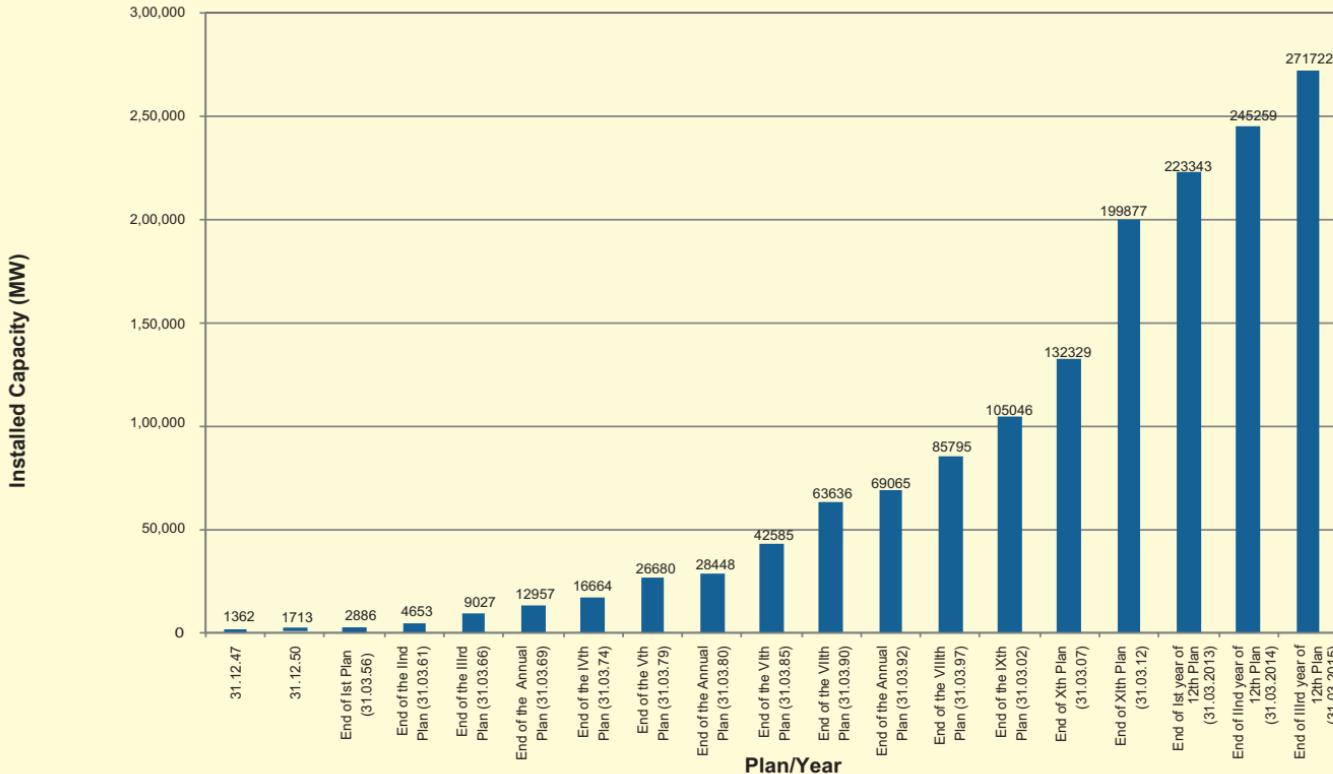
(^) As per revised definition of village electrification and 2001 Census.

(#) Includes 440 Volts Distribution Lines.

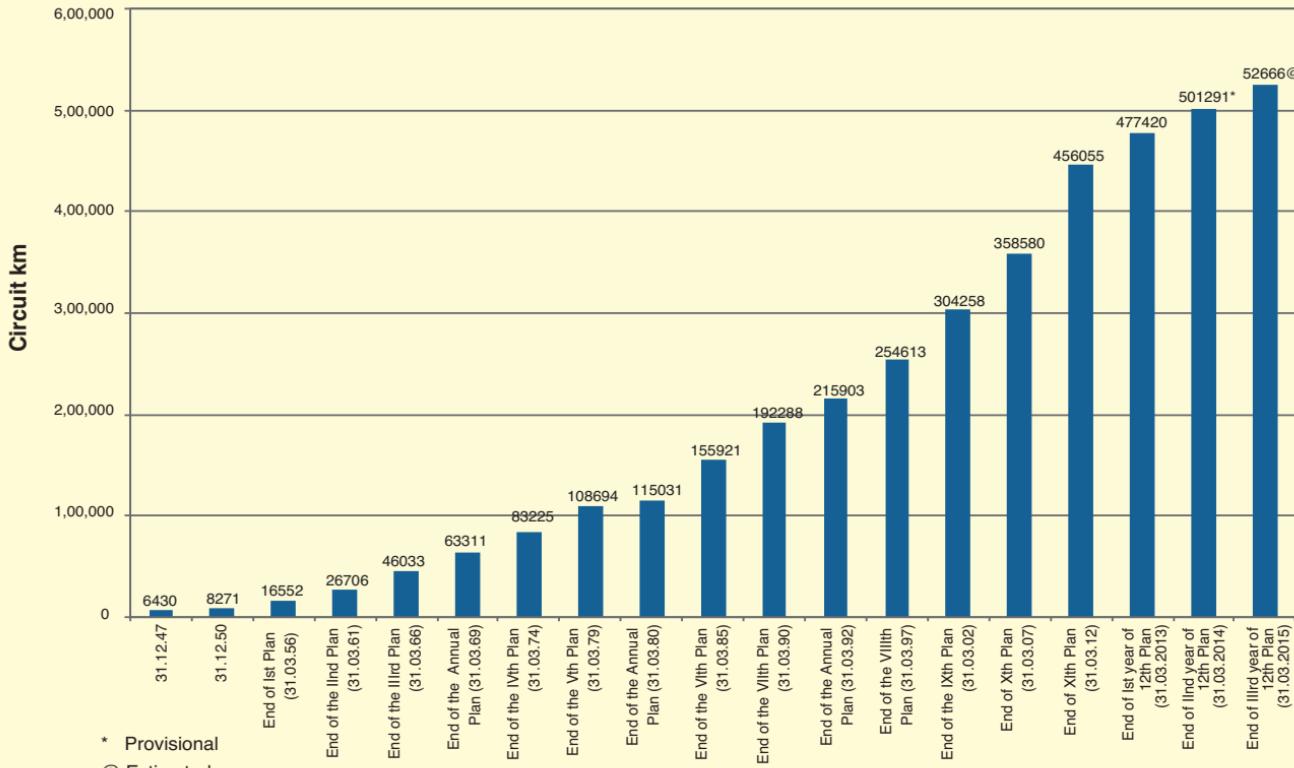
@ Estimated

\$ Per Capita Consumption=Gross Electrical Energy availability/Mid year Population

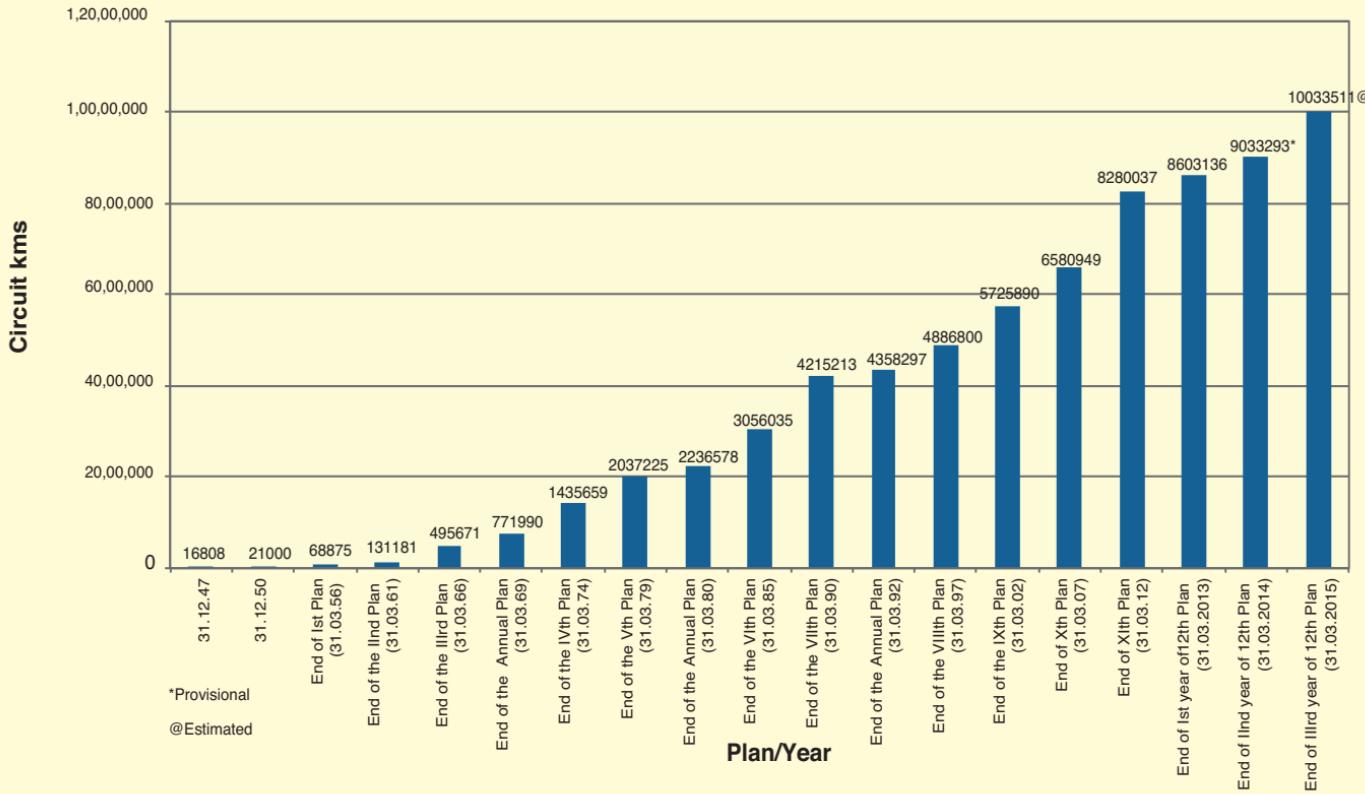
**PLANWISE GROWTH OF INSTALLED GENERATING CAPACITY IN THE COUNTRY  
(UTILITIES)**



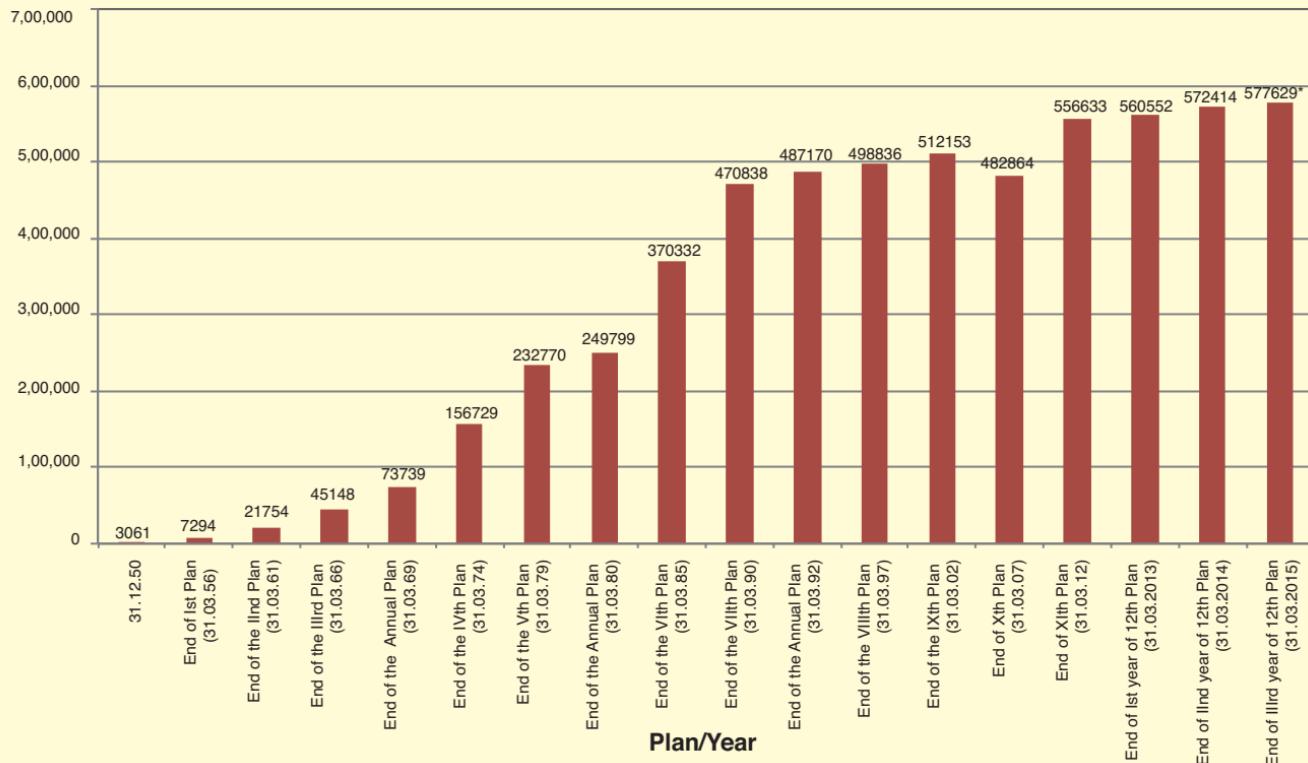
**PLANWISE GROWTH OF TRANSMISSION LINES IN THE COUNTRY**  
**66 KV AND ABOVE**



**PLANWISE GROWTH OF TRANSMISSION LINES IN THE COUNTRY**  
**BELOW 66 KV**

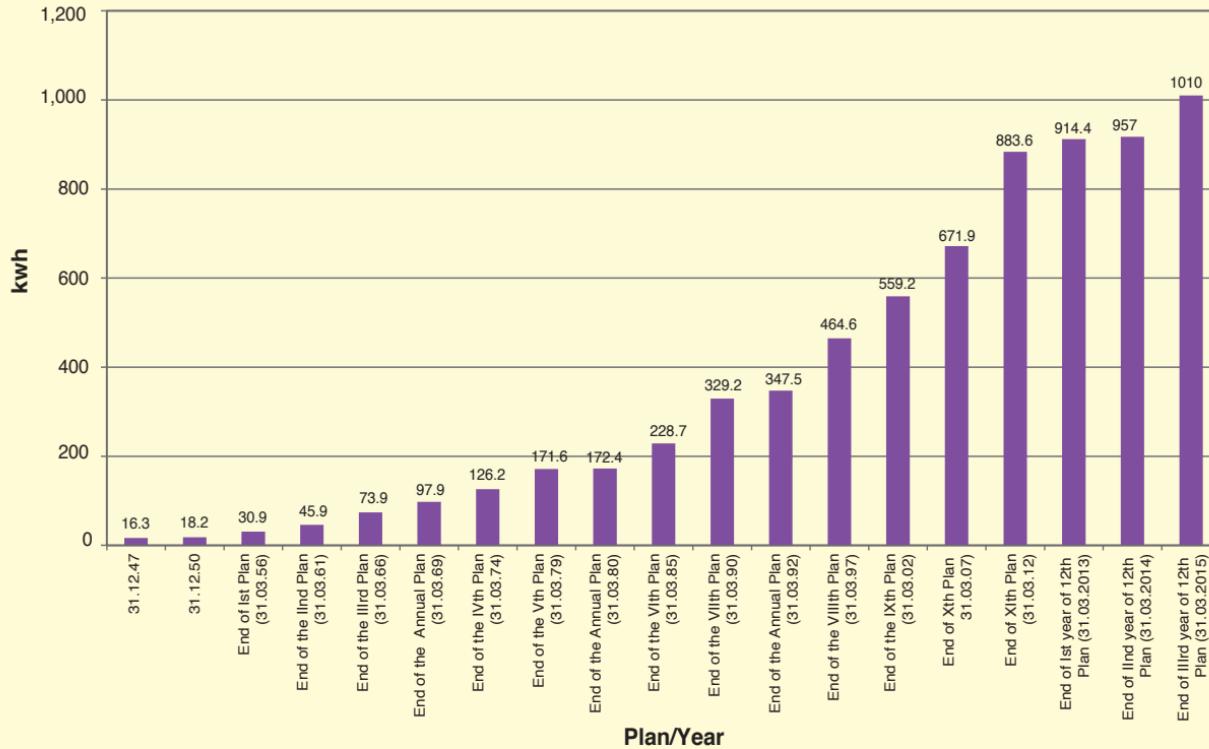


## PLANWISE GROWTH OF NUMBER OF VILLAGES ELECTRIFIED IN THE COUNTRY



\* Provisional, Number of Villages Elelctrified as per revised definition of Villages Electrification & 2001 census

## PLANWISE GROWTH OF PER CAPITA CONSUMPTION OF ELECTRICITY IN THE COUNTRY



Per Capita Consumption = (Gross Electrical Energy available /Mid year Population)

## PER CAPITA ELECTRICITY CONSUMPTION IN VARIOUS COUNTRIES IN 2011 & 2012

Chart : 5



Source : IEA website publication 'Key World Energy Statistics 2013' (other than India).

\* Per capita consumption = (gross electrical energy availability /mid year population).

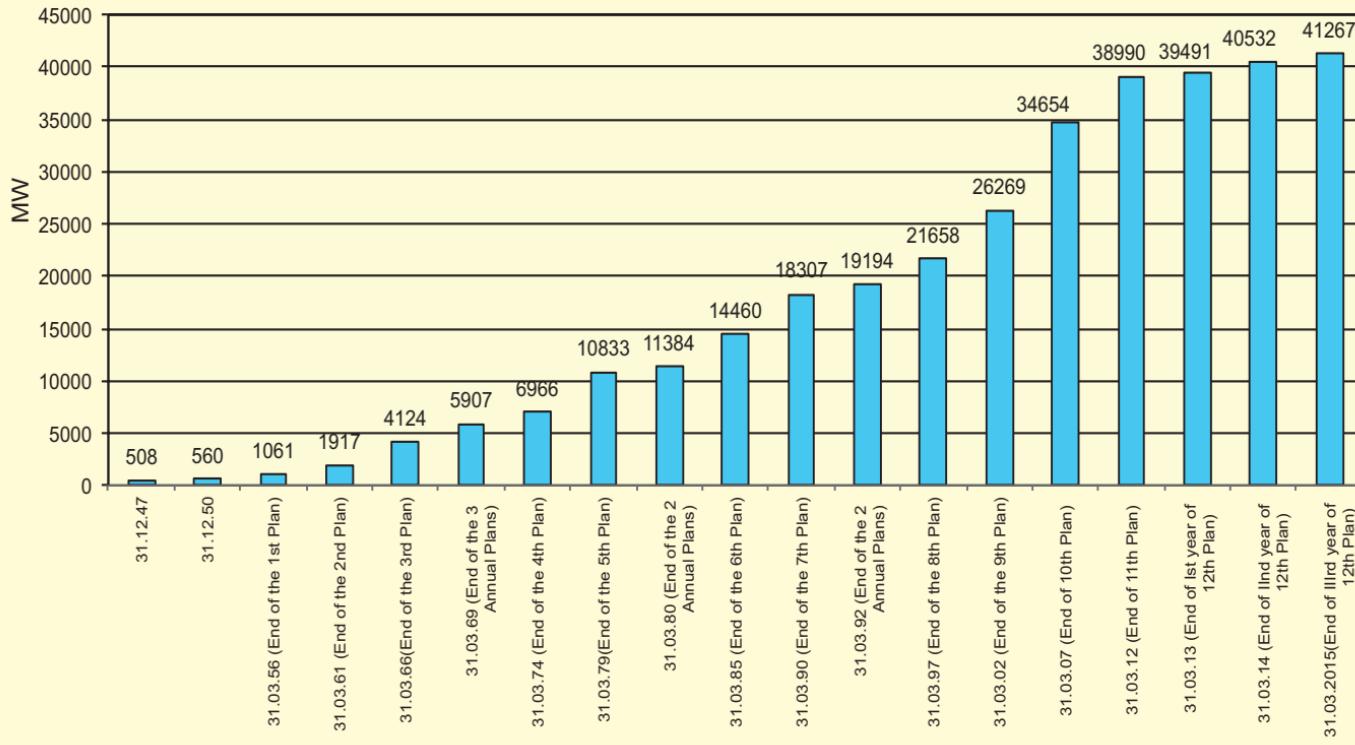
**Table 2**  
**PLANWISE GROWTH OF INSTALLED GENERATING CAPACITY IN INDIA - MODE-WISE**  
**UTILITIES**

(MW)

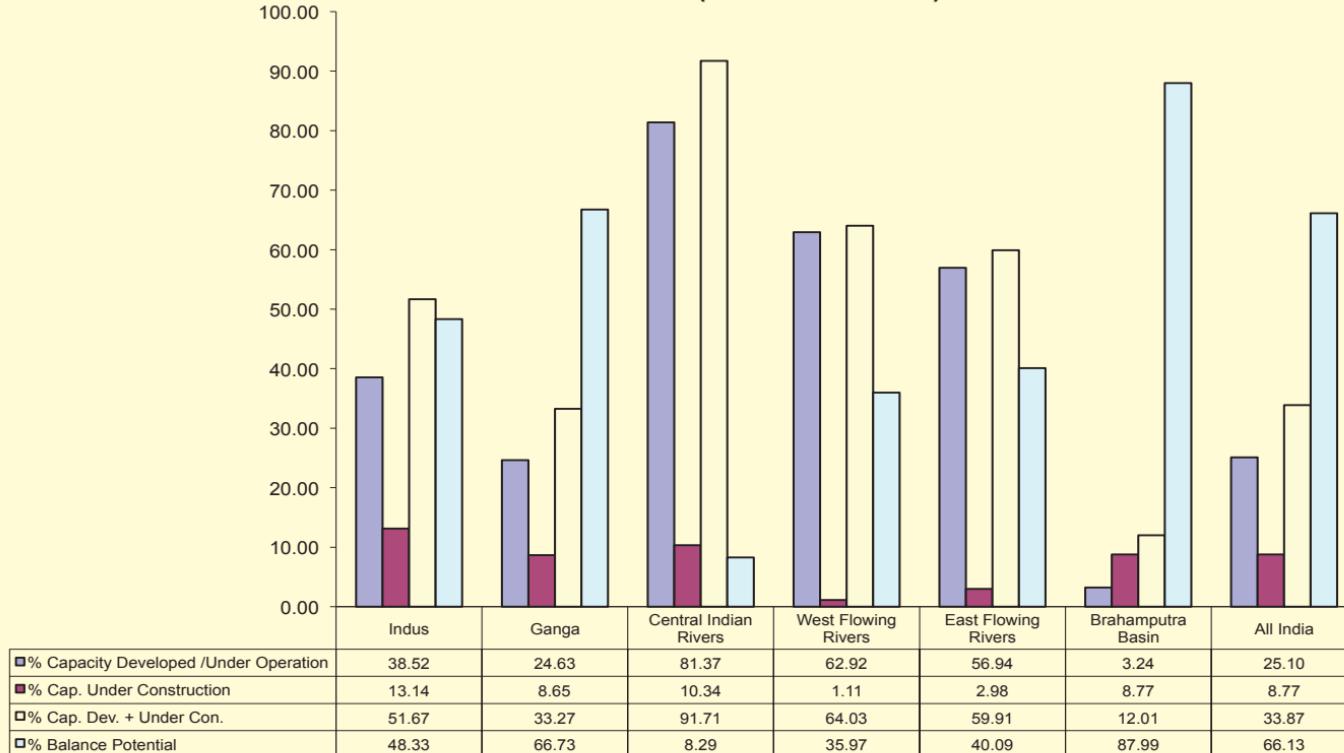
SL.No	As on	Hydro	Thermal			Total	Nuclear	RES #	Total
			Coal/Lignite	Gas	Diesel				
1	31.12.47		508	756	0	98	854	0	1362
2	31.12.50		560	1004	0	149	1153	0	1713
3	31.03.56 (End of the 1st Plan)		1061	1597	0	228	1825	0	2886
4	31.03.61 (End of the 2nd Plan)		1917	2436	0	300	2736	0	4653
5	31.03.66(End of the 3rd Plan)		4124	4417	134	352	4903	0	9027
6	31.03.69 (End of the 3 Annual Plans)		5907	6640	134	276	7050	0	12957
7	31.03.74 (End of the 4th Plan)		6966	8652	165	241	9058	640	16664
8	31.03.79(End of the 5th Plan)		10833	14875	168	164	15207	640	26680
9	31.03.80 (End of the 2 Annual Plans)		11384	15991	268	165	16424	640	28448
10	31.03.85 (End of the 6th Plan)		14460	26311	542	177	27030	1095	42585
11	31.03.90 (End of the 7th Plan)		18307	41236	2343	165	43764	1565	63636
12	31.03.92 (End of the 2 Annual Plans)		19194	44791	3095	168	48054	1785	69065
13	31.03.97 (End of the 8th Plan)		21658	54154	6562	294	61010	2225	85795
14	31.03.02 (End of the 9th Plan)		26269	62131	11163	1135	74429	2720	105046
15	31.03.07 (End of 10th Plan )		34654	71121	13692	1202	86015	3900	132329
16	31.03.12 (End of 11th Plan )		38990	112022	18381	1200	131603	4780	199877
17	31.03.13 (End of 1st year of 12th Plan )		39491	130221	20110	1200	151531	4780	223344
18	31.03.14 (End of 1Ind year of 12th Plan )		40532	145273	21782	1200	168255	4780	245259
19	31.03.2015(End of IIIrd year of 12th Plan)		41267	164636	23062	1200	188898	5780	35777
									271722

(#) RES:-Renewable Energy Sources also includes Hydro capacity of 25.00 MW and below as reported by MNRE.

