

# **LONGITUDINAL STUDY ON ELECTRICITY CONSUMPTION**

**LIRNEasia | LECO | SRL**  
**19<sup>th</sup> Feb 2025**

# **WAVE 1 QUESTIONNAIRE**

## Module A: Geographic and Related Information

This module is designed to collect information about the location and geographic attributes of the household and is not intended to be posed as questions to the participants.

A.1		
ASK: Do not ask. Interviewer to enter the unique ID of the customer and the rest of the information to be auto filled from the LECO database	TYPE: Fill in	
<p>a) Unique ID of LECO customer (to be entered by the interviewer)</p> <p><b>INSTRUCTIONS TO PROGRAMMER: THE FOLLOWING INFORMATION TO BE AUTO-CODED BASED ON THE LECO CUSTOMER DATABASE AND THE UNIQUE NUMBER ENTERED BY THE INTERVIEWER</b></p> <p>b) Province (to be auto coded from the LECO database)</p> <p>c) District</p> <p>d) LECO Branch</p> <p>e) LECO CSC area</p> <p>f) Meter type</p>		

## Module SC: Screener

### Introduction

#### INSTRUCTIONS TO INTERVIEWERS:

**ASK TO SPEAK TO THE HOUSEHOLD HEAD (THE PERSON RESPONSIBLE FOR MAKING THE MAIN HOUSEHOLD FINANCIAL DECISIONS). IF NOT AVAILABLE, CONTACT THE SECOND-MOST KNOWLEDGEABLE PERSON REGARDING HOUSEHOLD DETAILS.**

**IF BOTH ARE NOT AVAILABLE, THE HOUSE SHOULD BE REVISITED AT A LATER TIME (THE TIME OF DAY BEING DIFFERENT TO THE TIME THAT THE FIRST VISIT WAS MADE; INQUIRE FROM OTHER MEMBERS AS TO THE TIME THE RELEVANT PERSON WILL BE HOME. A MINIMUM OF THREE ATTEMPTS TO REACH THIS PERSON SHOULD BE MADE BEFORE A HOUSEHOLD IS REPLACED.**

#### INTERVIEWER TO READ:

Hello, my name is \_\_\_\_\_, I am from \_\_\_\_ . Currently, we are conducting a survey among LECO customers to understand various aspects, such as the electricity usage habits of different household types, the appliances commonly used in households, and how the physical attributes of a household influence electricity consumption.

This study is conducted together with LIRNEasia, another research organization. LECO has partnered with LIRNEasia for this survey and has shared the contact details of a sample of its customers.

W1_Sc.0		
ASK: All Respondents	TYPE: Single Selection	Ref: RECS-Your Home
<p>Is this premises used as a household or for a business / commercial purpose?</p> <p><b>INT. INSTRUCTIONS: If used as both household and for business purposes, mark as household and proceed.</b></p> <ol style="list-style-type: none"> <li>1. Household → <b>PROG. INS: CONTINUE</b></li> <li>2. Business purposes → <b>PROG. INS: TERMINATE</b></li> </ol>		

W1_Sc.1		
ASK: All Respondents	TYPE: Single Selection	
<p>Are you the household head? By household head, I mean the person who makes the most important financial decisions in the house/the person who contributes to the maximum of HH day-to-day expenses.</p> <ol style="list-style-type: none"> <li>1. Yes → <b>PROG. INS: GO TO W1_Sc.3</b></li> <li>0. No</li> </ol>		

W1_Sc.2		
ASK: IF W1_Sc.1 = 0	TYPE: Single Selection	
<p>Are you able to accurately tell me about the details related to the household?</p> <ol style="list-style-type: none"> <li>1. Yes</li> <li>0. No → <b>INT. INSTRUCTIONS: seek out suitable respondent; if not available, inquire as to when either of them will be available and revisit at that time. Thank respondent and continue to W1_Sc.3 then terminate</b></li> </ol>		

W1_Sc.3		
ASK: All Respondents	TYPE: Single Selection	
<p>Record number of attempts that have been made to meet with this household respondent.</p> <ol style="list-style-type: none"> <li>1. 1<sup>st</sup> Attempt</li> <li>2. 2<sup>nd</sup> Attempt</li> <li>3. 3<sup>rd</sup> Attempt</li> <li>4. Replacement from database</li> </ol>		

## Module CS: Consent form

As mentioned, we are conducting this survey among LECO customers on their electricity consumption habits and usage. This survey will consist of three rounds where we will conduct three interviews with you within the next one year. i.e.; one interview will be conducted this month, then 2<sup>nd</sup> interview in another 2-3 months and the third interview in another 2-3 months after the second interview.

If you agree, we would like to ask you some questions regarding your household and the electricity consumption at your household. This will take about 60 minutes in total.

If you choose to participate, please be assured that all the information given by you will be kept totally confidential. It will be shared with LIRNEasia only. This information will be combined with similar information from thousands of other people in to look at the average behaviour across society. There are no obvious physical, legal, or economic risks associated with participating in this study because your information will not be used in an identifiable manner.

Further, based on your consent, LECO will provide your past electricity consumption data to LIRNEasia.

Participation in this survey is voluntary. You may decline from answering any question at any time. You may also ask questions at any time. You may terminate your participation at any time. However, we hope that you will take part in this survey since your participation is important.

W1_Cs.1		
ASK: All Respondents	TYPE: Single Selection	
Do you consent to participate in this study and to provide your data to LIRNEasia?		
1. Yes		
0. No à <b>TERMINATE. RANDOM REPLACEMENT OF HOUSEHOLD.</b>		

W1_Cs.2		
ASK: All Respondents	TYPE: Single Selection	
May we audio record some parts of this interview for quality checking purposes?		
1. Yes		
0. No		

## Module EM: Electricity Meter Details

W1_EM.1		
ASK: All Respondents	TYPE: Single Selection	
Can you please tell me how many electricity meters are there in your house?		
1. 1-meter → <b>INST. TO PROGRAMMER: DISPLAY DEFINITION OF HOUSEHOLD – 1</b>		
2. 2 meters → <b>INST. TO PROGRAMMER: DISPLAY DEFINITION OF HOUSEHOLD – 2</b>		
3. More than 2 meters → <b>INST. TO PROGRAMMER: GO TO W1_EM.2</b>		

W1_EM.2		
ASK: W1_EM.1 = 3	TYPE: Single Selection	
Can you please tell me how many electricity meters are there in your house?		
RECORD THE NUMBER OF ELECTRICITY METERS: ____		
<b>INST. TO PROGRAMMER: DISPLAY DEFINITION OF HOUSEHOLD – 2</b>		

### DEFINITION OF HOUSEHOLD – 1

**INTERVIEWER TO SAY:** For the purpose of this survey, we are defining the house as the area covered by the electricity meter. Therefore, when answering the questions, please consider only the household area that is covered by the electricity meter which is billed to the address \_\_\_\_ (**PROG: TO DISPLAY THE ADDRESS OF THE HOUSEHOLD**). Please consider all areas such as living rooms, bedrooms, kitchen, washrooms, toilet etc. including the garden areas which are covered by this meter.

## DEFINITION OF HOUSEHOLD – 2

**INTERVIEWER TO SAY:** For the purpose of this survey, we are defining the house as the area covered by the electricity meter. Therefore, when answering the questions, please consider only the household area that is covered by the electricity meter which is billed to the address \_\_\_\_ (**PROG: TO DISPLAY THE ADDRESS OF THE HOUSEHOLD**). Please consider all areas such as living rooms, bedrooms, kitchen, washrooms, toilet etc. including the garden areas which are covered by this meter. However, if there are areas within the household which are covered by any other electricity meters, please do not consider these parts of the household when answering these questions. For example, if there is a room in the household that is covered by another electricity meter or if the upstairs of the house is covered by a separate electricity meter, please do not consider these areas when answering the questions.

W1_B.1		
ASK: All Respondents	TYPE: Single Selection	Ref: RECS-Your Home
Do you or any member of your household own this house or are you living on rent? <ol style="list-style-type: none"><li>1. Yes, I or a household member owns it.</li><li>2. No, I am living on rent and the rent is paid by me or a household member.</li><li>3. No, I am living on rent and the rent is paid by the employer.</li><li>4. No, I or any household member does not own or rent this household. We occupy this household without any payment of rent.</li></ol>		

W1_C.3		
ASK: W1_B.1 = 1	TYPE: Single Selection	
Do you occupy any of the following people in your house? By house, we mean the area covered by your electricity meter. <ol style="list-style-type: none"><li>1. Renters / boarders who are living in your annexe or any other attached place, maintaining separate living conditions but share the same electricity meter.</li><li>2. Boarders who live in your house using a room/s that is attached to your living conditions.</li><li>3. I don't occupy any of the above.</li></ol>		

W1_C.5		
ASK: W1_C3 = 1 or 2	TYPE: Single Selection	<b>INSTRUCTIONS TO PROGRAMMER: TERMINATE IF CODED 2 OR 3</b>
Which of the following best describes your awareness of the electricity consumption of renters/boarders people? Are you aware of details such as the appliances they use and the number of hours they use each appliance, the times they keep the lights and fans switched on etc.?		

1. I know all the details about the electricity consumption of the renters/ boarders; i.e.; the appliances they use and the number of hours they use each appliance, the times they keep the lights and fans switched on etc. → **PROG. INS: CONTINUE**
2. I know some details about the electricity consumption of the renters/ boarders; i.e.; the appliances they use and the number of hours they use each appliance, the times they keep the lights and fans switched on etc. → **PROG. INS: TERMINATE**
3. I do not know any details about the electricity consumption of the renters/ boarders; i.e.; the appliances they use and the number of hours they use each appliance, the times they keep the lights and fans switched on etc. → **PROG. INS: TERMINATE**

## Module B: Housing History and Ownership

**INTERVIEWER TO SAY:** First, we would like to get some information regarding the household; about the household type, when it was built, etc.

W1_B.2		
ASK: All Respondents	TYPE: Single Selection	Ref: RECS-Your Home
<p>Which of the following time periods best describes when your house was built? Knowing when the house was built will help us to understand whether there's any difference in older homes and newly built homes with regard to electricity consumption. for example, compared to a household built before 1980, a household built recently may use different techniques, improved material etc., which will help reduce energy consumption.</p> <p><b>INT. INSTRUCTIONS: If the house was built in parts at different time periods OR a part of the house was re-built, please take the time period as the time when most part of the house was built.</b></p> <ol style="list-style-type: none"> <li>1. Before 1980</li> <li>2. 1980-1989</li> <li>3. 1990-1999</li> <li>4. 2000-2009</li> <li>5. 2010-2019</li> <li>6. In 2020 or After 2020</li> <li>7. Don't know (to be displayed only if W1_B.1 = 2, 3 OR 4)</li> </ol>		

W1_B.5 (SHOWCARD)		
ASK: All Respondents	TYPE: Single Selection	Ref: HIES
<p>Select the best option which describes your house.</p> <ol style="list-style-type: none"> <li>1. Single House - Single Floor → ASK W1_B.8</li> <li>2. Single House -Double Floor → ASK W1_B.8</li> <li>3. Single House – More than 2 floors → ASK W1_B.7, W1_B.8</li> <li>4. Attached house / Annex. → ASK W1_B.7, W1_B.8</li> <li>5. Flat → ASK W1_B.6, W1_B.7, W1_B.8</li> <li>6. Condominium/ Luxury apartments → ASK W1_B.6, W1_B.7, W1_B.8</li> </ol>		

7. Twin houses → ASK W1\_B.7, W1\_B.8
8. Line room/row house → ASK W1\_B.7, W1\_B.8
9. Slum / Shanty → ASK W1\_B.7, W1\_B.8
10. Other → ASK W1\_B.7, W1\_B.8

#### W1\_B.6

ASK: If W1\_B.5 = 5 or 6

TYPE: Fill in

What floor is your house located on? (if the house occupies multiple floors, answer should be the lowest floor) The floor in which your house is located can affect how much energy it needs and how much natural light it gets. Usually, higher floors need more energy for heating and cooling because they're more exposed to outdoor temperatures whereas lower floors might not get as much natural light.

INT. INSTRUCTIONS:

Floor in which the house is located: \_\_\_\_\_

**PROG INS: ONLY INTEGER VALUES CAN BE ACCEPTED**

#### W1\_B.7

ASK: If W1\_B.5 not equal to 1 or 2

TYPE: Fill in

Ref: RECS-Your Home

How many storeys does your house have?

**INSTRUCTIONS TO INTERVIEWERS:** If the household type is a flat or a luxury apartment, please consider the number of floors the respondent's unit occupies. For example, if the respondent's unit is located on the 3<sup>rd</sup> floor but occupies only one floor (i.e.; does not have any connection to an upper floor), then it will be a one storey house. However, if the respondent's unit is located on the 3<sup>rd</sup> floor and has two floors (i.e.; is connected to the floor above from an internal staircase), then it will be considered as a two storey house.

No. of storeys: \_\_\_\_\_

**PROG INS: ONLY INTEGER VALUES CAN BE ACCEPTED**

#### W1\_B.8

ASK: All Respondents

TYPE: Fill in

Ref: RECS-Your Home

Can you please tell me what is the floor area of this household? i.e.; how many square feet does this household cover? Please remember, when we say household, what we mean is the parts of the household that is covered by the electricity meter.

**INSTRUCTIONS TO INTERVIEWERS:** If the respondent is not able to state the floor area of the house, prompt him/ her by asking for the length and width of the household.

State the area of your house in square feet.: \_\_\_\_\_

## Module C: Demographics

**INTERVIEWER TO SAY:** The number of members staying at the household, their behaviour in terms of whether they stay at home whole day or whether they go out, the number of hours they stay at home etc. will have an influence on how electricity is used in your household. Therefore, we would like to get some information regarding the household members such as



how many members are living in this household, their details such as age, gender, whether they are studying or working, how many hours they stayed at home etc..

W1_C.1		
ASK: All Respondents	TYPE: Fill in	Ref: RECS-Your Home
<p>Please tell me the number of members living in this household. By household, I mean the area covered by the electricity meter. If there are members who are temporarily living abroad or living in some other part of Sri Lanka, please include them as well. Also, if there are any boarders or those who are living on rent or if you have any maids/ housekeepers staying in this household, please include them as well.</p> <p>No. of household members: _____</p> <p><b>PROG INS: ONLY INTEGER VALUES CAN BE ACCEPTED</b></p>		

## W1\_C.2: DEMOGRAPHIC ROSTER

**INSTRUCTIONS TO PROGRAMMER: REPEAT THE BELOW QUESTIONS INTO NO. OF FAMILY MEMBERS TIMES.** [Ref: HIES and RECS]

I will now ask a few questions regarding each household member. Please start with the head of the household and then the move from the eldest member to the youngest.

	W1_C.2.a	W1_C.2.b	W1_C.2.c	W1_C.2.d	W1_C.2.d.1	W1_C.2.e	W1_C.2.f	W1_C.2.g	W1_C.2.h	W1_C.2.i	W1_C.2.j	ASK IF C.2.j = ECONOMICALLY ACTIVE (CODED 1,2 OR 3)			W1_C.2.n
												W1_C.2.k	W1_C.2.l	W1_C.2.m	
No	Name of the member  <b>INSTRUCTIONS TO INTERVIEWER: Please enter the first name of the household member.. Do not enter only</b>	Relationship to the head of the household. <b>(SINGLE ANSWER)</b>  1. Head of the household 2. Wife/Husband 3. Son/daughter 4. Son-in-law/Daughter in law 5. Parents of the head of the Household/spouse 6. Grandson/Granddaughter 7. Other relative 12. Refused to answer 86. Domestic servant/driver/watcher	Gender <b>(SINGLE ANSWER)</b>  0. Male 1. Female 2. Other	Year of birth  <b>TO BE FILLED IN</b>	Age <b>(PROG: THIS SHOULD NOT BE ASKED. TO BE CALCULATED BASED ON THE YEAR OF BIRTH AND DISPLAYED)</b>	Ethnicity <b>(SINGLE ANSWER)</b>  1. Sinhala 2. Sri Lankan Tamil 3. Indian Tamil 4. Sri Lankan Moor/Muslim 5. Burgher 6. Malay 9. Other	Religion <b>(SINGLE ANSWER)</b>  1. Buddhism 2. Hinduism 3. Islam 4. Roman Catholicism 5. Other Christian denominations 6. No religion 9. Other	Marital status. <b>(SINGLE ANSWER)</b>  1. Never married 2. Currently married (registered) 3. Currently married (customary) 4. Widowed 5. Divorced 6. Legally separated 7. Separated (not legally) 8. Not married but lives as a Family	<b>ASK ONLY IF THE MEMBER IS AGED 3 YRS OR ABOVE</b>  Current attendance at school or any other educational institution. i.e.; is he/she currently doing any type of studying? This could be a degree, MBA etc., or following a course like CIMA, CIM or a vocational training course? <b>(SINGLE ANSWER)</b>	<b>ASK ONLY IF THE MEMBER IS AGED 5 YRS OR ABOVE</b>  Highest level of education. <b>(SINGLE ANSWER)</b>  0. No Schooling 1. Studying/ Studied Grade 1 2. Passed Grade 1 3. Passed Grade 2 4. Passed Grade 3 5. Passed Grade 4 6. Passed Grade 5 7. Passed Grade 6 8. Passed Grade 7 9. Passed Grade 8 10. Passed Grade 9 11. Passed Grade 10 12. Passed G.C.E.(O/L) 13. Passed Grade 12 14. Passed G.C.E.(A/L) or equivalent 15. Passed GAQ (General Arts Qualifying (External)	<b>ASK ONLY IF THE MEMBER IS AGED 12 YRS OR ABOVE</b>  Main activity usually engaged in? <b>(SINGLE ANSWER)</b>  <b>Economically Active</b> 1. Engaged in economic activity/ currently employed/ engaged in own business 2. Retired and obtaining government/semi-government pension payment and is currently engaged in economic activity (employed elsewhere other than the place where he/she is receiving the pension from / engaged in own business) 3. Seeking for and available to work	Main occupation. <b>(SINGLE ANSWER)</b>  1. Legislator, senior official, and manager 2. Professional 3. Technician and associate professional 4. Clerk 5. Service worker and shop and market sales worker 6. Skilled agricultural and fishery worker 7. Craft and related worker 8. Plant and machine operator and assembler 9. Elementary occupation	Daily wage owner? <b>(SINGLE ANSWER)</b>  1. Yes 2. No	Employment status of main occupation. <b>(SINGLE ANSWER)</b>  1. Government employee 2. Semi government employee 3. Private sector employee 4. Employer 5. Own account worker 6. Contributing family worker	The electricity consumption can vary based on the time that people stay at home. Therefore, we would like to know the number of hours stayed at home during last week for each member. <b>(PROG: VALUES CAN BE FROM 0-168)</b>  <b>INSTRUCTIONS TO INTERVIEWER: PROBE FOR WEEKDAYS AND WEEKENDS</b>

	the initials and the surname	88. Don't know 97. Boarder 109. Other						9. Other	1.Preschool  2. School  3.University  4.Other educational institution  5.Vocational /Technical Institution  6.Pending results G.C.E. (O.L / A.L)  7.Still a toddler  8.Does not attend	Examination)/GS Q (General Science Qualifying examination) 16.Passed Degree / Diploma 17.Passed post Graduate Degree / Diploma 18.PhD 19.Special Education learning / learnt.	<b>Economically Inactive</b> 4.Retired - Obtaining government/semi- government pension payment and currently not engaged in economic activity (not employed elsewhere or not engaged in any own business) 5.Retired from the private/semi- government sector and does not obtain any pension payment. 6.Received other pension payments. 7.Household activities 8.Student 9.Too old / Disable/ unable to work. 10.Other	99.Related to forces.  11.No occupation				<b>SEPARATELY</b>  <b>INSTRUCTIONS TO INT.: Please use the following – 15 min = 0.25 hrs 20 min = 0.33 hrs 30 min = 0.5 hrs 40 min = 0.66 hrs 45 min = 0.75 hrs 60 min = 1 hr If used 24x7 = 168 hrs</b>	

W1_C.4		
ASK: W1_C3 = 1 or 2	TYPE: Single Selection	
<p>You mentioned that there are renters or boarders living in this household who share the same electricity meter. Which of the following best describes how you charge them for electricity?</p> <p><b>INSTRUCTIONS TO INTERVIEWERS: READ OUT THE ANSWERS</b></p> <ol style="list-style-type: none"> <li>1. You charge a fixed amount every month for electricity.</li> <li>2. You charge an amount for electricity depending on the variance of the bill.</li> <li>3. You don't charge a specific amount for electricity but charge a fixed amount for all the utilities such as electricity, water etc.</li> <li>4. You don't charge a specific amount for electricity but charge a varied amount for all the utilities such as electricity, water etc. The amount charged varied based on the utility bills</li> <li>5. You don't charge them for electricity consumption</li> </ol>		

W1_C.6		
ASK: W1_B.1 = 2 or 3 or 4	TYPE: Single Selection	
<p>You mentioned that you are living on rent. Which of the following best describes the payment for your electricity consumption?</p> <p><b>INSTRUCTIONS TO INTERVIEWERS: READ OUT THE ANSWERS</b></p> <ol style="list-style-type: none"> <li>1. You pay the full amount of the electricity bill.</li> <li>2. You pay a fixed amount to the owner every month for electricity.</li> <li>3. You pay a varied amount to the owner every month for electricity. The amount paid varies depending on the variance of the bill.</li> <li>4. You don't pay a specific amount for electricity, but pay a fixed amount for all the utilities such as electricity, water etc.</li> <li>5. You don't pay a specific amount for electricity, but pay a varied amount for all the utilities such as electricity, water etc. The amount paid varies depending on the variance of the utility bills.</li> <li>6. You don't pay the owner for electricity consumption</li> </ol>		

W1_C.7		
ASK: Ask All	TYPE: Single Selection	
<p>Is there any business activity that is being carried out in any part of this household such as a shop, a communication, your own office etc. for which, electricity is used from the same meter?</p> <ol style="list-style-type: none"> <li>1. Yes</li> <li>0. No</li> </ol>		

W1_C.8		
ASK: IF W1_C.7 = 1	TYPE: Single Selection	
<p>What type of business activity is being carried out in this household?</p> <ol style="list-style-type: none"> <li>1. A shop</li> <li>2. A communication</li> <li>3. Other (specify)</li> </ol>		

#### Module D: List of appliances in the household

#### INTERVIEWER TO SAY:

As mentioned earlier, we are doing this study to get an understanding of what all are related to the electricity consumption. As you know, the electricity consumption depends on the electric appliances used in your household. Therefore, I'd like to ask a few questions regarding the electric appliances that are there in your household which are in working condition and a few questions on your usage habits of these appliances.

Appliance category	Appliance (SHOWCARD)	W1_D1. Do you have any of these appliances in your household in working condition which you have used at least once?  If you have boarders or those who are living on rent in your household, please include the electrical appliances used by them as well.	<b>PROG: ASK W1_D2 AND W1_D3 TOGETHER FOR ONE TYPE OF APPLIANCE BEFORE MOVING TO THE NEXT TYPE OF APPLIANCE</b>	
			W1_D2. No of appliance of the type	W1_D3. Duration of usage in hours during the last week <b>INSTRUCTIONS TO INT.: PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY</b>  <b>(PROG: ASK SEPERATELY FOR THE NUMBER OF APPLIANCES)</b> <b>(PROG: VALUES CAN BE FROM 0-168)</b> <b>INSTRUCTIONS TO INT.:</b> Please use the following – 15 min = 0.25 hrs 20 min = 0.33 hrs 30 min = 0.5 hrs 40 min = 0.66 hrs 45 min = 0.75 hrs 60 min = 1 hr If used 24x7 = 168 hrs
KITCHEN APPLIANCES	Refrigerator	1		
	Separate Freezer	2		
	Mini Bar	3		
	Microwave	4		
	Electric Oven	5		
	Electric cook tops (induction cookers, Infra-red cookers, hot plates)	6		
	Electrical exhaust fan fitted above the oven or the hot plate	7		
	Electric Blender	8		
	Electric grinder	9		
	Electric mixer / beater	10		
	Electric food processor	11		
	Rice cooker	12		
	Electric Kettle	13		
	Electric water heater to heat water for drinking purposes	14		
	Toaster / Sandwich toaster	15		
	Waffle maker	16		
	Electric pressure cooker	17		
	Air fryer	18		
	Coffee maker	19		

	Electric grill	20		
	Electric coconut scraper	21		
	Electric Water filter / water dispenser	22		
	Dish washer	23		
CLEANING APPLIANCES	Washing Machine	24		
	Clothes dryer	25		
	Electric Iron including electric steam iron	26		
	Electric Vacuum Cleaner	27		
	Electric floor polisher	28		
	Electric water gun (used to wash cars etc.)	29		
	Electric Lawn mower	30		
ENTERTAINMENT APPLIANCE	TV	31		
	TV antenna	32		PROG: DURATION OF USAGE IS NOT REQUIRED
	Dialog TV / Peo TV / Satellite TV box	33		PROG: DURATION OF USAGE IS NOT REQUIRED
	Radio	34		
	Bluetooth Speakers	35		
	DVD / VCD	36		
	Gaming console/PlayStation	37		
	Sound systems (Subwoofer)/Stereo	38		
	Camera (that needs to be charged using electricity)	39		INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Home theater system	40		
	Electric musical Instruments (ex.: electric organ, electric guitar etc.)	41		
OFFICE APPLIANCES	Computers	42		
	Laptops	43		INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Routers	44		
	Mobile phone – Smart phones	45		INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Mobile phone – Feature phones	46		INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Mobile phone – Basic phones	47		INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Fixed phones	48		
	Power banks	49		INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Printer	50		INS. TO INT: NOT REQUIRED TO ASK FOR THE DURATION OF USAGE UNLESS THERE IS A COMMUNICATION CENTRE ATTACHED TO THE HOUSE OR THERE IS A BUSINESS THAT IS BEING CARRIED OUT AT THE HOUSE.
	Scanner	51		INS. TO INT: NOT REQUIRED TO ASK FOR THE DURATION OF USAGE UNLESS THERE IS A COMMUNICATION CENTRE ATTACHED TO THE HOUSE OR THERE IS A BUSINESS THAT IS BEING CARRIED OUT AT THE HOUSE.
	Fax machines	52		INS. TO INT: NOT REQUIRED TO ASK FOR THE DURATION OF USAGE UNLESS THERE IS A COMMUNICATION CENTRE ATTACHED TO THE HOUSE OR THERE IS A BUSINESS THAT IS BEING CARRIED OUT AT THE HOUSE.
	Photo Copiers	53		INS. TO INT: NOT REQUIRED TO ASK FOR THE DURATION OF USAGE UNLESS THERE IS A COMMUNICATION CENTRE

				ATTACHED TO THE HOUSE OR THERE IS A BUSINESS THAT IS BEING CARRIED OUT AT THE HOUSE.
HEALTH AND WELLNESS APPLIANCES	Hair dryer	54		
	Hair iron / hair curlers	55		
	Electric shavers	56		INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Electric Exercise Machines	57		
SECURITY APPLIANCES	Roller door	58		PROG: DURATION OF USAGE IS NOT REQUIRED
	CCTV camera systems (note to int.: even if there are more than one camera in the system, please consider as 1 CCTV camera system)	59		PROG: DURATION OF USAGE IS NOT REQUIRED
	Electric Alarm System	60		PROG: DURATION OF USAGE IS NOT REQUIRED
	Other Electric Security Systems	61		PROG: DURATION OF USAGE IS NOT REQUIRED
	Electric Bell	62		PROG: DURATION OF USAGE IS NOT REQUIRED
ELECTRIC VEHICLES	Electric vehicles (four wheelers) - cars, vans, SUVs)	63		INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Electric vehicles (two wheelers) - Electric bicycles, scooters	64		INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Electric vehicles (three wheelers)	65		INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
OTHER APPLIANCES	Electric Water pump	66		
	Electric Sewing machine	67		
	Oxygen filter for fish tank	68		
	Geyser / Hot water systems for bathrooms which operate from electricity	69		
	Hot tub	70		
	Electric Fountain / decorative waterfall	71		
	Emergency Light / re-chargeable torches	72		INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Electric heater (to control room temperature)	73		
	Humidifier	74		
	Toys with re-chargeable batteries	75		INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Other (specify)	76		
	Other (specify)	77		
	Other (specify)	78		
	Tabs	79		

## Module E: Housing Characteristics

### INTERVIEWER TO SAY:

Some people think about the ventilation, lighting etc. when building the house. This could have an impact on the electricity usage in the house. Now we would like to ask a few questions regarding the house such as; how it was built, the material used to build the house and the number of rooms etc. Please remember, when we say household, we refer to the area that is covered by the electricity meter.

