PROJECT REPORT TEMPLATE

PROJECT : PLUGGING INTO THE FUTURE : An exploration of electricity consumption patterns

1.Introduction:

1.1.Overview:

Whereas electricity consumption represents the amount of electrical energy that has been consumed over a specific time in units of (Wh or Kwh).

Analysing Electricity consumption in India. This dataset of India, here we are going to analyse state wise, region wise and overall electricity consumption in India.

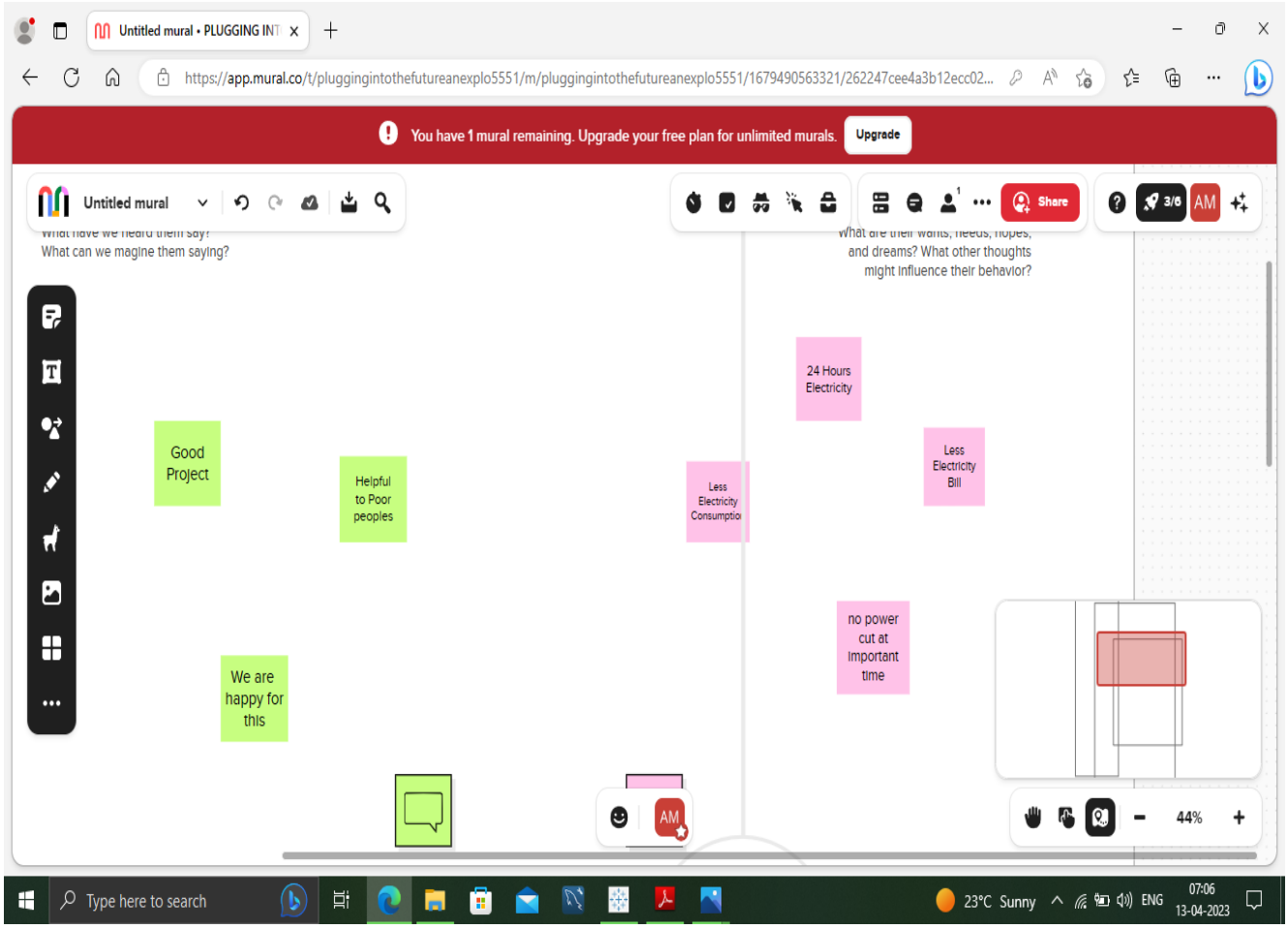
1.2.Purpose:

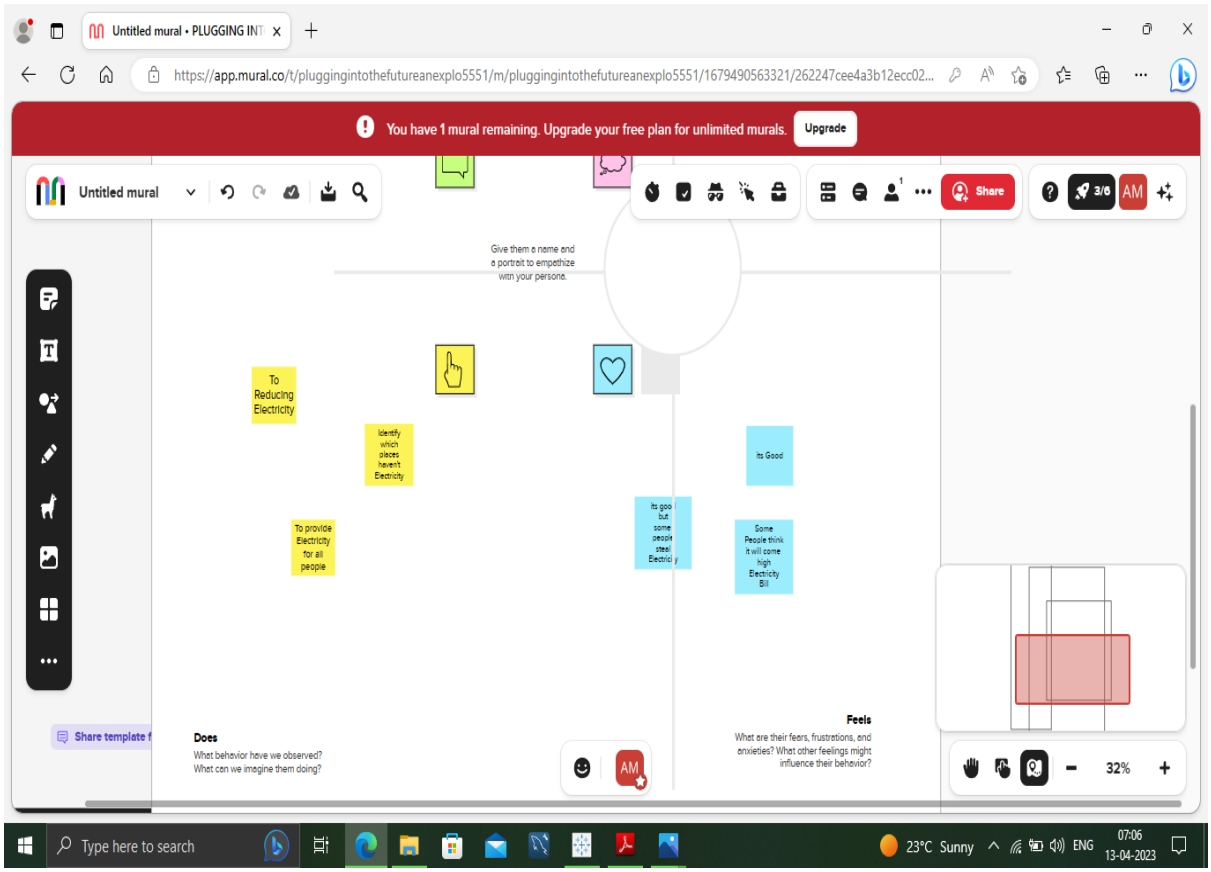
Annual electricity consumption per capita serves as an important measure of a country's electric power development.

Generally speaking, electricity consumption grows faster when the industrialization process develops quickly and goes down rapidly then industrialization is completed or near competition.

