

Final critical review report

PEFCR title and version Prepared Pet Food for Cats and Dogs
PEFCR (DRAFT FINAL submitted to the EF Steering Committee – 19 March 2018)

Review committee: François Charron-Doucet
Scientific Director, Groupe AGÉCO (Chair)

Caitlyn Bolton
Executive Director, Pet Sustainability Coalition

Namy Espinoza Orias
Food LCA Specialist, Nestlé Research Center

Type of review : PEFCR critical review

Date: March 21, 2018

1. Introduction

This document constitutes the final critical review report of the *Prepared Pet Food for Cats and Dogs PEFCR* (DRAFT FINAL submitted to the EF Steering Committee – 19 March 2018).

This product environmental footprint category rules (PEFCR) was prepared in the context of the PEF initiative led by the European Commission. The main objective of this PEFCR is to develop a consistent set of rules to calculate the relevant environmental impacts of prepared pet food products for cats and dogs.

This critical review report presents the scope and the process of the critical review, as well as the comments and conclusions of the critical review panel.

2. Scope of the critical review

The aim of this critical review is to ensure that the PEFCR supports the creation of credible and consistent PEF profiles and complies with the requirements of the PEFCR guidance (version 6.3).

In addition, the following criteria were considered :

- The PEFCR is consistent with the guidelines provided in the PEF Guide and the latest version available of this Guidance and deviations are justified,
- Functional unit, allocation and calculation rules are adequate for the product category under consideration,
- Primary and secondary datasets used in the screening and the supporting studies are relevant, representative, and reliable,
- Selected LCIA indicators and additional environmental information are appropriate for the product category under consideration and the selection is done in accordance with the guidelines stated in this Guidance and the PEF Guide,
- The benchmark and performance classes are correctly defined or the lack of performance classes is appropriately justified, and
- Both LCA-based data and the additional environmental information prescribed by the PEFCR give a description of the significant environmental aspects associated with the product.

The critical review process only covers the PEFCR document and does not include a review of the screening study and subsequent remodelling work.

Description of the review process

The critical review panel is chaired by François Charron-Doucet, scientific director at Groupe AGÉCO. The panel is made up of two pet food industry experts:

- Caitlyn Bolton, executive director at Pet Sustainability Coalition
- Namy Espinoza Orias, food LCA specialist at Nestlé Research Center

The review process got underway in December 2016 with the submission of the first draft version of the PEFCR.

On January 4, 2017, a meeting was held between the members of the review panel, FEDIAF and Quantis (authors). The review panel provided their written comments on January 20, 2017.

On January 27, 2017, Quantis submitted an updated version of the PEFCR. The review committee deemed this document and the authors' responses to the reviewers' comments satisfactory. Still, additional comments were received on January 31, 2017. Quantis delivered the final draft version of the document on January 31, 2017.

Following the publication of the PEFCR guidance (version 6.3) in December 2017, the PEFCR for Prepared Pet Food for Cats and Dogs was completely restructured and reviewed accordingly to the template provided in the PEFCR Guidance and the other new rules.

On February 12, 2018, the updated version of the PEFCR was submitted to the review committee. Reviewers' comments were sent on February 23.

On March 3, 2018, Quantis delivered the final draft document. The committee reviewed the changes and provided its feedback to Quantis. Minor changes were required.

The final version of the document was received by the reviewers on March 19, 2018. This document included changes based on comments provided by the European Commission.

On March 21, 2018, the reviewers accepted the last modifications and validated the final critical review report.

3. Final conclusion of the critical review

The review committee confirms that the Prepared Pet Food for Cats and Dogs PEFCR (DRAFT FINAL submitted to the EF Steering Committee – March 19 2018) complies with the requirements of the PEFCR Guidance (version 6.3) and the criteria listed in the scope of this critical review report.



François Charron-Doucet, Eng. MScA

Scientific Director

Groupe AGÉCO

francois.charron@groupeageco.ca

4. List of comments

Detailed list of the reviewers' comments on the first draft (December 21, 2016), the intermediate draft (January 31, 2017) and the final draft (February 6, 2018) of the PEFCR. Follow-up comments and answers are in red.

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
Comments on first draft (December 21, 2016)							
CBD	1			Per the unit number selected : I realize that for a comparative assessment a unit of measurement of product must be selected – however, I presume that dog food with higher caloric density per gram will have a lesser environmental impact because it will require less total volume to be manufactured, processed, and shipped. How will the environmental impact of caloric density be evaluated in this assessment so that businesses can determine best actions related to density?		Noted. This is a valid point which has already been addressed. See lines 388-403 where the process to consider energy density is described.	Closed
CBD	2			Would the lifecycle stages also include a stage beyond « use » to include	Expansion of lifecycle stages to	Noted. We agree that it has an influence but because data are	Closed

¹ Type of comment: “ge” and “G” = general; “te” and “T” = technical; “ed” and “E” = editorial

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
				volume of pet fecal waste as this varies by product type and has notable environmental impacts on water and land quality?	include pet fecal waste.	not available, it has been decided at the SC with approval of the EC that it will not be included for any of the food and drink pilots at this time.	
CBD	3			Is there no inclusion of dehydrated or raw pet food types? Does their comparative sale in the EU suggest that it should also be considered in the average product?		Noted. Because dehydrated and raw pet food are not generally considered to be complete pet food which is the scope of this PEFCR, they are not specifically included. Additionally, these types of food do not represent a significant portion of the European market share.	Closed
CBD	4			Has it been confirmed that the average pet food bowl is comprised of plastic and not metal?	Potentially inclusion of metal bowls depending on comparative use	Rejected. Because data are not readily available to determine what percentage of what type of bowl is used, and because the bowl has very little influence in the overall footprint, the assumption of a plastic bowl will be maintained. While a metal pet food bowl would be more impacting to produce, its lifetime is significantly longer and only a small portion would be included for each functional	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
						unit.	
FCD	1	Lines 190 to 193	ge	The document seems to be an hybrid between a draft PEFCR, a summary of screening studies and an internal working paper for the TS. The orange boxes could be used more intensively to separate the text that will be part of final PEFCR and the one that does not belong to such kind of document.	Throughout the document, clearly identify the blocks of text or sections that will be part of the final document.	Accepted. To be revised at a later date due to time constraints even though some changes have been made to date.	Closed
FCD	2	Lines 200 to 205	ge	Purple boxes are not used consistently throughout the document. There are several blocks of text taken directly from the guidance documents that are not highlighted in purple boxes.	Review the use and relevance of the purple boxes.	Accepted. To be revised at a later date due to time constraints even though some changes have been made to date.	Closed
FCD	3	Line 307-309	ge	Is this a requirement for the LCA practitioner?	If not, remove or put it in an orange box.	Accepted. Moved to an orange box.	Closed
FCD	4	Section 4.2	ge	Not clear where these requirements were taken.	Indicate the source of these requirements.	Noted. Source to be added or requirements to be updated based on the final version of the guidance document.	Closed
FCD	5	Line 358-359	te	Why is it not possible to compare wet and dry pet food for the same type of	Provide justification for this limitation on comparability.	Noted. Dry and wet pet food, being for dogs or cats, are	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
				<p>animal? According to PEF guidance (p. L 124/65) a principle of PEFCR is : striving for comparability. In this context, any requirements or guidance limiting comparability within the same product category should be carefully justified.</p> <p>I generally agree with the arguments about not comparing dry and wet pet food, although they should be limited to aspects related to the functionality of the product. For example, difference in production processes should not be presented as an argument to limit comparability. I would also suggest to add the relevant arguments in the PEFCR.</p>		<p>separate markets which respond to different needs of pets and hold very different characteristics. For instance, wet pet food promotes urinary output and is more suitable for pets with defective teeth while dry pet food has dental benefits and reduces occurrence tartar. Moreover, wet pet food moisture content is above 80% while dry pet food moisture content is below 14% which serves individual sensory preferences (smell, taste haptic ...) of animals. Wet pet food has a high palatability while dry pet food is perceived as less palatable. The texture of the products is also very different: for wet pet food, chunks (pre-cooked, shaped pieces, mainly of animal protein) are mixed in</p>	

