

# Circular CarbLog Waste Management System

CarbLog Circular Chain Technology





# CARBLOG CIRCULAR CHAIN TECHNOLOGY

## COSMO Innovate Center



Our teams develop  
Circular Waste  
Management solutions to  
build greener communities  
by transforming organic  
waste into shared  
responsibility, rewards and  
impact.





# CARBLOG CIRCULAR CHAIN TECHNOLOGY

ORGANIC WASTE CREATES  
GREENHOUSE GASES  
(GHG)



Organic Fraction of Municipal Solid Waste (OFMSW) making up to 40–57% of total global municipal solid waste.

Its decomposition in open landfills creates greenhouse gases (methane and nitrous oxide) and odor emissions (ammonia, hydrogen sulfide, etc.)



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## ORGANIC WASTE TREATMENT

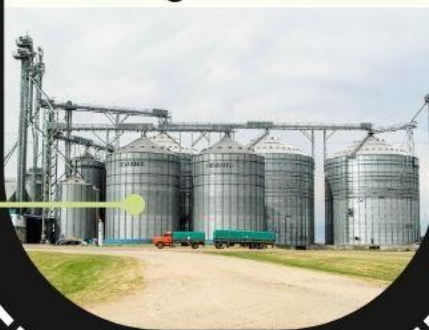
It is therefore essential to properly manage this waste fraction by directing it towards dedicated treatment: composting, anaerobic digestion, etc.

composting



1

anaerobic  
digestion



2



biogas  
heat  
organic  
fertilizer

3



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Housholds and HORECA companies are not sufficiently motivated to select waste.



Municipal waste sorting bins are not always used properly.



Effective waste separation and collection programs are a critical component of an integrated city waste management system.

**ORGANIC WASTE SELECTION AND MANAGEMENT PROBLEM**



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## DIGITAL WASTE MANAGEMENT CITY PLATFORM SOLUTIONS





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## Sensors:

- temperature
- fullness level
- content weight



## Other equipment:

- RF tag reader
- green/red light diode
- photovoltaic
- battery / battery level
- Wi-Fi
- IP address/ GSM module



**Universal Motivation Module**

**Digital Green Marketing**

**Other platforms**



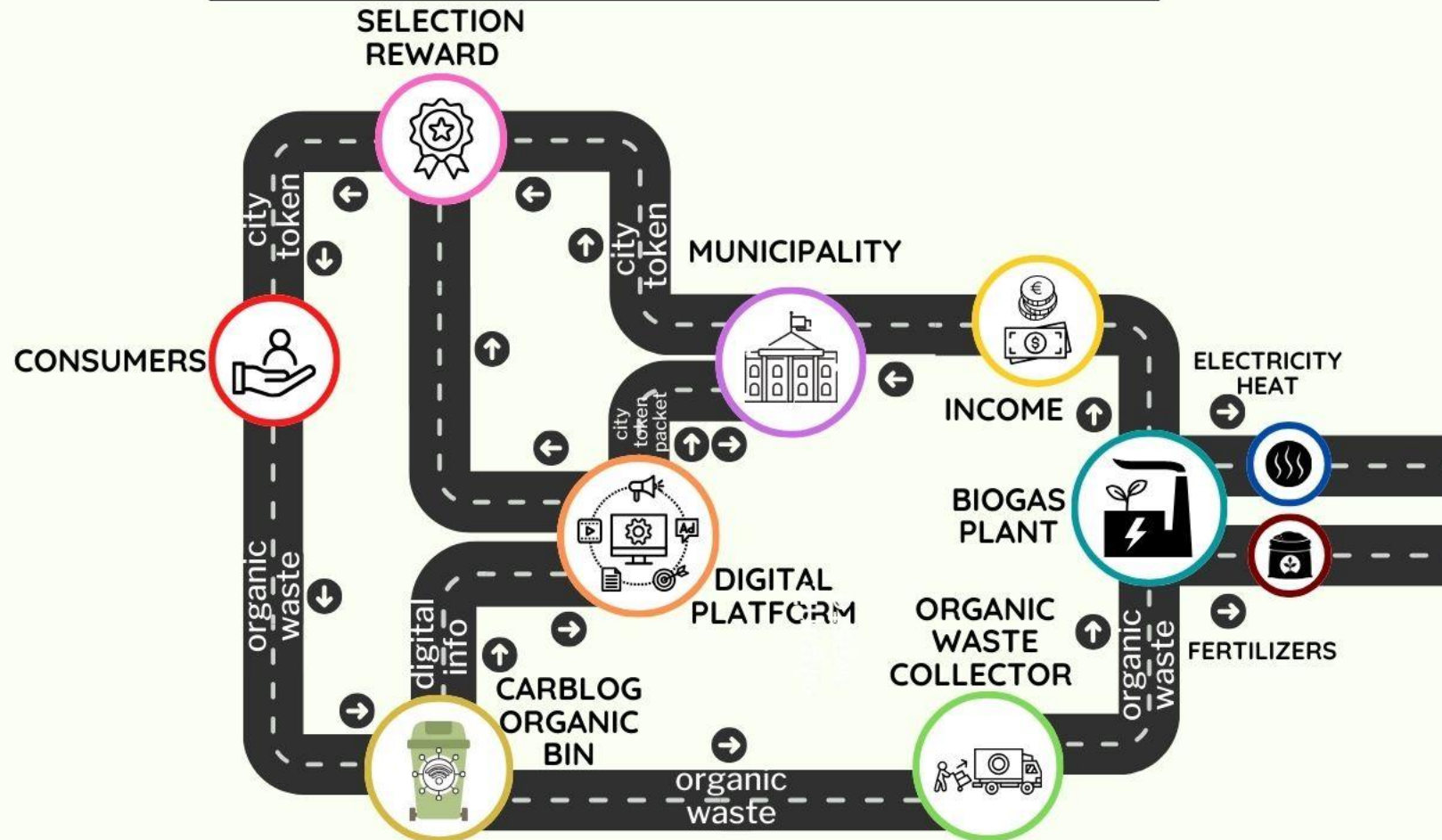
## CARBLOG ORGANIC BIN

CarbLog Organic Bin as tool that support social rewards and financial discounts will motivate the managements of HORECA companies as well as individuals for organic waste selection.



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## GREEN DIGITAL CITY PLATFORM ORGANIC WASTE & CITY TOKENS ROADMAP





# CARBLOG CIRCULAR CHAIN TECHNOLOGY

## **Nenov Marjan**

is a graduate electrical engineer, energy manager, Eco-En auditor and innovator who is responsible for the design of the project, its use, digitalization and future upgrading.

## **Edvard Sofeski**

is a project manager in several EU co-funded projects and startup innovative development projects, owner of a company supporting entrepreneurship and innovation in small and medium-sized enterprises.

The COSMO Innovate  
Center digitalization  
solutions development  
and implementation  
Team members:

## **Ilievski Risto**

owner of an innovative company in the field of industrial electronics and implementation of new technologies in everyday life.

## **Martin Nikolovski**

electrical technician for electronics and telecommunications with experience in the field of industrial automation and system integrator in the project.



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EDIH  
INNOFEIT



Veze Sharri Group  
- Elektro Sharri



University of  
Tetovo

Partners: