Regional Guidebook

on Circular Procurement

CROATIA

2020

RAZVOJNA AGENCIJA IGRA

CircPro Interreg Europe

European Union
European Regional Development Fund

Regional Guidebook on Circular Procurement - Croatia 2020

This guide has been prepared by the IGRA Development Agency as a part of the Smart Circular Procurement (CircPro) project.

The Smart Circular Procurement (CircPro) project receives financial support from the European Union (Interreg Europe / ERDF).

Content

INTRODUCTION

The project Smart Circular Procurement (CircPro)

The project CircPro (Smart Circular Procurement)[1] aims at promoting the transition to a more circular economy related national and regional decision-making by increasing the implementation of the circular procurement. The project is funded by Interreg Europe Program (European Regional Development Fund) and it gathers 11 partners from 9 EU regions and Norway.

Main barriers that hinder the systematic implementation of the circular procurement are general lack of knowledge and expertise, procedural and legal barriers, and procurers´ preconceptions about using, as well as lack of, recycled materials. CircPro tackles the challenge to analyse whether Circular Economy (CE) principles and Circular Procurement (CP) criteria could be included into the regional Policy Instruments as a general principle or as an award criterion to encourage applicants to systematically implement CPs.

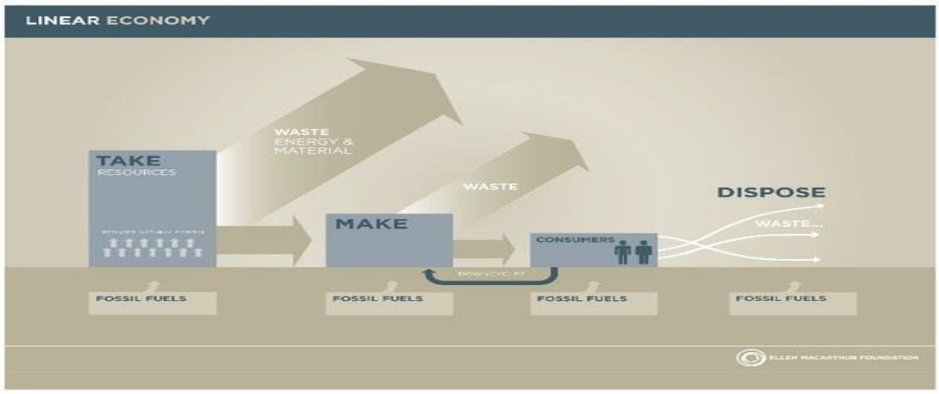
The project also focuses on exchange of experience within and between regions, at regional level by interacting with key stakeholders (procurers, suppliers, Academia, decision-makers and other valid parties) in regional stakeholders groups, and at interregional level by organizing interregional stakeholders meetings for fostering the interregional learning.

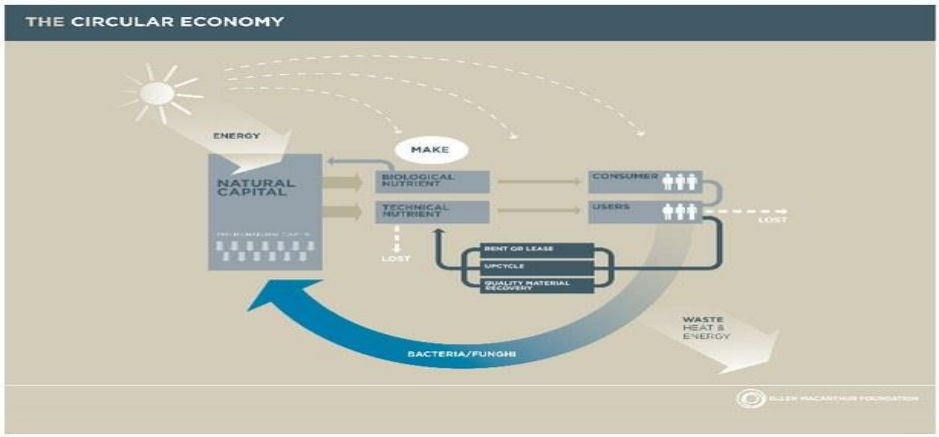
[1] For further information https://www.interregeurope.eu/circpro/

1. Circular Procurement as an Emerging Concept in EU

1.1. Role of public procurement in EU circular economy transition

On the assumption that the current economy is based on take-make-waste extractive industrial model, circular economy represents a transformative trajectory that follows three principles: design out waste and pollution; keep products and materials in use; regenerate natural systems (also according the European Green Deal). Transition from linear to circular economy is not immediate though, it rather requires full systematic change throughout value chains and innovation not only in technologies, but also in organization, society, finance trends and policies.





Source: *https://www.ellenmacarthurfoundation.org/news/circular-gospodarstvo*

Circular economy focus is on resource flows more than on products, as it comes out from the policy pathway that has eventually brought to the definition of a circular economy strategy and to its transposition into a circular economy package at European level.

In 2011 the EU Commission[2] acknowledged that the pressures on resources were increasing and that continuing with the usual patterns of resource use was not an option. Thence, the EU Commission deemed it key to develop new products and services and find new ways to reduce inputs, minimize waste, improve management of resource stocks, change consumption patterns, optimize production processes, management and business methods, and improve logistics.

To this end, a policy mix capable to optimize synergies and address trade-offs between different areas was needed. Amongst others, it was suggested that increasing recycling rates would reduce the pressure on demand for primary raw materials, help to reuse valuable materials which would otherwise be wasted and reduce energy consumption and greenhouse gas emissions from extraction and processing. Before getting to recycling, attention was on the life-cycle, which means on the entire value chain.

In this view, the EU Commission set a coordinated roadmap for guaranteeing a long-term framework for action in many policy areas, supporting agendas for climate change, energy, transport, industry, raw materials, agriculture, fisheries, biodiversity and regional development. A number of medium-term measures were considered, including *"a strategy to make the EU a circular economy, based on a recycling society with the aim of reducing waste generation and using waste as a resource".*

The European overall vision at the basis of the roadmap was defined as follows: *"By 2050 the EU's economy has grown in a way that respects resource constraints and planetary boundaries, thus contributing to global economic transformation. Our economy is competitive, inclusive and provides a high standard of living with much lower environmental impacts. All resources are sustainably managed, from raw materials to energy, water, air, land and soil. Climate change milestones have been reached, while biodiversity and the ecosystem services it underpins have been protected, valued and substantially restored"*. Given the vision, resource efficiency was identified as the route allowing the economy to create more with less, using resources in a way to minimize their impacts on the environment.

Changing the consumption patterns of economic operators and public purchasers was preliminarily necessary, as useful to generate direct net cost savings and increase demand for more resource efficient services and goods. The transformative route was twofold: on the one hand, purchasers were requested to adjust their decision-making process to avoid waste and purchase goods that last or that can be easily repaired or recycled; on the other hand, new entrepreneurial models, where goods/services are leased rather than bought, had to be designed to satisfy needs with less life-cycle resource use. In such a scenario, even waste was expected to become a

[2] COM(2011)21 final, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee of the Regions, *A resource-efficient Europe – Flagship initiative under the Europe 2020 Strategy*, 26 January 2011.

resource to be fed back into the economy as a raw material to the utmost extent possible.

These policies were resumed by the EU Commission in 2014[3], as further developed in the Seventh Environment Action Program (7th EAP)[4]. According to this act, whereas economies have developed a take-make-consume and dispose pattern of growth - that is a linear model based on the assumption that resources are abundant, available, easy to source and cheap to dispose of - moving towards a more circular economy was deemed essential to deliver the resource efficiency agenda established under the Europe 2020 Strategy for smart, sustainable and inclusive growth.

