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# Regional Baseline Assessment

Region IV: Croatia, Cyprus, France, Greece,  
Italy, Malta, Monaco, Slovenia and Spain

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<sup>1</sup> These are “sustainable” businesses (incl. social enterprises) that provide innovative and economically viable products and services that create environmental value (addressing ecological challenges and reducing environmental impacts) and social value (addressing social needs) by applying eco-innovation, life-cycle thinking and eco-design solutions.

<sup>2</sup> Monaco is not formally a part of the EU, but participates in certain EU policies, including customs and border controls

<sup>3</sup> [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Waste\\_generation\\_2016\\_\(kg\\_per\\_capita\).png](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Waste_generation_2016_(kg_per_capita).png) Several of the Member States with particularly high levels of waste generated per inhabitant reported very high shares of waste from mining and quarrying, while elsewhere construction and demolition often contributed to the high shares

<sup>4</sup> <https://www.oecd-ilibrary.org/docserver/cef1e5cb-en.pdf?expires=1599239874&id=id&accname=guest&checksum=BFF260766E6B5D195D-33499B142E2E95>

<sup>5</sup> The circular material use, also known as circularity rate is defined as the ratio of the circular use of materials to the overall material use. The overall material use is measured by summing up the aggregate domestic material consumption (DMC) and the circular use of materials. A higher circularity rate value indicates means that more secondary materials substitute for primary raw materials thus reducing the environmental impacts of extracting primary material. The circular material use rate can be increased in more ways than recycling rates can be increased and requires a deeper transformation within our societies. <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20200312-1>

<sup>6</sup> <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20200312-1>

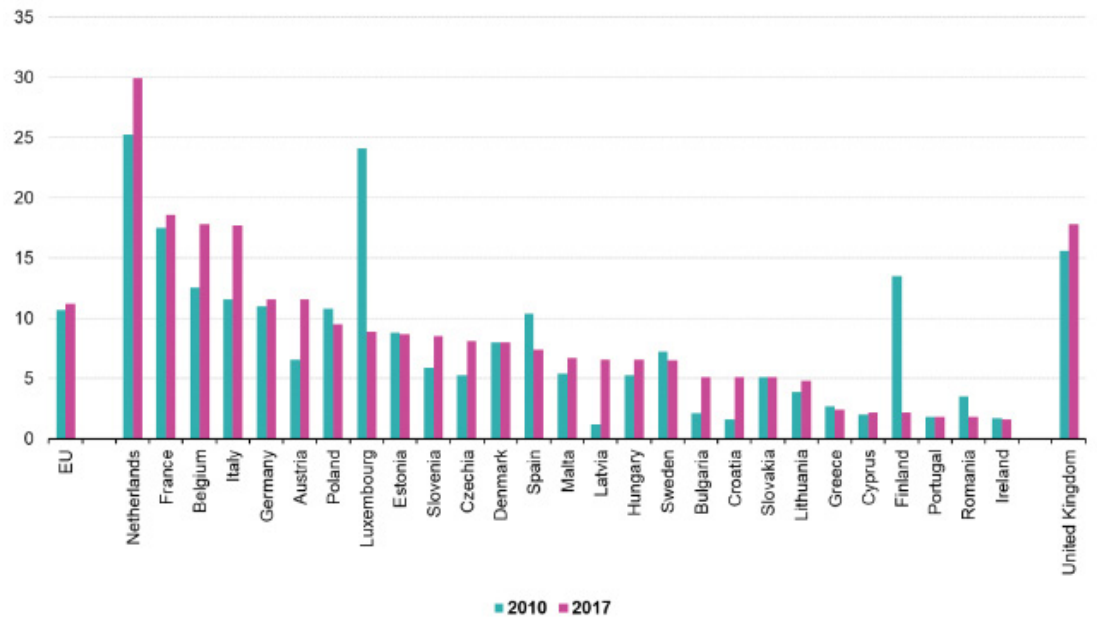
This report is a baseline assessment of the European Mediterranean countries, encompassing a brief overview of the policy framework as well as economic and socio-cultural context for green and circular businesses<sup>1</sup> in Croatia, Cyprus, France, Greece, Italy, Malta, Monaco, Slovenia and Spain. It is based on a set of country profiles produced through a literature review and stakeholder survey, per country, but is not an exhaustive study. As a baseline assessment, it highlights aspects that are relevant to create enabling conditions for green and circular businesses.

The countries analysed are very diverse in terms of size, population (highest: 65 million in France; lowest: 38,682 in Monaco), GDP per capita (highest: 67,786 EUR in Monaco; lowest: 12,480 EUR in Croatia, see figure 2 in the annex), economic sectors, culture, geography and implementation of environmental policies. This makes it challenging to identify similarities and common trends in relation to topics as broad as green entrepreneurship and the circular economy. Nevertheless, the fact that almost all countries are part of the European Union (except Monaco<sup>2</sup>) means that they must comply with EU policies.

A common challenge is the fact that all countries have a significant ecological footprint, although some more than others (highest: 6 gha/capita in France; lowest: 3 gha/capita in Greece), and face environmental challenges, ranging from water scarcity to waste generation (highest: Greece; lowest: Croatia, see figure 4 in the annex)<sup>3</sup>.

Although unemployment rates may not be as high as outside of the EU, it is still a structural issue, particularly in Greece (in contrast to Monaco). While the risk of poverty and social exclusion in Italy has been declining the past years, income inequality increased in 2018<sup>4</sup>.

Regarding circular economy, there are different levels of progress among the countries. An indicator to assess the material circularity of countries is the “circularity rate”<sup>5</sup>, the share of material resources used which came from recycled products and recovered materials, thus saving extractions of primary raw materials. This indicator is integrated in the EU monitoring framework for the circular economy (CE) (Figure 1) and was 11.2%<sup>6</sup> in 2017 for the whole of the EU. This means that over 11% of material resources used in the EU came from recycled products. In the period between 2010 and 2017, the highest increases were recorded in Italy (+6 pp), The Netherlands (+5 pp) and Belgium (+4 pp). At the opposite end of the scale, the largest drop was recorded in Luxembourg (-15 pp) and Finland (-11 pp), followed by Spain (-3 pp).



Source database: env\_ac\_cur



FIG. 1 Circular material use rate in 2010 and 2017 (Source: Eurostat)

However, the “circularity” of a country encompasses more indicators than the circular material use rate. Although there is no internationally recognised standard available yet to comprehensively measure the level of circularity of a country, there are several initiatives and studies that give some insight, like the circular economy index of Politico which is based on municipal waste, food waste, recycling rate, trade in recyclable raw materials, material reuse rates, patents and private investments. Based on this evaluation, the ranking of the EU Mediterranean countries (excl. Monaco and Malta) in 2018<sup>7</sup> was: 3. France, 5. Italy, 7. Slovenia, 10. Spain, 19. Croatia, 26. Greece, 27. Cyprus.

<sup>7</sup> <https://www.politico.eu/article/ranking-how-eu-countries-do-with-the-circular-economy/>



<sup>8</sup> EU countries will be required to recycle at least 55% of their municipal waste by 2025 (60% by 2030 and 65% by 2035), achieve a 10% cap on landfill by 2035, mandatory separate collection of biowaste and stricter schemes to make producers pay for the collection of key recyclables. Other measures range from the mandatory separate collection of all household waste – paper, plastic, glass, metals, textiles as well as hazardous and organic waste – to a ban on the incineration and landfilling of waste collected for recycling. Policy-makers also agreed to introduce schemes making producers pay for the collection and recycling of their products and incentivising consumers to return bottles and other types of packaging.

<sup>9</sup> “The strategy outlines the need for a truly responsible value chain, from product design and manufacturing to reducing toxicity and cutting waste. It also specifically addresses some of the product groups with the largest environmental footprints, including textiles, electronics, batteries, construction, packaging, and although less prominently also furniture and automobiles.

Proposed measures aim at making sustainable products the norm and fighting premature obsolescence. For example, minimum repairability requirements aimed at facilitating the disassembly of smartphones will considerably extend their lifespans. The EU also wants to set a food waste reduction target and promises to end over-packaging as well as microplastic pollution”. <https://eeb.org/circular-economy-action-plan-2020/>

<sup>11</sup> <https://eur-lex.europa.eu/legal-content/EN/NIM/?uri=celex%3A32018L0851>  
Accessed 17th of August 2020.

