# AFTER ‘GREEN MY PLACE’ QUESTIONNAIRE

The following questionnaire is aimed at evaluating the Save Energy Serious Games. Please answer the following questions by expressing your level of agreement, choosing **between 1 (highly disagree) and 4 (highly agree).** We would like to thank you in advance for your time and collaboration.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Area** | **Statement** | **1** | **2** | **3** | **4** |
|  |  |  |  |  |  |
| Interface of the game | The information provided clearly provides an instructive approach to energy efficiency |  |  |  |  |
| I was aware that the game is integrated to a pilot building |  |  |  |  |
| I was aware that the game is integrated with other online spaces (facebook) |  |  |  |  |
|  |  |  |  |  |  |
| Playing - Story line and Design | I completely understood the overview of the game |  |  |  |  |
| The game is original |  |  |  |  |
| The story of the game is logical |  |  |  |  |
| I like the virtual environment created |  |  |  |  |
| The minigame scenarios were related to real situations |  |  |  |  |
|  |  |  |  |  |  |
| Navigation / Help (supporting information provided in the game) | The information provided in the interface of the game clearly explains the content of the game |  |  |  |  |
| Information provided in the interface of the game clearly explains the objectives of the game |  |  |  |  |
| When I enter the game, I quickly get an overview of the whole game and what is expected for me to do next. |  |  |  |  |
| It is easy to navigate around in the game and I always have a clear feeling of where I am and how to continue or go back. |  |  |  |  |
| I had no technical problems in running the game |  |  |  |  |
|  |  |  |  |  |  |
| Enjoyment/ Motivation by playing the game | I would play this game again |  |  |  |  |
| The activities proposed in the game were engaging and kept my interest alive |  |  |  |  |
| I felt a good competition atmosphere |  |  |  |  |
|  |  |  |  |  |  |
| Training | The interface is appropriate for this kind of exercise |  |  |  |  |
| The game is a training instrument that encourages improvement |  |  |  |  |
| Final results and feedbacks are clear and understandable |  |  |  |  |
|  |  |  |  |  |  |
| Knowledge gained by playing the game | The game made me see the important of saving energy |  |  |  |  |
| The game has taught me about my chosen team’s pilot building scheme |  |  |  |  |
| The game has taught me new methods of energy saving |  |  |  |  |
| Contents of the game satisfied my expectations in terms of general knowledge |  |  |  |  |
|  |  |  |  |  |  |
| Impact of the game on my life | I am now more interested in knowing about energy efficiency in public buildings |  |  |  |  |
| The topics approached during the game are easily associable to everyday work situations |  |  |  |  |
| After finishing playing the game, I was interested in looking up additional information about the topics/facts addressed |  |  |  |  |
| Since playing the GMP have you started checking the energy consumption (kW) figures of electrical appliances at home or work? | **Yes** | | **No** | |
| Since playing the GMP have you started limiting the use of electrical appliances that consume relatively high amounts of electricity? | **Yes** | | **No** | |
| Has playing the GMP game changed your views on what it would take for people to start saving energy? | **Yes** | | **No** | |
| Describe how? | | | | |
| If you have adopted new energy saving actions after playing the GMP, has the game played a role in it? | **Yes** | | **No** | |
|  | Describe how? | | | | |

# ENERGY EFFICIENCY: BEHAVIOUR, MOTIVATION, AWARENESS QUESTIONNAIRE

Please answer all questions, take time to read but don't spend too long trying to think of the RIGHT answer - this is a test of YOUR understanding and awareness of energy.

## BEHAVIOUR

## Which of these energy saving actions do you do?

Rate each action in each category on the scale from 'Always' to 'Never', unless it does not apply to you or you can't say.

HOUSE KEEPING \*

|  |  | | Always | | Often | | Some times | | Never | | Can’t say / NA | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Rinsing dishes before putting them into the dishwasher |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Using an economical wash cycle |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Using an efficient spin cycle /dryer to minimize residual moistness |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Choosing a low temperature cycle for laundry and dishes |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Cleaning the lint trap in the dryer |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |

BATHROOM \*

|  |  | | Always | | Often | | Some times | | Never | Can’t say / NA |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Having the shower on for only a few minutes |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) |
| Not using running water while brushing teeth |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) |

LIGHTS \*

|  |  | | Always | | Often | | Some times | | Never | | Can’t say / NA | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Turning off the lights when I leave the room |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Making use of daylight instead of using electricity for lighting when possible |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Limiting the use of outside lighting with timers, dimmer switches or movement sensors |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Limiting the use of car heating by using a timer |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |

ELECTRICAL APPLIANCES AT HOME \*

|  |  | | Always | | Often | | Some times | | Never | | Can’t say / NA | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Switching off the TV, PC etc. when they are not in use |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Switching off the electrical appliances on stand-by mode |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Unplugging the mobile from the charger as soon as the battery is charged |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Making use of the automatic electricity saving functions of the PC |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Favoring energy-saving appliances |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Considering stand-by energy consumption when buying entertainment systems |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Monitoring, collecting and analyzing energy consumption and electricity bills |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |

ELECTRICAL APPLIANCES AT WORK \*

|  |  | | Always | | Often | | Some times | | Never | | Can’t say / NA | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Switching off the PC etc. when at lunch or otherwise not in use |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Switching off appliances which are on stand-by mode |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Making use of the automatic electricity saving functions of the PC |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Pointing out misuse of electrical appliances by colleagues |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Suggesting energy efficiency consideration to procurement responsible at work |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |

COOKING AND KITCHEN \*

|  |  | | Always | | Often | | Some times | | Never | | Can’t say / NA | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Heating only the minimum needed amount of water |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Making use of the residual heat of the oven |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Using pots and pans that match the size of the stove top |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Favoring the microwave oven when preparing food |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Making good use of the microwave oven in all food preparing and warming |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Cleaning and de-frosting the fridge and freezer regularly |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Monitoring the fridge and freezer temperature |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Adjusting fridge and freezer temperature to the most energy efficient acceptable temperatures |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |

HEATING / AIR-CONDITIONING \*

|  |  | | Always | | Often | | Some times | | Never | | Can’t say / NA | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Keeping the room temperature at a maximum of 20-22 °C in winter |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Lowering the room temperature when being away for several days |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Decreasing thermal loss by keeping blinds and curtains shut at night time |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Avoiding the use of extra heaters in the winter |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Doing maintenance work on heating equipment that saves energy (e.g. cleaned or changed furnace filters) |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Caulking and sealing around windows, doors, and other drafty areas at home |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |

FOOD \*

|  |  | | Always | | Often | | Some times | | Never | | Can’t say / NA | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Keeping red meat consumption at a minimum |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Limiting the consumption of fruit and vegetables flown in from far away countries at a minimum |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Favouring locally produced, seasonal food |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Favouring vegetarian food |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |

RECYCLING \*

|  |  | | Always | | Often | | Some times | | Never | | Can’t say / NA | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Considering buying suitable used furniture instead of buying new ones |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Considering buying suitable second-hand clothes instead of buying new ones |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Recycling furniture and clothing that one no longer needs |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Avoiding the purchase of items that one does not really need |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Sorting trash: paper, metal, glass, edibles etc. |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |

## MOTIVATION

What has caused you to take these energy saving actions? \* Range: 1 - "This did not affect me at all" to 5 - "This affected me greatly"

|  |  | 1 | 2 | 3 | 4 | 5 |
| --- | --- | --- | --- | --- | --- | --- |
| It’s the right thing to do |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| I would feel guilty if I hadn’t made the changes |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| I want to save money |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| Somebody (e.g. my kids/spouse/colleague) pressured me to do so |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| To set a good example for kids |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| I was raised that way |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| To improve my living conditions (e.g. insulation resulting in more comfortable conditions) |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| To reduce greenhouse gas emissions |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| To reduce global warming potential |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| To reduce demand for nuclear power |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| To protect the resources so as to ensure a similar quality of life for our children |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| Using less energy can allow other communities the opportunity to access energy |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| To get social acceptance of others |  | ( ) | ( ) | ( ) | ( ) | ( ) |

What will it take to motivate people to use energy wisely? \* Range: 1 - "This would not be effective at all" to 5 - "This would be very effective"

|  |  | | 1 | | 2 | | 3 | | 4 | | 5 | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Telling them it’s the right thing to do |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Having others commenting on their wasteful behavior |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Explaining that they can save money |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Having someone (e.g. kids/spouse/colleague) pressure them to adopt energy-saving behavior |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Explaining that they are setting a bad example for kids if they don’t adopt energy-saving behavior |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Energy saving can only be taught to kids, so raise kids to save energy |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Explain the benefits to living conditions (e.g. insulation resulting in more comfortable conditions) |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Explain the link to greenhouse gas emissions |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Explain the link to global warming |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Explain the link to nuclear power (less nuclear power is needed if energy consumption decreases) |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Pointing out the need to ensure a similar quality of life for our children |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Explain how using less energy can allow other communities the opportunity to access energy |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |
| Rewarding people with social acceptance or recognition for energy-saving behavior |  | ( ) | | ( ) | | ( ) | | ( ) | | ( ) | |

