Research in action: enhancing the policy impact of planning research through an interactive approach

Erblin Berisha, Giancarlo Cotella, David Evers & Ivana Katuric

Published online: 01 Nov 2023.

Submit your article to this journal ⬈

View related articles ⬈

View Crossmark data ⬈

Routledge
Taylor & Francis Group

Check for updates

Research in action: enhancing the policy impact of planning research through an interactive approach

Erblin Berisha [ID]ᵃ, Giancarlo Cotella [ID]ᵃ, David Evers [ID]ᵇ and Ivana Katuric [ID]ᶜ

ᵃInteruniversity Department of Regional and Urban Studies and Planning (DIST), Politecnico di Turin, Torino, Italy; ᵇDepartment of Spatial Planning and Quality of the Local Environment, PBL – Netherlands Environmental Assessment Agency, Den Hag, The Netherlands; ᶜURBANEX, Zagreb, Croatia

ABSTRACT

Planning researchers often engage in international comparative research oriented to improving domestic planning practices. However, policy transfer is seldom sucsessful because the identified 'best practices' are insufficiently applicable or transferable. To address this, we employed a reflexive action-oriented methodology valorise the results of an ESPON project on sustainable urbanisation in two specific contexts: Lithuania's national strategic plan and Croatia's post-earthquake reconstruction. In collaboration with stakeholders, we assessed the local context and then used the European knowledge as a means for reflection. The results are encouraging, suggesting that this method could improve the impact of planning research.

Introduction

Europe can be considered a vast laboratory for spatial development policy: 'experiments' are occurring everywhere to varying degrees of success. The European Union (EU) facilitates transnational learning by contracting pan-European or comparative research, hosting international fora for discussion, and stimulating the dissemination of knowledge and practices (Cotella *et al.*, 2015). As a result, a wealth of information is emerging that can assist policymakers and planning practitioners to guide urbanisation in their countries and regions towards more sustainable ends. Examples include work by the European Environment Agency (EEA and FOEN, 2016), the European Commission Joint Research Centre (Fioretti, 2020), various European Union institutions (Prokop, 2011) and international planning organisations (ECTP-CEU, 2002). More specifically, EU-funded research such as Interreg Central Europe SURFACE (Bovet *et al.*, 2019) and ESPON SUPER (Evers *et al.*, 2020) have studied how European planners and policymakers can promote sustainable urbanisation.

The question remains how useful such research is within an activity as notoriously complex and context-specific as spatial governance and planning (Harrison *et al.*, 2020; Berisha *et al.*, 2021). Indeed, the existence and availability of relevant information does not guarantee that this can or will be used in practice. Insights

---

generated by researchers need to be translated into terms that are relevant and understandable to policymakers and – some argue – should be created together with policymakers (Davoudi, 2006; Faludi & Waterhout, 2006; Adams *et al.*, 2011). For many academics, even those active within the practice-oriented discipline of planning, this can clash with firmly held beliefs about scientific objectivity and the ideal role of researchers in the policy process. On the other hand, there is an emergent literature on how reflexive knowledge-creation can bridge the science-policy gap without sacrificing quality (Bradbury, 2013; Pielke, 2007; Kunseler, 2017).

Drawing on this literature, this paper describes a methodology developed to facilitate the take-up of insights produced in the framework of the ESPON SUPER (Sustainable Urbanisation and land-use Practices in European Regions) project in two Eastern European policy contexts: Lithuania and Croatia. Although the project had created a database of sustainable urbanisation interventions and a guide for policymakers (Cotella *et al.*, 2020), it was unclear whether these products could or would be used in actual practice. At the request of planning officials in the two countries, the researchers applied the insights from the project to the specific challenges facing these areas. For Lithuania, this concerned the production of a national spatial strategy, while for Croatia, it concerned improving the sustainability of the post-earthquake reconstruction process. Rather than adopting a classic top-down or 'linear' approach (Davoudi, 2006), the project team worked in conjunction with policymakers to (1) understand the local territorial situation and reflect on this from a European perspective, (2) understand the mechanisms and effects of local interventions and use other European examples to reflect on these, and (3) generate recommendations based on a synthesis of local and international experiences. We believe that this hands-on approach or 'research-in-action' enhanced the uptake in policy, thus increasing the research's potential to promote sustainable urbanisation.

In this way, the paper contributes to current theoretical and methodological debates within planning by exploring the added value of site-specific tailored approaches in knowledge and policy transfer while attempting to avoid the reproduction of (neo) colonial, modernistic practices (Whitney & López-García, 2022; Blanc & Cotella, 2023). This is relevant in the European context when, for example, EU-funding is made conditional, or approval of projects more likely, when 'best practices' (usually located in the more affluent member states), are considered or applied (Tulumello *et al.*, 2021).

The next section starts with a brief discussion of the comparative planning literature and its aims. It then turns to the critical debate on evidence-based policy and the problematic concept of 'best practices' therein, recounting dilemmas within the science-policy interface, closing with insights from the policy transfer literature regarding pitfalls and how to avoid them. This leads to a treatment of literature that argues how interactive approaches can improve research impact and policy transfer. Section 3 presents the core of our contribution: the reflexive research design methodology. After briefly describing the ESPON SUPER intervention database and the *SUPER Guide to Sustainable Urbanisation* which served as the knowledge base, it explains the methodology used to apply this knowledge to the Lithuanian and Croatian cases. Section 4 discusses this application in practice, and the final section rounds off the contribution, reflecting on the experience and drawing lessons for the academic and policymaking arena.

Literature review

Planning research for sustainable urbanisation

How to control urban development has long been one of the central themes of the planning profession. Decades of scholarship have discussed the phenomenon of urban sprawl, mostly from a North American perspective. Since about 2000, similar processes and outcomes have been identified in Europe and globally (Couch *et al.*, 2008; Mustafa & Teller, 2020). A meta-analysis of the scientific literature identified the most important drivers of urban expansion, many of which directly relate to policy decisions or institutional arrangements (Colsaet *et al.*, 2018) within the purview of planning. Given the imperative posed by *inter alia* climate change and the energy and mobility transitions, planners are increasingly confronted with the challenge of promoting sustainable urbanisation as an alternative to urban sprawl.

