

kadaster



Will data, data, data be the new mantra instead of location, location, location in the property market?

Martin Salzmann

Netherlands' Cadastre, Land Registry and Mapping Agency

PCC Conference

The Ecosystems Related to Real Estate Conveyancing

Helsinki, Finland, November 20-21, 2019



What makes people buy a Tesla?



High Tech
Sex Appeal
Zero Emission
Performance
(range, driving)

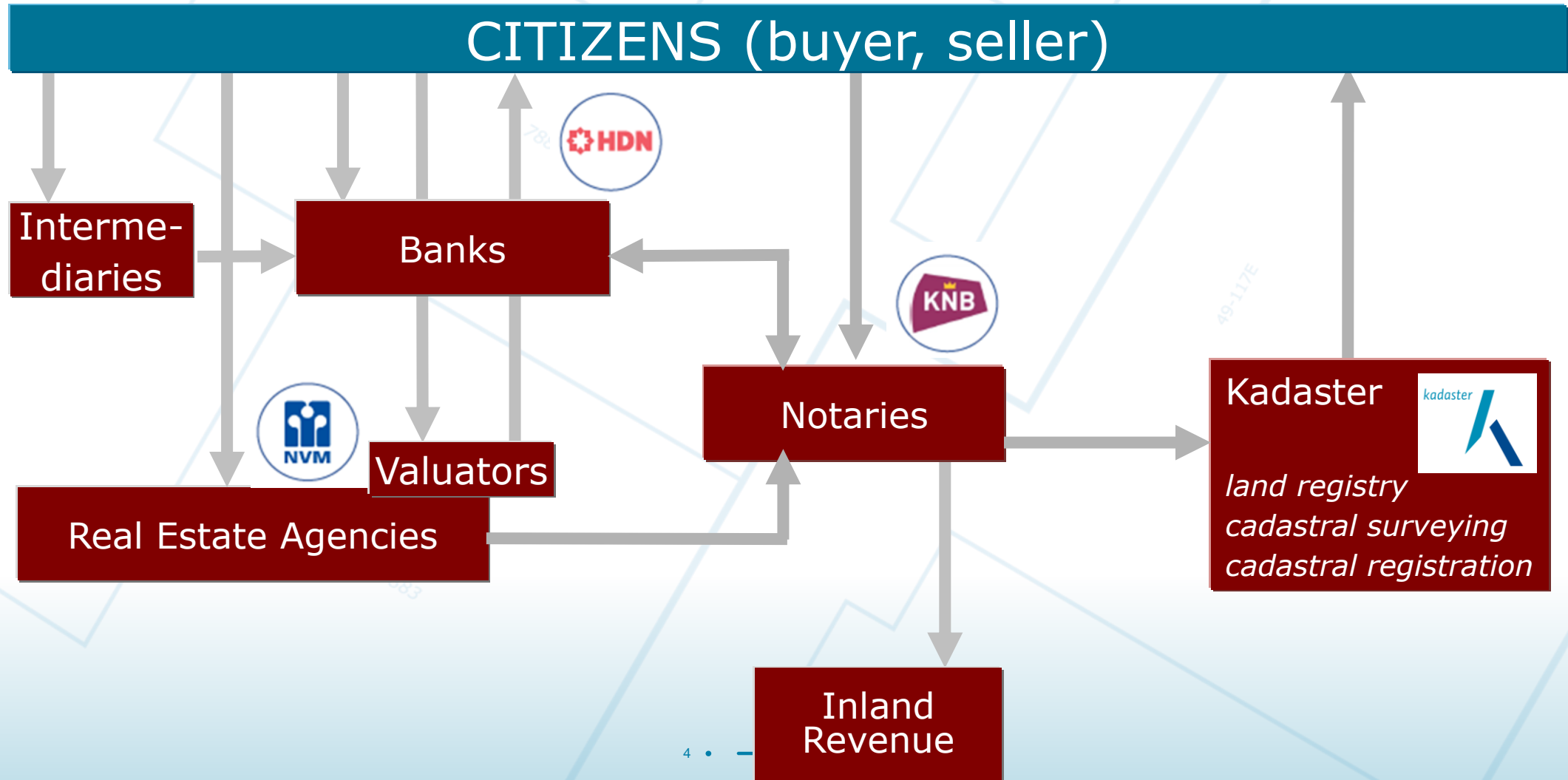


Data?