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
						<p>gravy or jelly while in dry pet food, the ingredients are subject to extrusion or cooking. In other words, wet and dry pet food are very different products which should be seen as complementary rather than in competition with each other. It was therefore decided by the TS that these products should not be subject to EF comparison to prevent inaccurate interpretations and conclusions on the overall benefits of wet and dry pet food products.</p> <p>Accepted. The explanation was modified and added to the PEFCR.</p>	
FCD	6	Table 2 – How well?	te	“Nutritional requirements” seems inexact or too broad here. It is later explained that only metabolizable	Review the definition of this aspect.	Accepted. Changed to the following: “to meet the daily caloric and nutritional	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changes	Author response	Status
				energy is considered in the expected level of quality.		requirements of an average cat or dog”.	
FCD	7	Line 396	ge	What is the source for these secondary data (average pet weight)?	Add the source.	Noted. The source is already included in the paragraph that precedes the table.	Closed
FCD	8	Line 418	ge	In this sentence, using the term "ingredients" instead of BOM would be more appropriate. Or you may want to separate the food (ingredients) and the packaging (BOM). See section 2.1 of PEF guidance (v6.0)	Review the terminology used.	Accepted. BOM was changed to BOI to avoid any misunderstanding.	Closed
FCD	9	Line 422 to 447	ge	This information from the screening studies is not directly relevant for the LCA practitioner.	Clearly separate PEF CR guidance and requirements from screening studies parameters and results.	Noted. To be revised when the EC issues the final PEF CR template later in 2017. This is a section that is currently required in the current template and the purpose is so that the LCA practitioner understands how the representative products were developed as the PEF will be	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
						compared to these results.	
FCD	10	Figure 4 Line 466-469	te	Definition of foreground and background should not be presented outside of the entire procedure explain later in the document.	Consider not identifying foreground and background process in this figure or present this figure later in the document (after the result of the materiality approach).	Accepted. Identification removed but to be reviewed when the final guidance document is issued. The EC is expected to impose specific requirements for this figure.	Closed
FCD	11	Line 480-506	ge	<p>The links between the DNM matrix, the materiality approach and the results or conclusions in table 6 and 7 is unclear. Again, is it guidance for the LCA practitioner or results from the screening studies?</p> <p>I appreciate the changes made to this section, however I found that the new table 7 (previously table 6) is more confusing than in the previous version. My understanding is that ingredient usage is simply defined by the BOI of the pet food. If this is the case, there is no LCI dataset for this "life cycle stage"(since it is already defined in the ingredient production life cycle stage)</p>	It is recommended to completely review this section with keeping in mind its objectives in terms of guidance for the LCA practitioner.	<p>Accepted. The section was reviewed and updated accordingly.</p> <p>Accepted. Table 7 was replaced by old Table 6. To be revisited in any case once the final guidance document is issued in 2017.</p>	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
				<p>.This is the same thing for energy and water usage.</p> <p><i>I understand that the distinction between activities and LCI dataset is not always clear cut, but I believe that the previous table was less confusing and more consistent with other tables such as table 14.</i></p>			
FCD	12	Section 5.5 – table 8 and 9	ge	Why do you provide generic information already available in the other PEF documentations and not necessarily relevant for this product category. This increase the risk of confusion.	Replace these tables by appropriate references to the PEF guide.	Noted. To be reviewed when the final guidance document is issued with the final PEFCR template. The TS requested to include this information because it felt like this information was necessary.	Closed
FCD	13	Line 522	te	It should also be clearly indicate that is a deviation from the PEF guidance (v6.0).	Add a mention	Accepted. The deviation was noted.	Closed
FCD	14	Line 543	te	Rational for exclusion is probably as much important as the one for inclusion. This would be required for compliance with the PEF Guide:	Add rational for exclusion.	Accepted. Rationale for exclusions was also added.	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
				"PEFCRs shall specify and justify any exclusion of the default EF impact categories, especially those related to the aspects of comparability." (L 124/23)			
FCD	15	Section 5.6	ge	Have you considered adding: <i>recyclability information for packaging?</i>		Noted. Recyclability from an environmental point of view is already captured in the PEF and therefore including it here would be a type of double-counting.	Closed
FCD	16	Line 594	te	"most relevant processes with the highest contributions". According to the PEF guidance, relevant processes are not the ones with the highest contribution, but with a cumulative contribution above 80% as mentioned in the PEFCR guidance.	Review the definition or explain if a different approach is used.	Accepted. The text was reworded to make this clear.	Closed
FCD	17	Table 11 –title	te	"Processes considered to be hotspots". The results in this table seems not to be consistent with the definition of hotspot in the PEF guidance (v6.0) section 2.3.5	Review the terminology or explain if a different approach is used.	Accepted. Corrected and made clear.	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
FCD	18	Section 6.2	ge	Is it possible to calculate and provide DQR results for default dataset in the appendix IV?		Noted. To be revised when the EC-approved datasets are made available later in 2017.	Closed
FCD	19	Line 659	ge	The term “mandatory process” is not used elsewhere in this document.	Make a thorough review of the terminology used in this document to ensure a better consistency between sections and other guidance documents	Accepted. Use of this term in the document was updated.	Closed
FCD	20	Line 669	ge	Should water stress index be only applied to water consumption and not water withdrawal?	Review the explanation if incorrect.	Accepted. To be changed to the percentage of freshwater consumed. Water resource depletion only applies to water consumption but some inventory structures only report withdrawal and release and therefore, the water resource depletion can be calculated as the water withdrawal multiplied by the local characterization factor minus the water released multiplied by the local characterization factor.	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
FCD	21	Table 14 (and other similar tables)	te	<p>According to PEF guidance (v6.0) section 2.15.2: “The list shall be as specific as possible in terms of unit of measures and any other characteristics that could help the applicant in implementing the PEFCR”.</p> <p>This list could certainly be improved in terms of specificity. An alternative approach is to make more explicit reference to annex IV.</p>	Consider providing more guidance to the LCA practitioner.	Accepted. An explicit reference to Annex IV was included.	Closed
