



Brussels
10/09/2019

Action Identity

Action Title:	<i>“Mainstreaming the circular economy as an eligible area into the post 2020 Cohesion Policy and corresponding Funds”</i>
Title of Deliverable:	Final Report
Edition:	1.0
Delivery date:	07.02.2020
Distribution to:	Partnership Members

The UAEU (Urban Agenda for the EU) Partnership on Circular Economy has members from 6 European cities and regions, 4 EU member states, relevant Commission Directorates General (DG Environment, DG Regional & Urban Policy, DG Research & Innovation), the EIB (European Investment Bank), other EU Institutions like CEMR (Confederation of European Municipalities and Regions) and EURO CITIES, URBACT initiative, as well as independent experts like ACR+. One of the Actions that the UAEU Partnership on Circular Economy included in its Action Plan is the “mainstreaming of the circular economy as an eligible area into the post 2020 Cohesion Policy and the corresponding funds”.



Table of contents

Table of contents	1
1. Introduction	2
2. Current situation	3
2.1 Mapping of existing opportunities for funding Circular Economy investments in the EU Cohesion Policy 2014-2020	3
2.1.1. Funding opportunities under the ESIF regulatory framework	4
2.1.2. Specific funding opportunities under RIS ³	10
2.1.3. Specific funding opportunities under the Integrated Territorial Approach	11
2.1.4. Specific funding opportunities under the Financial Instruments	12
2.1.5. Further funding opportunities under the Cohesion Policy 2014-2020	12
2.2 Funding the transition to Circular Economy – needs, benefits, gaps to be covered	14
2.2.1 Could Circular Economy tackle the major problems? What’s needed?	14
2.2.2 Benefits from Circular Economy	16
2.2.3 The lack of funding and the upcoming funding needs for Circular Economy	17
3. Proposals to feed in the regulatory framework post 2020	18
3.1 Basic information	18
3.2 Proposed regulatory provisions	19
4. Potential impact of the Action	25
5. Communication activities proposed	26
6. Position Paper	27
Bibliography	30



1. Introduction

The shift towards circular economy is expected to have a strong start in the urban areas where the economic, social and territorial impact in total is greater than in other types of areas and the conditions for integrated interventions are fully met. Therefore, it is a unique opportunity if not a necessity for the European Union to mainstream the circular economy in its policies and particularly in the Cohesion Policy (which through its corresponding Funds amounts around 1/3 of the total EU Multiannual Financial Framework), in order to provide the required impetus. In this regard, provisions should be foreseen in the respective post-2020 regulatory framework to ensure that at least the Cohesion Policy related Funds and Programmes contribute substantially and consistently to the transition towards a circular economy in the urban areas of the EU.

By definition, the Cohesion Policy framework provides all the options and opportunities for the effective and efficient implementation of innovative and sustainable projects and/or investments aiming at social, economic and territorial cohesion in the EU. This framework appears to fit very well in enabling the shift towards circular economy in the EU due to the critical amount of financial resources that could be invested to relevant projects, but also due to the leveraging possibilities and the financial and legal certainty that this framework provides.

2. Current situation

2.1 Mapping of existing opportunities for funding Circular Economy investments in the EU Cohesion Policy 2014-2020

The following analysis concerns a detailed scanning and critical review of the current ESIF legislative framework 2014-2020 for the identification of possible provisions addressing circular economy funding opportunities that could be used for relative investments at urban level.

First of all, one can easily find that the regulatory framework ruling the European Structural and Investment Funds (ESIF) in the current programming period (2014-2020) lack absolutely the term “circular economy” (e.g. in the context of the thematic objectives, investment priorities, or other options). This means that although circular economy aspects are not excluded but are partly possible to be supported under the ESIF (provided that the related actions fulfil the regulatory conditions and follow the respective rules), it does not explicitly support the shift towards Circular Economy as a priority either generally, or specifically (let e.g. at urban level).

Minor Exceptions of the above context are the Urban Innovative Actions (UIA) initiative and the URBACT Programme under the European Territorial Cooperation goal which they support among other actions circular economy investments. However, the related funding provided is limited and thus insufficient to cover the needs for the successful implementation of a respective policy.

Taking into account the above obvious finding, the effort within this action is focused on identifying eligibility options allowing the implementation of various actions that fall within the concept of circular economy.

For the purpose of this review, an action is considered as being a “circular economy investment” if it contributes to the “closing of the loop” concept, rather than simply being a fragmentary action that eventually continues to support the “linear approach”. In this context, it is necessary to define the type of actions that constitute a circular economy investment/ operation for which we should then search for funding possibilities as eligible support under the current ESIF framework. To this end it was suggested to use the “mapping of application of circular economy processes in various sectors” as proposed by the Centre for European Policy Studies (CEPS)¹. According to this CEPS’s report the main circular economy processes – classified into three main categories – are the following:

¹ V. Rizos, K. Tuokko and A. Behners, “The Circular Economy - A review of definitions, processes and impacts”, CEPS Research Report No. 2017/8, April 2017 (<https://www.ceps.eu/publications/circular-economy-review-definitions-processes-and-impacts>)

	Circular process	Examples of sectors where circular processes can be applied
USE OF LESS PRIMARY RESOURCES	Recycling	Automobile industry, Textile industry, Building sector, Packaging sector, Critical Raw materials, Forest sector, Chemical industry
	Efficient use of resources	Building sector, Plastics industry, Mining and metals industry, Food sector
	Utilisation of renewable energy sources	Chemical industry, Food industry, Forest sector
MAINTAIN THE HIGHEST VALUE OF MATERIALS AND PRODUCTS	Remanufacturing, refurbishment, and reuse of products and components	Automobile industry, Manufacture of computer, electronic and optical products, Building sector, Furniture sector, Transport
	Product life extension	Manufacture of computer, electronic and optical products, Automobile industry, Household appliances, Building sector, Food industry, Textile industry, Defence industry
CHANGE UTILISATION PATTERNS	Product as service	Household appliances, Transport, Building sector, Printing industry
	Sharing models	Automobile industry, Transport, Accommodation, Clothing
	Shift in consumption patterns	Food sector, Publishing sector, E-commerce sector

2.1.1. Funding opportunities under the ESIF regulatory framework

The main regulatory package of the ESIF 2014-2020 legislative framework to be considered under this chapter concerns the Common Provisions Regulation (CPR) and the Fund specific regulations (European Regional Development Fund, European Social Fund, Cohesion Fund, European Agricultural Fund for Rural Development and European Maritime and Fisheries Fund), i.e.:

- Common Provisions Regulation (CPR) – Regulation (EU) No 1303/2013
- Fund specific regulations:
 1. Regulation (EU) No 1301/2013 (ERDF)
 2. Council Regulation (EU) No 1300/2013 (Cohesion Fund – CF)
 3. Regulation (EU) No 1304/2013 (ESF)
 4. Regulation (EU) No 1305/2013 (EAFRD)
 5. Regulation (EU) No 508/2014 (EMFF)

There are also some secondary legislative acts completing the ESIF 2014-2020 framework; however, the following analysis is limited only to the main regulatory package, which is actually most relevant and critical for this review.

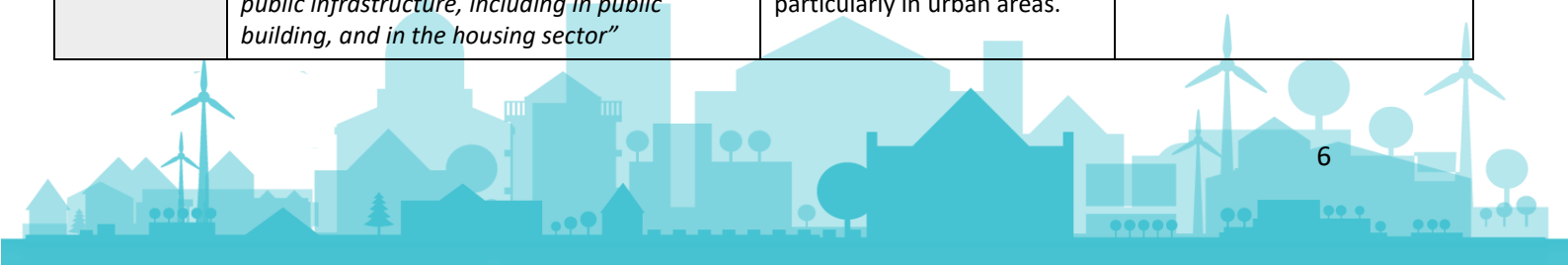
Given that there is no direct reference to circular economy (and especially linking to urban areas) in the ESIF 2014-2020 legislative framework, an attempt was made to identify possible relations (direct and indirect) between the legislative provisions (in terms of eligible support options) and the above mentioned circular economy processes. This distinction facilitates the mapping and makes clearer the needed changes in the regulatory framework.



