0:00:01.1 Speaker 1: So usually we'll start with a brief introduction of the project, and if you have any questions, further clarifications that you will need, then we can address it. Then you'll give a brief introduction of yourself, your academic background, and then your... Maybe any energy-related issues that you are... Policy, energy policy-related issues that you are working around, and before we go into the question, the list of questions.

0:00:37.2 XXXX: Okay.

0:00:37.3 Speaker 1: Yeah. So briefly to introduce the project, the title of the project is Gender Equity And Equitable Energy Access In The Global South. So we are trying to assess the relative levels of equity in terms of women's access to energy, and trying to identify how we can improve the role of women or women's access to energy across all the sources from renewable energy to the national grid to biomass or other sources of energy, but we usually prefer that you speak to the specific energy sources that you have been working with, if it is biomass that you have been working on or if it is renewables that you've been working on, so that we get the deeper context of what you have been addressing in the energy sector. This is a research that Friends of the Earth is facilitating the Ghana component. It's a regional project. So there is another... The other case study has been done in Nigeria, so Friends of the Earth Ghana is facilitating the Ghana component, so we are doing this in partnership with other Universities, Anglia Ruskin University in the UK, Leeds Beckett University also in the UK, and I think two other universities. So we are leading the Ghana component. Briefly, that's what the research is about. I don't know if you have any... If you need any further clarifications.

0:02:49.9 XXXX: I think so. I want to know, if I understand well, the objective of the research is to look at the link between energy access and gender equity then...

0:03:06.3 S1: Exactly, exactly.

0:03:08.9 XXXX: Just about giving access.

0:03:11.1 S1: Yes, yes. About improving equitable energy access.

0:03:16.7 XXXX: Improving equitable energy access.

0:03:23.9 S1: Yes. Yeah.

0:03:26.7 XXXX: Okay. My name is XXXX, quite long, but that's my name.

[laughter]

0:03:33.5 S1: I saw your name, and I was like, wow, but it's a nice name. Very nice name.

0:03:38.3 XXXX: Thank you. I'm a PhD student at the XXX at the University XXXX

0:03:49.3 S1: At the University of XXXX?

0:03:52.1 XXXX: Yes the centre... This is XXXXX.

0:04:07.0 S1: That's at XXXX?

0:04:09.2 XXXX: Yes.

0:04:09.9 S1: Okay. Alright. That's great.

0:04:12.7 XXXX: I hold a Bachelor of Science in Mechanical Engineering and a Master of Science in XXXX and Environment, both from the University of XXXX. I completed my Bachelor of Science in XXXX and my Master of Science in XXXX, and I'm currently working in XXXXin XXXX communities. In the bid to empower women. Just looking at gender inclusion in the management process, in the development process of the energy projects, particularly solar mini grids which have been seen to be the viable and the driver of the current energy transition when it comes to electricity in the electricity sector. That's a bit about me, so if you want to ask anything else that I have not mentioned?

0:05:44.5 S1: No, that's great. I think you've captured all the issues. Where you've spoken about your academic background as well as the specific energy issues that you are working on, and that's briefly what we wanted to know about your background. Yeah, so I'll go straight into the questions if you don't mind.

0:06:09.6 XXXX: Anything else...

0:06:10.1 S1: Okay. Right. So the first question, how would you describe equitable energy access in the a Ghanaian context?

0:06:19.3 XXXX: Equitable energy access to me should be giving people energy that they can use for productive activities. What I mean by productive, I mean not only having access to light in their homes and in their factories. Energy that can bring development to their neighbourhood, energy that can bring income into their pockets. That's what I mean.

0:07:05.1 S1: Oh okay. That's great. So within the Ghanaian context, how do you see that... How do you see the equitable energy access unfolding?

0:07:27.4 XXXX: Unfolding?

0:07:30.3 S1: How would you describe the status in Ghana in terms... How would you describe the energy, equitable energy access status in Ghana? Do you think there is that household or community level equitable distribution of energy access that the... Usable energy access as you described.

