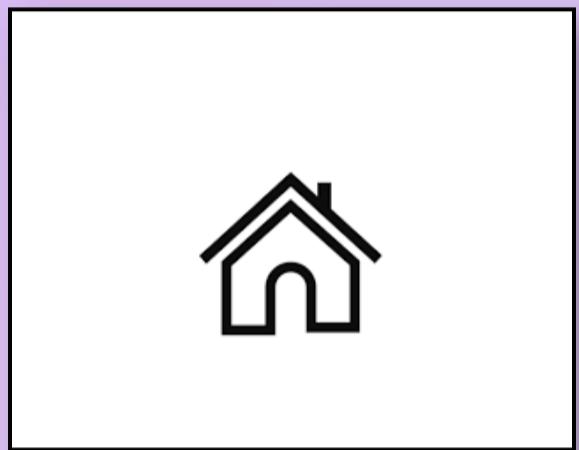


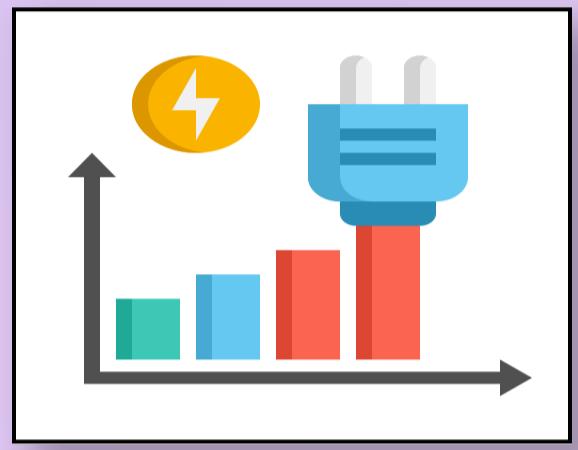


# Smart Utility Insights



## Home View

The **Home View** dashboard provides an overview of **Smart Utility Insights** including Energy Demand, AMI Anomaly Detection, and Billing Complaints. Helps monitor utility performance, detect anomalies, and resolve customer issues efficiently.



## Energy Consumption

This **Energy Consumption** dashboard provides insights into electricity, gas, and water usage. Track consumption trends by region and month for informed decision-making Energy Consumption.



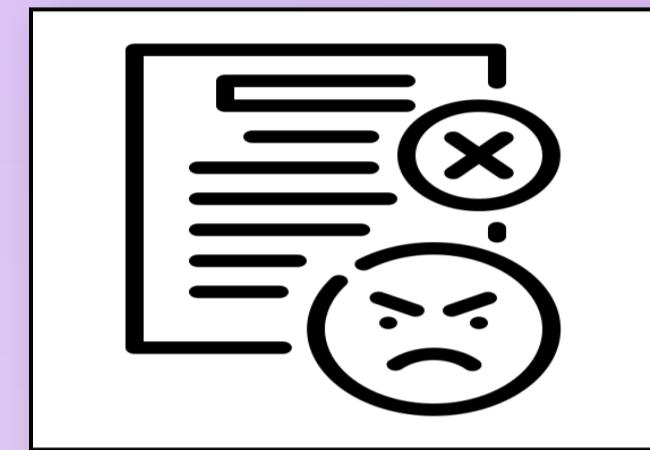
## Energy Demand Prediction

This **Energy Demand Prediction** dashboard provides insights into Predicts future electricity, gas, and water demand using historical trends. Helps optimize resource planning and load management across regions.



## AMI Anomaly Detection

This **AMI Anomaly Detection** dashboard provides insights into Identifies unusual consumption patterns using smart meter data. Helps detect energy theft, faulty meters, and irregular usage behavior.



## Billing Complaints

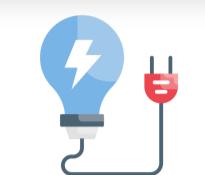
This **Billing Complaints** dashboard provides insights into Identifies unusual consumption patterns using smart meter data. Helps detect energy theft, faulty meters, and irregular usage behavior.



# Energy Consumption

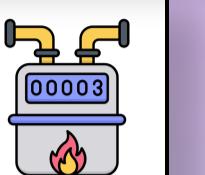


29.11K



Total\_Electricity\_Consumption

2.63K



Total\_Gas\_Consumption

5.37K



Total\_Water\_Consumption

Month

All

Region

All

Customer\_ID

All

12.17K!  
LM: 15.65K (-22.25%)

1.20K!  
LM: 1.28K (-6.45%)

2.44K!  
LM: 2.66K (-8.29%)

