



HoGent
WELCOME



Life Cycle Costs Residential Real Estate

UIREKA Edinburgh

21 november 2017
10 AM.

Session D2.3
Room Upper Gallery

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The renovation rate of residential real estate in Belgium needs to be increased to address current issues of sustainability and energy efficiency trends within the build environment.

Many dynamics are in place and several shortcomings must be tackled. The lack of knowledge and information about the life cycle costs of real estate and the need for more cooperation between actors involved on crucial moments in the real estate process are two clear examples. Secondly, a lot of rules and laws turn the renovation process of a building in co-ownership into a complex process of persuasiveness.

Therefore we want to create a strategic maintenance and planning tool to improve sustainability of residential buildings in co-ownership. Subsequently we want to create a charter with standards and procedures, tips and tricks for

professional organisations in the real estate business.

In this presentation we want to propose our approach and possible method to develop a Life Cycle Cost (LCC) analysis for residential real estate in co-ownership over its economic life cycle. In the final stage of this research project our purpose is to create a strategic maintenance and planning tool. This tool can be used from the start of the development of a building until the renovation of it. Several partners within the project have agreed on testing and evaluating this tool in a lean manner whereby adjustment and optimization can be processed.

If you are interested in this project or if you have knowledge of relevant research feel free to contact us at University College Ghent, Real Estate Department by following the contact details on the left.

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NATUUR EN TECHNIEK

LCC-Ecotoop

Life cycle costs of residential real estate
as an economic success factor

Presentation Mieke Paelinck – Koen Van Damme



https://hogent.be/

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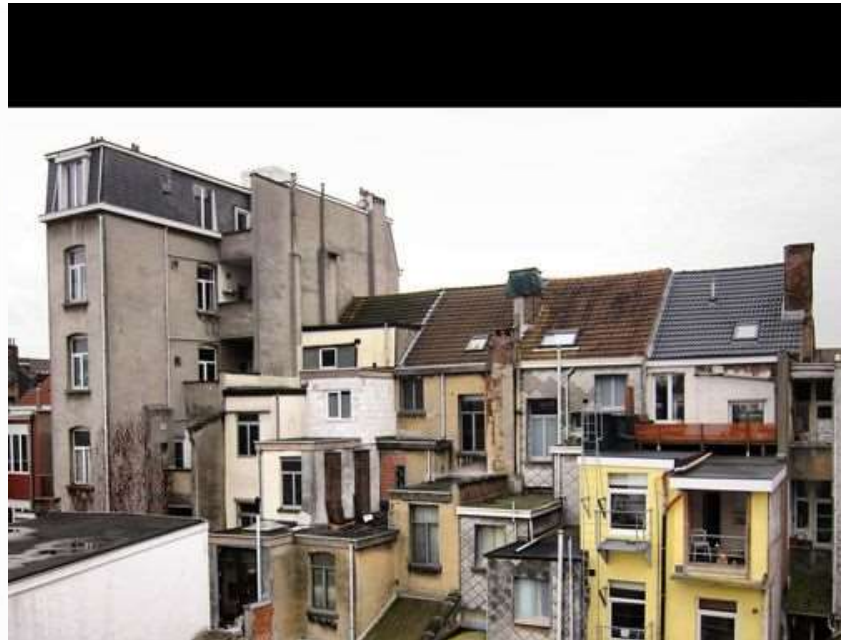
Hannes Coudenys

