



LifeMedGreenRoof Project **After-LIFE Communication Plan** 

LIFE12ENV/MT/000732



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## Introduction

The encroachment of the urban into the rural is having a negative effect on the natural environment due to habitat destruction, pollution and erosion. It is also having a negative effect on human health. Densely populated urban areas suffer from high pollution levels, increased ambient temperatures, reduced biodiversity to mention but a few. Such issues are causing both psychological and physical problems to urban dwellers especially children and the elderly. Unfortunately, these issues are not readily perceived by the public and living in highly urbanised areas has given the impression that people are distinct from what is natural. This has resulted in urban areas devoid of biodiversity. Biodiversity in urban areas provide what is termed ecosystem services, defined as those benefits enjoyed by people and provided by the ecosystem. These benefits are unfortunately often underestimated and underappreciated. This lack of awareness is also prevalent even with professionals such as architects and policy makers who have a substantial impact on the state of urban areas.

Since the latter half of the twentieth century an effort has been made in a number of European countries to mitigate and resolve such urban issues using green infrastructure. It has become an accepted concept that the ecosystem could help in rendering urban areas more hospitable to residents and visitors. Green roofs have been identified as an important tool in rendering urban areas more sustainable.

In Malta, green roofs have never been adopted and implemented within the urban fabric even if buildings are well suited for green roofs with flat-roof and sturdy concrete construction. In Italy green roofs are a known technology mainly due to the influence of northern European countries especially Germany. The Italian climate is more Mediterranean than it is temperate, and the use of temperate technology and specifications could be considered as not being ideal. This is especially true when it comes to plant selection and substrate composition.

## Project Background

The LifeMedGreenRoof project was established mainly to:

- 1. test green roofs in a Mediterranean environment and assess their performance in terms of plant survival, substrate performance, insulation properties and storm water management.
- 2. construct a green roof for demonstration purposes and disseminate information to increase green roof awareness.

Although the project could be hailed a success in terms of green roof performance and awareness raising, the efforts undertaken during the course of the project period should not terminate with the completion of the project. Awareness raising should be carried out at various levels so as to establish an understanding of the need to implement green roofs for their benefits, and to further research on the technology to appreciate limitations, strengths and opportunities. This after-LIFE plan is being drafted to better understand and increase the opportunities created by the project, with limited human resources and finances available and a strong collaboration between the different Faculties of the University of Malta and the partners involved in the project. Both the University of Malta and Fondazione Minoprio are in a strategic position of influencing students in favour of green infrastructure, especially green roofs.

### Project description

The LifeMedGreenRoof Project was a demonstration project dedicated to increase awareness on the benefits of green roofs in the Mediterranean region. The project aimed at the creation of a baseline study to illustrate that green roofs could be successfully implemented using plants native to the region and disseminate such information to the stake holders.

Communication is considered an effective tool in increasing awareness on the need to integrate green roofs within the urban environment to reduce and mitigate problems within towns and cities. The European Commission has in fact developed a Green Infrastructure Strategy, which aims to safeguard the protection, restoration, creation and enhancement of green infrastructure to become an integral part of spatial planning and territorial development.

#### Target audience

The project targeted different stakeholders during implementation. Stakeholders were divided into two groups, those who have direct relation to the site in question, such as employees and students of the university, and those who in some way would benefit from or influence the dissemination of the specific technology, including the public in general, government and policy makers, and the design profession.

## Communication objectives

The objectives of the LifeMedGreenRoof project were:

- To illustrate that green roofs could be successfully implemented in the semi-arid environment of the Mediterranean
- To illustrate that native vegetation is appropriate to cultivate on a green roof
- To raise awareness on the benefits of green roof vis-à-vis the insulation and storm water management performance.
- To disseminate technical information on the construction of green roofs
- To provide an example of what a green roof could look like through the demonstration green roofs

These objectives were implemented using different communication campaigns. Initially campaigns related mainly to articles in newspapers and magazines, the creation of a facebook page and a website. Following the installation of the demonstration green roof, the campaign intensified with various radio interviews, public lectures, featured articles, visits by dignitaries, policy makers, school children and entrepreneurs.

## Activities and impact on the target audience

#### Communication actions

36+ Press releases in local/national press targeting the general public. The press releases were mainly issued either by the project office but occasionally also by other entities.

14+ articles published in various newspapers and magazines. These targeted mainly the general public, but were broader in nature, and would have also reached policy makers and design professionals.

6 TV news items. These targeted mainly the general public.

6+ Radio interviews. These targeted mainly the general public.

20+ visits to the demonstration green roof and project site were organised. These visits included over 140+ students, school teachers, and representatives from the education department and church schools, 6+ visits by different commercial enterprises including APS bank, Baxter, and plant nursery representatives, visits by Members of Parliament from both the government and the opposition side. The demonstration green roof was, and remains open to the public. University students, members of staff and the public visit the site on a regular basis.

11 Lectures/presentations. These included organised lecture sessions to the general public or members of NGOs, and presentations during specific seminars targeting policy makers and professionals.

