

Final critical review report

PEFCR title and	Prepared Pet Food for Cats and Dogs
version	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.

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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/Secti on/Paragraph /figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
Comm	ents d	on first draft (D	ecemb	er 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/Secti on/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/Secti on/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/Secti on/Paragraph /figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
				animal? According to PEF guidance (p. L		separate markets which	
				124/65) a principle of PEFCR is : striving		respond to different needs of	
				for comparability. In this context, any		pets and hold very different	
				requirements or guidance limiting		characteristics. For instance,	
				comparability within the same product		wet pet food promotes urinary	
				category should be carefully justified.		output and is more suitable for	
						pets with defective teeth while	
				I generally agree with the arguments		dry pet food has dental	
				about not comparing dry and wet pet		benefits and reduces	
				food, although they should be limited		occurrence tartar. Moreover,	
				to aspects related to the functionality		wet pet food moisture content	
				of the product. For example, difference		is above 80% while dry pet food	
				in production processes should not be		moisture content is below 14%	
				presented as an argument to limit		which serves individual sensory	
				comparability. I would also suggest to		preferences (smell, taste haptic	
				add the relevant arguments in the) of animals. Wet pet food	
				PEFCR.		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	

Initials	#	Line/Page/Secti on/Paragraph /figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
						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.	
						Accepted. The explanation was	
						modified and added to the	
						PEFCR.	
FCD	6	Table 2 – How well?	te	"Nutritional requirements" seems	Review the definition of this	Accepted. Changed to the	Closed
				inexact or too broad here. It is later	aspect.	following: "to meet the daily	
				explained that only metabolizable		caloric and nutritional	

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

Initials	#	Line/Page/Secti on/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	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? 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)	It is recommended to completely review this section with keeping in mind its objectives in terms of guidance for the LCA practitioner.	Accepted. The section was reviewed and updated accordingly. Accepted. Table 7 was replace by old Table 6. To be revisited in any case once the final guidance document is issued in 2017.	Closed

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

Initials	#	Line/Page/Secti on/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:		Noted. Recyclability from an	Closed
				recyclability information for packaging?		environmental point of view is	
						already captured in the PEF and	
						therefore including it here	
						would be a type of double-	
						counting.	
FCD	16	Line 594	te	"most relevant processes with the	Review the definition or explain	Accepted. The text was	Closed
				highest contributions". According to	if a different approach is used.	reworded to make this clear.	
				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.			
FCD	17	Table 11 –title	te	"Processes considered to be hotspots".	Review the terminology or	Accepted. Corrected and made	Closed
				The results in this table seems not to	explain if a different approach	clear.	
				be consistent with the definition of	is used.		
				hotspot in the PEF guidance (v6.0)			
				section 2.3.5			

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

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

Initials	#	Line/Page/Secti on/Paragraph /figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
				listed in the TS (Section 2.1)? Is there a	who is a participant and who is	will be removed in the final	
				difference between stakeholders and	a stakeholder in the	version of the document.	
				participants?	preparation & use of the		
				For the purposes of this document as a	PEFCR.		
				"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.			
NEO	4	Table 1	ge	Only 1 participant is reported as	Clarify this situation or if not	Accepted. This table is required	Closed
				attendee to the 1^{st} meeting. Would it	relevant, then this could be	per the current template in the	
				be valid? Was the meeting postponed	omitted from the final	guidance document. Only one	
				due to insufficient quorum?	document.	person provided comments	
						during the first virtual	
						consultation and therefore only	
						one participant is counted.	
NEO	5	Line 268	ge	Who is "Studio Fieschi"?	Clarify the role / affiliation of	Accepted. Role clarified.	Closed
					this participant if relevant to		
					the final document.		