W1_E.2		
ASK: All Respondents	TYPE: Single Selection	Ref: HIES
<p>What is the main material used to build the outside walls of your house?</p> <p><b>INSTRUCTIONS TO INTERVIEWERS: READ OUT THE ANSWERS</b></p> <p><b>INSTRUCTIONS TO INTERVIEWER: If there is more than one material, please mark the material which is used for most part of the outside walls of the house.</b></p> <ol style="list-style-type: none"> <li>1. Brick</li> <li>2. Cement Block</li> <li>3. Stones/Cube stones</li> <li>4. Cabook</li> <li>5. Pressed soil blocks</li> <li>6. Cadjan / Palmyra</li> <li>7. Wood / Takaran / Asbestos</li> <li>8. Metal Sheet</li> <li>9. Mud</li> <li>10. Other</li> <li>11. I am not aware of that</li> </ol>		

W1_E.5		
ASK: All Respondents	TYPE: Fill in	Ref: RECS-Your Home
<p>We would like to know more about the different types of rooms and different sections in your house. When we say house, we mean the area covered by the electricity meter. How many of the following types of rooms are there in your house? If there are rooms or parts of the household that are not directly connected to the house, but is still covered by the same electricity meter such as a separate kitchen or a toilet, please include these as well.</p> <p>(A room/ section cannot be reported twice. This includes all rooms/ sections (including kitchens, gardens, passages, living rooms and bathrooms) where the aggregation eventually covers the entire house)</p> <p>If anyone permanently sleeps in the room, account it as a bedroom.</p> <p><b>INSTRUCTIONS TO INTERVIEWERS: IF THE STAIRCASE IS INSIDE THE HOUSE, CONSIDER IT AS A PART OF THE HOUSEHOLD (EG.: IF THE STAIRCASE IS ATTACHED TO THE LIVING ROOM, CONSIDER IT AS A PART OF THE LIVING ROOM ETC.). IF THE STAIRCASE IS OUTSIDE THE HOUSE, OR IN A SEPARATE PART OF THE HOUSE, COUNT IT AS A SEPARATE PART.</b></p>		
Living room		
Bedrooms		
Kitchen and/ or pantry / dining room		
Bathroom and / or toilets		
Storage room		
Other rooms / parts in the house including passages, veranda's, balconies, staircase etc.		
Garage		
Security Room		



Garden (including the wall around the garden, if any)	
Other rooms outside the house	

### **W1\_E.6: Room Roster**

**INTERVIEWER TO SAY:** We would now like to ask a few detailed questions about the rooms in your household like the number of doors and windows, the roof type etc. We would like to know these details because we want to understand whether there is a relationship between the level of ventilation and the type of roofing material etc. on the electricity consumption. For example, if the room has good ventilation and lighting, i.e.; if there are a number of windows etc., the amount of time that you need to switch on the fans or the lights may be lower. Therefore, we would like to get more details on each of the rooms in your household including the number of light bulbs, fans etc.

I will now go on a room-by-room basis to cover all the above-mentioned rooms.

#### **INSTRUCTIONS TO INTERVIEWER:**

The order can be decided by the respondent.

If it is a multi-storied house, ask the respondent to start from the lowest floor

#### **INSTRUCTIONS TO PROGRAMMER:**

- **ROOM ROSTER TO BE REPEATED FOR THE NUMBER OF ROOMS MENTIONED IN THE ABOVE TABLE. (W1\_E.5)**
- **EACH ROOM SHOULD HAVE A SERIAL NUMBER. SERIAL NUMBER TO BE OF THE FORMAT "ROOM\_NUMBER".**
- **ORDER OF QUESTIONING SHOULD BE AS FOLLOWS:**
  - **ASK W1\_E.6.a – W1\_E.6.j FOR ROOM NO. 1**
  - **ASK THE LIGHT ROSTER FOR ROOM NO. 1 (IF APPLICABLE, I.E.; W1\_E.6.j NOT EQUAL TO '0')**
  - **ASK W1\_E.6.k FOR ROOM NO. 1**
  - **ASK THE FAN ROSTER FOR ROOM NO. 1 (IF APPLICABLE, I.E.; W1\_E.6.k NOT EQUAL TO '0')**
  - **ASK W1\_E.6.l FOR ROOM NO. 1**
  - **ASK THE AC ROSTER FOR ROOM NO. 1 (IF APPLICABLE, I.E.; W1\_E.6.l NOT EQUAL TO '0')**
  - **REPEAT ABOVE ORDER FOR EACH ROOM**

	W1_E.6.a	W1_E.6.b	W1_E.6.c_1	W1_E.6.c_2	W1_E.6.d	W1_E.6.e	W1_E.6.f	W1_E.6.h	W1_E.6.i	W1_E.6.j	W1_E.6.j_1	W1_E.6.k	W1_E.6.l
No	<p>For what purposes do you mainly use this section of the household?</p> <p>1. Living room 2. Bedrooms 3. Kitchen and/ or pantry/ dining room 4. Bathroom and / or toilets 5. Storage room 6. Gaming room 7.Servant's Room 8. Visitors' room 9. Passage 10. Veranda 11. Balcony 12. Staircase 13. Garage 14. Security Room 15. Garden 16. Other rooms outside the house 17. Study room /Office room 18.Other</p>	<p>In which storey is this section of the household located? (Define ground floor by zero)</p>	<p>What is the main material used for the roof of this section of the household?</p> <p>1.Tile 2.Asbestos 3.Concrete 4.Metal Sheet 5.Takaran 6.Cadjun/Palmyra/Straw 7.Tent 8.Plastic sheets 9.Other 10. Garden – Not relevant</p>	<p>What type of ceiling does this section of the household have?</p> <p><b>INSTRUCTIONS TO INTERVIEWER: SHOWCARD</b></p> <p>1. No ceiling, just the roof above 2. A conventional ceiling 3. A beamed ceiling 4. A hanging ceiling 5. A polythene cover as a ceiling 6. No ceiling, the concrete slab 7. Wooden ceiling 8. Other 9. Garden – Not relevant</p>	<p>What is the main material used for the floor of this section of the household??</p> <p>1.Cement 2.Teraso 3.Tile 4.Granite 5.Wood (finished) 6.Mud 7.Wood 8.Sand 9.Concrete 10.Other 11. Garden – Not relevant</p>	<p>How many doors are there in this part of the house that let in light and air from the outside? That is, how many doors are there that let in light and air into the room from an external environment such as a garden, a balcony or a veranda?</p> <p><b>INST. TO INT: RECORD THE NUMBER OF DOORS THAT OPENS TO OUTSIDE. IF THERE ARE NO DOORS THAT OPENS TO OUTSIDE, RECORD AS '0'</b></p> <p><b>PROG: KEEP SPACE TO RECORD NUMBER OF DOORS. ACCEPT ONLY INTEGER NUMBERS.</b></p>	<p>How many windows are there in this part of the house that let in light and air from the outside? That is, how many windows are there that let in light and air into the room from an external environment such as a garden, a balcony or a veranda?</p> <p><b>INST. TO INT: RECORD THE NUMBER OF WINDOWS. IF THERE ARE NO WINDOWS, RECORD AS '0'</b></p> <p><b>PROG: KEEP SPACE TO RECORD NUMBER OF WINDOWS. ACCEPT ONLY INTEGER NUMBERS.</b></p>	<p><b>ASK ONLY IF W1_E.6.f &gt; 0</b></p> <p>Do you have curtains or blinds for the windows?</p> <p>1.Yes 0.No 3. Garden – Not relevant</p>	<p>Does this section of the household have natural ventilation other than windows, to allow fresh air circulation? This could be a ventilation hole in the wall or an area with a grill on top of the windows which is not covered by the windowpane etc. (SHOWCARD)</p> <p>1.Yes 0.No 3. Garden – Not relevant</p>	<p>How many light bulbs do you have in this section of the household? Please include the roof lights and wall lights when counting the number of lights. If there are lamp shades etc. which has more than one bulb, but all bulbs switch on with one common switch, please count as one light. Also, if there are table lamps, bed side lamps, lamp shades etc. in this part of the household, please include them as well.</p> <p>IF BATHROOM/ TOILET: INT. TO PROBE – Are there any mirror lights? IF GARDEN: INT. TO PROBE – Are there any garden lights or lights on the wall (thaappaya)?</p> <p><b>PROG: KEEP SPACE TO RECORD NUMBER OF LIGHTS. ACCEPT ONLY INTEGER NUMBERS</b></p>	<p><b>PROG: ASK ONLY IF W1_E.6.j &gt;0</b></p> <p>And how many of these bulbs did you use in the last week?</p> <p><b>PROG: KEEP SPACE TO RECORD NUMBER OF LIGHTS. ACCEPT ONLY INTEGER NUMBERS</b></p> <p><b>INS. TO PROG: IF NO. OF LIGHTS NOT EQUAL TO ZERO, REPEAT THE FOLLOWING LIGHT ROSTER FOR NUMBER OF LIGHTS.</b></p>	<p>How many fans do you have in this section of the household? Please include all types of fans such as ceiling fans, pedestal fans, table fans, exhaust fans, tower fans etc.</p> <p><b>PROG: KEEP SPACE TO RECORD NUMBER OF FANS. ACCEPT ONLY INTEGER NUMBERS</b></p> <p><b>INS. TO PROG: IF NO. OF FANS NOT EQUAL TO ZERO, REPEAT THE FOLLOWING FAN ROSTER FOR NUMBER OF FANS</b></p>	<p>How many ACs do you have in this section of the household?</p> <p><b>PROG: KEEP SPACE TO RECORD NUMBER OF ACs. ACCEPT ONLY INTEGER NUMBERS</b></p> <p><b>INS. TO PROG: IF NO. OF ACs NOT EQUAL TO ZERO, REPEAT THE FOLLOWING AC ROSTER FOR NUMBER ACs.</b></p>
“” ,													

## Light Roster

	W1_E.6.n	W1_E.6.o	W1_E.6.p	W1_E.6.q
No	<p>What is the type of the light Bulb out of following?</p> <p><b>INST. TO INT:</b> If the respondent is not sure whether the light bulb is a CFL or an LED, please code it as CFL (SHOWCARD)</p> <p>1.Incandescent 2.CFL 3.LED 4.Halogen 5.Tube Light (conventional) 6.Tube Light (LED) 7.Flashlight 8.Flood light 9. Other</p>	<p>What is the wattage (W) of the light?</p> <p><b>INST. TO INT:</b> If there are lamp shades etc. which has more than one bulb, but all bulbs switches on with one common switch, please add up the wattage of all the bulbs and record below.</p> <p><b>INS. TO INT.:</b> IF THE RESPONDENT DOES NOT KNOW THE WATTAGE, PLEASE MARK AS "0". Í</p>	<p>For how many hours was this light kept switched on last week during daytime. (8am – 6pm)?</p> <p><b>INSTRUCTIONS TO INT.: PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY</b></p> <p>(INSTRUCTIONS TO PROG: VALUE NEEDS TO BE BETWEEN 0 – 70. SHOULD ALLOW DECIMALS)</p> <p><b>INSTRUCTIONS TO INT.:</b> Please use the following – 15 min = 0.25 hrs 20 min = 0.33 hrs 30 min = 0.5 hrs 40 min = 0.66 hrs 45 min = 0.75 hrs 60 min = 1 hr Total number of hours per day from 8am – 6pm = 10 hrs If used every day from 8am-6pm = 70 hrs</p>	<p>For how many hours was this light kept switched on, during last week during night-time. (6pm- – 8am)?</p> <p><b>INSTRUCTIONS TO INT.: PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY</b></p> <p>(INSTRUCTIONS TO PROG: VALUE NEEDS TO BE BETWEEN 0 – 98. SHOULD ALLOW DECIMALS)</p> <p><b>INSTRUCTIONS TO INT.:</b> Please use the following – 15 min = 0.25 hrs 20 min = 0.33 hrs 30 min = 0.5 hrs 40 min = 0.66 hrs 45 min = 0.75 hrs 60 min = 1 hr Total number of hours per day from 6pm – 8am = 14 hrs If used every day from 6pm – 8am = 98 hrs</p>

## Fan Roster

	W1_E.6.r	W1_E.6.s	W1_E.6.t
No	<p>What is the type of the fan? (SHOWCARD)</p> <p>1.Ceiling fan 2.Wall fan 3.Pedestal fan/ Stand fan 4.Table fan 5.Exhaust fan 6.Tower fan 7.Other</p>	<p>For how many hours was this fan kept switched on last week during daytime. (8am – 6pm)?</p> <p><b>INSTRUCTIONS TO INT.: PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY</b></p> <p>(INSTRUCTIONS TO PROG: VALUE NEEDS TO BE BETWEEN 0 – 70. SHOULD ALLOW DECIMALS)</p> <p><b>INSTRUCTIONS TO INT.:</b> Please use the following – 15 min = 0.25 hrs 20 min = 0.33 hrs 30 min = 0.5 hrs 40 min = 0.66 hrs 45 min = 0.75 hrs 60 min = 1 hr Total number of hours per day from 8am – 6pm = 10 hrs If used every day from 8am-6pm = 70 hrs</p>	<p>For how many hours was this fan kept switched on last week during night-time. (6pm – 8am)?</p> <p><b>INSTRUCTIONS TO INT.: PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY</b></p> <p>(INSTRUCTIONS TO PROG: VALUE NEEDS TO BE BETWEEN 0 – 98. SHOULD ALLOW DECIMALS)</p> <p><b>INSTRUCTIONS TO INT.:</b> Please use the following – 15 min = 0.25 hrs 20 min = 0.33 hrs 30 min = 0.5 hrs 40 min = 0.66 hrs 45 min = 0.75 hrs 60 min = 1 hr Total number of hours per day from 6pm – 8am = 14 hrs If used every day from 6pm – 8am = 98 hrs</p>

## AC Roster

	W1_E.6.u	W1_E.6.v	W1_E.6.w	W1_E.6.x_2	W1_E.6.y	W1_E.6.z
No	<p>What is the type of air conditioning used in the room? (SHOWCARD)</p> <p>1. Central AC (Only to your Household) 2. Central AC (For the whole building. Relevant if B.5 = 5 or 6) 3. Individual AC with two components 4. Individual AC with one component 5. Air Cooler 6. Other</p>	<p>IF E.6.t = 3 or 4</p> <p>Is the AC an inverter AC?</p> <p>1. Yes 2. No</p>	<p>Which of the following is true regarding air conditioners?</p> <p>1. The room can be fully closed and sealed and there are no outside openings. When the AC is turned on, the cool air does not go out of the room. 2. The room is fully closed. However, it is not fully sealed. Therefore, when the AC is on, the cool air may leak through the spaces that are not sealed such as the space in-between the door and the door frame. 3. The room is not fully closed. There are spaces where the cool air can leak out</p>	<p>What is the BTU of the AC?</p> <p>INS. TO INT - IF THE RESPONDENT DOES NOT KNOW THE BTU, MARK AS "0"</p>	<p>For how many hours was this AC kept switched on, last week, during daytime? (8am – 6pm)?</p> <p><b>INSTRUCTIONS TO INT.: PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY (INSTRUCTIONS TO PROG: VALUE NEEDS TO BE BETWEEN 0 – 70. SHOULD ALLOW DECIMALS)</b></p> <p><b>INSTRUCTIONS TO INT.:</b> Please use the following – 15 min = 0.25 hrs 20 min = 0.33 hrs 30 min = 0.5 hrs 40 min = 0.66 hrs 45 min = 0.75 hrs 60 min = 1 hr Total number of hours per day from 8am – 6pm = 10 hrs If used every day from 8am-6pm = 70 hrs</p>	<p>For how many hours was this AC kept switched on last week, during night-time. (6pm – 8am)?</p> <p><b>INSTRUCTIONS TO INT.: PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY (INSTRUCTIONS TO PROG: VALUE NEEDS TO BE BETWEEN 0 – 98. SHOULD ALLOW DECIMALS)</b></p> <p><b>INSTRUCTIONS TO INT.:</b> Please use the following – 15 min = 0.25 hrs 20 min = 0.33 hrs 30 min = 0.5 hrs 40 min = 0.66 hrs 45 min = 0.75 hrs 60 min = 1 hr Total number of hours per day from 6pm – 8am = 14 hrs If used every day from 6pm – 8am = 98 hrs</p>

### W1\_E.7

ASK: All Respondents

TYPE: Single Selection

Are there any other parts of the household which are covered by the same electricity meter which were not covered above?

1. Yes → **INST. TO PROG: GO TO W1\_E.7a**

0. No → **INST. TO PROG: GO TO W1\_E.8**

### W1\_E.7a

ASK: Ask if W1\_E.7 = 1

TYPE: Fill in

Ref: RECS-Your Home

Can you please tell me which parts of the house you have missed mentioning earlier? Please mention only the parts you have missed and to which, electricity is supplied from the same electricity meter.

**INST. TO INT: PLEASE STATE ONLY THE NUMBER OF ROOMS/ PARTS OF THE HOUSEHOLD WHICH WERE MISSED BY THE RESPONDENT EARLIER.**

Living room

Bedrooms

Kitchen and/ or pantry / dining room

Bathroom and / or toilets

Storage room

Other rooms / parts in the house including passages, veranda's, balconies, staircase etc.

Garage	
Security Room	
Garden (including the wall around the garden, if any)	
Other rooms outside the house	

**INTERVIEWER TO SAY:** Now I'd like to ask you the details about these parts of the household.

**INST. TO PROG: REPEAT THE HOUSEHOLD ROSTER (W1\_E.6.a - W1\_E.6. z) FOR THE TOTAL NUMBER OF ROOMS IN W1\_E.7a**

W1_E.8		
ASK: All Respondents	TYPE: Single Selection	
Are there any constructions or renovations happening in this household currently?		
1. Yes		
0. No		

## MODULE E-2: OTHER METHODS OF GENERATING ELECTRICITY AND BACKUP ELECTRICITY

### INTERVIEWER TO SAY:

Now I would like to know a few details about other methods that you may be using to generate electricity at your household. As we are interested in the electricity consumption of your household, it is also important for us to know whether you use electricity from the LECO supply only or whether there are any other methods that you use at your household to generate electricity such as generators and solar panels.

W1_E.10		
ASK: All Respondents	TYPE: Single Selection	Ref: RECS – Energy Bills
Does your household have a backup generator to generate electricity if needed?		
1.Yes		
2.No		

W1_E.11		
ASK: All Respondents	TYPE: Single Selection	
Apart from the electricity that you get from the national grid and the back-up generator, do you use any other methods for generating electricity at your household? If so, what methods?		
<b>INST. TO INT.: READ OUT THE BELOW LIST OF METHODS</b>		
1. Solar Energy	Yes – 1, No – 2	
2. Bioenergy	Yes – 1, No – 2	
3. Mini Hydropower	Yes – 1, No – 2	
4. Wind Power	Yes – 1, No – 2	
5. Other	Yes – 1, No – 2	

W1_E.13		
ASK: If W1_E.11_Solar Energy = 1	TYPE: Single Selection	

Is your solar system on-grid or off-grid?

1. On-grid
2. Off-grid

W1\_E.14

ASK: If W1\_E.11\_Solar Energy = 1 TYPE: Single Selection

Do you have an inverter for the solar energy generation system? An inverter is a device that converts direct current (DC) electricity, which is what a solar panel generates, to alternating current (AC) electricity, which the electrical grid uses.

1. Yes
0. No

W1\_E.15

ASK: If W1\_E.13 = 2 TYPE: Multiple Selection

Which of the following purposes do you use solar energy in your house?

0. Cooking
1. Water heating
3. Outdoor lighting
4. Car charging
5. Agriculture equipment and systems (irrigation systems, etc)
6. All the above
7. Other

W1\_E.15a

ASK: If W1\_E.11\_Solar Energy = 1 TYPE: Single Selection

Are you aware of the number of units generated by the solar energy system in the last one month?

1. Yes
0. No

W1\_E.15b

ASK: W1\_E.15a=1 TYPE: Fill in

How many units did the solar system generate last month?

No. of units: \_\_\_\_\_

W1\_E.16

ASK: If W1\_E.11\_Solar Energy = 1 TYPE: Single Selection

When did you start using solar for electricity generation? Was it before November 2022 or after November 2022?

1. Before November 2022
0. After November 2022

W1_E.17		
ASK: All Respondents	TYPE: Single Selection	
<p>Do you have a system to backup / store electricity to be used in case of a power cut? This could be a battery with an inverter where you can use the normal lights and appliances of the full household or a part of the household from the electricity stored in the battery? Please note that what we are referring to here is not the emergency lights.</p> <p>1. Yes</p> <p>0. No</p>		

## Module F: Water Heating

### INTERVIEWER TO SAY:

Water heating is one of the few key activities that all households do using different types of energy sources. Therefore, I'd like to ask you a few questions regarding the water heating habits of your household.

W1_F.1		
ASK: All Respondents	TYPE: Single Selection	
<p>How does your household receive water?</p> <p>1. Protected well.</p> <p>2. Unprotected well.</p> <p>3. Tube well</p> <p>4. Tap Water (National Water Supply and drainage board)</p> <p>5. Tap Water (Community-based water supply and management organization)</p> <p>6. Tap Water (Local Government Organizations)</p> <p>7. Tap Water (Private Water Projects)</p> <p>8. River/ Tank/ Streams</p> <p>9. Rainwater</p> <p>10. Bottled water</p> <p>11. Bowser</p> <p>12. Other</p>		

W1_F.2		
ASK: All Respondents	TYPE: Single Selection	
<p>In the case of using hot water for bathing or having a body wash, what would you or any of the household members mostly do?</p> <p>0. We have an in-built water heating system powered solely by the grid supply.</p> <p>1. We have an in-built water heating system powered solely by solar energy.</p> <p>3. We have an in-built water heating system powered both by solar and the grid supply.</p> <p>4. We have a water heating system powered by a different source.</p>		

5. We don't have an inbuilt system for water heating, we use heated water through an electric kettle/heater.
6. We don't have an inbuilt system for water heating, we use water heated by means such as gas, firewood etc. (other than electric kettle, electric water heater or water heated using any other electrical appliance).
7. None, we do not use hot water for bathing or body wash purposes

W1_F.3		
ASK: if W1_F.2 = 1, 2, 3 or 4	TYPE: Single Selection	Ref: RECS – Water Heating
Does your water heating equipment serve other housing units?		
1. Yes		
0. No		

W1_F.4		
ASK: IF W1_F.2 not equal to 7	TYPE: Single Selection	
Did any of your household members use hot water for bathing in the last week?		
1. Yes		
0. No		

W1_F.5		
ASK: All Respondents	TYPE: Single Selection	
Do you normally boil water before drinking?		
1. Yes		
0. No		

W1_F.6		
ASK: If W1_F.5 = 1	TYPE: Multiple Selection	
What source of energy is used to boil water for drinking?		
1. Gas		
2. Electricity (directly from the national grid)		
3. Electricity (generated from solar energy system)		
4. Firewood		
5. Kerosene		
6. Saw dust/ Paddy husk.		
7. Biogas		
8. Coconut shells/charcoal		
9. Other		

## Module G: Cooking

### INTERVIEWER TO SAY:

Cooking is also a key activity that all households do using different types of energy sources. Therefore, I'd like to ask you a few questions regarding the cooking habits of your household.

W1_G.1		
ASK: All Respondents	TYPE: Single Selection	Ref: RECS – Appliances



How many times did you cook meals at home last week?

1. Did not cook at home last week
2. 1-7 times
3. 8 – 14 times
4. 15 – 21 times
5. More than 21 times

W1\_G.2

ASK: All Respondents

TYPE: Multiple Selection

What sources of energy does your house use for cooking?

1. Gas
2. Electricity (directly from the national grid)
3. Electricity (generated from solar energy system)
4. Firewood
5. Kerosene
6. Saw dust/ Paddy husk.
7. Biogas
8. Coconut shells/charcoal
9. Other

## Module H: SEC and monthly expenditure

In this final section, I am going to ask you a couple of questions regarding education and the occupation of the chief wage earner of your household and the household expenses. The objective of these questions is to classify respondents and look at the data among different categories of respondents.

W1\_H.1

ASK: All Respondents

TYPE: Single Selection

Could you also tell me the highest level of education attained by the chief wage earner in your household? By chief wage earner, I mean the person who contributes most to the household expenses.

1. Illiterate
2. Primary Education
3. Schooling upto Grade 6 - 9
4. O/L or A/L pending / Passed
5. Diploma with O/L or A/L (Non graduate)
6. Other professional certificates with O/L or A/L / Part qualification (Non graduate)
7. Graduate /Post-Grads/ Degree level professional qualification

W1\_H.2

ASK: All Respondents

TYPE: Single Selection

What is the Occupation of the Chief Wage Earner in your house?

1. Unskilled Worker
2. Skilled Worker
3. Clerk / Salesman grades
4. Supervisor grades

5. Junior executive / Executive
6. Middle and Senior executive
7. Manager / Professional
8. Small Businessman / Self-employed (Non-professional)
9. Boutique owner
10. Self-employed (Professional) - No employees
11. 1-9 Employed
12. 10+ Employed.
13. Agricultural labourer / Worker
14. Tenant cultivator
15. Farmer owning - Less than ½ Acre.
16. Farmer owning - ½ - 1 / Acre.
17. Farmer owning - 1 – 2 / Acre.
18. Farmer owning - 2 – 5 / Acre.
19. Farmer owning - Over 5 acres / Landed proprietor

#### W1\_H.3

PROG. INST.: DO NOT ASK. PLEASE CODE THE SEC BASED ON THE EDUCATION AND THE OCCUPATION OF THE CHIEF WAGE EARNER. (PLEASE TAKE THE EDUCATION AND THE OCCUPATION OF THE CHIEF WAGE EARNER FROM THE DEMOGRAPHICS ROSTER). DISPLAY THE SEC BELOW.