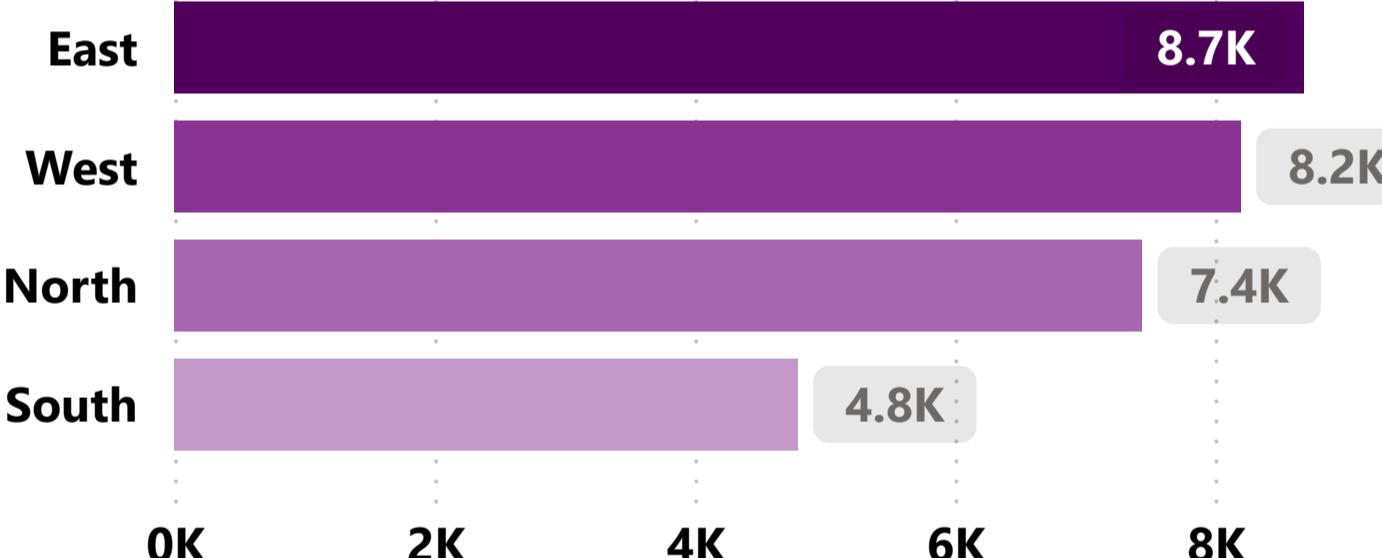
Water Consumption



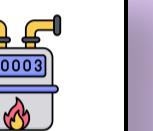
## Electricity Consumption



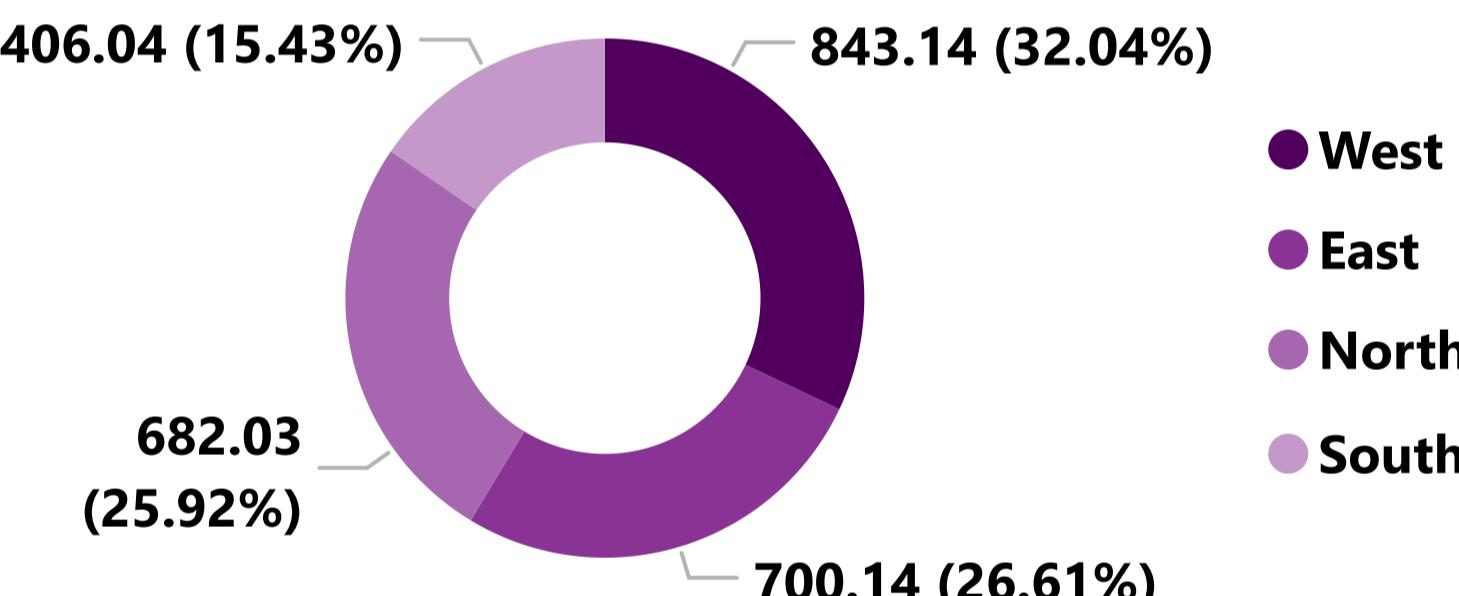
## Consumption by Region



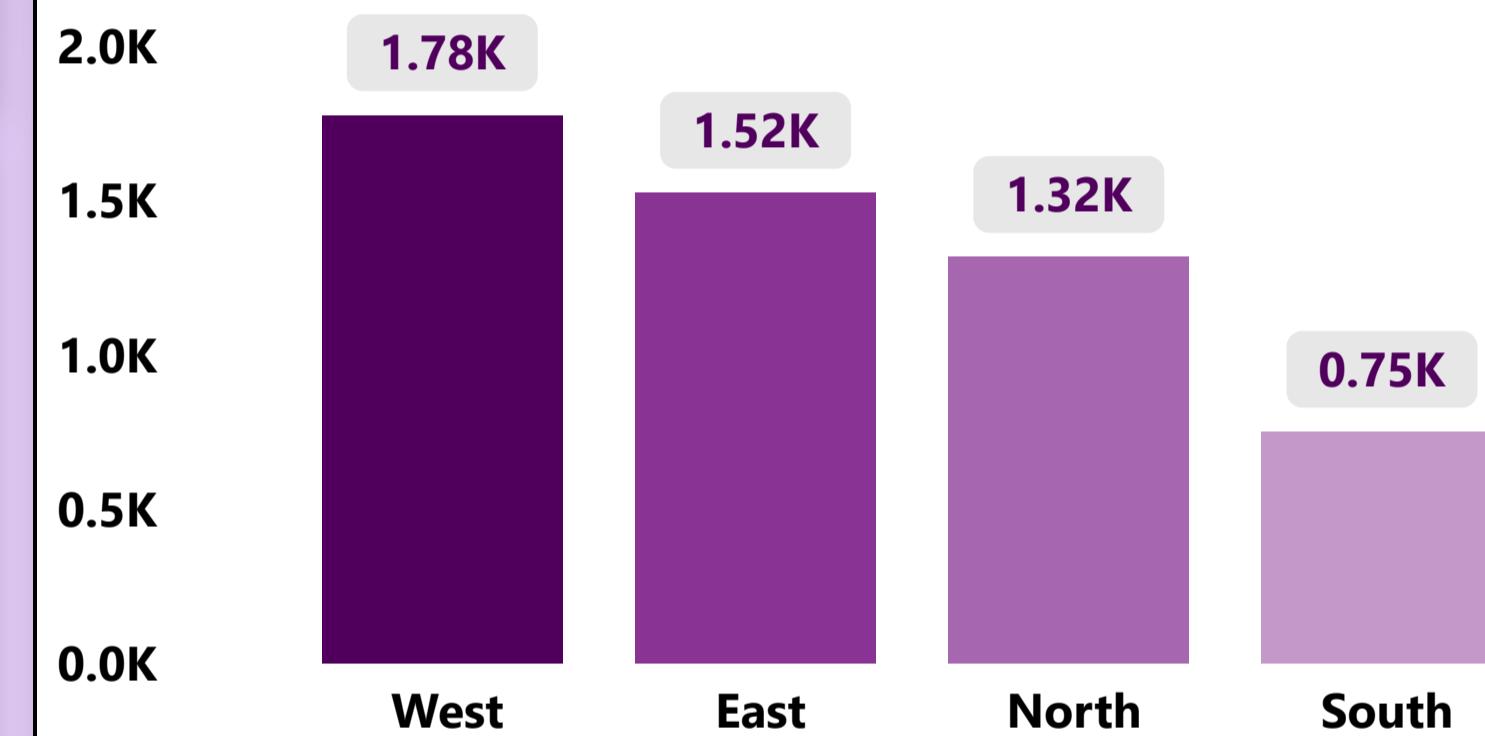
## Gas Consumption



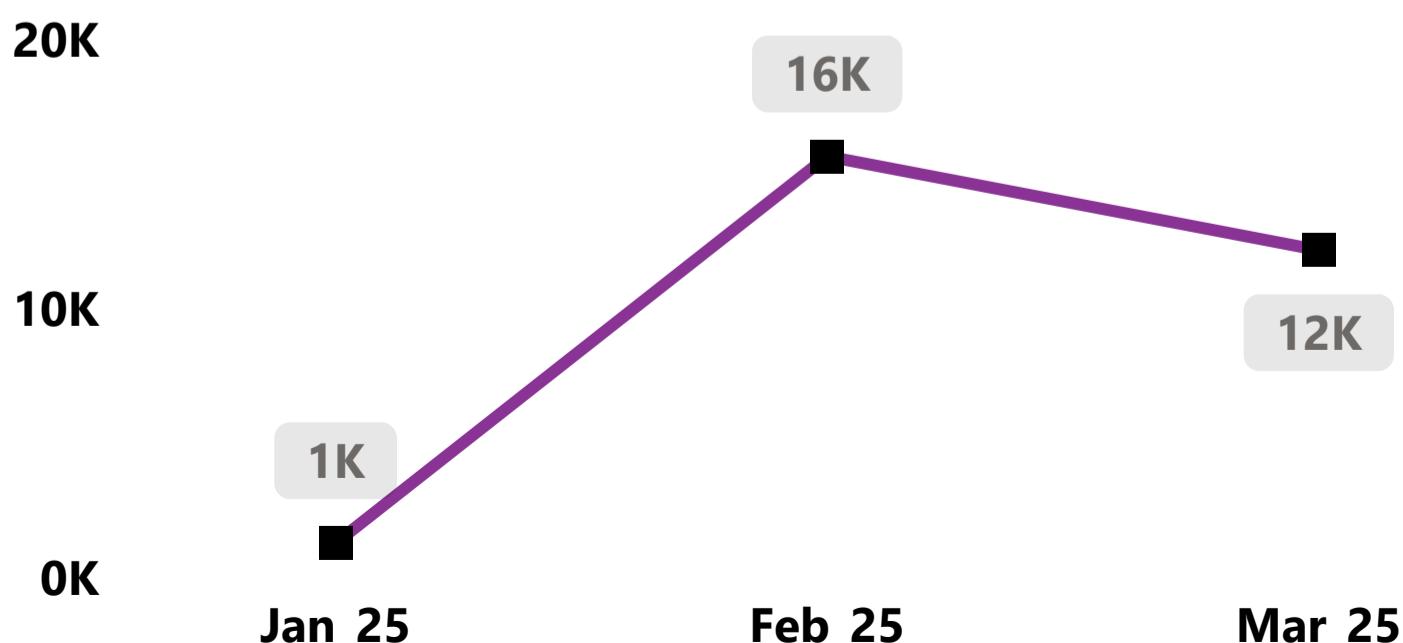
