

## Appendix A.1 Pro-Forma Questionnaire Survey

External temperature	<input type="text"/> °C	Block/Flat No	<input type="text"/>	Type of apartment unit					
Internal temperature	<input type="text"/> °C	Level	<input type="text"/>	<input type="checkbox"/> Penthouse	studio	1+1	2+1	3+1	
Location of tower block	<input type="checkbox"/> S-W	<input type="checkbox"/> N-W	<input type="checkbox"/> N-E	<input type="checkbox"/> S-E	<input type="checkbox"/> Corner flat (flat in the corner of the block)	studio	1+1	2+1	3+1
Location of respondent	Near an open window?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> Flat (sharing both walls with other flats)	studio	1+1	2+1	3+1	
Kitchen design layout		<input type="checkbox"/> OPEN	<input type="checkbox"/> CLOSED	<input type="checkbox"/> Flat (sharing a wall with a flat)	studio	1+1	2+1	3+1	

### SECTION 1

#### HOUSEHOLD

We would like to know some facts about your households. Fill in the following table: start with yourself (respondent) and continue with the rest of your household.

1. What is the gender, age, occupation and highest level of education for you and all occupants in your house?

	Gender (Male/Female)	Age	* Occupation (Full time/Part time)	** Level of Education
<input type="checkbox"/> Respondent				
<input type="checkbox"/> Person 2				
<input type="checkbox"/> Person 3				
<input type="checkbox"/> Person 4				
<input type="checkbox"/> Person 5				
<input type="checkbox"/> Person <input style="width: 20px;" type="text"/>				
* Occupation:	a. Works outside the home, b. works at home, c. household activities, d. pupil/student, e. other, (please specify); <input style="width: 100px;" type="text"/>			
** Level of Education:	a. None, b. elementary school, c. secondary school, d. high school, e. undergraduate, f. postgraduate (PhD, MSc, MA) g. other (please specify); <input style="width: 100px;" type="text"/>			

Remember the order you listed your household members above and use this order for the rest of the questionnaire.

2. How many years have you lived in this flat?

Less than 1 year    
  1-2 years    
  2-5 years    
  5-10 years    
  < 10 years

3. Do you own or rent your dwelling?

Owner-occupied    
  Rented property

4. Do you check your use of electricity by taking the meter reading frequently?

Yes    
  No

5. How much electricity (in kWh) did you consume (May-September) according to this last overview?

Low rate (rate or meter 1)  kWh

High rate (rate or meter 2)  kWh

**Fig. A.1.** Questions intended to record physical and environmental parameters and household socio-demographic characteristics.

## Appendix A.2 Pro-Forma Questionnaire Survey

6. Do you know anything about energy-saving methods?  
 A lot       Some       A little       Nothing

7. Have you received advice on how to reduce your energy bills?  Yes  No  
**If you answered 'yes', from where did you receive the advice?**

Famagusta Municipality     The Electricity Authority (KIB-TEK)     Other, please specify:

8. How many people generally stay in these specific rooms on a typical weekday?

Room/Number of people	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
<input type="checkbox"/> Living room																								
<input type="checkbox"/> Kitchen																								
<input type="checkbox"/> Bedroom 1																								
<input type="checkbox"/> Bedroom 2																								
<input type="checkbox"/> Bedroom 3																								

9. How many people generally stay in these specific rooms on a typical weekend day?

Room/Number of people	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
<input type="checkbox"/> Living room																								
<input type="checkbox"/> Kitchen																								
<input type="checkbox"/> Bedroom 1																								
<input type="checkbox"/> Bedroom 2																								
<input type="checkbox"/> Bedroom 3																								

### COOLING SUPPLY AND CONSUMPTION

10. What type of cooling system do you have? Specify numbers of each.

Central cooling system     A/C split unit     A/C inverter split unit     A/C portable unit  
 Ceiling-mounted fan     Portable fans     None     Other, (please specify):

We are interested in how you use your cooling system during the **SUMMER** months. Consider a summer day very hot and humid; last year the average temperature on a summer day was 32.5°C.

### TEMPERATURE REGULATION

11. Mark how you control the indoor air temperature at home in the summer:

<input type="checkbox"/> Remote control		<input type="checkbox"/> Smartphone application	
<input type="checkbox"/> Wall-mounted thermostat		<input type="checkbox"/> N/A	

Fig. A.2. Questions related to household occupancy patterns and types of cooling systems.

## Appendix A.3 Pro-Forma Questionnaire Survey

### COOLING DEVICES USE

We would like to know when you turn on/off your cooling device(s) in different rooms on **weekdays** and at **weekends**.  
12. Where and when do you turn on the cooling device(s) on **weekdays**?

