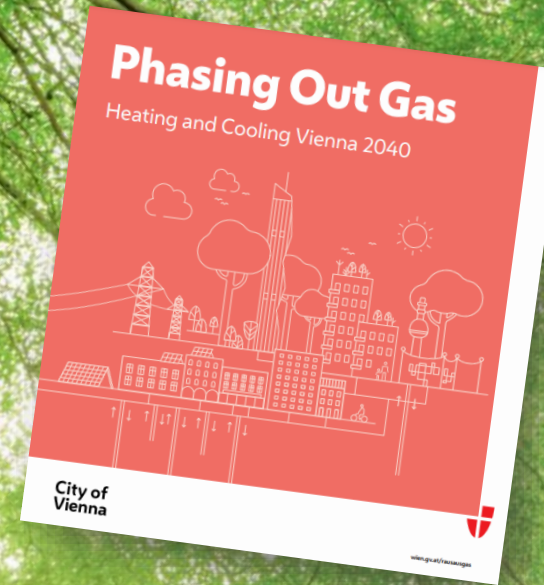


Phasing Out Gas In Vienna Challenges And How To



**Bernd Vogl, Managing Director
Climate and Energy Fonds**

14.10.2025



Background



- More than 30 years of experience in energy solutions for buildings
- Co-Founder (on part of the ministry) of Austrian State Prize for Architecture and Sustainability
- 2011 – 2022 Head of the energy planning department of the City of Vienna
- 2016 – 2022 Member of the board of Wien Energie (third largest energy company in Austria - owner of the district heating network in Vienna)

Welcome to Vienna!

Some numbers

Who lives in Vienna?

1 Jan. 2024

Population

2,005,760



Women
51.0%



Men
49.0%

Population density

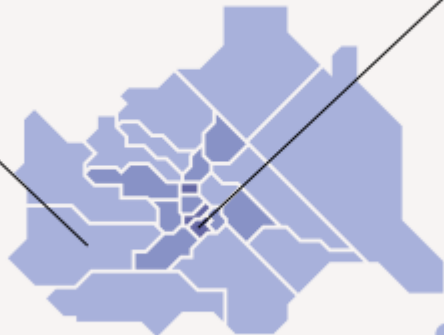
1 Jan. 2024

1,472

people per km²
Lowest density
(Hietzing)

27,043

people per km²
Highest density
(Margareten)



Vienna has an average population density
of **4,835 people per km²**

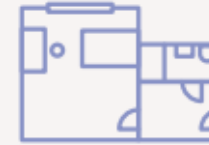
- Up to 10,000
- 10,001 to 20,000
- 20,001 and above

Average housing space

31 Oct. 2021

36 m²

Average housing
space per resident



2.0

Average number
of residents
per apartment

Buildings by construction period

31 Oct. 2021

In 2021, Vienna had a total of about
176,000 buildings.

