Plastic Waste Reduction Standard
A VERRA STANDARD

Comments Received During the 10 January to 9 February 2022 Public Consultation on the *Plastic Waste Recycling Methodology, v1.1*

Verra Responses

The original public consultation questions may be found here.

#	Organization	Organization Type	Topic	Section	Question	Comment	Proposal from Commenter	Response
1	Ampliphi	Industry	Applicability Conditions - Sorting	Section 4, AC 4	1a	It could be smart to start Condition 4 with the "plastic waste stream" instead of "waste stream". Else, too many sorting processes fall under the same condition, although their impact on feedstock quality differ strongly (e.g., single-stream for mixed MSW vs. multi-stream including sink float separation for plastics).		Applicability Condition 4 has been revised to clarify that sorting of the project's *plastic* waste stream is required. Additionally, a footnote has been added to clarify the intent of this applicability condition.
2	Ampliphi	Industry	Applicability Conditions - Sorting	Section 4, AC 4	1b	In my opinion, this requirement is redundant. The verification body should decide, whether the described sorting process is appropriate or not. If yes, go to next step in verification process. If no, engage with PD to improve sorting process.		Noted, thank you. However, it is valuable to provide examples of technologies and methods for sorting plastic waste to aid in a project proponent's understanding of the requirement and provision of the sorting description.
3	Ampliphi	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2a	No, because this would be against the concept of "promoting a circular economy for plastics". For instance, P2F shouldn't be considered as a "circular economy" solution.		Thank you. Verra has concluded that only recycling projects that result in an output that can displace virgin plastic are eligible for Waste Recycling Credits (WRCs). This methodology intends to drive investment to activities that contribute to building a circular economy for plastics, and is further supported by WWF's *Chemical Recycling Implementation Principles* (2022). This decision also aligns with one of the Plastic Program's key objectives, which is to increase the availability of recycled plastic feedstocks.
4	Ampliphi	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2bi	I'd say yes.		Noted, thank you.
5	Ampliphi	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2bii	Plastic-to-fuel, especially in South-East Asia. However, this is sort of in conflict with 2a.		Thank you. Verra has concluded that project activities that process plastic into an output that is used as fuel, for energy recovery and/or as a chemical product are not eligible to issue Waste Recycling Credits (WRCs). While these processes may divert waste from landfill or incineration without energy recovery, this methodology's objective is to keep plastics material in a circular system. Incineration with energy recovery and the use of plastic waste as a fuel are considered "appropriate end destinations" for collected plastic waste under the *Plastic Waste Collection Methodology, v1.1*. Such projects may be eligible to issue Waste Collection Credits (WCCs) under the Plastic Program.
6	Ampliphi	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2c	It would be ideal if mechanical recycling projects be required to provide evidence that their output was used to manufacture a product that displaces virgin plastic. However, in practice, this is hardly ever possible (especially when the recyclates are sold via brokers or commodity markets).		Noted, thank you. Applicability Condition 7 requires project proponents to monitor, on an ongoing basis, the amount and quality of recycled plastic waste generated by the project activity. Project proponents must provide sales receipts or other equivalent third-party evidence (e.g., ISCC PLUS certification) to demonstrate that the recycled plastic waste is of a quality such that it could be used to displace the virgin plastic.
7	Ampliphi	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2d	Not sure. But if that were the case, I wouldn't understand why WRC should be issued (as long as condition of "displacement of virgin plastic" holds).		Noted, thank you.
8	Ampliphi	Industry	Applicability Conditions - Exception for Composite Materials	Section 4, AC 7	3a	Not sure about the positioning of this paragraph. Do the "exceptions" only apply to Condition 7 or the entire Section 4?		The exception only applies to Applicability Condition 7. That is, projects that manage composite materials that contain non-plastic materials do not have to demonstrate that the recycled plastic waste is of a quality that allows it to displace the use of virgin plastic.
9	Ampliphi	Industry	Applicability Conditions - Exception for Composite Materials	Section 4, AC 7	3b	Plastic-to-fuel again. Could be a more favorable solution than leakage or open-burning...		Please refer to the response to comment #5.
10	Ampliphi	Industry	Quantification - Material Type	Section 8	5	In theory, it's definitely feasible and makes sense. In practice (especially for smaller projects), not sure...		Continuous improvement is a principle of the Plastic Program. Verra may revise and update this methodology if the requirements are determined to be unworkable, or not stringent enough, in practice. Input from project proponents and other stakeholders is critical to maintain credibility and effectiveness. Verra welcomes feedback from project proponents about Plastic Program requirements both on an ongoing basis and during dedicated public consultation periods.

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11	Ampliphi	Industry	Quantification - Mass Fraction	Section 8	6	This is dependent on the exceptions granted for composite materials (see Section 4, Condtition 7)		Noted, thank you. The mass fraction (MF) is only applied to the amount of plastic waste recycled in the form of depolymerized plastics. Project activities that apply the exception to Applicability Condition 7 must apply the adjustment factor in Table 7 to calculate the fraction of plastic in the composite materials managed by the project.
12	Ampliphi	Industry	Monitoring	Section 9	7	In theory, it's definitely feasible and makes sense. In practice (especially for smaller projects), not sure...		Please refer to the response to comment #10.
13	Ampliphi	Industry	Applicability Conditions - Source of Plastic Waste	Section 4, AC 2	N/A	Not sure how the "preference" for mechanical over chemical recycling will be dealt with. As it's not clear whether a project that diverts plastics from e.g. gasification to mechanical recycling would be allowed to issue credits?	The collection and diversion from chemical recycling to mechanical recycling would probably deserve a separate section. Or is this what Condition 9 in Section 2 is meant to do?	If the project activity diverts plastic waste from a historically existing, legally recognized recycling activity (e.g., chemical recycling), the activity would not be eligible to issue Waste Recycling Credits (WRCs) using this methodology. Given that chemical recycling rates are generally low, we do not expect that the expanded scope of the methodology will affect the eligibility of mechanical recycling projects. Broadly, Applicability Condition 9 requires projects that include chemical recycling to justify why the plastic waste cannot be recycled using mechanical recycling technologies.
14	Ampliphi	Industry	Applicability Conditions - Hazardous Materials	Section 4, AC 5	N/A	Not sure how to interpret the "coatings, adhesives, or colorants" here. In practice, it's often not viable to remove these substances from the waste materials. If I get it right, you'd like to exclude externally added hazardous materials and substances?	Waste materials are not mixed with "external" or "non-waste stream related hazardous materials or substances"...	Noted, thank you. Applicability Condition 4 has been revised to provide more clarity.
15	Ampliphi	Industry	Applicability Conditions - Output Quality	Section 4, AC 6	N/A	For sake of clarity, it could make sense to elaborate on the accepted physical conditions of the output (solid, liquid, gas)		The methodology is intended to be technology agnostic. Therefore, the recycled plastic waste (i.e., output) can be measured in any physical condition, assuming the project meets all the other requirements of the methodology.
16	Ampliphi	Industry	Definitions - Recycling Activity	Section 2	N/A	How do you account for biological/enzymatic recycling? Would this require an additional add-on to the methodology?		In order to comply with Applicability Condition 3, project proponents managing activities such as biological or enzymatic recycling would need to demonstrate that the technologies meet the definition of chemical recycling or mechanical recycling, as defined in the *Plastic Program Definitions, v1.0*. Otherwise, such activities would generally not be eligible under the Plastic Program.
17	Blushful Earth	Other	General Comments	N/A	N/A	The document has some good aspects; I feel that it makes an earnest attempt at being representative. A number of weaknesses relate to it not being adequately adapted from its earlier existence as a mechanical recycling-only methodology. Others evidence a failure to comprehend and address the limitations of chemical recycling, namely output quality and the need for further upgrading prior to use as plastic resin, along with the hazards of toxic by-products and spent solvents. See comments in this document, Review of Verra/South Pole Plastic Standard, Plastic Waste Reduction Program Methodology, Version 1.1, January 2022		Thank you for your feedback. Verra has addressed the comments from the document below (see comments #18-41).
18	Blushful Earth	Other	Applicability Conditions - Output Quality	Section 4, AC 7	N/A	Applicability Condition 7 is good (p.10, lines 15-19) for it explicitly excludes Plastic to Fuels: "…only the fraction of the output of the recycling process that is or can be used for the production of recycled plastics is eligible for Waste Recycling Credits (WRC)". And "The output of the recycling facility is of a sufficient quality such that it can be used to displace the use of virgin plastic." Plus "The mass fraction of the output that is used…for any purpose other than plastic production is not eligible for WRC". What is required to evidence this is less firm, made more so by inconsistency with relevant terms (in an earlier Definitions section). The following weaknesses with regard to upgrading/end product of plastic resin quality is the key problem with chemical recycling [see 1]. You must ensure that you make sure the method includes ALL stages necessary for the production of plastic precursor quality, which is likely to be undertaken off-site		Applicability Condition 7 has been revised to provide additional examples of evidence that may be provided by a project proponent. Please note that there are multiple ways a project may demonstrate compliance with this applicability condition. The evidence will likely differ depending on how the recycling activity fits into the broader recycled products value chain. Project proponents may email PlasticStandard@verra.org with any project-specific questions.
19	Blushful Earth	Other	Project Boundary	Section 5	N/A	In the Project Boundary schematic (line 10, p.13) there is a box marked with a dashed boundary as "intermediary". No other reference to this box is made within the whole document.		Section 5 has been revised to reference how intermediaries may be included in the project boundary.

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20	Blushful Earth	Other	Project Boundary	Section 5	N/A	In the same schematic, the definition of “Recycled Material” is “plastic or any other kind of raw material derived from plastics using chemical processes”, thus not stating explicitly the need for plastic precursor quality.		Section 5 has been revised to emphasize that the recycled plastic waste project may go through an intermediary process "before utilization as feedstock for plastic production". Furthermore, the monitoring requirements in Section 9 require the project proponent to demonstrate the recycled plastic waste that results from their project activity is of a quality that it can displace the use of virgin plastic.
21	Blushful Earth	Other	Definitions - Recycling Activity	Section 3	N/A	The Definition of “Recycling Activity” (p.8, lines 6-7) states that “collection” and “sorting” alone may be considered. So, does this mean that merely collecting and sorting make the activity eligible?		Applicability Condition 1 has been revised to clarify that a collection and/or sorting activity is only eligible if the project meets all other requirements of the methodology (e.g., provides evidence that the activity results in recycled plastic waste).
22	Blushful Earth	Other	Definitions	Section 3	N/A	Definition of site boundaries is confusing, hence whether this encompasses the production of plastic resin grade quality. The term “a site” (line 13, p.6) is not expanded on in the Definitions. Elsewhere the text also refers to “facility” which is also not defined.		The recycling facility or site is the location at which the project activity that generates the recycled plastic waste takes place. Verra will consider defining "facility" and "site" in future updates to the Plastic Program.
23	Blushful Earth	Other	Definitions - Recycled Products	Section 3	N/A	In the definition of “Recycled Products” (p.8, lines 1-4) we have a variety of phrases: “The physical goods that result from a product manufacturing process...”, “Recycled products refer to the next-use stage of the recycled material”. The last one appears to be particularly open to misuse.		The definition of "recycled products" should be interpreted in conjunction with the definition of "recycled material" in the *Plastic Program Definitions, v1.0*. There is a connection between "recycled plastic waste" and "recycled products", and "recycled products" are always made from "recycled material". The "recycled plastic waste" (i.e., output) of a project may be a recycled material itself or may be transformed into one after further processing.
24	Blushful Earth	Other	Monitoring	Section 9	N/A	There are some monitoring requirements “for validation” at the back of the methodology. Here, p.45, line 15 refers to requiring proof by “sales receipts to final buyer or equivalent third-party evidence”, again this offers scope for the output of the chemical recycling activity to not automatically be useable as a plastic precursor [see 1].		Noted, thank you. We acknowledge that even if the output is "of a quality" that it can be used to displace virgin plastics, and a project provides evidence of the same, the output may ultimately not be used to manufacture recycled plastics. However, chemical recycling value chains are complex, often with multiple intermediaries. Verra will continue to monitor projects applying the methodology, and will likely adjust methodological requirements in the future, where changes are necessary and appropriate. Continuous improvement is a principle of the Plastic Program. Verra notes that with the rise of mass balance approaches (e.g., ISCC PLUS) for measuring recycled content, there will likely be an increase in the transparency of available information in the value chain that projects can use as evidence to comply with methodology requirements.
25	Blushful Earth	Other	Monitoring	Section 9	N/A	Tables 6a and 6b, “project recycling parameter” (p. 39) just uses the word “recycled”, and “at the final stage of the recycling facility”.		The "final stage at the recycling facility" refers to the point at which the output of the recycling process (i.e., recycled plastic waste) is generated. Please refer to the term "recycled plastic waste", now defined in Section 3 of the methodology. A recycling process may include multiple steps. Therefore, the phrase "at the final stage at the recycling facility" has been used to refer to the point at which recycled plastic waste is generated.
26	Blushful Earth	Other	Monitoring	Section 9	N/A	In the same section, (p.45) lines 10-13 seek to ensure that the mass of end product is correctly measured. As evidence of the document’s former narrowed scope, this merely states the mass must be measured “...before being used for any manufacture of products within the recycling facility”.		The "Description of measurement methods and procedures applied" row in Tables 6a, 6b and 6c in Section 9.2 of the methodology states the recycled plastic waste should be measured "before leaving the project site" **or** before "being used for manufacturing products on site". If the project does not manufacture products on site, the recycled plastic waste may be measured before it leaves the project site (i.e., recycling facility).
27	Blushful Earth	Other	Quantification	Section 8	N/A	Within the quantification formula, the term “recycled” is regularly used, i.e. “The net recycled plastic waste is the amount of plastic waste recycled by the project activity”. As mentioned, the documents definition of ‘recycled’ gives scope for misuse.		A definition of "recycled plastic waste" has been added to Section 3 to provide further clarity. "Recycled plastic waste" is the output of the recycling facility, which either directly or after further processing is used to make a recycled product, thereby displacing the use of virgin plastic feedstock. "Recycling activity" and "recycled products" are also defined terms in the methodology. "Recycling" and "recycled material" are defined in the *Plastic Program Definitions, v1.0*. These definitions should be referenced where clarity is needed.

