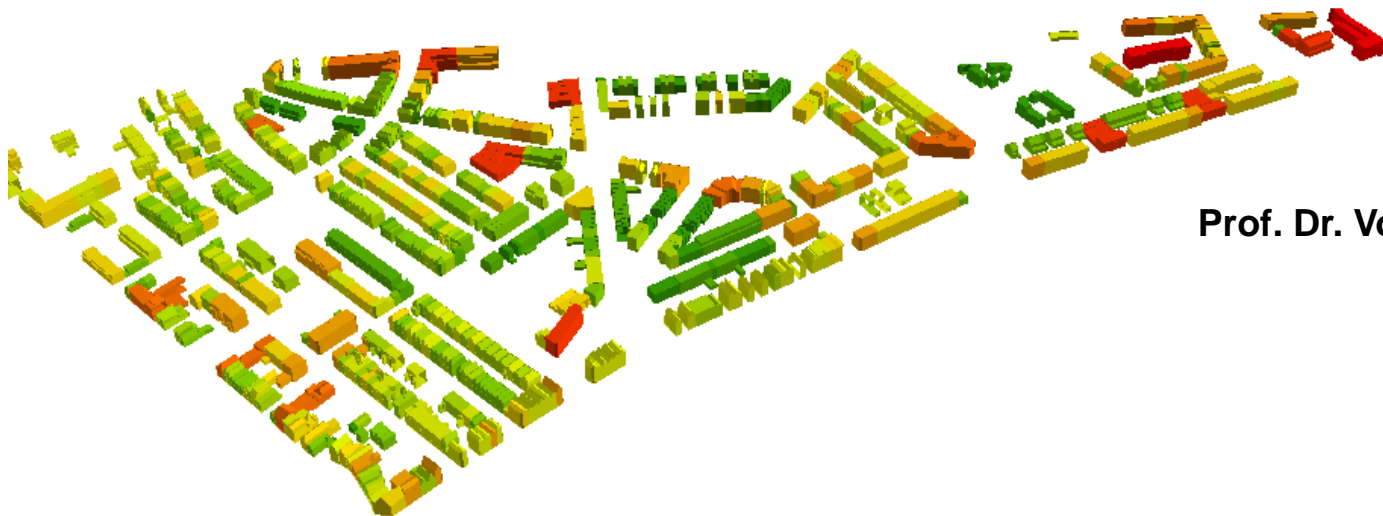


Workshop

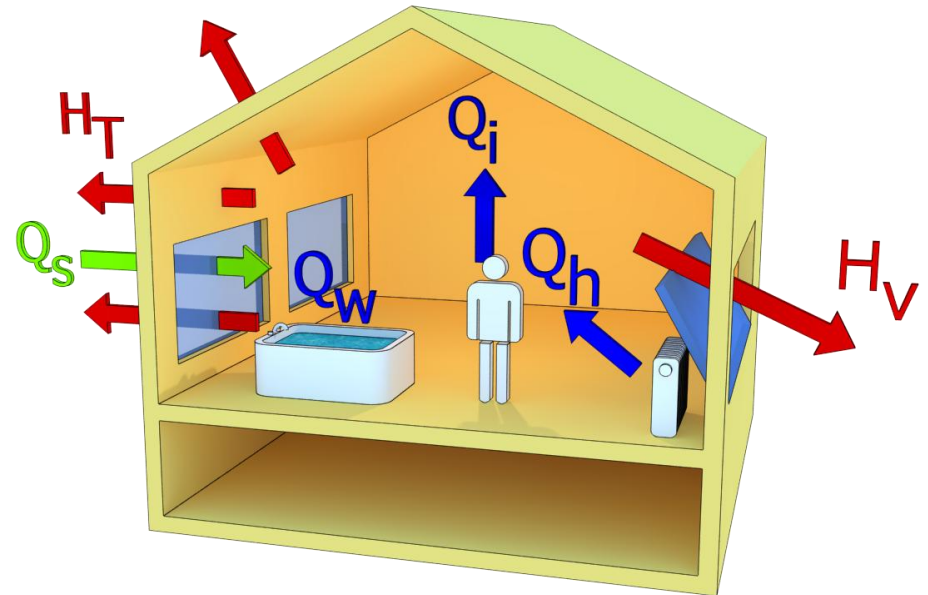
CityGML Energy ADE



Prof. Dr. Volker Coors

Shared interest

- Use 3D city model
 - as an input for
 - building simulations
 - on urban scale
 - as integration platform
 - for simulation results
 - and visualization





Gefördert durch:



aufgrund eines Beschlusses
des Deutschen Bundestages

CityGML
Energy ADE

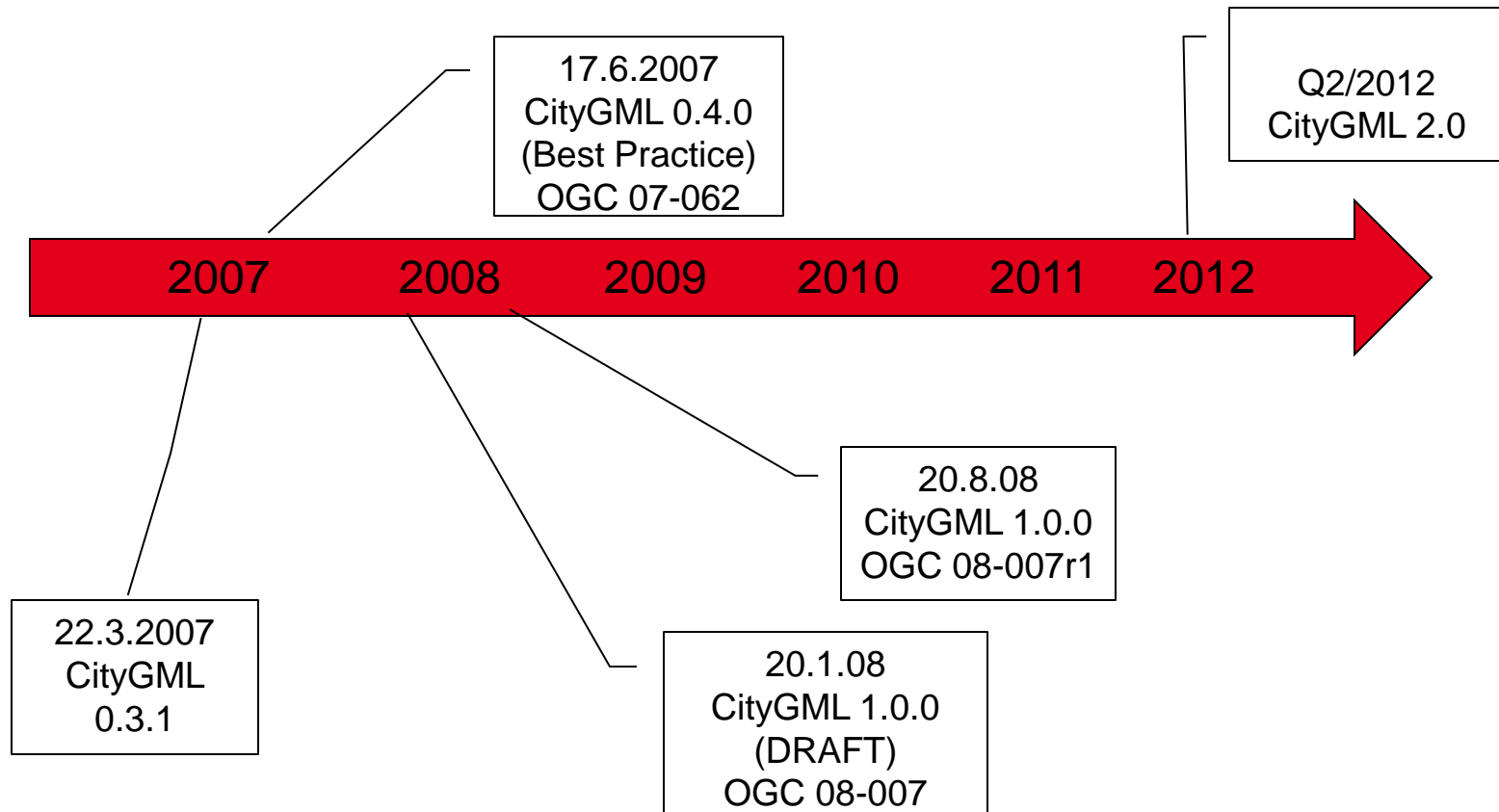


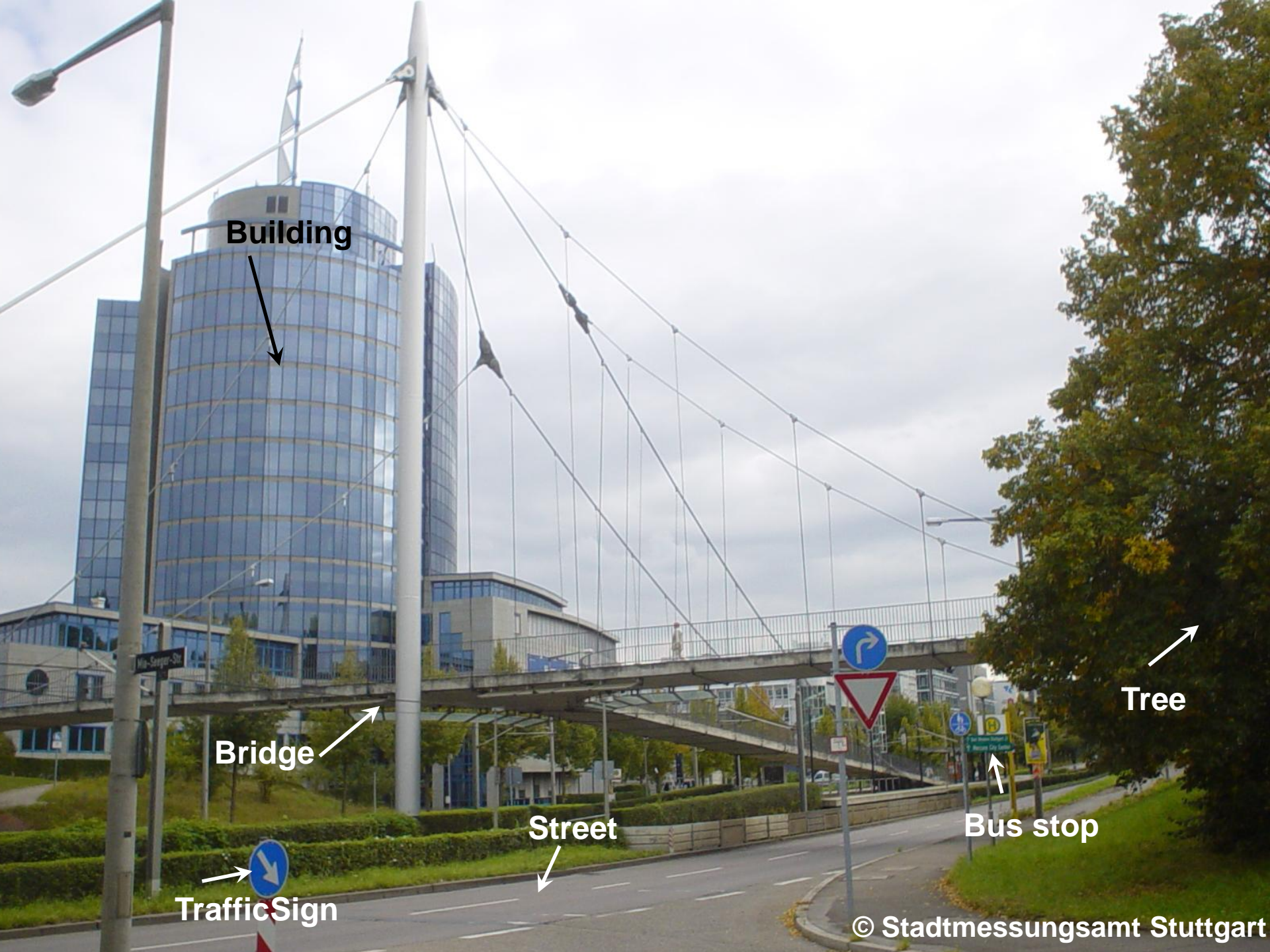
CITYGML

What is CityGML

- Information Model for 3D urban models
- Data exchange format
- Discrete Multiresolution Model (Geometry)
