## Summary

The Alps, often labeled as the green heart of Europe, are in fact a complex living environment, as well as an economic region undergoing profound transformation. For some decades now, a widespread deindustrialisation process is leading to the decline and disappearance of traditional resourceand energy-intensive mountain industries. Still largely underestimated by both research and practice, this process is producing an ever-increasing number of brownfield sites of relevant size and complexity. Their physical and functional transformation represents, for many mountain communities, a unique opportunity to improve socio-economic and environmental conditions both locally and regionally. However, the structural limitations of the mountain context prevent, in most cases, to initiate and successfully achieve a sustainable brownfield redevelopment. A possible way to overcome this planning challenge is to re-consider Alpine brownfields as a territorial infrastructure, that is, to emphasise their spatial embedment into a wider landscape structure, rather than just focusing on the functional disconnection from the context. In this perspective, the former industrial site becomes to all effects a structuring element of a complex system of relations - physical and functional, existing and potential - capable of informing the future transformation. By means of an holistic landscape approach, which integrates structuralism and systemic design in brownfield transformation, this hypothesis is concretised into an operative model. The latter is developed, implemented and tested on four case study sites in Austria, France, Italy and Switzerland, highly representative of the different brownfield typologies and contextual conditions across the Alpine region. Explored and rendered through intensive fieldwork and remote mapping and design, the proposed landscape approach to brownfield redevelopment in mountain regions holds a twofold potential. By fostering an inclusive, incremental and flexible site transformation, it enhances the feasibility of the overall process. In addition, being easily adaptable to a variety of situations and contexts, it ensures a very high transferability within the Alps and beyond.