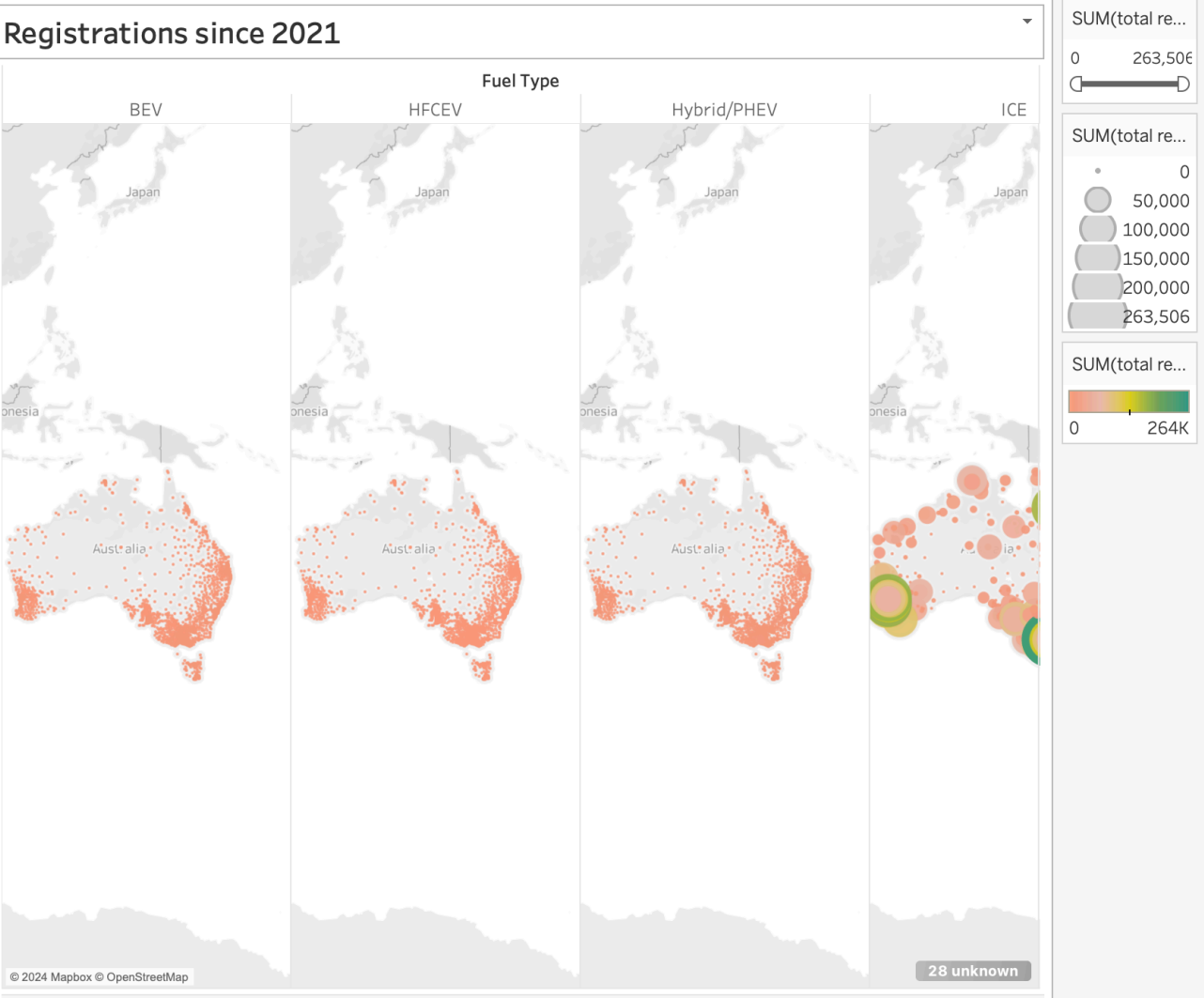# Tableau visualisations documentation

The purpose of this documentation is to present a series of Tableau visualisations that analyse the trends and adoption rates of electric vehicles (EVs) in Australia. The visualisations cover various aspects such as car registrations, sales trends, market shares, and EV stock values, providing valuable insights into the evolving landscape of EV adoption in the country.
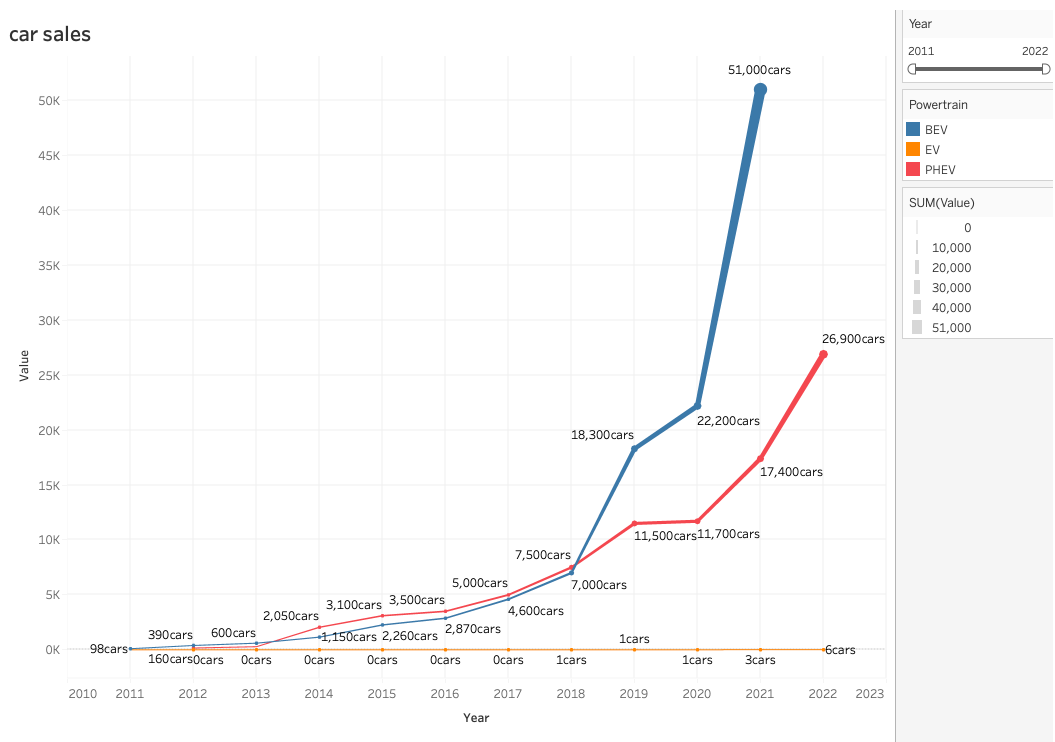
Overview of Visualisations:

- Australia Maps - Cars Registered by Fuel Type since 2021:

Description: This visualisation presents four maps of Australia, each showcasing the number of cars registered by fuel type - Battery Electric Vehicles (BEV), Hydrogen Fuel Cell Electric Vehicles (HCEV), Hybrid, and Internal Combustion Engine (ICE) vehicles since 2021. The maps provide a geographical understanding of the distribution of different fuel types across the country.

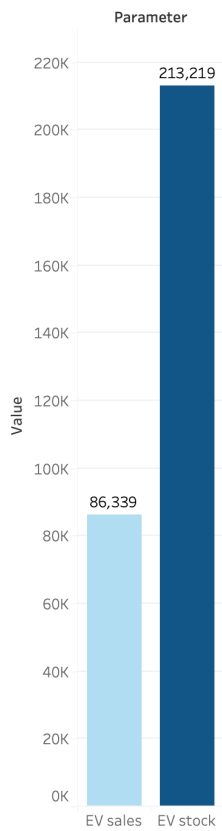**-Car Sales since 2012 by Fuel Type (Line Chart):**

Description: The line chart illustrates car sales trends since 2012 categorized by fuel type - BEV, HCEV, Hybrid, and ICE vehicles. This visualization helps in identifying the growth or decline patterns of each fuel type over the years, offering insights into consumer preferences and market dynamics.

- EV Share Values and EV Stock Value (Bar Chart):

Description: The bar chart compares EV share values and EV stock values, showcasing the market trends and the relative performance of electric vehicles in terms of market share and stock value. This visualization aids in understanding the market competitiveness and investment attractiveness of EVs.

