



# Renewable energy source

## Presentation

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# Purpose of study

- Analyzing the adoption trends of renewable energy across different regions

# Tools of study

- SQL (MySQL)
- Tableau

# Data Source

Kaggle

## Data contains:

Urban Rural: Whether the household is in an urban or rural area

Adoption Year: The year the household first adopted renewable energy

Income Level: The income bracket of the household (Low, Middle, High)

Region: The geographical region where the household is located (e.g., North America, Europe, Asia)

Energy Source: The type of renewable energy being used by the household (e.g., Solar, Wind, Hydro)

Subsidy Received: Whether or not household received any government subsidies for renewable energy (Yes/No)

## Renewable Energy Source

Warning:

The data in this study is not sufficient to make decisions, as there are only 1000 entries.  
Remember: the purpose of this study is only a general analysis.

# Renewable Energy Source

Distribution of energy sources by continent

As the photo shows, The continent of Europe is most reliant on renewable energy with total usage of 173, while Asia is the least, with total usage of 163.

Energy Source per Region						
Energy_So..	Region					
	Europe	Australia	Africa	South America	North America	Asia
Biomass	35	33	30	36	32	27
Geothermal	33	30	30	28	28	31
Hydro	42	34	35	27	32	29
Solar	22	36	31	34	43	35
Wind	41	34	41	41	29	41
Grand Total	173	167	167	166	164	163

