# Helsinki's energy data into 3D-model and citizens' views

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Helsinki

Helsinki's energy data into 3D-map

- ## Helsinki has an aim to be in forefront in energy 3D data
  - To support building owner's interest on the performance of their buildings and to see the potentials
  - To support S&C businesses possibilities to develop needed services for investors and see where they can help best
  - To ease city and climate planning in energy aspects (visuality often helps decision-making)
  - To help city's strategic climate neutrality goal
- ## Various projects ongoing with 3D experts to open the first datasets in February 2018 in 3D model
- ## More information to be included
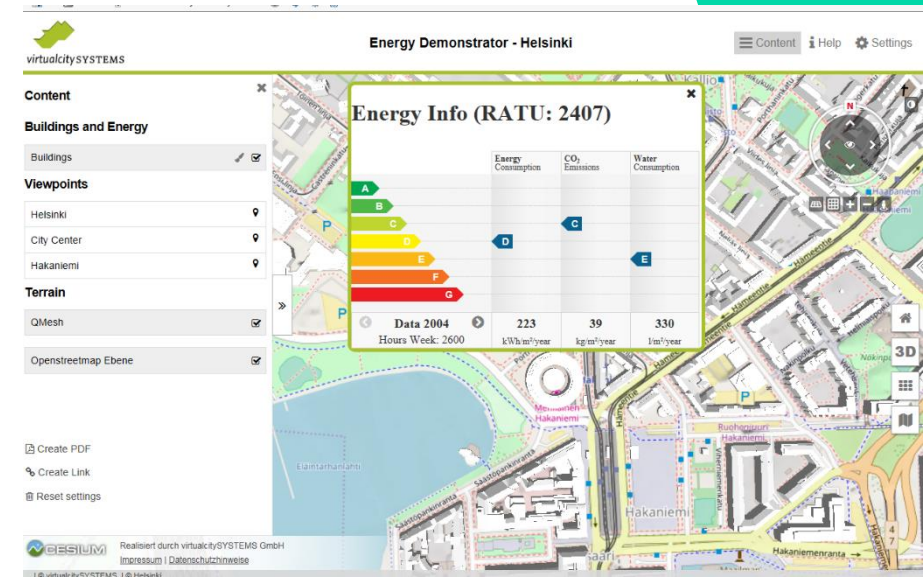
Contents of 3D energy data

Data	Source	Will be published	Challenges
1. Building renovation history	Facta building registry	Feb 2018	Some old data in paper format
2. Hekan apartment buildings heat, electricity and water consumption	Heka Ltd.	Feb 2018	
3. Energy certificate registry	www.energiatodistusrekisteri.fi	2018?	Building ID's needed
4. Public service buildings consumption	HEL Buildings and public areas div.	End of 2018	Energy monitoring renewed
5. Calculated energy consumption of all buildings	VTT	Feb 2018	
6. Calculated energy saving potential in one area (Merihaka)	VTT	Feb 2018	
7. Heat loss images of Helsinki's roofs reanalysis	HSY, kartta.hsy.fi	Feb 2018	Don't fit directly in buildings
8. Large scale waste heat potential of buildings	Metropolia study	2019	Preliminary study done, needs more accurate info
9. Solar energy potential and visualization	HSY+3D, kartta.hsy.fi	Feb 2018	
10. Thermal imaging of facades in one neighbourhood (Merihaka)	HEL environmental services	Winter 2018	Right weather needed (cold+dry)

Citizens thoughts about 3D-map

- **Questionnaire prepared by climate KIC Pioneers in environmental services**
- **Piloted in Lähiöfest2017 (suburb-week) event in Haaga's school**
- **Included presentation with computer and prints of visualization**
- **N=25**

Citizens thoughts about 3D-map

How many times have you accessed to the 3D City Model at https://kartta.hel.fi/3d