In this, circular economy definitively keeps the key principles characterizing green economy, while developing a systematic view though. Such understanding is clearly confirmed by the European Commission, which still considers circular economy as a way to address green growth.[5]

Source: European Commission

[3] COM(2014)398 final/2, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *Towards a circular economy: A zero waste programme for Europe, 25 September 2014*.
[4] Decision No. 1386/2013/EU of the European Parliament and of the Council of November 2013 on a General Union Environment Action Programme to 2020 "*Living well, within the limits of our planet*".
[5] For further details http://ec.europa.eu/environment/green-growth/index_en.htm.

At the very end, the idea behind green economy and circular economy is quite the same, on the assumption that the environment has natural limits in terms of how much it can provide and absorb, with a basic difference though. Instead of accepting the linear model as it is and trying to replace polluting elements with greener ones, circular economy looks at innovating production and consumption models in their deployment.

As anticipated, circular economy approaches design out waste and typically involve innovation throughout the entire value chain, rather than relying solely on solutions at the end of life of a good. Possible approaches include: reducing the quantity of materials required to deliver a particular service; lengthening products' useful life; reducing the use of energy and materials in production and use phases; reducing the use of materials that are hazardous or difficult to recycle in products and production processes; creating markets for secondary raw materials; designing products that are easier to maintain, repair, upgrade, remanufacture or recycle; developing the necessary services for consumers in this regard; incentivizing and supporting waste reduction and high-quality separation by consumers; incentivizing separation, collection systems that minimize the costs of recycling, and reuse; facilitating the clustering of activities to prevent by-products from becoming wastes; encouraging wider and better consumer choice through renting, lending or sharing services as an alternative to owning products, while safeguarding consumer interests.

This vision was consolidated in 2015 with the aim to set the conditions for closing the loop and make residuals not discharged into the environment but reused in the economy or used to produce secondary raw materials.

On December 2019 the EU Commission presented the European Green Deal[6], a roadmap for making the EU's economy sustainable by turning climate and environmental challenges into opportunities across all policy areas and making the transition just and inclusive for all. The European Green Deal covers all sectors of the economy, notably transport, energy, agriculture, buildings, and industries such as steel, cement, ICT, textiles and chemicals. The European Green Deal provides a roadmap with actions to boost the efficient use of resources by moving to a clean, circular economy and stop climate change, revert biodiversity loss and cut pollution. It outlines investments needed and financing tools available, and explains how to ensure a just and inclusive transition.

So far, the relevance of circular economy and the strategic use of public procurement was resumed in 2017 EU Public Procurement Strategy. To implement the circular economy action plan, in January 2018 was adopted the latest set of measures at European level, including: a Europe-wide EU strategy for plastics in the circular economy and annex to transform the way plastics and plastics products are designed, produced, used and recycled;

[6] COM(2019) 640 final, Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, *The European Green Deal*, 11 December 2019.

a Communication on options to address the interface between chemical, product and waste legislation that assesses how the rules on waste, products and chemicals relate to each other; a monitoring framework on progress towards a circular economy; a report on critical raw materials and the circular economy. In addition to that, the European Commission adopted: a proposal for a Directive on the reduction of the impact of certain plastic products on the environment; a proposal for a regulation setting minimum requirement to boost the efficient, safe and cost-effective reuse of water for irrigation.

In this context, integration of circular economy requirements into public procurement has been expressly mentioned amongst the implementation actions, all under the heading of circular procurement, which has been so introduced as neologism in the field of procurement. Indeed, public procurement is no longer recognized as a mere administrative procedure to purchase goods, services or work, but rather as a tool for achieving strategic goals. As such public procurers can truly be a role model and drive transition to circular economy. Every year public authorities spend around 14% of GDP on the purchase of services, works and goods and in many sectors public authorities are the principal purchasers. That is why, especially in times of strained national budgets, procurement could be a powerful tool for spending public money in an efficient, sustainable and strategic manner. Moreover, the Public Procurement Directives provide for strategic procurement possibilities that nonetheless, despite their potential benefits, are not sufficiently used at the moment. A change of approach is definitively needed and a broad collaborative partnership among national, regional and local authorities, the EU Commission, businesses and stakeholders is expected in this direction.

In consideration of that, the EU Commission strongly encourages demand driven strategies and in fact has already prepared specific guidance tools for procurers on circular procurement. The vision is that, starting from systematic implementation of green procurement criteria, the application of circular approaches to public procurement could really lead to considerable results not only in terms of reduced environmental impacts, but also in terms of effectiveness and efficiency of public spending. To this, six strategic priorities shall be followed: i) ensuring wider uptake of strategic public procurement; ii) professionalizing public buyers; iii) improving access to procurement markets; iv) increasing transparency, integrity and better data; v) boosting of the digital transformation of procurement; vi) cooperating to procure together.

1.2. European programs supporting the implementation of CP

In order to support transition to circular economy, the EU Commission has called for a commitment at all levels, from Member States, regions and cities, to businesses and citizens.[7] To facilitate transition acceptance, the EU Commission has then promoted a number of research programs and capacity building initiatives promoting systemic change. In order to rethink our ways of producing and consuming, and to transform waste into high value-added products, new technologies, processes, services are needed and business models capable to shape the future of our economy and society are expected.

The development of a circular economy definitively requires public and private sources of financing to scale-up improved technologies and processes, develop infrastructure and increase cooperation. In this sense, Europe is making a lot first of all by means of its cohesion policy.

The European Commission has adopted on March 2020 the new Circular Economy Action Plan "For a cleaner and more competitive Europe" to increase recycling and reuse of products in the EU. This new action plan is due to speed up the EU's transition towards a circular economy by strengthening EU industry, helping fight climate change and preserving the EU's natural environment. The new Action Plan announces initiatives along the entire life cycle of products, targeting for example their design, promoting circular economy processes, fostering sustainable consumption, and aiming to ensure that the resources used are kept in the EU economy for as long as possible. It introduces measures targeting areas where action at the EU level brings real added value.

In the investment framework for 2014-2020, significant funding has been devoted to improved recycling, improved waste management, resource and energy efficiency, strengthening the bio-economy, novel solutions in product design, new business models. In addition, resource efficiency becomes part of other cohesion policy priorities, following a horizontal commitment to sustainable development.

On this line, Interreg Europe and Interreg Central Europe programs, financed by the European Regional Development Fund (ERDF) for 2014-2020 are addressed to three types of beneficiaries: public authorities; managing authorities/intermediate bodies; agencies, research institutes, thematic and non-profit organizations. These programs supported for instance the

[7] The EU Action Plan, as part of the ambitious Circular Economy Package, keeps strong synergies with the Commission's package on Clean Energy for all Europeans, and is instrumental in supporting the EU's commitments on sustainability, as outlined in the Communication "Next steps for a sustainable European future" and, in particular, to reach Sustainable Development Goal 12 "Responsible consumption and production".

projects PPI2INNOVATE, GPP4GROWTH i SIMBI that specifically focus on the role of public procurement as driver for innovation and sustainability.

