Multiple benefits analysis to support urban regeneration

A practical tool to support project implementation and acceptance

Irene Bertolami, Marco Volpatti, Adriano Bisello [*]

Climate change is unequivocally affecting our daily lives, with irregular weather patterns and rising sea levels globally. In response, the European Union (EU) has become a major force, dedicating resources to initiatives that combat climate change and promote sustainability.

The ARV project, supported by Horizon 2020 funds, embodies the EU's effort to test innovative solutions against the climate crisis. The project involves the creation of climate-positive circular communities that prioritise environmental conservation, economic prosperity, social well-being, and aesthetics, in line with the principles of the New European Bauhaus. The project targets six EU Member States (Italy, Norway, Spain, Denmark, the Netherlands, and the Czech Republic) with the aim of presenting, validating and potentially replicating resilient, attractive, and sustainable solutions, with a focus on deep energy renovations to achieve net zero emissions in buildings and neighbourhoods. However, the realisation of such ambitious goals requires not only technological advances, but also a fundamental change in individual and societal mindsets and behaviour. The involvement of local communities, businesses, and politicians in the co-creation of solutions could foster a sense of ownership and collective responsibility for sustainability initiatives.

With the aim of quantifying and evaluating the wider positive impacts of the planned interventions, a methodology was therefore developed to analyse the multiple benefits of the project. Through the rigorous collection, analysis and interpretation of data, this methodology facilitated a comprehensive assessment of the project's potential to generate positive outcomes in various domains, laying the foundation for informed decision-making, effective resource allocation and increased project acceptance by end users.

Multiple benefits in urban regeneration projects encompass all positive impacts within the project, including both expected and unforeseen benefits, ranging from environmental improvements to socio-political progress, in qualitative and quantitative forms. The proposed multi-benefit analysis, pioneered within the ARV project, seeks to identify the most significant benefits for the various stakeholder groups through active engagement via workshops and questionnaires. The prioritisation of results, in line with the needs and priorities of key stakeholders, improves the overall effectiveness and impact of the project.

The methodology comprises several steps, including an extensive literature review, workshop sessions with project partners to identify potential benefits, and the development of questionnaires to rank these benefits according to stakeholder perspectives. Customised benefit analyses, tailored to each case study within the project, ensured alignment with unique contexts, themes and target audiences. The Best-Worst scaling method was used to construct the questionnaires, which facilitates balanced assessments while minimising respondent effort.

Adopting the concept of multiple benefits enables the development of effective strategies that ensure sustainability and resilience, considering the interests of all stakeholders. As climate change intensifies, prioritising sustainability and proactive action becomes increasingly critical. Promoting dialogue between policymakers, end-users and stakeholders aims to improve understanding of the overall benefits provided by sustainability initiatives.

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[*] Eurac Research – Institute for Renewable Energy, e-mail: irene.bertolami@eurac.edu

Eurac Research – Institute for Renewable Energy, e-mail: adriano.bisello@eurac.edu

Politecnico di Torino; Eurac Research – Institute for Renewable Energy, e-mail: marco.volpatti@polito.it / marco.volpatti@eurac.edu