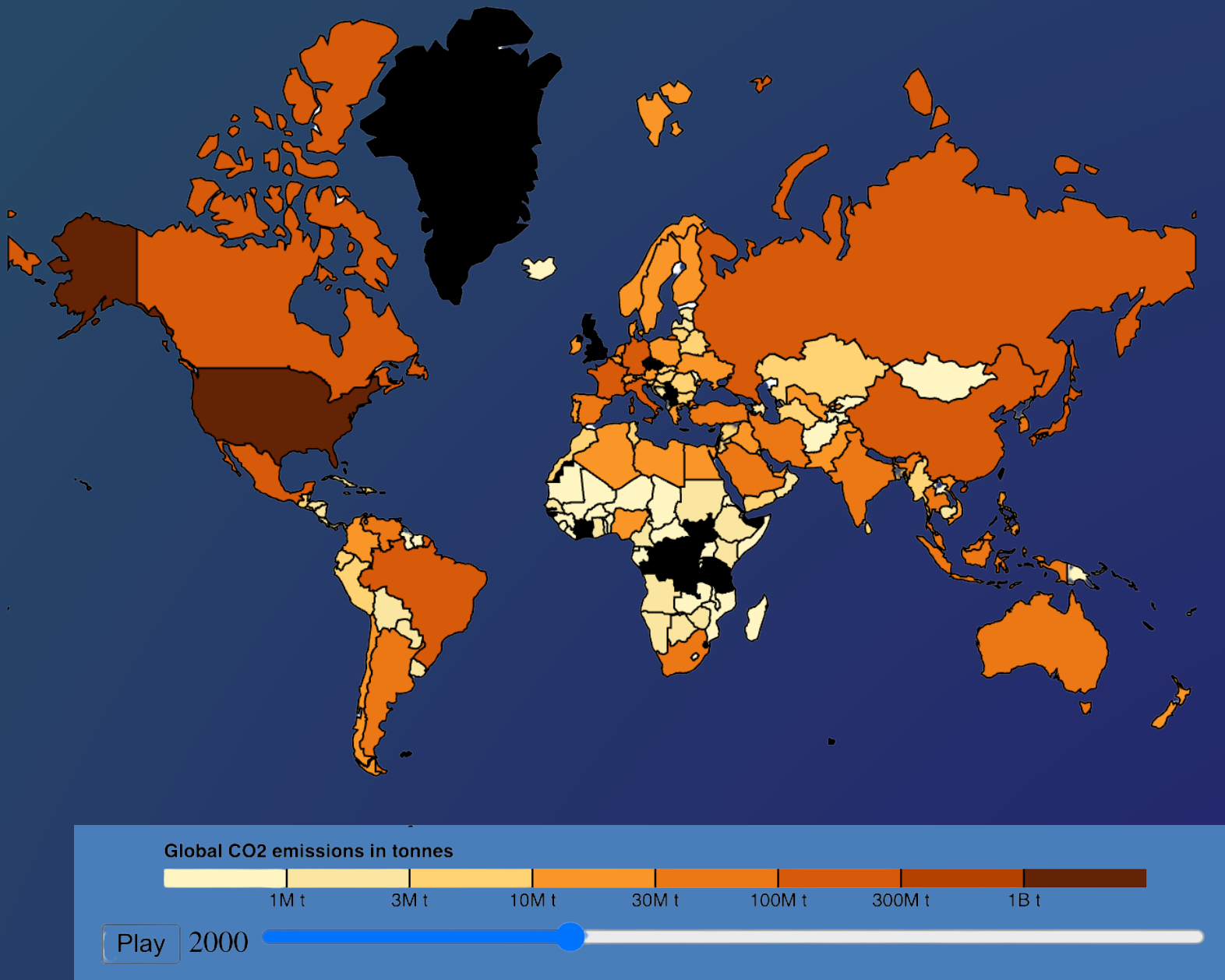


The Global EV-olution: Are We There Yet?

