

Approaches to integrate people's representations of climate change within adaptation pathways.

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As climate changes and increasingly affects coastal areas due to erosion and flooding, adaptation pathways are becoming a prominent approach to address deep uncertainties surrounding coastal adaptation. However, social research has shown that people's representations of climate change can either facilitate climate policies or act as a barrier to successful adaptation (e.g., Eisenack et al., 2014; Hinkel 2018). Here, we explore how to integrate people's perception and representations of their territories, of climate change and adaptation within the adaptation pathways framework, and we present a preliminary application in Saint-Pierre and Miquelon, a French oversea territory located south of Newfoundland (Canada) affected by sea-level rise, erosion and flooding. The method starts with social surveys identifying different representations toward climate change and adaptation measures for different climate scenarios, as well as past tipping points that change people's representations. Then, we propose to add a formal step to consider people's representations within state of the art methods to design dynamic adaptive policy pathways (Haasnoot et al., 2013). Finally, people's representations can be considered in subsequent steps, for example as indicators in adaptation pathway maps. We discuss to which extent the proposed approach may help anticipating future barriers and opportunities for successful adaptation.

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