**PLANWISE GROWTH OF INSTALLED GENERATING CAPACITY IN INDIA**  
**HYDRO ELECTRIC POWER STATIONS**

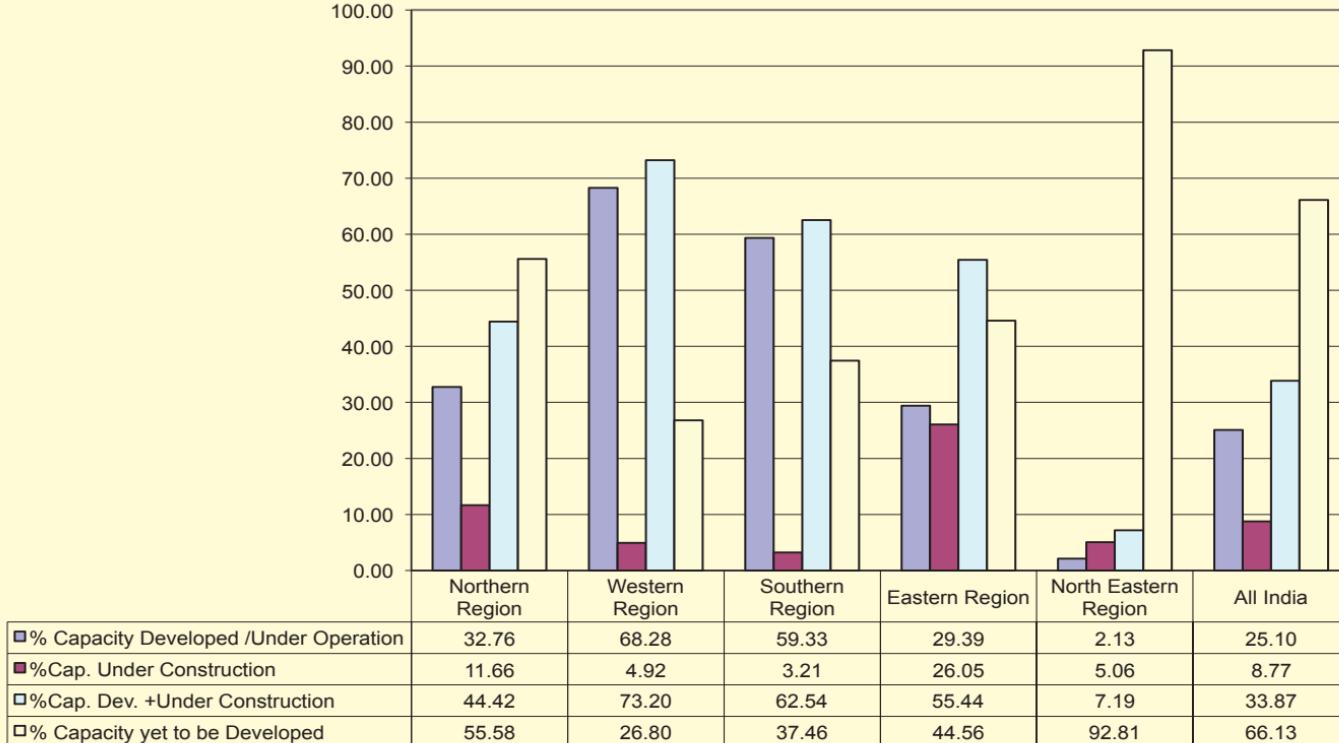


**Basinwise Status of Hydro Electric Potential Development**  
**In terms of Installed Capacity above 25 MW**  
**% wise (As on 31.03.2015)**

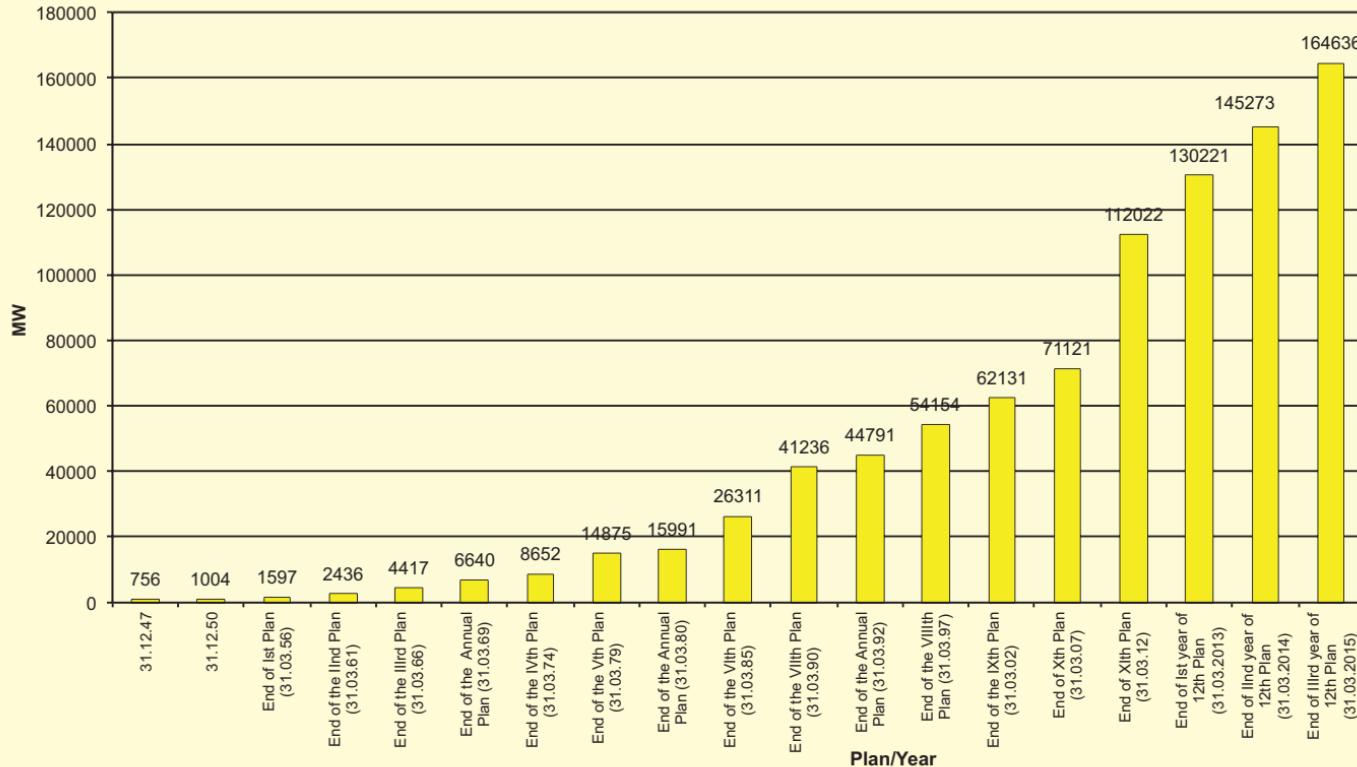


**Regionwise Status of Hydro Electric Potential Development  
In terms of Installed Capacity above 25 MW**  
**% wise (As on 31.03.2015)**

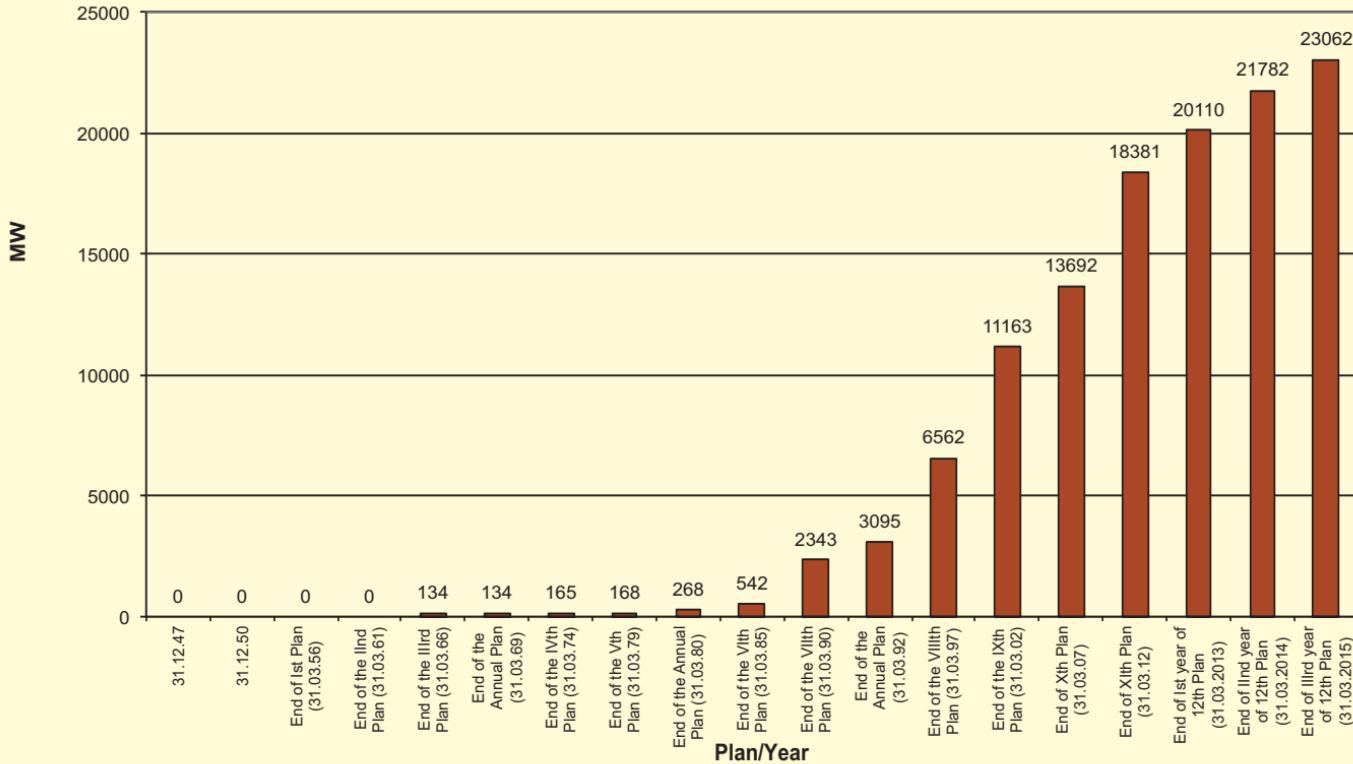
Chart :6 B



**PLANWISE GROWTH OF INSTALLED GENERATING CAPACITY IN INDIA**  
**COAL/ LIGNITE BASED PLANTS**

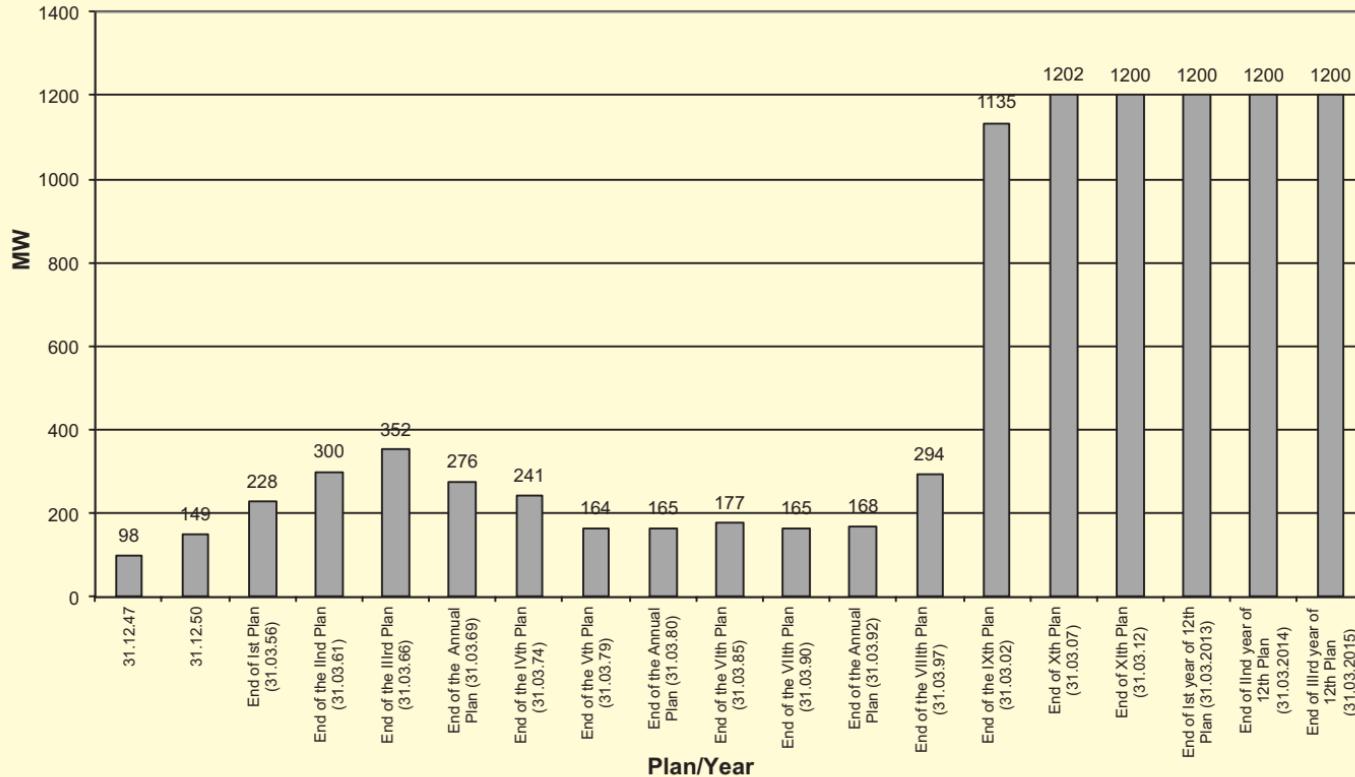


**PLANWISE GROWTH OF INSTALLED GENERATING CAPACITY IN INDIA**  
**GAS/LIQUID BASED PLANTS**



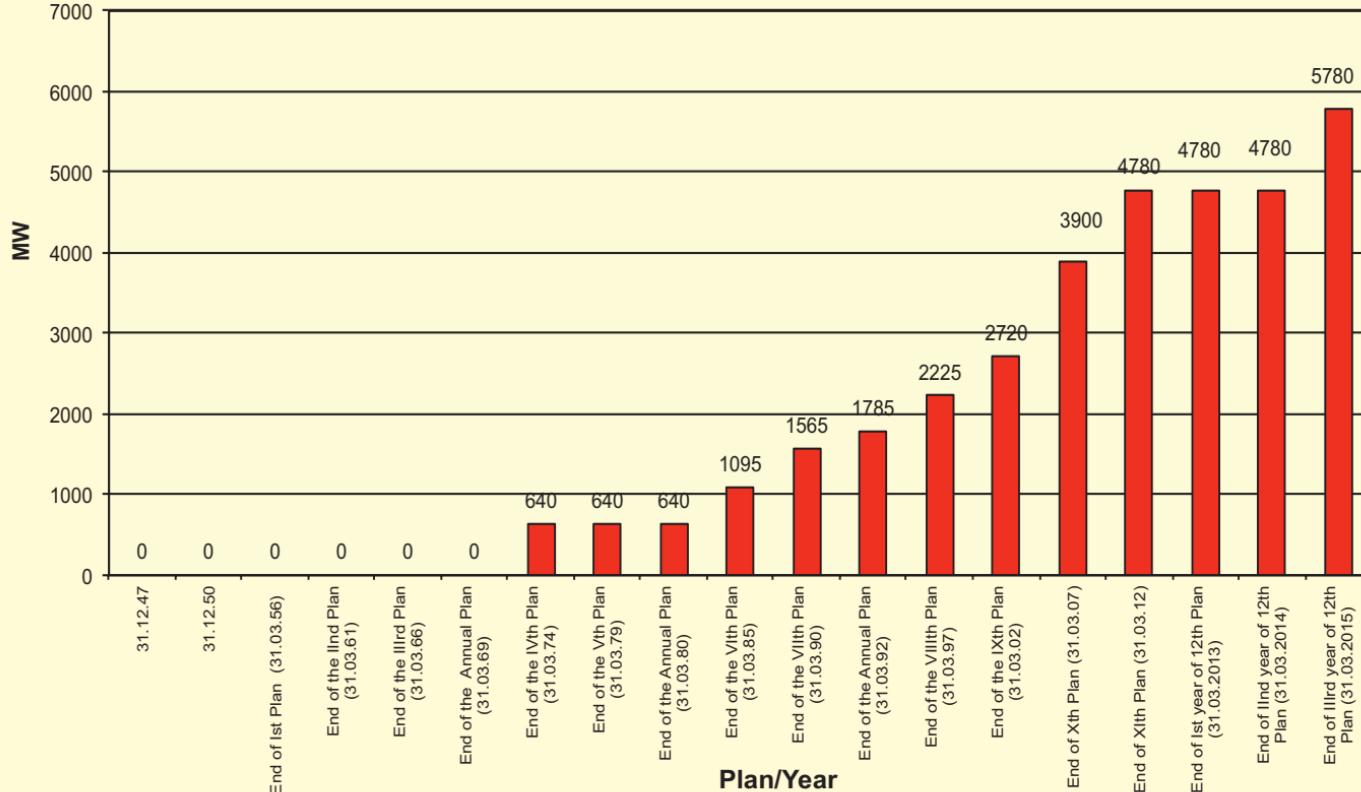
**PLANWISE GROWTH OF INSTALLED GENERATING CAPACITY IN INDIA**  
**DIESEL ENGINE BASED PLANTS**

**Chart : 7C**



## PLANWISE GROWTH OF INSTALLED GENERATING CAPACITY IN INDIA NUCLEAR POWER PLANTS

**Chart : 8**

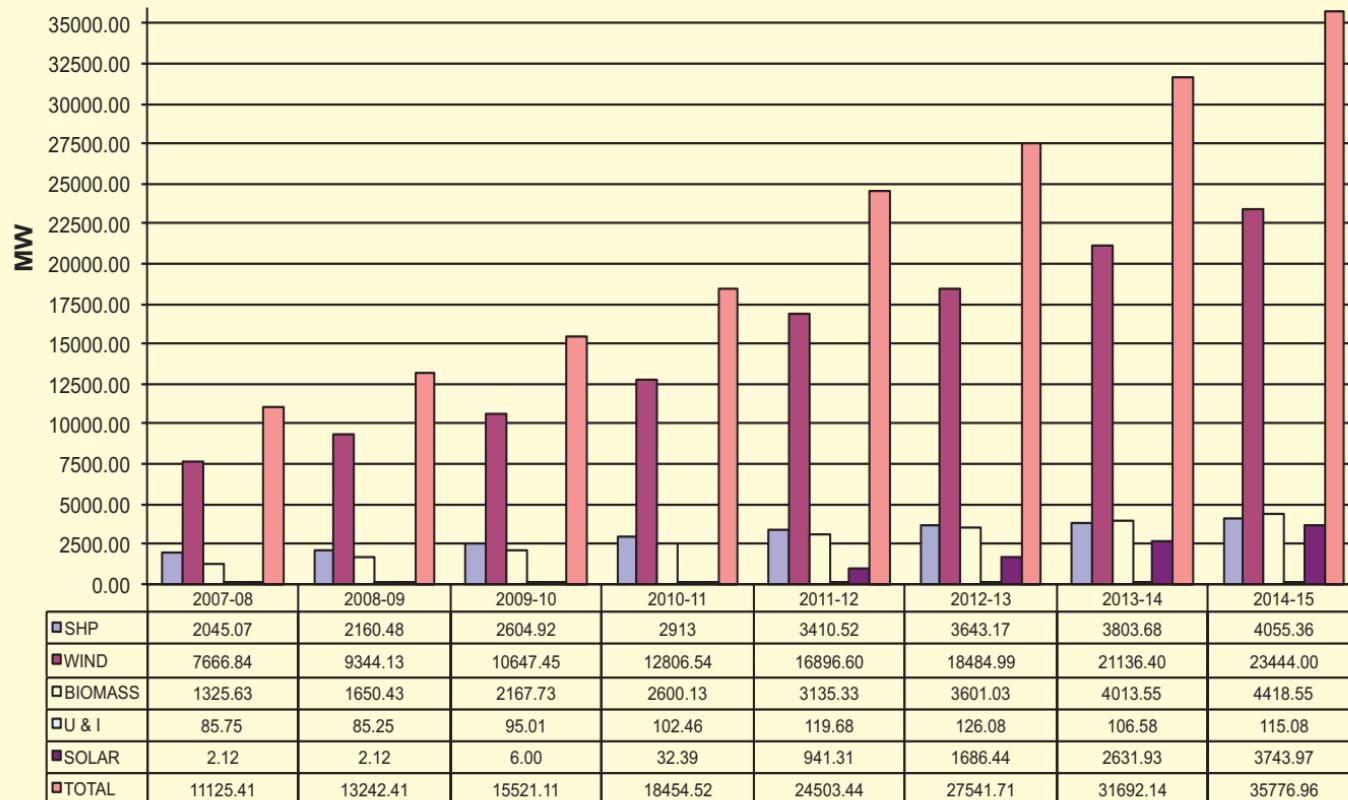


**SECTORWISE GROWTH OF GENERATION CAPACITY (MW)**  
**2000-01 TO 2014-15**



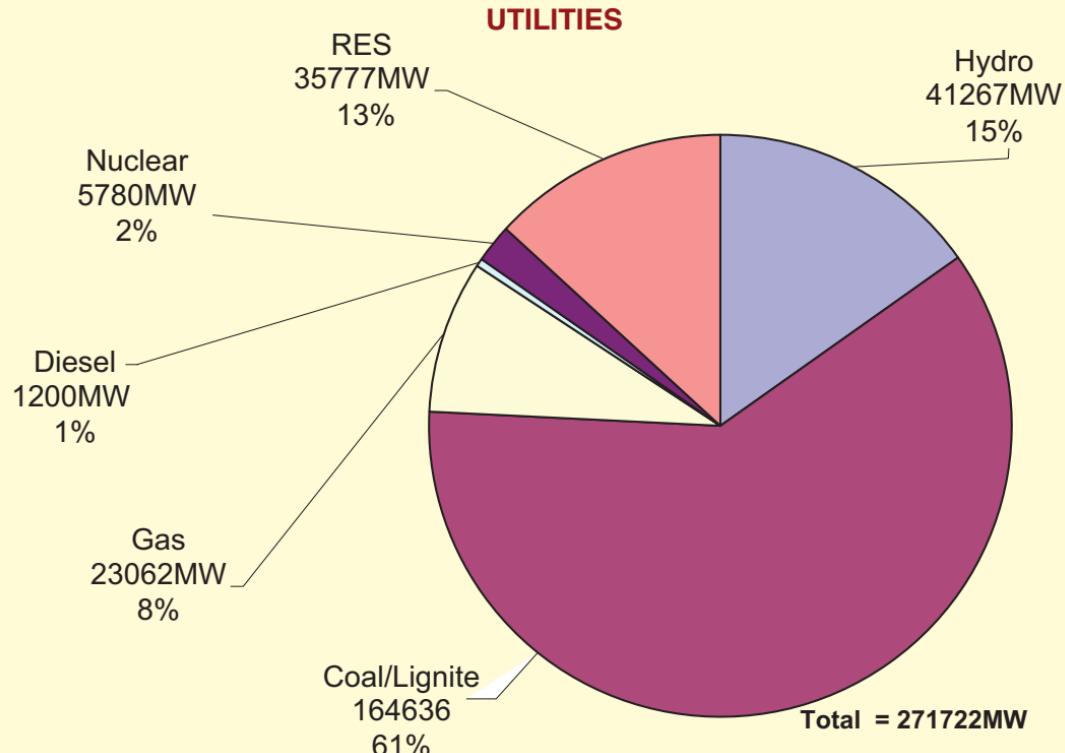
## MODEWISE GROWTH OF GENERATING CAPACITY OF R.E.S. DURING 12TH PLAN

**Chart :8 B**



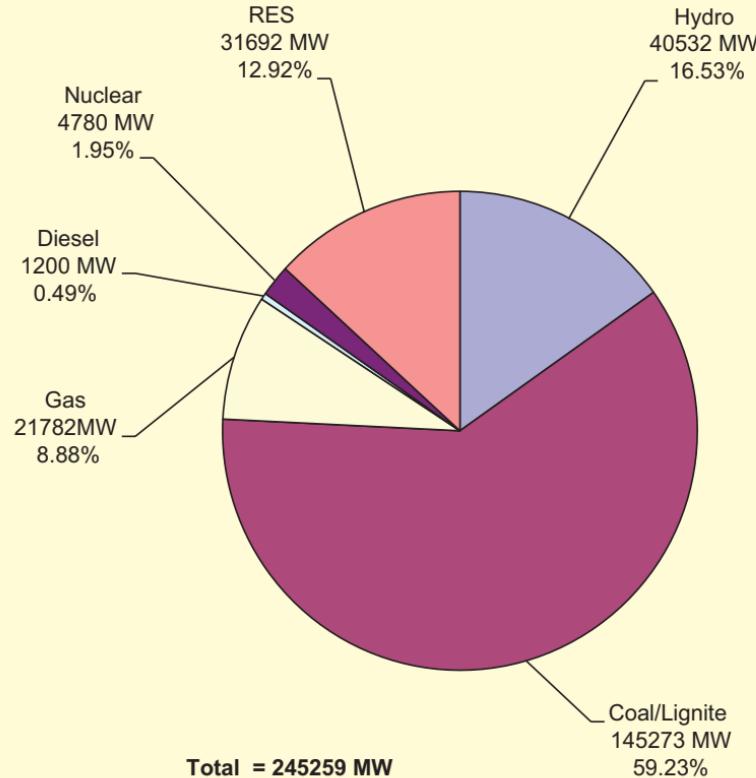
**ALL INDIA INSTALLED GENERATING CAPACITY AS ON 31.03.2015  
END OF IIIrd YEAR**

