India Data Insights

A SATTVA INITIATIVE

www.indiadatainsights.com

SDG 7 – Affordable and Clean Energy

Datashots

About SDG 7

SDG GOAL - Ensure access to affordable, reliable, sustainable and modern energy for all

SDGs aim is to ensure universal access to affordable, reliable and modern energy services by 2030. India looks at achieving this through

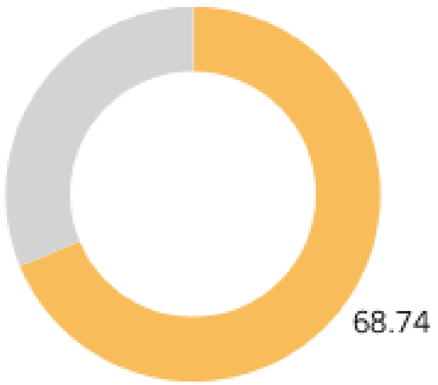
- Increase substantially the share of renewable energy in the global energy mix.
- Double the global rate of improvement in energy efficiency.
- Enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology.
- Promote investment in energy infrastructure and clean energy technology.
- Expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries.

7 AFFORDABLE AND CLEAN ENERGY

Country Rank

88/163

Score



UN Dashboard Status

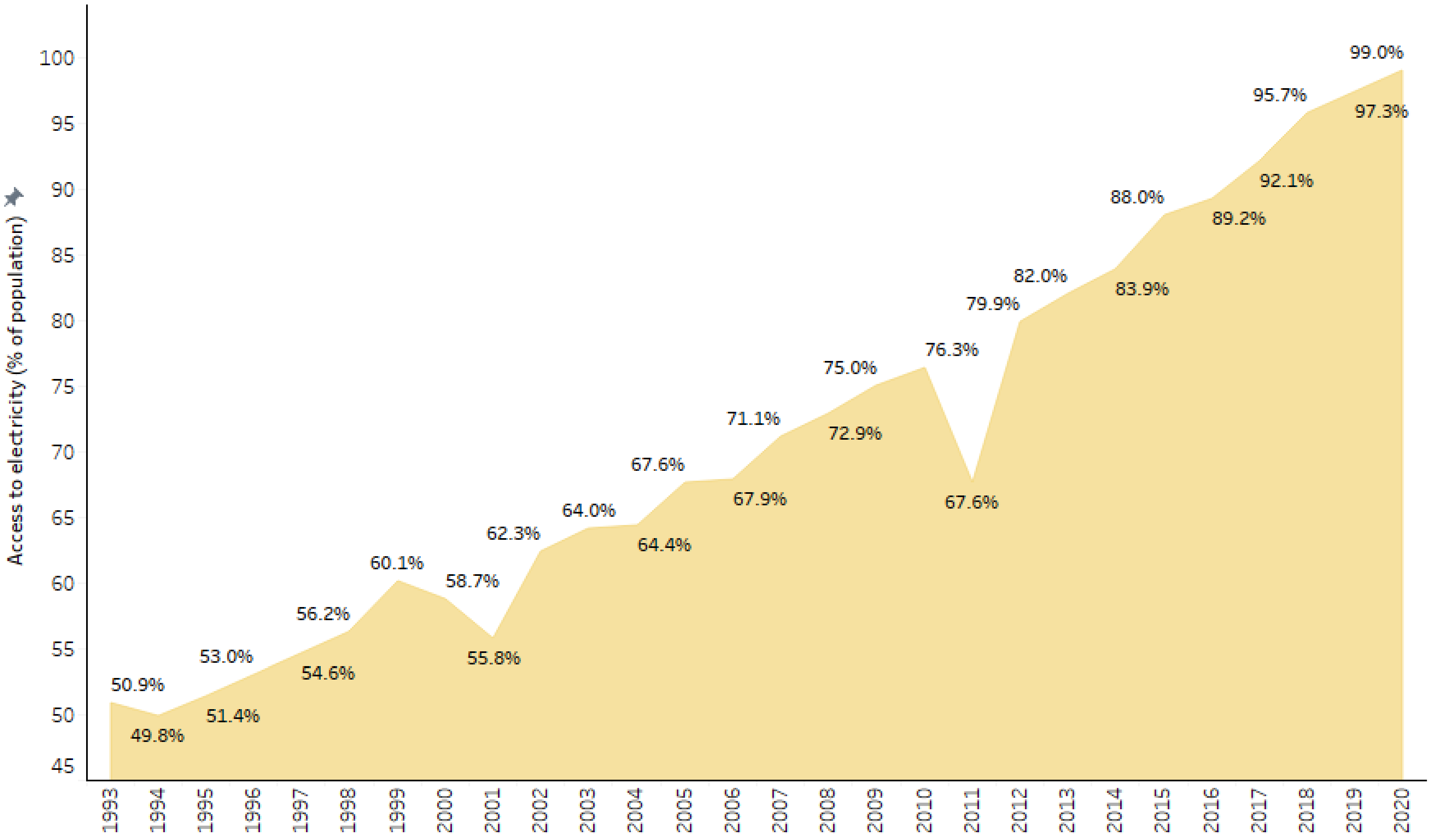
Significant challenges

Trend

Moderately improving

Notes: As per UN Sustainable Development Report 2022

India- Estimated % of Population with **Access to Electricity**



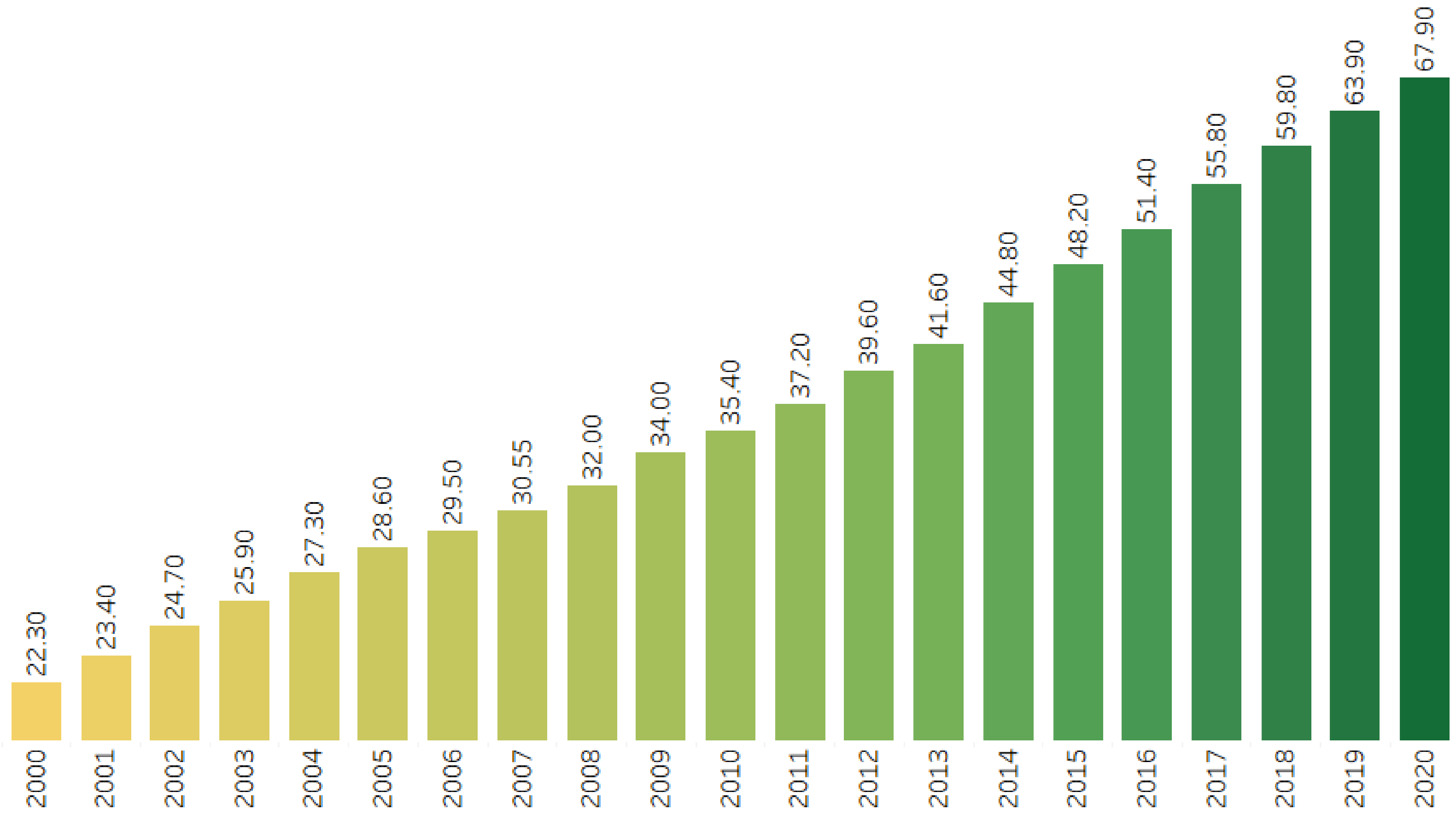
In the last three decades, India has seen a consistent growth in the percentage of population having access to electricity.

In 1993, ~50% of India's population had access to electricity. However as of 2020, more than **99%** of the population now has access to electricity.

Source:
World Bank Global Electrification Database

Notes:
2001 and 2011 are India's Census years which shows the data as per the census surveys. For other years, the figures are pertaining to an estimated percentage of the population electrified.

