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ABSTRACT
Ideas about green cities, good architecture and planning are often shared among professionals working in the field of urban planning and design during conferences, workshops, and meetings. But how is what is considered ‘good’ or ‘best’ in planning and policy decided? And where do we learn about good ideas, places to visit, and projects to be inspired by? Are there any potential risks or challenges inherent to following in the wake of the same ‘inspiring’ reference objects as everyone else—regardless of whether it is a city, a neighbourhood, or a building?

This article makes the case for a policy mobilities perspective for understanding how ideas about the green city are conceptualized, formulated, and mobilized in urban policy. Drawing on a growing body of literature in geography and urban studies, the article argues for the usefulness of adopting a policy mobilities perspective when working with(in) green city policy, also for scholars outside the field of geography. Using the case of multistorey housing in wood in Sweden, the article presents three different perspectives on how ideas about green cities are formulated and mobilized.

KEYWORDS
Green city, policy mobilities, multistorey housing in wood, green policy
INTRODUCTION

In April 2018, a group of people visited a newly completed student housing complex called Kungsbäck, in Gävle, Sweden. The group consisted of approximately forty people working as architects, planners, policymakers, and builders, and they were invited to Kungsbäck by the Trästad Sverige organization. The visitors were welcomed to the site by the head architect of the project, who is also the owner of the housing company that now rents the houses to students. He gave the group a detailed description of the project, the objectives that guided the process, and how functionality, tenants' needs, and the specificities of the place (light, surrounding environment, local and national planning regulations) worked together in the design and construction of the red and grey housing complex that consists of three three-storey buildings containing ninety-five apartments built entirely of wood. After this talk, the visitors were invited to visit one of the small studio apartments on the second floor, where they experienced the interior design, choice of materials, and the way light enters through the windows. This was followed by a round of questions from the visitors that were answered by the host.

This type of visit is a well-recognized practice among planners, architects, and policymakers, and it takes place in many different locations and formats around the world. Identifying objects that can be understood as ‘good’ in planning, architecture, or urban development and learning from those cases has become a key feature of everyday life for people working in urban planning.¹ Places that have been identified as flagships or showcases play an important role in deciding where to go and what to learn.² Visiting and learning from an already built environment helps planners and architects to conceptualize and refer to ‘good’ as well as ‘bad’ examples.³ One of the main rationales for this practice is that learning from elsewhere spreads proven ideas and concepts and is assumed to make it easier to be successful elsewhere.⁴ This type of study visit and tour has a long-standing tradition in planning,⁵ and increased attention to the circulation of good ideas through international policy programmes and finding best practices has increased the volume of circulated policy ideas and models.⁶

With the ‘urban turn’ in sustainability policymaking,⁷ concepts like ‘green cities’, ‘smart urban specialization’, and ‘low carbon communities’ have become buzzwords in policymaking and academia.⁸ The main issue at hand is how to decrease the climate impact of urban settlements, while maintaining growing populations and expectations of economic growth. Often, the
proposed solution to this urgent task is presented as a mix of new, more effective and strategic policymaking alongside innovative technological development, making policymakers look elsewhere for inspiration and good ideas.\textsuperscript{9} Especially in matters regarding planning for and building more sustainable and ‘green’ cities, destinations such as Copenhagen, Freiburg, Vancouver, and Malmö have been frequently referred to as must-see places to learn best practice.\textsuperscript{10} In geography and urban studies, this circulation of policy ideas and models has come to be known as ‘policy mobilities’\textsuperscript{11} and focuses on understanding how policy ideas and models are formulated, disseminated, and implemented across the globe.\textsuperscript{12}

In Sweden, the definition of a ‘green city’ has recently taken a new direction, introducing a discussion on the materials used when constructing houses.\textsuperscript{13} Multistorey housing in wood is considered a potential avenue for reducing climate impact, while addressing the increasing demand for new housing in urban areas.\textsuperscript{14} Building from wood have the potential of substantially reducing the carbon dioxide emissions compared to building a similar house using concrete and steel.\textsuperscript{15} Employing a renewable, locally sourced, and strong yet light material, wooden houses have dominated the single-family housing market in Sweden for centuries. However, building houses in wood that are taller than two storeys is a recent development in Sweden, which has only been permitted since 1994. This makes multistorey housing in wood a fairly new building technique in Sweden. It also requires slightly different methods for the design and construction than concrete and steel. The increased political focus on green cities and on multistorey housing in wood have created a surge among planners, architects, and engineers in Sweden to seek good examples and places to visit in order to learn about this new way of building green cities.