Room	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
Living room																								
Kitchen																								
Bedroom 1																								
Bedroom 2																								
Bedroom 3																								

13. Where and when do you turn on the cooling device(s) at **weekends**?

Room	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
Living room																								
Kitchen																								
Bedroom 1																								
Bedroom 2																								
Bedroom 3																								

### HEATING SUPPLY AND CONSUMPTION






14. What type of heating system do you have? Specify numbers of each.

- |   |   |  |   |
|---|---|--|---|
| <input type="checkbox"/> Central heating system | <input type="checkbox"/> A/C split unit | <input type="checkbox"/> A/C inverter split unit       | <input type="checkbox"/> Wall-mounted heating fan |
| <input type="checkbox"/> Portable external fans | <input type="checkbox"/> Radiator       | <input type="checkbox"/> Gas-supplied heater           | <input type="checkbox"/> Oil-supplied heater      |
| <input type="checkbox"/> Halogen heater.        | <input type="checkbox"/> None.          | <input type="checkbox"/> Other, (please specify) _____ |   |

We are interested in how you use your heating system during the **WINTER** months. Consider a winter day very cold and dry; last year, the average temperature on a winter day was 11°C.

### TEMPERATURE REGULATION

15. Mark how do you control the indoor air temperature at home:

<input type="checkbox"/> Radiator taps		<input type="checkbox"/> Smartphone application	
<input type="checkbox"/> Wall-mounted thermostat		<input type="checkbox"/> Remote controller	
<input type="checkbox"/> Automatic thermostat		<input type="checkbox"/> N/A	

**Fig. A.3.** Questions related to household cooling-energy-use patterns and types of heating systems.

## Appendix A.4 Pro-Forma Questionnaire Survey

### HEATING DEVICES USE

We would like to know when you turn on/off your heating device(s) in different rooms on **weekdays** and at **weekends**.  
 16. Where and when do you turn on the heating device(s) on **weekdays**?

Room	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	
Living room																									
Kitchen																									
Bedroom 1																									
Bedroom 2																									
Bedroom 3																									

17. Where and when do you turn on the heating device(s) at **weekends**?

Room	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	
Living room																									
Kitchen																									
Bedroom 1																									
Bedroom 2																									
Bedroom 3																									

### WINDOW SCHEDULES

Now we will follow some questions about the use of the windows during the **SUMMER** (average temperature approximately 32.5 °C, not too much wind). Where when do you open and close your windows on an average day during the **SUMMER**?

If you use doors for ventilation (like doors to the garden or balcony) please considers your doors as windows.

18. Where and when do you open your windows in the **SUMMER**?

Room	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00	
Living room																									
Kitchen																									
WC																									
Bathroom																									
Bedroom 1																									
Bedroom 2																									
Bedroom 3																									

19. In general, do you keep room doors open in the summer when you don't have cooling on?

Yes  No

20. Why do you open the windows? Multiple marks possible.

To get fresh air  To cool down (i.e., adjust temperature)  
 To remove condensation  To dissipate dirty air (e.g., smoking, cooking smells)

21. Why do you close the windows? Multiple marks are allowed.

Against draft  Against the warm air/cool air  Block sounds from outside  
 Block smells from outside.  For safety reasons  Other, (please specify): \_\_\_\_\_

**Fig. A.4.** Questions related to household heating-energy-use patterns and habitual window-opening behaviour and schedules in summer.

## Appendix A.5 Pro-Forma Questionnaire Survey

22. How would you rate the overall thermal sensation of the following areas in the **SUMMER**?

Living room	Cold	1	2	3	4	5	6	7	Hot
Kitchen	Cold	1	2	3	4	5	6	7	Hot
Bedroom 1	Cold	1	2	3	4	5	6	7	Hot
Bedroom 2	Cold	1	2	3	4	5	6	7	Hot
Bedroom 3	Cold	1	2	3	4	5	6	7	Hot

Now we will follow some questions about the use of the windows during the **WINTER** (average temperature approximately 11 °C, not too much wind). Where and when do you open and close your windows on an average day during the **WINTER**?

If you use doors for ventilation (like doors to the garden or balcony) please consider these doors as windows.

