

# The cadastre in the age of climate change and energy transition: juridical and environmental data as the foundation in the land market

Martin Salzmann (Netherlands)

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## SUMMARY

Cadastrals have since long been fundamental in a well-functioning land market, facilitating property transactions, valuation and taxation by providing – in unison with the land registers - legal security in the land market. In the past decades the scope of the cadastre has been widened to registering all (public and private) rights, restrictions and responsibilities. This has provided parties in the land market with a fuller picture of the issues at hand. Furthermore cadastral processes have been digitized and cadastrals are now entering the age of digitization of their workings and organisation. Data are key. This could have happened rather unnoted (in the general evolution to a digital society) were it not that also major issues have arisen that affect the land market. The Covid-19 pandemic has accelerated the pace of digitization in general, whereas at the same time climate change, sustainable biodiversity and the related issues of energy transition and circularity remain at the forefront of the global action plans and debates.

Decisions in the spatial domain and in the land market increasingly rely on physical data on climate related issues and energy conversion. This means not only our (public and private) RRR's matter, but increasingly data from construction and materials (BIM), (sub-)soil, energy generation and distribution and new financial arrangements are needed.

In this paper we provide an insight how cadastrals evolve in this data-driven world and contribute to sound decision making and recording in the spatial domain and the land market in particular. This requires that the data ecosystem of the cadastrals is linked up with the data of other domains. This is not predominantly a technical issue. We have found – based on our experiences as an agency covering cadastre, land registry and mapping - that users in the land market need and want meaningful information and streamlined processes in this ever more complex world. Cadastrals will be more data-centric and have to link up with other domains if they want to remain a relevant to the

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users. Not only in providing the foundation for the legal aspects in land transaction, but also in providing the basis of sound decision making and planning concerning sustainable land and properties in the coming decades.

This paper discusses the issues, solutions and dilemmas we encounter in bringing our cadastre to the next level in a world where data are at the heart of society's needs and our operations.

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