0:07:58.8 XXXX: First of all, I would like to say that my country Ghana has done well in terms of energy access in the West African sub-region. It's one of the countries with the highest access level. Currently at 85%. And out of this 85%, 100% of people who live in the rural... Urban centres have access to electricity. It means that the rest of the 15% are people who are in rural areas. And out of the people who are in rural areas, most of them are in the island and lakeside communities. That's why I chose to do my project in the first place. And so when we are talking about equity, we are doing well. But there's more to be done. But for those who are living in those areas, though they may not form a majority of the population, they also have the right to access, according to our constitution.

0:09:35.7 S1: Okay. So if we look into that 85% access that's today... You're talking in the context of the national grid?

0:09:47.2 XXXX: Yes.

0:09:47.9 S1: Okay. How is the... You talked earlier about productive use. How is the use of that energy? Would you describe it as highly productive in the people's livelihoods? Or how would you describe the productive use of that electricity access?

0:10:19.7 XXXX: In their countries? Should we take it at a country level?

0:10:22.1 S1: Yes. At a country level.

0:10:22.3 XXXX: At a country level I would say that there is access, but when it comes to productive use, it's not the best. Because a country that has their the residential sector taking majority of the power that is generated, it means that they are not... We don't have industries. If the industries would take majority, then we can say that there is productive use of the energy.

0:10:56.4 S1: Okay. Okay, that's great. Alright. So let's talk about gender equity. How would you describe gender equity in energy access?

0:11:10.5 XXXX: Very bad.

[laughter]

0:11:14.9 XXXX: Yes. I don't want to sugarcoat it. It's bad. My visit to some of these island communities, you see that there is a disconnect between the rest of us and those who are in the island communities. You would ask yourself if this is Ghana. Whether they are in our current age. And whether they even know about what coronavirus is. Yes. Yes. There's a link between that and the coronavirus...

0:12:00.5 S1: Yeah, yeah. I get it.

0:12:00.8 XXXX: Yes. Of course. Because if they had access to information through the media, which they could have gotten if they had access to electricity, I don't think they would be behaving the way they are currently behaving in such a period. And then when it comes to women, they are most hit by the energy problem because most of these communities have men as the head of their the families. And they are mostly fishermen. When they pull their boats, some of them, they go to fish three days. Like in the house where I was staying, the man said it's every three days that they go and then check on their nets. But they only sit at home and relax, while the woman does the most of the job. And when they bring back the fish, the woman has to smoke the fish apart from taking care of the house, cooking. They'll have to go a long distance to go and grind their corn and all that, it's quite bad. And at night, the whole place is dark, I think it's kind of dangerous for women at night.

0:13:36.3 S1: Okay, I see. So do you think gender affects the way energy is used at the household level in a general... In a national context?

0:13:55.6 XXXX: Gender affects...

0:13:57.0 S1: The way energy is used.

0:14:00.6 XXXX: Yes, yes, yes, yes. Because we have gender roles, whether we like it or not, we have gender roles. It's the duty of a woman to cook. Yeah. And that the man determines the kind of appliances that are brought home. If a woman had the power, she would buy a blender, a freezer and all those things, but when it comes to a man, the first thing that he would like to buy is the entertainment stuff, a TV, a radio. And it affects [0:14:44.1] \_\_\_\_.

0:14:45.1 S1: Right. Okay, but do you think it will be important for our policy interventions to prioritise gender, gender access, or equitable... Gender equity in our energy policies?

0:15:11.0 XXXX: Yes. It's very important. They are working on it, it's in the pipeline. And the... Economic... What is it? ECOWAS Centre for Renewable Energy and Energy Efficiency. They have come up with a document that has entreated countries in the ECOWAS, in the West African sub-region to make efforts to mainstream gender needs in their energy policies, so it's an emerging research area. Yeah, policy makers are aware.

0:15:55.0 S1: Okay. So if you take the... In the context of women, do you think there are different... There's a different level of access for various groups of women, say the youth versus adult, the low income versus high-income? Do you think there is any differences in their levels of access to energy? Or even if you look at ethnic backgrounds, do you see any differences in their levels of energy, energy access?

0:16:38.9 XXXX: I have not read any data on that, so I would not like to say, but I know that there are disparities in access to energy between the south and the northern parts of Ghana, so it's something. Age gratifications, I cannot talk to that issue. I cannot talk to that issue yet.

0:17:08.8 S1: Okay. How about income levels?

0:17:10.3 XXXX: Yes, of course, because we pay for electricity. If you can afford, you can do a lot of things.