TYPE: Single Selection

SEC.

1. SEC A
2. SEC B
3. SEC C
4. SEC D
5. SEC E

#### W1\_H.4

ASK: All Respondents

TYPE: Fill in

What is the total expenditure of your household in the last month? Please consider the spending by all members in your household. Please include all types of expenses, such as food items that you or your household members bought such as rice, coconut, chillies, sugar, prepared food that you'll bought from outside, you and your household members' spending on personal care products such as soaps, shampoo, toothpaste etc., expenses on laundry products such as washing powder, washing soap, expenses on travelling, on education such as school fees or tuition fees etc., your spending on clothes etc.

HH Expenses for last month: \_\_\_\_\_

#### W1\_H.5

ASK: All Respondents	TYPE: Single selection	INS. TO INT.: SHOWCARD
<p>As you know, we are doing this study regarding the electricity consumption. Therefore, can you please tell me what type of electricity meter do you have at home? Is it a smart meter or a non-smart meter?</p> <ol style="list-style-type: none"> <li>1. Smart meter</li> <li>2. Non smart meter</li> </ol>		

## Module K: Additional questions

### INTERVIEWER TO SAY:

Now we would like to ask you a few questions regarding an electricity supply management mechanism. In this card, we have a description of an electricity supply management mechanism used by a lot of countries to ensure uninterrupted power supply for the country.

W1_K.1		
ASK: All Respondents	TYPE: Single Selection	
<p><b>INSTRUCTIONS TO INTERVIEWERS: SHOWCARD AND READ OUT</b></p> <p>Demand response is a widely adopted strategy in numerous countries, aiming to adjust the electricity consumption of non-essential loads among consumers to align with demand, allowing for the flexible scheduling of activities such as running appliances like washing machines or irons during specified intervals set by the electricity provider (LECO). Alternatively, LECO may manage certain non-essential loads, such as air conditioners, providing the capability to remotely control these devices. This approach offers benefits for both individual consumers and the overall well-being of the country.</p> <p>If LECO initiate a demand response programme as described above, would you consider participating in it?</p> <ol style="list-style-type: none"> <li>1. Yes, I will participate voluntarily → <b>GO TO W1_K.3</b></li> <li>2. Yes, I will participate only if it provides me a financial benefit (like reducing my electricity bill) → <b>GO TO MODULE J</b></li> <li>3. No, I will not participate → <b>GO TO W1_K.2</b></li> </ol>		
W1_K.2		
ASK: IF W1_K.1 = 3	TYPE: Multiple coding	
<p>Why will you not consider participating in such a programme?</p> <ol style="list-style-type: none"> <li>1. I don't have any non-essential loads.</li> <li>2. I prefer not to have any devices plugged into my house.</li> <li>3. I don't want LECO to control my consumption.</li> <li>4. Other (specify)</li> </ol>		

W1_K.3		
ASK: IF W1_K.1 = 1	TYPE: Multiple coding	
<p>Why would you consider participating in such a programme?</p> <ol style="list-style-type: none"> <li>1. It will provide the load controllability.</li> <li>2. It will provide more visibility on electricity usage.</li> <li>3. It will be beneficial to the country.</li> <li>4. Other (specify)</li> <li>5. It will reduce my electricity bill</li> </ol>		

## Module J: Information on re-contacting

W1_J.1a		
ASK: All Respondents	TYPE: Fill in	
<p>As a part of our quality control process, we may have to re-contact you which will not take more than 5 minutes. Can you please share a contact number on which we can contact you?</p> <p>Name of respondent:</p> <p>Address of respondent:</p> <p>Contact no. of respondent.:</p>		

W1_J.1		
PROG. INST.: DISPLAY THE LIST OF HOUSEHOLD MEMBERS INST. TO INTERVIEWER: DO NOT ASK. CODE THE NAME OF THE RESPONDENT	TYPE: Single Selection	
Name of respondent:		

W1_J.2		
ASK: All Respondents	TYPE: Single Selection	
<p>Is it ok if we take a photograph of the household?</p> <p>1. Yes → <b>PROG. INSTRUCTIONS – ALLOW THE INTERVIEWER TO TAKE A PHOTOGRAPH OF THE HOUSEHOLD.</b></p> <p>0. No → <b>INS. TO PROG: GO TO W1_J.3.</b></p>		

W1_J.3		
ASK: All Respondents	TYPE: Single Selection	
<p>Please code the in interview status?</p> <p>1. Completed.</p> <p>2. Not completed</p> <p>3. Discarded</p>		

W1_J.4		
ASK: All Respondents	TYPE: Single Selection	
<p>Replacement?</p> <p>1. Yes → <b>GO TO J.5</b></p> <p>0. No → <b>GO TO J.6</b></p>		

J.5		
ASK: IF W1_J4 = 1	TYPE: Single Selection	
<p>Reason for replacement?</p> <p>1. Household respondent refused.</p> <p>2. Incomplete</p> <p>3. Discarded due to errors.</p> <p>4. Household locked</p>		

W1_J.6		
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INSTRUCTIONS TO PROGRAMMER: DISPLAY FOR ALL RESPONDENTS	TYPE: Multiple Selection	
<p>INSTRUCTIONS TO INTERVIEWERS: DO NOT ASK. RECORD.</p> <p>Language that interview was conducted in</p> <p>INSTRUCTIONS TO INT.: Select all languages in which the interview was conducted. This includes instances where substantive parts of the questionnaire have been verbally translated into a local language to be better understood by the respondent. More than 1 language can be selected.</p> <ol style="list-style-type: none"> <li>1. Sinhala</li> <li>2. Tamil</li> </ol>		

W1_J.7		
ASK: RECORD FOR ALL RESPONDENTS	TYPE: RECORD	
Record the GPS of the location.		

INTERVIEWER TO SAY: This is the end of this survey. Thank you for all the information given by you. Also, as mentioned at the beginning of the survey, there will be two more rounds of interviews. The next round will be in <MENTION MONTH>. We will contact you beforehand to book a time with you. Thank you.

## **WAVE 2 QUESTIONNAIRE**

## Module A: Geographic and Related Information

This module is designed to collect information about the location and geographic attributes of the household and is not intended to be posed as questions to the participants.

A.1		
Do not ask. Interviewer to enter the unique ID of the customer and the rest of the information to be auto filled from the LECO database	TYPE: Fill in	
a) Unique ID of LECO customer (to be entered by the interviewer) <b>INSTRUCTIONS TO PROGRAMMER: THE FOLLOWING INFORMATION TO BE AUTO-CODED BASED ON THE LECO CUSTOMER DATABASE AND THE UNIQUE NUMBER ENTERED BY THE INTERVIEWER</b> b) Province (to be auto coded from the LECO database) c) District d) LECO Branch e) LECO CSC area f) Meter type		

## Module SC: Screener

### Introduction

#### INSTRUCTIONS TO INTERVIEWERS:

**ASK TO SPEAK TO THE SAME PERSON TO WHOM WE SPOKE IN WAVE 1. IF HE / SHE IS NOT AVAILABLE, CONTACT THE SECOND-MOST KNOWLEDGEABLE PERSON REGARDING HOUSEHOLD DETAILS.**

**IF BOTH ARE NOT AVAILABLE, THE HOUSE SHOULD BE REVISITED AT A LATER TIME (THE TIME OF DAY BEING DIFFERENT TO THE TIME THAT THE FIRST VISIT WAS MADE; INQUIRE FROM OTHER MEMBERS AS TO THE TIME THE RELEVANT PERSON WILL BE HOME. A MINIMUM OF THREE ATTEMPTS TO REACH THIS PERSON SHOULD BE MADE.**

#### INTERVIEWER TO READ:

Hello, my name is \_\_\_\_\_, I am from \_\_\_\_ . A few months back, we conducted a survey with you regarding electricity consumption. As mentioned to you, there are three waves for this survey. We would like to conduct the second interview today.

This study is conducted together with LIRNEasia, another research organization and LECO has partnered with LIRNEasia for this survey.

W2_Sc.0		
ASK: All Respondents	TYPE: Single Selection	Ref: RECS-Your Home
Is this premises used as a household or for a business / commercial purposes? <b>INT. INSTRUCTIONS: If used as both household and for business purposes, mark as household and proceed.</b> 3. Household à <b>PROG. INS: CONTINUE</b>		

4. Business purposes à **PROG. INS: TERMINATE**

W2\_SC.1a

DO NOT ASK. RECORD BELOW TYPE: Single Selection

Are you talking to the same respondent as in wave 1 or is it a different member of the household?

1. Same respondent as in wave 1

0. A different respondent compared to wave 1

W2\_SC.1b

**PROG. INST.: DISPLAY THE LIST OF  
HOUSEHOLD MEMBERS  
INST. TO INTERVIEWER: CODE THE NAME  
OF THE RESPONDENT**

TYPE: Single  
Selection

Name of respondent:

W1\_SC.2

ASK: IF W2\_SC.1a = 0 TYPE: Single Selection

Are you able to accurately tell me about the details related to the household?

2. Yes

0. No à **INT. INSTRUCTIONS: seek out suitable respondent (the respondent who was interviewed in W1); if not available, inquire as to when he/ she will be available and revisit at that time. Make at least 3 attempts to meet the respondent.**

W2\_SC.3

ASK: All Respondents TYPE: Single Selection

Record number of attempts that have been made to meet with this household respondent.

1. 1<sup>st</sup> Attempt

2. 2<sup>nd</sup> Attempt

3. 3<sup>rd</sup> Attempt

## Module CS: Consent form

As mentioned, we are conducting this survey among LECO customers on their electricity consumption habits and usage. As we mentioned in the previous time we met, this survey consists of three rounds where we will conduct three interviews with you. This is the second interview.

If you agree, we would like to ask you some questions regarding your household and the electricity consumption at your household. This will take about 60-90 minutes in total.

If you choose to participate, please be assured that all the information given by you will be kept totally confidential. This information will be combined with similar information from thousands of other people in to look at the average behavior across society. There are no obvious physical, legal, or economic risks associated with participating in this study because your information will not be used in an identifiable manner.



Further, based on your consent, LECO will provide your past electricity consumption data to LIRNEasia.

Participation in this survey is voluntary. You may decline from answering any question at any time. You may also ask questions at any time. You may terminate your participation at any time. However, we hope that you will take part in this survey since your participation is important.

W2_Cs.1		
ASK: All Respondents	TYPE: Single Selection	
Do you consent to participate in this study and to provide your data to LIRNEasia?		
2. Yes		
0. No à <b>TERMINATE.</b>		

W2_Cs.2		
ASK: All Respondents	TYPE: Single Selection	
May we audio record some parts of this interview for quality checking purposes?		
2. Yes		
0. No		

## Module EM: Electricity Meter Details

**INTERVIEWER TO SAY:** First, we would like to know whether there have been any changes to your household; i.e., the structure and the ownership of the household and the number of electricity meters.

W2_EM.1		
ASK: All Respondents	TYPE: Single Selection	Ref: RECS-Your Home
Have you obtained any new electricity meter/s since we did the last survey?		
1.Yes à <b>GO TO W2_EM.2</b>		
0.No à <b>INST. TO PROGRAMMER: DISPLAY DEFINITION OF HOUSEHOLD</b>		

W2_EM.2		
ASK: If W2_EM.1 = 1	TYPE: Fill in	
Please tell me how many electricity meters are there in your house now?		
No. of electricity meters: _____		
<b>INST. TO PROGRAMMER: DISPLAY DEFINITION OF HOUSEHOLD</b>		

## DEFINITION OF HOUSEHOLD

**INTERVIEWER TO SAY:** As in the last time, for the purpose of this survey, we are defining the house as the area covered by the electricity meter. Therefore, when answering the questions, please consider only the household area that is covered by the electricity meter which is billed to the address \_\_\_\_ (**PROG: TO DISPLAY THE ADDRESS OF THE HOUSEHOLD**). Please consider all areas such as living rooms, bedrooms, kitchen, washrooms, toilet etc. including the garden areas which are covered by this meter. However, if there are areas

within the household which are covered by any other electricity meters, please do not consider these parts of the household when answering these questions. For example, if there is a room in the household that is covered by another electricity meter or if the upstairs of the house is covered by a separate electricity meter, please do not consider these areas when answering the questions.

W2_B.1		
ASK: All Respondents	TYPE: Single Selection	Ref: RECS-Your Home
<p>Do you or any member of your household own this house or are you living on rent?</p> <ol style="list-style-type: none"> <li>1. Yes, I or a household member owns it.</li> <li>2. No, I am living on rent and the rent is paid by me or a household member.</li> <li>3. No, I am living on rent and the rent is paid by the employer.</li> <li>4. No, I or any household member does not own or rent this household. We occupy this household without any payment of rent.</li> </ol>		

W2_C.3		
ASK: IF W2_B.1 = 1	TYPE: Single Selection	
<p>Do you occupy any of the following people in your house? By house, we mean the area covered by your electricity meter.</p> <ol style="list-style-type: none"> <li>1. Renters / boarders who are living in your annexe or any other attached place, maintaining separate living conditions but share the same electricity meter.</li> <li>2. Boarders who live in your house using a room/s that is attached to your living conditions.</li> <li>3. I don't occupy any of the above.</li> </ol>		

W2_C.3b		
ASK: IF W2_C.3 = 1 OR 2	TYPE: Single Selection	
<p>You said that there are renters / boarders who are living in this house. Can you please tell me whether they were living in this house when we did the 1<sup>st</sup> interview or did they start living here afterwards?</p> <ol style="list-style-type: none"> <li>1. They were living in this household when the 1<sup>st</sup> interview was done</li> <li>2. They started living in this household after the 1<sup>st</sup> interview was done</li> <li>3. Some were there when the first interview was done, but there are some who are new</li> </ol>		

W2_C.3c		
ASK: IF W2_C.3b = 2 OR 3	TYPE: Multiple Selection	
Since when did the new renters / boarder(s) start living in this household?		
1. December 2023	5. April 2024	
2. January 2024	6. May 2024	
3. February 2024	7. June 2024	
4. March 2024	8. July 2024	

C.5		
ASK: W2_C3 = 1 or 2	TYPE: Single Selection	
<p>Which of the following best describes your awareness of the electricity consumption of renters/boarders people? Are you aware of details such as the appliances they use and the number of hours they use each appliance, the times they keep the lights and fans switched on etc.?</p> <ol style="list-style-type: none"> <li>4. I know all the details about the electricity consumption of the renters/ boarders; i.e.; the appliances they use and the number of hours they use each appliance, the times they keep the lights and fans switched on etc.</li> </ol>		

5. I know some details about the electricity consumption of the renters/ boarders; i.e.; the appliances they use and the number of hours they use each appliance, the times they keep the lights and fans switched on etc.
6. I do not know any details about the electricity consumption of the renters/ boarders; i.e.; the appliances they use and the number of hours they use each appliance, the times they keep the lights and fans switched on etc.

## Module B: Changes in housing ownership and structure

W2_B.5a		
ASK ALL	TYPE: Single Selection	
<p>Has there being any structural changes to your household after we did the 1<sup>st</sup> interview with you? By household, we mean the area covered by your electricity meter. i.e.; have there being any additions to the house such as adding a new part to the household like a room etc. or completing a section which was being built at the time we did the first interview or added a new floor etc.? or, have there been any parts of the household which were dismantled?</p> <ol style="list-style-type: none"> <li>1. Yes, new parts were added only</li> <li>2. Yes, some parts were dismantled only</li> <li>3. Yes, some new parts were added to the household and some parts were dismantled</li> <li>4. No structural changes were done to the household</li> </ol>		

W2_B.5b		
ASK ALL	TYPE: Single Selection	
<p>Were there any renovations done after we did the 1<sup>st</sup> interview with you?</p> <ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>		

W2_B.5 (SHOWCARD)		
ASK: If W2_B.5a = 1, 2 OR 3	TYPE: Single Selection	Ref: HIES
<p>Which of these best describes your house now?</p> <ol style="list-style-type: none"> <li>11. Single House - Single Floor</li> <li>12. Single House - Double Floor</li> <li>13. Single House – More than 2 floors</li> <li>14. Attached house / Annex.</li> <li>15. Flat</li> <li>16. Condominium/ Luxury apartments</li> <li>17. Twin houses</li> <li>18. Line room/row house</li> <li>19. Slum / Shanty</li> <li>20. Other</li> </ol>		

W2_B.7		
ASK: If (W2_B.5a = 1, 2 OR 3) AND (W2_B.5 not equal to 1 or 2)	TYPE: Fill in	Ref: RECS-Your Home
<p>How many storeys does your house have?</p> <p><b>INSTRUCTIONS TO INTERVIEWERS:</b> If the household type is a flat or a luxury apartment, please consider the number of floors the respondent's unit occupies. For example, if the respondent's unit is located on the 3<sup>rd</sup> floor but occupies only one floor (i.e.; does not have any connection to an upper floor), then it will be a one storey house. However, if the respondent's unit is located on</p>		

the 3<sup>rd</sup> floor and has two floors (i.e.; is connected to the floor above from an internal staircase), then it will be considered as a two storey house.

No. of storeys: \_\_\_\_\_

**PROG INS: ONLY INTEGER VALUES CAN BE ACCEPTED**

W2\_B.8

ASK: IF W2\_B.5a = 1, 2 OR 3

TYPE: Fill in

Ref: RECS-Your Home

Can you please tell me what is the floor area of this household now? i.e.; how many square feet does this household cover? Please remember, when we say household, what we mean is the parts of the household that is covered by the electricity meter.

**INSTRUCTIONS TO INTERVIEWERS: If the respondent is not able to state the floor area of the house, prompt him/ her by asking for the length and width of the household.**

State the area of your house in square feet.: \_\_\_\_\_

W2\_B.9

ASK: IF W2\_B.1 = 1

TYPE: Single Selection

You mentioned that you or a household member owns this house. Can you please tell me whether you'll built this house or whether you'll purchased it?

1. Built the house
2. Purchased the house

W2\_B.10

ASK: IF W2\_B.9 = 1

TYPE: Multiple selection

When you built this house, did you consider any of the following?

- |                               |                 |
|-------------------------------|-----------------|
| 1. Natural lighting           | Yes – 1, No - 0 |
| 2. Good ventilation           | Yes – 1, No – 0 |
| 3. Use of insulation material | Yes – 1, No - 0 |

## Module C: Demographics Changes

**INTERVIEWER TO SAY:** Now we would like to know whether there have been any changes to your household member composition, i.e., whether there has been any changes to the members living in the household.

W2\_C.1a (PRELOAD)

ASK: All Respondents

TYPE: Single selection for each row

Ref: RECS-Your Home

During the last interview we had with you in < PROGRAMMER INSTRUCTIONS: MENTION THE MONTH WHEN FIELDWORK WAS CONDUCTED FOR WAVE 1>, you mentioned that there are \_\_\_\_ <INSTRUCTIONS TO PROGRAMMER: PRE-LOAD THE NUMBER OF HOUSEHOLD MEMBERS FROM WAVE 1 – W1\_C.1> members living in the household. Can you please tell me whether there are any changes in the composition of members living in the household? i.e.; whether these members are still living in this household or whether they have moved out and hence, are not staying here

anymore? If they are temporarily living abroad or living in some other part of Sri Lanka, please consider them as living in the household. Also, if there are any boarders or those who are living on rent or if you have any maids/ housekeepers staying in this household, please include them as well.

**INTERVIEWER INSTRUCTIONS: PLEASE MARK WHETHER THE HOUSEHOLD MEMBER IS STILL LIVING IN THE HOUSEHOLD OR NOT.**

<b>INSTRUCTIONS TO PROGRAMMER: PRE-LOAD THE DATA FOR W2_C1.1, W2_C1.2 AND W2_C1.3 FROM THE HOUSEHOLD MEMBER DETAILS IN W1.</b>			
W2_C1.1 (INSTRUCTIONS TO PROGRAMMER: PRE-LOAD FROM W1).	W2_C1.2 (INSTRUCTIONS TO PROGRAMMER: PRE-LOAD FROM W1_C.2.a, W1_C.2.c AND W1_C.2.d.1 IN W1 QUESTIONNAIRE).	W2_C1.3 (INSTRUCTIONS TO PROGRAMMER: TO BE PRE-CODED AS 'YES').	W2_C1.4 (INSTRUCTIONS TO PROGRAMMER: THIS COLUMN SHOULD BE KEPT AS A SINGLE CODE QUESTION FOR THE INTERVIEWER TO MARK YES OR NO).
Member no.	Name of the member, Gender, Year of birth, Age	Present in Wave 1	Still living in the household
M1	<Name> - <Gender> - <YoB> - <Age>	Yes	1. Yes 0. No
M2	<Name> - <Gender> - <YoB> - <Age>	Yes	1. Yes 0. No
M3	<Name> - <Gender> - <YoB> - <Age>	Yes	1. Yes 0. No
M4	<Name> - <Gender> - <YoB> - <Age>	Yes	1. Yes 0. No

<b>W2_C.1</b>		
ASK: All Respondents	TYPE: Fill in	Ref: RECS-Your Home
<p>Apart from the above-mentioned members, are there any others who are currently living in the household? It could be someone who has come back from abroad or any new additions? It could also be a boarder or a domestic help who has started living in the household after &lt;MENTION MONTH WHEN FIELDWORK WAS CONDUCTED FOR WAVE 1&gt;? If so, how many such members are there?</p> <p>Please specify the number of new members.: ____</p> <p>INSTRUCTIONS TO INTERVIEWER: If there are no new members, enter '0'</p> <p><b>PROG INS: ONLY INTEGER VALUES CAN BE ACCEPTED</b></p>		

## W2\_C.2: DEMOGRAPHIC ROSTER

**INSTRUCTIONS TO PROGRAMMER: REPEAT THE DEMOGRAPHIC ROSTER INTO NO. OF NEW FAMILY MEMBERS TIMES. (I.E., NUMBER OF MEMBERS STATED IN W2\_C.1)**

INTERVIEWER TO SAY: Now I would like to know a few details about the members who were not there when we did the first interview, but have started living in this household afterwards.

	W2_C.2.a	W2_C.2.b	W2_C.2.c	W2_C.2.d	W2_C.2.d.1	W2_C.2.e	W2_C.2.f	W2_C.2.g	W2_C.2.h	W2_C.2.i	W2_C.2.j	(ASK IF C.2.j = ECONOMICALLY ACTIVE)			W2_C.2.n
												W2_C.2.k	W2_C.2.l	W2_C.2.m	
No	Name of the member  <b>INSTRUCTIONS TO INTERVIEWER: Please enter the first name of the household member</b>	Relationship to the head of the household. <b>(SINGLE ANSWER)</b>  1. Head of the household 2. Wife/Husband 3. Son/daughter 4. Son-in-law/Daughter in law 5. Parents of the head of the household 6. Grandson/Granddaughter	Gender <b>(SINGLE ANSWER)</b>  1. Male 2. Female 3. Other	Year of birth <b>TO BE FILLED IN</b>	Age <b>(PROG: THIS SHOULD NOT BE ASKED. TO BE CALCULATED BASED ON THE YEAR OF BIRTH AND DISPLAYED)</b>	Ethnicity <b>(SINGLE ANSWER)</b>  1. Sinhala 2. Sri Lankan Tamil 3. Indian Tamil 4. Sri Lankan Moor/Muslim 5. Burgher 6. Malay 7. Other	Religion <b>(SINGLE ANSWER)</b>  1. Buddhism 2. Hinduism 3. Islam 4. Roman Catholicism 5. Other Christian denominations 6. No religion 9. Other	Marital status. <b>(SINGLE ANSWER)</b>  1. Never married 2. Currently married (registered) 3. Currently married (customary) 4. Widowed 5. Divorced 6. Legally separated	<b>ASK ONLY IF THE MEMBER IS AGED 3 YRS OR ABOVE</b>  Current attendance at school or any other educational institution. i.e.; is he/she currently doing any type of studying? This could be a degree, MBA etc., or following a course like CIMA, CIM or a	<b>ASK ONLY IF THE MEMBER IS AGED 5 YRS OR ABOVE</b>  Highest level of education.  <b>(SINGLE ANSWER)</b>  1. Studying/Studied Grade 1 2. Passed Grade 1 3. Passed Grade 2 4. Passed Grade 3 5. Passed Grade 4 6. Passed Grade 5 7. Passed Grade 6 8. Passed Grade 7	<b>ASK ONLY IF THE MEMBER IS AGED 12 YRS OR ABOVE</b>  Main activity usually engaged in?  <b>(SINGLE ANSWER)</b>  <b>Economically Active</b> 1. Engaged in economic activity/ currently employed/ engaged in own business 2. Retired and obtaining government/semi-government pension payment and is currently engaged in economic activity (employed)	Main occupation. <b>(SINGLE ANSWER)</b>  1. Legislator, senior official, and manager 2. Professional 3. Technician and associate professional 4. Clerk 5. Service worker and shop and market sales worker 6. Skilled agricultural	Daily wage owner? <b>(SINGLE ANSWER)</b>  1. Yes 0. No	Employment status of main occupation. <b>(SINGLE ANSWER)</b>  1. Government employee 2. Semi government employee 3. Private sector employee 4. Employer	The electricity consumption can vary based on the time that people stay at home. Therefore, we would like to know the number of hours stayed at home during last week for each member. For example, if a member leaves for work at 6.30 in the morning and returns only at 7.00 in the night, and after he returns home, he doesn't go out again, before he left for work, from midnight to 6.30am, he stayed at home for 6 hrs and 30 min. like-wise, after he returned home from work, from 7.00pm till midnight, he stayed at home for 5 hrs. This means, in total, he has spent 11 hrs and 30 min at home. If this happened all 5 weekdays, in that 5 weekdays, he would have stayed at home for 57 hrs and 30 min. During weekends, on Saturday, if he went out at 10 in the morning and came home at 3pm, and did not go anywhere after that, on Saturday, he has not being at home for 5 hrs. i.e.; he has stayed at home for 19 hrs. similarly,

	r.. Do not enter only the initials and the surname	7. Other relative 8. Domestic servant/driver/watcher 9. Boarder 10. Other						7. Separated (not legally)  8. Not married but lives as a Family  9. Other	vocational training course?  (SINGLE ANSWER)  1. Preschool  2. School  3. University  4. Other educational institution  5. Vocational / Technical Institution  6. Pending results G.C.E. (O.L / A.L)  7. Still a toddler  8. Does not attend	9. Passed Grade 8 10. Passed Grade 9 11. Passed Grade 10 12. Passed G.C.E.(O/L) 13. Passed Grade 12 14. Passed G.C.E.(A/L) or equivalent 15. Passed GAQ (General Arts Qualifying Examination)/ GSQ (General Science Qualifying examination) 16. Passed Degree / Diploma 17. Passed Post Graduate Degree / Diploma 18. PhD 19. Special Education learning / learnt. 20. No Schooling	elsewhere other than the place where he/she is receiving the pension from / engaged in own business) 3. Seeking for and available to work  <b>Economically Inactive</b> 4. Retired - Obtaining government/semi-government pension payment and currently not engaged in economic activity (not employed elsewhere or not engaged in any own business) 5. Retired from the private/semi-government sector and does not obtain any pension payment. 6. Received other pension payments. 7. Household activities 8. Student 9. Too old / Disable/ unable to work. 10. Other	and fishery worker  7. Craft and related worker  8. Plant and machine operator and assembler  9. Elementary occupation  10. Related to forces.  11. No occupation		5. Own account worker  6. Contributing family worker	on Sunday, if he left home at 8am and came at 10am, and again left at 4.30pm and returned home at 8.30pm, on Sunday, he was not home for 2 hrs in the morning and 4 hrs in the evening, i.e.; in total, he was not home for 6 hrs, so, on Sunday, he was at home for 18 hrs. This means, that he stayed at home for 11 hrs and 30 min during each weekday, for 5 days, i.e.; 57 hrs and 30 min in total during weekdays, 19 hrs on Saturday and 18 hrs on Sunday. i.e.; in total, he has stayed home for 57 1/2 hrs + 19hrs + 18hrs, i.e.; 94.5 hrs in total.  <b>(PROG: VALUES CAN BE FROM 0-168)</b>  <b>INSTRUCTIONS TO INT.: PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY</b>  <b>INSTRUCTIONS TO INT.: Please use the following –</b> 15 min = 0.25 hrs 20 min = 0.33 hrs 30 min = 0.5 hrs 40 min = 0.66 hrs 45 min = 0.75 hrs 60 min = 1 hr If used 24x7 = 168 hrs	

W2\_C.3 INTERVIEWER TO SAY: I would also like to know a few details about the other members of the household who were there when we did the first interview.

