

***From Grey to Green: A Social-Ecological Framework for Repurposing Unproductive
Transport Infrastructure***
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Transitioning to low-carbon transport presents opportunities to repurpose existing stock into infrastructure that requires fewer material resources but provides a wider array of services. Urban green infrastructure, for instance, is advocated for its diverse economic, social, and environmental services. However, what constitutes a “service” or “benefit” is contingent upon negotiations between diverse societal actors who differ starkly in their positions and also in their capacity to get their desired outcomes from urban space. This research develops a social-ecological framework that links repurposed transport infrastructure with the services which can be derived from them. Anticipating infrastructure transitions can: 1) enable a more cost-effective approach to the fundamental changes needed in the built environment to respond to future challenges; and 2) enhance civic capacity in technical decision-making by illustrating the links between infrastructure and its potential services. This research focuses on urban transport infrastructure in the European Union. Assets built in the mid-twentieth century are nearing the end of their service lives and the framework can be applied to assess (re)investment and repurposing decisions.