2. Problem Definition & Design Thinking :

2.1.Empathy Map :




Untitled mural • PLUGGING INT
https://app.mural.co/t/pluggingintothefutureanexplo5551/m/pluggingintothefutureanexplo5551/1679490563321/262247cee4a3b12ecc02...
You have 1 mural remaining. Upgrade your free plan for unlimited murals.
Upgrade
Untitled mural
Share
Give them a name and a portrait to empathize with your persona.
To Reducing Electricity
Identify which places haven't Electricity
To provide Electricity for all people
its Good
its goo but some people steal Electrici y
Some People think it will come high Electricity Bill
Does
What behavior have we observed? What can we imagine them doing?
Feels
What are their fears, frustrations, and anxieties? What other feelings might influence their behavior?
Share template f
32%
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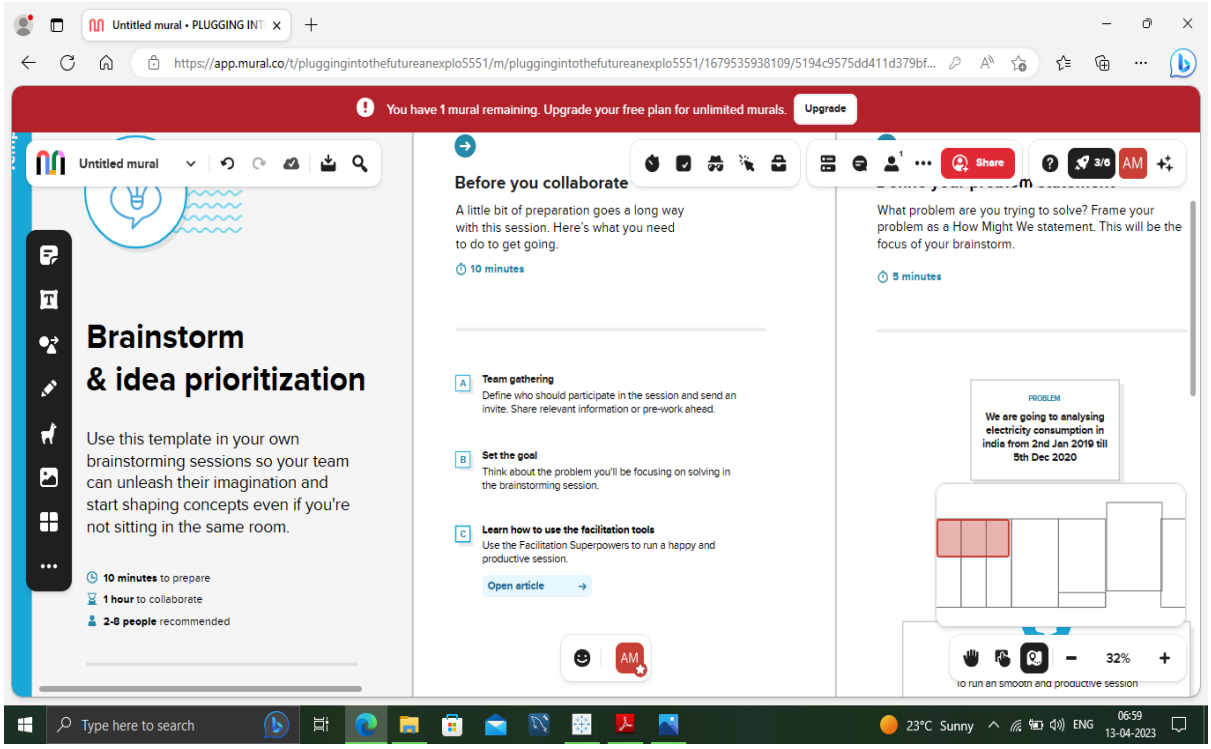
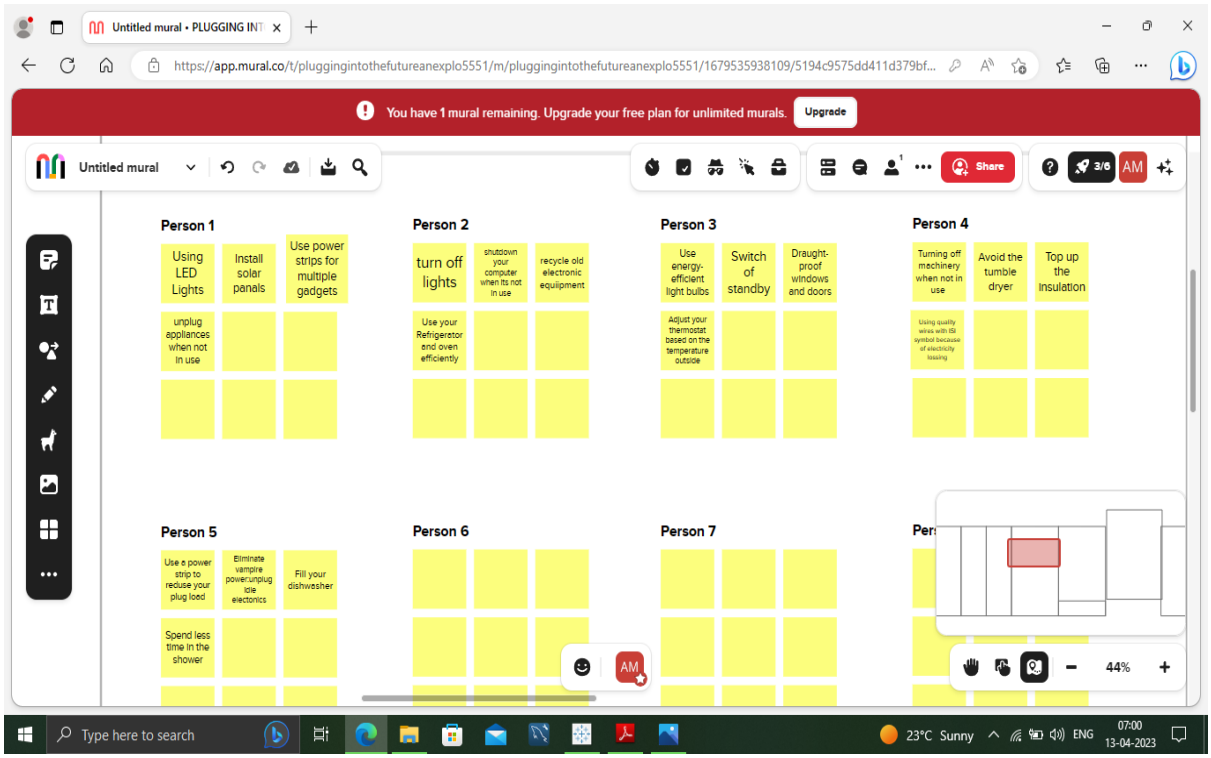
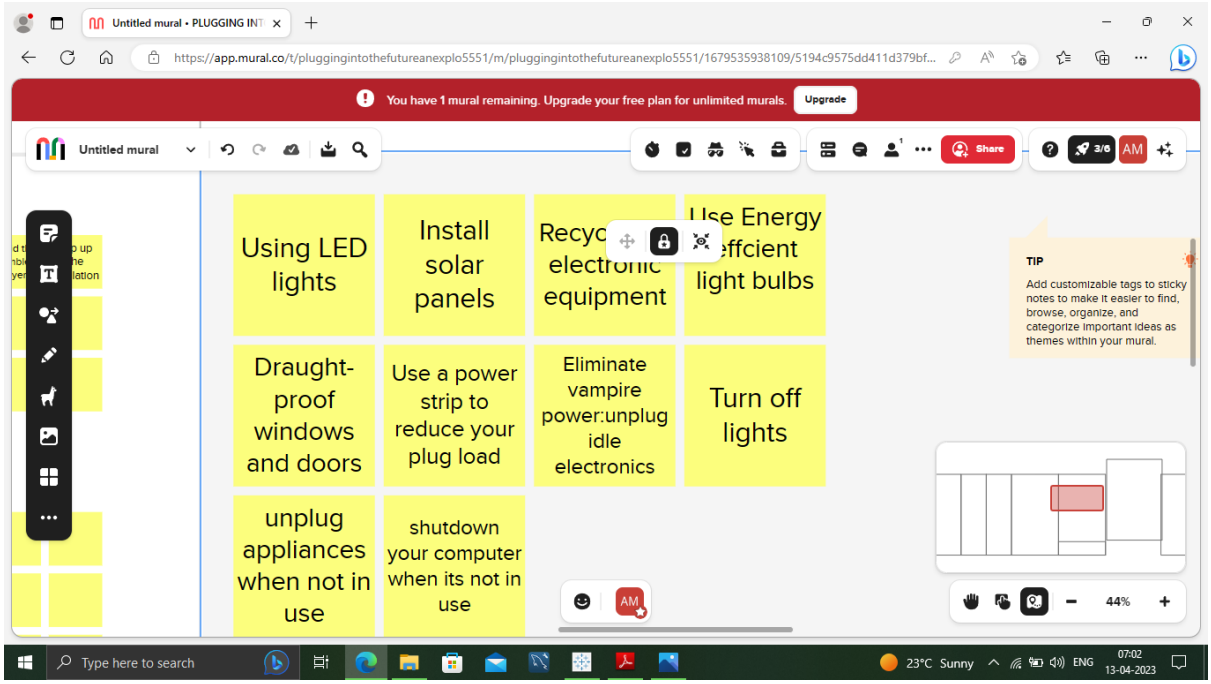
23°C Sunny
ENG
07:06
13-04-2023

