

# ITALIAN COMPOSTING AND BIOGAS ASSOCIATION

# PRESENTATION OF THE CIC'S QUALITY LABEL FOR COMPOST

# 1. WHO WE ARE

The Italian Composting and Biogas Association (in Italian: Consorzio Italiano Compostatori - CIC) unites public and private compost producers, local authorities and others involved in compost production, like machinery and equipment constructors, growing media producers, research bodies, etc.



Figure 1: CIC Members (May 2017)

Since the very beginning, in 1992, CIC's mission has been to enhance recycling and prevention of biowaste, share knowledge and know-how between CIC's associates, enhance compost quality and market, perform technical training for the composting sector, assist government bodies in improving biowaste recovery.

CIC Members are:

- Ordinary Members representing biological treatment facilities such as composting and/or anaerobic digestion plants treating mainly organic waste from separate collection;

- Associate Members representing companies that are not directly managing waste treatment plants;

- General Association Members from the public and private sector involved in MSW management and recycling.

In February 2017 CIC's Ordinary Members are 79, Associate Members 47 and General Association Members (or Category Members) were currently 2 (Fig. 1).



# NATIONAL CIC ACTIVITIES



# INTERNATIONAL CIC ACTIVITIES





## 1.1 Organizational structure of CIC

Italian Composting and Biogas Association is an Italian non-profit organization with ban on profits distribution. Head office is located in Rome (P.zza San Bernardo, 109 - 00187 Italy) and the Board of Directors could establish offices, branches, laboratories and delegations wherever they considered appropriate<sup>1</sup>.

The main office is located in Cavenago di Brianza (province of Monza e Brianza) at the following address: Loc. Cascina Sofia snc - postal code: 20873.

#### CONTACTS:

Head Office: +39 06 4827748 Main Office: +39 02 95019471 Email: cic@compost.it Website: www.compost.it www.compostabile.com

#### MAP OF THE AREA:

Head Office: P.zza San Bernardo, 109 - 00187 Rome - Italy (41.904072, 12.494223)



<sup>&</sup>lt;sup>1</sup> For further information, please refer to the "Statuto" (Italian only).





Main Office: Loc. Cascina Sofia, 20873 Cavenago di Brianza (MB) – Italy (45.586262, 9.432811)







CIC is the only Italian Association working to promote the separate collection of biowaste with the aim of producing high quality compost into biological treatment plants. The 3 main areas of expertise are:

- 1- Waste-Audits to assess the quality of food-waste
- 2- "Compostable CIC" Label, a certifications scheme on biodegradable materials according to the EN:13432:202
- 3- "CIC Quality Label" for compost, to verify and asses the quality of the compost produced by the associated plants.

The CIC organizational structure is shown in Fig. 2:

### 1.2 CIC's Quality Label Management

Within the CIC staff, the only people allowed check all the documents regarding the CIC Quality Label (CQL) Program are the following:

- Dr. Massimo Centemero
- Dr. Vera Brambilla
- Dr. Jenny Campagnol

In particular, Dr. Brambilla receives the analysis results from the laboratories, checks them and sends them to the plant-person-in-charge for receiving these data (as agreed during the "Application phase", see § 4.1). Analysis results documents are then stored electronically and on paper.

Technical Committee and Guarantee Committee supervise the CQL management. Technical Committee is composed by 13 members, 1 elected by the Board of Directors (he is the Coordinator) and 12 elected by the Technical Consult within the Associates representative. This Committee is responsible for all the modifications of the Manual, evaluating opportunity and evolutions of the Program.



Guarantee Committee is composed by 4 institutions related to CIC:

- IAMB Istituto Agronomico Mediterraneo di Bari;
- CRPA Centro Ricerche Produzioni Animali di Reggio Emilia (*resigned*)
- SAPM Scuola Agraria del Parco di Monza;
- CAA Centro Agricoltura Ambiente di Crevalcore (BO).

