

**Sample Baseline Questionnaire:  
For Solar Water Heater roll-out Projects**



CITY ENERGY SUPPORT UNIT  
a south african sustainable energy and  
climate protection initiative



**SOLAR WATER HEATER PROJECT FOLLOW UP SURVEY**

Questionnaire No. (office use only)	
Checked by (office use only)	
Coded by (office use only)	

**INTRODUCTION**

Hello, my name is \_\_\_\_\_.

I work for the solar water heater project. We have been asked to visit the households who have received solar water heaters. We would like to ask you some questions. You might already be familiar with some of the questions from the first survey.

During the questionnaire, we will write down information about how you perceive the solar water heater project, if you are happy with the technology and which things you would like to see improved. This will help us to keep track of your satisfaction with the project and ensure that we are fulfilling your personal expectations and those of the community.

Please note that the information you give us is **confidential**. All your answers will be added to those from other participants, and nothing you say will be quoted directly. Please feel free to say exactly what you want to say in response to the questions that I am going to ask you. We will not share your personal information with any other person or institution.

**Are you happy with us asking you now some questions about your household and house?**



Questionnaire details	Date: Area:												
Address	Erf no: Street:												
Electricity and Water	<p>Does your house have a municipal water connection?</p> <table border="1"> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td></td> <td></td> </tr> </table> <p>Does your house have a municipal electricity connection?</p> <table border="1"> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td></td> <td></td> </tr> </table> <p>Does your house have a solar water heater?</p> <table border="1"> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td></td> <td></td> </tr> </table>	Yes	No			Yes	No			Yes	No		
Yes	No												
Yes	No												
Yes	No												
Respondent's details [target the <b>most senior women</b> in charge of the house or, alternatively, the male head of the house]	<p>Surname:</p> <p>First name:</p> <p>Gender:</p> <table border="1"> <tr> <td>Female</td> <td></td> </tr> <tr> <td>Male</td> <td></td> </tr> </table>	Female		Male									
Female													
Male													

For enumerator: Codes for visits (Please tick  accordingly)

RESPONDENT QUALIFIES	
Questionnaire completed	
Selected respondent not at home but appointment made	
Selected respondent at home but not available and appointment made	
No one at home	
DOES NOT QUALIFY	
Vacant house / stand / not a house	
Respondent is not capable to be interviewed / cannot communicate without assistance	
REFUSAL	
Contact person refused	

Interviewer / Supervisor pledge: I **certify** that this interview has been completed in full with the respondent and according to the instructions I received from the **Nelson Mandela Bay Municipality project managers** and it has been thoroughly checked.

Interviewer name:	Tel no:		
Supervisor name ( <b>management only</b> ):			
Sample checked ( <b>management only</b> )	Yes	No	Date:



## **1. Performance and Maintenance of the Solar Water Heater**

**1.1. Please, think back to the day you received the Solar Water Heater. How did you experience the day of installation?**

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**1.2.1. Have you already had to call for maintenance of the Solar Water Heaters? (Please ✓)**

Yes	No

**1.2.2. What was the problem?**

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**1.2.3. Who did you report to?**

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**1.2.4. Did the project technicians come to solve the problem? (Please ✓)**

Yes, they came very quickly (less than 5 days)	Yes, but it took them a long time (more than week)	No, they never came

**1.2.5. Do you know how to stop the Solar Water Heater if it is broken?**

Yes	No

**1.2. How satisfied are you with the performance and maintenance of the Solar Water Heater?**

Satisfied	
Unsatisfied (explain <u>why</u> ):	

**1.3. Would you like to be part of a maintenance system for what you would have to pay a monthly fee or would you prefer to do repairs yourself?**

Maintenance system	Do it myself



**1.3.1. What would be your preferred way of paying the fee?**

Rates and Taxes	Electricity pre-paid meter

**1.3.2. How much could you afford to pay per month to keep your Solar Water Heater maintained?**

R 5	
R 10	
R 15	
R 20	
R 25	
R 30	

**2. WATER CONSUMPTION and EXPENDITURE**

**2.1. Since you got your Solar Water Heater installed, how much did you get charged on average for WATER per month in winter?**

Water	R
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*If they do pay, skip next question.*

**2.1.1. If you do not pay for water, please tell us why not? (Please tick ✓)**

We don't get the bill	
The municipality gives us water for free	
We don't use more than the free 6kl water per month	
We don't have the money to pay the bill.	
Other (please specify)	

