

## Deliverable D4:

# ELABORATION AND MAINTENANCE OF 4 NOTICEBOARDS

<b>Action</b>	D	Public awareness and dissemination of results
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<sup>1</sup> Dissemination level: **PU** = Public, **PP** = Restricted to other programme participants, **RE** = Restricted to a group specified by the consortium, **CO** = Confidential, only for members of the consortium.

<sup>2</sup> Nature of the deliverable: **R** = Report, **P** = Prototype, **D** = Demonstrator, **O** = Other.

## **Deliverable abstract**

This document describes the development of the Notice Board design. Notice boards will be designed and displayed during the project in strategic visible places on the beneficiaries premises. They will include a description, in a visual way of the environmental problem targeted, an explanation of the work carried out, its objectives and the technology proposed as solution and the foreseen outcomes of the project. It will be also set up who the beneficiaries are.

Useful links to let people know about more information of the project will be also available. A total of 4 notice boards will be set up.

## **List of acronyms and abbreviations:**

Life Drainuse: Re-utilization of drainage solution from soilless culture in protected agriculture. From open to close system.

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## 1. Project overview

The aim of this action is generate and maintain these notice boards describing the project is an important action to spread a wide dissemination of the notice boards and guarantee a spread dissemination of the knowledge to local visitors of the area and of the facilities of the beneficiaries.

Those panels will be created following advices of the LIFE programme and general conditions. The LIFE logo will appear on them. Taking into account most LIFE notice boards formats, it will be used a rectangular board attached to a frame which raises it to an easily readable level. Regarding the size, the notice boards will be visible from certain distance.

Concerning target audience, notice boards are primarily aimed at passers-by, so the information will serve people who have different levels of knowledge about the site. Even people who know the area well may not know that a LIFE project is active there, what actions are being carried out and what results are sought.

The panel should seek to increase all visitors' understanding of what is happening in these particular areas, as well as disseminate the project among visitors of beneficiaries' facilities.

## 2. Document objectives

### 2.1 Notice board design

As discussed previously, the panels will be created following advices of the LIFE programme. Some important considerations in designing onsite panels include:

1. Decide on the main objectives of the panel;
2. Put across a clear message;
3. Make the panel interesting;
4. Use plenty of visual information;
5. Provide information that is likely to be of interest to visitors;
6. Test the panel on friends

Four panels will be established in strategic places, in order to facilitate the access to the information.

Spread dissemination of the LIFE DRAINUSE knowledge to local visitors of the area and of the facilities of the beneficiaries. Taking into account that all partners have their own contacts and networks, it is expected that those related contacts of the sector will be informed about the project thanks to erased notice boards. It is expected at least horticultural producers and Greenhouse and irrigations companies as well as Agriculture associations at local and national level.

#### 2.1.1 First drafts

The first drafts are already under discussion. Some of the proposed designs appear later:

2.1.1.1. The first design (Figure 1: V1) was considered to be very extensive and it will be used in other contexts.

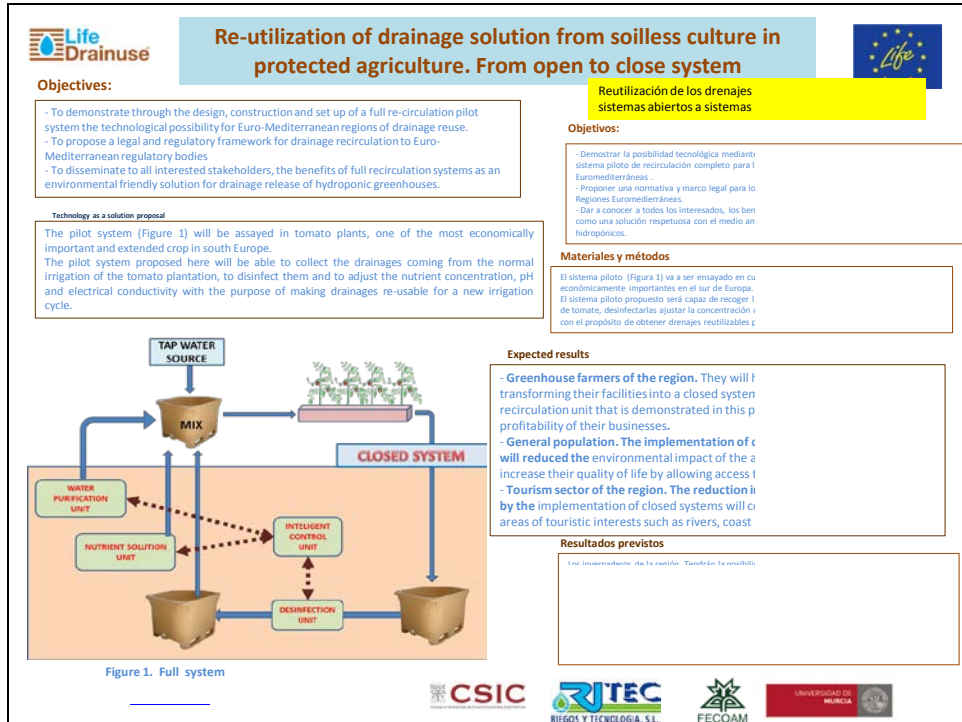


Figure 1: V1

For that it was designed a new version (Figure 2: V2) that has been sent to the design company.