## Consumption by Region



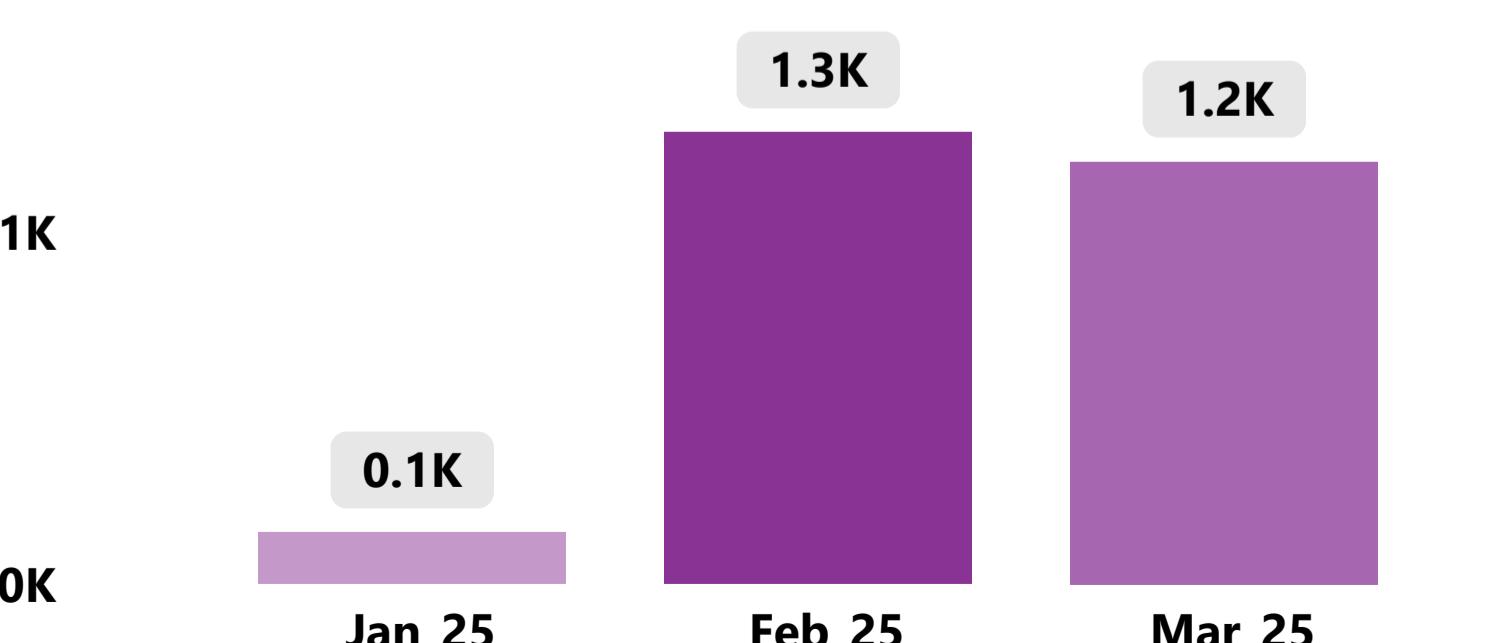
## Consumption by Region



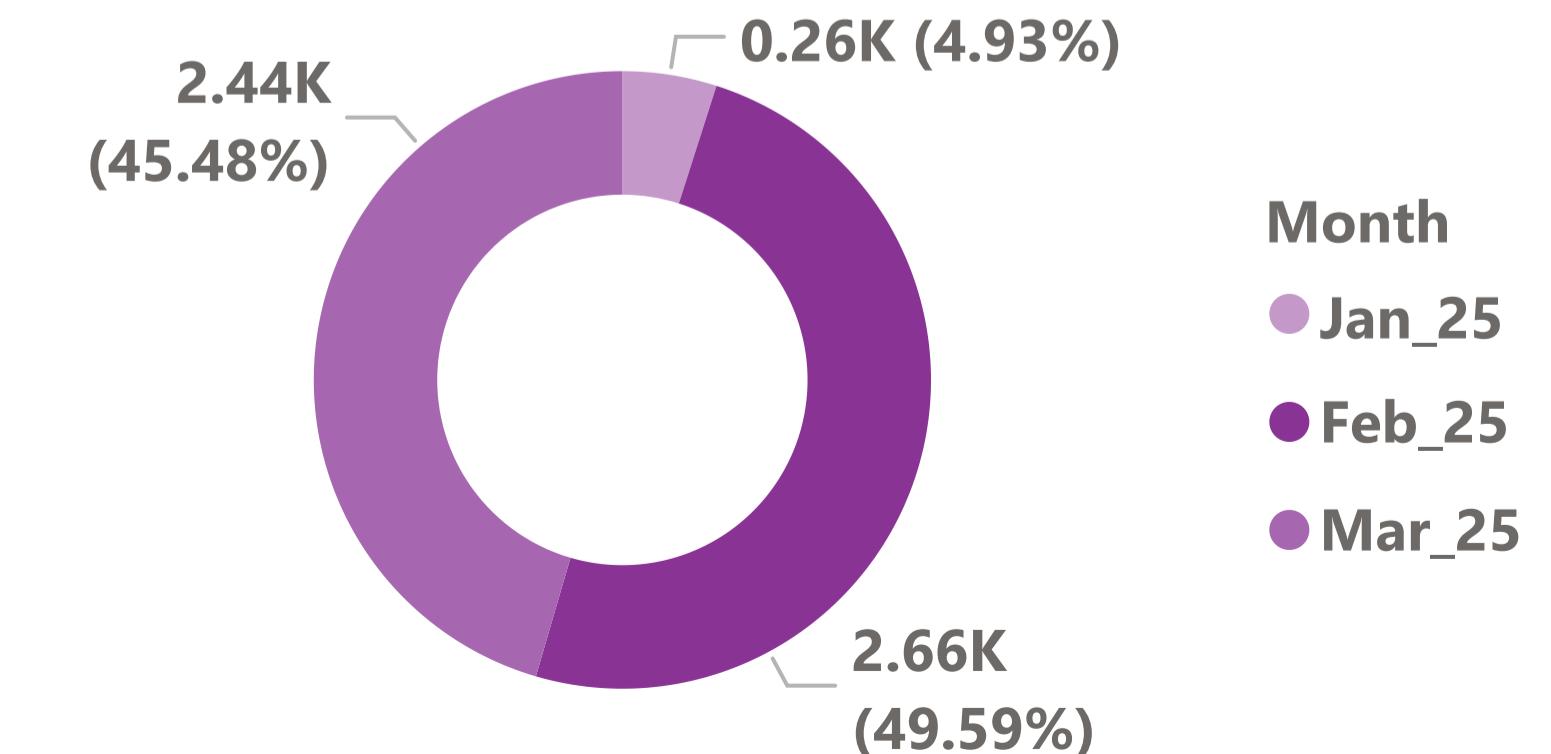
## Consumption by Month



## Consumption by Month



## Consumption by Month





# Energy Demand Prediction



**57.03K**  
Total Current Consumption