2.2. Ideation & Brainstorming Map :



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You have 1 mural remaining. Upgrade your free plan for unlimited murals.
Upgrade
Untitled mural
Share
Using LED lights
Install solar panels
Recyc electronic equipment
Use Energy ffficient light bulbs
Draught-proof windows and doors
Use a power strip to reduce your plug load
Eliminate vampire power:unplug idle electronics
Turn off lights
unplug appliances when not in use
shutdown your computer when its not in use
TIP
Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas as themes within your mural.
44%
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ENG
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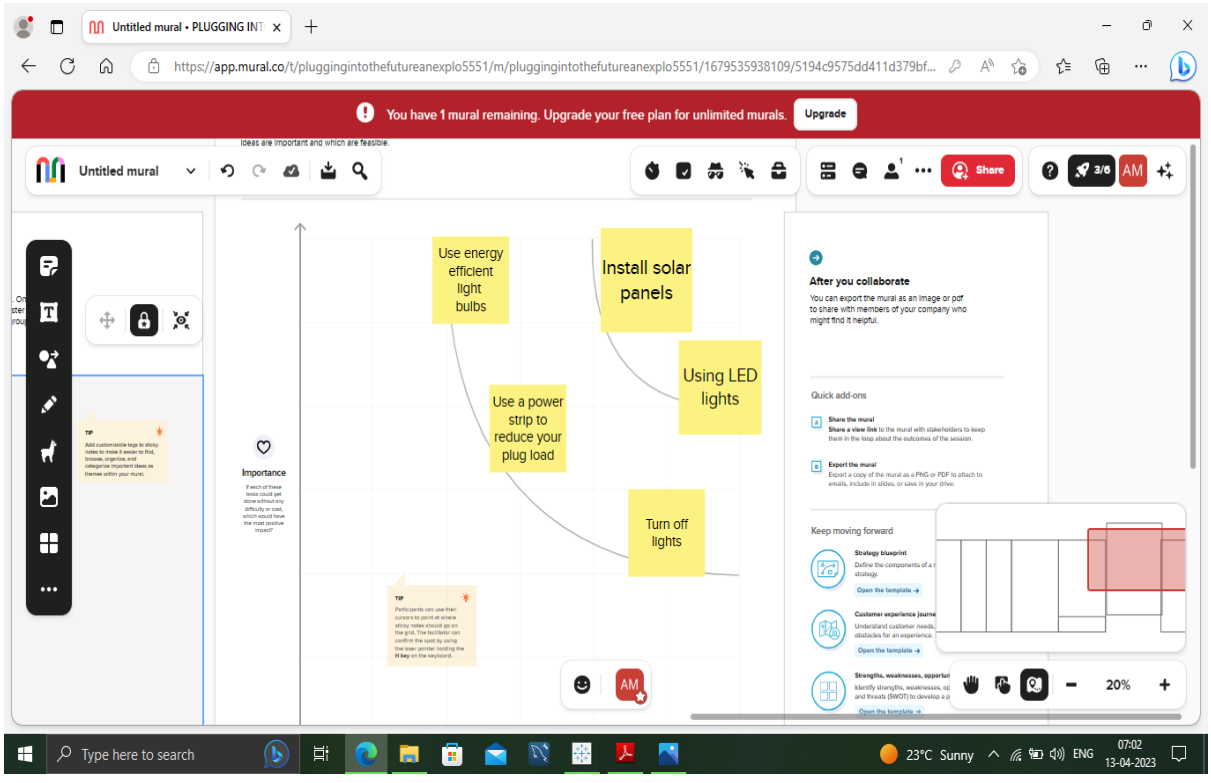
13-04-2023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You have 1 mural remaining. Upgrade your free plan for unlimited murals.
Upgrade
Untitled mural
Share
Use energy efficient light bulbs
Install solar panels
Using LED lights
Use a power strip to reduce your plug load
Turn off lights
Importance
After you collaborate
You can export the mural as an image or pdf to share with members of your company who might find it helpful.
Quick add-ons
Keep moving forward
20%
Type here to search
23°C Sunny
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13-04-2023

3.Result :

3.1.Data Model:

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<tr><td>Columns</td><td>Integer</td></tr>
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</td></tr>
<tr><td>2.SQL Server</td><td>
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<tr><td>Field Label</td><td>Data type</td></tr>
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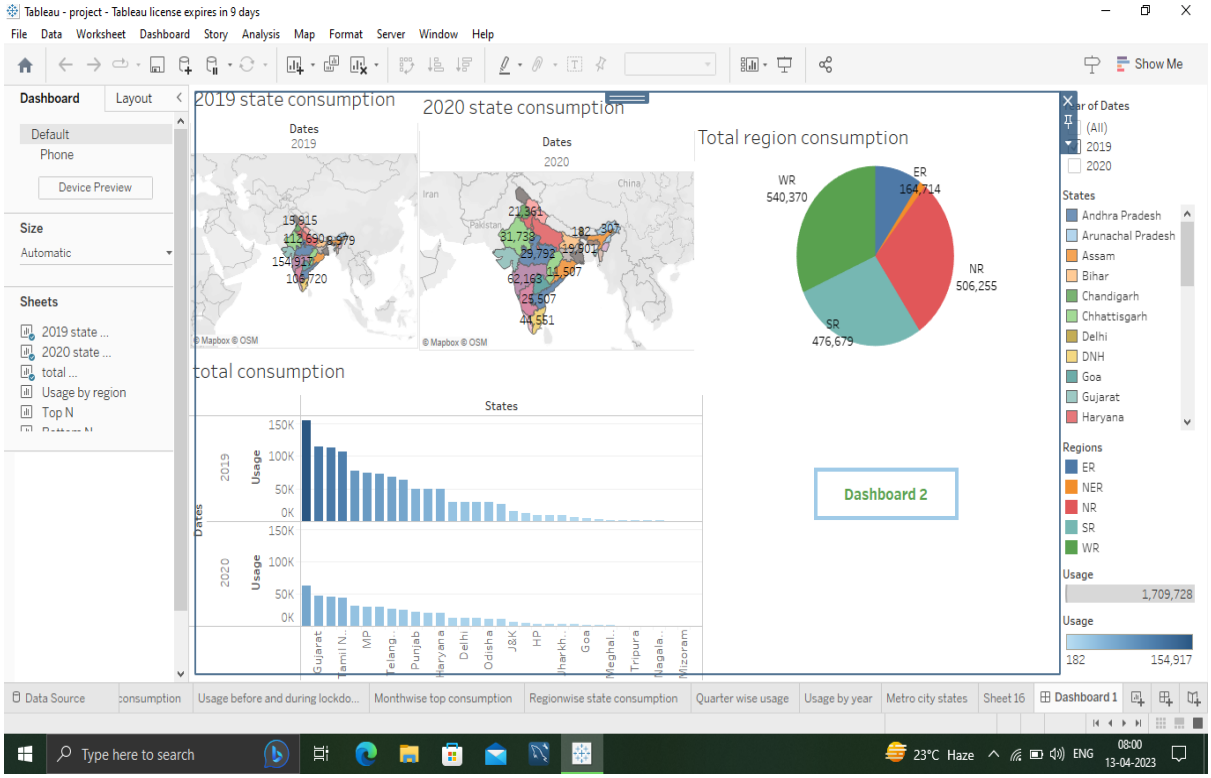
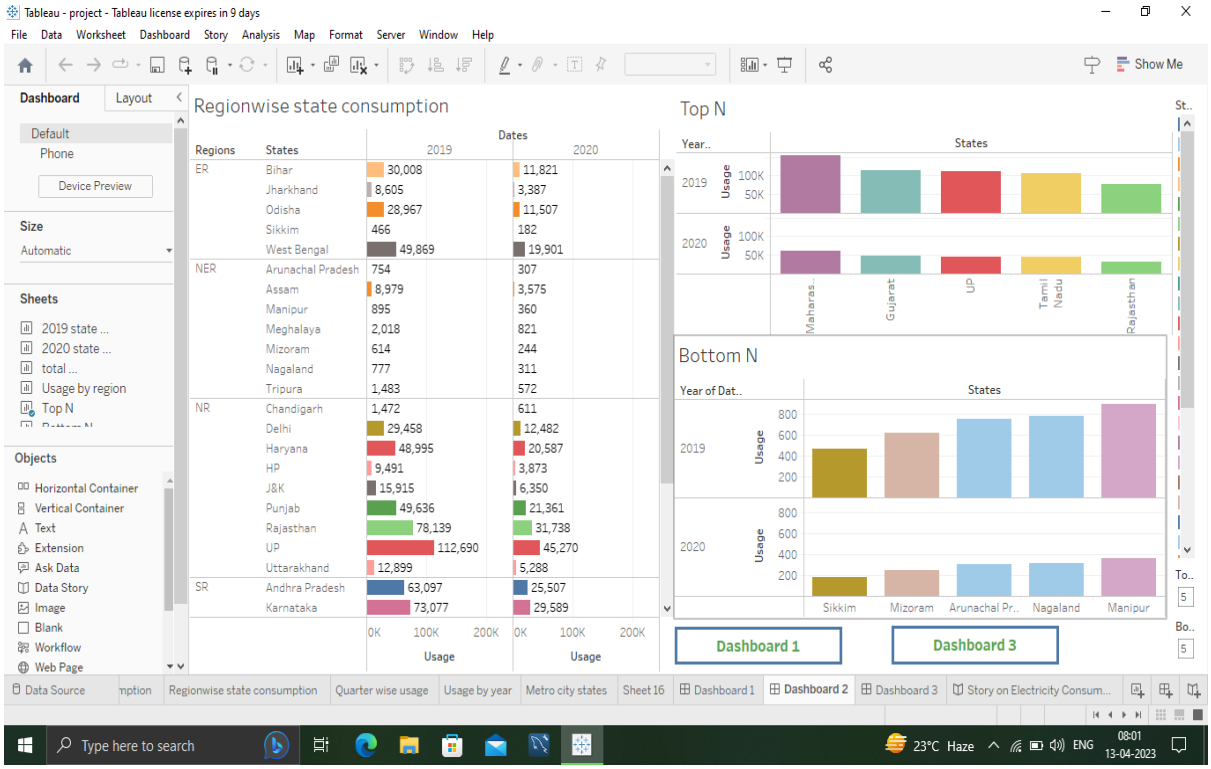
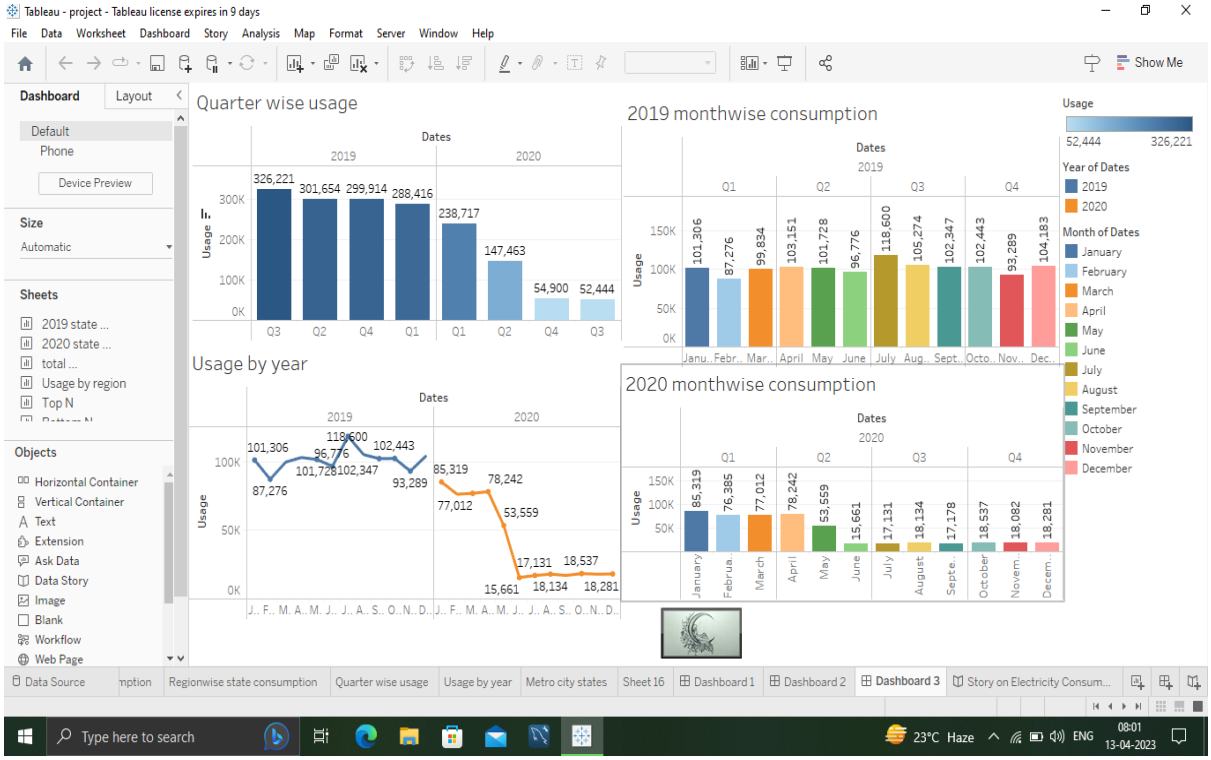
3.2.Activity & Screenshot:



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File Data Worksheet Dashboard Story Analysis Map Format Server Window Help
Show Me
Dashboard
Layout
Default
Phone
Device Preview
Size
Automatic
Sheets
2019 state ...
2020 state ...
total ...
Usage by region
Top N
Objects
Horizontal Container
Vertical Container
Text
Extension
Ask Data
Data Story
Image
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Workflow
Web Page
Quarter wise usage
Dates
2019
2020
Usage
326,221
301,654
299,914
288,416
238,717
147,463
54,900
52,444
Q3 Q2 Q4 Q1 Q1 Q2 Q4 Q3
2019 monthwise consumption
Dates
2019
Q1 Q2 Q3 Q4
101,306
87,276
99,834
103,151
101,728
96,776
118,600
105,274
102,347
102,443
93,289
104,183
Janu.. Febr.. Mar.. April May June July Aug.. Sept.. Octo.. Nov.. Dec..
Usage
52,444
326,221
Year of Dates
2019
2020
Month of Dates
January
February
March
April
May
June
July
August
September
October
November
December
Usage by year
Dates
2019
2020
101,306
87,276
118,600
86,776
101,728
102,347
93,289
85,319
77,012
78,242
53,559
17,131
15,661
18,134
18,537
18,281
2020 monthwise consumption
Dates
2020
Q1 Q2 Q3 Q4
85,319
76,385
77,012
78,242
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Data Source
Regionwise state consumption
Quarter wise usage
Usage by year
Metro city states
Sheet 16
Dashboard 1
Dashboard 2
Dashboard 3
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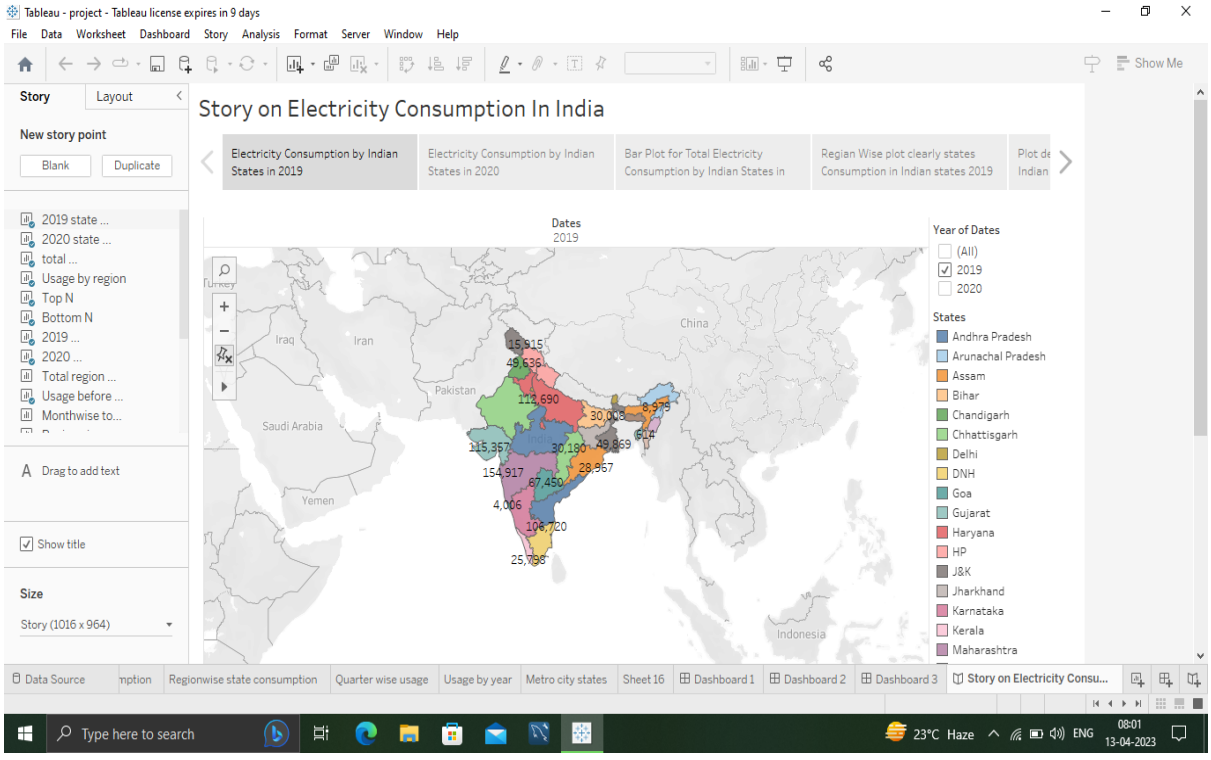
13-04-2023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Electricity Consumption by Indian States in 2019
Electricity Consumption by Indian States in 2020
Bar Plot for Total Electricity Consumption by Indian States in
Regian Wise plot clearly states Consumption in Indian states 2019
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Dates
2019
Turkey
Iraq
Iran
China
Pakistan
Saudi Arabia
Yemen
Indonesia
15,915
49,636
112,690
30,008
8,978
614
115,357
30,180
49,869
154,917
67,450
28,967
4,006
106,720
25,798
Year of Dates
(All)
2019
2020
States
Andhra Pradesh
Arunachal Pradesh
Assam
Bihar
Chandigarh
Chhattisgarh
Delhi
DNH
Goa
Gujarat
Haryana
HP
J&K
Jharkhand
Karnataka
Kerala
Maharashtra
Data Source
Regionwise state consumption
Quarter wise usage
Usage by year
Metro city states
Sheet 16
Dashboard 1
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Story on Electricity Consu...
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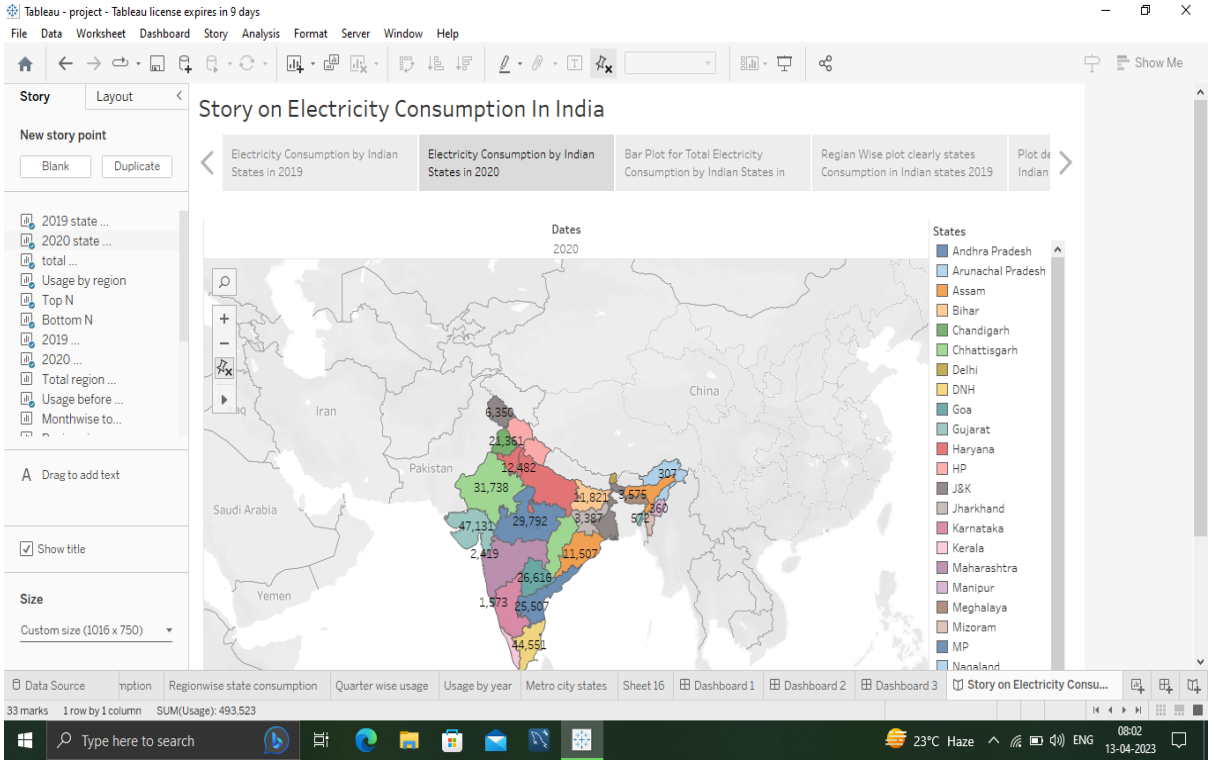
13-04-2023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Story on Electricity Consumption In India
Electricity Consumption by Indian States in 2019
