Smart Internz

Project Report

NMI2023TMID02425

Plugging into the future : An exploration of electricity consumption patterns

1.Introduction

1.1.Overview

Electricity consumption represents the amount of electrical energy that has been comsumed over aspecific time, in units of Wh(or kWh), electricity demand represents that rate at which electrical energy is consumed for a needed output rating,in units of W (orkW).

1.2.Advantage of electric consumption patterns

Which breaks with the traditional system of generating electricityin plans that is then distributed to our homes,gives consumer the possibility of generating their own energy.

The main advantange are increased autonomy and reduced costs.

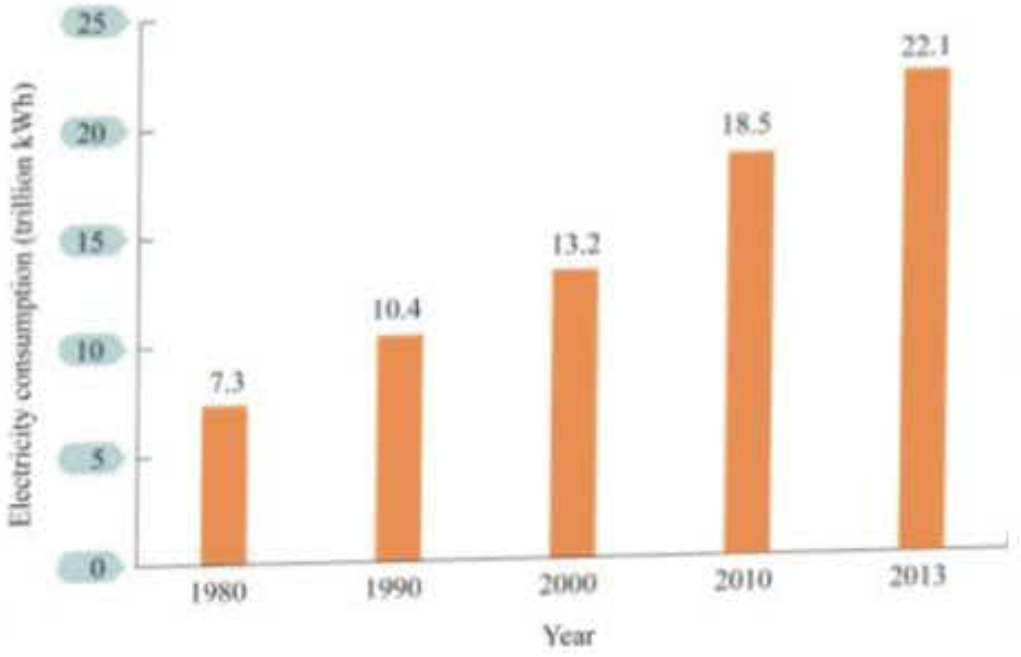
1.2.Disadvantages of electric comsupsion patterns

Power plants that burn biomass release sulfer dioxide and nitrogen oxoides, two undesirable polutants,into the air.
Power plants that burn fossil fuel pump carbon-di-oxide into the admosphere.