In geography, the research interest in ‘how, why, where and with what consequences’\textsuperscript{16} policies, which are being circulated between different places in search of best practice, has gained increased momentum.\textsuperscript{17} Trying to understand the underlying processes, structures, and agencies that make certain policies become mobilized while others remain immobile—and what happens to the ones that are moved about—lies at the heart of policy mobilities research. Are there any potential pitfalls associated with following ‘universal truths’ about what is good or desirable, or for everyone to follow in the wake of the same reference objects? And how are shared views on what is good and not so good even developed? At the same time, the question for someone outside of the policy mobilities research context might be why trying to
unveil these intricate social and geographical dynamics in identifying best practice policies matters at all? Instead, such a person might argue that, when working with green city policies, aiming to mitigate climate change should be the main concern, rather than debating about where these (good) ideas come from. This line of argument will be addressed in this article.

This article argues for the usefulness of a policy mobilities perspective in understanding how ideas about the green city—here exemplified by the case of Swedish multistorey housing in wood—are conceptualized and formulated in urban policy, and why policy mobilities perspectives matter for scholars outside of geography. Drawing on international literature about how policy ideas and models are formulated and mobilized, three different perspectives are presented on how multistorey housing in wood is conceptualized as a solution for building green cities in Sweden. These perspectives relate to: 1) practice, 2) policy development, and 3) institutional capabilities. The main outline of the article stems from a keynote presentation that I had the privilege to give at the Nordic Association of Architectural Research annual symposium in Seinäjoki, Finland, in 2018, which was further developed for the purpose of this article.

The article is structured as follows. The next session presents the main traits of the policy mobilities literature with an emphasis on the circulation of green urban policies. The case of multistorey housing in wood in Sweden is introduced, accompanied by a brief reflection on methods. The article continues by presenting three different perspectives on how multistorey housing in wood is being conceptualized as a solution for building green cities in Sweden. This is followed by a concluding discussion.

POLICY MOBILITIES AND THE CIRCULATION OF GREEN URBAN POLICY

In contemporary urban policy, certain cities are identified as ‘celebrity cities’ and are generally considered role models for how to handle particular types of urban issues. In planning and urban development, it is not uncommon to reference the ‘Barcelona model’ for urban regeneration and Bilbao’s ‘Guggenheiming’ for cultural development policies, or to celebrate the bicycle planning of Copenhagen and the public transport policies in Freiburg. Various rankings and awards, such as the Green City Index by Siemens and the Quality of Living City Ranking by Mercer, contribute to the understanding that some cities are considered to handle certain urban
issues better than others. These rankings serve to reinforce the notion of best practice being located in particular places and a hierarchy of nodes in policy circuits, creating what McCann calls ‘referencescapes’. By studying successful examples from such cities, politicians and policymakers hope to be inspired by ‘best practices’, learn what works, and bring good ideas back home to implement in a new context.

In response to this development, many studies have been published under the rubric of ‘policy mobilities’. This set of geography and urban studies literature aims to understand the phenomenon of mobile policies and the accompanied sharing and learning of good (and sometimes bad) practices. In policy mobilities research, there is a special interest in the study of the key actors, institutions, and practices involved in the process of transferring policies from one place to another, along with the institutional and geographical structures that facilitate or hinder such transfers. Key perspectives relate to ‘how, why, where and with what effects policies are mobilized, circulated, learned, reformulated and reassembled’. Previous research has shown how policy is increasingly being mobilized and circulated in professional networks through conferences, workshops, and policy briefs for the purpose of shared learning and exchange of experience. Examples of such practices are found in the fields of urban environmental policy, public transport, drug prevention policies, urban development, and regional policy. Especially for people working in a planning context, policy mobilities through study trips or ‘policy tourism’ are a shared practice in many parts of the world. Policy mobilities may therefore play a rather universal role in the formulation of ideas about what is ‘good’ urban policy.