0:17:22.8 S1: But do you see it really having a... From your personal observations, experiences, do you see these differences in level of income affecting women's access to energy?

0:17:42.3 XXXX: Yes, yes, it does. The income level, it has an effect not only on energy access, but on other rights. Women who are working, they're empowered and they can... They have some financial power, they are able to get all that they want and so access. With a woman who has to subdue or it's in a deprived area, she cannot access it.

0:18:23.0 S1: How about the rural-urban divide, so much of your research is focused on the remote communities.

0:18:31.7 XXXX: Yes.

0:18:32.0 S1: Can you describe maybe the differences in level of access to energy for women in these rural communities versus urban women?

0:18:47.5 XXXX: I would say that one of the biggest... Okay, not biggest, but most populated islands that I went to and it didn't have access to electricity. It is called Lala, it's in the Sene East district, Yes. Sene district of Bono Region.

0:19:10.0 S1: You said it's called Lala?

0:19:13.2 XXXX: Lala, yeah. When I went there, I see that about one out of 20 homes had some sort of lighting that they can use at night, not national grid, of course, but a solar home system, yes, for light, just light. Yeah, you can imagine how...

0:19:48.4 S1: Yeah, that's serious. But compared to the urban areas, how do you see it?

0:20:00.8 XXXX: For the urban areas, people have electricity at their disposal. They tap into it when they like. They put it everywhere they want to put it, some do not even pay for it. So it's abundant in the urban, but very scarce... It's like gold in the rural area.

0:20:28.4 S1: Yeah, I can imagine.

0:20:30.3 XXXX: Yes, yes, yes. For us, we don't value it anymore. We use... People leave their lights on throughout... Over the weekend, but for those in the rural areas it's very bad. Scarce.

0:20:47.1 S1: But apart from electricity, what forms of energy do these women in the rural communities have access to, if you could describe that a little bit?

0:21:00.9 XXXX: They use... I'm still collecting my data, but from what is going on they use firewood and charcoal for cooking. Firewood and charcoal for cooking.

0:21:15.6 S1: Are these sources easily accessible?

0:21:18.1 XXXX: They say it is, what I have gathered so far.

0:21:28.4 S1: Okay. I see. But would you say even, I mean, in spite of the electricity access in the urban areas, urban women still rely on wood fuels, charcoal, wood?

0:21:44.7 XXXX: Yes. Charcoal, not wood fuel, but charcoal. A lot of urban women rely on the charcoal. Some even have the perspective that there are some kind of foods that when you cook on a gas cylinder, it doesn't get cooked. Some women have that perspective for example when you're cooking banku, they say that when you cook banku on a gas stove it doesn't get cooked.

0:22:21.5 S1: That's interesting.

0:22:24.6 XXXX: Yes. A lot of people... You can conduct a survey and you will see that.

0:22:33.3 S1: Okay. I see. Alright. So in the national context, or even if you could speak to the community, from the community to the national context, do you think when new energy infrastructure is provided, does it benefit women more than men, or men benefit more than women?

0:22:56.9 XXXX: I don't get it. At the national level, whenever capacity is added to the national grid, you want to know who benefits more?

0:23:15.2 S1: Yeah, between men and women. Or like if you see, if you think there is any differences in terms of who benefits more.

0:23:26.9 XXXX: I think that it depends on the location and what you're using the energy for. Yes.

0:23:37.9 S1: Okay, could you explain that a little bit?

0:23:42.9 XXXX: In terms of location. If we send electricity to... Let me use a mini grid project in one of those islands that I'm talking about. Women will benefit, because men don't go and check on their nets at night. But women will have to smoke the fish at night. So then they use the electricity to smoke their fish at night. They can cook at night, they can help in the upkeep of their children at night. Children will do their homework at night and all that. Whereas when you bring electricity access to an urban or peri-urban centre. If both the woman and man are public servants, they're both there to benefit equally. Sometimes the woman may have access to other devices that she can use in the kitchen, but I think nowadays men help women a lot.

0:25:10.6 S1: Okay, I see. Alright, so in terms of participation in decision-making, do you see women participating in equally in decision-making of energy access, say at the household level, at the community level, or even at the national level?

0:25:35.2 XXXX: My views of what I have seen and heard so far, women are marginalised when it comes to decision-making in energy projects.