The aim of the Guarantee Committee is to supervise the Manual and help the Technical Committee about future developments of the CIC Label and definition of the procedures.



Figure 2: CIC organization chart (update: August 2017)



# 2. STATE OF ART OF COMPOSTING AND ANAEROBIC DIGESTION IN ITALY

Following the UE laws, the Italian waste management legislations is built on the "*4R principle*": Reduction, Reuse, Recycling and, in the end, material and energy Recovery according to the innovative "Decreto Ronchi" D.Lgs. n. 22/1997. This National Framework Law reorganised the basic framework conditions and the strategic outlook for MSW (Municipal Solid Waste) in the whole country. This law acted as a fundamental driver to renew MSW management in over 8400 Italian municipalities; it established extensive EPR (Extended Producer Responsibility) schemes for packaging waste and specific hazardous waste (such as batteries, pharma and others) and also boosted separate collection of organic waste

To reach the UE objectives and targets regarding the recycle of municipal solid waste and the sustainable principles, it is mandatory to collect the biowaste separately in order to recycle them into composting and anaerobic digestion facilities: as a matter of fact, in the two decades between 1997 and 2017, the amount of organic waste collected separately increased by a factor 10. In 2015 nearly 6,1 million [metric] tonnes of food and garden waste were collected separately in Italian municipalities, accounting for 100 kg per-capita and year. Today, Italians collect separately 48% of all MSW with peaks of about 70% in the Regions of Veneto and Trentino-South Tirol (two best-performing cases with a population of about 6 million) and other three Italian Regions place at about the 60% recycling (and hosting a population about 13 million).

As a consequence, in the last decades there was a quick development of the industrial sector of composting and biogas facilities recycling organic waste, manly food waste and green-waste, a sector that boomed from about 30 facilities in year 1997 to more than 300 facilities in 2015, with a total treatment capacity of 8,1 million tons.

# 2.1 The Italian approach for Source Separation of biowaste

Recycling of municipal waste has always been suggested by the European waste management hierarchy, and consequently by the Italian legislation, as the most favourable option, compared to incineration and landfilling of mixed waste. In Italy, national legislation has foreseen ambitious targets, namely a 65% of Source Separation and Recycling Level (SSL) for each municipality.

Today, biowaste, and particularly food-waste from residential source separation, is clearly addressed as the first waste fraction to tackle for municipalities planning to reach the very high SSL targets set by the National law. These high SSL has been easily achieved by hundreds of municipalities in Italy through the so-called "kerbside collection programs", focusing on food waste collection with the typical Italian scheme.

This approach is based on small volume kitchen caddies fitted with biodegradable bags, collection at the kerbside (or door-to-door collection) and adoption convenient frequencies of collection aimed at enhancing citizen's participation. Door-to-door collection program requests that households and commercial activities are responsible for the maintenance and cleaning of the receptacles (buckets, bins, etc.) assigned to them.

In the last decade, intensive source separation of biowaste (and other recyclables) has been extended also to medium/large towns in Italy and in metropolitan areas, achieving high participation by the population involved and reaching best-practise performances in terms of amount (between 70 and 120 kg per-capita) and the quality of the collected biowaste. Among these towns it is worth mentioning the high performances achieved since 2014 by Milan, a city of 1,4 million inhabitants located in Italy's most economically developed Region



Lombardy. Milan has now become a beacon for other metropolitan cities worldwide, currently collecting about 140.000tpy of food-waste, sent to recycling in biogas and composting facility.

## 2.2 The amount of biowaste collected in Italy

Separate collection of recyclables waste in Italian municipalities (including biowaste, packaging waste, WEEEs and others) has reached a quota of 47,5% of all MSW managed in 2015 (29,5Mtons/yr), with a rather stable total production of waste. The collection of biowaste currently accounts for more than 43% of all MSW separately collected and sent to recycling (Fig.2). According to CIC surveys in different Italian regions, about 40 million inhabitants are currently sorting food- and green waste.