Introduction

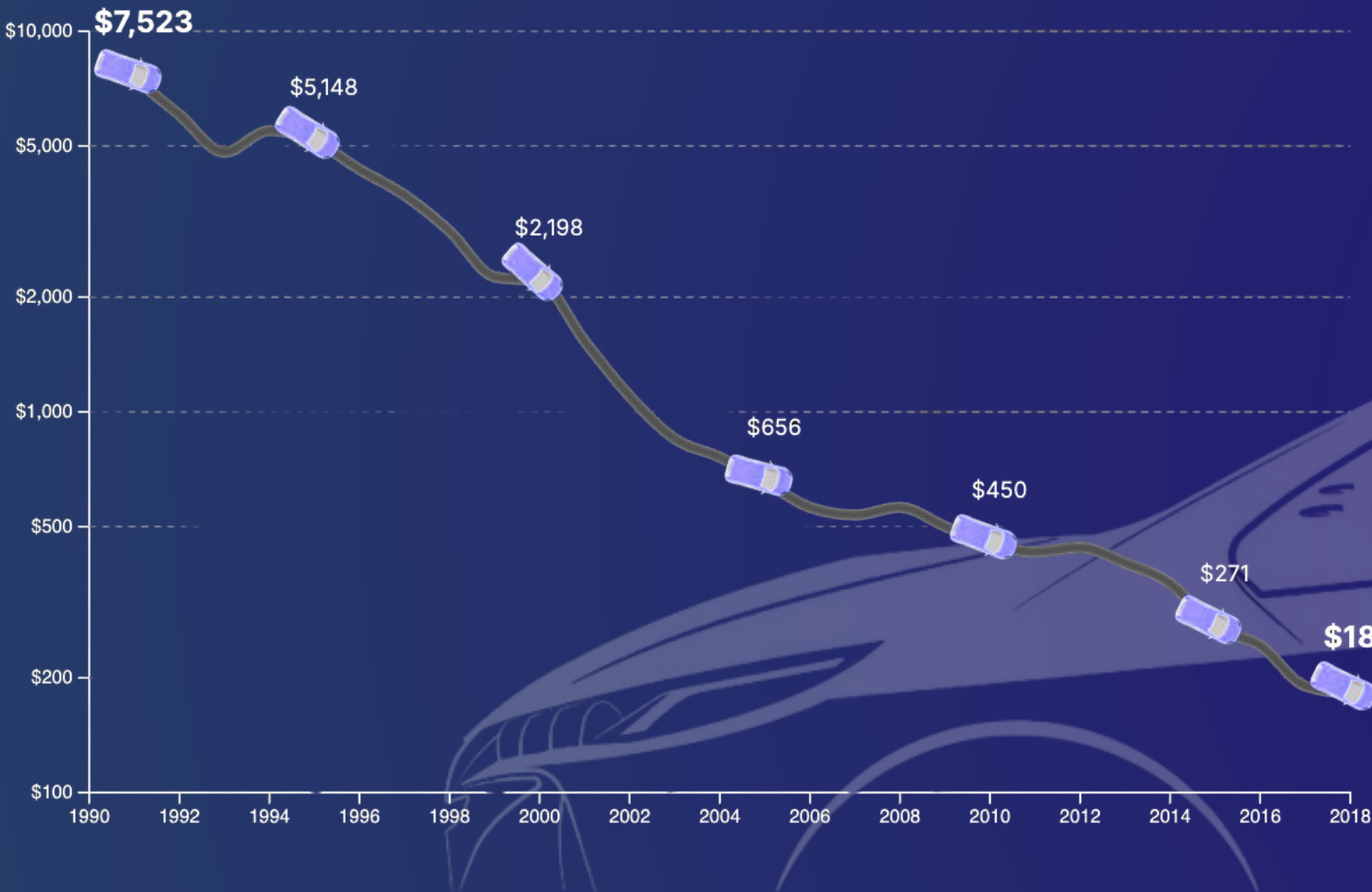
- Gasoline vehicles revolutionized the 20th century — but now threaten the 21st.
- Climate change, air pollution, and energy insecurity demand urgent action.
- Electric Vehicles (EVs) offer a path toward sustainable mobility and a cleaner future.