India-% of Population with **Access to Clean Cooking Fuel**

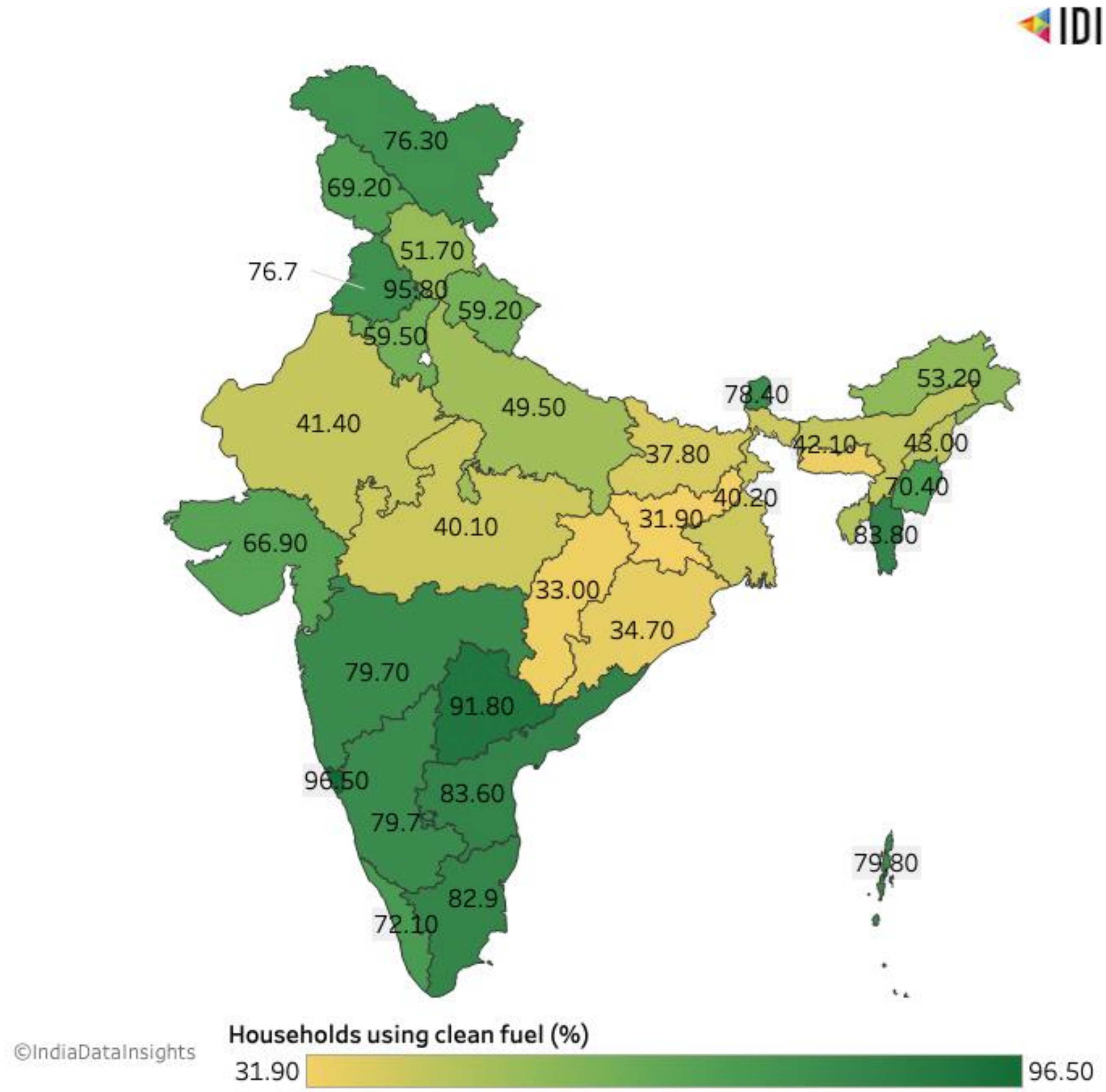


In the last three decades, India has seen a consistent growth in the percentage of population having access to clean cooking fuel.

In **2000, ~22.3%** of India's population had access to electricity. However as of 2020, more than **67%** of the population now has access to electricity - a three fold increase.

Source:
World Bank Database

Percentage of Households **Using Clean Cooking Fuel** (2019-21)



As per the recent NFH survey only 58.6% of India's total households use clean cooking fuel. 89.7% of Urban and 43.2% of Rural.

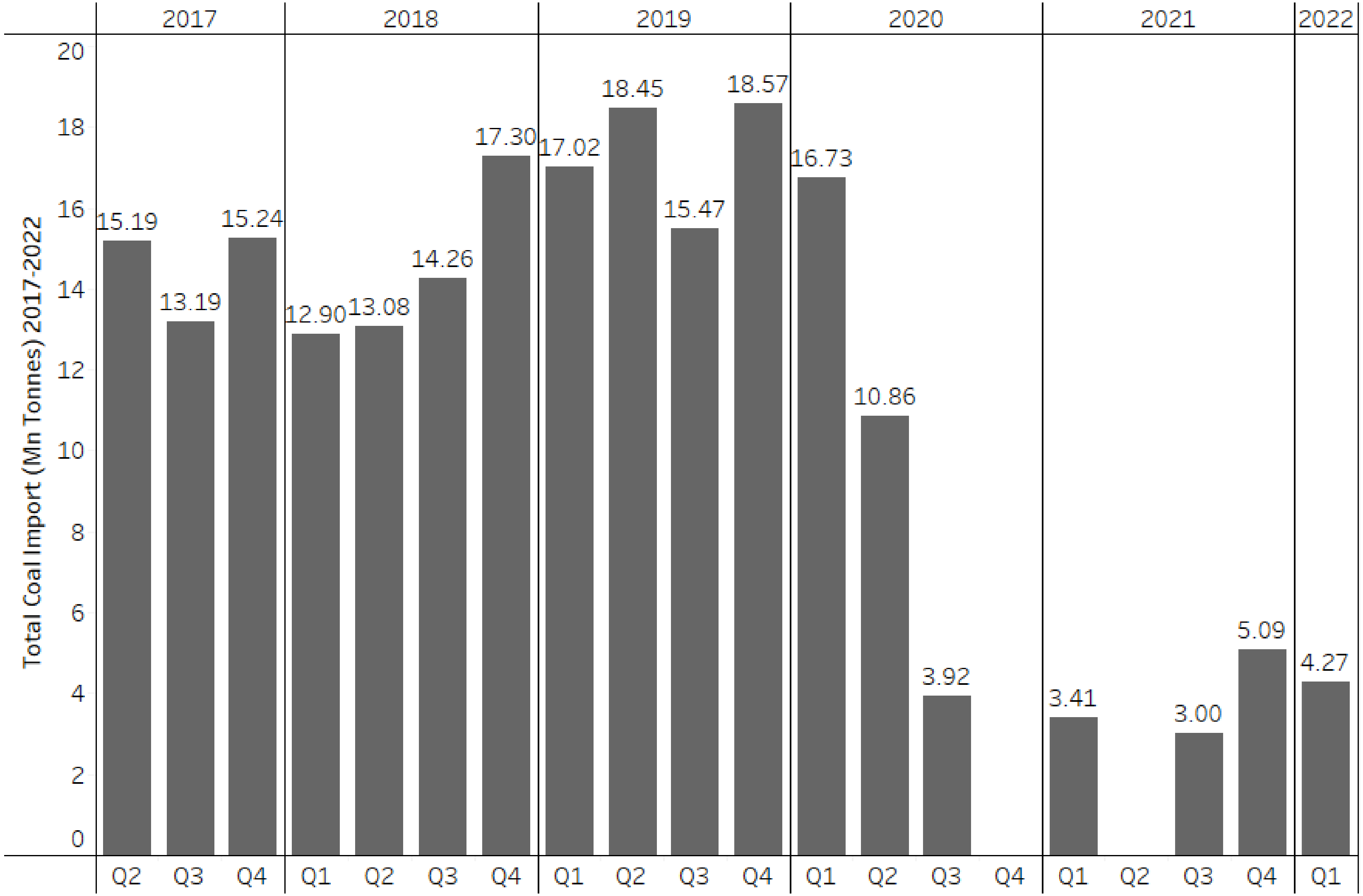
Top 5 states with more than 80% of their households using clean fuel include Goa, Telangana, Andhra Pradesh, Tamil Nadu and Mizoram.