Regarding environmental urban policies, several writers note that there is an increasing practice of sharing and learning about good ideas between policymakers working with issues related to sustainability. At the level of the European Union (EU), this is manifested through awards such as the European Green Capital Award and events such as the annual European Week of Regions and Cities in Brussels. At the urban level, the political interest in sharing good green ideas occurs through city networks, such as the Union of the Baltic Cities, Energy Cities, and the International Council for Local Environmental Initiatives (ICLEI). According to Gustavsson et al., local governments use such peer-to-peer networks to make a name for themselves and their city as a frontrunner or early adopter in the field of environmental policy and to access new ideas and technologies.
In response to augmenting interurban competition and economic globalization, cities with green ambitions are increasingly turning towards entrepreneurial and extrospective efforts, sometimes adopting ‘green place branding’ strategies. In addition, cities that actively engage in mitigating climate change or adopting green urban policies tend to do so by incorporating experimental pilot projects, as Emilia Smeds and Michele Acuto note. Such experiments, if somewhat successful, can be turned into permanent policies and examples for others to learn from. Experimental and innovative policy can thus provide both policy development and marketing opportunities for extrospective green cities. However, these strategies are not necessarily effective for addressing the underlying environmental issues, as Rosol et al. argue, for extrospective and experimental policies tend to focus on things that can be put on display and provide a competitive advantage, rather than on holistic approaches. Entrepreneurial and extrospective measures have been shown to increase elements of cherry-picking and selectivity in green urban policy, creating ‘semi-coverage’ in addressing urban environmental problems.

This brief introduction of policy mobilities and how it relates to the development of green urban policy serves as background for the continued discussion on how multistorey housing in wood is being conceptualized as a solution to building green cities in Sweden.

METHOD AND CASE STUDY INTRODUCTION
This article draws on empirical data collected during a three-year (2016–19) research project called Sustainable housing 2.0? The role of policy networks and eco-innovation in the Swedish wood housing industry. The project combines a number of different qualitative research methods to provide a rich and detailed data set that captures the interlinked processes between the development of policy and industry in relation to multistorey housing in wood. The data collection comprised: 1) in-depth interviews with stakeholders involved in the wood-based housing sector in Sweden, 2) participatory observation during network meetings, conferences, fairs, and seminars, 3) mini-interviews with participants during these meetings, conferences, fairs, and seminars, and 4) analysis of secondary printed materials such as flyers, newspapers, books, reports, and policy documents produced by industry organizations, political bodies, and interest groups.

When the ban on constructing new wooden houses taller than two stories was cancelled in Sweden in 1994, it had existed for over 120 years. It was
introduced as a response to the many devastating city fires that had struck Swedish cities in the 1700s and 1800s, where wooden houses were identified as a reason why the fires spread.\footnote{47} The ban was lifted when Sweden was about to join the European Union in 1995 and had to alter the national fire hazard regulations for construction. The changes meant that the regulations no longer specifically named wood as a prohibited material. Instead, the new regulations stipulate functionality in case of a fire. A building (regardless of building material) taller than two stories must be able to stand for a substantial amount of time (90–120 minutes, depending on height) before the risk of collapsing in case of a fire, which allows for time to evacuate the building and for the fire department to arrive. This shift in legislation, combined with fire prevention techniques such as sprinklers, provides a window of opportunity for new materials and construction methods in Sweden, and wood has been one of the most renowned and successful so far.\footnote{48}

A handful small-scale multistorey wood housing projects were realized in the 1990s and early 2000s. The subsequent rather slow start to the production of multistorey wood housing has recently increased in pace. Approximately 10 per cent (3,598 apartments) of the newly built apartment stock in 2016 was constructed of wood.\footnote{49} Building from wood can possibly reduce carbon dioxide emissions—compared to housing built from concrete and steel—and act as a carbon sink, binding carbon to the structure throughout the remainder of the house’s life span.\footnote{50} The notion of multistorey housing in wood as a political climate strategy was first introduced in the national political landscape in 2004 through the Swedish national policy called ‘Mer trä i byggandet’ (More Wood in Construction).\footnote{51} This was later replaced by a national three-year programme called ‘Trästad 2012’.\footnote{52} The programme involved seventeen municipalities and four regions, and it was aimed at increasing the large-scale production of multistorey housing in wood. It was supported by a larger national ‘Forrest Kingdom – with values for the world’ strategy, launched by the Minister for Rural Affairs. This strategy aimed at increasing the potential for economic growth in rural areas as well as the potential for new export markets for the timber industry, which included multistorey housing in wood.\footnote{53} The climate-related arguments to increase the production of multistorey housing in wood was renewed after the 2014 general election in Sweden and entered a number of different policy fields on the national level. Multistorey housing in wood became a shared concern for the Minister for Housing, the Minister for the Environment, the Minister for Business and Industry, and the Minister for Rural Affairs.\footnote{54}
Parallel with the development of national policies to promote multistorey housing in wood, policies to increase the construction of wooden-based housing have been developed on the local level. Several municipalities (e.g., Skellefteå, Växjö, Skövde, Stockholm, Mönsterås, etc.) have sought potential benefits from promoting the construction of multistorey housing in wood through planning strategies, budgetary work, and procurement policies.\textsuperscript{55} The development and characteristics of these policies are addressed in more detail below. Representatives from these municipalities—together with a growing number of producers, architectural and engineering firms, a handful of researchers and public officials—constitute a group of actors that actively engage in promoting increased production of multistorey wood housing in Sweden. This group of actors is henceforth referred to as \textit{the wood housing sector} in this article.