31,831
before 1919



23,841
1919–1944



54,328
1945–1980



65,760
1981–2021

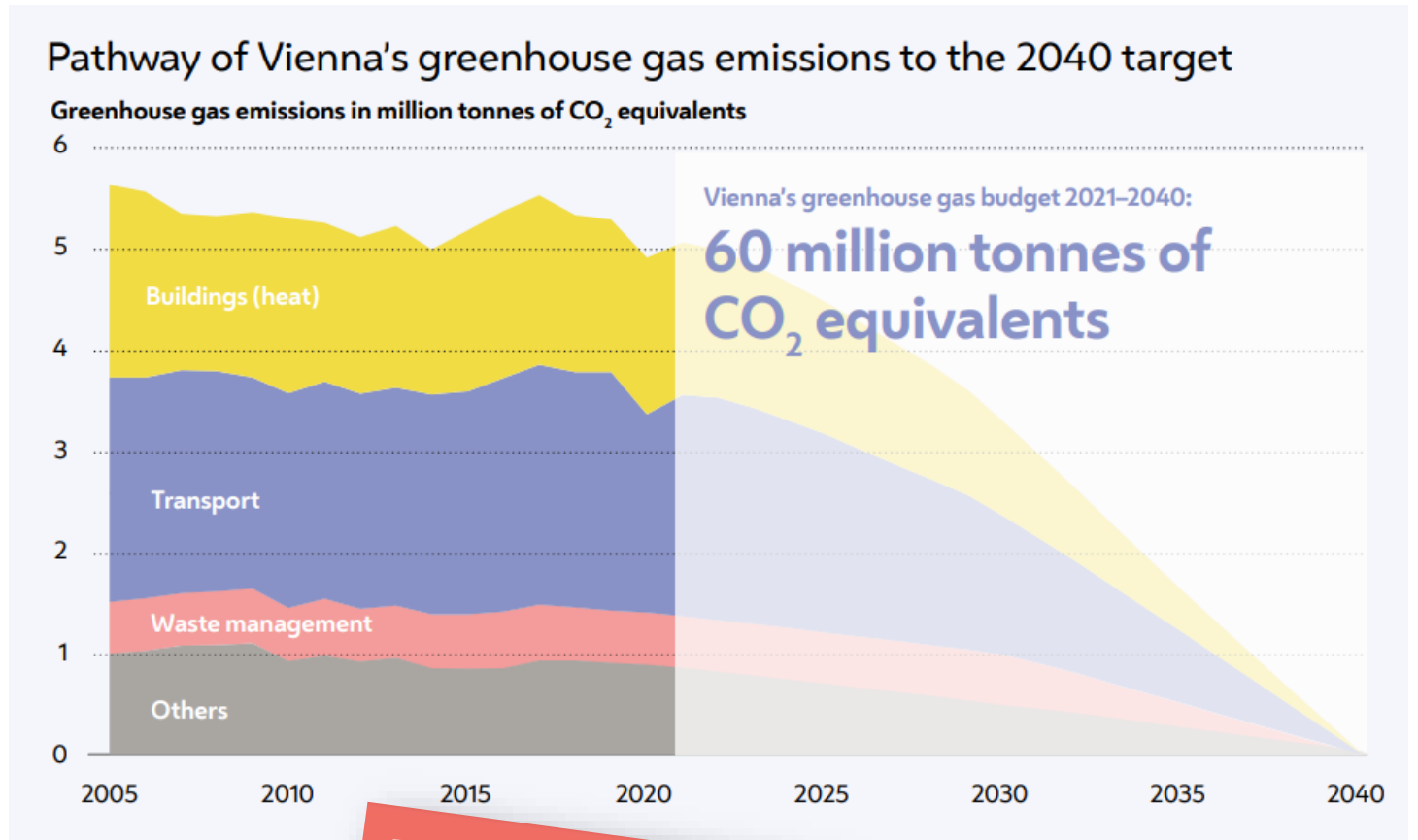


**City of
Vienna**

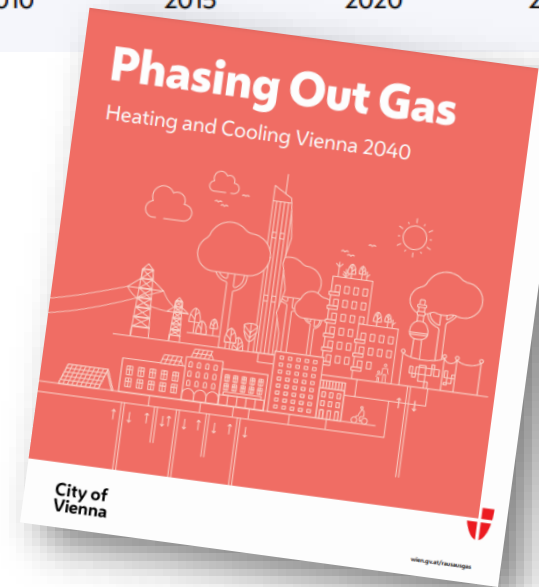
From gas dependency to renewable energy supply

Pathway to 0

- New strategy paper:
**Phasing Out Gas -
Heating and Cooling
Vienna 2040**
- City-wide program:
Phasing out Gas
- Solar initiative
- Vienna Climate Team