Figure 3: Separate collection of MSW in Italy - 2015

By the end of 2015 biowaste collected separately in Italian municipalities, including food-waste and greenwaste, exceeds 6 Mtons with an increase of 6,1% compared to the previous year. CIC estimates that the amount of food-waste reached 4Mt or 66 kg/pers/yr and 2,1 Mt of green-waste or 34 kg/pers/yr, thus passing the 100kg per-capita threshold.

# 2.3 Quality of biowaste

One of the goals of biowaste collection (mainly food-waste) is the reduction of the amount of noncompostable materials (contamination) for maximizing the recovery through composting and/or anaerobic digestion (AD). Initially, a high citizens participation rates was facilitated providing users with kitchen caddies and plastic bags. However, over the years, this practice has evolved, switching to compostable bags, which have brought a reduction of contamination, and vented caddies that allow the material to "breathe" and thus reduce odors and molds.

The Compost quality is based on feedstock composition and purity. Hence CIC conducts hundreds of wasteaudits each year at its members' facilities, for monitoring the quality of organic waste collection. These analyses can be divided into three main groups:



TYPES OF WASTE-AUDITS ON BIOWASTE PERFORMED BY CIC			
1	Composition of incoming food waste, so to determine the percentage of non-compostable materials not suitable for composting		
2	Micro analysis which consist in product waste composition analysis of the contents of a single bag, for groups of bags of different types of material <i>(not described in the present document)</i>		
3	Analysis on the type of bags used for the separate collection of biowaste, to distinguish the origin and type of material bags are made of		

## 2.4 Waste-Audits to assess the quality of food-waste

Only separately collected biowaste is allowed to be used as input material for the industrial composting and anaerobic digestion plants. Through visual controls at the gate and regular waste-audits of the biowaste, treatment plants ensure an input stream of continuous high quality.

CIC has set up in 2006 a continuous monitoring activity to assess the quality of source-separated biowaste nationwide and performed about 5000 waste-composition analyses up to year 2015. Currently, CIC is carrying out its analyses in 15 Italian regions every year. CIC assesses the percentage (w/w f.m.) of non-compostable fractions in the incoming waste; the Non-Compostable-Material quota (NCM) consists of different plastic items (i.e. bags, cups, etc.) and other non-compostable materials (i.e. glass, stones, metals, etc.). The quality of separately collected biowaste is classified according to five quality classes (Fig. 5).

In 2015, CIC performed about 835 waste audits on food-waste; the average non-compostable quota of biowaste delivered to Italian composting and biogas plants is 4,8% in weight, with best-practice cases<sup>2</sup> showing less than 2% impurities. The number of waste-audits falling into the five quality classes are shown in figure 5. The average composition of physical contaminants found inside the incoming waste (data not shown) is due to average plastic items (42,2%) followed by plastic bags and carriers (23,4%) and a mixture of metals, stones, inerts and others.

CIC's waste-audits also allow to compare the effectiveness of bring schemes and curbside schemes in terms of keeping NCM sufficiently low to enhance recycling activities at composting and AD plants. The assessment conducted in year 2015 clearly shows how kerbside schemes significantly reduce the need for pre-sorting of delivered biowaste before waste recycling; hence kerbside collection also reduces significantly the amount of residues from the recycling process that need to be disposed of.

 $<sup>^2</sup>$  Mostly door-to-door collection with compostable bags distributed to households and other biowaste producers.



Figure 4: CIC waste audits on food-waste separately collected - 2015

#### 2.5 Composting and AD plants in Italy

According to CIC, in 2015 there were 261 composting plants and 47 AD facilities designed to recycle biowaste and other organic waste<sup>3</sup>. The industrial sector has reached a total treatment capacity of about 8,1 Mtons, sufficient to recycle all organic waste separately collected in Italy. Despite an overall treatment capacity already able to face the future growth of separate collection, an unbalanced distribution of the facilities is observed over Italy, with a growing demand of new installation above all in southern regions.