It is generally accepted that sustainable urbanisation cannot be left up to market forces alone but requires active intervention, usually by public authorities (McLaughlin, 2012; Gerber *et al.*, 2018; Solly *et al.*, 2020). Planning scholarship in this area often investigates the effect of a single intervention within a particular context, such as in the Netherlands (Boeve & van Middelkoop, 2010), Germany (Henger & Bizer, 2010) and Italy (Cattivelli, 2021). Sometimes complete systems are compared, together with the instruments they employ and the development practices they engender (Millward, 2006; Halleux *et al.*, 2012; Solly *et al.*, 2021). Implicitly or explicitly, it is expected that this knowledge will produce better planning decisions (Evers *et al.*, 2020).

Such research, oriented at improving planning practice, is nothing new. Since antiquity, planning ideas have been borrowed from afar (Masser, 1992; Healey, 2013; Sykes *et al.*, 2023), and there is a long tradition of international comparative research in planning to foster 'the transfer of experience, ideas, instruments and institutions from one country to another' (Masser, 1992, p. 3). However, since the 1990s, globalisation processes and vastly improved information accessibility (Dolowitz & Marsh, 2000) have enabled an unprecedented proliferation of comparative policy research. As a result, policymakers are being made increasingly aware that their local problems are being dealt with elsewhere, offering the prospect of learning from 'best practices' be they in a neighbouring city, another region or abroad (Glaser *et al.*, 2021, p. 2). The topic of sustainable urbanisation is by no means an exception (Boeve & van Middelkoop, 2010; Shen *et al.*, 2011, p. 26). The question remains however, how knowledge of other practices can best effectuate domestic policy change (Adams *et al.*, 2011).

Policy transfer and its pitfalls

The literature on policy transfer is useful for addressing this question. According to a seminal article on the topic, there are arguably 'four different gradations, or degrees, of transfer: *copying*, which involves direct and complete transfer; *emulation*, which involves the transfer of the ideas behind the policy or program; *combinations*, which involve mixtures of several different policies; and *inspiration*, where policy in another jurisdiction may inspire a policy change, but where the final outcome does not actually draw upon the original' (Dolowitz & Marsh, 2000, p. 13, our emphasis). These gradations are important to bear in mind when considering international transfers, given that the most

ambitious level (copying) may be unfeasible due to intractable institutional differences (de Jong & Stoter, 2009; Marsden & Stead, 2011, p. 499). Still, there are widespread examples of politicians longing for 'quick fixes' and who, 'either implicitly or explicitly take it for granted that the process has led, or will lead, to the successful implementation of a policy, programme or institution. However, it is becoming increasingly apparent that policy transfer can, and often does, lead to policy failure' (Dolowitz & Marsh, 2000, p. 6). The authors go on to list three types of policy transfer failure:

- *Uninformed transfer*: the borrowing country may have insufficient information about the policy/institution and how it operates in the country from which it is transferred.
- *Incomplete transfer*: crucial elements of what made the policy or institutional structure a success in the originating country may not be transferred, leading to failure.
- *Inappropriate transfer*: insufficient attention is paid to the differences between the respective economic, social, political and ideological contexts.

In order to avoid these failures, Buffet *et al.* (2011) suggest a three-step procedure. First, one must define who will be involved in taking the decision. The second step concerns orienting participants to the process and establishing timelines. The third point is the most relevant: to assess both the *applicability* (e.g. political climate, resources, etc.) and the *transferability* (whether the target area resembles the original area on important criteria) of the host policy, which, the authors suggest, can be done in an interactive manner. This work was carried forward in a more comprehensive manner by Williams and Dzhekova (2014), who operationalised applicability and transferability using self-reflective questions such as: 'What is the difference in the risk status/issue prevalence between the donor and target setting?' (transferability) or 'Will the target population be interested in the intervention?' (applicability) (p. 12). To be answered adequately, these questions require both expert and political knowledge.

Action-oriented research

This brings up a fundamental point: how should the interaction between knowledge (researchers) and action (policymakers), in other words, the science-policy interface, take shape? This process architecture determines not only which 'solutions' or 'best practices' are deemed relevant but how they can be communicated and adapted to a local situation. Justifiably, there is great scepticism in planning academia about the prospects of the 'modernist' or 'linear approach' which views scientists as able to objectively inform policy from a comfortable distance (Davoudi, 2006). Instead, some form of interaction is deemed necessary, although it is not always clear how or how much. Many different models are possible, each with their own strengths and weaknesses (Pielke, 2007; Healey, 2013).

Writing on organisations spanning science-policy boundaries, Kunseler (2017) invokes what she calls the 'reflexive evaluation approach', which appreciates the multi-level governance and multi-actor complexities of the policy context. Reflexive evaluation is undertaken both during and parallel to policy processes, and relevant stakeholders

(such as policymakers) are actively involved with the research to ensure it meets their needs. According to Van Veen *et al.* (2016), reflexive evaluation follows a number of steps: 1) definition of an evaluation objective which helps to address multi-stakeholder complexity by optimizing capacity for adaptive change; 2) identification of the relevant stakeholders to involve and their needs; 3) definition of the role of researchers both as an assessor of policy progress for accountability purposes as well as a facilitator of learning processes; 4) establishing a research process aligned and parallel to policy practice and 5) aim to produce knowledge that is (politically) legitimate, (scientifically) credible and relevant to societal needs. A similar and emerging concept is 'action research' which positions itself between conventional methods on the one hand, and applied research/ consulting on the other. According to Bradbury (2013) three main characteristics define action research: (1) it is participative and democratic, (2) it is emergent and developmental and (3) pertains to practical issues.

Methodology

As argued above, the fate of policy transfer largely depends on conceptual and methodological choices. According to the reflexive evaluation and 'action research' approaches, success is enhanced when stakeholders have a say in the process, implying that scientists should play a double role as experts and as facilitators. In this sense, the distinction between researchers and consultants is blurred. Research is neither ex-ante nor ex-post but occurs simultaneously with the policy process in a spirit of joint-fact-finding and mutual understanding: what we call research in action. When being performed in an international comparative context, researchers should be aware of the risks of uninformed and incomplete transfer (transferability), while policymakers should be aware of the risk of inappropriate transfer (applicability).

Drawing on these conceptual elements, this section presents the research-in-action methodology which was applied in Lithuania and Croatia. The first part contains a description of the knowledge base: the intervention database used to identify relevant practices and the guide aimed at policymakers (Cotella *et al.*, 2020). Afterwards, the methodological protocol is presented, which was intended to facilitate knowledge uptake and enhance the prospects of successful policy transfer.