Initials	#	Line/Page/Secti on/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 Table 2	ed te	The sentence could use a re-arranging to give a clearer message. Definition of "What" is not clear.	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. Change to: "To feed dogs and	Accepted. Sentence rearranged. Accepted. Changed accordingly.	Closed
			le		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/Secti on/Paragraph /figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
				improved. Does an "average dog/cat"	dog/cat" implies.	refers to the weight. The text	
				imply that it was averaged over all		was updated accordingly.	
				breeds/ages/life stages?			
NEO	13	Section 5.4, Fig. 4	te	Food waste and food waste EOL do not	Clarify how far "Use losses"	Accepted. Each stage dealing	Closed
				seem to be considered within the	covers food waste & food	with pet food loss was updated	
				system boundaries.	waste EOL.	to include a reference to	
						Section 6.9. This section will be	
						updated when the final EC-	
						compliant datasets have been	
						made available.	
NEO	14	Section 5.4, lines	te	After reading the whole section, it is	Explicitly mention how capital	Accepted. Changed accordingly.	Closed
		478-479		not clear whether capital infrastructure	equipment & infrastructure will	The DC and retail place are	
				& infrastructure has to be included or	be considered in the PEFCR.	included as well as	
				not as part of the assessment. It is		infrastructure that is already	
				mentioned only that it may be		included in a given dataset by	
				included. This can lead to		default.	
				inconsistencies depending on how this			
				is interpreted. This topic will also be			
				addressed when the PEF compliant			
				databases become available.			
NEO	15	Table 7	ed	Title of column says: "Level of	Add: "Level of influence of	Accepted. Changed accordingly.	Closed
				influence".	company performing the PEF		
					study".		

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

Initials	#	Line/Page/Secti on/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	Define a standardized	Accepted. This sentence was	Closed
				differently by analysts using this PEFCR.	ingredient category list (or use	updated to avoid such	
					any other already accepted by	confusion and a reference to	
					FEDIAF/Pet food	the complete list in Annex IV	
					manufacturers).	was provided.	
NEO	23	Line 687	ed	This is one PEFCR for pet food	Throughout the document,	Accepted. "The PEFCR" will be	Closed
				(singular). In other places of the	consistently refer to this PEFCR	used when we are referring to	
				document it is referred in plural (these	as a single document.	the document but "these	
				PEFCR), which creates some confusion.		PEFCRs" will be used when we	
						are referring to the rules.	
NEO	24	Lines 707-708	te	Can the proportion of dairy beef to	Define if this proportion can be	Accepted. A sentence was	Closed
				beef co-products really be known for	used as a parameter for	added to indicate that the	
				this type of analysis? This is a	sensitivity analysis.	fraction of beef vs. dairy cattle	
				parameter likely to vary constantly (Pet		can be customized by creating	
				food manufacturers use the material		a custom dataset.	
				available / can be bought and adapt			

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

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

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

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

Initials	#	Line/Page/Secti on/Paragraph /figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
NEO	52	Section 6	ge	The section is general does not seem	Re-organize this section for	Noted. To be updated when	Closed
				properly organized. Sections 6.6 (use	clarity.	the final PEFCR template is	
				phase), 6.7 (logistics) and 6.8 (EOL		issued later in 2017.	
				packaging) are duplicated. Section 6.8			
				is also mentioned in Section 6.5			
NEO	53	Table 24, line 940	ed	"Methanizaton" is a bad translation	Use the correct term in English.	Accepted. Changed accordingly.	Closed
				from French to English of the			
				"anaerobic digestion" process.			
NEO	54	Tables 23 , 25	ge	Anareobic digestion and composting	For consistency with Table 24,	Accepted. Added to Table 23	Closed
				are not mentioned.	include also composting and	but not to Table 25 as this table	
					anaerobic digestion.	is for packaging only.	
NEO	55	Line 938	ge	Which one should be taken?	Clarify which EOL option will be	Accepted. Use the fraction of	Closed
				Incineration or landfilling? Can this be a	taken.	landfilling vs. incineration that	
				sensitivity parameter?		is country-specific per Annex C	
						of the PEF guidance 6.0.	
NEO	56	Section 6.9	ge	These elements have been mentioned	Duplication of information can	Noted. To be updated when	Closed
				elsewhere already.	create confusion, better to	the final PEFCR template is	
					keep the data in their	issued. As with the comments	
					respective section.	on electricity mix or	
						regionalisation sections, there	
						are also merits to including the	
						information in one section.	
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/Secti on/Paragraph /figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
				grain.	allocation for grains and	the EC-compliant datasets are	
				Overheads refer only to manufacture	overheads.	made available.	
				stage (as mentioned later in lines 997-			
				1001) or also to distribution stage?			
NEO	58	Lines 991-992	ge	Milk consumed by calves is not	Confirm if milk consumed by	Accepted. Mmilk is the total	Closed
				mentioned. Is it part of "M milk" in the	calves is considered or not.	amount of milk leaving the	
				formula?		farm and because calves drink	
						milk from their mothers or they	
						are fed with milk powder, this	
						quantity is already deducted	
						from Mmilk.	
NEO	59	Line 1007	ed	Punctuation missing.	Add a comma: "A ceiling height	Accepted. Changed accordingly.	Closed
					of 5 m (at the distribution		
					centre), 2 m (for		
					refrigerators)".		
NEO	60	Line 1009	te	It is not clear if capital goods at the	Give clear guidance on	Noted. To be updated when	Closed
				manufacture stage are included or not.	inclusion of capital goods.	the final guidance document is	
				It is open to interpretation of the		made available. It seems that	
				analyst.		the line number does not	
						correspond to the comment	
						however.	
NEO	61	Lines 1002-1017	ge	Most of the text is out of place,	Move guidance to Distribution	Noted. Because the allocation	Closed
				considering this is an allocation section.	section (6.3). Make a clear	procedure for the distribution	