**58.00K**  
Total Past Consumption

**52.64K**  
Total Predicted Consumption

Month  
All

Region  
All

Customer\_ID  
All

**24.38K!**  
LM: 29.85K (-18.33%)

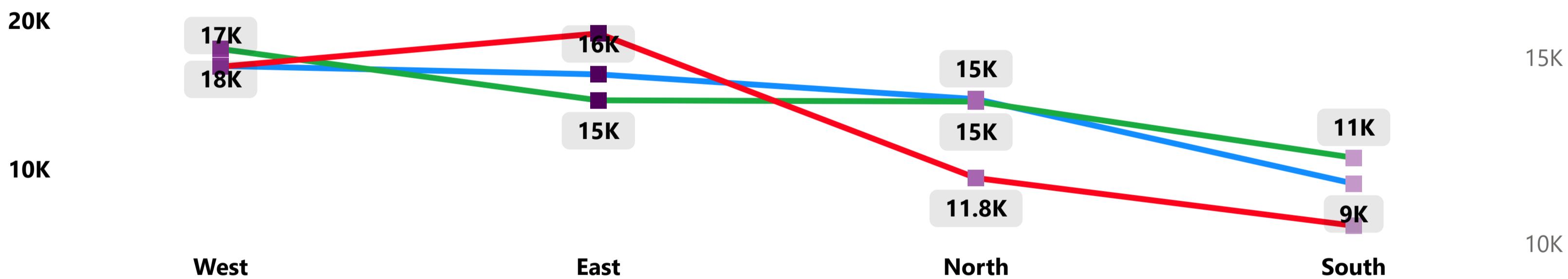
**22.46K!**  
LM: 32.38K (-30.62%)

