

# Encouraging participation of young adults to act environmentally friendly

Measuring willingness to participate and increasing participation of VerduurSAMEN2030 project in the age group of 18-25 within municipality Bergen

> Capstone Joyce Hendriks, S3984656 Rijksuniversiteit Groningen, Campus Fryslân 10-06-2022 Supervisor: T. Huiskes

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#### Abstract

The amount of droughts, hurricanes, desertification and floods are rapidly increasing in today's world. These are direct consequences of climate change. To reach the goals of the Paris agreement of 2015, worldwide change is needed. But how can you make this change, how do you encourage people, specifically young adults, to act environmentally friendly? This research aimed to answer this question, but then for the young adults in a specific municipality, within a specific project. The research question to which an answer is found in this research is: 'How is the willingness to participate and how to increase this participation in the age group of 18 to 25-year-old residents in the municipality Bergen on the 'VerduurSAMEN2030' project, explicitly the energy-saving part, small-scale generation and innovation?'. With the help of the literature review and a survey, the data was gathered. A total of 142 participants filled in the survey, making the study significant. The gathered data was not only stated but and also analysed in the results, to eventually come up with the conclusion, followed by recommendations. The willingness to participate by 18 to 25-year-olds in the municipality Bergen to take big measurements was found to existing for the majority of the partipants, whilst for taking small measurements and actually changing behavior to be more environmentally friendly the willingness is only there for the minority of the participants. To be able increase this participation, more understandable information should be spread, change should be affordable or profitable and more initiatives to get young adults interested in de topic of energy are needed.

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## Introduction

Droughts, hurricanes, desertification and floods are all phenomena that happen more and more often. These are threats, not only to our society but also for all the other living creatures on earth. The main reason for this is climate change, caused mainly by human beings, emitting an ever-growing amount of CO2 emissions, causing global warming (IPCC, 2022).

Therefore, governing bodies must take action to mitigate and adapt to this threat of climate change. Global problems need local solutions, and therefore it is crucial that local governing bodies take action to accomplish the goals of the Paris agreement (United Nations, 2015) regarding climate change. The municipality of Bergen is one the governing bodies that is trying to realise these goals on a local level. In the municipality of Bergen, sustainable energy is a priority. The municipality's goal is to be energy independent by 2030. To accomplish this, a project was launched called: 'VerduurSAMEN2030'. In order to become energy independent, a 100% energy shift is needed. Half of this 100% has to be reached by building a solar panel park: 'Energielandgoed Wells Meer,' 20% by energy-saving, and 30% by small-scale energy generation and innovation (Energielandgoed Wells Meer, 2018). For the municipality, to reach its goal, it is important that its residents have the willingness to save and generate electricity themselves. In this research, willingness is defined as: The state of being willing to cooperate (Merriam-Webster, n.d). In this research, I investigated the willingness to participate in VerduurSAMEN2030 and how to increase that, among municipal residents aged between 18 and 25. Therefore, the research only covers the 20% energy saving and 30% small-scale generation and innovation, not 'Energielandgoed Wells Meer'. This research can help other municipalities and/or governing bodies that want to start similar projects in the future. They can observe and learn from the process within the municipality of Bergen, to ensure the execution of their plan runs smoothly. Currently, there is not much

known in literature about the encouragement of young adults to act pro-environmentally, in this research the aim is to contribute to this academic knowledge gap. The term 'young adults' is defined differently across multiple platforms. However, in this research it was chosen to use the Massachusetts Institute of Technology's definition: 18 to 25-year-old people (Massachusetts Institute of Technology, 2018). The research question for this research is: '*How is the willingness to participate and how to increase this participation in the age group of 18 to 25-year-old residents in the municipality Bergen on the 'VerduurSAMEN2030' project, explicitly the energy-saving part, small-scale generation and innovation?*'

The research question will be answered using the following sub-questions:

# Explaining 'VerduurSAMEN2030'?

1. What is the project "VerduurSAMEN2030'?

2. What has been done already to encourage the participants for the 50% of the VerduurSAMEN2030 project (energy saving, small-scale generation and innovation)?

Current state of willingness and awareness

3. Are the 18 to 25-year-olds in the municipality of Bergen aware that the project VerduurSAMEN2030 exists?

4. How big is the willingness of the 18 to 25-year-olds to act in favour of the 'VerduurSAMEN2030' project?

How to increase willingness and active participation?

5. What are the motivators for 18 to 25-year-olds to act in favour of the 'VerduurSAMEN2030' project?

6. Are there significant differences in the answers to subquestions 4, 5 and 6 within the target group based on village, age, education, work and housing situation?

7. Which extra actions can be taken to increase participation in the energy-saving, small-scale generation and innovation action of 'VerduurSAMEN2030'?

This research adds to the already existing knowledge by investigating how to increase the participation of young adults in pro-environmental actions. To investigate the participation of young adults and how to increase it, quantitative research has been conducted with a social scientific, inductive approach in the form of a survey analysis. A conclusion is formed by combining a literature review with data gathered from quantitative research.

Firstly, the methods used in this research are described. Secondly, there is the literature review, containing grey literature followed by an academic literature review. After the literature review there is a results section in which the results are displayed and interpreted, then the conclusion follows, made recommendations, talked about the limitations, proposed future research and gave the acknowledgements. After which the references section is stated, finishing the research with the appendixes.

#### Methods

Throughout this research the different sub-questions will be answered leading to the final conclusion by answering the research question. The questions under the sub-category 'explaining VerduurSAMEN2030' are answered partially in the introduction but more precisely in the literature review. Subquestions 3, 4, 5 and 6 will be answered in the survey. Subquestion 7 will be answered by combining the previous sub-questions with the literature review. In this method section you will first read how the literature review was done, then how the survey was created and conducted, after which the participant information can be found and how the participants can be sure of their privacy and lastly, how the researcher should consider their position in this research.

# **Methods - Literature review**

This study involves both primary and secondary sources of information. In the literature review and context part, secondary material was utilized to give the research context. The literature review is made up of both academic and grey literature. Because reports from Dutch authorities and the municipality of Bergen can provide important knowledge which cannot be found in academic articles. The additional non-academic literature was selected based on the fact that it was published by well-known institutions such as governments, municipalities, or research institutes.

Articles used for this research have been found through the search engines 'Google Scholar' and 'SmartCat' and by snowballing the references of prior read papers. The academic papers were found by using the keywords: 'pro-environmental', 'behaviour', 'encouragement', 'willingness', 'young adults', 'households' and 'sustainable'.

The additional grey literature was obtained from <u>https://www.bergen.nl/</u>, <u>https://www.verduursamen2030.nl/</u> and <u>https://www.cbs.nl/</u>.

# Survey

With the use of the exploratory literature review and conversations with the municipality, a survey was created. This survey aimed to find out more about the willingness to participate and how to increase this participation of the 18 to 25-year-olds in the municipality within the 'VerduurSAMEN2030' project on the energy saving, small-scale generation and innovation parts. In order to conduct a comprehensive and holistic survey about the demographic factors and willingness of 18 to 25-year-olds, I conducted an empirical analysis of similar studies and existing literature and municipal documents. The survey questions have been substantiated by research on environmental behavior in young adults, housing, and energy usage to create the survey. Furthermore, I implemented the basic interview techniques, question structures, and information from previous research in order to create a survey of the highest possible quality and output.

The survey starts with four demographic questions, asking for age, village, work, and housing situation. Those questions are asked to get a good understanding of the differences within the target group and to possibly come up with different conclusions within the research question. For example, this is not based on any data, participants that have a full-time job, have more money to spend than jobless participants, so the participants with a full-time job are more likely to choose the environmentally friendly, but expensive, measurements. This is one of the countless possible revelations that can be done with the demographic questions. Some of those questions are also asked to make sure the group of participants are representative to the selected age group and their geographic spread. This is the case for questions regarding age and village (both calculated as a percentage of the population).

The municipality previously already included a research institution to help them find out what the general attitude of the municipal residents was towards the VerduurSAMEN2030 project in July/August of 2021. In this research, they investigate the willingness of all adolescents to take measurements. I used the same answer possibilities in my survey regarding questions about willingness. (VerduurSAMEN2030, 2021).

The other questions in the survey mainly relate to housing. In the literature review, t it was stated that surroundings and past education are very important as opposed to how much of biospheric values a person has. To learn more about the past surroundings of a participant I asked about the participant's past considering energy usage within their (past) home situation and education. Another question implemented in the survey targets the amount of influence the 18 to 25-year-olds have in their house on the energy topic. With this question, I aimed to find out if the 18 to 25-year-olds felt it was useful for themselves to think about energy usage within their house in the past. The questions regarding 'What would you do if you had your own house' were substantiated by what was found in the literature about differences in pro-environmental behaviour regarding efficiency (one time change) and curtailment (habits) measures (Schultz & Kaiser, 2012). As described above, a lot of the questions are mentioning housing. This is specifically chosen because your house is the place where you can make the biggest difference considering energy usage (Bhushan et al., 2016). An article from Milfont & Markowitz also said that energy consumption occurs at multiple levels of decision-making. Not only as an individual energy consumption choices are made, but more often in households (Milfont & Markowitz, 2016). As desribed and motivated in the methods, energy usage are often not those from the indivudual, but from the complete household. After the questions about housing, the survey continues with questions that are about information, when does the participant want information, do they want information at all, and how can information reach them the easiest. I particularly ask which platforms the municipality can use best to reach them, since the literature review showed that young adults do engage with content posted on social media (Hargittai et al., 2018). All these survey questions are created in such a way that the municipality can anticipate on, and work with them. I will state and analyze the results in the same section to overcome repetitiveness and make the research more reader-friendly.

#### Security

The participants that filled in the survey are all 18+. They all agreed on the 'informed consent form' before they started the survey, this form can be found in appendix I. To make sure the data gathered cannot be traced back to the participants, the demographical questions do not dig in deep. For example, their geographical location will only be asked regarding which village the participant lives in. The whole survey will be anonymous and the data gathered will be used for this research, and possible other future research within the municipality of Bergen. The data is gathered to answer the research questions, and possibly to end up working with its final results by implementing the conclusions in municipality policy or actions. The data will be stored to for a maximum of one year on a secured laptop, only the researcher and the municipality will have access to these data during this one-year timespan.

# **Participants**

The target group of the survey is 18 to 25-year-olds that are residents (for students possibly partially) in the municipality Bergen. This age group was chosen after a conversation with the municipality in which they came up with a problem statement: 'How do we (the municipality) address young adults to participate in the VerduurSAMEN2030 project, so the project can reach its goals by 2030?'. The municipality of Bergen includes 13103 residents, there are 1118 people with an age in the range of 18 to 25-year-olds (Gemeente Bergen, 2022 January 1). To check whether the survey is statistically representative, I checked the statistical accuracy of the survey. With an error margin of 5%, and a confidence level of 95% I calculated the confidence interval for all the questions, these

numbers will be stated in the results. In this research, I strived to get as much participants as possible with a minimum of 100 participants.

Convenience sampling was used to find the 142 participants to fill in the survey, striving to collect as many participants as possible, aiming for a good representation of the municipality and its residents (Price, 2013). For this survey sampling without replacement is used, people are only required to fill in the survey once, without repetition (Hedrih & Hedrih, 2022). To spread the survey as widely as possible within the municipality and get representative answers, three ways of distribution were used. The first one is by the use of the researcher's social media, the social media platforms that I used were Facebook, Instagram and Whatsapp. Those apps are used a lot by 18 to 25-year-olds (Hargittai et al., 2018), within the social media post, a request to share the survey to their friends and family is placed. The second way I reached participants is via the municipality project 'VerduurSAMEN2030' its channels, this includes their Facebook page, the newsletter, and a post on their website. In the VerduurSAMEN2030 newsletter a QR-code and a link to the survey was included, they also put the survey on their website. The Facebook post from the VerduurSAMEN2030 page got shared 59 times. The third way the target group is reached is by going to the streets. When the survey had reached already about 60 participants I analyzed the demographic distributions of the participants. The towns that are not evenly covered by enough participants based on the percentage of the population were the places where I went to and asked by-passers that fit the target group to fill in the survey. I was pleasantly surprised by the fourth way the survey got distributed. Without planning, the local newspaper put my request for participants on their news site (Appendix III).

The survey platform used is Qualtrics, this platform is provided by the university of Groningen to their students. I will also use qualtrics to analyse the data, with the help of the combining function to find correlations within the questions.

# Positionality

For this research, it was important that I was aware of my positionality, I tried to make sure of that during the whole research. As a resident of the municipality in which the research is done, I realize that I have my own perception of the project as well. Therefore, I made sure I will not make my own perspective part of the research, I looked at the data as an outsider. I am also aware that I am a pro-environmental person, this is not the case for everyone. Lastly, as part of my position, I realised that I am not a taxpayer in the municipality of Bergen and my money is not invested in this, whilst for the participants, it is about their money. This is of importance, not because it does directly influences how the research is carried out, but because without realizing I might have interpreted the survey with bias. This might have led to me, coming up with other findings then a researcher without any strings to my municipality.