FCD	22	Table 15 (and other similar)	ge	Why the P is not defined? Is it possible to apply the DQR formula without the P?		Noted. P is not defined because it is only dependent on the dataset itself and not its application.	Closed
FCD	23	Table 16	ge	Surface area calculations is missing for several geometrical figure.	Complete the table	Accepted. The missing formulas were included.	Closed
FCD	24	Section 6.9	te	It should be clearly indicated that food waste translates in an increase of pet food production to compensate for the actual amount of food that must be produced to achieved the functional unit.	Add this precision	Accepted. Explanation was provided.	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
FCD	25	Table 27 – Refrigerant gases (leaks)	ed	It is 0,29 and not 0,029.	Correct	Rejected. Only 10% of the value is considered for leaks.	Closed
FCD	26	Line 1061-1063	ge	This text should be in an orange square.		Accepted. Text was moved to an orange box.	Closed
FCD	27	Line 1230-1231	ge	What are the mandatory substances/elementary flows in this annex? It seems to be only a comprehensive list of all the LCI dataset and primary data that can/should be used or collected.	Review this description or make modification to annex IV.	Accepted. The description was reviewed.	Closed
Comments on intermediate draft (January 31, 2017)							
NEO	1	Lines 212-213	ed	Idea is there but not written in simple terms.	Re-write to make it clear that the PEFCR document has precedence over the PEF guide if it is more specific.	Accepted. Text was re-written.	Closed
NEO	2	Glossary, pages 7 & 9	ge	Definitions for “downstream” and “upstream” are not consistent. Downstream refers to the system boundary whereas Upstream mentions a point of referral.	Re-define both concepts using the same reference point. Confront with further discussion on the topic on lines 470-471.	Accepted. The definitions were made to be consistent using the same reference point.	Closed
NEO	3	Table 1	ge	When “participants” are mentioned, does it refer to the representatives	For clarity, include a definition/differentiation of	Accepted. A definition was included. Storytelling elements	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changes	Author response	Status
				<p>listed in the TS (Section 2.1)? Is there a difference between stakeholders and participants?</p> <p>For the purposes of this document as a “work in progress” still, it seems OK to have such list. However, once the PEFCR is finalized, it might not be necessary to include in such detail how the PEFCR was prepared. The document ought to stand on its own as guidance and minimize the “storytelling” elements currently present.</p>	<p>who is a participant and who is a stakeholder in the preparation & use of the PEFCR.</p>	<p>will be removed in the final version of the document.</p>	
NEO	4	Table 1	ge	<p>Only 1 participant is reported as attendee to the 1st meeting. Would it be valid? Was the meeting postponed due to insufficient quorum?</p>	<p>Clarify this situation or if not relevant, then this could be omitted from the final document.</p>	<p>Accepted. This table is required per the current template in the guidance document. Only one person provided comments during the first virtual consultation and therefore only one participant is counted.</p>	Closed
NEO	5	Line 268	ge	<p>Who is “Studio Fieschi”?</p>	<p>Clarify the role / affiliation of this participant if relevant to the final document.</p>	<p>Accepted. Role clarified.</p>	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
NEO	6	Lines 269, 270	ge	NPPE & EY are not formally introduced in the list of abbreviations.	Add what NPPE and EY stand for to the list of abbreviations.	Accepted. Company names were written out in full since only used once each.	Closed
NEO	7	Section 2.3	ge	Period of validity for the PEFCR is included, but will likely change as part of the final review.	Update the period of validity for the final version of the document.	Noted. The period of validity is based on the fact that the EC-compliant datasets will only be available for free until 2020.	Closed
NEO	8	Section 2.4	te	This section mostly refers to where the PEFCR may fail if applied.	Re-write this section so that it is clearly mentioned where the PEFCR is applicable only by design (EU).	Accepted. Text re-written.	Closed
NEO	9	Line 335	ed	Incorrect word used in definition of Functional Unit.	Change to: “..without any additional preparation steps”.	Accepted. Changed to preparation.	Closed
NEO	10	Lines 341-343	ed	The sentence could use a re-arranging to give a clearer message.	Refer only to the function of the product, which can be delivered by different technologies. Remove the clause “While the scope of the PEFCR”, which could be used in a different sentence if needed.	Accepted. Sentence rearranged.	Closed
NEO	11	Table 2	te	Definition of “What” is not clear.	Change to: “To feed dogs and cats prepared pet food”.	Accepted. Changed accordingly.	Closed
NEO	12	Table 2	te	Definition of “How well” could be	Define what an “average	Accepted. An average cat/dog	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
				improved. Does an “average dog/cat” imply that it was averaged over all breeds/ages/life stages?	dog/cat” implies.	refers to the weight. The text was updated accordingly.	
NEO	13	Section 5.4, Fig. 4	te	Food waste and food waste EOL do not seem to be considered within the system boundaries.	Clarify how far “Use losses” covers food waste & food waste EOL.	Accepted. Each stage dealing with pet food loss was updated to include a reference to Section 6.9. This section will be updated when the final EC-compliant datasets have been made available.	Closed
NEO	14	Section 5.4, lines 478-479	te	After reading the whole section, it is not clear whether capital infrastructure & infrastructure has to be included or not as part of the assessment. It is mentioned only that it may be included. This can lead to inconsistencies depending on how this is interpreted. This topic will also be addressed when the PEF compliant databases become available.	Explicitly mention how capital equipment & infrastructure will be considered in the PEFCR.	Accepted. Changed accordingly. The DC and retail place are included as well as infrastructure that is already included in a given dataset by default.	Closed
NEO	15	Table 7	ed	Title of column says: “Level of influence”.	Add: “Level of influence of company performing the PEF study”.	Accepted. Changed accordingly.	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
NEO	16	Table 8	ge	Missing abbreviations	Add abbreviations for: ODP, SOM, NOx, Sox	Noted. Acronym list will be updated once the decision to include Table 8 is made after reviewing the final PEFCR template provided by the EC later in 2017.	Closed
NEO	17	Table 11	te	Hotspots are listed, but no quantification (a range) is given as an indication of the point when a contribution becomes significant (for example, > 20%?)	Add some explanation about the criterion used to label "hotspots".	Accepted. Changed accordingly.	Closed
NEO	18	Table 12	ed	Requirements for "P" are repeated in the table.	Delete last column in the table, as it is repeated.	Accepted. Column deleted.	Closed
NEO	19	Table 12	ge	Title of Table 12 ought to be more specific. The requirements for data quality shown here apply only to mandatory elements.	Add to title of table: "Table 12. Data scoring criteria for mandatory elements".	Accepted. Changed accordingly.	Closed
NEO	20	Table 12	te	Table 12 is applicable to the mandatory elements, which are not summarized.	Add another table / Annex where mandatory elements are summarized.	Accepted. Updated in tables and Appendix IV to make this clear.	Closed