- Extensible Multipurpose Model
- Modular structure
- Based on GML 3.1.1

CityGML: History





Building



Bridge



Street



Traffic Sign



Bus stop



Tree



bldg:building



veg:vegetation



dem:Relief

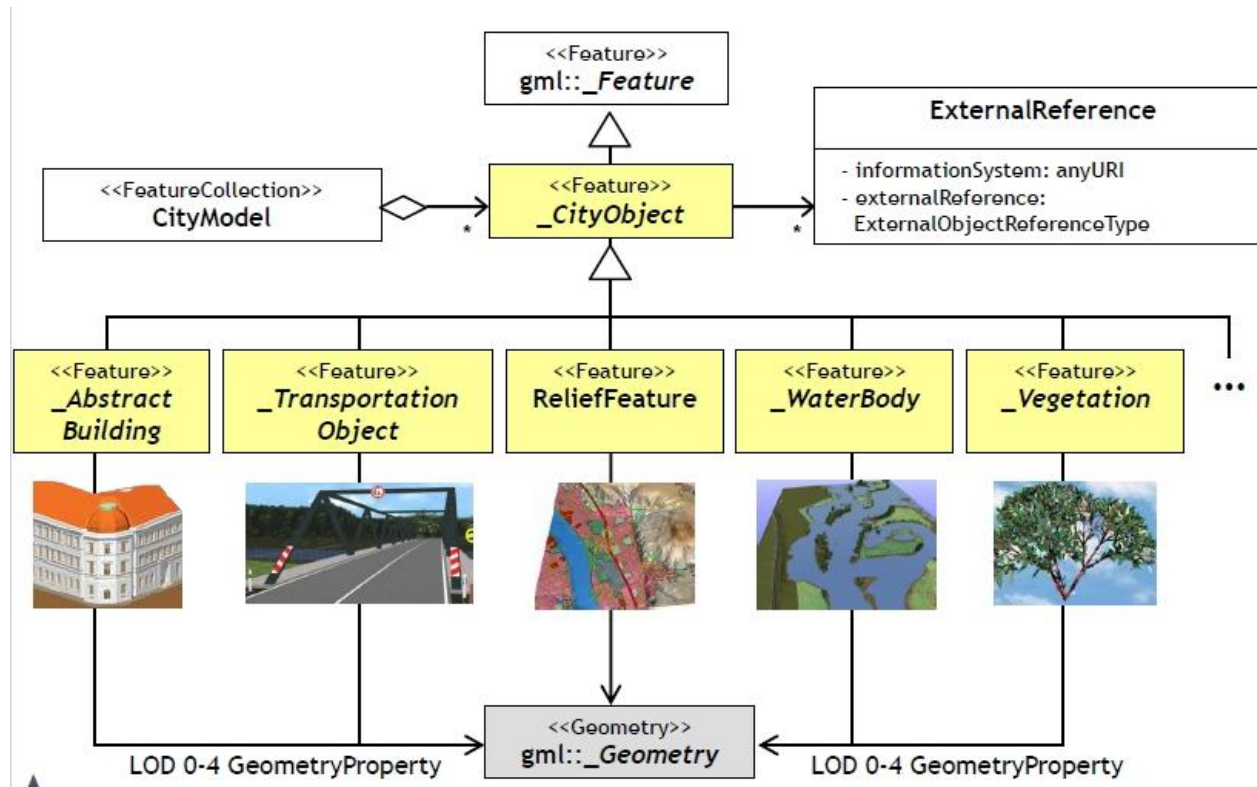
gen:GenericCityObject: Bridge
In CityGML 2.0: Bridge-Modul