#### Literature review

The literature review will be done to inform my research and sub-questions, the literature review is also a crucial part of this research to determine the questions asked in the survey. This literature review will include municipality documents, on the previously taken actions, the decisions that are made etc. But I also actively searched for academic literature: the terms mostly used for this were: 'pro-environment', 'behaviour', 'encouragement', 'willingness', 'young adults', 'local climate action', 'households' and 'sustainable'.

#### **Municipality and VerduurSAMEN2030**

# Subquestion 1: What is the project "VerduurSAMEN2030"?

In November 2016, the municipal council decided to make a budget available for energy policy. In 2017, this led to the municipality of Bergen starting its ambitious plan with the VerduurSAMEN2030 project, a project funded by the municipality itself and private investors. The eldermen of the municipality is the main driver of the project. He made connections with the province and other institution to be able to present this programme. With this project, the municipality of Bergen has the ambition to be energy independent by 2030. VerduurSAMEN2030 is for all residents, companies, and social organizations in Bergen, with the aim of making Bergen even more beautiful and sustainable. If a municipality, it is self-sufficient and hence energy independent. According to data from the province of Limburg in 2012 the energy consumption of the whole municipality was 1.74 PetaJoule (Grutters, 2017). The top 3 consumers are: Agriculture: 0.46 PJ (= 26.4%), Residential: 0.36 PJ (= 20.7%) and Mobility: 0.36 PJ (= 20.7%). According to the municipality, they can meet 20% of their goal to be energy independent through energy savings, simply because energy that is saved, is no longer required. This 20% will be reached

by small and big measurements and behaviour changes in residents' houses, some small for example, changing to led lamps, using a water-saving showerhead, implementing a letterbox brush a thermostatic tap. Some bigger measurements are improving the roof or -cavity wall insulation and implementing a heat pump, driving less, driving electrical etc. There are also behavioural changes that can save energy, for example, having shorter showers, lowering the heat and avoiding unnecessary energy usage as much as possible. The municipality also aims to reach 30% more energy independence by small-scale generation. Small-scale generation is implemented by the installation of solar panels on as many roofs as possible, not only on houses but also on bussinesses' roofs, and by setting up energy cooperatives. The municipality aims to make the most of every opportunity that exists within our built environment. Therefore, the other half of the project, 'the Wells Meer Energielandgoed', is focused on large-scale generation being good for another 50%, to together sum up towards an 100% energy independent municipality (Energielandgoed Wells Meer, 2018).

The municipality will make sure this 'Energielandgoed Wells Meer' will be built. For the other 50%, it is required to create energy independence by 2030 the municipality needs cooperation from its residents. This is the part where this research is focused on. The municipality's main role in generating and saving this 50%, is by having an exemplary and initiator role in implementing the energy vision. The municipality fulfils this function in two ways. Firstly, by taking energy measures and initiating projects, and secondly, by creating good preconditions under which stakeholders can take energy measures. There are no numbers available regarding the current participation in the VerduurSAMEN2030 project.

# Subquestion 2: What has been done already to encourage the participants for the 50% of the VerduurSAMEN2030 project (energy saving, small-scale generation and innovation)?

The municipality already put out multiple initiatives to encourage the residents of the municipality to take part in energy saving, small-scale generation and innovation. They built a website: <u>https://www.verduursamen2030.nl</u>, here you can find a lot of information on the current initiatives and projects. The website answers all your questions about the VerduurSAMEN2030 project, provides you with useful links to get to work yourself, tells you about the latest updates and provides important documents about the project.

Another initiative, which is currently already finished (31 December 2021), was created to give the project a boost. There was 120.000 euro made available in the form of subsidies. These subsidies could be used for four purposes: 1) developing local energy cooperatives, 2) projects aiming at boosting public awareness, 3) insulating measures, and 4) basic energy-saving measures in privately owned residences. Another subsidy provided by the municipality, for which applying is still possible, is the 'Groene Bon-actie', providing the approved requests with 90 euros to buy energy-saving products. For residents of the municipality, it is possible to get a free home and/or warmth analysis on your energy usage and ways to save or generate money, including personalized advice. It may occur that solar panels are not an option for an individual's own house, but they do want to help the energy transition with solar panels. To fix this problem two energy cooperations were created to put solar panels on other roofs than your own. For example, on the roofs of local businesses in two other villages of the municipality called: 'Well' and 'Afferden'. This is in line with the initiative called 'sun on business roofs'. This initiative helps entrepreneurs in the municipality to put solar panels on their businesses' roofs, to remove as many thresholds as possible. The municipality wants to stand as an example to its inhabitants. One of their ways is by heating the municipal barrack (loods) with a biomass-stove. Besides that, the municipal

employees are driving a shared electrical car to their business meetings. The last two initiatives are the online 'buurthulpplatform' (neighbourly help platform) and a so-called 'energy house' in which energy is freely accessible. These are places where people can go with ideas for the project, questions, or come into contact with each other.

All of these initiatives and actions were made to boost the ambition of the municipality. However, initiatives to explicitly encourage young adults were not created, These are initiatives and actions that were targeting all adults, not those of a particular age. This might be of importance because the target group in this research, young adults, are believed to be less financially independent than older people and might have a different outlook on life (Heer et al., 2011).

#### Pro-environmental behavior: awareness, willingness, increasing participation

This part of the literature review aims to provide a context for the questions in the survey template, to eventually get to conclusion by combining this academic literature with the survey answers.

Pro-environmental behavior can be defined as "behavior that harms the environment as little as possible, or even benefits the environment" (Bonini et al., 2008). This definition shares the idea that consumers act in ways that protect or cause less environmental damage than the alternatives (Bonini et al., 2008) (Park & Ha, 2012). The basis for pro-environmental behaviour is already based in childhood; your upbringing, surroundings, and education are very important factors in this (Erdogan, 2011). The basis for this behavior derives from you biospheric values (Filho & Hemstock, 2019). However, sustainable and environmental values have rapidly gained popularity over the last decade. The urgency to mitigate and adapt to climate change has reached a bigger audience (Theodore & James, 2020). Young adults, together with the elderly are proven to be more familiar with and more in favour of natural environments than adolescents (Berto, 2005).

