

The European Commission's
**INTELLIGENT CITIES
CHALLENGE**

This document was compiled by the Municipality of Central Corfu & Diapontia Islands. The information and views set out in this report are those of the City and do not necessarily reflect the official opinion of EISMEA or of the European Commission. Neither EISMEA, nor the European Commission can guarantee the accuracy of the data included in this document. Neither EISMEA, nor the European Commission or any person acting on their behalf may be held responsible for the use which may be made of the information contained therein.

September 2022

Municipality of Central Corfu & Diapontia Islands (MCCDI) : Intelligent City Transformation Overview

ICC Final Deliverable



Executive summary

The municipal authority of the new Municipality of Central Corfu and Diapontia Islands have embraced the vision to transform the new Municipality (MCCDI) into one of the most sustainable islands in Europe and to conform to this vision, the Department of European Affairs, Development and Digital Governance with the assistance of the Scientific Advisor to the Mayor, Mr. Victor Dimoulis, succeeded in becoming part of the «100 Intelligent Cities Challenge - ICC» programme.

The City Goals that the city of Corfu chose during her participation in the ICC, in order to establish effective strategies and reduce the total carbon footprint of the municipality and mostly to solve the biggest problem that the island of Corfu has ever faced (the waste management issue) are:

City goal 1- “Waste management and circular economy” (Prior City goal)

City goal 2- “e-Government and digitizing public services”

City goal 3- “Smart and green mobility and transport”

City goal 4- “Scaling up renewable energy solutions and energy-efficiency”

The MCCDI will continue its efforts to reduce the total carbon footprint of the municipality and more specific establish effective strategies for the circular economy, renewable energy solutions, and green mobility, while simultaneously aspiring to simplify citizens’ lives through e-Government and by digitizing public services to make our city fit for the European Digital Age and increase citizens’ participation.

The program has already provided us guidance and advice from experts in the thematic track of green economy and local green deals, but it has also given us the opportunity for the first time in our history, to form specific thematic networks with other cities in Europe that have similar problems to ours or with mentor-cities that have already dealt with these problems successfully and we can follow their example or efforts.

Mayor Foreword

As the Mayor of the city of Corfu, from the very first day, I strongly believed that our participation in the 100 ICC Initiative, would help us to achieve our vision of transforming Corfu into a smart, green, and sustainable city.

The ICC initiative had come at a very critical juncture for our municipality when we were trying to shed the burdens of the past and look to a better future. We, therefore, felt that this was a unique opportunity for our municipality to implement the necessary policy in general and to increase the number of people who would be benefited from that.

The truth is that until today with the help of the ICC initiative we have made huge steps in all of our City Goals, and especially on our Prior Goal which is the “Waste management and circular economy”, but there is more work to be done until we fulfill our expectations.

The city of Central Corfu & Diapontia Islands pursued an EU-supported transformation over four main stages, and this document details that journey by these sections

Overview to the city's journey and structure of this document



1 Preparation & assessment

5 months:
September 2020 – January 2021



2 Ambition & roadmap

3 months:
February 2021 – April 2021



3 Implementation

15 months
May 2021 – July 2022



4 Review & way forward

2 months
August 2022 – September 2022

*Reported as
one section*

Summary

Find out **where a city is, where it should go** and who in the ecosystem is going to **mobilise make things happen**

Develop a **concrete plan** to achieve **measured improvements**, collaborating with the community; push action with immediate benefits

Get “big moves” **done** and **see results**; take **action in partnership** with others

Measure success, and commit to **keep connections and improvements going**

Section

1

**Municipality of Central Corfu & Diapontia
Islands (MCCDI) : Preparation and assessment**

ICC transformation

September 2020 to January
2021

Introduction 1/2

The **Municipality of Central Corfu and Diapontia Islands** (hereafter "MCCDI") is based on the island of Corfu, which is the westernmost part of Greece, border nation of Europe to the east, and forms part of the Region of the Ionian Islands.

It is a new municipal authority, formed in 2019 and is the largest of the three (3) different Municipalities that were formed following the division of the formerly united Municipality of Corfu. The newly formed Municipality consists of the City of Corfu (new town, old town and suburbs) and the Diapontia islands (a complex of islands to the northwest).

Corfu Island is an internationally famous tourist destination. It possesses both a rich cultural heritage and all the aspects of a Greek island that make it appealing to tourists, who visit for at least eight (8) months each year, thus significantly increasing the population served by the municipal authorities.

Europe is currently leading the way in developing and applying environmental-friendly policies (like Green Deal and Digital Strategy). Numerous European cities have successfully been able to transition from a linear to a circular economy, reduce greenhouse emissions, promote green mobility and offer their citizens access to digital governance systems that are user-friendly and encourage integration and communication.

Unfortunately, Corfu Island at the recently past received significant bad publicity in international press due to the accumulation of waste on the streets following the closure of the only waste disposal site that had exceeded capacity. Thankfully, this has now been resolved, but it is still a work in progress, as is enhancing the recycling rate, which was remaining low until 2019 (10% - 11% of the total refuse volume in 2019).

Introduction 2/2


Our Municipality dedicates all this time its efforts to effectively apply all necessary measures to maximize the efficiency and keep up with the rest European cities that are ahead of us in the following fields :


- 1. The waste management, recycling up-scaling, and transition to a circular economy.*
- 2. The smart and green mobility and transport that has hitherto remained in theory only.*
- 3. The scaling up of renewable energy and energy-efficient solutions that had also remained fruitless.*
- 4. The digital transformation (e-Government and digitizing public services) of the municipal services.*


More information can be found in our ["Meet the city" profile in ICC's site](#)

City needs: State of the city overview

Significance of insight to what we want to do on the ICC

 Of critical importance to ICC journey and we should be working to change

 Of importance to ICC journey, and we should act to change this along the journey as opportunity presents

 Contextually relevant, but not major point of attention in ICC and unlikely to be impacted on the journey

The state of City of Corfu today

*Due to the geographical position of the island, but also due to its long history and cultural influences from Britain, France and Venice the City of Corfu is one of **UNESCO's World Heritage Sites**. And whilst it is very attractive to millions of tourists every year, it hasn't yet become "a smart city".*

The Mayor and the new municipal authority had embraced the vision to transform the new Municipality of Central Corfu and Diapontia Islands (MCCDI) into one of the most sustainable islands in Europe well before the previous elections. To comply with this vision there is a necessity to initially provide the City of Corfu with all the elements that would turn the City of Corfu into a "smart city".

Eager to solve one of the biggest problems that the island of Corfu had ever faced (the waste management issue) the new municipal authority focused all of its efforts to establish a vital collaboration between all departments of the Municipality and the new executive staff (even though it had been reduced in number) and follow the principles of circular economy.

Key insights from city performance analysis

Higher performance observed

- 1 Circular economy principles are mainstreamed into specific policy levers such as urban planning, asset management and public procurement.
- 2 Most of the population and visitors have access to quality essential health-care services and access to safe, effective, high-quality and affordable essential medicines and vaccines
- 3 Most of our city has wireless internet access and more specifically is covered by 3G/4G networks.
- 4 Our city is making partial use of digital technologies to improve the quality of tourism services that is providing to our guests.
- 5 A large share of the population and our visitors have access to public transport within 500m walking distance.

Lower performance observed

- 1 Our city wasn't compliant with the Waste Framework Directive's (2008/98/EC) target of 50% of the municipal waste (household waste and waste similar in nature and composition to household waste) to be recycled by 2020.
- 2 Unfortunately, there are no innovation labs or accelerators in the city to provide active support to any entrepreneurial activity or start-ups until today.
- 3 No significant specific attention has been given to green and blue infrastructure in major urban development projects until the recently past.
- 4 Our city has critical areas, assets, communities and sectors that are considered to be particularly vulnerable to current or/and future climate risks.
- 5 Our city isn't providing a significant part of its services digitally and most of them are mainly simple information.



City ecosystem

- **Shared aspirations and vision** – All stakeholders of the city agree that we are in a desperately need to set the necessary infrastructures so we can solve problems that are existing for many years now like waste management, green and smart mobility and energy and digitizing the public services & become a sustainable intelligent city – island.
- **What we bring and how we work together** – Municipality of Central Corfu and Diapontia Islands as one of the two main entities responsible for policy administration and implementation has several successful partnerships during the years (as unified Municipality of Corfu) with the rest of our ICC local team. **Ionian University** always bring innovative ideas and support to the MCCDI and the latest example is an Interreg Program on the "hot" area of Waste Management with the name **E-HORECA WANET**.

On the other hand, the **Technical Chamber of Greece/ Regional Department of Corfu** is the responsible entity that represents the professional engineers of the Island. It acts as an advisor and/or partner to the Municipality in technical matters within their remit relating to common good and we have active partnerships at the moment especially in water and wastewater treatment.

- **Urban resources for transformation** – As we have already mentioned, Corfu Island recently received significant bad publicity in international press due to the accumulation of waste on the streets. Considering that we are a world – famous tourist destination all the city stakeholders are aware for the large-scale changes that need to be done in a short time. The Municipality is committed to providing all required funds, staffing and time allocation to succeed it.

