



SPARCS

Sustainable energy **P**ositive & zero **cAR**bon **C**ommunities**S**

Enhancing municipal working structures for climate neutral development **Nadja Riedel, City of Leipzig**



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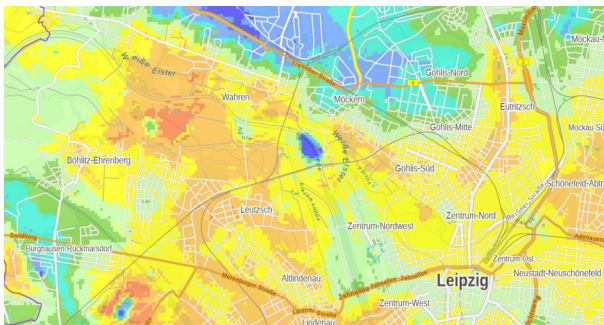
Challenges



Energy transition projects demand for cross-silo working structures (examples)

Strategic level

Municipal Heating Planning (Kommunaler Wärmeplan) – climate neutral heat supply till 2038



- + 12 City offices + departments involved
- + External stakeholders (e.g. LSW)

Large scale approval processes

Planing and permitting process Solar Thermal Plant Leipzig Lausen



- + Building permit/plan
- + Change land-use plan
- + Change Regional Plan

„Smale scale“ interventions

Energetic Refurbishment of buildings (e.g. facade, heating system, PV installation)

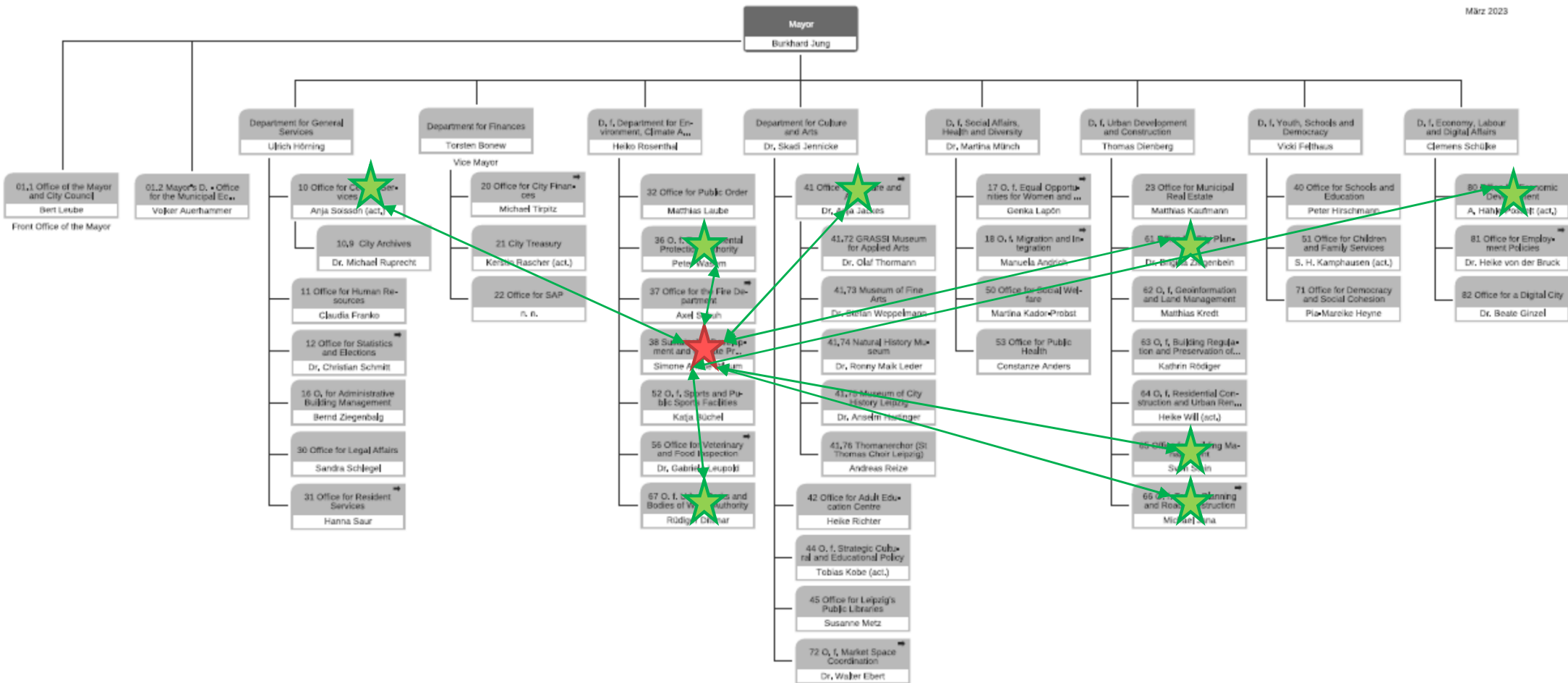


- + Social conservation area
- + Monument protection

Adjustment of working structures

City of Leipzig – Office for Sustainable Development and climate protection // core group climate protection managers

