

# SPATIAL PLANNING FOR ENERGY TRANSITION IN VIENNA

# Vienna

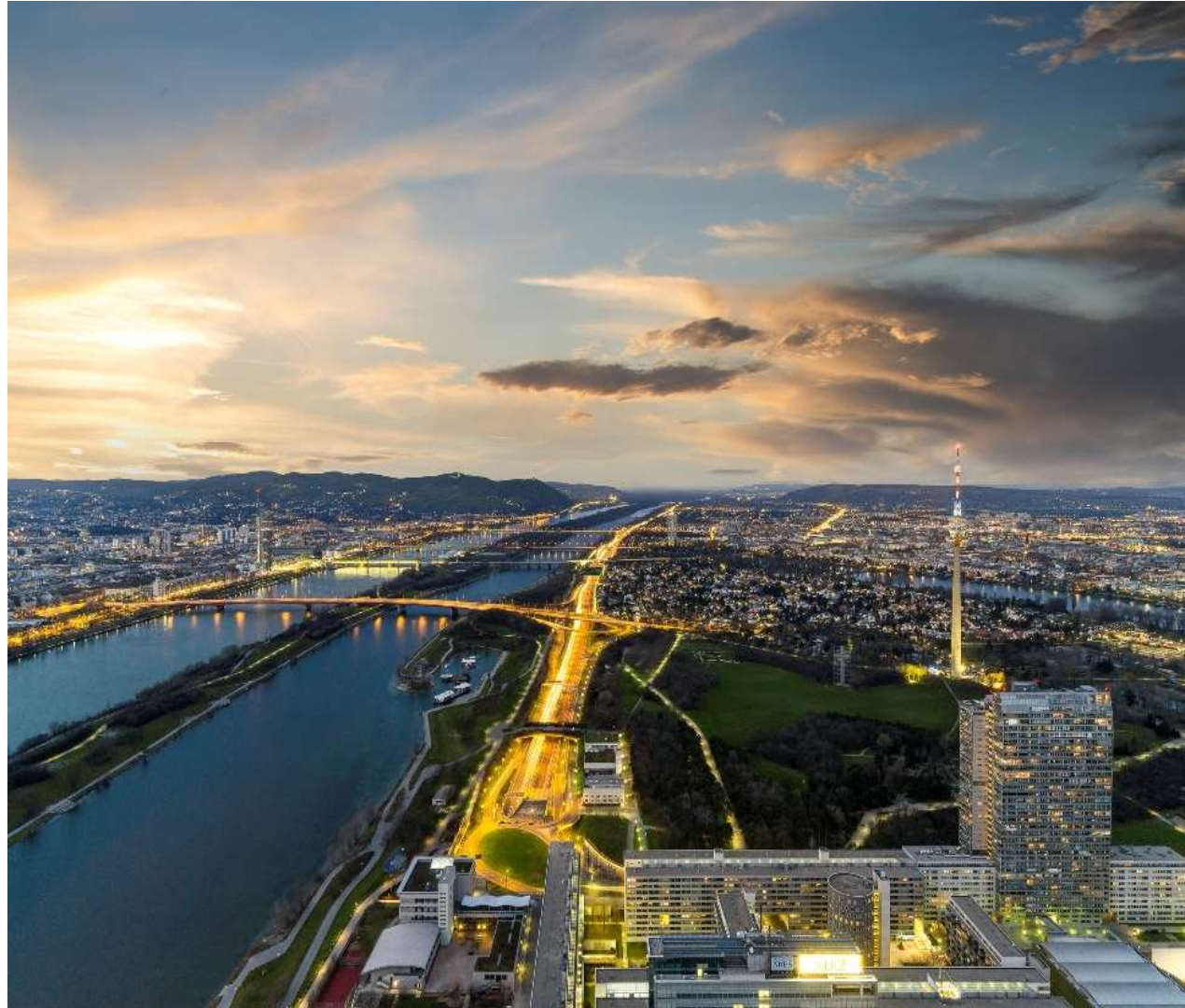
1,9 Mio inhabitants

... and growing by > 1%/year

reduce GHG-emissions by 80%  
per capita in 2050

decrease final energy  
consumption by 40% per  
capita in 2050

Increase renewable share of  
gross energy consumption  
50% in 2050



# Spatial Energy Planning in Vienna

## Why we are doing it and what are the challenges



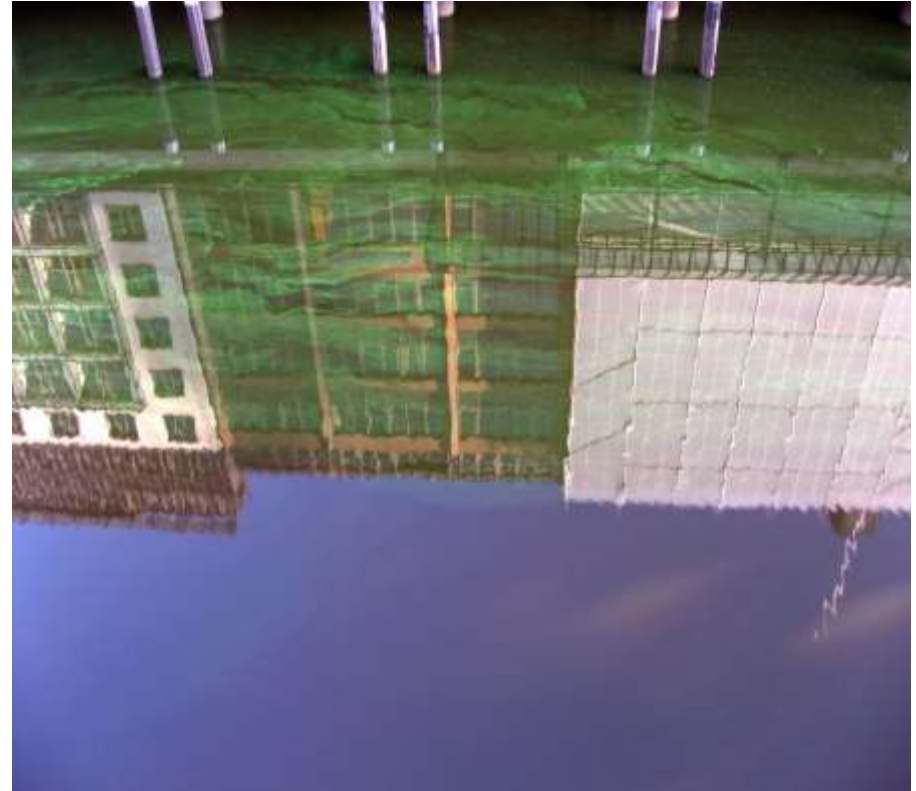