0:25:51.1 S1: Okay. So is it...

0:25:51.6 XXXX: Do you want me to expand on that?

0:25:53.7 S1: Yes, that would be great.

0:25:57.8 XXXX: Well, normally before such energy decisions... Devices are acquired. There's a question in my questionnaire asking them whether they have to ask... The women, whether they have to ask permission from their husbands before they acquire. They said... But they... Most of them have to ask permission because most of them do not have their own source of livelihood; their livelihood depends on the man's catch. The man knows what is coming in. If they had their own livelihood, their earning, they could take some decisions on their own.

0:26:43.8 S1: Okay. But how about at the national level, do you see women participating equally in, say, policy formulation, implementation of policies?

0:26:56.3 XXXX: No, no, no. When you look at the list of the people who contribute to most of these policy documents, it is just a few women, the names... When you are reading the report, and then you are checking the names of those who have contributed to the policy document, you'd see a... When you read the policy document, about 80% of them do not have specific policies for women. It's like we are all considered as one; we are all considered as one, yeah. And also, I have participated in at least three environmental impact assessments, and when you go there, few of the people from the communities who come are women, just a few of them. And they are even not able to express themselves because the men are there. They have a lot of... Most of these societies are chauvinistic societies.

0:28:22.7 S1: Okay, okay, I see. That actually... I think your response actually addressed the next question, I was about to ask whether these views are based purely on your research or other... So I think you've addressed the next question by referring to the environmental impact assessments that you have participated in. Yeah, so my next question is, to what extent does... I know you've already mentioned that your study is focused on energy access for women, but if you could explain a little bit, to what extent does gender factor into your work on energy access? And... Yeah, or if you could refer to specific component...

0:29:23.7 XXXX: Specific objectives. One of my objectives is to critically analyse the current... All the existing... I don't know if I can do all but...

0:29:42.0 S1: Yes, you can.

0:29:43.2 XXXX: Policy review... Conduct a specific review of existing policies to see whether they have considered... They have mainstreamed or they have made effort to inculcate, integrate the needs of women in such policies. Yeah and the... There's another objective that also seeks to empower women, to look at the productive use of energy. Or not just... I'm not interested in just access; access is not enough. For me, access is not enough, but women should have enough energy, such that they can go into productive ventures with the kind of energy. I'm saying this because some of the mini grids that have been... Mini grid projects that have been implemented in these island communities, for instance, Atigagome... There's an island like that that's called... Yes. When you go there, the people complain of low voltage, that the installed capacity... The population has outgrown the installed capacity. So they can have light but it is not stable, low voltage, and with the low voltage you cannot do anything productive with it. You can only see, and seeing is not enough. You cannot use a blender, if you cannot use your blender, I don't see it to be productive. If you cannot use a refrigerator and you have electricity, I don't see it to be productive.

0:31:54.8 S1: Yeah. Okay. Is this because of the source? If you could describe the source of this energy, is it from solar? Is it...

0:32:04.4 XXXX: It's solar, solar, solar, solar.

0:32:06.1 S1: Solar-based.

0:32:06.2 XXXX: It's not... You we cannot blame it on the source, no. I will not blame it on the source. It is issue with design and planning phase. Yes, we have something we call the hidden mix of energy. Yeah, so when you come and ask someone... Or hidden energy mix. Something like that. I've forgotten the exact technical term. When you conduct a survey, you come and ask someone, you go and ask someone, "If you have light, what will you use it for?" The first thing that the person say, "Oh, I want to have a light bulb or I want to have a radio, a television". They would forget some of the things. But when they have access and they are paying and they see say that, "Oh, okay. We can pay". They would like to go for a freezer, they would like to go for a woofer, that will consume more energy. So as we grow our energy needs... When we have access our energy needs also grow. They include the planner... Or at the design phase they don't make considerations. They don't make arrangements for further extension or what to do when such things happen. And you put so much pressure on the system and the system cannot give off its specs.

0:33:52.5 S1: Oh, Okay. Okay. I see. So coming back to your research objectives that address women, how do you expect these objectives to influence or have an effect on gender equity?

