

CODEx ALIMENTARIUS COMMISSION



Food and Agriculture
Organization of the
United Nations



World Health
Organization

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Agenda Item 2.4

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CRITICAL REVIEW – PART IV

REQUEST FOR INFORMATION ON A PROPOSAL FOR THE INVESTIGATION AND DEVELOPMENT OF RECYCLING GUIDANCE IN THE CODEx ALIMENTARIUS

BACKGROUND

1. At the 85th session of the Executive Committee of the Codex Alimentarius Commission (CCEXEC85, 2023), the United States of America, the Advisor to the Member from North America, presented a proposal for the investigation and development of recycling guidance in the Codex Alimentarius, as detailed in EXEC/85 CRD01. The proposal aimed to consider how Codex might support global efforts in this area, noting the increase in the use of recycled material for food packaging purposes by Member countries and the private sector and that this could raise food safety concerns.
2. CCEXEC85 agreed to recommend the 46th session of the Codex Alimentarius Commission (CAC46 (2023) to request the Codex Secretariat to issue a Circular Letter (CL) to Codex Members and Observers to gauge whether there was interest, value, or need for new work on guidance from the Codex Alimentarius Commission on food safety considerations related to the use of recycled material in food packaging. Furthermore, CCEXEC85 agreed to consider next steps based on the responses of Members and Observers to the CL.²
3. CAC46 (2023) noted the recommendation of CCEXEC85, and the proposal as presented in CAC/46 CRD36 and requested the Codex Secretariat to issue a CL to gather information from Codex Members and Observers, noting that this would be a preliminary step.³
4. The CL requesting information on a proposal for the investigation and development of recycling guidance in the Codex Alimentarius was issued in March 2024 (CL 2024/20-CAC). The deadline for responding was extended from 1 May to 15 May 2024 to allow adequate time for Codex Members and Observers to provide their comments.

SUMMARY OF COMMENTS IN REPLY TO CL 2024/20-CAC

¹ Rev 1: Addition of comments from Republic of Korea to Appendix I; Rev 2: Addition of comments from EUMS to Appendix 1

² REP23/EXEC2, paragraph 101

³ REP23/CAC, paragraph 16 ii

5. The purpose of this document is to provide CCEXEC86 with a summary of the comments received in response to CL 2024/20-CAC in order to advise on the next steps.
6. A total of 26 Members, 1 Member Organization and 11 Observers replied to the CL and the comments are attached as Appendix I to this document.
7. The responding Members agree on the importance of developing guidance on food safety considerations related to the use of recycled materials in food packaging. Generally, Members were of the view that the focus of the work should be on recycled plastics rather than all recycled materials. Further, the responding Members indicated their support for Codex to develop this guidance, except one Member who suggested development of a full standard through the International Organization for Standardization (ISO). Member also highlighted the importance of having a globally harmonized approach to recycled materials in food packaging and that this effort was timely given other international work that may impact recycling (e.g., UN negotiations on a legally binding agreement on plastic pollution, circular economy efforts, etc). Several Members noted that the development of international guidelines by Codex would provide a reference point and promote greater consistency between national standards and strengthen consumer protection worldwide.
8. Regarding existing national programs that address the safety of recycled materials used in food packaging, many of the responding Members indicated that they do not have specific criteria for recycled materials and instead point to their general food packaging requirements. A few of the responding Members have regulations that specifically address the use of recycled plastic in food packaging, with most limited to the use of recycled polyethylene terephthalate (PET) into beverage bottles. A few of the responding Members have guidelines on the use of recycled plastic in food packaging or have voluntary review programs to assess the use of recycled plastic in food packaging. Those Members provided summaries of the types of information considered by their review programs in determining the safety of recycled material. There was also mention of development of private sector voluntary recycling programs.
9. Responding Observer organizations noted that development of recycling programs has been geared toward recycled PET for use in beverage bottles. However, they recognize the importance of other recycled materials such as paper, glass, metal, and other polymers. Observer organizations also noted challenges associated with ensuring an adequate supply of suitable recycled materials, obtaining regulatory approval, and advancing the development and deployment of suitable equipment and technological innovations to produce high-quality and substantial volumes of recycled material for future supply chains.
10. Within the scope of the safety of recycled materials in food packaging, many comments highlighted that traceability of the origin or source of the recycled material should be considered and that the work should be applicable not only for existing technologies but also to new recycling techniques under development, and should take into consideration the diversity of recycling systems around the world.
11. A few Members or Observer organizations also noted factors beyond the scope of the safety of recycled materials in food packaging. These proposed expansions included the safety of all food packaging regardless of source (virgin or recycled); the fair trade of recycled materials; the economic, environmental, and societal impacts of the use of recycled materials; and the presence of microplastics in food.