ICC strategy: Vision and ambition statements

Overarching ICC city vision

"We hope that through ICC guidance, within the next 4-5 years, our newly formed Municipality and dedicated staff will learn how to use resources in efficient, effective, and reproducible ways, in order to achieve our vision of building a smart and green city, consistent with our commitment to comply with the United Nations' SDG indicators, where citizens will be proud to live in and visitors happy to come back to all year around."

Ambition statement 1

Establish a well-based separate collection for most of the waste categories usually applies and ensuring sustainable management of resources based on the 3Rs

Ambition statement 2

Developing a network of smart sensors to improve the quality of the urban environment.

Ambition statement 3

Development of smart city solutions to inform residents and visitors of the city of Corfu about the available Smart and Sustainable Urban Mobility choices.

Ambition statement 4

The promotion of thematic tourism through applications (web, mobile), with emphasis on the Historic Center of Corfu, aiming to develop digital interactive and multichannel services to visitors, promoting the city's tourism and culture as well as the local enterprises and products.

City strategy: justification

The Mayor and the new municipal authority had embraced the vision to transform the City of Corfu into a smart, green, and sustainable city of the 21st century and to reduce the total carbon footprint of the municipality, well before the previous elections.

All the axes of action chosen by our city aim to reduce the carbon footprint of our Municipality, so every success that comes in all axes, contributes to the achievement of this specific vision. Mainly the axis “e-Government and digitizing public services” interacts directly and strengthens every time at least one of the remaining 3 action axes of the city.

On all the way of our "ICC trip" we were always focusing to:

- Start with smaller projects so we can deliver “quick – wins” and on projects with measurable results.
- Dedicate a team from the starting point until the last stage in every solution.
- Be flexible with everything and everyone but not with the final result.
- Put the citizen in the center of every solution and share your vision in order to create motivation & interest.

In every solution we were deciding to implement, we were trying to answer at the following questions and check if it was the correct one in each case.

- *How much involved or eager to involve is the local ecosystem in each solution?*
- *Is the solution geographically cover all the citizens of the municipality?*
- *Is the solution in a permanently base ?*
- *Is the solution demand less human and financial resources to solve the problem than before?*

City solutions and delivery strategy

Priority 1. Waste Management and Circular Economy



Solution #1

Find the best choice for each case to set up effective public infrastructures to successfully implement separate collection to all the areas of the Municipality.



Description

The aim is to ensure that we will find, get and provide to our citizens all the necessary equipment and the public infrastructures so they can actively participate at the 3Rs process and especially at the very important “separation at source” stage for their household waste.



Relevant to which city ambition statement

Establish a well-based separate collection for most of the waste streams usually applies and ensuring sustainable management of resources based on the 3Rs.



Benefit to city

It will help us to solve the biggest problem that the island of Corfu had ever faced (the waste management issue) and to introduce and implement (as we supposed to) circular economy to our island.



Business model

Corfu ICC Team will provide active help at any stage to the Municipality's services that will be responsible to implemented it.



Parties interacting

The responsible waste collection agency will deliver the final outcome. In addition, Corfu ICC Team will provide active help at any stage.



Blockers and risks

The reduction in the number of skilled executive staff and workforce that followed the division of the former united Municipality of Corfu, is causing reasonable delays to the implementation of any new project.



Pending uncertainties

Covid-19 pandemia is causing further delay to the implementation of any new project.

Willingness of the households to support the program.

City solutions and delivery strategy

Priority 1. Waste Management and Circular Economy



Solution #2

Smart management of bins and smart fleet management



Description

Using smart sensors to as many waste or recycling bins as possible to monitoring their condition and get data so we can create the best routes according to their fullness. At the same time, we will also put GPS trackers to the Municipality's garbage trucks, so the citizen know when the trucks are close to their area.



Relevant to which city ambition statement

Developing a network of smart sensors to improve the quality of the urban environment.



Benefit to city

Affective waste collection for all the different waste streams (recycling materials, organic, waste, etc.) and further carbon footprint reduction of the Municipality because of the lower gas emissions that will come from our garbage trucks as a result from the optimized routes that will follow.



Business model

Corfu ICC Team will provide active help at any stage to the Municipality's services that will be responsible to implemented it.



Parties interacting

The responsible waste collection agency will deliver the final outcome probably with the help of the Ionian University.

In addition, Corfu ICC Team will provide active help at any stage



Blockers and risks

No one to our knowledge.



Pending uncertainties

How the workforce of the waste collection agency of the Municipality will welcome the new reality to their everyday duties.

Security of the equipment in public places.

Section

2

**Municipality of Central Corfu & Diapontia
Islands (MCCDI) : Ambition and roadmap**

ICC Transformation

February 2021 to May 2021

Solution 1

Solution 1

Find the best choice for each case to set up effective public infrastructures to successfully implement separate collection to all the areas of the Municipality.



Solution 1 : Short description

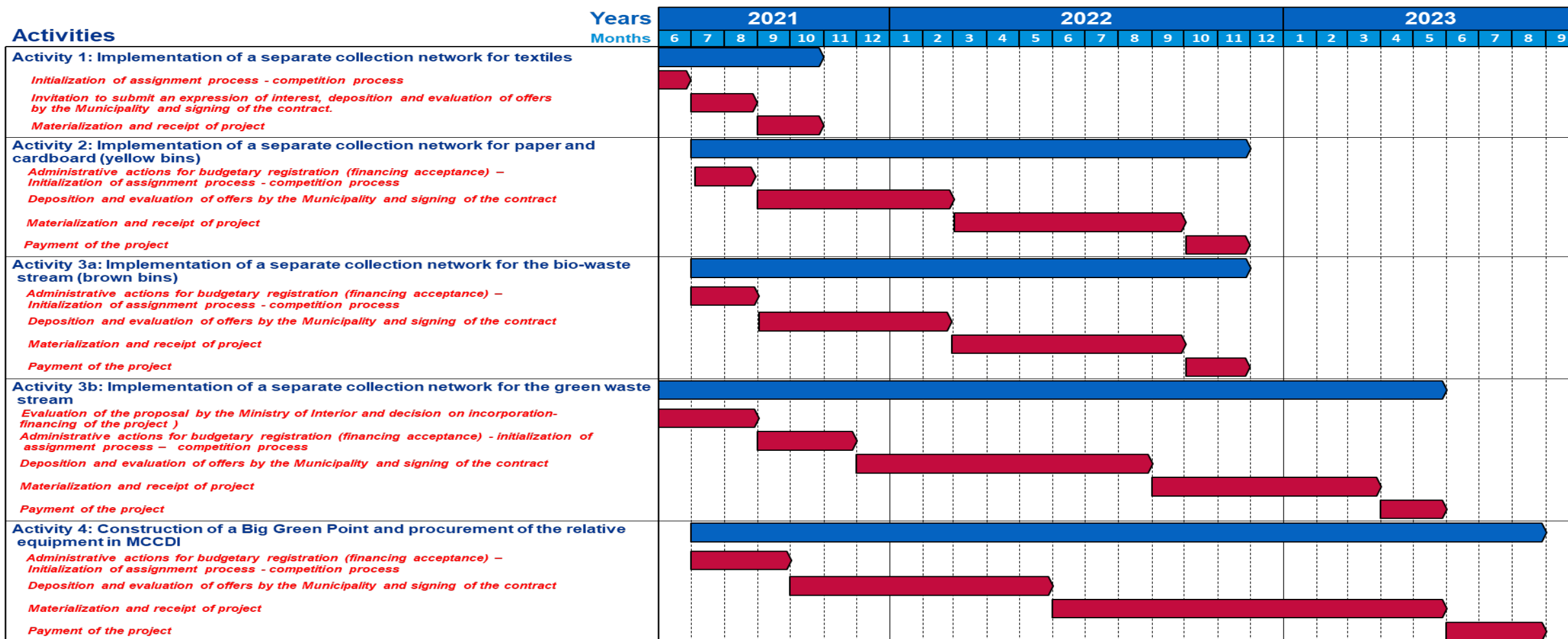
This particular solution will be the collective outcome of many, smaller, relevant actions that will create a complete collection network for separate waste streams, which primarily make up the Municipal Solid Waste. Each separate waste stream will subsequently be processed through alternative waste management, according to the principles of circular economy.