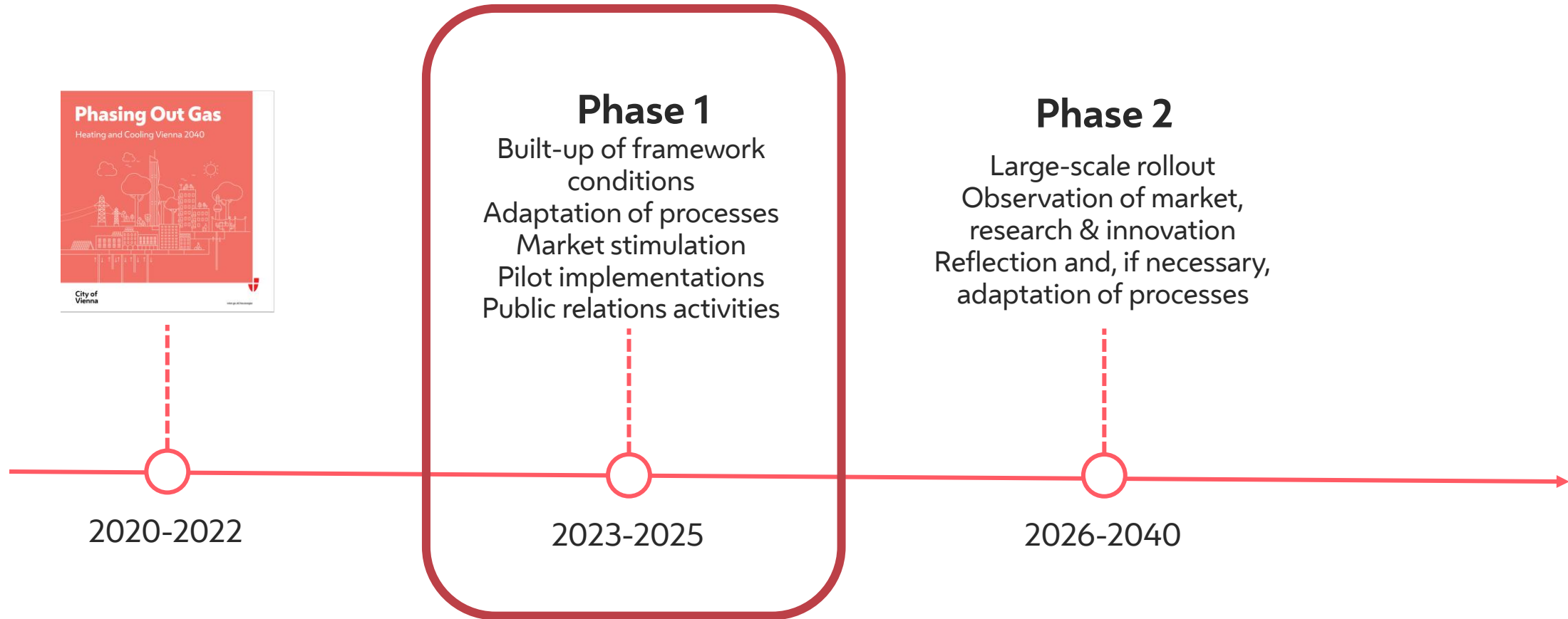


Source: Vienna Climate Guide



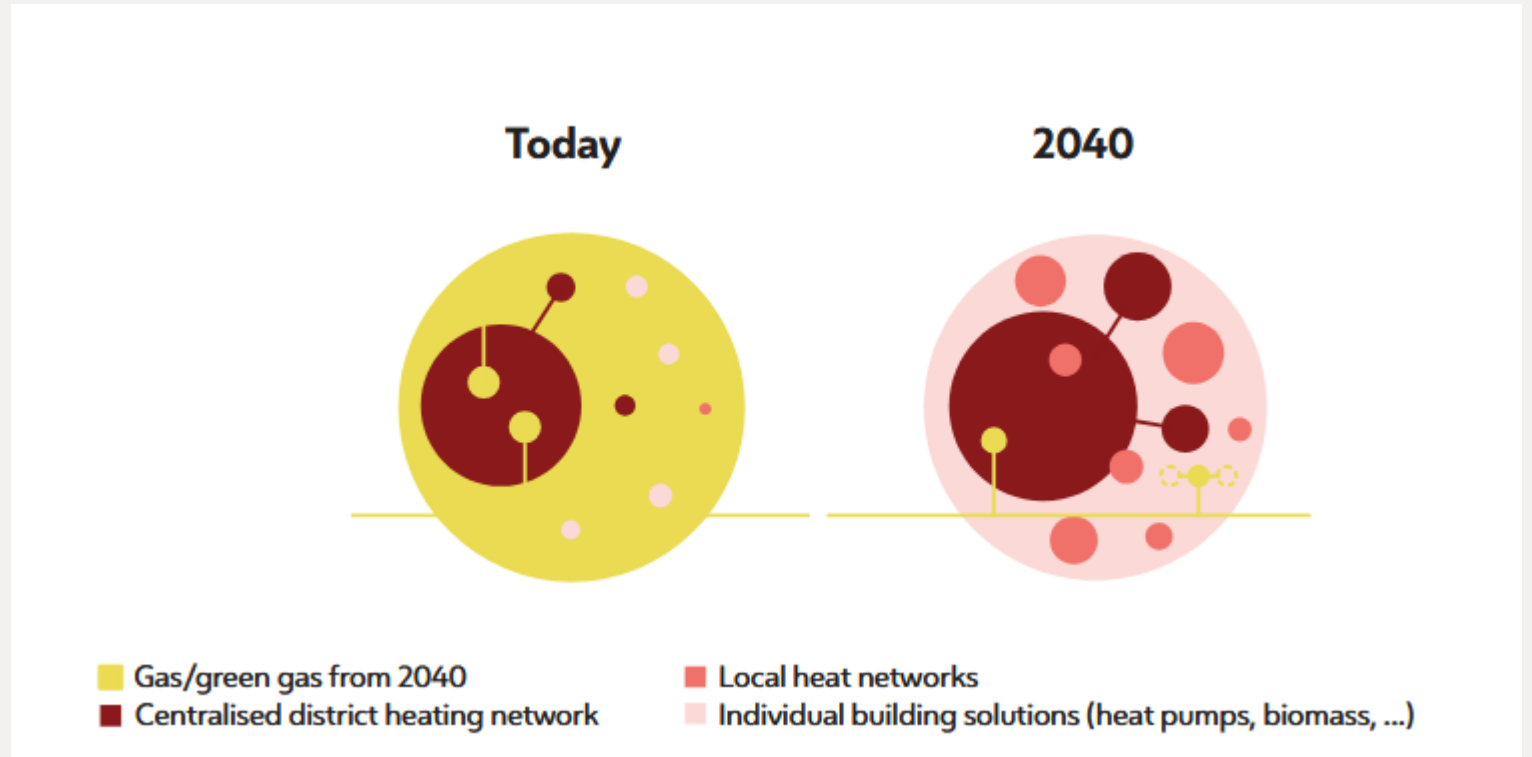
Programme „Phasing Out Gas“

Implementation in 2 phases



Energy Planning first!