Horizon 2020 is the financial instrument implementing the Innovation Union, a Europe 2020 flagship initiative aimed at securing Europe's global competitiveness. By coupling research and innovation, Horizon 2020 is helping to achieve this with its emphasis on excellent science, industrial leadership and tackling societal challenges. The goal is to ensure Europe produces world-class science, removes barriers to innovation and makes it easier for the public and private sectors to work together in delivering innovation.[8] The Horizon 2020 work programme already included a major initiative, "Industry 2020 in the circular economy", granting over €650 million for innovative demonstration projects supporting the objectives of circular economy and industrial competitiveness in the EU in a wide range of industrial and service activities, including process industries, manufacturing, and new business models. It particularly explored a pilot approach to help innovators facing regulatory obstacles (e.g. ambiguous legal provisions), by setting up agreements with stakeholders and public authorities (so called 'innovation deals'). This initiative adds to a wide range of existing Horizon 2020 programs supporting innovative projects relevant to the circular economy, in fields such as waste prevention and management, food waste, remanufacturing, sustainable process industry, industrial symbiosis, and bio-economy.[9]

Amongst others projects which have received funding from Horizon 2020, the project SPP Regions is particularly noteworthy. SPP Regions aimed at promoting the creation and expansion of European regional networks of municipalities working together on sustainable public procurement (SPP)[10] and public procurement of innovation (PPI). The 7 networks involved in the project regional networks collaborated directly on tendering for eco-innovative solution, whilst building capacities and transferring and knowledge through their SPP and PPI activities. 40 eco-innovative tenders were published.[11] The project also pursues to strengthen networking at European level by redeveloping the Procura+ European Sustainable Network.[12]

The LIFE program is the EU's funding instrument for the environment and climate action. LIFE contributes to the implementation, updating and development of EU environmental and climate policy and laws by co-financing projects with European added value. The LIFE program is divided into two sub-programs, one for environment (representing 75% of the overall finan-

[8] For further details: https://ec.europa.eu/programmes/horizon2020/what-horizon-2020.
[9] For further details on Horizon 2020 R&I projects supporting the transition to a circular economy: https://ec.europa.eu/research/environment/index.cfm?pg=output&pubs=thematic
[10] Sustainable Public Procurement (SPP) is a process by which public authorities seek to achieve the appropriate balance between the three pillars of sustainable development: economic, social and environmental – when procuring goods, services or works at all stages of the project. For further details: http://ec.europa.eu/environment/gpp/versus_en.htm
[11] For further details: http://www.sppregions.eu/about-spp-regions/
[12] Procura+ European Sustainable Network is a network of European public authorities that connect, exchange and act on sustainable and innovation procurement. For further details: http://www.procuraplus.org/manual/

cial envelope) and one for climate action (representing 25% of the envelope). The LIFE program is making an important contribution to Europe's transition away from a linear economic model. Since the beginning of the seven-year multiannual financial framework in 2014, LIFE has further increased its support for circular economy-related actions, helping to fund over 80 projects.[13]

COSME is the EU program for the Competitiveness of Small and Medium Sized Enterprises (SMEs) running from 2014 to 2020. The COSME program addresses four main objectives: ease access to finance for SMEs by providing loan guarantees and risk capital (access to finance); help companies access new markets, within and outside the EU (access to markets); create a business-friendly environment by reducing the administrative burden on SMEs (improving conditions for businesses); encourage an entrepreneurial culture (encouraging entrepreneurship). The Executive Agency for Small and Medium-Sized Enterprise (EASME) manages the parts of the COSME work programme addressing access to markets, improving conditions for businesses and encouraging entrepreneurship on behalf of the European Commission. Financial instruments under access to finance are managed by the European Investment Fund (EIF).

In addition to the abovementioned programs, there are a lot of initiatives at European level that support circular economy, first of all the European Circular Economy Stakeholder Platform, a joint initiative by the European Commission and the European Economic and Social Committee, which allows for sharing of news, events and good practices on circular economy and circular public procurement as well.[14] The PROCURA+ European Sustainable Procurement Network[15] of European public authorities and regions that connect, exchange and act on sustainable and innovation procurement and the Procurement of Innovation Platform[16], which is an online hub that targets public authorities, procurers, policy makers and researchers. The Platform consists of three elements: website, Procurement Forum, and Resource Centre. Innovation procurement empowers public authorities to obtain pioneering, innovative solutions customized to their specific needs. It helps local and central governments to provide tax payers with the best possible quality services, while at the same time saving costs.

[13] For further details: https://publications.europa.eu/en/publication-detail/-/publication/ac9eab4b-4045-11e7-a9b0-01aa75ed71a1
[14] For further details: https://circulareconomy.europa.eu/platform/en
[15] For further details: http://www.procuraplus.org
[16] https://procurement-forum.eu

2. Regulatory and Policy Framework for CP

Scope of this chapter is to set out the policy and regulatory framework for circular procurement, provided that there is no specific act regulating circular procurement as such. So far, circular procurement is conceived as "*an approach to greening procurement which recognizes the role that public authorities can play in supporting the transition towards a circular economy*"[17], while the common rules on green public procurement constitute the basis for its definition, and the rules for social and innovation procurement represent the reference for broadening its construction and set the stage for a systemic change of approach to production and consumption. In this sense, the chapter will provide a preliminary overview on the recent policy and regulatory developments, in order to identify the existing instruments for implementing circular procurement, at first at European level, then at national and regional level.

2.1. EU legal and regulatory framework

The notion of Green Public Procurement (GPP) stems from the 1996 Green Paper, EU presented as a consequence of the amendments made to the EC Treaty by the Single Act and the Maastricht Treaty and in consideration of Article 130 of the EC Treaty, which provided that environmental protection requirements had to be integrated into the definition and implementation of other Community policies.

While the Green Paper paved the way, the subsequent Communication entitled *"Integrated Product Policy – Building Environmental Life-Cycle Thinking*" - which the European Commission adopted on 18 June 2003 - definitively pinpointed the core idea at the heart of green procurement. According to the Communication at stake, green procurement implies five key principles: (i) life-cycle thinking, which considers a product's life-cycle and aims for a reduction of its cumulative environmental impacts, from the cradle to the grave; (ii) working with the market, which sets incentives so that the market moves in a more sustainable direction by encouraging the supply and demand of greener products; (iii) stakeholder involvement, which aims to encourage all those who come into contact with the product to act on their sphere of influence and to foster cooperation between the different stakeholders; (iv) continuous improvement, as improvements can often be made to decrease a product's environmental impacts across its life-cycle, whether in design, manufacture, use or disposal, taking into account the parameters set by the market; (v) a variety of policy instruments, because there are such a variety of products available and different stakeholders involved. In this respect, as common procurement practices were far from embracing such principles, the EU Commission committed to establish the framework

[17] European Commission, *Public Procurement for a Circular Economy – Good Practice and Guidance*, cit.

conditions for the continuous environmental improvement of all products throughout the production, use and disposal phases of their life-cycle.

Such commitment was eventually transposed in Directive 2004/18/EC[18], though it was thanks to the 2008[19] that public authorities gained the guidelines to effectively include environmental protection objectives in their procurement procedures and processes. This Communication was in fact to provide guidance on how to reduce the environmental impact caused by public sector consumption and thence on how to use green public procurement to stimulate innovation in environmental technologies, products and services, on the assumption that green public procurement is "…*a process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life cycle when compared to goods, services and works with the same primary function that would otherwise be procured*".

Being that the background, the existing framework for green procurement is primarily based on the EU Directives on Public Procurement, meaning Directive 2014/24/EU[20] and Directive 2014/25/EU[21], as well as on the green public procurement criteria adopted from time to time through specific acts designed to make it easier for public procurers to purchase goods, services and works that have a reduced environmental impact. The criteria are formulated in such a way that they can, if deemed appropriate by the individual authority, be (partially or fully) integrated into the authority's tender documents with minimal editing. Before publishing a contract notice, contracting authorities are advised to check the available offer of the goods, services and works they plan to purchase on the market where they are operating. The criteria are split into exclusion grounds, selection criteria, technical specifications and labels, award criteria and contract performance terms and conditions

The criteria can be distinguished in two types: (i) core criteria — which are designed to allow for easy application of GPP, focusing on the key area(s) of environmental performance of a product and aimed at keeping administrative costs for companies to a minimum; (ii) comprehensive criteria — which take into account more aspects or higher levels of environmental performance, for use by authorities that want to go further in supporting environmental and innovation goals.[22] In addition to legal and regulatory acts, there are a number of supporting instruments, such as the new edition of