**23.49K!**  
LM: 25.53K (-8%)

Predicted Consumption

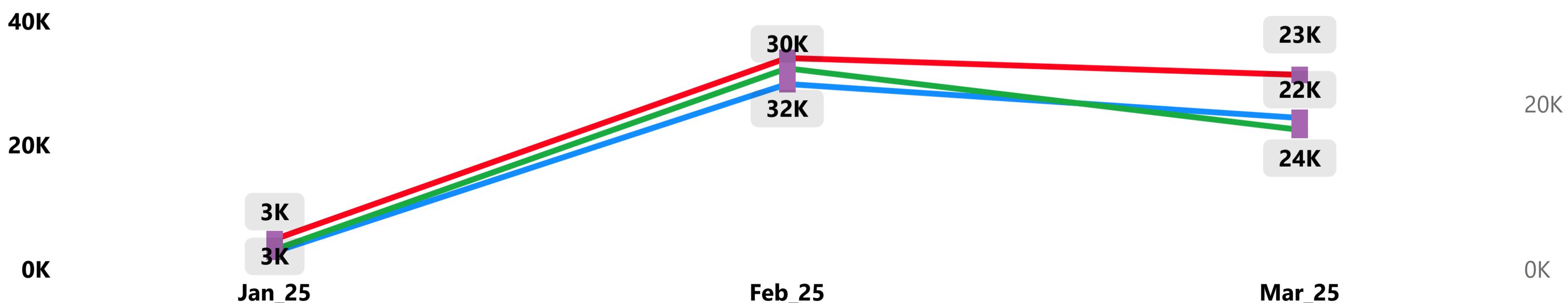
## Consumption by Region

● Current\_Consumption ● Past\_Consumption ● Predicted\_Consumption



## Consumption by Month

■ Current\_Consumption ■ Past\_Consumption ■ Predicted\_Consumption



## PRCBR

East

**52638.75**  
Total\_Predicted\_Consumption

North

**52638.75**  
Total\_Predicted\_Consumption

South

**52638.75**  
Total\_Predicted\_Consumption

West

**52638.75**  
Total\_Predicted\_Consumption

## PRCBM



**3.61K**  
Jan\_Predicted\_Cons

**25.53K**  
Feb\_Predicted\_Cons

**23.49K**  
Mar\_Predicted\_Cons

CCBR = Current Consumption by Region,

PCBM = Past Consumption by Month,

PRCBR = Predict Consumption by Region,

PRCBM = Predict Consumption by Month



# AMI Anomaly Detection



26.06K   
Total\_Consumption

11.13K!  
LM: 13.49K  
(-17.44%)

52.64K   
Total\_Predicted\_Consum...

23.49K!  
LM: 25.53K (-8%)

