Summary
ÖROK PUBLICATION NO 192 – ÖREK PARTNERSHIP „INTEGRATED SPATIAL AND ENERGY PLANNING“

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The notion of including energy efficiency in spatial planning can be traced back to the energy crisis of the year 1973. For 40(!) years now, the interaction between space, settlement patterns and energy consumption – especially for transport – has been a topic of discussion and also academic research. Why the knowledge gained up to now has not found its way into broad implementation may have several reasons; one of these is certainly the high complexity of the theme which covers a wide range of sectors and domains, many competent bodies and numerous actors with divergent and sometimes opposing interests.

In the past few years, the theme has been revived again not least due to the climate discussion – keyword: climate goals under several treaties. As is well known, CO_2 emissions caused by transportation have risen steeply in the past few years. Even though the measures taken up to now have made it possible to make remarkable achievements, there is no trend reversal in sight. Another question that arises is what spatial planning can contribute to the often cited “energy policy change” (*Energiewende*) considering that the promotion of renewable energy sources will ultimately create a need for more space for the production, storage and transport of power.

For this reason, the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management introduced the theme into the drafting process for ÖREK 2011 and took over the role of lead partner for the ÖREK Partnership Integrated spatial and energy planning that was launched in March 2012. The Ministry believes this very well complements its extensive climate protection activities, which include the highly successful climate protection initiatives klima**aktiv** and klima**aktiv** mobil[1]. Alone under the scheme klima**aktiv** mobil, more than 5,000 projects were implemented that reduced CO_2 emissions by an annual volume of over 570,000. Additionally, a volume of EUR 67 million in funding was disbursed through klima**aktiv** which triggered a total investment volume of EUR 495 million.

The ÖREK Partnership for Integrated spatial and energy planning is based essentially on the research project “PlanVision – Visions for an Energy-optimised Spatial Planning System”[2] funded by the Climate and Energy Fund which clearly reveals spatial planning’s considerable scope of action to support the goals of climate protection and promote energy change.

Before this backdrop, the ÖREK Partnership defined the following goals:

- → to prepare a common, implementation-oriented vision for integrated spatial and energy planning for diverse spatial structures;
- → to analyse and evaluate existing planning instruments;
- → to present recommendations for the integration of energy-optimising criteria in legalisation with an impact on the nominal and functional aspects of spatial planning;
- → to develop standards and criteria for energy-optimised spatial structures.

Endeavours to define the concept of “Integrated spatial and energy planning“ accompanied the work of several workshops of the partnership until the following result was achieved:

“Integrated spatial and energy planning is an integral component of spatial planning that looks at the spatial dimensions of energy consumption and energy supply in general.”

This makes spatial planning a major field of activity for climate protection. With the release of the Final Report by the Standing Subcommittee of ÖROK in

1 http://www.klimaaktiv.at/mobilitaet.html

2 Stöglehner, G., Narodoslawsky, M., Steinmüller, H., Steininger, K., Weiss, M., Mitter, H., Neugebauer G.C., Weber, G., Niemetz, N., Kettl, K.-H., Eder, M., Sandor, N., Pflüglmayer, B., Markl, B., Kollmann, A., Friedl, C., Lindorfer, J., Luger, M., Kulmer, V. (2011): PlanVision – Visionen für eine energieoptimierte Raumplanung. http://www.boku.ac.at/fileadmin/data/H03000/H85000/H85500/materialien/planvision/Endbericht_PlanVision.pdf

October 2014, the Integrated spatial and energy planning Partnership was successfully finalized. With this volume, the findings are published in the ÖROK publication series. The volume has two parts:

Part 1 of this volume of the ÖROK publication series includes the **Final Report** of the **experts**, which was drafted by the research team of the Partnership with the support of an editorial team. The report reflects the discussions at the workshops and presents the consensus expert opinion of the members of the ÖREK Partnership on integrated spatial and energy planning. The background explained based on the results of the "PlanVision" project. The vision, definition and objectives for integrated spatial and energy planning were developed.

Based on an analysis of the relevant actors, fields of action for integrated spatial and energy planning were defined that address the spatial dimensions of energy consumption as well as energy supply, the possibilities for supporting climate protection and energy policy change within nominal spatial planning. However, spatial planning operates within a complex grid of interrelated factors so that the implementation of climate protection and energy change can only be partially supported by integrated spatial and energy planning. Therefore, to implement the fields of action, proposals were drafted that address both the legislation and practice of nominal spatial planning as well as complementary measures needed to achieve consistency in the steering of other policy areas and legal matters. Finally, priority recommendations for action were defined that need to be urgently implemented.

A key outcome of the project "PlanVision" was that the current legal framework for nominal and functional spatial planning hardly contains any explicit demands for energy-linked spatial planning measures, but neither does it, to any major degree, prevent interested spatial planning actors from taking positive action. Therefore, it is called for practitioners to act accordingly. Consequently the question arises of how to provide systematic support in practice. As a contribution to the implementation of ÖREK and to support planning practice and the work of the ÖREK Partnership, the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management commissioned the study "**Tools for integrated spatial and energy planning**"[3] of which the first issue was published in January 2013. The study presents for the first time a comprehensive overview and description of numerous planning and evaluation tools, and provides assistance in selecting the right tools for planning decisions.

Part 2 of this volume contains the second updated issue of the study of November 2014 that supplements the Final Report.

The wide range covered describes the field of "integrated spatial and energy planning" and its systemic relationships, and also includes the tools used in planning practice as well as highlighting the significance of Spatial Planning for the goals of energy policy change and climate protection. Now it is time to take vigorous action and translate the findings into practice in planning and administration work.

3 Stöglehner, G., Erker, S., Neugebauer, G. (2013): Tools für Energieraumplanung. Ein Handbuch für deren Auswahl und Anwendung im Planungsprozess. http://www.bmlfuw.gv.at/publikationen/umwelt/energie/toolenergieraum.html