States very low percentage of their households using clean fuel include Jharkhand, Chhattisgarh, Odisha, Bihar and West Bengal

Source: National Family Health Survey (NFHS 5), Ministry of Health and Family Welfare

Notes:
Clean fuel – Electricity, Biogas, LPG/Natural gas

India- Total **Coal Import** in Million Tonnes (2017-2022)

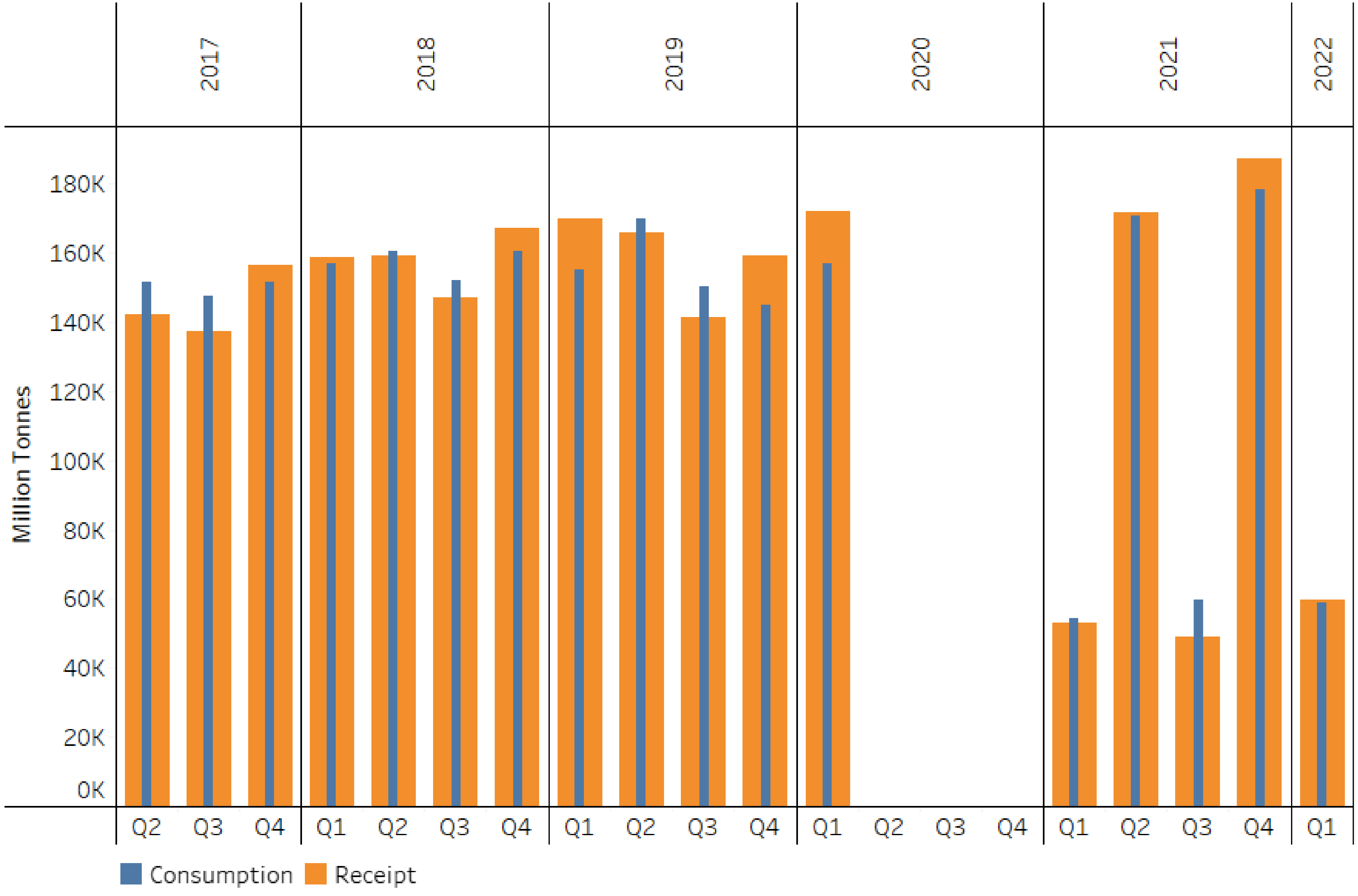


Approximately 12000 Million Tonnes of more coal was imported in year 2019 compared to 2018.

Impact of COVID was seen in the amount of coal import - especially during the period of lock-down.

Source: Ministry of Power – Central Electricity Authority

India- Total **Coal Receipt and Consumed** (2017-2022)



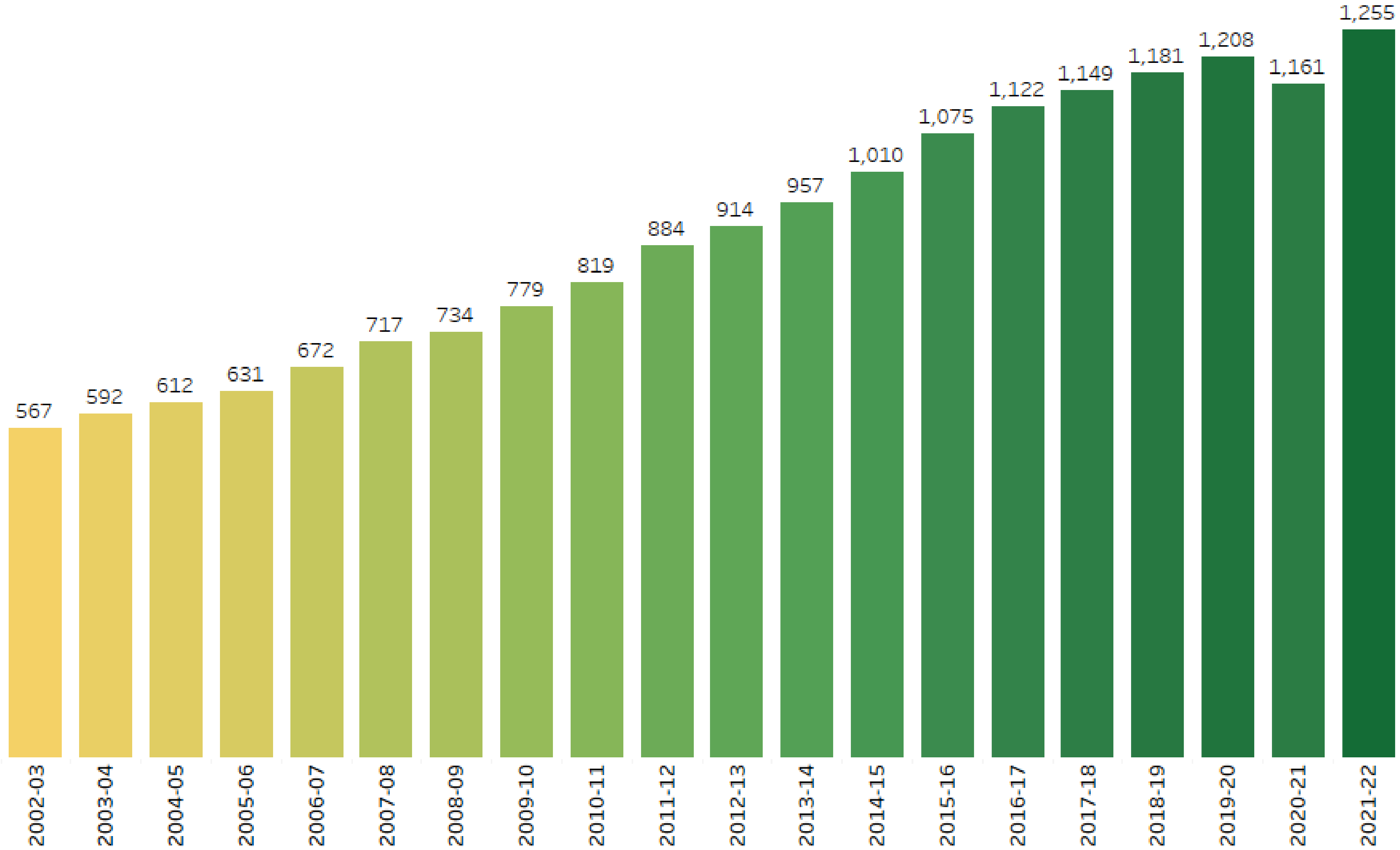
Higher consumption of Coal is seen in 2nd and 4th quarters of the year.

