Tilburg

1. Background

Tilburg is a city located in the south of the Netherlands in the province of North Brabant. In 2021, it had 224,459 inhabitants, making Tilburg one of the seven largest cities in the Netherlands (CBS, 202

2. Heat transition vision

2.1.Development of the heat transition vision

According to the Climate Agreement, each municipality in the Netherlands must develop a heat transition vision. To develop the vision, the municipality of Tilburg created a steering committee and working groups consisting of housing associations, tenant organisations, the electricity and gas network operator Enexis, the business community, Tilburg University, and the city councillor. The first draft of the vision was produced in April 2021.

In May-September 2021, the municipality solicited citizen feedback on the vision draft. Tilburg used a unique approach to citizen engagement in this process. First, the municipality set up a citizen assembly, or *Tilburger Tafel*, consisting of 20 representative Tilburg residents. Second, the municipality invited people to provide their feedback through a citywide *Digital Dialogue* (about 1500 people participated). People were invited through online platforms, the city newspaper, and by talking to people in the street. The participants were provided with a set of questions, and all the answers were available to all the participants. The answers allowed the municipality to understand a general trend in resident opinions on the heat transition. The answers were also spatially mapped, and the municipality plans to use them to devise a tailored heat transition planning and implementation approach in a specific neighbourhood. The recommendations received through the Tilburger Tafel and the Digital Dialogue have been incorporated into the heat transition vision (Tilburg Municipality, n.d.-b).

The majority of Tilburg residents who

districts. The vision strives for cost neutrality, meaning that the costs for homeowners or rent increases could not be higher than the energy bill savings. A municipal employee discussed the benefits of collective heating solutions: $\exists Now we have to ring every door[bell] and ask, <math>\tilde{o}$ Will you work with us for a new system? If we go with individual systems and we think later on, \tilde{o} Oh no, this wasn't the best solution , then we have to ring [the doorbell] again. So we are trying to get collective solutions ϕ^{5} .

Interviewees expressed the opinion that the municipal level is best equipped to coordinate and deliver heat transitions because it is closest to the household level and has the best knowledge of urban development, upcoming public projects, and local sources of heat⁶.

However, a municipal employee pointed out that the municipality does not always have the required powers and resources, $\exists We have to take control, but we don't have the instruments \vec{\phi}$. First, the municipality currently cannot obligate residents to connect to a heat network or adopt other sustainable heating solutions. Second, the municipality depends on the actions of the private company that owns the Amer heat network to make it more sustainable. Third, the municipality cannot directly make decisions regarding the electricity grid. The municipality can influence the decisions of the network operator because it is a shareholder of the network company,

some assurance that measures would be compliant with future policy requirements and that the technology used would retain value. A municipal employee mentioned that the municipality took on an advisory role by providing the long-term vision and the framework for (external) advice, but it did not give any specific advice on technology. However, given the involvement, there was some expectation among residents that the municipality would provide some guarantees on the quality and costs of the retrofit measures⁸.

One of the lessons learned is that there is a need for additional financial instruments for residents who do not qualify for regular loans. Another lesson is that homeowner associations and housing associations are an important actor in the heat transitions, as they can communicate on behalf of the whole group of homeowners, reducing transaction costs. However, the Quirijnstok district's housing association had not planned any renovations for

CBS. (2022b). Voorraad woningen; eigendom, type verhuurder, bewoning, regio. Online: <u>https://opendata.cbs.nl/#/CBS/nl/dataset/82900NED/table?ts=1669807561475</u> [Accessed 12.12.2022].

CBS. (2022c). Voorraad woningen; gemiddeld oppervlak; woningtype, bouwjaarklasse, regio. Online: <u>https://opendata.cbs.nl/#/CBS/nl/dataset/82550NED/table?ts=1669808291523</u> [Accessed 12.12.2022].

CBS. (2022d). Woningen; hoofdverwarmingsinstallaties, wijken en buurten, 2021. Online: <u>https://opendata.cbs.nl/#/CBS/nl/dataset/85337NED/table?ts=1669816082339</u> [Accessed 12.12.2022].

Energiewerkplaats Brabant. (n.d.). *Kostprijs+ model*. Online: <u>https://www.energiewerkplaatsbrabant.nl/sociale+innovatie/2120577.aspx?t=Kostprijs-model-Fabriekskwartier-Tilburg</u> [Accessed 22.12.2022].

Enexis. (n.d). Open data. Online: https://www.enexis.nl/over-ons/w