The Activities that will be included in this solution are the following (in more details in the Appendix, slides 59-64):

- Activity 1: “Implementation of a separate collection network for textiles”
- Activity 2: “Implementation of a separate collection network for paper and cardboard (yellow bins)”
- Activity 3a: “Implementation of a separate collection network for the bio-waste stream (brown bins)”
- Activity 3b: “Implementation of a separate collection network for the green waste stream”
- Activity 4: “Construction of a Big Green Point and procurement of the relative equipment in MCCDI”
- Activity 5: “WASTE RREACT - Integrated waste management facilities for boosting recycling and composting in 7 Regions through cross-border activities”
- Activity 6: “Procurement of Mobile Green Point(s) in MCCDI”
- Activity 7: “Procurement of 5 Big Recycling Corners with deposit refund schemes (DRS) in MCCDI”
- Activity 8: “Procurement of 10 Recycling Corners with deposit refund schemes (DRS) in MCCDI”

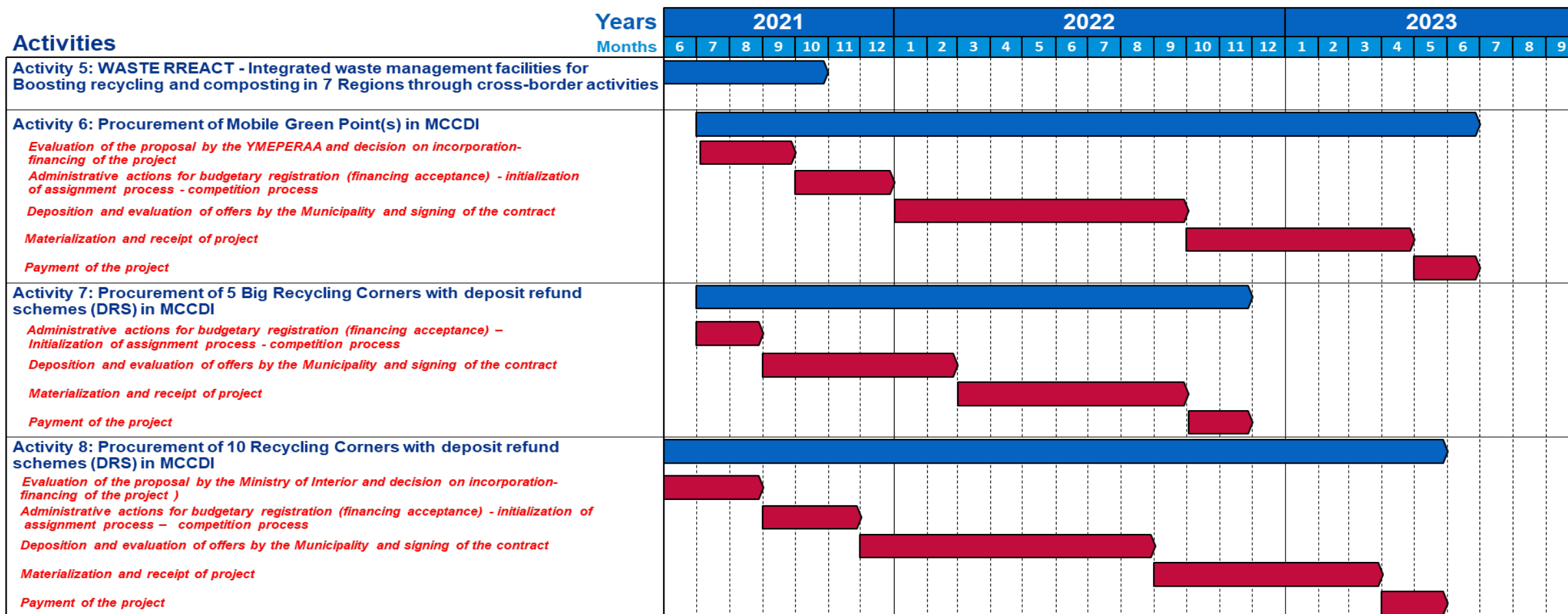
High level implementation roadmap for Solution 1

("10000m plan") (1/2) (original planning, subjected to changes)



High level implementation roadmap for Solution 1

("10000m plan") (2/2) (original planning, subjected to changes)



Solution 2

Solution 2
Smart management of
bins and smart fleet
management

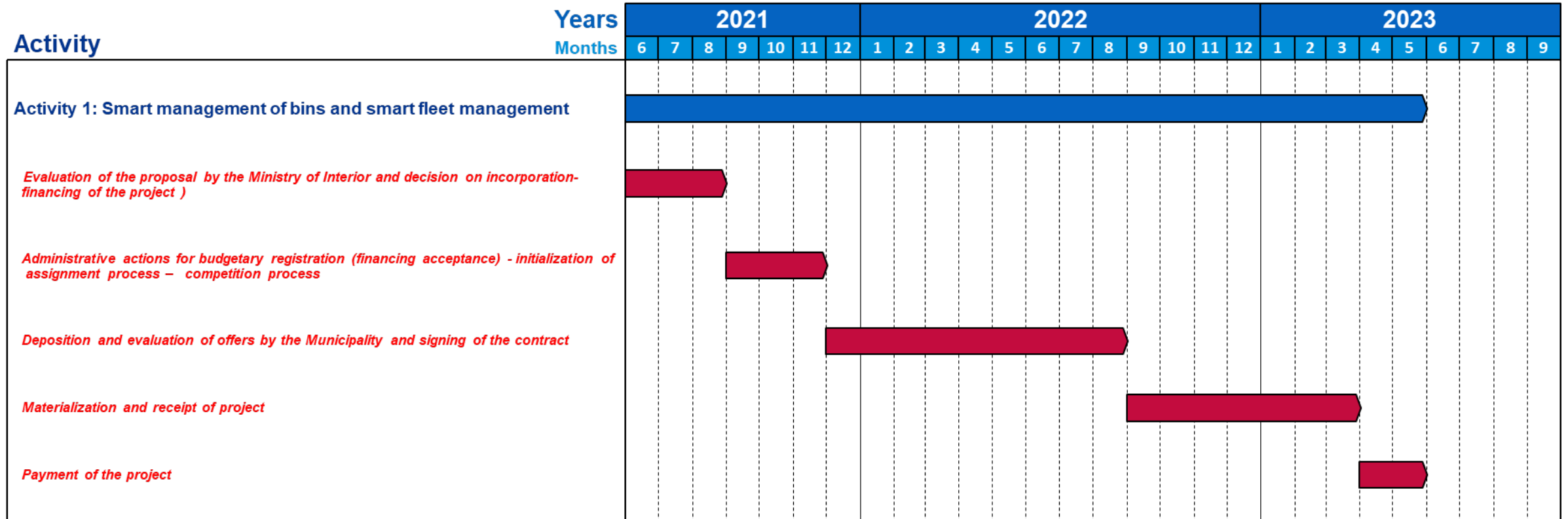


Solution 2 : Short description












The second solution will be the conversion of separate waste stream collection to separate waste stream “smart” collection. The funding source for this solution derives exclusively from the "**DIGITAL TRANSFORMATION OF OTAs**" project for the digital transformation of local government organizations.

It comprises the installation of specialized telematics devices to **50 municipal vehicles** and **1000 bins** for all waste streams. This will allow the total oversight of the entire vehicle fleet, and will facilitate upgrading the separate waste stream management, thus streamlining the collection routes and reducing the Municipal carbon footprint.












High level implementation roadmap for Solution 2 ("10000m plan") (original planning, subjected to changes)



Initiative charter: Find the best choice for each case to set up effective public infrastructures to successfully implement separate waste collection to all the areas of the Municipality

Strategy	Stakeholders involved	Inputs, outputs, outcomes and impacts
<p>Description</p>  <p>This particular solution will be the collective outcome of many, smaller, relevant actions that will create a complete collection network for separate waste streams, which primarily make up the Municipal Solid Waste. Each separate waste stream will subsequently be processed through alternative waste management, according to the principles of circular economy</p>	<p>Solution lead: Municipality of Central Corfu and Diapontia Islands</p>  <p>Solution working team: A team from MCCDI existing staff will be defined as project team for this solution</p> 	<p>Source of funding and estimated cost</p>  <ul style="list-style-type: none"> ➤ National Funding opportunities (NSRF 2014-2020, NSRF 2021-2027, YMEPERAA, Antonis Tritsis, Interreg- IPA CBC Greece- Albania, FILODIMOS II. ➤ Municipality's own resources
<p>Link to vision</p>  <p>Smart and green city, complied with the United Nations' SDG indicators</p>	<p>Contributors: The responsible waste collection agency will deliver the final outcome. In addition, Corfu's ICC Team will provide active help at any stage</p> 	<p>Solution maturity outputs</p>  <p>The solution is completed by 60%</p>
<p>Link to ambition statement</p>  <p>Establish a well-based separate collection for most of the waste categories usually applies and ensuring sustainable management of resources based on the 3Rs.</p>	<p>Risks and mitigation</p>  <ul style="list-style-type: none"> ➤ Procurement delays. ➤ Citizens' acceptance and compliance. 	<p>City performance outcomes and impacts</p>  <p>Until now, the MCCDI has managed to offer its citizens at least one option of a proper network for separate collection of in all alternative waste management systems that have received national approval and even in some additional alternative waste management systems that are in the process of getting the green light and final licensing. The creation of separate collection networks for paper/cardboard, used cooking oils & bio-waste are on-going projects and has initiated all the procedures for the short acquisition of equipment, as well as the acquisition of more equipment options for the better organization of a separate collection of waste of many categories (Recycling Corners, Mobile Green Points, small Green Points, Large Green Points, etc.).</p>
<p>Expected impact and timing</p>  <p>All the activities & actions will take place and conclude in the interval 06.2021 – 12.2023 (*the exact time subjects to change)</p>		