Electricity Consumption by Indian States in 2020
Bar Plot for Total Electricity Consumption by Indian States in
Regian Wise plot clearly states Consumption in Indian states 2019
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Arunachal Pradesh
Assam
Bihar
Chandigarh
Chhattisgarh
Delhi
DNH
Goa
Gujarat
Haryana
HP
J&K
Jharkhand
Karnataka
Kerala
Maharashtra
Manipur
Meghalaya
Mizoram
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Nagaland
China
Iran
Pakistan
Saudi Arabia
Yemen
4,350
21,361
12,482
31,738
47,131
29,792
2,419
26,616
1,573
25,507
44,551
11,821
3,575
307
860
3,387
507
11,507
Data Source
Regionwise state consumption
Quarter wise usage
Usage by year
Metro city states
Sheet 16
Dashboard 1
Dashboard 2
Dashboard 3
Story on Electricity Consu...
33 marks
1 row by 1 column
SUM(Usage): 493,523
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23°C Haze
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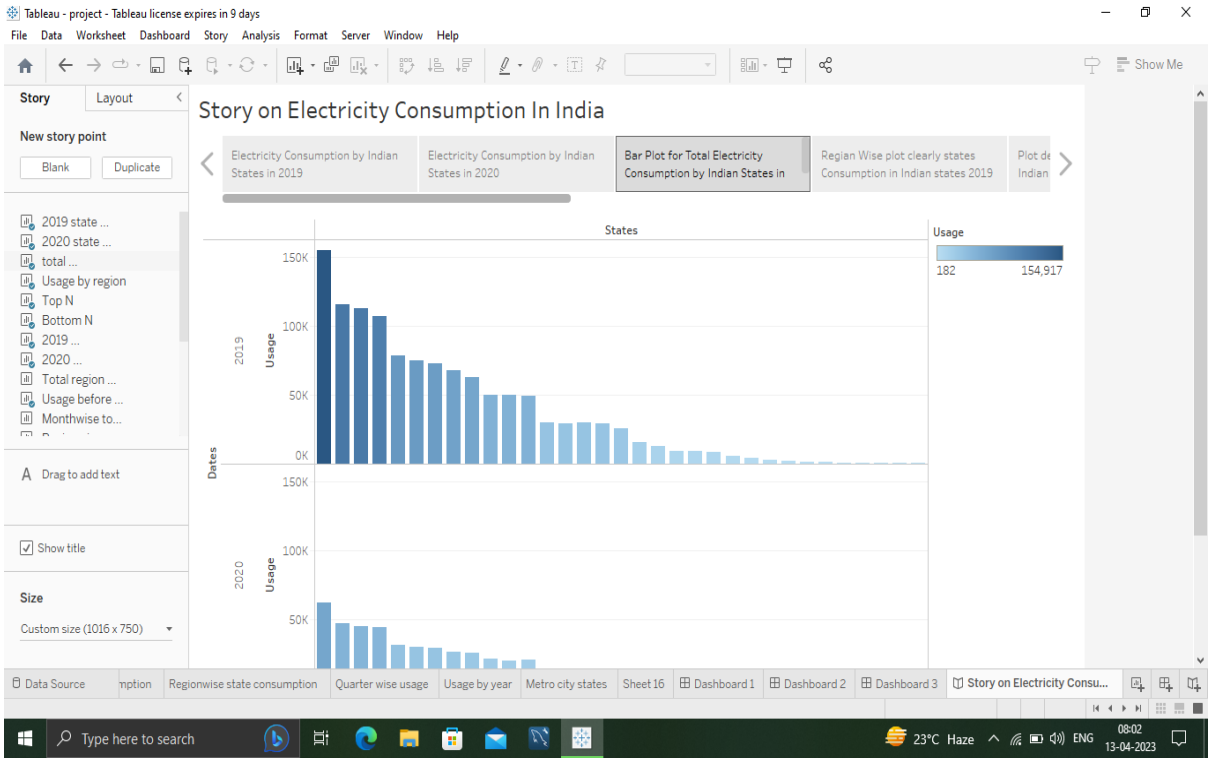
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Electricity Consumption by Indian States in 2019
Electricity Consumption by Indian States in 2020
Bar Plot for Total Electricity Consumption by Indian States in
Regian Wise plot clearly states Consumption in Indian states 2019
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Quarter wise usage
Usage by year
Metro city states
Sheet 16
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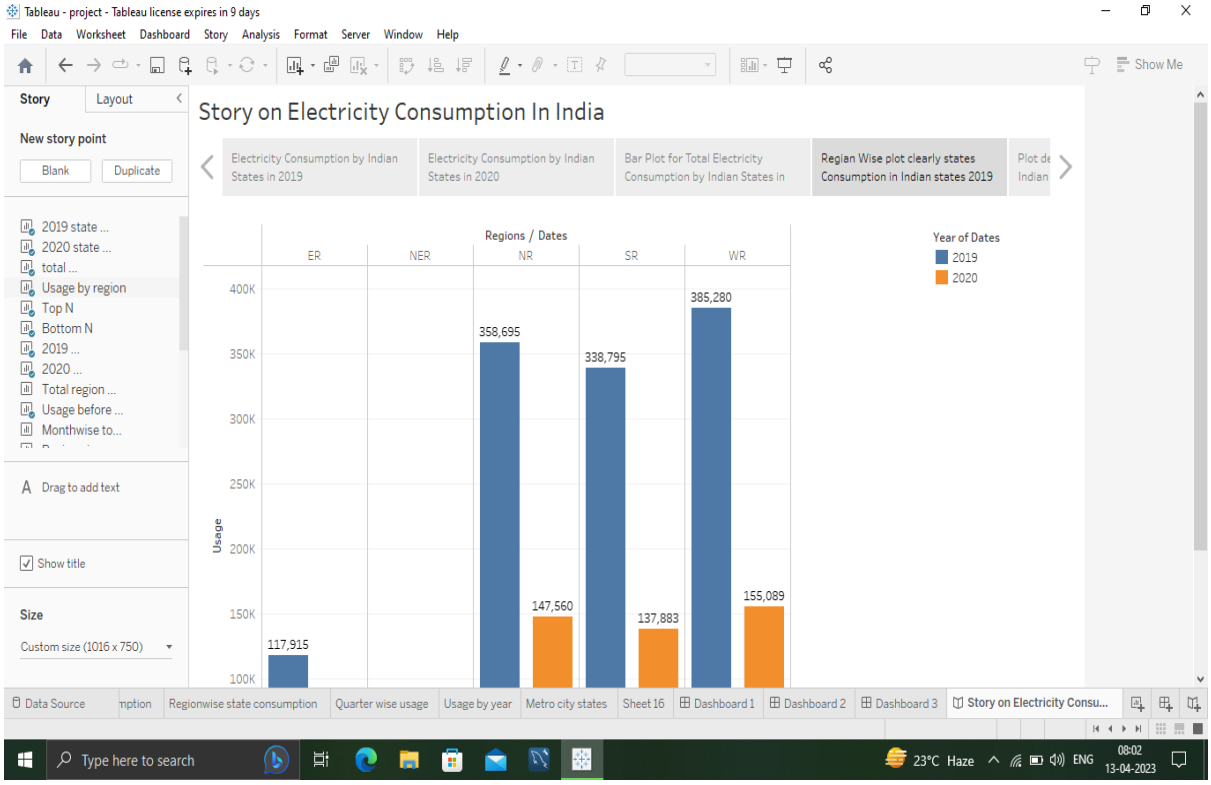
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2019 state ...
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Show title
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Custom size (1016 x 750)
Story on Electricity Consumption In India
Electricity Consumption by Indian States in 2019
Electricity Consumption by Indian States in 2020
Bar Plot for Total Electricity Consumption by Indian States in
Regian Wise plot clearly states Consumption in Indian states 2019
Regions / Dates
ER
NER
NR
SR
WR
Year of Dates
2019
2020
Usage
400K
350K
300K
250K
200K
150K
100K
117,915
358,695
147,560
338,795
137,883
385,280
155,089
Data Source
Regionwise state consumption
Quarter wise usage
Usage by year
Metro city states
Sheet 16
Dashboard 1
Dashboard 2
Dashboard 3
Story on Electricity Consu...
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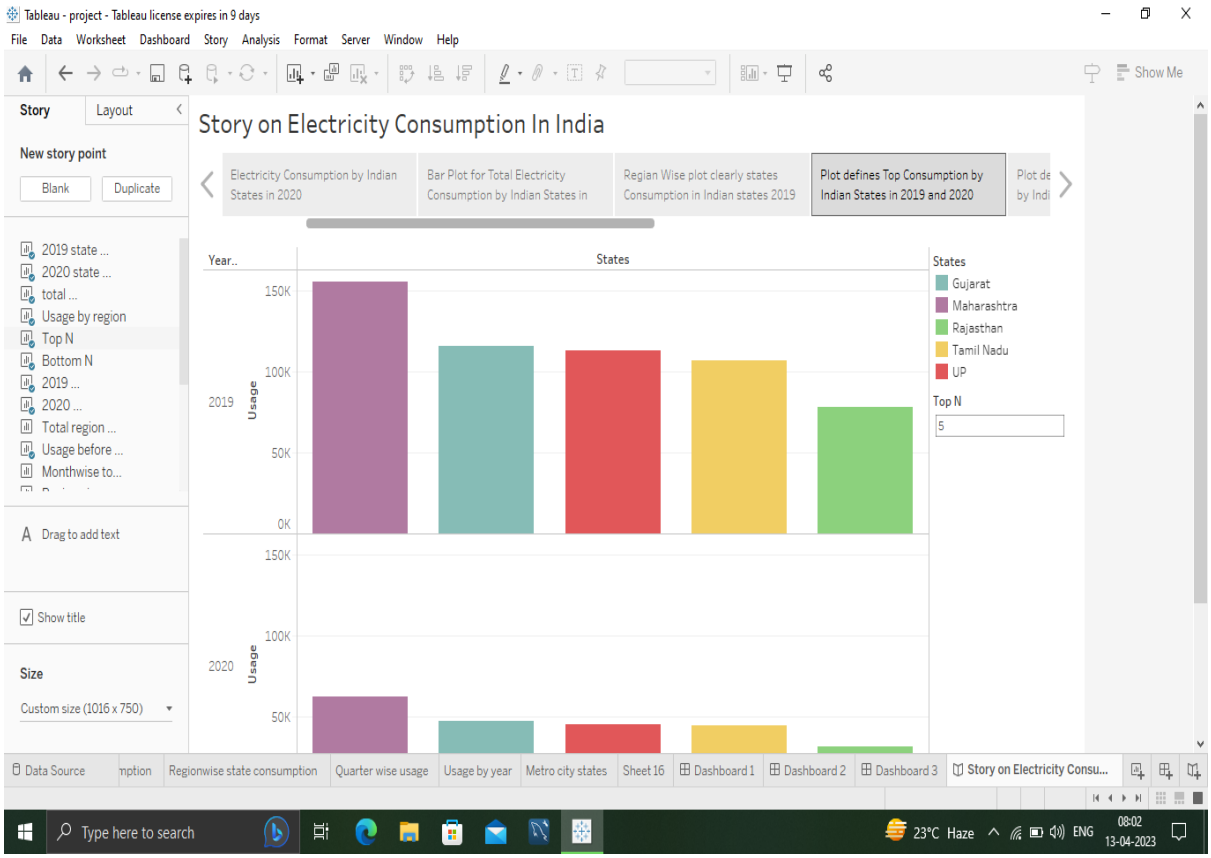
13-04-2023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File Data Worksheet Dashboard Story Analysis Format Server Window Help
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Usage by region