**Pie Chart : 9**



**ALL INDIA INSTALLED GENERATING CAPACITY AS ON 31.03.2014  
END OF IIInd YEAR**

**Pie Chart : 9A**



**Table 3**  
**PLANWISE GROWTH OF GROSS ELECTRICITY GENERATION IN INDIA - MODE-WISE**  
**UTILITIES**

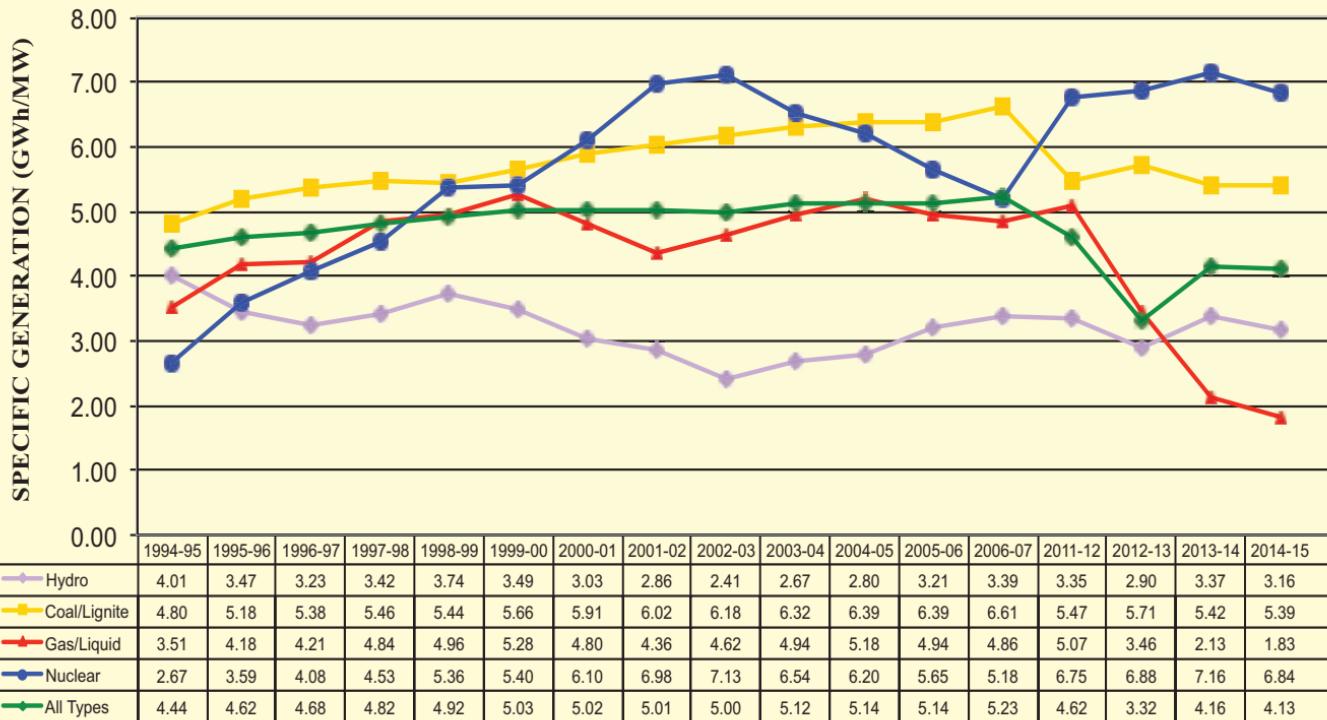
(GWh)

SL.No	During financial year ending with	Hydro	Thermal			Total	Nuclear	RES	Total
			Coal \$	Gas	Diesel				
1	1947	2195	1733	0	144	1877	0	0	4073
2	1950	2519	2587	0	200	2787	0	0	5106
3	1955-56 (End of the 1st Plan)	4295	5367	0	233	5600	0	0	9662
4	1960-61 (End of the 2nd Plan)	7837	9100	0	368	9468	0	0	16937
5	1965-66(End of the 3rd Plan)	15225	17765	69	324	18158	0	0	32990
6	1968-69(End of the 3 Annual Plans)	20723	26711	124	194	27029	0	0	47434
7	1973-74(End of the 4th Plan)	28972	34853	343	125	35321	2396	0	66689
8	1978-79(End of the 5th Plan)	47159	52024	515	55	52594	2770	0	102523
9	1979-80(End of the Annual Plan)	45478	55720	500	53	56273	2876	0	104627
10	1984-85 (End of the 6th Plan)	53948	96957	1834	45	98836	4075	0	156859
11	1989-90 (End of the 7th Plan)	62116	172643	5962	85	178690	4625	6	245438
12	1991-92(End of the 2 Annual Plans)	72757	197163	11450	95	208708	5525	38	287029
13	1996-97(End of the 8th Plan)	68901	289378	26985	679	317042	9071	876	395889
14	2001-02(End of the 9th Plan)	73579	370884	47099	4317	422300	19475	2085	517439
15	2006-07(End of the 10th Plan )	113502	461794	64157	2539	528490	18802	9860	670654
16	2011-12(End of the 11th Plan )	130511	612497	93281	2649	708427	32286.56	51226	922451
17	2012-13(End of 1st year of 12th Plan)	113720	691341	66664	2449	760454	32866	57449	964489
18	2013-14(End of IIInd year of 12th Plan)	134847	746087	44522	1868	792477	34228	59615	1021167
19	2014-15(End of IIIrd year of 12th Plan )	129244	835838	41075	1407	878320	36102	61780	1105446

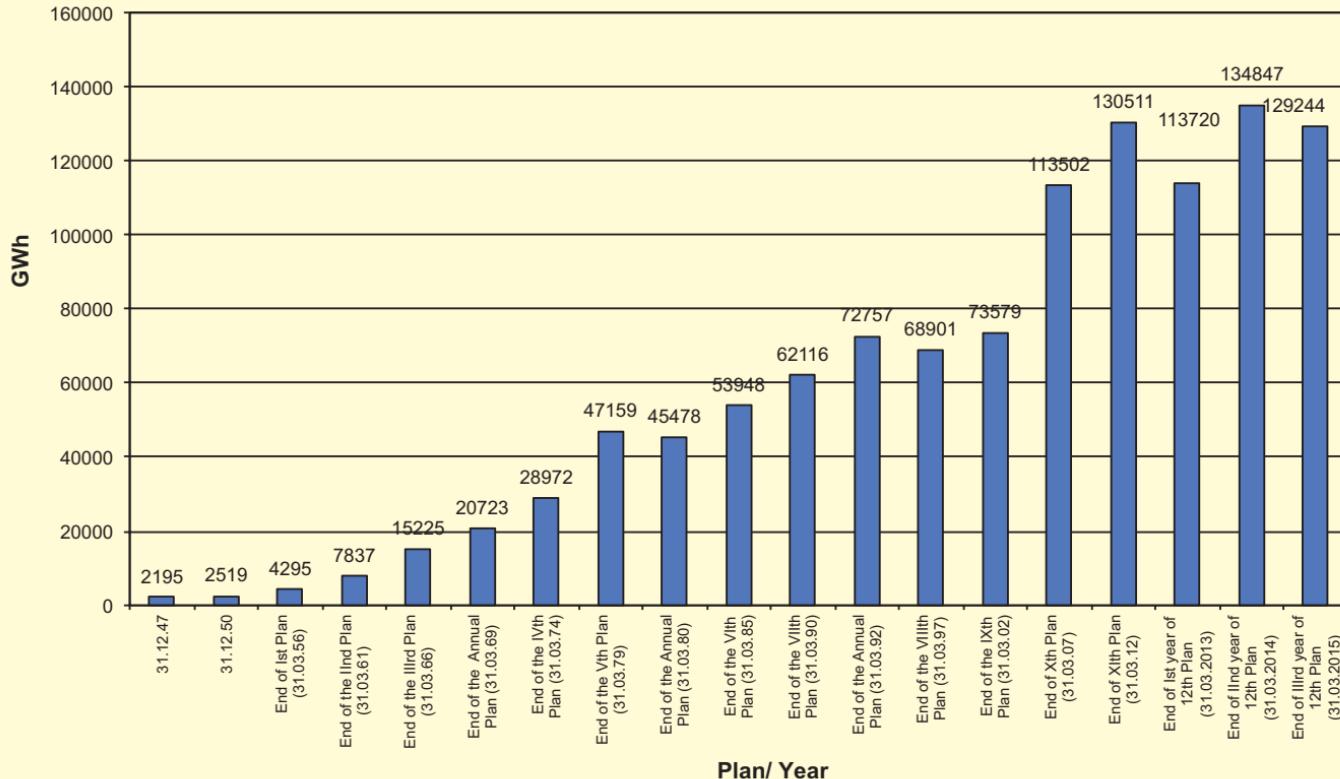
\$ Includes Lignite

RES : Renewable Energy Sources.

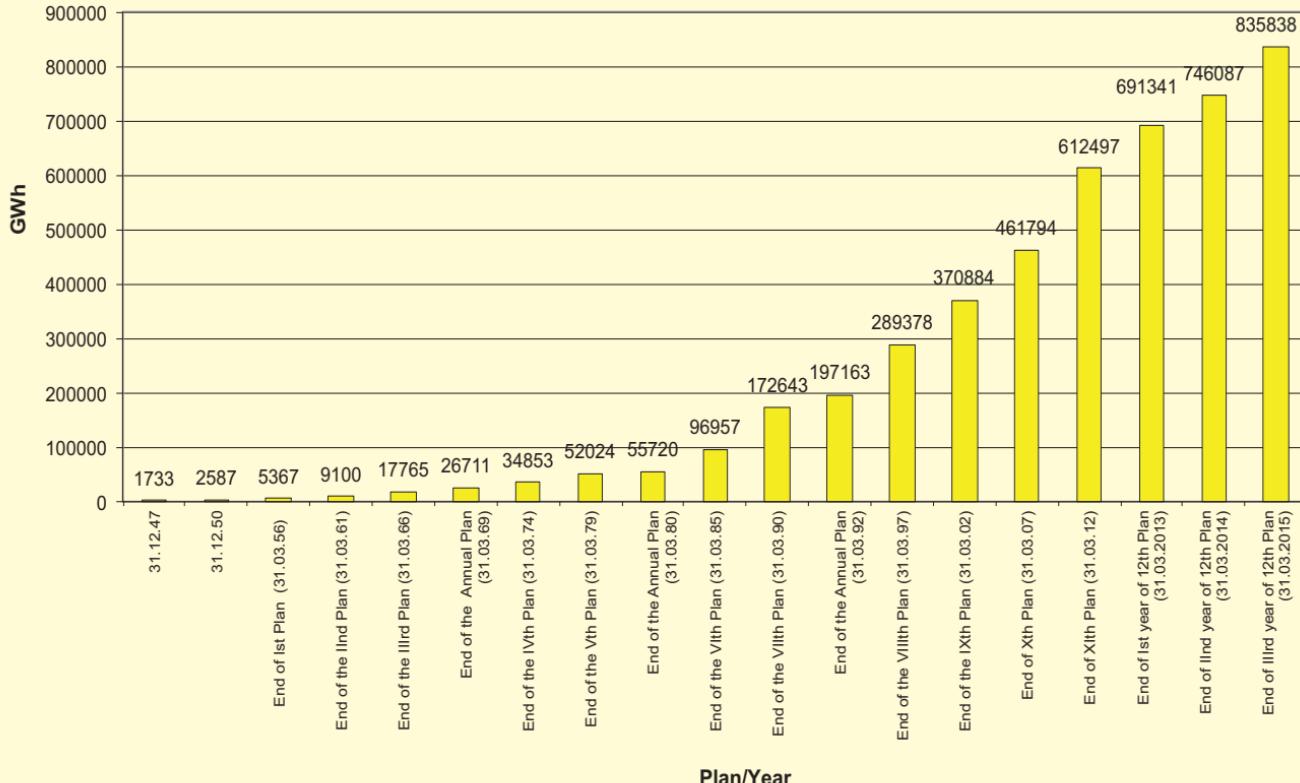
**SPECIFIC GENERATION BY ALL INDIA POWER STATIONS MODE-WISE**  
**UTILITIES**  
**1994 - 95 to 2014-15**



**PLANWISE GROWTH OF ELECTRICITY GENERATION IN INDIA**  
**HYDRO ELECTRIC POWER STATIONS**

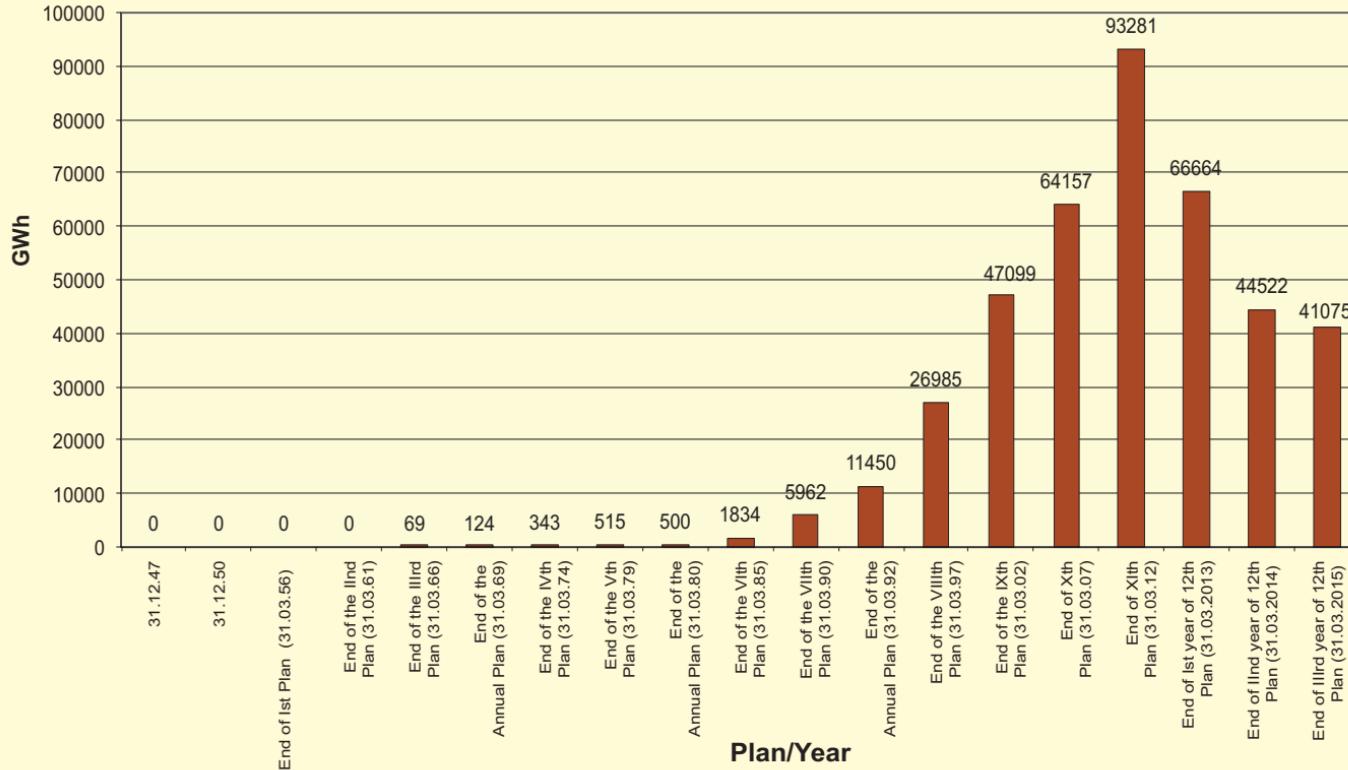


**PLANWISE GROWTH OF ELECTRICITY GENERATION IN INDIA**  
**COAL/ LIGNITE BASED PLANTS**

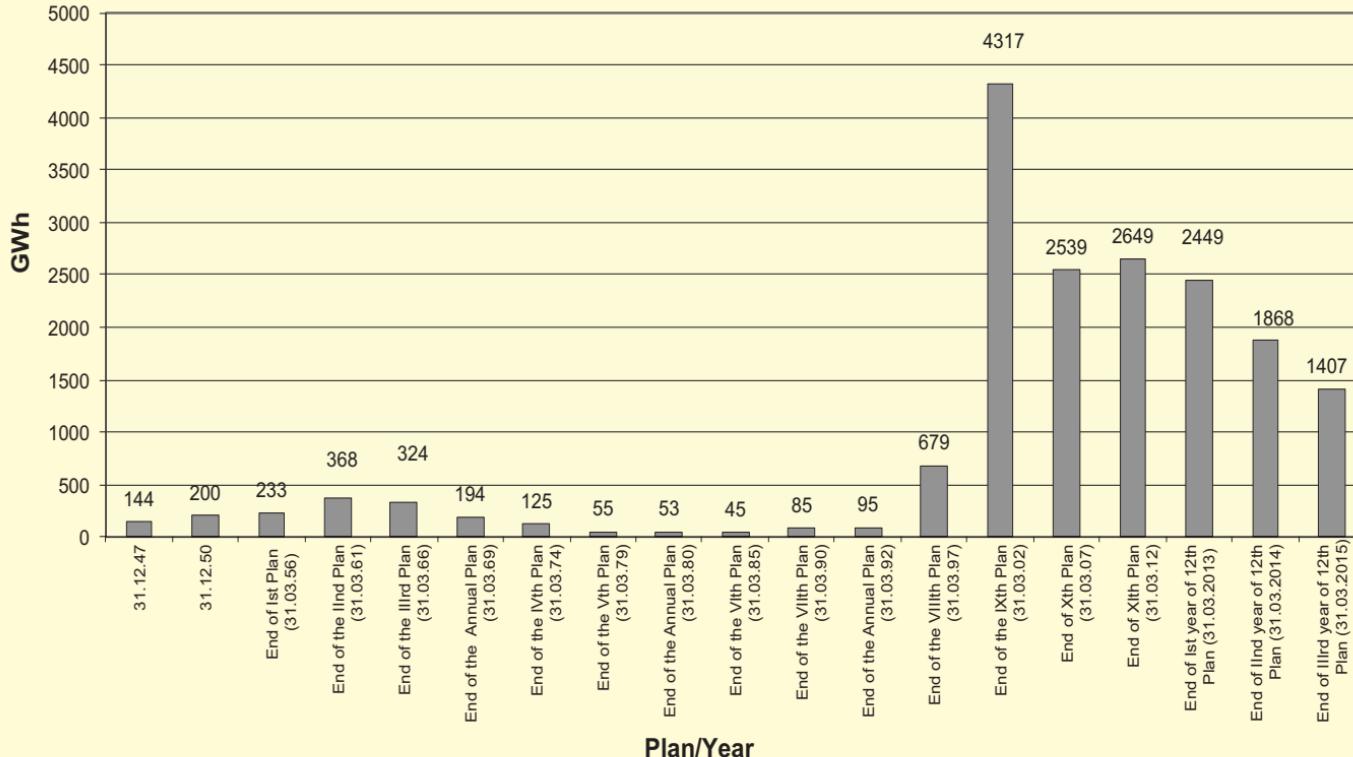


# PLANWISE GROWTH OF ELECTRICITY GENERATION IN INDIA

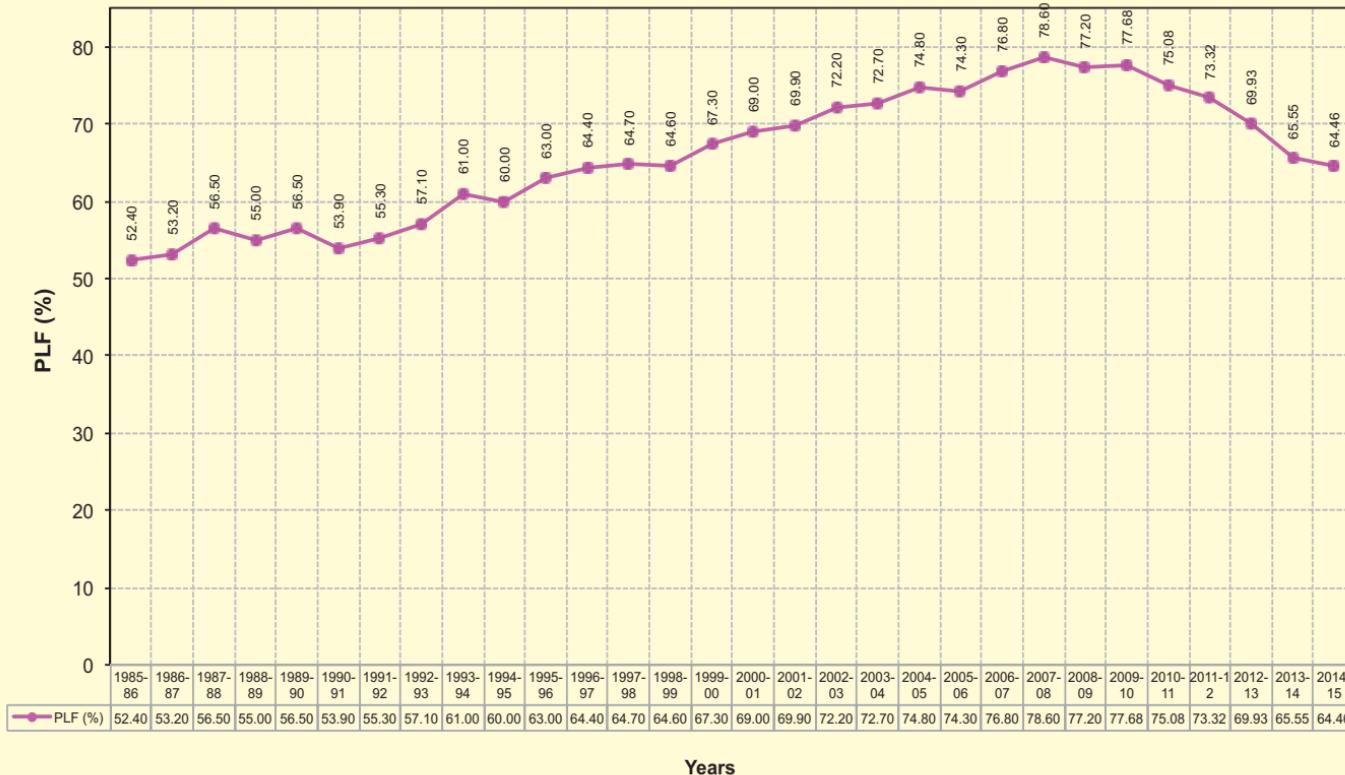
## GAS TURBINE BASED PLANTS



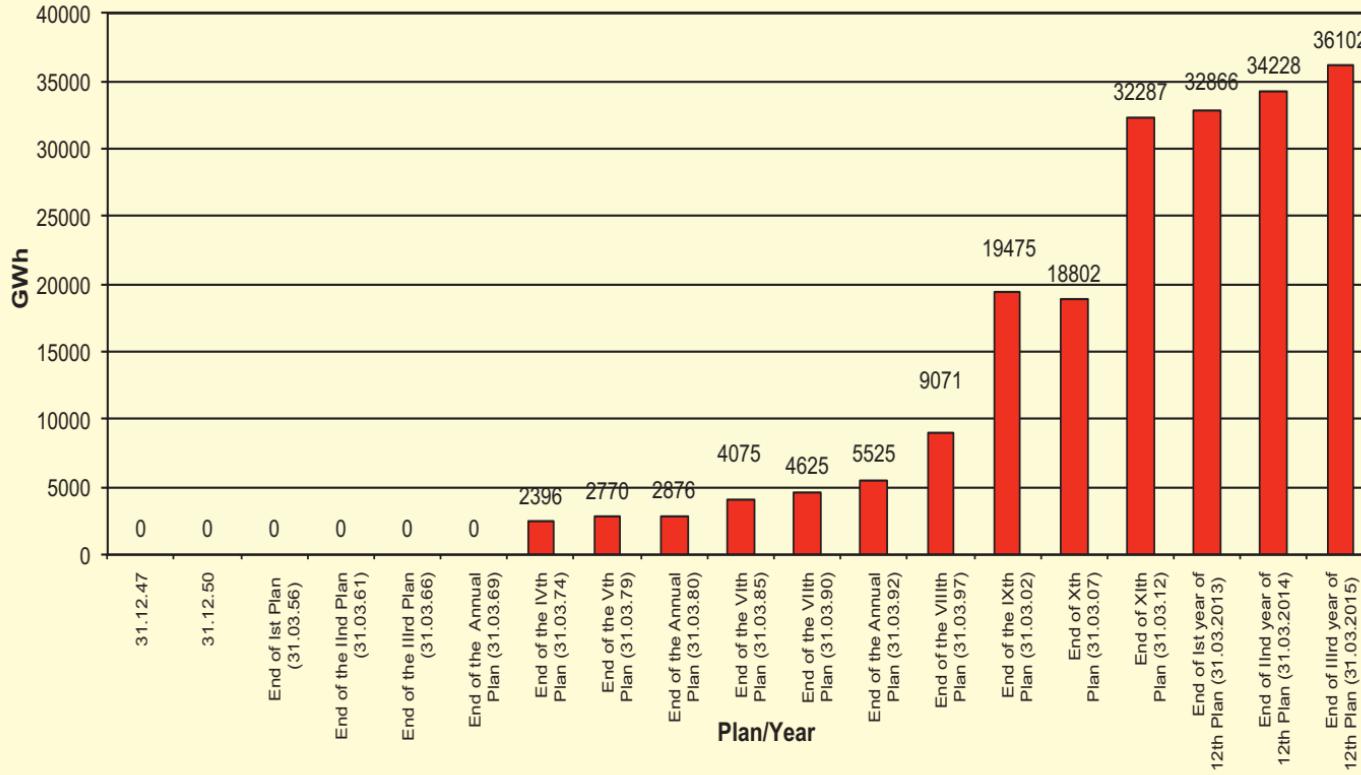
**PLANWISE GROWTH OF ELECTRICITY GENERATION IN INDIA**  
**DIESEL BASED PLANTS**