<sup>12</sup> Since 2015, France has banned planned obsolescence – a practice whereby manufacturers may deliberately shorten the lifespans of products to incentivise the new sales. A violation of this law can result in a sentence of up to two years in prison or a €300,000 fine

## General

Most EU Mediterranean countries have already had climate and energy policies in place for several years, even before circular economy was on the agenda. This means that most sustainability and eco-innovation efforts (of both public and private actors) have focused on the energy sector, to increase the share of renewable energy production but also energy-efficiency at national level.

The past years, there has been increasing attention to the topic of circular economy (which addresses all types of natural resources, not only fossil-based), both triggered by EU policy developments as well as private initiatives and NGOs/think-tanks like the Ellen MacArthur Foundation. Initially, the focus was on recycling and other “end-of-life” issues, but this has gradually shifted to upstream interventions (ecodesign, sustainable production, pollution prevention), at least in some countries.

The EU *Circular Economy Package* adopted in 2018<sup>8</sup> (consisting of the revised Waste Framework Directive, the Packaging and Packaging Waste Directive and the Landfill Directive), the European *Green Deal* and second *Circular Economy Action Plan*<sup>9</sup> have stimulated national governments to improve the policy framework. A wide variety of initiatives have been implemented or are underway at national level, more than can be described in detail in this report. In principle, all governments recognise the importance of green and circular businesses in the transition to a Circular Economy, but there are varying degrees to which policies have been adopted to actively support them in practice.

## National Strategies and Action Plans for Circular Economy

All EU member states are obliged to transpose the EU Circular Economy Action Package at national level. By 5 July 2020, EU governments should have formally adopted the most ambitious set of measures and targets ever agreed to boost recycling and reduce waste. Only ten governments have officially reported progress on the national transposition of the EU’s new waste laws, including France and Croatia<sup>11</sup>.

Nevertheless, more than half of the countries analysed have adopted a national Circular Economy Strategy and Action Plan or Roadmap, in line with EU policies. There are of course many differences in ambition at national level, with few countries going beyond what is obliged by EU legislation.

The Greek National Circular Economy Strategy was already adopted in 2018 and the National Roadmap for the implementation of CE in Greece will be published shortly (according to the national stakeholder consulted in August 2020).

France is very ambitious when it comes to circular economy, having adopted a ban on the destruction of unsold non-food, policy measures to combat planned obsolescence<sup>12</sup> and promote sustainable production (incl. ecodesign) and repair. The Slovenian government is also committed to CE and has set high goals to



turn Slovenia into a European frontrunner. Slovenia is a Government and Cities member of the Ellen MacArthur Foundation's international Circular Economy 100 programme.

The Spanish CE Strategy was adopted this year. In addition, a Pact for a Circular Economy<sup>13</sup> was signed between economic, social (NGO) actors and public administration to promote collaboration and accelerate the transition. Next year, a CE Action Plan (2021 to 2023) will be adopted to complement the CE Strategy.

Italy, Cyprus, Malta and Croatia do not have specific policies dedicated to circular economy, although they have the topic on the policy agenda and intend to develop programs in the near future. Furthermore, they already have policies dedicated to sustainable production and consumption. Malta has a Green Economy Strategy and Action Plan and Sustainable Development Vision for 2050 which are important steppingstones towards a circular economy. Italy has several laws and decrees (e.g. on waste management, innovation and clean technologies) that also contribute to a circular economy. Malta has formulated the objective of "Zero Single-Use Plastic Waste by 2030".

The disadvantage of not having a national strategy of action plan for CE, is a lack of a holistic approach to circular economy initiatives, as confirmed by the national expert from Cyprus.

## Fiscal and Financial Instruments<sup>14</sup>

In line with the feedback from the national expert from Croatia, the most effective way to support green and circular business is to implement economic instruments such as charges and taxes that will reduce pollution, but also positive incentives and subsidies for circular practices (discussed in the next chapter).

- In France, there are tax incentives for social enterprises (employing disadvantaged or disabled people) that collect and sell used goods, exempting them from VAT. France has also progressively increased environmental pollution taxes (incl. waste disposal), while de-creasing the tax rate on recycling.
- The Italian Industry Plan 4.0 (included in the Budget Law 2017) encompasses some fiscal measures to encourage both the reuse and recycling of packaging and the purchase of products that can be recycled and reused.
- In Spain, tax policy is largely shaped at a regional level. Many regions have a landfill tax, but only two regions have an incineration tax. Tax incentives are offered to companies and individuals that donate new or reused goods.
- Croatia has one of the highest environmental taxes in the EU: 3.43% of GDP in 2017<sup>15</sup>.
- The GDP from environmental taxes in Cyprus accounted for 2.93% in 2017<sup>16</sup>, which is above EU-28 average. Yet the national expert confirmed a lack of market-based incentives supporting the transition towards circularity. A new Green Tax Reform will be introduced in 2021.
- Monaco has no income tax and low business taxes and thrives as a tax haven<sup>17</sup>. In recent years, the country has committed to strengthening international tax co-operation and to fighting tax evasion.

<sup>13</sup> <https://www.miteco.gob.es/es/calidad-y-evaluacion-ambiental/temas/economia-circular/pacto/>

<sup>14</sup> Article 4 (3) WFD requires MS to use economic instruments in order to provide incentives for the effective application of the waste hierarchy. These instruments are primarily to be set up and used by MS, not at the EU level.

<sup>15</sup> Commission Staff Working Document, The EU Environmental Implementation Review 2019, Country Report – CROATIA

<sup>16</sup> Commission Staff Working Document, The EU Environmental Implementation Review 2019 Country Report – CYPRUS

<sup>17</sup> Yet the country is not tax-free; it charges nearly 20% value-added tax, collects stamp duties, and companies face a 33% tax on profits unless they can show that three-quarters of profits are generated within the principality.

An important instrument to accelerate the transition to a CE is Extended Producer Responsibility, making producers responsible for sustainable waste treatment and prevention. EU member states are obliged to implement EPR schemes for certain waste streams, like packaging, batteries and WEEE (through Producer Responsibility Organisations, or otherwise). In Italy, for instance, there are 40 EPR schemes covering 5 sectors<sup>18</sup>, which has led to a significant improvement in waste management since 2001<sup>19</sup>. France is an international leader on Extended Producer Responsibility, with EPR schemes for different product types such as electrical or electronic waste, packaging, furniture and paper, including the only scheme for textiles and the implementation of eco-modulation fees (Ecopreneur, 2019<sup>20</sup>).

## Resource Recovery

In general, there are still too many resources being wasted through landfilling (e.g. Greece, Cyprus) or incineration, although some Member States have relatively high recycling rates (e.g. Italy, Slovenia, France) (see figure 5 in the annex). Waste management and recycling are major challenges for all countries, and even for those performing relatively well there is still a lot of potential for improved waste prevention. For instance, in Cyprus there is a lack of infrastructure and systems for collecting recyclables and for diverting (biodegradable waste) from landfills. In 2018, the European Commission sent warnings to 14 governments at risk of missing their current national target of 50% recycling and preparation for reuse by 2020, incl. Croatia, Cyprus, Greece, Malta and Spain<sup>21</sup>. The warnings included recommendations on the implementation of separate waste collection laws, landfill and incineration taxes, schemes to increase producer responsibility and legally binding rules for the separate collection of waste<sup>22</sup>.

Circular businesses that recover or recycle resources benefit from clear by-product and end-of-waste regulations. Spain has developed national criteria to classify by-products in order to promote a secondary raw material market. In relation to end-of-waste status, waste streams are prioritised by their environmental relevance. Italy has enacted an End-of-Waste law (Law nr. 128 of 3 Nov. 2019), which will enable regions to define criteria on a case-by-case basis, stimulating recycling and recovery of waste streams. However, in most countries (e.g. Greece) national criteria for end-of-waste and technical standards on secondary raw materials are still lacking.

In some countries (notably Italy<sup>23</sup>), regional initiatives related to industrial symbiosis (exchange of residual streams between companies, often located in so-called eco-industrial parks) and multi-stakeholder partnerships across sectors to recover resources are supported by the national government.

Where water resources are concerned, much remains to be done to fully achieve the objectives of the EU Water Framework Directive and simulate water reuse. That is why Spain has integrated water reuse and purification in their CE Strategy. Malta has a National Water Management Plan, with incentive schemes for operators in the agricultural sector to better manage their water use.