Smart Internz

Project Report

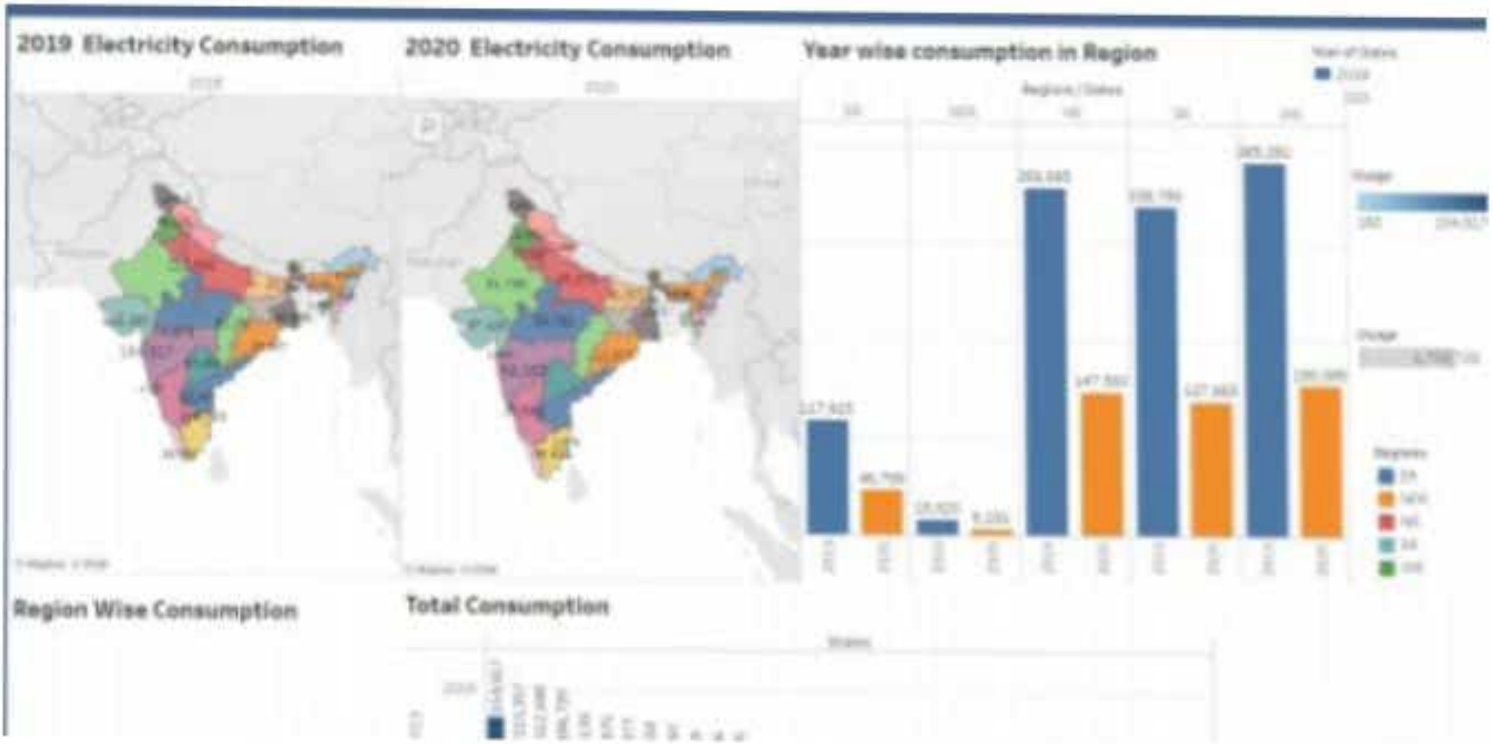
NMI2023TMID02425



Smart Internz

Project Report

NMI2023TMID02425



Smart Internz

Project Report

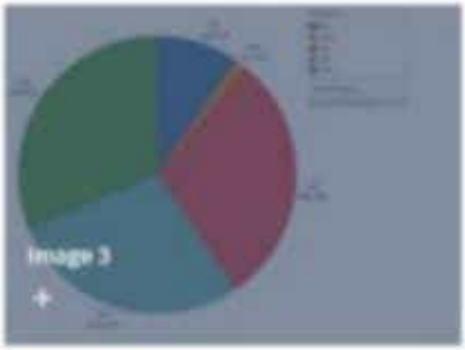
NMI2023TMID02425

Smart Internz

Project Report

NMI2023TMID02425

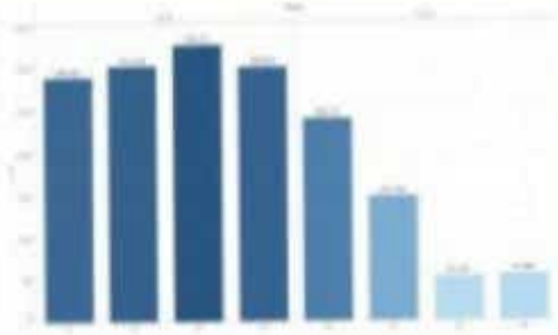
Visualizations



Smart Internz

Project Report

NMI2023TMID02425

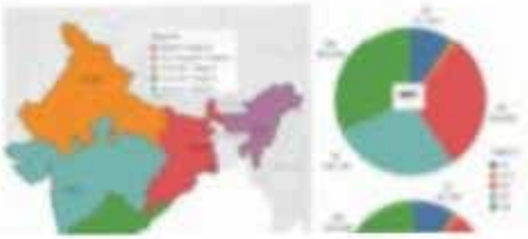


Electricity Consumption in Quarters

- Electricity Consumption in 2019 for Quarter 3 was Highest.
- Electricity Consumption in 2019 for Quarter 1 was Lowest.
- Electricity Consumption in 2020 for Quarter 3 was Lowest.
- Electricity Consumption in 2020 for Quarter 1 was Highest.

Electricity Consumption in Regions

- Total Electricity consumption in Western Region is Highest.
- Total Electricity consumption in North Eastern Region is Lowest.
- Electricity Consumption in 2020 for Quarter 3 was Lowest.



NMI2023TMID02425

2.Conclusion

Current throgh a given area of a conductor is the net chargethat passes per unit time through the conductor.

To keep up a gradual current,we must have a circuit within which an electrical phenomenon occurs from lower to higher mechanial energy

NMI2023TMID02425

3.Future scope

As the Indian government plans to increse electrification of rail-route kilometers from 40 percent presently to 77 percentby 2022, the levelof electricity consumption achieved by 2030 could be 35_43 TWh, growing at 5.0_6.3 percent CAGR from 17TWh in 2015