[18] Directive 2004/18/EC of the European Parliament and of the Council of 31 March 2004 on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts.
[19] COM(2008)400 final, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *Public procurement for a better environment*, 16 July 2008.
[20] Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC.
[21] Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal service sectors and repealing Directive 2004/17/EC.
[22] At the following link you could find the complete list of GPP criteria in place at European level: http://ec.europa.eu/environment/gpp/eu_gpp_criteria_en.htm.

the Buying Green! Handbook that has been specifically designed to explain how best to integrate environmental considerations into public procurement procedures.[23]

Innovative procurement for the systematisation of circular procurement

Once acknowledged that the definition of circular procurement cannot ignore that of green procurement, quite plainly it comes that circular procurement does not end with implementation of green procurement criteria. Differently from green procurement, which is much related to goods, circular procurement tends to put products in relation with processes. Its aim is indeed that to close the loop and so achieve a sustainable balance between economic, social and environmental aspects.[24]

In order to make this happen, public procurers shall consider that there is no one-fits all solution to implement circular procurement and that implementation of circular procurement eventually calls for an original understanding of the existing rules and an original combination of the existing instruments. On this understanding, the regulatory framework of reference broadens accordingly. According to existing legislation, innovation procurement includes both Public Procurement of Innovative Solution (PPI) and Pre-Commercial Procurement (PCP). Briefly, Public Procurement of Innovative Solutions (PPI) happens when the public sector uses its purchasing power to act as early adopter of innovative solutions which are not yet available on large scale commercial basis. Differently, in Pre-Commercial Procurement (PCP), public procurers buy R&D from several competing suppliers in parallel to compare alternative solution approaches and identify the best value for money solutions that the market can deliver to address their needs; R&D is split into phases (solution design, prototyping, original development and validation/testing of a limited set of first products) with the number of competing R&D providers being reduced after each R&D phase. In the end, this is a process that could be very helpful also to develop capacity-building and accompany public procurers in the process of understanding how to actually put circular procurement into practice.

The diffusion of circular procurement is in fact still at a preliminary stage and guidance tools are essential in order to transpose what is written in the policy papers recently adopted at European level on circular economy and circular procurement in particular in common procurement practices. As mentioned, serial application of green public procurement criteria constitutes the

[23] The third edition of Buying Green! – A Handbook on green public procurement is available at the following link: http://ec.europa.eu/environment/gpp/buying_handbook_en.htm. The handbook includes: guidance on how environmental considerations can be included at each stage of the procurement process in the current EU legal framework; practical examples drawn from contracting authorities across EU Member States; sector specific GPP approaches for buildings, food and catering services, road transport vehicles and energy-using products.

[24] In this, circular procurement falls into the broader category of sustainable procurement. On the matter, the United Nations has developed detailed guidance for the UN system, which addresses all the aspects of sustainability: "*Buying for a Better World*".

basis, but then implementation of circular procurement needs a step further. At least three levels of models for implementing circular procurement can be considered: (i) the system level model, which regards the contractual instruments that the purchasing authorities can use to ensure circularity, such as supplier take-back agreement, where the supplier returns the product at the end of its life in order to reuse, remanufacture or recycle it, or product-service systems, where the contract provides both services and products; (ii) the supplier level model, which describes how suppliers can build circularity into their own systems and processes in order to ensure the products and services they offer meet circular procurement criteria; (iii) product level model, which focuses solely on the products that suppliers to public authorities may themselves procure further down the supply chain.

The decision on which model fits best really depends on the needs of the public authority at stake, the sustainability improvements it wants to pursue, its organizational capacity. Strictly speaking, circular procurement is expected to reflect the European Waste Hierarchy: reduce, reuse, recycle and recover. Practically, that means to reduce the procurement of new products; increase reusability of available products; recycle products that cannot be reused anymore; recover waste to use it for a different purpose and, whenever possible, purchase recovered products. That is the very essence of circular procurement and there are various ways to implement it. Whatever the model of procurement would be, in the end though, what makes the difference is the ability to scale up circular practices and take them at a systemic level.

CIRCULAR PROCUREMENT MODELS		
System level	**Supplier level**	**Product**
Product service system	Supplier take-back system	Materials in the product can be identified
Public Private Partnership	Design to disassembly	Products disassembled after use
Cooperation with other organizations on sharing and reuse	Reparability of standard products	Recyclable materials
Rent / lease	External reuse / sale of products	Resource efficiency and Total Cost of Ownership
Supplier take-back systems including reuse, recycling, refurbishment and remanufacturing	Internal reuse of products	Recycled materials

Source: SPP Regions (2017), *Circular Procurement Best Practice Report*

In order to make a change at systemic level, combination of green procurement criteria and social criteria could definitively be an option. That would help to shift focus from goods/services to processes and thence make public procurement a strategic tool to drive social policies forward. In the end, circular procurement it is not only a matter of procurement intended as mere acquisition of products, works, services, but rather of control of possible relationships between procurer and supplier in the entire contract life-cycle, if not between procurer and multiple suppliers. In this, circular procurement calls for forms of collaboration between procurer and supplier that could make it easier to meet the objectives of reduce, reuse, recycle, and recover in procurement, in a way to fulfil the needs of the procurer by delivering social impact at the same time.

Often, buying responsibly and ethically can create incentives for entrepreneurs to commit to a more sustainable management of the production process, which eventually can bring benefits in terms of more sustainable management of the consumption process as well. In this regard, it might be useful to consider that in 2011, the European Commission has adopted a guide on taking account of social considerations in public procurement, titled "*Buying Social*", and that such guide is now expected to be updated.[25]

As evident from the above, in the absence of comprehensive legislative provisions specifically focusing on circular procurement, given the provisions contained in the Public Procurement Directives, the regulatory framework of reference can very much vary depending on how much procurers intend to engage with circularity and transpose it in procurement processes. That is a decision that eventually results from the level of understanding of circular principles and the needs assessment. That acknowledged, the regulatory framework of reference can further vary depending on whether on the market are already available solutions that, in relation to the specific needs at stake, could sufficiently help to develop practices compliant with reduce, reuse, recycle, recover, principles. In case the solutions available on the market are not sufficient, innovation procurement could definitively be an option to explore innovative ways to implement life-cycle management and so spur circular transition from the demand side.[26]

[25] For further details: https://ec.europa.eu/info/policies/public-procurement/support-tools-public-buyers/social-procurement_en#buying-social.

[26] Pursuant to Directive 2014/24/EU, Article 2 (22), innovation means "*the implementation of a new or significantly improved product, service or process, including but not limited to production, building or construction processes, a new marketing method, or a new organizational method in business practices, workplace, organization or external relations inter alia with the purpose of helping to solve societal challenges or to support the Europe 2020 strategy for smart, sustainable and inclusive growth*".

2.2. Legal and legislative framework in Croatia

The concept of circular procurement is not yet applied in Croatia, but green public procurement as a voluntary instrument that promotes environmental protection and sustainable consumption and production.

Green public procurement is defined as the process by which contracting entities procure goods, works and services defined by criteria containing key environmental pressures relating to resource and energy consumption, impact on biodiversity and eutrophication, toxicity, pollutant emissions, greenhouse gases and CO2 and generation of waste at source.

The National Action Plan for Green Public Procurement for the Period 2015-2017 with a View to 2020[27] was endorsed by the Croatian Government in August 2015. The 2015-2017 Report on the Implementation of the NAP GPP[28] provides an overview of the measures and activities implemented in the three-year period of validity of the NAP GPP.

The baseline of the NAP is the Sustainable Development Strategy of the Republic of Croatia[29], which states that promoting sustainable production and consumption is one of the priority objectives to be addressed in order to achieve balanced and stable growth in the economy and thus reduce environmental degradation (resource consumption, pollutant and greenhouse gas emissions, consumption of chemicals, generation of waste).

The strategy sets out a number of actions and measures to achieve the stated objectives, and one concerns the promotion of sustainable and green public procurement.