RECOMMENDATION

12. CCEXEC86 is invited to
- note the comments received and review the summary;
 - confirm the interest of Codex developing guidance on food safety considerations related to the use of recycled material in food packaging;
 - comment on the scope and focus of a possible new work in Codex on this topic; and
 - advise on the next steps such as encouraging submission to the Codex Secretariat of a project document for the proposed new work which should take into consideration the comments received and the discussions at CCEXE86 and preferably be submitted in time for further consideration by CCEXEC87 and CAC47.

Appendix I**Original Language Only****Comments in reply to CL 2024/20-CAC**

Comments by Australia, Brazil, Cameroon, Canada, Chile, China, Costa Rica, Cuba, Egypt, EU and its Member States (EUMS) Ghana, Guatemala, India, Indonesia, Iran, Japan, Malaysia, New Zealand, Paraguay, Peru, Republic of Korea, Saint Kitts and Nevis, Singapore, Thailand, United Kingdom, Uruguay, USA and Alianza Latinoamericana de Asociaciones de la Industria de Alimentos y Bebidas (ALAIAB), Consumer Goods Forum, FIVS, Food Industry Asia, FoodDrinkEurope, ICBA, IDF/FIL, IFU, International Special Dietary Food Industries, SSAFE, and World Food Programme

GENERAL COMMENTS

COMMENT	MEMBER / OBSERVER
CAMEROON welcomes and strongly supports this Codex initiative to gather information on this very important agenda. This agenda is in line with Goal 1 of Codex Strategic Plan 2020 – 2025, - “Address current, emerging and critical issues in a timely manner”.	Cameroon
Cuba agradece la posibilidad de responder la CL 2024/20-CAC y en principio considera que desde el punto de vista general, sería muy útil que el Codex elabora orientaciones sobre cuestiones relativas a la inocuidad alimentaria relacionadas con el uso de material reciclado en el envasado de los alimentos y además no tenemos aspectos adicionales a lo señalado en el documento CAC/46 CRD 36 y en el caso de lo señalado en la preguntas dirigidas a los miembros del Codex, en el caso de Cuba las autoridades sanitarias competentes dan seguimiento al material reciclado utilizado en los envases para alimentos , mediante el Registro sanitario a todos los alimentos de consumo humano . que se producen y comercializan en el país. En general Cuba apoya que se elaboren directrices sobre este tema.	Cuba
<p>The European Union and its Member States (EUMS) welcome the ongoing reflections on the opportunity to initiate Codex work on recycled material for food packaging.</p> <p>The EUMS support, in principle, Codex work on recycled plastics for food contact. We would be interested to participate in this work and share our experience in terms of legislative requirements.</p> <p>With respect to the recycling of metal and glass, the EUMS are of the view that the development of Codex standards or guidance concerning their recycling is not needed. Recycled metals and glass to be used as food contact materials have to comply with the same specific legislation as “virgin” metals and glass (specific migration limits for certain metals). Hence, the question is whether there is a need for Codex standards for metals and glass food contact materials, independent of the question whether the material is recycled or not.</p> <p>With respect to materials containing fibres from natural origins such as paper, board, wood and certain textiles, the EUMS note that the health risks related to possible contamination of these materials if recycled are serious. While the Technical guide on paper and board used in food contact materials and articles of the Council of Europe provides useful information, there is currently no authoritative international standard on this matter. Codex work could thus be considered for these materials.</p>	EUMS
Ghana welcomes and strongly supports this Codex initiative to gather information on this very important agenda. This agenda is in line with Goal 1 of Codex Strategic Plan 2020 – 2025, - “Address current, emerging and critical issues in a timely manner”.	Ghana