Your Tesla Is Watching—and Recording—You, All the Time
More data collected in one day
than you have data in your cadastral registration

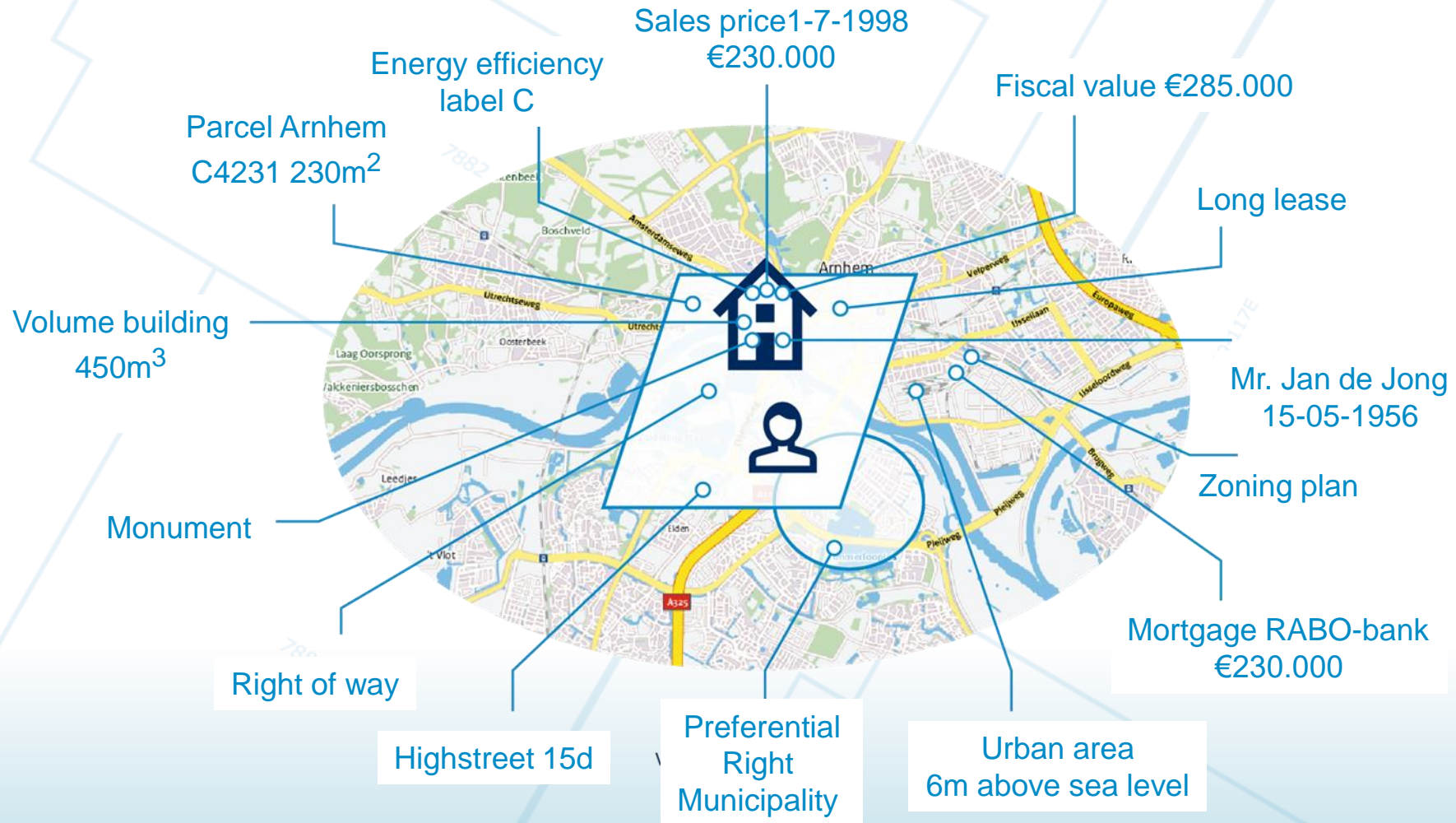


