
BIO-WASTE ASPECTS IN THE
FERTILISING PRODUCT REGULATION

EU proposal for CE marked fertilising products as part of the
Circular Economy Package:

A unique opportunity to use the untapped potential of bio-waste

31 October 2017

Taking into account the European Parliament's 24/10 vote on MEP Ţurcanu's report on the proposed CE marked fertilising products regulation, the European Compost Network (ECN) would herewith like to inform you of our position on the file. We would be pleased if the Council, in its ongoing deliberations on this file, would take these into consideration.

ECN is the leading European membership organisation promoting sustainable recycling practices in composting, anaerobic digestion and other biological treatment processes of organic resources. ECN has been actively following the Commission proposals as part of the Circular Economy Package, and is (inter alia) actively advocating for improving the management of bio-waste as part of the revision of the Waste Framework Directive (currently in interinstitutional negotiations). As part of our commitment to ensuring a more circular approach toward bio-waste, we welcome the Commission's revision to the EU Fertilising Product Regulation which widens the scope to organic materials. ECN sees this as a unique opportunity to place high quality compost and digestates produced from source-separated bio-waste on the EU marked as CE marked fertilising products.

While ECN appreciates the Commission's overall objectives, we regard several elements included in the proposal as incompatible with the goal of increasing the use of recycled nutrients. If adopted as such, the proposal would significantly obstruct the use of bio-waste materials including garden and park waste for CE marked fertilising products. Following the publication of the Commission proposal, ECN has therefore been in contact with decisions makers on a national as well as European level to increase the awareness of our concerns, and to share our recommendations for appropriate changes. Unfortunately, the report by MEP Ţurcanu, which the European Parliament adopted on the 24th of October, does not take into account these changes.

In light of the ongoing review of the proposal by the Council's Working Party on Technical Harmonisation (Fertilisers), ECN would therefore like take this opportunity to inform you (again) of our main concerns, and calls upon the Council to take these into consideration.

The following elements are in grave conflict with the objectives to promote safe and innovative organic fertilisers produced from recycled bio-waste and other secondary raw materials:

1. The unjustified widening of most CMCs Component material Categories CMC 2, 4, 6 for bio-waste input materials to CMCs without guaranteeing sufficient treatment, process control and conformity assessment compared to requirements set for CMC 3 and CMC 5 with bio-waste input materials as defined in Directive 2008/98. This shows the importance of a defined positive list of input material for compost CMC 3 and CMC 5 – digestates, as proposed by JRC in “End of Waste Criteria for Biodegradable Waste”. Please see the attached proposal from ECN, suggested amendment 1.

2. The missing adaption of a more flexible proposed temperature/time profiles for hygienisation for bio-waste within composting (CMC 3) and fermentation (CMC 5) other than those proposed by EU COM. ECN suggested amendment to the tt-profiles proposed by the EU COM were based on extended scientific examinations, numerous process validations and large practical experiences on national level: 65 °C or more at least 3 days in open systems/ 60 °C or more at least 3 days in closed systems / 55 °C or more for at least 10 days in open systems . Furthermore ECN suggests that a producer is allowed to apply an alternative time temperature profile if they can demonstrate equivalent effectiveness for hygienisation as the above indicated time temperature profiles (Authorization through validation of the file by EFSA (European Food and Safety Authority)). The JRC-report on EOW for compost and digestates shows scientific agreement with this flexible approach to tt-profiles. (please see pages 169 and 242: <http://publications.jrc.ec.europa.eu/repository/bitstream/JRC87124/eow%20biodegradable%20waste%20final%20report.pdf>).

3. The pathogen control with limit values for “Escherichia coli/ and Enterococcaceae” for organic fertilizer, organic soil improver and growing media. Both pathogens are subject to regrowth which is a natural process without influencing the product quality of fertilising products; they are not suitable for controlling final products, but only for crosscheck the effectiveness of a sanitation step of the treatment.

Please find ECN’s suggestions for amendments on these 3 priority issues at the bottom of this paper. These and other suggested amendments can also be found in ECN’s statement on the proposal for fertilising products dated from 21/09/2017, which you will find attached to the same email as this letter.

