#### **Data Analytic Powered By Tableau**

#### **PROJECT TITLE**

## PLUGGING INTO THE FUTURE: AN EXPLORATION OF ELECTRICITY CONSUMPTION PATTERNS



**SUBMITTED BY** 

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#### PROJECT REPORT

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- 1.1 OVERVIEW
- 1.2 PURPOSE

#### 2.PROBLEM DEFINITION AND DESIGN

- 2.2 EMPATHY MAP
- 2.2 IDEATION AND BRAINSTORMING
- 3.RESULT
- **4.ADVANTAGES AND DISADVANTAGES**
- **5. APPLICATIONS**
- **6.CONCLUSION**
- **7.FUTURE SCOPE**
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#### AN EXPLORATION OF ELECTRICITY CONSUMPTION PATTERNS

#### INTRODUCTION



Electricity is the energy that makes a work through the ordered flow of electrons .It is the product of current, voltage, and time. The amount of useful work that is done and conversely of energy that is lost as heat , depends on the resistance of the medium through which electrons flow . People use electricity for lighting, heating, cooling, and refrigeration and for operating appliances, computers, electronics, and public transportation systems.

#### **Problem**

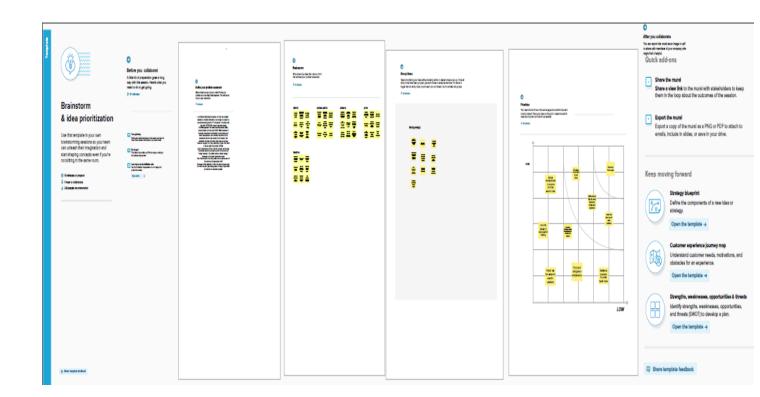
To increase the exploration of electricity consumption