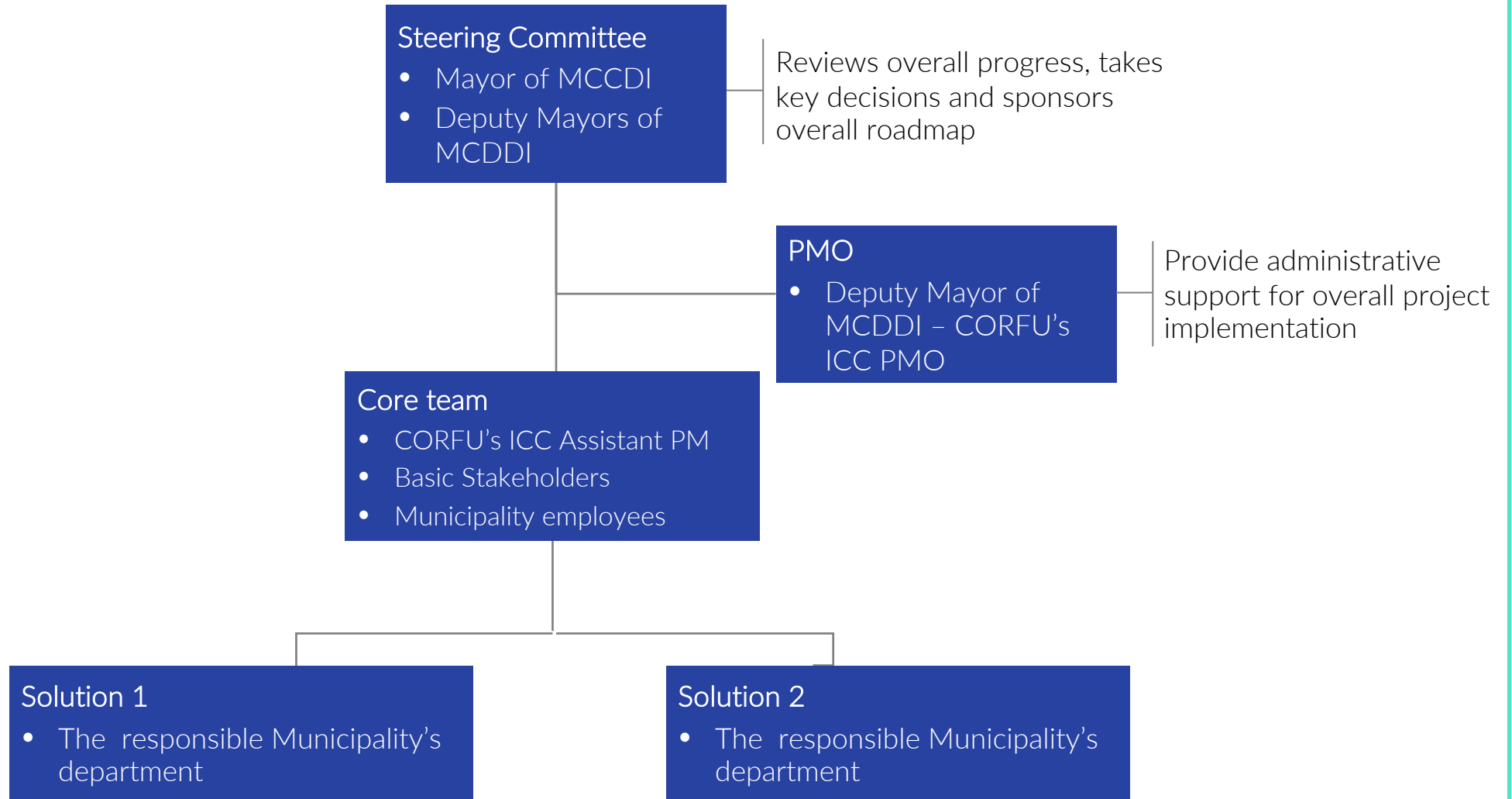
Initiative charter: Smart management of bins and smart fleet management

Strategy	Stakeholders involved	Inputs, outputs, outcomes and impacts
<p>Description</p>  <p>The second solution will be the conversion of a separate waste stream collection into a separate waste stream “smart” collection. It comprises the installation of specialized telematics devices to 50 municipal vehicles and 1000 bins for all waste streams. This will allow the total oversight of the entire vehicle fleet and will facilitate upgrading the separate waste stream management, thus streamlining the collection routes and reducing the Municipal carbon footprint.</p>	<p>Solution lead:</p>  <p>Municipality of Central Corfu and Diapontia Islands</p> <hr/> <p>Solution working team:</p>  <p>A team from MCCDI existing staff will be defined as project team for this solution</p>	<p>Source of funding and estimated cost</p>  <p>➤ National Funding opportunities ("DIGITAL TRANSFORMATION OF OTAs" programme).</p> <hr/> <p>Solution maturity outputs</p>  <p>There are not any outputs yet</p>
<p>Link to vision</p>  <p>Smart and green city, complied with the United Nations' SDG indicators</p>	<p>Contributors:</p>  <p>The responsible waste collection agency will deliver the final outcome. In addition, Corfu's ICC Team will provide active help at any stage</p>	
<p>Link to ambition statement</p>  <p>Developing a network of smart sensors to improve the quality of the urban environment.</p>		
<p>Expected impact and timing</p>  <p>All the activities & actions will take place and conclude in the interval 06.2021 – 12.2023 (*the exact time subjects to change)</p>	<p>Risks and mitigation</p>  <ul style="list-style-type: none"> ➤ How the workforce of the waste collection agency of the Municipality will welcome the new reality to their everyday duties. ➤ Security of the equipment in public places. ➤ Staff capabilities to operate the back office. 	<p>City performance outcomes and impacts</p>  <p>Regarding the smart management of the bins and the fleet of the Municipality, we have completed the application process and we are still waiting for the approval of funding from the Ministry of Digital Governance of the Hellenic Republic for the purchase of the relevant equipment.</p>

Key Performance indicators

Solution	Activities – Inputs and actions	Solution Maturity - outputs	City performance – outcomes and impacts
<p>Find the best choice for each cases to set up effective public infrastructures to successfully implement separate collection to all the areas of the Municipality.</p>	<p>Reduction in the amount of the mixed waste stream. Increase recycling rate Increase the clean spaces (green and blue) Target group reached Increased consciousness of citizenship % Funding committed by city authority % people who have access to separate bins</p>	<p>Local community involvement (# of households/people participating in solution) Technical know-how of the staff of the MCCDI (# of relevant certificates and seminars) Operational know-how of the staff of the MCCDI (# of relevant certificates and seminars) # of bins for separate waste collection % of raising awareness activities % of participating employees from involved dept.</p>	<p>Citizens' satisfaction levels The amount of municipal solid waste generated per capita annually Percentage of city's solid waste that is recycled At least 2-3 KPI's that will show the extent to which the project has used opportunities for increasing environmental awareness and educating about sustainability and the environment</p>
<p>Smart management of bins and smart fleet management</p>	<p>Reduction in the amount of the mixed waste stream. Increase recycling rate Increase the clean spaces (green and blue) Target group reached Increased consciousness of citizenship % Funding committed by city authority</p>	<p>Local community involvement (# of households/people participating in solution) Technical know-how of the staff of the MCCDI (# of relevant certificates and seminars) Operational know-how of the staff of the MCCDI (# of relevant certificates and seminars) # of vehicles working # bins /districts # of raising awareness activities # of participating employees</p>	<p>Citizens' satisfaction levels The amount of municipal solid waste generated per capita annually Percentage of city's solid waste that is recycled At least 2-3 KPI's that will show the extent to which the project has used opportunities for increasing environmental awareness and educating about sustainability and the environment</p>

Governance structure for roadmap implementation



Section

3+4

Municipality of Central Corfu & Diapontia Islands (MCCDI) : Impact

ICC Transformation

May 2021 to November 2022

City goal 1 – “Waste management and circular economy” (Prior City goal) – Current Status & Achievements (1/8)

Regarding Solution 1

Network of all the kind of Green Points (1 Big, 1 small and at least 5 mobile green points which they accept from 12 to 21 streams of waste).

- The small Green Point has already started the configuration of the space that will be installed and we hope to be done by the end of 2022.

<https://pin.gov.gr/?p=28290> + <https://greece-albania.eu/projects/integrated-waste-management-facilities-for-boosting-recycling-and-composting-7-regions-through-cross-border-activities>

- The Big Green Point will be until September 2023.

<https://corfu.gr/erga/kataskeyh-kai-e3oplismos-prasinoy-shmeioy-dhmoy-kerkyras/>

- The 5 Mobile Green Points we have submitted an application to a financial tool of the Ministry of Environment and we are waiting for approval

City goal 1 – “Waste management and circular economy” (Prior City goal) – Current Status & Achievements (2/8)

Network of at least 15 “Smart Recycling Corners” (with Deposit Refund Schemes (DRS) to encourage consumers to recycle at least 4 streams of recycling materials (plastic, metal, glass, paper & tetra-Pak).

- As of June 3, 2022, the tender for the supply of 5 "Green Kiosks" has already started, which will manage up to 15 waste streams separately and will also have DRS.

<https://corfu.gr/promhtheia-prwtotypwn-prasinwn-peripterwn-anakyklwshs/>

- We had submitted for funding to Invitation 04 from the "ANTONIS TRITSIS" program but due to the complications of this program it has not yet been approved for our Municipality and we are waiting to proceed with a tender and supply of 10 "Rewarding Recycling Centers " from the “REWARDING PACKAGING RECYCLING” and additionally the supply of equipment for separate collection of "green waste”.