Anomaly\_Type  
All

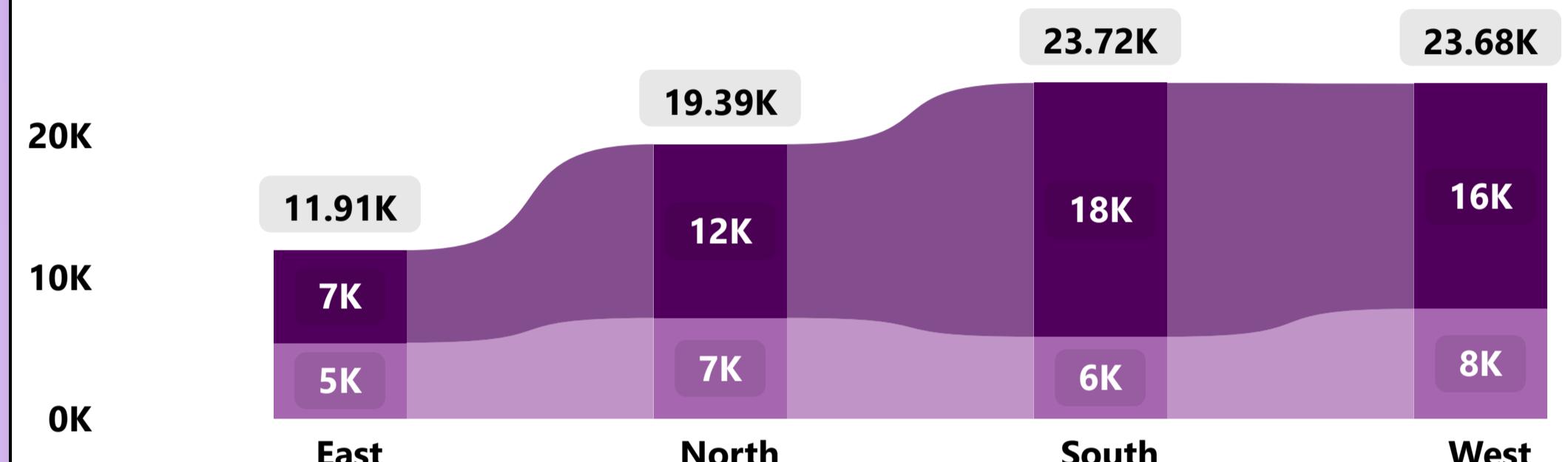
Month  
All

Region  
All

Customer\_ID  
All

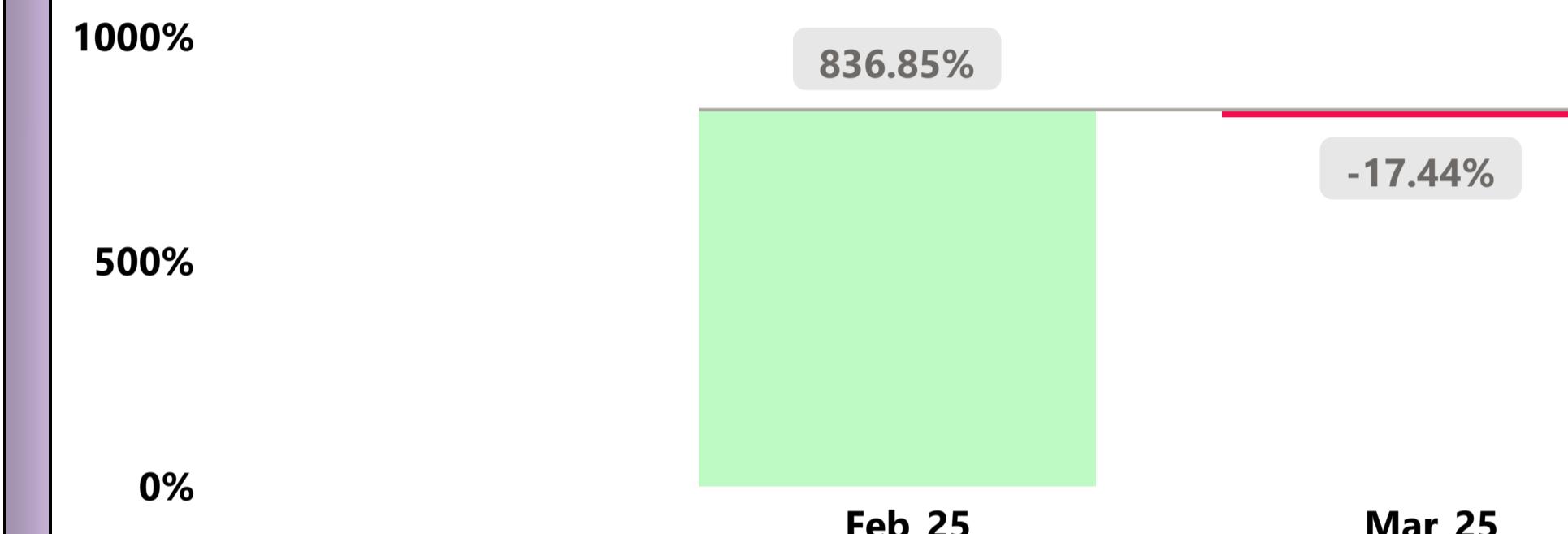
## Consumption by Region

● Total\_consumption ● Total\_Predicted\_Consumption



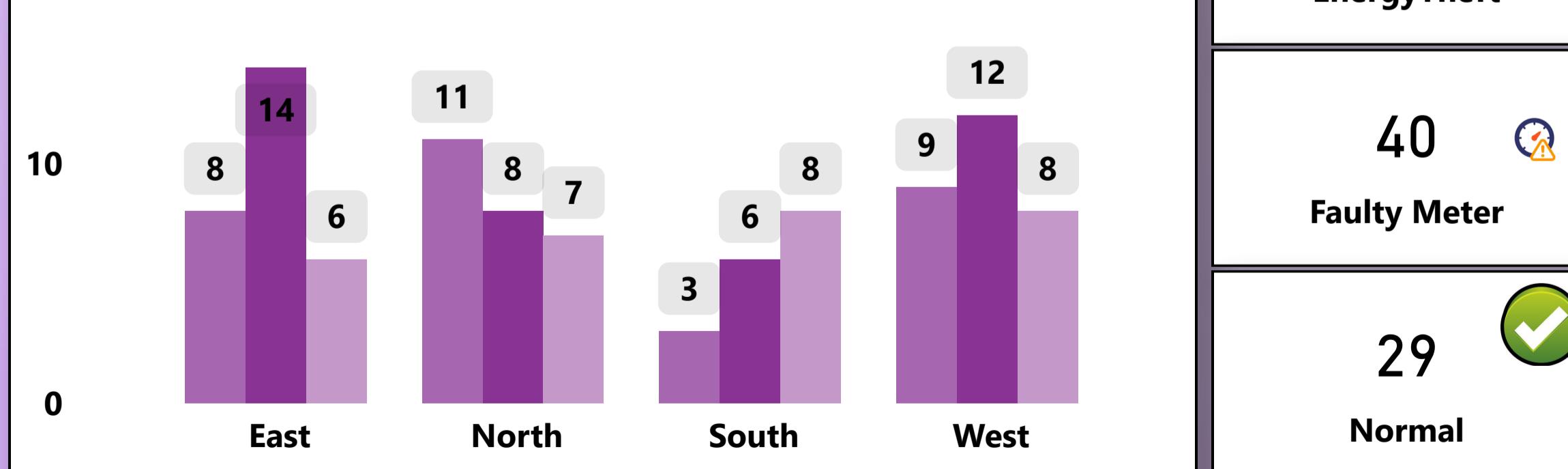
## Month\_Over\_Month\_Consumption\_Chg%

● Increase ● Decrease



## Region wise Anomaly Detection

● EnergyTheft ● Faulty Meter ● Normal



## Customer Statistics

Meter_ID	Customer_ID	Total_Consumption	Total_Predicted_Consumption	Anomaly_Flag
METER1104	CUST063	235.58	429.34	1
METER1111	CUST006	167.35	807.77	1
METER1194	CUST067	57.53	558.21	1
METER1230	CUST002	381.48	511.40	1
METER1256	CUST080	482.66	255.86	1
METER1265	CUST056	167.35	145.54	0
<b>Total</b>		<b>26061.64</b>	<b>52638.75</b>	<b>1</b>

