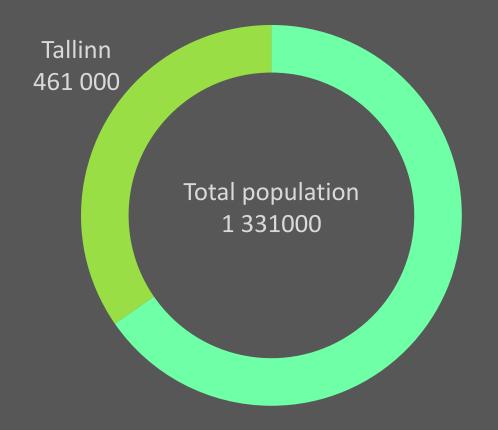
# **GEOBIM 2023!**





### **Estonia and Tallinn**



#### Two off-line services

MARRIAGE

DIVORCE





### Three digital twins

3d.tallinn.ee

3d.maaamet.ee

<u>ehr.ee</u>

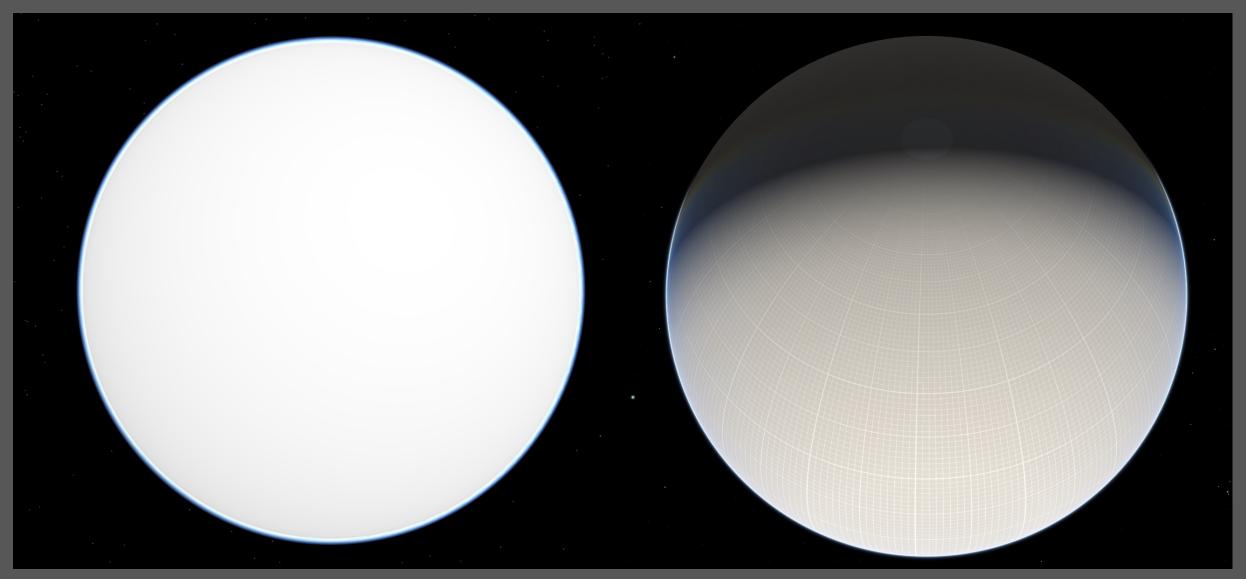








#### Last fall...





#### Framework of Tallinn's digital twin

DATA CAPTURE AND DATA FLOW



DATA MANAGEMENT AND ANALYSIS

**DESICION MAKING** 



- Remote sensing lidar ja fotogrammetrics
- Aerial-, mobile- ja terrestrial
- > IoT sensors
- Self-driving cars

- Analytics
- Parametrical
- Algorithms
- Digital bots

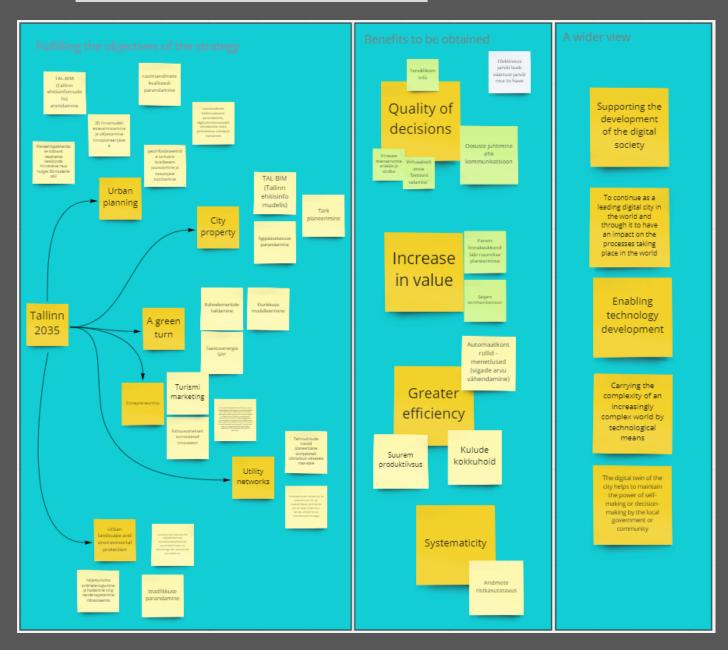
#### **Digital twin**

System of spatially enabled technologies— The technological foundation of a smart city

- Artificial intelligence
  - Machine learning
  - Deep neural network
  - Machine vision
  - > etc