0:34:14.8 XXXX: My research is a funded one. So I'm supposed to send, after I have collected the data and I have analysed it, the next phase is for me to engage stakeholders in the energy sector, some of representatives of the women from island communities. So that the stakeholders and then the women will meet and they will dialogue and then will look at how to integrate or mainstream gender needs into the existing policies that we have. So that's how I seek to make some impact.

0:35:09.8 S1: Oh, okay. That's great. Okay, so a bit on policies, do you think Ghana's energy policies are gender-sensitive?

0:35:26.6 XXXX: They are but not enough.

0:35:29.3 S1: Oh, okay. Could you...

0:35:32.0 XXXX: Yeah. Because if you look at the NDCs, they seek to promote clean cookstoves. They want to distribute LPG cylinders. Yeah, there are some elements from which women can benefit, but it is not enough. Yes, definitely. If we are talking about equity, then it is not enough. Maybe if it is equality then... [chuckle] But when it comes to equity it is not enough.

0:36:11.6 S1: Oh, okay. Could you expand on that a little bit, the equity and equality part?

0:36:18.2 XXXX: [chuckle] Well, equality means you are giving everyone the same platform so... I think, yeah. When I go to the classroom... Let me use something in the context of energy. When you are in the city, you are in the city and you want electricity, there is a grid that passes by. You just tap into it. You just have to go and tap into it and then you get it. Right? It's not so difficult?

0:37:02.0 S1: Yes.

0:37:03.1 XXXX: Yeah. The government rolled out a policy that they wanted to distribute solar home systems in the rural areas. But upon... Whilst the project was still ongoing, they... Should I say secretly? I don't know whether it was public, but I didn't know until recently that there was a barrier. They intentionally put a barrier, so that not everybody would get the solar home system. And at the end, it is the advantaged people, the people who were advantaged, who were able to get the solar home system instead of the disadvantaged in the rural communities. The barrier was that if you can afford the fee for the installation, you can have the solar home system for free. If you cannot afford, then you cannot, you cannot get it. Most households with women as their heads could not afford this legal fee to just... If maybe if there is a payment plan they will try, but they intentionally put a barrier which was very bad. From...

0:38:38.0 S1: I see. Okay. Okay, so you've already mentioned one of the gaps in relation to the solar energy distribution policy. But do you also see any additional gaps or barriers that limit women's ability to access energy in the Ghanaian context?

0:39:08.9 XXXX: Yes. What... Okay. Maybe. Actually, what... The point I was trying to make is that when you want to give someone equity, if you look at the strength of the person... Let me go to the classroom and say... I'm a teacher, the classroom example works more for me. When I am teaching, then I should be able to know that students have different needs. Some have dyslexia, dyscalculia, whatever that is. So If I'm teaching, I should give the students who have special needs special attention; I should not treat everybody as equal. Yes, so when I want to give equity, then it means that I'm considering... When I'm talking about equity then it means I'm considering the special needs of the individuals that I'm dealing with. Yes, that's what I meant by the barrier that they created. Even though they were distributing, women cannot pay an upfront fee because they have... Most of them they do not have any source of livelihood, but maybe if they could arrange a payment plan for women or they could say, we are sharing for women first before we consider men, maybe we will be happy, not feel bad. [chuckle] That's equity.

0:40:54.9 S1: Okay, but aside the economic limitations...

0:41:01.6 XXXX: Barriers. Yes.

0:41:02.6 S1: Do you also see maybe any social, cultural limitations?

0:41:08.2 XXXX: Yeah, when information is being passed on, the women do not get it. Let me give you example, during our community entry stage, when we went, we had a contact person, we called that person and said, "Okay, we are coming to your community, so inform them we are coming to meet the community". When we go there, at the meeting with the chief and all these people, you scarcely see women over there. On occasion, I told the leaders that... That was at the Konkomba community, I remember well, I told them that my project is more interested in women than men. I told them because there was no... At that place, there was no woman, and they said that they would relay the information to their wives.

0:42:25.4 XXXX: And that each of them had at least five women in their household, that's including their wives and their children, of course their daughters, maybe their sisters... That's what they meant by that. But before a woman can take a decision, the woman will have to consult with the man. So whatever information that I need, I should tell them, so that they will tell their women, and after all, if I tell the women, the women cannot afford to. The women are not the people who are going to pay for the electricity. Men would rather I speak to them and... So that they would send the information to the women. I thought that the women could have also spoken for themselves.