Global CO2 Emissions in Tonnes



Price of Lithium-ion Batteries Over the Years

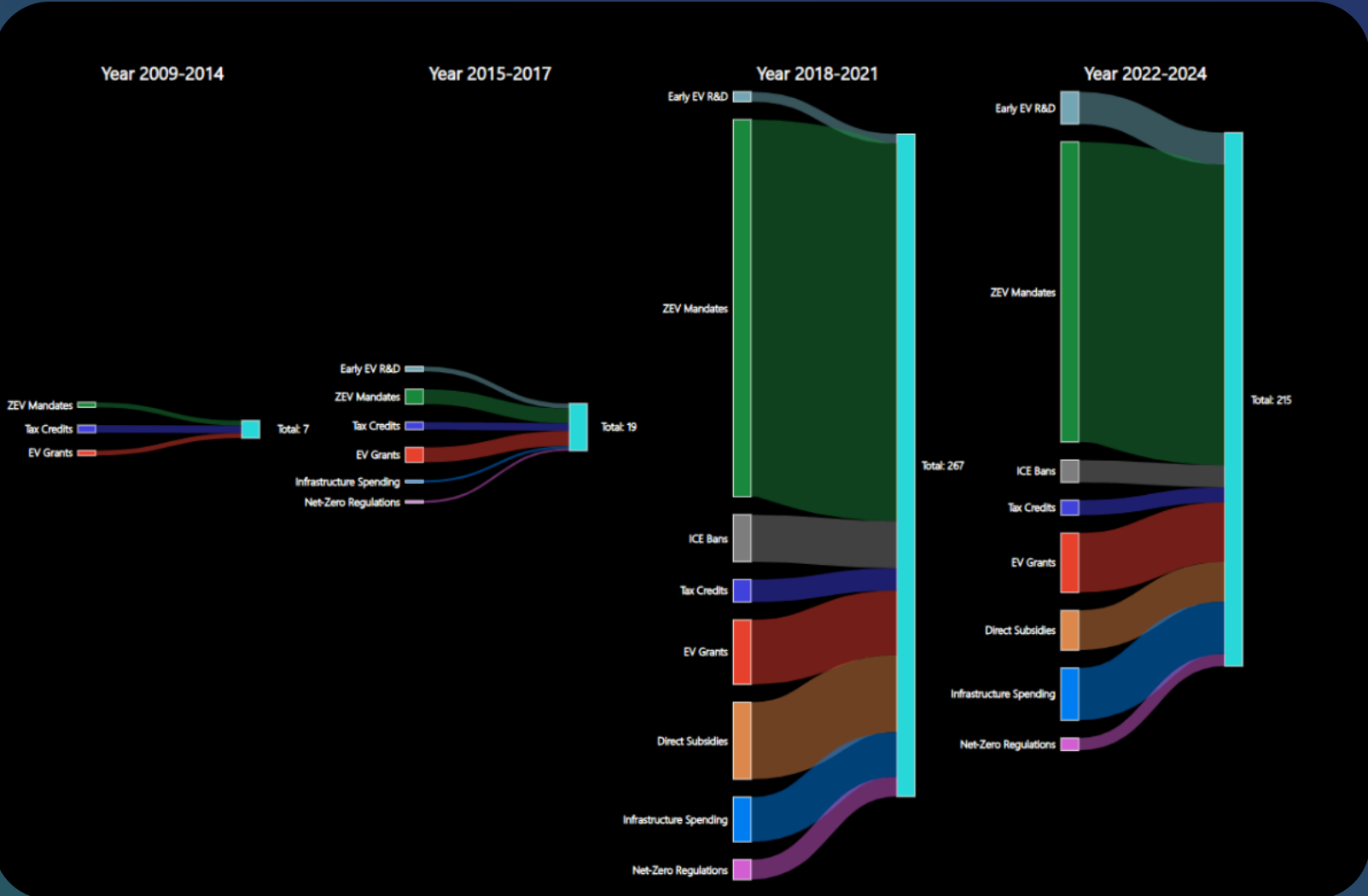
Price of lithium-ion battery cells per kWh (logarithmic axis)