Real estate transaction chain in the Netherlands

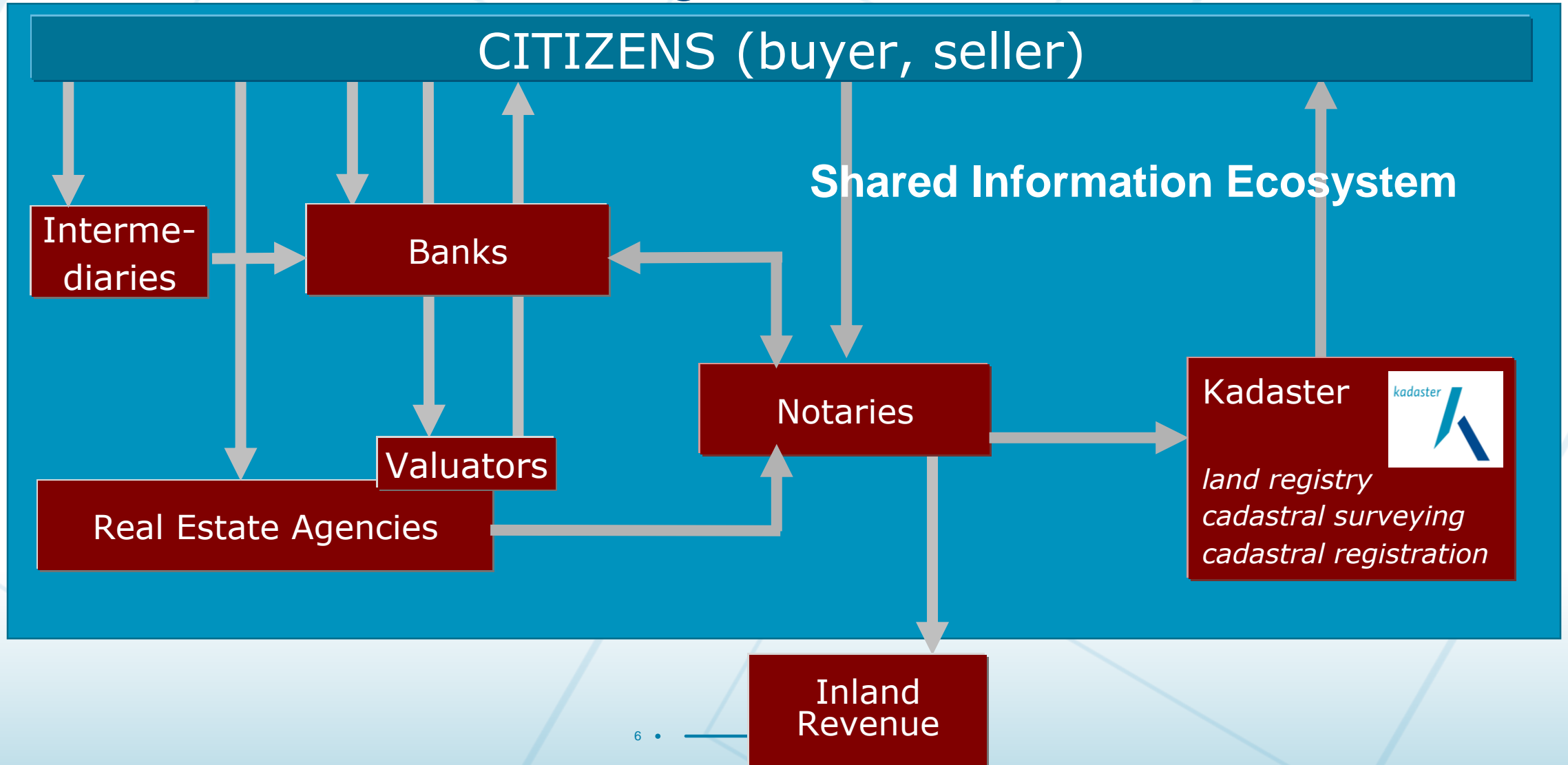




Information from public sources



Towards “carefree dealings in real estate”