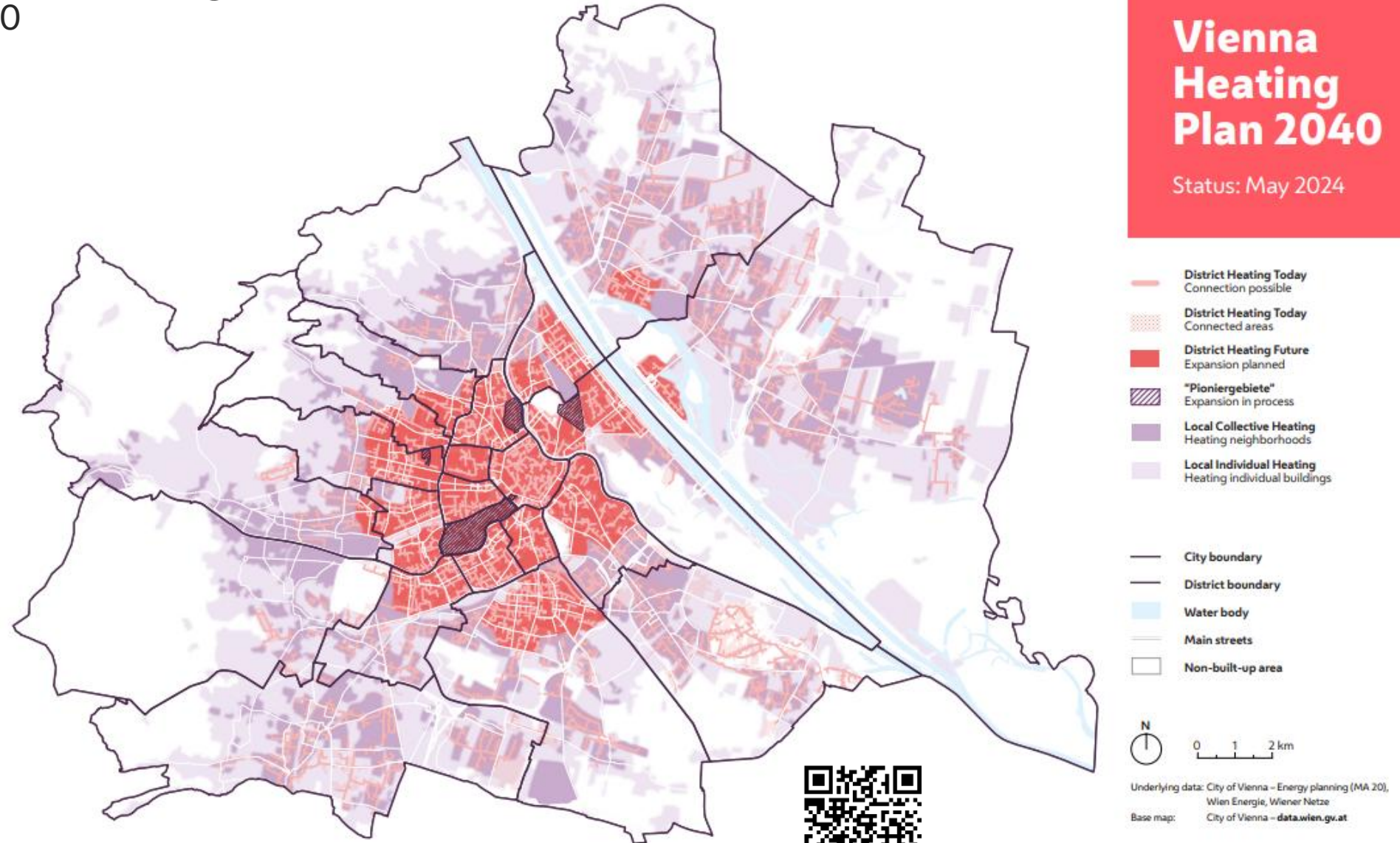
- A) What sources of renewables and waste heat do we have?
- B) What 's the demand & energy density?
- C) What infrastructure is already there and which should be developed?