Ugly Belgian Houses



Don't try this at home

 **BORGERSHOFF & LAMBERGOTS**





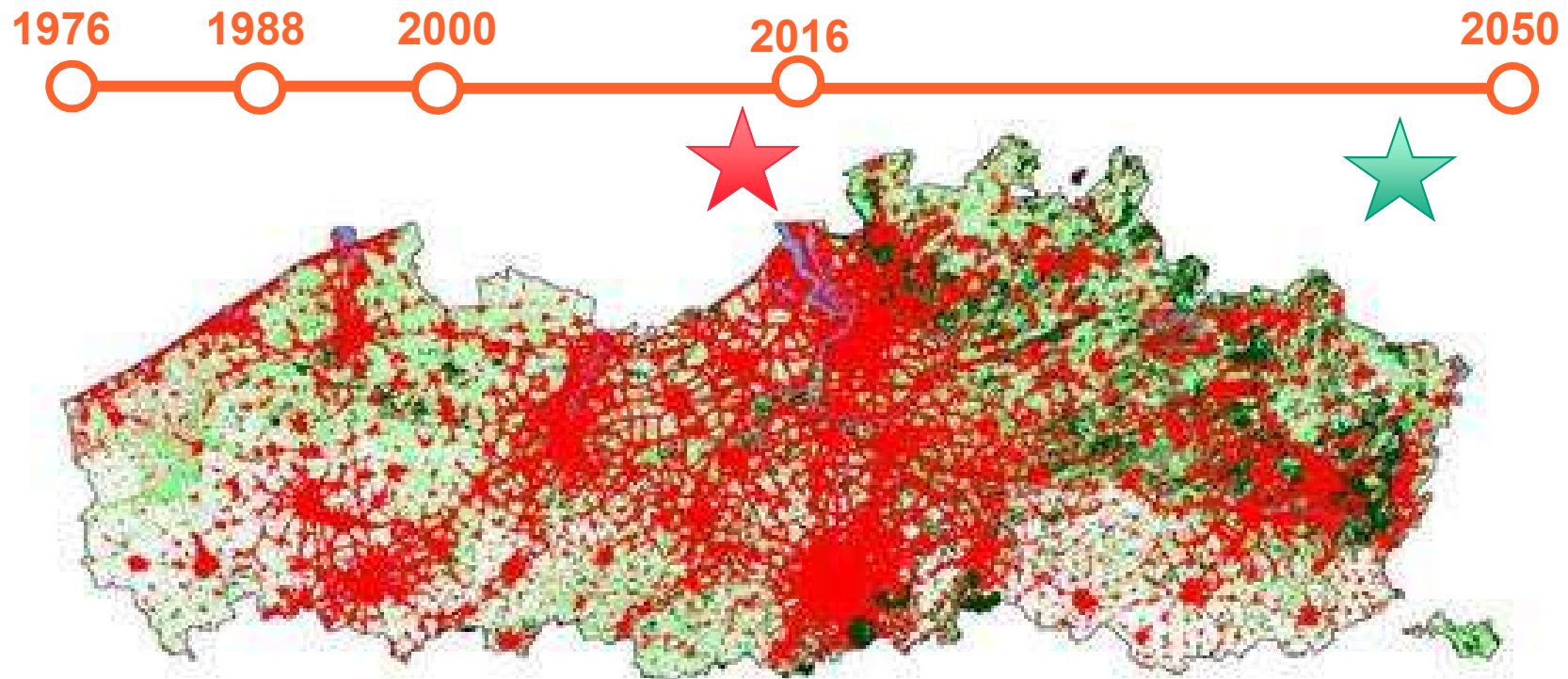
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21
November
2017