In addition to the Sustainable Development Strategy of the Republic of Croatia, IV. National Energy Efficiency Action Plan of the Republic of Croatia for the period 2017-2019[30] contains measure P.5 *Green public procurement*, which aims to integrate GPP criteria into regular public procurement procedures at national and local level, and to educate, train and develop the capacity of direct practitioners of GPP procurement procedures.

In doing so, the Ministry of Protection of the Environment and Energy has a prominent role to play in promoting sustainable development and integrating environmental protection and climate change adaptation policies and measures into all sectoral policies, promoting sustainable consumption and production policies to reduce resource consumption, greenhouse gas emissions and pollutant emissions as well as reducing waste generation, while also coordinating the EU Ecolabel and EMAS eco-labels and green public procurement.

[27] National Action Plan for Green Public Procurement for the Period 2015-2017 with a View to 2020
[28] 2015-2017 Report on the Implementation of the NAP GPP
[29] Sustainable Development Strategy of the Republic of Croatia
[30] IV. National Energy Efficiency Action Plan of the Republic of Croatia for the period 2017-2019

Also, in January 2017, a Croatian Waste Management Plan for the Period 2017-2022[31] was adopted at the session of the Croatian Government. It mentions green and sustainable public procurement as one of the waste prevention measures. Green procurement targets are prevention of municipal waste, EE waste and waste paper and cardboard, prevention of construction waste.

One of the most important changes introduced by the new Law on Public Procurement[32] (LPP) is the obligation to use the MEAT criterion as the only award criterion. This allows for the inclusion of GPP criteria in public procurement procedures, resulting in multiple positive effects: environmental, social and financial.

The most significant changes in the LPP 2016 (compared to the old law), which promote the implementation of sustainable or green public procurement, are related to technical specifications, award criteria, contract performance conditions and the new life-cycle costing institute and environmental labels.

Thus, the sustainability elements related to the technical specifications of the EU directives are well transposed into Articles 207 and 209. Article 284 of the LPP 2016 transposes the sustainability elements of the award criteria. Articles 251, 252 and 253 are related to the possibility of excluding tenderers. The elements of sustainability in the conditions for the performance of the contract are implemented in Article 218, life-cycle costing was implemented in Articles 287 and 288, while the designations are governed by Article 212 of the LPP 2016.

In the analysis of these provisions, it is noted that all sustainable elements from the new regulatory framework of the EU were literally transposed into the LPP 2016. However, the biggest problem in the implementation of sustainability elements in public procurement procedures is that GPP is still a voluntary instrument and, even in the LPP 2016, no means have been defined to force contracting authorities into its application and all elements of sustainability in public procurement remain only voluntary.

The monitoring of the implementation of green public procurement is carried out through annual statistical reports on public procurement in the Republic of Croatia. This annual Statistical Report contains a chapter on green public procurement containing data collected through the National Electronic Public Procurement Notice System.

According to the Statistical Report on Public Procurement in the Republic of Croatia for 2019, 10% of concluded contracts were declared to have used the green public procurement criteria. This is a strong increase compared to 2018.

Contracting entities concluded 1,731 contracts using the green public procurement criteria in the amount of HRK 4,248,846,794 (EUR 566,512,905) without VAT. Compared to 2018 (541 contracts), 1,190 contracts were published, which is an increase of 296,96%. The value of contracts in 2019 in relation to the value of contracts concluded using the criterion of green public procurement in 2018 (HRK 1.437.968.211 or EUR 191.729.094) recorded an increase of 195.47%!

[31] Waste Management Plan for the Period 2017-2022
[32] Low on Public Procurement

3. Best Practices on CP Implementation

The CircPro project partners have identified a number of good practices (GPs) from the partnership regions that could boost implementation of the circular procurement (CP).

3.1. Italy/City of Turin – School catering contract

In 2013, the City of Turin introduced a number of measures to their school catering contract to enhance its sustainability, which included requiring the use of energy efficient appliances and low environmental impact transport, as well as significantly reducing packaging and waste, for example by using tap water instead of bottled water, and favouring reusable and refillable products where packaging is unavoidable. In addition, contractors were required to shift from using plastic to reusable dishes. This one requirement alone resulted in a reduction of 157 tonnes/year of plastic waste. The current school catering service began in September 2013 and will continue until August 2016 with the possibility of extension for a further two years.

Information on procurement subject matter

School catering represents a significant part of the procurement budget for the City of Turin. Approximately 8 million meals are delivered annually, with a total value of approximately 40 million EUR per year. The school catering services present an opportunity to educate children on sustainability policies, as the Turin School system (kindergarten and primary schools) includes about 71,500 children between the ages 0-13 years. Taking into consideration the teachers and families of these children, between 230-250,000 citizens are affected by the school catering services.

Methodology

The contract for the overall school catering service is subdivided into eight lots, with each lot covering a different geographical area in Torino. The lots were awarded to three different suppliers.

Procurement strategy

Bidders were encouraged to favour low environmental impact packaging, including reusable, refillable or biodegradable products. One requirement for contractors to shift from using plastic to reusable as this criterion was applied to over five million meals delivered annually. Additional criteria were used to lessen other sustainability impacts associated with the catering contract, such as requiring the use of ecological cleaning products and awarding points for bidders offering a wider range of organic or fair trade products than were specifically requested.

3.2. Lithuania/Lithuanian Road Administration – Pre-commercial procurement of nano bitumen

In Lithuania, circular procurement is yet poorly established practice and the majority of existing examples are focused only on secondary circularity stages such as consumption, waste collection and recycling, rather than ensuring the initial steps of circular economy with lifelong design and durability. A more advanced way to improve this situation and integrate circularity principles in procurement is represented by the good practice of pre-commercial procurement (PCP) of nano bitumen.

Procurement strategy

In order to improve the quality of the roads, Lithuanian Road Administration initiated this type of procurement for bitumen. The aim was to design the longest-lasting road surface. The tender was focusing on materials that would be the most suitable for local climate and, thus, the road would be durable for a longer time without any major repairs. This procurement contributes to a circular economy by promoting the creation of new materials that require fewer raw materials, have a longer useful life and are easier to maintain.

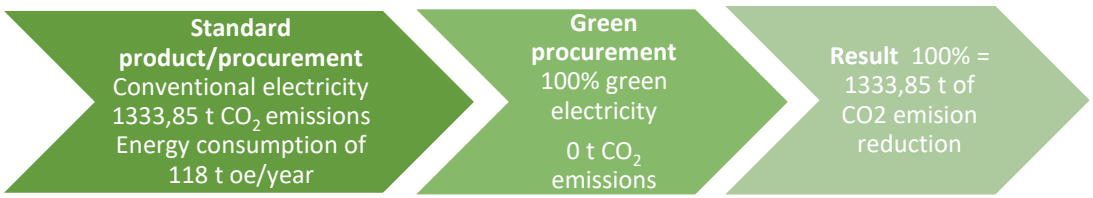
Procurer

The main stakeholder of this procurement was the Lithuanian Road Administration. Also, a significant role can be dedicated to scientific institutions and companies which carry out R&D in related area.

With the implemented procurement, the new surface for roads brings benefits not only for the drivers but also for the government as there will be fewer costs for road repair.

3.3. Croatia/City of Koprivnica – Supply of electricity made from renewable sources

The City of Koprivnica implemented a green public procurement process and managed to purchase 100% energy made out of renewable sources instead of the standard energy. The procurement was made jointly by 6 public institutions and it incorporated the public lightning too.



Solution applied:

Despite the fact that in previous procurement cases the award criterion was the lowest price, the city opted for a procedure involving the most economi-

cally advantageous tender. This time, the price was not the sole award criterion because 10% of the points were awarded to the bidder with the greenest electricity offered.

Procurement objectives:

Increase the use of electricity from renewable sources and improve from marketable energy consumption in local government. The approach was to award contracts to a supplier offering more energy produced from renewable sources.