Phase-out of gas and oil heating

Vienna Heating Plan 2040

- Goal: Replacing 600.000 units heated with gas
- Focus on existing buildings
- Guidance for all people



Heating and Cooling 2040

Key Tasks

- Replacing oil and gas with district heating, heat pumps and (biomass) & PV
- Renewables → district heating & energy storage
- H2 and biogas → CHP
- Renovate existing buildings appropriately
- Enable climate-friendly cooling



Raus aus Gas

Wiener Wärme und Kälte 2040



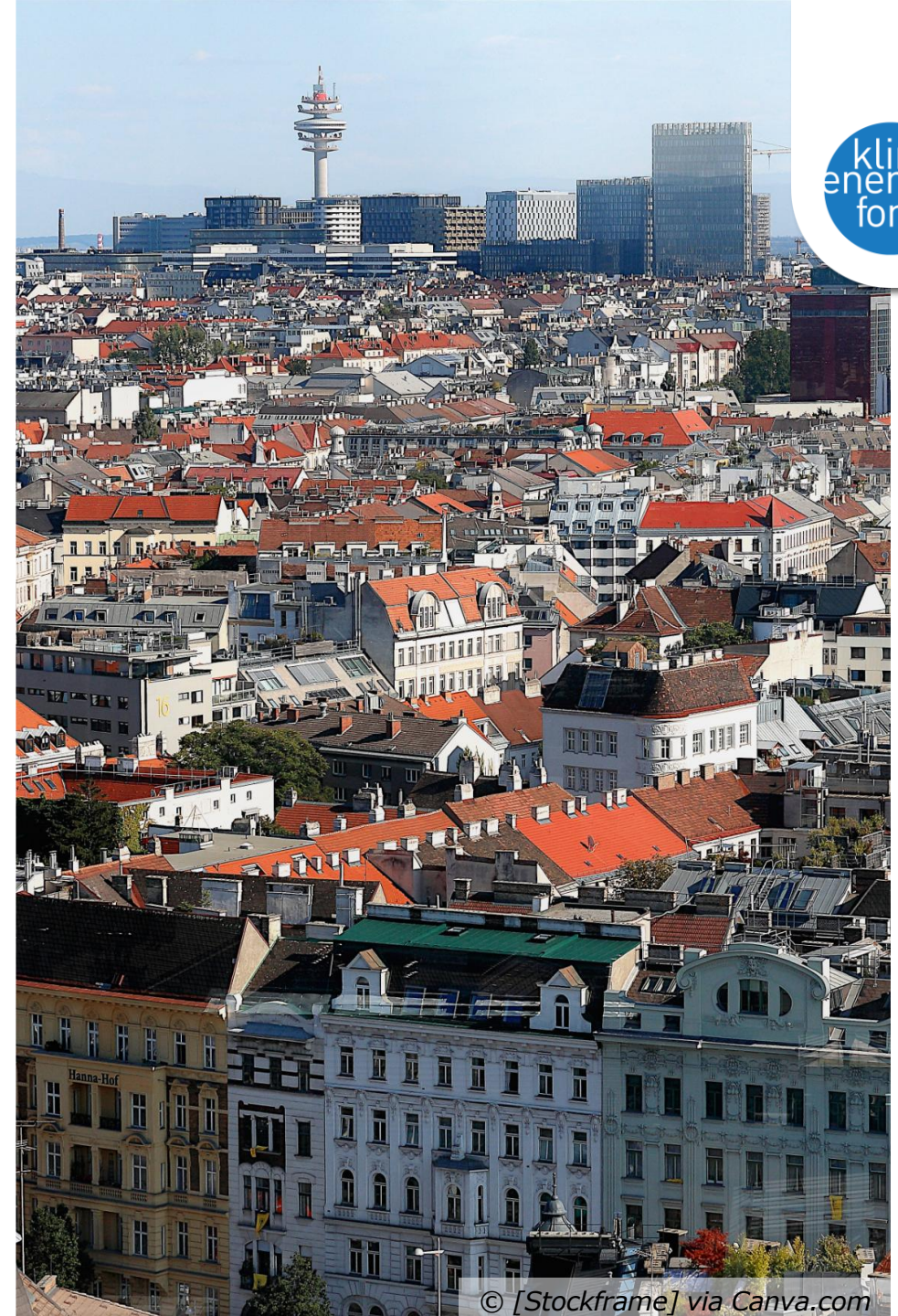
Stadt
Wien



Heating and Cooling 2040

Digitalisation

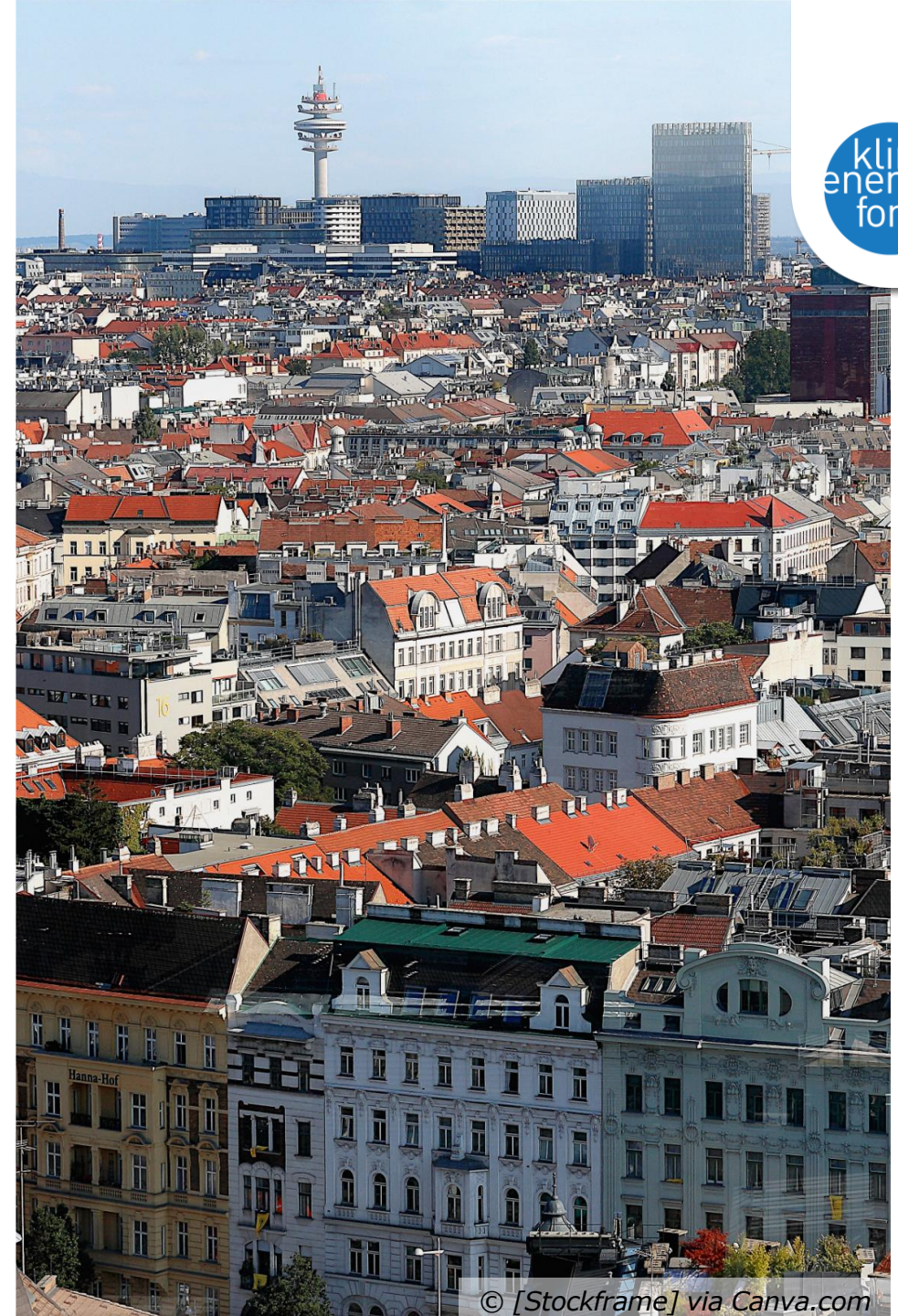
- Electricity from **renewables** will power data centres
- Use **waste heat** from **data centres** for district heating ! Location planning !



Challenges

Becoming part of the electricity system!