Lcc-Ecotoop

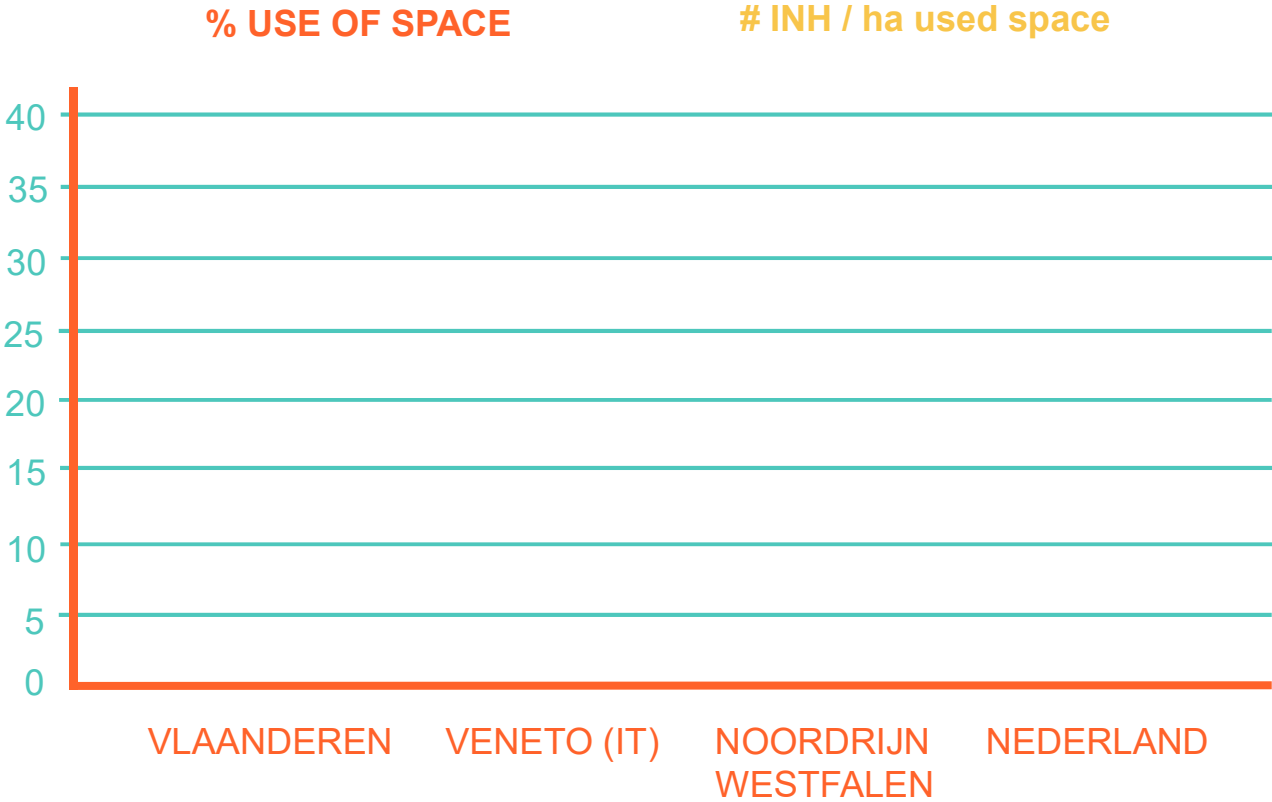
In Flanders the current use of open space begs for a radical change, especially in development strategies.

- 500.000 houses extra until 2050
- 79.000 ha undeveloped land with 'building allowance'