Procurement methodology:

An open procurement procedure was used.

Procurement of electricity	
Technical specification - purchase of at least 20% of electricity from renewable sources **Verification —** during the contract performance period the supplier must be able to present guarantees of electricity origin once in each quarter and upon any additional request	**Award criterion —** the most economically advantageous offer**:**: - 90% price - 10% for an offer that offers more than 20% of energy from renewable sources

Contract awarded:

- electricity from renewable energy sources for 6 public institutions and street lighting;
- the approximate amount of electricity required by the tender for a two-year calculation was 3.500,000 kWh.
- contract lasting 1 year;
- total cost: EUR 193,500,00 (without VAT)
- the most economically advantageous offer;

4. Guidance for Systematic and Efficient Use of CP

4.1. PHASE 1 – Pre-award stage: needs analysis, zero waste design, risk assessment

This pre-award stage is the starting stage and its appropriate implantation is vital for finding the right approach for the CP implementation.

One of the first practical steps in this stage is to consider how CP can be integrated into the existing procurement practices and systems of the organization[33]. Creating a circular procurement policy or incorporating circular economy principles into existing GPP or SPP policy can be an effective first step to ensuring it is visible as a priority **but it is not mandatory**.

There are three types or "levels" of models for implementing circular procurement:

1. "system level";[34]
2. "supplier level";[35]
3. "zero waste design".[36]

Procurers get to **know the market** (products, suppliers, manufacturers, service providers, etc.) to help them develop a greater understanding of what is already available and what is possible.

Engaging the market can help to:

- Change and improve the procurement plan and management;
- Gathering information on how the market is structured and how it operates;
- Increase your trust and credibility with suppliers and improving relationships with them;
- Create the market conditions needed to deliver the best solution;
- Help agencies to identify opportunities for sustainability and innovation.

[33] By applying term "organization" the guidebook intends to refer to all type of organizations and procuring entities of Piedmont Region.
[34] Which concerns the contractual methods that the purchasing organization can use to ensure circularity. This ranges from supplier take-back agreements, where the supplier returns the product at the end of its life in order to re-use, remanufacture or recycle it, to product service systems, where the contract provides both services and products.
[35] Model describes how suppliers can build circularity into their own systems and processes, in order to ensure the products and services they o er meet circular procurement criteria. "Product level" is related to this, but is focused solely on the products that suppliers to public authorities may themselves procure further down the supply chain.
[36] Focus on product design, its use phase and end-of- life (using buy-sell back, buy-resell and Product Service Systems). In some cases, the best solution may be to buy nothing at all. For example, the organization may be able to share resources or equipment with other authorities. Purchasing re-used, recycled or re-manufactured products can also contribute to the idea of a Circular Economy.

All these information are needed to identify risks related to the specific subject matter. By summarizing, especially three elements of procurement need to change or be in focus in order to promote more circular solutions:

1) Focus on service instead of products
2) Focus on the product's design, use phase and end of life
3) Focus on market dialogue

4.2. PHASE 2 – Functional/technical specifications and labels

The organizations should identify whether a technical or a "functional" approach would be more appropriate for innovation procurement and for achieving a circular result.

Functional (or 'output/ performance-based') criteria will describe the desired result and which outputs (for example, in terms of quality, quantity, and reliability) are expected**. Functional specifications are required Pre-Commercial procurement PCP and for PPI** (see below).

In regular procurement the contracting authority defines technical specifications. **Technical specifications** have two functions:

1) They describe the contract to the market so that companies can decide whether it is of interest to them. In this way they help determine the level of competition.

2) They provide measurable requirements against which tenders can be evaluated. They constitute minimum compliance criteria. Standards have a major role in influencing the design of products and processes, and many standards include environmental characteristics such as material use, durability or consumption of energy or water.

Labels and Eco-labels can be used by contracting authorities that wish to purchase works, supplies or services with specific environmental, social or other characteristics, provided that the requirements for the label are linked to the subject-matter of the contract, such as the description of the product and its presentation, including packaging requirements.

4.3. PHASE 3 – Market analysis: methodology for involving economic operators in the circular procurement process

Circular procurement is most effective if there is a clear understanding of what it is and the reasons for its application.[37]

[37] The awareness and resilience raising activities possibly through seminars/roundtables, in-house newsletters, the organization of intranet for general public could be in place.

Market analysis can be useful to determine whether appropriate alternatives are available which can reduce environmental impact. To keep the stakeholders involved in circular procurement transparency has a crucial role.

The success of any procurement exercise will ultimately be determined by how the market responds to the request. Effective engagement with potential suppliers prior to tendering has several purposes:

- Identify potential bidders and/or solutions
- Build capacity in the market to meet the requirement(s)
- Inform the design of the procurement and contract

The box below summaries the key steps for engagement of economic operators, resilience and interest rising towards participation in circular procurement tenders:

1. **Awareness raising –** resilience, life cycle costing, impact and benefits of circular procurement
2. **Networking –** experience sharing, best practices
3. **Market engagement –** consulting on available capacity
4. **Consulting –** assist on tendering documents preparation

4.4. PHASE 4 – Preparatory stage – defining the requirements and procurers needs, subject matter

In defining the best procurement strategy, the organization should consider at what stages will be able to apply CP criteria or considerations. This activity starts from exploration of the market and choosing the procedures. Before releasing the tender, it conducted market engagement, and completed a Life-Cycle Impact Mapping exercise to identify areas to focus on with regards to environmental and socio-economic risks and opportunities. A useful way to prioritize potential actions is by means of the 'Procurement Hierarchy', which is based on the European Waste Hierarchy: **reduce, reuse, recycle and recover**.[38]

Challenges include extending circular thinking beyond a "financing option", the commitment risk on part of the buyer, a lack of competition (especially within public tenders) and also improving inter-organizational collaboration. In most cases the shift in business model was simply the formalization of the collaboration.

[38] Reduce - the organization is requested to think if really need to procure something at all, or if a solution can be found that does not require the acquisition of new products or materials? Reductions can also be Reuse - When designing a procurement procedure including supplier take-back systems in contracts are one way of ensuring that reuse will happen. Recycle - If a product cannot be reused then designing for recycling is the next alternative in making it circular. This means ensuring that the product purchased recycled into a new product. Recover- In a circular economy, waste is recovered and used for cooking oil into biodiesel, or composting food waste.

4.5. PHASE 5 – Exclusion grounds and selection criteria

The selection of tenderers consists in assessing the tenderers on the basis of the **exclusion grounds** and the **selection criteria** set out in the procurement documents. These rules aim to ensure a minimum level of compliance with environmental law by contractors and sub-contractors. Techniques such as life-cycle costing, specification of sustainable production processes, and use of environmental award criteria are available to help contracting authorities identify environmentally preferable bids.

It is possible to exclude companies that have breached environmental law or have other serious defects in their environmental performance, although they must also be given the opportunity to "self-clean" and cannot be excluded for more than three years on this basis.

The 2014 directives also allow exclusion for violation of a limited list of international environmental conventions.[39]

Exclusion grounds are provided by EU Directives. Some of them are mandatory for all EU Member States other are voluntary implemented at national level by choice of EU Member States. National contracting authorities are obliged to use them as provided at national level.

Selection criteria may be used by a contracting authority to establish whether an economic operator is qualified to perform a specific contract:

- Personal situation of the economic operator:
  - mandatory grounds for exclusion
  - optional grounds for exclusion
- Suitability to pursue the professional activity
- Economic and financial standing
- Technical and/or professional ability.

Violations of environmental law can also be used as grounds to refuse to award a contract to an operator, to reject an abnormally low tender, or to require replacement of a subcontractor.

Specifications can be categorised as Functional, Performance, or Technical. It is common though to use the term "Technical Specifications" to refer to specifications in general. Functional specifications can refer to performance requirements.