The intervention database and guide

In addition to carrying out 11 in-depth case studies, the ESPON SUPER project aimed to create an extensive catalogue of interventions in Europe, here broadly defined as strategies, policies and projects that affect urbanisation and land use. Using a variety of data collection methods (literature survey, online questionnaire, targeted emailing, etc.), 235 examples of interventions across 39 European countries were compiled into a publicly available database. These are mapped out in Figure 1, which also indicates the type of intervention that was analysed and the type of instrument it adopted. The database contains information about the spatial characteristics, content and perceived impacts of the collected interventions. Not only 'best practices' are included, but less successful interventions as well. As such, the database offers a wealth of information to researchers investigating the conditions under which certain types of interventions are successful, as
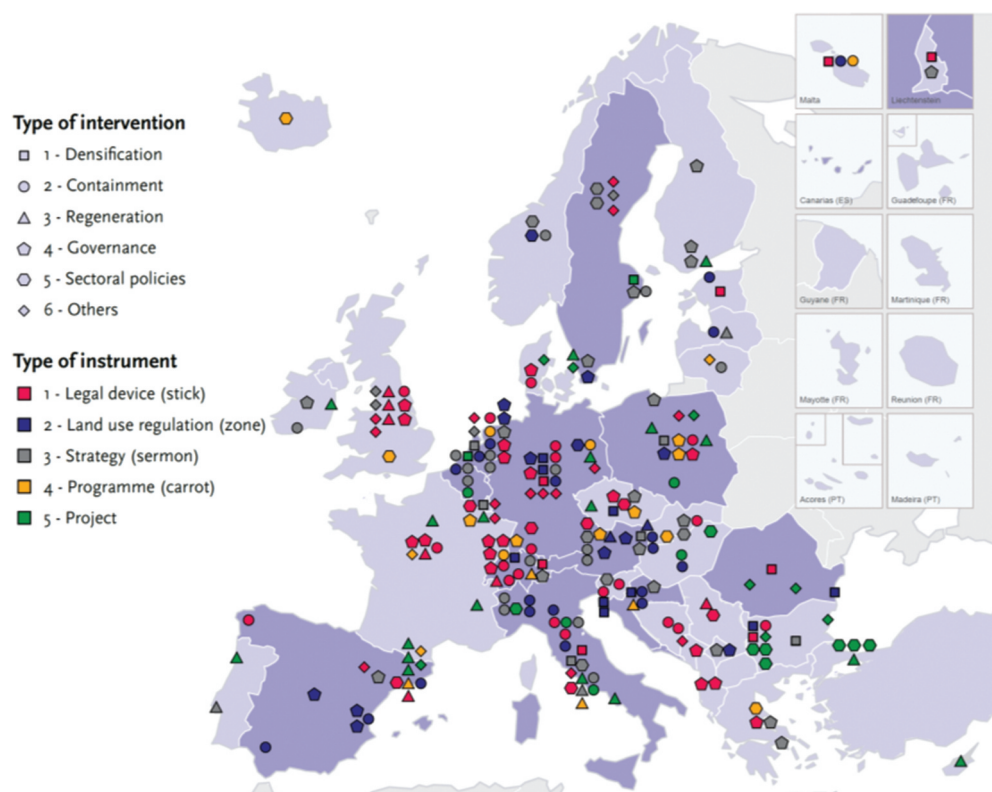
Figure 1. Geographical distribution of the collected interventions. Source: (Cotella *et al.,* 2020).

well as for policymakers seeking relevant examples of what (not) to do to promote sustainable urbanisation.

A statistical analysis performed on the database produced inconclusive results. Specifically, no significant relationship was found between the level of success recorded for each intervention (measured on the basis of self-reporting and desk research) and the variables used to classify these interventions (e.g. geographical scale, intervention type, or instrument type). Therefore, the database could not directly contribute to a standard theory of best practices (Berisha *et al.,* 2021, 2023; Solly *et al.,* 2021). This led the researchers of the ESPON SUPER project to conclude that the success of interventions most likely depends on unpredictable context-dependent factors, highlighting once again the pitfalls that characterise policy transfer (Evers *et al.,* 2020).

Even though no significant statistical correlation could be found between success rates and intervention attributes, the qualitative explanations included in the database revealed striking regularities. These comments were synthesised into general policy principles or guidelines and included in a guide aimed at both decision-makers (i.e. politicians deciding on a course of action) and policymakers (i.e. officials drafting interventions to implement this) (Cotella *et al.,* 2020). The guide eschews recommending generic norms or solutions but instead presents itself as a toolbox of ideas and options. This is akin to the 'honest broker' approach as identified by Pielke (2007), which describes a role where scientists provide relevant information about policy alternatives, allowing decision

makers to make an informed choice based on their own values and ambitions. In line with the policy transfer literature (Buffet *et al.*, 2011; Williams & Dzhekova, 2014; Glaser, 2021) as well as that regarding the science-policy interface (Kunseler, 2017), the guide warns against unreflective transplantation. Specifically, it stresses that:

- There are 'no one size fits all' solutions; each territory requires its own policy package. This means that policy recommendations should be assessed according to territorial specificities such as geography and administrative and cultural traditions.
- Stand-alone initiatives should be avoided when addressing complex issues like sustainable land use. Multi-dimensional, multi-sectoral and multi-stakeholder approaches are preferable.
- Sustainable land use is a shared responsibility and not an exclusive administrative domain. Identified solutions should be carefully evaluated and shared with all relevant actors.