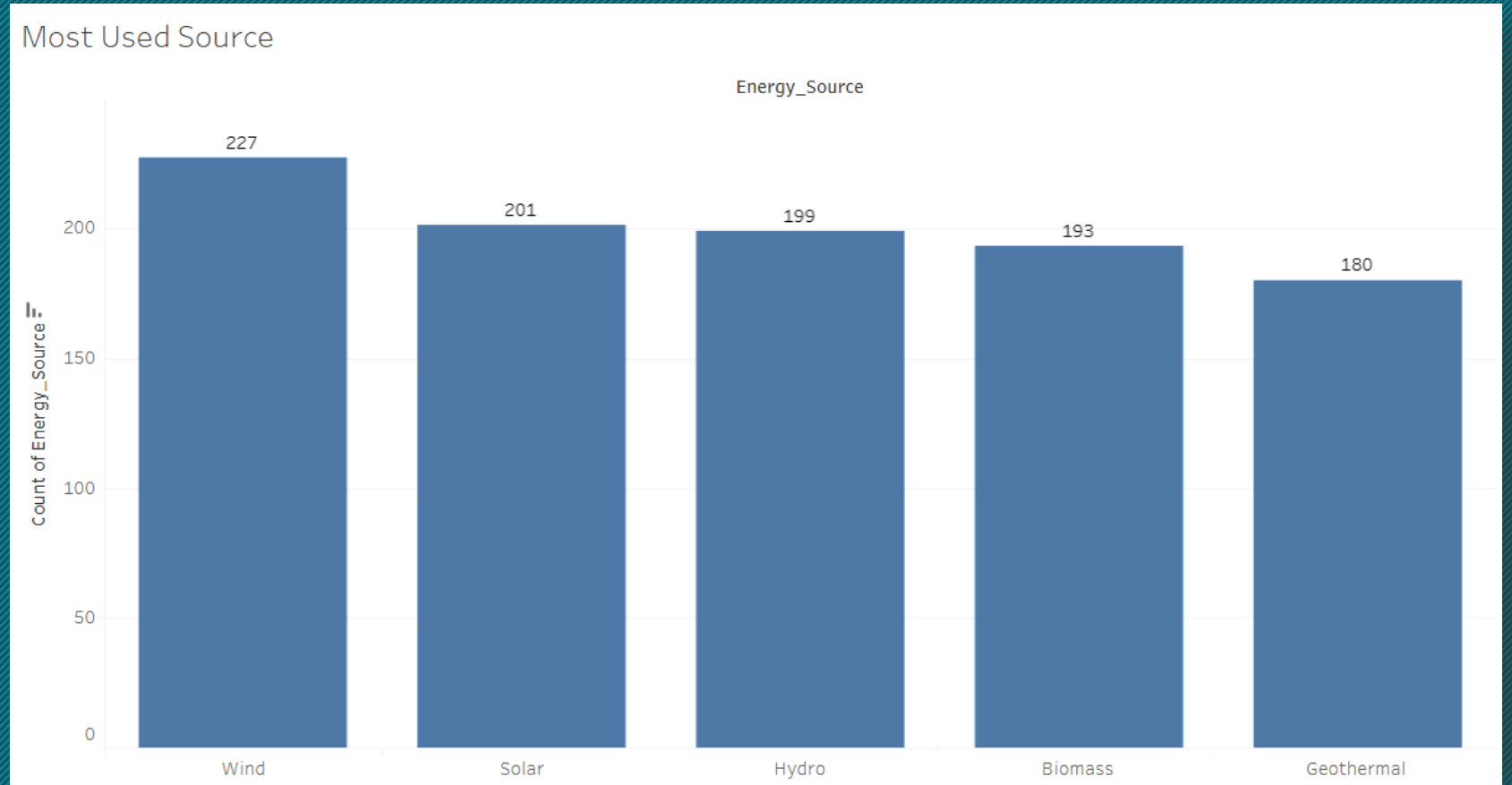
## Renewable Energy Source

So, What is the most used source of energy?

## Renewable Energy Source

What is the most used source of energy?

The wind source is the most popular among all sources, while geothermal is the least..



## Renewable Energy Source

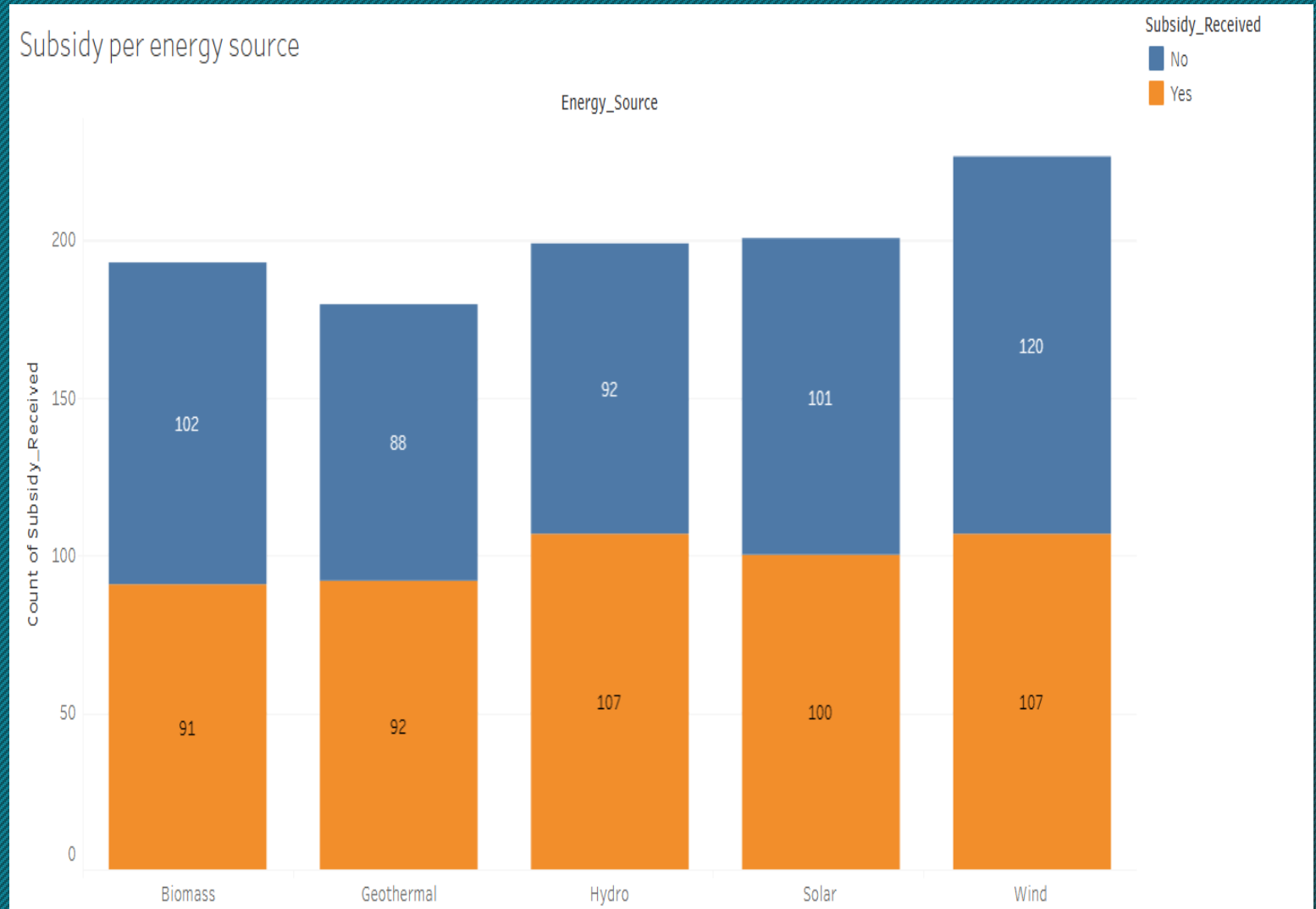
Does that happen because the government  
subsidizes



## Renewable Energy Source

Why Wind source is the most used one?