Additionally, and in reflection of the EP’s amendments, ECN feels that it is important to bring more clarity into the definition of “plant material” which falls under the definition of bio-waste and therefore cannot be an input material in CMC 2. ECN calls for a general elimination of all waste materials according to the definition of bio-waste on Directive 2008/2098/EG in CMC 2, 4, 6. The inclusion of non-processed or mechanically processed organic plant materials and other organic waste materials in other CMCs with no adequate stringent treatment, control and quality assurance requirements according to CMC 3 and CMC 5, will result in an underinsured, not CE-equivalent product quality.

ECN does not accept the widening the CMC 2 input material to more or less to all plants, plants parts or plant extracts which do not render the final substance subject to EU REACH regulation EC (No) 1907/2006 (*EP Amendment 228*).

Furthermore the EP’s suggestion to rename CMC 4 category (in the EC proposal titled “Energy crops digestate”) into “Energy crop and digestates and plant-based bio-waste” indicates again a widening to plant waste material, which ECN objects to (*EP Amendments 242*). ECN rejects the extension of the input material to CMC 6 (Food and Industry–by-products), which is in the EC proposal is limited to only the three substances (Food industry factory lime, molasses and vinasse), too. The extension to substance such as “olive pomace” material, “by-products of the feed industry which are listed in the catalogue of individual feed materials in Regulation No 68/20132” and to “any other materials or substance that has been approved for incorporation in food and animal feed” (*EP Amendments 226, 263 and 26*). This shows a bypass of these waste materials, which due to insufficient, treatment, control and conformity assessments, will negatively implicate the safety of fertilising materials.

Further recommendations and technical information are given in ECN’s statement on the proposal for fertilising products dated from 21/09/2017, which you will find attached to the same email as this letter.

As member state experts, ECN would like to ask you to take our concerns into consideration in the ongoing discussions in the Council, and ensure appropriate follow-up actions.

We would look forward to provide you with more detailed (technical) information on our positions. Please let us know if this information would be helpful for you by contacting info@compostnetwork.info.

Suggested amendments on priority issues

Please find the full overview of ECN amendments in ECN’s statement on the proposal for fertilising products dated from 21/09/2017, which you will find attached to the same email as this letter.

Suggested Amendment 1 Proposal for a Directive Recital (13)	
<i>Text proposed by the Commission</i> (13) For certain recovered wastes within the meaning of Directive 2008/98/EC of the European Parliament and of the Council ²⁰ , a market demand for their use as fertilising products has been identified. Furthermore, certain requirements are necessary for the waste used as input in the recovery operation and for the treatment processes and techniques, as well as for fertilising products	<i>ECN suggested amendment</i> (13) For certain recovered wastes within the meaning of Directive 2008/98/EC of the European Parliament and of the Council ²⁰ , a market demand for their use as fertilising products has been identified. Furthermore, certain requirements are necessary for the waste used as input in the recovery operation and for the treatment processes

<p>resulting from the recovery operation, in order to ensure that the use of those products does not lead to overall adverse environmental or human health impacts. For CE marked fertilising products, those requirements should be laid down in this Regulation. Therefore, as of the moment of compliance with all the requirements of this Regulation, such products should cease to be regarded as waste within the meaning of Directive 2008/98/EC.</p>	<p>and techniques, as well as for fertilising products resulting from the recovery operation, in order to ensure that the use of those products does not lead to overall adverse environmental or human health impacts. For CE marked fertilising products, those requirements should be laid down in this Regulation. Therefore, as of the moment of compliance with all the requirements of this Regulation, such products should cease to be regarded as waste within the meaning of Directive 2008/98/EC.</p> <p><i>Compost and digestate produced from biowaste, which do not fulfil all requirements of the annexes of the EU Fertilising Product Regulation and do not reach the CE mark, can be declared and marked as national fertilising product based on national end-of-waste criteria and status furthermore.</i></p>
<p><u>ECN Justification</u> <i>Clarification is needed, to ensure that non-harmonised compost and digestate materials can be used as organic soil improvers or organic fertilisers as national products under national regulation.</i></p>	