Table 2.1: Mapping the possible ESIF funding opportunities for Circular Economy investments

Regulation	Regulatory provision related to Circular Economy funding	Direct relation	Indirect relation
REGULATION (EU) No 1303/2013 (Common Provisions Regulation)	<p>The Common Provisions Regulation (CPR) sets out the common principles, rules and conditions for the operation of the ESIF.</p> <p>This regulation sets out the Thematic Objectives of the ESI-Funds, which are then broken down into Investment Priorities for the individual ESIF programmes. As mentioned above there is no reference on the term Circular Economy in this regulation. However the regulation does include some associated elements:</p>		
	<p>Article 9: Thematic objectives</p> <p><i>In order to contribute to the Union strategy for smart, sustainable and inclusive growth as well as the Fund-specific missions pursuant to their Treaty-based objectives, including economic, social and territorial cohesion, each ESI Fund shall support the following thematic objectives:</i></p> <p>Art. 9.4: <i>“supporting the shift towards a low-carbon economy in all sectors”</i></p>	<p>There is a strong link to the “use of less primary resources” category of CE processes, namely:</p> <ul style="list-style-type: none"> ○ Recycling ○ Efficient use of resources ○ Utilisation of renewable energy sources 	
	<p>Art.9.6: <i>“preserving and protecting the environment and promoting resource efficiency”</i></p>		<p>The preservation and protection of the environment do not involve circular economy actions in every case. However, they may under certain conditions include the circular economy approach.</p>
REGULATION (EU) No 1301/2013 (ERDF)	<p>This Regulation establishes the tasks of the European Regional Development Fund (ERDF), the scope of its support with regard to the Investment for growth and jobs goal and the European territorial cooperation goal and specific provisions concerning ERDF support for the Investment for growth and jobs goal.</p>		
	<p>Article 3: Scope of support from the ERDF</p> <p>Art.3.1: <i>The ERDF shall support the following activities in order to contribute to the investment priorities set out in Article 5:</i></p> <p><i>(c) “Investment in infrastructure providing basic services to citizens in the areas of energy, environment, transport and ICT”</i></p>		<p>Funding may include circular economy investments, like remanufacturing, refurbishment, re-use of products and components, etc</p>
	<p>Art.3.2: <i>“Under the European territorial cooperation goal, the ERDF may also support the sharing of facilities and human resource, and all types of infrastructure across borders in all regions</i></p>		<p>May also concern circular economy investments, as the sharing concept is a basic component of the Circular Economy approach.</p>

Regulation	Regulatory provision related to Circular Economy funding	Direct relation	Indirect relation
	<p>Article 5: Investment priorities <i>The ERDF shall support the following investment priorities within the thematic objectives set out in the first paragraph of Article 9 of Regulation (EU) No 1303/2013, in accordance with the development needs and growth potential referred to in point (a)(i) of Article 15.1 of that Regulation and set out in the Partnership Agreement:</i></p> <p>Art.5.1: Strengthening research, technological development and innovation by:</p> <p><i>(b) “Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialization, and supporting technological and applied research, pilot lines, early production validation actions”</i></p>		<p>Innovative proposals/ ideas that are linked to circular economy may be financed, such as extension of product life, eco-design, eco-innovation, etc.</p>
	<p>Art.5.3: Enhancing the competitiveness of SMEs by:</p> <p><i>(b) “Developing and implementing new business models for SMEs”, in particular with regard to internationalisation</i></p>		<p>New business models could include and promote the change of utilization patterns and to maintain the highest value of materials.</p>
	<p>Art.5.4: Supporting the shift towards a low-carbon economy in all sectors by:</p> <p><i>(a) “Promoting the production and distribution of energy derived from renewable sources”</i></p>	<p>There is a direct link to the “use of less primary resources” category of CE processes, specifically to the “Utilisation of renewable energy sources”.</p>	
	<p><i>(b) “Promoting energy efficiency and renewable energy use in enterprises”</i></p>	<p>There is a direct link to the “use of less primary resources” category of CE processes, specifically:</p> <ul style="list-style-type: none"> ○ Efficient use of resources ○ Utilisation of renewable energy sources 	
	<p><i>(c) “Supporting energy efficiency, smart energy management and renewable energy use in public infrastructure, including in public building, and in the housing sector”</i></p>	<p>There is a strong link to Circular Economy and particularly in urban areas.</p>	



Regulation	Regulatory provision related to Circular Economy funding	Direct relation	Indirect relation
	<i>(e) "Promoting low-carbon strategies for all types of territories, in particular for urban areas, including the promotion of sustainable multimodal urban mobility and mitigation-relevant adaptation measures"</i>	The promotion of low-carbon strategies, at urban level, is directly related to the Use of less primary resources, process of Circular Economy.	It could be linked to the "use of less primary resources" category of CE processes, specifically: <ul style="list-style-type: none"> ○ Efficient use of resources ○ Utilisation of renewable energy sources
	<i>(f) "Promoting research and innovation in, and adoption of, low carbon technologies"</i>	Promoting low-carbon technologies is directly connected with Circular Economy's process "use less primary resources".	It could be linked to the "use of less primary resources" category of CE processes, specifically: <ul style="list-style-type: none"> ○ Efficient use of resources ○ Utilisation of renewable energy sources
	<i>(g) "Promoting the use of high-efficiency co-generation of heat and power based on useful heat demand"</i>		Indirect link to the "use of less primary resources" category of CE processes, specifically to the "Efficient use of resources"
	Art.5.6: Preserving and protecting the environment and promoting resource efficiency by: Art.5.6(a): "Investing in the waste sector to meet the requirements of the Union's environmental acquis and to address needs, identified by the Member States, for investment that goes beyond those requirements"	Direct link to the most aspects of Circular Economy, such as: Recycling, Efficient use of resources, Remanufacturing, refurbishment and re-use of products and components, Product life extension, Shift in consumption patterns	
	Art.5.6(b): "investing in the water sector to meet the requirements of the Union's environmental acquis and to address needs, identified by the Member States, for investment that goes beyond those requirements"	Direct link to Circular Economy aspects, like: Efficient use of resources, Shift in consumption patterns	
	Art.5.6(f): "Promoting innovative technologies to improve environmental protection and resource efficiency in the waste sector, water sector and with regard to soil, or to reduce air pollution"		It could be about investing in innovative technologies projects to promote the mentioned sectors under the Circular Economy concept.
	Art.5.6(g): "Supporting industrial transition towards a resource-efficient economy, promoting green growth, eco-innovation and environmental performance management in the public and private sectors"	There is a strong link to circular economy, covering several aspects, like eco-Efficient use of resources, Remanufacturing, Product life extension, including eco-design, industrial symbiosis, etc.	