<sup>18</sup> Monier, V. et al. (2014). Development of Guidance on Extended Producer Responsibility (EPR). Final Report by Deloitte BIO Intelligence Service in cooperation with Arcadis, Ecologic, Institute for European Environmental Policy (IEEP) and Umweltbundesamt (UBA) for the European Commission DG Environment, p. 41-45. [https://ec.europa.eu/environment/waste/pdf/target\\_review/Guidance%20on%20EPR%20-%20Final%20Report.pdf](https://ec.europa.eu/environment/waste/pdf/target_review/Guidance%20on%20EPR%20-%20Final%20Report.pdf)

<sup>19</sup> Ecopreneur.eu European sustainable Business Federation Final Report Circular Economy Update Overview of Circular economy in Europe (2019) – p. 59-61. <https://circulareconomy.europa.eu/platform/sites/default/files/ecopreneur-circular-economy-update-report-2019.pdf>

<sup>20</sup> Ecopreneur (2019) Circular Economy Update

<sup>21</sup> <https://meta.eeb.org/2019/04/10/half-of-eu-countries-at-risk-of-missing-recycling-targets/>

<sup>22</sup> In the meantime, progress is made in Greece on existing waste management systems and procedures, through the new national legislative framework on waste, which will be issued in the next two months, transposing the four European Directives (2018/849-852) on waste. Greece was the first Country in EU to put into public consultation the Law which incorporates the EU Directive 2019/904 on the Single Use Plastics Directive.

<sup>23</sup> Regional projects of Industrial symbiosis developed by ENEA in Sicily, Lazio, and Emilia Romagna, first Italian network of industrial symbiosis - SUN - Symbiosis User Network.

## Sectoral Approaches

Some countries have dedicated policy approaches for specific sectors:

- The Spanish CE Strategy recognised the importance of focusing on specific sectors: construction, farming, fishing and forestry, industry, consumer goods, tourism and textile industries.
- The Italian “Relaunch Decree” (“Decreto Rilancio”) focuses particularly on the construction sector as an opportunity to support SMEs and local jobs. The Italian *Climate Decree* includes incentives on the recycling and the use of plastic, particularly addressing retailers. One of the measures is a plastic tax of €0,45 per kilogram of disposable plastic items.
- Cyprus Sustainable Tourism Initiative aims to turn Cyprus in a leader in sustainable tourism. This may also create opportunities for green and circular businesses. The level of green and circular entrepreneurship in other sectors as agriculture, construction or energy is considered very low (1 on a scale 1 to 5), according to the stakeholder consultation.
- Monaco has established itself as an ecotourism destination (facilitated by the Prince Albert Foundation), illustrated by the number of Green Key, Green Globe, ECO certification<sup>24</sup> and Planet 21-awarded hotels and restaurants. The ‘Responsible Trading’ and ‘Responsible Restaurant’ certifications identifies traders and restaurant owners who are committed to operating ecologically, economically and socially responsible.
- The environmental and energy performance of buildings is a priority in Monaco. The Medi-terranean Sustainable Buildings (BDM), is a voluntary approach with the ambition to promote good construction practices, maintaining comfort and health, while taking environmental, social and economic issues into account.
- Malta has a Construction and Demolition Waste Strategy which will promote markets for secondary raw materials in the construction area.

<sup>24</sup> Since 2002, the Malta Tourism Authority operates the ECO certification for hotels and farmhouses, which aims at improving tourism accommodations’ sustainable performance, especially regarding on energy efficiency, reducing water consumption, waste management and green procurement.

## Public-private Partnerships

Public-private partnerships are increasingly recognised as a valuable policy instrument to advance in areas where top-down regulations are not (politically) feasible.

An interesting governmental initiative within the region are the R&D partnerships (SRIPS<sup>25</sup>) in Slovenia, with the aim to stimulate eco-innovation, connect businesses, educational/research institutes and NGOs to develop new business models to close the loop and achieve higher resource-efficiency.

In Italy, the discontinuity of policies to support knowledge transfer and innovation ecosystems hampers innovation performance. Technology clusters and private-public partnerships have become more fragmented. In 2019, only 2% of Italy’s publications were public-private co-publications (a proxy for research-business collaboration), compared to 4% for the EU.

## Circular Cities

There appears to be few programs at sub-national/city level, with the exception of France (Paris) and Spain.

<sup>25</sup> SRIPS – Circular Economy: Strategic Research and Innovation Partnership – Networks for the transition into circular economy.



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At a regional level, 4 out of the 17 Spanish regions have Circular Economy strategies (Andalusia<sup>iii</sup>, Catalonia<sup>iv v</sup>, Galicia<sup>vi</sup> and Extremadura<sup>vii</sup>); Navarre has a CE Agenda<sup>viii</sup>; Castille La Mancha has specific legislation<sup>ix</sup>; At a local level, more than 200 municipalities have signed the “Seville Declaration”, a Manifesto showing their commitment to circular economy policies. Additionally, Catalonia has joined the CE100 network from Ellen McArthur Foundation in 2014.

In 2014, Ljubljana (Slovenia) became the first capital in the EU to commit to achieving a Zero Waste goal<sup>26</sup>. Interestingly, the city’s green purchases represent more than 70% of the city’s overall investment<sup>27</sup>. The Slovenian capital along with three other municipalities, Vrhnika, Borovnica and Log Dragomer joined the European network of Zero Waste communities.

<sup>26</sup> <https://ec.europa.eu/environment/europeangreencapital/ljubljana-zero-waste-goal/> <https://www.theguardian.com/cities/2019/may/23/zero-recycling-to-zero-waste-how-ljubljana-rethought-its-rubbish>

<sup>27</sup> Crnčec, 2015. Eco-Innovation in Slovenia. EIO Country Profile 2014-2015

### General

The market conditions for green and circular businesses in the EU Mediterranean countries are quite diverse, but there are also similarities. A common trait among these countries is a predominantly services-oriented economy and relatively few manufacturing industries with the exception of some sectors and countries (e.g. Italy). Many countries are now highly dependent on import (of raw materials) and globalised supply chains (as island states, Cyprus and Malta are even more dependent on imported goods). Many Mediterranean countries (particularly Greece, Italy and Cyprus) have large tourism industries.

All countries in the region have experienced economic setback due to the recession in 2009. Only Malta<sup>28</sup> has recovered fully from 2009 recession and has a low debt-to-GDP ratio, benefiting from continuing economic growth. Other countries, like Italy and Greece, face high public debt rates, which inhibits public sector investments. As elsewhere, all countries are severely impacted by the economic impacts of the COVID-19 pandemic.

### Green and Circular Businesses

There is no consistent information based on harmonised definitions available on the exact number of green and circular businesses per country, which makes it hard to compare. However, there is some data available to illustrate the (limited) presence of green and circular businesses activities in the region:

- France has a record of 542 patents related to circular economy since 2000, with €21.3M investment in circular economy sectors<sup>29</sup>. There are 111 circular economy initiatives in the *Grand Paris Circulaire database*<sup>x</sup> while the *Digital platform Le Hub BPI France* mapped 207 start-ups in Circular Economy in France in the field of ecodesign, sharing economy, repair and reuse, recycling and energy valorisation and composting .
- Overall, around 345,000 Italian companies invested in the “green economy” between 2011 and 2017, and around 24.9 % of all Italian businesses and 30.7% of manufacturing can be considered “green” in 2017<sup>30</sup>. However, only 16% of SMEs, the backbone of the Italian economy, offer “green” product or services, which is less than the EU average (25%). Nevertheless, there seems to be an increasing number of circular economy practices, which are collected in the report ‘*100 Italian circular economy stories*’.
- In Spain, the Gross Value Added contribution to GDP related to Circular Economy sectors<sup>xii</sup> as well as the number of CE jobs have been increasing.
- “Green” economy activities in Malta are mostly limited to waste collection, renewable energy and energy/resource efficiency technologies. Based on a Eurobarometer survey conducted among Maltese SMEs, circularity is not yet a priority (EC 2017a<sup>31</sup>).
- In Croatia, according to the national expert, there is a lack of quality solutions and examples of good practices on circular and green sectors. The country scores lower than the EU average when it comes to designing products which are easier to maintain and repair: 20% compared to the

<sup>28</sup> Malta seems to be benefiting from sustained economic growth and strong Maltese labour market. The unemployment rate dropped to 4.0% in 2017 and the employment rate has risen above the EU average (74.4%) in Q2-2018 (source).