<https://diavgeia.gov.gr/doc/9%CE%994%CE%A746%CE%9C%CE%932%CE%91-85%CE%A1?inline=true>

City goal 1 – “Waste management and circular economy” (Prior City goal) – Current Status & Achievements (3/8)

Separate collection networks for new waste streams

- 1. Batteries (51 spots)** (in the municipal buildings) <https://recycle.corfu.gr/en/ylika/batteries/>
- 2. Cigarette Butts (40 spots)** - (first municipality in the entire Region of Ionian Islands) <https://recycle.corfu.gr/en/2021/03/03/the-creation-of-a-network-for-the-separate-collection-of-cigarette-waste-has-been-completed/> & <https://recycle.corfu.gr/en/ylika/cigarette-butts/>
- 3. Light Bulbs – Lamps (20 spots)** (in the municipal buildings) <https://recycle.corfu.gr/en/2021/01/27/for-the-first-time-a-municipal-network-of-separate-collection-of-electronic-and-electrical-equipment-in-all-the-administrative-boundaries-of-the-municipality-of-central-corfu-and-the-diapontia-islands/> & <https://recycle.corfu.gr/en/ylika/light-bulbs-lamps/>
- 4. Small electrical and electronic equipment (10 spots)** (in the municipal buildings) <https://recycle.corfu.gr/en/ylika/small-electrical-and-electronic-equipment/>
- 5. Ink Cartridges – Toner (10 spots)** (in the municipal buildings) <https://recycle.corfu.gr/en/ylika/ink-cartridges-toner/>

City goal 1 – “Waste management and circular economy” (Prior City goal) – Current Status & Achievements (4/8)

Separate collection networks for new waste streams

6. Marine litter (ghost nets, plastic, tyres, etc.) (1 spot) - (from underwater clean ups) <https://recycle.corfu.gr/en/ylika/marine-litter/> & <https://recycle.corfu.gr/en/2021/05/19/underwater-cleaning-of-the-seas-in-anemilos-and-paleokastritsa-by-the-municipality-of-central-corfu-and-the-diapontia-islands-in-collaboration-with-aegean-rebreath/> & <https://recycle.corfu.gr/en/2022/04/29/actions-of-mapping-cleaning-and-decontamination-of-the-seabed-in-the-central-bay-of-paleokastritsa/> & <https://recycle.corfu.gr/en/2021/09/17/international-coastal-cleanup-2021/>

7. **Used textiles - (26 spots)** - most recent waste stream <https://recycle.corfu.gr/en/2022/03/14/in-operation-the-municipal-network-of-separate-collection-and-recycling-of-used-clothing-footwear-and-other-textile-materials/>

8. **Unused – non expired medicines (1 spot)** <https://recycle.corfu.gr/en/2020/12/16/cooperation-agreement-between-the-municipality-and-givmed-for-the-coverage-of-a-part-of-the-pharmaceutical-needs-of-the-social-pharmacy> & <https://recycle.corfu.gr/en/ylika/medicines/>

9. **Collection of abandoned vehicles - End-Of-Life vehicles** <https://recycle.corfu.gr/en/ylika/end-of-life-vehicles/> & <https://recycle.corfu.gr/en/2021/06/11/the-collection-of-abandoned-vehicles-has-started-in-the-municipality-of-central-corfu-and-the-diapontian-islands/>

City goal 1 – “Waste management and circular economy” (Prior City goal) – Current Status & Achievements (5/8)

Also until next year (2023), the MCCDI plans to implement separate collection networks for the following waste streams, which are:

- 1) **Used Cooking Oils** (to as many spots as possible) – not yet public.
- 2) **Paper and cardboard** (1.100 yellow bins + 3 dedicated vehicles) <https://corfu.gr/promhtheia-kadwn-anakylwsimoy-xartioy/> & <https://corfu.gr/promhtheia-aporrimmatoforwn-oxhmatwn-sylloghs-anakylwsimoy-xartioy/>
- 3) **Plastic or/and metal objects** (more than 150 red bins) <https://pin.gov.gr/?p=32609>
- 4) **Bio-waste** <https://corfu.gr/perilhps-h-diakhry3hs-anoiktoy-hlektronikoy-diagwnismoy-gia-promhtheia-kadwn-bioapoblhtwn/> & <https://corfu.gr/promhtheia-aporrimmatoforwn-sylloghs-bioapoblhtwn/>

More specifically, the separate collection network for the **bio-waste stream** will include:

- a) **1.800 bins for In-Home Composting**
- b) **20 large bins - containers for separate collection of the “green waste”** (from ANTONIS TRITSIS programme)
- c) **1.000 brown bins for separate collection of all the rest “organic waste”**
- d) **6 dedicated garbage trucks only to collect the bio-waste stream in total.**

City goal 1 – “Waste management and circular economy” (Prior City goal) – Current Status & Achievements (6/8)

The Cleaning services of the Municipality of Central Corfu and the Diapontia Islands were equipped with **seven new garbage trucks**, significantly renewing their vehicle fleet and by the end of next month (July 2022) they are expected to have arrived in Corfu with a total of 17 vehicles by using the leasing system. All vehicles will have a GPS system. <https://recycle.corfu.gr/en/2021/07/02/the-fleet-of-vehicles-of-the-cleaning-service-of-the-municipality-of-central-corfu-and-the-diapontian-islands-is-significantly-renewed/>

In the first stage, measures have been, or will be implemented, focusing **on educating and providing awareness to the citizens** on the proper management of household solid waste, the principles of circular economy and how to successfully apply for “Waste separation at source”. Examples on measures that have already been implemented are:

1) Our first and most proud accomplishment is the development of the website: recycle.corfu.gr/

This site is the first official website in the history of Corfu Island dedicated to matters related to the circular economy, recycling, and promoting understanding regarding the recycling process and how to apply "Waste separation at source" in accordance with our municipality's special conditions.

It is available **both in Greek and English** and until today, has more than 13.000 views on its pages and is constantly updated with new additions according to the needs. The most important is that it operates also as an online guide for the citizens, trying to answer to the fundamental questions citizens usually asked regarding (Where, which ones, Why, and How) to reduce, reuse or recycle properly the different waste categories and we hope to succeed and answer also the last critical question, which is

When !!!

City goal 1 – “Waste management and circular economy”

(Prior City goal) – Current Status & Achievements (7/8)

2) Participation of the Municipality in the **FOLLOWGREEN web platform** for 3rd year in a row, which includes also the “**School Recycling Marathon**” to raise awareness among the students of the municipality and is also available in the form of a web application. <https://recycle.corfu.gr/en/2022/02/22/the-municipality-of-central-corfu-and-diapontia-islands-starts-the-school-recycling-marathon-for-the-first-time-the-schools-belonging-to-secondary-education-also-participate/> & <https://corfu.gr/ekdhlwsh-brabeys-shs-gia-ton-sxoliko-marathwnio-pame-anakyklwsh/>

3) Also, in a few months (from September), it will take place the launch of a well-structured campaign that will include all the necessary methods of informing and raising awareness of the general population (like Media and Social Media Campaigns, public events, green festivals, printed information material, and others, etc.). It is in the final stage of preparation for auction. <https://corfu.gr/erga/kampania-prokatartikhshs-enhmerwshs-eyaisththtopoihshs-gia-thn-orthh-diaxeirish-twn-aporrimatwn-mesw-ths-dialoghs-sthn-phgh-epanaxrhsimopoihshs-kompostopoihshs/>

City goal 1 – “Waste management and circular economy” (Prior City goal) – Current Status & Achievements(8/8)

Regarding Solution 2

- We had submitted for funding in Invitation 08 from the program "ANTONIS TRITSIS" but due to complications of this program it has not yet been approved for our Municipality to proceed with a tender and supply of the necessary equipment. <https://diavgeia.gov.gr/doc/635%CE%A346%CE%9C%CE%932%CE%91-%CE%92%CE%9A%CE%A7?inline=true>
- From the 1st of July 2022, a new funding has begun for the Digital Transformation of the Municipalities of Greece and the MCCDI will re-submit until 30/11/2022 a proposal for the conversion to smart waste management that will include “smart” fleet and bins management. <https://digitalplan.gr/prosklisi/39/psifiakos-metaschimatismos-ton-ota>
- Additionally on that, from the 15th of July 2022, a new funding programme has begun for the pilot implementation of PAYT schemes in the Municipalities of Greece and the MCCDI will also submit until 31/10/2022 a proposal for funding. <https://www.ymeperaa.gr/prosklisi-ergou/proskliseis-ergon/1534-pilotikes-drasesi-diaxeirisis-tis-xoristis-syllogis-astikon-apovlition-se-dimous-tis-xoras-pay-as-you-throw-gain-as-you-sort-ops-prosklisis-5957>
- **Due to the delays of the funding of this solution, we hope that these measure will be in effect by the 4th quarter of 2023.** (Additional information for our actions at the appendix slides 57-62)

City goal 2 – “e-Government and digitizing public services” – Current Status & Achievements (1/3)

- We have created for the first time a FREE public Wi-Fi network which will be extended geographically during the following years. <https://recycle.corfu.gr/en/2020/10/05/free-wifi-in-corfu-town-wifi-for-europe-wifi4eu/>
- We have modernized and developed the main informative website of the municipality under the name corfu.gr/ , and developed 3 completely new websites for the 1st time in the history of the island, each one dedicated to a different field, which are recycle.corfu.gr/, visit.corfu.gr/ and smart.corfu.gr/, with more than 600.000 page views until today. <https://corfu.gr/> & <https://recycle.corfu.gr/en/> & <https://visit.corfu.gr/> & <https://smart.corfu.gr/> (under trial).
- We are participating in the digital platform “Novoville” for managing our citizens' requests and promote the citizen engagement and only in a 2 years time period, the number of citizens who have registered on the platform amounts to 6,657, and the requests that they have sent are approximately 10,013 of which only the 308 requests are currently pending, and the 10.000 requests have been solved. These numbers are placing our Municipality in those with the best relative percentages of everyday problem-solving. <https://recycle.corfu.gr/en/2022/09/02/our-municipality-has-improved-10-000-times-as-a-result-of-working-with-the-digital-platform-novoville-in-just-two-years/>

City goal 2 – “e-Government and digitizing public services” – Current Status & Achievements (2/3)

- Permanent online transmission of all municipal council meetings through corfu.gr

http://tv1.streampulse.eu/corfu/index_live.php

- For the first time, the Municipality utilized the new technologies in order to facilitate the active role of the citizens, in the formation of the development planning, and in the determination of the priorities of the Municipality.