März 2023



Standard model „climate-friendly“ district development

Starting point

Energetic refurbishment concepts (2021-2023)

- Nation funding scheme KfW 432
- district approach
- Part of Leipzig SECAP (3 concepts per year)
- Integrated development of solutions for climate neutral districts (focus: heating, energy, mobility)



Connection to SPARCS – standard model „climate neutral districts development“

Energetic refurbishment concepts (2021-2023)

SPARCS standard model „climate neutral district development (focus: existing building environment)“ 07/2022



8 different departments
and units

Unclear:

- Definitions (climate neutral, climate just, climate friendly)?
- Responsibilities?
- Process and work-flow?

Standard model „climate neutral districts development“ – Defining challenges

Energetic refurbishment concepts (2021-2023)

SPARCS standard model „climate neutral district development (focus: existing building environment)“ 11/2022



Goals and
ambition

Working process &
responsibilities

Data use and
sharing

9 different departments
and units

- Focus on future energetic refurbishment concepts
- Definition accord. to existing concepts

Data use and data sharing for climate neutral city development

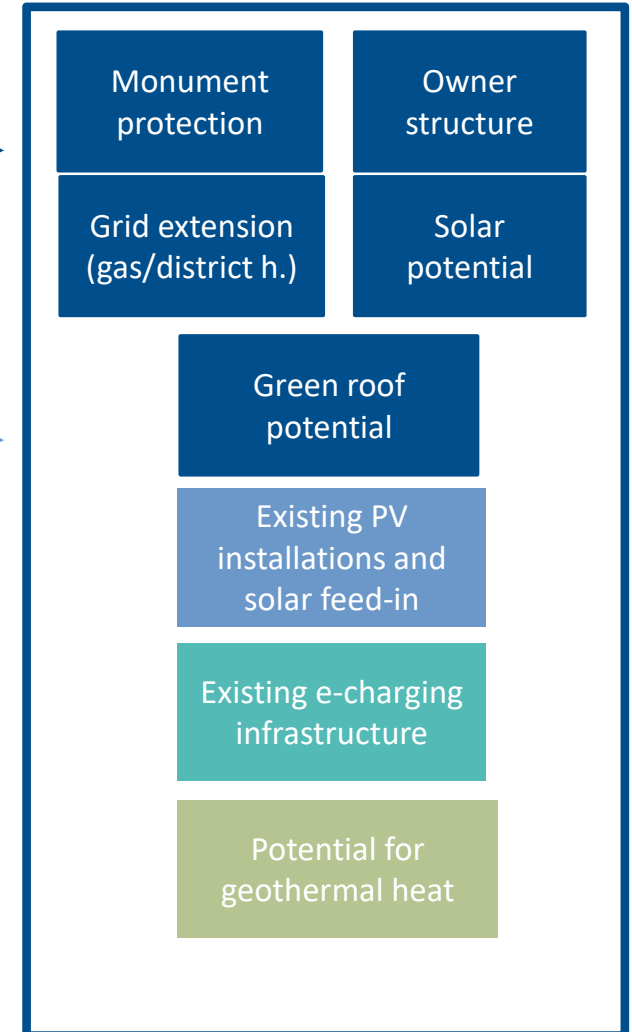
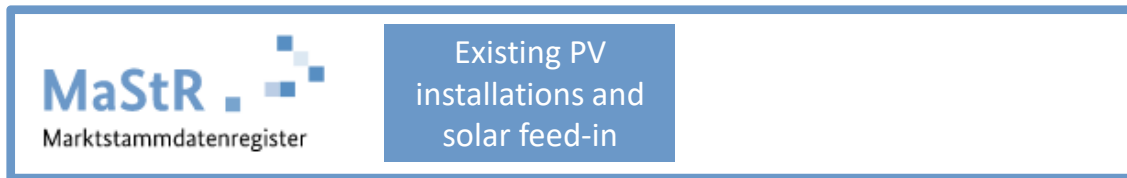
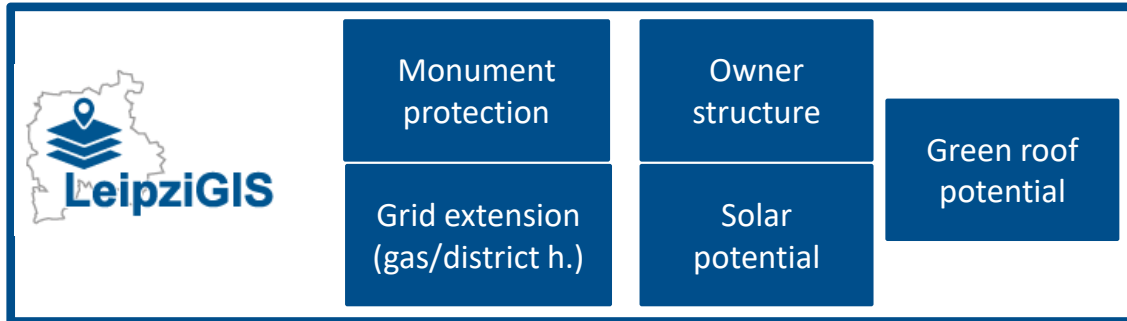
„Energie-Atlas Leipzig“