<p>Indonesia appreciates the efforts made by the Codex Secretariat in initiating discussions to gather information from members and observers regarding the use of recycled materials for food packaging in order to address emerging food safety issues.</p>	<p>Indonesia</p>
<p>St. Kitts & Nevis agree and support the need to develop guidance on food safety consideration related to food packaging material that was derived from recycled material. However, while CODEX mandate speak to food safety standards, I think instead of developing a guidance document, we should consider a full development of an international standard to support this. I think ISO would be more equipped to take on this role with member state input to support the CODEX objectives. St. Kitts and Nevis as a member of CODEX is also a full member (P) of ISO and can submit this development of a standard for recycled material used in food packaging as a new work item.</p>	<p>Saint Kitts and Nevis</p>
<p>By way of background, FIVS is a global trade federation for the alcohol beverage sector (since 1951). We are committed to bringing the sector together to develop positions and develop tools to encourage social, environmental, and economic sustainability among our members and the wider sector, in keeping with the United Nations Sustainable Development Goals. Our membership includes producers, importers, exporters, and trade associations (currently accounting for 75% of the wine traded globally). We also collaborate effectively with affiliates from allied sectors.</p>	<p>FIVS</p>
<p>FoodDrinkEurope Feedback on the Codex Alimentarius proposal for the investigation and development of recycling guidance</p> <p>FoodDrinkEurope[1], the organization of Europe’s food and drink industry, welcomes the new work started on a Guidance from Codex Alimentarius on food safety considerations related to the use of recycled material in food packaging. This initiative aligns well with the Codex food safety mandate and with Goal #1 of the Codex Strategic Plan 2020 – 2025: “Address current, emerging and critical issues in a timely manner”</p> <p>As stakeholders around the world strive to eliminate plastic pollution and increase circularity, there is a corresponding need to develop guidelines around the use of food-grade recycled packaging. Thus, this Codex work cannot be delayed further.</p> <p>We believe Codex is the appropriate body with the requisite scientific expertise to develop guidelines on the use of recycled content in food packaging. These guidelines will be timely and can inform related efforts on the global stage, such as the UN Plastics Pollution Treaty. The European food and drink industries recognise the global challenges posed by plastic waste, the need for sustainable practices, and are currently working to achieve more sustainable food systems and less plastic waste.</p> <p>Foremost, it is imperative to ensure that recycled materials in food application meet stringent safety standards to protect consumers from potential health risks and ensure fair practices in the food trade.</p> <p>We emphasise the importance of ensuring that any future Codex guidelines on the use of recycled material in food packaging remain focused within Codex mandates of (1) ensuring food safety and (2) facilitating fair trade practices. On the first, food safety is a foundational issue for food and drink industries. In whichever region of the world, we need regulators and consumers to have confidence in the safety of our product, and following Codex guidelines on this matter would help instil that confidence. Second, we are keen to ensure there is global harmonisation of food-grade rPET standards, which will allow food business operators regulatory certainty across borders.</p> <p>For the further development of this Guidance we highlight that true packaging circularity will mean ensuring packaging functionality and food safety, without trade-offs in food loss and waste prevention, all while maintaining food contact material safety.</p> <p>The European Food and Drink industries is on a firm path towards more sustainable food systems. FoodDrinkEurope members, in Europe and in their global operations, are continuously reducing packaging waste by investing in innovative solutions and new materials; improving packaging recyclability; and increasing the use of recycled materials [2]. We reiterate our commitment to increase the recycled material content in food packaging and can contribute with our expertise to the development of the guidance.</p> <p>Conclusions To gradually increase the sustainability and circularity of food packaging around the globe, the food and drink industries will need sufficient,</p>	<p>FoodDrinkEurope</p>