It is clear that this is not the reason, as those benefiting from government subsidies use wind source less than those who do not receive any support as this photo shows.



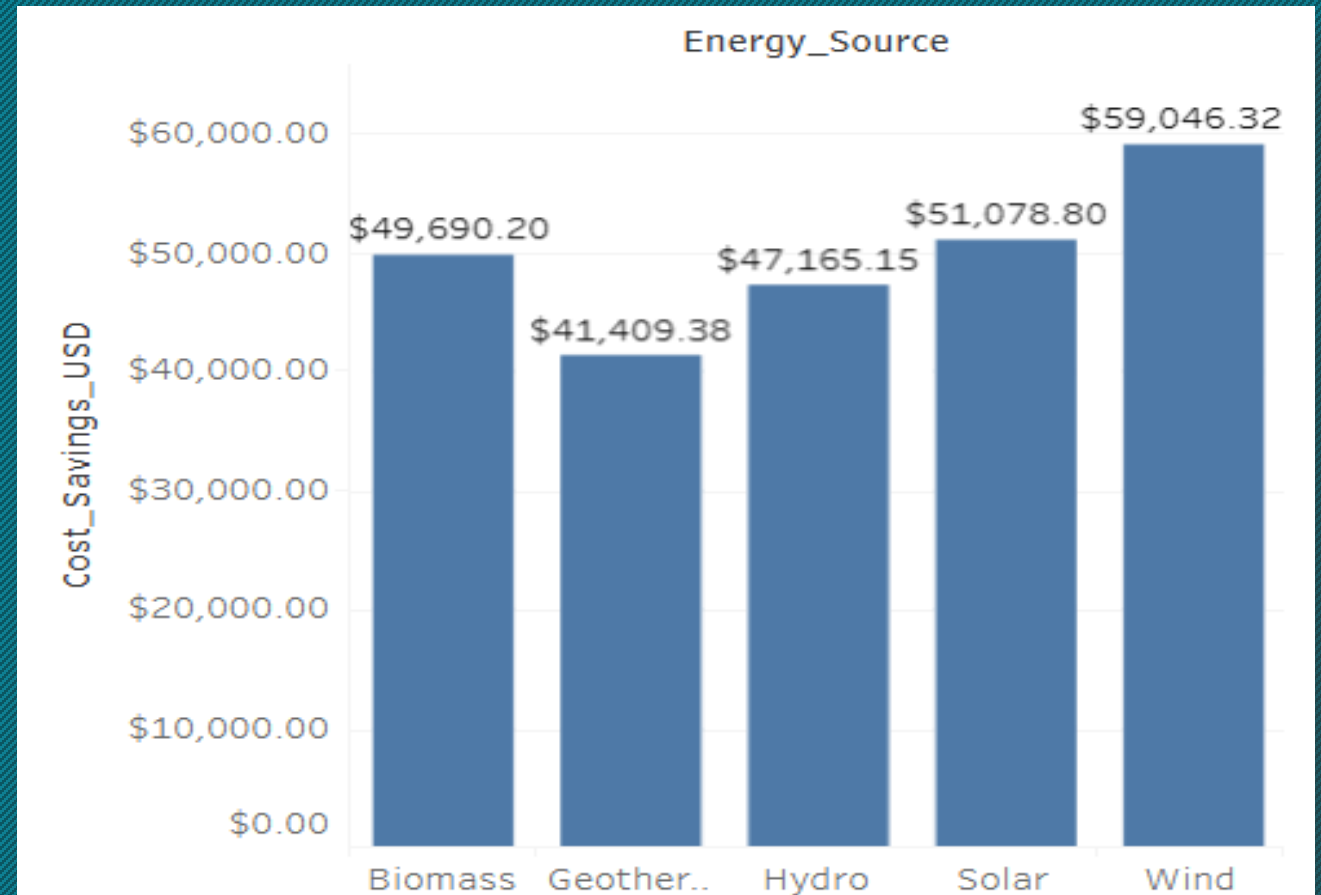
## Renewable Energy Source

Then, what is the reason behind that?

