## Title:

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#### **Energy for Energy**

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#### Where is this grassroots initiative implemented?

Approximately seven percent of all Dutch households live in so-called energy poverty (TNO, 2021), meaning that they spend ten percent or more of their disposable income on energy costs each month and have trouble affording their energy bills. In the city of Leiden this problem is biggest in the district Noord (North). In the past years, Leiden-Noord has become an area with multiple faces. On the west side, one can find affluent new neighborhoods, while in the northern neighborhoods there is less prosperity. As a result, the threat of a dichotomized neighborhood with increasingly more energy poverty is looming.

The grassroots project "Energie voor Energie" (energy for energy) aims to combat this dichotomy through a small-scale, neighborhood-oriented approach, by creating possibilities for residents in "De Prinsessenbuurt" and "De Hoven" – two small neighborhoods in Leiden-Noord – to join the energy transition (the transition to a new system where sustainable energy replaces fossil fuels and much attention is paid to energy conservation and storage).

"Energie voor Energie" is a collaboration between inhabitants of various neighborhoods in the district, different neighborhood organizations and energy ambassadors from the municipality of Leiden. The project's ultimate goal is to collectively generate solar energy on suitable roofs in Leiden Noord and give people who live in affordable rental homes and have little money to spare the opportunity to participate. By volunteering with a local public organization of their own choice, participants are able to "save up" for certificates in the collective solar park, or for other sustainable measures such as LED-lighting and insulation. In the Netherlands, volunteers can receive a compensation of up to €5,- per hour. De Leidse Uitdaging, a local independently operating residents' company by and for resident of Leiden-Noord, would save up this compensation until participants would have earned enough money for a certificate to partake in the solar panel roof. A certificate for a solar panel is expected to cost around €300,-, equal to 60 hours of volunteering (although this

amount is not yet final). This way, the project aims to empower active residents to participate in the energy transition by volunteering for an organization of their own choice, to reduce their cost of living and contribute to the quality of life and social cohesion in the neighborhood.

#### Who are the promoters?

Energie voor Energie was initiated by "De Leidse Uitdaging", a local residents' organization whose goal it is to make the neighborhood a pleasant, safe, accessible and attractive space for everyone who lives there. De Leidse Uitdaging promotes and organizes activities that contribute to social cohesion in Leiden-Noord, by involving (vulnerable) groups and volunteers from the neighborhood. In this project, De Leidse Uitdaging works together with residents from the neighborhoods De Hoven and De Prinsessenbuurt, residents' association "Zwijgers van Noord", citizens' initiative "Zon op Leiden" (sun on Leiden) and the energy coaches and neighborhood ambassadors of the municipality of Leiden.

#### Who are the actors involved? What is their background?

As a residents' association, Zwijgers van Noord coordinates a meeting center in the Leiden-Noord district, intended for local residents. Here, they give courses and provide a meeting place for people from the neighborhood.

Zon op Leiden is a local residents' cooperative whose aim it is to offer inhabitants of Leiden the opportunity to generate their own solar power on large roofs in the city. Members of the cooperative can buy certificates for solar energy generated from nearby rooftops.

The energy coaches are volunteers working with the municipality of Leiden. These are local residents who have themselves made their houses more sustainable, and now help others in their neighborhood to do this too. After receiving training on saving energy, they visit their neighbors to not only give tips and advice on how to live more sustainably, but also to immediately introduce small measures such as radiator foil or LED-lights.

Neighborhood ambassadors are paid by the Leiden municipality out of a budget for energy initiatives, and give advice on sustainability too. In addition, they organize information meetings, set up campaigns, maintain a newsletter, and are more in involved with the municipal government. Some neighborhood ambassadors are energy coaches as well.

#### Who are the beneficiaries?

Energie voor Energie focuses on the neighborhoods of De Hoven and De Prinsessenbuurt. In these neighborhoods, 70 percent of the homes are rentals, of which more than three quarters are social housing. (Gemeente Leiden, n.d.) More than 20 percent of people living in De Hoven and De Prinsessenbuurt have trouble making ends meet. A relatively large percentage of the residents here are non-western immigrants and many locals are dependent on social benefits. (Gemeente Leiden, n.d.)

Although there have been various initiatives in Leiden aimed at increasing the sustainability of owner-occupied houses, there has been less attention for rental homes. Not all social housing associations try to improve their homes in a similar fashion (and with similar speed). With gas prices on the rise, the people living in De Hoven and Prinsessenbuurt are especially vulnerable to energy poverty. Energie voor Energie aims to help this group specifically.

#### How does this initiative engage with climate?

One of the main aims of Energie voor Energie is to limit global warming and its related effects, by helping citizens increase the sustainability of their rental homes – a type of housing that as of now is still lagging behind in the sustainability transition.

However, Energie voor Energie does not just focus on the energy transition. Initiator De Leidse Uitdaging is a residents' company, which focuses on economic activity in the neighborhood, by the neighborhood and for the neighborhood. For example, the organization has set up a local tearoom, of which all generated income is distributed and invested locally to increase the livability of the neighborhood.

This ambition is key to Energie voor Energie too: besides aiding people in living more sustainably and through that, limiting the emission of CO2, the project also aims to create value for the neighborhood by motivating people to volunteer for public organizations, and tries to help tackle issues of energy poverty. By considering what the specific group of inhabitants of De Hoven and De Prinsessenbuurt needs and is capable of contributing, and by providing people with the chance to volunteer in return for shares in a communal solar roof, Energie voor Energie tries to make sustainability attainable for all inhabitants of the neighborhood. In addition, through volunteering for local organizations and projects, the project tries to increase social cohesion and contribute to the livability of the neighborhood – not just for those participating in Energie voor Energie, but also for other citizens living there.

#### What are the main objectives? What are the main values?

"The energy transition isn't just a technical issue. It's also a social issue. You want people to be able to participate. That means you also have to work on completely different things than just making everything possible technically. For this group, it's difficult to participate in the energy transition because they don't have money to invest. They don't own their homes and can't install solar panels." (M. de Loos, project leader of Energie voor Energie, interview, February 18, 2022.)

For Energie voor Energie, the energy transition is not just about technology - it is about people. The project's focus, then, is mainly on the social dimensions of sustainability, such as every day behavior and choices in food, mobility and living. Energie voor Energie believes that small-scale, neighborhood-oriented approaches where local parties collaborate are vital for a successful energy transition.

By aiming to help people who are at risk of suffering from energy poverty transition to a more sustainable way of living, not just through access to solar energy, but also through providing them with small, practical solutions for their homes, Energie voor Energie aims to create an inclusive and socially just energy transition. In doing so, Energie voor Energie takes an intersectional approach, paying attention to how the obstacles to participate in the energy transition differ between social groups. For example, where for native Dutch people who rely on social welfare, financial issues

could be the biggest obstacle to overcome, for elderly Moroccan-Dutch people there may be issues with language barriers or accessibility of information.

#### What is the timeline? Are there already visible effects?

"We have the impression that people are very hesitant. There is real energy poverty – and poverty in general – in this neighborhood, more than in the rest of Leiden. These are people who have little confidence in the government and institutions. So if you want to get people on board, they have to trust you. That's why we're having these conversations now." (M. de Loos, project leader of Energie voor Energie, interview, February 18, 2022.)

Energie voor Energie was conceived of in 2019, and the plan was put into action in July 2021. Although the end goal of the project is to connect as many people in the neighborhood as possible to the communal solar roof, it soon became clear that the creation of the solar roof should not be the first step. First, it was important to help people understand the relevance of this solar roof and get them excited to participate. In the first stages of the project, the focus is on starting to help people save energy, giving advice, getting to know them *and* making sure that the inhabitants of the neighborhood became familiar with the project.



1: Flyers for the energy conversations. By Anja Möltgen and Maaike de Loos.

Starting in October 2021, representatives of the project reached out to people through a local soup kitchen, putting up flyers (see image 1) and posters and an exhibition about sustainability measures in the local tearoom. Representatives also went door to door in the neighborhood to invite inhabitants to so-called "energy conversations", the concept for which was developed together with the GOED-neighborhood ambassador in Leiden-North. In these conversations, a small group of inhabitants and energy coaches will get together to discuss ways to save energy when renting a home. Afterwards, participants receive a package with products that can help increase the sustainability of their homes (e.g. radiator foil, water-saving showerhead, LED-lights). Participants can choose for themselves which products they want to take with them, as to make sure that everyone receives the help that is most useful to them.

The method for the energy conversations is specifically aimed at keeping the conversations accessible for people with low literacy or who aren't fluent in Dutch. For example, it incorporates cards written in various languages and visual aids to explain energy usage (see image 2). The method is designed so that it can be used in different ways, depending on what works best with a specific group, and the municipality of Leiden has shown interest in working with it on a larger scale.



2: Conversation cards in multiple languages. By Anja Möltgen and Maaike de Loos.

#### Which limits (institutional, physical, social, etc.) does it encounter?

"These people living at the subsistence minimum are very difficult to reach. Partly, that's an issue of trust. When you spend more time in the neighborhood and are more active, people will sooner join, because they know you. Another reason is that people have financial and other problems. That limits their mental space to think about saving energy – even if it would benefit them." (M. de Loos, project leader of Energie voor Energie, interview, February 18, 2022.)

There is little use in installing a solar panel roof, when no one is interested in participating. For neighborhoods such as De Hoven and De Prinsessenbuurt, increasing the sustainability of their homes is often not top of mind for the people living there, who might be more concerned with making ends meet.

The energy conversations are intended as a means to start to help people think about sustainability and to create awareness of the added value of making homes more sustainable. However, convincing people to join these conversations proved to be easier said than done. The organizers of Energie voor Energie put up posters and went door to door to explain the project and invite people to join their conversations. Of the circa 200 homes visited, around half of the residents showed interest in participating. However, few would sign up for the energy conversations, and in the end, only 13 people actually showed up to them. This is congruent with the experience of neighborhood ambassadors in these areas: it is notoriously difficult to convince people to get involved.

Another reason the inhabitants of De Hoven and De Prinsessenbuurt are hard to reach, has got to do with cultural and ethnic differences. For example, several inhabitants are elderly people of Moroccan descent, and speak little to no Dutch. Although De Leidse Uitdaging has provided posters and flyers in multiple languages and has tried to reach specific ethnic and religious groups through the Islamic center in the neighborhood, this has not been successful yet. Clearly, more time is needed to make contact with all groups in the neighborhood.

Other issues concern the effect of the solar panel certificate on social benefits and taxes, and practical concerns regarding the saving system for volunteers and the coupling between the solar panel roof and the individual participant's energy bills.

Currently, it is anticipated that participants who will have a certificate for one solar panel would pay their regular monthly energy bills, and for a period of 15 years would receive &40,- at the end of every year. This way, participants would invest the equivalent of &40,- in time volunteered, and receive &40,- in return in total. However, a monthly discount on the energy bill would be preferred, as this would limit the chance that the &40,- is taxed as extra income.

# Are any shortcomings or critical points visible? What other problematic issues can arise from its implementation?

Energie voor Energie aims to help people save money on their energy bills in two ways: by using less energy through adapting more sustainable behavior, and through earning certificates in a communal solar roof. However, there is only so much that inhabitants in De Hoven and De Prinsessenbuurt can do to save on energy. Of course, small adjustments such as using radiator foil or LED-lights can definitely decrease energy bills. However, many of the residents in these neighborhoods have extremely low incomes and will already be living fairly frugally and – in that sense – sustainably. The largest energy sink, then, is not the behavior of inhabitants, but the buildings they live in.

Most buildings in De Hoven and De Prinsessenbuurt were built in the 1950s and have thin facades, poorly insulating windows and uninsulated attics, which means that more energy is needed to heat them. To really help people save money on their energy spendings, energy conversations, solar energy certificates and small adjustments will not be enough. Structural improvements to these homes are necessary, which is the responsibility of the housing association. In De Prinsessenbuurt, for example, some of the homes have recently been made more sustainable by the housing association. However, as of now, the housing associations in De Hoven and De Prinsessenbuurt have not been involved in Energie voor Energie, although the organization has tried to get into contact with them.

In general, the amount of money that people will be able to save through participating in Energie voor Energie, is relatively small. Even for people living on the subsistence minimum, €40,- per year will not make a great difference. On top of that, a commitment of 15 years might be difficult to oversee for people who have more pressing financial matters on their minds. Possibly, monthly returns or discounts on

energy bills, instead of end-of-year payments, could give people more incentive to join, as the result would be more immediate.

Another question to consider for Energie voor Energie, is the location of the solar roof. Although solar panels are not as invasive as some other types of energy generation, they do reflect the sun and might cause a nuisance for people living in buildings looking out over the roof. This is something Energie voor Energie keeps into account as well. Although the location for the solar roof is not yet definitive, the organization considers placing them on the roof of a nearby cultural workshop just outside of De Hoven. Whereas the people living on this street would not immediately benefit from the solar roof being placed here, it is Energie voor Energie's ambition to extend the project to these areas eventually.

#### How would it be potentially replicable in other settings?

Energie voor Energie is fairly easily replicable in different settings. In Leiden alone, there are several communal solar roofs already. However, the focus on low-income renters is uncommon and, as has become clear from the current project, does pose specific challenges, which ask for a large time investment and deep involvement from people working within this project.

#### Is this initiative conducive to broader changes?

Although Energie voor Energie is a sustainability project aimed at helping people save energy, its focus is mainly on community awareness and community involvement. By letting people pay for their share in the solar roof through volunteer work for local, public organizations, and getting a group of people who are notoriously difficult to reach more involved in their own neighborhoods, Energie voor Energie tries to contribute to social cohesion in Leiden-Noord. On top of that, the fact that people are free to choose where they want to volunteer (as long as it is with a local, public organization) could contribute to a feeling of empowerment for a disadvantaged group of people.

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