CEN

WORKSHOP

AGREEMENT

CWA 17866

September 2022

ICS 13.030.40

English version

Key factors for the successful implementation of urban biowaste selective collection schemes

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties, the constitution of which is indicated in the foreword of this Workshop Agreement.

The formal process followed by the Workshop in the development of this Workshop Agreement has been endorsed by the National Members of CEN but neither the National Members of CEN nor the CEN-CENELEC Management Centre can be held accountable for the technical content of this CEN Workshop Agreement or possible conflicts with standards or legislation.

This CEN Workshop Agreement can in no way be held as being an official standard developed by CEN and its Members.

This CEN Workshop Agreement is publicly available as a reference document from the CEN Members National Standard Bodies.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No.:CWA 17866:2022 E

Contents

Page

European foreword

This CEN Workshop Agreement (CWA 17866:2022) has been developed in accordance with the CEN-CENELEC Guide 29 "CEN/CENELEC Workshop Agreements – A rapid prototyping to standardization" and with the relevant provisions of CEN/CENELEC Internal Regulations – Part 2. It was approved by a Workshop of representatives of interested parties on 2022-06-17, the constitution of which was supported by CEN following the public call for participation made on 2020-09-01. However, this CEN Workshop Agreement does not necessarily include all relevant stakeholders.

The final text of CWA 17866:2022 was provided to CEN for publication on 2022-07-01.

Results incorporated in this CWA received funding from the European Union's HORIZON 2020 research and innovation programme under grant agreement number 818312.

The following organizations and individuals developed and approved this CEN Workshop Agreement:

- PREZERO, Mr. Pedro Gustavo Rodríguez – Chairperson
- UNE – Spanish Association for Standardization, Ms Tania Marcos – Secretary
- ITENE, Spain, Ms. Carla Bartolomé
- CETENMA, Spain, Ms. Gemma Castejón
- Balkan association of standard users, North Macedonia, Mr. Ljupcho Davchev
- Zero Waste Latvia, Latvia, Ms. Zane Gailite
- Kalundborg Kommune, Denmark; Mr. Johan Ib Hansen
- Zero Waste Latvia, Latvia, Ms. Mairita Lūse
- ECOGEOS, France, Ms. Marie-Amélie Marcoux
- ENVAC IBERIA S.A., Spain, Mr. César Morais
- Avfall Sverige, Sweden, Mr. Jon Nilsson
- EUBIA - European Biomass Industry Association, Belgium, Mr. Giulio Poggiaroni
- Latvian standard (LVS); Latvia, Ms. Guna Smilga
- CETENMA; Spain; Mr. Martín Soriano
- City of Murcia, Spain, Mr. Manuel Valls
- ATEGRUS, Spain, Ms. Esther Vecino
- FRITZ SCHÄFER GMBH, Germany, Dr. Armin Vogel
- Wellness Telecom S.L. (Wellness TechGroup -WTG-), Spain, Mr. Jose Antonio Cabo
- Wellnesstech Sustainability Horizon, S.L., Spain, Mr. Javier Gutiérrez.

Attention is drawn to the possibility that some elements of this document may be subject to patent rights. CEN-CENELEC policy on patent rights is described in CEN-CENELEC Guide 8 “Guidelines for Implementation of the Common IPR Policy on Patent”. CEN shall not be held responsible for identifying any or all such patent rights.

Although the Workshop parties have made every effort to ensure the reliability and accuracy of technical and non-technical descriptions, the Workshop is not able to guarantee, explicitly or implicitly, the correctness of this document. Anyone who applies this CEN Workshop Agreement shall be aware that neither the Workshop, nor CEN, can be held liable for damages or losses of any kind whatsoever. The use of this CEN Workshop Agreement does not relieve users of their responsibility for their own actions, and they apply this document at their own risk. The CEN Workshop Agreement should not be construed as legal advice authoritatively endorsed by CEN/CENELEC.

Introduction

Every year each European citizen produces on average 200 kg of municipal biowaste. This means that between 118 and 138 million tons of biowaste arise annually in the EU. The municipal biowaste management systems that currently exist in Europe, such as landfilling, do not give a second life to materials or resources contained in the biowaste. Other alternatives such as incineration and composting do not allow to take full advantage of the biowaste potential.

With the increase in biowaste production, the EU's priorities are to reduce food waste, increase separate collection and reuse or recycling. One of the main challenges for biowaste management is to integrate a valorization system in a city context, and to recover strategic products with a market value that offsets the global cost of biowaste valorization.

Thus, the recovery and valorization of biowaste is one of the main lines of several EU-funded projects, like VALUEWASTE[1], which proposes an integrated system for urban biowaste valorization into key strategic products for the EU.

In order to implement successful valorization schemes to produce high value products with attractive and sustainable business cases, it is imperative to feed the processes with high quality biowaste. High quality biowaste relies on efficient selective collection systems and pre-treatments. Unfortunately, such systems to ensure high quality biowaste are scarce in Europe, making current valorization systems uneconomical and therefore underutilizing the potential of urban biowaste.

Standardization of the influencing key factors for the improvement of the selective collection and management of urban biowaste will help city managers and waste management service providers to increase the quality of the selectively collected biowaste, enabling the development of robust biowaste valorization processes. The influencing key factors will focus on actions to promote biowaste collection and improve the perception of citizens on urban biowaste as a local source of valuable materials.

Therefore, standardization will bring citizens' sorting and recycling efforts to increase the biowaste quality and contribute to pave the way for the transition of cities to a circular economy.

Part of this CWA is based on the biowaste selective collection experience implemented in the VALUEWASTE project. This research project has received funding from the European Union's HORIZON 2020 research and innovation programme under grant agreement number 818312.

[1]) https://valuewaste.eu/

1 Scope

This CWA provides guidance for the implementation of biowaste selective collection schemes.

This CWA also paves the way to increase citizen engagement, as this is crucial for the successful implementation of urban biowaste selective collection schemes.

It is intended to be used by city managers and municipal waste managers with interest in implementing the selective collection of urban biowaste to produce high quality biowaste (i.e., minimal presence of non-required fractions) which can be then used in robust valorization processes with attractive business cases.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
biowaste
waste that is composed chiefly of organic matter and typically comprises biodegradable garden and park waste, food and kitchen waste from households, restaurants, caterers and retail premises, and comparable waste from food processing plants

Note 1 to entry: For further information see Annex A.

3.2
non-required fraction
waste fraction affecting negatively the valorization process.

Note 1 to entry: For further information see Annex A.

3.3
customer
biowaste producer.

Note 1 to entry: In this CWA there are two types of customers: citizen and large producer.

3.4
collection point
place where the customer deposits the biowaste on public areas for collection

3.5
mixed fraction
this is the fraction of the waste where the biowaste is actually being deposited before the selective collection of biowaste begins