<sup>29</sup> Politico. Circular Economy Index. Retrieved August 10th 2020 from <https://www.politico.eu/article/ranking-how-eu-countries-do-with-the-circular-economy/>

<sup>30</sup> Environmental Implementation Review: [https://ec.europa.eu/environment/eir/pdf/report\\_it\\_en.pdf](https://ec.europa.eu/environment/eir/pdf/report_it_en.pdf)

<sup>31</sup> European Commission (2017) SMEs, resource efficiency and green markets, *Flash Eurobarometer 456*, European Union

<sup>32</sup> [https://ec.europa.eu/environment/eir/pdf/report\\_hr\\_en.pdf](https://ec.europa.eu/environment/eir/pdf/report_hr_en.pdf)

<sup>33</sup> Crnčec, 2015. Eco-Innovation in Slovenia. EIO Country Profile 2014-2015

<sup>34</sup> <https://ec.europa.eu/eurostat/cache/infographs/circulareconomy/>

EU average of 25% (according to the Environmental Implementation Review 2019)<sup>32</sup>.

· In Slovenia, companies and social entrepreneurs pointed out the problem of long and in-efficient administrative procedures and the lack of financial incentives<sup>33</sup>.

Eurostat<sup>34</sup> also provides figures on how the gross value added in the recycling, repair and reuse sector differs per country (Figure number 2), with Slovenia being the best performing country in the Mediterranean.

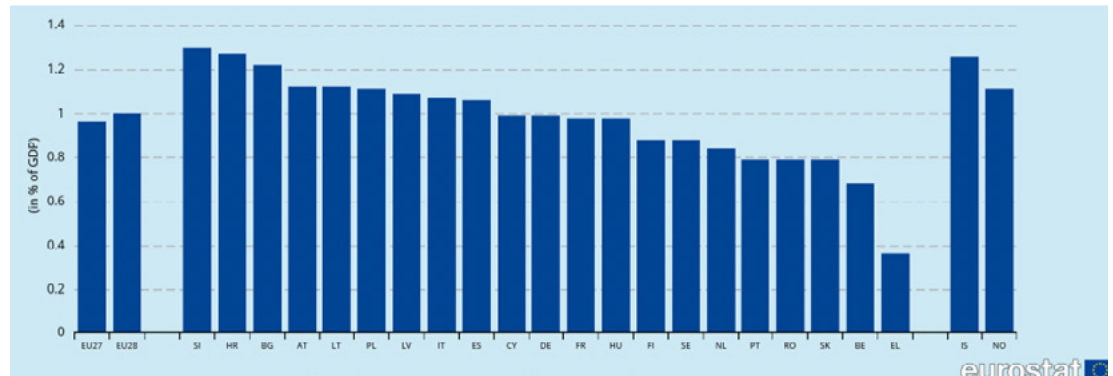


FIG. 2 Gross value added in the recycling sector and repair and reuse sector in 2017 (in % of GDP)

Generally, companies are more and more aware of the importance of sustainability, resource-efficiency and recently also circular economy, although in some countries more than others. In France, for instance, the Eurobarometer reported data on SMEs in France<sup>xiii</sup> (2018): 83% are minimizing waste; 68% say they are saving water; 33% design products that are easier to maintain, repair or reuse. It is estimated that in 2018 French companies invested 1,118 billion euros in environmental protection (greenhouse gas reduction, improving air quality, managing solid waste and wastewater, protecting soil etc.)<sup>35</sup>.

Factors that French SMEs experienced as impeding (according to 2018 Eurobarometer<sup>36</sup>) are: complex administrative or legal procedures (53%); cost of environmental actions (44%) and the fact that the technical requirements of the legislation were not up to date (47%). Supporting factors that would help entrepreneurs launch green products or services: 32% mention better cooperation between companies across sectors to re-use waste and by-products; 27% mention technical support and consultancy for the development of products, services and production processes; 24% mention assistance with identifying potential markets or customers; 21% mention consultancy services for marketing or distribution.

### Environmental Management and Labels

Having a proper environmental management system in place, is the first step towards creating a green and circular business. To help organisations certify and improve their environmental management, the EU has developed EMAS, which is being stimulated at national level, in some countries more actively than others (e.g. grant support in Cyprus). Nevertheless, EMAS is still having difficulties to expand its market share, especially in countries where companies tend to invest less in

<sup>35</sup> National Statistics and Economic Studies (INSEE). (2020). Insee Focus n 194. Accessed here: <https://www.insee.fr/fr/statistiques/4505271>

<sup>36</sup> European Commission. (2018). Flash Eurobarometer 456, SMEs, resource efficiency and green markets, January 2018, Online: <https://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/ResultDoc/download/DocumentKy/81280>

sustainability issues. In 2018, Croatia had no organisations registered in EMAS. Another standard related to environmental management is ISO 14001. In 2016 in Malta, 645 companies were registered under ISO 14001, by far the highest score in the EU. In Italy, the increased focus on Green Public Procurement (GPP) has resulted in an increase, in the last two years, of the number of organisations awarded with European or international sustainable schemes (i.e. EU Ecolabel, EMAS, ISO 14001).

Besides environmental management systems, green and circular businesses can choose to certify their products with a sustainability label like [Ecolabel](#). Although not all Ecolabel products are man-manufactured by truly circular businesses, and not all circular businesses are Ecolabel certified, there is some overlap. Italy is the third EU country with respect to the number of EU Ecolabel licences (179), after Germany (282) and France (328)<sup>37</sup>. With reference to the number of products/services awarded with the EU Ecolabel, Italy is in the second position with 8.560 after Spain with 27.832<sup>38</sup>. Cyprus has a relatively low number of products (87) and licenses (7) registered in the EU Ecolabel scheme (2018). The number of Ecolabel certified products in Croatia: only 2 licenses and 5 products registered<sup>39</sup>.

### Green and Circular Jobs

In general, few people are directly employed in circular economy sectors, the EU average is 1.73% (Eurostat, 2017)<sup>40</sup>. The figure is of course slightly different for each country, but for most countries it is around this figure (e.g. 1.65% in Greece<sup>41</sup> and 2.09% in Slovenia<sup>42</sup> in 2016). However, if employment in “eco-industries” is considered (which is a broader concept), 4.63% of total employment can be considered “green” (EIO country profile, 2015<sup>43</sup>).

In the last 15 years, the number of “green” jobs in France has increased more rapidly than other jobs. It is estimated that France had 800.000 circular economy Full Time Equivalents (FTE) in 2014 accounting for 3% of the total employment. In some countries like Greece and Cyprus, based on stakeholder input, there is a lack of knowledge and technical skills needed for the development of circular and sustainable business-es.<sup>xiv</sup>

In Malta, innovation is hindered by the size of the research and innovation system, but even more so by a mismatch between skills needed and current labour force. The low-skilled workforce is still partly excluded from the labour market, while companies rely on immigration to offset emerging skill gaps.

### Consumer Demand

There is generally a low but increasing demand for sustainable/ecological (e.g. Ecolabel, organic) products, which is related to environmental awareness (discussed more elaborately in the next chapter).

According to Eurobarometer 468, Greek society strongly supports circular economy initiatives and environmental protection measures<sup>44</sup>. More than 90% stated they are concerned about the impact of plastic products on the environment. This is also confirmed by consumers from other countries, like Slovenia.