NEO	21	Lines 667-672	te	Requirements for "specific data" to be regionalized are not clearly mentioned in the text.	Clarify if regionalization is also required for specific data / inventories.	Accepted. Geographical information is not required for any inventory flow except for	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
						water consumption. However, some flows such as particles or toxic emissions contain regionalized information using archetypes (e.g., urban, rural, etc.) which are recommended but not required.	
NEO	22	Line 680	te	Ingredient category can be interpreted differently by analysts using this PEFCR.	Define a standardized ingredient category list (or use any other already accepted by FEDIAF/Pet food manufacturers).	Accepted. This sentence was updated to avoid such confusion and a reference to the complete list in Annex IV was provided.	Closed
NEO	23	Line 687	ed	This is one PEFCR for pet food (singular). In other places of the document it is referred in plural (these PEFCR), which creates some confusion.	Throughout the document, consistently refer to this PEFCR as a single document.	Accepted. "The PEFCR" will be used when we are referring to the document but "these PEFCRs" will be used when we are referring to the rules.	Closed
NEO	24	Lines 707-708	te	Can the proportion of dairy beef to beef co-products really be known for this type of analysis? This is a parameter likely to vary constantly (Pet food manufacturers use the material available / can be bought and adapt	Define if this proportion can be used as a parameter for sensitivity analysis.	Accepted. A sentence was added to indicate that the fraction of beef vs. dairy cattle can be customized by creating a custom dataset.	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
				their formulation accordingly).			
NEO	25	Lines 724-727	te	The explanation of how to treat moisture content can be misinterpreted when the current text is read.	Introduce a formula so that moisture content is treated unambiguously.	Accepted. Equation added.	Closed
NEO	26	Line 732	ge	Climate change issue paper is mentioned,	Include a reference to this paper.	Accepted. This paper is now included in the PEF Guidance v6.0 and this reference was added.	Closed
NEO	27	Figure 4	ge	The colors used in the graph can be misleading. The foreground processes are in grey, and in other publications this is done to actually give the idea that they are not important.	Use thicker lines to highlight the foreground processes and use a brighter color (blue, red); dashed lines could also be used for background processes. Include a legend on how to read the graph as intended by the authors.	Accepted. Colour was removed.	Closed
NEO	28	Table 15	ge	All time representativeness requirements mention 2015 as the reference year. If this year stays in the text, it will quickly become outdated. It is not clear if 2015 is the upper limit, so that data from 2005 or 2010 can be	Wouldn't it be easier to mention "the previous calendar year", or the previous 5/10 years?	Accepted. Changed accordingly.	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
				used, or if 2015 is the lower limit.			
NEO	29	Table 15	te	Technological representativeness of ingredient processing is clearly stated only for scores 1 and 2.	Include requirements for technological representativeness of ingredient processing for scores 3, 4 and 5.	Accepted. Changed accordingly.	Closed
NEO	30	Lines 743-746	te	A separate section can be used to define regionalized data & inventories. This is applicable to more than just the ingredients used.	Introduce a section on regionalized data & inventories, applicable to all inputs to the assessment. See also comment NEO # 21 in this table.	Noted. See response to comment NEO #21. To be revisited after the final PEFCR template has been issued.	Closed
NEO	31	Lines 750-751	te	Label is mentioned as a potential “primary packaging” material, but no conclusion can be drawn from the text.	Clearly define if for this PEFCR labels shall be considered primary packaging.	Accepted. Changed accordingly.	Closed
NEO	32	Table 16	ge	The figures shown are theoretical, but actual packaging samples could be more illustrative and will clarify which dimensions need to be considered.	Consider including actual pictures of packaging.	Accepted. Pictures of actual packaging will be added at a later date due to current time constraints.	Closed
NEO	33	Lines 764-765	ge	This reference is too colloquial (the ecoinvent process, the thickness of the material). If other PEF compliant databases become available, this comment will be redundant.	Be more generic when referring to databases. Mention that LCI data will need to be adapted as required.	Accepted. Changed accordingly.	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
NEO	34		ge	<p>Transport of materials to factory / from factory ought to have a separate section. This will include ingredients, packaging material and final product transport. Here specify what is understood by volume or mass limited transport.</p> <p>Cans are volume limited (empty cans are taken to factories), not mass limited as mentioned in the text (Line 769).</p>	Include separate section on requirements for transport of materials.	Noted. Empty metal cans and aluminium trays are volume-limited whereas filled cans and trays are mass limited. A reference to the guidance document where volume-limited transport modelling information is provided was added.	Closed
NEO	35	Sub section Packaging production	ge	Only tin plating is mentioned as a packaging conversion process. What about other surface processes intended for other materials?	Consider other surface processes / conversion processes for packaging materials.	Noted. Only the tin plating process requires the activity data to be entered in m2. To be revisited once the EC-compliant datasets have been issued.	Closed
NEO	36	Tables 18-19	ge	Time representativeness is not clearly expressed.	Better to use intervals. For example: $0 < x < 2$	Accepted. Changed accordingly.	Closed
NEO	37	Lines 781-783	ge	This paragraph is not necessarily adding clarity to the guidance. Probably good to know for now, but	Remove this paragraph.	Accepted. Paragraph moved to an orange box.	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
				presumably the packaging issues will be solved for the final version of the document.			
NEO	38	Lines 789-790	te	The use of national electricity mixes needs to be mentioned in a separate “regionalized data” section. This is applicable beyond just manufacturing.	Introduce a section on “regionalized data”. See also comments #21 and #30 in this table.	Noted. Will be made clear and to be revisited when final PEFCR template is issued.	Closed
NEO	39	Lines 791-792	ge	Re-manufacture and re-use are not considered. Regular disposal could also be further explained.	Clarify the various disposal routes / processes for manufacture wastes.	Accepted. A reference to Section 6.9 was added.	Closed
NEO	40	Table 19	ge	The table needs to be divided, so that requirements for upstream and downstream processes do not get confused. Hazardous waste, solvent waste to treatment and manufacture losses imply that “upstream production” LCI data is required. Is this really the case? Shouldn’t it be “downstream production”?	Clarify which are upstream and downstream LCI processes / data.	Noted. All of the processes are treated in the manufacturing life cycle stage, which is the point of referral for the pet food manufacturer.	Closed
NEO	41	Table 20	te	No requirements are made for EOL of waste.	Include waste EOL requirements.	Accepted. A reference to Section 6.9 was added.	Closed
NEO	42	Line 810	ge	What is the difference in this case between product volumes and product	Clarify what is understood by product capacities and product	Accepted. An explanation was provided.	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