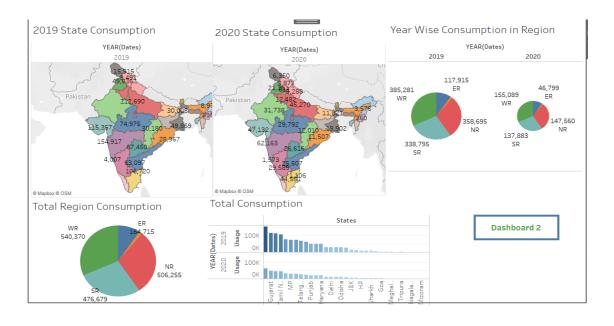
### **Empathy Map**



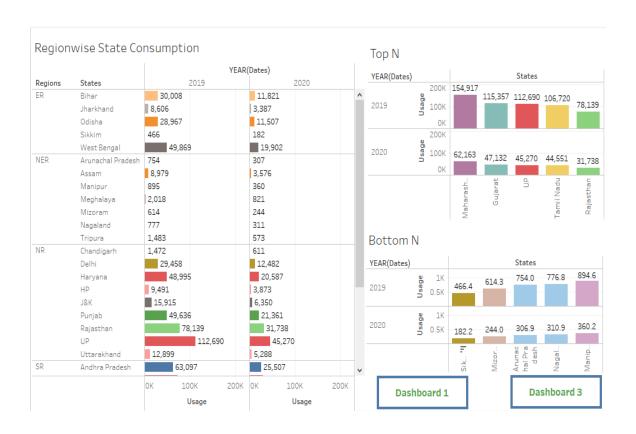
### **Ideation and Brainstorming Map**



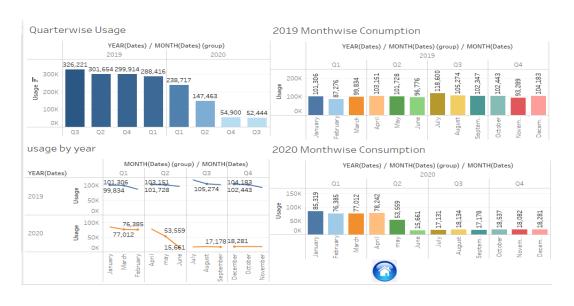
### **Dashboard 1**



#### Dashboard 2



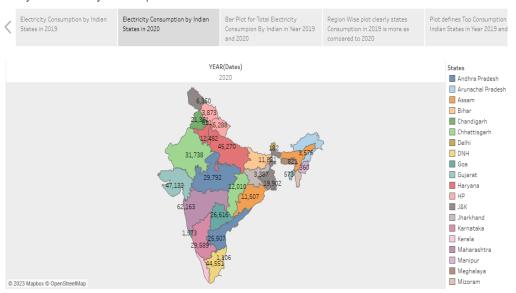
### **Dashboard 3**

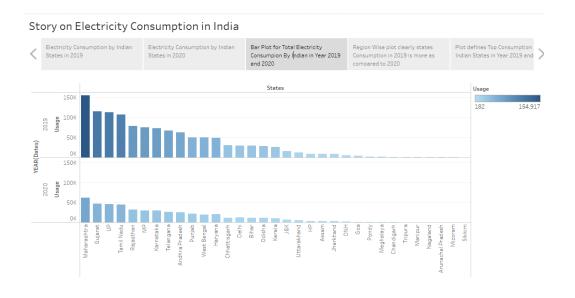


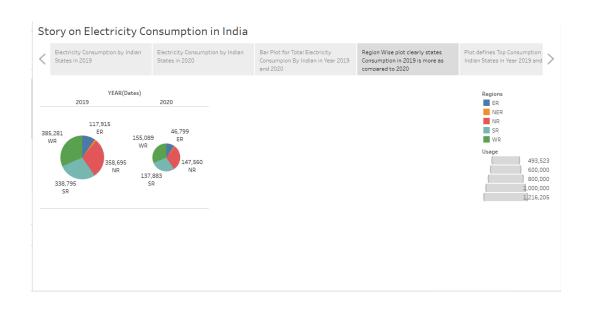
### **Story**

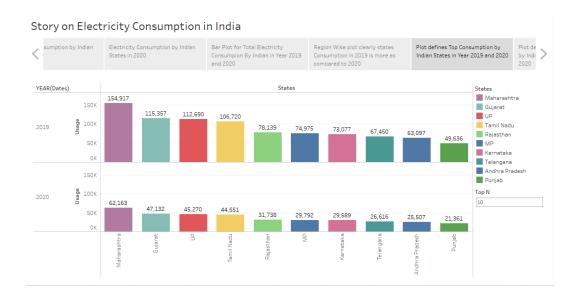


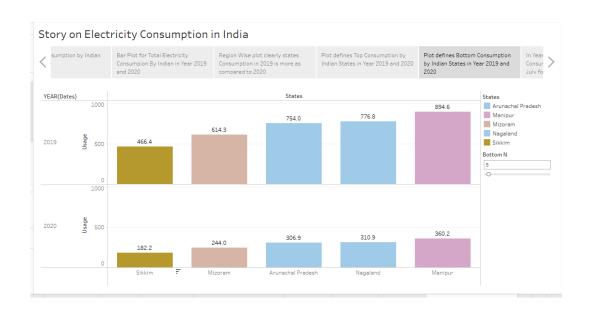
#### Story on Electricity Consumption in India