4.6. PHASE 6 – Award procedures

R&D can cover activities such as solution exploration and design, prototyping, up to the original development of a limited volume of first products or

[39] E.g.: Vienna Convention on the ozone layer, Basel Convention on hazardous waste, Stockholm Convention on persistent organic pollutants, PIC Convention (hazardous chemicals/pesticides). E.g. EU Directive 2014/24, Annex X.

services in the form of a test series. "Original development of a first product or service may include limited production or supply in order to incorporate the results of field testing and to demonstrate that the product or service is suitable for production or supply in quantity to acceptable quality standards". R&D does not include commercial development activities such as quantity production, supply to establish commercial viability or to recover R&D costs, integration, customisation, incremental adaptations and improvements to existing products or processes.

Research and development, including eco-innovation and social innovation, are among the main drivers of future growth and have been put at the centre of the Europe 2020 strategy for smart, sustainable and inclusive growth. Public authorities should make the best strategic use of public procurement to spur innovation and circular procurement.

EU Directives on public contracts shall only apply to specific public service contracts for **research and development services**[40] provided two conditions are fulfilled:

(a) the benefits accrue **exclusively** to the contracting authority **for its use in the conduct of its own affairs**, and

(b) the service provided is **wholly remunerated by the contracting authority**.

"Pre-commercial procurement" is intended to describe an approach to procuring R&D services other than those where "the benefits accrue exclusively to the contracting authority for its use in the conduct of its own affairs, on condition that the service provided is wholly remunerated by the contracting authority. PCP can be used when there are no near-to-the-market solutions yet that meet all the procurers' requirements and new R&D is needed to get new solutions developed and tested to address the procurement need. PCP can then compare the pros and cons of alternative solutions approaches and de-risk the promising innovations step-by-step via solution design, prototyping, development and first product testing. PCP is a public procurement of R&D services that does not include the deployment of commercial volumes of end-products.

Pre-commercial Procurement "deals with the procurement of those R&D services not falling within the scope of this Directive. Those models would continue to be available, but this Directive should also contribute to facilitating public procurement of innovation and help Member States in achieving the Innovation Union targets". "Pre-commercial procurement" regards a R & D activity which has the aim of reaching the development of a prototype and a different set of agreement can be provided for the Intellectual property of the prototype that could be developed (not only for CA but also permitting the private company to use it, that's way pre commercial procurement can

[40] which are covered by CPV codes 73000000-2 to 73120000-9, 73300000-5, 73420000-2 and 73430000-5.

be awarded without the payment of all the research activity and cost less to Ca because of the common effort to develop a solution that satisfy the need of CA and potentially can become the new solution also for others

Public procurement of innovative solutions (PPI) can be used when challenges of public interest can be addressed by innovative solutions that are nearly or already in small quantity on the market. PPI can thus be used when there is no need for procurement of new R&D to bring solutions to the market, but a clear signal from a sizeable amount of early adopters/launch customers that they are willing to purchase/deploy the innovative solutions if those can be delivered with the desired quality and price by a specific moment in time.

Innovation procurement refers to any procurement that has one or both of the following aspects:

- buying the process of innovation – research and development services – with (partial) outcomes;
- buying the outcomes of innovation created of others.

In the first instance, the public buyer buys the research and development services of products, services or processes, which do not exist yet. The public buyer describes its need, prompting businesses and researchers to develop innovative products, services or processes to meet the need. In the second instance, the public buyer, instead of buying off-the-shelf, acts as an early adopter and buys a product, service or process that is new to the market and contains substantially novel characteristics.

If a certain product or service is not currently available on the market the contracting authority could establish an ‘innovation partnership’. **Innovation partnership** is a new type of public procurement procedure provided for in Directive 2014/24/EU.

The main feature of the innovative partnership is that the innovation occurs during the performance of the contract. In most other procedures, the public buyer already knows what type of solution it is buying: innovation occurs in the pre-contracting phase and usually ends with the conclusion of the contract when the exact features of the solution are agreed. In an innovation partnership, the public buyer is entering into a contract with the best potential supplier(s) of innovation. The supplier(s) is (are) expected to create the innovative solution and ensure its real-scale implementation for the public buyer. The public buyer’s needs should be described with sufficient precision to allow potential tenderers to understand the nature and scope of the challenge and have sufficient information to decide whether or not to participate.

The innovation partnership process takes place in three phases:

1. The selection phase occurs at the very beginning of the procedure, when one or more of the most suitable partners are selected on the basis of their skills and abilities. The contracts establishing the innovation partnership are subsequently awarded based on the best price-quality ratio proposed.
2. In the next phase, the partner(s) develop the new solution in collaboration with the public buyer. This research and development phase can be further divided into several stages designated for evaluating concepts, developing prototypes and/or testing performance. During each stage the number of partners may be reduced on the basis of predetermined criteria.
3. In the commercial phase, the partner(s) provide the final results.

The other procedures applied by procurers are as follows[41]:

- In an **open procedure**, any operator may submit a tender.[42]

- In a **restricted procedure**, the environmental technical capacity in a prior stage can be assessed and also limit the number of operators invited to tender.[43]

-The **competitive procedure with negotiation** and **competitive dialogue procedures** can be used by public authorities for purchases which require an element of adaptation of existing solutions; design or innovation; or in certain other circumstances.[44]

The competitive dialogue, in which any economic operator may submit a request to participate in response to a contract notice by providing the information for qualitative selection that is requested by the contracting authority. In this case contracting authorities have to provide information on needs requested. Competitive dialogues may take place in successive stages in order to reduce the number of solutions to be discussed during the dialogue stage by applying the award criteria laid down in the contract notice.

Only in exceptional situations (e.g. where extreme urgency brought about by events unforeseeable by the contracting authority concerned that are not attributable to that contracting authority makes it impossible to conduct a regular procedure even with shortened time limits), contracting authorities should have the possibility to award contracts by **negotiated procedure without prior publication**.

Moreover, framework agreements can be award with an open procedure---has been widely used and is considered as an efficient procurement tech-

[41] EU Directive 2014/24, Art. 26 **Choice of procedures**
[42] EU Directive 2014/24, Art. 27, **Open procedure**
[43] EU Directive 2014/24, Art. 28, **Restricted procedure**
[44] EU Directive 2014/24, Art. 29, **Competitive procedure with negotiation**

nique (not an award procedure) throughout Europe. Its use can favour innovation and access to the relevant markets.

Framework agreements may be concluded according to five different models. With one or more economic operators by establishing all the terms of the agreement to be signed, or vice versa, without establishing all the terms providing a reopening of competition (so-called “mini-competition”) so that contracting authorities may tailor the requests to their needs in the purchasing phase. The 2014/24 Directive provide for a mixed or hybrid model “closed but with the possibility to reopen the competition”. The hybrid model allows public entities can purchase directly through the framework agreement (as in the “closed” model) or reopen the competition among the economic operators party to the FA (this is possible only if allowed by the terms and conditions indicated in the procurement documents). It is the contracting authority that needs to use FA which decides whether it might be convenient to reopen the competition among the economic operators inside the master contract.

4.7. PHASE 7 – Award criteria

The evaluation of tenders should be carried out by an evaluation committee according to:

- **lowest price,** in which only price is evaluated;
- **most economically and advantageous (MEAT**) in which is evaluated the price (using a cost-effectiveness approach, such as life-cycle costing) and technical performance indicated in the contract notice with their relative weighting.

EU Directive 2014/24, Art. 67:

“1. Without prejudice to national laws, regulations or administrative provisions concerning the price of certain supplies or the remuneration of certain services, contracting authorities shall base the award of public contracts on the most economically advantageous tender.