The most frequent psychological strategy for fostering pro-environmental behaviour and therefore energy-related behaviour focuses on changing the individual; the basic idea underlying this approach is that people do not engage in pro-environmental conduct because they lack sufficient knowledge and motivation. They simply don't care, aren't aware of the negative effects of their acts, don't know what to do, or aren't driven enough to act (Schultz & Kaiser, 2012). Compared to consumers who have no prior experience with or dedication to a pro-environmental activity, it is shown that consumers who have such experiences and/or commitment can easily accept additional pro-environmental disciplines (Steg & Vlek, 2009) (Park & Ha, 2012).

Encouraging individuals actually to behave on these pro-environmental values is proven to be difficult (Mair & Laing, 2013). For example, 53% of customers in Brazil, Canada, China, France, Germany, India, the United Kingdom, and the United States are worried about environmental issues yet are unwilling to take action (Park & Ha, 2012). But being aware of the problem is a necessary requirement for change. Awareness can be used in many ways, however, the definition of Modica & Rustichini of the word 'awareness' is used in this research. Awareness for that case is a synonym for 'knowing about something' (Modica & Rustichini, 1999) (Schipper & Burkhard, 2014). As developed by Mair & Lang (2013), a way to conceptualise encouraging sustainable behaviour is: 'The Transtheoretical Model', or so-called TTM. The model differs the change process into two-dimension, attitudinal and behavioural change. Before behavioural change can occur, there has to be an attitudinal change. The steps of attitudinal change are: realizing or being aware there is a problem  $\rightarrow$  emotional arousal  $\rightarrow$  realising change will have positive effects on society  $\rightarrow$ appreciating change will be positive on one's own identity  $\rightarrow$  believing in the change. After which the process of behavioural change will start, this process starts with seeking support to facilitate change  $\rightarrow$  finding motivation within oneself to change  $\rightarrow$  substituting new behaviours  $\rightarrow$  rebuilding one's environment to elicit new habits, and inhibiting old behaviour. With the last step even going further  $\rightarrow$  to social liberation by telling other about the behaviour and helping them to make the change (Mair & Laing, 2013).

Reaching people in order to make them aware about a certain project can be done in multiple ways. Social networking platforms are doing a fantastic job of promoting and taking action on environmental issues, especially the youth or young generation (Robelia, Greenhow & Burton, 2011). Social media has evolved into a valuable instrument for allowing the public to participate in influencing or opposing environmental choices (Mallick & Bajpai, 2019). Hargittai's research on social media content and young adults concluded that social media platforms are a way to get young adults engaged with the content you post. It is important though which platform you use, Facebook is more popular than Twitter for example (Hargittai et al., 2018).

To analyse pro-environmental behaviour it is sufficient to make a difference in two types of actions, efficiency and curtailment (Gardner & Stern, 1996). Curtailment behaviours are characterized by a shift in habit; they are recurrent behaviours that can result in a reduction in consumption. While efficiency practices are a one time change, that frequently have a significant pro-environmental impact (Schultz & Kaiser, 2012).

Individuals who have a strong sense of belonging to and identity with their community are more likely to cooperate in pro-environmental behaviour, then those who don't. There is even proof that high-identifying members of the group will try to compensate for other group members' overconsumption (Brewer & Kramer, 1986).

To be able to make a change it is important to find out which behaviour to target. There are three sets of considerations used by psychological research: potential to change, high impact, and specificity. Potential to change, focusing on activities (or market segments) where change is possible is also a criteria in picking a target habit (Schultz & Kaiser, 2012).

High impact, the impact of the conduct on the environment is a primary concern (Geller, 2002). Specificity refers to advice to focus on specific acts rather than broad categories of behaviour or goals (McKenzie-Mohr, 2000). Several assessment studies show that social marketing efforts based on psychological theory can successfully modify targeted behaviour (Abrahamse et al., 2005) (Michie et al., 2009). Rather than focusing on shifting individual consumption behavior, Jacksons proposes looking into how, when, and why people take collective action to engage in more sustainable production and consumption patterns (Jackson, 2009). According to ecological economics research, system-wide adjustments are required to begin the transition to a low-carbon economy, in addition to individual behavioral changes, this system-wide change can be implemented in a local scale (Jackson, 2009) (Bamberg et al., 2015). An example of initiatives to pursue a variety of locally-based activities aimed at reshaping social practices around energy consumption is from the TT (transition towns), they organise initiative such as: forming locally-owned renewable energy companies, promoting locally-grown food, encouraging energy conservation, exemplifying low-carbon living, and forming supportive communities around these activities (Hopkins et al., 2008) (Bamberg et al., 2015).

#### Results

In total, the survey was active for 9 days and it got 142 responses. After retrieving the results in excel format from the Qualtrics platform I began the analysis of the survey results.

# **Demographic trends respondents**

Firstly, I analysed the questions which were set up in order to determine the demographic trends of the respondents. Moreover to investigate whether the survey results are representative of the 18 to 25-year-old population of all the villages within the municipality.

Figure 1 shows the distribution of the 18 to 25-year-old participants purely based on their village, as visualised, the villages Bergen and Well were highly responsive compared to other villages. However, the number of responses from a particular village does not take into account the population number of the village.



In which village do you live?

Figure 1 A circle diagram: the geographical distribution of study participants

In Table 1 there can be observed that 2,57% of Well's complete population, not just 18 to 25-year-olds, filled in the survey, which is significantly better presented compared to the

other villages. However, for the other villages a total of, for the lowest 0,63%, for the highest 0,82% of the population filled in the survey.

Table 1: demographic distribution			hic distribution villages
	participants from the village	population of village	percentage of population
Bergen inc. Aijen	43	5257	0,82%
Well	63	2445	2,57%
Wellerlooi	9	1194	0,75%
Afferden	14	2146	0,65%
Siebengewald	13	2061	0,63%

Figure 2 shows the age distribution of the participants, as visualised, the 18/19 year olds are underrepresented and the 20/21 age group was less represented compared to the age groups of 22/23 and 24/25. However, the number of responses from a particular age does not take into account the complete population number of the municipality with that particular age.



Figure 2 A circle diagram: age distribution of study participants

In Table 2 there can be observed that 16,44% of all the 20/21-year-olds in the municipality, filled in the survey, which is significantly better presented compared to the

other ages. Whilst, for the complete population of 18/19-year-olds in the municipality 7,87% of the people, participated in my survey. The difference between 7,87% of the population and 16,44% of the population is proportionally big, and therefore, the age distribution is not representative.

	participants with that age	population with that age	percentage of population
18/19	21	267	7,87%
20/21	48	292	16,44%
22/23	39	290	13,45%
24/25	34	269	12,64%

table 2, demographic distribution age

Another demographical question was: 'Do you have a job at the moment?' As Figure 3 shows, 44% of the participants answered 'yes, I have a side job'. 40,4% of the participants answered 'yes, I have a full-time job'. 8,5% of the participants answered 'yes, part-time job'. 5% of the participants answered no, and 2.1% of the participants were in a different position.

different

Do you have a job at the moment?