Regulation	Regulatory provision related to Circular Economy funding	Direct relation	Indirect relation
REGULATION (EU) No 1300/2013 (CF)	This Regulation establishes the tasks of the Cohesion Fund and the scope of its support with regard to the Investment for growth and jobs goal referred to in Article 89 of Regulation (EU) No 1303/2013.		
	<p>Article 2: Scope of support from the Cohesion Fund</p> <p>Art.2.1: <i>The Cohesion Fund shall, while ensuring an appropriate balance and according to the investment and infrastructure needs specific to each Member State, support:</i></p> <p>Art.2.1(a): <i>“Investment in the environment including areas related to sustainable development and energy which present environmental benefits”</i></p>		Circular Economy is a tool for the achievement of Sustainable Development and environmental benefits at urban level.
	<p>Article 4: Investment priorities</p> <p><i>The Cohesion Fund shall support the following investment priorities within the thematic objectives set out in the first paragraph of Article 9 of Regulation (EU) No 1303/2013, in accordance with the development needs and growth potential referred to in point (a)(i) of Article 15(1) of that Regulation and set out in the Partnership Agreement:</i></p> <p>Art.4.a: <i>supporting the shift towards a low-carbon economy in all sectors by:</i></p> <p>Art.4.a.(i): <i>“Promoting the production and distribution of energy derived from renewable sources”</i></p>	There is a direct link to the “use of less primary resources” category of CE processes, specifically to the “Utilisation of renewable energy sources”.	
	<p>Art.4.a.(ii): <i>“Promoting energy efficiency and renewable energy use in enterprises”</i></p>	There is a direct link to the “use of less primary resources” category of CE processes, specifically: <ul style="list-style-type: none"> ○ Efficient use of resources ○ Utilisation of renewable energy sources 	
	<p>Art.4.a.(iv): <i>“Developing and implementing smart distribution systems that operate at low and medium voltage levels”</i></p>		There is a link to the “Efficient use of resources”
	<p>Art.4.a.(v): <i>“Promoting low-carbon strategies for all types of territories, in particular for urban areas, including the promotion of sustainable multimodal urban mobility and mitigation-relevant adaptation measures”</i></p>	The promotion of low-carbon strategies, at urban level, is directly related to the Use of less primary resources, process of Circular Economy.	It could be linked to the “use of less primary resources” category of CE processes, specifically: <ul style="list-style-type: none"> ○ Efficient use of resources ○ Utilisation of renewable energy sources

Regulation	Regulatory provision related to Circular Economy funding	Direct relation	Indirect relation
	<p>Art.4.b: promoting climate change adaptation, risk prevention and management by:</p> <p>Art.4.b(i): “supporting investment for adaptation to climate change, including ecosystem-based approaches”</p>		<p>There is an indirect link, as Circular Economy contributes to the adaptation to climate change by saving natural resources (used in energy production, manufacturing, etc) and by using them more efficiently, thus helping to ecosystem preservation.</p>
	<p>Art.4.c: Preserving and protecting the environment and promoting resource efficiency by:</p> <p>Art.4.c(i): “Investing in the waste sector to meet the requirements of the Union’s environmental acquis and to address needs, identified by the Member States, for investment that goes beyond those requirements”</p>	<p>Direct link to the most aspects of Circular Economy, such as: Recycling, Efficient use of resources, Remanufacturing, refurbishment and re-use of products and components, Product life extension, Shift in consumption patterns</p>	
	<p>Art.4.c(iv): “Taking action to improve the urban environment, to revitalize cities, regenerate and decontaminate brownfield sites (including conversion areas), reduce air pollution and promote noise-reduction measures”</p>		<p>There is an indirect link, as remanufacturing, refurbishment and re-use of products are Circular Economy processes.</p>
<p>REGULATION (EU) No 1304/2013 (ESF)</p>	<p>This Regulation establishes the missions of the European Social Fund (ESF), including the Youth Employment Initiative (YEI), the scope of its support, specific provisions and the types of expenditure eligible for assistance.</p>		
	<p>Article 3: Scope of support</p> <p>Art.3.2: Through the investment priorities listed in paragraph 1, the ESF shall also contribute to the other thematic objectives listed in the first paragraph of Article 9 of Regulation (EU) No 1303/2013, primarily by:</p> <p>Art.3.2.(a): “Supporting the shift towards a low-carbon economy, climate-resilient, resource efficient and environmentally sustainable economy through the improvement of education and training systems necessary for the adaptation of skills and qualifications, the up-skilling of the labour force, and the creation of new jobs in sectors related to the environment and energy”</p>		<p>There is a not very obvious link in the context of education and training. A shift towards circular economy requires the provision of new skills and an appropriate change of the mindset, the consumption patterns, etc.</p>
<p>REGULATION (EU) No 1305/2013 (EAFRD)</p>	<p>This Regulation sets out the objectives to which rural development policy is to contribute and the relevant Union priorities for rural development. It outlines the strategic context for rural development policy and defines the measures to be adopted in order to implement rural development policy. In addition, it lays down rules on programming, networking, management, monitoring and evaluation on the basis of responsibilities shared between the Member States and the Commission and rules to ensure coordination of the EAFRD with other Union instruments.</p>		

Regulation	Regulatory provision related to Circular Economy funding	Direct relation	Indirect relation
	<p>Article 7: Thematic sub-programmes</p> <p>Art.7.1: “With the aim of contributing to the achievement of the Union priorities for rural development, Member states may include within their rural development programmes thematic sub-programmes that address specific needs. Such thematic sub-programmes may, inter alia, relate to:</p> <p>Art.7.1(f): climate change mitigation and adaptation and biodiversity”</p>		<p>EAFRD is not the appropriate fund to promote urban circular economy objectives.</p> <p>However, possible circular economy actions under EAFRD at rural areas might have an indirect impact at urban level (e.g. industrial symbiosis, food waste mitigation under sharing economy, etc.)</p>
REGULATION (EU) No 508/2014 (EMFF)	This Regulation defines Union financial measures for the implementation of:		
	<p>(a) the Common Fisheries Policy (CFP);</p> <p>(b) relevant measures relating to the Law of the Sea;</p> <p>(c) the sustainable development of fisheries and aquaculture areas and inland fishing; and</p> <p>(d) the Integrated Maritime Policy (IMP).</p>		
	<p>Article 5: Objectives</p> <p>The EMFF shall contribute to the achievement of the following objectives:</p> <p>Art.5(a): “Promoting competitive, environmentally sustainable, economically viable and socially responsible fisheries and aquaculture”.</p>		Indirect relation in very broad terms, similar to the EAFRD case above.
<p>Article 6: Union priorities</p> <p>Art.6.1: Promoting environmentally sustainable, resource-efficient, innovative, competitive and knowledge-based fisheries by pursuing the following specific objectives:</p> <p>Art.6.1(a): “the reduction of the impact of fisheries on the marine environment, including the avoidance and reduction, as far as possible, of unwanted catches ”</p>		There might be a link to efficient use of bio-resources, as well as to recycling, refurbishment and re-use of products and components (e.g. recovery of fishing nets left in the sea bottom), etc	

For reasons of completeness, the analysis has been extended (below) to the identification of funding opportunities under the new introduced means provided by the regulatory framework for the ESI Funds, i.e. the “Research & Innovation Strategies for Smart Specialisation” (RIS³), the instruments under the Integrated Territorial Approach and the Financial Instruments.

2.1.2. Specific funding opportunities under RIS³

RIS³ is an integrated agenda for economic transformation, which:

- Focuses on policy support and investments on key national/regional priorities, challenges and needs for knowledge-based development;



- builds on each country/region's strengths, competitive advantages and potential for excellence;
- supports technological as well as practice-based innovation and aims to stimulate private sector investment;
- ensures the full involvement of stakeholders and encourages innovation and experimentation;
- is evidence-based and includes a sound monitoring and evaluation system.

A key procedure in setting priorities for a research and innovation strategy for smart specialisation and hence an essential element in its successful design is the entrepreneurial discovery process which is carried out through a bottom-up approach.

The ESIF 2014-2020 regulatory framework introducing RIS³ provides no explicit link to the circular economy, although it does not exclude it. In this context, circular economy and its aspects could be included in a RIS³ as priorities or as a horizontal principle. In particular:

In the category *"use less primary resources"*:

- recycling could be both a priority and a horizontal issue
- efficient use of resources is a horizontal issue, as it covers every economic sector
- utilization of renewable energy sources could be both a priority and a horizontal issue

In the category *"maintain the highest value of materials and products"*:

- remanufacturing, refurbishment and re-use of products and components could be considered as priority and horizontal issue as well
- product life extension is a horizontal issue

In the category *"change utilization patterns"*:

- product as service could be both a priority and an horizontal issue
- sharing models is a priority

2.1.3. Specific funding opportunities under the Integrated Territorial Approach

Another one new introduced key element in the EU cohesion policy for the period 2014-2020 is the Integrated Territorial Approach. This approach aims at integrated territorial and urban development through the following tools:

- Community Led Local Development
- Integrated Territorial Investments
- Integrated Sustainable Urban Development

Through these tools, cohesion policy 2014-2020 aims at contributing to the accomplishment of its various thematic objectives, as well as of other EU policies (e.g. education, employment, energy, environment, research and innovation, etc.). Moreover it provides the



necessary resources and suitable investment framework for implementing the objectives of the Europe 2020 Strategy of the EU.