2. The most economically advantageous tender from the point of view of the contracting authority shall be identified on the basis of the price or cost, using a cost-effectiveness approach, such as life-cycle costing in accordance with Article 68, and may include the best price-quality ratio, which shall be assessed on the basis of criteria, including qualitative, environmental and/or social aspects, linked to the subject-matter of the public contract in question. Such criteria may comprise, for instance: (a) quality, including technical merit, aesthetic and functional characteristics, accessibility, design for all users, social, environmental and innovative characteristics and trading and its conditions; (b) organisation, qualification and experience of staff assigned to performing the contract, where the quality of the staff assigned can have a significant impact on the level of performance of the contract; or (c) after-sales service and technical assistance, delivery conditions such as

delivery date, delivery process and delivery period or period of completion. The cost element may also take the form of a fixed price or cost on the basis of which economic operators will compete on quality criteria only. Member States may provide that contracting authorities may not use price only or cost only as the sole award criterion or restrict their use to certain categories of contracting authorities or certain types of contracts. See also EU Directive 2014/25, Art. 82.

3. Award criteria shall be considered to be linked to the subject-matter of the public contract where they relate to the works, supplies or services to be provided under that contract in any respect and at any stage of their life cycle, including factors involved in: (a) the specific process of production, provision or trading of those works, supplies or services; or (b) a specific process for another stage of their life cycle, even where such factors do not form part of their material substance.

4. Award criteria shall not have the effect of conferring an unrestricted freedom of choice on the contracting authority. They shall ensure the possibility of effective competition and shall be accompanied by specifications that allow the information provided by the tenderers to be effectively verified in order to assess how well the tenders meet the award criteria. In case of doubt, contracting authorities shall verify effectively the accuracy of the information and proof provided by the tenderers.

5. The contracting authority shall specify, in the procurement documents, the relative weighting which it gives to each of the criteria chosen to determine the most economically advantageous tender, except where this is identified on the basis of price alone. Those weightings may be expressed by providing for a range with an appropriate maximum spread. Where weighting is not possible for objective reasons, the contracting authority shall indicate the criteria in decreasing order of importance"

a) Life Cycle Costing

When focusing on resource efficiency, products tools like Total Cost of Ownership (TCO) or Life Cycle Costing (LCC) becomes relevant[45].

Many different backgrounds and disciplines have been interested in calculating the optimal allocation of budget by estimating the costs that incur during the whole life cycle of a product, service, project, investment, etc. The main cost categories that can be included in an LCC analysis are those related to the following five different life cycle stages: Research, development and design; Primary production; Manufacturing; Use; Disposal.

The awarding phase is not the only relevant moment for using LCC in the procurement. Analyzing the whole life-cycle costs of a product or service can be useful at different stages:

[45] EU Directive 2014/24, Art. 68. **Life-cycle costing**

- At the preparatory stage: to assess the LCC of the current situation.
- Before tendering: to roughly assess different proposals to help guide market engagement activities before tendering, or to narrow down the different technological solutions to be considered.
- During tendering: to compare the LCC and the anticipated CO2 emissions of different offers, during the evaluation phase.
- After tendering: to evaluate and communicate the improvements of the purchased product in comparison to the current situation and/or other products and to communicate results.

One of the recommendations of the European Commission working group on Life Cycle Costs in Construction is to carry out LCC at early design stage, where the opportunities for modifying the costs of a project are greatest. There are many external factors that can affect enormously the outcomes of an LCC analysis:

- Market price variability of products and services
- Electricity, water and gas prices
- Taxes, subsidies and incentives
- Inflation, discount rate and other economic elements
- Waste disposal regulations

Thus, the final result of an LCC can be highly dependent on these external factors, which usually are not related at all with the environmental quality of the product or service analysed. The conclusions highlighted that the final costs (and thus the LCC results) depends highly on the tax policy of the different Member States.

LCC analysis would be then just one piece of a wider number of elements to take into account when preparing and evaluating a public procurement process. Environmental impacts, as well as social conditions or innovation could be other additional issues to take into account in the procurement process.

b) Variants

Public buyers may allow tenders with “variants”: one or more alternative solutions usually based on alternative technologies or processes, can accompany the offer that closely matches the technical specifications. Suppliers can propose, alongside a traditional “safe” solution, a more innovative solution.[46]

The use of variants is most efficient when combined with functional requirements and award criteria that enable to compare various solutions in terms of their performance, efficiency, cost effectiveness, versatility or durability. Without these parameters, it is difficult to compare the variants.

[46] EU Directive 2014/24, Art. 45 **Variants**

4.8. PHASE 8 – Contract performance terms and conditions

Contract performance clauses are used to specify how a contract must be carried out. Environmental considerations can be included in contract performance clauses (EU Directive 2014/24, Art. 70; EU Directive 2014/25, Art. 87).[47]

Compliance with contract clauses should be carefully monitored during the execution phase, with responsibility for compliance and reporting clearly indicated in the contract. In case of modification of the contract during its execution EU limits should be respected.[48] In order to discourage breaches of environmental commitments, adequate sanctions should be provided under the contract, in compliance to EU Directive 2014/24, and EU Directive 2014/25.[49]

Suppliers may be required or encouraged to take responsibility for keeping the product or material in the cycle after use. Circular procurement contracts typically fall into one of the following categories:

- **Existing product improvement contract:** Applicable to contracts for the improvement, further development, repair, renovation or remediation of products instead of buying a new one.
- **Long service life and/or second-hand equipment contract:** Where more products are needed, contracting entities may request products that have been designed in such a way as to last a long period of time. These products usually meet high quality requirements - can be repaired, have spare parts available, can be dismantled and recycled. Contracting entities should also consider the possibility of meeting their needs with second-hand equipment in dialogue with the market.
- **Buy-back/reselling agreement:** Buying-in means buying back the product by the supplier and ensuring optimum preservation of the value through reuse. The resale contract includes an agreement on who (which third party) will have the product after use, usually for reuse or recycling. Alternatively, separate contracts relating specifically to reuse may be introduced.
- **Re-use and recycling service contract:** It may be concluded with a major supplier of new equipment or a subcontractor (third party) specialising in the reuse and recycling of the equipment in question. It can also be concluded as a separate contract, which is particularly useful when equipment has already been purchased.

[47] EU Directive 2014/24, Art. 70, **Conditions for performance of contracts** "Contracting authorities may lay down special conditions relating to the performance of a contract, provided that they are linked to the subject-matter of the contract within the meaning of Article 67(3) and indicated in the call for competition or in the procurement documents. Those conditions may include economic, innovation-related, environmental, social or employment-related considerations". See also EU Directive 2014/25, Art. 87.
[48] EU Directive 2014/24, Art. 72, **Modification of contracts during their term**.
[49] EU Directive 2014/24, Art. 73, **Termination of contracts** .

- **Product/service contract:** The supplier retains ownership of the product and the user pays after use or according to the performance, e.g. rental/leasing to extend the lifetime of the product. Compliance with the provisions of the contract should be closely monitored during the execution phase, with responsibility for compliance and reporting clearly stated in the contract.

CONCLUSION

Lessons learnt: Identification of obstacles while applying CP

As a conclusion, the section provides an overview of the analyses on the identification of the common obstacles from the cases studies which faced the procurers while applying the CP approach for the procuring different format goods, works and services.

- The investigations show that the procurers from different case studied identified the following common obstacles:
- Identification of priorities and principles to be clarified at the beginning of Procurement;
- Market engagement to ensure transparency and the confidence of suppliers, and to understand the potential challenges of certain solutions;
- Engagement of technical and environmental experts for identifying the right approach and choosing the right solutions;
- The complexity of the sector to structure the tender on the basis of a needs
- The question of subdivision of the tender into the lots to promote accessibility to small and medium-sized enterprises sometimes can be tricky and have an opposite result.

The solutions and recommendations on how to meet, overcome and/or mitigate these obstacles provided in the next section though step by step guidance on how to implement circular procurement, how to increase the circularity of regional companies and boost their participation in circular procurement.