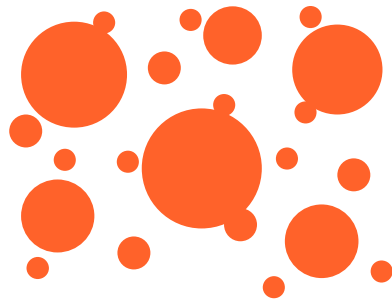


LIEN POELMANS (2010) MODELLING URBAN EXPANSION AND ITS HYDROLOGICAL IMPACTS

WHAT ABOUT OTHER REGIONS

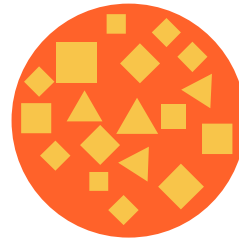


HIGH LAND TAKE COSTS AND SOCIAL RESPONSIBILITY



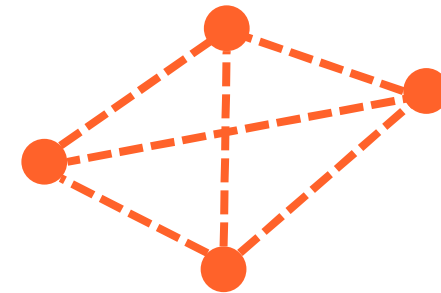
LOW DENSITY

PRESSURE ON OPEN SPACES
HIGHER ENERGY-USE
HIGHER CO2 EMISSION



HARDENING

FLOODING AND HEAT STRESS
LESS GREEN



DISTRIBUTION

CAR IS NECESSARY
HIGHER ENERGY-USE
HIGHER CO2 EMISSION

CHALLENGE



WE NEED TO CHANGE