				capacities?	volumes.		
NEO	43	Lines 810-811	te	Infrastructure and overhead impacts are mentioned.	Define clearly what is understood by overhead impacts.	Noted. To be updated when the EC-compliant datasets have been made available.	Closed
NEO	44	Lines 789, 814, 827, 870, 880	te	Different requirements for national electricity mix data are provided, depending on the life cycle stage considered.	Create a sub-section on electricity mix data, where all these requirements are summarized for clarity.	Noted. To be revisited when final PEFCR template is issued.	Closed
NEO	45	Lines 822-823	te	It is not mentioned if this is the storage volume of the product as sold to the consumer (primary packaging) or as it arrives to the store (in tertiary packaging). No reference is made either to back storage or front storage.	Specify storage volume using a formula for clarity, consider also which packaging has to be included (primary, secondary, tertiary).	Accepted. Formula added and it was clearly indicated that primary packaging must be considered.	Closed
NEO	46	Line 828	te	For distribution, shouldn't it be the sales-weighted average? (market share)	Clarify if this is a production or sales weighted average.	Accepted. Changed accordingly.	Closed
NEO	47	Lines 829-830	te	What distances should be considered when products are sold in different markets?	Consider including a "sales-weighted" distance, if relevant, and some guidance as to how to calculate such average.	Accepted. Changed accordingly however this is a cross-cutting issue and should be dealt with consistently among all pilots.	Closed
NEO	48	Figure 4, Section 6.3 and Section 6.4	ge	Background and foreground systems and data do not seem to be consistent	Revise these sections for consistency.	Noted. Changed accordingly where possible but to be	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
				between Figure 4 and sections 6.3 and 6.4.		revised when the final guidance document is issued.	
NEO	49	Lines 840-845	te	The assumption here is that pet dishes are washed in the same dishwashing machine used for dishes used by humans. Will they be washed together or separately? For hygienic reasons, it does not seem advisable to mix them. The assumption that a dishwashing machine will be used to clean the pet dish would need a review. Is this really the case? Is it defensible?	Consider taking by default a hand washing option for the pet dishes (more likely just a rinse) and using the dishwashing machine option as a sensitivity parameter. The assumption for frequency of washing is OK, the method not so much.	Rejected. Because robust data are not available, the TS prefers to maintain the current assumption that 50% of the pet food dishes are washed in a dishwasher and 50% are washed by hand.	Closed
NEO	50	Line 861-862	te		Express the storage volume in the fridge using a formula.	Accepted. An equation was added.	Closed
NEO	51	Lines 865-869	te	Not clear what the energy content of the petfood have to do with the allocation to refrigerated storage. In Lines 863-864 it is mentioned that anyway the whole pack is stored. Also, given that the amount remaining in the pack is not known, it could be used as another parameter for sensitivity assessment.	Clarify how refrigeration of remaining petfood needs to be treated consistently.	Accepted. Changed to make this clear.	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
NEO	52	Section 6	ge	The section is general does not seem properly organized. Sections 6.6 (use phase), 6.7 (logistics) and 6.8 (EOL packaging) are duplicated. Section 6.8 is also mentioned in Section 6.5	Re-organize this section for clarity.	Noted. To be updated when the final PEFCR template is issued later in 2017.	Closed
NEO	53	Table 24, line 940	ed	"Methanizaton" is a bad translation from French to English of the "anaerobic digestion" process.	Use the correct term in English.	Accepted. Changed accordingly.	Closed
NEO	54	Tables 23 , 25	ge	Anaerobic digestion and composting are not mentioned.	For consistency with Table 24, include also composting and anaerobic digestion.	Accepted. Added to Table 23 but not to Table 25 as this table is for packaging only.	Closed
NEO	55	Line 938	ge	Which one should be taken? Incineration or landfilling? Can this be a sensitivity parameter?	Clarify which EOL option will be taken.	Accepted. Use the fraction of landfilling vs. incineration that is country-specific per Annex C of the PEF guidance 6.0.	Closed
NEO	56	Section 6.9	ge	These elements have been mentioned elsewhere already.	Duplication of information can create confusion, better to keep the data in their respective section.	Noted. To be updated when the final PEFCR template is issued. As with the comments on electricity mix or regionalisation sections, there are also merits to including the information in one section.	Closed
NEO	57	Lines 959-962	ge	No allocation factors provided for	Clarify how to treat the	Noted. To be revisited when	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
				grain. Overheads refer only to manufacture stage (as mentioned later in lines 997-1001) or also to distribution stage?	allocation for grains and overheads.	the EC-compliant datasets are made available.	
NEO	58	Lines 991-992	ge	Milk consumed by calves is not mentioned. Is it part of "M milk" in the formula?	Confirm if milk consumed by calves is considered or not.	Accepted. Mmilk is the total amount of milk leaving the farm and because calves drink milk from their mothers or they are fed with milk powder, this quantity is already deducted from Mmilk.	Closed
NEO	59	Line 1007	ed	Punctuation missing.	Add a comma: "A ceiling height of 5 m (at the distribution centre), 2 m (for refrigerators)".	Accepted. Changed accordingly.	Closed
NEO	60	Line 1009	te	It is not clear if capital goods at the manufacture stage are included or not. It is open to interpretation of the analyst.	Give clear guidance on inclusion of capital goods.	Noted. To be updated when the final guidance document is made available. It seems that the line number does not correspond to the comment however.	Closed
NEO	61	Lines 1002-1017	ge	Most of the text is out of place, considering this is an allocation section.	Move guidance to Distribution section (6.3). Make a clear	Noted. Because the allocation procedure for the distribution	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
					distinction: In the allocation section, say how to allocate. In each specific life cycle section, say what is included and how this stage is modelled.	stage impacts are described here, this information was included here in accordance with the existing template. To be revisited when the final PEFCR template is issued.	
NEO	62	Figure 5	ed	This ought to be written ad 3 separate equations, not a figure.	<p>Explain each term used in the equations.</p> <p>Explain when to use the formulas.</p> <p>What is meant by “material”? Is this the packaging material?</p> <p>The formulas are missing an additional term: $X = a + b + c$</p>	Accepted and noted. The sentence prior to the equation explains that these three sections of the equation are to be summed. This is the official figure provided in the PEF Guidance v6.0. To be determined if this formula will be included or not in the final version of the PEFCRs (see comment FDC #12 on this same matter) and thus if it is included, the parameters will be described accordingly in the PEFCR.	Closed
NEO	63	Lines 1044-1046	ge	Does the PEFCR give some implicit endorsement to a specific software?	This sentence can be removed.	Accepted. Changed accordingly.	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