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2019 ...
2020 ...
Total region ...
Usage before ...
Monthwise to...
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Story on Electricity Consumption In India
Electricity Consumption by Indian States in 2020
Bar Plot for Total Electricity Consumption by Indian States in
Regian Wise plot clearly states Consumption in Indian states 2019
Plot defines Top Consumption by Indian States in 2019 and 2020
Year..
States
2019
2020
Usage
150K
100K
50K
0K
States
Gujarat
Maharashtra
Rajasthan
Tamil Nadu
UP
Top N
5
Data Source
Regionwise state consumption
Quarter wise usage
Usage by year
Metro city states
Sheet 16
Dashboard 1
Dashboard 2
Dashboard 3
Story on Electricity Consu...
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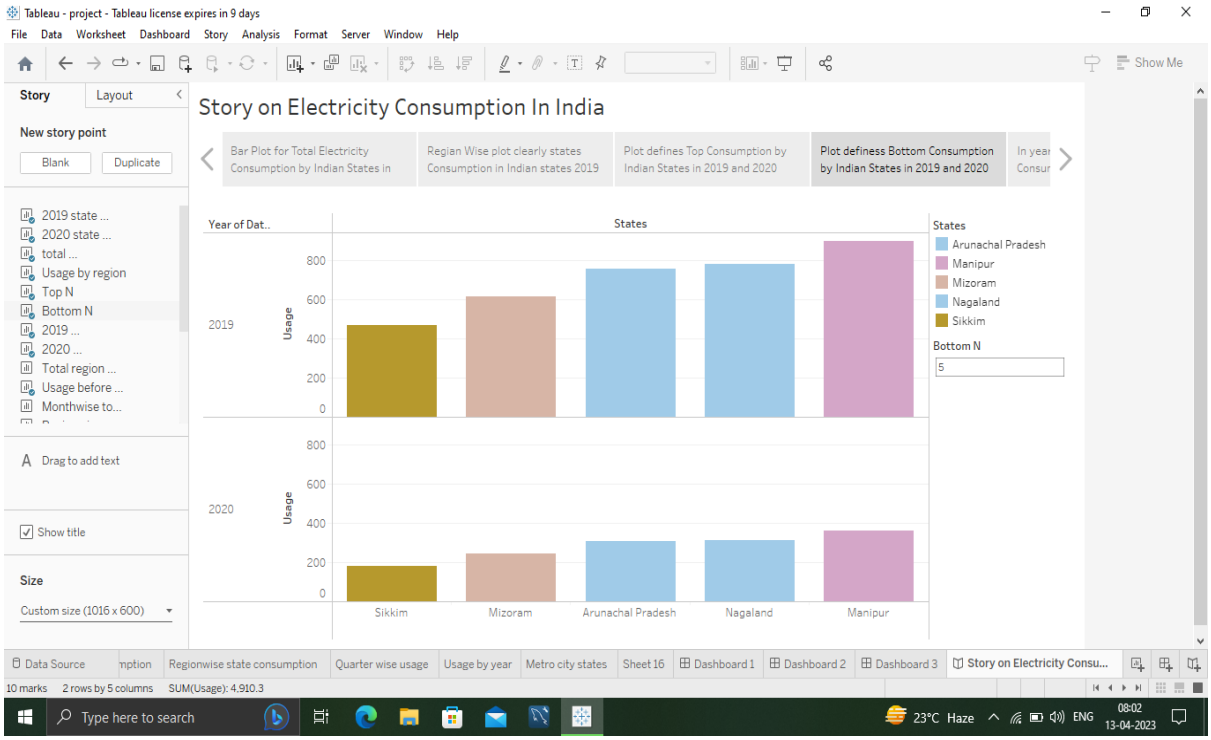
13-04-2023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Usage by region
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Total region ...
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Monthwise to...
Drag to add text
Show title
Size
Custom size (1016 x 600)
Story on Electricity Consumption In India
Bar Plot for Total Electricity Consumption by Indian States in
Regian Wise plot clearly states Consumption in Indian states 2019
Plot defines Top Consumption by Indian States in 2019 and 2020
Plot definess Bottom Consumption by Indian States in 2019 and 2020
Year of Dat..
States
2019
2020
Usage
0
200
400
600
800
Sikkim
Mizoram
Arunachal Pradesh
Nagaland
Manipur
States
Arunachal Pradesh
Manipur
Mizoram
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Sikkim
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Data Source
Regionwise state consumption
Quarter wise usage
Usage by year
Metro city states
Sheet 16
Dashboard 1
Dashboard 2
Dashboard 3
Story on Electricity Consu...
10 marks
2 rows by 5 columns
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ENG
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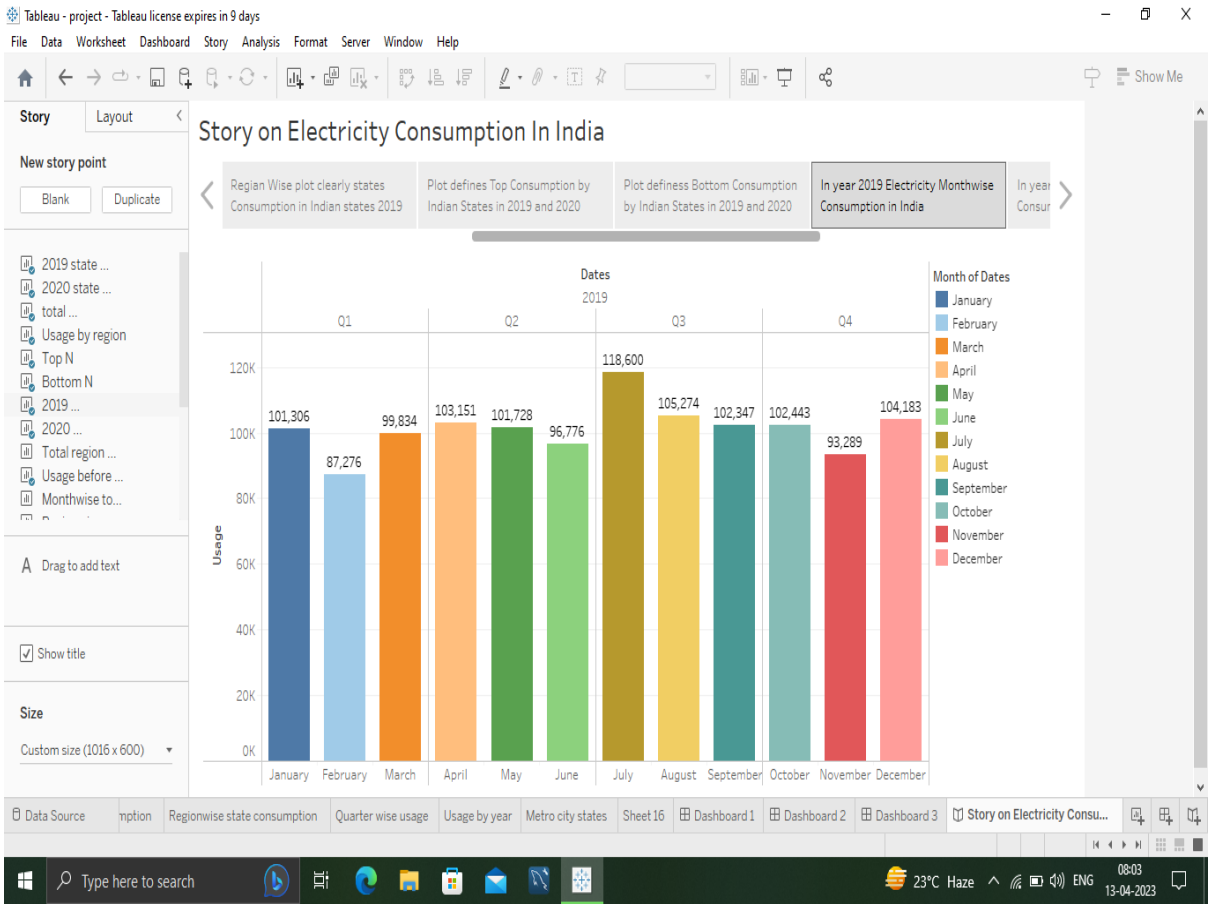
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Size
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Story on Electricity Consumption In India
Regian Wise plot clearly states Consumption in Indian states 2019
Plot defines Top Consumption by Indian States in 2019 and 2020
Plot definess Bottom Consumption by Indian States in 2019 and 2020
In year 2019 Electricity Monthwise Consumption in India
Dates
2019
Q1
Q2
Q3
Q4
Usage
0K
20K
40K
60K
80K
100K
120K
101,306
87,276
99,834
103,151
101,728
96,776