Decarbonizing the urban energy supply...

... requires long-term planning with a spatially differentiated approach.

... focuses on heating & cooling and respective infrastructure.

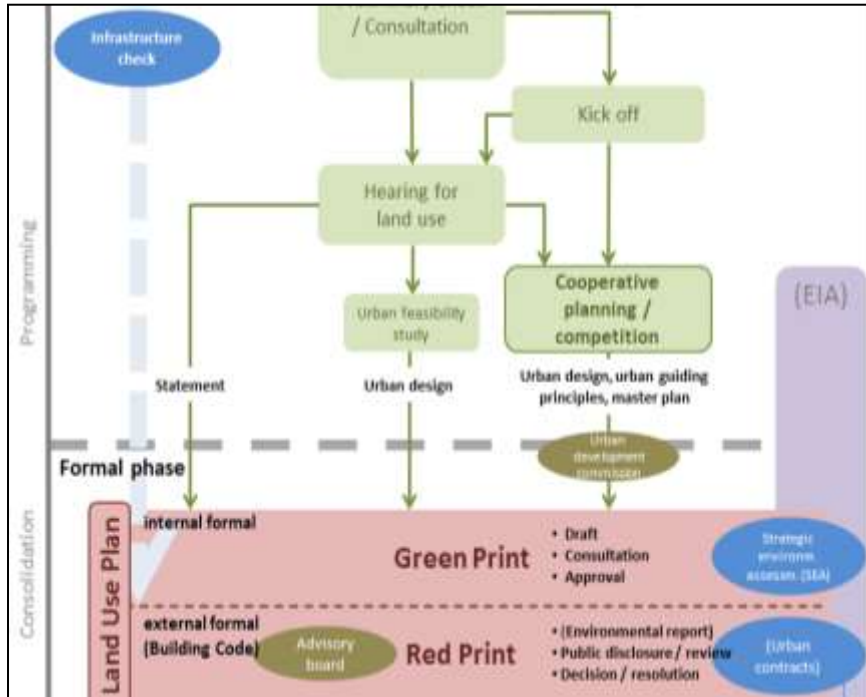
... supports grid viability through unbundling of district heating and gas infrastructure.

... needs new governance at local level, good quality data on buildings and energy at high resolution and smart data processing.