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28	Blushful Earth	Other	Applicability Conditions - Technology Justification	Section 4, AC 9	N/A	Related to 1.1, sub-section 9 of Applicability Conditions (lines 24 to 29) refers to the boundary limit (for energy use purposes) as being "recycled plastic granulate". Of course, chemical recycling produces liquid not granules, but to avoid misuse, this should refer to final plastic precursor quality output. In Footnote 34, p.22, post processing clean-up costs should be listed, as also should natural gas and other fossil fuels used.		Using the "plastic precursor" as a boundary limit would not allow for a consistent comparison to other processes that produce a similar quality output (e.g., mechanical recycling or virgin plastic pellet production). A project proponent should consider the complete process when assessing the project's compliance with this requirement. The list provided in Footnote 34 is not exhaustive, and projects may include other costs. Projects should include all relevant costs and revenues in their investment analysis.
29	Blushful Earth	Other	Definitions, Applicability Conditions	Sections 3 and 4	N/A	Applicability Condition 4 (p.10, lines 1 – 4) requires that "credible evidence" is provided to validate the technology. Unfortunately, this paragraph then refers to suitable evidence as "manufacturer specifications or good practice guidance". Elsewhere (Definition of "Recyclable" on p.7, lines26-27), deems that something is "recyclable" if it is "...proven to work in practice and at scale". Obviously, this is a problem for plastic to fuels technologies. Applicability Condition 7 (p.10, lines 15-19) defines "credible evidence" as "such as contractual agreements, receipts of sale of recycled material, third-party audits, third party survey results can be or chain of custody certification (e.g., ISCC 21 PLUS). In all cases, credible evidence must be provided from a source that can be verified by the validation/verification body (VVB)." VVB is not elsewhere defined.		1. The language in Applicability Condition 4 has been revised to improve clarity. Evidence is required to validate that the sorting process is appropriate for the recycling technology employed by the project. The appropriateness will be dependent on the manufacturer specifications of the relevant recycling technology, good practice guidance related to the relevant process, or other types of similar evidence. 2. Please refer to the definition of "recycling" in the *Plastic Program Definitions, v1.0,* which explicitly excludes plastic to fuel technologies. Furthermore, Applicability Condition 7 states plastic-to-fuel activities are not eligible for Waste Recycling Credits (WRCs), thus making the intent and requirements of the methodology clear. 3. "Validation/verification body (VVB)" is defined in the *Plastic Program Definitions, v1.0.*
30	Blushful Earth	Other	Quantification	Section 8	N/A	For plants with an operational capacity of less than one year (p.25, lines 12-16), the methodology states that data should be "as given by the manufacturer specifications".		Yes. If actual facility data is not available, then using the manufacturer's specifications regarding the maximum recycling capacity of the facility is deemed to be objective and credible evidence that can be used to establish the crediting baseline.
31	Blushful Earth	Other	Applicability Conditions - Hazardous Materials	Section 4, AC 5	N/A	The document should put greater emphasis on toxins which carry over into spent chemical recycling solvent (i.e, but not limited to, solvolysis), and the spent solvent itself (many of which are inherently hazardous). For example, Applicability Criterion 5 (which refers to the exclusion of hazardous substances in p.10, lines 5-6) does not mention solvent. Generally, the document is also weak on defining "hazardous substances" and how these transfer to the products of chemical recycling [1]. There was formerly a paragraph that covered this, but it is marked for deletion (p.11, lines 7-13). Why? It should be reinstated.		Applicability Condition 5 has been revised to provide more clarity. "Hazardous" is now defined in Section 3 of the methodology. Please note that this paragraph was not deleted, but was relocated to Applicability Condition 5. Furthermore, a new monitoring parameter, project recycling input (Table 5), has been incorporated into this version of the methodology. Projects are required to continuously monitor the recycling input.
32	Blushful Earth	Other	Applicability Conditions - Source of Plastic Waste	Section 4, AC 2	N/A	Applicability Condition 2 (p.9, lines 7-15) lists seven end of life options from which it is acceptable for plastic waste to be "collected or diverted from" to make it eligible for WRC. Incineration is on this list, while named chemical recycling technologies include gasification and pyrolysis. This appears to be a potential loophole by not excluding those incinerators which are called/ or have a process stage of gasification and pyrolysis, but which ultimately combust the plastic either with or without energy recovery; indeed, to be precise, gasification and pyrolysis are the names for stages in all combustion processes. None of this is explained by the Definitions of gasification and pyrolysis. This is relevant to the need for extra stages of processing to ultimately make crude-oil equivalent plastic precursor material.		Please refer to the definitions of "chemical recycling" and "controlled incineration (incineration)" in the *Plastic Program Definitions, v1.0.* By definition, chemical recycling explicitly excludes energy recovery and incineration.
33	Blushful Earth	Other	Additionality	Section 7, Step 3a	N/A	Step 3 (p.19) – which assesses the criteria for Penetration Rate – could be clearer on whether the formula includes all plastic waste accepted "by the activity" (i.e. "...all material types managed in the project activity" – line 3, p.19) or just that fraction which is targeted by chemical recycling. Some chemical recycling technologies target specific molecules [1]. Lines 4 – 5 (p.21) appear to suggest that this should be plastic-type specific, as it refers to the requirement to "focus on this material type only".		In Section 7, "managed in the project activity" describes those material types that are recycled by the project. Therefore, the project should calculate the penetration rate based on the publicly available information relevant to the material types recycled by the project activity (e.g., chemical recycling process).

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34	Blushful Earth	Other	Additionality	Section 7, Step 2	N/A	Step 2 refers to the Positive List of the Decision Tree (p15, and pp.17-18). It targets developing countries, thus although likely well intentioned, it places these countries at greatest risk of environmental pollution from toxic by-products and toxic spent solvents (which are not adequately addressed by the document). Moreover, the methodology puts the onus onto "national, regional or local regulations", and in these countries this framework of safeguards is likely to be weakest.		Thank you for this comment. Please note that Section 3.14 of the *Plastic Standard, v1.0* includes social and environmental safeguards that can address risks in cases where relevant national, regional and/or local regulation are not strong enough or not enforced. Applicability Conditions 5 and 11, and Table 9 in Section 9 of the methodology, require projects to responsibly manage non-recycled plastic waste, and treat any hazardous substances or byproducts of the recycling process. Projects must provide evidence support ongoing compliance with these requirements. Verra welcomes feedback on the social and environmental impacts associated with plastic waste management activities, and will consider revisions to the social and environmental safeguards in the next Plastic Program update.
35	Blushful Earth	Other	Quantification - Mass Fraction	Section 8	N/A	The simple case formula (with 100% recyclate input) is fine. This is: Mass Fraction (MF) = (mass used for production)/(total mass of depolymerised plastics at the output of the recycling facility). But, it appears to contain an elementary error in its formula for determining the Mass Fraction of activities where recycled plastic is blended with non-recycled resin or other substances. This error is contained in a later section (p.43, Table 8, "*Description of measurement methods…*"), and it exaggerates the quantity available for credits by fifty times. The formula/example at fault is in footnote 45. It is given to illustrate how mass fraction is calculated for depolymerisation: *"For example, if the project output of 2 tonnes is 1% of the input into a steam cracker and 100 tonnes of the output from the steam cracker are sold for polymer production, the MF will be equal to 100 / 2 * 1% = 0.5."* For this example, the correct MF should by 0.01, i.e. 2/198 = 0.01. Yet the answer given is 0.5, and no explanation or derivation is provided. It appears to me that an attempt has been made to simply append a factor to the simple case formula, thus: (100/2)(2/198), where the first bracket is the simple MF, and the second bracket is the input blend ratio. But this is wrong, unless some information is undisclosed, because the variable "2" should not appear in the formula twice. As mentioned, no explanation is given for this. Interestingly, the correct answer, that the MF for blended manufacture should be 0.01 is explained in Footnote 19 of p.10: "For example, if the input into the depolymerization process consists of 50% HDPE, 30% LDPE and 20% composites (plastic only), the output would be assigned the corresponding plastic material type using the same percentages."		Thank you. The example in Footnote 52 in Table 8 has been revised.
36	Blushful Earth	Other	Monitoring	Section 9	N/A	The following are some examples of information which is vague and could lead to misuse: Input materials (e.g. Table 5, p38) could be more specific by explicitly stating "solvents" and "process fuels". It currently just states "list of inputs to the recycling process…plastic waste material and other material". Frequency of Monitoring (e.g. p37) refers to each batch. Is this each batch of plastic processed or each batch of waste received? It is important that monitoring data (p.47) should be based on actual data at full-scale, not projected estimates (not explicitly stated).		1. Since the methodology is technology agnostic, we will not provide a specific list of input materials to be monitored. However, we have added solvents and process fuels as examples in Table 5. 2. The language on p. 37 and throughout Section 9.2 related to frequency of monitoring has been revised. In the case of the sorting output parameter, projects must monitor it each time a batch of sorted plastic waste is sent from the sorting facility to the recycling facility. 3. Waste Recycling Credits (WRCs) are only issued for the recycled plastic waste that has been verified. As stated in Section 4.1 of the *Plastic Standard, v1.0*, verification is the periodic ex-post independent assessment. Therefore, monitoring data by nature will only be based on actual results rather than forecasts.

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37	Blushful Earth	Other	Definitions - Pyrolysis	Section 3	N/A	The definition of pyrolysis is not accurate (p.7, lines 19 – 21). It is not "a decomposition process". Pyrolysis creates new molecules, so suggest adding "..and synthesis..", indeed this is how it has always been used in engineering. Pyrolysis also produces (lines 20 and 21) both condensable and non-condensable products (thus "condensable and " needs adding. Also, the temperature range of pyrolysis is ca. 210°C to 550°C [1, 2].		In the context of this methodology, pyrolysis is a type of recycling process that breaks down complex substances into simpler and smaller particles. Therefore, we have decided to not add synthesis to the definition. The definition has, however, been revised to state that the process occurs at a "medium to high" temperature.
38	Blushful Earth	Other	Definitions - Gasification	Section 3	N/A	The definition of gasification is not accurate (p.5, line 27). Gasification is both a decomposition and synthesis process, hence why it produces (what is described here as "synthesis gas"). Also, delete "high pressure", because most gasifiers operate at negative pressure [3, 4, 5].		In Section 3, the definition of "gasification" has been revised to remove the reference to "high pressure". The inclusion of "production of synthesis gas" in the definition indicates that synthesis occurs in the process. In the context of this methodology, gasification is a recycling process that breaks down complex substances into simpler and smaller particles.
39	Blushful Earth	Other	Definitions - Region	Section 3	N/A	I do not understand why the word "preferably" is used for the region from which the waste is collected (p.8, line 9). If not the geographic area components described, then what else could it be? Should the adverb really be "specifically"?		Noted, thank you. We have removed "preferably" from the definition. Verra is considering further revisions to the definition, including those that would better align it with the concept of "geographic area" in the *Plastic Standard, v1.0*.
40	Blushful Earth	Other	Definitions - Syngas	Section 3	N/A	The definition of syngas is not accurate (p.8, line 19). The words "predominantly" or "mainly" should be added, i.e. syngas is "A mixture of predominantly carbon monoxide and hydrogen". There are also appreciable quantities of carbon dioxide and methane plus other hydrocarbons.		The definition of syngas has been revised to include the word "predominantly".
41	Blushful Earth	Other	Definitions - Monomers	Section 3	N/A	The Definition of Monomers (p.6, line 10) states that a monomer can be converted to a polymer "by combining it with itself…". It can form a polymer by combining with other identical monomers but not, of course, with 'itself'.		The definition of monomer has been revised to replace "itself" with "identical monomers".
42	ClimeCo	Service Provider	Monitoring	Section 9	7	Table 4: The requirement for the measurement of sorted materials to be taken on-site at the Sorting Facility may add an extra burden. If the sorting facility is operated by a separate entity, the project proponent may not have oversight to request the weighing of sorted materials with a calibrated scale at the sorting site. We recommend adding an option so the project proponent can weigh the sorted material on arrival at their own facility with a calibrated scale, which will provide the same data.		Noted, thank you. The intent of Applicability Condition 4 and the parameter in Table 4 is to require project proponents to provide documentation of the sorting process and measure plastic waste before it enters the recycling process. No adjustments have been made at this time. If a project proponent can demonstrate that a proposed alternative method is equally accurate or more conservative, they may apply a methodology deviation as described in Section 3.15 of the *Plastic Standard, v1.0*.
43	ClimeCo	Service Provider	Monitoring	Section 9	7	Table 5: What is the basis for the requirement "aggregation of data, at least monthly"? Typically, a project will aggregate data at a minimum annually when preparing a monitoring report. Similarly, the Plastic Collection methodology does not specify a data aggregation interval and allows the project proponent to establish their own monitoring plan including procedures for compiling the data.		Table 5 has been revised to require projects to monitor and record the recycling input parameter prior to each batch of sorted plastic waste entering the recycling process. This frequency supports the intent of the requirement (i.e., projects should continuously monitor the inputs to the recycling process to comply with Applicability Condition 5 in Section 4 of the methodology).
44	ClimeCo	Service Provider	Applicability Conditions - Hazardous Materials	Section 4, AC 5	N/A	"Waste materials" can be confused for some sort of waste from the recycling process, when in this case the methodology means "input materials" that are going into the recycling process.	Change "waste materials" to "input materials"	Applicability Condition 5 has been revised to clarify that, when considering the inputs to the recycling process, plastic waste materials must not be mixed with any other hazardous materials or substances.
45	Composite Recycling Sàrl	Industry	Applicability Conditions - Sorting	Section 4, AC 4	1a	No. Sorting requirements for mechanical recycling are much more stringent than for chemical recycling. One of the key benefits of chemical recycling over mechanical recycling is that it does not require extensive sorting.		Noted, thank you. Applicability Condition 4 has been revised to include additional information about the intent of the requirement. Applicability Condition 4 will, for example, ensure that an unsorted waste stream that includes PET bottles best suited for mechanical recycling is not chemically recycled. The plastic crediting mechanism should drive investment to recycling processes that complement and increase the efficiency of existing waste management systems. Sorting is required to ensure that segregated plastic waste is processed using the most efficient and appropriate recycling technology. Furthermore, sorting allows chemical recycling projects to quantify recycled plastic waste by material type, which is required by the *Plastic Standard, v1.0*.
46	Composite Recycling Sàrl	Industry	Applicability Conditions - Sorting	Section 4, AC 4	1b	No, the same as the above, there are very different sorting requirements of mechanical and chemical sorting. Chemical recycling should be exempt from this section.		Please refer to the response to comment #45.