**2.1.2. Would you say that what you are charged for water is more, less or the same than you used to be charged for WATER before you got the Solar Water Heater installed? (Please ✓)**

More than before	The same as before	Less than before	Not sure/uncertain

**2.1.3. If the amount charged for WATER has changed, could you explain to us why? (Please ✓)**



**2.2. Even now that you have your Solar Water Heater, do you still heat water sometimes?**

Yes	No

*If NO, skip the next 2 questions.*

**2.2.1. How do you heat water? (Please tick ✓)**

With gas	With paraffin	With fuel wood	With an electric stove (using pots)	With an electric kettle	With an electric geyser	We do not heat water

**2.2.2. How many times per day does the household heat water? (Please ✓)**

Never	1-2 times per day	3-4 times per day	5 or more times per day

**2.2.3. At what time do you use hot water from the Solar Water Heater mostly? (Please ✓)**

5-8am	8-12am	12-3pm	3-7pm	7-9pm

**2.2.4. For what do you use that hot water coming from the roof? (Please ✓)**

Washing clothes		Other (please specify):
Washing dishes		
Cooking		
Bathing		
Tea/ Coffee		

*If they use it for tea/coffee/cooking, skip next question.*

**2.2.5. If you do not use the water for making tea/coffee and cooking, please explain why not?**

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**2.3. Do you provide hot water for other households in the area?**

	For free	For money or similar
Hot water from the solar water heater		
Cold water		

**2.3.1. Has your water consumption changed since you got your Solar Water Heater installed? (Please ✓)**

I use much more water now	I use a little more water	I use less water now	I use the same amount of water	I don't know

**2.3.2. How often do you check the household water consumption on your water meter?**

Never	Once a month	Once a week	Every day

*If NO, skip next question.*



**2.3.3. If you do, where do you check your water consumption?**

On my water meter in my house	On my water bill from the municipality

**2.4.4. Have you found the water coming out of the Solar Water Heater too hot? (Please ✓)**

Yes	No

**2.4.5. Has anybody in the household got burnt with the water coming out of the Solar Water Heater too hot? (Please ✓)**

Yes	No

**2.4.6. HOW have you managed to find a comfortable temperature for your water?**

**2.4.7. Does the house have a garden which gets watered from the house? (Please tick ✓)**

Yes	No

**3. ENERGY CONSUMPTION AND EXPENDITURE**

**LIGHTING and APPLIANCES**

**3.1. What do you use for lighting in your house and how many of each light are in your house? (Please state number of each type)**

TYPE	NUMBER
Conventional light bulb [Incandescent]	
CFLs	
Candles	
Petroleum Light	
Other (please specify)	



**Incandescent**



**CFL**

**3.2. Since the installation of the Solar Water Heater was concluded in your household, how much have you spend in average for ELECTRICITY per month in winter?**

Electricity	R
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*If they pay, skip next one.*

**3.2.1. If you do not pay for electricity, please tell us why not? (Please tick ✓)**

We do not have a connection	
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We can not afford to use electricity.	
We are connected to our neighbour and pay to him.	
We don't use more than the 75 kWh	
Other (please specify)	

**3.2.2. Would you say this is more, less or the same than you used to spend in ELECTRICITY before you participated in the project? (Please √)**

More than before	The same as before	Less than before	Not sure/uncertain

**3.2.3. If your expenditure level of ELECTRICITY has changed, could you explain us why?**

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**3.2.4. How often do you check your electricity consumption (the number of units)?**

Never	Once a month	Once a week	Every day

*If NEVER, skip next question.*

**3.2.5. If you do, where do you check the electricity consumption?**

Electricity meter in my home	On pre-paid slip	On my municipality bill

**COOKING**

**3.3. What kind of fuel do you use for cooking in your household? (Please tick all of them√)**

Electricity	
Paraffin	
Gas	
Charcoal	
Fuel wood	
Other (please specify)	

**3.3.1. In case COOKING HABITS have changed since the installation has been done, could you explain us why?**



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**HEATING THE HOUSEHOLD**

**3.4. Do you use anything to heat your home in winter? (Please tick ✓)**

Yes	No	Not sure

*If NO, skip next 2 questions.*

**3.4.1. If you do, what do you use? (Please tick all of them ✓)**

Paraffin	
Electricity	
Gas	
Wood burner	
Coal	
Other (please specify)	

**3.4.2. Since the installation of the Solar Water Heater was concluded in your household, how much have you spend in average for FUEL FOR HEATING THE HOUSEHOLD (other than electricity) PER MONTH in winter? (Please ✓)**