EV sales and EV stock values
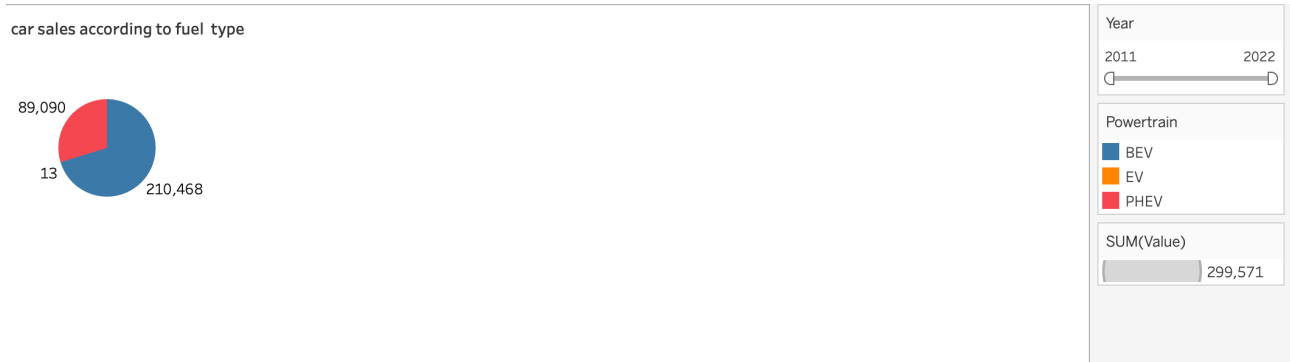
Parameter
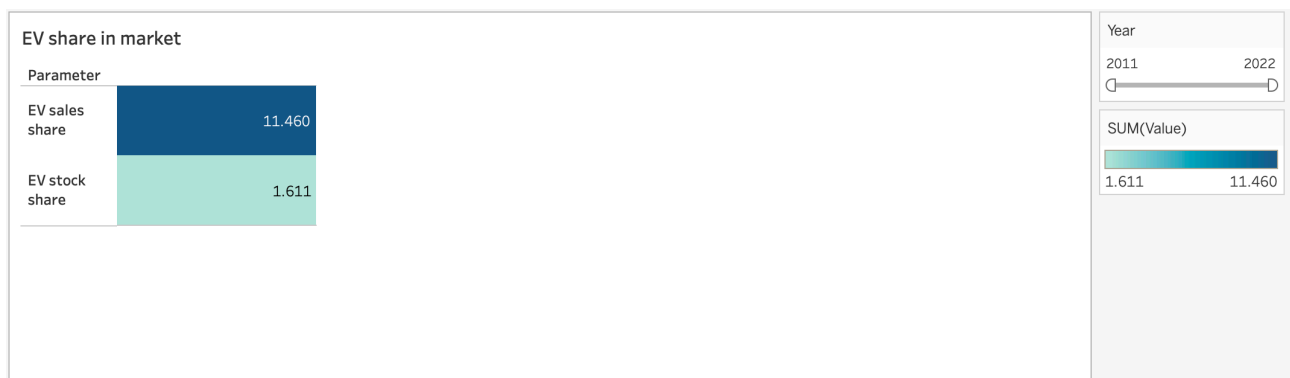

Year
2011 — 2022

SUM(Value)
86,339 — 213,219

Car Sales by Fuel Type (Pie Chart):

Description: The pie chart provides a clear breakdown of car sales by fuel type, highlighting the market share percentage or numerical distribution of BEV, HCEV, Hybrid, and ICE vehicles. This visualization offers a concise overview of the fuel type preferences among consumers.

car sales according to fuel type

89,090

13

210,468

Year
2011   2022

Powertrain
- BEV
- EV
- PHEV

SUM(Value)
299,571

EV Stock Share and EV Sales Share (Table):

Description: The table presents EV stock share and EV sales share, delineating the percentage or numerical representation of EVs in the overall market and sales. This tabular format allows for a detailed analysis of EV market penetration and sales performance.