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47	Composite Recycling Sàrl	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2a	Yes. For example, in the case of glass fibre reinforced plastics (GFRP), it is possible to displace virgin plastic with pyrolysis oil if the conditions are correct. However, in either case you can displace, for example virgin glass fibre from recycling GFRP. This economically incentivizes the removal of GFRP from the landfill and environment even in the case that virgin plastic is not displaced.		As stated in Section 2.1 of the *Plastic Standard, v1.0,* the scope of the Plastic Program is limited to the collection and recycling of plastic materials. An objective of the Plastic Program is to increase the availability of recycled plastic feedstocks. A project collecting and/or recycling composite materials containing plastic may be eligible for crediting assuming the project meet all other program and methodological requirements.
48	Composite Recycling Sàrl	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2b	The tracing of the chemicals sold from chemical recyclers should not be so stringent/difficult to track that it disensentives chemical recyclers which are displacing waste material from the environment or landfills.		This methodology does not explicitly require projects to trace the sale of the chemical product outputs that result from their activity. However, projects must responsibly manage any hazardous substances that result from their recycling process, as stated in Applicability Condition 11 of the methodology.
49	Composite Recycling Sàrl	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2bi	The output of chemical recycling should be able to be used for other purposes to make new chemicals or products displacing virgin materials. Even if those products are not plastic.		Please refer to the response in comment #3.
50	Composite Recycling Sàrl	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2bii	Recycling GFRP can displace virgin glass fibre. To scale to the level that quantities of pyrolysis oil can be sold to make new plastics (from the major plastic producing companies) would be difficult without credit revenue.		Please refer to the response in comment #47. The plastic fraction of GFRP (i.e., a composite material) that is collected and/or recycled may be eligible for crediting under the *Plastic Standard, v1.0.*
51	Composite Recycling Sàrl	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2d	In the case of pyrolysis oil, we are working to demonstrate that it is of the quality to displace virgin plastic, but the large companies buying pyrolysis oil to make plastic are very secretive of thier requirements.		Any projects seeking to issue Waste Recycling Credits (WRCs) must be able to provide information to support that the recycled plastic waste is of a quality that it can be used to displace the use of virgin plastic. Verra notes that with the rise of mass balance approaches (e.g., ISCC PLUS) for measuring recycled content, there will likely be an increase in the transparency of available information in the value chain.
52	Composite Recycling Sàrl	Industry	Applicability Conditions - Exception for Composite Materials	Section 4, AC 7	3a	There should be exceptions but this is poorly written. Also, I think that the recycling of the composite as a whole should be treated equally to recycling just the plastic portion. Otherwise the entire composite material will end up in landfill or the environment which is against the goals of this program.		The exception for composite materials containing plastic and non-plastic in Applicability Condition 7 has been maintained and the language has been revised to improve clarity. As noted in the response to comment #47, the collection and/or recycling of non-plastic materials is not in the scope of the Plastic Program.
53	Composite Recycling Sàrl	Industry	Applicability Conditions - Technology Justification	Section 4, AC 9	4a	This whole section should be removed, "level" of depolymerization doesn't fully make sense and is irrelevant for the goals of this program. If a technology is developed which allows plastic to be resold in a useful way, removing it from the environment, landfill, incineration etc, it should not have to put the extra effort to compare itself to other recycling technologies. A wind turbine blade could be turned into a play structure. This requires no depolymerization however this can obviously not be scaled to deal with all the composite waste. A technology which depolymerizes a glass fibre composite would be punished in this scheme even though it's neccessary to scale.		Noted, thank you. We acknowledge the importance of chemical recycling technology, and a wide range of innovative technologies, in contributing to building a circular economy for plastics. The language in Applicability Condition 9 has been revised to remove "level of depolymerization" and improve clarity. Depolymerization usually results in more material losses over the value chain. Furthermore, depolymerization technologies are generally considered more energy intensive. Hence, where suitable (e.g., output meets quality needs), a process that requires less depolymerization is preferred. The intent of this requirement is not to make it more difficult for projects to issue Waste Recycling Credits (WRCs). Rather, projects should assess what the most efficient and appropriate technology is, considering the output requirements (Applicability Condition 7) and the environmental implications of a technology.

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54	Composite Recycling Sàrl	Industry	Quantification - Material Type	Section 8	5a	Here in general I think that composite waste should be treated as a whole and not just for the plastic fraction. Otherwise composite waste (e.g. boat hulls, wind turbine blades) could continue to be abandoned to leak microplastics into the environment. Infusing plastics into composites makes them intrinsically harder and more expensive to treat, and should not be punished in this program for only containing a fraction of plastic.		As noted in the response to comment #47, the collection and/or recycling of non-plastic materials is not included in the scope of the Plastic Program. If a project manages both plastic and non-plastic materials, and meets all relevant requirements, credit finance received for the plastic recycling portion of their activities may help fund the broader recycling efforts. We do not intend to "punish" activities that are managing composite materials or waste. However, a key objective of the Plastic Program is to drive investment towards innovative plastic waste management technologies, such as those that can separate and recycle plastic used in composite materials. Projects recycling composite materials may issue Waste Recycling Credits (WRCs) for the plastic fraction of the composite material (assuming all other requirements are met). A WRC represents the increase in recycling of one metric tonne of plastic waste. It is therefore not appropriate to allow for the quantification and crediting of non-plastic materials.
55	Composite Recycling Sàrl	Industry	Quantification - Mass Fraction	Section 8	6	To my previous point, dealing with materials which contain plastics is more difficult than dealing with pure plastic. The easiest thing to recycle is a clear plastic PET bottle, recycling a boat hull is much more difficult. This program should be designed to promote the recycling of difficult plastic waste material, and that is typically mixed plastic materials.		Please refer to the response in comment #54.
56	Composite Recycling Sàrl	Industry	Monitoring	Section 9	7	I think it could be restrictive for small companies/projects that are looking to use plastic credits to develop a business to deal with difficult to deal with waste.		The monitoring requirements are intended to support the credibility and integrity of Plastic Credits issued under the Plastic Program. A portion of the revenue from Plastic Credits may be used to implement the project's defined monitoring plan.
57	Composite Recycling Sàrl	Industry	Applicability Conditions - Recycling Activities	Section 4, AC 1	N/A	For our recycling technology, it is not clear we qualify as the "installation of a new recycling facility". CR deploys Mobilized Recycling Units to treat waste at the source, but this is the temporary placement of a transportable unit and not a permanent installation. We also don't permanently increase capacity or change sorting habit through the defined means.	Add a section d) Increase the recycling of plastic waste through a temporary and/or recurring recycling technology.	Generally, it may be challenging for projects that deploy transportable units to meet the requirements of both the *Plastic Standard, v1.0* and this methodology. Among other things, projects must be able to define a project region (e.g., municipality, state) for the purposes of additionality, and identify and engage with local stakeholders. It will be difficult, if not impossible, for a project without any permanent elements to comply with Plastic Program requirements. The Mobilized Recycling Units themselves may be an eligible recycling activity if they remain in one location; however, permanent installation would likely defeat your objectives. Please feel free to send project-specific questions to PlasticStandard@verra.org.
58	DePoly SA	Industry	Applicability Conditions - Sorting	Section 4, AC 4	1a	Unfortunately the methodology has been written from the point of view of existing technology and fails to recognise and incentivise emerging technologies.		Noted. We are aware of the dynamics of plastic recycling and intend for the methodology to be as technologically agnostic as possible. Please refer to the response in comment #10.
59	DePoly SA	Industry	Applicability Conditions - Sorting	Section 4, AC 4	1b	Some of the requirements has been clearly set according to the limitations of existing technolgies (such as sorting, material clasifications) which leaves the new technologies in a gray zone and makes it harder for them to fit within a certain category. for example, if a technology is robust enough that a much lower level of sorting is necessary why there is a need to implement a tedious and expensive sorting system?		The language of Applicability Condition 4 has been revised. The requirement states that the sorting method(s) should be appropriate for the recycling technology. Therefore, if the recycling technology requires less sorting, sorting procedures may be designed accordingly. It is anticipated that some form of sorting will be necessary for all recycling technologies.
60	DePoly SA	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2a	Only if they result in a product(s) that producing its virgin counterpart have higher impact than virgin plastic		"Impact" can be interpreted in many different ways (e.g., resource use, GHG emissions, energy intensity). It would be very difficult to define how your suggestion would be quantified, and would leave room for misuse. Therefore, we have not included your proposal at this time.
61	DePoly SA	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2bi	The displacement of virgin feedstock should obviously be the benchmark but it is not currently possible for all types of plastics hence if a process results in product(s) that producing its virgin counterpart have higher impact/footprint than virgin plastic it should be eligible. of course this requires comprehensive life cycle analysis of the product(s) in comparison to plastic value chain		Please refer to the response in comment #3.