**A MAN WHO DOES NOT PLAN AHEAD
WILL FIND TROUBLE AT HIS DOOR**

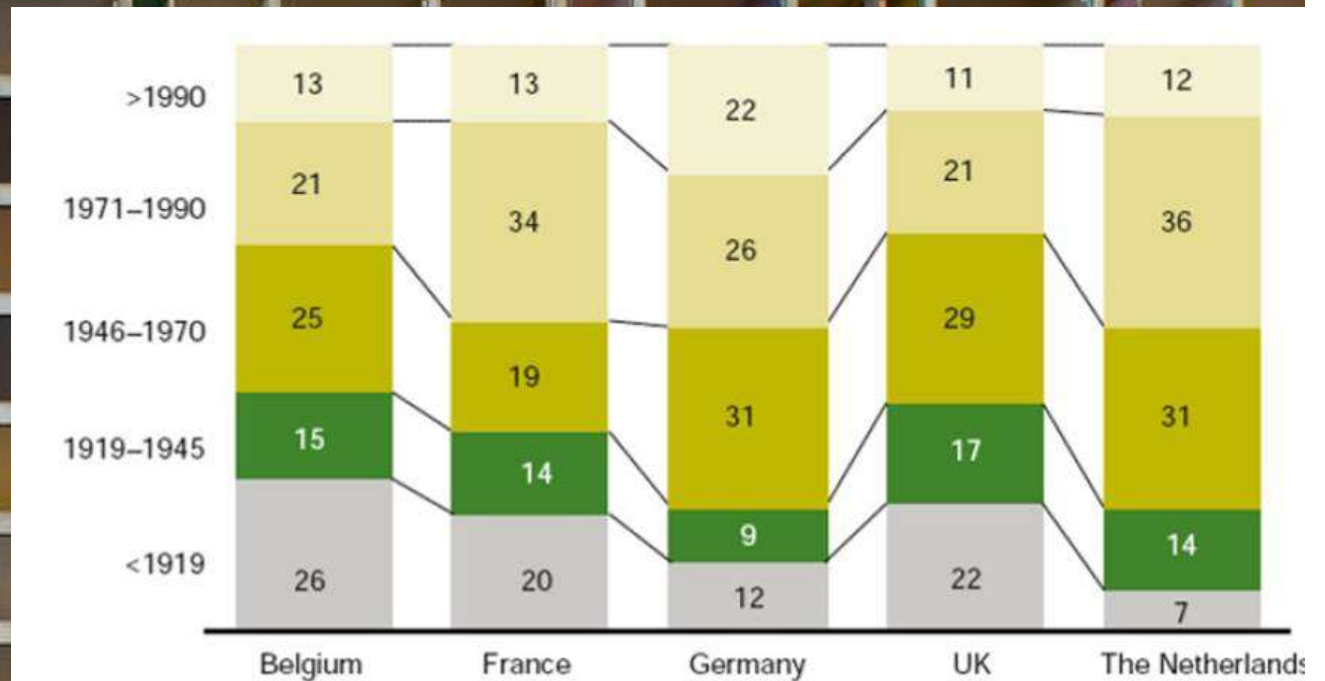
- CONFUCIUS

THE PROJECT

Focus on existing residential buildings

BUT > 60% > 1970

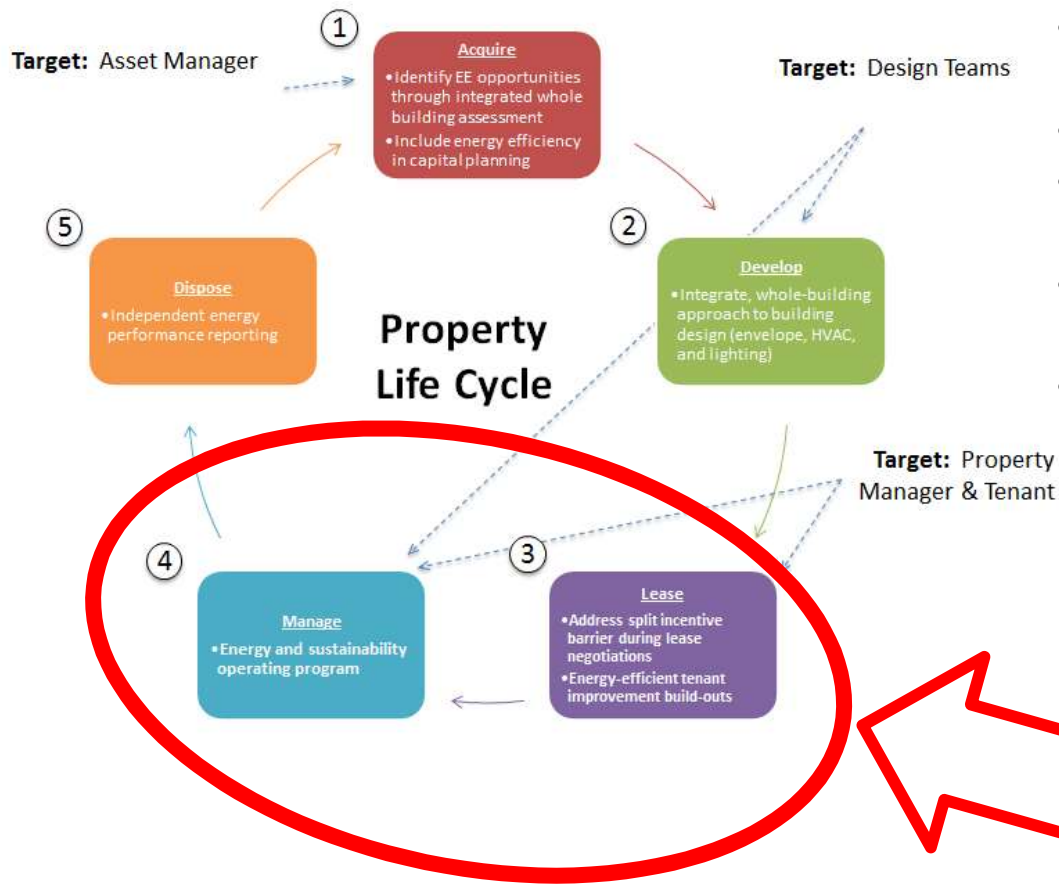
- Flanders (2015): 115.000 apartments for 750.000 units
- 50.000 > 30 years



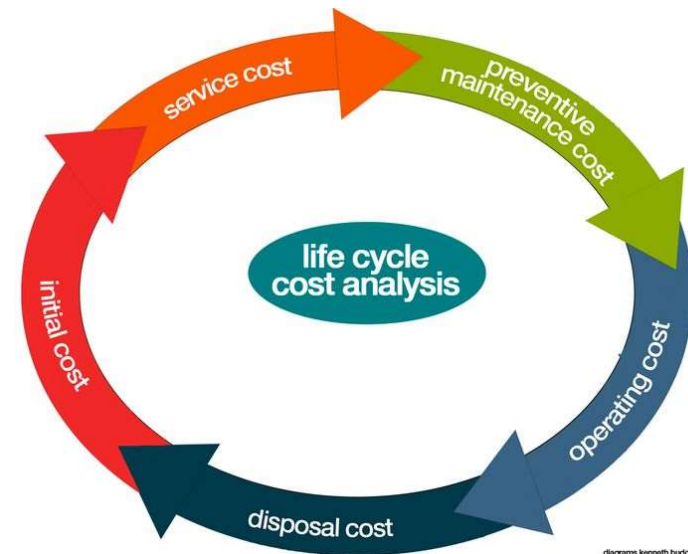
IEE TABULA - Typology Approach for Building Stock Energy Assessment project (VITO, 2011/TEM/R/091763),

http://episcopa.eu/fileadmin/tabula/public/docs/scientific/BE_TABULA_ScientificReport_VITO.pdf