Considering the technical specificities of multistorey wood housing, the potential of different building techniques and solutions to reduce carbon dioxide emission and provide a carbon sink varies.\textsuperscript{56} In general, there are two main building techniques in the Swedish market for multistorey housing in wood: cross-laminated timber (CLT) \textit{frames} and CLT \textit{modules}. The former has a higher degree of design flexibility and timber content as it is custom made for each new project, which usually also implies higher production costs. The latter permits more streamlined and cost-efficient production with a high level of automatization to produce standardized modules with more repetitive design features.\textsuperscript{57}

![Figure 1. Number of apartments built with a wooden core in Sweden, 1995–2016 (Source: TMF, 2017)](image-url)
However, building multistorey housing in wood is far from uncomplicated. As this building technique is fairly recent in Sweden, the skills and acceptance of building wooden housing taller than two stories are rather limited. The knowledge and experience is rather concentrated within a few architectural firms, construction companies, and engineering consultancies. In addition, the capacity of the wood house producers is limited, as there are few such producers, considering the size of the overall construction industry, despite recent investments and start-ups. Moreover, given the lightness and flexibility of wood as a construction material, the beams separating the different floors must be thicker than concrete ones. This can potentially lead to fewer floors and thus fewer square metres in tall wooden buildings than in equally tall concrete constructions, affecting the economy of the projects. This issue has been handled in a few planning projects (e.g. Vallastaden in Linköping and Frostaliden in Skövde) by specifying in the planning permits the maximum number of floors rather than the maximum height. This solution requires the active involvement of policymakers producing such planning documents to advocate wood as a building material. Taken together, these issues create obstacles for the wood housing sector in increasing the amount of multistorey housing built of wood in Sweden.

To address this complex structure of technical, knowledge-related, policy-oriented, and capacity-based challenges, the Swedish wood housing sector has organized a series of conferences, seminars, and study tours and produced numerous reports, debate articles, guidebooks, and policy documents arguing for the potential benefits of building more multistorey housing in wood. This presents a rather intricate and detailed case from which this article draws. The following section combines insights from policy mobilities literature and data from the above case to present three perspectives on how multistorey housing is being conceptualized as a solution to building green cities in Sweden.

THREE PERSPECTIVES ON CONCEPTUALIZING THE GREEN CITY (BUILT IN WOOD)

As noted above, policy mobilities play an important role in how ideas and understanding of green city policies are formulated, disseminated, and implemented and with what consequences. Reflecting on who is included in networks working with green urban policy and who is not provides a strong argument for why policy mobilities matter. Considering the processes of policy development and formation, it is important to reflect on who is...
considered an expert. Who is being listened to and who do people take advice from? In what arenas do these actors operate? In the following sections, three different perspectives on how multistorey housing in wood is being conceptualized as a solution to building green cities in Sweden—relating to practice, policy development, and institutional capabilities—are discussed.

UNDERSTANDING GREEN URBAN POLICY PRACTICES
One of the most easily detected policy mobilities practices in green urban policy is the study tour. Study tours are crucial in learning about ‘what works’ for other cities and what has been successfully implemented elsewhere. In the case of the wood housing sector in Sweden, study tours are usually organized under the umbrella concept ‘wood house safaris’. The safaris are organized in municipalities that are considered to be frontrunners in wood building, such as Växjö and Skellefteå, with many well-known objects to
showcase. Safaris are also organized in less established wood city locations—often where new development is taking place or is planned—such as Linköping and Gävle. The wood house safaris attract a broad spectrum of interested actors, including real estate developers, engineers, building contractors, architects, planners, politicians, and researchers.

The conferring of rewards and prizes is another well-established practice that helps mobilize green urban policies. ‘Trästadens gnista’ (Wood City Ignition), ‘Träflugan’ (The Wooden Bowtie), ‘Träpriset’ (Wood Award), and ‘Trähjälte’ (Wood Hero) are some of the many awards that are given in the Swedish wood housing sector. Some awards are bestowed by private actors, such as ‘The Wooden Bowtie’, which the major CLT timber frame producer Martinson awards every year. The Bowtie is awarded for innovative accomplishments by small-scale actors (with less than ten employees) or individuals ‘who have pushed their business—or the entire industry—forward during the last year’.