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62	DePoly SA	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2c	There is an important factor missing here especially when comparing conventional mechanical recycling with chemical recycling which result in monomers: The mech. recycling can only demosntrate their output to have the virgin quality only in one cycle. The same product cannot be recycled again with the same quality and this is an inherit limitation of the process. hence they can never replace virgin plastic. Hence when comparing the technologies, not only the type of waste materials (which by itself requires more clear categorization and definitions) but also the impact of the full cycle needs to be considered.		Applicability Condition 9(b) addresses this scenario. If mechanically recycling a sorted plastic waste stream can no longer yield an output with the quality required to displace virgin plastic, then another technology (e.g., chemical recycling) may be used. In the first cycle, mechanical recycling is preferred over chemical recycling.
63	DePoly SA	Industry	Applicability Conditions - Exception for Composite Materials	Section 4, AC 7	3	This shouldn't even be an exception rather be a rule! Obviously the composite materials are the most difficult waste streams to recycle and they consist a large amount of waste stream and if there are technologies available that can make that possible in an impactful manner they obviously should be considered. This should be applied to both composite material of plastic-plastic and plastic-nonplastic.		Please refer to the response in comment #54.
64	DePoly SA	Industry	Applicability Conditions - Technology Justification	Section 4, AC 9	4	One condition that should be considered is the limitations of lower degree of depolymerization technologies and their product quality in comparison to higher degree technologies.		Noted. This should be covered by Applicability Condition 9(a). Furthermore, Applicability Condition 7 requires a project's recycled plastic waste to be of a quality that it can displace the use of virgin plastic. If a project's technology does not allow for this, then it is not eligible to apply the methodology.
65	DePoly SA	Industry	Quantification - Material Type	Section 8	5	It seems appropriate		Noted. Thank you.
66	DePoly SA	Industry	Quantification - Mass Fraction	Section 8	6	The approach is feasible but lacks consideration for processes that directly produce monomers for plastic production not intermediate or byproducts such as pyrolysis oil. In this case the MF is essentially 1 or equal to the yield of the process based on the mass balance or actual amount of monomers produced		If the recycling yield is exclusively used for plastic production, then the MF would be 1.
67	DePoly SA	Industry	Monitoring	Section 9	7	It seems appropriate		Noted. Thank you.
68	DePoly SA	Industry	Applicability Conditions - Sorting	Section 4, AC 4	N/A	Why the stream has to be sorted before? And what level of sorting is considered here? Does it refer to plastic from other materials or sorting different type of plastic or …?	There are advantages of removing the tedious sorting process if the technology demonstrates that can process the unsorted streams with the same quality/efficiency	Please refer to the response to comment #45.
69	DePoly SA	Industry	Applicability Conditions - Availability of Recyclable Plastic Waste	Section 4, AC 8	N/A	It should be cleared up that "the availability of the waste in the region" is just a baseline or the credits will be limited to the regional amount available?! It might hinder the possibility of receiving the feed from other countries/regions. This may not be a big issue for mech. recyclers but for chemical recycling it probably makes more sense from both footprint and financial point of view to build a larger plant that receive feed from many surrounding regions rather than building one for each region.		Region, as defined in Section 3 of the methodology, is not necessarily restricted to country or other administrative units (i.e., the project may define the region most appropriate to the project activity). However, please note that Applicability Condition 12 prohibits the transboundary movement of plastic waste, unless certain conditions are met. The intent of this requirement is to drive finance to systems that create local solutions for the treatment of plastic waste.
70	DePoly SA	Industry	Applicability Conditions - Technology Justification	Section 4, AC 9	N/A	Is this one cycle or whole life? ex. Mechanical recycling can avoid the use of virgin plastic for one cycle and technically their LCA is better but over several cycle they cannot avoid use of virgin plastic! this needs to be clarified.		Please refer to the response in comment #62.
71	DePoly SA	Industry	Applicability Conditions - Diverting Plastic Waste from Historically Existing Recycling Activities	Section 4, AC 10	N/A	This does not make sense! if the "historically existing" technologies were good then what are we doing? I believe the whole idea of protecting the status quo is irrelevent because the status quo is obviously failing to address the plastic issue!	I think the new technologies should be allowed if they can demonstrate to be better.	Applicability Condition 10 states that projects must not divert plastic waste that would have otherwise been appropriately managed and recycled by an existing facility. If the plastic waste would have been recycled in the absence of the project, then the project is not additional. If a new technology is "better" (i.e., can produce a virgin quality feedstock, where the "old" or "existing" technology cannot) then this activity may be eligible. In this methodology, a historically existing project activity that does not produce recycled plastic waste that can be used to displace virgin plastic would not be considered a recycling activity.
72	DePoly SA	Industry	Applicability Conditions - Transboundary Movement of Waste	Section 4, AC 12	N/A	This will hinder new technologies to use the untreated waste feed which will otherwise be treated poorly in the exporting country.	I think another one can be added as: If there is no suitable/comparable technology in the exporting country to recycle the exported stream at the time of the project! This is of course a bit tricky because it might hinder the feed for development of such projects in the exporting country but still can facilitate treatment of the waste until the suitable technologies become available	Noted, thank you. The intent of the Plastic Program is to incentivize investment in local and regional infrastructure. However, please note that exceptions to this requirement already exist for certain scenarios (e.g., the exporting country does not have sufficient plastic waste available to enable the development recycling infrastructure).

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73	DePoly SA	Industry	Additionality	Section 7	N/A	The limitations of varioous recycling technologies are vastly different. "Material Type" needs to be clearly defined! Is the differentiation based on the chemical content, form/shape, application, etc.? And what is the limits of the diffeerntiation? Ex. assuming that chemical content is the creteria, Is adding pigment change the type? what is the limitation? 1%,5%, 50%?	The most comprehensive categorization would be the combination of chemical content and form/shape.	Material type in the context of the Plastic Program is defined in Section 2.1 of the *Plastic Standard, v1.0.*
74	DePoly SA	Industry	Additionality	Section 7, Step 3a	N/A	Legal definition of recycling is vastly differs based on the local regulations. The 20% common practice is only applicable here when the calculated capacities corresponds to comparable technologies in term of the output, impact, footprint, etc.	A comprehensive and clear categorization of recycling technologies vs upcycling and energy recovery needs to be defined. This will help a more fair comparison between the different technollogies available for a certain material type.	Noted, thank you. When assessing the additionality of a recycling activity, a project only needs to consider the legal mandate of those activities that meet definition of "recycling" in the *Plastic Program Definitions, v1.0* (i.e., upcycling and incineration with energy recovery are not recycling). Generally, Verra has not prescribed or defined a waste management hierarchy, and this methodology is intended to be technology agnostic as much as is feasible. Verra will consider this feedback in future updates to the methodology.
75	DePoly SA	Industry	Additionality	Section 7, Step 3a	N/A	Legal definition of recycling is vastly differs based on the local regulations.	A comprehensive and clear categorization of recycling technologies vs upcycling and energy recovery needs to be defined. This will help a more fair comparison between the different technollogies available for a certain material type.	Please refer to the response in comment #74.
76	DePoly SA	Industry	Quantification - Adjustment Factor	Section 8	N/A	Clause "iv" and "iii" could be in contrast. If a process has the ability to treat several types of composite streams without differentiating them in the input of process, then clearly the 90/10 confidence/precision is irrelevent. It means that the process is robust enough to process several different samples in the same system.		Please note the Adjustment Factor (AF) is only relevant to the quantification of plastic waste recycled without depolymerization. This is illustrated in Equations 2 and 3 in Section 8 of the methodology.
77	DePoly SA	Industry	Applicability Conditions - Sorting	Section 4, AC 4	1	One of the advantages of chemical recycling can be that material does not have to be sorted. It is appropriate that the waste strea used in this process is monitored, however sorting is not necessary for many types of chemical recycling.		Please refer to the response to comment #45.
78	DePoly SA	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2a	Unfortunly, the poor quality and logic of this methodolgy makes this question difficult to answer. Ideally yes, the products of chemcially recycled plastic material should go back to make plastic again thus dispacing virgin plastic. However the restrictions / limitations this methoodology states makes this difficult to achieve for chemcial reyclers.		Noted, thank you. However, the requirements of this methodology are necessary in order to enable the consistent and transparent verification of project impact. That said, continuous improvement is a principle of the Plastic Program. Verra will continue to monitor evolving technologies and may adjust methodological requirements in the future, where changes are demonstrated to be necessary and appropriate.
79	DePoly SA	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2bii	Chemical degradtion of plastic can provide high value chemicals with a significantly lower environmental impact than tradtional methods - if the WRC is exclusivly focussed on plastics, then this will not be taken into consideration, but then again, the restrictions this methoodology provides makes this focus extreamly difficult for chemical recyclers.		Please refer to the response in comment #3.
80	DePoly SA	Industry	Applicability Conditions - Exception for Composite Materials	Section 4, AC 7	3	Unless there is strict, worldwide legislation, composite plastic material will be manufactured, therefore is here to stay. Again, the advantage of chemical recycling is that such composite materials can be recylced to a high degree. It does not make sense to even attampt to justify why this exemption should be kept.		Please note that, generally speaking, we only anticipate that the exception to Applicability Condition 7 will be applied by projects employing mechanical recycling technologies. Most chemical recycling technologies will likely enable the separation of plastic polymers for recycling. In such cases, a project would not need to apply this exception because presumably the activity would result in recycled plastic waste that is of a quality that can be used to displace virgin plastic.
81	DePoly SA	Industry	Applicability Conditions - Technology Justification	Section 4, AC 9	4	Again, this is so limited in thinking and indicative of why this methodology is so ill thought. Plastic can only be mechanical recycled a limited number of times; converting plastic to monomers and back to plastic again can carry on infinitely; this is why, in answer to the 2nd question, I say that ideally yes the products of chemical recycling should go back into the plastic industry. But here, you are asking chemical recyclers to justify why they are chemically recycling to give continually back to the plastic industry, and not allowing the status quo of mechanically recycling then incinerating / landfilling when the plastic cannot be mechanically recycled anymore.		Please refer to the response in comment #62.

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82	DePoly SA	Industry	Quantification - Material Type	Section 8	5	This is linked to other parts of the methodology, and the aims of circualrly containing the plastic. If this is the case, then the recylcing credits based on the ultimate output of the product makes sense, but some of the methodology runs counter to this aim.		The recycled plastic waste that results from the recycling process must be quantified at the output stage. However, we recognize that at that stage it may not be possible to quantify the output by material type depending on the form of the recycled plastic waste (e.g., a pyrolysis oil created using an input stream that contained multiple plastic material types). In such cases, a project may classify the recycled plastic waste in proportion to the inputs of the recycling process (e.g., 50% HDPE, 30% LDPE, 20% composites).
83	DePoly SA	Industry	Quantification - Mass Fraction	Section 8	6	Similar answer to 5.		Please refer to the response in comment #82.
84	DePoly SA	Industry	Monitoring	Section 9	7	For these, many of the parameters will be monitored for quality control of products, so should be feasible.		Noted. Thank you.
85	DePoly SA	Industry	Applicability Conditions - Sorting	Section 4, AC 4	N/A	An advantage of chemcial recycling can be that sorting is not required. The mthodology here regarding montoring and analysis of the waste stream is good, but sorting should be an option rather than being required to take place	Could be changes to 'pre processing' with the details / analysis recorded as requred	Please refer to the response to comment #45.
86	DePoly SA	Industry	Applicability Conditions - Output Quality	Section 4, AC 6	N/A	As in asnwer to questions- this in principle is good, but the rest of the methodlogy does not seem to encourage this		Please refer to the response in comment #82.
87	DePoly SA	Industry	Line 16 on p.11	N/A	N/A	This is non sensicle, and seems to exlude all new technologies.		Unfortunately, it is not clear what element of the methodology the commenter is referring to.
88	DePoly SA	Industry	Line 34 on p.11	N/A	N/A	This is again seriously limiting, and confusion with the exceptions		Unfortunately, it is not clear what element of the methodology the commenter is referring to.
89	DePoly SA	Industry	Definitions - Recycled Products	Section 3	N/A	Recylced products - there should be a better definition for composites (eg is it recycled if only 1% of the composition is recycled?)		As long as a product contains recycled material, it is considered a "recycled product" according to Section 3 of the methodology. Verra does not define or prescribe the minimum percent or amount of recycled content.
90	DePoly SA	Industry	Applicability Conditions - Sorting	Section 4, AC 4	1	For companies that use sorting, yes. However, in many chemical recycling methods sorting is an unnecessary task which should be accounted for in this document. For companies that do sort, I do not believe that a sorting method needs to be verified. The likely methods used will be methods that have already been established and used in industry, predating this document, and already likely have been optimized for efficiency.		Please refer to the response to comment #45.
91	DePoly SA	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2a	Yes		Please refer to the response in comment #3.
92	DePoly SA	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2bi	No, it should be looked at on a case by case basis to understand what plastic is being used, what is the feedstock (monomers or plastic) that is being produced, and why that method should quality for some OR ALL of the waste recycling credit.		Thank you for the suggestion. However, a requirement for a case-by-case assessment cannot be implemented in a methodology. Applicability conditions and criteria must provide objective guidance that third-party auditors can use to determine whether a project is or is not eligible to apply the methodology. A recycling activity that meets the requirements of this methodology is able to issue Waste Recycling Credits (WRCs) for the amount of plastic recycled by the project.
93	DePoly SA	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2bii	Yes. Any SME and Start up working on this technology. E.g. if you mean vigin feedstock such as PTA and MEG (feedstock monomers of PET) then there are about 30 start ups who would use these credits as a secondard source of revenue to help scale up faster.		A recycling process that results in the feedstock monomers of PET would likely be eligible for crediting, assuming that feedstock is of a quality that allows it to displace the use of virgin feedstock and the project meets all other methodology requirements.
94	DePoly SA	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2c	Mechanical recycling cannot replace virgin plastic (otherwise this would have already happened in industry instead of them co-existing), and if new technology emerged that demonstrated the quality was "virgin", then the technology would be used. Yes, mechanicl recycling should have to prove that their output was used to make a virgin product, but it should also have to prove that it is not a singular batch system (current LCA system) and should be compared against a continous system (e.g. what chemical recycling can do). It should also have to prove that the product that they produced was not used in downgraded materials (e.g. from a bottle to a chair).		Please refer to the response in comment #62. Applicability Condition 7 requires projects to demonstrate that the recycled plastic waste is of a quality that allows it to be used to displace the use of virgin plastic. Therefore, if the product (e.g., chair, garment) would normally be produced using a virgin plastic feedstock, then the project is eligible to apply this methodology.
95	DePoly SA	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2d	No. There are too many industrial standards to avoid this comparison.		Noted. Thank you.
96	DePoly SA	Industry	Applicability Conditions - Exception for Composite Materials	Section 4, AC 7	3	Composites in chemical recycling should be considered under the same category as everything else. They are considered difficult items in the recycling industry due to their nature.		Please refer to the response in comment #54.

