

Release of

National Energy Data : Survey and Analysis

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Government of India

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National Energy Data: Survey and Analysis

Year 2021-22



Bureau of Energy Efficiency



Need for Authenticated Energy Data



- At present no other Government publication, which provides detailed energy sector supply or consumption data for the country and its analysis.
- Reliable and comprehensive energy sector data needed to track country's outcome of energy sector policies and progress on energy transition goals.
- To enable focused actions towards India's **PANCHAMRITS** as under :
 - ❑ India will meet 50% its cumulative power installed capacity with non- fossil sources by 2030. This includes non-fossil power capacity of 500 GW.
 - ❑ Reduce Emissions Intensity of its GDP by 45 percent by 2030, from 2005 level. This will need additional 1 Billion Ton of CO2 reduction upto 2030.
 - ❑ By 2070, India will achieve net zero emissions.
- Ministry of Power directed BEE to set up an Energy Data Management Unit (EDMU) which has prepared this first publication in co-ordination with various departments and NITI.



Steering Committee - National Energy Data Report



Secretary, Ministry of Power (Chair)

Director General, BEE (Convener)

Adviser, NITI Aayog

Representative from Ministry of Coal

Representative from Ministry of New and Renewable Energy (MNRE)

Representative from Ministry of Ports, Shipping and Waterways (MoPSW)

Representative from Ministry of Road Transport and Highways (MoRTH)

Representative from Ministry of Petroleum & Natural Gas (MoPNG)

Representative from Ministry of Environment Forest and Climate Change (MoEF&CC)

Representative from Central Electricity Authority (CEA)

Representative from Ministry of Civil Aviation

Representative from Department of Commerce

Representative from Ministry of Statistics and Programme Implementation (MoSPI)

Representative from Ministry of Housing and Urban Affairs (MoHUA)

Representative from DPIIT, Ministry of Commerce and Industry



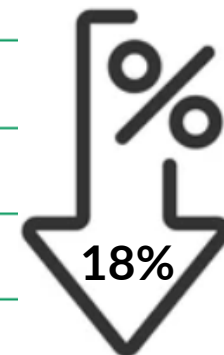
Key Findings of the Report



Use of Indian coal conversion factors enabled to more realistic picture of energy supply and consumption patterns for last 6 years i.e. 2016-17 to 2021-22

1. Energy Supply to economy is actually less by 18% (Figures in KTOE)

Year	Final Energy Supply (Using IEA Conversion Factors)	Final Energy Supply (Using Indian CF (GCV))
2016-17	822,689	669,193
2017-18	839,059	695,902
2018-19	906,273	748,764
2019-20	944,363	764,739
2020-21	883,152	709,570
2021-22	897,446	754,981



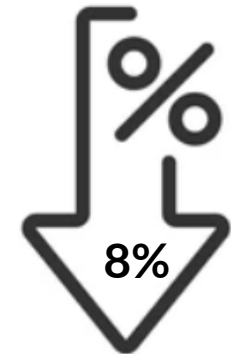


Key Findings of the Report...contd



2. Energy Consumption data is lesser by 8% (Figures in KTOE)

Year	Final consumption (Using IEA Conversion Factors)	Final consumption (Using Indian CF(GCV))
2016-17	519,341	476,368
2017-18	545,314	500,781
2018-19	584,252	521,017
2019-20	578,527	516,167
2020-21	554,349	507,160
2021-22	570,534	533,487



3. Share of electrification has increased to 21 %

Year	Final consumption (Using Indian Conversion Factors)	Electricity Consumption	% share
2016-17	476,368	91,156	19.1 %
2017-18	500,781	96,502	19.3 %
2018-19	521,017	103,937	19.9%
2019-20	516,167	107,211	20.7 %
2020-21	507,160	105,675	20.8 %
2021-22	533,487	111,352	20.9 %