(bar chart)
- Sometimes: 2
- Few times: 2
- One time: 2
- Never: 18
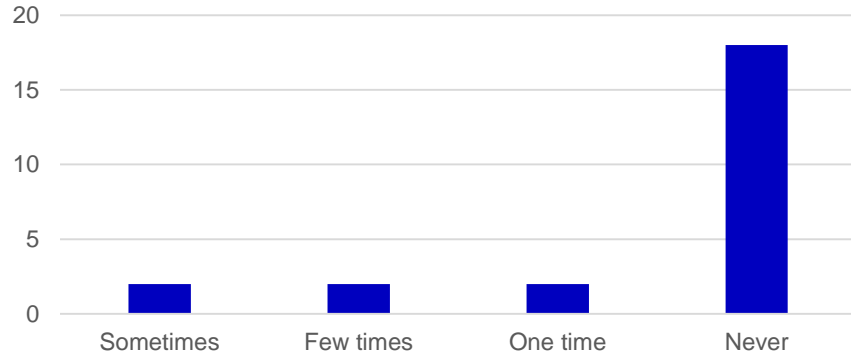
If YES, is the 3D City Model easy to understand and easy to handle?

(bar chart)
- Yes: 4
- No: 1
- Don't know: 2
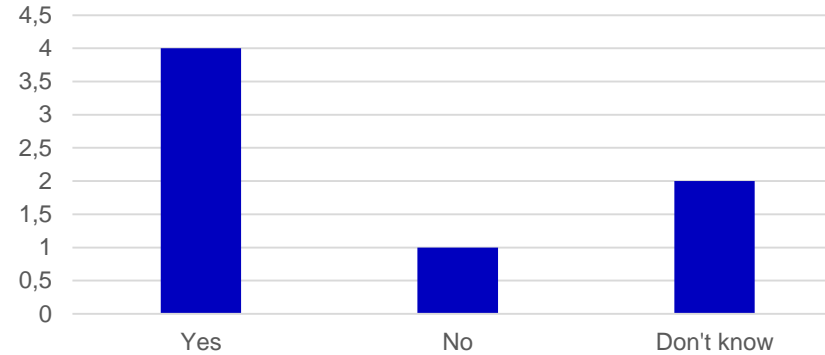
From your experience / from what you have seen now, would you use it again / in the future?

(bar chart)
- Yes: 19
- No: 1
- Don't know: 2
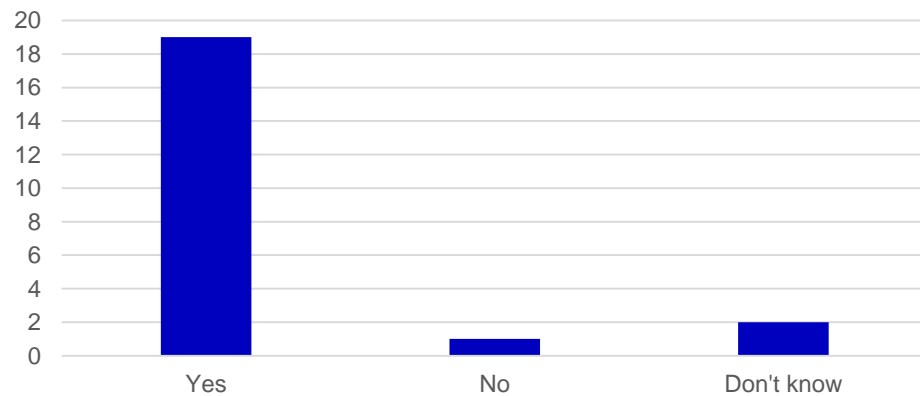
For what purposes would you use the 3D City Model?

(bar chart)
- Other (art projects): 1
- Getting to know city planning: 16
- Processing open data: 5
- Developing 3D-model: 0
- Games/scenarios: 4
- Refurbishment planning: 5
- Comparison building performance: 9
- Visual map service: 20