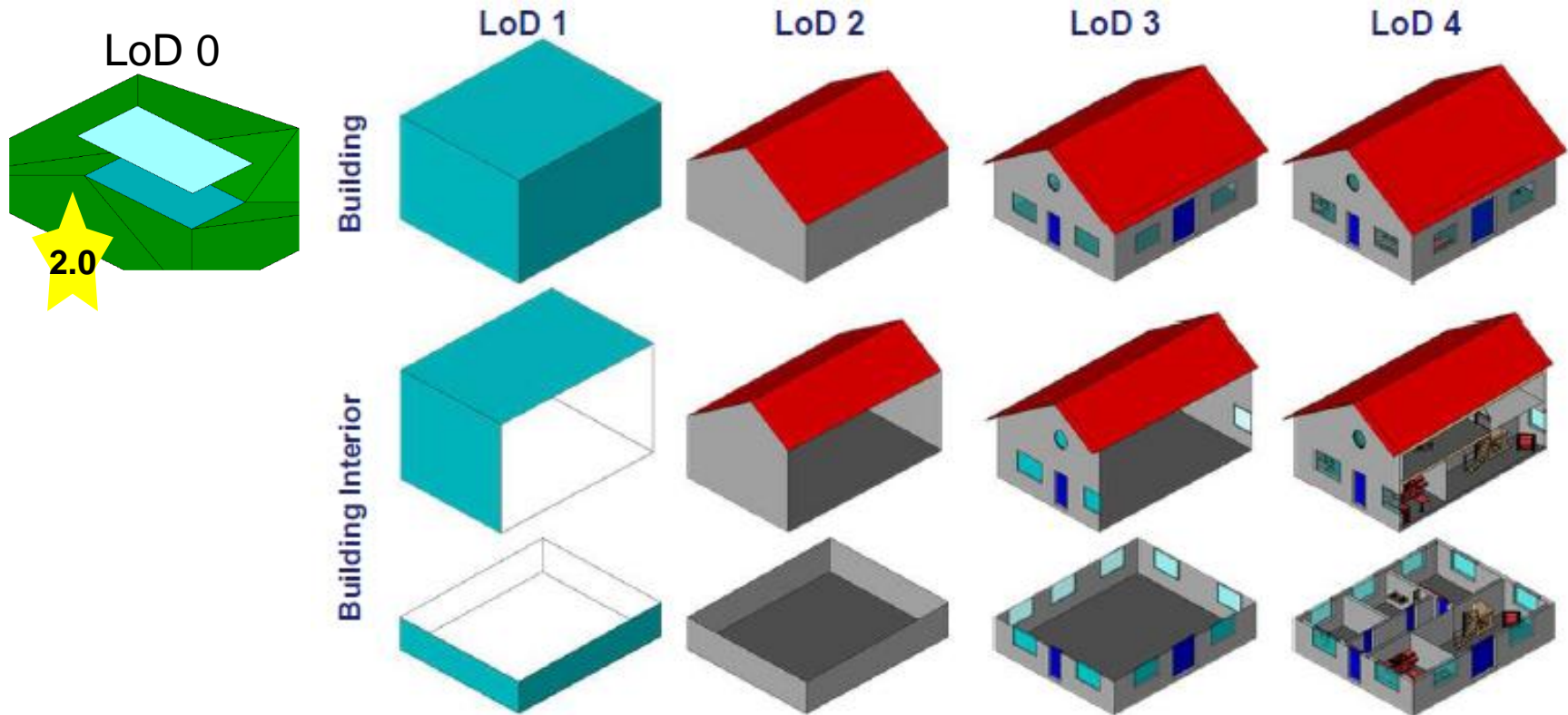
tran:Road



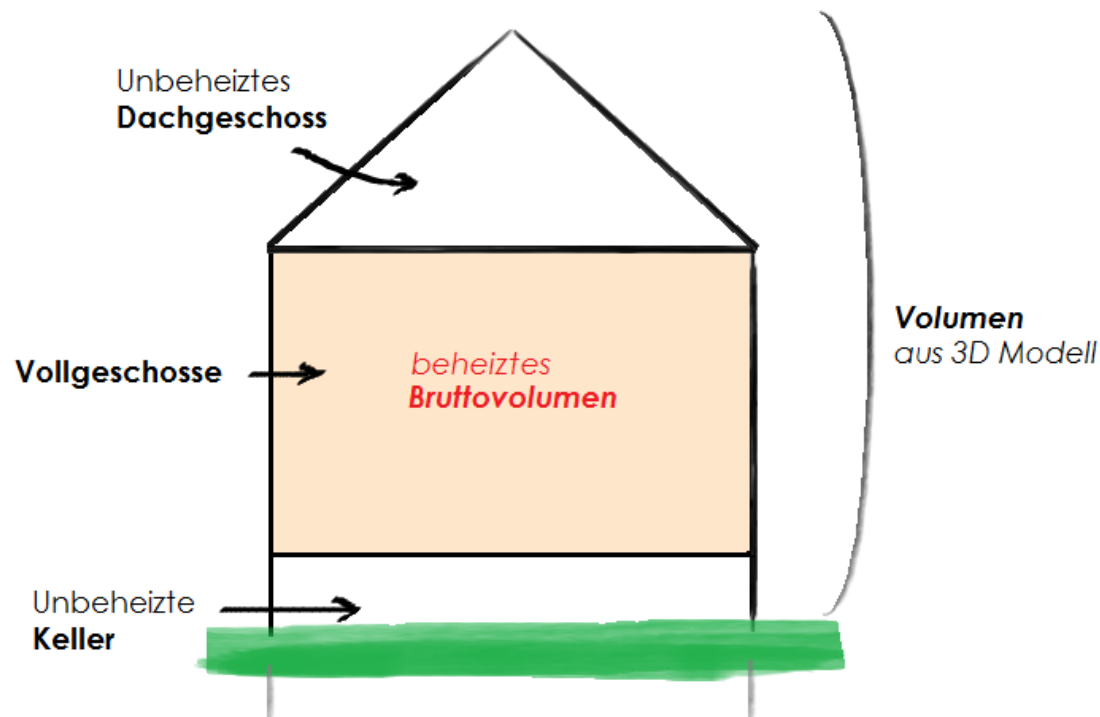
CityGML: Modular



Building Model

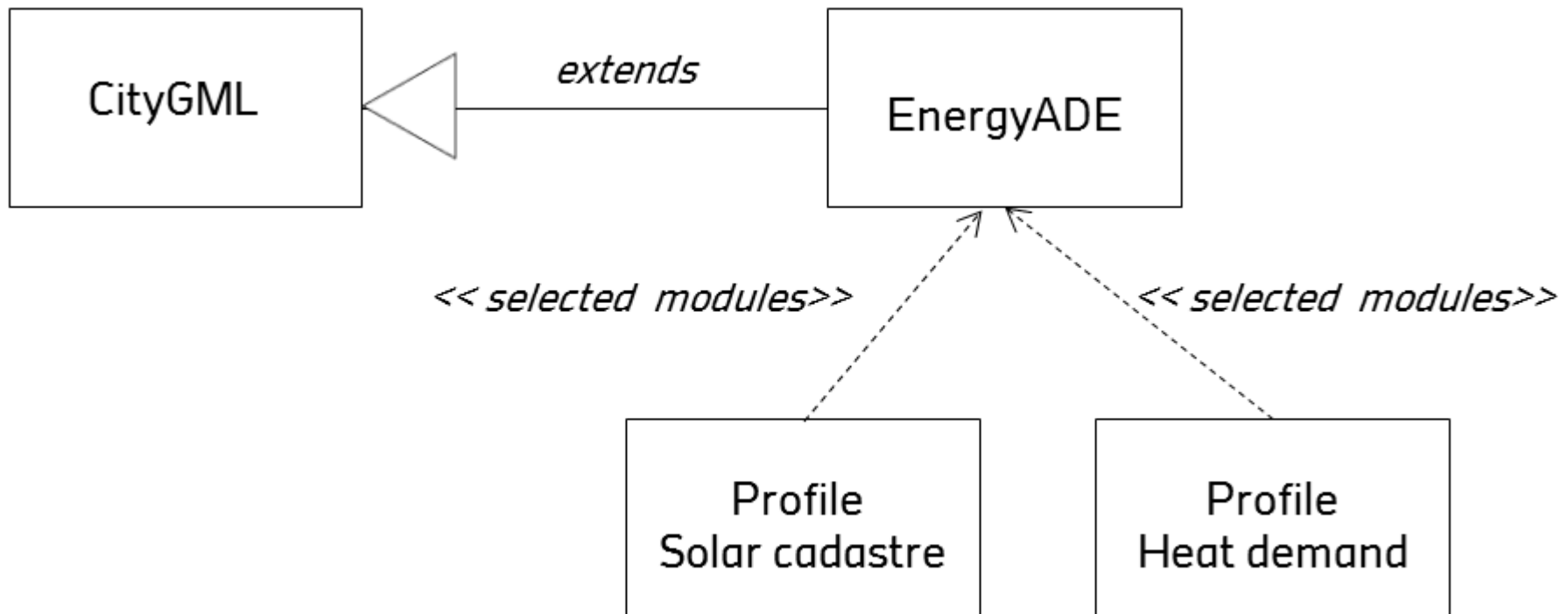