Fuel for heating the household (paraffin, gas, wood, charcoal,...)	R
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**3.4.3. Would you say this is more, less or the same than you used to spend in FUEL FOR HEATING before you got the Solar Water Heater installed? (Please ✓)**

More than before	The same as before	Less than before	Not sure/uncertain

**3.4.4. If your expenditure level of FUEL FOR HEATING THE HOUSEHOLD has changed, could you explain to us why?**

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#### **4. HEALTH IMPACTS**

**4.1 If you look at the last four winter month, did people in your household suffer of one of the following illnesses? (Please tick ✓)**

Coughing	
Cold/flu (fever, running nose,)	
Sore throat	
Asthma	
TB	
Red and itchy eyes	
Other (please specify)	

**4.1.2. How often (in average) do people in your household suffer from cold, flu, coughing, and sore throat, since you got the Solar Water Heater?**

Very often (3 or more times/year)	Often (twice per year)	Not a lot (once per year)	Hardly ever (can't remember last time)

**4.1.3. Do you think illnesses like flue and coughing in your household have increased, decreased, or remained the same since you got the Solar Water Heater? (Please ✓)**

Increased	Remained the same	Decreased

**4.1.4. Has the Solar Water Heater had any positive or negative impacts on household indoor conditions and household members' health condition? Can you explain what has changed exactly?**

Positive impacts	
Negative impacts	

#### **5. PROJECT ADDITIONAL BENEFITS AND TRAINING**

**5.1. What do you think is the general perception of people in the community about the Solar Water Heater project? (Please ✓)**

People are generally very satisfied	People are generally satisfied but have a few complaints	People complain and they are not satisfied	Don't know/not sure

**5.1.1. If you think there are people in the community who are not satisfied with the project, can you explain us why?**



**5.1.2. What would you say are the main benefits that the project has brought to the community, besides the Solar Water Heater?**

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**5.1.3.. What do you know about the opinion of the people who have not received a Solar Water Heater about the project?**

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**5.2. Has anyone from your household been employed by the project? (Please ✓)**

Yes	No

**5.2.1. How many people from the community do you think have been employed for by the project? (Please ✓)**

Nobody	1-5 people	5-10 people	10-20 people	20-40 people

**5.3. A workshop has taken place in the community to inform about the project. Did anyone from your household participate?**

Yes	No	Not sure

**5.3.1. How did you find the workshop?**

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**5.3.2. Do you know who is funding the project? (Please ✓ answer y/n and thereafter ✓ the option the respondent considers most appropriate)**

Yes	No



National government	Provincial government	Municipality	South African private companies	Foreign private companies



**5.3.3. Why is the municipality implementing this project?**

**5.4. How do you think the project installation has changed your life?**

**5.4.1. Do you have any worries regarding the safety of your Solar Water Heater now you lived with it since some time?**

Yes, because.../No, because...

**5.4.2. What are the biggest changes for women and men caused by the Solar Water Heater?**

**women**

**men**

**5.4.3. Who do you think is in your household benefiting most form the installation?**

**6. HOUSEHOLD MEMBER CHARACTERISTICS**

**6.1. How many people live in this household including you? Indicate TOTAL number of people in the household (incl. shacks).**

*(By household, I mean all the people who live here permanently for at least four days a weak, and who usually eat together or take part in joint activities.)*

Number of household members:



**6.1.2. How many elderly people above the age of 60 live in the household?**

Number of elderly people:
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**6.1.3. How many children under the age of 18 do you have living with you in your household?**

Number of children:
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**6.1.4. How many of the people in your household do have special needs?**

(Person in wheelchair, mentally or physically disabled)

Number of people with special needs
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**6.2. Who is the decision maker of the household and how old is that person?  
(Please tick ✓ and specify age in brackets)**

Grandfather	Grandmother	Father/Husband	Mother/Wife	Son/Brother	Daughter/Sister
( )	( )	( )	( )	( )	( )

**8. JOBS, INCOME AND EXTERNAL SUPPORT**

**8.1. How many members of the household earn an income (including jobs and GRANTS)?**

(Please tick ✓)

None	1	2	3	4	5	More than 5

**8.1.2. Which activities bring money into the household?**

(Please tick all of them ✓)

None	Small business	Government grants	Remittances (money send to household by children working in other city or overseas)	Pension	Employment	Others

**Space for comments from households or enumerators:**