



## Contribution of cadastral information to climate change policy in the Netherlands

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### Aim of this presentation

- To present how cadastral core data can be enriched to useful information for climate change policy
- To demonstrate a practical case
- To inspire colleagues for an international approach

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## Climate change policy in the Netherlands

- 55% of our land surface is susceptible for flooding
- The Netherlands developed a national climate change policy early
- Today the national climate change targets are in accordance with EU directives, including a 20% CO<sub>2</sub> reduction in 2020
- Local authorities play a major role in developing and implementing climate change policies:
  - Developing effective strategies
  - Monitoring policy results

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## CO<sub>2</sub> emissions in the built environment

- The built environment is responsible for 25% of CO<sub>2</sub> emissions in the Netherlands
- 70% of built environment emissions are caused by dwellings / houses
- 50% of dwelling emissions are caused by houses built before 1976
- Municipalities try to convince private owners to make their houses climate proof

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## Cadastral registration in the Netherlands

- The Netherlands' Cadastre has a Cadastral Key Register in which several registers are integrated:
  - Cadastral Registration
  - Cadastral Map
  - Adresses and Building key register
- Other registrations like the Energy Label Registration can easily be linked

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## Enriching core data and designing information for policy makers

- Combine core data:
  - Dwelling type
  - Year of construction
  - Type of ownership
  - Age of private owners
  - Guarantee or maximum mortgage
  - Registered energy label
  - Geographical location of house
- Add data from national and statistical databases:
  - Energy consumption
  - Social economic characteristics of neighborhoods
- Use benchmark studies on
  - Estimated energy labels
  - Improvement measures
  - Potential reduction on energy and CO2 emissions
- Aggregate information on the level of neighborhoods

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## Use case: municipality of Apeldoorn

- Research question: In which neighbourhoods will our communication campagne be most succesful?
- Use physical and socio-economic indicators

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## Geographical distribution of indicators

- Physical indicators
  - Energy index of houses
  - Homogeneity of residential buildings
  - Appearance of monuments
- Socio-economic indicator
  - Estimated income

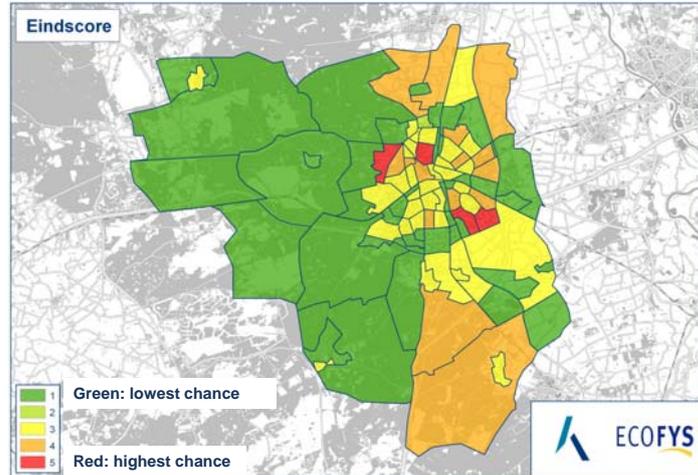


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## Chances in reducing energy and CO2 emissions



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## Conclusions

- Cadastral core data are a successful base for the climate change theme
- Useful information can only be designed in collaboration with the policy maker
- Joint data of more cadastral organizations should be explored to address international and global climate change challenges

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