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97	DePoly SA	Industry	Applicability Conditions - Technology Justification	Section 4, AC 9	4	Yes. Comparisons should not be done between Mechanical recyclers and companies who do depolymerization (monomer production). The comparison should be depolymerization monomers to current industry standard monomers. E.g DePoly PTA and MEG to petrol PTA and MEG (GHG emissions, LCAs etc all under the same comparison). Otherwise you're comparing apples to oranges.		Noted, thank you. If a project chooses to use option (b) to demonstrate compliance with Applicability Condition 9, they may compare their energy intensity and GHG emissions to a technology and/or process that produces a "similar quality output". Therefore, if petrol PTA and MEG are considered outputs of similar quality, then the project may compare to those.
98	DePoly SA	Industry	Quantification - Material Type	Section 8	5	Why not include both?		The alternative approach would be less accurate and would provide less transparency to a Waste Recycling Credit (WRC) buyer who wants to understand what material type was recycled. Therefore, at this time, we will not introduce "other plastic" or "mixed plastic" categories. Projects that cannot quantify recycled plastic waste by plastic material type may instead rely on the recycling process inputs to determine the proportional breakdown.
99	DePoly SA	Industry	Quantification - Mass Fraction	Section 8	6	It is false to assume that less than 100% of the monomers from a depolymerization process would be used for plastic production. For start ups that do produce the main monomers, the goal is the 100% sale of the monomers back to platic resin producers. E.g. our PTA and MEG (100% of it) will be sold back to resin producers. It is unclear how the MF will be applied then.		We agree that one cannot assume that 100% of the output of a depolymerization process will be used for plastic production. Therefore, projects should use the MF to quantify the portion of their output that is used for plastic production. If 100% of the output will be used to produce plastic, then the MF would be 1.
100	DePoly SA	Industry	Definitions - Depolymerization	Section 3	N/A	"decomposing Macromolecules .."	decomposing macromolecules and/or polymers	The definition of "depolymerization" in Section 3 has been revised to provide "plastic polymers" as an example of a macromolecule that will be converted into smaller molecules through depolymerization.
101	DePoly SA	Industry	Applicability Conditions - Recycling Activities	Section 4, AC 1	N/A	"installation of a new recycling facility" Should be defined for new tech such as chem recycling	installation of a new recycling facilit, including chemical recycling facilities, or facilities that break down the polymer to monomers or oligomers for chemical sale.	Recycling broadly refers to any recycling process and/or technology. Therefore, to keep this methodology technology agnostic, Applicability Condition 1 will not be revised to be more specific at this time. Please note that Applicability Condition 3 states that any project activity that meets the definition of mechanical recycling or chemical recycling, as defined in the *Plastic Program Definitions, v1.0* may be eligible to apply this methodology.
102	DePoly SA	Industry	Applicability Conditions - Sorting	Section 4, AC 4	N/A	"The waste stream is sorted before it enters the recycling process.." Not all waste streams need to be sorted. Chemical recycling for example works without sorting colours, different polymers, etc.	The waste stream may be sorted befre it enters the recycling process. If so, the project proponent….	Please refer to the response to comment #45.
103	DePoly SA	Industry	Applicability Conditions - Sorting	Section 4, AC 4	N/A	"Credible evidence.."	If sorting is required, credible evidence such as …	Sorting is required for all recycling activities. Please refer to the response in comment #45.
104	DePoly SA	Industry	Applicability Conditions - Hazardous Materials	Section 4, AC 5	N/A	"Waste mataerials are not mixed with hazardous materials…" Chemical recycling by definition uses hazardous materials or subtsances. E.g. Acids, bases, alcohols, etc. all by chemical standards are considered hazardous substances.	remove this whole section	The intent of Applicability Condition 5 is to prevent the addition of any substances that could become unsafe during the recycling process. Therefore, if the chemical recycling process safely utilizes input materials and/or substances, they would not be impacted by this applicability condition. Furthermore, please consider how "hazardous" is defined in Section 3 of the methodology. Applicability Condition 5 also aims to ensure that the recycled plastic waste is not hazardous or toxic, thereby limiting its useability a substitute of virgin feedstock in plastic production, which is important in the context of this methodology.
105	DePoly SA	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	N/A	"receipts of sale of recycled materials" Not all material will be obtained via sales. E.g. given for free/donated.	remove	Projects must provide evidence to demonstrate that the recycled plastic waste (i.e., output of the activity) meets Applicability Condition 7. A receipt of sale of recycled material is one example of evidence that may be used to demonstrate compliance with this requirement. Projects may provide other credible evidence to demonstrate compliance.
106	DePoly SA	Industry	Applicability Conditions - Exception for Composite Materials	Section 4, AC 7	N/A	"suitable application for the recycled material that is designed to be durable.." Monomers and other chemicals (the recycled material) cannot be quaitifed as durable.	remove	The exception to Applicability Condition 7 is applicable only to projects that process composite materials that contain plastics and non-plastics, which cannot be separated through a process like chemical recycling. A project that can break down their recycled plastic waste into monomers would not need to apply this exception.

#	Organization	Organization Type	Topic	Section	Question	Comment	Proposal from Commenter	Response
107	DePoly SA	Industry	Applicability Conditions - Exception for Composite Materials	Section 4, AC 7	N/A	"Where the project activity includes the manufacture of recycled products from composite materials, applications that combine the composite materials with other plastic waste such that it is not possible to separate the additional materials for recycling after use should be avoided."	Remove - this defeats the purpose of recycling composite or creating circular economy for composites.	The language in Applicability Condition 7 has been clarified and revised to state that applications that combine composite materials and other plastic waste such that it is not possible to separate the single-resin plastics for recycling after use are not eligible. The intent of this requirement is to prevent projects from combining a composite recycled material with single-resin plastics, thereby preventing the recyclable single-resin plastics from being separated and recycled in the future.
108	DePoly SA	Industry	Applicability Conditions - Technology Justification	Section 4, AC 9	N/A	"Project activities that include any depolymerization of sorted waste streams must justify why none of the materials in the sorted waste stream can be recycled using a technology with a lower degree of depolymerization (e.g., monomers instead of syngas)." Lower degree of depolymerization does not make sense. By defintion the lowest degree is the monomers of the polymers. Syngas generation is a separate method.	Project activitie that converted sorted waste streams to syngas, must justify why none of the materials in the sorted waste stream cannot be recycled using depolymerization technology (e.g. monomer generation instead of syngas)	The language in Applicability Condition 9 has been revised to improve clarity. Conversion of a polymer into syngas would be a depolymerization process, as per the definition of "depolymerization" provided in Section 3 of the methodology. We intend for the methodology to be technology agnostic, and therefore avoid referring to specific outputs (e.g., oil, gas) or processes (e.g., pyrolysis, gasification) in Applicability Condition 9.
109	DePoly SA	Industry	Applicability Conditions - Technology Justification	Section 4, AC 9	N/A	"lower degree of depolymerization"	any process that generates syngas, or similar chemical products..	Please refer to the response in comment #108.
110	DePoly SA	Industry	Applicability Conditions - Technology Justification	Section 4, AC 9	N/A	"The technology and/or process used in the project activity with a higher degree of depolymerization has a lower energy intensity and/or lower GHG emissions compared to other technologies and/or processes that produce a similar quality output. For the comparison of technologies, the entire process from the exit of the sorting facility (if separate from the recycling facility) to the production of recycled plastic granulate must be included." You cannot say higher degree of depolymerization - again it does not make sense. Also the compaison of granular production should be excluded as there are too many variables. Some information for this might also be impossible to get. E.g. if we sell PTA and MEG to indorama ventures, their data for polymerization is likely proprietary.	The technology and/or process used in the project activity has a lower energy intensity and/or lower GHG emissions compared to other technologies and/or processes that produce a similar quality output.	The language in Applicability Condition 9 has been revised to refer to the "reduction in (macro)molecular mass", rather than "degree of depolymerization". Projects that provide evidence to meet condition (a) must include the production of recycled plastic granulate in order to compare the technology to the production of virgin plastic granulate. If this information is not available to the project, then they may be able to demonstrate compliance with this applicability condition through condition (b). Note that WWF's *Chemical Recycling Implementation Principles* (2022) recommend that "any chemical recycling technologies pursued should achieve at minimum a 20% reduction in GHG emissions at demonstration scale compared to the virgin production system".
111	DePoly SA	Industry	Applicability Conditions - Diverting Plastic Waste from Historically Existing Recycling Activities	Section 4, AC 10	N/A	"The project activity does not compete with other recycling activities or include plastic waste that has been diverted from a historically existing, legally recognized recycling activity. Evidence, such as proof of how the plastic waste was managed over the three-year period prior to implementation of the project activity, shallmust be provided to demonstrate that the project activity does not divert plastic waste from any historically existing, legally recognized recycling activity."	Remove - all new recycling technologies are competing with old methods. This would include "diverting from a historically exsiting legally reconized recycling acitivity"..	Applicability Condition 10 refers to scenarios in which Project A sources plastic from a waste stream (e.g., community) where there was already a historically existing, legally recognized recycling activity (e.g., facility) in place. Project A would not be additional or contribute to an increase in the total amount of plastic waste recycled (i.e., Project A would be recycling plastic that would have been recycled anyway). Therefore, Project A would not be eligible to issue Waste Recycling Credits (WRCs).
112	DePoly SA	Industry	Applicability Conditions - Transboundary Movement of Waste	Section 4, AC 12	N/A	Entire section This section, and the section above completely destroy the crediability of this document. You've effectively put contraints that the new technology cannot be competitive against old methods (giving loopholes to mechanical recyclers, waste to energy, and other burning methods) and that no plastic cant be imported unless its from countries that require you fly/ship it in over large distances (so in favour of increasing GHG emissions), or that there isnt enough waste for recycling intiatives to be developed. How do you classify poor countries with a lot of waste? With the size and interconnectedness of CH, FR. DE, IT, and other surrounding countries, why would you limit the import of plastic items? How can any new technology then work with global brands (and some of the main polluters) like Pepsi, Nestle, Decathlon, Nike Toyota, H&M, Ikea etc? You cannot solve a global problem by limiting new technologies in favour of old, and keeping them locked in their own countries.	Remove completely. Switzerland is a small country, and with how interconnected it is with the surrounding countries (e.g FR, DE, IT, etc) you are completely limiting companies and technologies to only develop locally. Also, importing plastic waste from LSC and SIDS is going to have a higher GHG emission than if you get it over the boarder. This contradicts the whole goal of the document.	Noted, thank you. One of the objectives of the Plastic Program is to drive investment to improving local and regional waste management infrastructure. At this point in time, it is very difficult to both objectively and equitably define regions where transboundary movement of waste should be allowed. Verra welcomes feedback on this element and will consider potential revisions in the next update to the methodology. Please note that projects that use waste-to-energy or "burning methods" to manage waste are not eligible to issue Waste Recycling Credits (WRCs) using this methodology.
113	DePoly SA	Industry	Project Boundary	Section 5	N/A	Sorting facility	Not all processes need a sorting facility	Please refer to the response to comment #45.

#	Organization	Organization Type	Topic	Section	Question	Comment	Proposal from Commenter	Response
114	DePoly SA	Industry	Additionality	Section 7, Step 2	N/A	recycling acitivies in low income, rural areas, SUZ	These clauses should be removed, or be made includive or all countries. Limiting to specific countries does not solve the problem of plastic pollution and usage.	Step 2 in Section 7 refers to the activities that are deemed automatically additional using the positive list criteria (i.e., the criteria listed in Step 2). Projects that do not meet one of these criterion may use the penetration rate (i.e., Step 3a) or the investment analysis (i.e., Step 3b) to demonstrate additionality.
115	DePoly SA	Industry	Additionality	Section 7, Step 3b	N/A	"The objective of the investment analysis is to demonstrate that the project activity is not economically or financially attractive." I do not understand why benchmarking a companies IRR, specially ones that are introducing new techonology to solve the plastic probem, is a concern or a limiting factor. How is this additional or not additional? Or how does this actually apply to the problem this document is apparently trying to fix.	Remove - otherwise new technologies would not be able to enter the market. E.g. SMEs. Profitability is typically shown to get investments for SME growth and expansion.	Projects must be able to demonstrate that their activity is additional (i.e., the recycling would most likely not have occurred in the absence of the project). The investment analysis in Step 3b of Section 7 of the methodology is applied to show that under standard market conditions, an investor would not invest in this activity and therefore, the project needs Plastic Credit finance. Following your example, a SME that is able to obtain financing for their activity through traditional investment may not be eligible to issue Plastic Credits if they can't demonstrate additionality using the positive list (i.e., Step 2) or penetration rate (i.e., Step 3a).
116	DePoly SA	Industry	Monitoring	Section 9	N/A		1. Sorting variables should be removed for companies who can demonstrate that sorting in their process is not required.	Please refer to the response to comment #45.
117	DePoly SA	Industry	Monitoring	Section 9	N/A		2. washing parameters should be removed for companies who do not need to wash their plastic waste before chemical recycling.	The methodology does not require projects to wash the plastic waste prior to it entering the recycling process. The reference made to washing is meant to emphasize that, if the recycling activity's process does include washing, they should weigh the recycled plastic waste after it has been dried. This ensures that only the recycled plastic waste (i.e., not moisture or water) is quantified and ultimately issued as Waste Recycling Credits (WRCs).
118	DePoly SA	Industry	Monitoring	Section 9	N/A		3. Batch parameters should be removed, or edit for processes that you a continous industrial depolymerization system	The monitoring parameter tables have been revised. Projects are required to measure recycled plastic waste before it is sent from the recycling facility to the next stage in the value chain (e.g., processing or manufacturing facility). CDM methodologies (e.g., AMS-III.AJ and AMS-III.BA) informed the revisions.
119	DePoly SA	Industry	General Comments	N/A	N/A	General comments on the document which seem to have been missed or maybe are not considered as heavily. Chemical recycling (e.g. depolymerization) is a superior method for plastic recycling when viewed on a continous system, and not a batch system which mechanical recycling typicaly argues for. The main issue not considered here, is that the lifetime of the rPET (for example) that is produced by mechanical recyclers is only 1-3 uses before that item has to be downgraded and eventually ends up in the landfill or in incinerated. This goes down to the fundamental flaw of mechanical recycling, which is that it just converts the polymer back into granules but does not deal with the structural issues of the new rPET polymer - that is, the polymer is not as crystalline as compared to virgin. Mechanical recycling also cannot deal with plastic collections that are dity, are mixed with other plastics, are heavily dyed or contaminated, etc. Their ideal material is clean, clear plastic, which in the the plastic industry is a fraction of what is actually produced and used. Chemical recycling, or depolymerization, offers a solution to these issues because most of the technologies do not require the feedstock to be pre-sorted, pre-separated, pre-washed, and can handle contaminents such as food, dyes, residues, other plastics, and compsite materials. The technologies being developed typically also demonstrate high conversion efficiency, virgin quality feedstock, and an unlimited amount of times that those recycled platsic items can be recycled and reused. This document needs to avoid an apples to orange comparison of mechanical and chemical recycling, because they are not the same process and they do not have the same product outputs.		In line with WWF's *Chemical Recycling Implementation Principles*, Verra believes chemical recycling should complement existing waste management systems, and not compete with mechanical recycling for feedstock. Applicability Condition 9 in Section 4 of the methodology acknowledges that chemical recycling, in many cases, is necessary and the best technology to recycle certain types of plastic waste. Chemical recycling enables the management of certain types of plastic waste that are not able to be recycled using current mechanical recycling technologies. In particular, chemical recycling technologies allow for the recycling and conversion of low-value and hard to recycle plastics into feedstocks that can be used to displace virgin plastic in, for example, food-grade packaging.

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120	Earthwake	Industry	Additionality	Section 7, Step 2	N/A	Our project meets the need of the positive additionality. We are a French start-up that has developed a machine capable of revalorizing plastic waste, which is difficult to recycle, into energy (65 diesel, 15% gasoline, 15% gaz and 5% of carbonaceous residues) using pyrolysis technology. It's a chemical recycling process that have very good positives externalities. For example fueling generators in villages without access to electricity and logistical vehicles that collect plastic waste. Especially since the fuel produced is 80% less greenhouse gas emitting than a conventional oil extraction, according to an analysis that we have conducted.	The idea is to allow projects that have very good positive externalities to receive plastic credits even if their outcome is gas and fuel	Please refer to the response in comment #5.
121	Enexor BioEnergy	Industry	Applicability Conditions - Sorting	Section 4, AC 4	1a	Yes.		Noted, thank you.
122	Enexor BioEnergy	Industry	Applicability Conditions - Sorting	Section 4, AC 4	1b	No, this requirement is not necessary. VVBs will assess this in validation and/or verification, but I don't believe that credible evidence should be a requirement. Any sorting process used to separate useable plastics for project activity should be assumed to be appropriate, as projects are using as much of the waste stream as possible to generate the most credits. The wording of "appropriate" is also vague and the criteria is unclear, so this requirement is unnecessary.		Thank you. The language in Applicability Condition 4 has been revised to improve clarity. Validation/verification bodies (VVBs) must inspect evidence in order to determine whether a project is in compliance with the requirements, and such evidence must be credible. The applicability condition provides examples of credible evidence, which serve as a helpful guide for both project proponents and VVBs. Please refer to the response in comment #45 for the rationale for the sorting requirement.
123	Enexor BioEnergy	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2a	Yes, this is a critical next step for the PWRS. Enexor aims to generate plastic credits through converting low-value plastics to energy through combustion with energy capture. The requirement to displace virgin plastics bars this kind of project, even though it would divert landfill-bound plastics from the landfill. Opening the methodology to include projects of this type is necessary to more wide-scale plastic recycling to projects that are reducing global plastic. Our projects would never use virgin plastics as a fuel source, but are effectively managing waste by diverting nonrecyclable plastics from the landfill by converting them to energy. An inclusion of this kind of project in the eligibility conditions would open the door for many more impactful plastics projects to use the standard.		Please refer to the response in comment #5.
124	Enexor BioEnergy	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2bi	Limiting recycling credits to the fraction of the output used to produce recycled plastics will limit the impacts of projects, as many plastics do not have high enough value to be recycled to produce new plastics. It is critical that the methodology be revised to include all plastics that are processed - or eliminated - to divert these kinds of plastics from the landfill. Recycling credits should not be limited to displacement of virgin feedstock, as this deters projects like Enexor's from making an impact. Instead, recycling credits should be calculated based on the amount of plastic that is diverted from the landfill, because it allows chemical recycling projects that create new non-plastic end uses, like energy generation, to get credits for their impact. The methodology could calculate credits based on the amount of plastic that is processed. In the case of Enexor, this could apply by calculating the amount of plastic used as feedstock for Bio-CHP units for energy generation.		Please refer to the response in comments #3 and #5.
125	Enexor BioEnergy	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2bii	No comment.		Noted. Thank you.
126	Enexor BioEnergy	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2c	Mechanical recycling projects should prove that their recycled product (e.g. flakes) are being used and are high enough quality to be used, so they are not just processing the plastic into an unusable product. This could be demonstrated through records of sale and production of recycled products with the entity they sell their flakes to.		Please refer to the response in comment #6.
127	Enexor BioEnergy	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2d	No comment.		Noted, thank you.
128	Enexor BioEnergy	Industry	Applicability Conditions - Exception for Composite Materials	Section 4, AC 7	3	Yes, since processing composites is much more difficult and should be incentivized.		Noted, thank you. Verra has maintained the exception to Applicability Condition 7 for projects that process composite materials that contain plastic and other non-plastic materials.
129	Enexor BioEnergy	Industry	Applicability Conditions - Technology Justification	Section 4, AC 9	4	No comment.		Noted, thank you.

#	Organization	Organization Type	Topic	Section	Question	Comment	Proposal from Commenter	Response
130	Enexor BioEnergy	Industry	Quantification - Material Type	Section 8	5	The methodology should be flexible to allow for projects to measure their output by material type as well as they can, but should not limit projects that cannot do this. In verification and validation, the VVB can assess whether the project is measuring the output of the material type as well as they can, but the methodology should leave room for projects with more mixed plastic material streams so they can manage these more complex streams.		Please refer to the response in comment #98. Since projects are required to sort the plastic waste used as an input to the recycling process, the information needed to quantify the plastic waste recycled by material type should be available to them.
131	Enexor BioEnergy	Industry	Quantification - Mass Fraction	Section 8	6	Yes, this approach is feasible.		Noted, thank you.
132	Enexor BioEnergy	Industry	Monitoring	Section 9	7	The monitoring should include parameters for projects like Enexor's that generate energy from non-recyclable plastics, which could include the dry weight of plastics used for feedstock. The monitoring frequency and QA/QC procedures are appropriate.		Please refer to the response in comment #5. Projects that generate energy from plastic waste are not eligible to apply this methodology and issue Waste Recycling Credits (WRCs). Therefore, the monitoring parameters have not been adjusted.
133	EY Cova	Service Provider	Applicability Conditions - Sorting	Section 4, AC 4	1	There are some industrial plastic waste stremas, that when produced, do not require sorting prior to going through to the recycling process. In the same light, it might be a good idea to include the washing of some waste streams to remove contaminants prior to the start of the recycling process. Propose the scope is expanded to include these.		Please refer to the response in comment #45 for the rationale behind the sorting requirement in Applicability Condition 4. Projects may choose to incorporate washing to support conformity with Applicability Condition 5. However, projects should also ensure that any waste from or byproduct of the recycling activity that contains hazardous substances is managed in alignment with Applicability Condition 11. Since washing is not necessary for all recycling technologies, it is not a requirement.
134	EY Cova	Service Provider	Applicability Conditions - Output Quality	Section 4, AC 7	2a	No, but it might be tricky to track that the recycled material is going to be used to 100% replace virgin plastic.		Please refer to the response in comment #6 for additional information.
135	EY Cova	Service Provider	Applicability Conditions - Output Quality	Section 4, AC 7	2b	Agreed that the scope should not include the displacement of non-plastic feedstock, as this method is specific to plastic waste. However, it would be good to consider developing other strandards, or and inclusve standard that encompases all other materials and their circular economy. eg, chemicals, textiles etc.		Noted, thank you. Verra may develop other standards or frameworks to address the recycling of non-plastic materials in the future.
136	EY Cova	Service Provider	Applicability Conditions - Output Quality	Section 4, AC 7	2c	It would be difficult to prove that exactly 100% of all flakes get used to off-set virgin plastic, especially dependng on who to, and where the flakes get sold.		Please refer to the response in comment #6.
137	EY Cova	Service Provider	Applicability Conditions - Exception for Composite Materials	Section 4, AC 7	3	Composite materials, such as multi-layered plastics, are a huge waste problem. They need to be included as part of this methadology. Mechnical or chemical recycling of composite materials should be allowed if it can be proven that the resultant recycled material or products replaces virgin plastic. Examples in South Africa do exisit.		The recycling of composite materials that contain plastic is within the scope of the Plastic Program, as set out in Section 2.1 of the *Plastic Standard, v1.0*. This question asked whether projects that manage composite materials should be granted an exception, under certain scenarios, to the requirement that recycled plastic waste must be of a quality that it can displace virgin plastic. Please refer to Applicability Condition 7 for the final revised language.
138	EY Cova	Service Provider	Quantification - Material Type	Section 8	5	Feasable and Apprpriate		Noted, thank you.
139	EY Cova	Service Provider	Quantification - Mass Fraction	Section 8	6	Method is clear		Noted, thank you.
140	EY Cova	Service Provider	Applicability Conditions - Hazardous Materials	Section 4, AC 5	N/A	It is not possible to make it compulsory that waste materials are not mixed witvh any other hazardous wastes, or are contaminated. The nature of waste, even after sorting is such that it cannot be garunteed that no contaminants remain.	It could however, rather be stated that measures should be put in place to ensure that sufficnet contmianation be removed, should it exist.	The language in Applicability Condition 5 has been revised to improve clarity. Plastic waste that contains hazardous substances must be treated following relevant regulations and/or industry best practices before entering the recycling process.
141	EY Cova	Service Provider	General Comments	N/A	N/A	As a general comment, at point can the WRC's be claimed during gthe recycling process. For example, there is a pharmaceutical company that generates a plastic tablet trays as a waste stream. These trays however also have a aluminium foil underside that has been laminted to the tray. A stage 1 recycling company sets up a process to remove the foil from the plastic tray, and sells the plastic trays to a stage 2 recycling company that turns them into washed and ground flakes. In this circumstance, who is able to claim for the credits, and how do you prevent both for claiming from the credits?		The stage 2 company is recycling the plastic trays and therefore would be eligible to claim Waste Recycling Credits (WRCs). However, we would encourage the stage 1 and stage 2 companies to work together and/or share revenues from the sale of WRCs. Stage 1 activities may be considered "collection/sorting" activities referenced in Applicability Condition 1(c), which are eligible to issue WRCs if they incentivize or enable recycling.