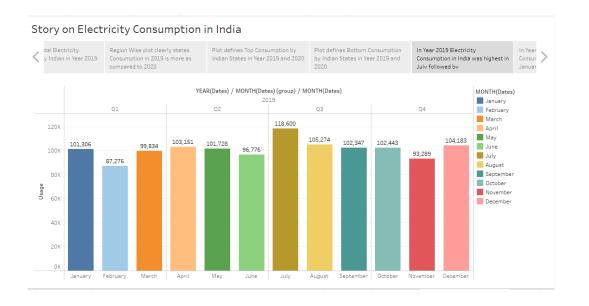


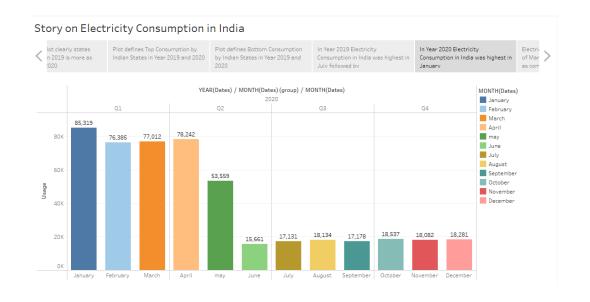


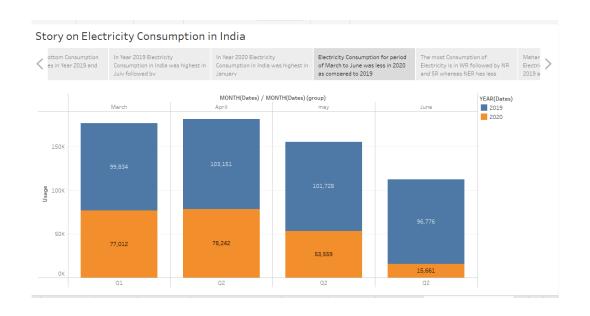


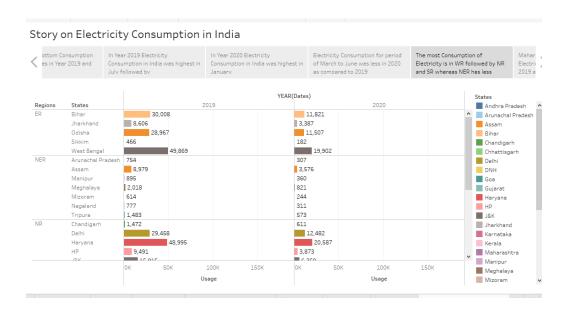


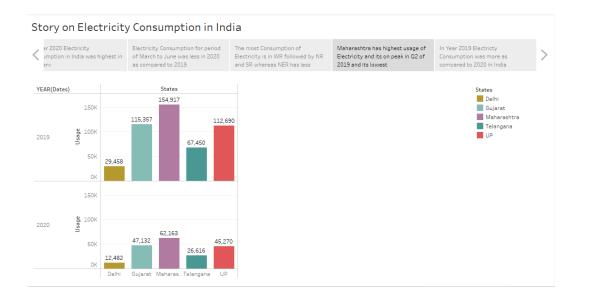


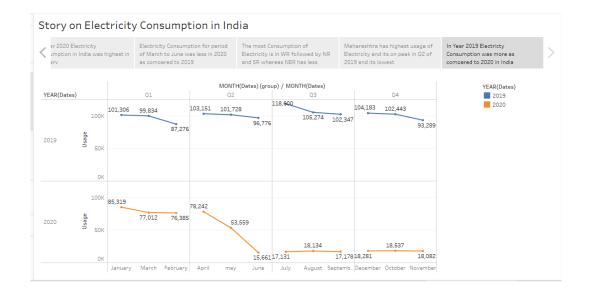




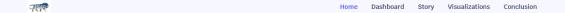








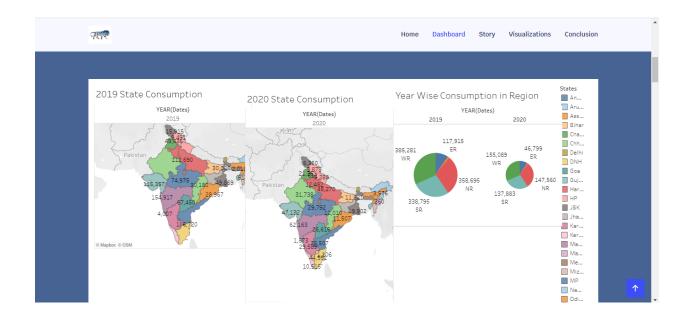
### Web integration

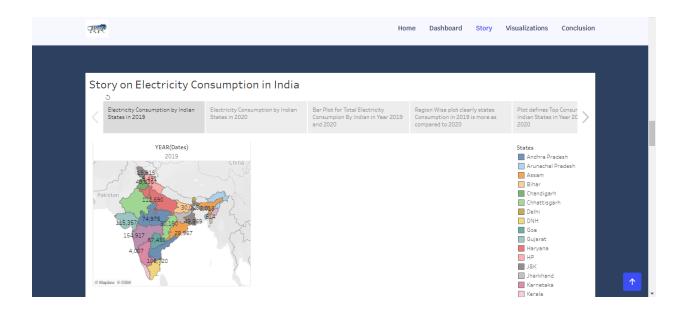


## **Analysis on Electricity Consumption In India**

India is the third largest producer of electricity in the world. During the fiscal year (FY) 2019–20, the total electricity generation in the country was 1,598 TWh, of which 1,383.5 TWh generated by utilities. The gross electricity consumption per capita in FY2019 was 1,208 kWh.







### **Advantages and Disadvantages**

### **Advantages**

- Lower maintenance cost
- No tailpipe emission
- Reduces greenhouse emission
- It is renewable
- It is a safe, cheap and convenient source of energy.

#### **Disadvantages**

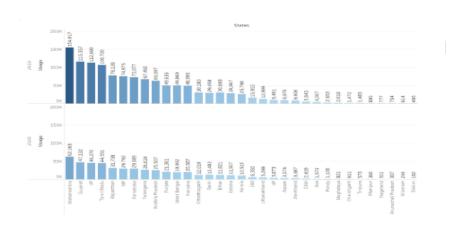
- More expensive than gasoline
- More power plants and more pollution
- Drought can affect power production
- Loss of fish species
- Cost of construction

### **Application**



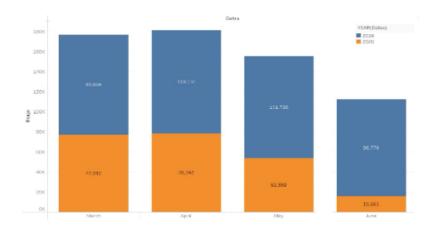
Electricity led to the development of light bulbs, heating systems and cooling systems, which have improved the quality of people's lives.

#### **Conclusion**



### **Electricity Consumption States.**

- → Maharashtra is the Highest Electricity consumption user of India.
- → Gujarat is the Second Highest Electricity consumption user of India
- → Sikkim is the Lowest Electricity consumption user of India



# **Electricity Consumption before and during lockdown** in India

Electricity consumption was more in 2019 in month of March-June before Lockdown

Electricity Consumption was less in 2020 in month of March-June during the Lockdown

### **Future scope**



India Energy Outlook 2021 explores the opportunities and challenges ahead for India as it seeks to ensure reliable, affordable and sustainable energy to a growing population. The report examines the pathways out of the crisis that emerged from the Covid-19 pandemic, as well as longer-term trends, exploring how India's energy sector might evolve to 2040 under a range of scenarios.