**Executive summary**

The visualisation suite presents a multi-faceted, interactive narrative of environmental decline across land, atmosphere, and oceans. Each graphic is selected to expose a distinct dimension of the crisis while interactive controls transform static statistics into an exploratory experience that supports both broad pattern recognition and focused investigation.

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**Visualisations overview**

- **Purpose**: Convey different facets of environmental decline and enable user-driven analysis.
- **Interaction methods**: Filtering, brushing, selectors, and tooltips.
- **Scope**: Global coverage with regional and temporal breakdowns to reveal long-term trends and key outliers.

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**Global Deforestation by Country**

The choropleth map provides a macro perspective on forest loss using a red gradient to convey severity and geographic concentration. A year selector allows users to animate changes across a 25-year period, exposing shifting deforestation hotspots and enabling rapid assessment of temporal patterns.

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**Forest Area as Share of Land Area**

The line chart reframes the discussion from absolute loss to relative coverage by showing forest area as a share of land area. An interactive regional filter facilitates direct comparison between continents, clarifying which regions exhibit recovery and which show persistent decline.

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**Global $CO_2$ Emissions Per Year**

The area chart delivers a consolidated view of the principal driver of climate change. A linked brush and detail view provide an effective mechanism for time-series exploration, permitting close examination of distinct historical periods and the rate of change within those intervals.

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**$CO_2$ Emissions Percentage by Region**

The stacked bar chart decomposes the global total into regional contributions. The static presentation emphasizes how emissions responsibility has shifted over time, supporting analysis of equity and the evolving balance between developed and developing economies.

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**Plastic Waste to Ocean versus GDP per Capita**

The scatter plot on a logarithmic scale reveals the relationship between economic development and marine plastic leakage. An interactive regional filter and labelled outliers enable hypothesis testing and identification of principal contributors, highlighting instances where middle-income economies show elevated leakage rates.

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**Integrated interpretation**

The suite intentionally covers land, atmosphere, and water to demonstrate that environmental decline is an interconnected crisis rather than isolated problems. The consistent application of interactivity promotes active investigation, allowing users to move from global summaries to granular stories that illuminate causation, responsibility, and opportunity for intervention.

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**Conclusion**

This set of visualisations combines complementary perspectives, deliberate visual encodings, and targeted interactive controls to make complex environmental data accessible and actionable. The design prioritizes insight discovery, comparative analysis, and the identification of high-leverage cases for policy and research attention.