Data on consumption of coal is unavailable or found to be lesser during the period of COVID especially during lock-down.

Source: Ministry of Power – Central Electricity Authority

Notes: Tonnes – 1000 Kgs; K - Thousand
Q1: Apr – June; Q2: Jul – Sep; Q3: Oct – Dec; Q4: Jan-Mar

India- **Per Capita Consumption** of Electricity (kWh)



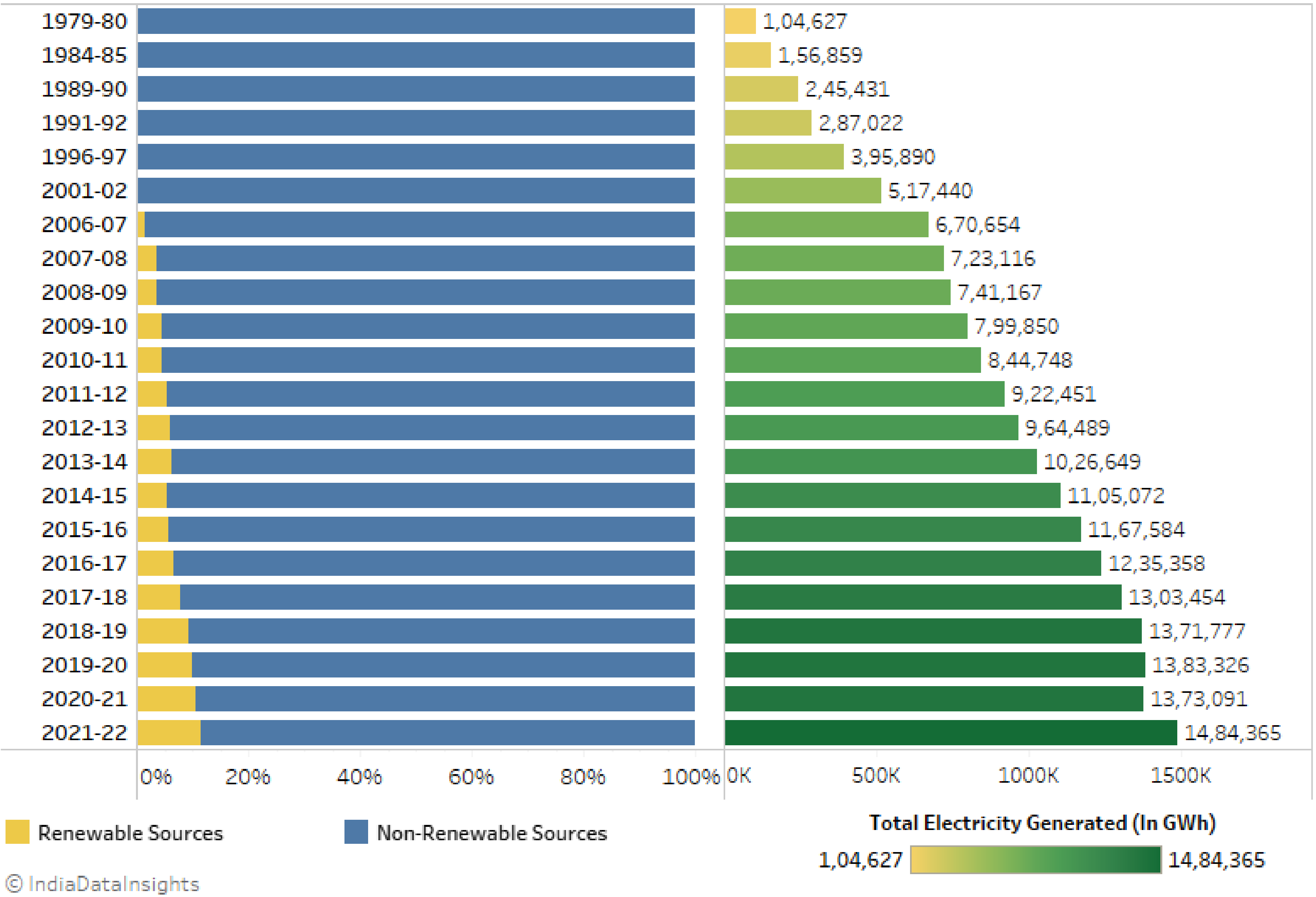
Per capita consumption of electricity has more than doubled in the last two decades.

In 2002-03 per capita consumption of electricity was 566 kWh. It has increased to 1255 kWh in 2021-22 - increased by ~120%.