0:43:17.2 S1: Right, okay. XXXX, I think I would really like to visit one of these communities with you, because it sounds very, very interesting. [laughter] Yeah, I would really like to visit one of these communities.

0:43:32.6 XXXX: Okay. We can arrange that.

0:43:35.5 S1: Yeah, maybe later. Yeah. Okay, so how do we... From your perspective, how do you think gender equity in energy access can be improved? I know your study is still ongoing, but from the observations you've made, would you be able to make any preliminary recommendations as to how we can improve gender equity in terms of energy access?

0:44:09.5 XXXX: I would just say that we should... First of all, let me make a quote. Kwegyir Aggrey says that when you educate a man, you educate an individual, but when you educate a woman, you educate the a whole nation. The same thing applies to electricity access. When you we give electricity access to a woman, it tends to impact more people than giving it to a man, because a woman has related... Has more relations with people than the man. Yeah, and I'm not talking about blood relations, but in her day-to-day activities.

0:45:06.2 S1: Interactions.

0:45:07.3 XXXX: She has children, in fact, when we went to some of these communities, if you see the school... Some had no schools and some of them to... The school was just so bad. So I would imagine what the children would be doing during the COVID era. People in the cites were watching TVs, but these children had nothing like that. They were watching these joy educational programs. Yeah, they had nothing like that, but I think that when women have the right and power to influence energy access, they would think about their children and then that would bring development. Education would be at a higher level in such communities.

0:46:04.4 S1: Okay, I like that quote you started with. [laughter]

0:46:08.2 XXXX: Yeah, yeah, so give us energy access, we need it.

0:46:10.9 S1: Okay, would you say in an ideal situation, you would want to see women rather in charge of the decision-making?

0:46:22.7 XXXX: I would not say that I want to see women in charge, but I want affirmative actions. [laughter] Equal opportunity to contribute.

0:46:37.6 S1: Equal opportunity. Okay.

0:46:39.6 XXXX: Don't decide for us, we can decide on our own. We want to take part in the decision-making stage. Thank you.

0:46:48.5 S1: Okay. I see. I mean, you're talking both at the community, national... And the national level, right?

0:46:57.7 XXXX: Yeah, yeah, yeah.

0:47:00.4 S1: Okay, right. That's great. So maybe just to the last few questions, a bit on energy transition, so we know Ghana, we are still highly dependent on hydro, but we are also making some... We are also seeing some increases in thermal natural gas LPG, and we've also seen over the years, government has made some promises to increase our renewable energy contribution up to 10% by 2020. Do you... From all of this... From this landscape, do you see government of Ghana being very committed to energy transition, is there any evidence or any specific things that you can point to that indicates that Ghana is committed to energy transition?

0:48:08.6 XXXX: I would say that there's bureaucratic evidence document. Ghana has all the nice policies for the energy transition, but the efforts are in the opposite direction, that's what I would say.

0:48:33.3 S1: Okay, so in the effort section, can you expand on that a little bit?

0:48:42.5 XXXX: Yeah, because if we have excess capacity, like we have excess... First of all our renewable energy contribution is less... Is 1% as of... By the end of 2019, energy that is like this, it's just a little bit below 1%. So the... Akosombo is not renewable.

0:49:17.5 S1: Yes.

0:49:19.1 XXXX: Yeah, so we still have more to do, if Akosombo is not renewable we have more to do. We can't be hydro, hydro. And we have all the nice strategies, we have all the... An act of parliament, we have a lot of standing orders, yet what we have to do for instance when the... 2011 Act, the Renewable Energy Act established that there should be a renewable energy fund, during the... From 2011 to 2019, the fund did not receive anything from government. If government was committed to developing the renewable energy sector or increasing the share of renewable energies, the Act would not just be a paper lying and then the actions would be different, the efforts would be different. Yes. If it is a sector that is very important to them, they would have pushed some funds into... Some money into that fund.

0:50:45.3 S1: Okay, so specifically in the renewable energy context, what do you think are the key challenges to gender equity?

0:51:05.0 XXXX: The key challenges to gender equity.

0:51:09.2 S1: I mean in the renewable energy context.