# How can we help?

## Energy Center supports the City of Vienna



incorporating energy aspects into the early phase of planning processes

research support on digital data use

coordinating multiple city stakeholders

building a governance framework to realise potential of spatial energy planning

# Governance framework

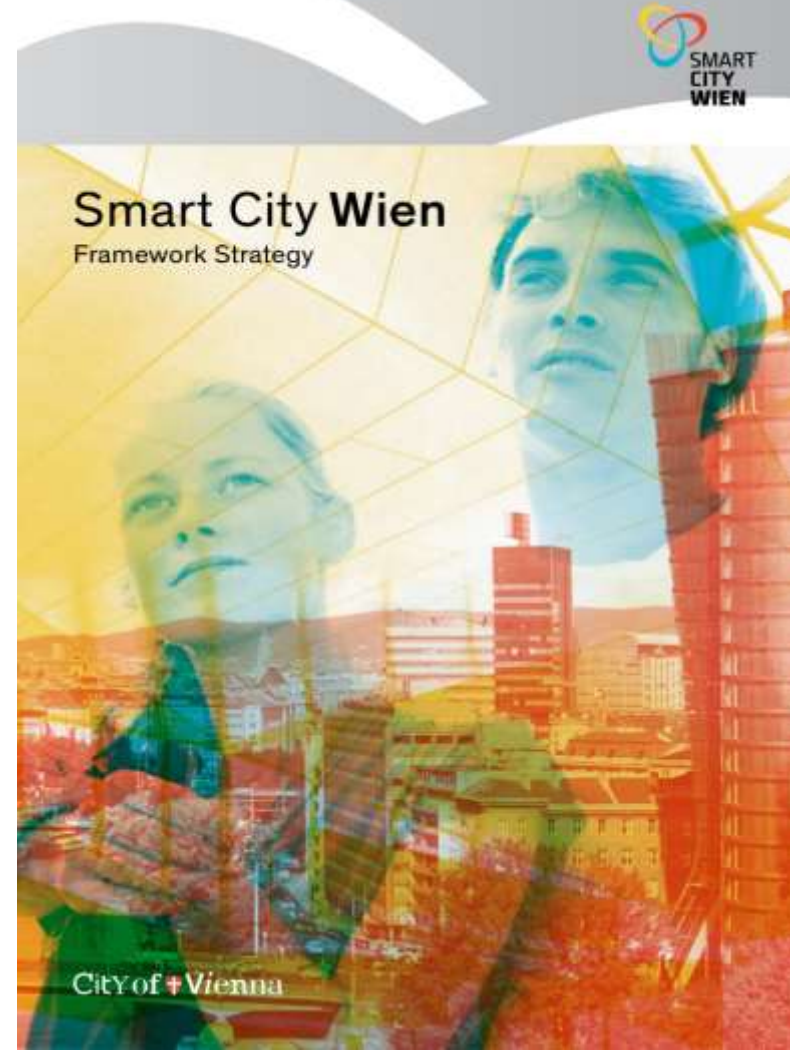
## Recent developments in Spatial Energy Planning

### Recent amendments to Vienna Building Code

1. Energy and climate protection as new objectives of spatial planning
2. New and old residential buildings: no oil heating
3. New residential buildings: no new gas connections in „energy zones“.

### Recent amendment to Funding Schemes

- No funding for renewable heat in „energy zones“. Generous funding elsewhere.
- New scheme for micro low-temperature networks.



# GeoData work on demand and supply potential



yesterday

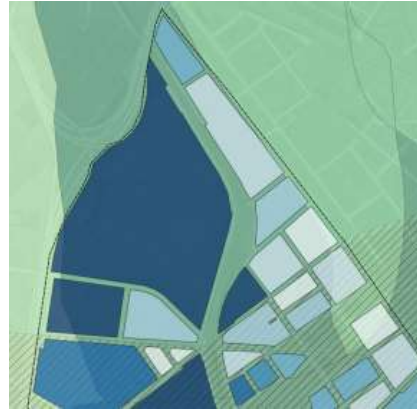
*individual and general*



- DH infrastructure
- geothermal heat
- groundwater
- solar (PV, thermal)
- waste heat