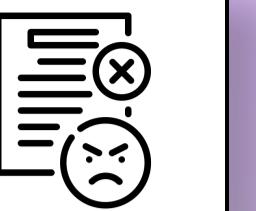
TC = Total Consumption,

LM = Last Month,

TPC = Total Predicted Consumption



# Billing Complaints Data



273.42K

**117.25K!**  
LM: 139.34K  
(-15.85%)

CR

All

CT

All

CS

All

PS

All

Month

All

Region

All

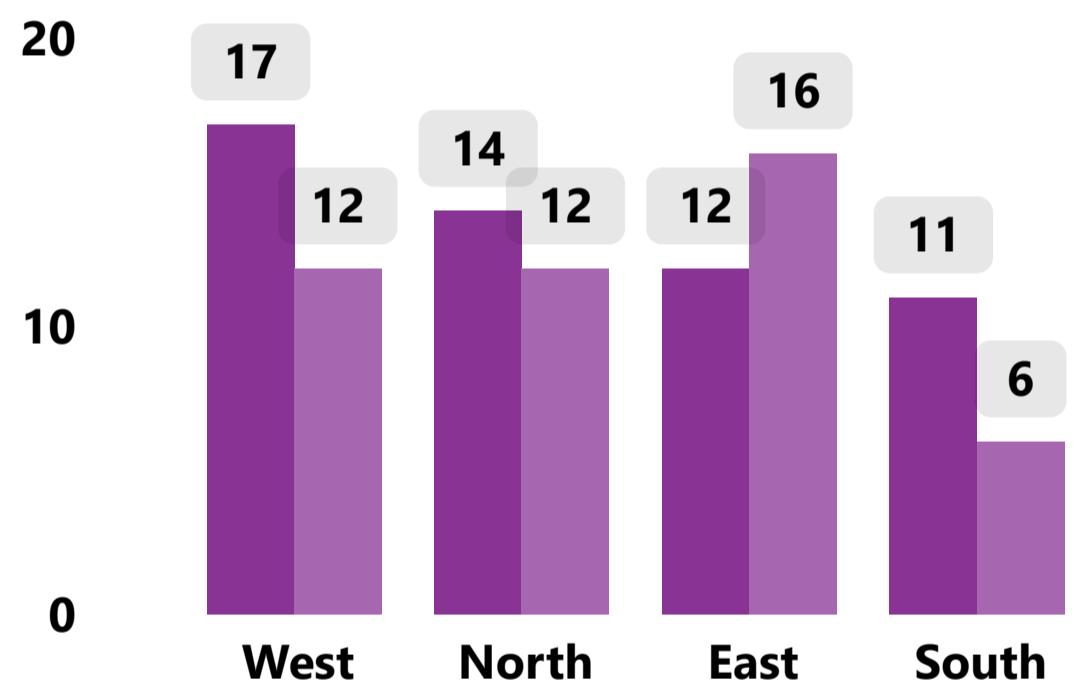
Customer\_ID

All

## Complaint Registered



### Complaint\_Registered by Region

● CR\_Yes   ● CR\_No


### CR\_Yes

54

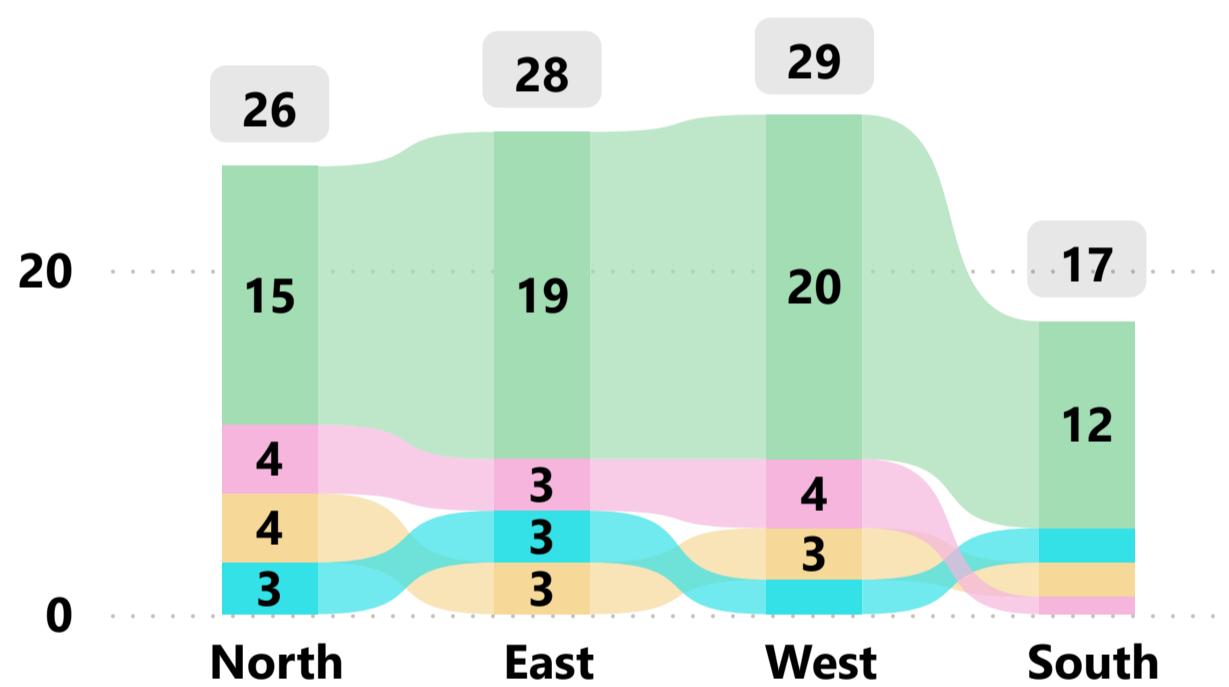
### CR\_No

46

## Complaint Type



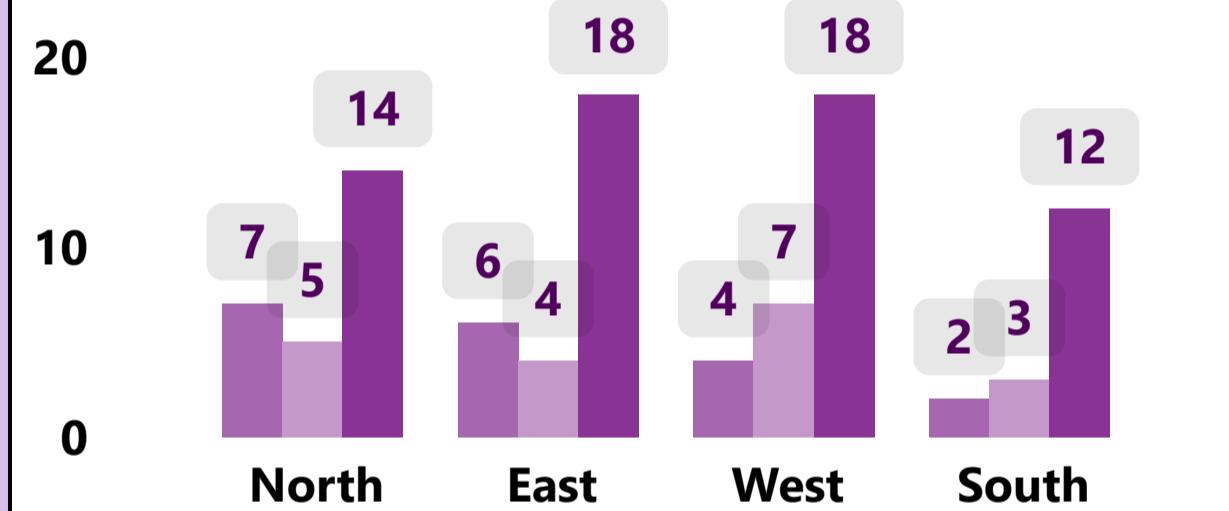
### Complaint\_Type by Region

● Billing Issue   ● Meter Fault   ● NA   ● Power Outage