<p>Suggested Amendment 5 Proposal for a Directive Article 18 End-of-waste status</p>	
<p><i>Text proposed by the Commission</i> A CE marked fertilising product that has undergone a recovery operation and complies with the requirements laid down in this Regulation shall be considered to comply with the conditions laid down in Article 6(1) of Directive 2008/98/EC and shall, therefore, be considered as having ceased to be waste. For any aspects not covered by Annex I or II, CE marked fertilising products shall meet the requirement that their use, as specified in the use instructions, does not lead to food or feed of plant origin becoming unsafe within the meaning of Articles 14 and 15 of Regulation (EC) No 178/2002, respectively.</p>	<p><i>ECN suggested amendment</i> A CE marked fertilising product <i>which exists of or contains compost (CMC 3) or digestates other than energy crops (CMC 5) ceases to be waste and obtains a product status according to conditions laid down in Article 6(1) of Directive 2008/98/EC at the same time, if the compost and digestates:</i></p> <ul style="list-style-type: none"> ▪ <i>have undergone a recycling operation of aerobic composting or anaerobic digestion with approved input material according to this Regulation and with defined treatment process and</i> ▪ <i>comply with all requirements and specific criteria for the component categories (CMC 3 and CMC 5), addressed product function categories and related conformity assessment procedures laid down in this Regulation and its annexes.</i> <p><i>At the moment of compliance with all requirements of this Regulation these compost (CMC 3) and digestate</i></p>

	<p><i>(CMC 5) products are no longer waste and are outside of the scope of the Directive 2008/98/EC.</i></p> <p><i>In case other input materials, other treatment and other essential and specific requirements than those referred to in this Regulation are used, the resulting compost and digestate products cannot be marketed as CE marked fertilising products.</i></p> <p><i>Amendments of the criteria set in the Annexes of this regulation referring to compost (CMC 3) and digestate (CMC 5) can only be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 39 a of Directive 2008/98/EC.</i></p>
<p><u>ECN Justification</u></p> <p><i>More clarification is needed due to the interface with the waste regulation and existing national product status of fertilising products from the same bio-waste input materials. Referring to Article 6 (d) in the Waste Framework Directive only in the case where no criteria have been set on EU level based on paragraph 1 and 2 of article 6, Member States can decide whether certain waste has ceased to be waste. As consequences compost and digestate produced from bio-waste, which doesn't fulfil all requirements of the annexes of the EU Fertilising Products Regulation and doesn't reach the CE mark, can still be declared as a "national product" based on "national end of waste"-status.</i></p>	
<p>Suggested Amendments 11, 18 & 21 Proposal for a Directive Annex I – part II – PFC 1(A) - paragraph 4 Annex I – part II – PFC 3(A) - paragraph 3 (b) Annex I – part II – PFC 4 - paragraph 4</p>	
<p><i>Text proposed by the Commission</i></p> <p>None of the two following types of bacteria shall be present in the CE marked fertilising product in a concentration of more than 1000 CFU/g fresh mass:</p> <p style="padding-left: 40px;">(a) <i>Escherichia coli</i>, or (b) <i>Enterococcaceae</i>.</p> <p>This shall be demonstrated by measuring the presence of at least one of those two types of bacteria.</p>	<p><i>ECN suggested amendment</i></p> <p>None of the two following types of bacteria shall be present in the CE marked fertilising product in a concentration of more than 1000 CFU/g fresh mass:</p> <p style="padding-left: 40px;">(a) <i>Escherichia coli</i>, or (b) <i>Enterococcaceae</i>.</p> <p>This shall be demonstrated by measuring the presence of at least one of those two types of bacteria.</p>
<p><u>ECN Justification</u></p> <p><i>We propose to delete the hygienic parameter "Escherichia coli or Enterococcaceae". It makes no sense to measure and regulate such a parameter in end products of biological treatment of organic materials. These are applicable in the Animal By-Product Regulation (ABPR) mainly as a process parameter to cross-check the effectiveness of the sanitation step of the treatment but gives no information in finalised products, due to the fact, that in natural occurring circumstances, E. coli or Enterococcus is subject to regrowth, which is a natural process without</i></p>	

influencing the product quality. For the final product assessment, the adequate parameter for hygiene aspects is Salmonella.