today

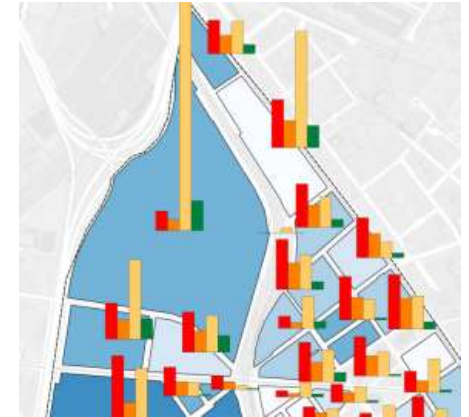
*aggregated and disaggregated*



- buildingblock
- plot
- building

tomorrow

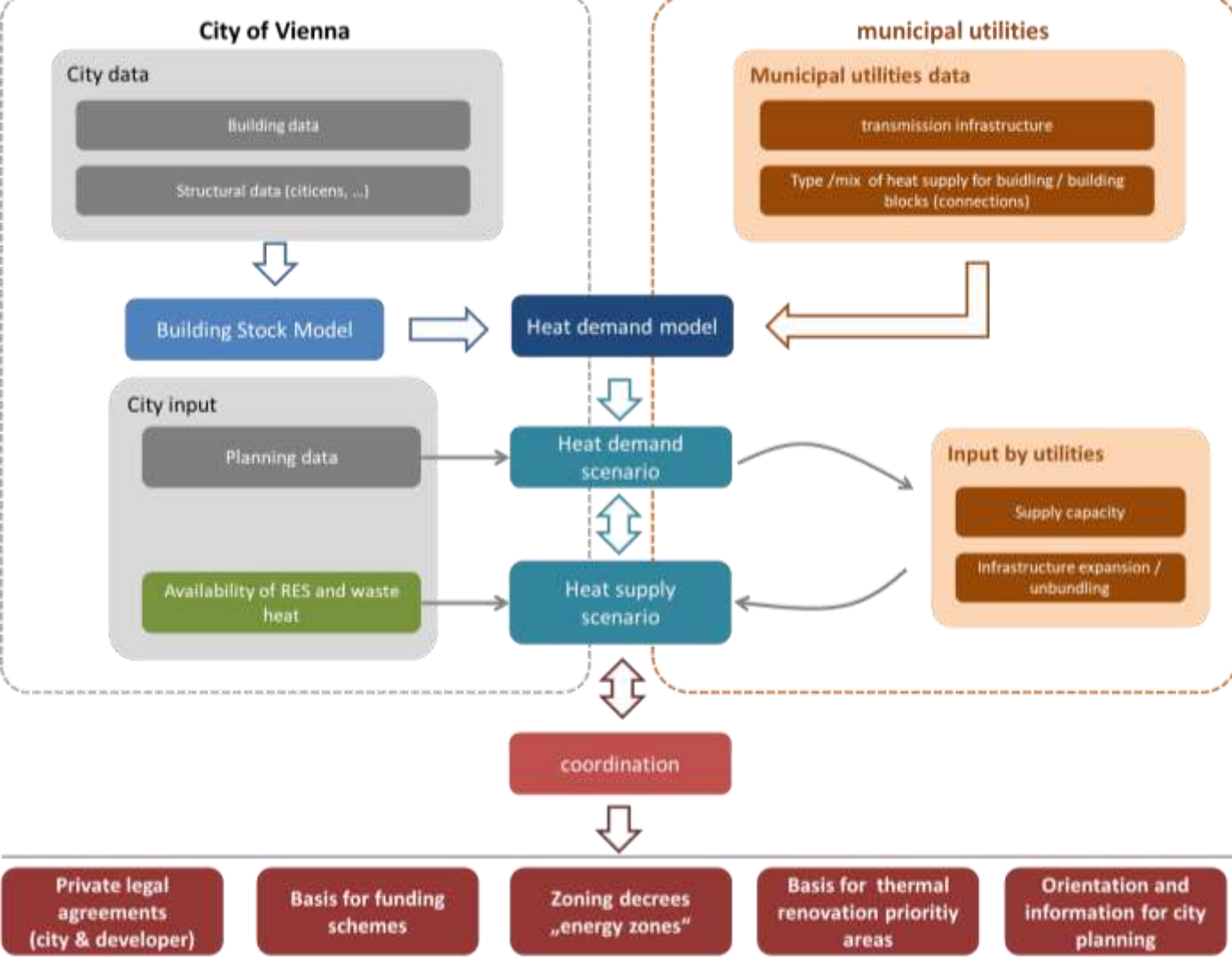
*feasibility and coverage ratio*



- feasibility assumptions (technological and economical)
- Combination with potential and demand(-scenarios)
- heat atlas with standard applications



# Collaboration with local grid operator: Data basis and exchange for spatial energy planning in Vienna



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# THANKS

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