	W2_C.3.a	W2_C.3.j.1 INSTRUCTIONS TO PROGRAMMER: PRE-LOAD THE NAMES OF THE MEMBERS WHO WERE LIVING IN THE HOUSEHOLD IN WAVE 1 TOGETHER WITH THEIR MAIN ACTIVITY ENGAGED IN (W1_C.2.j IN WAVE 1).	W2_C.3.j INSTRUCTIONS TO PROGRAMMER: PRE-LOAD THE NAMES OF THE MEMBERS WHO WERE LIVING IN THE HOUSEHOLD IN WAVE 1	(ASK IF W2_C.3.j = ECONOMICALLY ACTIVE (CODED 1,2 OR 3))			W2_C.3.n INSTRUCTIONS TO PROGRAMMER: PRE-LOAD THE NAMES OF THE MEMBERS WHO WERE LIVING IN THE HOUSEHOLD IN WAVE 1.  KEEP SPACE FOR INTERVIEWER TO ENTER THE NUMBER OF HOURS
				W2_C.3.k	W2_C.3.l	W2_C.3m	
No (PRE LOADED)  (INSTRUCTIONS TO PROGRAMMER: PRE-LOAD FROM W1_C.2.a, W1_C.2.c AND W1_C.2.d.1 IN W1 QUESTIONNAIRE)	Name of the member	<b>ASK ONLY IF THE MEMBER IS AGED 12 YRS OR ABOVE</b>  Was there any change in the main activity usually engaged in? it could be a change in jobs, a promotion etc., or started to work full-time or part-time, or started to study full-time, or stopped working / got retired etc.  1. Yes 0. No	<b>ASK ONLY IF THE MEMBER IS AGED 12 YRS OR ABOVE</b>  Main activity usually engaged in currently? (SINGLE ANSWER)  <b>Economically Active</b> 1. Engaged in economic activity/ currently employed/ engaged in own business 2. Retired and obtaining government/semi-government pension payment and is currently engaged in economic activity (employed elsewhere other than the place where he/she is receiving the pension from /	Main occupation.  (SINGLE ANSWER)  1. Legislator, senior official, and manager 2. Professional 3. Technician and associate professional 4. Clerk 5. Service worker and shop and market sales worker 6. Skilled agricultural and fishery worker 7. Craft and related worker 8. Plant and machine operator and assembler	Daily wage owner?  (SINGLE ANSWER)  1. Yes 0. No	Employment status of main occupation.  (SINGLE ANSWER)  1. Government employee 2. Semi government employee 3. Private sector employee 4. Employer 5. Own account worker 6. Contributing family worker	The electricity consumption can vary based on the time that people stay at home. Therefore, we would like to know the number of hours stayed at home during last week for each member.  For example, if a member leaves for work at 6.30 in the morning and returns only at 7.00 in the night, and after he returns home, he doesn't go out again, before he left for work, from midnight to 6.30am, he stayed at home for 6 hrs and 30 min. like-wise, after he returned home from work, from 7.00pm till midnight, he stayed at home for 5 hrs. This means, in total, he has spent 11 hrs and 30 min at home. If this happened all 5 weekdays, in that 5 weekdays, he would have stayed at home for 57 hrs and 30 min. During weekends, on Saturday, if he went out at 10 in the morning and came home at 3pm, and did not go anywhere after that, on Saturday, he has not being at home for 5 hrs. i.e.; he has stayed at home for 19 hrs. similarly, on Sunday, if he left home at 8am and came at 10am, and again left at 4.30pm and returned home at 8.30pm, on Sunday, he was not home



			engaged in own business) 3. Seeking for and available to work <b>Economically Inactive</b> 4. Retired - Obtaining government/s emi-government pension payment and currently not engaged in economic activity (not employed elsewhere or not engaged in any own business) 5. Retired from the private/semi-government sector and does not obtain any pension payment. 6. Received other pension payments. 7. Household activities 8. Student 9. Too old / Disable/ unable to work. 10. Other	9. Elementary occupation 10. Related to forces. 11. No occupation			for 2 hrs in the morning and 4 hrs in the evening, i.e.; in total, he was not home for 6 hrs, so, on Sunday, he was at home for 18 hrs. This means, that he stayed at home for 11 hrs and 30 min during each weekday, for 5 days, i.e.; 57 hrs and 30 min in total during weekdays, 19 hrs on Saturday and 18 hrs on Sunday. i.e.; in total, he has stayed home for 57 1/2 hrs + 19hrs + 18hrs, i.e.; 94.5 hrs in total.  <b>(PROG: VALUES CAN BE FROM 0-168)</b>  <b>INSTRUCTIONS TO INT.: PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY</b>  <b>INSTRUCTIONS TO INT.: Please use the following –</b> 15 min = 0.25 hrs 20 min = 0.33 hrs 30 min = 0.5 hrs 40 min = 0.66 hrs 45 min = 0.75 hrs 60 min = 1 hr If used 24x7 = 168 hrs

<b>W2_C.4</b>		
ASK: W2_C3 = 1 or 2	TYPE: Single Selection	
<p>You mentioned that there are renters or boarders living in this household who share the same electricity meter. Which of the following best describes how you charge them for electricity?</p> <p><b>INSTRUCTIONS TO INTERVIEWERS: READ OUT THE ANSWERS</b></p> <ol style="list-style-type: none"> <li>1. You charge a fixed amount every month for electricity.</li> <li>2. You charge an amount for electricity depending on the variance of the bill.</li> <li>3. You don't charge a specific amount for electricity but charge a fixed amount for all the utilities such as electricity, water etc.</li> <li>4. You don't charge a specific amount for electricity but charge a varied amount for all the utilities such as electricity, water etc. The amount charged varied based on the utility bills</li> <li>5. You don't charge them for electricity consumption</li> </ol>		

W2_C.6		
ASK: W2_B.1 = 2 or 3 or 4	TYPE: Single Selection	
<p>You mentioned that you are living on rent. Which of the following best describes the payment for your electricity consumption?</p> <p><b>INSTRUCTIONS TO INTERVIEWERS: READ OUT THE ANSWERS</b></p> <ol style="list-style-type: none"> <li>1. You pay the full amount of the electricity bill.</li> <li>2. You pay a fixed amount to the owner every month for electricity.</li> <li>3. You pay a varied amount to the owner every month for electricity. The amount paid varies depending on the variance of the bill.</li> <li>4. You don't pay a specific amount for electricity, but pay a fixed amount for all the utilities such as electricity, water etc.</li> <li>5. You don't pay a specific amount for electricity, but pay a varied amount for all the utilities such as electricity, water etc. The amount paid varies depending on the variance of the utility bills.</li> <li>6. You don't pay the owner for electricity consumption</li> </ol>		

W2_C.7		
ASK: Ask All	TYPE: Single Selection	
<p>Is there any business activity that is being carried out in any part of this household such as a shop, a communication, your own office etc. for which, electricity is used from the same meter?</p> <ol style="list-style-type: none"> <li>1. Yes</li> <li>0. No</li> </ol>		

W2_C.8		
ASK: IF W1_C.7 = 1	TYPE: Single Selection	
<p>What type of business activity is being carried out in this household?</p> <ol style="list-style-type: none"> <li>0. A shop</li> <li>1. A communication</li> <li>2. Other (specify)</li> </ol>		

## Module D: List of appliances in the household

### INTERVIEWER TO SAY:

As mentioned earlier, we are doing this study to get an understanding of what all are related to the electricity consumption. As you know, the electricity consumption depends on the electric appliances used in your household. Therefore, as in the previous time, I'd like to ask a few questions regarding the electric appliances that are there in your household which are in working condition and a few questions on your usage habits of these appliances.

We have with us the list of appliances that you mentioned were there in your household which are in working condition and which, you have used at least once, together with the number of such appliances. As I read out each appliance, can you please tell me whether they are still there in your household in working condition?

<p>W2_D1_0. INS. TO PROG: PRE-LOAD THE TYPE OF APPLIANCE AND THE NUMBER FROM W1. (FROM W1_D1 AND W1_D2)</p>	<p>W2_D1a. INS. TO INTERVIEWERS: PLEASE ASK THE RESPONDENTS WHETHER THERE ARE ANY CHANGES TO THE NO. OF APPLIANCES AND MARK AS YES / NO</p> <p>You mentioned you had ____ (MENTION THE NUMBER OF APPLIANCE) ____ (MENTION THE CORRESPONDING TYPE OF APPLIANCE). Do you still have the same number of ____ (MENTION APPLIANCE TYPE) in working condition?</p>	<p>W2.D2a INS. TO PROG: ASK ONLY IF THERE IS A CHANGE TO THE NUMBER OF APPIANCES IN WORKING CONDITION (W2_D1a = 0)</p> <p>No of appliance of the type?</p> <p><b>INSTRUCTIONS TO INT.: IF THE APPLIANCE IS NOT THERE ANYMORE, PLEASE ENTER AS '0'</b></p>	<p>INS. TO PROG: ASK ALL RESPONDENTS ABOUT ALL THE APPLIANCES. ASK SEPERATELY FOR THE NUMBER OF APPLIANCES</p> <p>W1_D3a. Duration of usage in hours during the last week</p> <p><b>INSTRUCTIONS TO INT.: PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY</b></p> <p><b>INSTRUCTIONS TO INT.: Please use the following –</b>  15 min = 0.25 hrs  20 min = 0.33 hrs  30 min = 0.5 hrs  40 min = 0.66 hrs  45 min = 0.75 hrs  60 min = 1 hr  If used 24x7 = 168 hrs</p> <p><b>(PROG: VALUES CAN BE FROM 0-168)</b></p>
<p>&lt;Appliance type&gt; - &lt;No. of appliances&gt;</p>	<p>1. Yes    0. No</p>		
<p>&lt;Appliance type&gt; - &lt;No. of appliances&gt;</p>	<p>1. Yes    0. No</p>		

Apart from the above-mentioned appliances, do you have any of these appliances in your household in working condition?

Appliance category	Appliance (INSTRUCTIONS TO INT.: SHOWCARD)  PROG: DISPLAY THE APPLIANCES THAT WERE NOT AVAILABLE IN WAVE 1 (I.E.; NOT MENTIONED IN W2_D1a)	W2_D1. Do you have any of these appliances in your household in working condition which you have used at least once? If you have boarders or those who are living on rent in your household, please include the electrical appliances used by them as well.	PROG: ASK W1_D2 AND W1_D3 TOGETHER FOR ONE TYPE OF APPLIANCE BEFORE MOVING TO THE NEXT TYPE OF APPLIANCE	
			W2_D2. No of appliance of the type	W2_D3. Duration of usage in hours during the last week  INSTRUCTIONS TO INT.: PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY  INSTRUCTIONS TO INT.: Please use the following – 15 min = 0.25 hrs 20 min = 0.33 hrs 30 min = 0.5 hrs 40 min = 0.66 hrs 45 min = 0.75 hrs 60 min = 1 hr If used 24x7 = 168 hrs  (PROG: ASK SEPERATELY FOR THE NUMBER OF APPLIANCES)  (PROG: VALUES CAN BE FROM 0-168)
KITCHEN APPLIANCES	Refrigerator			
	Separate Freezer			
	Mini Bar			
	Microwave			
	Electric Oven			
	Electric cook tops (induction cookers, Infra-red cookers, hot plates)			
	Electrical exhaust fan fitted above the oven or the hot plate			
	Electric Blender			
	Electric grinder			
	Electric mixer / beater			
	Electric food processor			
	Rice cooker			
	Electric Kettle			
	Electric water heater to heat water for drinking purposes			
	Toaster / Sandwich toaster			
	Waffle maker			
	Electric pressure cooker			
	Air fryer			

	Coffee maker			
	Electric grill			
	Electric coconut scraper			
	Electric Water filter / water dispenser			
	Dish washer			
CLEANING APPLIANCES	Washing Machine			
	Clothes dryer			
	Electric Iron including electric steam iron			
	Electric Vacuum Cleaner			
	Electric floor polisher			
	Electric water gun (used to wash cars etc.)			
	Electric Lawn mower			
ENTERTAINMENT APPLIANCE	TV			
	TV antenna			PROG: DURATION OF USAGE IS NOT REQUIRED
	Dialog TV / Peo TV / Satellite TV box			PROG: DURATION OF USAGE IS NOT REQUIRED
	Radio			
	Bluetooth Speakers			
	DVD / VCD			
	Gaming console/PlayStation			
	Sound systems (Subwoofer)/Stereo			
	Camera (that needs to be charged using electricity)			INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Home theater system			
	Electric musical Instruments (ex.: electric organ, electric guitar etc.)			
OFFICE APPLIANCES	Computers			
	Laptops			INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Routers			
	Mobile phone – Smart phones			INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Mobile phone – Feature phones			INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Mobile phone – Basic phones			INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Fixed phones			
	Power banks			INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Printer			INS. TO INT: NOT REQUIRED TO ASK FOR THE DURATION OF USAGE UNLESS THERE IS A COMMUNICATION CENTRE ATTACHED TO THE HOUSE OR THERE IS A BUSINESS THAT IS BEING CARRIED OUT AT THE HOUSE.
	Scanner			INS. TO INT: NOT REQUIRED TO ASK FOR THE DURATION OF USAGE UNLESS THERE IS A COMMUNICATION CENTRE ATTACHED TO THE HOUSE OR THERE IS A BUSINESS THAT IS BEING CARRIED OUT AT THE HOUSE.
	Fax machines			INS. TO INT: NOT REQUIRED TO ASK FOR THE DURATION OF USAGE UNLESS THERE IS A COMMUNICATION CENTRE ATTACHED TO THE HOUSE OR THERE IS A BUSINESS THAT IS BEING CARRIED OUT AT THE HOUSE.
	Photo Copiers			INS. TO INT: NOT REQUIRED TO ASK FOR THE DURATION OF USAGE UNLESS

				THERE IS A COMMUNICATION CENTRE ATTACHED TO THE HOUSE OR THERE IS A BUSINESS THAT IS BEING CARRIED OUT AT THE HOUSE.
HEALTH AND WELLNESS APPLIANCES	Hair dryer			
	Hair iron / hair curlers			
	Electric shavers			INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Electric Exercise Machines			
SECURITY APPLIANCES	Roller door			PROG: DURATION OF USAGE IS NOT REQUIRED
	CCTV camera systems (note to int.: even if there are more than one camera in the system, please consider as 1 CCTV camera system)			PROG: DURATION OF USAGE IS NOT REQUIRED
	Electric Alarm System			PROG: DURATION OF USAGE IS NOT REQUIRED
	Other Electric Security Systems			PROG: DURATION OF USAGE IS NOT REQUIRED
	Electric Bell			PROG: DURATION OF USAGE IS NOT REQUIRED
ELECTRIC VEHICLES	Electric vehicles (four wheelers) - cars, vans, SUVs)			INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Electric vehicles (two wheelers) - Electric bicycles, scooters			INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Electric vehicles (three wheelers)			INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
OTHER APPLIANCES	Electric Water pump			
	Electric Sewing machine			
	Oxygen filter for fish tank			
	Geyser / Hot water systems for bathrooms which operate from electricity			
	Hot tub			
	Electric Fountain / decorative waterfall			
	Emergency Light / re-chargeable torches			INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Electric heater (to control room temperature)			
	Humidifier			
	Toys with re-chargeable batteries			INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Other (specify)			
	Other (specify)			
	Other (specify)			
	Tabs			

## Module E: Changes in the Housing Characteristics

**INTERVIEWER TO SAY:** Now I'd like to know a few details about the household. When we say household, we mean the area covered by the electricity meter. If you remember, last time I asked you about the number of rooms in the household and a few details of each. As I read out each room type and the number of rooms of that type that were there when we last interviewed you please tell me whether there are any changes to the number of rooms/parts?

If there are rooms or parts of the household that are not directly connected to the house but is still covered by the same electricity meter such as a separate kitchen or a toilet, please include these as well.

W2_E.5			
AK: All Respondents		TYPE: E.5c – Single selection / E.5d - Fill in	
<b>PROG. INSTRUCTIONS: PRE-LOAD THE TYPES OF ROOMS TOGETHER WITH THE NUMBER OF ROOMS RECORDED IN WAVE 1 FROM W1_E.5. (COLUMN 1 AND 2 IN THE BELOW TABLE)</b>			
<b>INSTRUCTIONS TO INTERVIEWERS:</b> READ OUT THE TYPE AND NUMBER OF ROOMS FROM THE BELOW TABLE. IF THE RESPONDENT SAY THAT THERE IS A CHANGE IN THE NUMBER OF ROOMS OF A PARTICULAR TYPE, CODE 'YES' IN W2_E.5c AND ENTER THE NEW NUMBER OF ROOMS IN W2_E.5d. IF THE RESPONDENT SAY THAT THERE IS NO CHANGE IN THE NUMBER OF ROOMS OF A PARTICULAR TYPE, CODE 'NO' IN W2_E.5c.			
<b>INSTRUCTIONS TO INTERVIEWERS:</b> A ROOM CANNOT BE REPORTED TWICE. THIS INCLUDES ALL ROOMS INCLUDING KITCHENS, GARDENS, PASSAGES, LIVING ROOMS AND BATHROOMS WHERE THE AGGREGATION EVENTUALLY COVERS THE ENTIRE HOUSE			
Type of rooms	Number of rooms (TO BE PRE-LOADED)	W2_E.5c Are there any changes to the number of ____ (room type)?	W2_E.5d (Prog. Inst.: ASK ONLY IF "1" CODED AT W2_E.5c) New no. of rooms
Living room		Yes – 1    No - 0	
Bedrooms		Yes – 1    No - 0	
Kitchen and/ or pantry / dining room		Yes – 1    No - 0	
Bathroom and / or toilets		Yes – 1    No - 0	
Storage room		Yes – 1    No - 0	
Other rooms / parts in the house including passages, veranda's, balconies, staircase etc.		Yes – 1    No - 0	
Garage		Yes – 1    No - 0	
Security Room		Yes – 1    No - 0	
Garden (including the wall around the garden, if any)		Yes – 1    No - 0	
Other rooms outside the house		Yes – 1    No - 0	

**INTERVIEWER TO SAY:** As in the last time, I would like to know a few details about the rooms in your household, especially the number of lights, fans, etc. We would like to know these details because we want to understand the relationship between the usage of lights, fans etc. and the electricity consumption. Let's start from one room and move on to each room in the household.

**INSTRUCTIONS TO PROGRAMMER:**

- THE FOLLOWING FLOW OF QUESTIONS TO BE ASKED FOR EACH ROOM SEPARATELY.
- EACH ROOM SHOULD HAVE A SERIAL NUMBER. SERIAL NUMBER TO BE OF THE FORMAT "ROOM\_NUMBER".

**INSTRUCTIONS TO PROGRAMMER – ROOM ROSTER:**

- ORDER OF QUESTIONING SHOULD BE AS FOLLOWS:
  - ASK W2\_E.6.a – W2\_E.6.j FOR ROOM NO. 1

- ASK THE LIGHT ROSTER FOR ROOM NO. 1 (IF APPLICABLE, I.E.; W2\_E.6.j NOT EQUAL TO '0')
- ASK W2\_E.6.k FOR ROOM NO. 1
- ASK THE FAN ROSTER FOR ROOM NO. 1 (IF APPLICABLE, I.E.; W2\_E.6.k NOT EQUAL TO '0')
- ASK W2\_E.6.l FOR ROOM NO. 1
- ASK THE AC ROSTER FOR ROOM NO. 1 (IF APPLICABLE, I.E.; W2\_E.6.l NOT EQUAL TO '0')
- REPEAT ABOVE ORDER FOR EACH ROOM



	W2_E.6.a	W2_E.6.a_1	W2_E.6.b	W2_E.6.c_1	W2_E.6.c_2	W2_E.6.d	W2_E.6.e	W2_E.6.f	W2_E.6.h	W2_E.6.i	W2_E.6.j	W1_E.6.j_1	W2_E.6.k	W2_E.6.l
No	<p>For what purposes do you mainly use this section of the household?</p> <p>1. Living room 2. Bedrooms 3. Kitchen and/ or pantry/ dining room 4. Bathroom and / or toilets 5. Storage room 6. Gaming room 7. Servant's Room 8. Visitors' room 9. Passage 10. Veranda 11. Balcony 12. Staircase 13. Garage 14. Security Room 15. Garden 16. Other rooms outside the house 17. Study room /Office room 18. Other</p>	<p>Was this section a part of the household when we did the first interview in &lt;PROGRAMME R INSTRUCTIONS: MENTION THE MONTH WHEN FIELDWORK WAS CONDUCTED FOR WAVE 1&gt;? And were there any changes done for this section of the household?</p> <p>1. Yes, and no changes were done to this section of the household à <b>GO TO W2_E.6.j</b> 2. Yes, but there were some changes done to this section of the household à <b>CONTINUE</b> 0. No, this section was built after the 1st interview à <b>CONTINUE</b></p>	<p>In which storey is this section of the household located? (Define ground floor by zero)</p>	<p>What is the main material used for the roof of this section of the household?</p> <p>1.Tile 2.Asbestos 3.Concrete 4.Metal Sheet 5.Takaran 6.Cadjun /Palmyra /Straw 7.Tent 8.Plastic sheets 9.Other 10. Garden – Not relevant</p>	<p>What type of ceiling does this section of the household have?</p> <p><b>INSTRUCTIONS TO INTERVIEWER : SHOWCARD</b></p> <p>1. No ceiling, just the roof above 2. A conventional ceiling 3. A beamed ceiling 4. A hanging ceiling 5. A polythene cover as a ceiling 6. No ceiling, the concrete slab 7. Wooden ceiling 8. Other 9. Garden – Not relevant</p>	<p>What is the main material used for the floor of this section of the household?</p> <p>1.Cement 2.Teraso 3.Tile 4.Granite 5.Wood (finished) 6.Mud 7.Wood 8.Sand 9.Concrete 10.Other 11. Garden – Not relevant</p>	<p>How many doors are there in this part of the house that let in light and air from the outside? That is, how many doors are there that let in light and air into the room from an external environment such as a garden, a balcony or a veranda?</p> <p><b>INST. TO INT: RECORD THE NUMBER OF DOORS. IF THERE ARE NO DOORS, RECORD AS '0'</b></p> <p><b>PROG: KEEP SPACE TO RECORD NUMBER OF DOORS. ACCEPT ONLY INTEGER NUMBERS.</b></p>	<p>How many windows are there in this part of the house that let in light and air from the outside? That is, how many windows are there that let in light and air into the room from an external environment such as a garden, a balcony or a veranda?</p> <p><b>INST. TO INT: RECORD THE NUMBER OF WINDOWS. IF THERE ARE NO WINDOWS, RECORD AS '0'</b></p> <p><b>PROG: KEEP SPACE TO RECORD NUMBER OF WINDOWS. ACCEPT ONLY INTEGER NUMBERS.</b></p>	<p><b>ASK ONLY IF W2_E.6.f &gt; 0</b></p> <p>Do you have curtains or blinds for the windows of this section of the household?</p> <p>1.Yes 0.No 2. Garden – Not relevant</p>	<p>Does this section of the household have natural ventilation other than windows, to allow fresh air circulation? This could be a ventilation hole in the wall or a area with a grill on top of the windows which is not covered by the window pane etc. (<b>SHOWCARD</b>)</p> <p>1.Yes 0.No 2. Garden – Not relevant</p>	<p>How many light bulbs do you have in this section of the household? Please include the roof lights and wall lights when counting the number of lights. If there are lamp shades etc. which has more than one bulb, but all bulbs switches on with one common switch, please count as one light. Also, if there are table lamps, bed side lamps, lamp shades etc. in this part of the household, please include them as well.</p> <p>IF BATHROOM/ TOILET: INT. TO PROBE – Are there any mirror lights? IF GARDEN: INT. TO PROBE – Are there any garden lights or lights on the wall (thaappaya)?</p> <p><b>PROG: KEEP SPACE TO RECORD NUMBER OF LIGHTS. ACCEPT ONLY INTEGER NUMBERS</b></p>	<p>And how many of these bulbs did you use in the last week?</p> <p><b>PROG: KEEP SPACE TO RECORD NUMBER OF LIGHTS. ACCEPT ONLY INTEGER NUMBERS</b></p> <p><b>INS. TO PROG: IF NO. OF LIGHTS NOT EQUAL TO ZERO, REPEAT THE FOLLOWING LIGHT ROSTER FOR NUMBER OF LIGHTS.</b></p>	<p>How many fans do you have in this section of the household? Please include all types of fans such as ceiling fans, pedestal fans, table fans, exhaust fans, tower fans etc.</p> <p><b>PROG: KEEP SPACE TO RECORD NUMBER OF FANS. ACCEPT ONLY INTEGER NUMBERS</b></p> <p><b>INS. TO PROG: IF NO. OF FANS NOT EQUAL TO ZERO, REPEAT THE FOLLOWING FAN ROSTER FOR NUMBER OF FANS</b></p>	<p>How many ACs do you have in this section of the household?</p> <p><b>PROG: KEEP SPACE TO RECORD NUMBER OF ACs. ACCEPT ONLY INTEGER NUMBERS</b></p> <p><b>INS. TO PROG: IF NO. OF ACs NOT EQUAL TO ZERO, REPEAT THE FOLLOWING AC ROSTER FOR NUMBER ACs.</b></p>