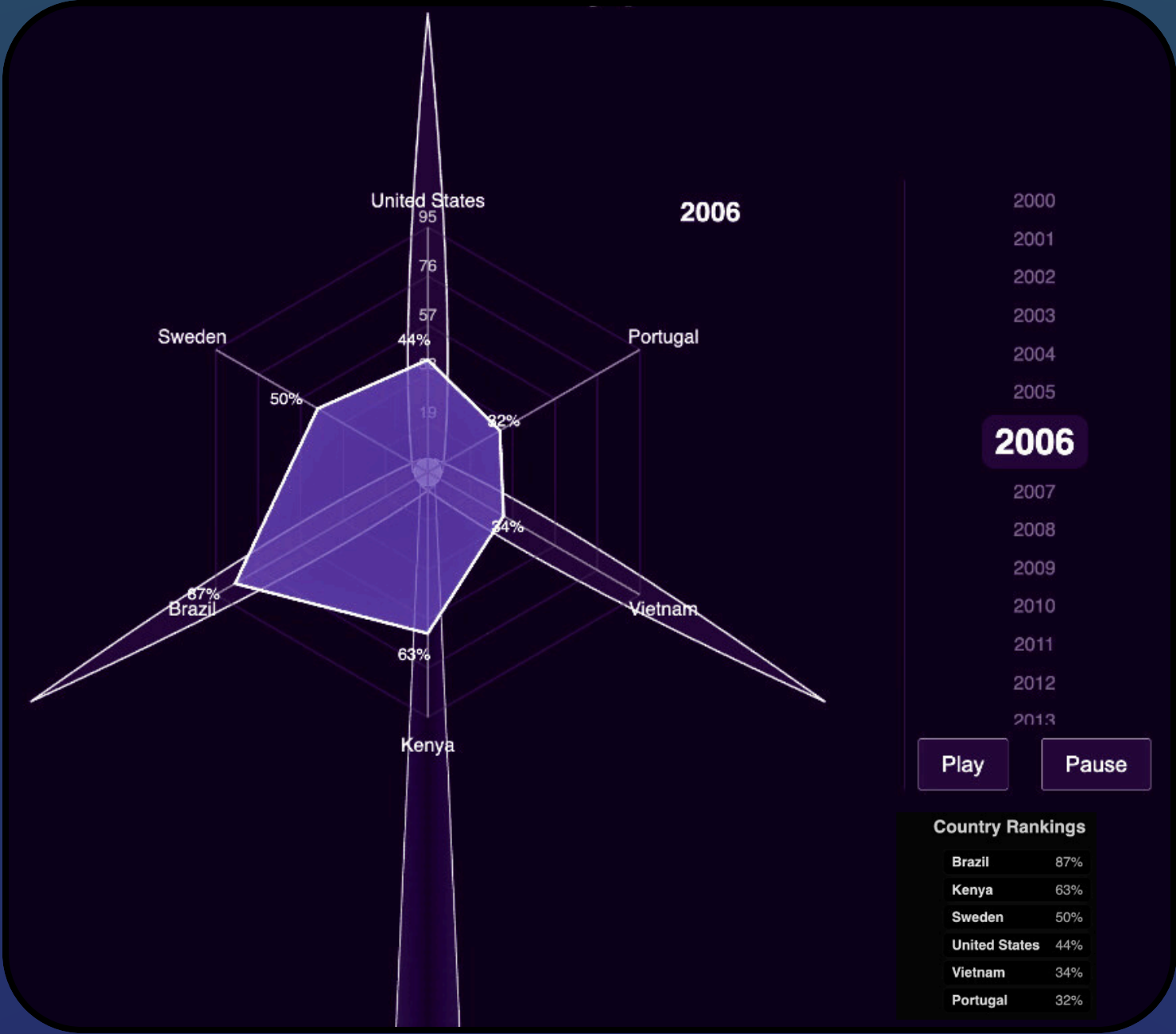
System Description

- We created an interactive scrollytelling data story: “The Global EV-olution: Are We There Yet?”
- The visualizations include: choropleths, line charts, funnel chart, stacked bar charts, bubble chart, step sankey, polar chart, radar chart, and a 3d globe.
- Upon scrolling the visualizations appear/disappear.

