

LIFE Integrated Projects 2016 Optimising the implementation of the 2nd RBMP in the Malta River Basin District LIFE 16 IPE MT 000008



Action C.1

Deliverable 2: End of phase assessment report on the reach of the first and second household visits, outlining the reactions of household occupiers during Phase 2

Throughout the year 2021, another challenging year, approximately 370 house visits were carried out, where queries regarding water and energy consumption within different household in Malta & Gozo were handled. The service was undertaken by scheduling an appointment with the household owner. The officer visited the household (homes which ranged from an apartment, maisonette, terraced house or any other) to visualise the situation/problem in situ. During the visit, the last 3 utility bills were presented to have an overview of the household consumption during the past months. During the visitand the household members are informed about the measures that could be adopted to reduce the energy and water consumption depending on the season. Residents are also informed on how each family member can make behavioural changes for better efficiency and sustainable outcomes.

A good number of queries were related to the bill. The queries ranged from how consumption is calculated, reasons leading to high consumption and whether all details within the bill are correctly inputted or not. These queries would eventually lead to a house visit in which the officer explains how the units are consumed and how high water and energy bills could be mitigated. The officer explains how the family could be more in line with Malta's household average consumption and how that specific household would then eventually benefit from the eco-reduction scheme. Throughout the years 2020/ 2021, when COVID-19 cases were significantly high, or the Department of Health recommended lack of contact between households, house visits were suspended. Because of this, a lot of assistance was given over the phone and utility bills were sent to our officers via email. If problems persisted, a visit was set up during a time with lower cases.

Apart from general interest, it has been noted that the following two reasons lead household owners to call the Energy and Water Agency to request a visit:

- Household owners who wish to improve on their consumption patterns and learn new ways how to become more efficient.
- Residents who cannot understand why their bills are excessively high and need to improve upon their expenditure. These home owners are generally more willing to receive guidance on how to become more efficient; either by introducing small behavioural changes in their everyday habits or by investing in new appliances or equipment.

During a house visit the below points were discussed, each visit varies depending on the situations encountered:

- Sustainable ways how appliances and old equipment can be replaced in order to generate long term energy savings.
- The European Energy grading System was explained to home owners and residents were also educated on how energy consumption within a household can be monitored through the personal Smart Energy Meter found in each household. Furthermore, each household was given examples of how the consumption rates between one appliance and another varies.
- Informing home owners how powering off certain electronic items rather than keeping them on standby might help reduce the overall energy consumption.
- Discussing ways how water heaters could be used, whether a kitchen oven should be gas or electric, same for the hob, the size of washing machines, fridges, ACs etc.
- Suggesting ways how HVAC methodologies could save energy consumption and make residents feel more comfortable during cold wintery days, and dry, hot and humid summery days.
- Highlighting the benefits of energy saving lighting equipment and giving indication of the amounts of wattage different bulbs have. Describing the difference between the consumption of heating elements compared to the consumption of electric lighting within a household. Mentioning the advantages of an occupancy sensors as well.
- Making sure that fridges are properly sealed and that they are well maintained and placed in good places with the household. Making sure that the motor is working properly and not consuming more energy than it is requires.
- Suggesting household owners to keep temperature for air conditioners 18-20°C (in winter) 23-26°C (in summer) explaining the 'night' function within the AC control. Making sure that the household has the proper shading and mentioning the benefits of having double glazing and properly sealed rooms.
- Discussing PVs, their maintenance and how home owners can benefit from various schemes offered for new PV panels, solar water heater, invertors, and energy batteries storage.
- Suggesting ways how to properly use a dishwasher (eco functions explained) and washing machines (the benefits in washing with 30°C setting).
- How to be efficient in energy and water use when taking care of pets.

- During house visits we inspect toilet flush system and try to help residents know how to detect a water leak.
- The benefits of a shower instead of a bath.
- How water well could be used in watering plants, washing of floors etc.
- Discuss what methods a household uses to drink potable water; whether they use the water mains, buy plastic bottles or use RO systems. We check how the RO systems works and if the filtered water is going down the drain or it is pumped up to the water tank.
- We asses if the tap water in the kitchen is coming from the mains and weather the plumbing system needs maintenance or needs re-arranging in order to be more efficient especially when it comes to the delivery of hot water into bathrooms or other water faucets
- How water displacement techniques could help the household be more efficient.
- We analyse water consumption habits and how homeowners and members utilise their water and electricity supply. We are responsible to come up with suggestions how to use such resources in an efficient and sustainable way. Suggesting Water Saving Methodologies while addressing any possible leaks or any water related problems.

The above points are summarised in a check list which is being attached to this document. See Annex I.

Apart from the actual house visits, the Agency also handles a number of queries over the phone, not only regards energy and water saving tips and behavioural changes, but also in promoting schemes related to energy and water. Assistance is also given for any queries related to the Water Be the Change project, Solar Panels Schemes queries, and additionally we try to inform low-income earners and people living in great difficulty about the Vulnerable Project which assists people to change their old appliances with a new and more efficient one.

The team constantly researches, updates and educate themselves with regards to new trends, technologies and schemes so to help home owners in the best possible way. Courses online are done and completed to learn about the new emerging sustainable technologies available in the market which the same technologies are then eventually bought by home owners or any household user.

Annex I

| Date | <u>//</u> | |
|-----------------|-----------|---|
| Mr. /Ms. | | |
| House name /no. | | |
| Street | | |
| Locality | | |
| Subject: | | Water and Electricity waste reducing tips |

Dear Tenant,

Further to the visit of our representative on ___/__/, please find below tips explained to you during the visit which can actively assist you to reduce water and electricity waste and also save up on your bills.

| Electricity: | Yes | No |
|---|-------------------------|----|
| 1. Replacing of older equipment with new more end | ergy saving technology | |
| Describing energy grading system | | |
| 2. Powering off electronic items kept on stand by | | |
| 3. Promoting energy saving lighting (LED/ energy sa | ving lamps) | |
| 4. Promotion of occupancy sensors | | |
| 5. Proper temperature for fridges (1.3 to 4 °C) | | |
| 6. Proper temperature for freezers (about -18 °C) | | |
| 7. Proper sealing of fridge/freezer doors | | |
| 8. Proper temperature for air conditioners 18-20°C | (in winter) 23-26°C (in | |
| summer). | | |
| 9. Closing doors and windows when using air condit | tioners | |
| 10. Proper maintenance of air conditioners (cleaning | of filters) | |
| 11. Use of PVs on roof | | |
| 12. Use of solar water heaters | | |
| 13. Setting of temperature on water heater thermos | tat (60°C) | |
| 14. Carry out full loads when using the washing mach | nine/ dish washer | |
| 15. Roof shading/ use of blinds windows and curtains | S | |
| 16. Boil only enough water for use | | |
| Vater: | | i |
| 1. Use well water to wash floors, car and to flush to | ilets | |
| 2. Install water aerators | | |
| 3. Wash your clothes at washing powder manufactu | urer recommendations | |
| (usually 30°C or less) | | |
| 4. Take a shower instead of a bath | | |

| 4. | | |
|----|--|--|
| 5. | Fix leaks | |
| 6. | Install efficient flushings or use water displacement techniques | |
| | (insert a plastic bottle full of water and sand in the flushing) | |
| 7. | Never leave running water when not in use | |

Officer in Charge _____ Endorsed by _____