<sup>37</sup> [https://circulareconomynetwork.it/wp-content/uploads/2020/04/Rapporto-sulleconomia-circolare-in-Italia-2020\\_r04.pdf](https://circulareconomynetwork.it/wp-content/uploads/2020/04/Rapporto-sulleconomia-circolare-in-Italia-2020_r04.pdf)

<sup>38</sup> [https://circulareconomynetwork.it/wp-content/uploads/2020/04/Rapporto-sulleconomia-circolare-in-Italia-2020\\_r04.pdf](https://circulareconomynetwork.it/wp-content/uploads/2020/04/Rapporto-sulleconomia-circolare-in-Italia-2020_r04.pdf)

<sup>39</sup> <http://www.haop.hr/hr/tematska-podrucja/integrirane-i-opce-teme/opce-teme>

<sup>40</sup> The indicator “Number of persons employed” in the following two sectors: the recycling sector and repair and reuse sector. Jobs are expressed in number of persons employed and as a percentage of total employment. Number of persons employed is defined as the total number of persons who work in the observation unit. [https://ec.europa.eu/eurostat/cache/metadata/EN/cei\\_cie010\\_esmsip2.htm](https://ec.europa.eu/eurostat/cache/metadata/EN/cei_cie010_esmsip2.htm)

<sup>41</sup> [https://ec.europa.eu/environment/eir/pdf/report\\_el\\_en.pdf](https://ec.europa.eu/environment/eir/pdf/report_el_en.pdf)

<sup>42</sup> The Environmental Implementation Review 2019 COUNTRY REPORT SLOVENIA

<sup>43</sup> [https://ec.europa.eu/environment/ecoap/sites/ecoap\\_stayconnected/files/field/field-country-files/slovenia\\_eco-innovation\\_2015.pdf](https://ec.europa.eu/environment/ecoap/sites/ecoap_stayconnected/files/field/field-country-files/slovenia_eco-innovation_2015.pdf)

<sup>44</sup> Directorate-General for Communication (2017) Special Eurobarometer 468: Attitudes of European citizens towards the environment [https://data.europa.eu/euodp/data/dataset/S2156\\_88\\_1\\_468\\_ENG](https://data.europa.eu/euodp/data/dataset/S2156_88_1_468_ENG)

In France, most retailers report increased sales of sustainable products over the past five years and in 2017 French consumers were willing to pay more for sustainable products. However, there is always a difference between intentions and actual practise. In Greece, according to the national expert, there is a low but increasing demand for circular products/services, but a decreasing purchasing power has made Greek consumers extremely price conscious.

<sup>45</sup> Flash Eurobarometer 388 (2014) ATTITUDES OF EUROPEANS TOWARDS WASTE MANAGEMENT AND RESOURCE EFFICIENCY

<sup>46</sup> Zajko, 2019. Demand and Characteristics of Customers of Reusable Products in Slovenia [https://www.researchgate.net/publication/336276870\\_Demand\\_and\\_Characteristics\\_of\\_Customers\\_of\\_Reusable\\_Products\\_in\\_Slovenia](https://www.researchgate.net/publication/336276870_Demand_and_Characteristics_of_Customers_of_Reusable_Products_in_Slovenia)

A 2014 Eurobarometer survey<sup>45</sup>, shows that 77% of EU consumers would rather repair their goods than buy new ones. This is also reflected in an article about the increasing demand for reusable products in Slovenia (Zajko, 2019)<sup>46</sup>. The problem is that many products are still discarded and replaced in the end because consumers are discouraged by the cost of repairs and the level of service provided.

Some countries, like Monaco, Malta and Cyprus, have small internal markets. For sales, their SMEs are therefore mostly oriented to international markets.

### **Access to Financing and Funding**

According to a Legambiente study<sup>47</sup> about circular economy in Italy, investments in the circular economy are mainly made with equity capital for 81.5% of companies; 38.9% used bank financing; 18.5% for European funding; 14.8% for regional funding and only 3.7% for crowdfunding and fundraising. Although these numbers are specifically for Italy, the order maybe be similar in other countries.

<sup>47</sup> [https://www.economia.unipd.it/sites/economia.unipd.it/files/Rapporto\\_economicocircolare\\_industria4.0\\_Legambiente\\_LMD\\_2.pdf](https://www.economia.unipd.it/sites/economia.unipd.it/files/Rapporto_economicocircolare_industria4.0_Legambiente_LMD_2.pdf)

Public funding or grants tend to be more important for early-stage green and circular (micro) start-ups and value-driven initiatives that usually have difficulties with accessing equity capital or bank financing because of the challenge to establish a convincing circular business case in a linear economy.

Several national experts also indicated a high dependency on public support schemes and European funding schemes such as the European Structural and Investment Funds, Interreg, LIFE or H2020 for circular projects (not only green and circular businesses, but also R&D and innovation).

In most countries, public and private investments is generally focused on high-tech industries and “innovative” technologies with potentially high return on investment. Otherwise, public funding is mostly directed towards priority (industrial) sectors such as renewable energy and waste (water) treatment.

Access to finance can be a barrier to eco-innovation in businesses. In the private sphere, Slovenia still did not have any green early-stage investments in 2015<sup>48</sup>.

<sup>48</sup> Crnčec, 2015. Eco-Innovation in Slovenia. EIO Country Profile 2014-2015

Investments in green technologies, circular strategies and resource-efficiency, often lead to higher production costs in the beginning, creating a need for external funds. Private investment in green and circular businesses is often low in smaller countries with a limited internal market.

To support circular innovation in services and new business models, a diversification of financing instruments (including access to venture capital) is important, as is also the new focus of the Malta Development Bank.



<sup>49</sup> “Enterprise 4.0 plus” provides €7 billion to companies that will invest in innovation, green investments, research and development, design and training [https://www.mise.gov.it/images/stories/documenti/investimenti\\_impresa\\_40\\_eng](https://www.mise.gov.it/images/stories/documenti/investimenti_impresa_40_eng) <https://www.mise.gov.it/index.php/en/202-news-english/2036690-national-industry-4-0-plan>

<sup>50</sup> “This includes some first measures in line with the Green Deal such as the establishment of a public investment fund with a budget of € 4,24 billion (2020-2023) for the decarbonization of the Italian economy, the adaptation and mitigation of climate change, sustainable tourism and the regeneration of urban areas. This may also benefit green and circular businesses. The Budget Law also includes the provision of a plan of €33 billion to support the conversion of the Italian economy over the next 15 years through innovative and sustainable projects and programmes.

<sup>51</sup> PIA has supported 745 projects between 2010-2017 (PIA 1 and 2). Out of all projects, 135 were related to Circular Economy and Waste Management. In 2017, ADEME made €1 billion available through PIA3 for innovative projects that contribute to green growth. Funding is also available for ecodesign projects

<sup>52</sup> Croatian Private Equity and Venture Capital Association (CVCA) – Facilitates private equity and venture capital investments in Croatia and South East Europe. HAMAG-BICRO (Croatian Agency for SMEs, Innovations and Investments) is a government agency that promotes foreign investments in SMEs and publishes a catalogue of private companies looking for equity investments. Credit lines and loans financed by the Natural Capital Financing Facility (NCFF) and promoted by the Croatian Bank of Reconstruction and Development (HBOR)

<sup>53</sup> Grupo Interplataformas de Economía Circular (GIEC) <https://www.giec.es/#>

In any case, governments should offer funding for green investments and innovation, like the Italian “Enterprise 4.0 plus<sup>49</sup>” and the Transition Plan 4.0 which are included in the 2020 Budget Law<sup>50</sup> which is strongly influenced by the European Green Deal.

In France, public funding is provided by the French Environment and Energy Management agency (ADEME) through for instance the *Investments for the Future Program (Programme Investissement Pour L’Avenir, PIA)*<sup>51</sup>. Green finance is being scaled up because of the disclosure obligation for climate-related information and the creation of a Green Label for Investment funds.<sup>xv</sup>

In Greece, there is a national initiative, the Hellenic Fund for Sustainable Development (ETVA) which is the only private investment fund in Greece that invests exclusively in businesses that contribute to sustainable development. In addition, the National Fund for Entrepreneurship and Development (ETEAN) will support sustainability, energy-efficiency and renewable energy-related activities of businesses.

The Spanish Government has specific funding lines for R&D in the area of CE<sup>xvi</sup>. Sustainability is an important criterion used in regional strategic plans for subsidies, developed by regional administrations, e.g. on R&D CE implementation in collaboration between public and private entities<sup>xvii</sup>; tourist waste management in an inclusive job market; industrial research; waste management and eco-design.

In Slovenia, the Eco Fund and Environmental Public Fund are the main public finance program to environmental projects in the form of loans or grants.

In Croatia, there are initiatives to support private investments, but these are not focused on green and circular businesses<sup>52</sup>.

### Support Programmes

There are not many accelerators and incubators in the EU Mediterranean region focused on circular economy. Although there are several support programs (especially for “innovative” R&D), but these do not prioritise environmental aspects.