#	Organization	Organization Type	Topic	Section	Question	Comment	Proposal from Commenter	Response
142	EY Cova	Service Provider	General Comments	N/A	N/A	There should also be scope to include the re-use or re-purposing of plastic waste into products, that would have otherwise been made with virgin plastic.This wholeheartedly embraces a circular economy. There currently are a number of communities, businesses and companies that take plastic waste (sorted, contaminated and composite) and produce products through re-use and re-purposing, rather than recyling. There could perhaps be a way to expand this current methadology to include this.	Inclusion of Re-use and re-purposing	If the described activities collect the plastic waste that is then reused or repurposed, this activity may be eligible to issue Waste Collection Credits (WCCs) under the *Plastic Waste Collection Methodology, v1.1*. Furthermore, in the future, Verra will consider how the scope of the Plastic Program may be expanded to include activities that contribute to avoiding the use and production of virgin plastics.
143	GEM Advisory	Service Provider	Applicability Conditions - Output Quality	Section 4, AC 7	2	I would reccomended the output be expanded to include sustainable fuels. I am in early stages of projects using a modular technology with small output amounts from the pyrolysis process to produce sustainable fuels and be used locally as not economic to transport to large chemical complex. Although not truely circular also no guarantee plastic made form the displace virgin plastic will be recycled at teh end of use.		Please refer to the response in comment #5.
144	Loop Industries	Industry	Definitions - Solvolysis	Section 3	N/A	The use of "thermochemical process" may be limiting	Replace "thermochemical process" with "chemical process"	The term "chemical process" could imply that no heat is involved in the process. However, the term "thermochemical process" includes processes that leverage heat and/or chemicals, which is more inclusive and technology agnostic.
145	Loop Industries	Industry	Definitions - Solvolysis	Section 3	N/A	The solvents should not be limited to water or alcohol		In the definition of "solvolysis" in Section 3, water and alcohol are provided as examples of reactants that may be used in a solvolysis process. Projects are not limited to using water and/or alcohol as reactants. The language has been revised to improve clarity.
146	Loop Industries	Industry	Applicability Conditions - Hazardous Materials	Section 4, AC 5	N/A	This appears to be relevant to mechanical reclying and not nessesarily applicable to chemicla recycling. Chemical depolymerization process can purify and remove even toxic materials. This section should be adressed in a sense that the material recovered from the recycling can fulfill second life application. e.g Loop makes monomers with proper purity to make food grade PET that complies with food grade regulation. This is covered under point 7 (line 15 to 19)	Either make it specific to Mechanical reclycling or remove it.	The language in Applicability Condition 5 has been revised to improve clarity. If the chemical depolymerization process purifies or detoxifies plastic waste that contains hazardous materials or substances, then the project should show how the hazardous materials have been treated following relevant regulations and/or industry best practices in alignment with Applicability Condition 11.
147	Ocean Purpose Project	Industry	Applicability Conditions - Sorting	Section 4, AC 4	1a	The sorting needs more specification how the sorting is specific to the type of recycling, mechanical or chemical. Specifying the types of plastics to be sorted and whitelisted for the specific type of recycling is also important. For example, chemical recyling can recycle a far greater range of plastic types than mechanical recycling. This is important to be specified as it affects the development of plastic offsets prices.		In general, we intend to keep the methodology as technologically agnostic as possible. Therefore, we have refrained from prescribing what type of sorting process is required for different technologies. However, the language in Applicability Condition 4 has been revised to clarify that the sorting process must result in a plastic waste stream (homogeneous or heterogeneous) that is appropriate for the recycling technology used by the project.
148	Ocean Purpose Project	Industry	Applicability Conditions - Sorting	Section 4, AC 4	1b	With regards to credible evidence on the equipment, this is difficult especially when many chemical recyclers are having to create thier own machines. ISO standards for the operation of the machine, safety standards, handling and storage of plastic feedstock and recycled materials are ways to ensure credibility, especially when they follow existing petrochemical standards for fuel oil storage and treatments.		Presumably, an internally developed sorting machine or process would have been created in alignment with sorting requirements for the specific industry or technology. Therefore, a project may use good practice guidance (GPG) as evidence that the method is appropriate for the recycling technology used by the project.
149	Ocean Purpose Project	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2a	Yes this is important because they will be more inclusive to projects that are removing ocean plastic or plastics currently decomposing in landfills.		Please refer to the response in comment #3. Additionally, please consider how activities that remove waste from the environment or dumpsites may be eligible to issue Waste Collection Credits (WCCs) under the *Plastic Waste Collection Methodology, v1.1*.
150	Ocean Purpose Project	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2b	There needs to be a list of all the specific use cases currently recorded for products created from output of chemical recycling. In the instance of Ocean Purpose Project, our materials are carbon nanotubes, hydrogen, low sulphur fuel and carbon black. Promoting the use of these byproducts instead of virgin fuels to create them will be vital in implementation of our OPP PTF unit. The lack of documentation by certifying agencies causes VCs and investors to stop the flow of funds to such projects. The lack of representation of Plastic to Carbon Nanotubes solutions in for example in VCS causes regulatory environment to distrust plastic offset schemes and plastic recycling technologies and have a low level of compliance and belief in standards.		We have refrained from providing a list of specific use cases, because we intend for the methodology to remain technology agnostic. Please note that activities that generate a fuel from plastic waste are not eligible to issue Waste Recycling Credits (WRCs) using this methodology. However, these activities may be eligible to issue Waste Collection Credits (WCCs) using the *Plastic Waste Collection Methodology, v1.1*.

#	Organization	Organization Type	Topic	Section	Question	Comment	Proposal from Commenter	Response
151	Ocean Purpose Project	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2c and 2d	The aim of chemical recyling should not be SOLELY to replace virgin plastic, but to create a continous loop of petrochemical products that can be made from plastic waste. Example, the OPP PTF unit solution does not create products to replace ONLY virgin plastics, but instead alter the chemical molecular structure to create fuels, highly conductive materials such as CNTs and gasses such as blue hydrogen. Such a solution and many like this would be penalised for not complying with the existing VCS plastic offset methodology because they are not creating "like to like" materials.		Please refer to the response in comment #5. Also, please note the methodology under consultation, the *Plastic Waste Recycling Methodology, v1.1,* is not a VCS methodology. This is a methodology approved under Verra's Plastic Waste Reduction Program (Plastic Program).
152	Ocean Purpose Project	Industry	Applicability Conditions - Exception for Composite Materials	Section 4, AC 7	3	The exceptions should remain however there is an issue with the need for the recycled material to be durable (more than 10years). For example, the OPP PTF unit can create high durable and high quality Carbon Nanotubes which can last 20years but also produce VLSFO and Hydrogen which is meant for immediate use. The projects should not be penalised for not conforming to the standards because they are creating innovative products that don't fit the application of the recycled material outlined here.		Please note that the exception referenced in the consultation question is only relevant to those projects recycling composite materials that contain plastic and other non-plastic materials. Additionally, please refer to the response in comment #3.
153	Ocean Purpose Project	Industry	Applicability Conditions - Technology Justification	Section 4, AC 9	4	The core aim here seems to be focussed on replacing virgin plastic. This is very "mechanical recycling" centric and doesn't seem to pivot towards "chemical recycling" modes of thinking. Again, in chemical recycling, the aim is not to replace virgin plastics ONLY, they can be a component of the end product types.		Please refer to the response in comments #3 and #5.
154	Ocean Purpose Project	Industry	Quantification - Material Type	Section 8	5	Again, output from chemical recycling is more than just plastics. Its about capturing plastic waste to create feedstock for different industries from chemical, automotive, smartphone and energy sectors. There needs to be an exhaustive list of potential products and product categories listed to ensure that chemical recycling processes are being represented accurately and thier benefits.		Please refer to the response in comment #150.
155	Ocean Purpose Project	Industry	Quantification - Mass Fraction	Section 8	6	OPP PTF uses volume fraction (percentage by volume, vol%) as the way of expressing the composition. The issue with MF would be calculating gasses- mass fraction (percentage by weight, wt%). For example, our solution can turn ocean plastics into hydrogen. If our products are calculated by MF we have a lower value proposition than VF.		This scenario describes a plastic-to-fuel technology, which is not eligible for Waste Recycling Credits (WRCs). The measurement procedures are based on mass to ensure consistency across projects.
156	Ocean Purpose Project	Industry	Monitoring	Section 9	7	It should be suggested as the best practises and maybe a scoring system to meet 7/10 of the monitoring requirements.		Methodological monitoring requirements cannot be optional or flexible. They must be followed in entirety to support the credibility of the of the project activities verified under this methodology. If a project proponent can demonstrate that a proposed alternative method is equally accurate or more conservative, they may apply a methodology deviation as described in Section 3.15 of the *Plastic Standard, v1.0*.
157	Ocean Purpose Project	Industry	General Comments	N/A	N/A	It is vital that the gas released during these chemical recycling procedures are documented and accounted for. In our experience there are many chemical recycling plan ts claiming to do "pyrolysis" when in fact they are burning in a furnace and creating char to be turned into "fertilisers. They solving plastic pollution and creating air pollution instead.		The process described would likely not be eligible under this methodology if the process does not produce recycled plastic waste that is of a quality that can displace the use of virgin plastic feedstock. Please note that under the *Plastic Standard, v1.0,* projects must consider their impact on air quality and mitigate any (potential) negative impacts that result from their activities. Furthermore, projects must comply with any national, regional, or local regulatory requirements that relate to air pollution.
158	Ocean Purpose Project	Industry	General Comments	N/A	N/A	Thorough investigation into the current products made from checmical recycling is needed.		Noted, thank you. We acknowledge, in particular, that many chemical recycling technologies are still in the early stages of development. Verra will continue to track such developments and revisions will be made to the methodology over time, as needed.
159	Ocean Purpose Project	Industry	General Comments	N/A	N/A	Use Volume Fraction and not Mass Fraction.		Please refer to the response in comment #155.
160	Resynergi, Inc.	Industry	Applicability Conditions - Sorting	Section 4, AC 4	1a	The methodology makes no mention of plastic fillers, which will offset the mass balance between feedstock and products, especially in the case of advanced recycling/chemical recycling methods.		Table 8 in Section 9 has been revised to improve clarity. In general, if fillers and/or additivities are a part of the recycled material which itself can displace virgin plastic, they will be eligible for Plastic Credits. If they are used for other purposes, especially in the case of advanced/chemical recycling methods, those recycled material streams will not be eligible for WRCs.

#	Organization	Organization Type	Topic	Section	Question	Comment	Proposal from Commenter	Response
161	Resynergi, Inc.	Industry	Applicability Conditions - Sorting	Section 4, AC 4	1b	This seems unnecessary. If the feedstock is not suitable for the technology, the discrepancy will be apparent in the process mass balance/diversion metrics and be ineligible for WRCs or appear as inefficiencies. One would expect a project to avoid collecting feedstocks that does not suit its technologies for these reasons.		Applicability Condition 4 requires project proponents to demonstrate whether the sorting method is appropriate for the recycling technology, rather than the suitability of the feedstock.
162	Resynergi, Inc.	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2a	Yes. The goal of these projects isn't only the reduction of virgin plastic demand, but is to reduce the amount of plastics entering landfills and simultaneously reduce demand for any non-circular resource. Objectively, from a GHG standpoint and for getting a second use, it would be appropriate to apply to projects producing fuels and chemical feedstocks as well, which reduce crude oil demand and, in some cases, may be repolymerized to form virgin plastics.		Please refer to the response in comment #5.
163	Resynergi, Inc.	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2bi	This question is unclear. All projects producing useable chemical feedstocks, including those not serving tp produce virgin plastics, should be eligible for WRCs if they divert plastics from landfills and a LCA proves that the process is more energy/resource efficient than conventional production methods.		Please refer to the response in comment #3.
164	Resynergi, Inc.	Industry	Applicability Conditions - Exception for Composite Materials	Section 4, AC 7	3a	Yes, the exceptions should remain. Many composites are not suitable for standard mechanical recycling or some methods of chemical recycling. In these cases, the project may still be reducing the demand for virgin plastics and diverting the stream from a landfill.		Noted, thank you. Verra has maintained the exception to Applicability Condition 7 for projects that process composite materials that contain plastic and other non-plastic materials. The language has been revised to improve clarity.
165	Resynergi, Inc.	Industry	Quantification - Material Type	Section 8	5	Yes, this is appropriate.		Noted, thank you.
166	Resynergi, Inc.	Industry	Quantification - Mass Fraction	Section 8	6a	This seems largely appropriate, though not all products of depolymerization will will monomers/oligomers. Some percentage of product from pyrolysis will be in the form of inorganic plastic fillers and amorphous carbon separated from the hydrocarbon stream, which may be reused as plastic fillers. This fraction should be eligible for some credit/included in the fraction of product that displaces virgin plastic.		Please refer to the response in comment #160.
167	Resynergi, Inc.	Industry	Monitoring	Section 9	7a	The monitoring requirements are realistic.		Noted, thank you.
168	Resynergi, Inc.	Industry	Monitoring	Section 9	7b	Contaminants should be noted in mass balances and considered when calculating the efficiency of a process.		The Mass Fraction (MF) is only applicable in cases where projects produce plastic waste in the form of depolymerized plastics. The purpose of MF is to quantify the portion of recycled plastic waste that can be used for plastic production and, therefore, is eligible for crediting.
169	Resynergi, Inc.	Industry	General Comments	N/A	N/A	In the case where there are two processes in series, for example where we make a paraffinic naphtha liquid that will subsequently go into a plastic crackers that further process into virgin resin, will you clearly address who gets what fraction of plastic "processing" credit? Will the ratio depend on who is doing the 'hard part' (getting to a high quality naphtha that can simply go into existing crackers)? Perhaps it is already in the definition of "Additionality", but might need clarity going forward. We are happy to discuss on a call.		Thank you. The facility that processes the plastic waste into a recycled plastic waste output (e.g., paraffinic naphtha liquid) would be considered the recycler. The party that is converting the output from the recycling facility in a plastic cracker prior to its use as a substitute to virgin resin is the intermediary as defined in the project boundary flow chart in Section 5. However, please note that processors and intermediaries may choose to develop plastic projects together and share the Plastic Credit revenue.
170	RiverRecycle	Industry	Applicability Conditions - Sorting	Section 4, AC 4	1a	The information required is in line with our thinking. It is important to remove non-plastics and also certain plastic types such as PET for preferred mechanical recycling, prior to chemical recycling.		Noted, thank you.
171	RiverRecycle	Industry	Applicability Conditions - Sorting	Section 4, AC 4	1b	This evidence will also provide proof the process is appropriate and enables higher material and energy efficiency vs e.g. gasification of unsorted mixed municipal waste		Noted, thank you.
172	RiverRecycle	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2a	Recycling projects that replace or reduce the need for additional virgin plastic capacity should be eligible. Some products from chemical recycling may replace fossil products in the petrochemical industry or even fuels and these should be eligible for credits, but fuels only for an interim period, e.g. 10 years.		Please refer to the response in comment #3 and #5.
173	RiverRecycle	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2b	Plastics to plastics should be the target of all recycling processes. However, in order to enable the recycling industry to grow, it may require an interim period as proposed before. Replacement of fossil chemicals with recycled chemicals should also be eligible for credits		Please refer to the response in comment #3 and #5.
174	RiverRecycle	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2bi	The product of chemical recycling is effectively replacing fossil feedstock in virgin plastics production.		Noted, thank you.
175	RiverRecycle	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2bii	Credit revenue is a key enabler to chemical recycling as it is in very early stages and prior to scaling up and streamlining processes it is more expensive than virgin plastics production.		Noted, thank you.