<https://recycle.corfu.gr/en/2021/04/05/consultation-of-phase-i-strategic-planning-of-the-operational-program-of-the-municipality-of-central-corfu-and-the-diapontia-islands/>

- For the first time, digital signatures were used by both the elected and the executives of the municipality and it has allowed the start of the electronic circulation of documents. <https://corfu.gr/orismos-ypallhlwn-gia-pshfiakh-ypografh/>

- Digitization and modeling of the procedures of the Municipality (Workflows).

- For the first time, digital registration of fire hydrants of the Municipality was made.

<https://recycle.corfu.gr/en/2021/08/30/digital-registration-and-display-of-the-fire-hydrants-of-the-municipality/>

City goal 2 – “e-Government and digitizing public services” – Current Status & Achievements (3/3)

- The first phase consisted of registering the Municipality's old and decommissioned electronic equipment for immediate recycling, and purchasing new equipment to upgrade the technological equipment, thereby increasing the possibilities of digitization for the Municipality. <https://corfu.gr/promhtheia-hlektronikwn-ypologistwn-hlektronikwn-sygkrothmatwn-d-e-axilleiwn-pareliwn-palaiokastritwn-faiakwn-diapontiwn-nhswn/>
- Activation and utilization of digital tools offered by the state through the Single Digital Portal of Public Administration (gov.gr), to individuals and companies, through corfu.gr and smart.corfu.gr. (online publication of documents, digital mailboxes of citizens, etc.). <https://corfu.gr/> - <https://smart.corfu.gr/>

(Additional information for our actions at the appendix slides 57-62)

City goal 3 – “Scaling up renewable energy solutions / energy-efficiency” – Current Status (1/1)

- Replacing of the old street lighting bulbs with LED lamps to reduce the energy consumption from the public lightning system. <https://recycle.corfu.gr/en/2021/03/09/the-municipality-of-central-corfu-and-the-diapontia-islands-is-gradually-replacing-all-incandescent-lamps-with-new-led-bulbs/>
- "Energy Upgrading of school buildings of the Municipality of Corfu" with the general goal of saving energy and reducing energy consumption, which will be achieved by improving the energy behavior of school units after thermal insulation interventions. <https://recycle.corfu.gr/en/2022/03/30/energy-upgrade-of-three-lyceums-and-two-primary-schools-by-the-municipality-of-central-corfu-and-the-diapontia-islands-the-mayor-of-central-corfu-and-the-diapontia-islands-signed-the-project-contract/>
- Elaboration of a study concerning the clean energy transition of the Diapontia islands and the complete decarbonization of the islands of Ereikoussa and Othonoi, as well as the development of a "smart marina" on the island of Mathraki. <https://recycle.corfu.gr/en/2021/07/09/pan-european-first-for-the-municipality-of-central-corfu-and-the-diapontian-islands-in-energy/>

City goal 4 – “Smart and green mobility and transport” – Current Status & Achievements (1/2)

- Continuous interventions for the restoration-maintenance of the road network of the Municipality of Central Corfu and the Diapontia Islands. <https://corfu.gr/ergasies-synthrhshs-odikoy-diktyoy-ston-dhmo-kentrikhs-kerkyras/>
- Signing of the Sustainable Urban Mobility Plan (SUMP), a comprehensive plan for the management and planning of sustainable urban mobility for the Municipality of Central Corfu and the Diapontia Islands, with a time horizon of 15 years. <https://recycle.corfu.gr/en/2021/08/03/the-contract-for-the-sustainable-urban-mobility-plan-was-signed-in-the-municipality-of-central-corfu-diapontia-islands-m-ydraiou-we-are-working-for-a-more-human-greener-city/> & <https://perfectwebster.wixsite.com/svakkerkyras>
- Preparing of an “Electric Vehicle Charging Plans” for all the e-vehicles. <https://recycle.corfu.gr/en/2020/12/30/the-municipality-of-central-corfu-and-the-diapontia-islands-in-the-program-electric-vehicle-charging-plans/> & <https://corfu.diavouleuseis.gr/>

City goal 4 – “Smart and green mobility and transport” – Current Status & Achievements (2/2)

- Procurement of equipment, construction, transport, and installation of 36 smart stop shelters to serve passengers and protect them from the prevailing weather conditions and provide adequate lighting, electronic passenger information, and a suitable point for posting information material. <https://recycle.corfu.gr/en/2021/01/14/municipality-of-central-corfu-and-the-diapontia-islands-the-supply-of-36-shelters-was-approved-by-philodimos/>
- Supply of 10 electric vehicles and charging stations <https://diavgeia.gov.gr/doc/%CE%A8%CE%93%CE%A1%CE%9646%CE%9C%CE%932%CE%91-%CE%A4%CE%9A9?inline=true>
- Participation in a research project for car-sharing in Corfu. <https://enimerosi.com/article/69404/Central-Corfu-Municipality-announces-car-sharing-in-Corfu>

(Additional information for our actions at the appendix slides 57-62)

Assessment of city performance - discussion

Due to the fact that MCCDI is a new municipal authority, formed in 2019, we didn't have at our disposal data in order to extract safe KPIs.

At the moment it is important to initially create the appropriate new infrastructures and the new separate collection networks for new waste streams so that the information and awareness programs that will follow can have an appropriate positive impact on the citizens.

Unfortunately, so far little improvement has been established solely with the placement of the new bins for the separate collection networks for new waste streams.

Also, specific categories of government funding have been delayed in being approved for our Municipality which has led to the delayed possibility of procurement of the appropriate equipment.

Assessment of solution maturity - discussion

Our Municipality, with the addition of each new separate collection network for a new waste stream, managed to install a complete network of bins to geographically cover the needs of the entire Municipality.

Unfortunately, we have not been able to install, as quickly as we would like, all the new separate waste collection networks we need to meet all our needs to date.

This arose due to the inability of the already existing staff of the Municipality to cope with the additional working needs required for separate collection of the new waste streams.

Also, specific categories of government funding have been delayed in being approved for our Municipality which has led to the delayed possibility of procurement of the appropriate equipment.

Assessment of city ecosystem and activities - discussion

We have really stayed within the plan we have set from the beginning of our participation in the ICC and we have already seen impressive results in terms of projects.

The rest of the ICC team from our local ecosystem was always available to our every call for participation and help and especially the Ionian University showed eagerness in providing innovative solutions.

5 key lessons

Lesson	Reflections
1	Dedicating team on the solutions is needed
2	Collaboration between Greek cities could add value, since they have access to same sources of funding and face same problems and obstacles
3	Collaboration with non-Greek cities could add value and help with proposed solutions that have been already been successfully applied
4	In order to succeed in your solutions you should always put the citizen in the center and be prepared to share your vision in order to create motivation & interest
5	The importance of the involvement of the local ecosystem is crucial and needed

Reflections on city collaborations

Several contacts have been made with other cities that have common goals with ours (Amsterdam/Mentor city, Gava, Molina de Segura, Pescara) but no substantial collaborations have yet been made through the ICC initiative with other cities.

We hope that in the following period, after the further development of our own solutions, we will be able to make more substantial collaborations with them.

Also in National level we have been actively participated in the Greek Geographic Chapter Meeting and in digital meetings with other Greek Municipalities of ICC. Also, we have made contacts with the Municipalities of Ioannina & Chalkida.

Commitments

Commitments to on-going resources

We will pursue new partnerships with the local ecosystem.

Commitments to on-going collaboration

As mentioned before, we will seek and create new and more substantial collaborations with other ICC cities that share the same goals and challenges as us.

Commitments to on-going KPIs

Due to the fact that It is a new municipal authority, formed in 2019 it didn't have in its disposal data in order to extract safe KPIs. We have to build the appropriate mechanisms to secure that we will get in the future all the needed data in order to have safer and more reliable decisions

3 Year plan - ambitions

Building on the ICC, what would will the city aim to achieve in 3 years time?