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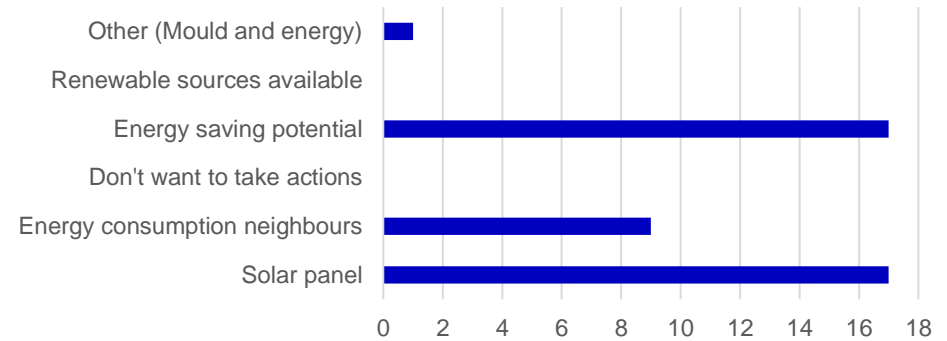
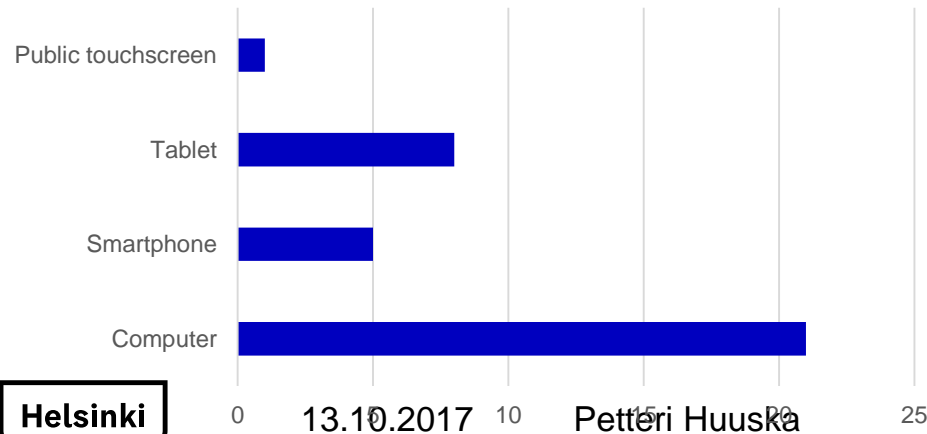13.10.2017   Petteri Huuska

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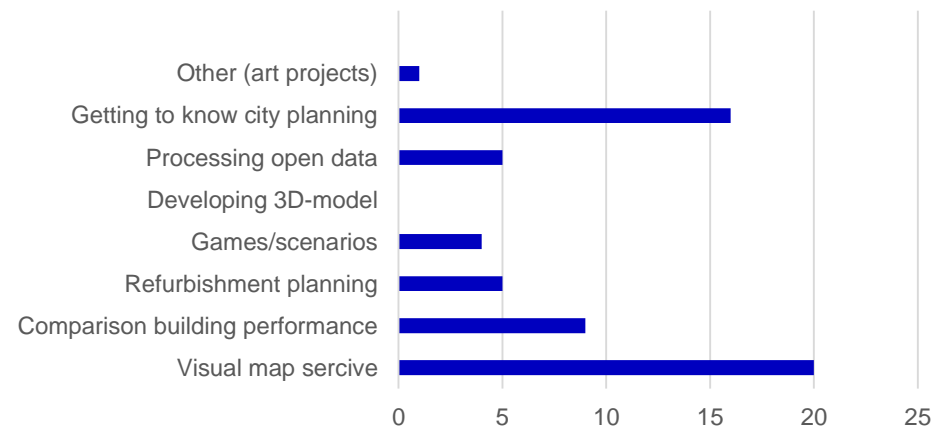
Citizens thoughts about 3D-map

Would you like to compare your building's performance with the performance of other…?