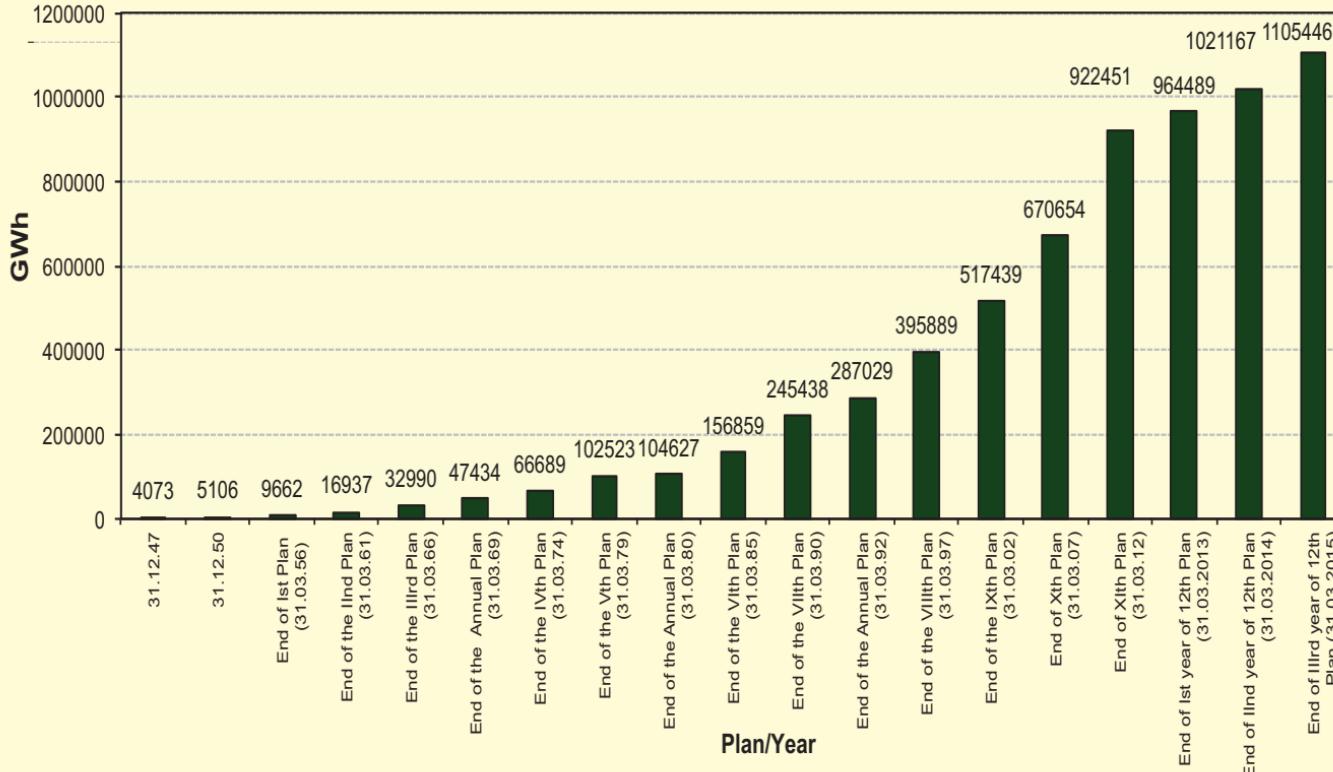
**ALL INDIA PLF (%) OF THERMAL POWER STATIONS  
(COAL AND LIGNITE BASED)**



**PLANWISE GROWTH OF ELECTRICITY GENERATION IN INDIA**  
**NUCLEAR POWER PLANTS**

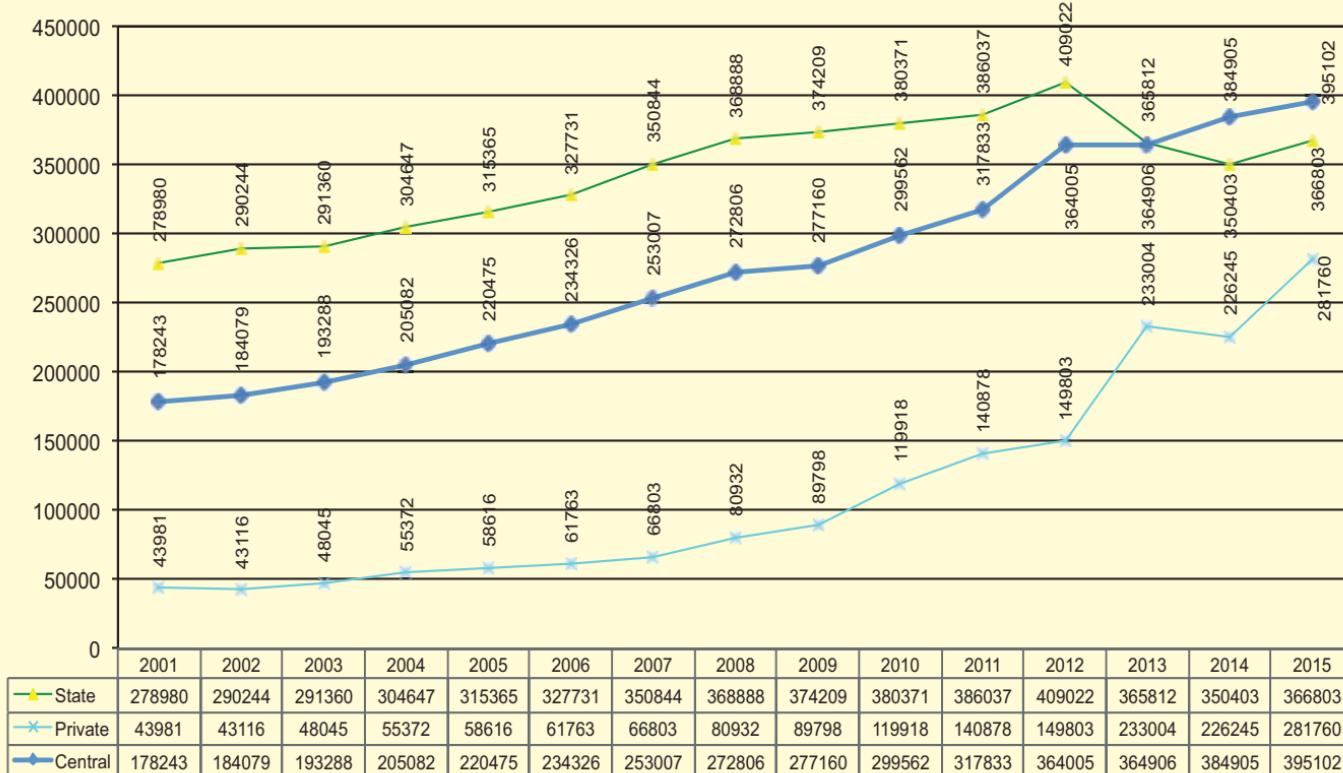


# PLANWISE GROWTH OF ALL INDIA ELECTRICITY GENERATION UTILITIES



## SECTORWISE GROWTH OF ENERGY GENERATION (GWh)

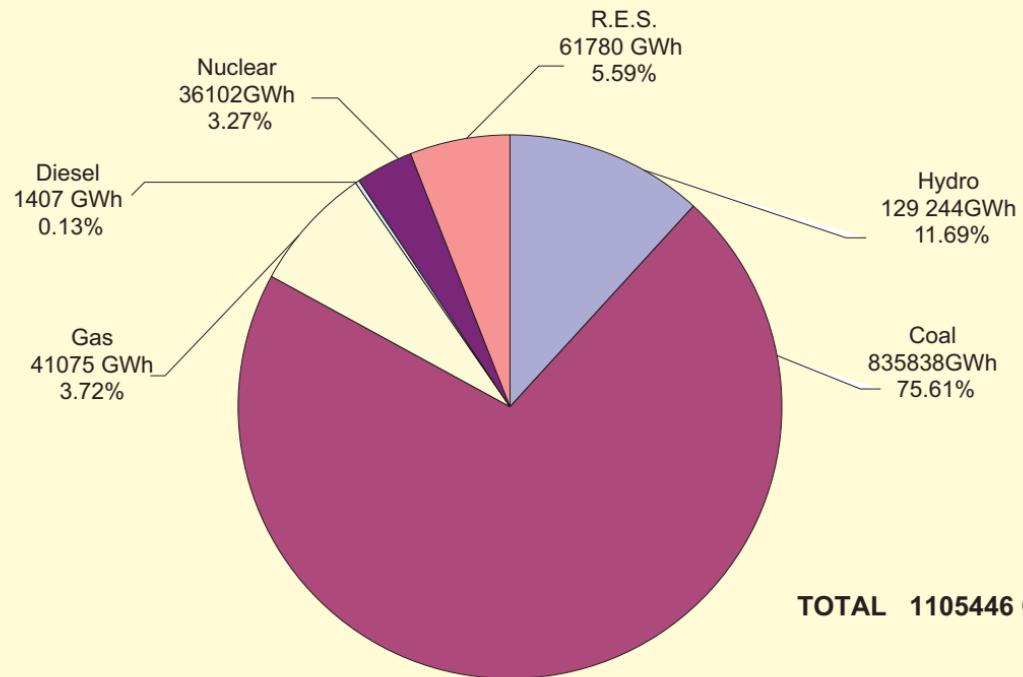
**2000-01 TO 2014-15**



GROSS ELECTRICITY GENERATION IN INDIA MODEWISE - END OF 3rd YEAR OF XIITH PLAN

(31.03.2015)

UTILITIES

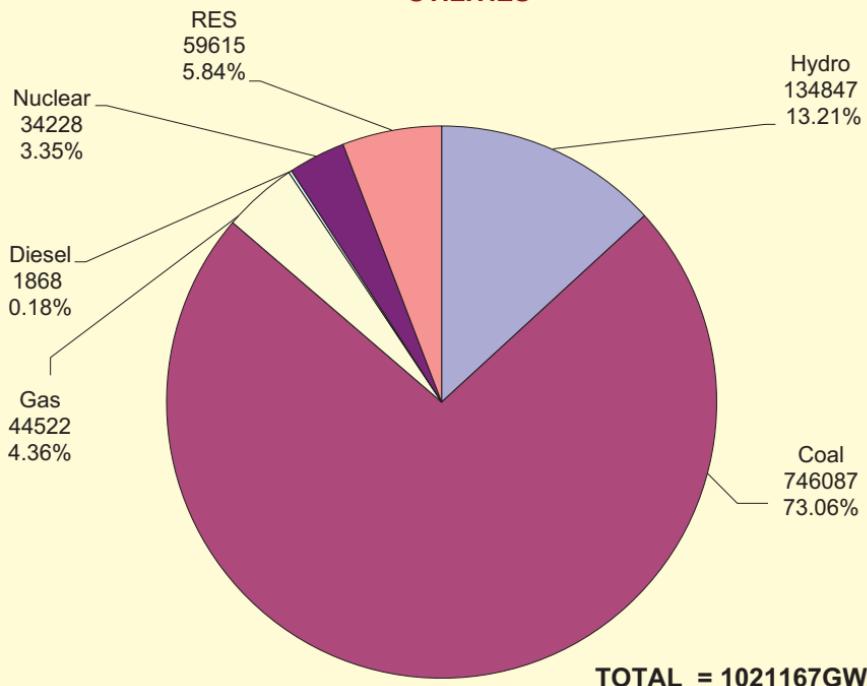


## GROSS ELECTRICITY GENERATION IN INDIA MODEWISE - END OF 11th YEAR OF 12th PLAN

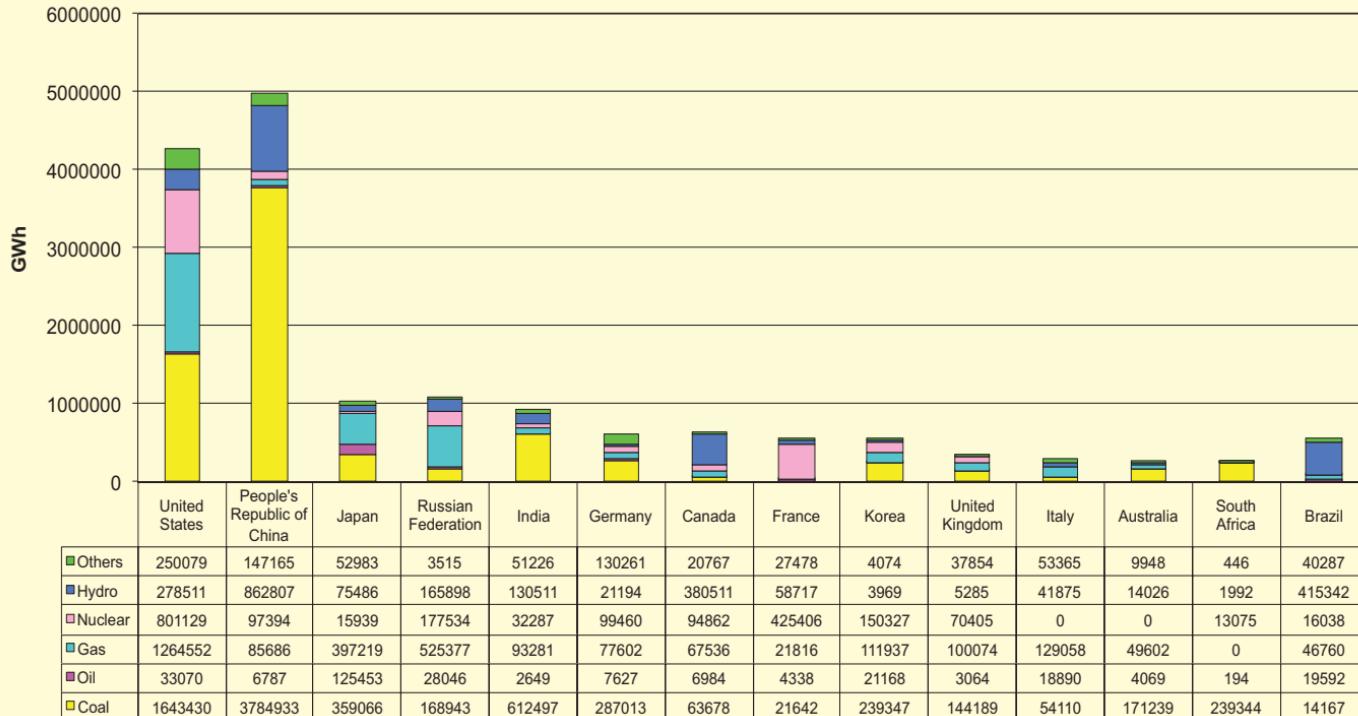
Pie Chart : 16A

31.03.2014

UTILITIES

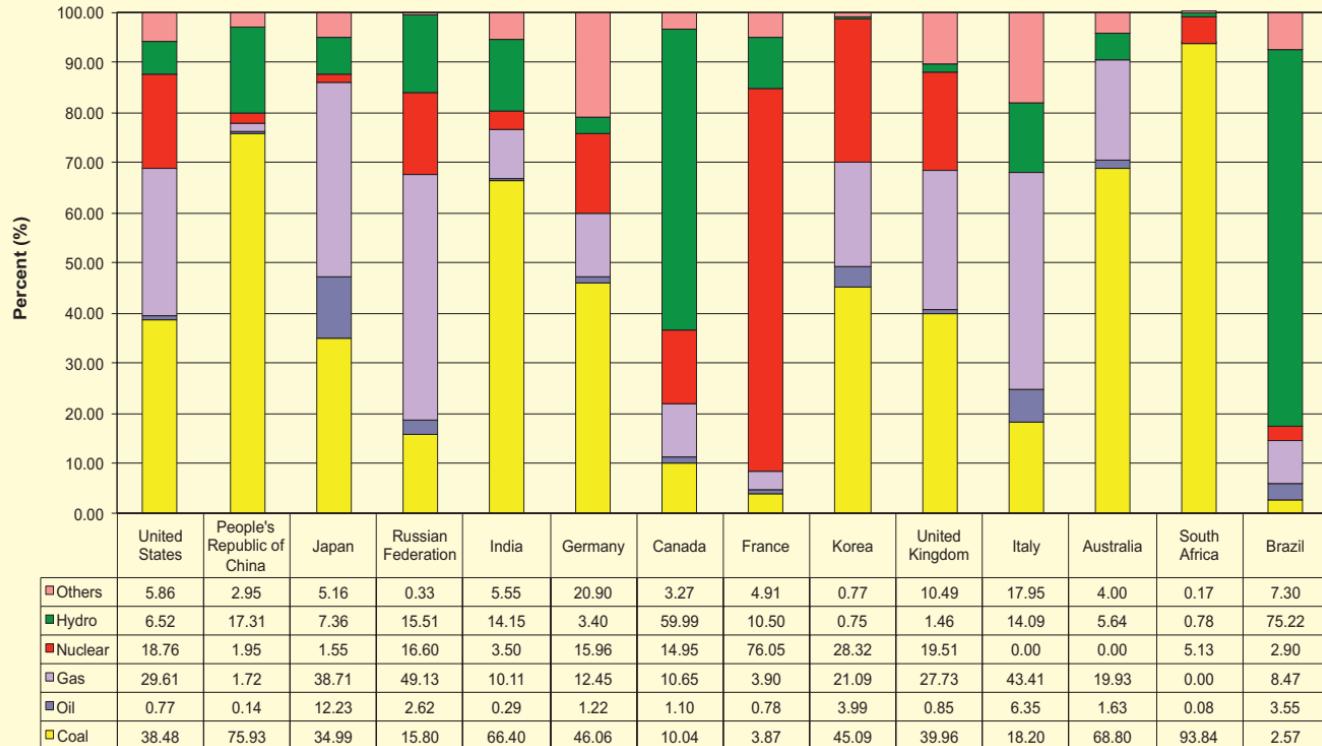


## GROSS ELECTRICITY GENERATION IN VARIOUS COUNTRIES MODE- WISE IN 2012



Source : - International Energy Agency (IEA) (except India)

**MODE- WISE SHARE IN ELECTRICITY GENERATION IN VARIOUS COUNTRIES**  
**IN % 2012**



Source :- International Energy Agency ( IEA) (except India)

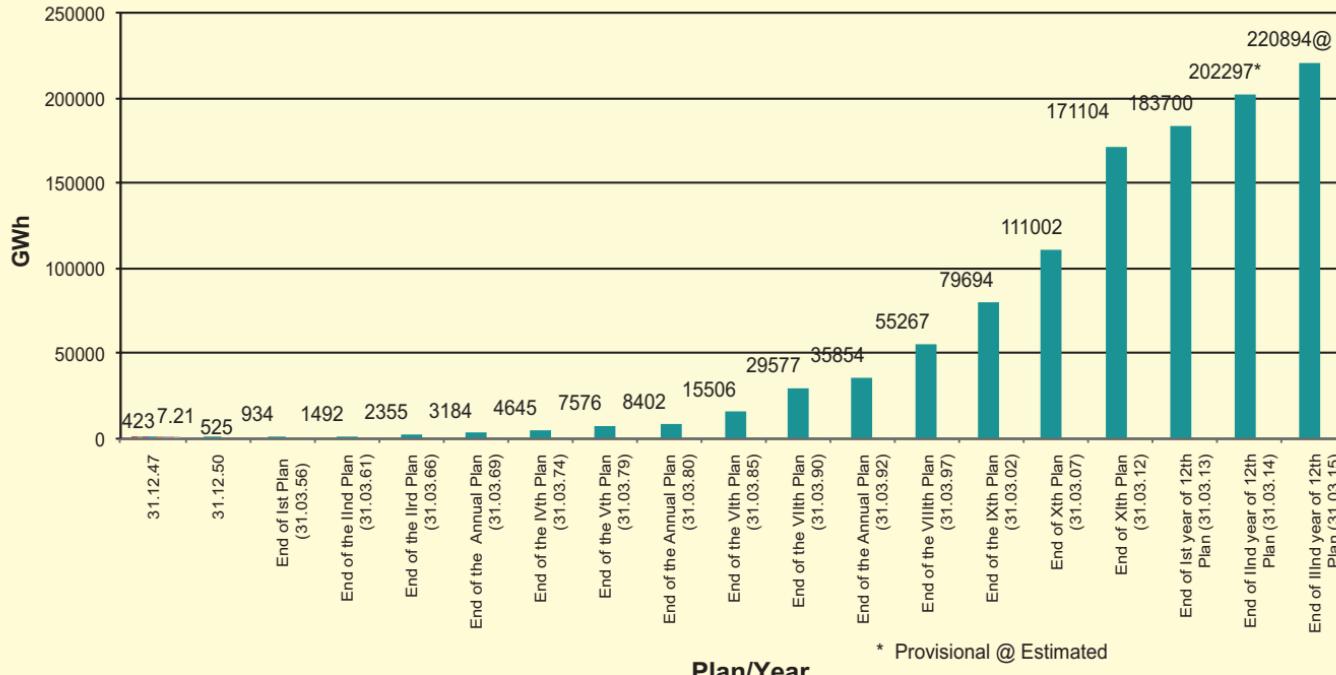
**Table: 4**  
**PLAN/CATEGORY-WISE GROWTH OF ELECTRICITY CONSUMPTION IN INDIA**  
**UTILITIES & NON-UTILITIES**

Sl. No	During financial year ending with	Domestic	% to Total	Commercial	% to Total	Industrial	% to Total	Traction	% to Total	Agricul- ture	% to Total	Misc.	% to Total	(GWh)	
														Total	
1	1947	423	10.11	178	4.26	2960	70.78	277	6.62	125	2.99	219	5.24	4182	
2	1950	525	9.36	309	5.51	4057	72.32	308	5.49	162	2.89	249	4.44	5610	
3	1955-56 (End of the 1st Plan)	934	9.20	546	5.38	7514	74.03	405	3.99	316	3.11	435	4.29	10150	
4	1960-61 (End of the 2nd Plan)	1492	8.88	848	5.05	12547	74.67	454	2.70	833	4.96	630	3.75	16804	
5	1965-66(End of the 3rd Plan)	2355	7.73	1650	5.42	22596	74.19	1057	3.47	1892	6.21	905	2.97	30455	
6	1968-69(End of the 3 Annual Plans)	3184	7.69	2126	5.14	29931	72.31	1247	3.01	3465	8.37	1439	3.48	41392	
7	1973-74(End of the 4th Plan)	4645	8.36	2988	5.38	37791	68.02	1531	2.76	6310	11.36	2292	4.13	55557	
8	1978-79(End of the 5th Plan)	7576	9.02	4330	5.15	54440	64.81	2186	2.60	12028	14.32	3445	4.10	84005	
9	1979-80(End of the 2 Annual Plans)	8402	9.85	4657	5.46	53206	62.35	2301	2.70	13452	15.76	3316	3.89	85334	
10	1984-85 (End of the 6th Plan)	15506	12.45	6937	5.57	73520	59.02	2880	2.31	20961	16.83	4765	3.83	124569	
11	1989-90 (End of the 7th Plan)	29577	15.16	9548	4.89	100373	51.45	4070	2.09	44056	22.58	7474	3.83	195098	
12	1991-92(End of the 2 Annual Plans)	35854	15.51	12032	5.20	110844	47.94	4520	1.96	58557	25.33	9394	4.06	231201	
13	1996-97(End of the 8th Plan)	55267	17.53	17519	5.56	139253	44.17	6594	2.09	84019	26.65	12642	4.01	315294	
14	2001-02(End of the 9th Plan)	79694	21.27	24139	6.44	159507	42.57	8106	2.16	81673	21.80	21551	5.75	374670	
15	2006-07(End of 10th Plan )	111002	21.12	40220	7.65	241216	45.89	10800	2.05	99023	18.84	23411	4.45	525672	
16	2011-12 (End of 11th Plan)	171104	21.79	65381	8.33	352291	44.87	14206	1.81	140960	17.95	41252	5.25	785194	
17	2012-13(End of 1st year of 12th Plan)	183700	22.29	72794	8.83	365988.99	44.40	14100	1.71	147462	17.89	40256	4.88	824301	
18	2013-14(End of 1Ind year of 12th Plan)*	202297	22.95	77558	8.80	380605	43.17	15447	1.75	160331	18.19	45324	5.14	881562	
19	2014-15(End of IIIrd year of 12th Plan)@	220894	23.53	82322	8.77	395221	42.10	16794	1.79	173200	18.45	50392	5.37	938823	