- **Heat sources** should **fit** into the **grid**
- **Adapting electricity consumption to renewable production**
- **Storages** will help! **Co-planing!** „**Gold of the future**“
- **Force on site production:** **ambient heat, waste heat, PV**



100 Projects Phasing Out Gas

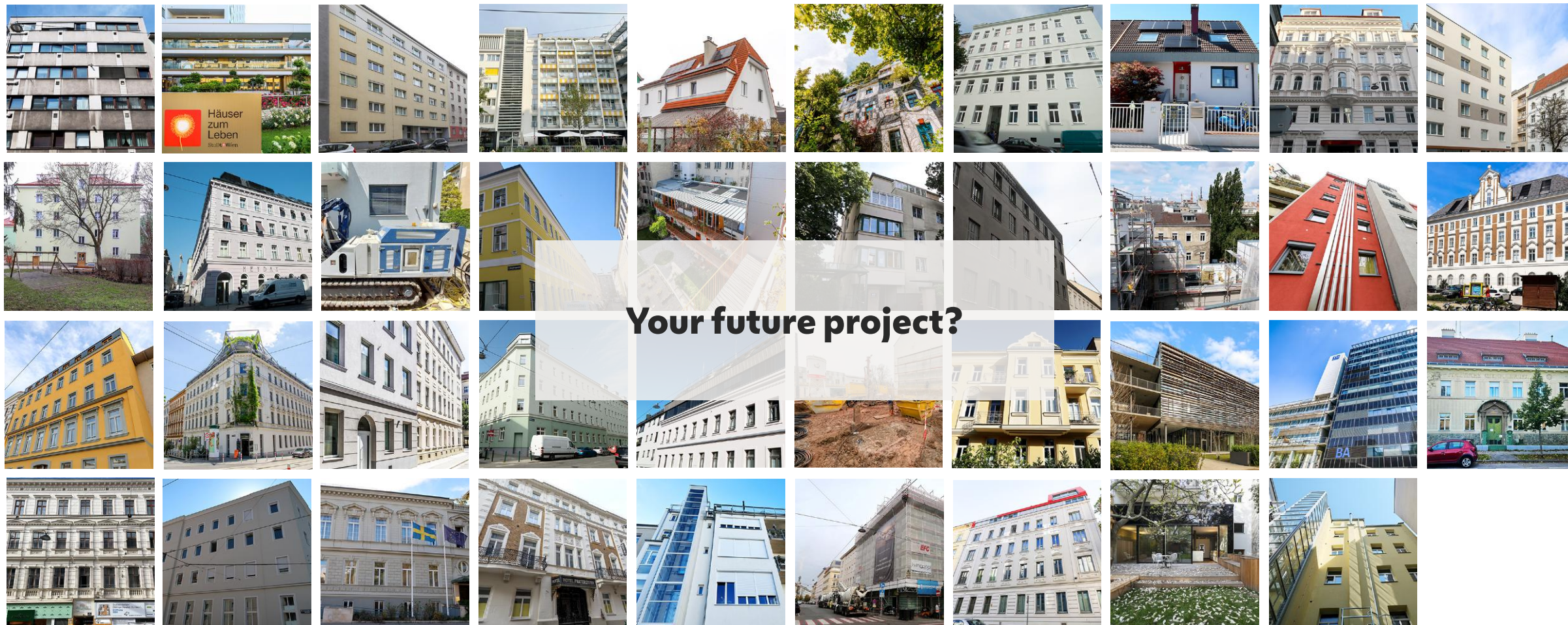
Initiate, inform, accompany, learn, talk about it

- **Demonstrate broad feasibility** of decarbonizing existing buildings
- Primary focus on **multi-storey residential buildings** without district heating connection options
- Collect, process and effectively disseminate **at least 100 Viennese Get Out of Gas projects by the end of 2025**
- As **wide a range** as possible of different initial situations and transformation solutions
- Create space for shared learning & prepare inputs for widespread rollout from 2026
- Important: **high transferability** of the developed solution approaches



Phasing Out Gas – Showcase projects

100 Projects Phasing Out Gas



Education Campus Aspern Seestadt North



1400 children and young people
Year-round operation (incl. summer)



© Marc Lorenz/Karl und Bremhorst Architekten ZT GmbH

Renewable coverage on site **>95 %** (geothermal probes & heat pumps & PV)
Annual energy costs **< 1/4** compared to conventional solutions as district heating

Renews in existing buildings

- nineteenth-century building from gas to heat pump (geothermal probes) and solar
- Low temperature network for the whole building block possible
- Underfloor heating & cooling
- Low running costs