The MCCDI will continue its efforts to reduce the total carbon footprint of the municipality and more specific establish effective strategies for the circular economy, renewable energy solutions, and green mobility, while simultaneously aspiring to simplify citizens' lives through e-Government and by digitizing public services to make our city fit for the European Digital Age and increase citizens' participation.

What steps will you take over the next 3 years to achieve these goals?

We will proceed with the necessary procurement of equipment and personnel as well as we will continue the training efforts of the staff to cope with their new work obligations but also of the citizens regarding the additional requirements imposed by the need for the reduction of the carbon footprint of our Municipality.

Also, we will continue to pursue all those appropriate collaborations with other Greek and European cities but also we will try to participate in similar European programmes such as the ICC which would help us to achieve our vision of transforming Corfu into a smart, green, and sustainable city.

Appendix

Municipality of Central Corfu & Diapontia Islands (MCCDI) : Additional information – Milestones

ICC Transformation

September 2020 to November
2022

Awards / Events / Networks/ Projects / Proposals (1/6)

The Municipality of Central Corfu and Diapontia Islands has been awarded in the “GREEK GREEN AWARDS 2022” - The Municipality of Central Corfu and the Diapontia Islands was honored with the Award “**Best Practice for the Marine Environment**” and was essentially awarded for its overall efforts to protect the environment of the island and especially the marine and coastal environment. <https://recycle.corfu.gr/en/2022/03/21/greek-green-awards-2022-awards-award-of-the-municipality-of-central-corfu-and-the-diapontian-islands/> . It is already been scheduled the next coastal and underwater clean- ups on the 27th & the 28th of October 2022.

Also, MCCDI has been very active during the ICC by participating in many Events Networks, Projects and Proposals. Please find below most of them with the corresponding links:

1. CORFU 2022 - 9th International Conference on Sustainable Solid Waste Management, 15-18 June 2022, Corfu, Greece
<https://corfu2022.uest.gr/index.php/en/>

The MCCDI co-organized the “4th PhD Summer School and Executive Training on Solid Waste Management, from 13th to 14th of June 2022 and the “9th International Conference on Sustainable Solid Waste Management - CORFU 2022” from 15th to 18th of June 2022 and also had two (2) presentations during the 1st day of the conference:

- a)V. Dimoulis - “Marine litter management in the city of Corfu”.
- b)V. Dimoulis - “Intelligent Cities Challenge (ICC): A green and digital transition opportunity for the Municipality of Central Corfu and Diapontia Islands”.

Awards / Events / Networks/ Projects / Proposals (2/6)

The Conference brought together scientists & professionals from government departments, industries, Municipalities, private institutions, research & education institutions and became a forum for the exchange of the most recent ideas, techniques & experiences in all areas of solid waste management.

The Conference aimed to address the significant issue of sustainable solid waste management through the promotion of safe practices & effective technologies. The Conference focused mainly on modern solid waste technologies. It aimed to stimulate the interest of scientists and citizens and informed them about the latest developments in the field of municipal solid waste management.

2. On the 13th and 14th of June 2022 took place the 4th PhD Summer School – an executive training on **solid waste management** with indicative subjects: Legal Framework and Policy, Circular Economy, Municipal Solid Waste treatment technologies, Anaerobic Digestion, Waste-to-Energy, Sustainable Management.

3. Participation of the Municipality of Central Corfu and the Diapontia Islands (as one of the founding members) in the first network of Municipalities for the protection of the marine environment in Greece by the name “*Blue Municipalities Network*”. <https://recycle.corfu.gr/en/2022/02/25/the-mayor-of-central-corfu-at-the-meeting-of-mayors-of-the-network-of-blue-municipalities-coordination-and-cooperation-for-the-protection-of-our-seas/>

Awards / Events / Networks/ Projects / Proposals (3/6)

4. Energy Transition Week in the Municipality of Central Corfu and Diapontia Islands.

<https://www.ertnews.gr/perifereiakoi-stathmoi/kerkira/kerkyra-evdomada-energeiakis-metavasis-sto-dimo-kentrikis-kerkyras/>

The Municipality of Central Corfu and the Diapontia Islands organized in collaboration with the independent Energy Regulatory Authority (RAE) the "**Energy Transition Week**", during the period 09/05/2022 - 13/05/2022, where through Targeted, interactive, educational activities that included specially designed games, offered the opportunity to students of Primary and Secondary Schools of the Municipality, both urban and the Diapontia Islands, to come in contact with concepts such as:

- the phenomenon of climate change, the concept of energy transition in the islands,
- the energy crisis and how it affects the islands,
- smart grids,
- smart homes,
- the electric drive,
- the development of Renewable Energy Sources (RES) and their benefits in the islands,
- energy saving, etc.

Awards / Events / Networks/ Projects / Proposals (4/6)

5. Participation of the Municipality for the first time as a speaker in conferences and workshops related to smart cities, and practical and technological solutions. <https://recycle.corfu.gr/en/2021/03/11/participation-of-the-municipality-of-central-corfu-and-the-diapontia-islands-in-the-9th-smart-cities-conference-2021/> & <https://dccg.gr/wp-content/uploads/2021/11/202111111040445198.pdf>
6. The Municipality of Central Corfu and the Diapontia Islands in the European Mobility Week 2021. <https://recycle.corfu.gr/en/2021/09/22/the-municipality-of-central-corfu-and-the-diapontian-islands-in-the-european-mobility-week-2021/>
7. Municipality of Central Corfu and the Diapontia Islands in the Covenant of Mayors for the Climate and the Energy. <https://recycle.corfu.gr/en/2020/12/17/the-municipality-of-central-corfu-and-the-diapontian-islands-on-the-covenant-of-mayors-for-climate-and-energy/> & [The Municipality of Central Corfu and the Diapontia Islands in the “Covenant of Mayors” for a fairer and climate neutral Europe](#)
8. Inclusion of the Municipality of Central Corfu and the Diapontia Islands in the “Network of Historic Cities Against Plastic Waste” which is an important part of the *Horizon 2020* project entitled BIO-PLASTICS EUROPE. <https://recycle.corfu.gr/en/2022/03/30/inclusion-of-the-municipality-of-central-corfu-and-the-diapontian-islands-in-the-network-of-historic-cities-against-plastic-waste/>

Awards / Events / Networks/ Projects / Proposals (5/6)

9. **“Climathon Corfu 2020” - 21 & 22 November 2020 – Reduction of the plastic pollution.**

<https://recycle.corfu.gr/en/2020/11/20/climathon-corfu-2020-21-22-november-2020-reduction-of-the-plastic-pollution/>

10. **The MCCDI was one of the Greek candidates for the European Mission “100 Climate - Neutral and Smart Cities by 2030”. Also, participated in the online meeting of the 21 candidate Municipalities for the European Mission “100 Climate Neutral Cities by 2030” and the Secretary-General of Spatial Planning of the Ministry of Environment.**

<https://recycle.corfu.gr/en/2022/01/31/%ce%bf-%ce%b4%ce%ae%ce%bc%ce%bf%cf%82-%ce%ba%ce%b5%ce%bd%cf%84%cf%81%ce%b9%ce%ba%ce%ae%cf%82-%ce%ba%ce%ad%cf%81%ce%ba%cf%85%cf%81%ce%b1%cf%82-%ce%ba%ce%b1%ce%b9-%ce%b4%ce%b9%ce%b1%cf%80%ce%bf%ce%bd/>

11. **The Municipality of Central Corfu and Diapontia Islands has joined as a Member of the Global Sustainable Tourism Council (GSTC) and proceeded for the 1st time to a Destination Assessment of the island of Corfu in total with the help of the GSTC.** <https://www.gstcouncil.org/corfu-joins-gstc/>

Awards / Events / Networks/ Projects / Proposals (6/6)

11. Participation of the Municipality of Central Corfu and the Diapontia Islands in the submission of a proposal to the Horizon Europe Framework Program (HORIZON), in the framework of HORIZON-CL2-2022-HERITAGE-01-10 – (The New European Bauhaus – shaping a greener and fairer way of life in creative and inclusive societies through Architecture, Design and Arts).

12. The Old Town of Corfu is one of the most important fortified cities-ports of the Mediterranean, with a rich cultural heritage, authentic and unique identity and is a UNESCO World Heritage Site. In the framework of the LIFE-IP AdaptInGR program, the Old Town of Corfu has been chosen as a case study of the Cultural Heritage of the country, with the aim, on the one hand, of assessing the effects of climate change on the monuments / historical sites / archaeological sites under consideration. On the other hand, the development of a methodological tool with measures and proposals for strengthening their resilience and their adaptation to climate change.

13. The city of Corfu, initially in a research stage, will soon participate in the development of an integrated electronic car sharing service (car sharing), contributing to the substantial reduction of the carbon footprint produced by vehicles and the substantial "green" transformation of the city of Corfu. (Project "ERICA")

14. A 4-day action to inform and raise awareness of the citizens and visitors for the protection of the Mediterranean seal (monachus monachus), which took place during the period 17/08 - 20/08 with great success while the last day the action was moved to the island of Othonoi which is located at the borders of Greece.