(\*) Provisional

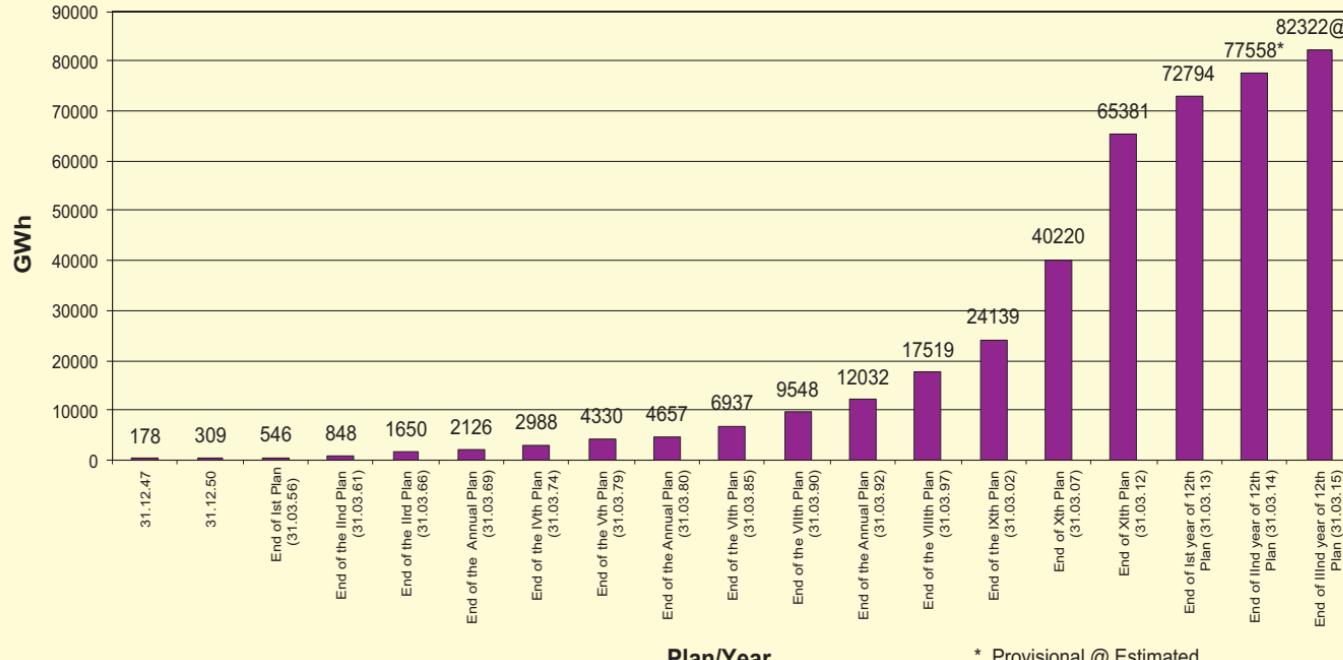
(@) Estimated

## PLANWISE GROWTH OF ELECTRICITY CONSUMPTION IN INDIA DOMESTIC SECTOR



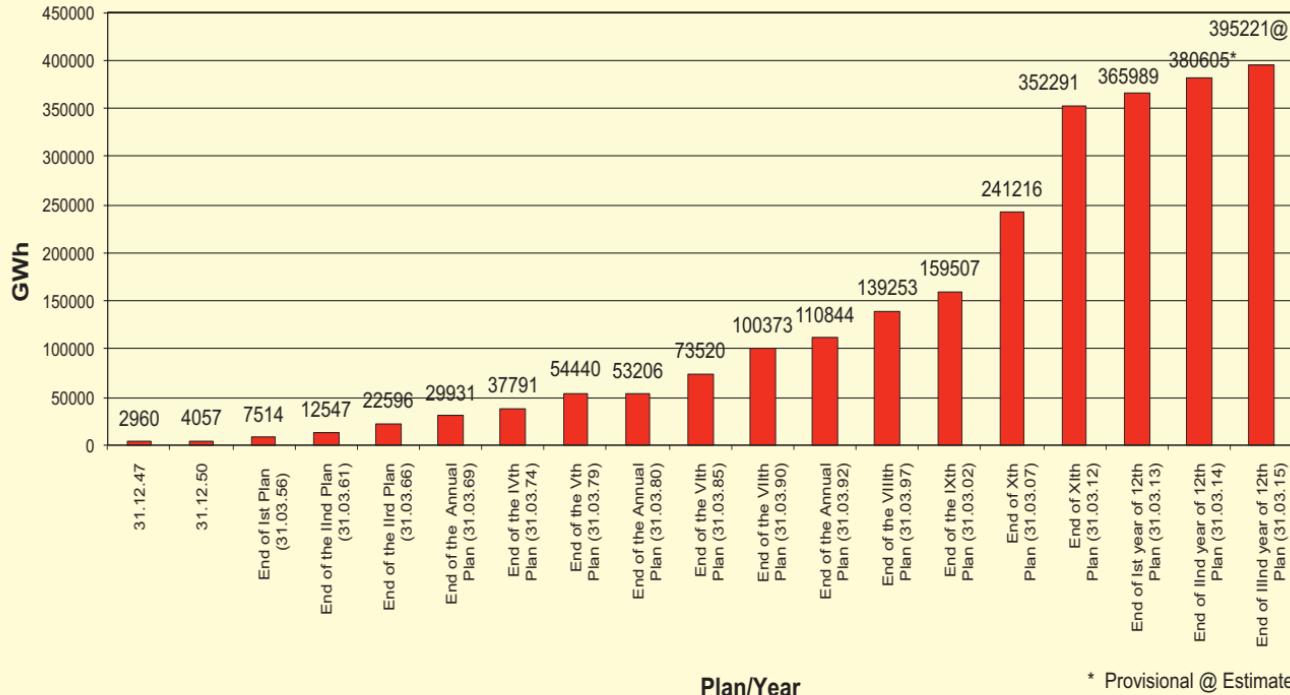
Year	1947-50	1950-60	1960-70	1970-80	1980-90	1990-2000	2000-10	2010-15
% Growth	11.87	10.14	9.73	9.18	13.41	9.08	7.21	8.45

**PLANWISE GROWTH OF ELECTRICITY CONSUMPTION IN INDIA  
COMMERCIAL**



Year	1947-50	1950-60	1960-70	1970-80	1980-90	1990-2000	2000-10	2010-15
% Growth	3.18	9.50	11.78	7.15	7.45	8.28	11.47	5.86

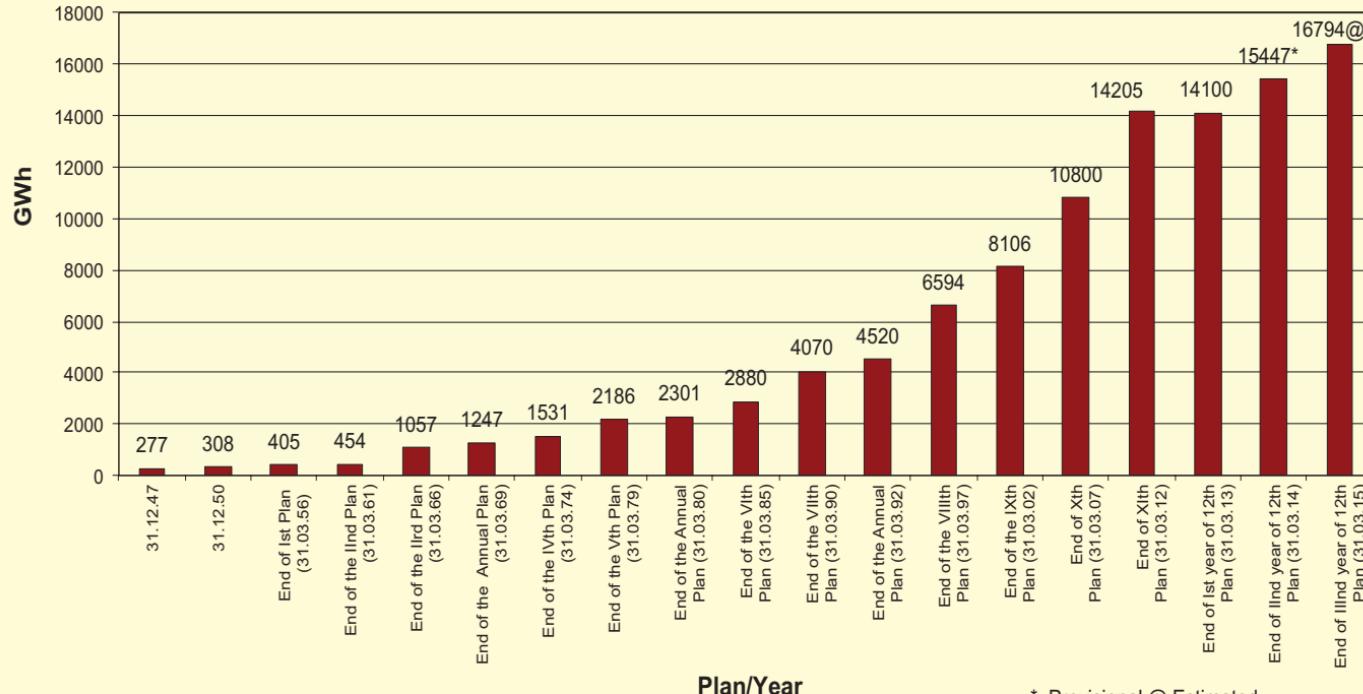
**PLANWISE GROWTH OF ELECTRICITY CONSUMPTION IN INDIA  
INDUSTRIAL**



Year	1947-50	1950-60	1960-70	1970-80	1980-90	1990-2000	2000-10	2010-15
% Growth	11.08	10.40	11.57	5.02	6.55	4.43	10.36	4.62

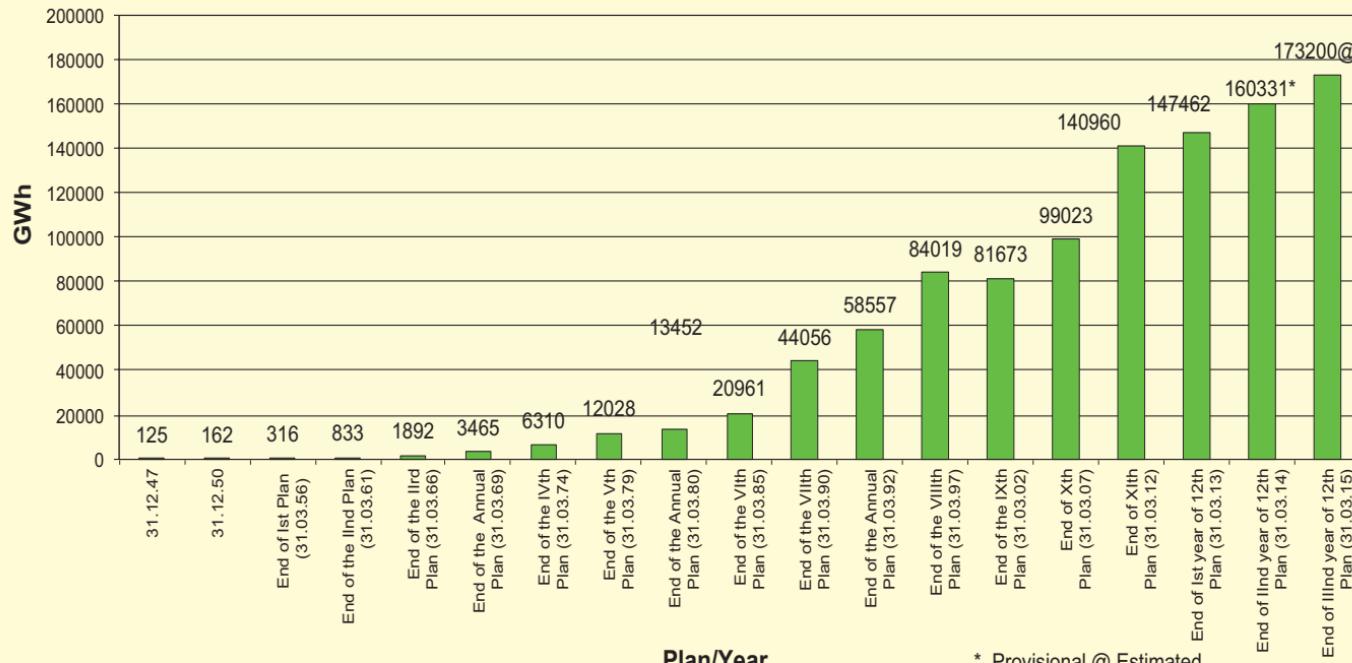
# PLANWISE GROWTH OF ELECTRICITY CONSUMPTION IN INDIA

## TRACTION



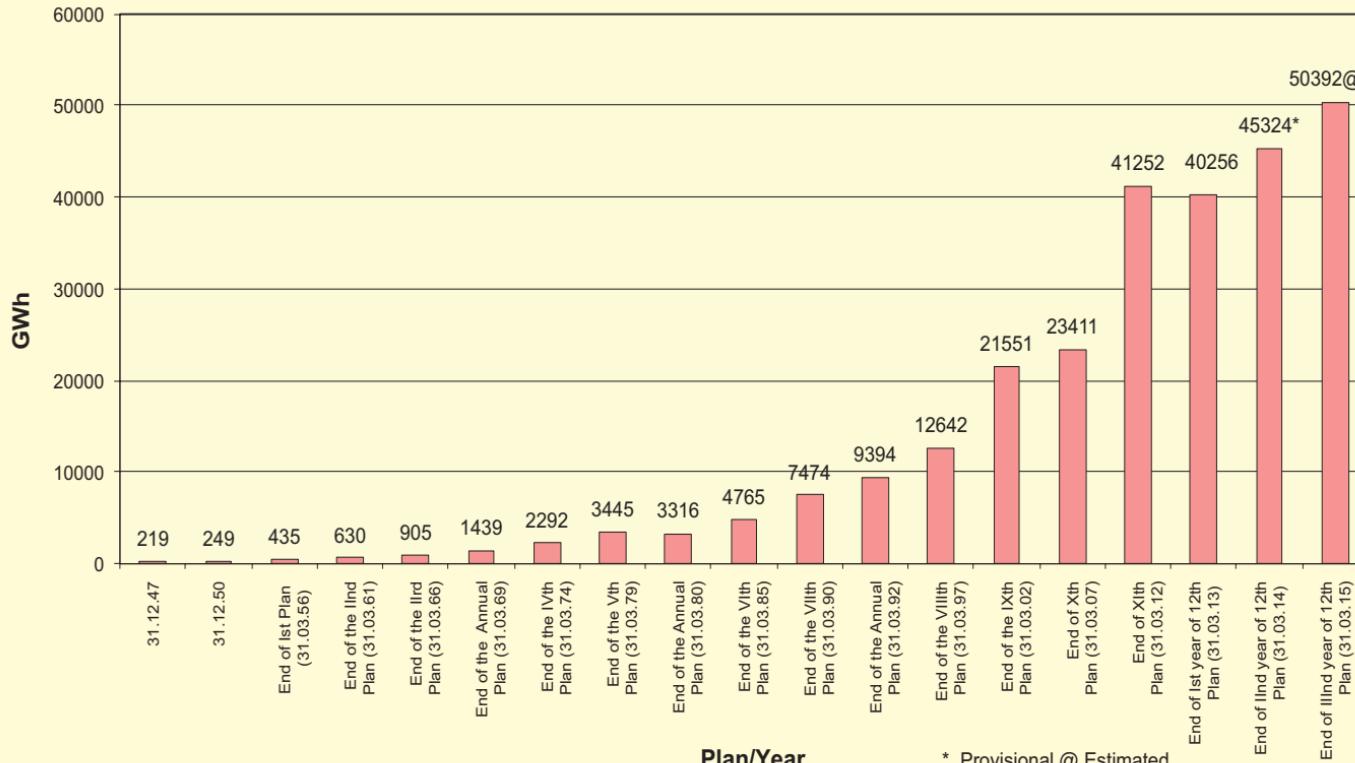
Year	1947-50	1950-60	1960-70	1970-80	1980-90	1990-2000	2000-10	2010-15
% Growth	3.60	12.71	48.63	4.74	5.87	7.10	4.33	5.21

**PLANWISE GROWTH OF ELECTRICITY CONSUMPTION IN INDIA**  
**AGRICULTURE**

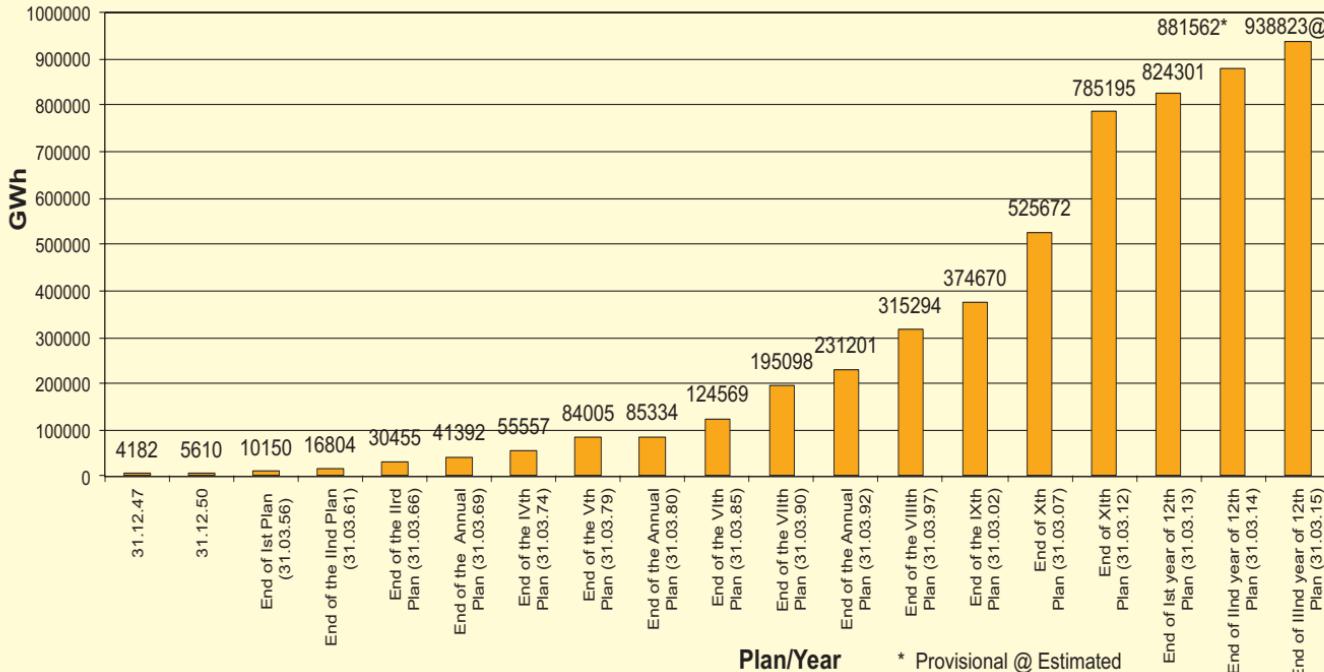


Year	1947-50	1950-60	1960-70	1970-80	1980-90	1990-2000	2000-10	2010-15
% Growth	9.03	66.96	71.06	13.55	12.60	7.52	2.05	7.41

**PLANWISE GROWTH OF ELECTRICITY CONSUMPTION IN INDIA**  
**MISCELLANEOUS**



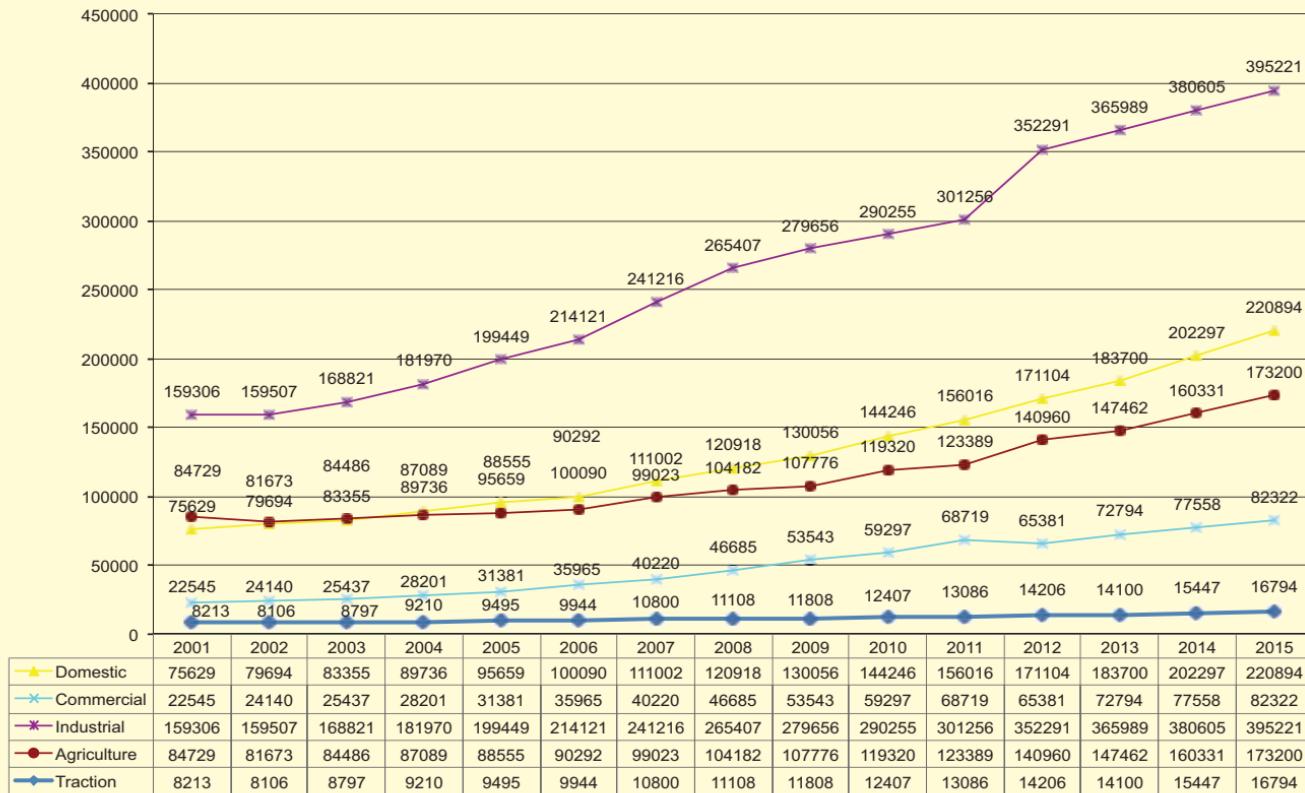
**PLANWISE GROWTH OF ALL INDIA TOTAL ELECTRICITY CONSUMPTION**  
**UTILITIES & NON-UTILITIES**



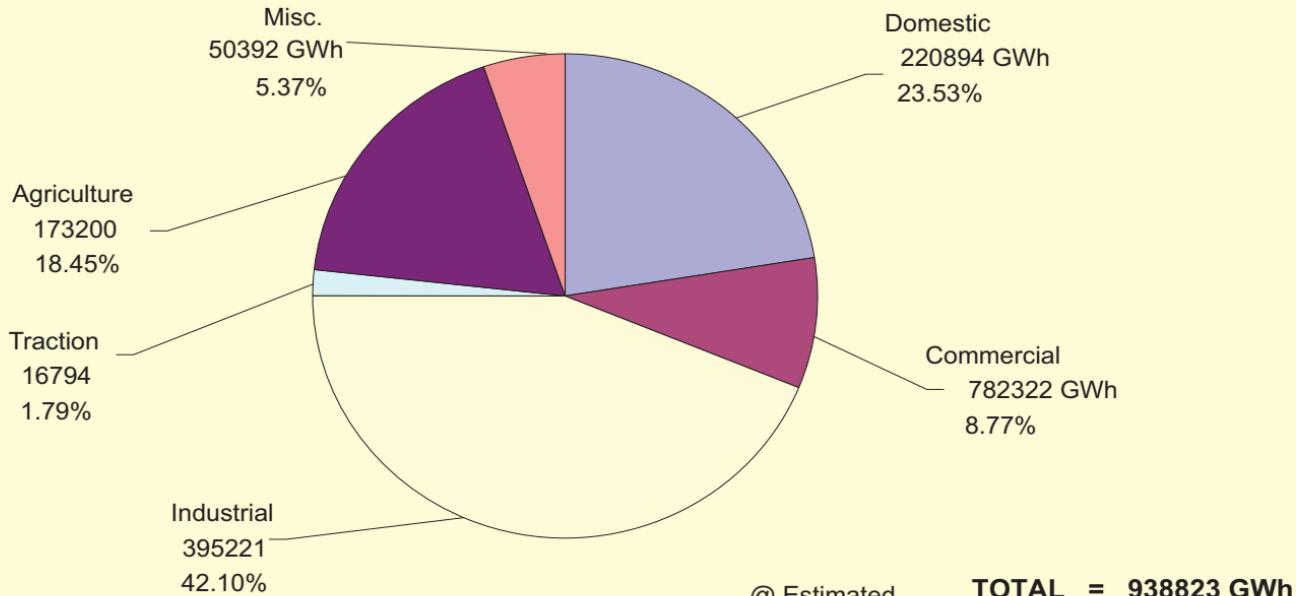
Year	1947-50	1950-60	1960-70	1970-80	1980-90	1990-2000	2000-10	2010-15
% Growth	10.29	38.38	44.97	6.54	8.62	6.35	8.26	6.33