France might be an exception in this regard. In 2017, the Paris Innovation agency (Paris & Co.), launched a Circular Economy Incubator “Ville Durable” in which 19 start-ups participated. Currently it incubates 66 start-ups within the sustainable cities theme<sup>xviii xix</sup>. In France, the program “*SMEs winning every time*” has supported 2,000 SMEs by 2020 providing free resource-efficiency audits<sup>xx</sup>. ADEME also provides support to businesses to reduce energy use and GHG emissions, develop renewable energies, develop circular economy strategies, improve air quality, clean polluted sites.

In Spain, there are many accelerator/incubator initiatives, both public and private, dedicated to environment, sustainability, although not so many specific to circular economy. There are 26 technology and innovation platforms supporting the transition to a CE<sup>53</sup>, also addressing the efficient use of resources through

the public-private collaboration and R&D. Some examples Circular Think-ing<sup>xxi</sup> (public); Circular Hub (private) and The Circular Lab (private)<sup>xxii</sup>.

There are several accelerators and incubators across Italy, most are concentrated in Lombardy and the central region. Veneto is home to some of the most innovative development hubs in Europe (PoliHub, H-Farm, Luiss Enlabs, BioUpper, Impact Hub).

In Greece, there is an Operational Programme on Competitiveness, Entrepreneurship and Innovation which supports green growth and eco-innovation.

In Cyprus, Cyprus Employers and Industrialist Federation (OEB) is the leading organization to work and promote the implementation of circular economy within Cypriot companies (for example, Circular Economy in the Hotel Sector, which involves capacity building and coaching<sup>54</sup>).

<sup>54</sup> <https://www.oeb.org.cy/en/drasis/hotels4climate/>

### Green Public Procurement (GPP)

- In Italy, GPP has become an important instrument within Italy's National Action Plan on Sustainable Consumption and Production. The level of sustainable public procurement represents about 5-10 % of the total expenditure, according to the stakeholder survey.
- The first GPP National Action Plan of Malta showed that SMEs tend to have more difficulties to be GPP compliant due to the costs of achieving environmental improvement. The Second Green Public Procurement Action Plan of Malta formulated a series of ambitious targets and measures. At the same time, procurement officials and bidders find it difficult to keep up with GPP updates. As a result, GPP was being increasingly perceived as an additional burden to the already complex public procurement system.
- The Spanish GPP<sup>xxiii</sup> has criteria in line with the EU GPP. The implementation is being monitored for various goods and activities.<sup>xxiv</sup>
- With 10-20% of total expenditure<sup>55</sup>, France's level of sustainable public procurement may be considered high and the national government is now trying to implement circular criteria. In other countries, circular procurement is either still in an initial stage, like Malta, or not existent yet.
- Slovenia was one of the first countries in Europe to make GPP mandatory. However, the uptake is still low, although it has increased compared to 2013. The focus on the cheapest bids, favouring price over quality, puts green and sustainable solutions at a disadvantage in the majority of cases.
- There is no national policy on GPP yet in Greece, but according to the national expert, the draft National Plan on Green Public Procurement is in public consultation until the end of August. The new Recovery and Resilience Facility will enable Greece to secure the required financial resources to further promote PPP towards developing the necessary waste management infrastructure.
- Since 2012, Cyprus's Government has implemented a GPP Action Plan, which is mandatory for all state authorities. Overall, there is still a low level

<sup>55</sup> Costa, S., Donner, M. (2019). Consumer perceptions of the circular economy and bio-based products. colloque SFER "La bioéconomie : organisation, innovation, soutenabilité et territoire", June 2019, Reims, France. fhal-02788904f

of GPP, accounting for 1 to 5% of total expenditure (based on stakeholder consultation). Public procurement is mostly led by financial criteria. There is a low variety of green products available in the market that match the criteria set by the GPP.

- There is a national action plan for green public procurement (2015-2017) in Croatia. A new national action plan for green public procurement (until 2020) is still under construction. There is a GPP web platform to communicate GPP criteria, education materials, webinars, LCA tools and examples of good practices.

### **(Public) Private initiatives**

There are several private initiatives, sometimes with public support, that promote sustainable, green and circular practises in the region. These are some examples:

- ‘Made Green in Italy’ is a voluntary system to assess the environmental footprint of products, and ReMade in Italy, a non-profit NGO that promotes recycled products through independent third-party certification;
- Examples from Spain are: Foretica<sup>xxxv</sup>; Sustainability Excellence Club<sup>xxxvi</sup>, COTEC<sup>xxxvii</sup>, Recircular<sup>xxxviii</sup> and the recently created Economía Circular en Acción;
- In Slovenia, one of SRIP’s goals is to foster and develop long-term public-private partnerships by connecting and promoting collaborations between all sectors into new more circular value chains;
- In Greece, there are several councils (including the National Council on Circular Economy) and industrial organisations with programs aimed to help the transition to a CE;
- The Croatian Business Council for Sustainable Development and ECO-OZRA is one of leading organizations working to raise awareness about circular economy in the country;
- The Cyprus Federation of Employers & Industrialists (OEB) organises educational and awareness raising initiatives and capacity building workshops and it has developed an online platform that shares good practices on CE.

The socio-cultural context in a country influences the success of green and circular businesses and acceptance of policy measures. Obviously, the EU Mediterranean region is quite diverse in this respect. This section is not an in-depth socio-cultural analysis, it merely highlights some interesting elements, without being comprehensive.

### Public Awareness & Knowledge

In general, awareness about environmental issues and sustainability (which is the basis for circular economy) seems to be increasing in most countries. Circular economy is a relatively new concept in many countries, and it is generally associated with recycling rather than waste prevention and systemic change. There are varying degrees to which policymakers, companies and citizens truly understand the concept and adopt circular strategies. For example, 20% of Spanish are familiar with the concept of Circular Economy<sup>56</sup>, but we cannot compare with other countries due to lack of consistent data.

<sup>56</sup> <https://www.creafutur.com/estudios-blog/2018/7/3/ciudadanos-economia-circular>

In Slovenia, consumer awareness about the environment and sustainability is relatively well developed and Slovenian society appears to support circular economy initiatives. A study indicated that in 2019, 72% of Slovenian consumers were willing to buy second-hand products.

In the special Eurobarometer survey of October 2017 on attitudes of EU citizens towards the environment<sup>57</sup>, Italians appear to support circular economy initiatives and environmental protection measures. 93% of Italians said they were highly concerned about the effects of plastic products on the environment (the EU-28 average is 87%), and 93% of Italians said they were concerned about the impact of chemicals (the EU-28 average is 90%).

<sup>57</sup> [https://data.europa.eu/euodp/data/dataset/S2156\\_88\\_1\\_468\\_ENG](https://data.europa.eu/euodp/data/dataset/S2156_88_1_468_ENG)

There appears to be a very strong support for circular economy initiatives and environmental protection actions in Malta among citizens (2017 Special Eurobarometer).

Studies have reported a high rate of environmental awareness across the Croatian population, stating that around 70% of the adult population is conscious of the importance of nature protection. And yet, according to the national expert of Croatia, there is a lack of awareness and willingness to engage in circular economy principles by the general population.

<sup>58</sup> [https://www.researchgate.net/publication/233421167\\_Environmental\\_NonGovernmental\\_Organizations\\_and\\_public\\_awareness\\_concerning\\_the\\_environment\\_in\\_Greece](https://www.researchgate.net/publication/233421167_Environmental_NonGovernmental_Organizations_and_public_awareness_concerning_the_environment_in_Greece)

In both Greece<sup>58</sup> and Cyprus, there is a relatively low level of public awareness about the environment. And yet a report from the European Commission reveals that Greek society strongly supports circular economy initiatives and environmental protection measures<sup>xxix</sup>. According to the 2017 Special Eurobarometer, 92% of Cypriot people were worried about the impacts of plastic products on the environment, and they strongly support circular economy initiatives and environmental protection measures.

However, increased awareness does not always mean that consumers and companies are prepared to adapt their behaviour. Price, quality, convenience and habits remain decisive factors for consumers and procurement officers, often posing barriers for green and circular businesses.

In many countries, there are more and more events, organisations and initiatives dedicated to circular economy. Sometimes these are initiated by the national government (e.g. Malta) or private organisations (e.g. [Italian Circular Economy Stakeholders Platform](#) and [Circular Economy Network](#)). This helps to stimulate both public and private actors as well as citizens to adopt green and circular products and services.