## Light Roster

	W2_E.6. n	W2_E.6. o	W2_E.6. p	W2_E.6. q
No	<p>What is the type of the light Bulb out of following? <b>INST. TO INT:</b> If the respondent is not sure whether the light bulb is a CFL or an LED, please code it as CFL (SHOWCARD)</p> <p>1.Incandescent 2.CFL 3.LED 4.Halogen 5.Tube Light (conventional) 6.Tube Light (LED) 7.Flashlight 8.Flood light 9. Other</p>	<p>What is the wattage (W) of the light?</p> <p><b>INST. TO INT:</b> If there are lamp shades etc. which has more than one bulb, but all bulbs switches on with one common switch, please add up the wattage of all the bulbs and record below.</p> <p><b>INS. TO INT.:</b> IF THE RESPONDENT DOES NOT KNOW THE WATTAGE, PLEASE MARK AS "0".</p>	<p>For how many hours was this light kept switched on last week during daytime. (8am – 6pm)? <b>INSTRUCTIONS TO INT.: PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY</b> <b>(INSTRUCTIONS TO PROG: VALUE NEEDS TO BE BETWEEN 0 – 70. SHOULD ALLOW DECIMALS)</b></p> <p><b>INSTRUCTIONS TO INT.:</b> Please use the following – 15 min = 0.25 hrs 20 min = 0.33 hrs 30 min = 0.5 hrs 40 min = 0.66 hrs 45 min = 0.75 hrs 60 min = 1 hr Total number of hours per day from 8am – 6pm = 10 hrs If used every day from 8am-6pm = 70 hr</p>	<p>For how many hours was this light kept switched on, during last week during night-time. (6pm- – 8am)? <b>INSTRUCTIONS TO INT.: PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY</b> <b>(INSTRUCTIONS TO PROG: VALUE NEEDS TO BE BETWEEN 0 – 98. SHOULD ALLOW DECIMALS)</b></p> <p><b>INSTRUCTIONS TO INT.:</b> Please use the following – 15 min = 0.25 hrs 20 min = 0.33 hrs 30 min = 0.5 hrs 40 min = 0.66 hrs 45 min = 0.75 hrs 60 min = 1 hr Total number of hours per day from 6pm – 8am = 14 hrs If used every day from 6pm – 8am = 98 hrs</p>

## Fan Roster

	W2_E.6.r	W2_E.6.s	W2_E.6.t
No	<p>What is the type of the fan? (SHOWCARD)</p> <p>1.Ceiling fan 2.Wall fan 3.Pedestal fan/ Stand fan 4.Table fan 5.Exhaust fan 6.Tower fan 7.Other</p>	<p>For how many hours was this fan kept switched on last week during daytime. (8am – 6pm)? <b>INSTRUCTIONS TO INT.: PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY</b> <b>(INSTRUCTIONS TO PROG: VALUE NEEDS TO BE BETWEEN 0 – 70. SHOULD ALLOW DECIMALS)</b> <b>INSTRUCTIONS TO INT.:</b> Please use the following – 15 min = 0.25 hrs 20 min = 0.33 hrs 30 min = 0.5 hrs 40 min = 0.66 hrs 45 min = 0.75 hrs 60 min = 1 hr Total number of hours per day from 8am – 6pm = 10 hrs If used every day from 8am-6pm = 70 hrs</p>	<p>For how many hours was this fan kept switched on last week during night-time. (6pm – 8am)? <b>INSTRUCTIONS TO INT.: PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY</b> <b>(INSTRUCTIONS TO PROG: VALUE NEEDS TO BE BETWEEN 0 – 98. SHOULD ALLOW DECIMALS)</b> <b>INSTRUCTIONS TO INT.:</b> Please use the following – 15 min = 0.25 hrs 20 min = 0.33 hrs 30 min = 0.5 hrs 40 min = 0.66 hrs 45 min = 0.75 hrs 60 min = 1 hr Total number of hours per day from 6pm – 8am = 14 hrs If used every day from 6pm – 8am = 98 hrs</p>

## AC Roster

	W2_E.6. u	W2_E.6. v	W2_E.6. w	W2_E.6. x. 2	W2_E.6. y	W2_E.6. z
No	<p>What is the type of air conditioning used in the room? (SHOWCARD)</p> <p>1. Central AC (Only to your Household) 2. Central AC (For the whole building. Relevant if B.5 = 5 or 6) 3. Individual AC with two components 4. Individual AC with one component 5. Air Cooler 6. Other</p>	<p>IF W2_E.6.u = 3 or 4</p> <p>Is the AC an inverter AC?</p> <p>1. Yes 0. No</p>	<p>Which of the following is true regarding air conditioners?</p> <p>1. The room can be fully closed and sealed and there are no outside openings. When the AC is turned on, the cool air does not go out of the room. 2. The room is fully closed. However, it is not fully sealed. Therefore, when the AC is on, the cool air may leak through the spaces that are not sealed such as the space in-between the door and the door frame 3. The room is not fully closed. There are spaces where the cool air can leak out</p>	<p>What is the BTU of the AC?</p> <p>INS. TO INT - IF THE RESPONDENT DOES NOT KNOW THE BTU, MARK AS "0"</p>	<p>For how many hours was this AC kept switched on, last week, during daytime? (8am – 6pm)?</p> <p><b>INSTRUCTIONS TO INT.: PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY (INSTRUCTIONS TO PROG: VALUE NEEDS TO BE BETWEEN 0 – 70. SHOULD ALLOW DECIMALS)</b></p> <p><b>INSTRUCTIONS TO INT.: Please use the following –</b>  15 min = 0.25 hrs  20 min = 0.33 hrs  30 min = 0.5 hrs  40 min = 0.66 hrs  45 min = 0.75 hrs  60 min = 1 hr  Total number of hours per day from 8am – 6pm = 10 hrs  If used every day from 8am-6pm = 70 hrs</p>	<p>For how many hours was this AC kept switched on last week, during night-time. (6pm – 8am)?</p> <p><b>INSTRUCTIONS TO INT.: PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY (INSTRUCTIONS TO PROG: VALUE NEEDS TO BE BETWEEN 0 – 98. SHOULD ALLOW DECIMALS)</b></p> <p><b>INSTRUCTIONS TO INT.: Please use the following –</b>  15 min = 0.25 hrs  20 min = 0.33 hrs  30 min = 0.5 hrs  40 min = 0.66 hrs  45 min = 0.75 hrs  60 min = 1 hr  Total number of hours per day from 6pm – 8am = 14 hrs  If used every day from 6pm – 8am = 98 hrs</p>

### W2\_E.7

ASK: All Respondents

TYPE: Single Selection

Are there any other parts of the household which are covered by the same electricity meter which were not covered above?

1. Yes à **INST. TO PROG: GO TO W2\_E.7a**

0. No à **INST. TO PROG: GO TO W2\_E.8**

### W2\_E.7a

ASK: Ask if W2\_E.7 = 1

TYPE: Fill in

Ref: RECS-Your Home

Can you please tell me which parts of the house you have missed mentioning earlier? Please mention only the parts you have missed and to which, electricity is supplied from the same electricity meter?

**INST. TO INT: PLEASE STATE ONLY THE NUMBER OF ROOMS/ PARTS OF THE HOUSEHOLD WHICH WERE MISSED BY THE RESPONDENT EARLIER.**

Living room

Bedrooms

Kitchen and/ or pantry / dining room

Bathroom and / or toilets

Storage room

Other rooms / parts in the house including passages, veranda's, balconies, staircase etc.

Garage

Security Room

Garden (including the wall around the garden, if any)

Other rooms outside the house

ASK W2\_B.5a = 2/3

W2\_E.8 Are there any sections of the household that were there when we did the first interview, but has been demolished now?

Y / N

If Y à which parts / number

**INTERVIEWER TO SAY:** Now I'd like to ask you the details about these parts of the household.

**INST. TO PROG:** REPEAT THE HOUSEHOLD ROSTER (W2\_E.6.a – W2\_E.6. z) FOR THE TOTAL NUMBER OF ROOMS IN W2\_E.7a

W2_E.8		
ASK: All Respondents	TYPE: Single Selection	
Are there any constructions or renovations happening in this household currently? 1. Yes 0. No		

## MODULE E-2: OTHER METHODS OF GENERATING ELECTRICITY AND BACKUP ELECTRICITY

### INTERVIEWER TO SAY:

Now I would like to know a few details about other methods that you may be using to generate electricity at your household. As we are interested in the electricity consumption of your household, it is also important for us to know whether you use electricity from the LECO supply only or whether there are any other methods that you use at your household to generate electricity such as generators and solar panels.

W2_E.18		
ASK: DO NOT ASK. PROGRAMMER TO PRE-LOAD FROM WAVE 1 (W2_E.1_SOLAR ENERGY)	TYPE: Single Selection	
INSTRUCTIONS TO PROGRAMMER: PLEASE PRE-CODE BASED ON THE ANSWER TO 'SOLAR ENERGY' IN W1_E.1  Did the household had solar energy when the 1 <sup>st</sup> interview was done? 1. Yes à <b>INSTRUCTIONS TO PROG.: GO TO W2_E.20a</b> 0. No à <b>INSTRUCTIONS TO PROG.: GO TO W2_E.19</b>		

W2_E.19		
ASK: ONLY IF W2_E.18 = 0	TYPE: Single Selection	
Do you have a solar panel to generate electricity at your home?		

1. Yes à <b>INSTRUCTIONS TO PROG.: GO TO W2_E.13</b>
0. No à <b>INSTRUCTIONS TO PROG.: GO TO MODULE AP: DETAILS OF APPLIANCES</b>

W2_E.20a		
ASK: ONLY IF W2_E.18 = 1	TYPE: Single Selection	
You mentioned that you have solar panels to generate electricity when we did the first interview. Do you still have it?		
1. Yes à <b>INSTRUCTIONS TO PROG.: GO TO W2_E.20b</b>		
0. No à <b>INSTRUCTIONS TO PROG.: GO TO MODULE AP: DETAILS OF APPLIANCES</b>		

W2_E.20b		
ASK: ONLY IF W2_E.20a = 1	TYPE: Single Selection	
Have you done any changes to the number of panels in the solar panel at your household after we did the first interview? i.e.; have you increased or reduced the number of panels?		
1. Yes, we have increased the number of panels		
2. Yes, we have reduced the number of panels		
3. No, we have not done any changes to the number of panels		

W2_E.13		
ASK: If W2_E.19=1 OR W2_E.20b = 1, 2 OR 3	TYPE: Single Selection	
Is your solar system on-grid or off-grid?		
3. On-grid		
4. Off-grid		

W2_E.14		
ASK: If W2_E.20a=1 OR W2_E.19=1	TYPE: Single Selection	
Do you have an inverter for the solar energy generation system? An inverter is a device that converts direct current (DC) electricity, which is what a solar panel generates, to alternating current (AC) electricity, which the electrical grid uses.		
2. Yes		
1. No		

W2_E.12		
ASK: If W2_E.13=2	TYPE: Multiple Selection	
Which of the following purposes do you use solar energy inside your house?		
2. Water heating		
3. Cooking		
4. Outdoor lighting		
5. Car charging		
6. Agriculture equipment and systems (irrigation systems, etc)		
7. All the above		
8. Other		

W2_E.15a		
ASK: If W2_E.20a=1 OR W2_E.19=1	TYPE: Single Selection	
Are you aware of the number of units generated by the solar energy system in the last one month?		
1. Yes		
0. No		

W2_E.15b		
ASK: If W2_E.15a =1	TYPE: Fill in	
How many units did the solar system generate last month?		
No. of units: _____		

W2_E.15c		
ASK: If W2_E.20a=1 OR W2_E.19=1	TYPE: Fill in	
What is the capacity of the solar system in your household?		
Capacity: _____		

## Module AP: Details of appliances

### INTERVIEWER TO SAY:

The types of appliances that you use, whether they were bought recently or some time ago, their brand, size, type etc., may have an impact on the electricity usage of a house. Therefore, we would like to collect some information on some of the appliances that are there in your household.

	<b>INST. TO PROG.:</b> <b>1. THE FOLLOWING DETAILS NEED TO BE ASKED FOR ALL APPLIANCES OWNED BY THE HOUSEHOLD (STATED IN MODULE D: LIST OF APPLIANCES IN THE HOUSEHOLD)</b> <b>2. ASK W2_AP.2 – W2_AP.7 FOR ONE APPLIANCE AND THEN MOVE TO THE NEXT APPLIANCE</b> <b>3. IF THERE ARE MORE THAN ONE APPLIANCE FROM THE SAME TYPE, THE FOLLOWING DETAILS NEED TO BE ASKED FOR EACH APPLIANCE SEPARATELY. FOR EXAMPLE, IF THERE ARE TWO REFRIGERATORS, THE FOLLOWING DETAILS NEEDS TO BE ASKED FOR THE TWO REFRIGERATORS SEPARATELY. I.E., ASK W2_AP.2 – W2_AP.7 FOR REFRIGERATOR 1 AND THEN ASK W2_AP.2 – W2_AP.7 FOR REFRIGERATOR 2</b> <b>4. GIVE A SERIAL NUMBER FOR EACH APPLIANCE. THE SERIAL NUMBER SHOULD BE OF THE FOLLOWING FORMAT &lt;APPLIANCE TYPE_NUMBER&gt; (EX.: IF THERE ARE TWO REFRIGERATORS, THE FIRST REFRIGERATOR WILL BE REFRIGERATOR_1 AND THE SECOND WILL BE REFRIGERATOR_2)</b> <b>5. W2_AP.3 AND W2_AP.4 ARE TO BE ASKED FOR ALL TYPES OF APPLIANCES.</b> <b>6. W2_AP.2, W2_AP.5, W2_AP.6 AND W2_AP.7 ARE TO BE ASKED FOR ONLY SELECTED TYPES OF APPLIANCES. (STATED IN THE BELOW TABLE)</b>					
W2_AP.1	<b>INST. TO PROG.: PLEASE USE THE QUESTION NUMBER GIVEN IN EACH CELL (EG.: FOR REFRIGERATORS - W2_AP.2_REF, W2_AP.3_REF AND W2_AP.4_REF)</b>					
	<b>W2_AP.2</b> <b>(TO BE ASKED ONLY FOR SELECTED TYPES OF APPLIANCES AS MARKED BELOW)</b>	<b>W2_AP.3</b> <b>(TO BE ASKED FOR ALL TYPES OF APPLIANCES)</b>	<b>W2_AP.4</b> <b>(TO BE ASKED FOR ALL TYPES OF APPLIANCES)</b>	<b>W2_AP.5</b> <b>(TO BE ASKED ONLY FOR SELECTED TYPES OF APPLIANCES AS MARKED BELOW)</b>	<b>W2_AP.6</b> <b>(TO BE ASKED ONLY FOR SELECTED TYPES OF APPLIANCES AS MARKED BELOW)</b>	<b>W2_AP.7</b> <b>(TO BE ASKED ONLY FOR SELECTED TYPES OF APPLIANCES AS MARKED BELOW)</b>
Type of appliance and number of appliances of the type  INS. TO PROGRAMMER: DISPLAY THE TYPE OF APPLIANCES AND THE NUMBER OF APPLIANCES OF THAT TYPE FROM (W2_D1_0 / W2_D1a / W2.D2a) OR FROM (W2_D1/ W2.D2)  INST. TO INT.: IF THE NUMBER OF APPLIANCES OF THE TYPE IS ONLY 1, SAY: You mentioned that you have ____ (STATE THE NUMBER OF APPLIANCES) ____ (STATE THE TYPE OF APPLIANCE). We would like to know some details about your ____ (STATE THE TYPE OF APPLIANCE)  INST. TO INT.: IF THE NUMBER OF APPLIANCES OF THE TYPE IS MORE THAN 1, SAY: You mentioned that you have ____ (STATE THE NUMBER OF APPLIANCES) ____ (STATE THE TYPE OF APPLIANCE). We would like to know some details about each of these ____ (STATE THE TYPE OF APPLIANCE). Please think about each appliance separately and answer.	Manufacturer/Brand  <b>(SINGLE ANSWER)</b>  <b>INST. TO PROG: RELEVANT BRAND LISTS TO BE DISPLAYED FOR EACH TYPE OF APPLIANCE</b>	When was this purchased?  <b>(SINGLE ANSWER)</b>  1. Within the last 1 year.  2. Within the last 1- 5 years.  3. Within the last 5-10 years.  4. More than 10 years ago.	Was it purchased as brand new or a second hand?  <b>(SINGLE ANSWER)</b>  1. Brand New 2. Second Hand	Other questions  <b>INST. TO PROG: ASK ONLY FOR RELEVANT APPLIANCES (AS STATED IN THE BELOW ROWS)</b>	Size of the appliance?  <b>INST. TO PROG: ASK ONLY FOR RELEVANT APPLIANCES (AS STATED IN THE BELOW ROWS)</b>	Buying Behaviour  <b>INST. TO PROG: ASK ONLY FOR RELEVANT APPLIANCES (AS STATED IN THE BELOW ROWS)</b>

Refrigerator	W2_AP.2_REF_NUMBER	W2_AP.3_REF_NUMBER	W2_AP.4_REF_NUMBER	<p>W2_AP.5a_REF_NUMBER What is the door arrangement of the refrigerator? <b>(SHOW CARD)</b> <b>(SINGLE ANSWER)</b> 1 One door 2 Two doors, freezer above the refrigerator 3 Two doors, freezer below the refrigerator 4 Three or more doors 5 Other</p> <p>W2_AP.5b_REF_2_NUMBER Does your refrigerator require manual de-frosting? <b>(SINGLE ANSWER)</b> 1. Yes 0. No</p> <p>W2_AP.5c_REF_3_NUMBER Does your refrigerator have the through-the-door ice facility? <b>(SINGLE ANSWER)</b> 1. Yes 2. No</p>	<p>W2_AP.6_REF_NUMBER Mention the length and the width of your Refrigerator.</p> <p><b>INST. TO PROG: KEEP SPACE TO ENTER THE LENGTH AND THE WIDTH</b></p> <p><b>INST. TO INT: ENTER THE LENGTH AND THE WIDTH IN FEET</b></p> <p>W2_AP.6a_REF_NUMBER _a. length (in feet): ____</p> <p>W2_AP.6b_REF_NUMBER _b. width (in feet): ____</p> <p>W2_AP.6c_REF_NUMBER _b. height (in feet): ____</p>	<p><b>PROG. INS.: ASK ONLY IF THE REFRIGERATOR WAS PURCHASED IN THE LAST ONE YEAR. (IF W2_AP.3_REF = 1)</b></p> <p>W2_AP.7_REF_NUMBER Which of the following did you consider when purchasing the refrigerator? Please mention <b>three most important attributes</b> that you considered.</p> <p><b>(MULTIPLE RESPONSE – UPTO 3 ANSWERS)</b></p> <p><b>(PROG. INS.: ALLOW MAXIMUM OF 3 RESPONSES ONLY. I.E. 0 – 3 ANSWERS ONLY)</b></p> <ol style="list-style-type: none"> <li>Brand</li> <li>Energy Rating (wattage)</li> <li>Size of the refrigerator</li> <li>No. of doors in the refrigerator</li> <li>De-frosting type of the refrigerator</li> <li>Size of the freezer of the refrigerator</li> <li>Added Features</li> <li>Country of manufacture</li> <li>Color</li> <li>Safety</li> <li>Price</li> <li>Professional Reviews</li> <li>Other (specify)</li> </ol>
Separate Freezer	W2_AP.2_SEPERATE FREEZER_NUMBER	W2_AP.3_SEPERATE FREEZER_NUMBER	W2_AP.4_SEPERATE FREEZER_NUMBER	<p>W2_AP.5a_SEPERATE FREEZER_NUMBER What is the door arrangement of the freezer? <b>(SHOW CARD)</b> <b>(SINGLE ANSWER)</b> 1 Upright 2 Chest 3 Other</p> <p>W2_AP.5b_SEPERATE FREEZER_NUMBER What is the defrosting type of the freezer? <b>(SINGLE ANSWER)</b> 1 Manual 2 Automatic</p>	<p>W2_AP.6_SEPERATE FREEZER_NUMBER Mention the length and the width of your Freezer</p> <p><b>INST. TO PROG: KEEP SPACE TO ENTER THE LENGTH AND THE WIDTH</b></p> <p><b>INST. TO INT: ENTER THE LENGTH AND THE WIDTH IN FEET</b></p> <p>W2_AP.6a_SEPERATE FREEZER_NUMBER _a. length (in feet): ____</p>	



					W2_AP.6b_SEPERATE FREEZER_NUMBER_. width (in feet): _____  W2_AP.6c_SEPERATE FREEZER_NUMBER_. height (in feet): _____	
Mini Bar	W2_AP.2_MINI BAR_NUMBER	W2_AP.3_MINI BAR_NUMBER	W2_AP.4_MINI BAR_NUMBER			
Microwave	W2_AP.2_MICROWAVE_ NUMBER	W2_AP.3_MICR OWAVE_NUMB ER	W2_AP.4_MICROW AVE_NUMBER	W2_AP.5a_MICROWAVE_NU MBER What is the type of your microwave? <b>(SHOW CARD)</b> <b>(SINGLE ANSWER)</b> 1. Solo 2. Grill 3. Convection 4. Not aware		
Electric Oven	W2_AP.2_EL OVEN_NUMBER	W2_AP.3_EL OVEN_NUMBER	W2_AP.4_EL OVEN_NUMBER	W2_AP.5a_EL OVEN_NUMBER What is the type of your electric oven? <b>(SHOW CARD)</b> <b>(SINGLE ANSWER)</b> 1. Conventional 2. Convectional 3. Conventional with multifunction 4. Not aware		
Electric cook tops (induction cookers, Infra-red cookers, hot plates)	<del>W2_AP.2_EL COOK TOP</del>	W2_AP.3_EL COOK TOP_NUMBER	W2_AP.4_EL COOK TOP_NUMBER	W2_AP.5a_EL COOK TOP_NUMBER What is the type of your electric cook top? <b>(SHOW CARD)</b> <b>(SINGLE ANSWER)</b> 1. Solid plate 2. Ceramic 3. Induction 4. Infra-red 5. Cook top with a coil	W2_AP.6a_EL COOK TOP_NUMBER What is the plate size of your electric cook top? By plate size, we mean the diameter of the cook top?  <b>INST. TO PROG: KEEP SPACE TO ENTER THE DIAMETER</b>  <b>INST. TO INT: ENTER THE DIAMETER IN INCHES</b>	<b>PROG. INS.: ASK ONLY IF THE ELECTRIC COOK TOP WAS PURCHASED IN THE LAST ONE YEAR. (IF W2_AP.3_EL COOK TOP = 1)</b>  W2_AP.7_EL COOK TOP_NUMBER Which of the following did you consider when purchasing the electric cook top? Please mention <b>three most important attributes</b> that you considered.  <b>MULTIPLE RESPONSE – UPTO 3 ANSWERS)</b>  <b>(PROG. INS.: ALLOW MAXIMUM OF 3 RESPONSES ONLY. I.E. 0 – 3 ANSWERS ONLY)</b>

					Diameter (in inches): ____	1. Brand 2. Energy Rating 3. Type of the cook top (eg.: induction, infra-red etc.) 4. Added Features 5. Country of manufacture 6. Color 7. Safety 8. Price 9. Professional Reviews 99. Other (specify)
Electric Blender	<del>W2_AP.2_EL BLENDER</del>	W2_AP.3_EL BLENDER_NUMBER	W2_AP.4_EL BLENDER_NUMBER			
Electric grinder	<del>W2_AP.2_EL GRINDER</del>	W2_AP.3_EL GRINDER_NUMBER	W2_AP.4_EL GRINDER_NUMBER			
Electric food processor	<del>W2_AP.2_EL FOOD PRC</del>	W2_AP.3_EL FOOD PRC_NUMBER	W2_AP.4_EL FOOD PRC_NUMBER			
Rice cooker	<del>W2_AP.2_RICE COOKER</del>	W2_AP.3_RICE COOKER_NUMBER	W2_AP.4_RICE COOKER_NUMBER			
Electric Kettle	<del>W2_AP.2_EL KETTLE</del>	W2_AP.3_EL KETTLE_NUMBER	W2_AP.4_EL KETTLE_NUMBER			
Electric pressure cooker	<del>W2_AP.2_EL PRESSURE COOKER</del>	W2_AP.3_EL PRESSURE COOKER_NUMBER	W2_AP.4_EL PRESSURE COOKER_NUMBER			
Electric Air fryer	<del>W2_AP.2_EL AIR FRYER</del>	W2_AP.3_EL AIR FRYER_NUMBER	W2_AP.4_EL AIR FRYER_NUMBER			
Dish washer	<del>W2_AP.2_DISH WASHER</del>	W2_AP.3_DISH WASHER_NUMBER	W2_AP.4_DISH WASHER_NUMBER			
Washing Machine	W2_AP.2_WASH MACH	W2_AP.3_WASH MACH_NUMBER	W2_AP.4_WASH MACH_NUMBER	W2_AP.5a_WASH MACH_NUMBER What is the type of your washing machine? <b>(SHOW CARD)</b> <b>(SINGLE ANSWER)</b> 1. Fully automatic Front loading		<b>PROG INS.: ASK ONLY IF THE WASHING MACHINE WAS PURCHASED IN THE LAST ONE YEAR. (IF W2_AP.3_WASH MACH = 1)</b>  W2_AP.7_WASH MACH_NUMBER Which of the following did you consider when purchasing the washing machine? Please mention <b>three most important attributes</b> that you considered.?