#### Communication tools

Communication material was also produced during the life of the project. Materials are available in both Maltese/English and Italian.

Production of 2 brochures (6000 copies). These highlight the importance and benefits of green roofs. They were published in Maltese/English and Italian.

A 30-minute DVD (300 copies) in English.

A website (www.lifemedgreenroof.org) available in Italian and English.

A Facebook page with regular updates available in English.

A number of PowerPoint/Prezi presentations

6 exhibition posters used in a number of events and venues.

#### Results and effects of communication

The effects of the communication campaign were assessed through four surveys conducted. Two surveys were conducted towards the general public and design community, and another two surveys were aimed at the employees of the Faculty for the Built Environment were the demonstration green roof was constructed. This was done to assess how green roofs affect the day-to-day life of people working next to a green roof.

The main findings of these studies can be summarised into the following:

It can be concluded that through the media activities conducted by the project, the perception of stake holders towards green roofs has increased. More people are aware of what green roofs are and what their purpose is. Green roofs contribute towards a more pleasant environment increasing a sense of well-being. The value of green roof increases if stakeholders experience an increase in attractive wildlife such as birds and butterflies.

The way that information was distributed was also important. Internet proved very effective. The use of a website, and better still, social media widened the catchment area. Publication of articles and press releases exposed stake holders to the concept of green roofs. However, the most effective way of altering the perception of stake holders was through the demonstration green roofs. Many are those who perceive green roofs as being difficult to establish locally. Through the demonstration green roof, stake holders could see that green roofs can be a reality in Malta, and that issues such as water leaks, could be mitigated with the proper workmanship and the right construction methods. For the project to be truly successful, it is imperative that information dissemination is not terminated at the end of the project. Information dissemination especially amongst policy makers should persist. Demonstration project should be encouraged on a national scale to further reinforce the idea that green roofs play an important role in rendering urban areas more sustainable.

## The After-Life and future communication actions

The objectives of the After-Life communication activities are to provide a plan for extending and increasing the scope of the LifeMedGreenRoof Project beyond the project time frame and ensure a continuation of the project aims. The project aims are: to create a baseline study on green roof performance, establish the insulation and storm water management of green roofs in a Mediterranean climate and increase awareness on green roof benefits amongst stake holders.

The objectives of the After-Life communication plan are listed here under as 8 Actions:

- 1. To maintain communication with policy makers for a national green roof policy within the building industry
- 2. To continue increasing awareness about the importance of green roofs amongst university students from different Faculties and encourage further green roof research
- 3. To disseminate information on green roofs through the project website
- 4. To revise the Standard document
- 5. To continue collaboration between partners
- 6. To maintain the demonstration green roof
- 7. To re-print and disseminate communication material.
- 8. Action 8: Replicate the technology used in the construction of the demo green roof for the proposed construction of the Sustainable Living Centre at the University of Malta

The plan is scheduled for a five-year period (July 2017 – July 2022),

## Action 1: To maintain communication with policy makers for a national green roof policy

#### **Description (objectives)**

Following communication efforts by the project, policy makers have shown interest in green roofs for their benefits especially when it comes to mitigating urban related problems. Following the end of the project, it is expected that contact with policy makers will be retained to encourage the implementation of green roof policies within the building industry. This entails lobbying heads of departments and Ministries to create the relevant incentives, policies and regulations on a national scale. Meetings will be organised with the relevant policy makers to push towards the implementation of the policies.

#### Responsible institution

The University of Malta (Faculty for the Built Environment) will be responsible for lobbying policy makers and members of parliament to initialise the process of creating the necessary mechanisms to encourage the dissemination of green roof technology on a national scale. University of Malta staff members from the Faculty for the Built Environment will be involved.

## Period

Throughout the five year period or until policies are set in place.

# Action 2: To continue increase awareness about the importance of green roofs amongst university students from different Faculties and encourage further green roof research

#### **Description (objectives)**

It is acknowledged that planners, architects and engineers have a role to play in the dissemination of green roof technology. As such it is important that students from the Faculty for the Built Environment as well as those from other Institutes and Faculties are aware of green roof benefits.

The After-Life objective is to increase collaboration with other Faculties and Institutes so as to increase further awareness amongst students and academics. Lectures to students on the need for green roofs and dissertations to understand green roof performance will be a focus of this action. This is intended to take place over the next 5 years. Institutes, faculties and departments which would be approached include the Institute of Earth Systems, the Faculty of Engineering, the Biology Department and the Institute of Agriculture. The Faculty for the Built Environment has throughout the course of the project period been pushing to increase green roof appreciation amongst architecture and planning students.

#### **Responsible institution**

The Faculty for the Built Environment will be responsible to liaise with the different Departments, Institutes and Faculties. A member of staff from the Faculty for the Built Environment will be assigned this task.

#### **Period**

Throughout the five year period

# Action 3: To disseminate information on green roofs through the project website/facebook Description (objectives)

The website and Facebook page are important communication tools to disseminate information on green roof performance. The website will be maintained online during five years. Any new information will be uploaded on the website and facebook page to increase awareness.