In theory, if these caveats are taken seriously, both the guide and the intervention database can serve as tools to learn from experiences across European countries and craft tailor-made solutions for a specific planning context. In practice, having these tools available is insufficient because policymakers do not have the time, skills, or awareness to use them. The following section describes a protocol that was drawn up to overcome this problem.
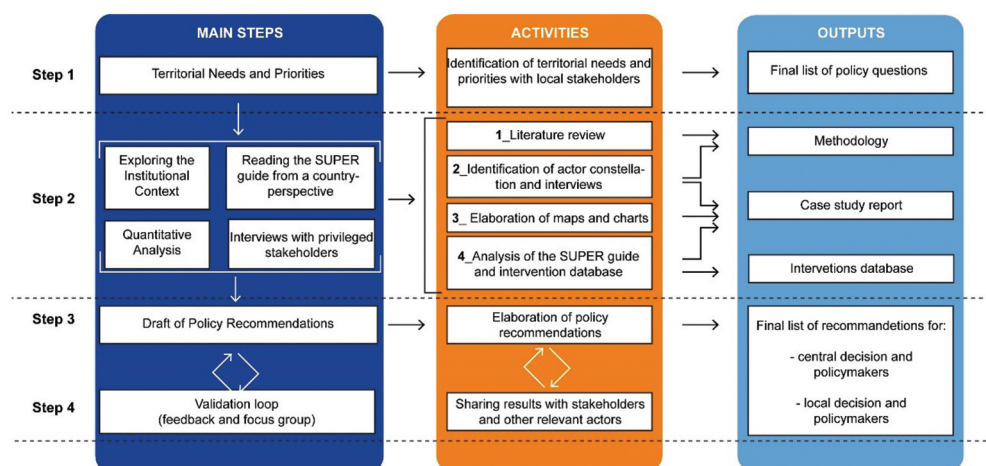
Methodological protocol

The aim of the methodological protocol was not to produce a general theory but to translate knowledge into policy action (Van Veen *et al.*, 2016) while avoiding well-known policy transfer pitfalls. The protocol consists of four main steps performed in close collaboration between the research team and the stakeholders. The steps are consecutive (but also contain a few feedback processes) and require the completion of various tasks by the involved parties (Figure 2). The protocol was developed and tested in two case study areas – Lithuania and Croatia – whose results are presented in more detail later.

The first step consists of the identification and validation of territorial needs and priorities of the engaged stakeholders. Stakeholders are asked to voice their expectations regarding knowledge needs and potential policy transfer, and discussed whether those expectations match the general content of the project. This step produces a list of relevant policy questions on sustainable urbanisation and land use. To avoid 'uninformed transfer', the second step consisted of four contextual analyses carried out by the research team in parallel: (1) exploring the institutional context, (2) performing a quantitative territorial analysis, (3) screening the guide for appropriate lessons and (4) identifying and interviewing key stakeholders. These will be discussed in turn.

The institutional analysis sought to understand how land use is managed 'on paper' and in daily practice. It also attempts to uncover the peculiarities of the spatial governance and planning system in place, who the major actors are, and how responsibilities are shared. Following others (de Jong & Stoter, 2009; Buffet *et al.*, 2011; Marsden & Stead, 2011; Williams & Dzhekova, 2014), a multi-perspective understanding of the

Figure 2. Flowchart depicting the methodological protocol. Source: (Cotella *et al.*, 2021).

institutional context is considered crucial for transferability and applicability. On the one side, it helps to identify interventions holding valuable lessons for the receiving country and, on the other side, allows for policy recommendations that are tailored to the local spatial planning and land-development context. The quantitative territorial analysis, which runs concurrently to the institutional analysis, maps out socioeconomic dynamics and land-use developments, producing maps and charts on driving forces and land-use trends using data produced in the ESPON SUPER project. This allows the researchers to better understand the local context and puts this in a European perspective for the stakeholders. The final activity is to scan the intervention database and guide to select a preliminary set of interventions relevant to the identified policy needs and priorities and the specific territorial structure and institutional framework.

Next, in collaboration with the stakeholders, potential interview partners are selected on the basis of three indicators: representativeness (all spatial planning levels), inclusiveness (public sector, private sector, civil society organisations, academia, etc.) and territorial diversity (geography and size) and an interview guide drawn up. The interviews seek to gather first-hand knowledge on land use and contrast these insights with the quantitative and qualitative data amassed in the previous step. This includes questions on the main problems, solutions and potential developments as well as domestic interventions that have proven to be particularly successful or unsuccessful in addressing territorial development.

The final steps concern meetings to draw up policy recommendations and validating them via deep focus group activities. These meetings give participants the opportunity to: (1) understand the recommendations, particularly those pertaining to them; (2) discuss land-use issues based on their experiences, expectations and ambitions; and (3) contribute to improving the final set of recommendations.

Findings: the cases of Lithuania and Croatia

The protocol was tested in two very different policy contexts in eastern Europe: drawing up a national spatial strategy in Lithuania and repairing earthquake damage in Croatia.

Given the considerable differences between the cases, commonalities in the lessons learned may indicate a robust insight into how research-in-action could be performed. In addition, these two cases also may serve as an example of how 'best practices' – many from northwest Europe – can be utilised in a way that is relevant to and respectful of the local context, therefore avoiding possible accusations of a patronising arrangement or (neo)colonialism.

Lithuania

In 2020 the Ministry of Environment of Lithuania requested the ESPON programme for support in the development and implementation of the Comprehensive Plan of the Republic of Lithuania (CPRL). As the CPRL was still being drafted, tailored policy recommendations for promoting sustainable urbanisation and land use could still be incorporated into the final document. Following the methodological protocol, the ESPON SUPER research team set up two preliminary meetings, the first with the civil servant requesting assistance and the second with a group from the Ministry (Step 1). The meetings were held in English, which did not seem to pose any barrier to understanding. The first part of both meetings was devoted to building mutual trust and identifying and specifying the stakeholders' needs and priorities. These were sketched out during the first meeting with the main stakeholder and then discussed, amended and consolidated with the broader array of actors in the second meeting. A finalised list of needs and priorities was then drawn up by the research team and shared with the lead stakeholder to make sure that all relevant elements had been included.

Step 2 of the methodological protocol concerns the institutional and territorial analysis. The former revealed that Lithuania has several tools in place that can promote sustainable urbanisation and land use, but also that contradictory policies could undermine their success. A major institutional factor was a reform of the planning system in 2010 which had abolished the county level (Adams *et al.*, 2014). Their responsibilities were either reallocated to the central government or, more sporadically, to the country's 60 municipalities. As a result of this and other administrative reforms (the most recent being in 2017), a two-tier planning system is now in force where the central level establishes spatial concepts, principles and priorities and the municipal/local level produces plans in line with local needs and conditions. Each level makes comprehensive plans to control land use as well as sectoral plans (e.g. land management documents, special plans of protected areas, plans concerning the protection of cultural heritage, plans for the development of infrastructure). The quantitative analysis revealed that Lithuania is, by European standards, relatively rural – only 3.3% of its surface is urbanised, and has faced significant demographic decline (−19% since 2000 on average, with values as low as −30% in some counties). Even so, urbanisation has increased in most counties, mostly due to suburbanisation processes around urban centres and the spread of second homes in rural areas.