<p>reliable, and consistent supply of high-quality and safe recycled plastic materials for food contact applications. A Codex Alimentarius Guidance can be the harmonising instrument to head in that direction with all members and stakeholders of the international community. At the national level, it will enable competent authorities and food business operators to help drive the transition.</p> <p>A Codex Alimentarius lead guidance for recycled materials should prioritise packaging functionality and food safety, without trade-offs like food loss and waste.</p> <p>[1] FoodDrinkEurope is the organization of Europe's food and drink industry, the largest manufacturing sector and leading employer in the EU and a key contributor to its economy (289 000 companies, 99% SMEs, 4.2 million employees). Its membership comprises 25 National Food and Drink Federations, 27 European Sector Associations, and 27 large companies. FoodDrinkEurope aisbl - Avenue des Nerviens 9-31 - 1040 Brussels – BELGIUM - Tel. +32 2 514 11 11, info@fooddrinkeurope.eu - www.fooddrinkeurope.eu - ETI Register 75818824519-45</p> <p>[2] FoodDrinkEurope position on Food Contact Materials of 12 January 2023 https://www.fooddrinkeurope.eu/wp-content/uploads/2023/01/FoodDrinkEurope-position-paper-Food-Contact-Materials.pdf</p>	
<p>IDF welcomes and strongly supports this Codex initiative to gather information on this very important agenda. This agenda is in line with Goal 1 of Codex Strategic Plan 2020 – 2025, - "Address current, emerging and critical issues in a timely manner".</p>	IDF/FIL
<p>IFU would like to suggest including a specific question on how these SDG actions are going to be financed.</p>	IFU
<p>SSAFE welcomes the potential development of recycling guidance in Codex Alimentarius. This work item is extremely important as it supports several key global objectives: harmonization of standards and practices, international trade and food safety. SSAFE has polled all its members and strongly supports this work going ahead.</p>	SSAFE

SPECIFIC COMMENTS

Would it be useful for Codex to develop guidance on food safety considerations related to the use of recycled material in food packaging?	
<p>Yes. Developing guidance on food safety considerations related to the use of recycled material in food packaging would be highly beneficial.</p>	Australia
<p>Yes. Brazil recognizes that there is increasing use of recycling food packaging to address concerns related to the sustainability of the food chain. This scenario brings additional concerns regarding food safety aspects, as the use of new recycled material feedstock and recycling technologies may result in the migration of toxic substances into food.</p> <p>Therefore, Brazil understands that it would be useful to have Codex guidance on food safety considerations related to the use of recycled material in food packaging and that the development of such guidelines is aligned with the Codex's objectives to protect consumer health and promote fair practices in food trade by setting international science-based food safety and quality standards.</p> <p>These guidelines will be timely and can inform related efforts on the global stage, such as the UN Plastics Pollution Treaty.</p>	Brazil
<p>Recognizing the global challenges posed by plastic waste and the need for sustainable practices, we firmly believe that the use of recycled material in food packaging not only contributes to environmental goals but also prioritizes consumer safety. It is imperative to ensure that recycled</p>	Cameroon