## TREND OF CATEGORYWISE ENERGY CONSUMPTION

2000-01 TO 2014-15

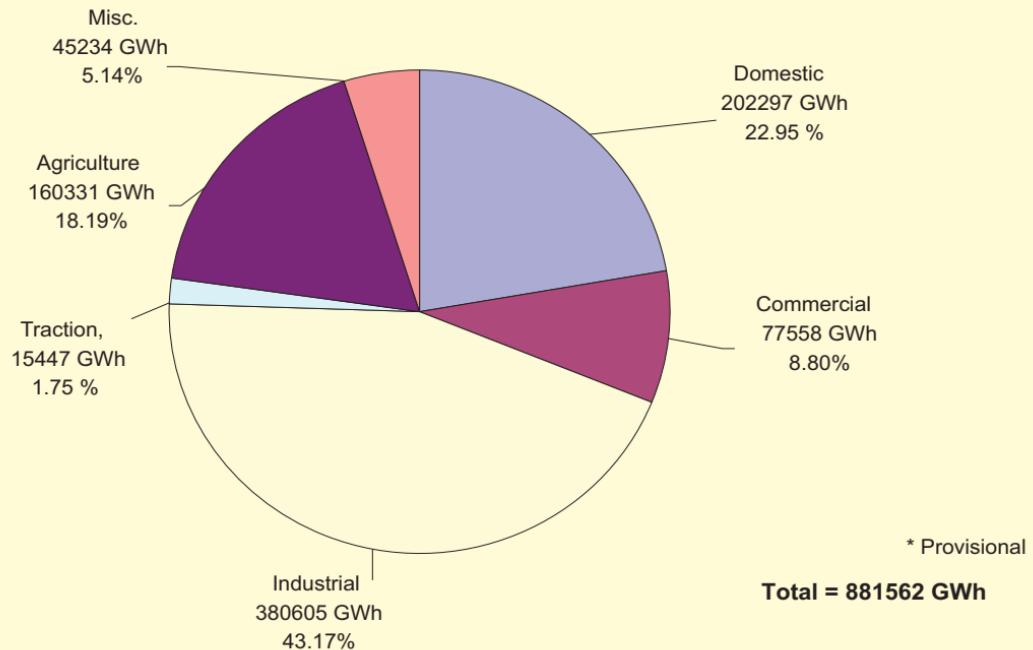


**ALL INDIA ELECTRICITY CONSUMPTION SECTOR WISE-  
END OF IIIrd YEAR OF XIITH PLAN  
UTILITIES & NON - UTILITIES  
(31.03.2015) @**

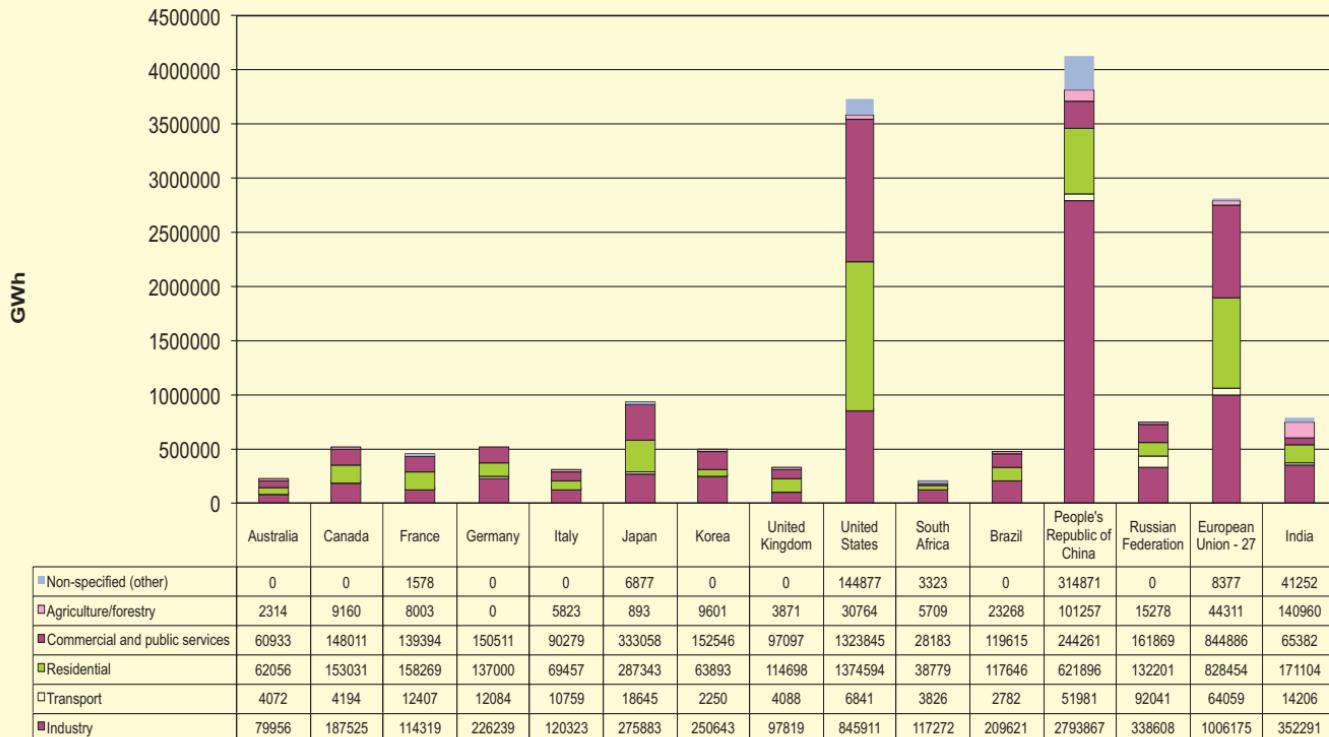


**Pie Chart : 26A**

**ALL INDIA ELECTRICITY CONSUMPTION SECTOR- WISE - END  
OF 11th YEAR OF 12th PLAN  
UTILITIES & NON - UTILITIES  
(31.03.2014)\***

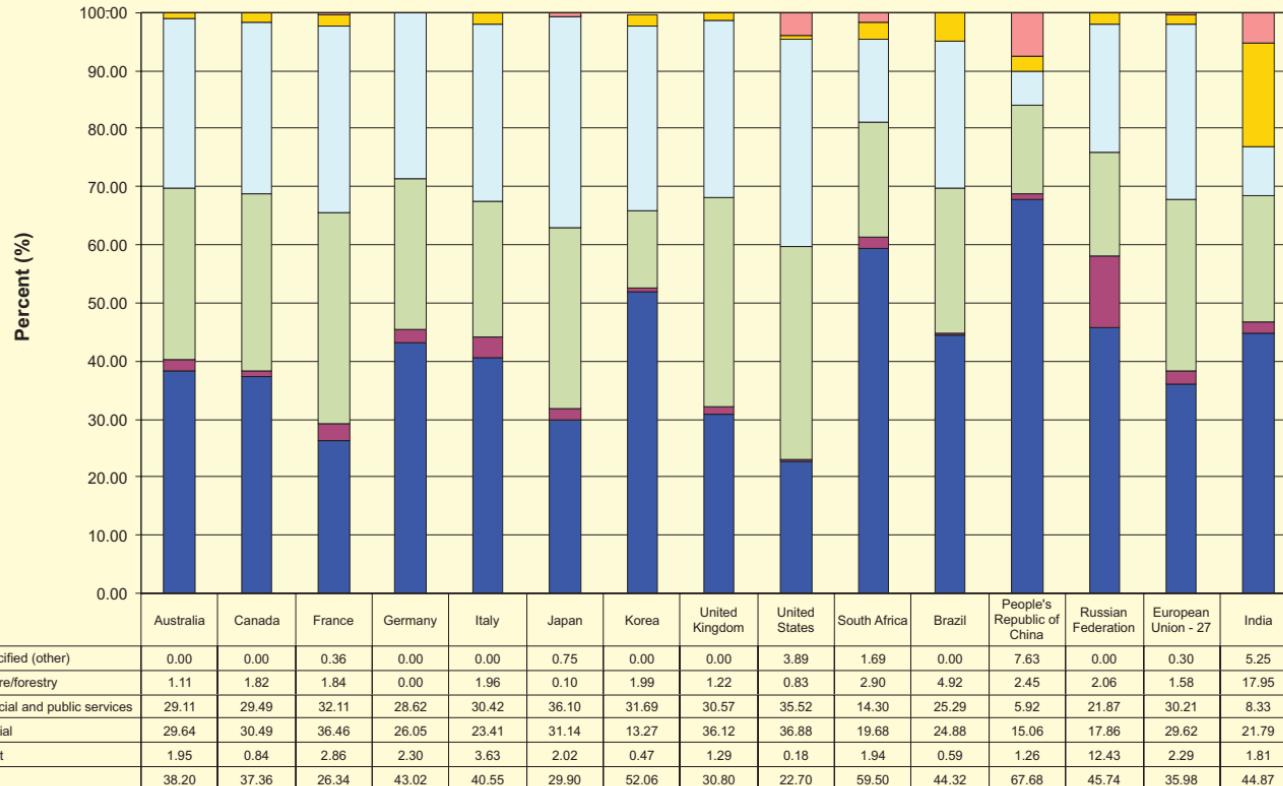


## CATEGORY-WISE ELECTRICITY CONSUMPTION IN VARIOUS COUNTRIES 2012



Source: - International Energy Agency (IEA) (except India)

**CATEGORY-WISE SHARES IN ELECTRICITY CONSUMPTION IN VARIOUS COUNTRIES -2012**  
**( in % )**



**Table 5**  
**PER CAPITA ELECTRICITY CONSUMPTION AND T & D LOSSES**  
**OF VARIOUS COUNTRIES IN 2011 & 12**

Sl. No.	Per Capita Consumption (kWh)			Sl. No.	T & D Losses (%)		
	Name of the Country	2011	2012		Name of the Country	2011	2012
1	Canada	16406	15558	1	Korea	3.57	3.47
2	USA	13227	12947	2	Japan	4.98	4.79
3	Australia	10514	10218	3	Germany	4.70	4.46
4	Japan	7847	7753	4	Italy	6.46	6.61
5	France	7318	7367	5	Australia	5.94	5.68
6	Germany	7083	7138	6	South Africa	9.61	10.19
7	Korea	10162	10346	7	France	6.47	7.99
8	UK	5518	5452	8	China	6.54	6.56
9	Russia	6533	6602	9	USA	6.41	6.73
10	Italy	5393	5277	10	Canada	6.27	8.19
11	South Africa	4694	4410	11	UK	8.06	8.26
12	Brazil	2441	2509	12	Russia	12.59	12.59
13	China	3298	3475	13	Brazil	16.08	16.63
14	India*	819	884	14	India	23.97	23.65
15	World	2933	2972	15	World	8.90	8.89

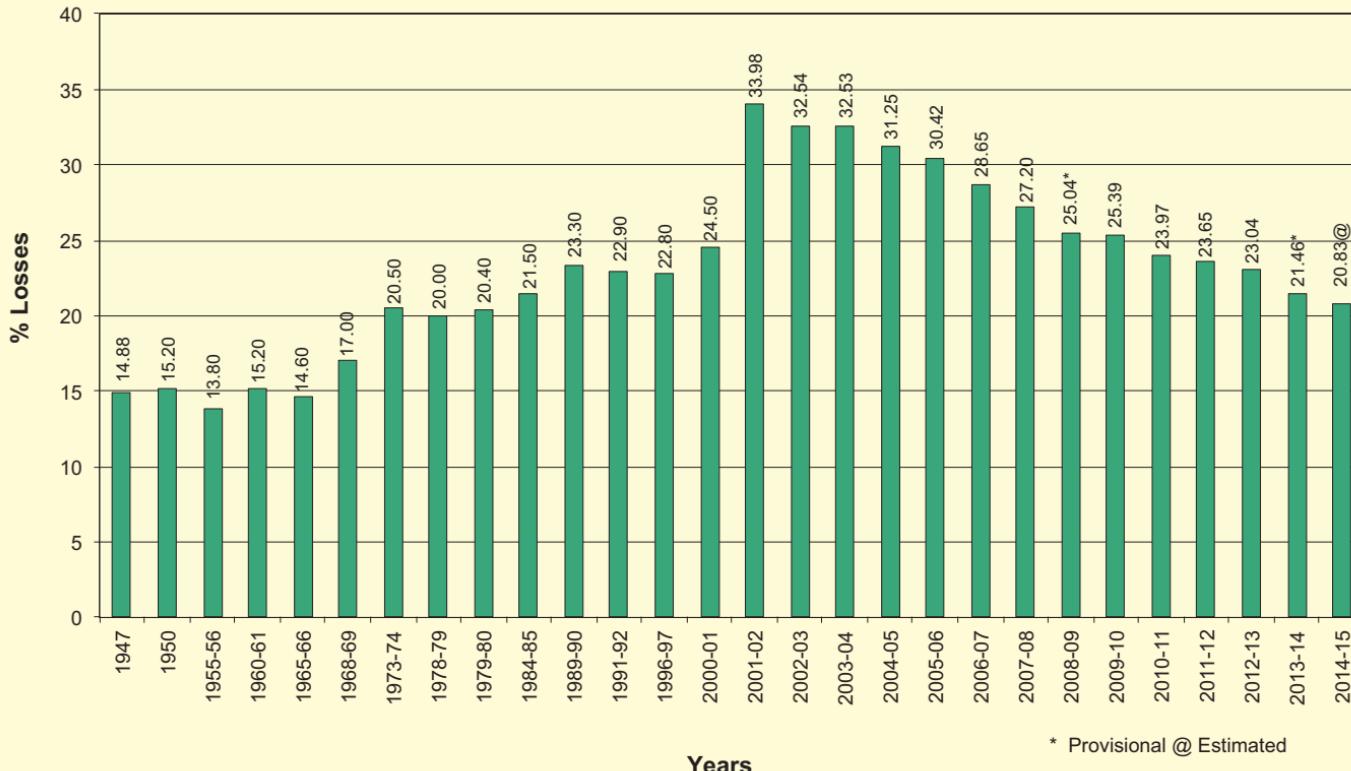
Note :-

Basic data obtained from IEA Website (Except India)

\* Per Capita Consumption= (Gross Electrical Energy Availability/Midyear Population).

# ALL INDIA TRANSMISSION AND DISTRIBUTION LOSSES

( in % )



**T & D LOSSES OF VARIOUS COUNTRIES IN 2011& 2012**  
**in %age**



Source: - International Energy Agency (IEA) (except India)

**Table 6**  
**PLANWISE GROWTH OF INSTALLED GENERATING CAPACITY OF  
CAPTIVE POWER PLANTS (1MW & above) IN INDUSTRIES - MODE- WISE**

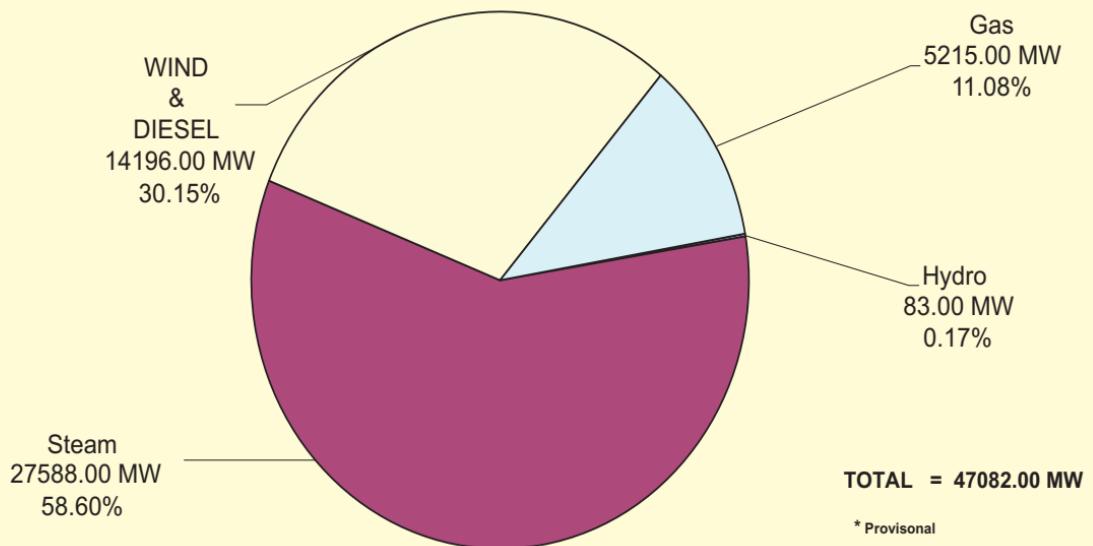
Sl.No.	As on	Hydro	Steam	Diesel @	Gas	Sub - Total	Railways	(MW) Total
1	31.12.1947	**	**	**	**	410.00	0.00	410.00
2	31.12.1950	**	**	**	**	587.85	0.00	587.85
3	31.03.1956 (End of the 1st Plan)	**	**	**	**	759.65	0.00	759.65
4	31.03.1961 (End of the 2nd Plan)	**	**	**	**	1001.37	0.00	1001.37
5	31.03.1966(End of the 3rd Plan)	**	**	**	**	1082.36	0.00	1082.36
6	31.03.1969(End of the 3 Annual Plans)	**	**	**	**	1277.47	0.00	1277.47
7	31.03.1974(End of the 4th Plan)	**	**	**	**	1732.70	0.00	1732.70
8	31.03.1979(End of the 5th Plan)	2.61	1949.23	559.17	44.27	2555.28	62.31	2617.59
9	31.03.1980(End of the 2 Annual Plans)	2.61	2021.61	720.58	54.27	2799.07	60.44	2859.51
10	31.03.1985 (End of the 6th Plan)	2.91	2803.18	2077.06	155.31	5038.46	81.80	5120.26
11	31.03.1990 (End of the 7th Plan)	3.60	4822.85	2754.48	425.51	8006.44	109.29	8115.73
12	31.03.1992 (End of the 2 Annual Plans)	4.30	5377.10	3291.06	495.72	9168.18	133.23	9301.41
13	31.03.1997(End of the 8th Plan)	3.50	6151.69	4594.74	1166.38	11916.31	162.62	12078.93
14	31.03.2002(End of the 9th Plan)	51.10	8354.03	6614.16	2125.91	17145.20	0.00	17145.20
15	31.03.07 (End of 10th Plan )	60.50	11397.52	7901.02	2976.00	22335.04	0.00	22335.04
16	31.03.12(End of 11th Plan)	48.00	22615.00	10827.00	5885.00	39375.00	0.00	39375.00
17	31.03.13 (End of 1st year of 12th Plan)	66.90	23889.61	12272.19	4497.69	40726.39	0.00	40726.39
18	31.03.14 (End of 1Ind year of 12th Plan)	73.00	25986.00	13349.00	4893.00	44228.00	0.00	44301.00
19	31.03.15 (End of IIIrd year of 12th Plan)*	83.00	27588.00	14196.00	5215.00	46999.00	0.00	47082.00

\*\* Breakup Not Available

\* Provisional

INSTALLED GENERATING CAPACITY OF CAPTIVE POWER PLANTS IN INDUSTRIES HAVING  
DEMAND OF 1 MW & ABOVE - MODEWISE END OF IIIRD YEAR OF XIITH PLAN

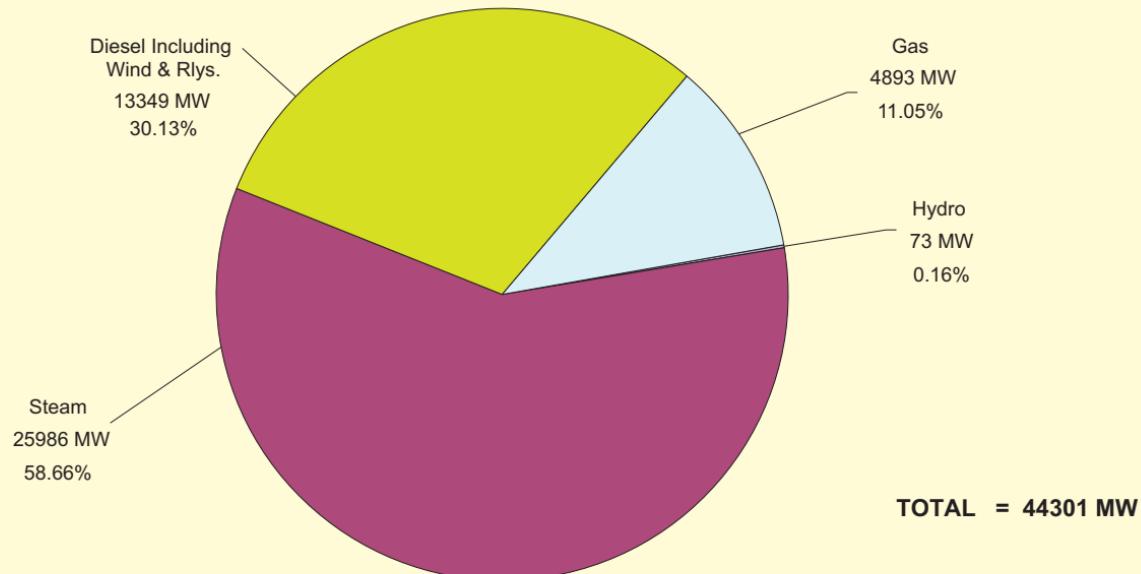
31.03.2015 \*



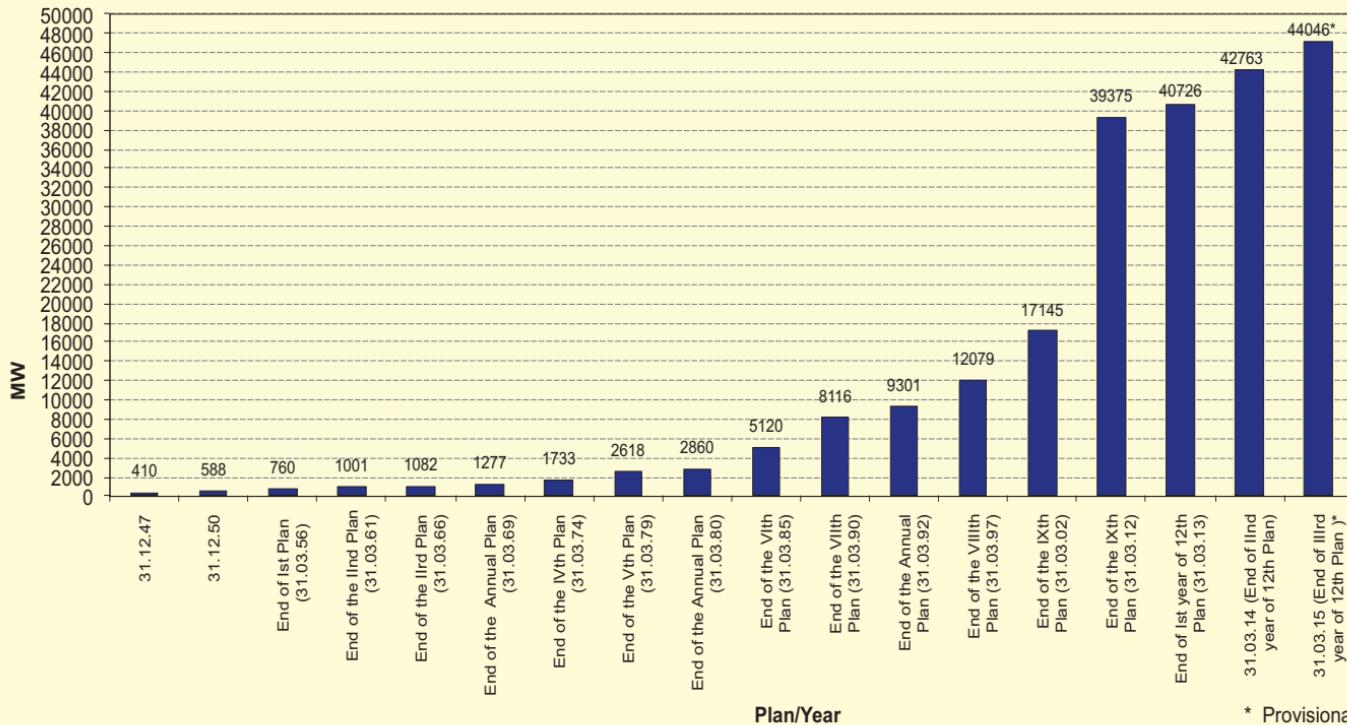
INSTALLED GENERATING CAPACITY OF CAPTIVE POWER PLANTS IN  
INDUSTRIES HAVING DEMAND OF 1 MW & ABOVE MODEWISE

END OF 11th YEAR OF 12TH PLAN

31.03.2014



**PLANWISE GROWTH OF ALL INDIA INSTALLED GENERATING CAPACITY OF CAPTIVE POWER PLANTS  
IN INDUSTRIES HAVING DEMAND OF  
1MW & ABOVE**