118,600
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102,347
102,443
93,289
104,183
January
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Month of Dates
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Data Source
Regionwise state consumption
Quarter wise usage
Usage by year
Metro city states
Sheet 16
Dashboard 1
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Story on Electricity Consu...
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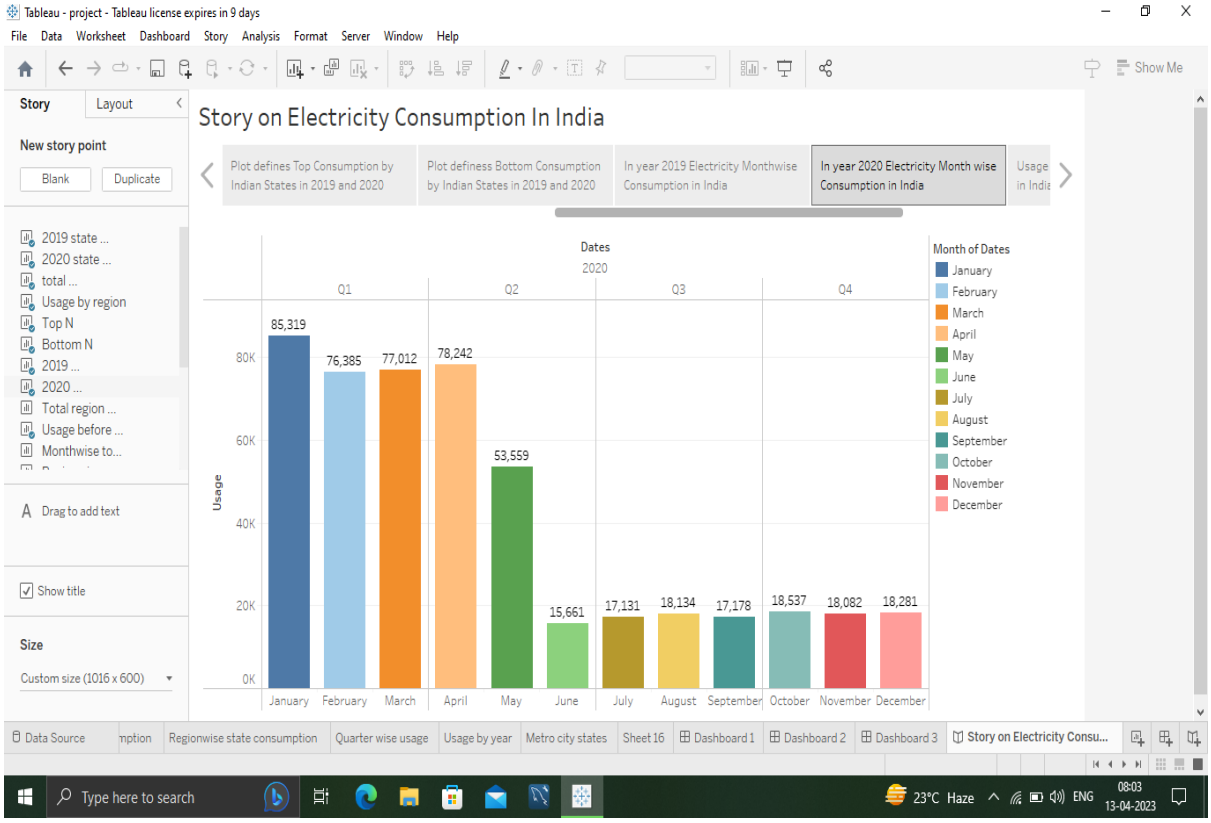
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Bottom N
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Total region ...
Usage before ...
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Show title
Size
Custom size (1016 x 600)
Story on Electricity Consumption In India
Plot defines Top Consumption by Indian States in 2019 and 2020
Plot definess Bottom Consumption by Indian States in 2019 and 2020
In year 2019 Electricity Monthwise Consumption in India
In year 2020 Electricity Month wise Consumption in India
Usage in India
Dates
2020
Q1
Q2
Q3
Q4
Usage
0K
20K
40K
60K
80K
85,319
76,385
77,012
78,242
53,559
15,661
17,131
18,134
17,178
18,537
18,082
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Data Source
Regionwise state consumption
Quarter wise usage
Usage by year
Metro city states
Sheet 16
Dashboard 1
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Dashboard 3
Story on Electricity Consu...
Type here to search
23°C Haze
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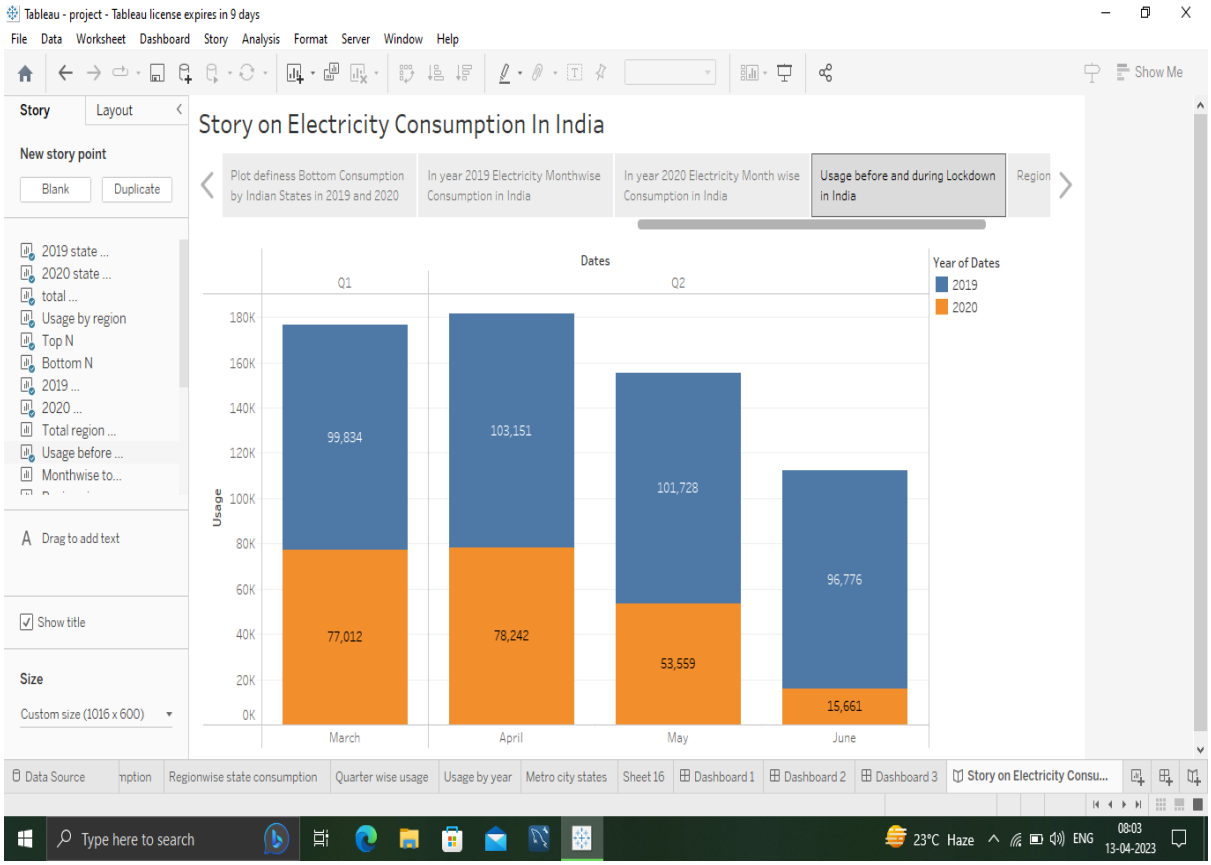
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Show title
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Custom size (1016 x 600)
Story on Electricity Consumption In India
Plot definess Bottom Consumption by Indian States in 2019 and 2020
In year 2019 Electricity Monthwise Consumption in India
In year 2020 Electricity Month wise Consumption in India
Usage before and during Lockdown in India
Region
Dates
Q1
Q2
Usage
0K
20K
40K
60K
80K
100K
120K
140K
160K
180K
99,834
77,012
103,151
78,242
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53,559
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March
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Data Source
Regionwise state consumption
Quarter wise usage
Usage by year
Metro city states
Sheet 16
Dashboard 1
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Story on Electricity Consu...
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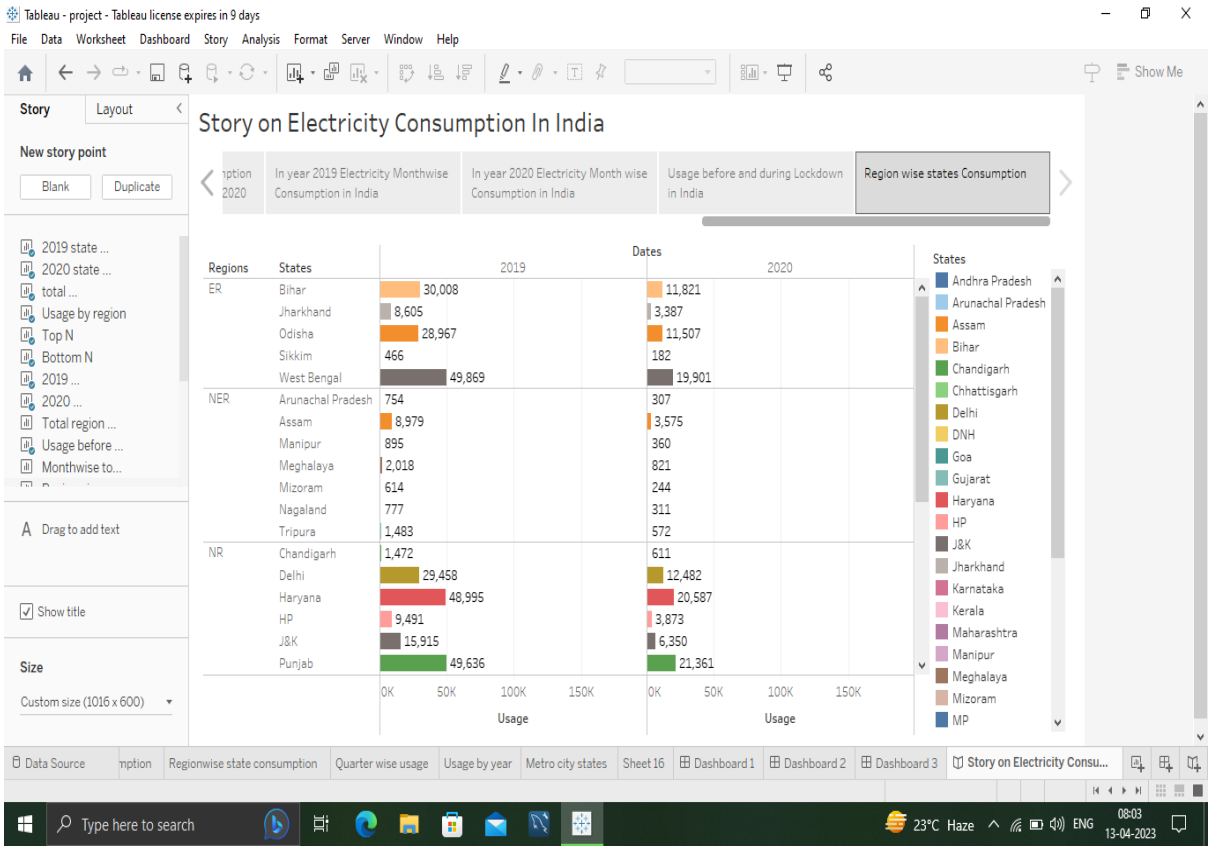
08:03
13-04-2023