Not available in CityGML

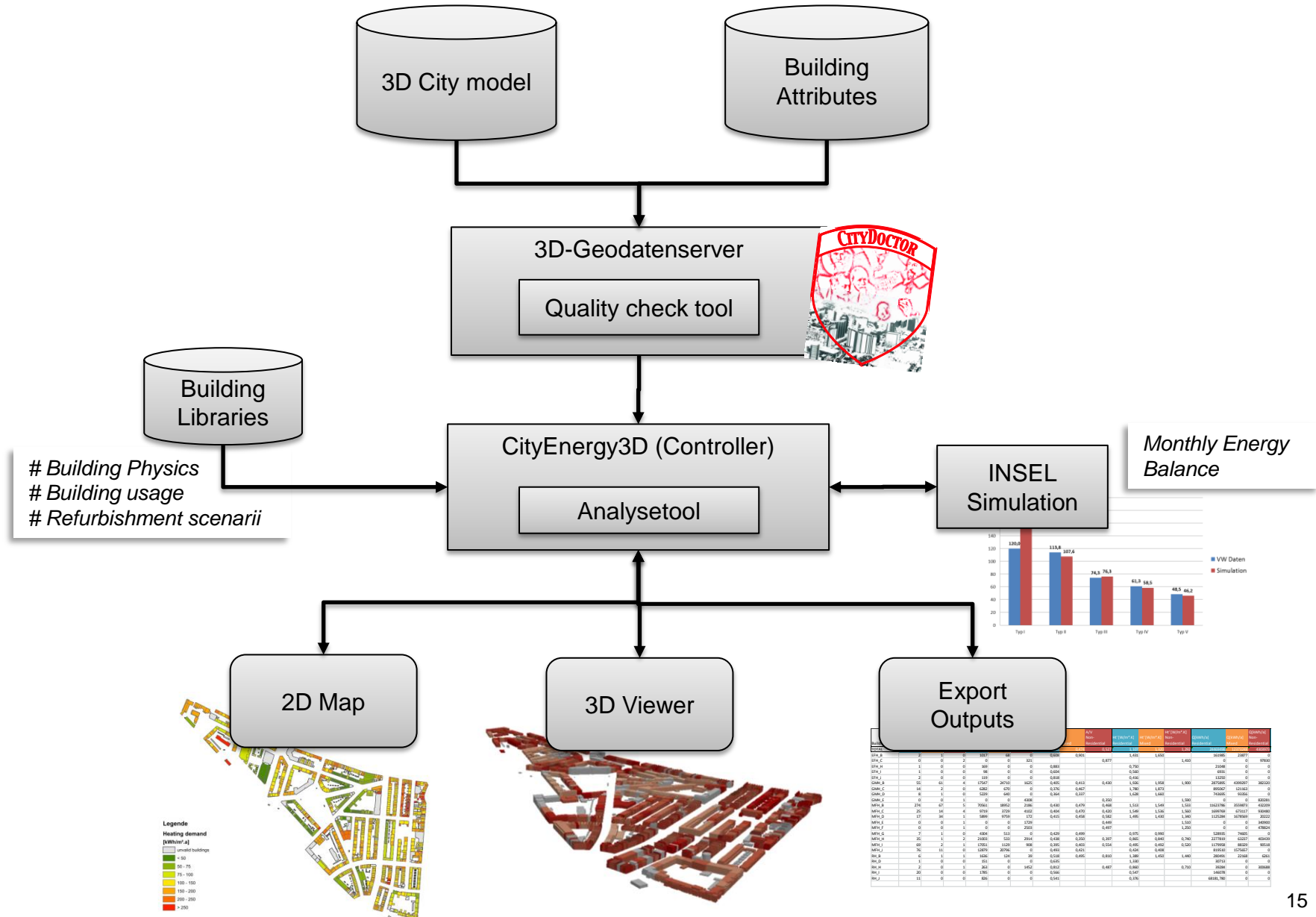


DATA PRODUCT „3D-CITYMODEL ENERGIE“

CityGML ADE Energy



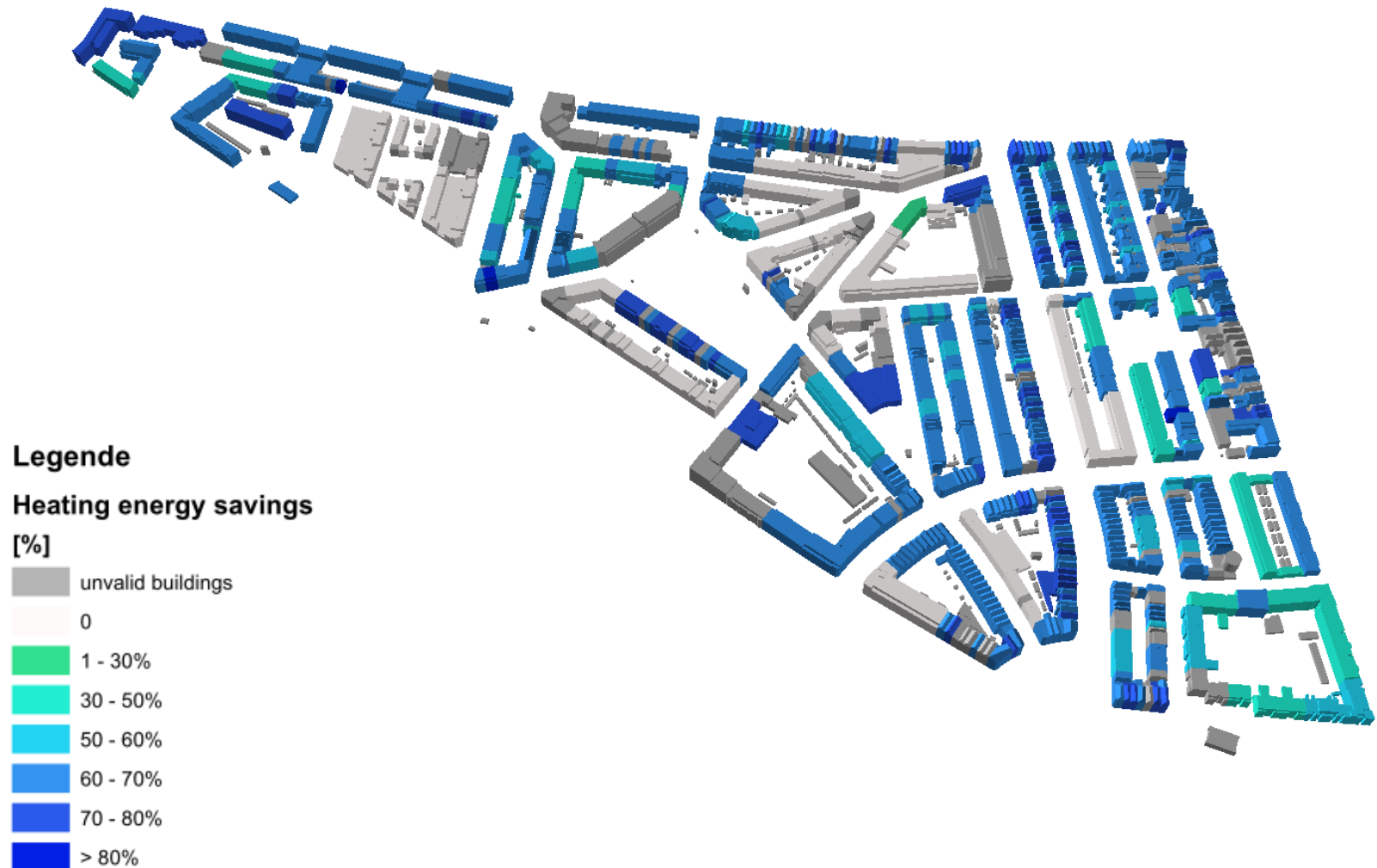