\* Provisional

**Table 7**  
**PLANWISE GROWTH OF ENERGY GENERATED BY CAPTIVE POWER PLANTS IN INDUSTRIES**  
**(1MW & Above) - MODE WISE**

Sl.No.	During financial year ending with	Hydro 3	Steam 4	Diesel @ 5	Gas 6	Sub - Total (4+5+6) 7	Railways 8	Total (3+7+8) 9
1	2							(GWh)
1	1947	**	**	**	**	856.91	*	856.91
2	1950	**	**	**	**	1467.81	0.00	1467.81
3	1956(End of 1st Plan)	**	**	**	**	2184.82	0.00	2184.82
4	1961(End of 2nd Plan)	**	**	**	**	3186.10	0.00	3186.10
5	1966(End of 3rd Plan)	**	**	**	**	3733.19	0.00	3733.19
6	1969(End of 3 Annual Plans)	**	**	**	**	4136.06	0.00	4136.06
7	1974(End of 4th Plan)	**	**	**	**	6067.47	0.00	6067.47
8	1979(End of 5th Plan)	13.22	7211.30	299.13	48.97	7572.62	34.47	7607.09
9	1980(End of 2 Annual Plans)	15.06	7225.60	825.71	90.67	8157.04	35.67	8192.71
10	1985(End of 6th Plan)	18.29	9966.55	2001.18	317.03	12303.05	42.80	12345.85
11	1990(End of 7th Plan)	15.83	19110.46	2757.27	1313.29	23196.85	29.07	23225.92
12	1992(End of 2 Annual Plans)	17.57	23409.35	3247.81	1905.24	28579.97	22.52	28602.49
13	1997(End of 8th Plan)	28.84	29127.94	6619.01	5039.22	40815.01	25.07	40840.08
14	2002(End of 9th Plan)	116.59	41853.85	10875.19	8835.19	61680.82	0.00	61680.82
15	2007 (End of 10th Plan )	217.81	56184.04	10190.74	15207.17	81799.76	0.00	81799.76
16	2012 (End of 11th Plan)	131.28	104862.65	7422.48	21971.57	134256.70	0.00	134387.98
17	2013 (End of 1nd year of 12th Plan (31.03.13)	118.18	113166.95	9955.64	20768.88	143891.47	0.00	144009.65
18	2014 (End of 11nd year of 12th Plan (31.03.14)*	129.00	123094.00	10829.00	22591.00	156514.00	0.00	156643.00
19	2015 (End of 111rd year of 12th Plan (31.03.15)@	147.00	130682.00	11515.00	24082.00	166279.00	0.00	166426.00

@ Estimated

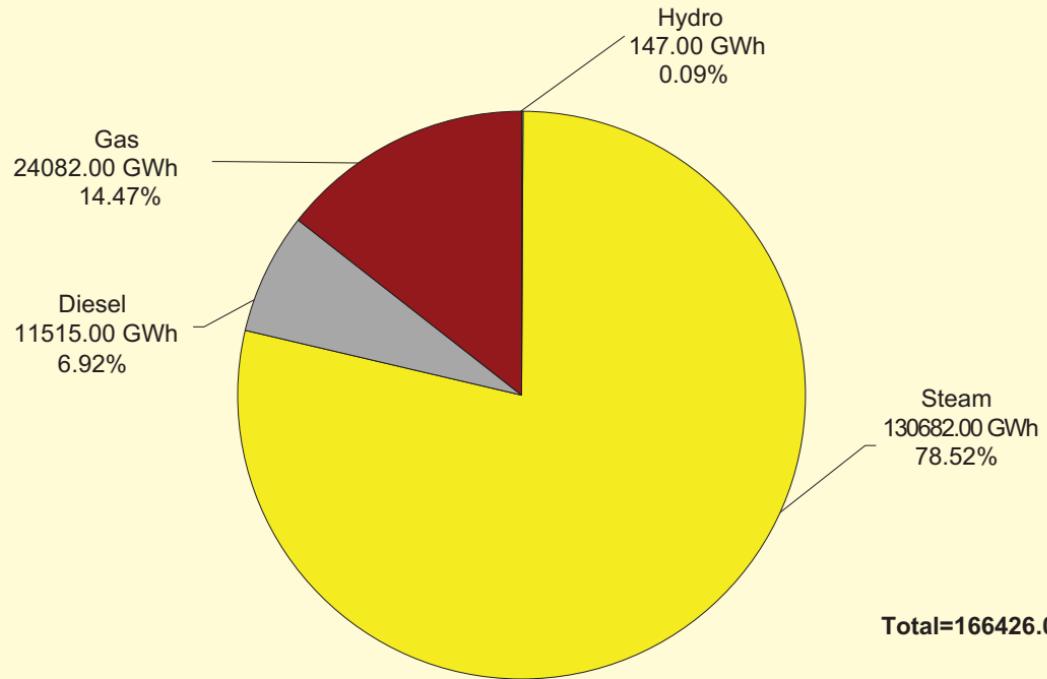
\* Provisional

\$ Include Wind Power capacity

\*\* Breakup not Available

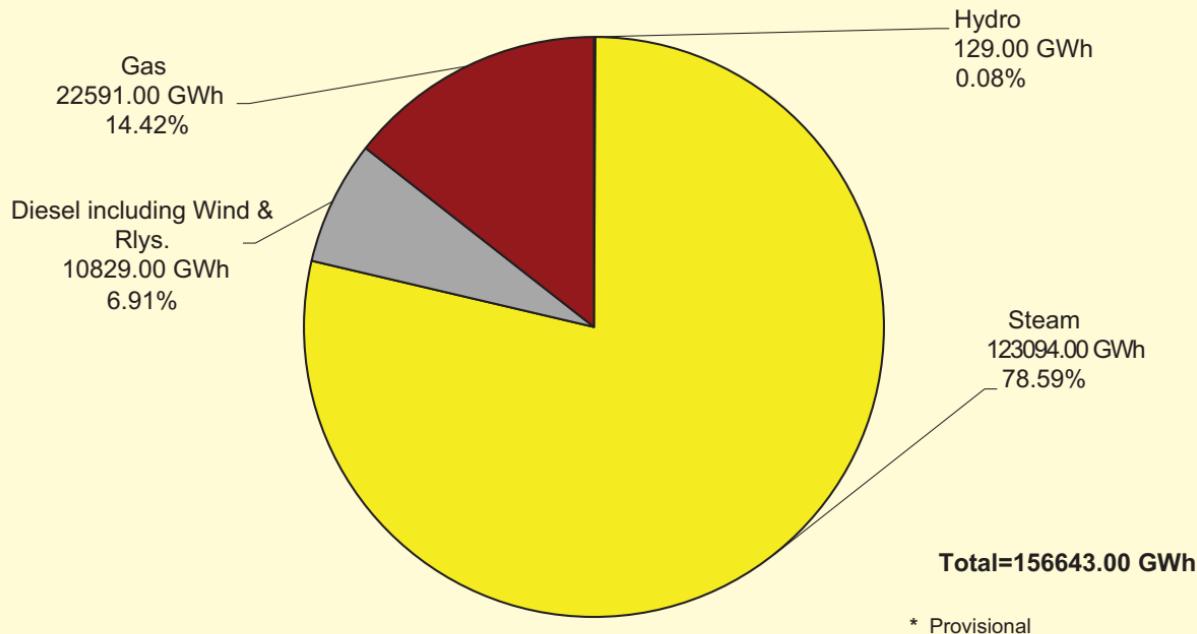
ALL INDIA ELECTRICAL ENERGY GENERATED BY CAPTIVE POWER PLANTS  
IN INDUSTRIES HAVING DEMAND OF 1 MW AND ABOVE MODE WISE  
(31.03.15)<sup>@</sup>

END OF IIIrd YEAR OF 12th PLAN

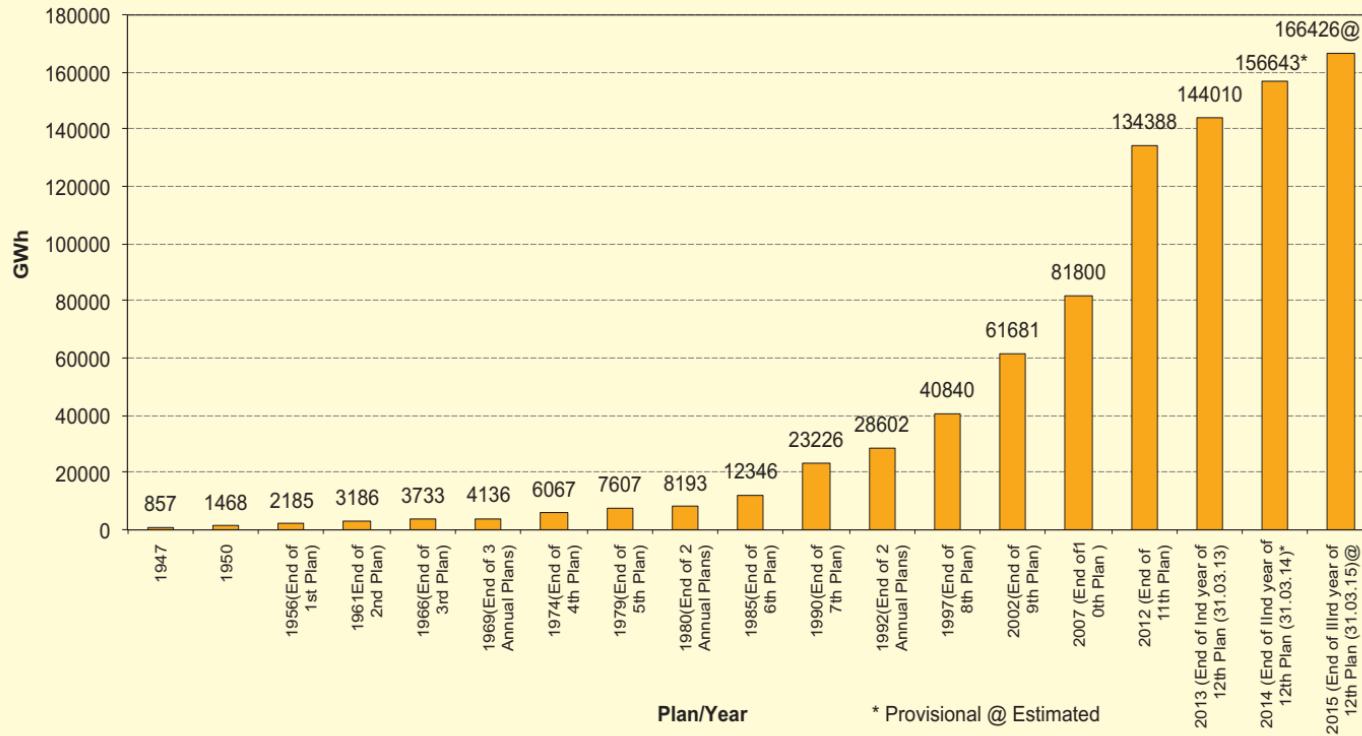


**Pie Chart : 33A**

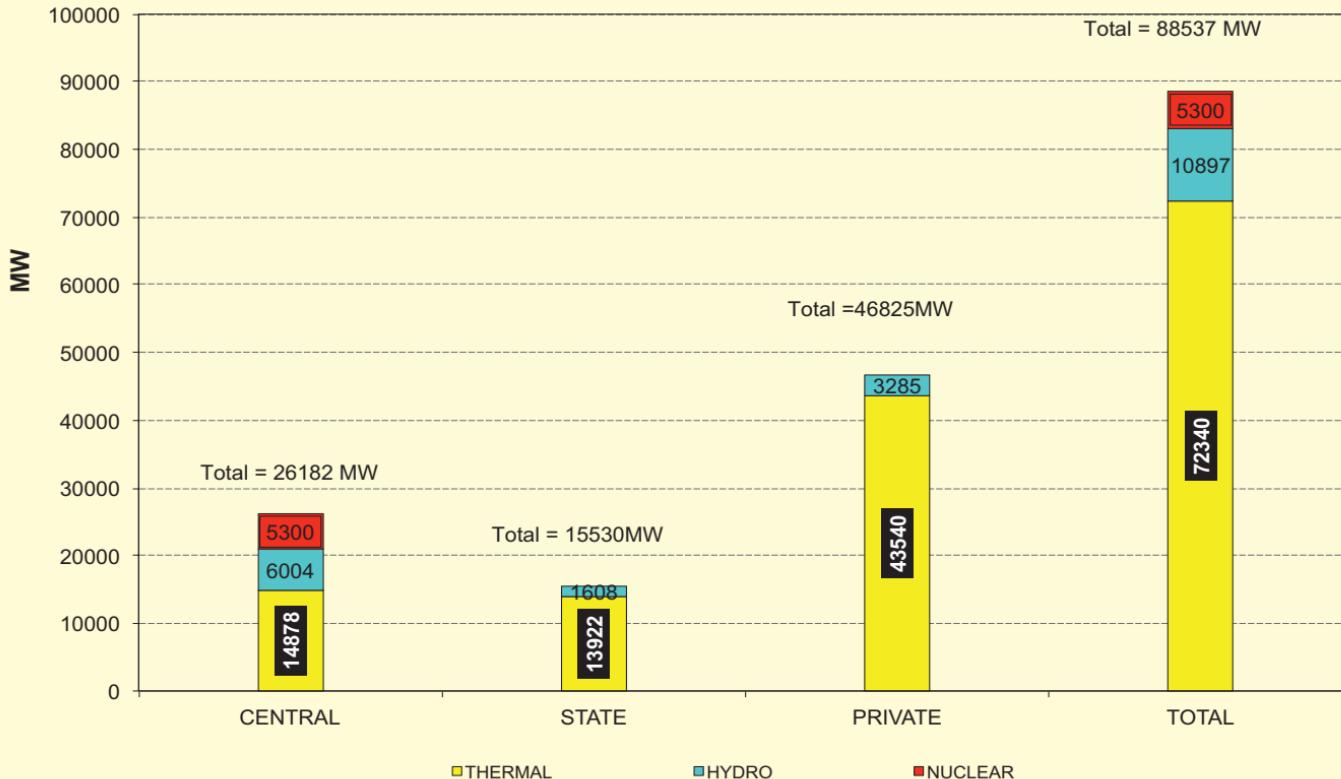
**ALL INDIA ELECTRICAL ENERGY GENERATED BY CAPTIVE POWER PLANTS  
IN INDUSTRIES HAVING DEMAND OF 1 MW AND ABOVE MODE WISE  
END OF 11th YEAR OF 12th PLAN (31.03.14) \***



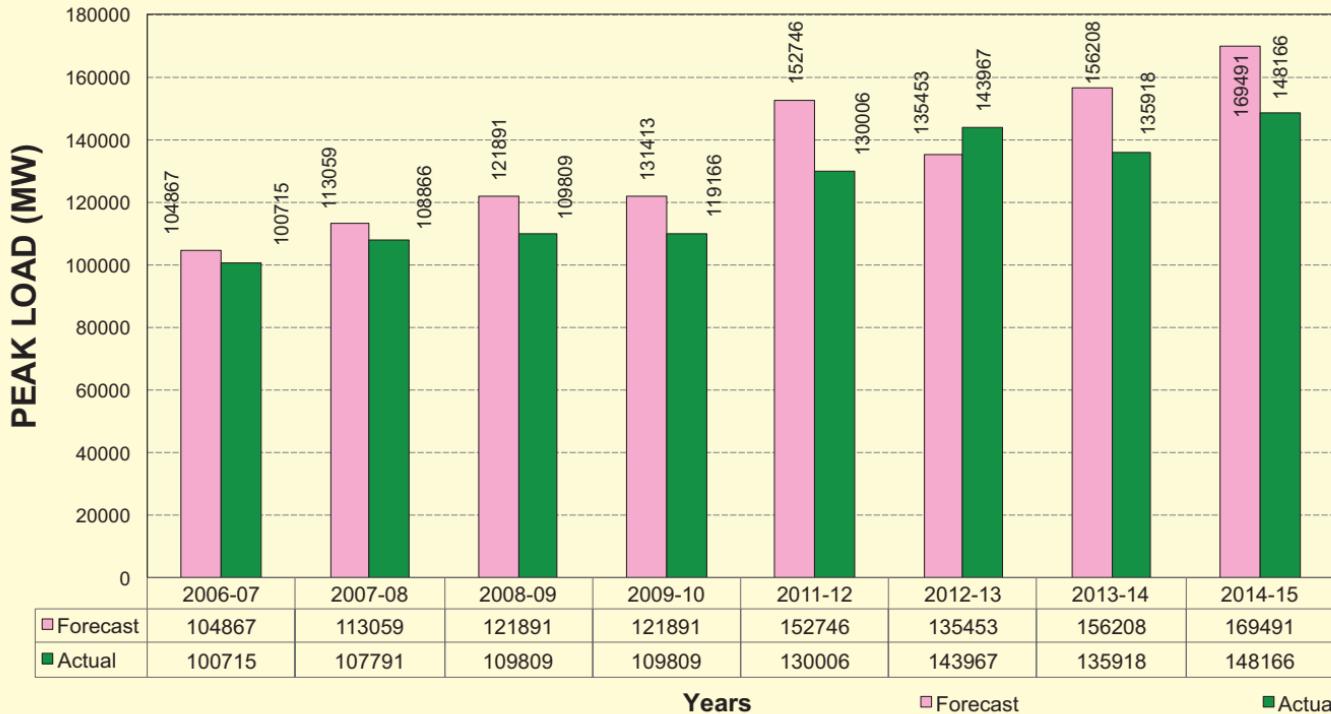
**PLANWISE GROWTH OF ENERGY GENERATED BY CAPTIVE POWER PLANTS IN INDUSTRIES  
HAVING DEMAND OF 1MW & ABOVE**



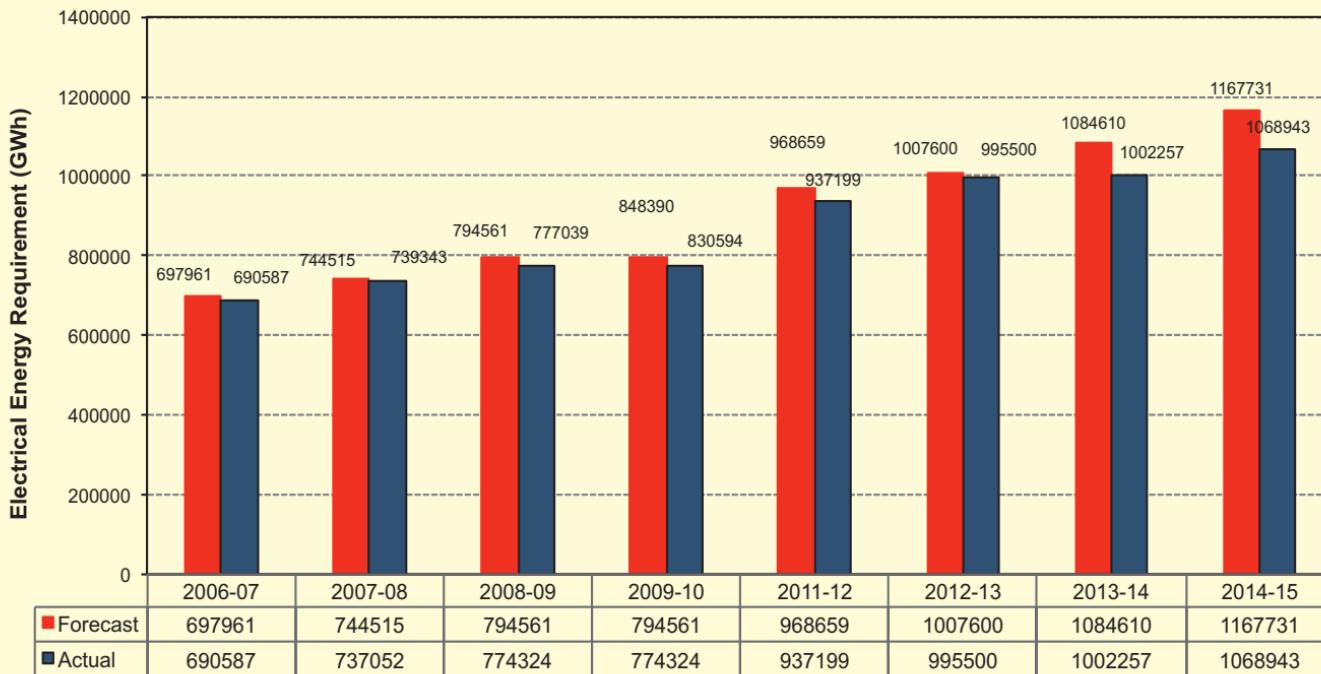
**CAPACITY ADDITION PROGRAMME  
12TH PLAN**



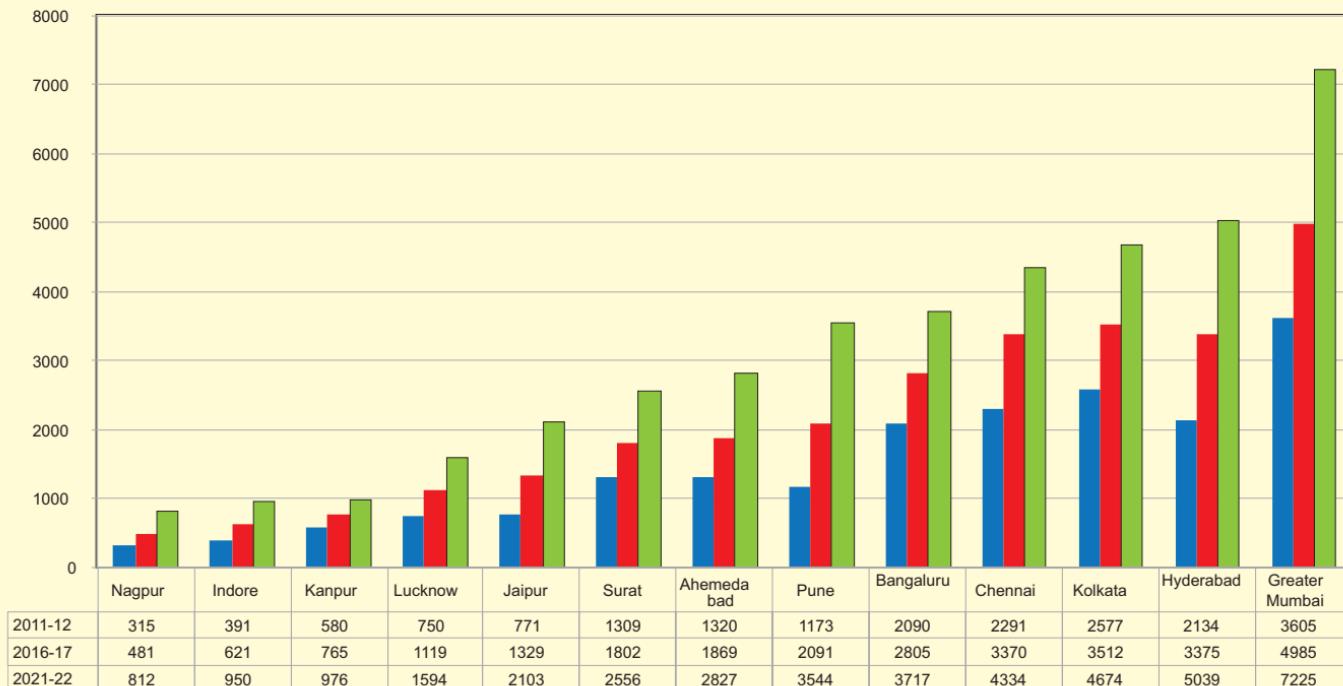
**FORECAST OF ALL INDIA PEAK ELECTRICITY DEMAND  
UTILITIES  
AS PER 18TH ELECTRIC POWER SURVEY  
IN MW**



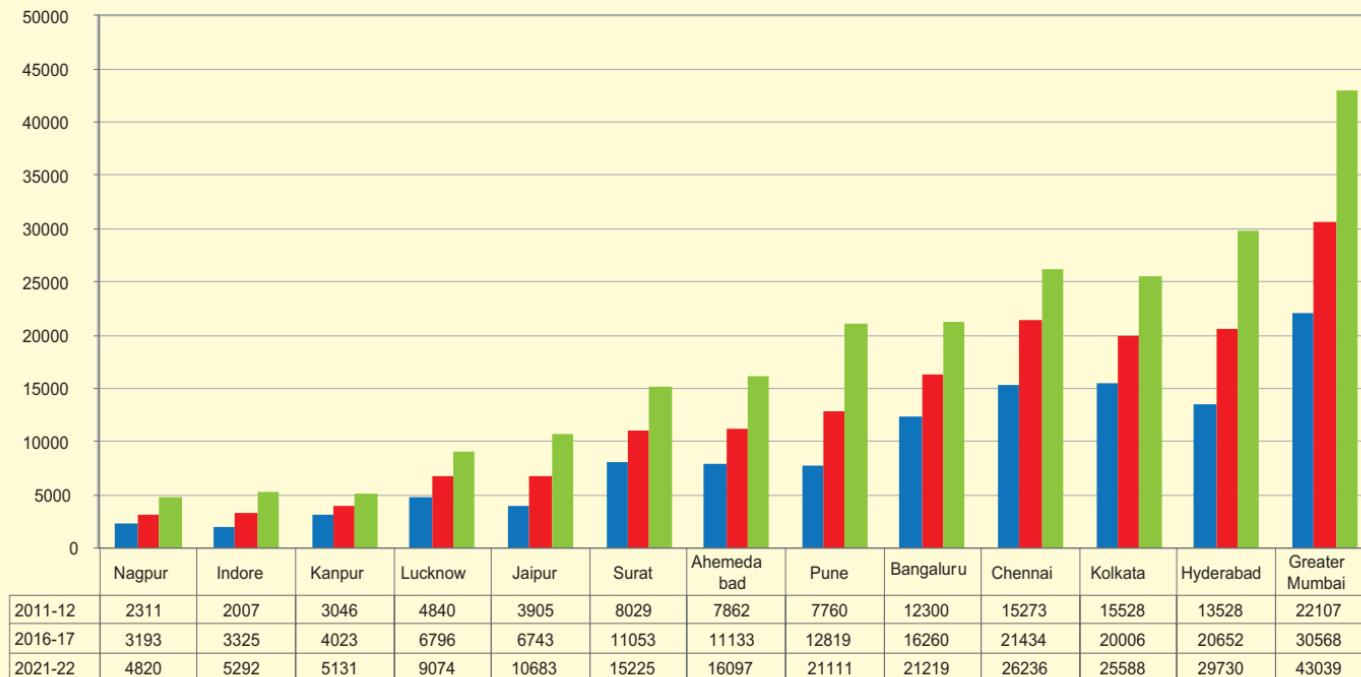
**FORECAST OF ALL INDIA ELECTRICAL ENERGY REQUIREMENT**  
**UTILITIES**  
**AS PER 18TH ELECTRIC POWER SURVEY**  
**IN GWh**