In the current ESIF regulations there is no explicit reference on priorities regarding the mainstreaming of Circular Economy as a concept in the ITA tools, but it does not exclude the support of actions related to circular economy aspects. Rather, these tools provide the most appropriate and relevant framework for developing and implementing circular economy strategies and interventions at regional/ urban level.

All the defined circular economy processes could constitute some of the objectives in an Integrated Territorial Approach strategy. Especially the urban environment is the main area in which it has been identified the biggest frequency for the implementation of Circular Economy processes. In this regard, Integrated Sustainable Urban Development is the most effective tool covering a wide range of interventions.

2.1.4. Specific funding opportunities under the Financial Instruments

Financial instruments represent a resource-efficient way of deploying cohesion policy resources in pursuit of the Europe 2020 Strategy objectives. Targeting projects with potential economic viability (bankable investment plans), financial instruments provide support for investments by way of loans, guarantees, equity and other risk-bearing mechanisms, possibly combined with technical support, interest rate subsidies or guarantee fee subsidies within the same operation. Financial Instruments help to mobilise additional public or private co-investments in order to address market failures in line with Europe 2020 and cohesion policy priorities.

Legal basis for the Financial Instruments (FIs) under ESIF is the Common Provisions Regulation (EU No 1303/2013, Articles 37 to 46) analysed above. Furthermore, implementation details are laid down in related secondary legislation (Delegated Acts and Implementing Acts). FIs can serve enterprises investing in innovation, households wishing to improve the energy efficiency performance of their dwelling, individuals pursuing their business ideas, as well as public infrastructure or productive investment projects that meet the strategic objectives of cohesion policy and deliver the expected outputs of its programmes.

In this context, FIs are very relevant for investments in circular economy projects (as defined above) under the conditions set out by the ESIF 2014-2020 legislative framework (see mapping of funding opportunities above).

2.1.5. Further funding opportunities under the Cohesion Policy 2014-2020

In addition to the above analysis, two further regulations were also reviewed, namely:

Commission Delegated Regulation (EU) No 522/2014 on Urban Innovative Actions (UIA)

Scope: This delegated regulation provides detailed rules concerning the principles for the selection and management of Urban Innovative Actions. UIA is an Initiative of the European Union that provides urban areas throughout Europe with resources to test new and unproven solutions to address urban challenges. Based on article 8 of ERDF Regulation 1301/2013/EU, the Initiative has a

total ERDF budget of EUR 372 million for 2014-2020².

Recital 5: The Commission should define the themes for selection of innovative actions to ensure that the calls for proposals address urban issues which will potentially grow in importance for the Union in future years (comments on Article 2.1 below)

Article 2.1: The selection of innovative actions takes place based on: themes defined by the Commission services on an annual basis.

This initiative functions by opening calls for proposals on subjects as selected by the Commission. The themes chosen by the Commission follow the themes from the Urban Agenda for the EU. Circular economy was part of the 2nd Call for Proposals³ during 2016-2017. Moreover, as it is announced it will be also part of the 5th Call (and last one for the current programming period) which it is expected to be open from September to December 2019⁴.

Regulation (EU) No 1299/2013 on specific provisions for the support from the ERDF to the European Territorial Cooperation goal

Regulation (EU) 1299/2013, Article 2.3(b), provides that *“Under the European territorial cooperation goal, the ERDF shall support ... interregional cooperation to reinforce the effectiveness of cohesion policy by promoting ... exchange of experience concerning the identification, transfer and dissemination of good practices in relation to sustainable urban development, including urban-rural linkages”* which practically refers to **“URBACT III” Programme**.

The potential thematic scope of URBACT III is provided by the 11 thematic objectives described in Article 9 of the Common Provisions Regulation (EU) No 1303/2013 (reviewed above).

Circular Economy is one of the Urban Topics of this Programme, under which two transfer networks were created: BluAct and Tropa Verde⁵.

Beyond the EU Cohesion Policy, it is also worth mentioning the Horizon 2020 Programme managed by the European Commission under Regulation (EU) No 1291/2013 on establishing Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020), which also facilitates among others Circular Economy actions and which could create synergies with the ESIF. More specifically, the Horizon 2020 Work Programme for the period 2016-2017 allocated €670 million for circular economy at programming level under the initiative “Industry 2020 in the Circular Economy”, whereas from the Work Programme 2018-2020 will be invested nearly €1 billion into research, innovation and financing of projects and initiatives that will support circular economy ambitions.

² For more information see: <https://www.uia-initiative.eu/en>

³ For more information please see http://www.uia-initiative.eu/sites/default/files/2016-12/ToR_2ndCall_UJA_16_12_2016_EN_0.pdf

⁴ For more information see: <https://www.uia-initiative.eu/en/call-proposals/guidance>

⁵ For more information see: <https://urbact.eu/circular-economies>

2.2 Funding the transition to Circular Economy – needs, benefits, gaps to be covered

The recognition of today's threateningly emerging major problems, such as climate change and the scarcity of resources creates the urgent need to find practical and sustainable solutions for a rapid response. In this struggle, the transition to the circular economy (aiming at tackling the problem) must be accelerated. So, in addition to any legislative/ institutional changes needed and knowledge/ experience required, there is also urgency for significant investments that should be supported by both private and public resources.

From the other hand, this need creates also major business opportunities that could be sought particularly in urban areas of the European Union, taking in to account that it is one of the most urbanized areas in the world. It is estimated that today, more than 70% of Europe's citizens live in urban areas, while a projection calculated by the UN put this figure at 80% in 2050. In this regard it is anticipated that circular economy will have a major positive impact on the future sustainable urban development (in economic, environmental and social terms) of the European Union and the quality of life of its citizens.

2.2.1 Could Circular Economy tackle the major problems? What's needed?

In a resource constrained environment, Circular economy should become a priority not only for Europe but also for the whole world. While relevant European investments are still limited due to the multiple crises facing various policies, Circular Economy, coupled with the digital transformation, offers a unique opportunity to boost growth, employment, while it could mitigate or even eliminate several major problems such as CO₂ emissions, wastewater, bio-waste, scarcity of raw materials, etc.

In this sense Circular Economy could tackle the emerging major problems that have exacerbated the environmental and life conditions, and which constitute mainly the following:

- Climate change
- Water scarcity
- Limited natural resources
- Decline in biodiversity
- Distorted urbanization that degrades the urban environment
- Rapid demographic growth (by 2050 the population is expected to reach 9,7 billion, with a corresponding increase in demand for natural resources)

Natural resources, from raw materials to food, water, air and ecosystems are fundamental to the functioning of our economy and our quality of life, but global strains on them are constantly increasing. Moreover, the depletion of resources, the water quality degradation, the air pollution, the old infrastructure, the urban poverty and unemployment, all have been plaguing the urban life. Building a more resource-efficient Europe, while maintaining the highest value of materials and products and changing the utilization patterns is therefore a crucial point to the EU's economic and ecological security and well-being. In this context

Circular Economy processes could be used as innovative and effective tools for the mitigation/ elimination of the above-mentioned problems.

In the near future, it is expected that the needs for funding as well as the business opportunities that will emerge for circular economy investments in urban areas will concern among others the following sectors:

- **Waste management**

Today, only around 40% of the waste produced by EU households is recycled. This average masks the wide variation between Member States and regions, with rates as high as 80% in some cases. To raise the levels of high-quality recycling, an increase of the funding resources with regard to circular waste management is needed.

- **Low renewable energy consumption**

Renewable energy in the EU has grown strongly in recent years. More concretely, the share of energy from renewable sources in gross final energy consumption has almost doubled in the last years, from around 8.5 % in 2004 up to 17.0 % in 2016.⁶ However, the gap is still big and efforts (including increased financing/ investments) should be taken in order to reach the goal towards decarbonisation of energy.