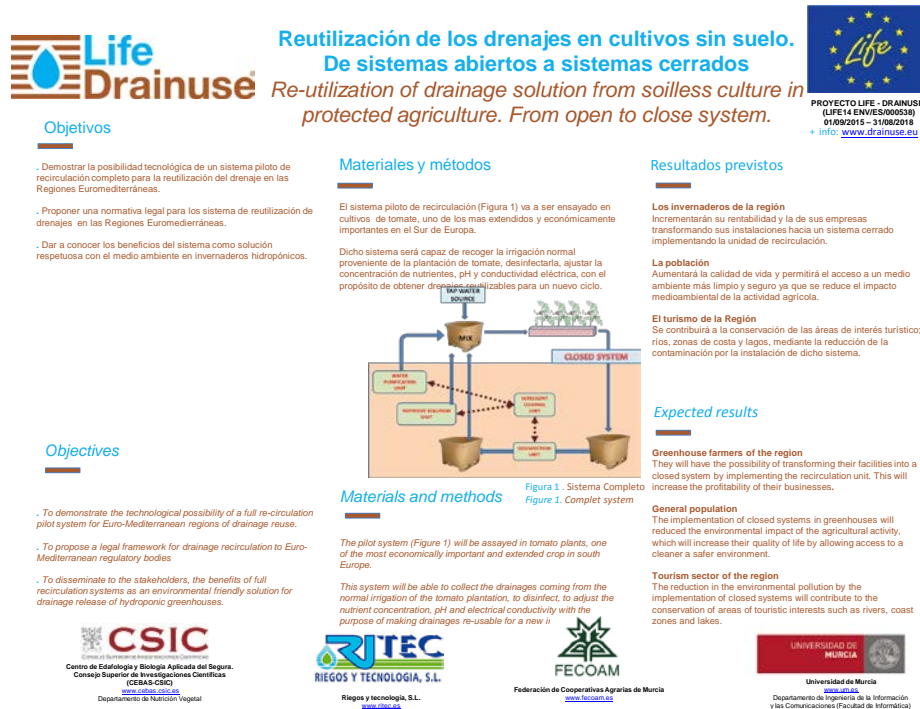


Figure 2: V2

## 2.1.2 Final versions

2.1.2.1. The most consolidate proposal is the following one; it is being studied by the design company. We have included a schematic picture of the system pilot as well as the explanation of the different stages of the work project.

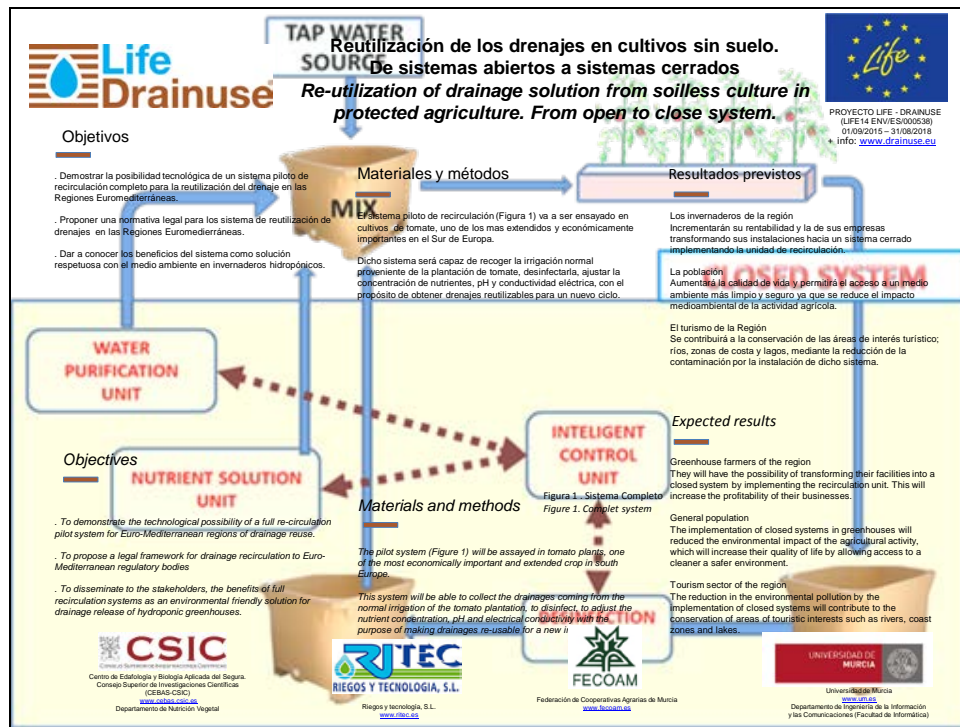


Figure 3

2.1.2.2. Finally the last version of this draft proposed by the Design Company is shown below. It includes a description, in a visual way of the environmental problem targeted, an explanation about the work, its objectives, and the technology proposed as solution as well as the expected results, but the images have been simplified to make them more easily understandable and graphic.