<p>materials in food application meet stringent safety standards to protect consumers from potential health risks and ensure fair practices in the food trade.</p> <p>Therefore, CAMEROON welcomes and strongly support Codex to start new work item related to the Codex guidance on food safety considerations related to the use of recycled materials on food packaging. This will enable national competent authorities and food business operators and will also enable harmonization.</p>	
<p>Canada believes it would be useful for Codex to develop guidance on food safety consideration related to the use of recycled material in food packaging. Many stakeholders, including the food packaging industry, environmental NGO and the public in general, have indicated that they would support this initiative, which will help eliminate global plastic pollution and improve circularity while protecting human health. Moreover, the development of science-based guidance may minimize divergent regulatory approaches on national and regional sustainable initiatives.</p>	Canada
<p>Estamos a favor del desarrollo de directrices por parte del Codex, dado que están en consonancia con su misión de proteger la salud de los consumidores y fomentar prácticas comerciales equitativas. Con el objetivo global de reducir la contaminación y promover la economía circular, es esencial establecer directrices que aborden el uso de materiales reciclados en contacto directo con los alimentos. Chile considera que el Codex posee la experiencia científica necesaria y redes de consulta adecuadas para desarrollar estas directrices sobre el uso de contenido reciclado en envases alimentarios. Estas directrices serán de relevancia actual y respaldarán iniciativas globales relacionadas con este tema. La reutilización de envases y el reciclado de los envases y productos utilizados en los alimentos, sin duda es una contribución en cuanto a disminuir los residuos en especial los elaborados con materias primas, como plásticos, que muchas veces tienen un solo uso, y que pueden generar problemas medioambientales y un impacto negativo en la vida natural, como se ha podido observar en las últimas décadas en cuanto a los plásticos, microplásticos y nanoplasticos presentes en aguas marinas y superficiales, que han afectado a la vida acuática y el paisaje. Sin embargo, es importante considerar que el utilizar material reciclado para el envasado de alimentos, debe asegurar que este debe estar libre de contaminantes que pudieran afectar la salud del consumidor, por ejemplo, en el caso de los plásticos muchas veces para su fabricación se utilizan químicos, colorantes, adhesivos que pueden contener sustancias orgánicas y metales no deseados que pueden tener contacto con el alimento o migrar al alimento tras su contacto. Como también considerar la debida limpieza y desinfección de envases reutilizables (metálicos, vidrio y plásticos resistentes) que aseguren su integridad e higiene.</p>	Chile
<p>The significance of food contact materials in ensuring food safety is not negligible. However, whether recycling or not, the food contact materials have not posed any obstacle to international food trade. Without the overall guidance on the food contact materials, the basis of discussing the guidance on the recycled material in food packaging is unsolid.</p> <p>Therefore according to the necessity and urgency of this issue, as well as the limited Codex resources at hand, we would like to suggest Codex to consider the food contact materials as a whole before considering the specific issue of recycled food contact materials.</p>	China
<p>R/. Sí. Costa Rica considera fundamental la elaboración de estas orientaciones en el marco de los objetivos del Codex como ente de referencia en materia de inocuidad alimentaria, en concordancia con el Anexo A del Acuerdo MSF de la OMC, a fin de fomentar el comercio justo y la inocuidad alimentaria, especialmente para los países en vías de desarrollo.</p> <p>En un momento en el que los actores globales están diseñando estrategias para mitigar la contaminación y fomentar la economía circular, la propuesta de directrices elaboradas por el Codex, gracias a su respaldo científico, se presenta como la herramienta adecuada para sustentar regulaciones sobre el uso de materiales reciclados en los envases de alimentos. Estas directrices serán fundamentales para respaldar las iniciativas globales relacionadas con este asunto.</p>	Costa Rica
<p>Yes, it be useful for Codex to develop guidance on food safety considerations related to the use of recycled material in food packaging</p>	Egypt