- **Limited use of secondary raw materials and water reuse**

In a circular economy, materials that can be recycled are injected back into the economy as new raw materials thus increasing the security of supply. Nowadays, secondary raw materials account for a small proportion of the materials used in the EU. A common issue is the water scarcity across EU, which affects both environment and economy; however, the water reuse is not a common issue in the EU.

- **Plastic recycling**

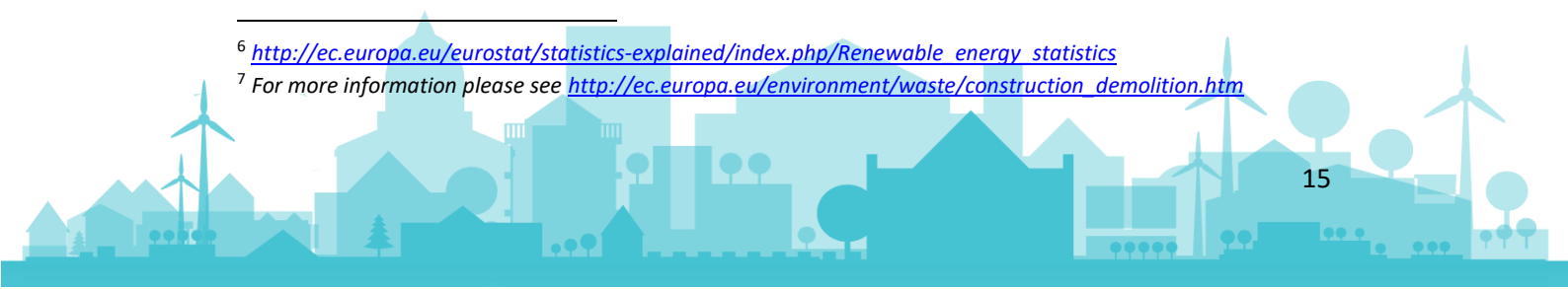
Increasing plastic recycling is essential for the transition to a circular economy at urban level. The use of plastics in the EU has grown steadily, but less than 25% of collected plastic waste is recycled and about 50% goes to landfill. Large quantities of plastics also end up in the oceans. However, there is a big trend to abandon single use plastics and some European cities have already announced respective policy measures or taken related decisions in this direction, which consequently creates the need to find and finance alternative solutions, which in turn creates new business opportunities.

- **Construction**

Among the biggest sources of waste in the EU is the construction and demolition sector, which consists of 25%-30% of wastes.⁷ Although many of the materials are recyclable or can be reused, reuse and recycling rates vary widely across the EU. The construction sector plays a significant role in the environmental performance of buildings and infrastructure throughout their life. However, more effort is needed in this field.

⁶ http://ec.europa.eu/eurostat/statistics-explained/index.php/Renewable_energy_statistics

⁷ For more information please see http://ec.europa.eu/environment/waste/construction_demolition.htm



2.2.2 Benefits from Circular Economy

Circular Economy is expected to constitute one of the main policy tools of the European Union in achieving its 2030's climate and energy goals towards at least 40% cuts in greenhouse gas emissions (from 1990 levels), at least 32% share for renewable energy, at least 32,5% improvement in energy efficiency⁸. Moreover, Circular Economy is expected to contribute significantly to the UN's Sustainable Development Goals (SDGs), where the European Union is fully committed to being a pioneer in achieving them⁹.

Some of the expected benefits and added value pursued by the transition towards a circular economy that could also meet the above mentioned policy goals contributing thus to a sustainable development are indicatively:

- Relief from the environmental pressures within Europe and beyond, in terms of climate and biodiversity, air, soil, water pollution, etc. As an example energy could be saved which in turn could help avoid the irreversible damages caused by using up natural resources at a rate that exceeds the Earth's capacity to renew them.
- Minimisation of the high and increasing dependence on imports of raw material, several goods and products as well as energy. Specifically, EU imports 54% of its consumed energy¹⁰. Increasingly, this dependence could be a source of vulnerability. Growing global competition for natural resources has contributed to marked increases in price levels and volatility.
- Boosting the EU's competitiveness by protecting businesses against scarcity of resources and volatile prices, helping to create new business opportunities and innovative, more efficient ways of producing and consuming¹¹, resulting in considerable cost savings
- Regenerating the industrial sector by boosting the investments in new innovative processes and products, thus resulting in increasing the competitiveness of Europe's industry while delivering net benefits in terms of business profits
- Maintaining/ creating new jobs. More specifically, local jobs could be created at all skill levels and opportunities contributing thus to social inclusion and cohesion. It is estimated that more than 580,000 jobs could be created until 2035¹²
- Creating an additional 7% of EU's GDP growth (over 1 trillion Euros) by 2030, by investing around €320 billion in ten circular economy themes (in the sectors of mobility, food and built environment) – based on Ellen Macarthur Foundation Report¹³

⁸ For more information please see https://ec.europa.eu/clima/policies/strategies/2030_en

⁹ For more information please see the European Commission's Communication "Next steps for a Sustainable European Future" https://ec.europa.eu/europeaid/sites/devco/files/communication-next-steps-sustainable-europe-20161122_en.pdf

¹⁰ For more information please see <https://ec.europa.eu/energy/en/topics/imports-and-secure-supplies>

¹¹ For more info please see EPRS, "Closing the loop-new circular economy package" ([http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/573899/EPRS_BRI\(2016\)573899_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/573899/EPRS_BRI(2016)573899_EN.pdf))

¹² For more info please see (https://ec.europa.eu/commission/sites/beta-political/files/circular-economy-factsheet-general_en.pdf)

¹³ For more information please see "Achieving Growth Within", Ellen Macarthur Foundation, 2017 (<https://www.ellenmacarthurfoundation.org/assets/downloads/publications/Achieving-Growth-Within-20-01-17.pdf>)

Action on circular economy ties closely with the EU key priorities, including jobs and growth goal, the wider investment agenda for cohesion, the climate and energy goals, the social agenda, the industrial innovation, as well as with the global efforts on sustainable development.

2.2.3 The lack of funding and the upcoming funding needs for Circular Economy

Today, one of the main barriers to exploiting the opportunities and benefits of circular economy to their real extent is the lack of specific investments. The circular economy has not yet become a mainstream investment area for the private sector, leaving the related transition in lacking of funding and therefore putting the exploitation of its full benefits at risk. However, the Circular Economy funding need is fundamental and crucial for the economic transformation. Anticipating an amount of approximately 320 billion Euros¹³ to be channeled into Circular Economy investments until 2025 (as mentioned above), the related funding support is expected to be increased accordingly.

Currently, the allocation of Cohesion Policy resources for the 2014-2020 programming period amounts about 355,1 billion Euros¹⁴ and an increase in this should be expected for the coming period 2021-2027.

Apparently, the funding that is needed to facilitate the transformation towards a Circular Economy could not be met adequately through the existing Cohesion Policy's framework. Specifically, Cohesion Policy programmed within the 2014-2020 period significant funding for waste management, but also support for the circular economy in innovation, SME competitiveness, resource efficiency and low-carbon investments amounting approximately 150 billion Euros in total¹⁵. This amount constitutes approximately the 0,0095% of the EU28 GDP (2018). Therefore, according to the constantly increasing investment needs this percentage is expected to be increased significantly in the next programming period 2021-2027.

¹⁴ For more information please see https://ec.europa.eu/regional_policy/en/policy/what/investment-policy/

¹⁵ For more information please see http://ec.europa.eu/regional_policy/en/policy/themes/environment/circular_economy/ and https://ec.europa.eu/regional_policy/en/information/publications/factsheets/2016/cohesion-policy-support-for-the-circular-economy

3. Proposals to feed in the regulatory framework post 2020

In an attempt to informally contribute in time to the preparation of the post 2020 Cohesion Policy proposals which were expected to be published by the European Commission by the end of May 2018, the Partnership delivered at the beginning of April 2018 a working document with recommendations/ proposals on regulatory provisions with a broad spectrum of possible eligibility/ intervention fields for the 2021-2027 Cohesion Policy related Funds, all relevant to the circular economy with focus in urban areas. These proposals have taken account of the European Commission's views that were informally communicated so far. Finally, the outcome of this exercise was submitted to the European Commission ahead of the time of the publication of the European Commission's legislative proposals.