Once the constellation of actors involved in urban development had been mapped out and key stakeholders identified, the interview campaign commenced. The interviews deepened the understanding about the limits and potentialities of how land use is managed in Lithuania. Various respondents lamented the abolition of the counties in 2010, and with it, regional spatial plans. They argued that there is now more competition

than cooperation among municipalities for development, investment and public services. This fragmentation was seen as unconducive for sustainable urbanisation. Still, most considered the current administrative structure as capable of responding to territorial needs and priorities, even though coordination between policy sectors is less than ideal (e.g. tension between the Agriculture Law and the 2018 regional housing policy). All respondents applauded the introduction of the CPRL. In it they saw an instrument with a long-term perspective (2050) that establishes principles, values and spatial trajectories to help central and local authorities in the coming years.

According to the respondents, plans at the local level often overestimate building volumes and allot more land for development than necessary. They felt that local plans were incapable of managing territorial imbalances and shrinking processes faced by most municipalities. The lack of monitoring and feedback mechanisms and limited institutional capacity at the local level further inhibited the efficiency of these plans. One expert observed that only municipalities can take the initiative to adapt a land-use plan, but in most cases, have insufficient technical capacity to do so. For this reason, it is difficult to reorient existing plans towards sustainable urbanisation. Some respondents called for a mechanism to allow for a general revision of the local plans in cases of inadequacy or conflict with the guidelines and prescriptions of the CPRL.

The information collected through the interviews was then employed to screen the database to identify interventions and policy messages that could support the Lithuanian CPRL. This resulted in the production of a description of 25 relevant interventions such as regional urban containment strategies in Spain, Austria and Italy, anti-sprawl regulations in Switzerland, soil protection measures in Germany and the Czech Republic, and sustainable urban regeneration projects in Ireland, Denmark and Sweden. These were compared to similar interventions already in place in Lithuania. The potential applicability and transferability of the foreign interventions was raised by means of a reflection of the lessons learned abroad. The researchers were careful to present the examples not as 'best practices' to emulate, but as 'food for thought' that could broaden the discussion on policy alternatives.

Based on these steps, a preliminary list of policy recommendations was compiled by the research team and shared with all participants of the meetings devoted to the identification of policy needs and the interview respondents (Step 3). This allowed for the construction of a focus group to discuss the findings. At this meeting, the research team presented its recommendations one by one and discussed them with the participants. This resulted in a lively discussion on the conditions under which the proposed recommendations could be transferred to the Lithuanian context. As such, awareness was raised about the potential risks that could lead to a failure in policy transfer.

Following this validation step (Step 4), final recommendations were formulated for both decision-makers and policymakers at both spatial planning levels. Specifically, national stakeholders were urged to take a more collaborative approach in the implementation of the CPRL to commit stakeholders active at the different territorial levels and sectors of society. To this end, it was agreed that the plan should be complemented by clear protocols and a common set of principles on sustainable land use, as well as by open and coordinated implementation mechanisms. Finally, the national stakeholders agreed to (i) conduct an ex-ante territorial impact assessment to explore potential side effects of the CPRL and make potential trade-offs more explicit and (ii) accompany the

plan with a monitoring system which includes measurable and realistic performance targets on sustainable urbanisation and land use.

At the local level, stakeholders were invited to voice their own ambitions and policies with respect to the guidelines and information provided in the CPRL, considering that different territories face different problems and have different potentials, and, consequently, successful initiatives in one territory may fail elsewhere. They were also asked whether potential synergies between different planning instruments could be secured through policy packages. At the same time, they were invited to consider which negative side-effects or trade-offs can occur when instruments are not based on a clear long-term vision or not supported by adequate public engagement.

As the CPRL is just now entering its implementation phase, it is too early to know how much impact this research-in-action had on the ground. From the vantage point of the researchers involved, the protocol followed fostered fruitful cooperation towards the coproduction of meaningful, policy-relevant knowledge between the stakeholders and the research team. At the same time, and perhaps most importantly, it triggered mutual learning between stakeholders at the various levels and enhanced virtuous cooperation dynamics that have the potential for producing positive results in the mid and long term.

Croatia

In 2020, central Croatia was hit by two series of devastating earthquakes, causing widespread physical damage. Shortly thereafter, national initiatives were launched for a major post-earthquake reconstruction of public and private buildings, but also for the general revitalisation of urban areas. It was hoped that reconstruction would upgrade the outdated and energy-inefficient building stock. This 'build back better' model seeks to combine revitalisation with a more sustainable approach to urbanisation (green transition measures, urban regeneration measures, energy-efficient renovation, earthquake resilient building, etc.). It is in this context that the Croatian Ministry of Physical Planning, Construction and State Assets made its request to the ESPON programme to analyse the sustainability of the post-earthquake reconstruction process in central Croatia and provide input from abroad. An international approach was also deemed desirable because the authorities felt that the results would be useful for other earthquake-damaged areas in Europe.

The project team applied the same interactive methodology described previously. One difference with Lithuania is that one researcher was Croatian and that the previous project had included a Croatian case study. After defining the main territorial needs and priorities (Step 1) in consultation with the stakeholders, parallel in-depth analyses of the territorial and institutional context of Croatian spatial planning were carried out (Step 2). The institutional analysis consisted of a literature review of legal, academic and other sources as well as an investigation of the legal and financial framework being prepared for post-earthquake reconstruction. The territorial analysis concerned quantitative research to understand the socio-economic, territorial and morphological trends.

Together with Ministry officials, key stakeholders from different sectors and planning levels were identified as potential interview partners. The intent was to involve a large number of stakeholders in the action-oriented research. However, the second earthquake and newly imposed COVID-19 restrictions frustrated these efforts. For this reason, the

research focused on a smaller circle of stakeholders, starting with researchers and policy-makers active in post-earthquake reconstruction planning who already knew each other. This had the advantage of a foundation of mutual understanding, which facilitated the structuring of recommendations. All interviews were conducted in Croatian, so no language barriers existed between the research team and the stakeholders.