NEO	64	Lines 1047-1050	ge		This information is not required in the PEFCR.	Accepted. Changed accordingly.	Closed
NEO	65	Line 1058	te	This is a Pet food PEFCR. How does “personal normalization factors” apply in this case?	Give some comment on this particularity (normalization factors applicable to the pet owners rather than the pets per se).	Noted. Normalization by person is common practice regardless of the subject. This is a decision made by the EC, not by this particular pilot.	Closed
NEO	66	Lines 1061-1063	ge	Text will be removed later, correct?		Accepted. Moved to orange box.	Closed
NEO	67	Section 8	ge	Does this mean that benchmarks will be further considered then? For now the benchmarks are not compliant with PEF?	Clarify as final version becomes available.	Noted. To be revisited when the final template is made available and the remodelling has been performed.	Closed
NEO	68	Lines 1075-1076	ge	This is inconsistent with Section 8. It is not clear if a benchmark will be used or not in the end. Also, no benchmarks are provided.	Revise for consistency with Section 8.	Accepted. Revised accordingly.	Closed
NEO	69	Lines 1086-1087	ge	Is this section reporting on the screening studies or are these already the conclusions and hotspots that will be reported in the revised PEF studies?	Revise if this needs to be included in final version of the document.	Accepted. Removed accordingly.	Closed
NEO	70	Section 10	ge	In the final document, this section should be different. Here, as a draft		Noted. To be revisited when the final PEFCR template is	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changes	Author response	Status
				document, it is a “nice to know” element.		made available.	
NEO	71	Annex II	ed	Paragraphs are repeated. (Lines 1121-1126; 1138-1142).	Revise text.	Accepted. Repeated paragraph was removed.	Closed
NEO	72	Line 1141	ge	A bit confusing which are the benchmarks.	Clearly mention that the benchmarks in this case are the results of the screening studies.	Accepted. Revised accordingly.	Closed
NEO	73	Line 486		Could a weight range be included just for informative purposes? A foot note would be OK, unless this information is shown in Annex IV, in which case a reference to it would be OK. By the way, Annex 4 was not attached.		Accepted. Added the average pet weights to the table.	Closed
NEO	74	Table 7, p. 35		It is more appropriate to refer to “water supply and further processing”, rather than “water production”.		Noted. These lines were removed from the table per the request of FCD (comment #11).	Closed
NEO	75	Table 8		The definition for Ozone depletion reads as if the World Meteorological Organization has the potential to deplete ozone. Some re-wording is needed.		Accepted. This is copied from the PEF Guide but was changed in this PEFCR.	Closed
NEO	76	Table 10		For acidification: Add: “..could be important locally but NOT overall”.		Accepted. The word "not" was added.	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
Comments on final draft (February 6, 2018)							
NEO	1	Lines 68-71	E	The definition of « comparison » in the PEFCR glossary implies that comparisons are done among products / product and a benchmark to substantiate a PEFCR. Two applications mentioned (recommended for external application without comparison and mandatory for external application with comparison) are not sufficiently clear . The comparisons needed to substantiate this PEFCR are already done. Unless this is not the intention of the text, then it needs to be clarified how should “comparisons” be understood.	Given that “comparison” is used widely throughout the document, it would be useful to distinguish when it is used in the strict terms defined in the glossary (the minority of cases) to avoid confusion.	Accepted. Sentence was removed to avoid confusion, definitions for comparisons and comparative assertions were added to the glossary, and the use of the word comparison was clarified throughout the PEFCRs.	Closed
NEO	2	Line 248	G	Link to PEFCR website requires authentication first.	Mention that readers need to create an account first and need to register to the Pet food PEFCR working space.	Accepted. Instructions were added.	Closed
NEO	3	Line 272	E	Similarly to the introduction of Studio Fieschi, it would be useful to mention something for Ernst & Young.	Include a phrase explaining Ernst & Young’s line of work.	Accepted. Description was added.	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
NEO	4	Lines 307-314	T	The PEFCR applies for products sold in the EU +EFTA. This implies products manufactured in this area and products manufactured elsewhere and sold in the area. If the PEFCR is applied out of this area (products manufactured and sold elsewhere, products exported from EU) then the PEFCR can still be applied. The limitation of EF-compliant LCI availability (as mentioned in lines 313-314) is relevant only if the analyst wants to use EF-compliant data; otherwise, other DBs can still be used but then the study cannot be called PEF compliant in its entirety (could be informed by PEFCR).	Change line 309 to: “.. applying these PEFCRs to products exported out of the EU +EFTA or products manufactured and sold elsewhere is that EF-approved....”.	Approved. Sentence was changed accordingly.	Closed
NEO	5	Lines 352-353	E	It is not clear if the text is summarizing the conclusions / recommendations of the 2013 report or if it refers to this actual PEFCR. In particular, the PEF screening studies have already been carried out.	Use past tense and clarify that 4 representative products and common packaging were recommended at the time for the PEF screening studies / PEFCR development.	Approved. Sentence was improved for clarity and tense.	Closed
NEO	6	Lines 464-465	G	Link to PEFCR website requires	Mention that readers need to	Accepted. Instructions were	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changes	Author response	Status
				authentication first.	create an account first and need to register to the Pet food PEFCR working space.	added.	
NEO	7	Lines 466-467	G	The mandatory text mentions that the PEF study is available upon request to the TS coordinator. Is there no contradiction with providing the link to the report in lines 464-465?	Revise if availability of PEF study as mentioned in the report is aligned with the mandatory text.	Accepted. This sentence is required per the template in the PEFCR Guidance v6.3 however it was modified to add the word "additionally" at the start. Thus it is clear readers could obtain the document through two different channels.	Closed
NEO	8	Lines 469-470	E	Sentence is too long and not too clear.	Split the sentence for clarity.	Accepted. Sentence was split for clarity.	Closed
NEO	9	Line 527, table 8	E	Table is split in 2 pages	Present the Table in the next page.	Accepted. Table is now grouped.	Closed
NEO	10	Line 527, table 8	G	Some elements in the process description are not described in terms of processes.	Change to "Secondary/tertiary packaging manufacture". Change to "Manufacture of pet food dish". Similar change can be applied to the use phase in Fig. 4.	Accepted. Elements now changed to describe processes in both the table and figure.	Closed
NEO	11	Line 533	G	Food processors seems to be similar to petfood manufacturers	Change to "feed processors" if that was the intention.	Noted. Indeed food processors is not clear and thus it was	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
						removed altogether.	
NEO	12	Line 549, table 9	E	Clarify the title of the table.	Change to: Application of the materiality principle for pet food manufacturers.	Accepted. Title updated	Closed
NEO	13	Line 578	G	Link does not work	Check that link has not changed and is accessible.	Accepted. Missing "l" was added to the link.	Closed