However, it should be noted, that a general position paper had already been drafted and submitted by the Partnership to the European Commission as the Partnership's contribution to the respective public consultation on the post 2020 cohesion policy in February 2018 (an updated version is attached in Chapter 6 of this report). Moreover, the position paper, together with the above mentioned working document were also distributed to the European Parliament, the European Committee of the Regions and other organizations (Council of European Municipalities and Regions, EUROCITIES and ACR+) in order to inform on the proposals of the Partnership and to feed in the thinking of policy makers.

3.1 Basic information

According to the information communicated informally by the European Commission (DG REGIO) in several occasions until April 2019, the post 2020 Cohesion Policy was supposed to include the following five policy objectives:

PO 1: Smart Growth and Innovation

PO 2: Social Inclusion (including everything related to human capital, education, training, etc)

PO 3: Green Economy (including issues related to sustainability, **circular economy**, climate action, energy transition, etc)

PO 4: Connectivity (including transport and energy networks, as well as ICT)

PO 5: Europe closer to the citizens (it is considered to be rather a toolkit for integrated territorial approach, including among others the **urban** dimension, in particular the support of innovative sustainable urban development actions to promote circular economy with its various aspects)

These Policy Objectives seem to replace 10 of the 11 Thematic Objectives of the current period 2014-2020 (the 11th being the “enhancing institutional capacity of public authorities and stakeholders and efficient public administration”).



3.2 Proposed regulatory provisions

Based on the above, to ensure an essential mainstreaming of circular economy (CE) as such and especially at urban level in the coming programming period 2021-2027, the UAEU Partnership on Circular Economy requests that more detailed and distinct references to the circular economy are made, not only in the scope of support, but also when it comes to the specific eligibility fields (e.g. in terms of intervention fields/ investment priorities falling under the respective policy objectives). Moreover, these should be pursued consistently throughout all other elements of the regulatory framework and post 2020 Cohesion Policy implementation mechanisms.

In this context, the Partnership presents in this chapter its proposals that could feed in the Commission's regulatory proposals, by Policy Objective. The individual intervention types proposed may be either standalone, or clustered with other similar priorities.

In the recommendations below, it is taken into account that the financial means to support the implementation of the proposed measures will come from the Funds supporting the EU Cohesion Policy. However, it is also proposed to establish financial instruments/ mechanisms that, by leveraging funding from the Funds, the European Investment Bank, other Financial Institutions, as well as private investors, can significantly increase the size of the investments involved.

Moreover, the Partnership suggests to make provision for common outcome indicators and common results indicators with regard to these priorities in order to reflect not only the progress in supporting the shift towards circular economy, but mainly the contribution of the support to the achievement of the relevant policy goals.

In addition, provisions could be made for incentives according to which urban authorities choosing to implement circular economy actions could receive some kind of reward, e.g. extended eligibilities beyond the standard rules.

In the following list of intervention types, the Partnership highlights the importance of PO 3 "Green Economy" and PO 5 "Europe closer to the citizens" as the main Policy Objectives to boost the shift towards circular economy. However, under an integrated approach, PO 1 and PO 2 should additionally contribute to this goal.

PO 1: Smart Growth & Innovation

Policy Objective 1 could contribute to the transition towards circular economy by promoting relevant business investments in research and innovation and by supporting relevant competitiveness of enterprises and particularly by:

- 1) Developing and implementing new business models for SMEs, in particular with regard to circular economy
- 2) Supporting capacity building and extension of advanced competencies of SMEs for the development of circular products and services
- 3) Supporting the development of ICT products and services (e-commerce, web platforms, etc) for circular economy activities



- 4) Supporting the design of new products or re-design of existing ones on the basis of Life Cycle Assessment
- 5) Supporting the adoption of circular economy labelling (management systems/ schemes) from enterprises, local authorities, organisations, etc.
- 6) Promoting eco-design
 - Life cycle analysis of products, taking into account the energy involved in the production of raw materials and finished products, as well as the cost of their decomposition and disposal
 - Production of products avoiding the introduction of hazardous substances and facilitating reparability and extension of life span. Improvement of waste quality in the production process, reduction of environmental impact.
 - Developing measures to promote product repair, durability and recyclability and ensure availability of spare parts in the context of an eco-design
 - Integrating renewable energy technologies into public works such as hydroelectric, photovoltaic, active and passive systems in buildings, in order to reduce the energy footprint of the projects at the end of their technical life span.
 - Developing specifications, standards and certification of recycled building materials (e.g. tiles, paving slabs) and beneficiaries, as well as strengthening of Green Public Procurement.
- 7) Promoting research and innovation activities to improve waste management, such as new technologies for sorting and recycling plants
- 8) Promoting innovative industrial symbiosis schemes among enterprises based on the use of wastes/ byproducts in the urban territory
- 9) Supporting the adoption of Extended Producer Responsibility schemes by enterprises (manufacturers, importers)

PO 2: Social Inclusion

Policy Objective 2 could contribute to the transition towards circular economy by supporting the development of the required human resources skills and competencies, as well as by promoting the various aspects of circular economy (e.g. sharing economy, collaborative economy, avoidance of food waste, etc.) that contribute to social inclusion and combating of poverty and all forms of discrimination and more specifically by:

- 1) Supporting self-employment, entrepreneurship and business creation, including innovative and/or circular micro, small and medium sized enterprises (e.g. enterprises dealing with remanufacturing, refurbishment and re-use of products and components)
- 2) Supporting the adaptation of employees, enterprises and entrepreneurs (including the development of the required human resources skills and competencies) to the shift towards circular economy
- 3) Supporting employment-friendly growth – including for population outside of the labour market – at local level through the development of circular economy activities (management, recovery and re-use and repair of waste products)

- 4) Promoting collaborative economy, sharing models and change of consumption patterns (e.g. avoidance of food waste) in order to facilitate access to employment and combat poverty

Note: The use or redistribution of products (such as clothes, furniture, appliances, etc. that are not useful to citizens or families) to other fellow citizens or families may be absolutely necessary. Local initiatives for the collection of useful products that are unnecessary for someone but could be useful for deprived groups or low-income citizens could be supported. Today, the collection and redistribution of those products is carried out by social groups supporting people with basic livelihood needs (homeless, refugees, etc.), however, not always with the proper and effective management, resulting in inefficient utilisation. Such schemes could be rationalized, promoted and reinforced through relevant municipal initiatives.

PO 3: Green Economy

- 1) Promoting circular economy strategies for urban areas, including strengthened cooperation between local and regional stakeholders
- 2) Supporting recycle and reuse of materials, packaging and other products
- 3) Supporting investments in urban mining including landfill mining as an important part of developing a Circular Resource Management Systems for cities

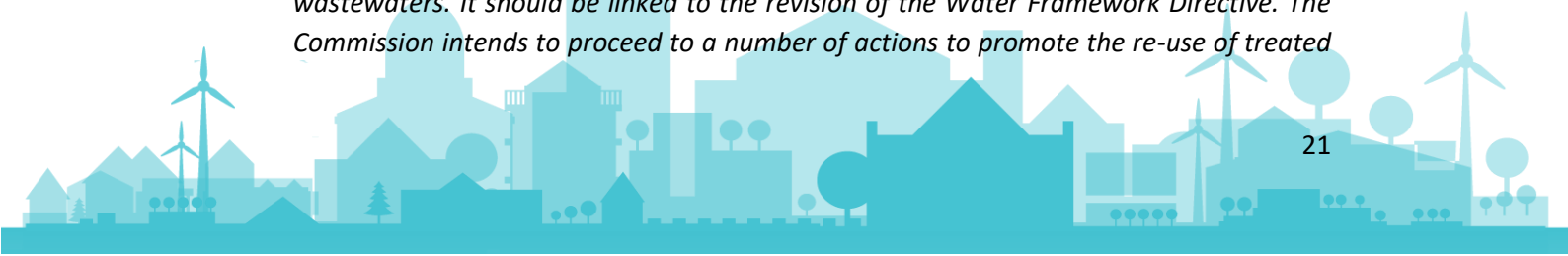
Note: Landfill mining represents the activities involved in extracting and processing wastes which have been previously stocked in specific kinds of deposits (municipal landfills, mining tailings, etc.). Urban Mining extends the landfill mining concept to the recovery of compounds and elements from any kind of anthropogenetic stocks, including buildings, infrastructures, industries, products (at the end of use), environmental media receiving anthropogenetic emissions, etc.