The institutional analysis revealed that the post-earthquake reconstruction process is being regulated by the quickly implemented 2020 Act on the Reconstruction of Earthquake-damaged Buildings in the Territory of the City of Zagreb, Krapina-Zagorje County and Zagreb County, amended in 2021 to include newly affected areas after the second earthquake (Sisak-Moslavina and Karlovac County). This Act sought to provide a financial and organisational framework for the post-earthquake reconstruction process. As such, it is not primarily concerned with spatial planning but rehabilitating buildings and did not identify wider environmental, social and economic issues in urban areas or view the reconstruction as a vehicle to this end. Given that reconstruction can be a long, time-consuming process, there is still scope for integrating sustainable urbanisation considerations into the post-earthquake reconstruction process.

The first round of interviews aimed to obtain detailed information and collect opinions on post-earthquake reconstruction. In the second round, all stakeholders attended an interdisciplinary multi-sector focus group. Here, recommendations were prioritised and adapted through deliberation to align and unify the needs of all involved sectors. Again, the choice of only including stakeholders with hands-on experience in the process proved effective.

The interactive process produced valuable qualitative information about current bottlenecks within the reconstruction process and the prospects for more sustainable solutions. Some concerned the combination of substantive issues. For example, disorganised and outdated transport systems, waste management, water supply and other urban infrastructure, large derelict brownfields, and neglected historical heritage were viewed as posing a real challenge to sustainable land use. The respondents also noted that even though reconstruction was focused on the level of individual buildings, more could be done to tackle the problem of outdated and substandard housing stock. In addition, the interviewees argued that more effort was needed to integrate spatial planning concerns into the process.

Another problem identified was deficient knowledge. There was a lack of territorial awareness and insufficient knowledge of options for sustainable urbanisation among policymakers as well as inadequate technical capability at important institutions. The interviewees recommended involving regional and local stakeholders to take advantage of their local knowledge. They also noted an increased public awareness about sustainable development and a growing need for citizen participation in decision-making on the development of their communities. In view of this, the respondents felt that the post-earthquake reconstruction process did not adequately take the opinions of experts and the community into account, for example, to build replacement houses in the new settlements at higher densities. Therefore, the respondents recommended linking the financial mechanisms to citizen and community involvement.

This information was then used by the research team to identify relevant interventions elsewhere in Europe that could help make reconstruction more sustainable (Step 3). In the end, 13 interventions were selected on topics such as high-density urban regeneration

in Paris, Amsterdam and Barcelona, controlling development through green spaces in Warsaw and Linz and smaller scale sustainable community projects in Casoria and Nicosia. These were presented together with similar interventions already present in Croatia. A reflection on the lessons afforded by the European examples proved helpful for drafting recommendations.

In the final round (Step 4), all stakeholders attended an interdisciplinary multi-sector focus group to discuss the draft recommendations. Again, the choice of only including stakeholders with hands-on experience in the process proved effective. The stakeholders indicated that the input provided by the researchers gave a good basis for reflection. After a set of interactive validation steps, a set of final recommendations was then drawn up for decision-makers and policymakers. The participants felt that the results of the research went beyond the Croatian context and could be applied to other earthquake-affected areas (especially in the Mediterranean region) but also to smaller-scale disasters such as urban floods.

In retrospect, the focussed approach in terms of stakeholders proved conducive for making precise and timely recommendations which ultimately led to the modification of policy documents (i.e. research impact). For example, the concept 'planning urban space sustainably' was inserted into the national programme to finance post-pandemic recovery, which in the Croatian case also includes post-earthquake reconstruction. In addition, the interactive research helped bring about a specific reform to the National Recovery and Resilience Plan: integrated strategies for green urban renewal, along with selected pilot projects outlined by these strategies, are now eligible for funding. Moving beyond one-off actions, the plan allows for strategic thinking in post-earthquake reconstruction that reflects the principles of sustainable urban development, including brownfield redevelopment, green infrastructure, circular management, and the use of nature-based solutions. Moreover, as a result of the research-in-action project, the involved stakeholders pledged to help develop pilot projects in 2023 that combine green infrastructure and brownfield regeneration more strategically. The first generation of strategies has already been funded and the call for proposals for pilot projects is underway. Similar interventions are now being considered in the preparation of operational programs for the EU's multi-annual financial framework for Croatia.

Discussion and conclusion

Policy transfer is a delicate endeavour and prone to failure. However, many experiences in practice have shown the added value of exchanging knowledge and borrowing ideas from abroad. We have found that a middle road is possible between being overcautious or fatalistic about the barriers to successful policy transfer (academics) and being too sanguine about the prospects of copying a foreign best practice (politicians). This middle road, we argue, requires that researchers and policymakers work together to find relevant examples and evaluate their transferability and applicability within the respective territorial and institutional contexts. To systematise this cooperation, a reflexive action-oriented methodological protocol was drawn up and tested in two European case studies.

The methodology consciously sought to avoid uninformed, incomplete or inappropriate knowledge transfer (Dolowitz & Marsh, 2000). To this end, it contains steps designed to enhance mutual understanding and establish realistic

expectations between the two groups, thus helping to overcome 'cultural barriers' (Healey, 1997). To enhance applicability and transferability (Buffet *et al.*, 2011; Williams & Dzhekova, 2014), it prescribes activities to allow the researchers to grasp the local situation (qualitative institutional analysis) and help policymakers put their own challenges into perspective (quantitative territorial analysis using standardised European data). The process seeks to organise fruitful knowledge exchange: policymakers supply relevant interventions in their own country and the researchers respond with inspirational examples from abroad. Following the 'honest broker' approach (Pielke, 2007), these examples are not presented as photocopiable 'best practices' but as inspirations to illustrate the range of possibilities and their potential (desirable and undesirable) effects. At every stage, collaboration is key: both parties work together to select appropriate interview partners and recommendations are crafted and validated interactively (Bradbury, 2013; Kunseler, 2017).

Even though the protocol was applied in two very different policy and institutional contexts, the outcomes were remarkably similar and positive. The application of the protocol produced insights and recommendations with substantial policy impacts. In Croatia, the main stakeholder used the policy momentum (the earthquake post-reconstruction) to introduce innovative approaches informed by the research. In the case of Lithuania, the research was used to adapt the CPRL to the territorial and institutional challenges identified in the research. On reflection, two conditions enhanced knowledge transfer in these cases, which should be considered in future applications and policy transfer scholarship:

- proactive domestic institutions – it is important that the institutions involved are open to learning and are fully aware of their needs and expectations;
- real cooperation between policymakers and researchers – early involvement in the policymaking process and faithful application of co-creation tools and mechanisms.