Figure 3 A circle diagram: distribution of current occupation of study participants

The last demographical question was: 'How is your housing situation?'. As Figure 4 shows, 62,5% of the participants answered they still live with their parents or caregivers. 14,7% of the participants answered they live partially with their parents/caregivers. 16,9% of the participants answered 'own house, bought'. 5,9% of the participants answered 'own house, rented'.





The upcoming analysed survey questions are divided and structured in such a way that they are answering the sub-questions.

## Awareness of participants VerduurSamen2030

Starting with the third sub-question: 'Are the 18 to 25-year-olds in the municipality of Bergen aware that the project VerduurSAMEN2030 exists?' To answer this sub-question the participants answered the question about whether they know about the existence of the project. This was asked because as stated in the literature review, behavioral change, starts with being aware of the problem, which in this case is the municipality not being energy independent. The answers to this question were according to Figure 5: 54,2% of the participants answered no, 20,4% of the participants answered yes, and 25,4% of the participants answered, yes partially. From this we can conclude that the awareness of the

project VerduurSAMEN2030 within the 18 to 25- year-olds is not as high as the municipality would like.



Did you know about the existence of the VerduurSAMEN2030 project from the municipality?

Figure 5 A circle diagram: distribution of "VerduurSAMEN2030" awareness from study participants

# Willingness participants on energy-saving and generation

For the fourth sub-question: 'How big is the willingness of the 18 to 25-year-olds to act in favour of the 'VerduurSAMEN2030' project?' Three questions about future behaviour and actions were asked. As well as one question regarding their current opportunities in their housing situation. For the upcoming 3 questions, the confidence interval (CI) will also be calculated. 18 to 25-year-olds are often in a phase within their lives where they start thinking about moving out from their parents' or carers' house (Dey & Pierret, 2014). As stated in the literature review, potential to change, high impact, and specificity are smart to look at when targeting a behavior or measurements. Therefore, 'future housing' was chosen to be the main topic to evaluate, since behavior and measurements in this segment are of high impact, have the potential to change and can be made specific.

First question: 'If you have your own house in the future, what behaviors would you perform for a more energy-friendly house? (if you already have your own house, not rented, what are you doing at the moment ....) (multiple answers possible)

As shown in Figure 6, 26,6% of the participants answered they would view electrical consumption when purchasing appliances, CI lower bound for this is 0,2158 and upper bound is 0,3707. 54,5% of the participants would keep the doors constantly closed, CI lower bound for this is 0,5060 and upper bound is 0,6732. 87% of the participants would avoid unnecessary energy usage, CI lower bound for this is 0,8071 and upper bound is 0,9231. 33,1% of the participants would take short showers, CI lower bound for this is 0,2804 and upper bound is 0,4439. 54,5% of the participants would lower heating to be more energy-friendly, CI lower bound for this is 0,5060 and upper bound is 0,6732. Lastly, 7,8% of the participants would not show any of the previously named behaviors, CI lower bound for this is 0,0444 and upper bound is 0,1430.



If you have your own house in the future, what behaviors would you perform for a more energy-friendly house? (if you already have your own house, not rented, what are you doing at the moment ....)



The second question: 'If you have your own house in the future, which small measures would you take for a more energy-friendly house? (if you already have your own house, not rented, what are you doing at the moment.....)' (multiple answers possible)

As shown in figure 7, 35,2% of the participants answered they would install a letterbox brush, CI lower bound for this is 0,2739 and upper bound is 0,4366. 76,8% of the participants would install led lamps, CI lower bound for this is 0,6894 and upper bound is 0,8343. 28,2% of the participants would install pipe insulation, CI lower bound for this is 0,2095 and upper bound is 0,3633. 17,6% of the participants would use radiator foil, CI lower bound for this is 0,1173 and upper bound is 0,2488. 9,9% of the participants would install a radiator ventilator, CI lower bound for this is 0,0550 and upper bound is 0,1599. 38,7% of the participants would install a thermostatic tap, CI lower bound for this is 0,3068 and upper bound is 0,4726. 33,1% of the participants would install remote energy controllers, CI lower bound for this is 0,2544 and upper bound 0,4148. 59,2% of the participants would install weatherstrips, 28,9 would install a water-saving shower head, CI lower bound for this is 0,2158 and upper bound is 0,3707. Lastly, 4,2% of the participants say they would not implement any of the previously mentioned small measures, CI lower bound for this is 0,0897.

yes no no 100% 75% 50% 25% tende anelytottoles under some scone thead 0% radiator ventiator weather stips pipe insulation radiator foil themosate tap led lamps + brush none

If you have your own house in the future, which small changes would you take for a more energy-friendly house? (if you already have your own house, not rented, what are you doing at the moment.....)



Third question: If you have your own house in the future without the following measures, what major measures do you think you would take for a more energy-friendly house? (if you already have your own house, not rented, what are you doing at the moment.....) (multiple answers possible)

As shown in Figure 8, 53,5% of the participants answered they would implement hr++/triple glass, CI lower bound for this is 0,4497 and upper bound is 0,6192. 66,2% of the participants answered they would improve roof insulation, CI lower bound for this is 0,5779 and upper bound is 0,7391. 65,5% of the participants would improve cavity wall insulation, CI lower bound for this is 0,5706 and upper bound is 0,7326. 34,5% of the participants would install a heat pump, CI lower bound for this is 0,2674 and upper bound is 0,4294. 80,3% of the participants would install solar panels, CI lower bound for this is 0,7278 and upper bound is 0,8648. Lastly, 3,5% of the participants say they would not implement any major measurements, CI lower bound for this is 0,0115 and upper bound 0,0803.



Figure 8 A Bar plot: distribution of potential energy sustainability measures among study participants

The fourth question: Do you currently have the opportunity to make adjustments within your home situation (within the municipality of Bergen) for a more energy-friendly house?