4.Trailhead Profile Public URL:

Team leader: https://trailblazer.me/id/manushya

Team Member 1: https://trailblazer.me/id/mwaran20

Team Member 2: https://trailblazer.me/id/subhp12

Team Member 3: https://trailblazer.me/id/ppriya332

Team Member 4: https://trailblazer.me/id/laksp29

5. Advantages :

* It is a clean , safe, cheap and convenient source of energy.
* Lower maintenance cost.
* We all known that it can be set many sizes.
* A station can operate and run for long periods of time.
* It doesn’t require as many employees.

Disadvantages:

* More expensive than gasoline.
* Loss of fish species.
* Sometimes meases up wildlife.
* Dependent on precipitation.
* More power plants and more pollution.
* Cost for construction.
* Change in river or stream quality.

6. Applications :

People use electricity for lighting, heating , cooling , and refrigeration and for operating appliances, computers, electronics, machinery and public transportation systems.

Electric cells are used as a source of electricity in torches, wristwatches, alarms clocks, transistor, Radios, TV remotes, Cameras, Mobile phone, toys and many other devices.

7. Conclusion :

Electricity Consumption States:

- Maharashtra is the highest electricity consumption user of India.
- Gujarat is the 2nd highest electricity consumption user of India.
- Sikkim is the lowest electricity consumption user of India.

Electricity consumption before and during lockdown in India:

During lockdown that is 2020 we used less electricity.

In 2019, we used more electricity than during the lockdown period.

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 2019 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.

* Electricity consumption in 2020 for Quarter 1 was highest.

8. Future scope:

In the stated policies scenario, global electricity demand grows at 2.1% per year to 2040, twice the rate of primary energy demand.

This raises electricity's share in total final energy consumption from 19% in 2018 to 24% in 2040. Electricity demand growth is set to be particularly strong in developing economics.