## Renewable Energy Source

Why Wind source is the most used one?

According to the image in front of us, wind saves money more than the others, around \$59,046, while geothermal saves \$41,409.



## Renewable Energy Source

Does that also apply to income levels?

## Renewable Energy Source

Does Wind source is the most used one through all income levels?

As the image shows, low and middle-income earners tend to use wind more than other sources, while high-income earners prefer biomass and hydro.

Energy Sources Per Income Level

Income_Lev..	Energy_Source				
	Biomass	Geothermal	Hydro	Solar	Wind
Low	61	51	68	61	71
Middle	62	65	66	70	95
High	70	64	65	70	61

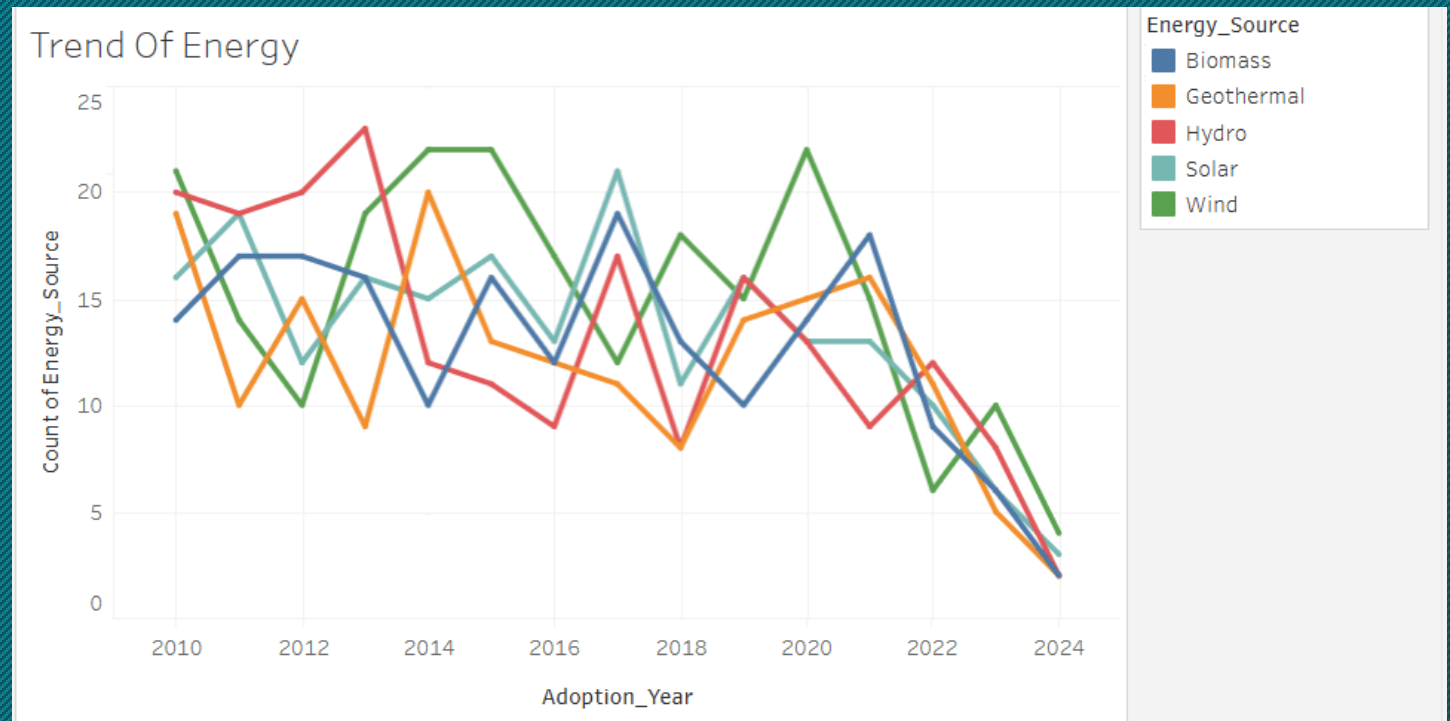
## Renewable Energy Source

Does this indicate a bright future for wind energy?

## Renewable Energy Source

Does this indicate a bright future for wind energy?