0:51:15.1 XXXX: Everybody will tell you that... No, not everybody, I can't speak for everybody, sorry. [laughter] On the upfront, our environment is good. Ghana has a good environment for... We have created a good environment for renewable energy investment and implementation, but there is no demand for renewable energy from the private sector or individuals because we cannot afford it. We are buying... People are still buying candles. They're buying kerosene jars, they're buying torchlights. Why are they not demanding for solar home systems? If they are demanding for solar home systems then we can say that the market will... If the market is growing then we can now talk about the other barriers such as the availability of skills, technological issues, and if the systems are good enough. Don't bother you get it. What I am trying to say, for me it is the financial barrier.

0:52:46.9 S1: Challenge, oh okay. Okay.

0:52:48.3 XXXX: Yes. It's the first for me, it is the first thing to look at. If people have enough financial power, they will make a demand, and if they make a demand the market will grow.

0:53:01.8 S1: Okay, okay, I see, so in that context, do you see or have you seen, maybe say the last 10 years, do you think there has been any... Have you observed any changes at the household level in terms of the type of energy that is used, whether households are moving from non-sustainable sources to sustainable sources, have you observed any changes?

0:53:33.2 XXXX: When you ask me such a question, I'm an academic, so I will tell you what I have read which is still through Twitter but it is not verified, let me make that disclaimer please. Yes. I read through, when I read they tell me this but I have not verified it. According to the energy statistics there is improvement because there is a reduction in demand for firewood. Yes, and even the energy intensity of the economy has reduced, so that is through Twitter, but I have not verified that.

0:54:21.6 S1: But from your personal experiences in your interactions with households, have you seen... Maybe households, probably... Have you seen maybe households are now using LPG more, or they are still more dependent on bio-fuels or household are using solar energy more?

0:54:44.0 XXXX: I think they are trying to adapt. More people are understanding the need for, the use of LPG gas burners and LPG, yeah. A lot of the people are shifting from firewood to charcoal for that one it is evident, but when it comes to LPG it is still quite low.

0:55:21.3 S1: Okay, XXXX my last question. So let's talk about gender disaggregated data in the context of energy. Do you think it is important for Ghana to have such data and can you describe a little bit about the current status whether such data is available?

0:55:50.0 XXXX: I haven't come across the data on... Gender disaggregated data in energy sector, I haven't come across that. I think that it is very important. It's definitely very important. It is this data, this kind of data that can inform policies that will mainstream gender needs. Yes. Policies that will be able to push for equity, gender equity in the energy sector. So I think it is very important for us to have such data.

0:56:42.0 S1: Okay. Right. So that was the last question. So we've talked about equitable energy access, we've talked about the role of women ensuring gender equity, we've talked a little bit about policy-related issues and then energy transition. Is there anything that you think we need to take into consideration which we have not mentioned in this study? Anything you'd like to add to this study?

0:57:23.1 XXXX: I would like to add my voice to your research by saying this, while we are fighting for energy access for women, access to clean energy, we should look at a plan to empower women with it because most of the women when you go... Most of them when you ask them, if you had electricity what will you do? The only thing they tell me is, "I will sell sobolo", how sustainable is that business? I don't know whether you get my point, me, I no longer buy sobolo, but if everybody can store sobolo in their fridge at home, who would buy sobolo? I don't think it is a sustainable venture but as to how... I would rather entreat that we look at some business models whilst we are looking at providing access for them. Otherwise we will provide access, after that they will not know what to do with it. Yes.

0:58:46.7 S1: Okay. I see, I see. So you are referring to the productive use of the energy?

0:58:56.9 XXXX: Sure, that's what I stand for.

0:59:00.5 S1: Okay, I see, alright. Right XXXX, thank you very much for your time.

0:59:05.3 XXXX: Thank you too. Thank you too.

0:59:05.7 S1: Thank you for your insights, I really, really appreciate it. So we are still... This is an ongoing research so I will update you as and when there is anything new, whether there is a publication or anything to be shared. Okay, and we are also planning for a regional workshop so, it's still at the planning stage, so I'll keep you updated on it in case you are available to participate.

0:59:45.4 XXXX: Okay, thank you very much.

0:59:46.7 S1: Alright. Thank you very much, XXXX, and have a nice day.

0:59:49.9 XXXX: You too.

0:59:50.8 S1: Okay. Alright. Bye-bye.

0:59:54.3 XXXX: Bye.