## MOTIVATION AND BEHAVIOUR

Does anything make it impractical to save energy or adopt new energy saving behavior? \* Range: 1 - "Totally disagree" to 5 - "Agree fully"

|  |  | 1 | 2 | 3 | 4 | 5 |
| --- | --- | --- | --- | --- | --- | --- |
| I don’t have the power to make the changes (e.g. heating is centrally controlled) |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| I don’t have the time to e.g. recycle |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| I don’t have access to additional equipment that would be necessary for making some of the changes (e.g. controlling temperature) |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| Nobody would listen if I suggested ideas for energy-saving practices |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| Other people’s wasteful actions would make my savings pointless |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| Other people have the responsibility because they consume more than I do |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| I don’t believe the bad effects (global warming/economic hardship) are really related to high energy use |  | ( ) | ( ) | ( ) | ( ) | ( ) |

## AWARENESS

Rank the following with regard to which functions constitute for most of the electricity bill in a house with electricity heating? \* Select only ONE function for each number - i.e. order them from 1:most to 4:least

|  |  | | 1 | | 2 | | 3 | | 4 | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Controlling room temperature, i.e. heating & cooling |  | ( ) | | ( ) | | ( ) | | ( ) | |
| Water consumption |  | ( ) | | ( ) | | ( ) | | ( ) | |
| Electrical appliances |  | ( ) | | ( ) | | ( ) | | ( ) | |
| Lighting |  | ( ) | | ( ) | | ( ) | | ( ) | |

Rank the following electrical appliances according to which ones on average consume the most energy per hour \* Select only ONE appliance for each number - i.e. order them from 1:most to 5:least

|  |  | 1 | 2 | 3 | 4 | 5 |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Washer/dryer |  | ( ) | ( ) | ( ) | ( ) | ( ) |  |
| Hair dryer |  | ( ) | ( ) | ( ) | ( ) | ( ) |  |
| Hair straighteners |  | ( ) | ( ) | ( ) | ( ) | ( ) |  |
| Vacuum cleaner |  | ( ) | ( ) | ( ) | ( ) | ( ) |  |
| Dish washer |  | ( ) | ( ) | ( ) | ( ) | ( ) |  |

Rank the following electrical appliances by their average energy consumption per hour \* Select only ONE appliance for each number - i.e. order them from 1:most to 5:least

|  |  | 1 | 2 | 3 | 4 | 5 |
| --- | --- | --- | --- | --- | --- | --- |
| Oven |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| Microwave Oven |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| Fridge |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| Freezer |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| 40W Incandescent Light bulb |  | ( ) | ( ) | ( ) | ( ) | ( ) |

Rank the following electrical appliances found at work according to which ones on average consume the most energy per hour \* Select only ONE appliance for each number - i.e. order them from 1:most to 5:least

|  |  | 1 | 2 | 3 | 4 | 5 |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Laptop |  | ( ) | ( ) | ( ) | ( ) | ( ) |  |
| Desktop PC |  | ( ) | ( ) | ( ) | ( ) | ( ) |  |
| Data projector |  | ( ) | ( ) | ( ) | ( ) | ( ) |  |
| TV (plasma) |  | ( ) | ( ) | ( ) | ( ) | ( ) |  |
| Printer |  | ( ) | ( ) | ( ) | ( ) | ( ) |  |

Rank the following workplace electrical appliances based on their average energy consumption per hour \* Select only ONE appliance for each number - i.e. order them from 1:most to 5:least

|  |  | 1 | 2 | 3 | 4 | 5 |
| --- | --- | --- | --- | --- | --- | --- |
| Scanner |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| Fax Machine |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| PC Monitor |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| Fluorescent tube lights (as commonly found in offices) |  | ( ) | ( ) | ( ) | ( ) | ( ) |
| Mobile phone charger |  | ( ) | ( ) | ( ) | ( ) | ( ) |

How much energy do the most energy-efficient light bulbs consume? \*

* ( ) 1-4 Watts per hour
* ( ) 5-9 Watts per hour
* ( ) 10-14 Watts per hour
* ( ) 15-19 Watts per hour
* ( ) 20-24 Watts per hour
* ( ) 25-29 Watts per hour
* ( ) 30-39 Watts per hour
* ( ) 40-49 Watts per hour
* ( ) 50-60 Watts per hour

In a city such as Manchester, how much electricity do you think is being used in its public buildings as opposed to residential ones? \* Select one option

* ( ) Public buildings together consume only a small fraction of what is consumed by residential buildings
* ( ) Public buildings together consume about half of what is consumed by residential buildings
* ( ) Public buildings consume much more electricity than what is consumed by residential buildings