## Complaint Status



### Complaint\_Status by Region

● Resolved   ● Pending   ● NA


### Resolved

19

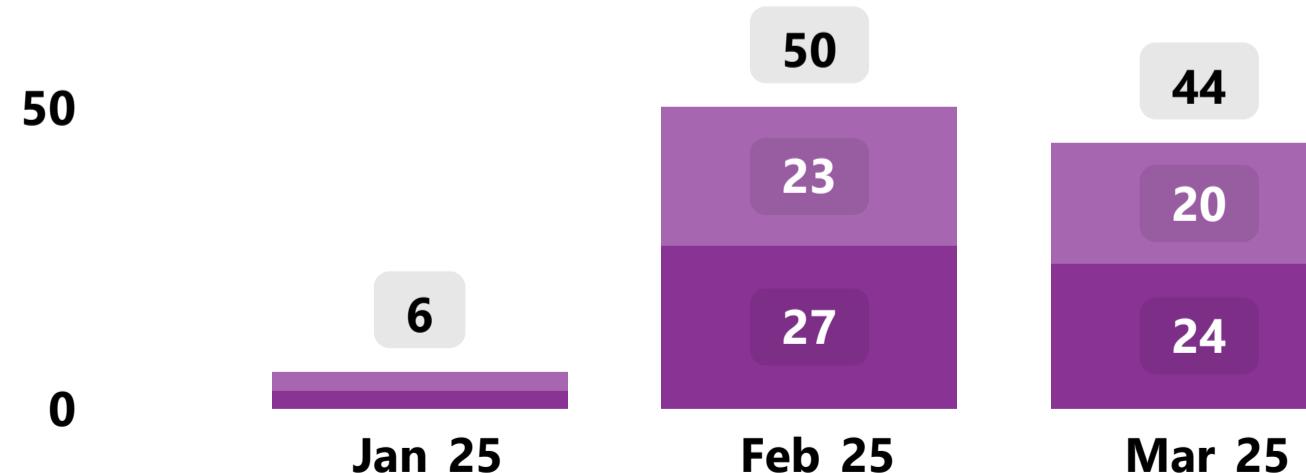
### Pending

19

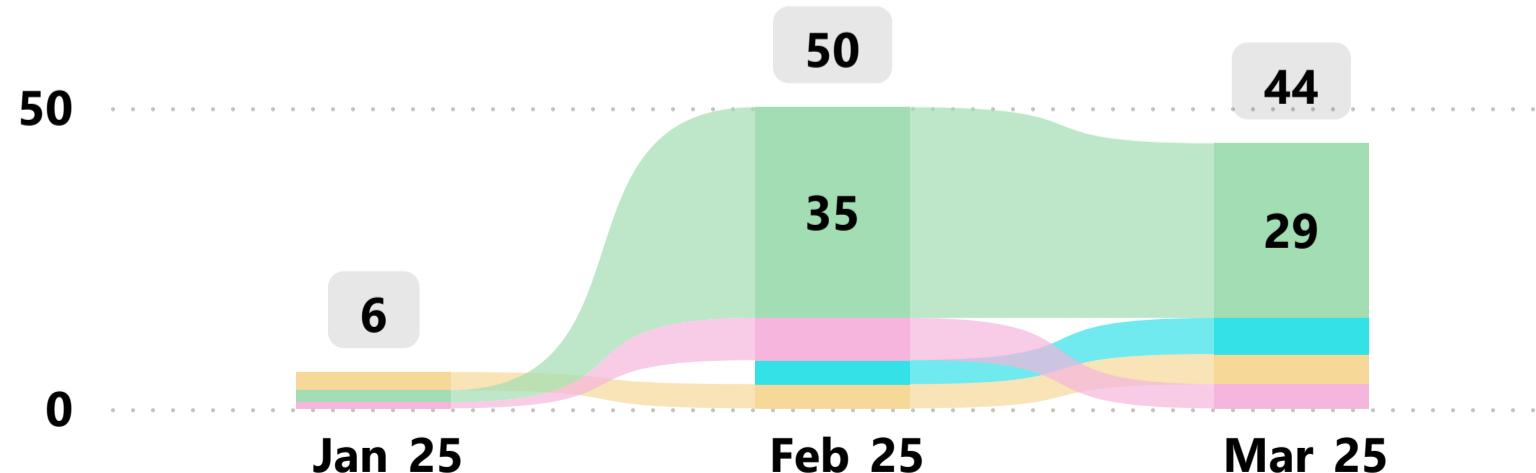
### NA

62

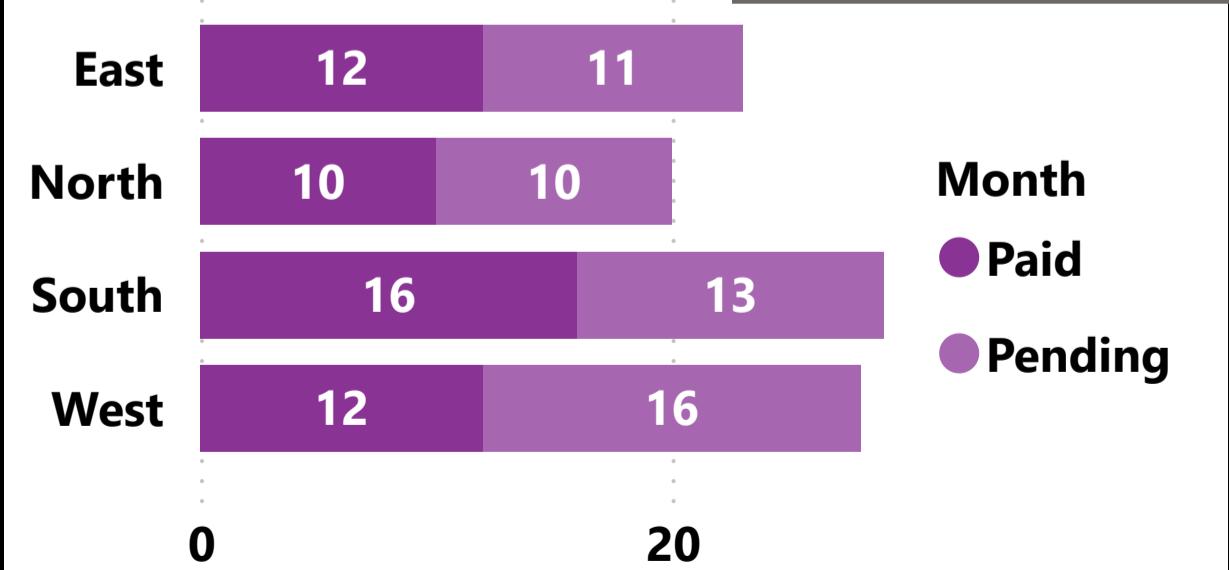
### Complaint\_Registered by Month

● CR\_Yes   ● CR\_No


### Complaint\_Type by Month

● Billing Issue   ● Meter Fault   ● NA   ● Power Outage


### Payment\_Status by Region

● Region   ● Month


### Paid

50

### Pending

50

LM = Last Month,

CR - Complaint Registered,

CT = Complaint Type,

CS = Complaint Status,

PS = Payment Status