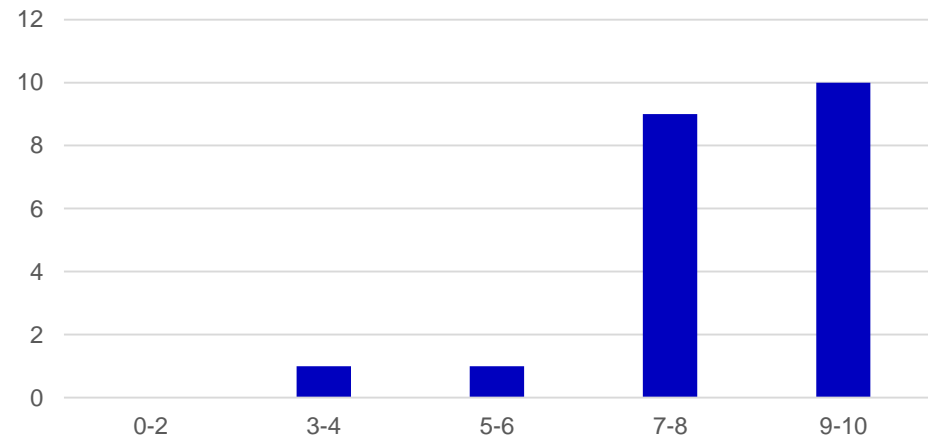### On what appliances would you like to use the 3D City Model?

What information would you like to visualize in the 3D City Model in order to take actions for making your building more energy efficient
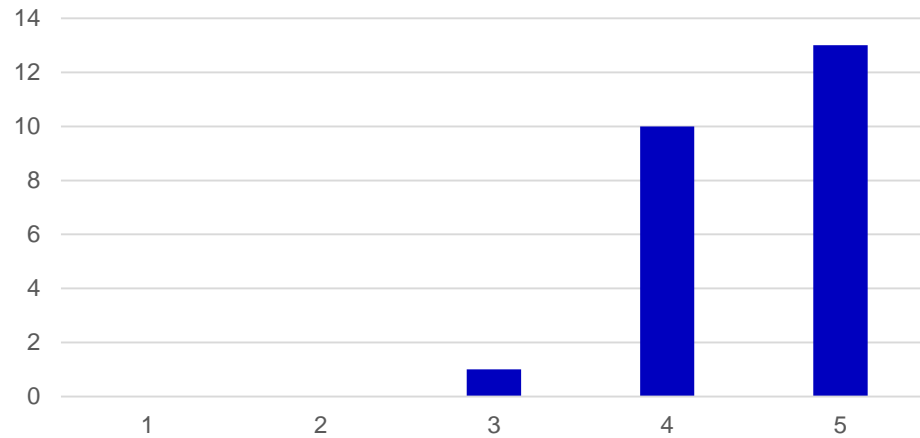

Overall how good do you evaluate the 3D City Model initiative (1-10)

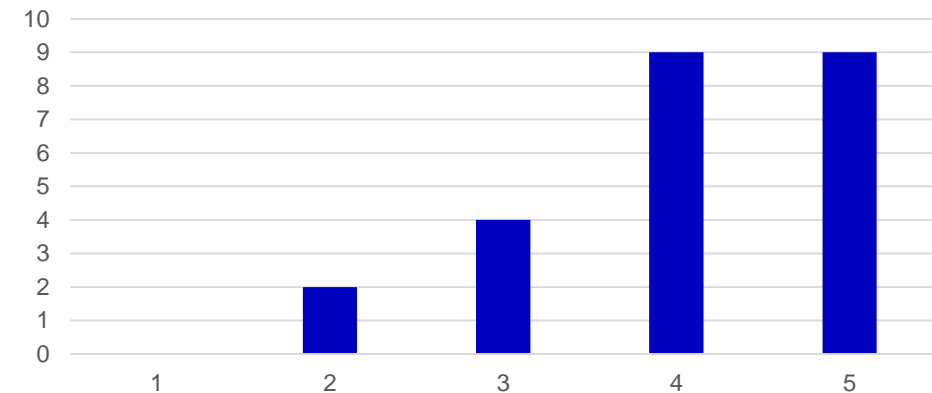# Citizens thoughts about 3D-map

Your interest in energy-saving related issues
(rate from 1=very poor to 5=very high)

14	
12	
10	
8	
6	
4	
2	
0	

1   2   3   4   5

Your willingness to implement energy-saving measures in the next 12 months (rate from 1=very poor to 5=very high)

10	
9	
8	
7	
6	
5	
4	
3	
2	
1	
0	

1   2   3   4   5

Thank You!

Helsinki's climate work www.stadinilmasto.fi –pages. Order also newsletter! (in Finnish)

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