- 4) Promoting integrated actions towards an increased recycling/ recovery of critical raw materials

Note: This may include the recycling/ recovery of critical raw materials from e.g. discarded electronic devices, mining wastes, etc., as well as development of systems for the exchange of information between manufacturers and recyclers of products, provision of data for economic operators on the potential for recycled critical raw materials, development of recycling standards, etc.

- 5) Promoting sustainable building and circular re-use of buildings and public spaces under the circular economy concept (design, construction, use, demolition, material recovery and reuse)
- 6) Investing in the establishment of regional markets for secondary raw materials
- 7) Supporting investments for industrial/ urban wastewater treatment/ reuse for irrigation (urban green, gardens, peri-urban agriculture) and/ or industrial/ port uses.

Note: Such actions could increase the potential of water reuse from treated wastewaters. It should be linked to the revision of the Water Framework Directive. The Commission intends to proceed to a number of actions to promote the re-use of treated



wastewater, including through legislation on minimum requirements for reusable water¹⁶.

- 8) Promoting the treatment of sludge derived from wastewater treatment processes for further use/ reuse in urban green or energy production (specifications)
- 9) Supporting industrial symbiosis based on the use of wastes/ byproducts between enterprises in the urban territory
- 10) Supporting “Resource Centers” at local level that will encourage repair, reuse, exchange, training in repair processes, etc.

Note: “Resource Centers” are wider structures based on Green Points, Reuse Centers (meeting points for consumers and producers) that encourage eco-design in urban areas (social training centers, repair-café in cities, local/ regional platforms and web-sites, and more integrated structures)

- 11) Promoting bioeconomy and the use of biological raw materials and biological processing methods
- 12) Developing and implementing new business models in recycling and product life extension (e.g. repair and reuse)
- 13) Supporting research and innovation in circular economy, particularly through Research & Innovation Strategies for Smart Specialisation

Note: This may include actions such as the use of “clean” energy, recycling and reusing of materials, packaging and other products, treatment of urban wastewater for the production of “clean” water, sewage sludge utilization, and generally the reduction of the environmental footprint of specific sectors of the economy e.g. food and beverage, building materials, metal industry, etc.

- 14) Supporting the use of the available Key Enabling Technologies (KETs) and support frugal innovation opportunities for circular economy.
- 15) Supporting the use of alternative fuels derived from organic/ industrial wastes, while taking into account the waste management hierarchy
- 16) Promoting green gas production, use (as fuel for transport, enterprises and housing) and distribution through injecting/ blending it into the natural gas network

Note: The use of biogas and, more general, of “green gas” (methane and hydrogen produced by biogas) is globally a fast growing fuel choice that is necessary for the achievement of GHG emission targets and the objectives of the Paris Agreement. The current technology allows the cleansing of the biogas through the use of membranes that enables the production of methane of similar quality to the one of the natural gas. However, the current legal framework in some MSs allows its use by injecting it into the natural gas network or its use as transport fuel, such as France (FR has set as a target to inject in the natural gas network 1,7 TWh/year in 2018 and to increase the share of “green gas” in the total gas consumption to 10% by 2030). Promoting biomethane would not only contribute to reducing greenhouse gas emissions and reducing gas

¹⁶ <http://ec.europa.eu/environment/water/reuse-actions.htm>

imports but would also solve the problem of organic waste management from the domestic sector (including hotels and expired food). The use of biomethane requires a lower feed-in tariff than biogas production (around 50%) for both injecting it directly into the natural gas network (usually medium pressure) and for use as a transport fuel.

- 17) Promoting “energy communities” at urban level through the introduction of Renewable Energy Sources technologies and the improvement of energy efficiency

Note: This includes incentives for “energy communities” to exploit municipal waste (biomass-biogas) and use the produced electricity to electrify their infrastructures, like transport. As another example could be the participation of “energy communities” in energy upgrading projects by using recyclable materials from Municipalities (provisions taken from the Greek Law 4513/2018 on energy communities)

- 18) Supporting cooperation platforms to allow active exchange of best practice between key stakeholders including local authorities and cities to ensure a fast transition towards strong circular economy for the EU

PO 5: Europe closer to the citizens

In case that this Policy Objective includes investment priorities, then at least one of them should refer to circular economy as one of the main priorities of the Urban Agenda for the European Union.

In case that it is not linked to specific investment priorities, the related references should provide for the selection of circular economy actions in integrated territorial development plans. Actions/ aspects of circular economy that may form part of integrated territorial development plans are indicatively (but not limited to) the following:

- 1) Supporting recycling and re-use
- 2) Supporting efficient use of resources (in all operations of a municipality: e.g. water supply, irrigation, lighting, building heating, etc.)
- 3) Supporting the utilisation of renewable energy sources in municipal operations
- 4) Supporting of enterprises dealing with remanufacturing, refurbishment and re-use of products and components (e.g. through incubators)
- 5) Promoting of sharing/ collaborative schemes
- 6) Supporting the change of consumption patterns (e.g. minimising food wastes) and initiatives directed at creating a strong public awareness on circular economy
- 7) Promoting green public procurement taking into consideration the notion of circular economy

Note: This may include public authorities purchasing works, goods or services that seek to contribute to closed-loop processes within supply chains, whilst minimizing, and in the best case avoiding, negative environmental impacts and waste creation across their whole life-cycle.



- 8) Promoting circular economy innovations in the Research & Innovation Strategies for Smart Specialisation
- 9) Promoting the circular economy aspects in the Cross-Border and Transnational Cooperation Programs, as well as in the Macro-Regional Strategies

Note: According to recent draft report of the European Parliament “the macro- regional approach is the key to achieving regional cooperation and coordination, as well as an opportunity for the establishment of regional markets, in particular for secondary raw materials. Thus, we must streamline the creation of joint capacities, as for instance with respect to regeneration of waste oils and other recycling capacities. Cross – border and transnational cooperation programmes are crucial to foster interregional cooperation on circular economy activities, promote industrial symbiosis, awareness-raising and the exchange of knowledge and best practice”¹⁷

- 10) Promoting the development of integrated territorial strategies which take into account the circular economy dimension

¹⁷ European Parliament, Draft Report on Cohesion Policy and the Circular Economy (2017/2211(INI)), 7.3.2018 (<http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-%2f%2fEP%2f%2fNONSGML%2bCOMPARL%2bPE-619.126%2b02%2bDOC%2bPDF%2bV0%2f%2fEN>)

4. Potential impact of the Action

The overall potential impact of the action lies on the strong impetus that could be succeeded in the cities through the expected use of the significant amount of financial resources provided by the EU cohesion policy towards achieving the transition of the EU growth process based on the circular economy model, which ensures financial, social and environmental sustainability. Furthermore, the expected impact of promoting the transition to a circular economy in urban areas through the EU Cohesion Policy and its corresponding funds is identical to the aims of this policy, as dictated by Article 174 of the Treaty on the Functioning of the EU regarding the Economic, Social and Territorial Cohesion, i.e. “...reducing disparities between the levels of development of the various regions and the backwardness of the least favoured regions”, etc.

Indicative specific impacts:

Social

- Support of job creation and new skills responding to circular economy
- Promotion of collaborative/ sharing economy schemes, and change of consumption patterns as well as facilitating access to employment and combat poverty
- Promotion of multilevel government with the involvement of all local stakeholders

Financial

- Support of entrepreneurship (SMEs), innovation (new business models) and competitiveness responding to the needs of circular urban areas
- Financial stability in terms of availability of resources, better sharing of financial risk and higher financial leverage
- Contribution to the restructuring of industry (industrial transition), e.g. by promoting industrial symbiosis, eco-design, etc

Environmental

- Promotion of natural resources saving
- Contribution to tackling climate crisis
- Support of integrated sustainable urban development actions based on circular economy

Moreover, this action fits indirectly to the following SDGs:



5. Communication activities proposed

The Partnership, supported by its members, could communicate the present output by intervening at both: policy level and programming level through relevant communication activities:

Policy level (legislative negotiating process)

The Partnership may disseminating its concerns and recommendations to the European Parliament, the Presidency of the EU and the other EU Institutions to be taken into account through the negotiation process of the legislative package of the 2021-2027 programming period.

