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

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Introduction and challenges ahead

• Optimizing the value chain in the land market in the Netherlands: towards a shared data ecosystem in the land market

• The impact of decarbonisation and climate change

• Quality improvement of the cadastral data: registration as a basis of legal security example of the next level cadastral map: next speakers

• Data and the future of cadastres and land registries
Real estate transaction chain in the Netherlands

CITIZENS (buyer, seller)

Intermediaries → Valuators → Real Estate Agencies → Banks

Notaries

Kadaster
land registry cadastral surveying cadastral registration

Inland Revenue
Information from public sources

- Fiscal value: €285,000
- Sales price 1-7-1998: €230,000
- Zoning plan
- Mortgage RABO-bank: €230,000
- Long lease
- Mr. Jan de Jong 15-05-1956
- Monument
- Right of way
- Highstreet 15d
- Volume building: 450m³
- Parcel Arnhem C4231 230m²
- Energy efficiency label: C
- Urban area: 6m above sea level
- Preferential Right
- Municipality
Cadastres in the digital age: operating in a data ecosystem

Cadastral and Land Registry processes have been fully digitized. Our agencies operate increasingly as part of data ecosystems.
Guiding principles of this ecosystem (manifesto)

(legal) security at earlier stage
By retrieving validated data directly from the source, we offer (legal) security at an earlier stage

insight and overview
Citizens and chain partners have insight into information and process and know what is expected of them

control of data
We enable the citizen and chain partners to actively control their data

interoperability
The guiding principle is that the system of agreements is open to everyone and relies as much as possible on existing standards

security
Information exchange only takes place at a high security level

✅ Buyer OK
✅ Seller OK
✅ Property OK
✅ Financing OK
Facing challenges in energy transition

How do we incorporate additional information?
Facilities impact value, (use) rights, mortgaging

The cadastre in the age of climate change and energy transition
Increasing spatial and legal demands for solar power

What are suitable locations for solar fields and Where are they already located?

Based on various spatial characteristics, clusters of properties can be selected that are suitable for the construction of solar fields.

A few facts on solar fields in NL (research carried out in 2020):

- One-third of solar parks is situated on land owned by municipalities and water boards
- 63% of the area of solar fields is located on agricultural land
Example: Securing property rights of solar panels on rooftops

Regions strive to achieve 50% ownership on the large-scale renewable energy production in the local community (by citizens, cooperatives and businesses)

This Local Energy Initiative generates its own renewable energy with solar panels on the roof of a school or a piece of land nearby.

Shared properties (the solar panels on rooftops) are registered by means of right of superficies.
Facing challenges in climate change

More frequent heavy downpours: the drainage of excess water becomes an issue.

Convert paved areas to green areas

Where are these measures feasible? Where are building restrictions imposed?
Data way forward for cadastres and land registries

Connect with other data-ecosystems

Climate- and energy-related data

Integrate within a larger data-ecosystem

Cadastre and Land Registry data

Climate- and energy-related data

We are concerned with data and meaningful information; for our users location and usability are still essential