#### Responsible institution

The maintenance will be taken care of by the University of Malta. There will be a person assigned as a contact. The Faculty will pay the hosting and upkeep of the website during the five year period of the After-Life plan.

#### **Period**

The content will be updated as and when required.

#### Action 4: To revise the Maltese standard document

#### **Description (objectives)**

Updating the standard document for green roofs is important so as to keep the document up to date reflecting current technology and practices. Standards are generally revised every 3-5 years. This happens if it is requested by the industry or by other entities s.a. the university. In the event of the standard requiring a revision, a technical committee will be set up to discuss the revisions. The technical committee will be composed of interested parties which would be invited to participate. The process for revision will take around 9 months to complete, with meetings organised as and when required. The final document will be published on the government gazette.

#### Responsible institution

Being the institution responsible for issuing national standards, the MCCAA will see to the procedures required. Two members of staff will be assigned to seeing this action through.

#### Period 2020-2022

#### Action 5: To continue collaboration between partners

#### **Description (objectives)**

The collaboration between partners will continue following the end of the project. This action will reinforce knowledge transfer between entities in an effort to understand better the benefits and potential of green roofs. The partners will continue working together through over-the-net meetings and other means of communication. Occasionally meetings will be held in Malta or Italy for monitoring or/and testing purposes.

#### **Responsible institution**

All partners

#### **Period**

All year over the course of the After-Life period. Travel to respective country 2 x year maximum.

## Action 6: To maintain the green roof

#### **Description (objectives)**

The green roof will still be utilised for demonstration and research purposes. The lower garden will be open to the public on a daily basis whereas the upper roof will be used as a laboratory to further green roof research. The maintenance of the green roof will fall within the responsibility of a Faculty for the Built Environment member of staff and precincts office. If required members of staff will assist visitors on the green roof to discuss any queries they might have.

#### **Responsible institution**

The University of Malta being the owner of the green roof will see to the maintenance and upkeep of the green roof and to assisting visitors when needed.

#### Period

Over the 5 year period.

#### Action 7: To re-print and disseminate communication material

#### **Description (objectives)**

This action consists in the re-printing of the brochures once the existing stock has been exhausted. The material will be disseminated to stake holders during activities such as lectures, visits and exhibitions. The contents will be revised if the need arises.

#### **Responsible institution**

The UoM will finance the reprinting of the brochures, their storage and dissemination.

## **Period**

The brochures will be printed when the existing reprinted stock has been exhausted. It is envisaged that 1000 will be reprinted once over the 5 year period

# Action 8: Replicate the technology used in the construction of the demo green roof for the proposed construction of the Sustainable Living Centre at the University of Malta

#### **Description (objectives)**

The University of Malta has planned the construction of the Sustainable Living Complex to house a number of faculties and other Institutes, as a proto-type resource-efficient research facility. This Project proposes, inter alia, the installation of green infrastructure, including green roofs. These green roofs will expose both students and academics of different disciplines, to alternative building methods and the advantages of green infrastructure. These green roofs will also act as experimental laboratories for further investigation on the technology. The facility will also be used to propagate the relative technologies to industry.

#### **Responsible institution**

The UoM will finance the construction of this building through EU funds.

#### Period

The building of the Sustainable Living Complex is expected to commence in the second quarter of 2018, with completion by end 2020/beginning 2021.

## Audience targeted by the After-Life Communication plan

Actions	Students	General public	Policy makers	Professionals	Partners
Green roof policy			✓		
Awareness with students	✓				
Maintenance of website/facebook	✓	✓		✓	
Revision of Standard document for				<b>4</b>	
green roofs				·	
Collaboration between partners					✓
Upkeep of demonstration green roof	✓	✓	✓	✓	
To re-print and disseminate	1	1	<b>√</b>	✓	
communication material			•	·	

## Estimated budget for the After-Life Communication plan (2017-2022)

Actions	Costs
Maintenance of website/Facebook	
Database and website maintenance	3400.00
Minor modification to the website	300.00
Hosting	300.00
Revision of Standard document for green roofs	10,000.00
Collaboration between partners	11,800.00
Upkeep of demonstration green roof	7,500.00
Re-print and dissemination of communication material	200.00
Total cost	€ 33,500.00

## **Project Identity**



## Project data

PROJECT REFERENCE LIFE12 ENV/MT/000732

DURATION 01-JUL-2013 to 31-JUL -2017

TOTAL BUDGET 837,647.00 €

PROJECT LOCATION Malta, Italy

## Beneficiaries:

COORDINATING BENEFICIARY Faculty for the Built Environment

University of Malta

PARTNERS Fondazione Minoprio, Italy

Minoprio Analisi e Certificazioni S.r.l., Italy

Competition and Consumer Affairs Authority, Malta

CO-FINANCIERS European Commission (LIFE+)



This project is partially financed through LIFE+ which is the EU's financial instrument supporting environmental and nature conservation projects throughout the EU. Http://ec.europa.eu/environment/life/index.htm