Although drawn up to assist in the field of sustainable urbanisation, this methodology could be applied by academics seeking direct policy impact in other fields as well. However, it does require paradigmatic change by relinquishing modernist preconceptions about the ideal role of researchers in the science-policy interface and embracing joint fact-finding and a reflexive approach.

Finally, the research-in-action also had impacts on the researchers. In line with previous studies (Verwoerd *et al.*, 2019), it was found to improve overall quality both in scientific terms as well as impact. Moreover, enriched by working with and learning from the stakeholders in Croatia and Lithuania and gaining a deeper understanding of this territorial context in Europe, the researchers could use this experience in future international projects and their critical reflections.

Disclosure statement

ORCID

Erblin Berisha ⓘ http://orcid.org/0000-0002-1378-4487
Giancarlo Cotella ⓘ http://orcid.org/0000-0001-8445-412X
David Evers ⓘ http://orcid.org/0000-0002-6794-1062
Ivana Katuric ⓘ http://orcid.org/0000-0001-5965-3493

References

Adams, N., Cotella, G., & Nunes, R. (Eds) (2011) *Territorial Development, Cohesion and Spatial Planning*, (London: Routledge).

Adams, N., Cotella, G., & Nunes, R. (2014) The engagement of territorial knowledge communities with European spatial planning and the territorial cohesion debate: A Baltic perspective, *European Planning Studies*, 22(4), pp. 712–734. doi:10.1080/09654313.2013.772735

Berisha, E., Cotella, G., Janin Rivolin, U., & Solly, A. (2021) Spatial governance and planning systems in the public control of spatial development: A European typology, *European Planning Studies*, 29(1), pp. 181–200. doi:10.1080/09654313.2020.1726295

Berisha, E., Cotella, G., Janin Rivolin, U., & Solly, A. (2023) Spatial governance and planning systems *vis-à-vis* land consumption in Europe, *European Planning Studies*, pp. 1–16. doi:10.1080/09654313.2023.2207605

Blanc, F., & Cotella, G. (2023) The role of time in the localisation of global urban policy. A comparative analysis of Ecuador and Bolivia, *Journal of Comparative Policy Analysis: Research and Practice*, 25(4), pp. 1–15. doi:10.1080/13876988.2023.2173582

Boeve, M. N., & van Middelkoop, L. (2010) Sustainable urban development, the Dutch method: Best practice for the European integrated approach?, *Journal for European Environmental & Planning Law*, 7(1), pp. 1–23. doi:10.1163/161372710X12676263561719

Bovet, J., Marquard, E., & Schroeter-Schlaack, C. (2019) *International Expert Workshop on Land Take 4-5 April 2019 in Berlin, Germany Workshop Report* FKZ: 3717 18 110 0, Leipzig: Helmholtz Centre for Environmental Research (UFZ).

Bradbury, H. (Ed) (2013) Introduction: How to situate and define action research, in: *The Sage Handbook of Action Research*, pp. 1–9 (London: SAGE Publications).

Buffet, C., Ciliska, D., & Thomas, H. (2011) *It Worked There. Will It Work Here? A Tool for Assessing Applicability and Transferability of Evidence (A: When Considering Starting a New Program)*, (Hamilton, ON: McMaster University National Collaborating Centre for Methods and Tools). Available at http://www.nccmt.ca/resources/publications/9.

Cattivelli, V. (2021) Planning peri-urban areas at regional level: The experience of Lombardy and Emilia-Romagna (Italy), *Land Use Policy*, 103, p. 105282. doi:10.1016/j.landusepol.2021.105282

Colsaet, A., Laurans, Y., & Levrel, H. (2018) What drives land take and urban land expansion? A systematic review, *Land Use Policy*, 79, pp. 339–349. doi:10.1016/j.landusepol.2018.08.017

Cotella, G., Berisha, E., Casavola, D., Katuric, I., Gregar, M., Simon, S., Lipovac, R., Gaupp-Berghausen, M., Andronic, C., & Evers, D. (2021) *SUPER (Sustainable Urbanization and Land-use Practices in European Regions) spin-off Lithuania: Main Report* Main Report, Luxembourg: ESPON.

Cotella, G., Evers, D., Janin Rivolin, U., Solly, A., & Berisha, E. (2020) *SUPER Guide to Sustainable Urbanization*, (Luxembourg: ESPON).

Cotella, G., Janin Rivolin, U., & Santangelo, M. (2015) Transferring "good" territorial governance across Europe: Opportunities and barriers, in: L. Van Well & P. Schmitt (Eds) *Territorial*

Governance Across Europe. Pathways, Practices and Prospects, pp. 238–253 (London : New York: Routledge).

Couch, C., Petschel-Held, G., & Leontidou, L. (2008) *Urban Sprawl in Europe: Landscape, Land-Use Change and Policy*, (Oxford: Blackwell Publishing).

Davoudi, S. (2006) Evidence-based planning: Rhetoric and reality, *DisP - the Planning Review*, 42 (165), pp. 14–24. doi:10.1080/02513625.2006.10556951

de Jong, M., & Stoter, S. (2009) Institutional transplantation and the rule of law: How this interdisciplinary method can enhance the legitimacy of international organisations, *Erasmus Law Review*, 2(311–330), p. 20. doi:10.5553/ELR221026712009002003003

Dolowitz, D. P., & Marsh, D. (2000) Learning from abroad: The role of policy transfer in contemporary policy-making, *Governance*, 13(1), pp. 5–23. doi:10.1111/0952-1895.00121

ECTP-CEU (2002) Try it this way: Sustainable development at the local level, (European Council of Spatial Planners).

EEA and FOEN (2016) *Urban Sprawl in Europe*, (Luxembourg: European Environment Agency and Swiss Federal Office for the Environment). Available at http://bookshop.europa.eu/uri?target=EUB:NOTICE:THAL16010:EN:HTML (accessed 15 November 2019).

Evers, D., van Schie, M., van den Broek, L., Nabielek, K., Ritsema van Eck, J., van Rijn, F., van der Wouden, R., Schmidt-Seiwert, V., Hellings, H., Binot, R., Kiel, L., Cotella, G., Janin Rivolin, U., Solly, A., Berisha, E., Casavola, D., Katuric, I., Gregar, M., Simon, s., Lipovac, R., Farinós-Dasí, J., Llausàs, A., Zornoza-Gallego, C., Celinska-Janowicz, D., Ploszaj, A., Wojnar, K., Gaupp-Berghausen, M., Dallhammer, E., Schuh, B., Mollay, U., Gaugitsch, R., Slivinskaya, L., & Claus, T. (2020) *ESPON SUPER (Sustainable Urbanization and Land-use Practices in European Regions) Final Report - Main Report* Main Report, Luxembourg: ESPON, p. 87.