Programming level (informal dialogue with the European Commission)

The Partnership may keep promoting the outputs on the occasion of relevant dissemination activities, as its recommendations may prove useful to the regions/ local authorities and member-states concerned in the planning process of the 2021-2027 programming period which includes the preparation of Partnership Agreements and the corresponding Operational Programs. In this context the planning and programming of circular economy actions should be guided by the partnership principle according to the European Code of Conduct on Partnership, which promotes multilevel governance with the involvement of all stakeholders. Taking this public consultation process into consideration, a number of communication activities aiming at raising awareness on the Partnership's action and the specific issues could be undertaken, such as:

- Speeches/ presentations at European/ national/ regional/ local workshops/ conferences, including indicative messages based on this document
- Creation of policy briefs, brochures, flyers, infographics, etc. including selected best practices and identified innovative ideas that could be part of the programming documents/ investment priorities under cohesion policy 2021-2027
- Upload material and/or embed a link to Futurium website and to other websites of each partner



6. Position Paper

Transition towards a circular economy for a more competitive, sustainable and inclusive Europe

According to Commission's Communication on "Closing the loop – An EU action plan for the Circular Economy" (COM(2015) 614 of 2.12.2015)¹⁸:

"The transition to a more circular economy, where the value of products, materials and resources is maintained in the economy for as long as possible, and the generation of waste minimised, is an essential contribution to the EU's efforts to develop a sustainable, low carbon, resource efficient and competitive economy. Such transition is the opportunity to transform our economy and generate new and sustainable competitive advantages for Europe.

The circular economy will boost the EU's competitiveness by protecting businesses against scarcity of resources and volatile prices, helping to create new business opportunities and innovative, more efficient ways of producing and consuming. It will create local jobs at all skills levels and opportunities for social integration and cohesion. At the same time, it will save energy and help avoid the irreversible damages caused by using up resources at a rate that exceeds the Earth's capacity to renew them in terms of climate and biodiversity, air, soil and water pollution".

The transition to a more circular economy creates significant investment opportunities

At present, Circular economy investment opportunities remain unrealised. The current production methods and use of products and resources cost in the EU about € 7,2 trillion annually, mainly in the mobility, food and built environment sectors¹⁹. A higher pace in the transition towards circular economy could reduce net resource spending in the EU by € 600 billion annually, while this transition could potentially increase the EU GDP by 7% by 2030²⁰.

According to a report elaborated by "Systemiq", SUN Institute and Ellen McArthur Foundation²¹, "ten attractive circular innovation and investment themes, totalling €320 billion through to 2025, have been identified and could be unlocked with modest policy reform or action by industry."

Cities provide a favourable environment for a circular economy development. The Cohesion Policy post 2020 should seize the opportunity and contribute substantially and in a sustainable way towards this transition.

The actions and efforts around circular economy in the EU to date suggest that the shift towards a circular economy is expected to start in urban areas where the economic, social and territorial impact is greater and the conditions for integrated interventions are met.

¹⁸ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52015DC0614>

¹⁹ McKinsey&Company, Europe's circular economy opportunity, available link on <https://www.mckinsey.com/business-functions/sustainability-and-resource-productivity/our-insights/europes-circular-economy-opportunity>

²⁰ EU, Closing the loop: New Circular Economy Package, available link on [http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/573899/EPRS_BRI\(2016\)573899_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/573899/EPRS_BRI(2016)573899_EN.pdf)

²¹ Systemiq, SUN Institute and Ellen McArthur Foundation, Achieving "Growth Within", 2017, available link on <https://www.ellenmacarthurfoundation.org/assets/downloads/publications/Achieving-Growth-Within-20-01-17.pdf>

The circular economy tends to progress very fast driven by the necessity towards smart growth which ensures sustainability and social inclusion at local level, and starts to become one of the most important challenges for EU cities after 2020 as it seems to provide competitive advantages at global level.

Given that the United Nations also emphasizes the shift towards a circular economy through the Sustainable Development Goals (SDGs), circular economy is expected to become even more important globally in the coming years. Within this context, the circular economy rational at EU level can constitute an effective tool to achieve these targets.

In this context, it is very important for the European Union's Cohesion Policy to seize the opportunity and mainstream the circular economy as an eligible field for funding in its entirety and facilitate opportunities for circular economy innovations in other areas of Cohesion Policy funding, in order to ensure the required impetus of relevant investments towards the transition to circular economy. The European Commission also recognizes the importance of the Cohesion Policy funds in making the transition towards a circular economy possible. More specifically, the European Commission in its "Action Plan for the Circular Economy" highlights the following:

- *"The development of the circular economy will also require public and private sources of financing to scale up improved technologies and processes, develop infrastructure and increase cooperation between actors in the value chain. Significant support for these objectives will come from EU funding programmes such as Cohesion Policy, LIFE and COSME. For example, Cohesion Policy funds are directed towards a growing number of programmes supporting the circular economy, including support for reuse and repair, improved production processes, product design and SMEs."*
- *"The Commission will step-up its action to mobilise stakeholders on the circular economy and in particular for the implementation of this action plan. It will also carry out targeted outreach to help the development of circular economy projects for various sources of EU funding, in particular Cohesion Policy Funds."*

The framework for the implementation of EU Cohesion Policy (currently the European Structural and Investment Funds -ESIF) may provide all the options and opportunities for an effective and efficient implementation of innovative and sustainable projects/ investments aiming at social, economic and territorial cohesion in the EU. This framework is proved over the programming periods to be one of the most appropriate means to enable major policy innovations across EU, due to the magnitude of the financial resources that can be mobilized for related investments, as well as the financial and legal certainty which provides.

Thus, given that the current regulatory framework governing the ESIF 2014-2020 does not explicitly and holistically support circular economy, a clear reference and focus on this concept across different policy objectives at least at urban level in the post 2020 regulatory framework is considered a necessity. This could decisively boost related investments, which in turn can contribute to the achievement of Cohesion Policy objectives and in particular of territorial cohesion, as well as to the achievement of other Union goals, ultimately contributing to investments with high European value added.

More specifically, the provisions in the regulatory framework for EU cohesion policy post-2020 should include as one of the main priorities in its Policy Objectives, the transition



towards circular economy as such and in particular in urban areas where the potential is the greatest. Moreover this focus may be enhanced by encouraging the introduction of circular economy concept and related actions to several instruments and strategies such as the current Research and Innovation Strategies for Smart Specialisation (RIS³) and the various Integrated Territorial Instruments like Sustainable Urban Development Strategies, etc.

Bibliography

- *Ellen MacArthur Foundation, Achieving Growing Within*
- *Ellen MacArthur Foundation, Growth within: a circular economy vision for a competitive Europe, 2015*
- *EU, Closing the loop: New Circular Economy Package*
- *European Commission, Fact Sheet, Circular Economy: Commission delivers on its promises, offers guidance on recovery of energy from waste and works with EIB to boost investment, 2017*
- *European Parliament, Draft Report on Cohesion Policy and the Circular Economy (2017/2211(INI)), 7.3.2018 for more information please see (<http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-%2f%2fEP%2f%2fNONGML%2bCOMPARL%2bPE-619.126%2b02%2bDOC%2bPDF%2bV0%2f%2fEN>)*
- *McKinsey&Company, Europe's circular economy opportunity*
- *Systemiq, SUN Institute and Ellen McArthur Foundation, Achieving "Growth Within", 2017*
- *The Circular Economy, A review of definitions, processes and impacts, Vasileios Rizos, Katja Tuokko, Arno Behrens, April 2017*
- *Urban Agenda: new knowledge sources available for Europe's cities*
- *UNDP, Global trends, Challenges and opportunities in the implementation of the Sustainable Development Goals*
- www.europa.eu
- <http://ec.europa.eu/environment/water/reuse-actions.htm>