<p>The EUMS support, in principle, Codex work on recycled plastics for food contact. We would be interested to participate in this work and share our experience in terms of legislative requirements.</p> <p>With respect to the recycling of metal and glass, the EUMS are of the view that the development of Codex standards or guidance concerning their recycling is not needed. Recycled metals and glass to be used as food contact materials have to comply with the same specific legislation as “virgin” metals and glass (specific migration limits for certain metals). Hence, the question is whether there is a need for Codex standards for metals and glass food contact materials, independent of the question whether the material is recycled or not.</p> <p>With respect to materials containing fibres from natural origins such as paper, board, wood and certain textiles, the EUMS note that the health risks related to possible contamination of these materials if recycled are serious. While the Technical guide on paper and board used in food contact materials and articles of the Council of Europe provides useful information, there is currently no authoritative international standard on this matter. Codex work could thus be considered for these materials.</p>	EUMS
<p>Recognizing the global challenges posed by plastic waste and the need for sustainable practices, we firmly believe that the use of recycled material in food packaging not only contributes to environmental goals but also prioritizes consumer safety. It is imperative to ensure that recycled materials in food applications meet stringent safety standards to protect consumers from potential health risks and ensure fair practices in the food trade.</p> <p>Therefore, Ghana welcomes and strongly supports Codex to start a new work item related to the Codex guidance on food safety considerations related to the use of recycled materials on food packaging. This will enable national competent authorities and food business operators and will also enable harmonization.</p>	Ghana
<p>Guatemala considera que es de suma importancia y apoya en que el Codex elabore orientaciones sobre el uso de material reciclado en el envasado de alimentos tomando en cuenta que hoy en día se busca cumplir las regulaciones, sin embargo, también se establece la necesidad de prácticas sostenibles, por lo que utilizar materia reciclado en la elaboración de envases de alimentos contribuye a los objetivos ambientales como lo manifiesta Estados Unidos en el CAC/46 CRD36. Sin embargo, reconocemos la importancia de garantizar que los materiales reciclados deben priorizar la seguridad de la salud del consumidor y garantizar prácticas justas en el comercio de los alimentos a nivel internacional.</p>	Guatemala
<p>Yes, India supports the development of Codex guidelines that align with its food safety mandate. Recycling is a well-known practice across globe specifically for paper, metals (such as aluminium), glass and over few decades in plastic materials. As stakeholders worldwide endeavor to combat plastic pollution and promote circularity to reduce the use of virgin material, there arises a corresponding need to establish guidelines for the use of food-grade recycled packaging. Acknowledging the global challenges posed by plastic waste and the imperative for sustainable practices, we firmly advocate for the utilization of recycled materials in food packaging. This not only advances environmental objectives but also prioritizes consumer safety.</p> <p>It is also crucial to ensure that recycled materials used in food applications adhere to rigorous safety standards, safeguarding consumers against potential health hazards and promoting fairness in the food trade. Therefore, India endorses and strongly encourages Codex Alimentarius to initiate new work items pertaining to guidance on food safety considerations related to the use of recycled materials in food packaging. Such initiative will empower national competent authorities and food business operators while fostering harmonization. Guidance from Codex will help to create a benchmark and facilitate harmonization among the countries.</p>	India
<p>Indonesia believes that it would be highly beneficial if Codex could develop guidance on food safety considerations related to the use of recycled materials in food packaging. However, it should be noted that currently Codex does not have a Committee with specific Terms of Reference (TOR) for food packaging. Therefore, the developing of guidelines would be more focused on the food safety aspect of food packaging in general.</p>	Indonesia
<p>Yes, It would be useful for Codex to develop guidance on food safety considerations related to the use of recycled material in food packaging. This could help address contamination risks, such as heavy metals, chemicals, or bacteria, and promote sustainability. Additionally, harmonized</p>	Iran