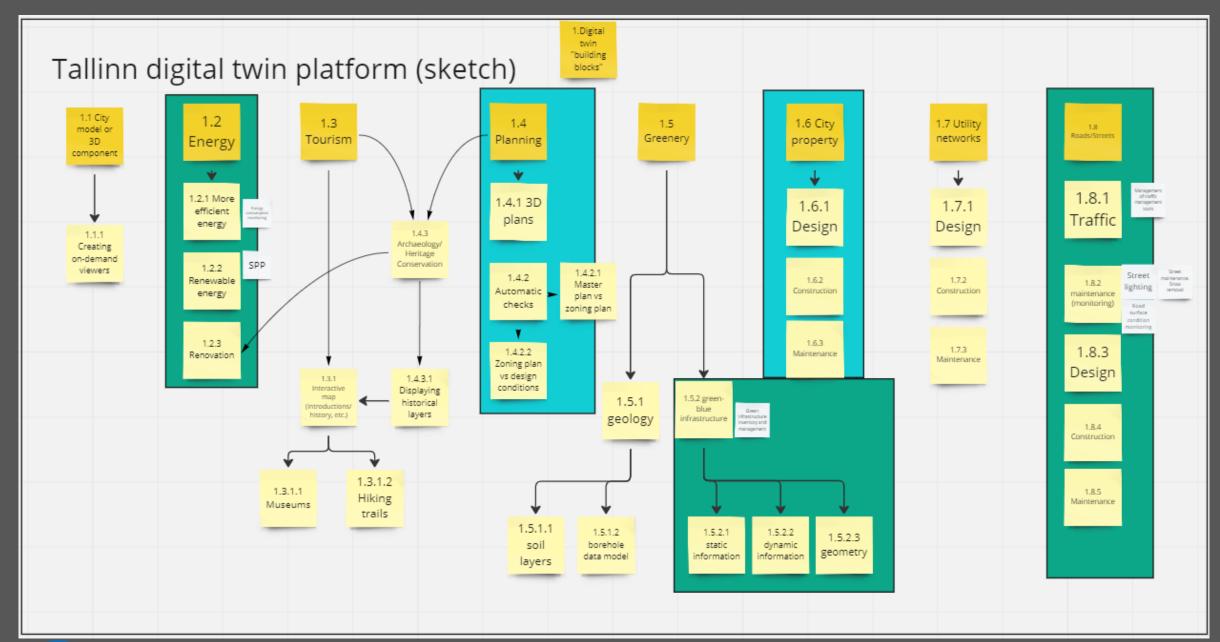


#### Why Tallinn digital twin



## Advantages of Tallinn –Test in Tallinn

- Digital society
- Private sector
- City size
- Cooperation with Helsinki
- Education and research institutions
- Proximity to the state level



#### **ROADMAP**

Introduction of new processes

Technical specifications and framework

Mapping of City processes

Creating a network for digital twin

Activation of product owners

DT roadmap

Digital twin strategy 2035

2022

2023

2024

2025

Mobile data capture pilot

Mobile data capture

Models of the whole City buildings LOD3

GreenTwins

Detailed green models

Solar energy analyses

Street lighting register

3D/BIM models of City buildings

TPR 3D/BIM detailed zoning plans PoC

VR/AR City model pilot

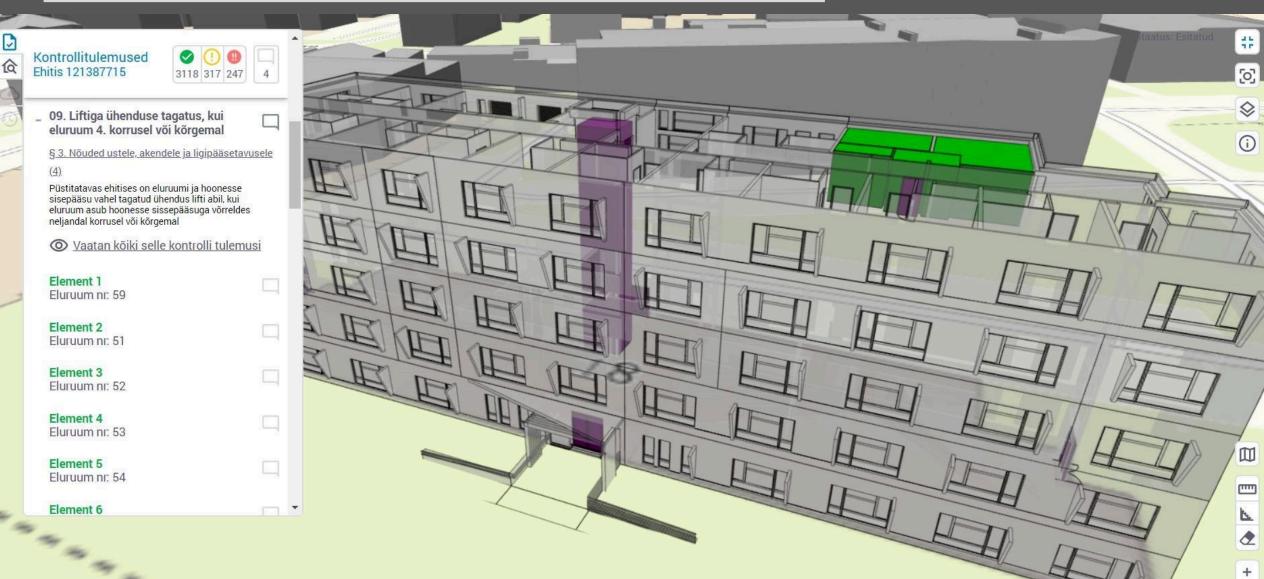
"Open City" VR installation

"Open City" involvement center City model



2035

## BIM based detail zone planning (automated checks)





# Thank You! 3d.tallinn.ee



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