Figure 5: Map of CIC members recycling facilities

The ten largest facilities exceed 100.000 tpy capacity each and together they can treat up to 2 Mtons or 25% of the total treatment capacity existing in Italy in 2015; these jumbo plants all are members of the Italian Composting and Biogas Association.

The number of composting (only) facilities in the last 10 years is apparently declining, due to the rise of AD&Composting facilities. In 2015 the 64 composting facilities associated to CIC have a total treatment capacity of at least 2,2 Mtons with an average 37.000t/yr. acceptance of The number of AD&Composting plants constantly increased in the last decade; in 2015, 47 AD-plants have been realized with a total authorized capacity of 3 million tons; most plants integrate AD with (post) composting of digestate. There are 21 AD facilities out of 47 associated to CIC, with a total treatment capacity of 2,15 Mt/yr, thus representing about 70% of the current capacity for anaerobic digestion of biowaste in Italy.

<sup>&</sup>lt;sup>3</sup> Farm AD facilities (those utilizing manure, slurry and residues from agriculture as feedstocks) are not included in this survey.



## 3. PRODUCTION OF QUALITY COMPOST

According to the Italian Legislation, compost is defined as a soil-amendment. Compost is divided into three categories, recognized as "End-of-Waste" according to the input feedstock:

- Green Compost (GWC): compost produced from green-waste only;
- Biowaste Compost (BWC): compost produced from biowaste, including both food- and green-waste;
- Sludge Compost (SWC): compost produced including also sludge inside the mixture of different feedstock.

The Italian standards for End-of-Waste compost are set by the national Law on Fertilizers (D.Lgs 75/2010 and subsequent amendments), and can be divided into agronomical parameters (pH, moisture content, Carbon and organic Nitrogen, etc...), environmental parameters (heavy metals, physical impurities) and sanitization parameters (Salmonella spp., E.coli).

On the amounts of waste delivered to Italy's composting and AD&composting plants, CIC has estimated that the total production of compost reached 1,76 Mtons in year 2015. The production of compost in North-, Central- and Southern-Italy depends on the treatment capacities of the different composting plants. The different categories of compost produced in 2015 are shown in Figure 6:



Figure 6: Production of compost from Greenwaste (GWC), Biowaste (BWC) and Sludges (SWC) in Italy



## 4. CIC'S QUALITY LABEL FOR COMPOST

In order to support the development of the biowaste management sector, CIC has introduced in 2003 the first voluntary program for quality compost in Italy, addressed to its associated companies; the initiative, named "CIC Quality Label" for compost (CQL), aims to assess the quality of compost produced by CIC's members. The standards applied in the rules of CIC's compost label are a useful instrument both for the producer of compost, as a way of monitoring the quality standards achieved, and for the consumer, who can verify the quality of the compost used.

Since 2003, over 2.700 samples of compost were taken and analyzed within the CQL system. Compost samples are taken by qualified operators, trained and authorized by CIC and



independent from the composting plants. Samples are analyzed by Laboratories accredited by the Italian Ministry of Agriculture (MIPAAF) for analysis of soil improvers and growing media and chosen by CIC only.

Since the very beginning, there has been a growing interest in quality Compost and a consequent significant increase of products labeled with the CQL. Between 2013 and 2016 the number of labeled composting-facilities increased and the reasons can be explained as follows:

- Substantial communication and marketing investments as well as public awareness activities and sharing of information;
- Convenient price of compost compared to the mineral fertilizers one;
- Incentives for compost use in organic depleted soils, including the use of Compost in Rural Development Plans so to restore organic matter content;
- Extensive availability of the product.

In year 2016, there were 46 composting-facilities complying with CIC's QL scheme, producing 54 products<sup>4</sup>.

Hence, by end of 2016, the amount of labeled compost represents about 600.000 tons, equal to 33% of Italy's total compost production. Most of the products awarded with CIC's Quality Label are referred to biowaste compost and sludge compost (41 products, around 520.000 tons of compost produced from biowaste), against 13 green compost products, with some 84.500 tons of compost produced.