As Figure 9 shows: 16,9% of the participants answered with 'no main residents decide, but I don't care'. 25,4% of the participants answered 'no main-residents decide, but I

don't care'. 8,5% of the participants answered 'yes, but never tried to'. 26,8% of the participants answered 'yes, convinced the main-residents'. 2,1% of the participants answered 'yes own house, but didn't make adjustments'. 12,7% of the participants answered 'yes own house, did make adjustments, and lastly 7,7% of the participants answered 'different'. All those participants elaborated on their answer with the statement or another way that eventually meant the same being: they did not need any more adjustments in their caregivers/parents' house. Out of the participants that answered: 'yes, own house, made adjustments', and 'yes, convinced the main residents and 'no main-residents decide, but I would like to' we can derive some form of willingness. These participants together stand for at least 65% of the of the participants (at least, since we cannot derive willingness from the participants that answered with 'different').

Do you currently have the opportunity to make adjustments within your home situation (within the municipality of Bergen) for a more energy-friendly house?



Figure 9 A circle diagram: the distribution of the interest and opportunity to make sustainable energy changes From those four questions we can conclude that the willingness to participate by 18 to 25-year-olds in the municipality Bergen to take big measurements is found to existent for the majority of the participants, whilst for taking small measurements and actually changing behavior to be more environmentally friendly the willingness is only there for the minority of the participants.

# **Motivators**

For the fifth sub-question: 'What are the motivators for 18 to 25-year-olds to act in favour of the 'VerduurSAMEN2030' project?' We asked how involved the participants currently are in their energy usage, and what the reason behind that is.

As shown in Figure 10, 41,9% of the participants answered they are involved, and the motivation behind that is money. 26,5% of the participants answered they are involved, and the motivation behind that is sustainability. 18,7% of the participants said they are not actively involved because they do not know what to do, and 12,9% of the participants said they are not involved because they are not interested. From this we can conclude that money and sustainability are important motivators for young adults with regard to acting pro-environmentally friendly.



Are you currently actively involved in the amount of energy you consume?



# **Combining results**

For the sixth sub-question: 'Are there significant differences in the answers to subquestions 3, 4 and 5 within the target group based on village, age, work, childhood energy environment and housing situation?' The data were combined, there were only two interesting patterns discoverd. First of all, there is a correlation between sub-question 4, about the participants that are aware of the 'VerduurSAMEN2030', and the age distribution as well as the current job as well as the housing situation. 43,3% of the participants that knew of the 'VerduurSAMEN' project have their own, not rented, house whilst only 16,9% of the participants have their own, not rented, house. 60% of the participants that knew about the 'VerduurSAMEN' project where people with a full-time job, even though only 40% of the participants had a full-time job. 53% of the people that knew about the project have an age of 24/25 whilst only 24,1% of the participants have that age.

All these participants being aware of the project, are representing a group that in an average life span are further than the rest of the participants the young. What is meant by this is that the participants have their own house, are older in age and do have full-time jobs. Out of this, we can conclude that the awareness of the project is higher once the participants are getting more grown-up.

Another interesting result is that 40% of the participants that did know about the project are from the village called Bergen, whilst only 30,5% of the participants do live in that village. This might be due to the fact that the municipality its headquarter is in Bergen, and therefore municipal projects reach the people more often.

# **Increasing participation**

For the seventh sub-question: Which extra actions can be taken to increase participation in the energy-saving, small-scale generation and innovation action of 'VerduurSAMEN2030?'

Five questions within the survey were used to come to a good conclusion of this question. Starting with the question: 'How could you be personally encouraged to save/generate energy?'

34% of the participants answered they cannot be encouraged to save/generate energy. The other 66% of the participants put an explanation of how they could be motivated. 37 times this had to do with money, this mostly considered profitability or if they can get good discounts, subsidies or compensation. Another common answer was 'as soon as it is about my money'. 33 times, clear descent information could encourage them, of importance in this category was that the information gives out factual numbers as to the costs and profits, that the information not only includes advantages but also the disadvantages, and that the information is provided in easy language. 9 times the participants answered that they first needed to be convinced of the fact that it is actually better for the earth and that their contribution does matter. 6 times participants answered that the motivation would come from positive stories from people in their surroundings. 3 times participants answered that they did not need more motivation, since they already were motivated themselves. The result of this question are completely in line with the results on the question if the participants are currently involved in the amount of energy they use.

On the question: Would you like to receive more information from the municipality to be able to make good choices energy-wise? As shown in Figure 11, 76,7% reacted they would like to get information, and 23,3% would not like to receive this information. 76,7% is an almost 3 times higher percentage than 26%, this means that the participants do like to get information, but for about two/third this is not the main motivator. From this we can conclude it would be beneficial for the municipality to spread information about energy to encourage the VerduurSAMEN2030 project.



Would you like to receive more information from the municipality to be able to make good choices energy-wise?

Figure 11 A circle diagram: the distribution of the wish to receive the more information from municipality on sustainable energy behavior

The next question in the survey was: 'Would you attend an energy event with information on how to save/generate energy?' As shown in Figure 12, 79,1% of the participants reacted with no, whilst 20,9% of the participants reacted with yes. From this, we can conclude that for the majority of participants that want to get information, it is most sufficient to bring the information to the participant. Instead of the participant searching for the information themselves.



Figure 12 A circle diagram: the distribution of the wish to attend events dedicated to energy

The next question in the survey was: 'Would you like to receive an overview with information about saving and generating energy when you buy a house?

As shown in Figure 13, 52,7% of the participants answered 'yes, that would be convenient'. 36,4% of the participants answered 'yes, it does not do harm'. 4,7% of the participants answered: 'no, busy enough at that time and 6,2% of the participants said no. From these answers we learn that it is benificial for the municipality to spread information at a specific time in once live, when buying a house.



Would you like to receive an overview with information about saving and generating energy when you buy a house?

Figure 13 A circle diagram: the distribution of the wish to receive information on saving or generating energy when buying a house

The next question in the survey was: "Which social media platform would be most effective for you?" In the literature review it was stated that Facebook is a more popular platform than Twitter (Hargittai et al., 2018), which is proved to be right within the municipality of Bergen. As shown in Figure 14, 55% of the participants answered Instagram. 30% of the participants answered Facebook. 10% of the participants answered Whatsapp. 2,5% of the participants choose for TikTok as well as Snapchat.



Which social media platform would be most effective for you?

Figure 14 A circle diagram: the preferred social media platforms for further communication Some more questions were asked in the survey, however, the findings were not high-lighted in the results section. You can find all the diagrams in Appendix II.