				2. Fully automatic Top loading 3. Semi-automatic Front loading 4. Semi-automatic Top loading  W2_AP.5b_WASH MACH_NUMBER Water temperature used for washing machine? <b>(MULTIPLE ANSWER)</b> 1 Hot 2 Warm 3 Normal water 4 Don't know		<b>(MULTIPLE RESPONSE – UPTO 3 ANSWERS)</b>  <b>(PROG. INS.: ALLOW MAXIMUM OF 3 RESPONSES ONLY. I.E. 0 – 3 ANSWERS ONLY)</b>  1. Brand 2. Energy Rating (wattage) 3. Type of washing machine (eg: Fully automatic Front loading, fully automatic Top loading, semi-automatic Front loading, semi-automatic Top loading) 4. Added Features <del>5. Material</del> 5. Country of manufacture 6. Color 7. Safety 8. Price 9. Professional Reviews 99. Other (specify)
Clothes dryer	<del>W2_AP.2_CLTH DRYER</del>	W2_AP.3_CLTH DRYER_NUMBER	W2_AP.4_CLTH DRYER_NUMBER			
Electric Iron including electric steam iron	<del>W2_AP.2_IRON</del>	W2_AP.3_IRON_NUMBER	W2_AP.4_IRON_NUMBER	W2_AP.5a_IRON_NUMBER What is the type of your iron? <b>(SHOW CARD)</b> <b>(SINGLE ANSWER)</b> 1. Dry irons (with or without water steaming facility) 2. Steam irons 3. Other		<b>PROG. INS.: ASK ONLY IF THE IRON WAS PURCHASED IN THE LAST ONE YEAR. (IF W2_AP.3_IRON = 1)</b>  W2_AP.7_IRON_NUMBER Which of the following did you consider when purchasing the iron? Please mention <b>three most important attributes</b> that you considered. <b>(MULTIPLE RESPONSE – UPTO 3 ANSWERS)</b>  <b>(PROG. INS.: ALLOW MAXIMUM OF 3 RESPONSES ONLY. I.E. 0 – 3 ANSWERS ONLY)</b> 1. Brand 2. Energy Rating (wattage) 3. Added Features <del>4. Material</del> 4. Type of iron (ex.: dry vs, steam) 5. Country of manufacture 6. Color 7. Safety 8. Price 9. Professional Reviews 99. Other (specify)

Electric Vacuum Cleaner	W2_AP.2_EL VAC CLN	W2_AP.3_EL VAC CLN_NUMBER	W2_AP.4_EL VAC CLN_NUMBER			
Electric Lawn mower	W2_AP.2_EL LAWN MOWER	W2_AP.3_EL LAWN MOWER_NUMBER	W2_AP.4_EL LAWN MOWER_NUMBER			
TV	W2_AP.2_TV	W2_AP.3_TV_NUMBER	W2_AP.4_TV_NUMBER	W2_AP.5a_TV_NUMBER What is the type of your TV? <b>(SHOW CARD)</b> <b>(SINGLE ANSWER)</b> 1. CRT. 2. LCD / LED (Note to interviewer, (do not read out) multiple variations of LCD screens are called QLED, quantum dot, LED, LCD TN, LCD IPS, LCD PLS, LCD VA, etc.) 3. OLED. 4. Plasma	W2_AP.6a_TV_NUMBER Size of TV <b>(SINGLE ANSWER)</b> 1 27 inches or less 2 28 to 39 inches 3 40 to 59 inches 4 60 inches or more 5. Other	
Computers	W2_AP.2_COMP	W2_AP.3_COMP_NUMBER	W2_AP.4_COMP_NUMBER			
Laptops	W2_AP.2_LAPTOP	W2_AP.3_LAPTOP_NUMBER	W2_AP.4_LAPTOP_NUMBER			
Electric Exercise Machines	W2_AP.2_EL EX MACH	W2_AP.3_EL EX MACH_NUMBER	W2_AP.4_EL EX MACH_NUMBER			
Electric Water pump	W2_AP.2_EL WATER PUMP	W2_AP.3_EL WATER PUMP_NUMBER	W2_AP.4_EL WATER PUMP_NUMBER			
Electric Sewing machine	W2_AP.2_EL SEWN MACH	W2_AP.3_EL SEWN MACH_NUMBER	W2_AP.4_EL SEWN MACH_NUMBER			
Geyser / Hot water systems for bathrooms which operate from electricity	W2_AP.2_GYS/ HOT WATER SYS	W2_AP.3_GYS/ HOT WATER SYS_NUMBER	W2_AP.4_GYS/ HOT WATER SYS_NUMBER			
Electric heater (to control room temperature)	W2_AP.2_EL HEATER	W2_AP.3_EL HEATER_NUMBER	W2_AP.4_EL HEATER_NUMBER			
Humidifier	W2_AP.2_HUMIDIFIER	W2_AP.3_HUMIDIFIER_NUMBER	W2_AP.4_HUMIDIFIER_NUMBER			

<p><b>INST. TO PROG.: ASK ONLY IF THE RESPONDENT HAS AT LEAST ONE AC IN THE ROOM ROSTER. (I.E.; IF W2_E.6.I NOT EQUAL TO 0 FOR AT LEAST ONE ROOM IN THE ROOM ROSTER)</b></p> <p>Air conditioner</p>	W2_AP.2_AC_NUMBER	W2_AP.3_AC_NUMBER	W2_AP.4_AC_NUMBER	<p>W2_AP.5a_AC_NUMBER</p> <p>How many times did you change the air filters in the last year? (ANSWER TYPE: Single selection)</p> <p><b>(SINGLE ANSWER)</b></p> <ol style="list-style-type: none"> <li>1. Once</li> <li>2. Twice</li> <li>3. Three times</li> <li>4. Four times</li> <li>5. More than four times</li> </ol>	<p><b>PROG. INS.: ASK ONLY IF THE AC WAS PURCHASED IN THE LAST ONE YEAR. (IF W2_AP.3_AC = 1)</b></p> <p>W2_AP.7_AC_NUMBER</p> <p>Which of the following did you consider when purchasing the AC? Please mention <b>three most important attributes</b> that you considered?</p> <p><b>((MULTIPLE RESPONSE – UPTO 3 ANSWERS))</b></p> <p><b>(PROG. INS.: ALLOW MAXIMUM OF 3 RESPONSES ONLY. I.E. 0 – 3 ANSWERS ONLY)</b></p> <ol style="list-style-type: none"> <li>1. Brand</li> <li>2. Energy Rating (wattage)</li> <li>3. BTU</li> <li>4. Added Features</li> <li>5. Material</li> <li>5. Country of manufacture</li> <li>6. Color</li> <li>7. Safety</li> <li>8. Price</li> <li>9. Professional Reviews</li> <li>99. Other (specify)</li> </ol>
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## Module L: Behavior

INTERVIEWER TO SAY: Now, we would like to know a few details regarding your general behaviour related to ironing, washing clothes etc.

W2_L.1		
ASK: All Respondents	TYPE: Single Selection	
<p>Which of the following best describes your behaviour of ironing clothes?</p> <ol style="list-style-type: none"> <li>1. We iron the clothes weekly.</li> <li>2. We iron our clothes twice a week.</li> <li>3. We iron the clothes daily.</li> <li>4. We iron when and where the need arises.</li> <li>5. We don't iron clothes.</li> </ol>		

W2_L.2		
ASK: All Respondents	TYPE: Single Selection	
<p>Which of the following is true regarding drying the clothes that you wash under normal conditions?</p> <ol style="list-style-type: none"> <li>1. We don't use the dryer / in-built dryer in the washing machine to dry our clothes, we dry them out naturally (sunlight)</li> <li>2. If we use the washing machine, we use the in-built dryer to dry our clothes.</li> <li>3. We always use the dryer / in-built dryer in the washing machine to dry our clothes, irrespective of how they were washed.</li> </ol>		

W2_L.3		
ASK: All Respondents	TYPE: Single Selection	
<p>Which of the following best describes your behaviour regarding night lighting considering the whole house?</p> <ol style="list-style-type: none"> <li>1. We don't keep any of the lights on when sleeping.</li> <li>2. We keep one or two-night lights on when sleeping.</li> <li>3. We keep more than two lights on when sleeping</li> </ol>		

W2_L.4		
ASK: All respondents	TYPE: Single Selection	Ref: RECS – Energy Assistance
<p>How often do you and your household members switch-off unnecessary lights when leaving a room?</p> <ol style="list-style-type: none"> <li>1. Always</li> <li>2. Sometimes</li> <li>3. Never</li> </ol>		

W2_L.5		
ASK: All respondents	TYPE: Single Selection	Ref: RECS – Energy Assistance
<p>How conscious are you and your household members about reducing the number of times you open and close the refrigerator?</p> <ol style="list-style-type: none"> <li>1. Very conscious</li> <li>2. Somewhat conscious</li> <li>3. Not conscious at all</li> </ol>		

W2_L.6		
ASK: All Respondents	TYPE: Single Selection	
<p>When buying appliances, do you and your household members look at the wattage (or the energy rating) for energy saving purposes?</p> <ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>		

## Module H: Monthly expenditure

In this final section, I am going to ask you ~~a couple of questions regarding education and the occupation of the chief wage earner of your household and~~ about the household expenses. The objective of these questions is to classify respondents and look at the data among different categories of respondents based on household expenditure.

W2_H.4		
ASK: All Respondents	TYPE: Fill in	
<p>What is the total expenditure of your household in the last month? Please consider the spending by all members in your household. Please include all types of expenses, such as food items that you or your household members bought such as rice, coconut, chillies, sugar, prepared food that you'll bought from outside, you and your household members' spending on personal care products such as soaps, shampoo, toothpaste etc., expenses on laundry products such as washing powder, washing soap, expenses on travelling, on education such as school fees or tuition fees etc., bill payments such as electricity bill, water bill phone bill etc., your spending on clothes etc.</p> <p>HH Expenses for last month: _____</p>		

W2_H.5		
ASK: All Respondents	TYPE: Single selection	INS. TO INT.: SHOWCARD
<p>As you know, we are doing this study regarding the electricity consumption. Therefore, can you please tell me what type of electricity meter do you have at home? Is it a smart meter or a non-smart meter?</p> <ol style="list-style-type: none"> <li>1. Smart meter</li> <li>2. Non smart meter</li> </ol>		

## Module J: Information on re-contacting

W2_J.1a		
ASK: All Respondents	TYPE: Fill in	
<p>As a part of our quality control process, we may have to re-contact you which will not take more than 5 minutes. Can you please share a contact number on which we can contact you?</p> <p>Name of respondent:  Address of respondent:  Contact no. of respondent.:</p>		

W2_J.1		
PROG. INST.: DISPLAY THE LIST OF HOUSEHOLD MEMBERS INST. TO INTERVIEWER: DO NOT ASK. CODE THE NAME OF THE RESPONDENT	TYPE: Single Selection	
Name of respondent:		

W2_J.2		
ASK: All Respondents	TYPE: Single Selection	
<p>Is it ok if we take a photograph of the household?</p> <p>2. Yes à <b>PROG. INSTRUCTIONS – ALLOW THE INTERVIEWER TO TAKE A PHOTOGRAPH OF THE HOUSEHOLD.</b></p> <p>0. No à <b>INS. TO PROG: GO TO W2_J.3.</b></p>		

W2_J.3		
ASK: All Respondents	TYPE: Single Selection	
<p>INST. TO INTERVIEWER: DO NOT ASK. RECORD.</p> <p>Please code the in interview status.</p> <p>2. Completed.</p> <p>2. Not completed</p> <p>3. Discarded</p>		

W2_J.6		
INSTRUCTIONS TO PROGRAMMER: DISPLAY FOR ALL RESPONDENTS	TYPE: Multiple selection	
<p>INSTRUCTIONS TO INTERVIEWERS: DO NOT ASK. RECORD.</p> <p>Language that interview was conducted in</p> <p>INSTRUCTIONS TO INT.: Select all languages in which the interview was conducted. This includes instances where substantive parts of the questionnaire have been verbally translated into a local language to be better understood by the respondent. More than 1 language can be selected.</p> <p>3. Sinhala</p> <p>4. Tamil</p>		

W2_J.7		
ASK: RECORD FOR ALL RESPONDENTS	TYPE:	
Record the GPS of the location.		



INTERVIEWER TO SAY: This is the end of this survey. Thank you for all the information given by you. Also, as mentioned earlier, there will be one more interview which will be in <MENTION MONTH>. We will contact you beforehand to book a time with you. Thank you.

## **WAVE 3 QUESTIONNAIRE**

### Module A: Geographic and Related Information

This module is designed to collect information about the location and geographic attributes of the household and is not intended to be posed as questions to the participants.

A.1		
Do not ask. Interviewer to enter the unique ID of the customer and the rest of the information to be auto filled from the LECO database	TYPE: Fill in	
g) Unique ID of LECO customer (to be entered by the interviewer) <b>INSTRUCTIONS TO PROGRAMMER: THE FOLLOWING INFORMATION TO BE AUTO-CODED BASED ON THE LECO CUSTOMER DATABASE AND THE UNIQUE NUMBER ENTERED BY THE INTERVIEWER</b> h) Province (to be auto coded from the LECO database) i) District j) LECO Branch k) LECO CSC area l) Meter type		

### Module SC: Screener

#### Introduction

#### INSTRUCTIONS TO INTERVIEWERS:

**ASK TO SPEAK TO THE SAME PERSON TO WHOM WE SPOKE IN WAVE 1/ WAVE 2. IF HE / SHE IS NOT AVAILABLE, CONTACT THE SECOND-MOST KNOWLEDGEABLE PERSON REGARDING HOUSEHOLD DETAILS.**

**IF BOTH ARE NOT AVAILABLE, THE HOUSE SHOULD BE REVISITED AT A LATER TIME (THE TIME OF DAY BEING DIFFERENT TO THE TIME THAT THE FIRST VISIT WAS MADE; INQUIRE FROM OTHER MEMBERS AS TO THE TIME THE RELEVANT PERSON WILL BE HOME.**

#### INTERVIEWER TO READ:

Hello, my name is \_\_\_\_\_, I am from \_\_\_\_ . A few months back, we conducted two interviews with you/ your household member for this survey regarding electricity consumption. As mentioned to you, there are three waves for this survey and we would like to conduct the last interview today.

This study is conducted together with LIRNEasia, another research organization. LECO has partnered with LIRNEasia for this survey and has shared the contact details of a sample of its customers.

W3_SC.1a		
DO NOT ASK. RECORD BELOW	TYPE: Single Selection	

Are you talking to the same respondent as in wave 1 and / or wave 2 or is it a different member of the household?

1. Same respondent as in wave 1 / wave 2
0. A different respondent compared to wave 1 / wave 2

W3\_SC.1b

**PROG. INST.: DISPLAY THE LIST OF HOUSEHOLD MEMBERS**  
**INST. TO INTERVIEWER: CODE THE NAME OF THE RESPONDENT**

TYPE: Single Selection

Name of respondent:

W3\_Sc.2

ASK: IF W3\_SC.1a = 0

TYPE: Single Selection

Are you able to accurately tell me about the details related to the household?

3. Yes

0. No → **INT. INSTRUCTIONS: seek out suitable respondent (the respondent who was interviewed in W1 and / or W2); if not available, inquire as to when either of them will be available or revisit at that time. Make at least 3 attempts to meet the respondent. Continue to W3\_Sc.3 and terminate.**

W3\_Sc.3

ASK: All Respondents

TYPE: Single Selection

Record number of attempts that have been made to meet with this household respondent.

1. 1<sup>st</sup> Attempt

2. 2<sup>nd</sup> Attempt

3. 3<sup>rd</sup> Attempt

## Module CS: Consent form

As mentioned, we are conducting this survey among LECO customers on their electricity consumption habits and usage. This survey consists of three rounds where we will conduct three interviews with you. This is the third interview.

If you agree, we would like to ask you some questions regarding your household and the electricity consumption at your household. This will take about 60 minutes in total.

If you choose to participate, please be assured that all the information given by you will be kept totally confidential. This information will be combined with similar information from thousands of other people in to look at the average behaviour across society. There are no obvious physical, legal, or economic risks associated with participating in this study because your information will not be used in an identifiable manner.

Further, based on your consent, LECO will provide your past electricity consumption data to LIRNEasia.

Participation in this survey is voluntary. You may decline from answering any question at any time. You may also ask questions at any time. You may terminate your participation at any time. However, we hope that you will take part in this survey since your participation is important.

W3_Cs.1		
ASK: All Respondents	TYPE: Single Selection	
Do you consent to participate in this study and to provide your data to LIRNEasia?		
3. Yes		
0. No → <b>TERMINATE.</b>		

W3_Cs.2		
ASK: All Respondents	TYPE: Single Selection	
May we audio record some parts of this interview for quality checking purposes?		
3. Yes		
0. No		

#### Module EM: Electricity Meter Details

**INTERVIEWER TO SAY:** First, we would like to know whether there has been any changes to your household – i.e., the structure and the ownership of the household and the number of electricity meters.

W3_EM.1		
ASK: All Respondents	TYPE: Single Selection	Ref: RECS-Your Home
Have you obtained any new electricity meter/s since we did the last survey?		
1.Yes → <b>GO TO W3_EM.2</b>		
0.No → <b>INST. TO PROGRAMMER: DISPLAY DEFINITION OF HOUSEHOLD</b>		

W3_EM.2		
ASK: W3_EM.1 = 1	TYPE: Fill in	
Please tell me how many electricity meters are there in your house now?		
No. of electricity meters: _____		
<b>INST. TO PROGRAMMER: ALLOW ONLY INTEGER NUMBERS. THE NUMBER HAS TO BE GREATER THAN 1</b>		
<b>INST. TO PROGRAMMER: DISPLAY DEFINITION OF HOUSEHOLD</b>		

#### DEFINITION OF HOUSEHOLD

**INTERVIEWER TO SAY:** As in last time, for the purpose of this survey, we are defining the house as the area covered by the electricity meter. Therefore, when answering the questions, please consider only the household area that is covered by the electricity meter which is billed to the address \_\_\_\_ (**PROG: TO DISPLAY THE ADDRESS OF THE HOUSEHOLD**). Please consider all areas such as living rooms, bedrooms, kitchen, washrooms, toilet etc. including the garden areas which are covered by this meter. However, if there are areas within the household which are covered by any other electricity meters, please do not

consider these parts of the household when answering these questions. For example, if there is a room in the household that is covered by another electricity meter or if the upstairs of the house is covered by a separate electricity meter, please do not consider these areas when answering the questions.

W3_B.1		
ASK: All Respondents	TYPE: Single Selection	Ref: RECS-Your Home
<p>Do you or any member of your household own this house or are you living on rent?</p> <ol style="list-style-type: none"> <li>5. Yes, I or a household member owns it.</li> <li>6. No, I am living on rent and the rent is paid by me or a household member.</li> <li>7. No, I am living on rent and the rent is paid by the employer.</li> <li>8. No, I or any household member does not own or rent this household. We occupy this household without any payment of rent.</li> </ol>		

W3_C.3		
ASK: W3_B.1 = 1	TYPE: Single Selection	
<p>Do you occupy any of the following people in your house? By house, we mean the area covered by your electricity meter.</p> <ol style="list-style-type: none"> <li>4. Renters / boarders who are living in your annexe or any other attached place, maintaining separate living conditions but share the same electricity meter.</li> <li>5. Boarders who live in your house using a room/s that is attached to your living conditions.</li> <li>6. I don't occupy any of the above.</li> </ol>		

W3_C.3b		
ASK: IF W3_C.3 = 1 OR 2	TYPE: Single Selection	
<p>You said that there are renters / boarders who are living in this house. Can you please tell me whether they were living in this house when we did the previous interviews or did they start living here afterwards?</p> <ol style="list-style-type: none"> <li>1. They were living in this household from the time when the 2<sup>nd</sup> interview was done</li> <li>2. They started living in this household after the 2<sup>nd</sup> interview was done</li> <li>3. Some were there when the second interviews was done, but some came after the second interview</li> </ol>		

W3_C.3c																
ASK: IF W2_C.3b = 2 OR 3	TYPE: Multiple Selection															
<p>Since when did the new renters / boarder(s) start living in this household?</p> <table border="0" style="width: 100%;"> <tr> <td>1. December 2023</td> <td>8. July 2024</td> </tr> <tr> <td>2. January 2024</td> <td>9. August 2024</td> </tr> <tr> <td>3. February 2024</td> <td>10. September 2024</td> </tr> <tr> <td>4. March 2024</td> <td>11. October 2024</td> </tr> <tr> <td>5. April 2024</td> <td>12. November 2024</td> </tr> <tr> <td>6. May 2024</td> <td>13. December 2024</td> </tr> <tr> <td>7. June 2024</td> <td>14. Other (specify)</td> </tr> </table>			1. December 2023	8. July 2024	2. January 2024	9. August 2024	3. February 2024	10. September 2024	4. March 2024	11. October 2024	5. April 2024	12. November 2024	6. May 2024	13. December 2024	7. June 2024	14. Other (specify)
1. December 2023	8. July 2024															
2. January 2024	9. August 2024															
3. February 2024	10. September 2024															
4. March 2024	11. October 2024															
5. April 2024	12. November 2024															
6. May 2024	13. December 2024															
7. June 2024	14. Other (specify)															

W3_C.5		
ASK: W3_C3 = 1 or 2	TYPE: Single Selection	

Which of the following best describes your awareness of the electricity consumption of renters/boarding people? Are you aware of details such as the appliances they use and the number of hours they use each appliance, the times they keep the lights and fans switched on etc.?

7. I know all the details about the electricity consumption of the renters/ boarders; i.e.; the appliances they use and the number of hours they use each appliance, the times they keep the lights and fans switched on etc.
8. I know some details about the electricity consumption of the renters/ boarders; i.e.; the appliances they use and the number of hours they use each appliance, the times they keep the lights and fans switched on etc.
9. I do not know any details about the electricity consumption of the renters/ boarders; i.e.; the appliances they use and the number of hours they use each appliance, the times they keep the lights and fans switched on etc.

## Module B: Changes in housing ownership

**INTERVIEWER TO SAY:** First, we would like to know whether you have done any changes to the household, i.e.; whether you have built any new parts or has dismantled any parts that were there or whether you have done any renovations to your household.

W3_B.5a		
ASK ALL	TYPE: Single Selection	
<p>Has there being any structural changes to your household after we did the 2<sup>nd</sup> interview with you? By household, we mean the area covered by your electricity meter. i.e.; have there being any additions to the house such as adding a new part to the household like a room etc. or completing a section which was being built at the time we did the first interview or added a new floor etc.? or, have there been any parts of the household which were dismantled?</p> <ol style="list-style-type: none"> <li>1. Yes, new parts were added only</li> <li>2. Yes, some parts were dismantled only</li> <li>3. Yes, some new parts were added to the household and some parts were dismantled</li> <li>4. No structural changes were done to the household</li> </ol>		

W3_B.5b		
ASK ALL	TYPE: Single Selection	
<p>Were there any renovations done after we did the 2<sup>nd</sup> interview with you?</p> <ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>		

W3_B.5 (SHOWCARD)		
ASK: If W3_B.5a = 1, 2 OR 3	TYPE: Single Selection	Ref: HIES
<p>Which of these best describes your house now?</p> <ol style="list-style-type: none"> <li>21. Single House - Single Floor</li> <li>22. Single House -Double Floor</li> <li>23. Single House – More than 2 floors</li> <li>24. Attached house / Annex.</li> <li>25. Flat</li> <li>26. Condominium/ Luxury apartments</li> <li>27. Twin houses</li> <li>28. Line room/row house</li> </ol>		

29. Slum / Shanty
30. Other

W3_B.7		
ASK: If (W3_B.5a = 1, 2 OR 3) AND (W3_B.5 not equal to 1 or 2)	TYPE: Fill in	Ref: RECS-Your Home
<p>How many storeys does your house have?</p> <p><b>INSTRUCTIONS TO INTERVIEWERS:</b> This is the number of storeys the house has. if it is an apartment / flat, please do not enter on which floor the apartment/ flat is. (for example, if the apartment/ flat is in the 3rd floor, do not enter 3 here). bit only wnter the number of floors the respondent's unit occupies. For example, if the respondent's unit is located on the 3rd floor but occupies only one floor (i.e.; does not have any connection to an upper floor), then it will be a one storey house. However, if the respondent's unit is located on the 3rd floor and has two floors (i.e.; is connected to the floor above from an internal staircase), then it will be considered as a two storey house.</p>		

W3_B.8		
ASK: If W3_B.5a = 1, 2 OR 3	TYPE: Fill in	
<p>Can you please tell me what is the floor area of this household now? i.e.; how many square feet does this household cover? Please remember, when we say household, what we mean is the parts of the household that is covered by the electricity meter.</p> <p><b>INSTRUCTIONS TO INTERVIEWERS:</b> If the respondent is not able to state the floor area of the house, prompt him/ her by asking for the length and width of the household.</p> <p>State the area of your house in square feet.: _____</p>		

## Module C: Demographics Changes

**INTERVIEWER TO SAY:** Now we would like to know whether there have been any changes to your household member composition, i.e., whether there has been any changes to the members living in the household.

W3_C.1a (PRELOAD)		
ASK: All Respondents	TYPE: Fill in	Ref: RECS-Your Home
<p>&lt; INSTRUCTIONS TO PROGRAMMER: PRE-LOAD THE NAMES, GENDER AND AGE OF ALL THE HOUSEHOLD MEMBERS STATED IN THE DEMOGRAPHIC ROSTER IN WAVE 1 AND WAVE 2 – REFER THE BELOW TABLE&gt;</p> <p>During the last two interviews we had with you , you mentioned that there are _____</p> <p>&lt;INSTRUCTIONS TO PROGRAMMER: PRE-LOAD THE NUMBER OF HOUSEHOLD MEMBERS FROM WAVE 1 – W1_C.1&gt; members living in the household. Can you please tell me whether there are any changes in the composition of members living in the household? i.e.; whether these members are still living in this household or whether they have moved out and hence, are not staying here anymore? If they are temporarily living abroad or living in some other part of Sri Lanka, please consider them as living in the household. Also, if there are any boarders or those who are living on rent or if you have any maids/ housekeepers staying in this household, please include them as well.</p>		



**INTERVIEWER INSTRUCTIONS: PLEASE MARK WHETHER THE HOUSEHOLD MEMBER IS STILL LIVING IN THE HOUSEHOLD OR NOT.**

INSTRUCTIONS TO PROGRAMMER: PRE-LOAD THE DATA FOR W3_C1.1, W3_C1.2, W3_C1.3a AND W3_C1.3b FROM THE HOUSEHOLD MEMBER DETAILS IN W1 AND W2				
W3_C1.1 (INSTRUCTIONS TO PROGRAMMER: PRE-LOAD FROM W1 AND W2).	W3_C1.2 (INSTRUCTIONS TO PROGRAMMER: PRE-LOAD FROM W1_C.2.a, W1_C.2.c AND W1_C.2.d.1 IN W1 QUESTIONNAIRE AND W2_C.2.a, W2_C.2.c AND W2_C.2.d.1 IN W2 QUESTIONNAIRE). DO NOT REPEAT THE SAME MEMBER TWICE.	W3_C1.3a (INSTRUCTIONS TO PROGRAMMER: TO BE PRE-CODED AS 'YES' OR 'NO' BASED ON WHETHER THEY WERE PRESENT IN WAVE 1).	W3_C1.3b (INSTRUCTIONS TO PROGRAMMER: TO BE PRE-CODED AS 'YES' OR 'NO' BASED ON WHETHER THEY WERE PRESENT IN WAVE 2).	W3_C1.4 (INSTRUCTIONS TO PROGRAMMER: THIS COLUMN SHOULD BE KEPT OPEN FOR THE INTERVIEWER TO MARK YES OR NO).
Member no.	Name of the member, Gender, Age	Present in Wave 1	Present in Wave 2	Still living in the household
M1	<Name> - <Gender> - <Age>	Yes	Yes	1. Yes currently lives in 2. temporally not living 3. No, permanently left
M2	<Name> - <Gender> - <Age>	Yes	No	1. Yes currently lives in 2. temporally not living 3. No, permanently left
M3	<Name> - <Gender> - <Age>	No	Yes	1. Yes currently lives in 2. temporally not living 3. No, permanently left

W3_C.2		
ASK: All Respondents	TYPE: Fill in	Ref: RECS-Your Home
<p>Apart from the above-mentioned members, are there any others who are currently living in the household? It could be someone who has come back from abroad or any new additions? It could also be a boarder or a domestic help who has started living in the household after &lt;MENTION MONTH WHEN FIELDWORK WAS CONDUCTED FOR WAVE 2&gt;? If so, how many such members are there?</p> <p>please specify the number of new members.: ____</p>		

<b>INSTRUCTIONS TO INTERVIEWER: If there are no new members, enter '0'</b>
--

### **W3\_C.3: Demographic Roster**

**INSTRUCTIONS TO PROGRAMMER: REPEAT THE DEMOGRAPHIC ROSTER INTO NO. OF NEW FAMILY MEMBERS TIMES. (I.E., NUMBER OF MEMBERS STATED IN W3\_C.2)**

INTERVIEWER TO SAY: Now I would like to know a few details about the members who were not there in the previous rounds but have started living here after the 2<sup>nd</sup> interview, we had with you.