<sup>&</sup>lt;sup>4</sup> In August 2017, 4 more products have awarded successfully the CIC Quality Label for Compost.





Figure 7: Plants and products involved in the CIC's Quality Label



Figure 8: Number of sampling evolution within the CIC's Quality Label.

### 4.1 Details of the CIC's quality label for compost

CIC's Quality Label for compost is regulated by a Manual recently updated (March 2017) and it is configured as a Label for product. The Manual describe the labelling process and requirements (scope, requirements of conformity, evaluations, procedures) for obtaining and granting the CIC's Label on compost quality. The instruments used by CIC to assess the quality of the compost produced are auditing, sampling, analyses and administrative controls.

After a pre-phase called "Application phase", where CIC provides to the plant-person-in-charge all the documents necessary to join the program, the flow chart of the CIC's Label is shown in the following schemes, divided into "Recognition phase" and "Monitoring phase".

The first one is the "Recognition phase", for new plants and/or new products to join the program. The necessary samplings and controls are taken by CIC Specialists and one of the accredited Laboratories does the analyses. Depending on the type of the product, CIC carries out 2 or 4 analyses on different lots of production



### CONSORZIO ITALIANO COMPOSTATORI

(2 analyses for GreenWaste compost, 4 analyses for Biowaste Compost and Compost from sludge). As the outcome of the "Recognition phase", together with successful analyses results, the product awards the CIC's Label and the plant gets the licence to use the label to promote the awarded product.

After the "Recognition phase", the production plant enters the "Monitoring phase", a continuous supervision by CIC about the quality of the compost produced to grant the licence obtained during the first phase.

#### **RECOGNITION PHASE**





#### **MONITORING PHASE**



\* To the limit established for each parameter is considered a 10% tolerance, for no more than 25% of the samples analysed in a year, or, in the "Recognition Phase", for not more than one sample of those expected. Tolerance does not apply to more than two parameters.

\*\* Requirements are set out in the CIC Compost Quality Manual and comply with the data set out by the Italian National Law (i.e. D.Lgs 75/2010 et seq.)

° Re-check: the analyses will be done on the "counter sample" of the compost lot taken during the first sampling.

\* Re-sampling: second sampling on the same compost lot not compliant in the first instance.

CIC's Label is based on the limit values for use of biowaste as a secondary material (fertilizers or soil improvers) set by the National Law (D.Lgs 75/2010 and subsequent amendments) for the most important environmental parameter (chemical, physical and microbiological parameters). Nutrient composition is tested and to be declared to the user, not regulated.



Parameter	M.U.	GREEN COMPOST (GC)	MIXED COMPOST (MC)	COMPOST FROM SLUDGE
Moisture content	% f.m.	≤50	≤50	≤50
рН	-	6-8,5	6-8,8	6-8,8
Organic C	% d.m.	≥20	≥20	≥20
Humic and fulvic acids	% d.m.	≥2,5	≥7	≥7
Organic N	%Ntot (d.m.)	≥80	≥80	≥80
C/N	-	≤50	≤25	≤25
Cu	mg/kg d.m.	≤230	≤230	≤230
Zn	mg/kg d.m.	≤500	≤500	≤500
Pb	mg/kg d.m.	≤140	≤140	≤140
Cd	mg/kg d.m.	≤1,5	≤1,5	≤1,5
Ni	mg/kg d.m.	≤100	≤100	≤100
Нg	mg/kg d.m.	≤1,5	≤1,5	≤1,5
CrVI	mg/kg d.m.	≤0,5	≤0,5	≤0,5
ті	mg/kg d.m.	≤2*	≤2*	≤2*
Impurities (Plastic, glass and metals $\geq$ 2 mm)	% d.m.	≤0,5	≤0,5	≤0,5
Stones ≥ 5 mm	% d.m.	≤5	≤5	≤5
Salmonellae	MPN/25g	Absent	Absent	Absent
E.coli	CFU/g	≤1.000	≤1.000	≤1.000
Germination index (30% dilution)	%	≥ 60	≥ 60	≥ 60
PCB**	mg/kg d.m.	-	-	0,8