Source: Ministry of Power – Central Electricity Authority

Notes: kWh – Kilo Watt Hour
Per Capita Consumption=Gross Electrical Energy availability/ Mid year Population

India – Share in Total **Renewable Energy Generated** for Electricity (By Source)



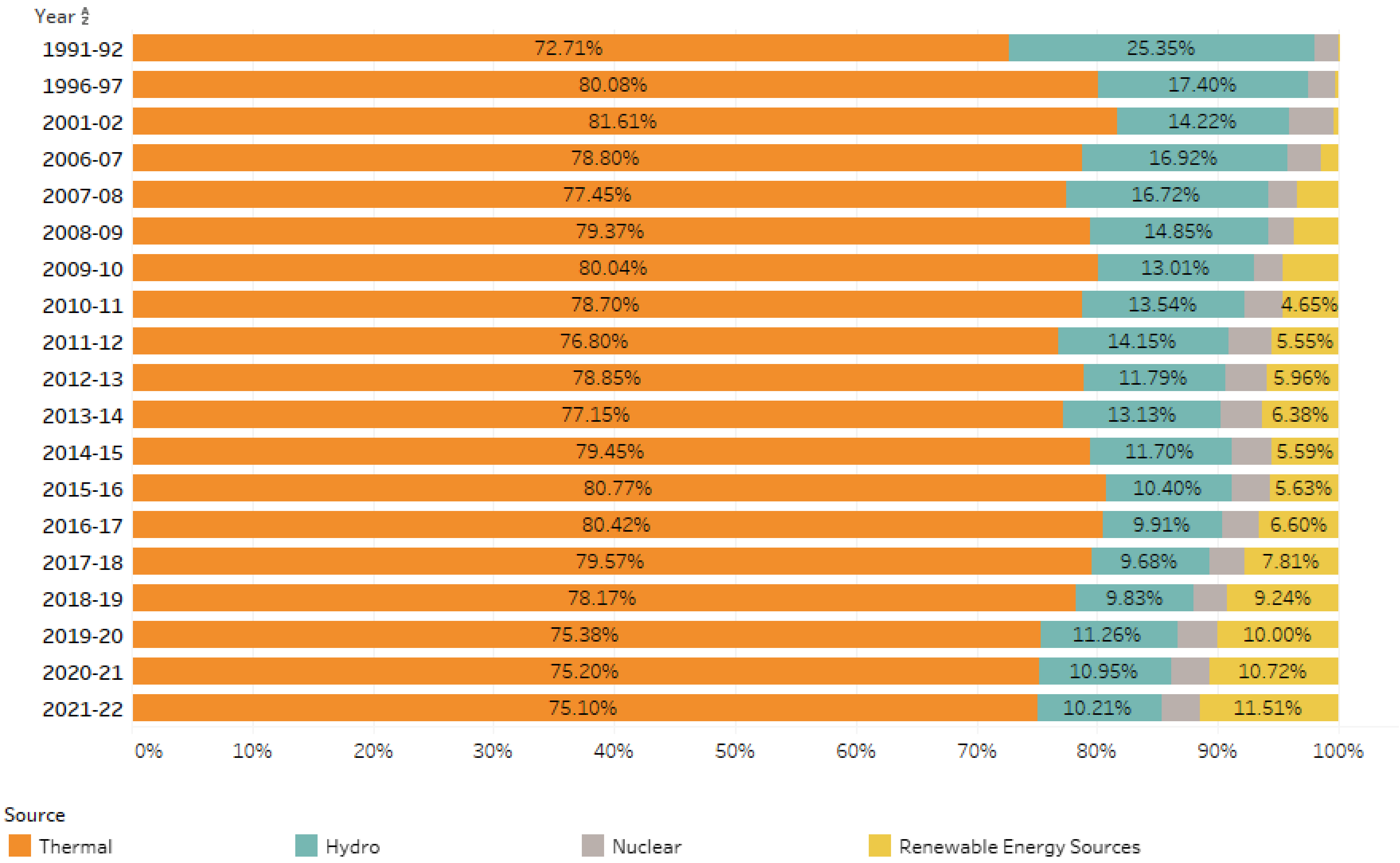
In 2021-22, India generated 14,84,365 GWh of electricity.

Share of energy generated for electricity from renewables resources increased from 1% in 2006 to 10% in 2021-22.

Source: All India Electricity Statistics General Review Report 2021, Ministry of Power, Central Electricity Authority

Notes: **Renewable** – Small Hydro, Solar, Wind, Biomass Bagasse, Renewables
Non Renewables – Hydro, Thermal (Coal, Diesel, Natural Gas), Nuclear

India – Share in Total **Renewable Energy Generated** for Electricity (By Major Sources) 2019-2020



Energy generation from the Thermal Source has increased from ~72% to 75% in last three decades.