APPLICATIONS

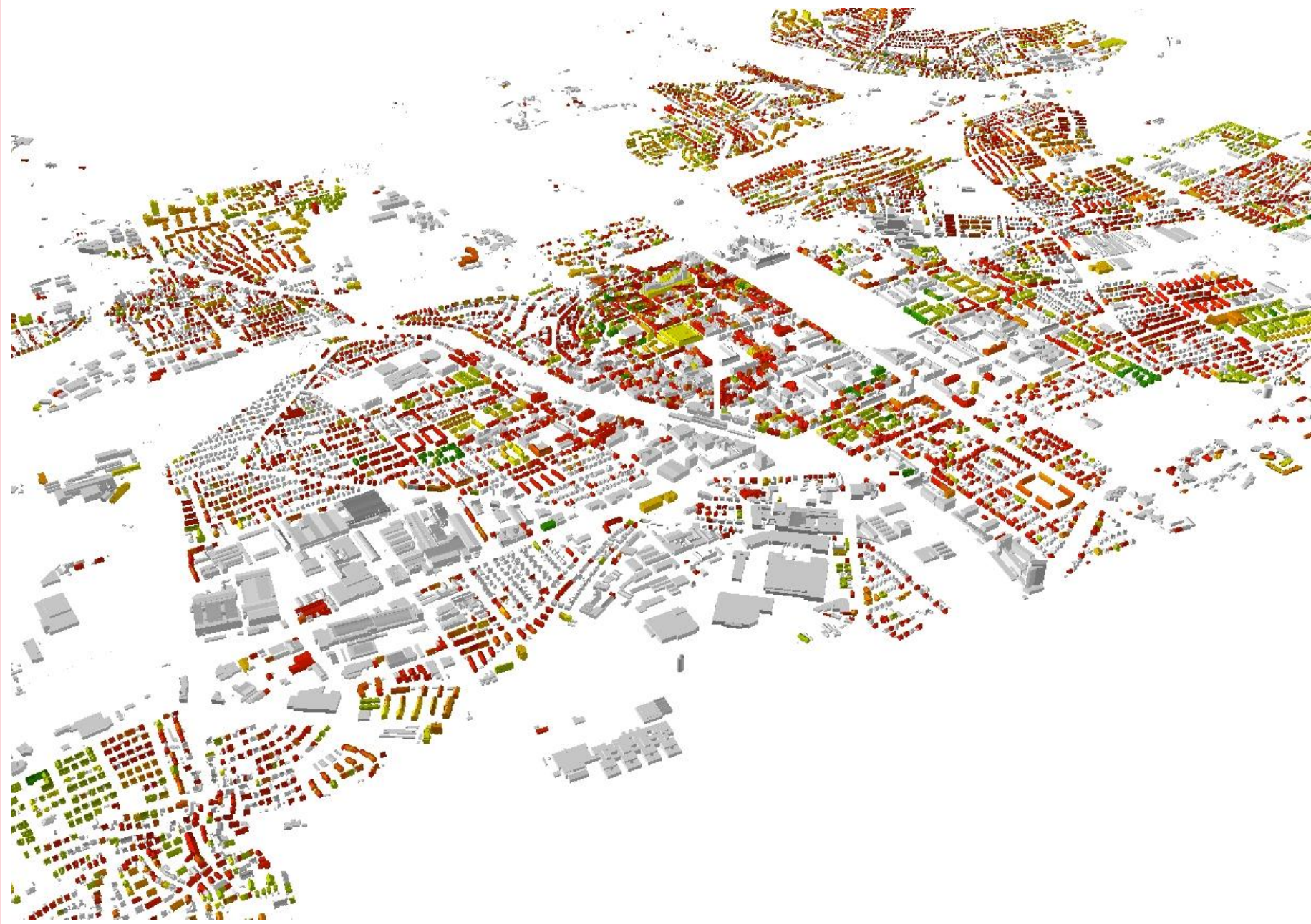


- Generation of building refurbishment scenariii
 - defined by an energy standard goal
 - defined by specific refurbishment measures
 - defined by new U-values (thermal library)



- And calculation of Energy/CO₂ savings for these Scenarii
(can be used to define the refurbishment priorities)