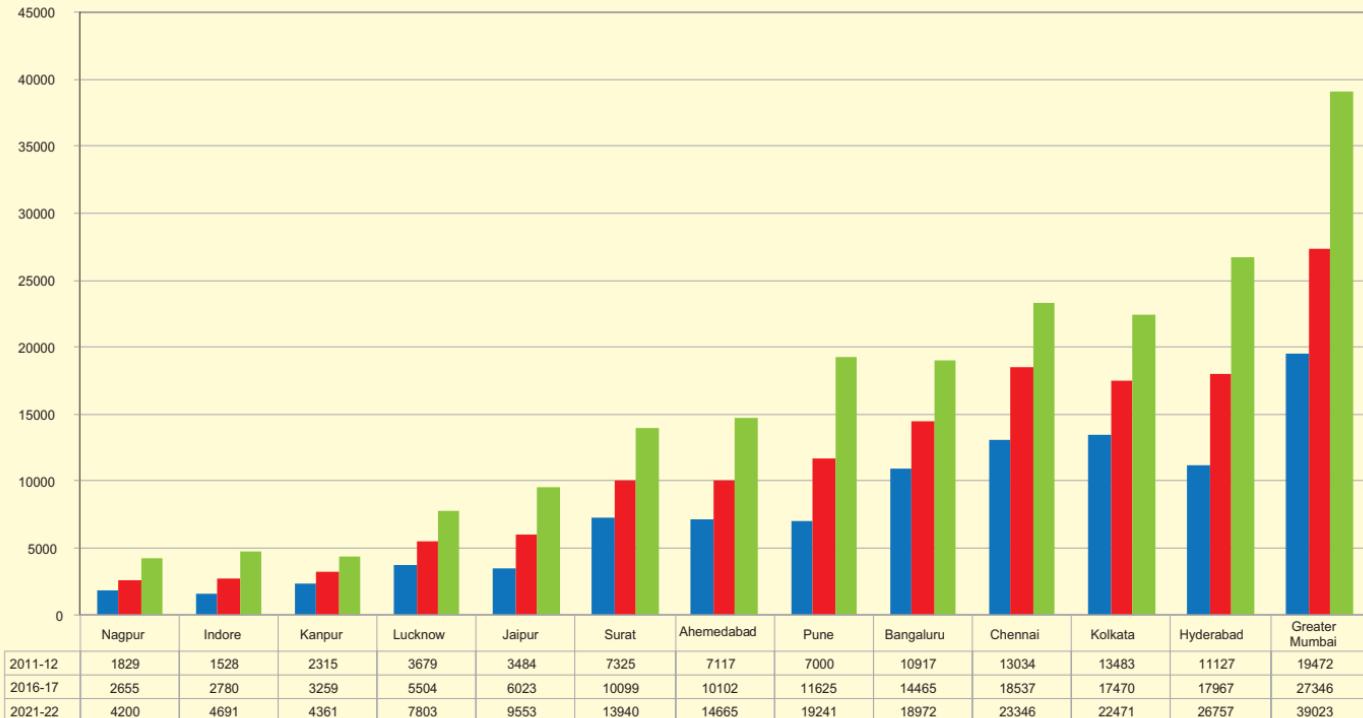
**18TH ELECTRIC POWER SURVEY OF INDIA (VOLUME - II)**  
**ANNUAL ELECTRIC PEAK LOAD (IN MW) OF MEGA CITIES**  
**AT POWER STATION BUS BAR (IN MW)**  
**(AT THE TERMINAL YEAR OF 11TH,12TH & 13TH PLANS)**



**18TH ELECTRIC POWER SURVEY OF INDIA (VOLUME - II)**  
**ELECTRICAL ENERGY REQUIREMENT (IN MU) OF MEGA CITIES**  
**(AT THE TERMINAL YEAR OF 11TH,12TH & 13TH PLANS)**



**18TH ELECTRIC POWER SURVEY OF INDIA (VOLUME - II)**  
**ELECTRICAL ENERGY CONSUMPTION (IN MU) OF MEGA CITIES**  
**(AT THE TERMINAL YEAR OF 11TH,12TH & 13TH PLANS)**



**Table No.8**  
**ALL INDIA POWER SUPPLY POSITION ENERGY-WISE & PEAK-WISE (UTILITIES)**  
**1984-85 to 2014-15**

Year	Energy				Peak Demand			
	Requirement (GWh)	Availability (GWh)	Deficit (GWh)	Deficit (%)	Demand (MW)	Availability (MW)	Deficit (MW)	Deficit (%)
1984-85	155432	145013	10419	6.70	25810	22800	3010	11.66
1985-86	170746	157262	13484	7.90	28090	24215	3875	13.79
1986-87	192356	174276	18080	9.40	30850	26924	3926	12.73
1987-88	210993	187976	23017	10.91	31990	28242	3748	11.72
1988-89	223194	205909	17285	7.74	36245	31713	4532	12.50
1989-90	247762	228151	19611	7.92	40385	33658	6727	16.66
1990-91	267632	246560	21072	7.87	44005	37171	6834	15.53
1991-92	288974	266432	22542	7.80	48055	39027	9028	18.79
1992-93	305266	279824	25442	8.33	52805	41984	10821	20.49
1993-94	323252	299494	23758	7.35	54875	44830	10045	18.31
1994-95	352260	327281	24979	7.09	57530	48066	9464	16.45
1995-96	389721	354045	35676	9.15	60981	49836	11145	18.28
1996-97	413490	365900	47590	11.51	63853	52376	11477	17.97
1997-98	424505	390330	34175	8.05	65435	58042	7393	11.30
1998-99	446584	420235	26349	5.90	67905	58445	9460	13.93

Contd.

**Table No.8 (contd.)**  
**ALL INDIA POWER SUPPLY POSITION ENERGY-WISE & PEAK-WISE (UTILITIES)**  
**1984-85 to 2014-15**

Year	Energy				Peak Demand			
	Requirement (GWh)	Availability (GWh)	Deficit (GWh)	Deficit (%)	Demand (MW)	Availability (MW)	Deficit (MW)	Deficit (%)
1999-00	480430	450594	29836	6.21	72669	63691	8978	12.35
2000-01	507216	467409	39807	7.85	74872	65628	9244	12.35
2001-02	522537	483350	39187	7.50	78441	69189	9252	11.79
2002-03	545674	497589	48085	8.81	81492	71547	9945	12.20
2003-04	559264	519398	39866	7.13	84574	75066	9508	11.24
2004-05	591373	548115	43258	7.31	87906	77652	10254	11.66
2005-06	631757	578819	52938	8.38	93255	81792	11463	12.29
2006-07	690587	624495	66092	9.57	100715	86818	13897	13.80
2007-08	739343	666007	73336	9.92	108866	90793	18073	16.60
2008-09	777039	691038	86001	11.07	109809	96785	13024	11.86
2009-10	830594	746644	83950	10.11	119166	104009	15157	12.72
2010-11	861591	788355	73236	8.50	122287	110256	12031	9.84
2011-12	937199	857886	79313	8.46	130006	116191	13815	10.63
2012-13	998114	911209	86905	8.71	135453	123294	12159	8.98
2013-14	1002257	959829	42428	4.23	135918	129815	6103	4.49
2014-15	1068943	1030800	38143	3.60	148166	141160	7006	4.70

**Table 8A**  
**REGIONWISE SUMMARY OF EER & APEL BY END OF 12TH & 13TH PLAN**  
**AS PER 18TH EPS**

Region/Year	EER (MU)		APEL(MW)	
	2016-17	2021-22	2016-17	2021-22
<b>Northern</b>	422498	594000	60934	86461
<b>Western</b>	394188	539310	62015	86054
<b>Southern</b>	357826	510786	57221	82199
<b>Eastern</b>	163790	236952	24303	35928
<b>North East</b>	16154	23244	2966	4056
<b>A &amp; N Island</b>	366	505	67	89
<b>Lakshdweep</b>	52	65	11	18
<b>All India Total</b>	<b>1354874</b>	<b>1904862</b>	<b>199540</b>	<b>283470</b>

NOTE : EER :- Electrical Energy Reuirement  
APEL :- Annual Peak Electric Load  
EPS :- Electric Power Survey

**Table 8B**  
**CATEGORYWISE FORECAST OF ELECTRICAL ENERGY CONSUMPTION**  
**BY END OF 12TH & 13TH PLAN**  
**AS PER 18TH EPS**

Category	Year	Year
	2016-17	2021-22
	End of 12th Plan	End of 13th Plan
Domestic	289924	426148
Commercial	116535	185722
Irrigation	210611	287926
Industries	393306	585819
Others	88619	126193
<b>Total</b>	<b>1098995</b>	<b>1611808</b>

**Table 8C**  
**FORECAST OF ELECTRICAL ENERGY CONSUMPTION (IN MU) OF NCR AT END OF 12TH AND 13TH PLAN**

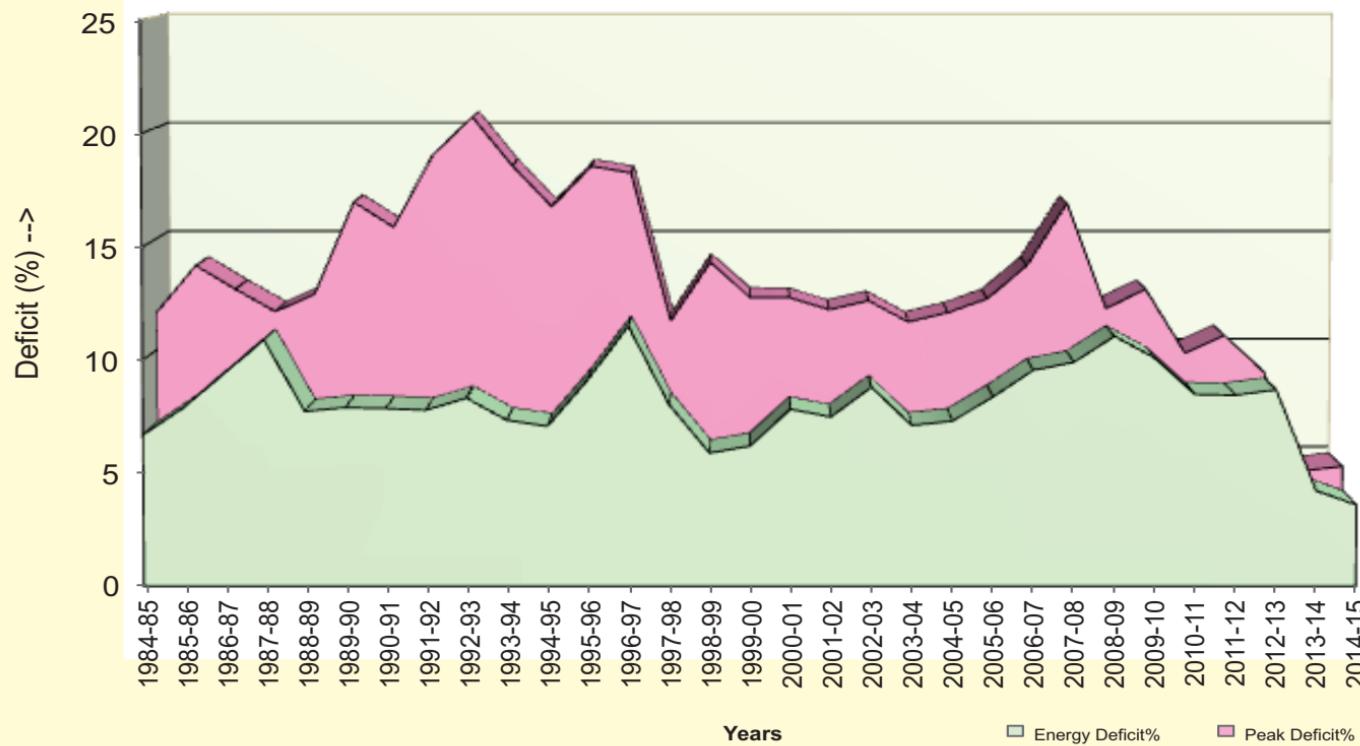
Consumption Category	2016-17	2021-22
Domestic	26602	39278
Commercial & Misc.	13072	18588
Public lighting	700	937
Public Water Works	1909	2687
Irrigation	7939	9781
Industries LT	6327	9101
Industries HT	19025	28189
Railway traction	758	993
Bulk Supply	2589	3830
<b>Total (Energy Consumption)</b>	<b>78921</b>	<b>113384</b>

**Table 8D**

**FORECAST OF ELECTRICAL ENERGY REQUIREMENT (IN MU) OF NCR AT END OF  
12TH AND 13TH PLAN**

NCR Sub Region	2016-17	2021-22
Delhi	37529	52930
Haryana	29607	37864
Rajasthan	7531	10868
Uttar Pradesh	20150	30192
<b>NCR - Total</b>	<b>94817</b>	<b>131854</b>

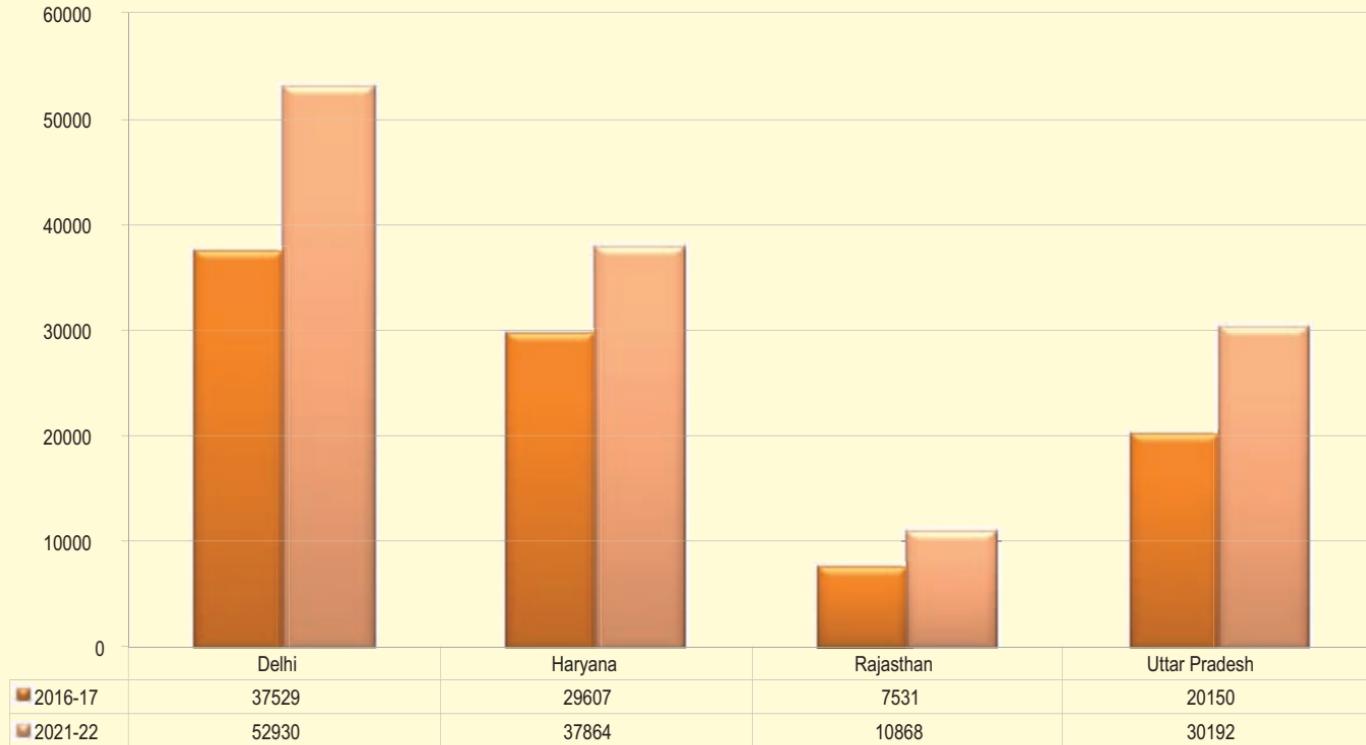
**ALL INDIA PEAK AND ENERGY DEFICIT**  
**UTILITIES**  
**1984 -85 to 2014-15**



**FORECAST OF ELECTRICAL ENERGY CONSUMPTION (IN MU) OF NCR AT  
END OF 12TH AND 13TH PLAN**



## FORECAST OF ELECTRICAL ENERGY REQUIREMENT (IN MU) OF NCR AT END OF 12TH AND 13TH PLAN

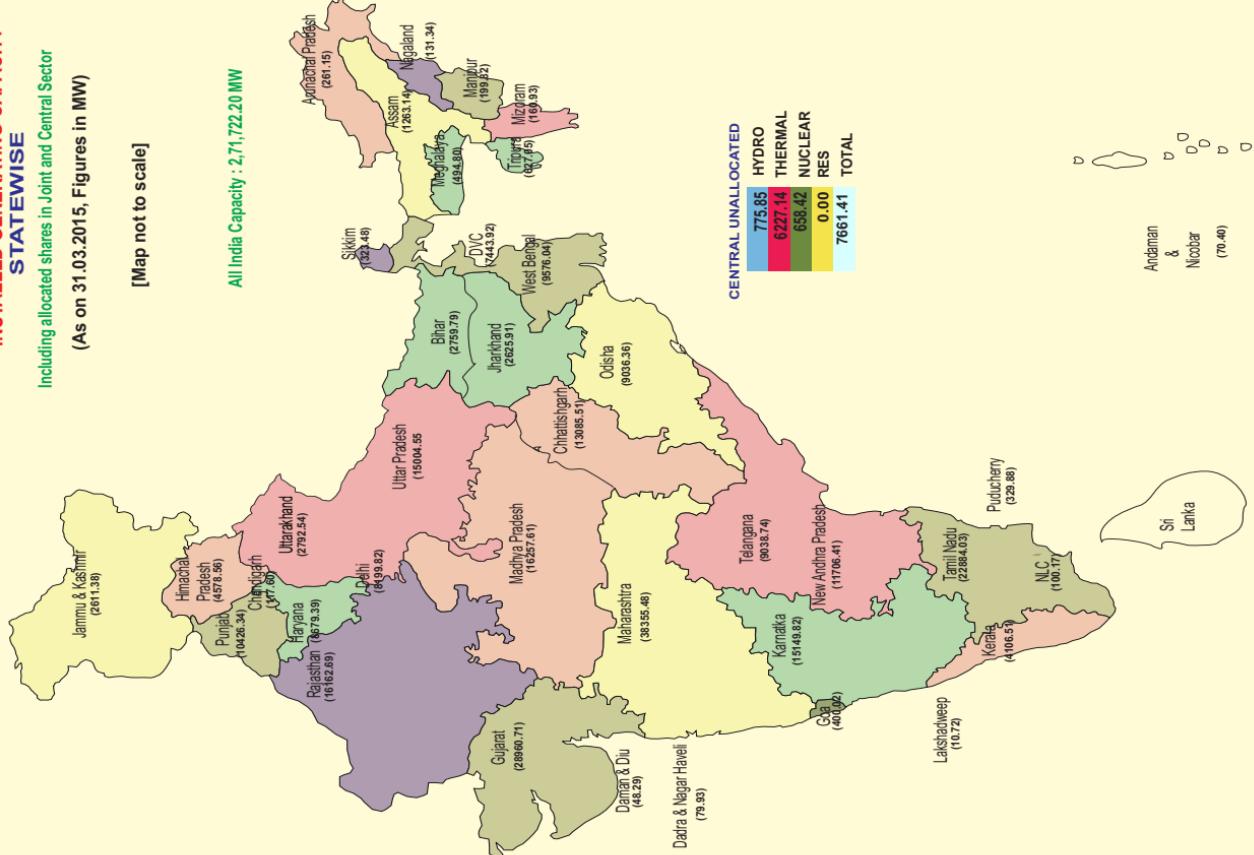


# MAP OF INDIA SHOWING INSTALLED GENERATING CAPACITY STATEWISE

Including allocated shares in Joint and Central Sector  
(As on 31.03.2015, Figures in MW)

[Map not to scale]

All India Capacity : 271,722.20 MW

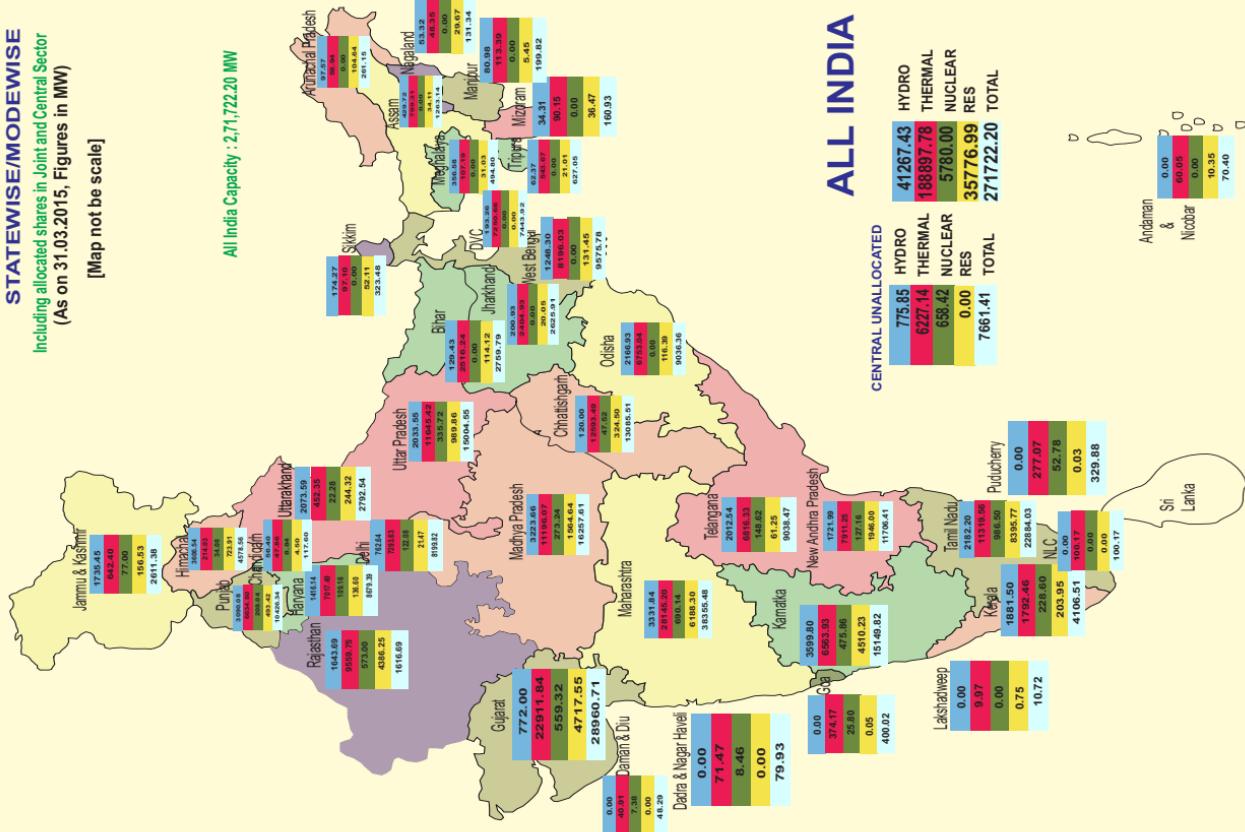


# MAP OF INDIA

## SHOWING INSTALLED GENERATING CAPACITY

STATEWISE/MODEWISE  
Including allocated shares in Joint and Central Sector

(As on 31.03.2015, Figures in MW)  
[Map not be scale]





**JSW ENERGY, JAIGAD**

## **Energy Conservation is Energy Generation**



**Hydro Electric Power : An Eco-Friendly Power**



**CENTRAL ELECTRICITY AUTHORITY,**  
Data Management & Load Forecasting Division.  
R.K. Puram, New Delhi