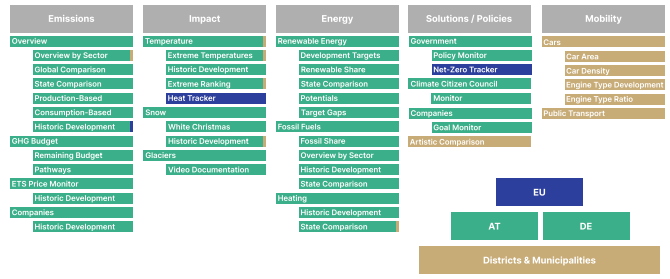
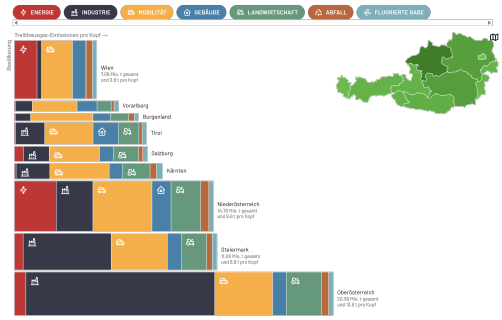
Accepted at the 2026 vis4climate workshop, which is part of the IEEE VIS 2026 conference. For more information, please visit https://vis4climate.org.

Klimadashboard: Tangible Climate Data Communication Across Austria and Germany

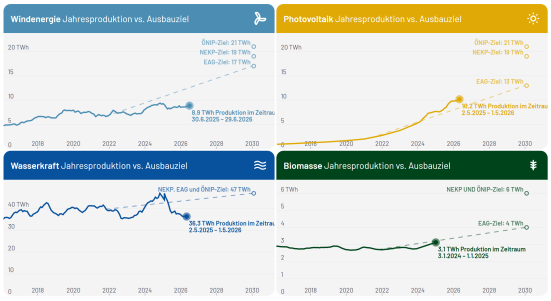
Team Klimadashboard*



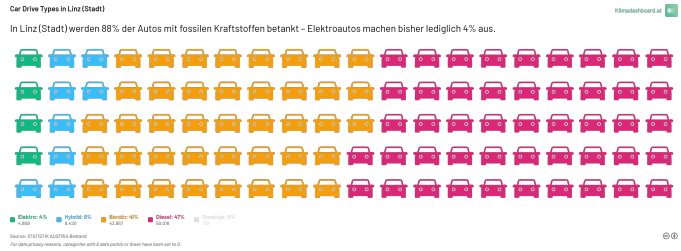
(a) Overview of the different topic- and region-specific dashboards available within Klimadashboard. The main color of each dashboard-tile represents the region for which it was initially designed. Smaller colored bars indicate additional uses.



(b) Greenhouse gas emissions for each federal state in Austria categorized by emission sectors. States are represented as bar charts where the length encodes the emission value and the width encodes the population.



(c) Historical change of renewable energy capacities and development targets.



(d) The pictogram depicts the fraction of each car engine type that is registered in the city of Linz and the text above narrates the insights.

Fig. 1: Figure (a) is a categorization of the Klimadashboard. Figures (b)-(d) show examples from the Klimadashboard.

The Klimadashboard is a collection of interactive visual dashboards that communicate—potentially complex—climate-related data in a tangible way to a non-scientific audience. In particular, the Klimadashboard aids media representatives, policy makers, and the general public to better understand the challenges, impacts, and possible solution pathways within the climate crisis.

The tasks of the Klimadashboard team span three areas: We **collect data** sets by extracting values from scientific studies and reports, validating data against official resources, and working with domain experts and public institutions. We iteratively **design and develop visualizations** while keeping in mind the analysis goals for each respective dataset. Visuals are composed as reusable components and the deployed charts can be embedded in external pages. For **communication and outreach**, we create data-driven stories in which we embed our visualizations. We communicate data-driven insights through regular posts on social networks. Common challenges during these tasks include gathering high-quality data, understanding what we can learn from it, and presenting it in a way that is tangible to a diverse audience.

The Klimadashboard utilizes simple, widely known chart types to maximize understandability for non-scientific audiences. In particular, we use bar charts for comparing among categorical variables (e.g., emissions coming from various sectors or regions as shown in Figure 1b), line charts for analyzing temporal trends (e.g., how the capacity of renewable energy technologies change as shown in Figure 1c), maps to give an overview based on the geography of the region (e.g., emissions per state as shown in Figure 1b top, right), or pictograms to show fractions or distributions (e.g., the ratio of car engine types as shown in Figure 1d). The website is structured by different topics related to climate change, as shown in Figure 1a.

The Klimadashboard follows an extensible design strategy. Initially, it was built for Austria, showing data at the national and federal-state levels. We horizontally expanded the Klimadashboard for Germany, reusing many existing components. Vertical extensions include international dashboards for the EU. To support tangible science communication at local scales, we extended the Klimadashboard to sub-national levels for Austria and Germany. In total, 94 district-level dashboards and 2116 municipality-level dashboards can be accessed for Austria. The goal of these regional dashboards is to help people understand the climate crisis in their immediate vicinity, support local media representatives, and enable local policymakers to make informed decisions.

The impact of the Klimadashboard so far can only be gauged through anecdotal evidence, such as coverage of visual components in media articles or informal feedback from users in person or on social media. Future (semi-)structured interviews or user studies could help to better understand the impact of such dashboards at the regional, national, and international levels.

More information about the team, our projects, and media coverage: https://klimadashboard.org/, the codebase: https://github.com/klimadashboard, the Klimadashboard Austria: https://klimadashboard.at/, the Klimadashboard Germany: https://klimadashboard.de/, the EU Emissions Tracker: https://emission-tracker.eu/, and the EU Heat Tracker: https://heat-tracker.eu/.

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