Unfortunately, it seems that the trend for all sources of energy is declining!!



## Renewable Energy Source

What about urban and rural?

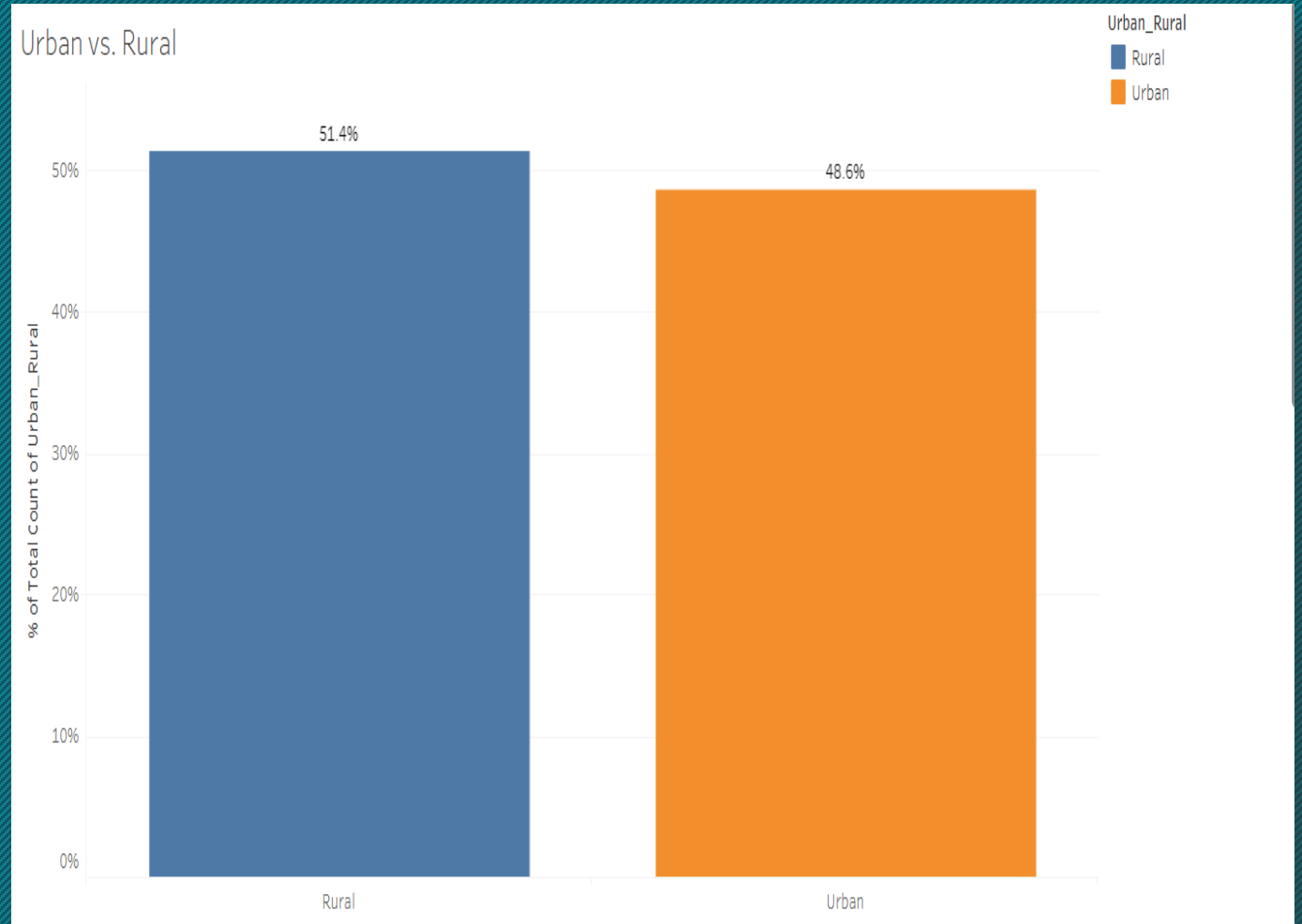


# Renewable Energy Source

## Urban vs. Rural

It seems that rural areas are more interested in renewable energy than urban areas.

This may be due to limited access to electricity and its cost in rural areas



# Recommendations

1. Focus on campaigns and advertisements, specifying the preferred type for the target audience.
2. Intensify efforts to promote renewable energy in rural areas.

## Renewable Energy Source

If you have any question or recommendation, please contact my through  
my [LinkedIn profile](#)



**Thank You**