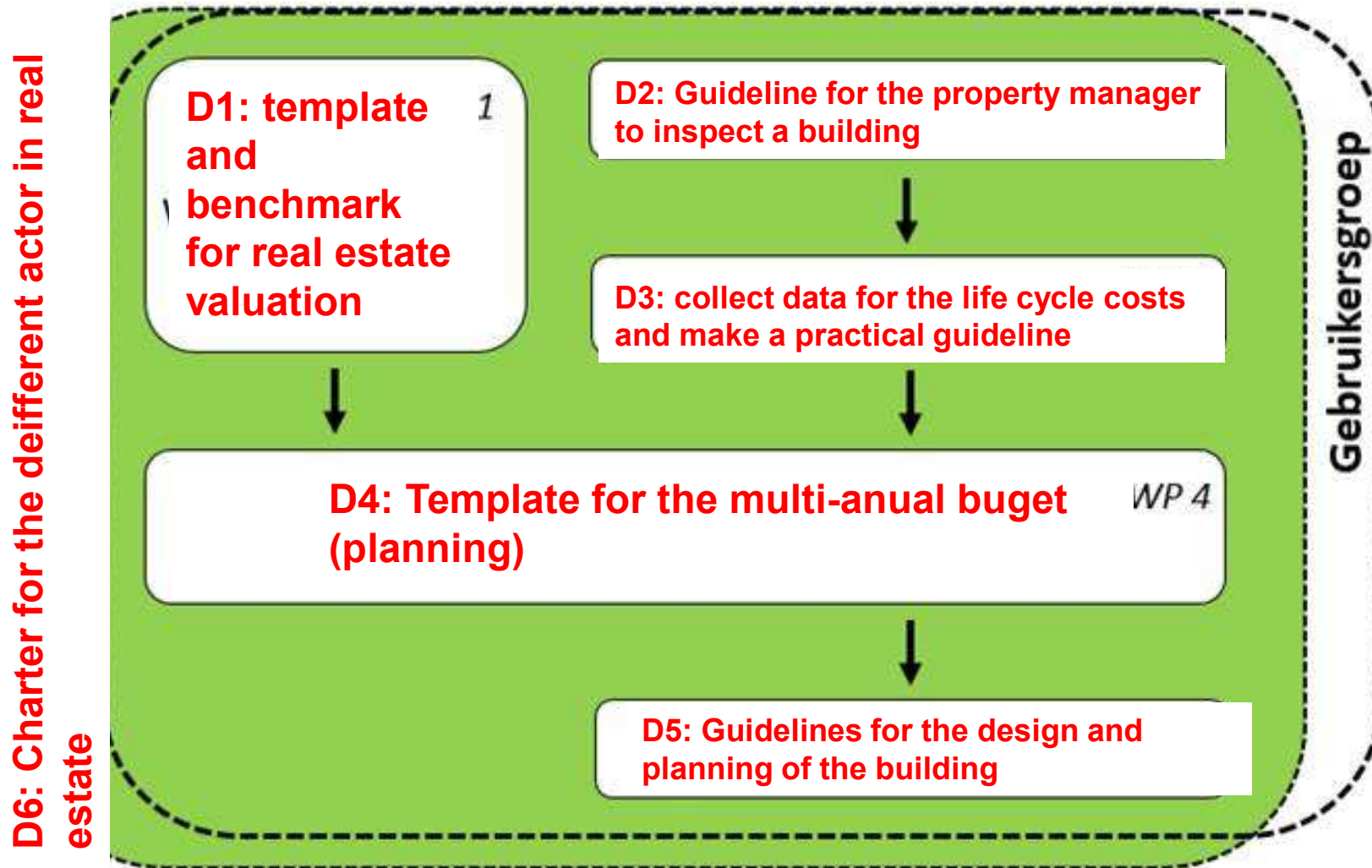
PROPERTY LIFE CYCLE, ACTORS AND THE LIFE CYCLE COST



- Life cycle cost is focused on lease and manage/maintenance/sustainability data
- Short time based
- Life cycle should be integrated in development/disposition
- The thinking of life cycle costs should be on a long term (added value)



PROJECT APPROACH / PLANNING



Questions ?



Contact



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Coordinator RICS*

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