City needs: State of the city analysis

The Municipality of Central Corfu and Diapontia Islands is a new municipal authority, formed in 2019 and is the largest of the 3 different Municipalities that were formed following the division of the formerly united Municipality of Corfu. Following the recent division of Corfu into 3 municipal authorities, the previously unified infrastructure, staff, and equipment had to be equitably redeployed. This led to an inevitable delay to the completion of various European projects that our Municipality was either a participant or beneficiary.

Although the remaining staff of our Municipality are highly skilled and able to cope with these new challenges, most of them have been redeployed to new posts and have taken on responsibilities and challenges that often differ from their previous remit. This has unfortunately contributed to further delays in the completion of numerous municipal projects and has also set back the implementation of the agenda of the new municipal authority in regard to:

1. The waste management, recycling up-scaling, and transition to a circular economy.
2. e-Government and digitising public services
3. The scaling up of renewable energy and energy-efficient solutions
4. The smart and green mobility and transport

Top-down perspective: High Performance Areas

The vision of the Municipality of Central Corfu and Diapontia Islands, regardless that it is a newly formed municipality, is to be transformed into a smart, green and sustainable city. In this, we are supported by a new Mayor, committed to adopt all the necessary circular economy principles that will lead to synchronizing the city and improving the quality of life of its inhabitants.

At the same time, the economy of our city's ecosystem is based mainly on tourism. For this reason, we are proud because most of our city has advanced wireless internet access and more specifically is covered by 3G/4G networks and we are able to use as much as possible the digital technologies so we can improve the quality of tourism services that is providing to our guests. Unfortunately, at the current time we are making only partial use of digital technologies but we are planning to increase that use.

Also, a large share of our city's population and our visitors have access to public transport within 500m. walking distance and free access to quality essential health-care services and to safe, effective, high-quality and affordable essential medicines and vaccines.

Top-down perspective: Low Performance Areas

Unfortunately, as it has already been mentioned before, our newly formed municipality wasn't compliant with the Waste Framework Directive's (2008/98/EC) target of 50% of the municipal waste (household waste and waste similar in nature and composition to household waste) to be recycled by 2020.

Although that we are proud because most of our city has wireless internet access and more specifically is covered by 3G/4G, at the same time our city isn't providing a significant part of its services digitally and most of them are mainly simple information.

Also, until the recently past, there was given no significant specific attention to green and blue infrastructure in major urban development projects and that has made our city's critical areas, assets, communities and sectors to be considered as particularly vulnerable to current or/and future climate risks.

We should also highlight that there are no significant innovation labs or accelerators in the city to provide actively support to any entrepreneurial activity or start – ups until today.

Bottom-up perspectives: stakeholder views

Ionian University views:

The economy of Corfu's ecosystem is based mainly on tourism. Therefore, we experience during the tourist season a rapid increase in waste and very little ability to manage them. We also add that the special morphological conditions of our ecosystem (island) do not allow for extensive installations. Our goal is to modernize the process, to design a waste management strategy and to inform the citizens. Waste management is an issue that can be solved collectively and each party can implement what is related to its role. The Ionian University aspires to provide scientific and technical support to the stakeholders, but also to the citizens aiming at the actual waste management. The process should be modernized, there should be more data that will enable better decision-making. Short-term information and education of citizens on the proper management of their waste (separation at source, minimizing the percentage of waste, reuse, recycling), empowering citizens with mobile applications. In the medium term we expect improvements regarding the modernization of the whole waste management process (smart system of waste collection & management & municipal waste, using ICT). In the long term we expect to have a comprehensive strategic plan for waste management and profit creation for the local ecosystem and incentives for citizens. In a year we would like our city to have a proper planning for waste management. The modernization of the waste management process should be completed in five years (intelligent system for collection & management of waste & municipal waste, using ICT). In ten years, the integrated waste management system will be developed, implemented and improved.

Bottom-up perspectives: stakeholder views

Technical Chamber of Greece/ Regional Department of Corfu views :

Our expectations are the optimization of management achieving the smallest possible environmental footprint, in a continuous and renewable effort towards improvement. Our contribution could be to the design of solutions from a technical and environmental point of view, as well as the information of the local communities by scientists related to the environment, in collaboration with the Municipality. We have visited other cities that had already developed processing facilities and we will try to transfer this experience to the local community. In addition, we have participated in the effort to create a road map with a specific timetable for the required actions and projects in cooperation with the Municipality and the Regional Government. We would like to see short-term improvements in the recycling sector with the creation of a network of recycling corners and a collection system for recyclable materials. We are also in favor of the idea to launch a dynamic public awareness campaign on the benefits of recycling in the short term. We believe that we should start immediately the process and the announcement of the waste treatment plant and initiate its construction. Our goal is to achieve high rates of recycling to contribute to a final solution for the processing and disposal of non-recyclable materials.

Solution 1 : Short description (1/6)

This particular solution will be the collective outcome of many, smaller, relevant actions that will create a complete collection network for separate waste streams, which primarily make up the Municipal Solid Waste. Each separate waste stream will subsequently be processed through alternative waste management, according to the principles of circular economy.

The Activities that will be included in this solution are the following:

➤ **Activity 1: “Implementation of a separate collection network for textiles”**

It refers to **26 special bins**. The signed contractor, rather than municipality, will be responsible for their collection using their own resources. Funding stream: At no extra cost for the municipality due to the nature of the agreement.

Solution 1 : Short description (2/6)

➤ Activity 2: “Implementation of a separate collection network for paper and cardboard (yellow bins)”

It refers to 1.100 yellow bins & 3 garbage trucks dedicated exclusively to the collection of the paper and cardboard streams. Funding stream: **NSRF 2014-2020** – Transport Infrastructure, Environment and Sustainable Development (YMEPERAA).

➤ Activity 3a: “Implementation of a separate collection network for the bio-waste stream (brown bins)”

- a) 1.800 bins for In-Home Composting b) 1.000 brown bins for separate collection of all the rest “organic waste”
- c) 3 garbage trucks dedicated exclusively to collect the brown bin network.

Funding stream: **NSRF 2014-2020** – Transport Infrastructure, Environment and Sustainable Development (YMEPERAA). Furthermore, as a result of the programme «E-HORECA WANET» from the NSRF 2014-2020 - Interreg IPA II Greece-Albania, we have been able to secure a further 2 dedicated garbage trucks for the support of the collection of the brown bin network.

Solution 1 : Short description (3/6)

➤ Activity 3b: “Implementation of a separate collection network for the green waste stream”

It refers to 20 specialized bins for separate collection of the “green waste” & 1 garbage truck dedicated exclusively to the collection of the green waste stream Funding stream: “**ANTONIS TRITSIS**” funding program for the development of local government organizations by the Greek Ministry of Interior.

As a result of the aforementioned **Activities 3a & 3b**, the separate collection for the bio-waste stream will include, in total:

- a) **1.800 bins** for In-Home Composting
- b) **20 bins** for separate collection of the “green waste”
- c) **1.000 brown bins** for separate collection of all the rest “organic waste”
- d) **6 garbage trucks** dedicated exclusively to the collection of the bio-waste stream

Solution 1 : Short description (4/6)

- Activity 4: “Construction of a Big Green Point and procurement of the relative equipment in MCCDI”
 - ❑ Key point: repair of Municipal’s products to be reused free of charge or for a nominal fee.
 - ❑ Separate point for the collection and shredding of green waste
 - ❑ Key collection point for the Municipality for CD&E waste (Construction, Demolition and Excavation waste - CD&E)
 - ❑ Separate point for the collection and temporary storage of a total of 21 different waste streams (used cooking oils, used textiles, etc.).
 - ❑ Key point with training room and activities for promoting recycling purposes.

Funding stream: *NSRF 2014-2020* – Transport Infrastructure, Environment and Sustainable Development (YMEPERAA)

Solution 1 : Short description (5/6)

➤ Activity 5: “WASTE RREACT - Integrated waste management facilities for boosting recycling and composting in 7 Regions through cross-border activities”

- Procurement of more than 150 red bins for the separate collection of plastic or/and metal objects.
- Initial collection points for used cooking oil waste
- Available solid waste compression equipment
- There will be a total of at least 12 different waste streams.

Funding stream: NSRF 2014-2020 - Interreg- IPA CBC Greece- Albania

➤ Activity 6: “Procurement of Mobile Green Point(s) in MCCDI”

Funding stream: NSRF 2014-2020 – Transport Infrastructure, Environment and Sustainable Development (YMEPERAA).

Solution 1 : Short description (6/6)

➤ Activity 7: “Procurement of 5 Big Recycling Corners with deposit refund schemes (DRS) in MCCDI”

15 streams of recycling materials in each Big Recycling Corner (for peripheral municipal units):

- ❑ Plastic, metal, glass, paper & Tetra-Pak
- ❑ WEEE, Lamps, Batteries, Used Cooking Oils, etc.

Funding stream: “**FILODIMOS II**” funding program for the development of municipalities by the Greek Ministry of Interior

➤ Activity 8: “Procurement of 10 Recycling Corners with deposit refund schemes (DRS) in MCCDI”

Smart Recycling Corners with deposit refund schemes (DRS) to incentivize consumers to recycle at least 4 streams of recycling materials (plastic, metal, glass, paper & Tetra-Pak). (for the central municipal unit).

Funding stream: “**ANTONIS TRITSIS**” funding program for the development of local government organizations by the Greek Ministry of Interior