NEO	14	Line 569, tables 10-11	T	Two different names are used for the impact category "water use". Moreover, in Table 11, the description provided does not seem to capture the "scarcity" aspect.	Use same name for the indicator in both tables. Consider elaborating on the description of the method.	Accepted. Impact category names harmonized and the description for water use was updated.	Closed
NEO	15	Line 569, tables 10-11	E	The names of the impact categories in both tables do not match for all impacts.	Revise and use the same names in both tables. Also, for easier reading, consider following the same order when presenting the impacts.	Accepted. Impact category names were harmonized and order used throughout the PEFCRs.	Closed
NEO	16	Lines 593-595	T	The recommendation about the use (or not) of the PEFCR when comparing packaging formats is not strong enough. It may belong to the scope of the PEFCR rather than the limitations section.	Use recommended words such ("shall", "should" or "may") to convey the strength of this recommendation and move to the "scope" section if more appropriate.	Accepted. Changed to "shall not" and moved to section 3.2.	Closed
NEO	17	Line 603	T	Deviations from the PEFCR have to be	Use "shall" to emphasize this	Accepted. Changed to "shall".	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
				identified and explained.	point.		
NEO	18	Lines 604-608	E	This paragraph refers to applications of the PEFCR, which are not limitations.	Include this part where “applications” of the PEFCR are described.	Accepted. Paragraph moved to section 1.	Closed
NEO	19	Lines 612-614	E	Sentence difficult to follow.	Split into 2 sentences, one presenting the impact categories and another explaining how they were chosen.	Accepted. Sentence was split for clarity.	Closed
NEO	20	Lines 615-620, tables 12-16	T	Names of relevant impact categories are different to those named in the PEFCR guidance.	Revise names used and align with official nomenclature.	Accepted. Names revised.	Closed
NEO	21	Line 639, tables 13-16	G	Reading Tables 13-16 is not too straightforward. In Table 16 a “grand total” value for wheat adds up to > 100%.	Provide a key on how the tables should be read properly to avoid confusion (at row level, at column level, and the “total” and “grand total” values). Explain how values higher than 100% ought to be interpreted.	Accepted. Explications added and row and column headers for totals changed.	Closed
NEO	22	Lines 735-738	G	Data gaps are not provided by the European Commission.	Change to “these are datasets provided by the EC”.	Accepted. Changed to datasets.	Closed
NEO	23	Line 902	G	Link does not work	Check that link has not changed	Accepted. Link will be replaced	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
					and is accessible.	with the correct one.	
NEO	24	Line 1210	E	Recommended words are not systematically used.	Change to: "Secondary data may be used".	Accepted. Changed to "may".	Closed
NEO	25	Line 1218	E	Sentence may cause mis-understanding regarding availability of LCI datasets.	Change to: "... all ingredients required to manufacture prepared pet food are within the scope of this PEFCR...."	Accepted. Sentence changed accordingly.	Closed
NEO	26	Line 1223	E	Recommended words are not systematically used.	Change to: "... the dataset used shall be .."	Accepted. Changed to "shall".	Closed
NEO	27	Line 1242, table 23	T	The elements mentioned are not strictly processes, rather product obtained by processing different animal co-products.	Modify the wording and table to reflect processes per se: Bone meal processing, Oil extraction and refining, fat rendering. Alternatively, if processes are not what is intended to mention, then amend the wording to "co-products".	Accepted. Process names adapted accordingly.	Closed
NEO	28	Line 1253	E	In general, all equations in the document follow a paragraph but are not introduced within the text.	Mention in the text that Eq. (x) shows how to calculate a given value or parameter.	Accepted. All equations are now introduced in the text.	Closed
NEO	29	Lines 1263-1264	E	Recommended words are not systematically used.	Change to: "...all ingredient processing shall be included".	Accepted. Changed to "shall" in both instances.	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
					"...if it is not, it shall be included".		
NEO	30	Lines 1264-1265	G	LCI datasets are mentioned interchangeably as EF-compliant or EC-compliant.	Clarify if EF- and EC- compliant datasets refer to the same concept.	Accepted. Changed this typo to "EF-compliant".	Closed
NEO	31	Lines 1274-1280 and other transportation stages	T	The PEFCR guidance mentions that this PEFCR shall specify the utilisation ratio to be used for each truck transport modelled, as well clearly indicate whether the utilisation ratio includes empty return trips. The requirements for empty return trips are not mentioned.	Mention if empty return trips are considered or not in all transportation stages.	Accepted. Updated transportation sections with utilisation ratio and mention that empty truck returns are included.	Closed
NEO	32	Line 1279, table 24	T	Table 24 includes requirements for ambient and frozen transport using truck, train and ship. However, the text in Lines 1276-1277 implies that the table refers to frozen/refrigerated ingredients only. It is not clear what "assumption" refers to. Is this the share of this type of transport mode to be used? It is not clear either if the distances	Clarify if Table 24 refers to requirements for all ingredients or frozen ingredients only. Clarify what "assumption" refers to. The table could have an additional column mentioning the utilization ratio for truck transportation.	Accepted. Table 24 was updated and a column with the utilisation rate was added.	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
				mentioned here override primary data (Line 1275) on distances travelled if available, or when these distances should be used (if at all).			
NEO	33	Line 1285	G	Link does not work	Check that link has not changed and is accessible.	Accepted. Link updated.	Closed
NEO	34	Line 1347	T	An additional equation is required to have mass in fat and protein corrected terms.	Provide the IDF equation for FPCM.	Accepted. Equation was added.	Closed
NEO	35	Line 1408, table 29	T	It is not clear what “assumption” refers to. Is this the share of this type of transport mode to be used?	Clarify what “assumption” refers to. The table could have an additional column mentioning the utilization ratio for truck transportation	Accepted. Table 29 was updated.	Closed
NEO	36	Line 1416, table 30	E	A specific LCI for plastic pouch (multi-laminate) is mentioned in lines 1369-1375. Why is this not referenced in Table 30?	For easier reading, include an internal reference to this particular dataset in Table 30.	Rejected. Specific datasets to be used are not listed in the tables in the report but rather in Annex IV. A reference to the Annex is given in the paragraph prior to Table 30.	Closed
NEO	37	Lines 1422-1423	G	This is an informative note, but it would be good to know if this group	Clarify if recommendations ought to be expected from this	Accepted. The note was removed and a short paragraph	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
				reached some conclusions available in a report or not.	group.	was added to section 2.8.	
NEO	38	Line 1431	E	Recommended words are not systematically used.	Change to: "Manufacturing wastes shall be divided..."	Accepted. Changed to "shall".	Closed
NEO	39	Lines 1435-1436	E	Recommended words are not systematically used.	Change to: " If no primary data are available, a default loss rate of 2% shall be used..."	Accepted. Changed to "shall".	Closed