## Education

Again, there is a large degree of diversity among countries, with only fragmented information available. Some specific highlights:

- Malta has adopted a *National Education for Sustainable Development Strategy (NESDS<sup>59</sup>)* targeting every sector of the local population (formal, non-formal and informally). The University of Malta and/or MCAST have training programs to stimulate new skills that are required to further the green economy, particularly for the development (& inspection) of green buildings.
- The previous Spanish CE Action Plan included different measures dedicated to professional training<sup>xxx</sup>. Adequate and accessible professional training and education programs exist to increase sustainability skills and competences of the local workforce.
- The Italian Climate Degree also funded an environmental education program called *#IoSonoAmbiente* for Italian schools at all levels. The Italian Industrial plan 4.0 also invests in University training aiming at increasing skilled workforce in relation to environmental or sustainable technologies.
- In Slovenia, there are training programmes for circular economy promoted mostly by NGOs and companies, often supported by EU funding.

<sup>59</sup> Available at: [https://meae.gov.mt/en/Public\\_Consultations/MEDE/Pages/Consultations/2016-MEDE-NSESD.aspx](https://meae.gov.mt/en/Public_Consultations/MEDE/Pages/Consultations/2016-MEDE-NSESD.aspx)

## Gender Equality

It was not possible to gather detailed information on gender equality issues, although in general it can be said that for most EU Mediterranean countries (e.g. France, Spain, Slovenia) labour market participation and empowerment of women is generally better than in the Middle East or Northern Africa. There is however still room for improvement, particularly in Greece and Cyprus where women are not always treated equally. Even in Italy, where more than half of all Italians with a degree are female, there are still few women in the workforce compared to other countries.



Commonalities that apply throughout the region:

## Strengths

- Growing political and government support of circular economy policies and strategies (stimulated by European Green Deal and Circular Economy Action Plan).
- Increased awareness on environmental issues and to certain extent also interest in sustainable products in recent years (although in some countries more than others).
- Public funding available for green and circular initiatives in some countries (mostly France, Spain, Italy).
- Extended Producer Responsibility for packaging, electronic waste, end-of-life vehicles, waste tires and others.
- Public entities, private organisations and projects stimulating CE thinking and strategies at various levels as well as public/private collaboration.
- Knowledge exchange between EU member states, e.g. through intergovernmental learning platforms<sup>60</sup>.

## Weaknesses

- Not all countries have a national/regional CE plan. EU ambitions regarding CE still have to trickle down to regional/city level.
- Although there is an increasing awareness in most countries, most consumer and companies are still stuck in business-as-usual with a focus on prices/costs.
- Subsidies often dependent on European funds.
- EPR schemes focus too much on waste treatment at industrial scale rather than waste prevention by SMEs.
- Environmental taxes and incentives are still low to have a big impact (even though higher than outside of EU).
- Low to moderate level of private investment in green/circular businesses.
- Risky business models of green and circular start-ups limit access to finance/credit.
- Worldwide: unpriced environmental externalities, virgin raw materials are often cheaper than secondary ones.
- Low level of investment in environmental law enforcement and monitoring

## Opportunities

All countries should adopt a national CE Strategy (general vision) and Action Plan (practical operationalisation) and stimulate CE strategies at regional or city level. Explicitly supporting green and circular businesses through the various measures below. Part of the policy framework should be action plans for specific sectors: construction, agrifood (incl. farming fishing and forestry), tourism, plastics and textiles industry.

- Include quantitative targets to reduce raw materials use and waste production through waste prevention (e.g. through reuse and repair strategies)
- Create financial incentives:
  - Reduction of VAT on sustainable services/products of green and circular businesses
  - Eco-modulation for ecodesign within EPR schemes

## Threats

- Continued post-COVID economic down-turn. Continued narrow focus on GDP and economic growth rather than broader SDGs.
- Risk perception of investors may lead to limited investments in sustainability, less corporate willingness to invest, less entrepreneurial activity.
- Decreasing purchasing power in some countries (e.g. Greece) results in consumers becoming more price conscious.
- Bureaucracy and delays in the legislative process.
- Clientelism and corruption in some countries/subregions, undermining GPP.
- Social opposition against top-down environmental policies that raise costs for consumers in the short term.

- Promote the EU taxonomy at national level (to boost sustainable finance)
- Make the GPP (and monitoring) mandatory. Implement Circular Procurement training for local authorities. Increased use of Life Cycle Costing (LCC) in procurement.
- Strengthen local supply chains and industrial symbiosis. Stimulate intersectoral cooperation to reuse by-products and residual streams.
- Create clear end-of-waste and by-product criteria. Develop technical guidelines on secondary raw materials.
- Post-Covid recovery fund may boost investments in the circular economy sectors.
- The CE Strategies and Action Plans should explicitly address the recovery of organic waste. This can happen at central level through large-scale anaerobic digestion installations and/or on local level through composting initiatives.
- Multi-stakeholder initiatives / public-private partnerships supporting green and circular businesses with the implementation of circular models at local, regional and national level. As part of these partnerships, facilitation to find synergies and opportunities between large corporates and startups as well as mentoring and sponsorship by larger companies may be provided to green and circular initiatives.
- Increased corporate transparency, traceability and accountability translate into greater transparency on the markets (reporting of non-financial corporate information).

<sup>60</sup> The Environmental Implementation Review put in place a new tool – the Peer-to-Peer programme - to stimulate environmental authorities from different Member States to learn from each other's experiences across borders. Since its launch, all Member States were involved in at least one event covering circular economy, air quality, timber regulation, nature and biodiversity, and water quality topics

- <sup>i</sup> Spain, Agriculture and Fisheries, Food and Environment Ministry MITECO (2017). Procedimiento para la declaracion de subproducto. Accessed online [https://www.miteco.gob.es/es/calidad-y-evaluacion-ambiental/temas/prevencion-y-gestion-residuos/171212procedimientodeclaracionsubproductoaprobado20171212\\_tcm30-435981.pdf](https://www.miteco.gob.es/es/calidad-y-evaluacion-ambiental/temas/prevencion-y-gestion-residuos/171212procedimientodeclaracionsubproductoaprobado20171212_tcm30-435981.pdf)
- <sup>ii</sup> Spain, Agriculture and Fisheries, Food and Environment Ministry MITECO. Grupo de Trabajo de Subproductos Y Fin de la Condicion de Residuo. Accessed online: <https://www.miteco.gob.es/es/calidad-y-evaluacion-ambiental/temas/prevencion-y-gestion-residuos/comision-coordinacion/Procedimiento-Evaluacion-Subproducto.aspx>
- <sup>iii</sup> Andalusia, Andalusian Government (2018). Andalusia Strategy for Circular Bioeconomy <http://www.bioeconomiaandalucia.es/documents/1056091/1338555/Resumen+ejecutivo.+Estrategia+Andaluza+de+Bioeconom%C3%ADa+Circular/c247a2ff-5a67-45a9-b667-1cfe7ac408ce>
- <sup>iv</sup> Catalonia, Catalanian Government (2015). Estrategia de Impulso a la economía verde y a la economía circular [http://mediambient.gencat.cat/web/.content/home/ambits\\_dactuacio/empresa\\_i\\_produccio\\_sostenible/economia\\_verda/impuls/IMPULS-EV\\_150519.pdf](http://mediambient.gencat.cat/web/.content/home/ambits_dactuacio/empresa_i_produccio_sostenible/economia_verda/impuls/IMPULS-EV_150519.pdf)
- <sup>v</sup> Catalonia, Catalanian Government. Estrategia catalana de ecodiseño para una economía circular y ecoinnovadora [http://mediambient.gencat.cat/web/.content/home/ambits\\_dactuacio/empresa\\_i\\_produccio\\_sostenible/estrategia\\_ecodisseny/contingut/Estrategia-catalana-ecodisseny-Acord-Govern.pdf](http://mediambient.gencat.cat/web/.content/home/ambits_dactuacio/empresa_i_produccio_sostenible/estrategia_ecodisseny/contingut/Estrategia-catalana-ecodisseny-Acord-Govern.pdf)
- <sup>vi</sup> Galicia, Galician Government. Galician Strategy of Circular economy [https://sirga.xunta.gal/c/document\\_library/get\\_file?folderId=190428&name=DLFE-54785.pdf](https://sirga.xunta.gal/c/document_library/get_file?folderId=190428&name=DLFE-54785.pdf)
- <sup>vii</sup> Extremadura, Junta de Extremadura. (2018) Extremadura 2030. Accessed online <https://extremadura2030.com/presentacion-estrategia/https://extremadura2030.com/>
- <sup>viii</sup> Navarre, Navarre Government (2019). Agenda for the development of Circular Economy in Navarre 2030: [https://gobiernoabierto.navarra.es/sites/default/files/3291\\_anexo\\_agenda\\_para\\_el\\_desarrollo\\_de\\_la\\_economia\\_circular.pdf](https://gobiernoabierto.navarra.es/sites/default/files/3291_anexo_agenda_para_el_desarrollo_de_la_economia_circular.pdf)
- <sup>ix</sup> Castilla-la Mancha, Comunidad Autónoma de Castilla-la Mancha (2020) Boletín Oficial del Estado 1st february 2020 <https://www.boe.es/boe/dias/2020/02/01/pdfs/BOE-A-2020-1534.pdf>
- <sup>x</sup> Grand Paris Circulaire Database online accessed on 11th August 2020 from <https://www.grandpariscirculaire.org/initiative/#page1:local>
- <sup>xi</sup> LE Hub BPI France (2019). LE POINT SUR L'ÉCONOMIE CIRCULAIRE EN FRANCE ET LES STARTUPS QUI AGISSENT. Accessed here: <https://lehub.bpifrance.fr/mapping-startups-economie-circulaire-france/>
- <sup>xii</sup> COTEC (2019) Cotec report on Circular Economy in Spain <https://cotec.es/media/informe-cotec-economia-circular-2019.pdf>
- <sup>xiii</sup> European Commission. (2018). Flash Eurobarometer 456, SMEs, resource efficiency and green markets, January 2018, Online: <https://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/ResultDoc/download/DocumentKy/81280>
- <sup>xiiii</sup> France, French Government (2016). France Stratégie pour. (2016). L'économie Circulaire, combien d'emplois. Retrived on 11th August 2020 from [https://www.strategie.gouv.fr/sites/strategie.gouv.fr/files/atoms/files/na46\\_economie\\_circulaire\\_07042016\\_finale-web.pdf](https://www.strategie.gouv.fr/sites/strategie.gouv.fr/files/atoms/files/na46_economie_circulaire_07042016_finale-web.pdf)
- <sup>xiv</sup> General Directorate of Treasury of Finance and Economy Ministry. (2019). Scaling up

