

**Legal challenges for integrated spatial and energy planning –**

**A study in the European urban context**

***Verena Madner<sup>1</sup> & Katharina Prochazka<sup>2</sup>***

*<sup>1</sup>Professor of Public Law, Environmental Law, Public and Urban Governance,  
Vienna University of Economics and Business, Research Institute for Urban  
Management and Governance, A-1020 Vienna, Welthandelsplatz 1, +43-1-313 36 -  
4662, [verena.madner@wu.ac.at](mailto:verena.madner@wu.ac.at)*

*<sup>2</sup>Teaching and Research Associate, Vienna University of Economics and Business,  
Research Institute for Urban Management and Governance, A-1020 Vienna,  
Welthandelsplatz 1, +43-1-313 36 - 5542, [katharina.prochazka@wu.ac.at](mailto:katharina.prochazka@wu.ac.at)*

**Abstract**

In order to achieve ambitious goals in climate change policy and resource conservation, cities are facing the challenge to develop innovative instruments and strategies in a variety of policy fields in a multi-level context.

Although the European Union does not have legislative competences in spatial planning, urban planning in Europe is being influenced substantially by the EU's energy and climate targets and by EU-funding instruments and legislation: The "European Smart City Agenda", the EU climate change policy goals as well as a number of Directives – i.a. the Energy Performance of Buildings Directive (2010/31/EU), Energy Efficiency Directive (2012/27/EU), Renewable Energy Directive (2009/28/EU) all work as powerful drivers. The European Innovation Partnership for Smart Cities and Communities recommends to develop zero-energy new buildings and districts and to find retrofit solutions in order to improve the energy efficiency of existing buildings. The EU's secondary law sets minimum standards for the energy efficiency of buildings and requires a certain use of renewable energies (see in particular the Energy Performance of Buildings Directive (2010/31/EU) or the Energy Efficiency Directive (2012/27/EU)).

A number of European cities are using planning and building legislation as a means to achieve energy policy goals and to establish sustainable city structures. Existing spatial planning instruments are being used explicitly for energy purposes and new spatial planning instruments are being introduced and put into practice. Planners and policy-makers promote examples of "good practice" on how to best integrate spatial and energy planning. However, the potential for energy-orientated planning not only depends on the physical structures and the social fabric of urban

space. The introduction and implementation of new instruments and the transfer of “good practices” in the national context also requires a thorough analysis of the relevant legal-institutional context.

With this paper we mainly want to contribute to the discussion on how spatial planning can foster energy and climate targets from a legal perspective. Our paper is based on research undertaken in two research projects funded by the Austrian Research Promotion Agency (FFG), where we have analyzed the legal framework for spatial and energy planning in Europe and Austria in interdisciplinary project consortia. The findings of our research have been discussed in a series of workshops with city representatives and planning experts.

In our research we took stock of practices in Europe and systematized a wide range of instruments which might be used for integrated spatial and energy planning thus identifying potentials for mutual learning. With regard to selected instruments we analyzed potential barriers for implementation in the Austrian legal system both with regard to large as well as small and medium-sized cities. We took a closer look to a variety of instruments ranging from the introduction of new zoning categories to energy efficiency criteria for building permits and to contractual obligations for developers (e.g. to construct renewable energy power stations, to comply to strict energy-efficiency criteria, or to develop and implement energy supply concepts for district development).

We find that fundamental rights (esp. property rights, principle of equality), the principle of rule of law and the fragmented allocation of competences in the Austrian federal system make the introduction of new instruments for energy related planning a challenging task. Perhaps even more surprisingly we also identify common market rules (e.g. liberalization of energy markets; public procurement) as a substantive challenge for the design of innovative approaches to energy related planning. With regard to both the introduction of new and the application of already existing legislation in Austria, we find that legal uncertainties, financial restrictions, regional competition among cities and conflict of goals (e.g. affordable housing and retrofitting or density vs fresh air corridors) constrain the potential of climate related planning legislation.

We conclude our paper by taking a step back and looking at biases and omissions of the current discourse on planning and energy and climate policy in Europe. Thus we also hope to contribute to a critical discussion of further research needs with regard to planning law and climate change policy in Europe and on a global level.

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