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

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

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

Initials	#	Line/Page/Secti on/Paragraph /figure/table	Type ¹	Reviewer comments	Proposed changed	Author response	Status
Comm	ents d	on final draft (F	ebruary	y 6, 2018)			
NEO		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	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
				understood.			
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/Secti on/Paragraph	Type ¹	Reviewer comments	Proposed changed	Author response	Status
		/figure/table					
NEO	4	Lines 307-314	Т	The PEFCR applies for products sold in	Change line 309 to: " applying	Approved. Sentence was	Closed
				the EU +EFTA. This implies products	these PEFCRs to products	changed accordingly.	
				manufactured in this area and products	exported out of the EU +EFTA		
				manufactured elsewhere and sold in	or products manufactured and		
				the area. If the PEFCR is applied out of	sold elsewhere is that EF-		
				this area (products manufactured and	approved".		
				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).			
NEO	5	Lines 352-353	E	It is not clear if the text is summarizing	Use past tense and clarify that	Approved. Sentence was	Closed
				the conclusions / recommendations of	4 representative products and	improved for clarity and tense.	
				the 2013 report or if it refers to this	common packaging were		
				actual PEFCR. In particular, the PEF	recommended at the time for		
				screening studies have already been	the PEF screening studies /		
				carried out.	PEFCR development.		
NEO	6	Lines 464-465	G	Link to PEFCR website requires	Mention that readers need to	Accepted. Instructions were	Closed

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

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

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

Initials	#	Line/Page/Secti on/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	Accepted. Link updated.	Closed
					and is accessible.		
NEO	34	Line 1347	Т	An additional equation is required to	Provide the IDF equation for	Accepted. Equation was added.	Closed
				have mass in fat and protein corrected	FPCM.		
				terms.			
NEO	35	Line 1408, table 29	Т	It is not clear what "assumption" refers	Clarify what "assumption"	Accepted. Table 29 was	Closed
				to. Is this the share of this type of	refers to.	updated.	
				transport mode to be used?	The table could have an		
					additional column mentioning		
					the utilization ratio for truck		
					transportation		
NEO	36	Line 1416, table 30	E	A specific LCI for plastic pouch (multi-	For easier reading, include an	Rejected. Specific datasets to	Closed
				laminate) is mentioned in lines 1369-	internal reference to this	be used are not listed in the	
				1375. Why is this not referenced in	particular dataset in Table 30.	tables in the report but rather	
				Table 30?		in Annex IV. A reference to the	
						Annex is given in the paragraph	
						prior to Table 30.	
NEO	37	Lines 1422-1423	G	This is an informative note, but it	Clarify if recommendations	Accepted. The note was	Closed
				would be good to know if this group	ought to be expected from this	removed and a short paragraph	

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

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

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

Initials	#	Line/Page/Secti on/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	"This PEFCR requires that only the	Review this sentence.	Accepted. Sentence was	Closed
				most relevant processes be included as		modified to make meaning	
				determined by the screening		clear.	
				assessment and thus some processes			
				specific for a particular product may be			
				overlooked."			
				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.			
FCD	50	Line 657	Т	I would have expected that at least	I suggest to remove this list	Noted. According to the PEFCR	Closed
				water use (input and output) as well as	(line 658) to avoid confusion	guidance v6.3: "Each PEFCR	
				quantity and fate of manufacturing	with table 18.	shall specify the minimum list	
				losses would be required as primary		of processes (called mandatory	
				data.		processes) that shall always be	
				I see in table 18 that primary data are		covered by company-specific	
				required for these activity data.		data. The purpose is to avoid	

Initials	#	Line/Page/Secti on/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	Closed
						#22.	
FCD	52	Line 1225	Т	"If the ingredients come from multiple	Review this guidance.	Accepted. Changed to weighted	Closed
				sources, a representative sample		average.	
				should be used to properly represent			
				the variability of the sources"			
				What do you mean by representative			

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

Initials #	Line/Page/Secti on/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).			