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176	RiverRecycle	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2c	Indeed, it is important to demonstrate that recycled plastics displace virgin plastics and are not additional replacing e.g. wood in park benches.		Please refer to the response in comment #6.
177	RiverRecycle	Industry	Applicability Conditions - Output Quality	Section 4, AC 7	2d	In mechanical recycling, dirty and old, degraded polyethylenes will not be suitable to replace virgin plastics and should instead be directed to chemical recycling.		Projects that use chemical recycling technology to process dirty, old, degraded polyethylenes into a recycled plastic waste that meets the requirements of Applicability Condition 7 may be eligible to apply this methodology.
178	RiverRecycle	Industry	Applicability Conditions - Exception for Composite Materials	Section 4, AC 7	3a	Many composite materials are suitable for chemical recycling		Noted, thank you. Verra has decided to maintain this exception for projects managing composites containing plastics and non-plastics. However, projects must demonstrate that there is a lack of accessible technology (e.g., chemical recycling) available to separate the layers of the composite materials managed by the project activity.
179	RiverRecycle	Industry	Applicability Conditions - Exception for Composite Materials	Section 4, AC 7	3b	Composites made from recycled material replacing virgin composites are justified		Project activities that produce a recycled material the displaces composites would not meet the intent of Applicability Condition 7. However, Verra has maintained the exception for projects that manage and recycle composite materials made from plastic and non-plastic materials. The exception may allow projects to receive credits for processes that result in a durable good that substitute for virgin composites.
180	RiverRecycle	Industry	Applicability Conditions - Technology Justification	Section 4, AC 9	4	Large scale gasification of unsorted wet, organic waste containing, mixed municipal waste have a very low yield and are extremely energy intensive. It would instead make sense to sort out the plastics for recycling mech/chemically and use the organic waste for biogas production		Thank you for providing this example. The requirements of this methodology would likely incentivize this. That is, Applicability Condition 4 requires projects to sort their waste prior to recycling. Additionally, if depolymerization is utilized, Applicability Condition 9(b) requires projects to justify why the sorted plastic materials cannot be recycled using a less energy intensive technology.
181	RiverRecycle	Industry	Quantification - Material Type	Section 8	5	Looks good. Simplifying: Calculating the sum of mechanically recycled output + chemically recycled output, using mass balance approach		Noted, thank you.
182	RiverRecycle	Industry	Quantification - Mass Fraction	Section 8	6	It is important to define how MF is calculated. Without a clarification, there can be a wide variation due to interpretations. There may be a lighter fraction and heavier fraction, both sold to a plastics producer, but only lighter fraction is effectively used directly to replace virgin feedstock. The yield of the lighter fraction may vary from 10-90% depending on the feedstock and technology used. It would be easier to apply for first 10 years the credits to the entire oil fraction supplied to the petrochemical industry. Some plastics producers can use the entire range lighter+heavier until the available volumes grow beyond their threshold (may need dilution when feeding into a steam cracker)		Section 8 has been revised to improve clarity. MF is calculated based on the mass used for plastic production (i.e., that is used to displace virgin plastic feedstock). We appreciate your suggestion, but have decided that any output that is used for any purpose other than plastic production (e.g., fuel, energy recovery, chemical products) is not eligible for Waste Recycling Credits (WRCs).
183	RiverRecycle	Industry	Monitoring	Section 9	7	Daily recording is not feasible, suggest weekly instead.		Noted, thank you. The monitoring frequencies in Section 9 have been revised. Projects must record the relevant parameters at the time of sending each batch of recycled plastic waste from the recycling facility to the next stage.
184	Ruby Canyon Environmental	Service Provider	Applicability Conditions - Output Quality	Section 4, AC 7	2a	Yes. In what situation would recycling of plastic not displace virgin plastic material?		Processing waste plastic into fuel is one example, although this wouldn't necessarily be considered "recycling". Verra has decided that any output that is used for any purpose other than plastic production (e.g., fuel, energy recovery, chemical products) is not eligible for Waste Recycling Credits (WRCs).
185	Ruby Canyon Environmental	Service Provider	Scope of the Plastic Program	N/A	N/A	Carbon credits from offsetting emissions from virgin plastic production is not included in the Protocol.	We propose including carbon offsets from avoiding emission from virgin plastic production as an eligible activity.	This is a Plastic Program methodology, which enables the quantification and crediting of plastic waste recycling activities. The scope of the Plastic Program does not include GHG accounting. However, Verra supports the development of a VCS methodology for the quantification of emission reductions associated with recycling activities.
186	Ruby Canyon Environmental	Service Provider	Definitions - Collection Area	Section 3	N/A	Under the definition of 'collection area', the project boundary excludes imported plastic waste. 'Imported plastic waste' is not listed in the definition section. I assume this is waste imported from outside of a country into said country for recycling?	Define 'imported plastic waste' or point to page 12 line 14 where it is described in detail.	Applicability Condition 12 states that projects that import plastic waste from other countries are not eligible to apply this methodology.

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187	Ruby Canyon Environmental	Service Provider	Definitions - Region	Section 3	N/A	"The spatial extent that covers preferably the geographic area containing the source of the plastic waste, the project activity, and the end destination of the plastic waste collected and/or recycled by the project activity; and at most covers the host country or countries in which the project activity and end destination are located." Comment: is there a reason that recycled product cannot be exported to a different country? I understand the reasoning for defining the collection area regionally in order for the assessment of common practice. I don't understand why the end destination is of concern though.	The word 'preferably' could introduce ambiguity. Consider revising to either to "should" or "must". Maybe clarify that for purposes of applicability, the region where final products are delivered does not necessarily need to be the same region where plastic waste is collected? I'm confused as to why the final product has to end up in the same region as the recycling activity?	Noted, thank you. We have removed "preferably" from the definition. Verra is considering further revisions to the definition, including those that would better align it with the definition of "geographic area" in the *Plastic Standard, v1.0.* There is no requirement in this methodology that prohibits a recycled product from being exported to a different country. The project must recycle the plastic waste and generate the recycled plastic waste (i.e., output) in the same country that the plastic waste was collected. However, the project may sell this raw material outside of the country, assuming they can provide the evidence to support the relevant monitoring requirements.
188	Ruby Canyon Environmental	Service Provider	Applicability Conditions - Availability of Recyclable Plastic Waste	Section 4, AC 8	N/A	This applicability condition references 'plastic waste generation and recycling rates in the region'. However, the data for U.S. recycling rates from the EPA or other sources may include all plastic from the U.S. If the project's collection region is smaller (i.e. state or local municipality), can the project use recycling rate data that encompasses a greater area than the project's chosen region?	The project may only be collecting plastic waste from within 100 - 200 mile radius. However, it may not be feasible to find published studies on the recycling rate for such a small region. We propose that studies for a larger region can be used to demonstrate the low adoption rate of recycling plastic for smaller areas (as long as there is no legal requirement from a municipality to recycle minimum percentage of plastic waste).	Projects should always use the most specific and appropriate data available. The third-party auditors will assess whether the data provided is sufficient and appropriate to demonstrate compliance with the relevant requirement(s). If you have project-specific questions, please email PlasticStandard@verra.org.
189	Ruby Canyon Environmental	Service Provider	Applicability Conditions - Diverting Plastic Waste from Historically Existing Recycling Activities	Section 4, AC 10	N/A	When collecting plastic waste from multiple waste streams, it may not be feasible to demonstrate three-years of how the plastic waste was managed.	1. Consider adding a threshold for this requirement. I.e., if more than 10% of plastic waste comes from a single supplier, then the 3-year demonstration applies. 2. Consider adding examples of what type of evidence would be acceptable to demonstrate the three-year period prior to implementation of the project.	The intent of this requirement is to prevent the crediting of activities that include the management and recycling of plastic waste that would have been recycled in the absence of the project (i.e., prevent the crediting of activities that are not additional). Therefore, it is not appropriate to establish thresholds in this applicability condition. At this time, we have not provided examples. The validation/verification body (VVB) will assess whether the evidence provided by the project proponent is appropriate. Project proponents may contact PlasticStandard@verra.org with questions about project-specific scenarios.
190	Ruby Canyon Environmental	Service Provider	Additionality	Section 7, Step 3a	N/A	…must be no more than three years old at the time of validation	1. Is this calendar years prior to validation or 365 days x 3? 2. Is there a way to provide some flexibility with this requirement? It may be difficult to find this data for a specific plastic types included in the project activity.	Projects must provide data that was published within three years prior to validation. For example, if a project's validation date is 1 June 2022, the data or report used as evidence by the project must be no older than 1 June 2019. Ultimately, the validation/verification body (VVB) determines whether the data and evidence provided by a project proponent is appropriate and in line with the requirements. Please email any project-specific questions to PlasticStandard@verra.org.
191	Ruby Canyon Environmental	Service Provider	Language	N/A	N/A	I agree with changing the word "shall" to "must". We feel like this wording is more direct and forceful.		Noted, thank you.
192	Tearfund	NGO	General Comments	N/A	N/A	Please see Tearfund's new report, Safety First: safely recovering value from plastic waste in low and middle income countries. Tearfund commissioned Ed Cook from the University of Leeds to undertake an independent academic assessment of eight different approaches to recovering value from plastic waste – ranging from conventional recycling to incineration. They are assessed according to their impact on the environment; public and occupational health; and commercial prevalence and maturity. It also includes further assessment of the suitability of these approaches in low- and middle-income countries, including the risk that they may be operated below safety standards. The report was reviewed by Professors David Wilson and Linda Godfrey and Dr David Lerpiniere.		Thank you very much. Verra reviewed the report. We're pleased that the methodology requirements are in alignment with many of the conclusions of this report.

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193	TerraGenix, Inc.	Industry	General Comments			Recovered petroleum products (post-use plastics) converted to transportation fuel (ULSD; SAF; Gasoline) should part of the credit process in plastic recovery and recycling. All credits should be earned based on the energy efficiency of the process used to reduce emissions. Unless a process can recover more energy than is required to operate the system, full credit should not be allowed. See comments in this document, PRODUCING TRANSPORTATION FUELS FROM 100% POST-CONSUMER RESINS SHOULD EARN CREDITS IN THE PLASTIC STANDARD		Please refer to the response in comment #49.
194	Vireo Energy	Industry	Definitions - Pyrolysis	Section 3	N/A	Pyrolysis system we work with creates condensable gases that condense to recyclable pyro-oil.	Remove "non-condensable" from definition of pyrolysis.	Thank you. It is recognized that the output is the condensable product and, therefore, the example system meets the definition of pyrolysis. However, please note that Footnote 20 in Section 4 of the methodology clarifies that the methodology does not prescribe or limit the eligibility of chemical recycling activities based on the recycling technology. The recycling technology you implement is not necessarily ineligible if it does not meet the definition of pyrolysis.
195	Vireo Energy	Industry	Applicability	N/A	N/A	We are working to bring Biofabrik WASTX Plastic, distributed pyrolysis recycling systems to the U.S., as they have installations in other nations. Please be sure this Verra methodology matches with this system and the pyrolysis oil output. https://biofabrik.com/wastx-plastic/		If the pyrolysis oil is used to produce plastic products, then the activity may be eligible to issue Waste Recycling Credits (WRCs), assuming it meets all other requirements of the methodology.
196	WWF	NGO	General Comments	N/A	N/A	Shared WWF's recently published position paper on Chemical Recycling Implementation Principles for your consideration to share our current thinking on this issue		Thank you. Verra reviewed the report. We're pleased that the methodology requirements are in alignment with the principles in this report. Continuous improvement is a principle of the Plastic Program. Verra may revise and update this methodology if the requirements are determined to be unworkable, or not stringent enough, in practice. Input from stakeholders is critical, and Verra welcomes feedback about Plastic Program requirements both on an ongoing basis and during dedicated public consultation periods.