Data for: A Digital Twin for supporting decision-making and stakeholder collaboration in urban decarbonization processes. A participatory development in Gothenburg.

SND-ID: 2024-435. **Version**: 1. **DOI**: https://doi.org/10.5878/x3yz-hk74

Is part of collection at SND: Citizen surveys

Download data

Survey by test users of the Digital Twin Viewer Gothenburg.xlsx *(24.78 KB)*

Associated documentation

README file.docx *(18.73 KB)*

Download all files

2024-435-1.zip *(~43.51 KB)*

Citation

Thuvander, L., Maiullari, D., & Dokter, G. (2024) Data for: A Digital Twin for supporting decision-making and stakeholder collaboration in urban decarbonization processes. A participatory development in Gothenburg (Version 1) [Data set]. Chalmers University of Technology. Available at: https://doi.org/10.5878/x3yz-hk74

Creator/Principal investigator(s)

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Research principal

Chalmers University of Technology - Department of Architecture and Civil Engineering

Principal's reference number

10-2020-1697

Description

The dataset contains questionnaire survey data from the evaluation of a Digital Twin Viewer (CDTE) for the city of Gothenburg. The questionnaire collects background information about the users and their familiarity with digital twins or other digital tools, their evaluation of the usability and usefulness of the City Digital Twin and general reflections on the characteristics and the maintenance of the viewer platform.

Data is collected through two assessment workshops: First, a workshop with 22 stakeholders representing the city energy provider, the planning and environmental department of the municipality, property companies both municipal and private, and researchers; and second, a

workshop with 70 master students with a background in architecture and urban planning as part of a course on sustainable development and stakeholder engagement.

Data contains personal data

No

Language

English

Unit of analysis

Individual

Organization/Institution

Population

Students, municipal stakeholders, property managers, representatives energy provider

Time Method

Cross-section

Other

Sampling procedure

Other
No sampling

Variables

9

Number of individuals/objects

52

Response rate/participation rate

60%

Data have been collected in connection with evaluation workshops.
Response rate: 53-68%

Number of respondents (stakeholders): 15
Number of respondents (students): 37
Response rate (stakeholders): 68%
Response rate (students): 53%

Data format / data structure

Text

Data collection 1

- Mode of collection: Focus group: face-to-face
- Description of the mode of collection:

Questionnaire survey. Data is collected through two assessment workshops: First, a workshop with 22 stakeholders representing the city energy provider, the planning and environmental department of the municipality, property companies both municipal and private, and researchers; and second, a workshop with 70 master students with a background in architecture and urban planning as part of a course on sustainable development and stakeholder engagement.

During the workshops, participants worked in parallel group sessions driven by an assignment of exploring the viewer and defining robust decarbonization strategies in different areas of Gothenburg using the viewer. At the end of the assignment, participants completed a questionnaire survey and evaluated their experience of the viewer for decision-making. The questionnaire, structured into 24 questions, allowed multiple answers to the same question.

- Time period(s) for data collection: 2023-06-15 – 2023-11-30
- Data collector: Chalmers University of Technology
- Source of the data: Registers/Records/Accounts, Research data

Geographic spread

Geographic location: Göteborg Municipality

Responsible department/unit

Department of Architecture and Civil Engineering

Contributor(s)

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Funding

- Funding agency: Göteborg Energi (Sweden) Foundation for Research and Development
- Funding agency's reference number: Project number 10-2020-1697
- Project name on the application: Digital twin for modelling future energy needs in the Gothenburg building stock: A tool for increased stakeholder collaboration, efficiency, and coordination of energy issues

Research area

Community, urban and rural life (CESSDA Topic Classification)

Civil engineering (Standard för svensk indelning av forskningsämnen 2011)

Architectural engineering (Standard för svensk indelning av forskningsämnen 2011)

Energy systems (Standard för svensk indelning av forskningsämnen 2011)

Environmental management (Standard för svensk indelning av forskningsämnen 2011)

Planning / cadastre (INSPIRE topic categories)

Geoscientific information (INSPIRE topic categories)

Environment (INSPIRE topic categories)

Location (INSPIRE topic categories)

Society (INSPIRE topic categories)

Keywords

Cadastral parcels, Energy resources, Environmental monitoring facilities, Digital twin, Urban energy, Decision making, Stakeholders, Building stock

Publications

Link to publication list:
https://research.chalmers.se/project/?id=10040#publications

Point (Lon/Lat)

11.986477, 57.719895

Accessibility level

Access to data through SND
Data are freely accessible

Use of data

Things to consider when using data shared through SND

License

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Versions

Version 1. 2024-10-14

Homepage

Digital Twin for modelling future energy needs in the building stock of the city of Gothenburg

Related research data in SND's catalogue

Data for: A Digital Twin for supporting decision-making and stakeholder collaboration in urban decarbonization processes. A participatory development in Gothenburg.

Is part of collection at SND

Citizen surveys

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DataCite
DDI 2.5
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DCAT-AP-SE 2.0
JSON-LD
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