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green finance in France. Accessed online here: <https://www.financeministersforclimate.org/sites/cape/files/inline-files/Session%204%20-%20Scalingup%20Green%20Finance%20in%20France.pdf>

<sup>xv</sup> Spain, CDTI (2019) Ayudas para Proyectos de I+D en Economía Circular: Proyectos I+D de Transferencia Cervera

[https://www.cdti.es/index.asp?MP=4&MS=0&MN=1&textobuscado=econom%EDa+circular&tipo=4&TR=A&IDR=49&id=5266&xtmc=economia\\_circular&xtcr=2](https://www.cdti.es/index.asp?MP=4&MS=0&MN=1&textobuscado=econom%EDa+circular&tipo=4&TR=A&IDR=49&id=5266&xtmc=economia_circular&xtcr=2)

<sup>xvi</sup> Aragón, Departamento de Economía, Planificación Y Empleo (2020).

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<sup>xxiv</sup> [https://www.miteco.gob.es/es/ministerio/planes-estrategias/plan-de-contratacion-publica-ecologica/segundoinformegeneralsobreelestadodelacontratacionpublicaverdeenlaage\\_tcm30-88970.pdf](https://www.miteco.gob.es/es/ministerio/planes-estrategias/plan-de-contratacion-publica-ecologica/segundoinformegeneralsobreelestadodelacontratacionpublicaverdeenlaage_tcm30-88970.pdf)

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<sup>xxviii</sup> Recircular <https://www.recircular.net/>

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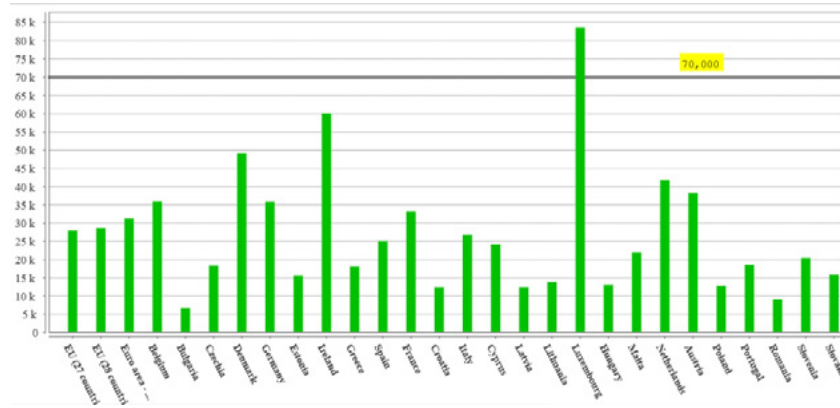
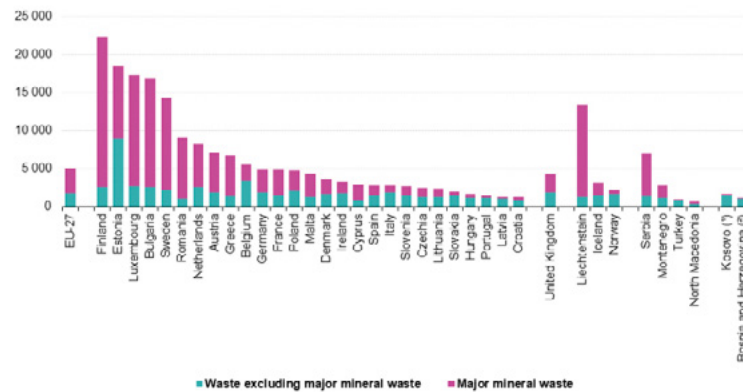


FIG. 3: Real GDP per capita

Real GDP<sup>61</sup> is calculated as the ratio of real GDP to the average population of a specific year. Source: [https://ec.europa.eu/eurostat/web/products-datasets/-/SDG\\_08\\_10](https://ec.europa.eu/eurostat/web/products-datasets/-/SDG_08_10)

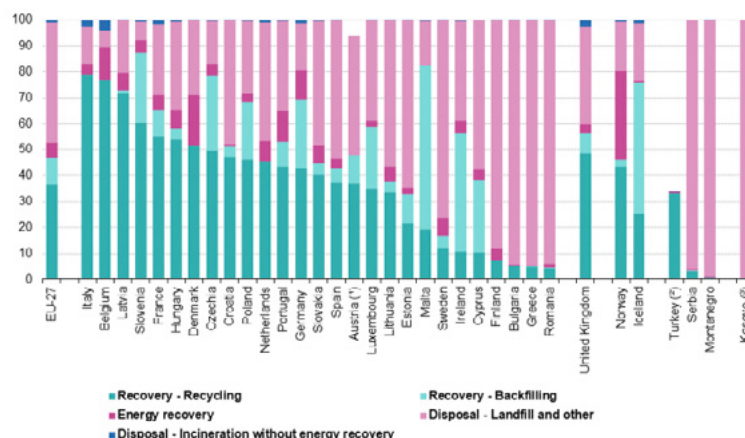
<sup>61</sup> GDP measures the value of total final output of goods and services produced by an economy within a certain period of time. It includes goods and services that have markets (or which could have markets) and products which are produced by general government and non-profit institutions. It is a measure of economic activity and is also used as a proxy for the development in a country's material living standards.



Note: sorted on total waste generated.  
 (\*) This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo Declaration of Independence.  
 (\*\*) 2012.  
 Source: Eurostat (online data code: env\_wasgen)



FIG. 4: Waste Generation in 2016 (kg/capita)



(\*) No data available for energy recovery and incineration without energy recovery.  
 (\*\*) No data available for incineration without energy recovery.  
 (\*) This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo Declaration of Independence.  
 Source: Eurostat (online data code: env\_wasttr)



FIG. 5: Waste Treatment in 2016 by type of recovery and disposal (% share in tonnes)