Faludi, A., & Waterhout, B. (2006) Introducing evidence-based planning, *DisP - the Planning Review*, 42(165), pp. 4–13. doi:10.1080/02513625.2006.10556950

Fioretti, C. (2020) *Handbook of Sustainable Urban Development Strategies*, (Seville: European Commission, Joint Research Centre (EUR 29990 EN)). doi:10.2760/32842

Gerber, J.-D., Hartmann, T., & Hengstermann, A. (Eds) (2018) *Instruments of Land Policy: Dealing with Scarcity of Land*, 1st ed.(New York: Routledge (Urban planning and environment)). doi:10.4324/9781315511658

Glaser, M. (2021) From global ideas to local action, PhD, University of Amsterdam.

Glaser, M., Bertolini L., Te Brömmelstroet M., Blake O., Ellingson C. (2021) Learning through policy transfer? Reviewing a decade of scholarship for the field of transport, *Transport Reviews*, pp. 1–19. doi:10.1080/01441647.2021.2003472

Halleux, J.-M., Marcinczak, S., & van der Krabben, E. (2012) The adaptive efficiency of land use planning measured by the control of urban sprawl. The cases of the Netherlands, Belgium and Poland, *Land Use Policy*, 29(4), pp. 887–898. doi:10.1016/j.landusepol.2012.01.008

Harrison, P., Klein, G., & Todes, A. (2020) Scholarship and policy on urban densification: Perspectives from city experiences, *International Development Planning Review*, pp. 1–23. doi:10.3828/idpr.2020.5

Healey, P. (1997) *Collaborative Planning: Shaping Places in Fragmented Societies*, (London: Macmillan Press).

Healey, P. (2013) Circuits of knowledge and techniques: The transnational flow of planning ideas and practices: The transnational flow of planning ideas and practices, *International Journal of Urban and Regional Research*, 37(5), pp. 1510–1526. doi:10.1111/1468-2427.12044

Henger, R., & Bizer, K. (2010) Tradable planning permits for land-use control in Germany, *Land Use Policy*, 27(3), pp. 843–852. doi:10.1016/j.landusepol.2009.11.003

Kunseler, E.-M. (2017) *Government Expert Organisations In-Between Logics: Practising Participatory Knowledge Production at the PBL Netherlands Environmental Assessment Agency*, (Free University Amsterdam).

Marsden, G., & Stead, D. (2011) Policy transfer and learning in the field of transport: A review of concepts and evidence, *Transport Policy*, 18(3), pp. 492–500. doi:10.1016/j.tranpol.2010.10.007

Masser, I. (1992) Learning from Europe, *Journal of the American Planning Association*, 58(1), pp. 3–8. doi:10.1080/01944369208975530

McLaughlin, R. B. (2012) Land use regulation: Where have we been, where are we going?, *Cities*, 29, pp. S50–S55. doi:10.1016/j.cities.2011.12.002

Millward, H. (2006) Urban containment strategies: A case-study appraisal of plans and policies in Japanese, British, and Canadian cities, *Land Use Policy*, 23(4), pp. 473–485. doi:10.1016/j.landusepol.2005.02.004

Mustafa, A., & Teller, J. (2020) Self-reinforcing processes governing urban sprawl in Belgium: Evidence over six decades, *Sustainability*, 12(10), pp. 4097. doi:10.3390/su12104097

Pielke, R. A. (2007) *The Honest Broker: Making Sense of Science in Policy and Politics*, (Cambridge ; New York: Cambridge University Press).

Prokop, G. (2011) *Overview of Best Practices for Limiting Soil Sealing or Mitigating Its Effects in EU-27: Final Report*, (Luxembourg: Publications Office). Available at http://dx.publications.europa.eu/10.2779/15146 (accessed 17 July 2020).

Shen, L.-Y., Jorge Ochoa, J., Shah, M. N., & Zhang, X. (2011) The application of urban sustainability indicators – a comparison between various practices, *Habitat International*, 35(1), pp. 17–29. doi:10.1016/j.habitatint.2010.03.006

Solly, A., Berisha, E., & Cotella, G. (2021) Towards sustainable urbanization. Learning from what's out there, *Land*, 10(4), p. 356. doi:10.3390/land10040356

Solly, A., Berisha, E., Cotella, G., & Janin Rivolin, U. (2020) How sustainable are land use tools? A Europe-wide typological investigation, *Sustainability*, 12(3), p. 1257. doi:10.3390/su12031257

Sykes, O., Shaw, D., & Webb, B. (2023) *International Planning Studies: An Introduction*, (Singapore: Springer Nature Singapore (Planning, Environment, Cities)). doi:10.1007/978-981-19-5407-8

Tulumello, S., Cotella, G., & Othengrafen, F. (2021) Spatial planning and territorial governance in Southern Europe between economic crisis and austerity policies, *International Planning Studies*, 25(1), pp. 72–87. doi:10.1080/13563475.2019.1701422

Van Veen, S., Verwoerd, L., & Regeer, B. (2016) *Characteristics of Reflexive Evaluation a Literature Review Conducted in the Context of the Natuurpact (2014-2027) Evaluation*, (Amsterdam/The Hague: Athena Institute/Netherlands Environmental Assessment Agency). Available at https://www.pbl.nl/sites/default/files/downloads/characteristics-of-reflexive-evaluation.pdf (accessed 29 July 2022).

Verwoerd, L., Klaassen, P., & Regeer, B. (2019) *The Value of a Reflexive Evaluation Approach in the Eyes of Researchers*, p. 44 (Amsterdam/The Hague: Athena Institute/Netherlands Environmental Assessment Agency).

Whitney, R. A., & López-García, D. (2022) Fast-track institutionalization: The opening of urban planning best practice agencies in Mexico city, *Environment & Planning C: Politics & Space*, 41 (3), pp. 600–616. doi:10.1177/23996544221142166

Williams, C. C., & Dzhekova, R. (2014) Evaluating the cross-national transferability of policies: A conceptual framework, *Journal of Developmental Entrepreneurship*, 19(4), pp. 1–16. doi:10.1142/S1084946714500228