

Munich

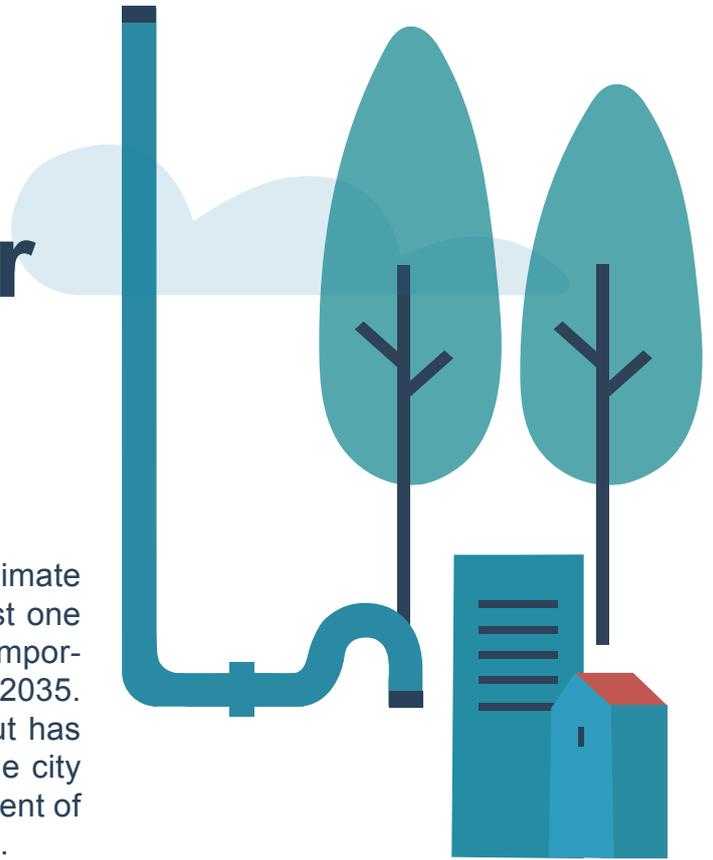


Climate neutrality in 2035: a growing city choosing energy efficiency and renewable energy



Climate neutrality by 2035 to answer climate emergency

Munich is part of the cities that have declared a climate emergency. Recognition of the climate issue is just one facet of Munich's political commitment, the most important one being its goal to become climate neutral by 2035. This exchange was initially scheduled for 2050 but has been shortened! To define the pathway to take, the city is developing an Action Plan, in which the Department of Climate and Environment was particularly involved.



Collective writing of a future for Munich

Since 2018, the development of Munich's Energy plan has been collectively managed. The external energy planner team first drafted the project plan. Then, working groups with members from different departments of the City of Munich, and other stakeholders accompany the process. A core group is discussing citywide strategies for Munich's future. Other groups are dealing with singular solutions and affiliated strategic solutions. Utility, grid operators, city-owned housing companies, and city-owned refurbishment companies are taking part in the discussions.

Energy efficiency and renewable energy for a growing city



Munich is the third largest city in Germany and encounters rising energy demand due to its dynamic development. The city has adopted a neighborhood approach to developing tailored solutions to phase out fossil fuels. The densification, optimization, and extension of the existing district heating grids are part of the plan. It will also be combined with a change of main heat sources for geothermal energy, especially to use in the district heating. The city also plans to build local heat grids based on near-surface geothermal energy in combination with groundwater heat pumps. Outside district heating areas, heat

pumps are the preferred decarbonized solutions. For municipally owned buildings, Munich is wisely tapping into the potential of energy savings and energy efficiency to reduce GHG emissions. The efficiency house 40 standard, a passive house standard, will also be a tapped tool for the municipality. Finally, the municipality is setting up a new agency for energy and renovation. This new agency is needed to deal with neighbourhood level requests and activities in a more flexible way than the city administration. It will be supervised by the city, which will support it through its city's climate budget.



A comprehensive transition roadmap

The transition roadmap of Munich takes into account any strategic aspects to achieve the transition. Some legal instruments are implemented like provisions on energy supply and integration of building standards in urban development contracts with private building developers.

When it comes to information and planning, the city aims at communicating on spatial requirements of the heat transition and integrating the transition into other plans. Within the city administration, one big change is made with the introduction of a climate protection check in the decisions. Concerning labor market and training, the city is organizing a “skilled personnel” round table for, among other goals, the education, upskilling, and training of technical staff. In addition, the municipality counts on the oversight and control of the new energy and renovation agency.

Structural changes to overcome structural obstacles

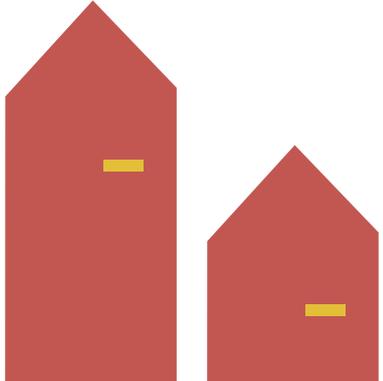


Munich is encountering many constraints to its energy transition. To name but a few, slow transformation of long-lived infrastructures, complex legislations like the Buildings Energy Act, or the absence of reporting on waste heat potentials are slowing down the transition. Progress is expected to be made in the legislation to generalize energy zoning planning and energy efficiency, to allow hybrid heating systems, and standardization of energy data, among other measures. Munich would also be supported by a legal obligation to change to a fossil-free and affordable heating system at regional or national level. Long-term available funding programs would also help to create financial security for citizens and ease their understanding of the transition. Finally, the enactment of a "Geothermal Energy Development Act" as a central, tailor-made shell law could help speed up approval procedures.

Heating planning offering multiple benefits

Developing a heat strategy for Munich enables the city to stay on its path of decarbonization and ensures the security of heat supply with the use of renewable energies. Such a strategy substantially increases planning and investment security for energy suppliers and building owners.

The municipality is gaining further insights into the difficult task of transforming heat supply and creating targeted solutions for social issues related to the transformation, which will benefit the citizens.



Trust, transparency, and participation as keys to success

For Munich the most essential for the success of a heat strategy is a close and trusted relationship between the municipality and the key local energy supplier(s). The creation of a digital, amendable, and up-dateable database is essential and especially beneficial when models and the assumptions are built on together with energy supplier(s) and other relevant stakeholders. Keeping citizens and homeowners informed about the plans is also important. In general, the participation and approval of key stakeholders allow a more consensual and successful transition. Munich would also advise any city, willing to take a similar path, to be open to new technologies, to work closely with energy supplier(s) of the city and to consider using external and scientific expertise. Finally, with Decarb City Pipes 2050 project, the city assessed the value of optimizing the supply side, with the help of an energy and renovation agency and of the neighbourhood approach.

Want to know more about Munich?

- ➡ [Munich's strategy for climate and energy \(in German\)](#)
- ➡ [Munich Transition Roadmap](#)



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