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*

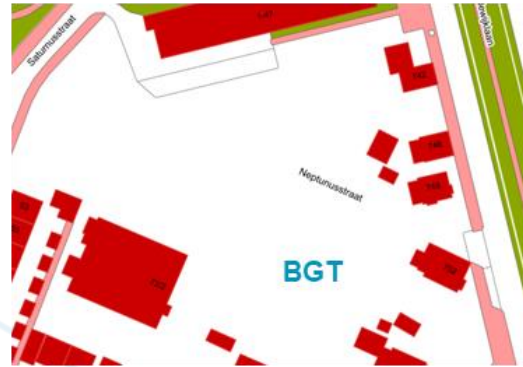


Get the rest of your data (key registers) in sync

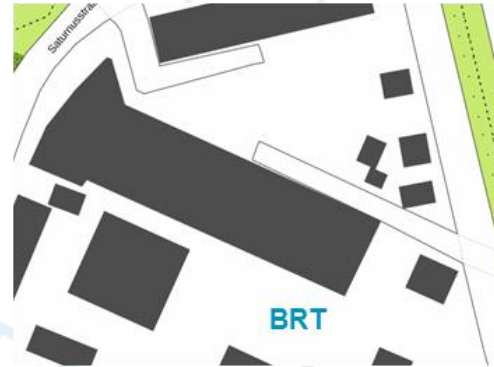
Buildings and Addresses



Large scale Topography



Topographic Map



Each register complies with its specifications. Registrations are linked, but have different origins.



Valuation



Cadastral Map



Terrain

We have to learn to deal with harmonization, synchronization and semantic issues from a user's perspective.



What ecosystems and developments relate to properties?



Design and construction (BIM)

Environmental Planning Act
Integrated permit

Subsoil

Act on Quality Assurance for Building
Building passport

Digital Twin and decision making
Visualisation

Energy transition/efficiency
Modular financing

Climate adaptation
Circular economy



BIM Legal: extracting legal spaces using IFC datamodel



Linking up building and cadastral ecosystems
Closing the chain from design via 'as built' to legal spaces (apartment rights)

Source: R.W.E. Meulmeester (2019), BIM Legal, <https://repository.tudelft.nl/islandora/object/uuid%3Aca32eb79-7f53-4948-b3cb-d52a3b8c18a5>