Other awards are presented by governmental organizations, such as the ‘Wood Building Award’ bestowed by the Växjö municipality that is awarded to a project, company, or research publication that ‘reinforces the municipal wood building strategy and manifests Växjö as the national leader in wood building’.

The third policy mobilities practice highlighted here is the participation in various types of green city networks and policy workshops/seminars. As noted above, such networks are central in understanding how and why certain green urban policies are circulated. There are several policy networks in the Swedish wood housing sector. The primary network is called ‘Trästad Sverige’ (Wood City Sweden) and gathers policymakers, industry representatives, and researchers from all over Sweden. The network was created in the wake of the Trästad 2012 programme, and the network’s main objective is to ‘inspire to develop the construction in wood and to disseminate knowledge on how to do this in the best possible way—technically, environmentally and economically’.

Other examples of networks that work to promote building in wood are ‘Nordic Wooden Cities’, ‘Tre Trästäder’, and ‘Rethinking wood’. In 2018, a professional network for architects interested in learning about multistorey housing in wood was inaugurated. The network is called ‘TränätverkA’ and aims to ‘spread knowledge about wood within the [architectural] community in order to collectively keep the initiative in wood building issues and ensure good architecture’. In one of the first meetings held by this network in the fall of 2018, the founding members explained that, due to the technological speci-
cities of building multistorey housing in wood, the design of such houses has been left at the hands of engineers and manufacturers. Through TränätverkA, architects are looking to retake the design initiative for green urban structures.

In addition to various types of networks, many different seminars, conferences, and workshops have been organized by various actors in the Swedish wood housing sector. A common theme for most of these activities is an ambition to bridge research and policy with industry know-how and good examples from implemented projects from Sweden and abroad. During these conferences and workshops, small-scale business fairs are often set up outside of the conference venues so that related businesses can showcase building materials (i.e. insulation, screws, etc.), new technologies, and consultancy services targeting the Swedish market for multistorey housing in wood.

UNDERSTANDING GREEN URBAN POLICY DEVELOPMENT

Previous studies have shown that the green city concept is rather imprecise in terms of what it can and cannot involve, which allows for a broad range of interpretations when it is being implemented.72 There is variability in what is meant by ‘green’ in green urban policy, which spans from green space to de-growth strategies. Between these two extremes, there are many issues such as green growth, energy efficiency, smart city strategizing, and bio-economy.73 As separate entities, these concepts represent various dimensions of environmentally oriented policymaking, and they can be understood as a spectrum of green urban policies. Local governments adopting a green city identity for the purpose of place branding can define what they mean by using green terminology and how these different policy concepts can be combined.74 Critical views have described this as a cherry-picking process, where local governments tend to highlight the dimensions of green that they perform better in,75 and downplay what they do less effectively.76

The dominating argument for building multistorey housing in wood in Sweden rests on a general argument of ecological sustainability. Here, the lower carbon dioxide emissions during production as compared to using concrete and steel has been targeted.77 In addition, wood is being promoted as a renewable building material and a carbon sink as compared to concrete.78 Multistorey housing in wood was initially introduced as a way to alleviate issues related to climate change, but the spectrum of sustainability arguments broadened over the years. Social sustainability has recently been introduced into the discourse, manifested in two main avenues. The first is the potential
health benefits of living or working in a wooden house, where some early claims of respiratory benefits must be considered anecdotal. However, one study in Norwegian hospitals claimed that post-op patients recovering in hospital rooms with visible wood on the walls are discharged faster than those with traditional white plastered walls, a finding that is repeatedly referenced at wood-housing conferences and workshops. The other avenue focuses on the workplace conditions for those who are building the houses, where the high level of prefabrication of wood house modules means that the workers assembling can potentially work in indoor factories rather than outdoors using other building techniques. The workplace conditions on the assembly sites have been added to this discussion, with claims that the softer wood makes it less noisy than concrete when drilling in the walls. This is claimed to be beneficial for those working on the building sites as well as for any potential neighbours, who might be disturbed by the noise from construction.