©twitter.com @whertzsch



©berndvogl

Merci di vos intérêts

Bernd Vogl

Managing director Climate and Energy Fonds

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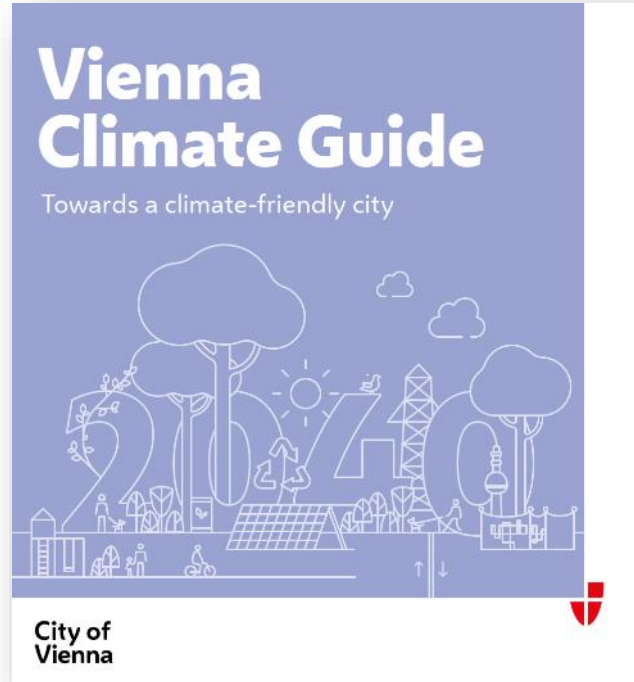
bernd.vogl@klimafonds.gv.at

www.klimafonds.gv.at

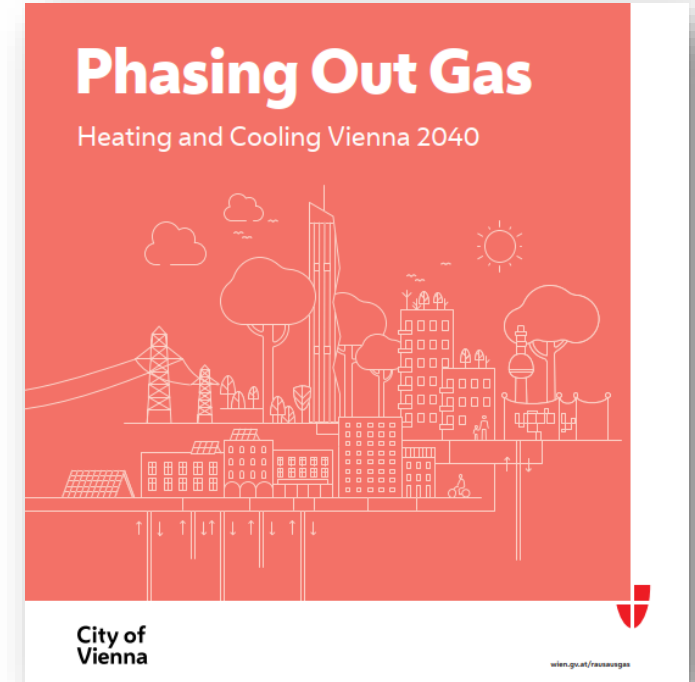
Achieving net zero by 2040 –strategies & concepts



[DOWNLOAD:
https://smartcity.wien.gv.at/en/strategy/](https://smartcity.wien.gv.at/en/strategy/)



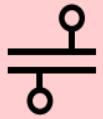
[DOWNLOAD:
https://www.wien.gv.at/spezial/klimafahrplan/](https://www.wien.gv.at/spezial/klimafahrplan/)



[DOWNLOAD:
https://www.wien.gv.at/stadtentwicklung/energie/wissen/waerme-und-kaelte-2040.html](https://www.wien.gv.at/stadtentwicklung/energie/wissen/waerme-und-kaelte-2040.html)

Vienna Heating Plan 2040

Areas in detail



District Heating Future expansion planned

These areas are particularly suitable for district heating due to the **dense urban development**, the **high heat demand density** and the **limited availability of local renewable energy sources**. Comprehensive expansion of district heating in these areas is being examined and will be realised gradually.



„Pioniergebiete“ (Pilot Areas) expansion in process

In these pioneering areas, the comprehensive **expansion** of district heating is proactively pursued and **implemented**. Synergies with other construction projects are utilised and the **experiences gained** are incorporated into the future expansion of district heating.

Rossau
(1090)



Allierviertel
(1020)



Huber-Block
(1160)



Gumpendorfer Straße
(1060)



Vienna Heating Plan 2040

Areas in detail



Local Collective Heating heating neighbourhoods



These areas are particularly suitable for collective heat supply via local heating networks. This is due to the **dense urban development** and **high heat demand densities** in these areas. Local heating networks utilise locally available energy sources and are capable of **supplying several buildings at once**. However, a **building-specific heat supply is also an option**.



- Heat density
- Building density
- Building structure



Local Individual Heating heating individual buildings



These areas are **less densely developed**. For buildings in these areas individual heating solutions using locally available renewable energy sources are recommended. **Local heating networks are also possible** in some cases.