	W3_C.2.a	W3_C.2.b	W3_C.2.c	W3_C.2.d	W3_C.2.d.1	W3_C.2.e	W3_C.2.f	W3_C.2.g	W3_C.2.h	W3_C.2.i	W3_C.2.j	ASK IF W3_C.2.j = ECONOMICALLY ACTIVE (CODED 1,2 OR 3)			W3_C.2.n	
												W3_C.2.k	W3_C.2.l	W3_C.2.m		
No	Name of the member	Relationship to the head of the household. <b>(SINGLE ANSWER)</b>  1. Head of the household 2. Wife/Husband 3. Son/daughter 4. Son-in-law/Daughter in law 5. Parents of the head of the Household/spouse 6. Grandson/Granddaughter 7. Other relative 8. Domestic servant/driver/watcher 9. Boarder 10. Other	Gender <b>(SINGLE ANSWER)</b>  1. Male 2. Female 3. Other	Year of birth	Age <b>(PROG: THIS SHOULD NOT BE ASKED. TO BE CALCULATED BASED ON THE YEAR OF BIRTH AND DISPLAYED)</b>	Ethnicity <b>(SINGLE ANSWER)</b>  1. Sinhala 2. Sri Lankan Tamil 3. Indian Tamil 4. Sri Lankan Moor/Muslim 5. Burgher 6. Malay 7. Other	Religion <b>(SINGLE ANSWER)</b>  1. Buddhism 2. Hinduism 3. Islam 4. Roman Catholicism 5. Other Christian denominations 6. No religion 9. Other	Marital status. <b>(SINGLE ANSWER)</b>  1. Never married 2. Currently married (registered) 3. Currently married (customary) 4. Widowed 5. Divorced 6. Legally separated 7. Separated (not legally) 8. Not married but lives as a Family 9. Other	<b>ASK ONLY IF THE MEMBER IS AGED 3 YRS OR ABOVE</b>  Current attendance at school or any other educational institution. i.e.; is he/she currently doing any type of studying? This could be a degree, MBA etc., or following a course like CIMA, CIM or a vocational training course?  1. Preschool 2. School	<b>ASK ONLY IF THE MEMBER IS AGED 5 YRS OR ABOVE</b>  Highest level of education. <b>(SINGLE ANSWER)</b>  1. Studying/Studied Grade 1 2. Passed Grade 1 3. Passed Grade 2 4. Passed Grade 3 5. Passed Grade 4 6. Passed Grade 5 7. Passed Grade 6 8. Passed Grade 7 9. Passed Grade 8 10. Passed Grade 9 11. Passed Grade 10 12. Passed G.C.E.(O/L) 13. Passed Grade 12 14. Passed G.C.E.(A/L) or equivalent	<b>ASK ONLY IF THE MEMBER IS AGED 12 YRS OR ABOVE</b>  Main activity usually engaged in? <b>(SINGLE ANSWER)</b>  <b>Economically Active</b> 1. Engaged in economic activity/ currently employed/ engaged in own business 2. Retired and obtaining government/semi-government pension payment and is currently engaged in economic activity (employed elsewhere other than the place where he/she is receiving the pension from / engaged in own business) 3. Seeking for and available to work  <b>Economically Inactive</b> 4. Retired - Obtaining government/semi-government pension payment and currently not engaged in economic activity (not employed elsewhere or not engaged in any own business) 5. Retired from the private/semi-government sector and does not obtain any pension payment.	Main occupation. <b>(SINGLE ANSWER)</b>  1. Legislator, senior official, and manager 2. Professional 3. Technician and associate professional 4. Clerk 5. Service worker and shop and market sales worker 6. Skilled agricultural and fishery worker 7. Craft and related worker 8. Plant and machine operator and assembler 9. Elementary occupation 10. Related to forces. 11. No occupation	Daily wage owner? <b>(SINGLE ANSWER)</b>  1. Yes 0. No	Employment status of main occupation. <b>(SINGLE ANSWER)</b>  1. Government employee 2. Semi government employee 3. Private sector employee 4. Employer 5. Own account worker 6. Contributing family worker	The electricity consumption can vary based on the time that people stay at home. Therefore, we would like to know the number of hours stayed at home during last week for each member.  For example, if a member leaves for work at 6.30 in the morning and returns only at 7.00 in the night, and after he returns home, he doesn't go out again, before he left for work, from midnight to 6.30am, he stayed at home for 6 hrs and 30 min. likewise, after he returned home from work, from 7.00pm till midnight, he stayed at home for 5 hrs. This means, in total, he has spent 11 hrs and 30 min at home. If this happened all 5 weekdays, in that 5 weekdays, he would have stayed at home for 57 hrs and 30 min. During weekends, on Saturday, if he went out at 10 in the morning and came home at 3pm, and did not go anywhere after that, on Saturday, he has not being at home for 5 hrs. i.e.; he has stayed at home for 19 hrs. similarly, on Sunday, if he left home at 8am and came at 10am, and again left at 4.30pm and returned home at 8.30pm, on Sunday, he was not home for 2 hrs in the	

									3.University 4.Other educational institution 5.Vocational/Technical Institution 6.Pending results G.C.E. (O.L / A.L) 7.Still a toddler 8.Does not attend	15.Passed GAQ (General Arts Qualifying Examination) /GSQ (General Science Qualifying examination) 16.Passed Degree 17.Passed post Graduate Degree / Diploma 18.PhD 19.Special Education learning / learnt. 20.No Schooling	6.Received other pension payments. 7.Household activities 8.Student 9.Too old / Disable/ unable to work. 10.Other				<p>morning and 4 hrs in the evening, i.e.; in total, he was not home for 6 hrs, so, on Sunday, he was at home for 18 hrs. This means, that he stayed at home for 11 hrs and 30 min during each weekday, for 5 days, i.e.; 57 hrs and 30 min in total during weekdays, 19 hrs on Saturday and 18 hrs on Sunday. i.e.; in total, he has stayed home for 57 1/2 hrs + 19hrs + 18hrs, i.e.; 94.5 hrs in total.</p> <p><b>(PROG: VALUES CAN BE FROM 0-168)</b></p> <p><b>INSTRUCTIONS TO INT.: PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY</b></p> <p><b>INSTRUCTIONS TO INT.: Please use the following –</b>  15 min = 0.25 hrs  20 min = 0.33 hrs  30 min = 0.5 hrs  40 min = 0.66 hrs  45 min = 0.75 hrs  60 min = 1 hr  <b>If used 24x7 = 168 hrs</b></p>	

W3\_C.3 INTERVIEWER TO SAY: I would also like to know a few details about the other members of the household.

	W3_C.3.a	W3_C.3.j.1 INSTRUCTIONS TO PROGRAMMER: PRE-LOAD THE NAMES OF THE MEMBERS WHO WERE LIVING IN THE HOUSEHOLD IN WAVE 1 TOGETHER WITH THEIR MAIN ACTIVITY ENGAGED IN (W1_C.2.j IN WAVE 1) OR (W2_C.2.j IN WAVE 2)	W3_C.3.j INSTRUCTIONS TO PROGRAMMER: PRE-LOAD THE NAMES OF THE MEMBERS WHO WERE LIVING IN THE HOUSEHOLD IN WAVE 1 AND / OR WAVE 2 TOGETHER WITH THEIR MAIN ACTIVITY ENGAGED IN (W1_C.2.j IN WAVE 1 OR W2_C.2.j IN WAVE 2). KEEP A NEW COLUMN TO MARK THE MAIN ACTIVITY THE MEMBER IS CURRENTLY INVOLVED IN.	(ASK IF W3_C.3.j = ECONOMICALLY ACTIVE (CODED 1,2 OR 3))			W3_C.3.n INSTRUCTIONS TO PROGRAMMER: PRE-LOAD THE NAMES OF THE MEMBERS WHO WERE LIVING IN THE HOUSEHOLD IN WAVE 1 AND / OR WAVE 2.  KEEP SPACE FOR INTERVIEWER TO ENTER THE NUMBER OF HOURS	
				W3_C.3.k	W2_C.3.l	W2_C.3m		
No  (INSTRUCTIONS TO PROGRAMMER: PRE-LOAD FROM W1 & W2)	Name of the member  (INSTRUCTIONS TO PROGRAMMER: PRE-LOAD FROM W1 and W2  Wave 1 question naire : W1_C.2.a, W1_C.2.c AND W1_C.2.d.1  Wave 2 question naire : W2_C.2.a,	<b>ASK ONLY IF THE MEMBER IS AGED 12 YRS OR ABOVE</b>  Was there any change in the main activity usually engaged in? it could be a change in jobs, a promotion etc., or started to work full-time or part-time, or started to study full-time, or stopped working /	<b>ASK ONLY IF THE MEMBER IS AGED 12 YRS OR ABOVE</b>  Main activity usually engaged in? (SINGLE ANSWER)  <b>Economically Active</b> 1. Engaged in economic activity/ currently employed/ engaged in own business 2. Retired and obtaining government/semi-government pension payment and is currently engaged in economic activity (employed elsewhere other	Main occupation.  (SINGLE ANSWER)  1. Legislator, senior official, and manager  2. Professional  3. Technician and associate professional  4. Clerk  5. Service worker and shop and market sales worker  6. Skilled agricultural and fishery worker	Daily wage owner?  (SINGLE ANSWER)  1. Yes 0. No	Employment status of main occupation.  (SINGLE ANSWER)  1. Government employee  2. Semi government employee  3. Private sector employee  4. Employer  5. Own account worker  6. Contributing family worker	The electricity consumption can vary based on the time that people stay at home. Therefore, we would like to know the number of hours stayed at home during last week for each member.  For example, if a member leaves for work at 6.30 in the morning and returns only at 7.00 in the night, and after he returns home, he doesn't go out again, before he left for work, from midnight to 6.30am, he stayed at home for 6 hrs and 30 min. like-wise, after he returned home from work, from 7.00pm till midnight, he stayed at home for 5 hrs. This means, in total, he has spent 11 hrs and 30 min at home. If this happened all 5 weekdays, in that 5 weekdays, he would have stayed at home for 57 hrs and 30 min. During weekends, on Saturday, if he went out at 10 in the morning and came home at 3pm, and did not go anywhere after that, on Saturday, he has	

	<b>W2_C.2.c AND W2_C.2. d.1</b>	got retired etc.  1. Yes 0. No	than the place where he/she is receiving the pension from / engaged in own business) 3. Seeking for and available to work <b>Economically Inactive</b> 4. Retired - Obtaining government/semi- government pension payment and currently not engaged in economic activity (not employed elsewhere or not engaged in any own business) 5. Retired from the private/semi- government sector and does not obtain any pension payment. 6. Received other pension payments. 7. Household activities 8. Student 9. Too old / Disable/ unable to work. 10. Other	7. Craft and related worker  8. Plant and machine operator and assembler  9. Elementary occupation  10. Related to forces.  11. No occupation			not being at home for 5 hrs. i.e.; he has stayed at home for 19 hrs. similarly, on Sunday, if he left home at 8am and came at 10am, and again left at 4.30pm and returned home at 8.30pm, on Sunday, he was not home for 2 hrs in the morning and 4 hrs in the evening, i.e.; in total, he was not home for 6 hrs, so, on Sunday, he was at home for 18 hrs. This means, that he stayed at home for 11 hrs and 30 min during each weekday, for 5 days, i.e.; 57 hrs and 30 min in total during weekdays, 19 hrs on Saturday and 18 hrs on Sunday. i.e.; in total, he has stayed home for 57 1/2 hrs + 19hrs + 18hrs, i.e.; 94.5 hrs in total.  <b>(PROG: VALUES CAN BE FROM 0- 168)</b>  <b>INSTRUCTIONS TO INT.: PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY</b>  <b>INSTRUCTIONS TO INT.: Please use the following – 15 min = 0.25 hrs 20 min = 0.33 hrs 30 min = 0.5 hrs 40 min = 0.66 hrs 45 min = 0.75 hrs 60 min = 1 hr If used 24x7 = 168 hrs</b>	

<b>W3_C.4</b>		
ASK: IF W3_C.3 = 1 OR 2	TYPE: Single Selection	
<p>You mentioned that there are renters or boarders living in this household who share the same electricity meter. Which of the following best describes how you charge them for electricity?</p> <ol style="list-style-type: none"> <li>1. You charge a fixed amount every month for electricity.</li> <li>2. You charge an amount for electricity depending on the variance of the bill.</li> <li>3. You don't charge a specific amount for electricity but charge a fixed amount for all the utilities such as electricity, water etc.</li> <li>4. You don't charge a specific amount for electricity but charge a varied amount for all the utilities such as electricity, water etc. The amount charged varied based on the utility bills</li> <li>5. You don't charge them for electricity consumption</li> </ol>		

<b>W3_C.6</b>		
ASK: W3_B.1 = 2 OR 3 OR 4	TYPE: Single Selection	

You mentioned that you are living on rent. Which of the following best describes the payment for your electricity consumption?

7. You pay the full amount of the electricity bill.
8. You pay a fixed amount to the owner every month for electricity.
9. You pay a varied amount to the owner every month for electricity. The amount paid varies depending on the variance of the bill.
10. You don't pay a specific amount for electricity, but pay a fixed amount for all the utilities such as electricity, water etc.
11. You don't pay a specific amount for electricity, but pay a varied amount for all the utilities such as electricity, water etc. The amount paid varies depending on the variance of the utility bills.
12. You don't pay the owner for electricity consumption

W3\_C.7

ASK: Ask All

TYPE: Single Selection

Is there any business activity that is being carried out in any part of this household such as a shop, a communication, your own office etc. for which, electricity is used from the same meter?

2. Yes
1. No

W3\_C.8

ASK: IF W3\_C.7 = 1

TYPE: Single Selection

What type of business activity is being carried out in this household?

3. A shop
4. A communication
5. Other (specify)

## Module D: List of appliances in the household

### INTERVIEWER TO SAY:

As mentioned earlier, we are doing this study to get an understanding of what all are related to the electricity consumption. As you know, the electricity consumption depends on the electric appliances used in your household. Therefore, as in the previous time, I'd like to ask a few questions regarding the electric appliances that are there in your household which are in working condition and a few questions on your usage habits of these appliances.

We have with us the list of appliances that you mentioned were there in your household which are in working condition and which, you have used at least once, together with the number of such appliances. As I read out each appliance, can you please tell me whether they are still there in your household in working condition?

<p>W3_D1_0.</p> <p><b>INS. TO PROG: PRE-LOAD THE TYPE OF APPLIANCE AND THE NUMBER FROM W2 (FROM W2_D1a / W2_D2a) AND FROM W2_D1 / W2_D2)</b></p>	<p>W3_D1a.</p> <p><b>INS. TO INTERVIEWERS: PLEASE ASK THE RESPONDENTS WHETHER THERE ARE ANY CHANGES TO THE NO. OF APPLIANCES AND MARK AS YES / NO</b></p> <p>You mentioned you had ____ (MENTION THE NUMBER OF APPLIANCE) ____ (MENTION THE CORRESPONDING TYPE OF APPLIANCE). Do you still have the same number of ____ (MENTION APPLIANCE TYPE) in working condition?</p>	<p>W3.D2a</p> <p><b>INS. TO PROG: ASK ONLY IF THERE IS A CHANGE TO THE NUMBER OF APPIANCES IN WORKING CONDITION (W3_D1a = 0)</b></p> <p>No of appliance of the type?</p> <p><b>INSTRUCTIONS TO INT.: IF THE APPLIANCE IS NOT THERE ANYMORE, PLEASE ENTER AS '0'</b></p>	<p><b>INS. TO PROG: ASK ALL RESPONDENTS ABOUT ALL THE APPLIANCES. ASK SEPERATELY FOR THE NUMBER OF APPLIANCES</b></p> <p>W3_D3a. Duration of usage in hours during the last week</p> <p><b>INSTRUCTIONS TO INT.: PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY</b></p> <p><b>INSTRUCTIONS TO INT.: Please use the following –</b>  15 min = 0.25 hrs  20 min = 0.33 hrs  30 min = 0.5 hrs  40 min = 0.66 hrs  45 min = 0.75 hrs  60 min = 1 hr  If used 24x7 = 168 hrs</p> <p><b>(PROG: VALUES CAN BE FROM 0-168)</b></p>
<p>&lt;Appliance type&gt; - &lt;No. of appliances&gt;</p>	<p>1. Yes    0. No</p>		
<p>&lt;Appliance type&gt; - &lt;No. of appliances&gt;</p>	<p>1. Yes    0. No</p>		



Apart from the above-mentioned appliances, do you have any of these appliances in your household in working condition?

Appliance category	Appliance (INSTRUCTIONS TO INT.: SHOWCARD)  PROG: DISPLAY THE APPLIANCES THAT WERE NOT AVAILABLE IN WAVE 2 (I.E.; NOT MENTIONED IN W3_D1a)	W3_D1. Do you have any of these appliances in your household in working condition which you have used at least once? If you have boarders or those who are living on rent in your household, please include the electrical appliances used by them as well.	PROG: ASK W1_D2 AND W1_D3 TOGETHER FOR ONE TYPE OF APPLIANCE BEFORE MOVING TO THE NEXT TYPE OF APPLIANCE	
			W3_D2. No of appliance of the type	W3_D3. Duration of usage in hours during the last week  INSTRUCTIONS TO INT.: PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY  INSTRUCTIONS TO INT.: Please use the following – 15 min = 0.25 hrs 20 min = 0.33 hrs 30 min = 0.5 hrs 40 min = 0.66 hrs 45 min = 0.75 hrs 60 min = 1 hr If used 24x7 = 168 hrs  (PROG: ASK SEPERATELY FOR THE NUMBER OF APPLIANCES)  (PROG: VALUES CAN BE FROM 0-168)
KITCHEN APPLIANCES	Refrigerator			
	Separate Freezer			
	Mini Bar			
	Microwave			
	Electric Oven			
	Electric cook tops (induction cookers, Infra-red cookers, hot plates)			
	Electrical exhaust fan fitted above the oven or the hot plate			
	Electric Blender			
	Electric grinder			
	Electric mixer / beater			
	Electric food processor			
	Rice cooker			
	Electric Kettle			
	Electric water heater to heat water for drinking purposes			
	Toaster / Sandwich toaster			
	Waffle maker			
	Electric pressure cooker			
	Air fryer			
	Coffee maker			

	Electric grill			
	Electric coconut scraper			
	Electric Water filter / water dispenser			
	Dish washer			
CLEANING APPLIANCES	Washing Machine			
	Clothes dryer			
	Electric Iron including electric steam iron			
	Electric Vacuum Cleaner			
	Electric floor polisher			
	Electric water gun (used to wash cars etc.)			
	Electric Lawn mower			
ENTERTAINMENT APPLIANCE	TV			
	TV antenna			PROG: DURATION OF USAGE IS NOT REQUIRED
	Dialog TV / Peo TV / Satellite TV box			PROG: DURATION OF USAGE IS NOT REQUIRED
	Radio			
	Bluetooth Speakers			
	DVD / VCD			
	Gaming console/PlayStation			
	Sound systems (Subwoofer)/Stereo			
	Camera (that needs to be charged using electricity)			INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Home theater system			
	Electric musical Instruments (ex.: electric organ, electric guitar etc.)			
OFFICE APPLIANCES	Computers			
	Laptops			INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Routers			
	Mobile phone – Smart phones			INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Mobile phone – Feature phones			INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Mobile phone – Basic phones			INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Fixed phones			
	Power banks			INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Printer			INS. TO INT: NOT REQUIRED TO ASK FOR THE DURATION OF USAGE UNLESS THERE IS A COMMUNICATION CENTRE ATTACHED TO THE HOUSE OR THERE IS A BUSINESS THAT IS BEING CARRIED OUT AT THE HOUSE.
	Scanner			INS. TO INT: NOT REQUIRED TO ASK FOR THE DURATION OF USAGE UNLESS THERE IS A COMMUNICATION CENTRE ATTACHED TO THE HOUSE OR THERE IS A BUSINESS THAT IS BEING CARRIED OUT AT THE HOUSE.
	Fax machines			INS. TO INT: NOT REQUIRED TO ASK FOR THE DURATION OF USAGE UNLESS THERE IS A COMMUNICATION CENTRE ATTACHED TO THE HOUSE OR THERE IS A BUSINESS THAT IS BEING CARRIED OUT AT THE HOUSE.
	Photo Copiers			INS. TO INT: NOT REQUIRED TO ASK FOR THE DURATION OF USAGE UNLESS THERE IS A COMMUNICATION CENTRE

				ATTACHED TO THE HOUSE OR THERE IS A BUSINESS THAT IS BEING CARRIED OUT AT THE HOUSE.
HEALTH AND WELLNESS APPLIANCES	Hair dryer			
	Hair iron / hair curlers			
	Electric shavers			INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Electric Exercise Machines			
SECURITY APPLIANCES	Roller door			PROG: DURATION OF USAGE IS NOT REQUIRED
	CCTV camera systems (note to int.: even if there are more than one camera in the system, please consider as 1 CCTV camera system)			PROG: DURATION OF USAGE IS NOT REQUIRED
	Electric Alarm System			PROG: DURATION OF USAGE IS NOT REQUIRED
	Other Electric Security Systems			PROG: DURATION OF USAGE IS NOT REQUIRED
	Electric Bell			PROG: DURATION OF USAGE IS NOT REQUIRED
ELECTRIC VEHICLES	Electric vehicles (four wheelers) - cars, vans, SUVs)			INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Electric vehicles (two wheelers) - Electric bicycles, scooters			INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Electric vehicles (three wheelers)			INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
OTHER APPLIANCES	Electric Water pump			
	Electric Sewing machine			
	Oxygen filter for fish tank			
	Geyser / Hot water systems for bathrooms which operate from electricity			
	Hot tub			
	Electric Fountain / decorative waterfall			
	Emergency Light / re-chargeable torches			INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Electric heater (to control room temperature)			
	Humidifier			
	Toys with re-chargeable batteries			INS. TO INT: ASK FOR THE TIME TAKEN TO CHARGE
	Other (specify)			
	Other (specify)			
	Other (specify)			
	Tabs			

## Module E: Changes in the Housing Characteristics

### INTERVIEWER TO SAY:

Now I'd like to know a few details about the household. When we say household, we mean the area covered by the electricity meter. If you remember, last time I asked you about the number of rooms in the household and a few details of each. As I read out each room type and the number of rooms of that type that were there when we last interviewed you, please tell me whether there are any changes to the number of rooms/ parts?

If there are rooms or parts of the household that are not directly connected to the house, but is still covered by the same electricity meter such as a separate kitchen or a toilet, please include these as well.

W3_E.5			
AK: All Respondents		TYPE: Fill in	Ref: RECS-Your Home
<b>PROG. INSTRUCTIONS: PRE-LOAD THE TYPES OF ROOMS TOGETHER WITH THE NUMBER OF ROOMS RECORDED IN WAVE 2 FROM W2_E.5. (COLUMN 1 AND 2 IN THE BELOW TABLE)</b>			
<b>INSTRUCTIONS TO INTERVIEWERS: READ OUT THE TYPE AND NUMBER OF ROOMS FROM THE BELOW TABLE. IF THE RESPONDENT SAY THAT THERE IS A CHANGE IN THE NUMBER OF ROOMS OF A PARTICULAR TYPE, CODE 'YES' IN W3_E.5c AND ENTER THE NEW NUMBER OF ROOMS IN W3_E.5d. IF THE RESPONDENT SAY THAT THERE IS NO CHANGE IN THE NUMBER OF ROOMS OF A PARTICULAR TYPE, CODE 'NO' IN W3_E.5c.</b>			
<b>INSTRUCTIONS TO INTERVIEWERS: A ROOM CANNOT BE REPEATED TWICE. THIS INCLUDES ALL ROOMS INCLUDING KITCHENS, GARDENS, PASSAGES, LIVING ROOMS AND BATHROOMS WHERE THE AGGREGATION EVENTUALLY COVERS THE ENTIRE HOUSE</b>			
Type of rooms	Number of rooms (TO BE PRE-LOADED)	W3_E.5c Are there any changes to the number of ____ (room type)?	W3_E.5d (Prog. Inst.: ASK ONLY IF "1" CODED AT W3_E.5c) New no. of rooms
Living room		Yes – 1    No - 0	
Bedrooms		Yes – 1    No - 0	
Kitchen and/ or pantry / dining room		Yes – 1    No - 0	
Bathroom and / or toilets		Yes – 1    No - 0	
Storage room		Yes – 1    No - 0	
Other rooms / parts in the house including passages, veranda's, balconies, staircase etc.		Yes – 1    No - 0	
Garage		Yes – 1    No - 0	
Security Room		Yes – 1    No - 0	
Garden (including the wall around the garden, if any)		Yes – 1    No - 0	
Other rooms outside the house		Yes – 1    No - 0	

**INTERVIEWER TO SAY:** As in the last time, I would like to know a few details about the rooms in your household, especially the number of lights, fans, etc. We would like to know these details because we want to understand the relationship between the usage of lights, fans etc. and the electricity consumption. Let's start from one room and move on to each room in the household.

**INSTRUCTIONS TO PROGRAMMER:**

- THE FOLLOWING FLOW OF QUESTIONS TO BE ASKED FOR EACH ROOM SEPARATELY.
- EACH ROOM SHOULD HAVE A SERIAL NUMBER. SERIAL NUMBER TO BE OF THE FORMAT "ROOM\_NUMBER".