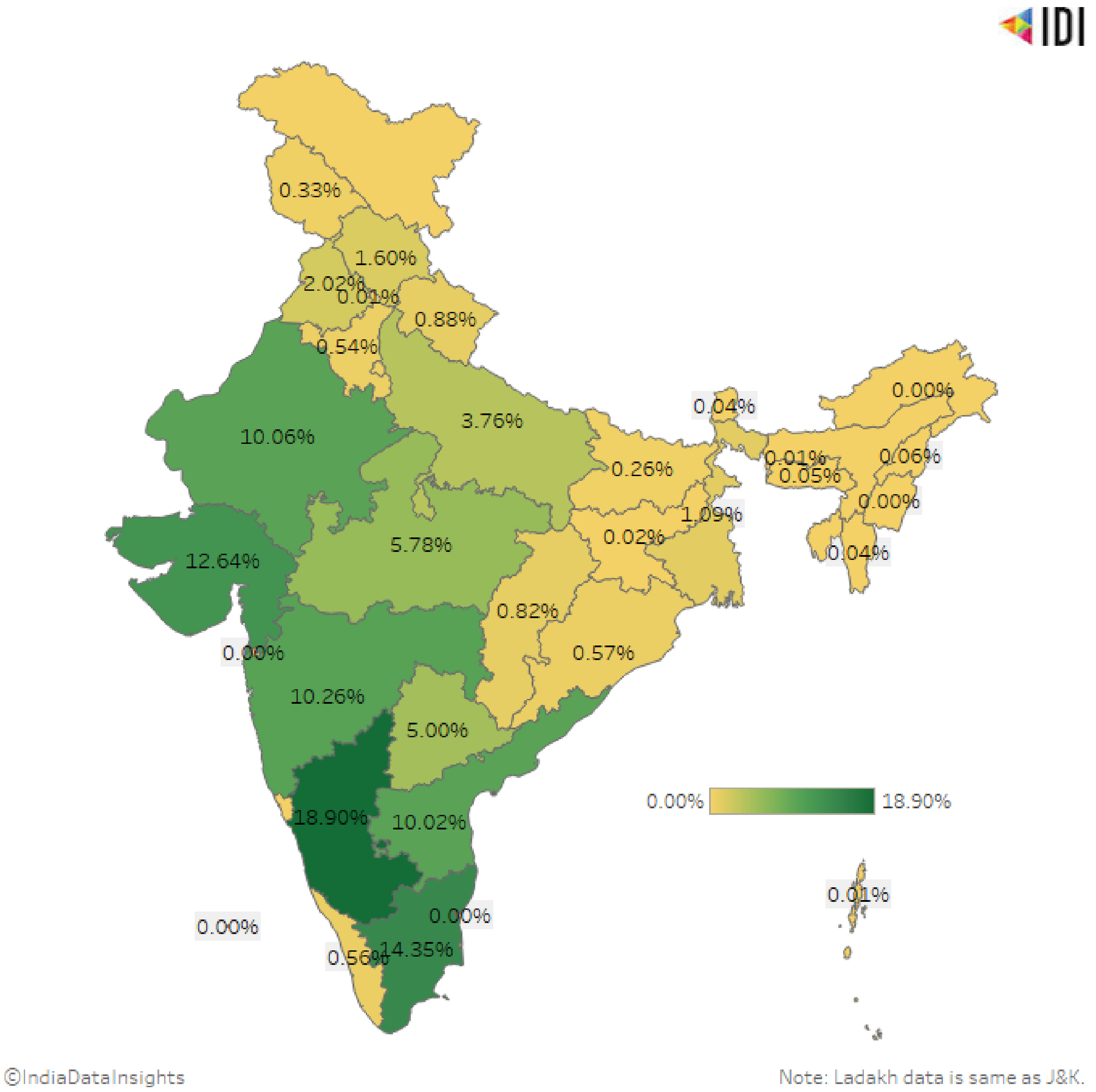
Share from Hydro has decreased from the year 1991 to 2022 by 15%.

Renewable Energy Source contribution has increased from 1 % to 11.5% from last two decades 2001 to 2021

Share from Nuclear source is constant ~3%.

Source: All India Electricity Statistics General Review Report 2021, Ministry of Power, Central Electricity Authority

State’s Share in Total Renewable Energy Generated for Electricity in India - 2020



10% of India’s energy production for electricity is from Renewable sources.

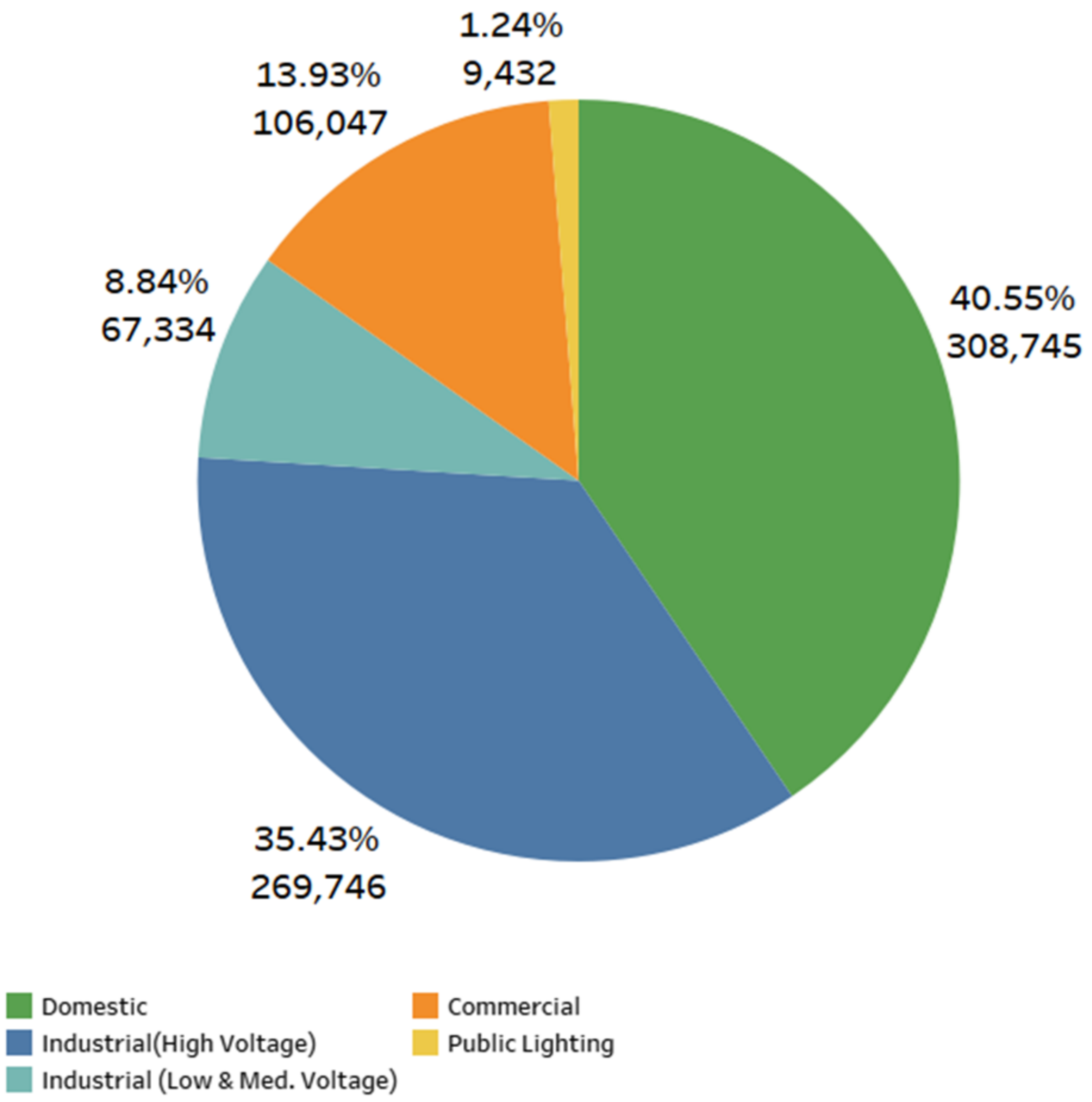
2/3rd (66%) of India’s renewable energy is contributed by these 5 states

