

Rotterdam

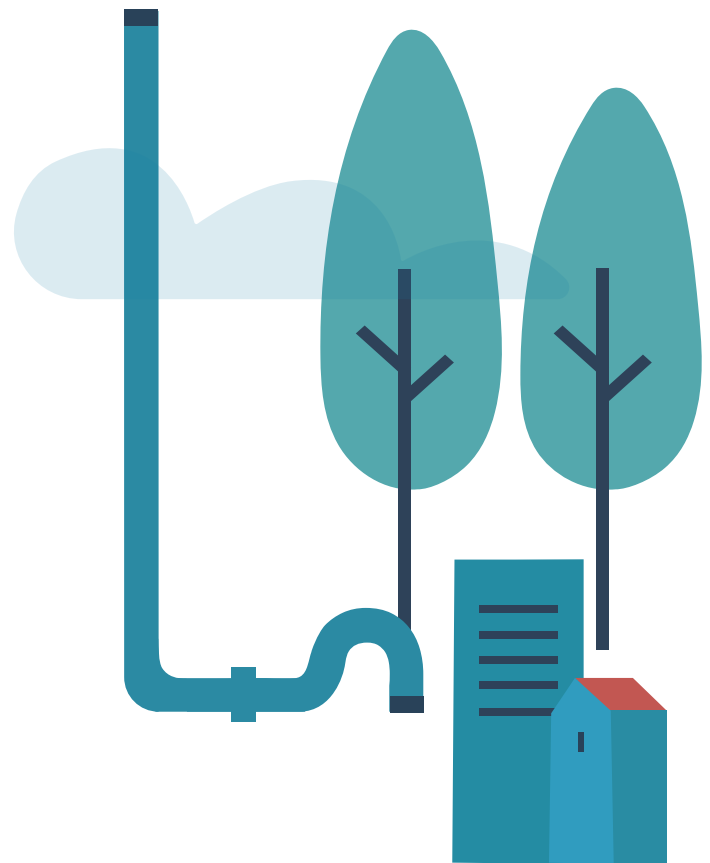
How to develop a transition
towards climate neutrality?



A city in the lead to reach climate neutrality

The Netherlands is a strong advocate for an ambitious EU climate policy and, together with other ambitious member states, extensively lobbied for the targets that were laid down in the 2021 EU Climate Law: climate neutrality in 2050 and a 55 percent emission reduction in 2030. To reach this goal, one thing is for sure: municipalities like Rotterdam play a leading role in the heat transition. Since 2019, all Dutch municipalities must develop a gas phase-out strategy, and Rotterdam stands as frontrunner among others.

It makes sense for Rotterdam to develop such a strategy as cities are responsible for ensuring a good quality of life for its citizens, protecting them from climate change, and providing them with affordable and clean energy.



Engagement of various stakeholders

Rotterdam understands that its heat transition requires alignment and good coordination between the stakeholders, internally and externally. Internally, the Sustainability departments work together with (for example) departments involved in spatial integration and the building environment. Externally, the municipality works at different levels with multiple stakeholders. The first level is strategic as they develop an Energy System Vision in cooperation with district heating companies, grid operators, and regional energy strategy partners (for example neighborhood municipalities). The second level is tactical to develop a Heat Transition Strategy, especially with housing associations. The third and last level is the operational one, where the municipality started district-oriented approaches with homeowners, district heating companies, and, of course, citizens.

Phasing out of natural gas by mapping affordable alternatives

Today, in Rotterdam natural gas is the dominant energy source for heating, just like at the national level. Around 75% of Rotterdam's buildings are connected to the natural gas grid. One of the clear priorities of the city is the affordability of potential alternatives for natural gas. In addition, the city plans to invest in funding energy-savings and home improvement like insulation, to reduce heat demand and thus the energy bill of its citizens.


The construction of the "WHAT map" has been a key step to define the most affordable alternative to natural gas at the lowest social costs for existing buildings. The most affordable alternative for approximately 85% of the city is a collective district heating. In the future additional heat sources will be added to the heat network, like geothermal and aquathermal energy. Another solution is electric heating with the use of heat pumps.



Planning and communication as pillars of the transition roadmap

In the transition roadmap of Rotterdam, planning, and communication are two main elements. The “WHEN map” which allows anyone to follow the alternatives to gas by district is now translated into an interactive version available on the “Duurzaam010.nl” website. The map indicates where the opportunities lie to start working on a gas-free area approach. Rotterdam also focuses on maintaining transparent communication about the Heat Transition Strategy, its adoption, and the decision-making process in general. The website mentioned above, free local papers, local communication, and social media are the main channels of communication between the municipality and the residents. The city aims at fostering actions taken by citizens. A supportive tool is developed to evaluate the impact of a switch to a district heating network on citizens’ energy bills.

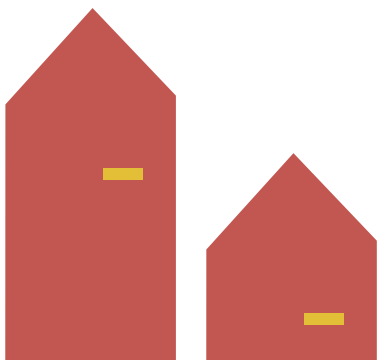
Policy recommendations for a successful heat transition



Many barriers to heat transition have been identified in Rotterdam. The municipality has limited capacities to fully manage the transition at the local level. They have access to data but its quality and availability should be improved. Rotterdam formulates several recommendations to overcome these obstacles. Some upcoming national regulations, like the Municipal Instruments for Heat Transition Act, should provide support for municipalities to plan their heat transition. In addition, the city is calling for more direct government investment instead of current subsidies in heat infrastructures to help the development of district heating network and ensure a more public-owned approach and cost-based tariffs. These changes in the regulatory framework would foster the heat transition in Rotterdam while developing public support.

Planning clarifies Rotterdam’s future

The development of the Heat Transition Strategy has enabled Rotterdam to communicate and give clarity to internal and external stakeholders, particularly regarding the areas where district heating will be developed. From municipality departments to citizens and private stakeholders, the roadmap has brought information and explanations on the heating transition. For instance, the municipality explained the alternatives to natural gas in Rotterdam. Another benefit has been to broaden cooperation and collaboration between departments like spatial planning departments and housing ones, for the implementation.



So, get in touch!

To a city wanting to do the same, Rotterdam would advise getting in touch with municipalities that are already advanced in their heating and cooling transition. Cities should also think of involving all the different stakeholders impacted by the transition, to take part and give support to the decisions. For Rotterdam, particular attention should be paid to the communication around the start of the implementation, as requirements can often delay it, after the plan has been adopted.

Want to know more about Rotterdam?

➡ [Rotterdam Transition Roadmap](#)



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