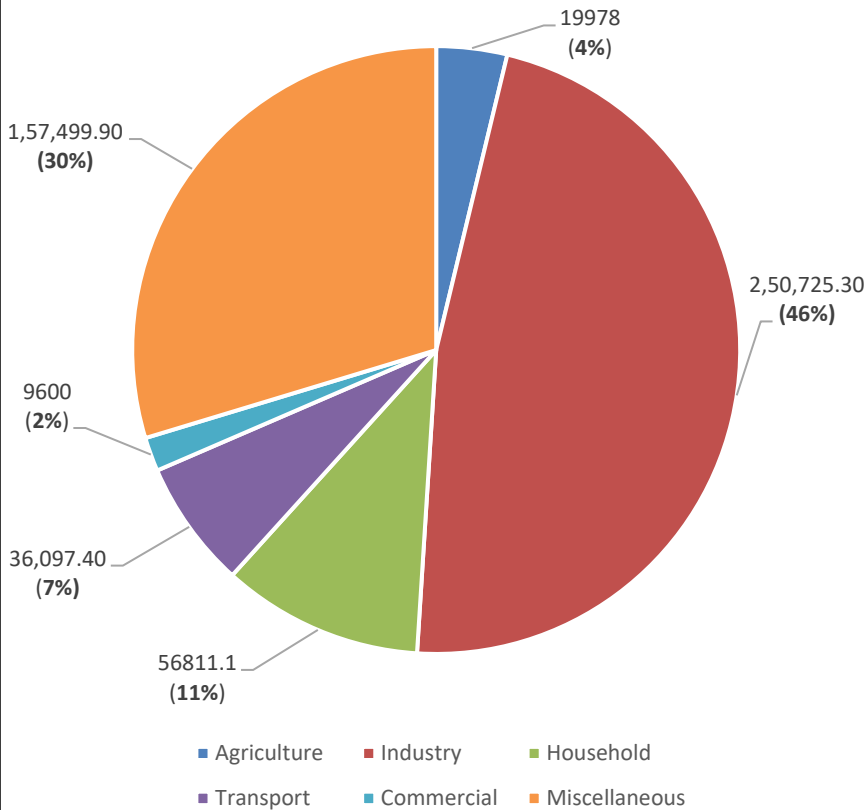




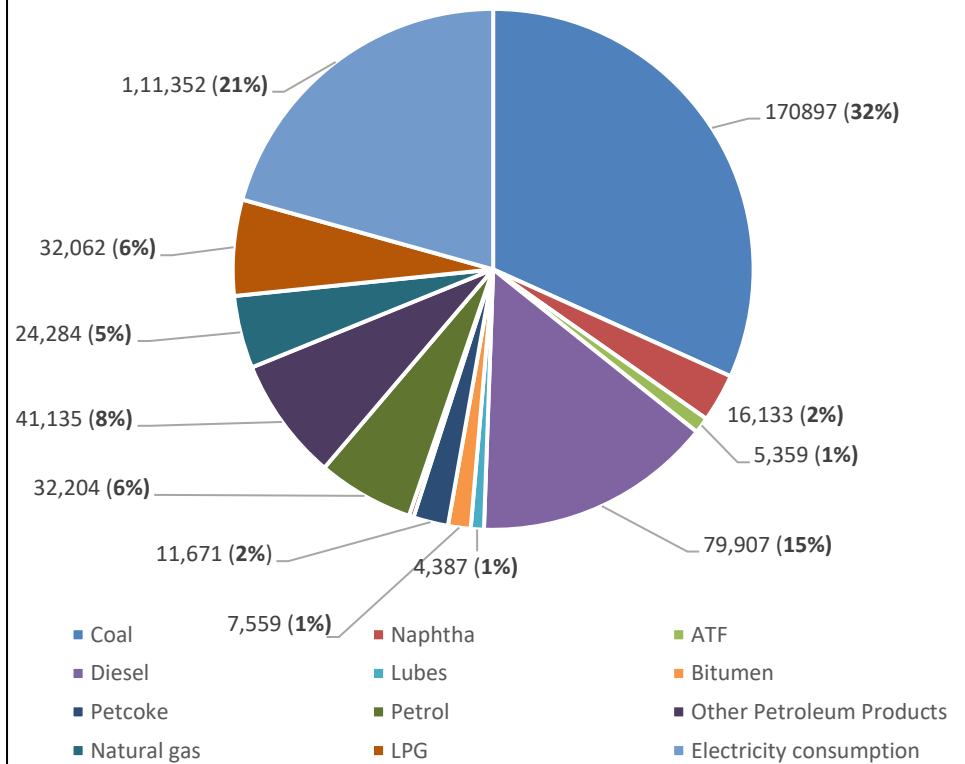
Sector-wise and Fuel-wise Consumption of Energy Products for the year 2021-22 (in KTOE)



Sector-wise Consumption of Energy Products in 2021-22 (ktoe)



Fuel-Wise Consumption of Energy Products in 2021-22 (ktoe)