#### **INSTRUCTIONS TO PROGRAMMER – ROOM ROSTER:**

- **ORDER OF QUESTIONING SHOULD BE AS FOLLOWS:**
  - ASK W3\_E.6.a – W3\_E.6.j\_1 FOR ROOM NO. 1
  - ASK THE LIGHT ROSTER FOR ROOM NO. 1 (IF APPLICABLE, I.E.; W3\_E.6.j\_1 NOT EQUAL TO '0')
  - ASK W3\_E.6.k FOR ROOM NO. 1
  - ASK THE FAN ROSTER FOR ROOM NO. 1 (IF APPLICABLE, I.E.; W3\_E.6.k NOT EQUAL TO '0')
  - ASK W3\_E.6.l FOR ROOM NO. 1
  - ASK THE AC ROSTER FOR ROOM NO. 1 (IF APPLICABLE, I.E.; W3\_E.6.l NOT EQUAL TO '0')
  - REPEAT ABOVE ORDER FOR EACH ROOM

	W3_E.6.a	W3_E.6.a_1	W3_E.6.b	W3_E.6.c_1	W3_E.6.c_2	W3_E.6.d	W3_E.6.e	W3_E.6.f		W3_E.6.h	W3_E.6.i	W3_E.6.j	W3_E.6.j_1	W3_E.6.k	W3_E.6.l
N o	For what purposes do you mainly use this room? 1. Living room 2. Bedrooms 3. Kitchen and/ or pantry 4. Bathroom and / or toilets 5. Storage room 6. Gaming room 7.Servant’s Room 8. Visitors' room 9. Passage 10. Veranda 11. Balcony 12. Staircase 13. Garage 14. Security Room 15. Garden 16. Other rooms outside the house 17. Study room /Office room 18.Other	Was this section a part of the household when we did the second interview in <PROGRAMMER INSTRUCTIONS: MENTION THE MONTH WHEN FIELDWORK WAS CONDUCTED FOR WAVE 2>? And were there any changes done for this section of the household?  1. Yes, this was a part of the house when the second interview was done, and no changes were done to this section of the household → <b>GO TO W2_E.6.j</b> 2. Yes, this was a part of the house when the second interview was done, but there were some changes done to this section of the household → <b>CONTINUE</b> 0. No, this section was built after the second interview → <b>CONTINUE</b>	In which storey is this room located? (Define ground floor by zero)	What is the main material used for the roof of this section of the household?  1.Tile 2.Asbestos 3.Concrete 4.Metal Sheet 5.Takaran 6.Cadjun/Palmyra/Straw 7.Tent 8.Plastic sheets 9.Other 10. Garden – Not relevant	What type of ceiling does this section of the household have? <b>INSTRUCTIONS TO INTERVIEWER : SHOWCARD</b>  1. No ceiling, just the roof above 2. A conventional ceiling 3. A beamed ceiling 4. A hanging ceiling 5. A polythene cover as a ceiling 6. No ceiling, the concrete slab 7. Wooden ceiling 8. Other 9. Garden – Not relevant	What is the main material used for the floor of this section of the household?  1.Cement 2.Teraso 3.Tile 4.Granite 5.Wood (finished) 6.Mud 7.Wood 8.Sand 9.Concrete 10.Other 11. Garden – Not relevant	How many doors are there in this part of the house that let in light and air from the outside? That is, how many doors are there that let in light and air into the room from an external environment such as a garden, a balcony or a veranda?  <b>INST. TO INT: RECORD THE NUMBER OF DOORS. IF THERE ARE NO DOORS, RECORD AS ‘0’</b>  <b>PROG: KEEP SPACE TO RECORD NUMBER OF DOORS. ACCEPT ONLY INTEGER NUMBERS.</b>	How many windows are there in this part of the house that let in light and air from the outside? That is, how many windows are there that let in light and air into the room from an external environment such as a garden, a balcony or a veranda?  <b>INST. TO INT: RECORD THE NUMBER OF WINDOWS. IF THERE ARE NO WINDOWS, RECORD AS ‘0’</b>  <b>PROG: KEEP SPACE TO RECORD NUMBER OF WINDOWS. ACCEPT ONLY INTEGER NUMBERS.</b>	<b>ASK ONLY IF W3_E.6.f &gt; 0</b>  Do you have curtains or blinds for the windows?  1.Yes 0.No 2. Garden – Not relevant	Does this section of the household have natural ventilation other than windows, to allow fresh air circulation ? This could be a ventilation hole in the wall or a area with a grill on top of the windows which is not covered by the window pane etc. ( <b>SHOWCARD</b> )  1.Yes 0.No 2. Garden – Not relevant	How many light bulbs do you have in this section of the household? If there are lamp shades etc. which has more than one bulb, but all bulbs switches on with one common switch, please count as one light. Also, if there are table lamps, bed side lamps, lamp shades etc. in this part of the household, please include them as well. IF BATHROOM/ TOILET: INT. TO PROBE – Are there any mirror lights? IF GARDEN: INT. TO PROBE – Are there any garden lights or lights on the wall (thaappaya)?  <b>PROG: KEEP SPACE TO RECORD NUMBER OF LIGHTS. ACCEPT ONLY INTEGER NUMBERS</b>	And how many of these bulbs did you use in the last week?  <b>PROG: KEEP SPACE TO RECORD NUMBER OF LIGHTS. ACCEPT ONLY INTEGER NUMBERS</b>  <b>INS. TO PROG: IF NO. OF LIGHTS NOT EQUAL TO ZERO, REPEAT THE FOLLOWING LIGHT ROSTER FOR NUMBER OF LIGHTS.</b>	How many fans do you have in this section of the household? Please include all types of fans such as ceiling fans, pedestal fans, table fans, exhaust fans, tower fans etc.  <b>PROG: KEEP SPACE TO RECORD NUMBER OF FANS. ACCEPT ONLY INTEGER NUMBERS</b>  <b>INS. TO PROG: IF NO. OF FANS NOT EQUAL TO ZERO, REPEAT THE FOLLOWING FAN ROSTER FOR NUMBER OF FANS</b>	How many ACs do you have in this section of the household?  <b>PROG: KEEP SPACE TO RECORD NUMBER OF ACs. ACCEPT ONLY INTEGER NUMBERS</b>  <b>INS. TO PROG: IF NO. OF ACs NOT EQUAL TO ZERO, REPEAT THE FOLLOWING AC ROSTER FOR NUMBER ACs.</b>	

## Light Roster

	W3_E.6.n	W3_E.6.o	W3_E.6.p	W3_E.6.q
No	<p>What is the type of the light Bulb out of following?</p> <p><b>INST. TO INT:</b> If the respondent is not sure whether the light bulb is a CFL or an LED, please code it as CFL (SHOWCARD)</p> <p>1.Incandescent 2.CFL 3.LED 4.Halogen 5.Tube Light (conventional) 6.Tube Light (LED) 7.Flashlight 8.Flood light 9. Other</p>	<p>What is the wattage (W) of the light?</p> <p><b>INST. TO INT:</b> If there are lamp shades etc. which has more than one bulb, but all bulbs switches on with one common switch, please add up the wattage of all the bulbs and record below.</p> <p><b>INS. TO INT.:</b> IF THE RESPONDENT DOES NOT KNOW THE WATTAGE, PLEASE MARK AS "0".</p>	<p>For how many hours was this light kept switched on last week during daytime. (8am – 6pm)?</p> <p><b>INSTRUCTIONS TO INT.:</b> <b>PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY</b> (INSTRUCTIONS TO PROG: VALUE NEEDS TO BE BETWEEN 0 – 70. SHOULD ALLOW DECIMALS)</p> <p><b>INSTRUCTIONS TO INT.:</b> Please use the following – 15 min = 0.25 hrs 20 min = 0.33 hrs 30 min = 0.5 hrs 40 min = 0.66 hrs 45 min = 0.75 hrs 60 min = 1 hr Total number of hours per day from 8am – 6pm = 10 hrs If used every day from 8am-6pm = 70 hr</p>	<p>For how many hours was this light kept switched on, during last week during night-time. (6pm – 8am)?</p> <p><b>INSTRUCTIONS TO INT.:</b> <b>PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY</b> (INSTRUCTIONS TO PROG: VALUE NEEDS TO BE BETWEEN 0 – 98. SHOULD ALLOW DECIMALS)</p> <p><b>INSTRUCTIONS TO INT.:</b> Please use the following – 15 min = 0.25 hrs 20 min = 0.33 hrs 30 min = 0.5 hrs 40 min = 0.66 hrs 45 min = 0.75 hrs 60 min = 1 hr Total number of hours per day from 6pm – 8am = 14 hrs If used every day from 6pm – 8am = 98 hrs</p>

## Fan Roster

	W3_E.6.r	W3_E.6.s	W3_E.6.t
No	<p>What is the type of the fan? (SHOWCARD)</p> <p>1.Ceiling fan 2.Wall fan 3.Pedestal fan 4.Table fan 5.Exhaust fan 6.Tower fan 7.Other</p>	<p>For how many hours was this fan kept switched on last week during daytime. (8am – 6pm)?</p> <p><b>INSTRUCTIONS TO INT.:</b> <b>PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY</b> (INSTRUCTIONS TO PROG: VALUE NEEDS TO BE BETWEEN 0 – 70. SHOULD ALLOW DECIMALS) <b>INSTRUCTIONS TO INT.:</b> Please use the following – 15 min = 0.25 hrs 20 min = 0.33 hrs 30 min = 0.5 hrs 40 min = 0.66 hrs 45 min = 0.75 hrs 60 min = 1 hr Total number of hours per day from 8am – 6pm = 10 hrs If used every day from 8am-6pm = 70 hrs</p>	<p>For how many hours was this fan kept switched on last week during night-time. (6pm – 8am)?</p> <p><b>INSTRUCTIONS TO INT.:</b> <b>PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY</b> (INSTRUCTIONS TO PROG: VALUE NEEDS TO BE BETWEEN 0 – 98. SHOULD ALLOW DECIMALS) <b>INSTRUCTIONS TO INT.:</b> Please use the following – 15 min = 0.25 hrs 20 min = 0.33 hrs 30 min = 0.5 hrs 40 min = 0.66 hrs 45 min = 0.75 hrs 60 min = 1 hr Total number of hours per day from 6pm – 8am = 14 hrs If used every day from 6pm – 8am = 98 hrs</p>

## AC Roster

	W3_E.6. u	W3_E.6. v	W3_E.6. w		W3_E.6. x_2	W3_E.6. y	W3_E.6. z
No	What is the type of air conditioning used in the room? (SHOWCARD)  1. Central AC (Only to your Household) 2. Central AC (For the whole building. Relevant if B.5 = 5 or 6) 3. Individual AC with two components 4. Individual AC with one component 5. Air Cooler 6. Other	IF W2_E.6 .u = 3 or 4  Is the AC an inverter AC?  1. Yes 0. No	Which of the following is true regarding air conditioners?  1. The room can be fully closed and sealed and there are no outside openings. When the AC is turned on, the cool air does not go out of the room. 2. The room is fully closed. However, it is not fully sealed. Therefore, when the AC is on, the cool air may leak through the spaces that are not sealed such as the space in-between the door and the door frame 3. The room is not fully closed. There are spaces where the cool air can leak out		What is the BTU of the AC?  INS. TO INT - IF THE RESPONDENT DOES NOT KNOW THE BTU, MARK AS "0"	For how many hours was this AC kept switched on, last week, during daytime? (8am – 6pm)? <b>INSTRUCTIONS TO INT.: PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY (INSTRUCTIONS TO PROG: VALUE NEEDS TO BE BETWEEN 0 – 70. SHOULD ALLOW DECIMALS)</b>  <b>INSTRUCTIONS TO INT.: Please use the following –</b> 15 min = 0.25 hrs 20 min = 0.33 hrs 30 min = 0.5 hrs 40 min = 0.66 hrs 45 min = 0.75 hrs 60 min = 1 hr Total number of hours per day from 8am – 6pm = 10 hrs If used every day from 8am-6pm = 70 hrs	For how many hours was this AC kept switched on last week, during night-time. (6pm – 8am)? <b>INSTRUCTIONS TO INT.: PROBE FOR WEEKDAYS AND WEEKENDS SEPARATELY (INSTRUCTIONS TO PROG: VALUE NEEDS TO BE BETWEEN 0 – 98. SHOULD ALLOW DECIMALS)</b>  <b>INSTRUCTIONS TO INT.: Please use the following –</b> 15 min = 0.25 hrs 20 min = 0.33 hrs 30 min = 0.5 hrs 40 min = 0.66 hrs 45 min = 0.75 hrs 60 min = 1 hr Total number of hours per day from 6pm – 8am = 14 hrs If used every day from 6pm – 8am = 98 hrs

### W3\_E.7

ASK: All Respondents

TYPE: Single Selection

Are there any other parts of the household which are covered by the same electricity meter which were not covered above?

1. Yes à **INST. TO PROG: GO TO W3\_E.7a**

0. No à **INST. TO PROG: GO TO W3\_E.8**

### W3\_E.7a

ASK: Ask if W3\_E.7 = 1

TYPE: Fill in

Ref: RECS-Your Home

Can you please tell me which parts of the house you have missed mentioning earlier? Please mention only the parts you have missed and to which, electricity is supplied from the same electricity meter?

**INST. TO INT: PLEASE STATE ONLY THE NUMBER OF ROOMS/ PARTS OF THE HOUSEHOLD WHICH WERE MISSED BY THE RESPONDENT EARLIER.**

Living room

Bedrooms

Kitchen and/ or pantry / dining room

Bathroom and / or toilets

Storage room

Other rooms / parts in the house including passages, veranda's, balconies, staircase etc.

Garage

Security Room

Garden (including the wall around the garden, if any)

Other rooms outside the house



**INTERVIEWER TO SAY:** Now I'd like to ask you the details about these parts of the household.

**INST. TO PROG:** REPEAT THE HOUSEHOLD ROSTER (W3\_E.6.a – W3\_E.6. z) FOR THE TOTAL NUMBER OF ROOMS IN W3\_E.7a

W3_E.8a		
ASK: IF W3_B.5a = 2 OR 3	TYPE: Single Selection	
Are there any sections of the household that were there when we did the second interview, but has been demolished now?		
1. Yes		
0. No		

W3_E.8b		
ASK: Ask if W3_E.8a = 1	TYPE: Fill in	Ref: RECS-Your Home
Can you please tell me which parts of the house were demolished after we did the second interview? And how many such parts were demolished?		
<b>INST. TO INT: PLEASE STATE ONLY THE NUMBER OF ROOMS/ PARTS OF THE HOUSEHOLD WHICH WERE DEMOLISHED AFTER THE SECOND INTERVIEW.</b>		
<b>Part of the HH</b>	<b>Demolished or not</b>	<b>No. of parts / rooms demolished</b>
Living room		
Bedrooms		
Kitchen and/ or pantry / dining room		
Bathroom and / or toilets		
Storage room		
Other rooms / parts in the house including passages, veranda's, balconies, staircase etc.		
Garage		
Security Room		
Garden (including the wall around the garden, if any)		
Other rooms outside the house		

W3_E.8c		
ASK: All Respondents	TYPE: Single Selection	
Are there any constructions or renovations happening in this household currently?		
1. Yes		
0. No		

## MODULE E-2: OTHER METHODS OF GENERATING ELECTRICITY AND BACKUP ELECTRICITY

### INTERVIEWER TO SAY:

Now I would like to know a few details about other methods that you may be using to generate electricity at your household. As we are interested in the electricity consumption of your household, it is also important for us to know whether you use electricity from the LECO supply only or whether there are any other methods that you use at your household to generate electricity such as generators and solar panels

W3_E.10		
ASK: All Respondents	TYPE: Single Selection	Ref: RECS – Energy Bills
Does your household have a backup generator to generate electricity if needed?		
1.Yes		
0.No		

W3_E.18		
ASK: DO NOT ASK. PROGRAMMER TO PRE-LOAD FROM WAVE 2	TYPE: Single Selection	
INSTRUCTIONS TO PROGRAMMER: PLEASE PRE-CODE BASED ON THE ANSWER TO W2_E.19 OR W2_E.20a		
Did the household had solar energy when the 2 <sup>nd</sup> interview was done?		
1. Yes → <b>INSTRUCTIONS TO PROG.: GO TO W3_E.20a</b>		
0. No → <b>INSTRUCTIONS TO PROG.: GO TO W3_E.19</b>		

W3_E.19		
ASK: ONLY IF W3_E.18 = 0	TYPE: Single Selection	
Do you have a solar panel to generate electricity at your home?		
1. Yes → <b>INSTRUCTIONS TO PROG.: GO TO W3_E.13</b>		
0. No → <b>INSTRUCTIONS TO PROG.: GO TO MODULE N</b>		

W3_E.20a		
ASK: ONLY IF W3_E.18 = 1	TYPE: Single Selection	
You mentioned that you have solar panels to generate electricity when we did the second interview. Do you still have it?		
1. Yes → <b>INSTRUCTIONS TO PROG.: GO TO W3_E.20b</b>		
0. No → <b>INSTRUCTIONS TO PROG.: GO TO MODULE N</b>		

W3_E.20b		
ASK: ONLY IF W3_E.20a = 1	TYPE: Single Selection	
Have you done any changes to the number of panels in the solar panel at your household after we did the second interview? i.e.; have you increased or reduced the number of panels?		
1. Yes, we have increased the number of panels		
2. Yes, we have reduced the number of panels		
3. No, we have not done any changes to the number of panels		

W3_E.13		
ASK: If W3_E.19=1 OR W3_E.20b = 1, 2 OR 3	TYPE: Single Selection	
Is your solar system on-grid or off-grid?		
1. On-grid		
2. Off-grid		
9. Don't know /Can't say		

W3_E.14		
ASK: If W3_E.20a=1 OR W3_E.19=1	TYPE: Single Selection	
Do you have an inverter for the solar energy generation system? An inverter is a device that converts direct current (DC) electricity, which is what a solar panel generates, to alternating current (AC) electricity, which the electrical grid uses 3. Yes 2. No		

W3_E.12		
ASK: If W3_E.13 = 2	TYPE: Multiple Selection	
Which of the following purposes do you use solar energy inside your house? 9. Water heating 10. Cooking 11. Outdoor lighting 12. Car charging 13. Agriculture equipment and systems (irrigation systems, etc) 14. All the above 15. Other		

W3_E.15a		
ASK: If W3_E.20a=1 OR W3_E.19=1	TYPE: Single Selection	
Are you aware of the number of units generated by the solar energy system in the last one month? 1. Yes 0. No		

W3_E.15b		
ASK: W3_E.15a=1	TYPE: Fill in	
How many units did the solar system generate last month? No. of units: _____		

W3_E.15c		
ASK: If W3_E.20a=1 OR W3_E.19=1	TYPE: Fill in	
What is the capacity of the solar system in your household? Capacity: _____		

## Module N: Behavior

INTERVIEWER TO SAY: Now, we would like to know a few details regarding your general behaviour related to use of electrical devices etc.

W3_N.1		
ASK: All Respondents	TYPE: Single Selection	

Have you and your household members consciously reduced or stopped using any electrical appliance, i.e.; consciously switched off or stopped using electrical devices such as fans, electric rice cookers, kettles, ovens etc.?

1. Yes, always consciously reduce/ stop using some appliances
2. Yes, sometimes consciously reduce/ stop using some appliances
1. No, never consciously reduce/ stop using some appliances

W3\_N.2

ASK: IF W3\_N.2 = 1

TYPE: Single Selection

Which appliances / devices have you and your household members have reduced or stopped using consciously?

**INSTRUCTIONS TO INT.: DO NOT READ OUT LIST. MARK ALL APPLIANCES/ DEVICES MENTIONED BY THE RESPONDENT.**

PROBE: Any other devices that you and your family members have reduced or stopped using?

1. TV
2. Electric rice cookers
3. Electric kettles
4. Washing machines
5. Fans
6. ACs
7. Oven
8. Microwave
9. Electric cook tops
10. Electric blender
11. Electric grinder
12. Electric iron
13. Radio
14. Gaming console/PlayStation
15. Computer
16. Laptop
17. Tabs
18. Hair dryer
19. Electric shavers
20. Electric Sewing machine
21. Geyser / Hot water systems for bathrooms which operate from electricity
99. Other (specify)

W3\_N.3

ASK: All Respondents

TYPE: Single Selection

Do you or your household members switch off the refrigerator as a habit at specific times of the day? This does not include switching off the refrigerator when there is lightning etc.

1. Yes
2. No

W3\_N.4

ASK: All Respondents

TYPE: Single Selection

To what extent do you agree with the statement "We usually replace the old electric appliances and buy new ones without waiting till the appliance is unusable"?

1. Very much disagree
2. Somewhat disagree
3. Neither agree nor disagree

- |   |
|---|
| 4. Somewhat agree<br>5. Very much agree |
|---|

## Module P: Awareness of “Time of use metering”

INTERVIEWER TO SAY: Now, we would like to ask you a few questions on “Time of use metering”.

W3_P.1		
ASK: All Respondents	TYPE: Single Selection	
Have you heard of “Time of use metering”?		
1. Yes		
0. No		

W3_P.2		
ASK: IF W3_P.1 = 1	TYPE: Single Selection	
Have you or your household use “Time of use metering”?		
1. Yes		
0. No		

W3_P.3		
ASK: IF W3_P.2 = 1	TYPE: Single Selection	
Has the use of “Time of use metering” reduced your electricity bill considerably? i.e.; reduced your electricity bill at least by 20%?		
1. Yes		
0. No		

W3_P.4		
ASK: IF W3_P.2 = 0	TYPE: Single Selection	
Why have you not used “Time of use metering”?		
1. I wanted to apply but couldn’t do it yet		
2. Don’t think there is any considerable reduction in the electricity bill by using “Time of use monitoring”		
3. I don’t know how to apply for it		
4. Other (specify)		

W3_P.5		
ASK: IF W3_P.1 = 0	TYPE: Single Selection	
<p>The “Time of use metering” is a way of measuring electricity consumption separately according to the different times of day. The day is divided into 3 periods; peak, day time and off-peak and electricity usage is charged at different rates for the three periods, with a higher rate for the peak, a medium rate for the day time and a lower rate for the off peak time. Apart from the charge based on time period, there is also a fixed charge per month.</p> <p>If this type of electricity billing was available, would you use it?</p>		
1. Yes		
0. No		

W3_P.6		
ASK: IF W3_P.5 = 1	TYPE: Single Selection	
<p>You mentioned that if “Time of use metering” was available, that you would use it. Will you be able to shift your usage of electrical appliances to off-peak times in order to gain a considerable reduction (at least a 20% reduction) in your electricity bill?</p> <p>1. Yes 0. No</p>		

## Module M: Electricity Billing

**INTERVIEWER TO SAY:** Finally, I would like to ask you a few questions regarding your electricity bill payment behaviour.

W3_M.1		
ASK: All Respondents	TYPE: Single Selection	
<p>Do you have a target number of units or a target bill value for monthly electricity consumption for your household?</p> <p>1. Yes 0. No</p>		

W3_M.2		
ASK: If W3_M.1 = 1	TYPE: Single Selection	
<p>What is your target type?</p> <p>1. Number of units 2. Bill value 3. Both</p>		

W3_M.3		
ASK: If W3_M.2 = 1 or 3	TYPE: Fill in	
<p>What was the target maximum number of units for the last month?</p> <p>Record the target number of units: _____</p>		

W3_M.4		
ASK: If W3_M.2 = 2 or 3	TYPE: Fill in	
<p>What was the target bill value for the last month?</p> <p>Record the target bill value: _____</p>		

W3_M.5		
ASK: If the meter is a smart meter	TYPE: Single Selection	Ref: RECS – Energy Assistance
<p>Does any household member view smart meter interval data?</p> <p>1. Yes 2. No</p>		

W3_M.6		
ASK: All Respondents	TYPE: Single Selection	
<p>Which of the following can most accurately describe your knowledge in electricity bill calculation?</p> <p>1. I am aware of how the bill is calculated.</p>		

2. I'm not aware of how the bill is calculated, but a household member is aware
3. Neither me, nor my household members are aware of how the bill is calculated

W3_M.7		
ASK: All Respondents	TYPE: Single Selection	
Which of the below is true regarding your normal bill payment practice (example given when the bill is Rs 4566)?		
<ol style="list-style-type: none"> <li>1. We try to pay the exact amount in the bill (ex: 4566)</li> <li>2. We try to pay a rounded off amount which is mostly lower than the bill (ex: 4500)</li> <li>3. We try to pay a rounded off amount which will cover the whole bill amount (ex: 4600)</li> <li>4. We try to pay a portion of the bill amount that is possible for us (ex: 3500)</li> <li>5. We don't pay the bill regularly/ every month.</li> <li>6. We live on rent and we do not pay directly to LECO.</li> </ol>		

W3_M.8		
ASK: All Respondents	TYPE: Single Selection	Ref: RECS – Energy Bills
Have you experienced any disconnection in electricity supply due to late payment during the last year?		
<ol style="list-style-type: none"> <li>1. Yes</li> <li>0. No</li> </ol>		

W3_M.9		
ASK: All Respondents	TYPE: Fill in	Ref: RECS – Energy Bills
Nearly how many red notices did you receive last year from LECO? A red notice is issued for failing to settle outstanding bills during a certain period?		
No. of red notices received last year: _____		

## Module H: Monthly expenditure

W2_H.4		
ASK: All Respondents	TYPE: Fill in	
How much did your family spend last month? Please consider the spending by all members in your household. Please include all types of expenses, such as food items that you or your household members bought such as rice, coconut, chillies, sugar, prepared food that you'll bought from outside, you and your household members' spending on personal care products such as soaps, shampoo, toothpaste etc., expenses on laundry products such as washing powder, washing soap, expenses on travelling, on education such as school fees or tuition fees etc., your spending on clothes etc.		
HH Expenses for last month: _____		

W2_H.5		
ASK: All Respondents	TYPE: Single selection	INS. TO INT.: SHOWCARD
<p>As you know, we are doing this study regarding the electricity consumption. Therefore, can you please tell me what type of electricity meter do you have at home? Is it a smart meter or a non-smart meter?</p> <p>1. Smart meter</p> <p>2. Non smart meter</p>		

## Module J: Information on re-contacting

W3_J.1a		
ASK: All Respondents	TYPE: Fill in	
<p>As a part of our quality control process, we may have to re-contact you which will not take more than 5 minutes. Can you please share a contact number on which we can contact you?</p> <p>Name of respondent:</p> <p>Contact no. of respondent.:</p>		

W3_J.1		
PROG. INST.: DISPLAY THE LIST OF HOUSEHOLD MEMBERS INST. TO INTERVIEWER: DO NOT ASK. CODE THE NAME OF THE RESPONDENT	TYPE: Single Selection	
Name of respondent:		

W3_J.2		
ASK: All Respondents	TYPE: Single Selection	
<p>Is it ok if we take a photograph of the household?</p> <p>3. Yes → <b>PROG. INSTRUCTIONS – ALLOW THE INTERVIEWER TO TAKE A PHOTOGRAPH OF THE HOUSEHOLD.</b></p> <p>0. No → <b>INS. TO PROG: GO TO W3_J.3</b></p>		

W3_J.3		
INSTRUCTIONS TO PROGRAMMER: DISPLAY FOR ALL RESPONDENTS	TYPE: Single Selection	
<p>INST. TO INTERVIEWER: DO NOT ASK. RECORD.</p> <p>Please code the in interview status?</p> <p>3. Completed.</p> <p>2. Not completed</p> <p>3. Discarded</p>		

W3_J.6
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INSTRUCTIONS TO PROGRAMMER: DISPLAY FOR ALL RESPONDENTS	TYPE: Multiple selection	
<p>INSTRUCTIONS TO INTERVIEWERS: DO NOT ASK. RECORD.</p> <p>Language that interview was conducted in</p> <p>INSTRUCTIONS TO INT.: Select all languages in which the interview was conducted. This includes instances where substantive parts of the questionnaire have been verbally translated into a local language to be better understood by the respondent. More than 1 language can be selected.</p> <p>5. Sinhala</p> <p>6. Tamil</p>		

W2_J.7		
ASK: RECORD FOR ALL RESPONDENTS	TYPE:	
Record the GPS of the location.		

INTERVIEWER TO SAY: This is the end of this survey. Thank you for all the information given by you and thank you for your participation throughout the three waves of this survey.