00 INTRODUCTION

We live on a marvellous planet, where we have been able to create technology that has allowed us to attain high levels of well-being and a long life expectancy. This technological progress has radically changed the way we live and our relationship with the planet. More specifically, our consumption of fossil fuels has led to a series of changes to the environment, bringing with it potential consequences such as floods, storms, draught, rising sea levels and the mass extinction of species. But this isn't the only way that our industrial and social activity influences the environment. We are already aware of the data that warn us about the consequences of our development.

DID YOU KNOW...

... in Europe 27 raw materials have already been identified as critical due to the difficulty in supplying them?

... on Wednesday, August 1, 2018 natural resources of an amount equal to the annual ecosystem production was consumed?

... 72% of plastic packaging is not recovered: 40% goes to landfill and 32% is in nature as litter?

... in 2017, 250 million tons of waste were generated in Europe, 11 million of which was in Spain?

... 9 million people die each year from air pollution?

... the chemical toxicity of freshwater in Europe poses an ecological threat to 50% of the organisms that inhabit it?

HOWEVER... NOT ALL IS LOST

Various initiatives to mitigate and reverse all these effects as much as possible are already underway. One of the movements that tries to minimize environmental impacts is the circular economy, which seeks to close the cycles of material and energy. Many people from different areas are already working to change things. For example:

The European Commission has developed a package of measures aimed at improving waste management (5,500 million euros from ESI Funds) and for funding research, innovation and investments in the circular economy (650 million euros from the Horizon 2020 programme)
https://ec.europa.eu

The Ellen MacArthur Foundation, created in 2010, aims to accelerate the transition to the circular economy by promoting a range of measures among company leaders and governments, as well as collaborating with academics and researchers.
https://www.ellenmacarthurfoundation.org

At the state level, a number of initiatives in Spain encourage companies to join groups and platforms in order to work on the transition towards an economic model based on keeping materials in the economy as long as possible, such as the Pact on the Circular Economy, promoted by the Ministries of Agriculture and Fisheries, Food and Environment, and Economy, Industry and Competitiveness.

All these actions aim to create spaces for development and collaboration in order to change the current model for one that is more sustainable economically, socially and environmentally. This guide provides additional help to companies that want to explore and develop sustainable opportunities in their business models.

Work platforms for public and private agents are also being created, with the aim of fostering the exchange of ideas and opinions to favour innovation and the creation of new products and more sustainable processes. One such example is the GK Recycling Cluster in the Basque province of Guipúzcoa.
https://www.gipuzkoa.eus/en/

Other initiatives seek to give visibility to the companies that are already working with circular thinking, such as Eco Circular, a web portal that showcases circular companies and success stories.
https://eco-circular.com

Public and private companies work on developing environmental policies and promoting the culture of environmental sustainability. An example is Ihobe, a public company affiliated with the Basque Government.
https://www.ihobe.eus/home

HOW TO USE THIS GUIDE:

This guide is divided into four chapters, each laying out a series of steps that will help companies to take their journey towards the circular economy (CE).

CH. 4 – TOOLS FOR DEVELOPING THE CIRCULAR ECONOMY

For each field of action in the CE, tool sets and the particular aim of each tool are given. Each tool's description contains information about how it can be applied, including examples of use.

CH. 3 – IMPLEMENTATION METHODOLOGY

This chapter covers a four-stage cycle that companies can use to undertake actions that will help them be more circular. The opportunity analysis stage proposes a number of tools that prove useful for each field of action and are further explained in Chapter 4.

CH. 2 – FIELDS OF ACTION IN THE CIRCULAR ECONOMY

This chapter presents the circular economy model and the different fields of action it encompasses. It covers the goals and benefits of applying CE principles in each of the fields.

CH. 1 – TRANSITIONING TO THE CIRCULAR ECONOMY

This chapter describes the evolution of production systems and the various theories and principles offered by different schools of thought up through the circular economy.