Flow of Significant EV Policies Over Time



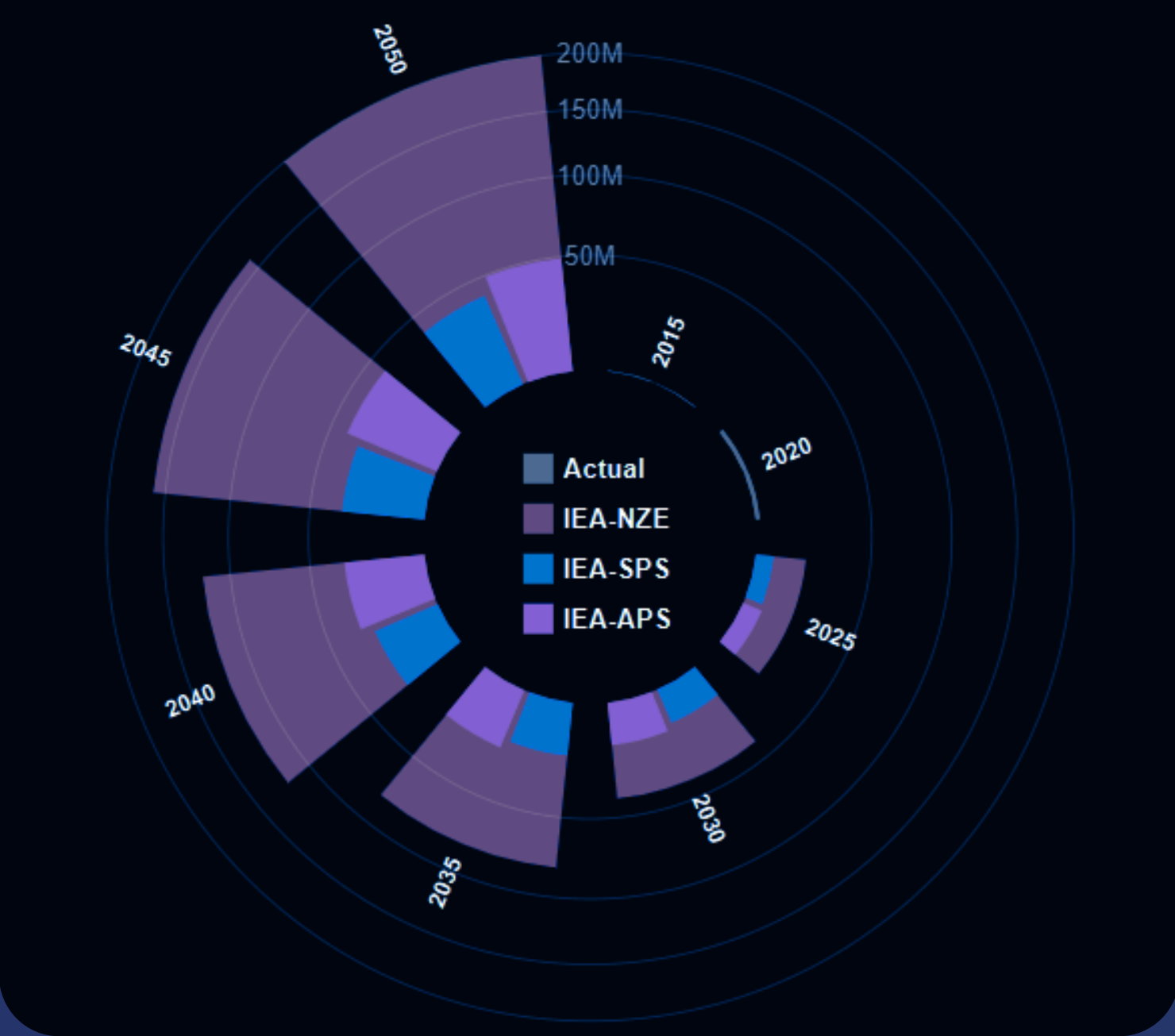
Share of Electricity Production from Renewables 1990-2023



Scrollytelling Experience

- As users scroll vertically, key sections fade in, highlighting each data story moment.
- Our Windmill Radar chart rotates with user scroll progressing to display the next year data over each rotation cycle.
- Users experience an immersive, data-driven journey — from historical trends to future projections.
- Users can interact with most charts, using tooltips, scroll and drag features.