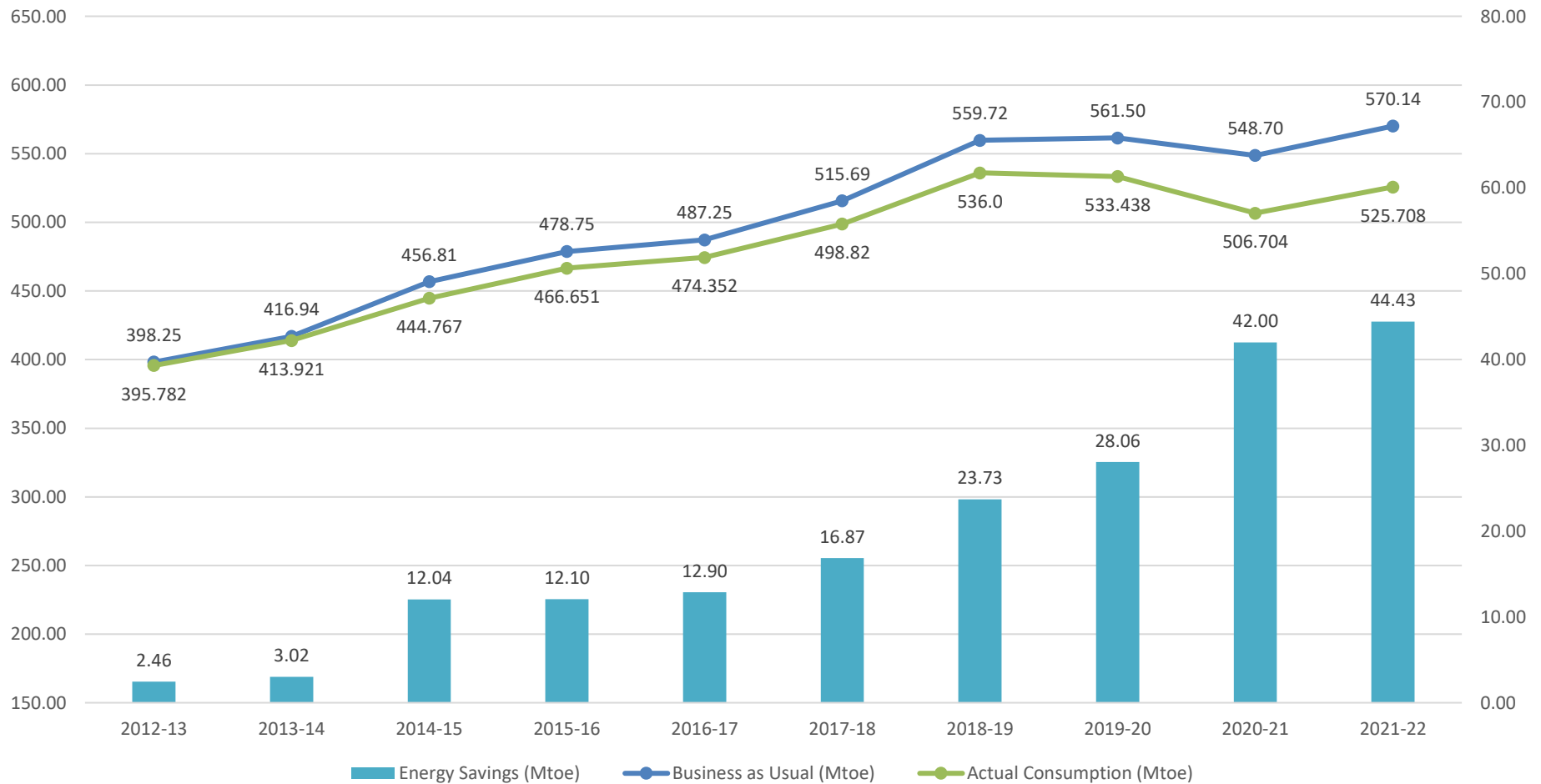




Impact of Various Energy Efficiency programs (2021-22)



Impact of various EE measures on the energy consumption of the country





Impact of Energy Efficiency programmes for the year 2021-22



- Electricity savings of **249 BUs** annually
- Thermal energy savings of **23.85 MTOE per year**
- Total energy savings of **44.43 MTOE i.e., 6 %** of the total primary energy supply of the country
- Total energy savings worth **Rs.1,60,721 crore per year**
- Total equivalent reduction in CO₂ emissions is around **280 Million Tonnes annually**



Key areas for future refinement



- Investments in energy sector (supply and demand side) would be tracked.
- Impact of various Govt. schemes including incentives, subsidies would be assessed.
- Further deep-dive to analyze sub-sectoral energy consumption patterns under commercial sector.
- Segregation of imported coal usage in various sectors would be determined.
- Retailer data for Gasoline and CNG consumption would be refined.
- Data on non-commercial energy sources such as biomass would be captured.



We Welcome your feedback

eBook Report is available on the link: <http://bit.ly/449njf9>

Thank you