23. Where and when do you open your windows in the **WINTER**?

Room	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	24:00
Living room																								
Kitchen																								
WC																								
Bathroom																								
Bedroom 1																								
Bedroom 2																								
Bedroom 3																								

24. In general, do you keep room doors open in the winter when you don't have heating on?

Yes  No

25. How would you rate the overall thermal sensation of the following areas in the **WINTER**?

Living room	Cold	1	2	3	4	5	6	7	Hot
Kitchen	Cold	1	2	3	4	5	6	7	Hot
Bedroom 1	Cold	1	2	3	4	5	6	7	Hot
Bedroom 2	Cold	1	2	3	4	5	6	7	Hot
Bedroom 3	Cold	1	2	3	4	5	6	7	Hot

### APPLIANCES INVENTORY

26. Which and how much of the following appliances is present your home, and for how many hours each day?

Rooms	Equipment	Number of hours
Living room	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Kitchen	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Bedroom 1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Bedroom 2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Bedroom 3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
*Appliances:	a. Television set; b. computer monitor; c. computer laptop; d. smartphone/tablet; e. video game console; f. home cinema; g. refrigerator/freezer; h. cooker/oven; g. dishwasher; j. washer/dryer; k. toaster; m. kettle; n. coffee machine; p. microwave; r. hair-dryer s. others, (please specify); _____	

**Fig. A.5.** Questions related to built-environment factors that impacted household TSVs.

## Appendix A.6 Pro-Forma Questionnaire Survey

27. How much light bulbs are being used in per room and how many hours a day?

Type of Light Bulb Numbers of Hours	Livingroom	Kitchen	WC	Bathroom	Bedroom 1	Bedroom 2	Bedroom 3
<input type="checkbox"/> Low-energy light bulb	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Halogen light bulbs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### HEALTH

28. How is your health general?

	Very Poor	Poor	Mediocre	Good	Very Good
<input type="checkbox"/> Respondent					
<input type="checkbox"/> Person 2					
<input type="checkbox"/> Person 3					
<input type="checkbox"/> Person 4					
<input type="checkbox"/> Person 5					
<input type="checkbox"/> Person <span style="background-color: #cccccc; padding: 0 5px;"> </span>					

### INCOME

29. What is your monthly income?

less than 9,500 TL     
  9,500, - 2,850 TL     
  2,850 -1,800 TL

**Fig. A.6.** Questions related to household health and income.



## Appendix A.7 Pro-Forma Questionnaire Survey

SECTION 2								
30. How do you prefer to feel? (Check the most appropriate response)								
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Hot	Warm	Slightly Warm	Neutral	Slightly Cool	Cool	Cold		
31. Using the list below, please check every item of clothing that you are wearing right now; this is an indication of the thermal comfort level of your interior space:								
<b>Top</b>			<b>Bottom</b>					
<input type="checkbox"/> Short-sleeved shirt			<input type="checkbox"/> Trousers					
<input type="checkbox"/> Long sleeved shirt			<input type="checkbox"/> Knee-length skirt					
<input type="checkbox"/> Walking Shorts			<input type="checkbox"/> Suit vest					
<input type="checkbox"/> Jeans			<input type="checkbox"/> T-shirt					
<input type="checkbox"/> Athletic sweat pants.			<input type="checkbox"/> Ankle-length skirt					
<input type="checkbox"/> Other: (Please note if you are wearing something not described above, or if you think something you are wearing is especially heavy): _____								
32. How would you describe your activity level just prior to completing this survey? (Check the one that is most appropriate)								
<input type="checkbox"/> Reclining			<input type="checkbox"/> Seated					
<input type="checkbox"/> Relaxed, standing			<input type="checkbox"/> Light activity, standing					
<input type="checkbox"/> Medium activity, standing			<input type="checkbox"/> High activity					
<input type="checkbox"/> Reclining			<input type="checkbox"/> Seated					
<input type="checkbox"/> Cooking, standing			<input type="checkbox"/> Light activity standing					
<input type="checkbox"/> Medium activity standing			<input type="checkbox"/> High activity					
33. In the <b>summer</b> months, how satisfied are you with the temperature in your space now?								
Very Satisfied	1	2	3	4	5	6	7	Very Dissatisfied
34. In the <b>winter</b> months, how satisfied are you with the temperature in your space?								
Very Satisfied	1	2	3	4	5	6	7	Very Dissatisfied
35. How would you best describe the source of this discomfort? (Check all that apply):								
<input type="checkbox"/> Humidity too high (damp)			<input type="checkbox"/> Humidity too low (dry)				<input type="checkbox"/> N/A	
<input type="checkbox"/> Air movement too high			<input type="checkbox"/> Air movement too low					
<input type="checkbox"/> Incoming sun			<input type="checkbox"/> Heat from home appliances					
<input type="checkbox"/> Drafts from windows			<input type="checkbox"/> Draft from vents					
<input type="checkbox"/> Thermostat is inaccessible.			<input type="checkbox"/> Thermostat is adjusted by other household members					
<input type="checkbox"/> Heating/cooling system does not respond quickly enough to the thermostat								
<input type="checkbox"/> Heat/cold surrounding surfaces (floor, ceiling, walls or windows)								
<input type="checkbox"/> Deficient window (not operable)								
<input type="checkbox"/> My room is hotter/colder than other rooms								
36a. Please describe any other issues related to being too hot or too cold in your room:								

**Fig. A.7.** Thermal-comfort assessment.