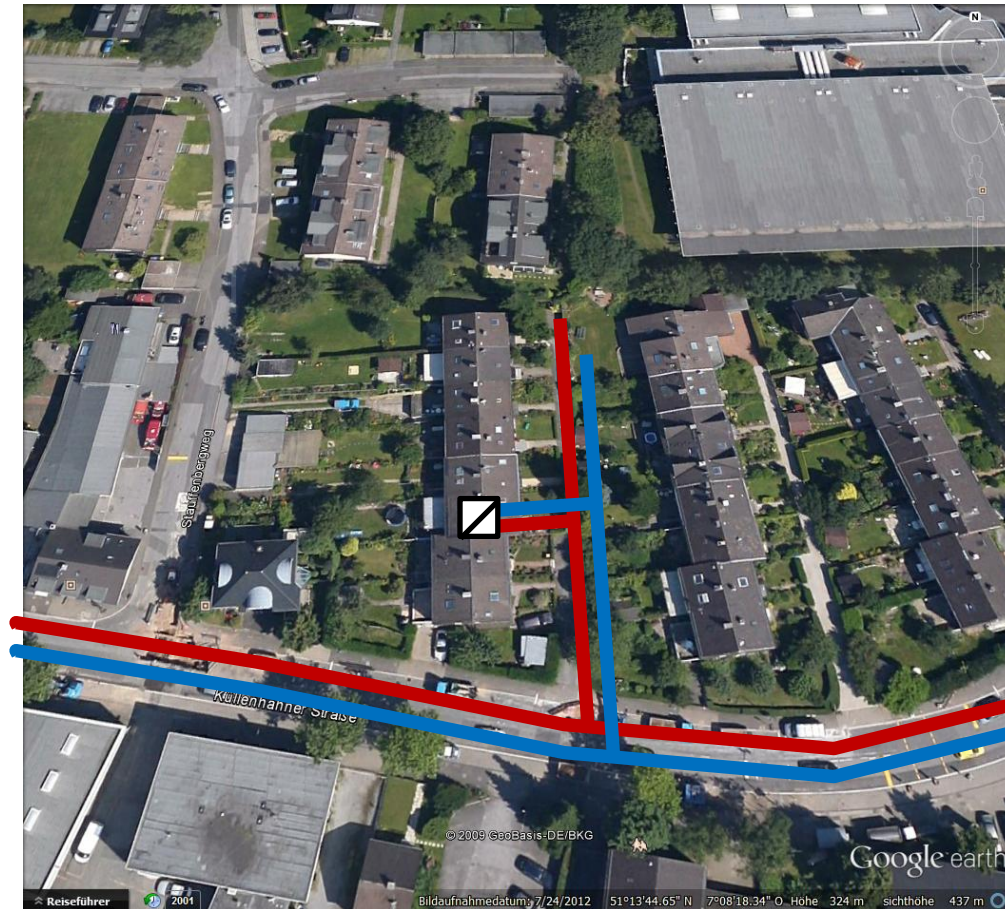


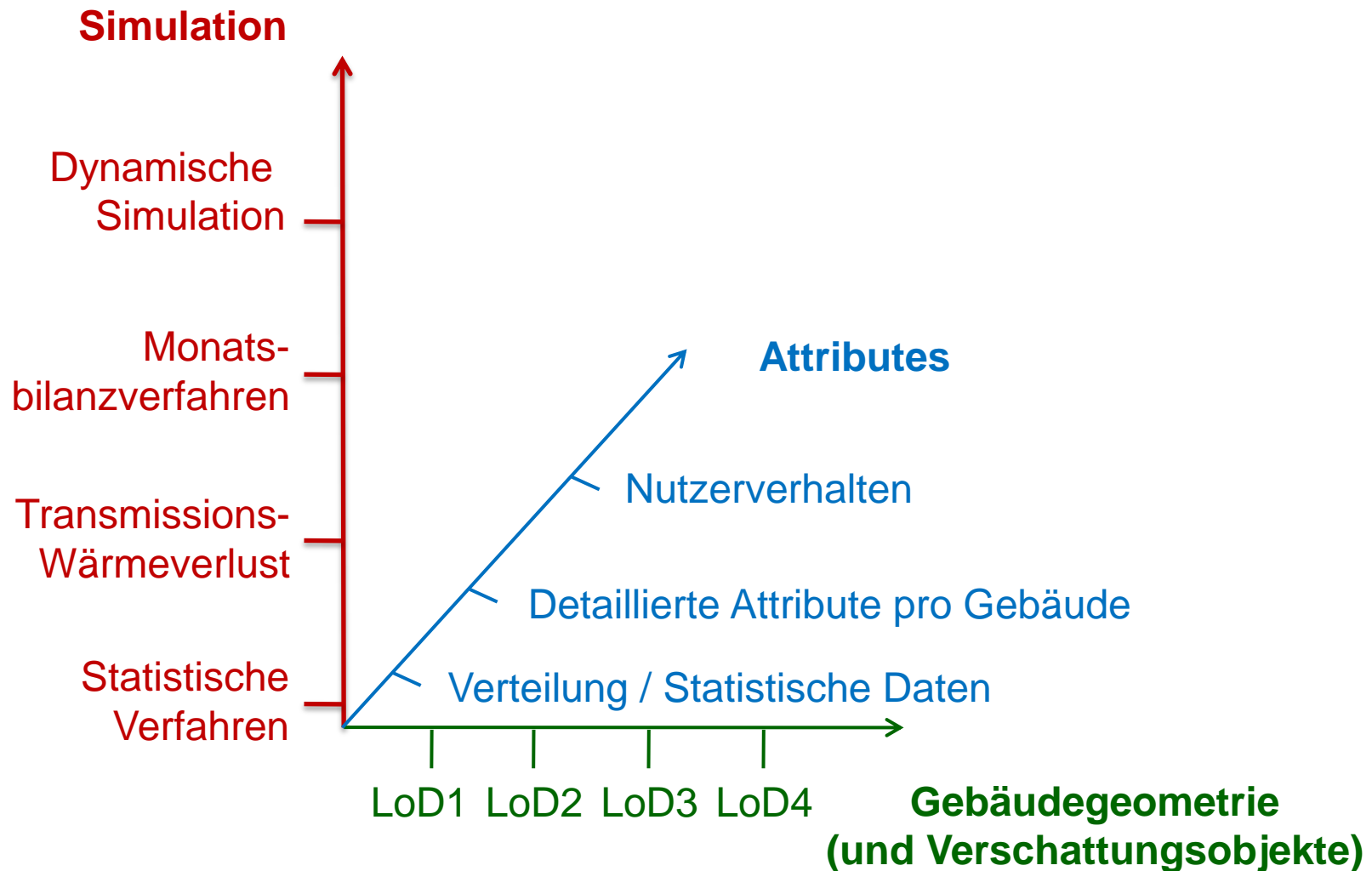


Scale ?



District Heating ?





Kontakt

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