\*For compost containing algae

\*\* Up to 30% of sewage sludge into feedstock (d.m. basis)

The necessary samples are taken by CIC specialists (currently, there are 17 specialists sampling on behalf of CIC) and analysed by accredited laboratories chosen by CIC using recognised methods. The number of samples per product is calculated on the basis of biowaste input:

n° of analyses per year =  $\frac{X}{10.000}$  +1 where X = authorized tons to be treated into the plant

(the number is always rounded off upwards)

Laboratories, in order to be accredited to make the analyses within the CIC's Label program, have to take part and pass regular ring test for compost analyses, and provide the results to CIC staff. On June 2017, there are 3 laboratories recognised by the MIPAAF accredited to work with CIC.



# CONSORZIO ITALIANO COMPOSTATORI

Besides the analyses carried out within the CQL Program, the treatment plants are themselves obliged to take product samples for analysis for internal quality assurance.

The following methods are used by the Laboratories to analyse the compost samples within the CIC's Quality Label Program:

Parameter	Method
Moisture content	UNI EN 13040:2008 UNI EN 10780:1998 app. C1
рН	UNI EN 13037:2012 ANPA 3/2001 metodo N.8 EPA 9045D 2004
Conductivity	UNI EN 13038:2012 UNI 10780:1998 APP. D1
Organic C	DM 21/12/2000 GU n°21 26/01/2001 Suppl. n°6 UNI 10780:1998 APP.E
Humic and Fulvic Acids	DM 21/12/2000 GU n.21 26/01/2001 Supp.6 Manuale ANPA 03/2001 metodo n.11 UNI 10780:1998 App. F
Organic N	UNI EN 13654-1:2001 ISO 11261:1995 Reg. CE 2003/2003 13/10/2003 GU CEE L304 21/11/2003 all. IV Met 2.1 UNI 10780:1998 App.J.1. UNI 10780:1998 APP. J.3.1.
N tot	UNI EN 13654-1:2001 ISO 11261:1995 UNI EN 10780:1998 app. J.1
Organic N / N tot	calculated
C/N	calculated
Salinity	Manuale ANPA 03/2001 Metodo n.9 UNI 10780:1998 App. D1 DGRV 09/08/2005 SO BURV n°89 20/09/2005
Na	UNI EN 13650:2002 UNI EN ISO 11885:2009 UNI 10780:1998 App. B EPA 3050B 1996 + EPA 6010C 2007
Cd	UNI EN 13650:2002 UNI EN ISO 11885:2009 UNI 10780:1998 App. B EPA 3050B 1996 EPA 6010C 2007
Cr VI	ANPA Met. 16 Man. 3 2001 UNI 10780:1998 App. B
Hg	ISO 16772:2004 ANPA 15.3.4.2 Man. 3 2001 UNI 10780:1998 App. B



Parameter	Method
	UNI EN 13650:2002
	UNI EN ISO 11885:2009
Ni	EPA 6010C 2007
	EPA 3050B 1996
	UNI 10780:1998 App. B
	UNI EN 13650:2002
	UNI EN ISO 11885:2009
Pb	EPA 6010C 2007
	EPA 3050B 1996
	UNI 10780:1998 App. B
	UNI EN 13650:2002
	UNI EN ISO 11885:2009
Cu	EPA 6010C 2007
	EPA 3050B 1996
	UNI 10780:1998 App. B
	UNI EN 13650:2002
75	UNI EN ISU 11885:2009
ΖΠ	
	EFA 50500 1990
	DM 27/01/2014
Salmonellae	Rannorti ISTISAN 2002/3
Sumonende	$\Delta P \Delta T 20/2003 - Can - 3 Pag - 27$
	DM 27/01/2014
	LINI 10780-1998
E.coli	FD CEN/TR 15214-1.2006
	DM 08/07/2002 SO GU n°179 01/08/2002 Rapporti ISTISAN 02/08
Impurities (Plastic glass and metals	Manuale ANPA 03/2001 metodo n 4
≥ 2 mm)	UNI 10780:1998 App. A
,	
Germination index (30% dilution)	UNI 10780-1998 Ann K
	10700.1330 App. K
Stones ≥ 5 mm	Manuale ANPA 03/2001 Metodo n.4
	UNI 10780:1998 App. A