Finally, several sets of arguments relating to economic sustainability have been added to arguments for building multistorey housing in wood in Sweden. One of the central arguments from a political point of view is that building multistorey wood housing contributes to regional development in more peripheral areas of the country. As most of the producers of multistorey housing in wood are located in rural and remote areas of the country, arguments are made that building wooden houses for urban markets contribute to creating rural jobs and investments. In addition, especially in relation to building module housing, the argument of low-cost housing has made its way into the discussion. For example, housing producer BoKlok, jointly owned by IKEA and Skanska, claims that single mothers with two kids and a low income are their ‘target customer’ for their wooden apartments. A similar market segment is identified by family-owned Lindbäcks Bygg, which uses LEAN production principles to provide large quantities of wooden module housing at a cost-efficient price level.

The development of multistorey housing policy in Sweden can also be understood from a political point of view that is related to a discussion in policy mobilities literature about assemblages. According to Robinson, local policy can be understood as assemblages of local structures and policy fragments borrowed from elsewhere. With this perspective, what is implemented is what local decision makers are ‘arriving at’ by mixing these fragments and structures. This perspective is highly relevant for understanding the development of wood housing policy in Swedish municipalities.
Examples of different policy assemblages can be found in an increasing number of municipalities. Several municipalities have adopted the concept of the ‘Wood City’ as part of their city branding strategy, presenting different arguments for prioritizing wood in planning. However, within this adoption of wood city policies there are many interpretations and local adaptations. For instance, the municipality of Växjö aims to highlight wooden housing in relation to a general branding strategy of striving to be ‘the Greenest city in Europe’ by focusing on the reduction of carbon dioxide emissions from building more structures in wood. In contrast, Skellefteå emphasizes local economic growth in their interpretation of the wood city concept. By calling themselves a wood city, Skellefteå aims to encourage the local timber industry to produce multistorey housing in wood. Falun is another example of a municipality that incorporates a wood city concept in their place-branding strategy, but from a social and cultural point of view. In the branding of Falun as a wood city, the cultural heritage of timber buildings is highlighted. The historic neighbourhoods in the city centre displaying old worker’s homes in wood are put forward as one of the main arguments in their understanding and promotion of Falun as a wood city. These three examples are just a few ways that Swedish municipalities are creating wood city assemblages when working with green place branding.

UNDERSTANDING INSTITUTIONAL CAPABILITIES THROUGH GREEN CITY POLICY

The third policy mobilities perspective on understanding the development of green city policy discussed in this article is related to institutional capabilities. Institutional capabilities encompass relational capability, knowledge capability, and mobilizing capability and have a strong impact on scope and resilience in the development of policy. Previous research has shown that relational capabilities are required for successful green city policies to be established, as trust and collaboration between multiple types of actors is required for long-term and resilient green city policy. Furthermore, mobilizing capabilities, which includes the ability to activate various actors to strive towards common goals, are critical in green city policy development. This is particularly noticeable in matters relating to large-scale infrastructural investments, where both local and non-local actors are required to collaborate to secure necessary capital investments. Knowledge capabilities, understood as the pooling of timely and locally relevant information and new ideas, are highly relevant in green city policymaking and finding common points of reference for public-private partnerships.
Relational capabilities in the Swedish wood housing industry are primarily built through various forms of formalized networks and events (described above). Some of the networks, such as Trästad Sverige, have a rather tight social structure characterized by a high degree of familiarity among its members and a strong discourse that building multistorey housing in wood is both rational and preferred. Other networks are more loose and centre on particular projects or events such as the annual ‘Ingenjörsmässigt byggande i trä’ (Timber Construction from an Engineering Point of View)—hosted by the timber industry lobby organization Swedish Wood and the architectural network TränätverkA. These networks often focus on learning about the possibilities of building from wood, and a discussion of whether or not wooden housing is possible or advisable is reoccurring. Several professionals working in the wood housing industry, who were interviewed for this project, described the importance of being active in both of these types of networks for various reasons. The tighter networks function as a source of support, as an ‘inner circle’ among peers, and aim to form a collective force in terms of political influence and impact directed primarily towards the national level. The more loose networks are described as being related to building new relations and extending professional networks, learning and sharing ideas, and understanding what the main discussion and potential doubts among ‘curious outsiders’ are.

Knowledge capabilities are highly relevant and are constantly being redeveloped through the various activities involving different wood housing actors. For example, many manuals and how-to-guides covering different aspects and techniques of designing and building multistorey housing in wood have been published, often in collaboration among competing firms. These manuals can be seen as a response to a major challenge shared by most of the companies involved in producing multistorey housing in wood, namely, finding and recruiting relevant competences. In Sweden, the professional education in architecture, engineering, planning, and construction has not incorporated wood in their educational portfolios for multistorey housing in the same way as other building materials such as steel and concrete. However, with the increasing political and market demand for more multistorey housing in wood, the strategy of the wood housing sector has been to recruit people from the traditional building industry and teach them about building houses in wood.