# Conclusion

To conclude, with the help of literature review and a survey, results were gathered. The gathered data was not only stated but also analysed in the results, to eventually come up with a conclusion, followed by recommendations. This research aimed to answer the following research question: '*How is the willingness to participate and how to increase this participation in the age group of 18 to 25-year-old residents in the municipality Bergen on the 'VerduurSAMEN2030' project, explicitly the energy-saving part, small-scale generation and innovation?*' The willingness to participate of 18 to 25-year-olds in the municipality of Bergen to take big measurements is found to exist for the majority of the participants, whilst the willingness for taking small measurements and changing behaviour to be more environmentally friendly, is only there for the minority of the participants. To be able to increase this participation, more easy understandable information should be spread, change

should be made affordable or profitable. Also, more initiatives are needed to get young adults interested in the topic of energy.

#### Recommendations

By using the results of the survey in combination with the literature review, some conclusions could be made, based on which four recommendations were made.

Firstly, as found in the results, the young adults in the municipality of Bergen are not aware of the VerduurSAMEN2030 programme, therefore it is recommended to make the programme known more widely. This can be done using social media, specifically the platforms Facebook and Instagram for 18 to 25 year olds.

Secondly, the questions dedicated to measure the willingness of the participants to behave environmentally friendly had very divergent answers. To increase this willingness, providing information both on paper, via social media and as a mouth to mouth advertisement is advised. This mouth to mouth advertising works best when the municipality approaches personally the 18 to 25-year-olds, this can be done for example in the local pub. Another way to improve willingness is to make environmentally friendly behaviour profitable or less expensive.

Thirdly, to increase participation it is necessary to create more initiatives that are appealing to 18 to 25-year-olds. Interesting ways to do this can be by making young adults enthusiastic about energy friendly behavior by making it cool. For example, make it a game, 18 to 25 year-olds compete and can win a appealing present when they are found to be the least environmentally unfriendly.

Fourtly, the majority of the young adults wanted to receive information on energy related topics with the regards to a house either, just before, during or just after, buying a house. The municipality can take ownership of this task by being in close contact with the estate managment in the surroundings and inform them to inform their customers, the young adults. The municipality should also provide this information every time a young adult registers themselves in the municipality. It is of big importance that the information is trustworthy and easy understandable.

Lastly, an important factor for young adults to implement environmentally friendly measurements in their (future) houses is money, its need to be profitable or at least affordable. Therefore, the municipality should take an active role in arranging discounts, providing subsidies and rewarding environmentally friendly measurements and behaviour.

# Limitations

As is the case for every research, also this research has some limitations.

The first limitation in this research is the convenience sampling, which led to the respondents of the survey not being representative according to the demographical division.

Secondly, another limitation is that the respondents are only people that had the willingness to answer the survey; this is already a particular group of people invested in the topic of energy, thus might not be a correct representation of all the 18 to 25-year-olds within the municipality.

Thirdly, the language barrier, the quantitative data gathered were all in Dutch. It is possible that some results got lost in translation.

Lastly, there was an error in the collected data. I made a mistake on the survey platform, in the beginning when the survey was active people could skip questions which created gaps in the data, once this mistake was visible it was immediately fixed.

# **Future research**

In future research, researchers could elaborate on the motivators of the participants and explore more practical ideas to implement for more active participation. This can be done by doing qualitative research, interviewing the target group to get an better incide on their own ideas. Furthermore, this research gave more of a general overview, in future research it is advised to take a more excessive look at correlations within the survey answers. Lastly, future research should take into account the existing limitations of the this research.

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# Appendix

## **Appendix I - survey template**

Alvast bedankt voor je deelname aan deze enquête! Ik ben Joyce Hendriks, kom uit Well en studeer op het moment op Campus Fryslân van de Rijksuniversiteit Groningen, deze enquête helpt mij met mijn afstudeeronderzoek. Voor dit afstudeeronderzoek doe ik onderzoek naar de bereidheid van 18- tot 25- jarigen in de Gemeente Bergen om bij te dragen aan de realisatie van de doelstellingen van het programma 'VerduurSAMEN2030'. Dit doe ik in samenwerking met de Gemeente Bergen.

Voordat de enquête begint, word je gevraagd toestemming te geven voor je deelname. Deelname aan deze enquête is vrijwillig en je kunt de enquête op elk moment stopzetten. De gegevens die tijdens dit project worden verzameld, worden strikt vertrouwelijk behandeld. De gegevens worden op groepsniveau geanalyseerd. De gegevens zullen dus nooit direct herleidbaar zijn tot een persoon. Persoonlijke informatie wordt niet gedeeld met derden, je privacy is dus gegarandeerd. Voor vragen kun je altijd contact met mij opnemen, hiervoor kun je gebruik maken van het volgende e-mailadres: j.h.j.hendriks@student.rug.nl

Indien je niet bekend bent met de plannen van 'VerduurSAMEN2030', is het bevorderend deze toelichting even te lezen: Gemeente Bergen heeft met het programma 'VerduurSAMEN2030' de ambitie om in 2030 energieonafhankelijk te zijn. Een ambitieus doel waarvoor actie ondernomen moet worden. Dit wordt verwezenlijkt met een groot project dat in zijn totaal zorgt voor een 100% energie onafhankelijke gemeente, verdeelt in plannen van 20%, 30% en 50%. 20% ervan wordt behaald door energiebesparing. Alle energie die bespaard wordt, hoeft niet meer opgewekt te worden. 30% wordt bereikt door kleinschalige opwekking (bijvoorbeeld met zonnepanelen op bedrijfsdaken en het oprichten van energiecoöperaties) en innovatie. De overige 50% zit in grootschalige opwekking en krijgt vorm in het project Energielandgoed Wells Meer. In deze enquête gaat het over de 20% energiebesparing en 30% kleinschalige opwekking en innovatie.

# Survey questions:

In welk dorp woon je?

- Well
- Wellerlooi
- Bergen
- Aijen
- Afferden
- Siebengewald

Hoe oud ben je?

- 18/19
- 20/21
- 22/23
- 24/25

Heb je op dit moment werk?

- nee
- ja, bijbaan
- ja, part-time baan
- ja, full-time baan
- anders .....(invulruimte)

Hoe is jouw thuissituatie?

- inwonend bij ouders
- deels inwonend bij ouders
- eigen huis, koopwoning
- eigen huis, huurwoning
- anders .....(invulruimte)

Ben je opgegroeid in een omgeving waar bewust omgaan met energie gestimuleerd werd/wordt?

- ja, er werd/wordt op de kleinste verbruiken gelet
- ja, onnodig energieverbruik werd gedemotiveerd (lampen aanlaten, deuren open laten staan)
- nee

Wist je van het bestaan van het VerduurSAMEN2030 project van de gemeente?

- ja
- ja, maar deels
- nee

Ben je op het moment actief bezig met hoeveelheid energie die je verbruikt?