#### 4.2 Plant awarded list

At the end of 2016, there were 46 plants included in the program, with 54 products awarded with the CIC's Quality Label. At the beginning of 2017, 4 more plants passed with success the "Recognition phase" and their products are now included within the labelled products. However, one plant decided to exit the program because its product is no longer produced, so its product is not included in the list anymore. Considering also the product in the "Recognition phase", on June 2017, there are 60 products who joined the program.



	Company	City	Pegion	Phase	Product
4			Region	Filase	type
1		GIUSSAGO	Lombardy	Monitoring phase	BWC
2	ACEA PINEROLESE IND. SPA	PINEROLO	Piedmont	Monitoring phase	BWC
3	ACIAMISPA	AIELLI	Abruzzo	Monitoring phase	BWC
4	ACSR SPA	BORGO SAN DALMAZZO	Piedmont	Monitoring phase	BWC
5		AREZZO	luscany	Monitoring phase	BWC
6	ALIA SPA	MONTESPERIOLI	Tuscany	Monitoring phase	BWC
/	ALIA SPA	BORGO SAN LORENZO	luscany	Monitoring phase	BWC
8	AMA ROMA SPA	ROMA	Lazio	Monitoring phase	BWC
9	ASECO SPA	MARINA DI GINOSA	Apulia	Monitoring phase	BWC
10	AZ. AGRICOLA ALLEVI SRL	SAN NAZZARO DE BURGONDI	Lombardy	Monitoring phase	GWC
11	AZ. AGRICOLA ALLEVI SRL	SAN NAZZARO DE BURGONDI	Lombardy	Monitoring phase	BWC
12	AZ. AGRICOLA ALLEVI SRL	SAN NAZZARO DE BURGONDI	Lombardy	Monitoring phase	BWC
13	BIOCICLO SRL	CASTIGLIONE DELLE STIVIERE	Lombardy	Monitoring phase	BWC
14	BIOCICLO SRL	CASTIGLIONE DELLE STIVIERE	Lombardy	Monitoring phase	BWC
15	BIOFACTORY SPA	CALCINATE	Lombardy	Monitoring phase	BWC
16	BIOFACTORY SPA	CALCINATE	Lombardy	Monitoring phase	GWC
17	BIOMAN SPA	BALLO' DI MIRANO	Friuli V. G.	Monitoring phase	BWC
18	BIWIND SRL	DELICETO	Apulia	Monitoring phase	BWC
19	CALABRA MACERI E SERVIZI SPA	RENDE	Calabria	Monitoring phase	BWC
20	CI.VE.TA.	CUPELLO	Abruzzo	Monitoring phase	BWC
21	CONS. IND. PROVINCIALE ORISTANESE	ARBOREA	Sardinia	Monitoring phase	BWC
22	CONSORZIO STABILE AMBIENTE SCARL	NOTARESCO	Abruzzo	Monitoring phase	BWC
23	E.R.U.S. SERVICE SPA	ORIGGIO	Lombardy	Monitoring phase	GWC
24	ECO CALL SPA	VIBO VALENTIA	Calabria	Monitoring phase	BWC
25	ECOCOMPOST MARSICA SRL	LAQUILA	Abruzzo	Monitoring phase	BWC
26	ENOMONDO SRL	FAENZA	Emilia Romagna	Monitoring phase	BWC
27	ENOMONDO SRL	FAENZA	Emilia Romagna	Monitoring phase	GWC
28	ETRA SPA	BASSANO DEL GRAPPA	Veneto	Monitoring phase	BWC
29	F.LLI BERTUZZO SRL	MONTECCHIO PRECALCINO	Veneto	Monitoring phase	GWC
30	FUTURA SPA	GROSSETO	Tuscany	Recognition phase	BWC
31	GAIA SPA	SAN DAMIANO D'ASTI	Piedmont	Monitoring phase	BWC
32	GREEN ASM SRL	NERA MONTORO	Umbria	Recognition phase	BWC
33	HERAMBIENTE SPA	OZZANO DELL'EMILIA	Emilia Romagna	Monitoring phase	GWC
34	HERAMBIENTE SPA	SANT'AGATA BOLOGNESE	Emilia Romagna	Monitoring phase	BWC
35	HERAMBIENTE SPA	RIMINI	Emilia Romagna	Monitoring phase	BWC
36	HERAMBIENTE SPA	OSTELLATO	Emilia Romagna	Monitoring phase	BWC
37	HERAMBIENTE SPA	VOLTANA DI LUGO	Emilia Romagna	Monitoring phase	BWC
38	HERAMBIENTE SPA	CESENA	Emilia Romagna	Monitoring phase	BWC
39	ISONTINA AMBIENTE SRL	GORIZIA	Friuli V. G.	Monitoring phase	BWC
40	KOSTER SRL	VARESE	Lombardy	Monitoring phase	GWC
41	MANTOVA AMBIENTE SRL	MANTOVA	Lombardy	Monitoring phase	BWC
42	MONTELLO SPA	MONTELLO	Lombardy	Monitoring phase	BWC