ACTUAL

Data Silos

TARGET

one data space 



Support decision making



Green roofs?



PV installation on roofs?



Solar thermal installations on roof?



Geothermal potential?



Gas supply will be replaced by district heating?



Wind energy for energy supply?



PV open space plant?



Green roofs can be supplemented with PV

Larger PV Potential on roofs

High geothermal potential, therefore better PV on roofs

High potential for use of geothermal energy

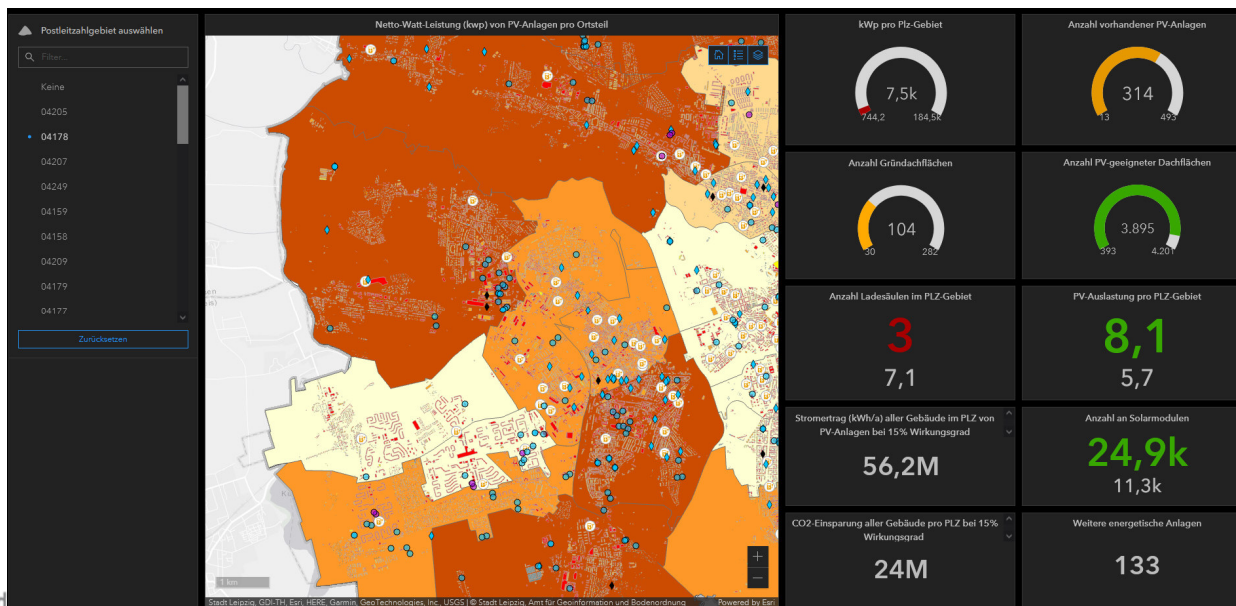
District heating will only be available in five years

Medium wind potential, not yet labeled as wind priority area

No spaces/ plots available for open space plants

Next steps

- May 2023: Co-creation and testing workshop with city departments
- Connect to ongoing strategy developments
- adding further data (e.g. eMob)
- Creating tools for analysis and decision making





<https://www.sparcs.info/>



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