

# Connecting Global and Local: Using Open Data to Convey Climate Change Risks, Responsibilities and Mitigation & Adaptation Opportunities

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Climate change is already impacting human populations. For instance, the World Health Organisation has estimated that climate change is leading to 150,000 premature deaths a year. Climate change presents a complex social and environmental challenge on a global scale, and diverse actions by people around the world are required to mitigate and adapt to it. However, for individual action to be effective, people need to be 1) well informed about the challenge and 2) motivated to act. Individual motivation can be influenced by how much this global challenge is perceived to be relevant to their local situation; the impacts of climate change & the responsibility for it may seem more distant in place & time than they truly are. Globe-Town (<http://Globe-Town.org>) is a web application based on open data that addresses these issues. Firstly, it uses World Bank open data, integrated with other data sources to provide a multi-faceted picture of climate change within the broader context of sustainable development (economy, society and environment), making the information easy and pleasant to explore. Such greater awareness of the facts can help counter misinformation about climate change and misplaced apathy or alarm. Secondly, Globe-Town shows how networks of relationships between countries (such as trade, aid, travel & migration) connect the user with distant places in an era of increasing globalisation. These links may transmit the risks of climate change around the globe (e.g., the impact of the 2011 Thai floods on the Japanese economy). They can also transmit the responsibilities for causing it (e.g., the embodied energy in exports from China), and provide opportunities to act to mitigate and to adapt effectively (e.g., investing in renewable energy projects abroad). Globe-Town has won a place in the finals of the World Bank's "Apps for Climate" competition in Washington DC. It is a data visualization that brings together many intuitive design elements in order to make the information engaging. For instance, the complex networks of interrelationships between countries are represented as a simple row of houses in a street using the familiar metaphor of being neighbours. Globe-Town has originated from a previously developed theoretical framework that characterises the many ways in which Web technologies are relevant to climate change, and how they can ultimately contribute to public engagement, mitigation, and adaptation strategies.

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