**Reutilización de los drenajes en cultivos sin suelo.**  
**De sistemas abiertos a sistemas cerrados.**  
*Re-utilization of drainage solution from  
soilless culture in protected agriculture.  
From open to close system.*

**Objetivos**

- Demostrar a través del diseño, construcción y puesta en marcha de un sistema piloto de recirculación completo, la posibilidad tecnológica de reutilización de drenaje en las Regiones Euromediterráneas.
- Proponer una normativa y marco legal para la recirculación de drenaje a los Organismos reguladores Euromediterráneos.
- Difundir a todas las partes interesadas, los beneficios de los sistemas de recirculación completo como una solución respetuosa con el medio ambiente para los drenajes provenientes de invernaderos hidropónicos.

**Materiales y Métodos**

El sistema piloto de recirculación (Figura 1) va a ser ensayado en cultivos de tomate, uno de los mas extendidos y económicamente importantes en el Sur de Europa. Dicho sistema será capaz de recoger la irrigación normal proveniente de la plantación de tomate, desinfectarla, ajustar la concentración de nutrientes, pH y conductividad eléctrica, con el propósito de obtener drenajes reutilizables para un nuevo ciclo.

**Resultados Previstos**

Los invernaderos de la región. Incrementarán su rentabilidad y la de sus empresas transformando sus instalaciones hacia un sistema cerrado implementando la unidad de recirculación. La población. Aumentará la calidad de vida y permitirá el acceso a un medio ambiente más limpio y seguro ya que se reduce el impacto medioambiental de la actividad agrícola. El Turismo de la Región. Se contribuirá a la conservación de las áreas de interés turístico; rios, zonas de costa y lagos, mediante la reducción de la contaminación por la instalación de dicho sistema.

Diagrama de un sistema cerrado de recirculación de drenajes.

**Objetives**

- To demonstrate through the design, construction and set up of a full re-circulation pilot system the technological possibility for Euro-Mediterranean regions of drainage reuse.
- To propose a legal and regulatory framework for drainage recirculation to Euro-Mediterranean regulatory bodies
- To disseminate to all interested stakeholders, the benefits of full recirculation systems as an environmental friendly solution for drainage release of hydroponic greenhouses.

**Materials and Methods**

The pilot system (Figure 1) will be assayed in tomato plants, one of the most economically important and extended crop in south Europe. This system will be able to collect the drainages coming from the normal irrigation of the tomato plantation, to disinfect, to adjust the nutrient concentration, pH and electrical conductivity with the purpose of making drainages re-usable for a new irrigation cycle.

**Expected results**

Greenhouse farmers of the region. They will have the possibility of transforming their facilities into a closed system by implementing the recirculation unit. This will increase the profitability of their businesses. General population. The implementation of closed systems in greenhouses will reduce the environmental impact of the agricultural activity, which will increase their quality of life by allowing access to a cleaner e safer environment. Tourism sector of the region. The reduction in the environmental pollution by the implementation of closed systems will contribute to the conservation of areas of tourstic interests such as rivers, coast zones and lakes.

**Socios y Colaboradores**

Más información.  
[More information.  
www.drainuse.eu](http://www.drainuse.eu)

Figure 4

## 2.2 Design of poster

The following draft was proposed as a warning panel of the places of study, concretely on the greenhouse facilities.

They will be located in the area of study to inform about the project.



**Life Drainuse**

PROYECTO LIFE - DRAINUSE  
(LIFE14 ENV/ES/000538)  
01/09/2015 – 31/08/2018

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*Re-utilization of drainage solution from soilless culture in  
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+ info:  
[www.drainuse.eu](http://www.drainuse.eu)

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Departamento de Ingeniería de la Información y las Comunicaciones (Facultad de Informática)

Figure 5

And the next one is the proposal draft from the Design Company. In this way, now we are waiting for the decision of the Consortium about it.



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Socios y Colaboradores

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Más información. [www.drainuse.eu](http://www.drainuse.eu)

Figure 6



## 2.3 Conclusion

Today the design company is working with the different versions of drafts.  
When the final versions are finished, the Consortium will give their approval at a meeting.