

## BRIEF ON TECHNICAL TALK ON RENEWABLE ENERGY – THE ENERGY OF THE CENTURY ON 26.9.2015

Shri Jai Uppal, Senior Consultant, Renewable & Alternate Energy, delivered a talk on “Mainstream of Renewable Energy – the Energy of this Century” at our Chapter’s premises on 26<sup>th</sup> September 2015.



He highlighted the Indian and global scenario in the area of Renewable Energy.

He stated that per capita electricity consumption in India is very low as can be seen from the table below:

<b>Per Capita Electricity Consumption</b>	
<b>Country</b>	<b>Power Consumption (kWh/PC)</b>
<b>China</b>	<b>3,298</b>
<b>Germany</b>	<b>7,081</b>
<b>India</b>	<b>1050</b>
<b>Japan</b>	<b>7,847</b>
<b>Sweden</b>	<b>14,030</b>
<b>United States</b>	<b>13,246</b>
<b>World Average</b>	<b>3064</b>

In his presentation he covered the details of Global Energy Sources like coal, oil and gas. The following table will give these details:

<b>Global Primary Energy Sources (MTOe)</b>			
	<b>2013</b>	<b>2030</b>	<b>CAGR (%)</b>
<b>Coal</b>	<b>3973</b>	<b>3448</b>	<b>-0.8</b>
<b>Oil</b>	<b>4235</b>	<b>4313</b>	<b>0.1</b>
<b>Gas</b>	<b>2880</b>	<b>3547</b>	<b>1.2</b>
<b>Nuclear</b>	<b>646</b>	<b>1044</b>	<b>2.9</b>
<b>Hydro</b>	<b>320</b>	<b>482</b>	<b>2.4</b>
<b>Bioenergy</b>	<b>1366</b>	<b>1827</b>	<b>1.7</b>
<b>Other RE</b>	<b>159</b>	<b>708</b>	<b>9.2</b>
<b>Total</b>	<b>13579</b>	<b>15370</b>	<b>0.7</b>

Regarding the pattern of Energy Sectoral consumption, it was indicated that industry, transport and building/ construction occupy the major consumption sources.

In his presentation, Shri Jai Uppal discussed about the impact of GHG global warming and Indian CO2 emissions.



The Indian Energy consumption pattern was covered in the Talk. The table below gives the details of the same:

Indian Energy Consumption				
Type of Energy Consumption	Units	(1950)	(2014) (Domestic +Imports)	R/P
Coal & Lignite	Mill T	32.3	620 +150	100
Crude Oil	Mill T	0.27/3.4	38+190	20
IC Power (Hydro+N+RE)	GW	2.3 (0.6)	285 (40+4.8+37)	NA
Power Generation	BU	6.6	1049	NA

The Indian Energy Consumption pattern was covered. The price trend of Solar Power also reviewed. The pattern of wind and hydro power were also touched upon.

Apart from above issues the presentation also touched upon the basis of the following issues:



- a) Role of Renewable Energy
- b) RE Sectoral Growth Rates
- c) Total installed RE capacity

- d) Solar power in India
- e) Bio Energy & Bio Power

After conclusion of the Talk, there was a lively interaction between the audience and the speaker on the various issues relating to renewable energy.



The Talk was attended by about 30 persons.

The presentation ended with lunch.

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