

# #1



## The Project REINWASTE contributes to Circular Economy



When we talk about waste  
"Prevention is better than cure"

Project co-financed by the European  
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Circular Economy suggests a change in society's consumption model by changing from the idea of "use and throw" to "reducing" or "giving a second life" to those things that normally would end up in the trash, thus returning them to the productive cycle in an environmentally-friendly way.



The Project REINWASTE aims at contributing to waste reduction in the agri-food sector, especially through prevention: plastics (greenhouses plastic covers, padding plastics, stakes and clips, packaging for agro-chemicals...) and food packing and packaging.

### DID YOU KNOW THAT MOST OF THE WASTE THAT REACHES THE SEA COME FROM INLAND AREAS ?

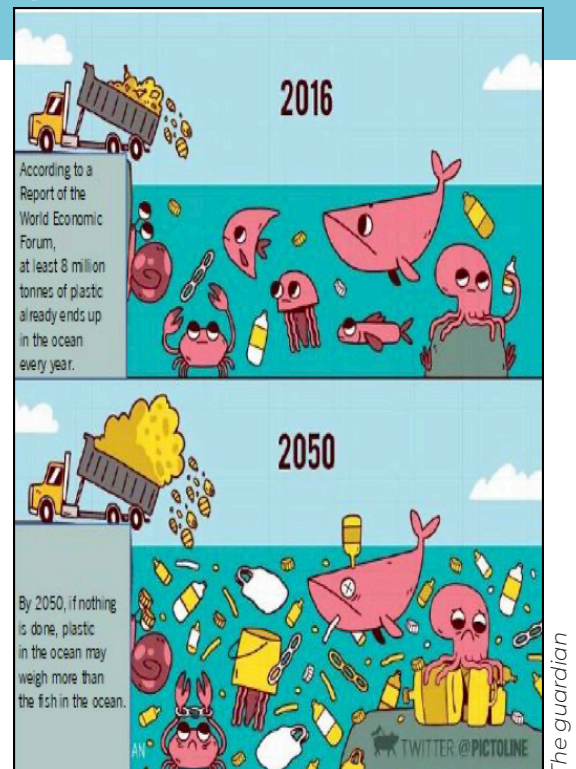
At least 8 million tonnes of plastic already ends up in the ocean every year. If nothing is done, seas and oceans will have more plastic than fish by 2050.

We are the last generation with the possibility of reversing this situation that is deteriorating the planet.

We can all contribute to this change from our farms, industries, businesses, companies, workplaces, educational centres, political institutions and even from home.

The Project REINWASTE is intended to help rethink the current model used for food production so as to make it more sustainable, thus reducing the inorganic waste generated in three value chains: horticulture, meat and dairy products.

With regards to horticulture, greenhouses in Andalusia occupy 35,000 hectares located in Almería (90%) and Granada (10%). They produce 3.3 million tonnes of horticultural products every year which represent 25% of the Spanish production. Of this production, 70% is exported thus reaching more than 500 million consumers. Andalusia is known as the "Pantry of Europe".



The waste generated in greenhouses are plant debris (94%) and waste from non-vegetable origin (6%). The adjectives usually used to define waste are 'organic' and 'inorganic', by analogy with household garbage, and not because of its chemical nature.

The waste hierarchy establishes five options from which prevention is the best option, followed by reuse, recycling and other forms of recovery, such as the energy assessment and, as last option, landfilling.

## DO YOU KNOW WHAT WASTE IS?

Waste is any substance or object whose possessor discards (Law 22/2011, of 28 July, of waste and contaminated soil).

Waste is generated when, once a particular object is used, we decide to throw it away because it no longer serves us. For example, if we buy a can of soda and drink its content, when the soda is finished and we throw the can, it becomes waste. We usually associate waste to food packaging and, indeed, they are the more numerous but any other object that we discard is also waste, for example, a hair dryer which does not work or a marker which does not write.

## DID YOU KNOW THAT ALL COMPOSTABLE MATERIAL IS BIODEGRADABLE BUT NOT ALL BIODEGRADABLE MATERIAL HAS TO BE COMPOSTABLE?

Biodegradable waste: waste which can be degraded by micro-organisms, mainly bacteria, but also fungi and algae, in a process called biodegradation. Biodegradation results in the release of harmless substances such as water, carbon dioxide and organic matter. In short, biodegradation eliminates the problem of waste as it prevents its accumulation and transforms it into other non-harmful substances.

Compostable waste: waste which can be biodegraded by a particular process called composting.

This is a type of biodegradation which takes place under particular humidity, aeration, pH and temperature conditions and in the presence of particular microorganisms, able to transform waste into a substance called compost, which can be used as fertilizer.

Relationship between biodegradable and compostable materials: The composting process is a particular type of biodegradation which takes place in a particular environment and under certain conditions, therefore, a compostable material is biodegradable in composting conditions although it does not have to be biodegradable, for example, in water.

Similarly, any biodegradable material does not have to



The agricultural and industry sectors have the opportunity to change their production processes in order to generate less waste and to contribute to circular economy.

The Project REINWASTE focuses on prevention, i.e. on how to reduce waste generation within the agri-food sector by replacing plastic materials with another type of materials, for example, those that can be biodegradable or compostable.

be biodegradable in a composting environment.

Some of the innovative solutions currently developed by the project REINWASTE, in collaboration with companies and research centers, are the replacement of plastic materials with biodegradable materials and, in particular, compostable materials. For example, the use of alternative materials instead of raffia and staking clips for plants, and the replacement of plastic films of quilts or greenhouses plastic covers in the horticultural sector.



Concerning the agri-food industry, pilot projects have been developed for the replacement of primary packaging materials with recyclable or compostable materials and their minimization by a more sustainable alternative, and as a best case, the non-use of primary packaging.



## REFERENCE

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