New energy systems (could) lead to modular financing and connection to subsoil

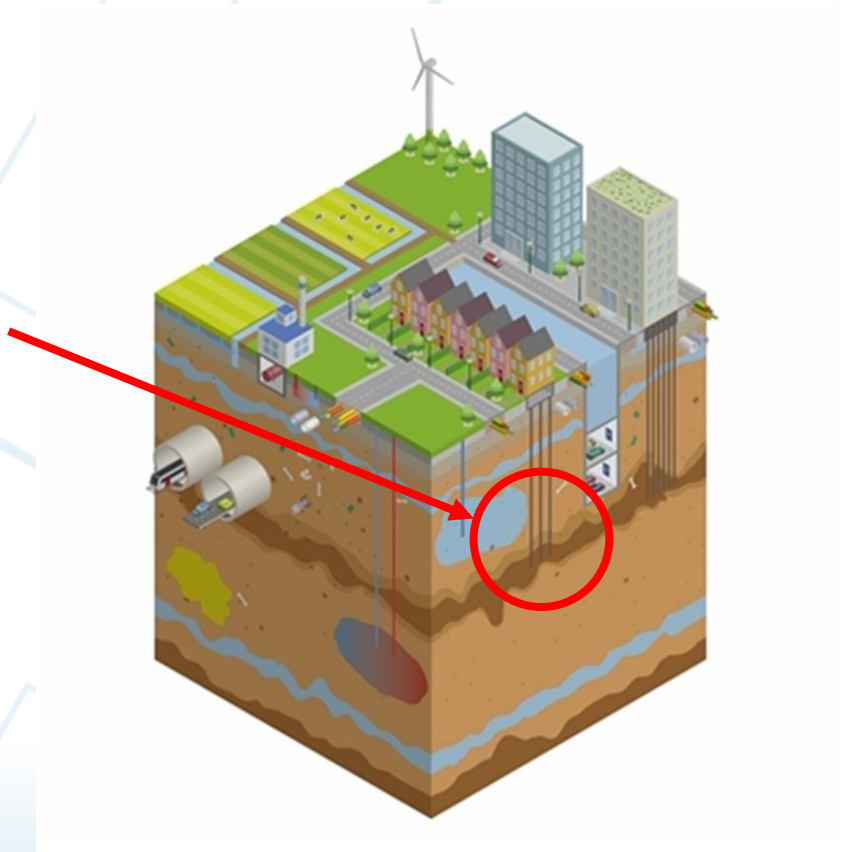
4 Energiebesparing in een woning



The sustainable home house with separate facilities

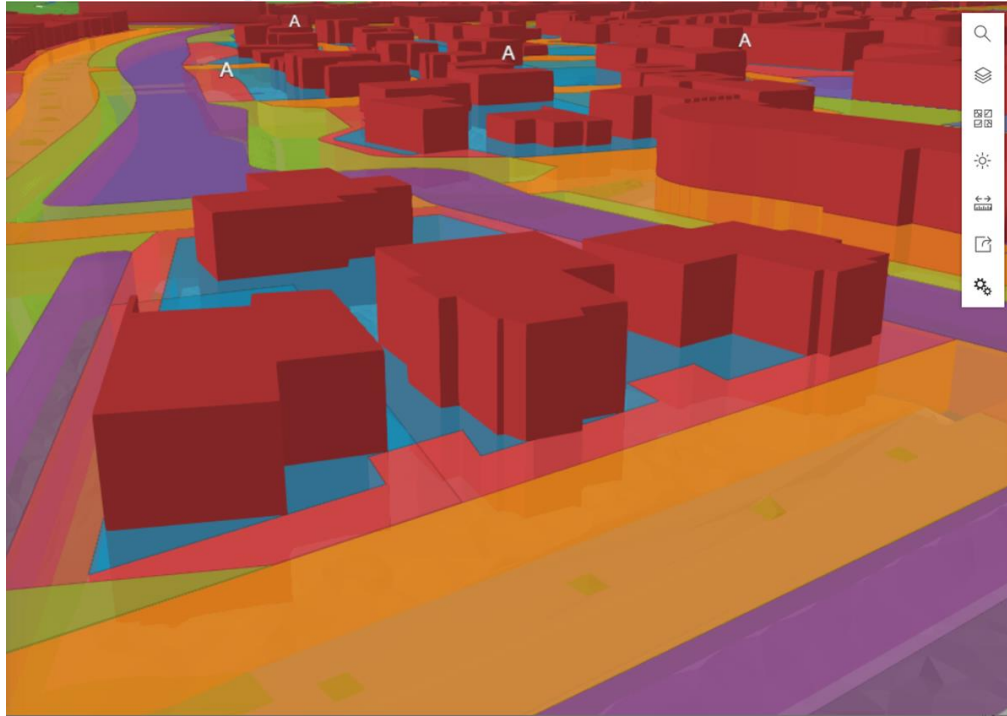


Separate financing facilities?
Mortgage coupled to the property instead of the owner





Planning and decision making in the virtual world



Digital Twin Stadshagen
Experiment Kadaster & City of Zwolle

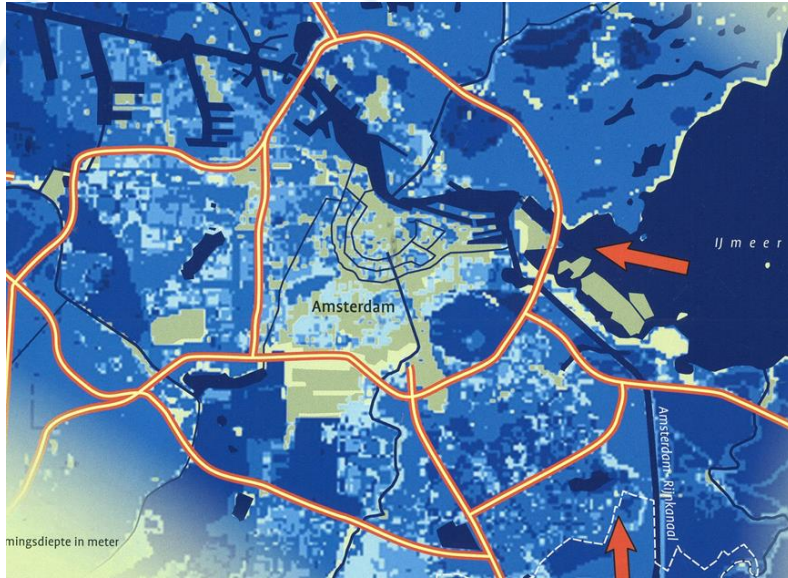
The problem at hand determines to a large extent the level of detail and the ecosystems you have to connect to.

Interaction and decision making is very dependent on what you visualise.



City of Utrecht (Merwedekanaal)

Climate change



Keeping dry feet when visiting Amsterdam (in a worst case scenario)

Air

Draft National Strategy on Spatial Planning and the Environment

A sustainable perspective for our living environment

Land use

Natural Resources

Hydrology

Nature

Housing

Economic activities

Transportation

Subsoil/geology

Ecosystems





Concluding Remarks

- Users expect (all relevant) underlying data to be included
- Users look for answers, not for data
- Consider to improve your ecosystem before connecting to others
- It is about connecting to data that matter for the issue at hand

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