Suggested Amendment 24

Proposal for a Directive

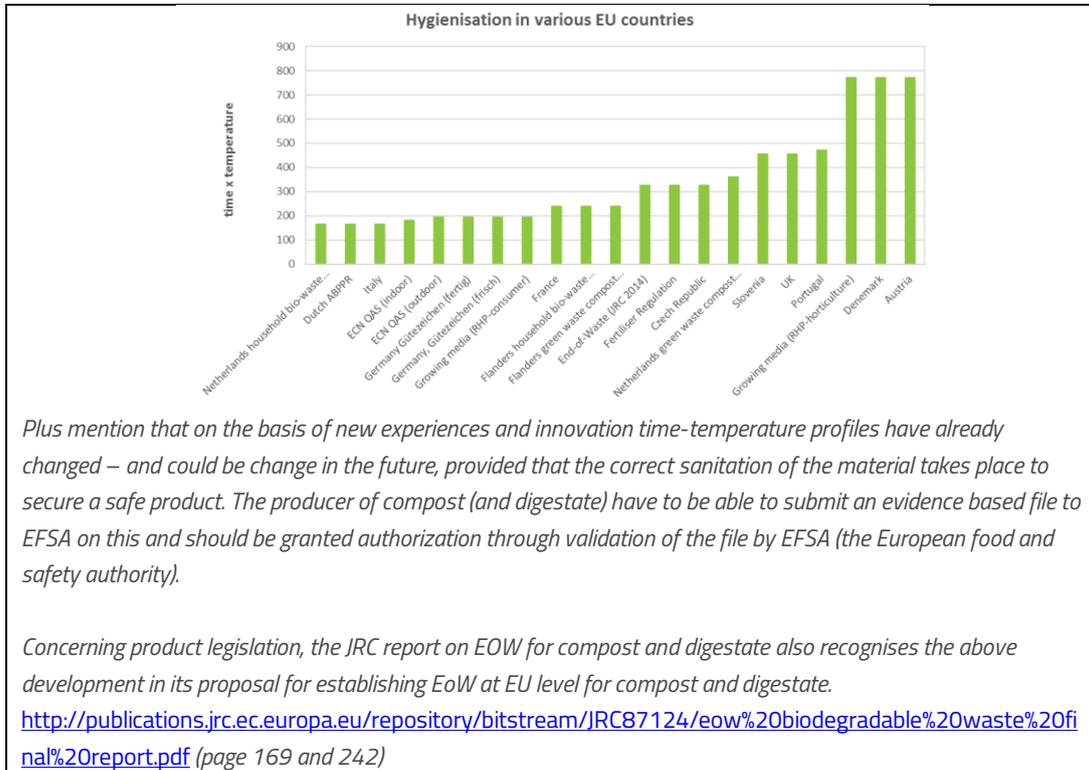
Annex II – part II – CMC 3 - paragraph 3

<p><i>Text proposed by the Commission</i></p> <p>3.The aerobic composting shall consist in controlled decomposition of biodegradable materials, which is predominantly aerobic and which allows the development of temperatures suitable for thermophilic bacteria as a result of biologically produced heat. All parts of each batch shall be regularly and thoroughly moved in order to ensure the correct sanitation and homogeneity of the material. During the composting process, all parts of each batch shall have one of the following temperature-time profiles:</p> <ul style="list-style-type: none"> ▪ 65 °C or more for at least 5 days, ▪ 60 °C or more for at least 7 days, or ▪ 55 °C or more for at least 14 days. 	<p><i>ECN suggested amendment</i></p> <p>3.The aerobic composting shall consist in controlled decomposition of biodegradable materials, which is predominantly aerobic and which allows the development of temperatures suitable for thermophilic bacteria as a result of biologically produced heat. All parts of each batch shall be regularly and thoroughly <i>moved, turned or forced aerated</i> in order to ensure the correct sanitation and homogeneity of the material. During the composting process, all parts of each batch shall have one of the following temperature-time profiles:</p> <ul style="list-style-type: none"> ▪ 65 °C or more for at least 3 days in open systems, ▪ 60 °C or more for at least 3 days in closed systems, or ▪ 55 °C or more for at least 10 days in open systems. <p>The producer is allowed to apply an alternative time temperature profile for which he can demonstrate equivalent effectiveness for hygienisation as the above indicated time temperature profiles.</p>
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ECN Justification

Based on extended scientific examinations, numerous process validations (HBPS, BGK) and practical experience on national level those defined temperature/time profiles are implemented national regulation. The German bio-waste ordinance which entered into force in 1998, defined and implemented temperature file requirements as hygienisation requirement for composting of bio-waste. With the latest revision of the German bio-waste ordinance in 2012 the time/temperature profiles were defined for composting with 55 °C for 2 weeks or 60 °C for 6 days or 65 °C for 3 days (without difference between open or closed systems).

With regard to hygienisation the temperature-time profiles are very different in EU countries, see figure below (the y-axis is the value of time x temperature).