Another ‘knowledge gap’ identified by several interviewees in this project is the lack of experience and information among public officials on how
to plan for wood housing projects, especially for public housing and governmental buildings. As most zoning and physical planning in Sweden is carried out by the 290 municipalities, the lack of knowledge on how to support the construction of wooden housing through public procurement and physical planning is considered to hamper the construction of multi-storey housing in wood. Through seminars and guidebooks, both public and private actors are trying to teach planners, politicians, and procurement specialists how to incorporate wood as a factor in their municipal plans. The Wood House Safaris described above also play an important role in educating both building professionals and public officials, by showcasing multi-storey wood housing.

Measures have also been taken to address these identified knowledge gaps in industry and government through more structural interventions, which require mobilizing capabilities. Several of the regional universities (e.g. Dalarna University, Linnaeus University, Luleå University of Technology) now offer supplementary training for building professionals to be future ‘experts in sustainable wood construction’.97 In addition, the vocational college (e.g. Yrkeshögskolan) offers a two-year training programme to become a specialist in wooden construction, and other technical colleges offer tailor-made training programmes designed to fit the competence demand of the expanding wood house sector.98 Furthermore, some of the larger housing producers (i.e. Lindbäcks Bygg, BoKlok) and interest groups (i.e. Swedish Wood) sponsor research and professorships in wood construction at some the Swedish universities (e.g. Chalmers, Luleå University of Technology). Steps have also been taken to influence the revision of the national building regulations to promote wood as a building material.99 This occurs in various lobbying settings, by collectively pushing for more neutral regulations in terms of building materials and for making Life Cycle Analysis (LCA) mandatory when constructing new buildings.100

These are a few of the myriad of combined ways in which the Swedish wood housing sector relies on institutional capabilities to increase the number of houses built from wood. Notably, public and private actors in various geographical locations and scales have recurrently joined forces almost seamlessly in a broad range of projects and events in their collective pursuit of producing more multi-storey housing in wood.
CONCLUDING DISCUSSION

This article has argued for the usefulness of a policy mobilities perspective for understanding how ideas about the green city are conceptualized and formulated in urban policy. Using the case of multistorey housing in wood in Sweden, the article has illustrated why it matters for scholars outside geography to understand how policy ideas and models are formulated and mobilized. In doing so, this article has presented three perspectives on how multistorey housing is being conceptualized as a solution to building green cities in Sweden.

First, policy mobilities perspectives aid in the understanding of how green urban policy is formed as a practice. Through study tours, conferences, workshops, and awards, policy mobilities are a central dimension of how ideas and policies about multistorey housing in wood are formulated and shared among different actors and networks that are active in the Swedish wood housing sector. Second, policy mobilities are relevant to understanding the process of how ideas and perspectives on multistorey housing in wood are developed as policy. Similar to the imprecise definitions of green urban policies, the definitions of what constitutes (good) wood building policies are rather fluid, which makes it ideal for cherry-picking. The arguments from stakeholders that are active in the Swedish wood housing sector regarding why and how multistorey housing in wood can be considered sustainable include a range of perspectives—such as carbon dioxide emissions and the workplace conditions for those building the houses. The line of argumentation is also somewhat flexible, and the breadth of the argument varies depending on who is the target audience. In a wider perspective, this assembling of policy perspectives and angles can provide an understanding as to why green urban policies seem to be in continuous transformation and vary between different places.

Third and finally, policy mobilities play a part in understanding how the institutional capabilities necessary for implementing wood house policies are formed and how they contribute to the understanding of multistorey housing in wood as a green city strategy. Through relational capabilities, wood housing networks of various shapes and sizes have been created. These networks collectively aim to increase the pace of wood building in Sweden as well as the knowledge diffusion about how to build wooden houses. Some of the more dense networks not only share information among their members but also aim to influence policy formation on the national level. Knowledge
capabilities are formed through collaborative action between various stakeholders aiming to address the gaps in terms of professional know-how on how to plan for, design, procure, produce, and maintain multistorey housing in wood. To take more long-term measures to balance out the current differences between concrete, steel, and wood in academic and professional education, mobilizing capabilities focus on traditional educational institutions and stakeholders active in the Swedish wood housing sector. The investments from wood house stakeholders in both research and education at some of the Swedish universities exemplify such initiatives.