EV share in market

Parameter	
EV sales share	11.460
EV stock share	1.611

Year
2011   2022
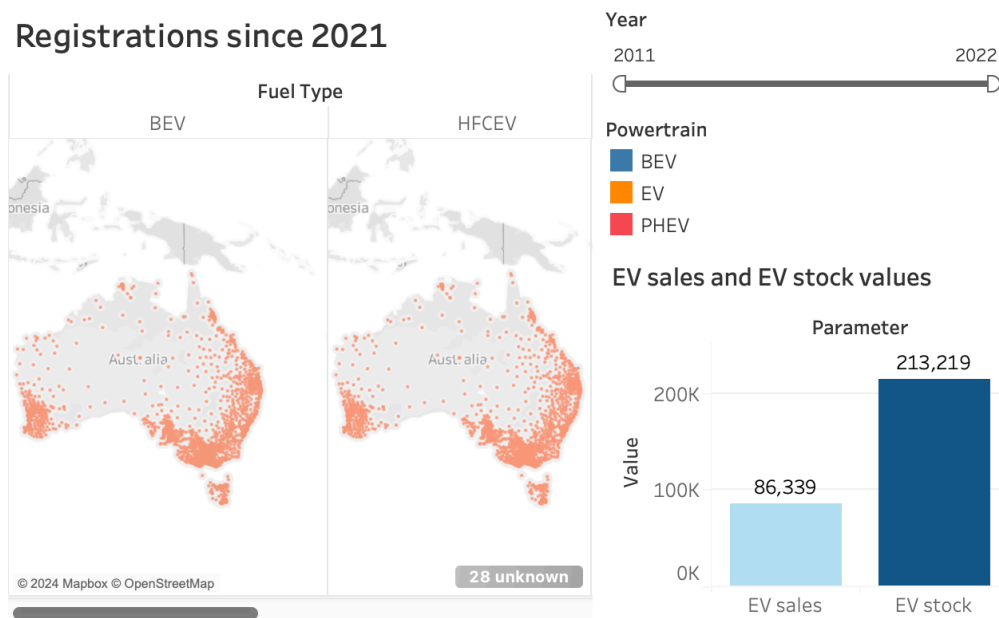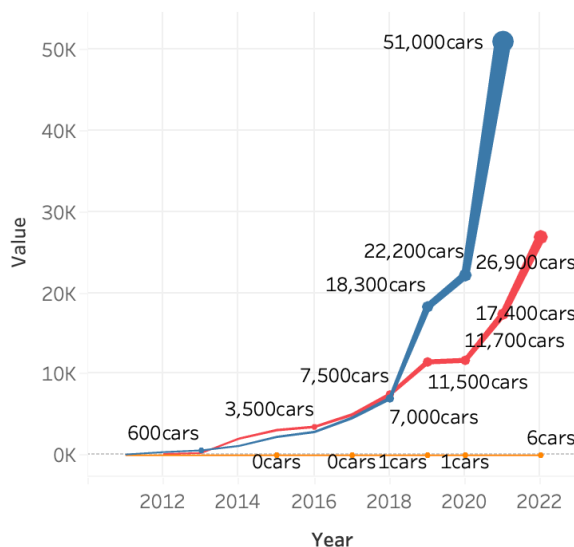
SUM(Value)
1.611   11.460

Conclusion

The visualisations presented offer a comprehensive view of the evolving landscape of electric vehicle (EV) adoption in Australia. Key insights derived from the data include:

- **Growth Trajectory:** The visualisations depict a noticeable growth trajectory in EV registrations and sales since 2021, indicating a positive trend towards increased adoption of electric vehicles across the country.
- **Shift in Market Shares:** Analysis of market shares by fuel type reveals a gradual shift towards electric and hybrid vehicles, with a corresponding decline in traditional internal combustion engine (ICE) vehicles. This shift underscores changing consumer preferences and the growing acceptance of EVs.
- **Regional Variances:** Geographical maps highlight regional variances in EV registrations, reflecting varying levels of adoption and infrastructure development across different parts of Australia. This information can guide targeted interventions and investment strategies.
- **Investment and Policy Implications:** The comparison of EV share values, stock values, and sales shares provides valuable insights for investors, policymakers, and industry stakeholders. It underscores the need for continued investment in EV technologies, infrastructure, and supportive policies to sustain the momentum of EV adoption.
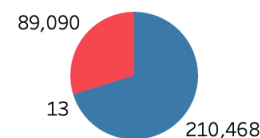
Registrations since 2021

EV sales and EV stock values

car sales

car sales according to fuel type

EV share in market