NEO	40	Lines 1470-1471	E	Equation 7 is not easy to read.	Re-write the equation to fit in 1 line, using abbreviations if needed and definitions for these abbreviations.	Accepted. Equation is given on one line.	Closed
NEO	41	Line 1484, table 34	T	It is not clear what "assumption" refers to. Is this the share of this type of transport mode to be used? What does Consumer with no distance travelled mean? Why include this if there is no impact associated?	Clarify what "assumption" and the last line refers to. The table could have an additional column mentioning the utilization ratio for truck transportation	Accepted. Table 34 was updated. It is important to include the fact that a portion of consumer transport is neglected because it is assumed that the consumer walks to purchase the pet food.	Closed
NEO	42	Lines 1461-1469 and Lines 1513-1517	T	The storage times for the products at plant, DC and store are mentioned 2 times, the first time in a prescriptive way, and the second time in a narrative way. Why?	Consolidate the requirements in one section for clarity.	Accepted. The section was revised and storage times are only listed once.	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
NEO	43	Line 1453, section 6.4	T	This section needs to be re-organized, stating clearly the differences in treatment of its various sub-components. There is no clarity in whether transportation is handled at the beginning or in the last section (lines 1518-1525) .	Re-organize this section allowing for a logical flow of requirements for the various elements in distribution. Use prescriptive terms, not narrative ones.	Accepted. Section 6.4 was reorganized.	Closed
NEO	44	Lines 1611-1612	G	UCTE is mentioned here; however, UCTE no longer exists. https://www.entsoe.eu/news-events/former-associations/ucte/Pages/default.aspx	Update the name of UCTE to ENTSO-E.	Rejected. This section was deleted altogether. It was based on past guidance and not the CFF must be followed.	Closed
NEO	45	Line 1617, table 38	T	Anaerobic digestion and composting are mentioned as EOL options for packaging. Is that applicable for the materials listed in Table 39? Compare also data in Table 40.	Revise if the distances included in the table ought to correspond to distance to collection point for recycling, landfill or incineration plant.	Noted. Distances correspond to the PEFCR Guidance v6.3 but the table name was changed to avoid confusion.	Closed
NEO	46		G	At times, it is difficult to read the PEFCR in the sense that it is being reported what was done, I presume, when modelling the reference product and the case studies. In the PEFCR per se, a more prescriptive tone should be	Revise the document and try to focus on the prescriptive elements. Use “shall”, “should” and “may”. Turn assumptions in to default data or data to be used in the absence of primary	Accepted. The document was revised accordingly.	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
				expected and clear distinctions on what is a requirement and what are recommendations, or default data in case no data is available (and how these were defined).	data.		
FCD	47	Line 495	G	Some parts of the document are still written as if it was a LCA report instead of a PEFCR. This language may create confusion for the user of the guidance. For example, here it should be written: "The reference flows for each product category (shall/should/may) be calculated using daily energy requirements of cats and dogs (...)" See also comment NEO #46 and other similar.	Review the language of this PEFCR throughout the document.	Accepted. The language throughout the PEFCR was reviewed and this section was revised.	Closed
FCD	48	Line 497	T	"However, when the energy density of a product is available (primary data)" Is there really an option to perform a LCA of food pet without primary data on metabolizable energy? Fro the credibility of the study, the guidance should be:	Review this guidance	Accepted. Text was updated to require primary data on energy density.	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
				Metabolizable energy content of the feed shall be calculated in accordance with FEDIAF's Nutritional Guidelines for Complete and Complementary Pet Food for Cats and Dogs			
FCD	49	Line 596	G	<p>"This PEFCR requires that only the most relevant processes be included as determined by the screening assessment and thus some processes specific for a particular product may be overlooked."</p> <p>Not sure to understand this comment. Several processes with very low contribution are included in this PEFCR. What would be a not relevant process in this context.</p>	Review this sentence.	Accepted. Sentence was modified to make meaning clear.	Closed
FCD	50	Line 657	T	<p>I would have expected that at least water use (input and output) as well as quantity and fate of manufacturing losses would be required as primary data.</p> <p>I see in table 18 that primary data are required for these activity data.</p>	I suggest to remove this list (line 658) to avoid confusion with table 18.	Noted. According to the PEFCR guidance v6.3: "Each PEFCR shall specify the minimum list of processes (called mandatory processes) that shall always be covered by company-specific data. The purpose is to avoid	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
						that an applicant without access to the relevant company-specific primary data is allowed to perform a PEF study and communicate its results by only applying default data. The PEFCR shall define this mandatory list of processes based on their relevance and the possibility to have access to company-specific data." Thus, this list only contains the most important relevant processes that require primary data. A short paragraph was added to explain this.	
FCD	51	Line 737	E	Typo: "but a data gap is provided"		Noted. See NEO's comment #22.	Closed
FCD	52	Line 1225	T	"If the ingredients come from multiple sources, a representative sample should be used to properly represent the variability of the sources" What do you mean by representative	Review this guidance.	Accepted. Changed to weighted average.	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changes	Author response	Status
				sample? The term “weighted-average of the different sources” would be more appropriate.			
FCD	53	Line 1416, table 30	T	Data requirement is a minimum threshold, consequently it is not relevant to indicate two different thresholds (e.g. Primary or secondary) for the same parameter, only the lowest level is relevant. In some cases, additional conditions can explain the fact there are two choices, but they are not explained in the document.	Review the definition of some data requirements. 2018/03/07: In the 2018/03/01 document, the data requirement tables still have the following issues : - the modified tables 28 and 34 have inconsistent colors - table 32 still contains "Primary or secondary" - table 38 has an empty line. Please correct.	Accepted. Requirements reviewed.	Closed
FCD	54	Line 1518	T	For consumer transport, the PEFCR guidance already provides clear guidance on the allocation factor (see section 7.14.1.3). What is the reason to not follow this guidance?	Review the choices and explanations in this section.	Accepted. The modelling was performed correctly but the text was not updated accordingly. This has been reviewed and corrected.	Closed

Initials	#	Line/Page/Section/Paragraph/figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
				Also, why talking about the weight of the RP. This is not relevant for the practitioners and for the allocation methods proposed (here and in the PEFCR guidance).			