In conclusion, one might reflect further on why it matters to adopt a policy mobilities perspective on the conceptualization of ideas for green urban policy. One way to address such a question is to argue that there is a need to be mindful of policy mobilities when interacting with(in) the processes producing practice, policy, and institutional capabilities relating to green cities, as these processes actively contribute to reproducing and circulating certain championed ideals and perspectives. Are there truly universal truths that are considered ‘good’ or ‘best’ in green urban policy? Does one size truly fit all, and how is that size decided? Is there a risk of overlooking good ideas that (currently) are not being identified as best practice or are not located in places understood as frontrunners? Being mindful of what examples and places are being reproduced as good or best practice also makes it easier to look for good examples elsewhere. These issues should be considered when aiming to understand how to build a green city.

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NOTES


17 For an overview, see: Eugene McCann and Kevin Ward, Mobile Urbanism Cities and Policymaking in the Global Age (Minneapolis: University of Minnesota Press, 2011); Peck and Theodore, Fast Policy; Temenos et al., ‘Inside Mobile Urbanism’.


25 McCann, ‘Expertise, Truth, and Urban Policy Mobilities’.


Andersson and Cook, ‘Conferences, Award Ceremonies and the Showcasing of “Best Practice”’.


Gustavsson et al., ‘Multilevel Governance’; see also McCann, ‘Policy Boosterism’.


44 McCann, 'Policy Boosterism'; Temenos and McCann, 'Geographies of Policy Mobilities'.


46 Andersson and James, 'Altruism or Entrepreneurialism?'; McCann, 'Mobilities, Politics, and the Future'; Rosol et al., 'Greenest Cities?'.


49 Trä- och möbelföretagen (TMF), 'Drygt 50 procents ökning av flerbostadshus med stomme i trä – ny statistik från trä- och möbelföretagen, TMF, 12 December 2017; see also figure 1.

50 Ingenjörsvetenskapsskolan, Klimatpåverkan från byggprocessen; Kellner, Klimat Energi Hållbarhet.

51 Departementsserien, ‘Mer trä i byggandet’.


55 Canas, ‘The Necessity of More or Less Wooden Construction?’.

56 Kellner, Klimat Energi Hållbarhet; Reiden, 2000-talets svenska trästäder.


58 Kellner, Klimat Energi Hållbarhet.

59 Edholm, ‘Glesbygden bygger för framtiden’;

60 Kellner, Klimat Energi Hållbarhet.

61 McCann, ‘Mobilities, Politics, and the Future’.

62 Cook and Andersson, ‘Tour Guides and the Hosting of Policy Tourism’; Gonzalez, ‘Bilbao and Barcelona “in Motion”’.
63 Trästad, Årsmöte och konferens med Trästad Sverige, Trästad Sverige årskonferens, Linköping, 4–5 May 2017; Trästad, Årsmöte och utblick mot framtiden, Trästad Sverige Årskonferens, Gävle, 26–27 April 2018.

64 Cf. Andersson and Cook, ‘Conferences, Award Ceremonies and the SHOWCasing of “Best Practice”’; Berrini and Bono, Measuring Urban Sustainability.


67 Gustavsson et al., ‘Multilevel Governance’; McCann, ‘Policy Boosterism’.


70 This has a double connotation in Swedish, meaning both ‘Wood Network A’ and ‘Networking in Wood’ in English.


75 Burch, ‘Transforming barriers into enablers of action on climate change: In-sights from three municipal case studies in British Columbia, Canada’

76 Cf. Andersson and James, ‘Altruism or Entrepreneurialism?’; McCann, ‘Policy Boosterism’; While et al., ‘The Environment and the Entrepreneurial City’.

Ingenjörsvetenskapsakademien, *Klimatpåverkan från byggprocessen*; Kellner, *Klimat Energi Hållbarhet*.


Edholm, ‘Glesbygden bygger för framtiden’.


Skellefteå kommun, ‘Träbyggnadsstrategi’.


Jonas et al., ‘The New Urban Politics’; McLean and Borén, ‘Barriers to Implementing Sustainability Locally’; Andersson, “‘Green Cities” Going Greener?'.
95 Cf. Andersson and James, ‘Altruism or Entrepreneurialism?’.


99 Trästad, Årsmöte och konferens med Trästad Sverige.

100 Frank, ‘Wood Buildings Attractive for Both the Environment and the People’; Trästad, Årsmöte och konferens med Trästad Sverige; Trästad, Årsmöte och utblick mot framtiden.