Projected Growth of Charging Ports (Slow and Fast Units)



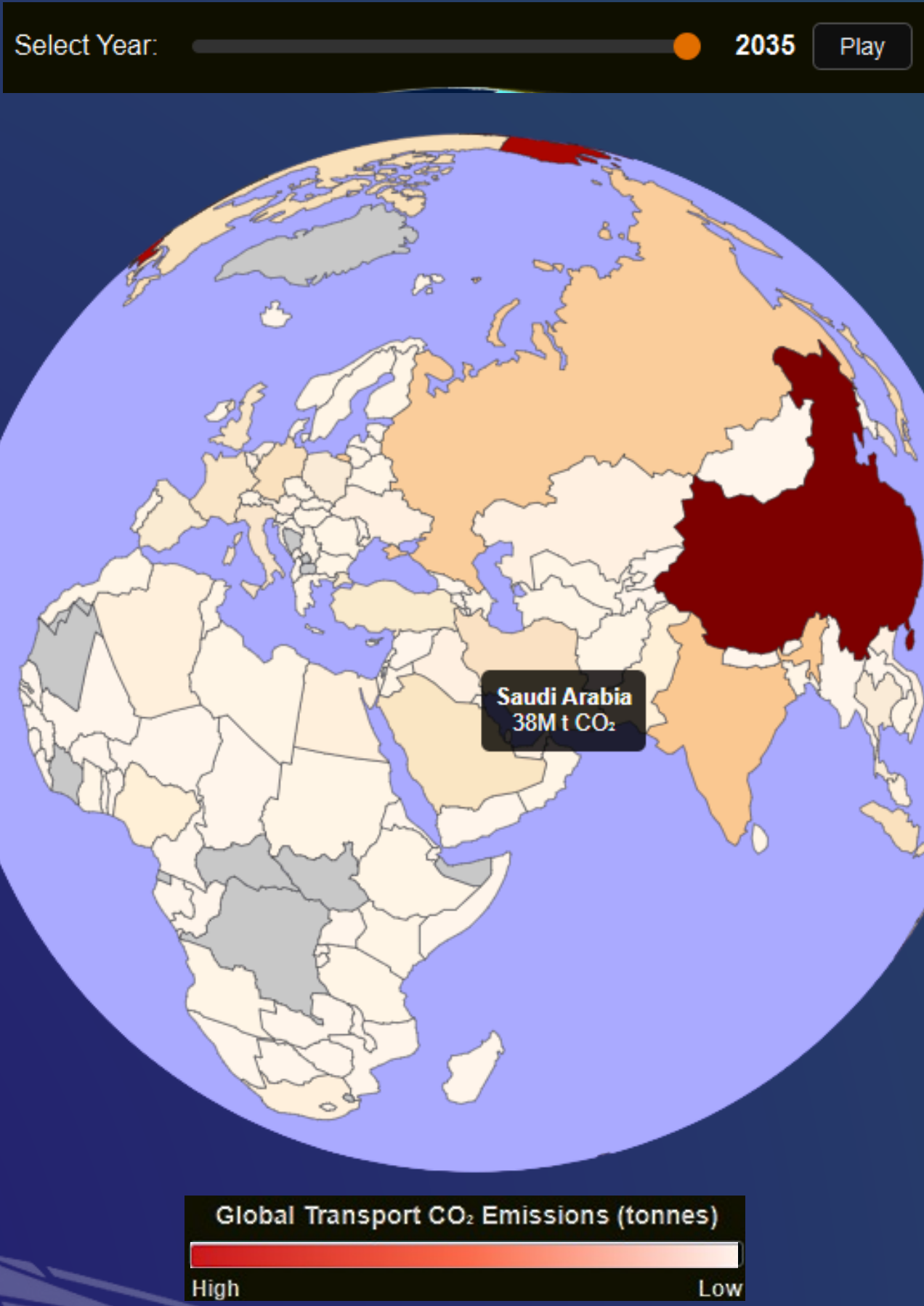
Datasets

- Global CO₂ emissions from transportation (Our World in Data).
- Battery cost trends, EV sales statistics, government incentive data (IEA, BloombergNEF, UCD Research Reports).
- Charging infrastructure growth, renewable energy shares, and EV adoption projections (Our World in Data).

Results

- Highlighted how EVs have shifted from niche to mainstream globally.
- Showcased the impact of government incentives and charging infrastructure challenges.
- Illustrated the future potential of EVs in reducing global carbon emissions.

CO2 emission Predictions - 3D Draggable Globe



Conclusion

- The journey towards an electric future is already underway.
- The EV-olution is not just about cars but about reimagining mobility, rethinking energy and rewriting the future.
- And the time to accelerate is now!!

Number of New Cars Sold by Type per Year

Electric vs. Non-Electric Global Car Sales (2010–2023)
Electric cars include fully battery-electric and plug-in hybrids.