- ja, duurzaamheid is daarin voor mij een motivator
- ja, geld is voor mij een motivator
- ja, geld en duurzaamheid zijn voor mij motivators
- ja, andere motivator namelijk ......
- nee, ik zou ook niet goed weten wat ik daarvoor moet doen
- nee, het maakt me niets uit

Als je in de toekomst een eigen huis zou hebben zonder de volgende maatregelen, welke grote maatregelen denk je dan te nemen voor een energievriendelijker huis? (meerdere antwoorden mogelijk)

(als je al een eigen koopwoning hebt, wat doe je op het moment.....)

- zonnepanelen
- isolatie verbeteren dak
- isolatie verbeteren spouwmuur
- hr ++ glas/triple glas
- warmtepomp
- geen
- anders ..... (invulruimte)

Als je in de toekomst een eigen huis zou hebben welke kleine maatregelen zou je nemen voor een energievriendelijker huis? (meerdere antwoorden mogelijk)

(als je al een eigen koopwoning hebt, wat doe je op het moment.....)

- ledlampen
- tochtstrips
- radiatorfolie
- waterbesparende douchekop
- leidingisolatie
- thermostaatkraan
- brievenbusborstel
- radiatorventilator
- tijdschakelklok
- geen
- anders/nog meer namelijk ..... (invulruimte)

Als je in de toekomst een eigen huis zou hebben welke gedragingen zou je uitvoeren voor een energievriendelijker huis? (meerdere antwoorden mogelijk)

(als je al een eigen koopwoning hebt, wat doe je op het moment.....)

- bij de aanschaf van elektrische aparaten kijken na het elektrisch verbruik
- verwarming lager
- deuren constant dicht houden
- kort douchen
- geen enkele maatregel

- onnodig verbruik minimaliseren
- anders/ nog meer namelijk ..... (invulruimte)

Heb je op dit moment de mogelijkheid om aanpassingen te doen jouw huis voor een energievriendelijker huis?

- nee, de hoofdbewoners gaan hierover, maakt mij verder niet uit
- nee, de hoofdbewoners gaan hierover, maar ik zou er wel graag mee bezig gaan
- ja, maar heb ik mij nooit voor ingezet
- ja, ik heb de hoofdbewoners overtuigd
- ja, ik heb mijn eigen huis en heb aanpassingen gedaan
- ja, ik heb mijn eigen huis maar heb geen aanpassingen gedaan
- anders.... (invulruimte)

Hoe zou jij persoonlijk aangemoedigd kunnen worden om energie te besparen/opwekken?

- niet
- door .....

Zou je vanuit de gemeente graag meer informatie ontvangen om energie gewijs goede keuzes te kunnen maken?

- ja
- nee

Zou jij een energie-event met informatie over hoe energie te besparen/opwekken bijwonen?

- ja
- nee

Zou je op het moment dat je een huis koopt, een overzicht willen krijgen met informatie over het besparen en opwekken van energie?

- ja, lijkt me handig, dan kan ik aan de slag
- ja, een keertje doorlezen kan geen kwaad
- nee, dan heb ik het al druk genoeg
- nee
- anders ..... (invulruimte)

Wat is voor jou de maximale tijd die het mag duren voordat een energie besparende, of opwekkende, maatregel terugbetaald moet zijn door minder hoge energie kosten?

- 1 jaar
- 2 jaar
- 5 jaar
- 10 jaar
- 20 jaar
- 30 jaar
- hoeft niet, zolang het maar beter is voor de planeet

In welke fase van je leven verwacht je dat het verkrijgen van informatie over het verlagen en opwekken van energie het grootste resultaat zal hebben in jouw eigen gedrag/maatregelen? open vraag

Hoe zou de gemeente jou het best kunnen bereiken?

- via de mail
- via social media
- offline, via een brief / informatie boekje
- via een persoonlijk gesprek
- met een app
- anders ..... (invulruimte)

Welke social media zou voor jou het meest effectief zijn?

- Facebook
- Instagram
- Twitter
- Snapchat
- TikTok
- Telegram/Whatsapp/Messenger
- anders.... (invulruimte)

Hoe denk jij dat de gemeente ervoor kan zorgen dat er meer energiebewuste keuzes worden gemaakt door 18 tot 25 jarige?

- hetzelfde antwoord als de vorige vraag

of

..... (invulruimte)

Appendix II - survey diagrams

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In which village do you live?







Do you have a job at the moment?



How is your housing situation?



Did you grow up in an environment where conscious use of energy was/is stimulated?



Did you know about the existence of the





If you have your own house in the future, what behaviors would you perform for a more energy-friendly house? (if you already have your own house, not rented, what are you doing at the moment ....)



If you have your own house in the future, which small changes would you take for a more energy-friendly house? (if you already have your own house, not rented, what are you doing at the moment.....)



If you have your own house in the future without the following features, what major changes do you think you would take for a more energy-friendly house? (if you already have your own house, not rented, what are you doing at the moment....)



Do you currently have the opportunity to make adjustments within your home situation (within the municipality of Bergen) for a more energy-friendly house?



Are you currently actively involved in the amount of energy you consume?



Would you like to receive an overview with information about saving and generating energy when you buy a house?



Would you like to receive more information from the municipality to be able to make good choices energy-wise?



Which social media platform would be most effective for you?



Would you attend an energy event with information on how to save/generate energy?



# Appendix III - local news paper



Foto: Joyce Hendriks

# Joyce vraagt hulp bij onderzoek

vr 3 jun 2022, 17:25



Well | Joyce Hendriks uit Well is bezig met afstuderen aan de Rijksuniversiteit Groningen en in het kader daarvan houdt zij een enquête over een energieonafhankelijk Bergen. Hieronder haar oproep:

"Hallo! Ik ben Joyce Hendriks en ik kom uit Well. Op dit moment ben ik bezig met afstuderen aan de Rijksuniversiteit van Groningen. Hiervoor doe ik een onderzoek naar de bereidheid van 18 tot 25-jarigen in de gemeente Bergen om bij te dragen aan een energieonafhankelijk Bergen.

Ben jij tussen de 18 en 25 jaar oud en woon je in de gemeente Bergen? Dan zou ik het super fijn vinden als je mij kunt helpen door onderstaande enquête in te vullen. Het invullen van de enquête kost maximaal 5 tot 10 minuten. Alvast bedankt."

Klik op de link voor de enquête:

https://rug.eu.qualtrics.com/jfe/form/SV\_3FcbsFNtykEiX ly