Karnataka – 18.9%
Tamil Nadu – 14.35%
Gujarat – 12.64%
Maharashtra – 10.26%
Rajasthan – 10.06%

Source: All India Electricity Statistics General Review Report 2021, Ministry of Power, Central Electricity Authority

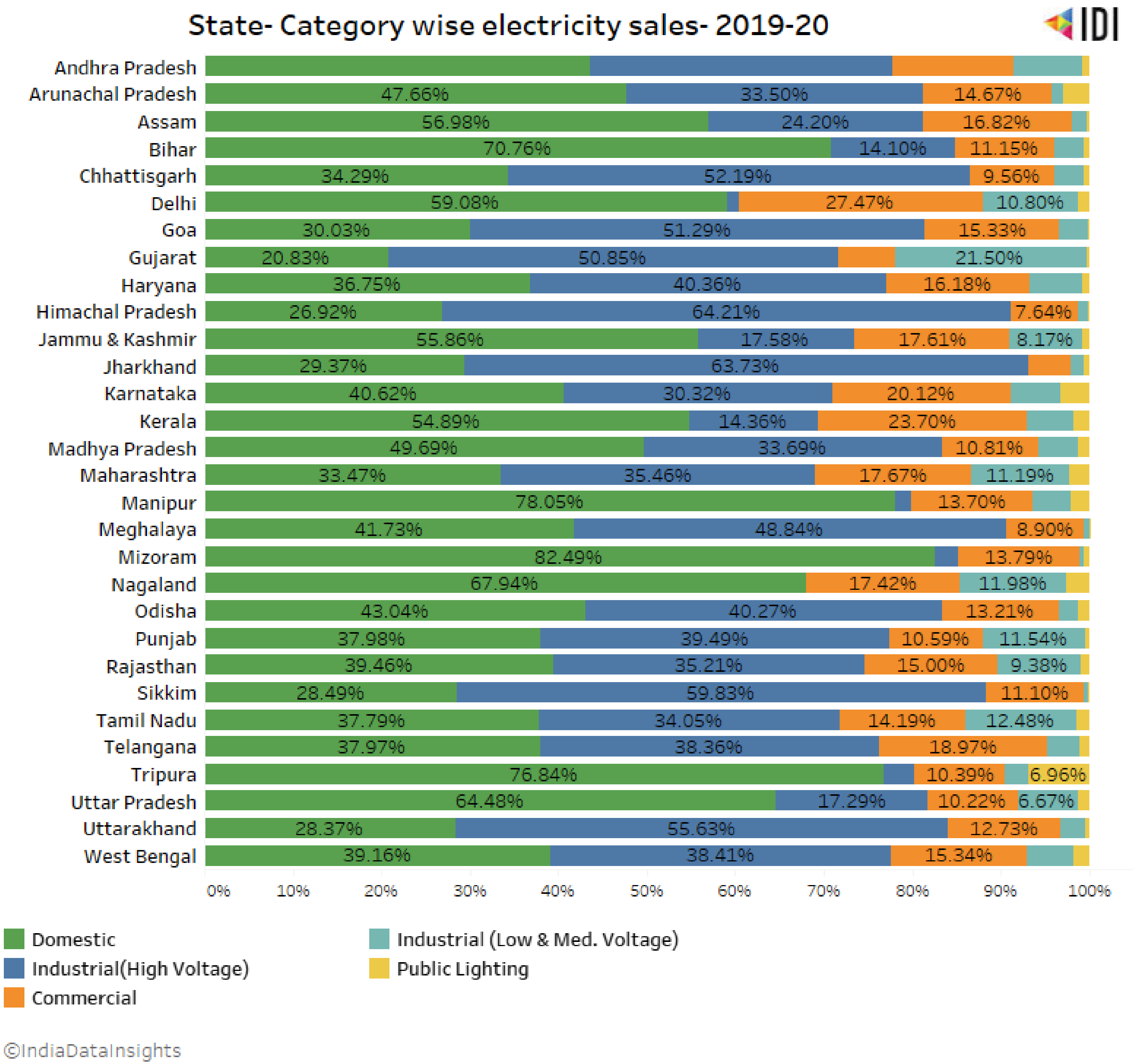
Notes: Jammu & Kashmir data includes Ladakh.
Renewable – Small Hydro, Solar, Wind, Biomass Bagasse, Renewables

Electricity Sales Category Wise (2019-20) (In GWh)



The major energy is sold for the domestic purpose (40%), followed by Industrial(High Voltage) (35.43%) and Commercial (13.93%) in 2019-20

Source: All India Electricity Statistics General Review Report 2021, Ministry of Power, Central Electricity Authority



Mizoram (82.49%), Tripura(76%), Manipur (78%) sell its most energy for domestic purpose.
Chhattisgarh, Gujarat, Jharkhand, Himachal Pradesh, Sikkim, and Uttarakhand sells it 50% of energy to Industrial Usage.

Source: All India Electricity Statistics General Review Report 2021, Ministry of Power, Central Electricity Authority

India Data Insights

A SATTVA INITIATIVE

SATTVA

Delivering High Impact.

We are a part of Sattva Consulting - a leading firm specialising in research, data, advisory and assessment services for the social impact sector. Our work is powered by Sattva's decade-long experience in delivering high impact projects in emerging economies around the world.

Launched in January 2019, we are adding data-sets and visualisations every day.

If you are a social sector professional - CSR, foundation, social enterprise, non-profit organisation, impact investor, researcher, media house, think-tank - you will find us to be a great data guide.

Connect with us - we would love to hear from you.

www.indiadatainsights.com

info@indiadatainsights.com

www.facebook.com/IndiaDataInsights/

twitter.com/IDIforImpact

www.linkedin.com/company/india-data-insights/

www.sattva.co.in