	Company	City	Region	Phase	Product type
43	NUOVA AMIT SRL	BOARA POLESINE	Veneto	Monitoring phase	BWC
44	PROGEVA SRL	LATERZA	Apulia	Monitoring phase	BWC
45	PROGEVA SRL	LATERZA	Apulia	Monitoring phase	GWC
46	SEA RISORSE SPA	VIAREGGIO	Tuscany	Monitoring phase	GWC
47	SELFGARDEN SRL	APRILIA	Lazio	Monitoring phase	BWC
48	SESA SPA	ESTE	Veneto	Monitoring phase	BWC
49	SIENAMBIENTE SPA	ABBADIA SAN SALVATORE	Tuscany	Monitoring phase	BWC
50	SIENAMBIENTE SPA	(CORTINE) ASCIANO	Tuscany	Monitoring phase	BWC
51	SILEA SPA	ANNONE BRIANZA	Lombardy	Recognition phase	BWC
52	SOGLIANO AMBIENTE SPA	SOGLIANO AL RUBICONE	Emilia Romagna	Monitoring phase	BWC
53	TECNOGARDEN SERVICE SRL	CASTELSEPRIO	Lombardy	Monitoring phase	GWC
54	TECNOGARDEN SERVICE SRL	ROMA	Lazio	Monitoring phase	GWC
55	TECNOGARDEN SERVICE SRL	LUINO	Lombardy	Monitoring phase	GWC
56	TECNOGARDEN SERVICE SRL	VIMERCATE	Lombardy	Monitoring phase	GWC
57	VALLE UMBRA SERVIZI SPA	FOLIGNO	Umbria	Monitoring phase	GWC
58	VALLE UMBRA SERVIZI SPA	FOLIGNO	Umbria	Monitoring phase	BWC
59	VERDE VITA SRL	ALGHERO	Sardinia	Monitoring phase	BWC
60	VILLASERVICE SPA	VILLACIDRO	Sardinia	Monitoring phase	BWC

#### 4.3 Scale of fees

In order to join the "CIC Quality Label", companies have to pay an annual membership fee, depending on the type of compost to be labelled. Here in details:

Type of Compost	Memebership fee
Green Waste Compost	€ 500
Biowaste Compost	€ 1.000
Compost from Biowaste and Sludge	€ 1.000