Suggested Amendment 22 & 27	
Proposal for a Directive	
Annex II – part II – CMC 3 - paragraph 1 subparagraphs a-c, new (d)	
Annex II – part II – CMC 5 - paragraph 1 (a-c), new (d) and (e)	
<p><i>Text proposed by the Commission</i></p> <p>1. A CE marked fertilising product may contain compost obtained through aerobic composting of exclusively one or more of the following input materials:</p> <p>(a) Bio-waste within the meaning of Directive 2008/98/EC resulting from separate bio-waste collection at source;</p> <p>(b) Animal by-products of categories 2 and 3 according to Regulation (EC) No 1069/2009;</p> <p>(c) Living or dead organisms or parts thereof, which are unprocessed or processed only by manual, mechanical or gravitational means, by dissolution in water, by flotation, by extraction with water, by steam distillation or by heating solely to remove</p>	<p><i>ECN suggested amendment</i></p> <p>1. A CE marked fertilising product may contain compost obtained through aerobic composting of exclusively one or more of the following input materials:</p> <p>(a) Bio-waste within the meaning of Directive 2008/98/EC resulting from separate bio-waste collection at source; <i>with reference to a guiding document containing types and origin of source separated organic waste that is eligible as feedstock, based on Table 14 of the JRC report 2014 'End of Waste Criteria for Biodegradable Waste'.</i></p> <p>(b) Animal by-products of categories 2 and 3 according to Regulation (EC) No 1069/2009;</p> <p>(c) Living or dead organisms or parts thereof, which are unprocessed or processed only by manual,</p>

<p>water, or which are extracted from air by any means, except</p> <ul style="list-style-type: none"> ▪ the organic fraction of mixed municipal household waste separated through mechanical, physicochemical, biological and/or manual treatment, ▪ sewage sludge, industrial sludge or dredging sludge, and ▪ animal by-products of category 1 according to Regulation (EC) No 1069/2009; 	<p>mechanical or gravitational means, by dissolution in water, by flotation, by extraction with water, by steam distillation or by heating solely to remove water, or which are extracted from air by any means, except</p> <ul style="list-style-type: none"> ▪ the organic fraction of mixed municipal household waste separated through mechanical, physicochemical, biological and/or manual treatment, ▪ municipal sewage sludge, industrial sewage sludge or dredging sludge, and ▪ animal by-products of category 1 according to Regulation (EC) No 1069/2009; <p><i>New (d) food and feed washing waste, sludges from food and feed processing plants</i></p> <p><i>New (e) Energy crops – plants that have not for any other purpose, including algae, according to CMC 4 Nr. 1 (a). [only relevant for CMC 5]</i></p>
<p><u>ECN Justification</u></p> <p><i>ECN calls for a defined, acceptable input list with detailed information for producing compost and digestates in the Fertilising Products Regulation in order to give legal certainties for CE marked products. As a guidance, waste codes should/could give an added value (although not binding). As an example in the European Quality Assurance scheme for compost and digestate of the European Compost Network 'ECN-QAS' approved input materials are provided in a definite list, together with the waste code, waste type, specification of permitted materials and remarks. A guidance document should contain more detailed clarification on the types and origin of source separated organic waste that is eligible as feedstock. This should be based on the input list provided as Table 14 in the JRC report 2014 on End of Waste Criteria for Biodegradable Waste.</i></p> <p><i>The word 'sewage' should be added here to not exclude sludges from feed, food and beverage retail premises and from feed, food and beverage processing plants.</i></p> <p><i>In addition, a new subparagraph (d) food waste, food washing waste, sludges from food and feed processing plants should be added.</i></p> <p><i>[Only relevant for CMC 5] In practice some Co-fermentation plants are treating different organic input materials, from biowaste, manure up to energy crops with different amounts in their processes. In order to keep this flexibility within the input material management of digestion plants (CMC 5), it should be allowed using energy crop materials – according to CMC 4 Nr. 1(a)?</i></p>	



About ECN

The European Compost Network (ECN) is the leading European membership organisation promoting sustainable recycling practices by composting and anaerobic digestion of organic resources and guarding over the quality and safe use of the recovered organic fertilisers/soil improvers.

The European Compost Network is a membership organisation with 66 members from 28 European countries. Members include all European bio-waste organisations and their operating plants, research, policy making, consultants and authorities. ECN represents 20 bio-waste organisations from 13 European countries, 26 companies producing bio-based products, 6 environmental NGOs, 11 academic (research) institutes in environmental, agricultural and natural sciences and three environmental agencies. Through its member organisations, ECN represents more than 3,000 experts and plant operators with a biological waste treatment capacity above 30 million tonnes.