guidance from Codex could help facilitate the safe use of recycled materials and reduce confusion and trade barriers caused by different countries' regulations and standards and it could help provide clear guidelines and facilitate the trade in food products using recycled materials.	
It is useful to discuss recycled material in food packaging.	Japan
Yes, it would be useful for codex to develop guidance on food safety related to the use of recycled material in food packaging.	Malaysia
Yes. As a trading nation New Zealand supports the work of Codex in developing international food standards and guidelines for current and emerging food safety, health protection, nutrition, and trade issues. New Zealand recognises that recycled material in food packaging is an area of increasing international interest and activity and Codex guidance on food safety considerations would support harmonisation across members.	New Zealand
Paraguay considera útil trabajar en la elaboración de orientaciones sobre cuestiones relativas a la inocuidad de alimentos en envases en contacto con alimentos.	Paraguay
Consideramos que sí sería de utilidad que el Codex elaborara orientaciones sobre consideraciones relativas a la inocuidad de los alimentos relacionadas con el uso de material reciclado en el envasado de alimentos. Hay que considerar que algunos países estarían aplicando tecnologías para la reutilización de envases reciclados, como es el caso de la unión europea conforme al artículo 3 del Reglamento (CE) N° 1935/2004 Sobre los materiales y objetos destinados a entrar en contacto con alimentos, el cual señala “Los materiales y objetos, incluidos los materiales y objetos activos e inteligentes, habrán de estar fabricados de conformidad con las buenas prácticas de fabricación para que, en las condiciones normales o previsibles de empleo, no transfieran sus componentes a los alimentos (...)” . Asimismo, hay que reconocer los desafíos globales que plantean los desechos plásticos y la necesidad de prácticas sostenibles, creemos firmemente que el uso de material reciclado en los envases de alimentos no solo contribuye a los objetivos ambientales, sino que también prioriza la seguridad del consumidor. Es imperativo garantizar que los materiales reciclados utilizados en alimentos cumplan con estrictos estándares de seguridad para proteger a los consumidores de posibles riesgos para la salud y garantizar prácticas justas en el comercio de alimentos. Por lo tanto, apoyamos iniciar un nuevo trabajo relacionado con la orientación del Codex sobre consideraciones de seguridad alimentaria relacionadas con el uso de materiales reciclados en los envases de alimentos.	Peru
The guidance development on food safety management for the use of recycled food contact materials is expected to be very useful.	Republic of Korea
With the increased use of recycled materials in food packaging (e.g., recycled PET bottles, recycled PET film, recycled Nylon film), there are concerns on possible presence of legacy chemicals* in recycled resins. Moreover, the recycling process might introduce contaminants to the recycled material such as those arising from the feedstock or chemicals used in packaging production (e.g., lubricants, washing solvents, contact surfaces), which might not be suitable for food-grade applications. Therefore, Singapore views that the development of such a guidance on food safety considerations related to the use of recycled material in food packaging would be beneficial for use as a reference guide. *Legacy chemicals are chemicals that were used in the past during packaging manufacturing but have since been phased-out, banned, or restricted.	Singapore
Thailand is of the view that the development of guidance on food safety related to the use of recycled material in food packaging is useful. This initiative aligns with the Codex Strategic Plan (2020-2025). Furthermore, this work would contribute to the achievement of specific Sustainable Development Goals (SDGs), particularly SDG 12: Ensure sustainable consumption and production patterns, and SDG 3: Ensure healthy lives and promote well-being for all at all ages. Additionally, this initiative is consistent with the core objectives of the Codex, which are to protect consumer health and facilitate fair trade practices. In light of the current situation, with varying regulations and standards among countries, and a lack of standards in some regions, the development	Thailand

<p>of international guidelines by Codex would provide a reference point for countries to establish their own national standards. This would promote greater consistency and ensure a higher level of consumer protection worldwide.</p>	
<p>Si</p>	<p>Uruguay</p>
<p>Codex's mission is to "protect consumer health and promote fair practices in food trade by setting international science-based food safety and quality standards." The first goal in the Codex Strategic Plan 2020-2025 is to address current, emerging, and critical issues in a timely manner. It is within Codex's mandate pertaining to food safety not only to address production of food itself, but also other aspects of the production chain such as food packaging.</p> <p>There is increasing global interest in utilizing recycled material in food packaging as an approach to addressing sustainability. However, as recycled material represents a vector for the potential introduction of contaminants into food, these efforts may impact food safety. To address this potential food safety issue, countries/regions are developing requirements for the use of recycled material in food packaging. Inconsistent approaches to national/regional requirements may cause issues for international trade, indicating there is a need for consistency in the criteria used to determine appropriate recycled material for use in food packaging.</p> <p>Codex Alimentarius has been an integral part of the development of standards, guidance, and guidelines that have supported safe food and fair trade throughout the world. Developing a guideline for the use of recycled material in food packaging would align with Codex's mission and address an emerging issue with the potential to impact both food safety and food trade.</p>	<p>USA</p>
<p>Sí. Desde ALAIAB apoyamos el desarrollo de directrices del Codex, ya que están alineadas con su mandato de proteger la salud del consumidor y garantizar las prácticas equitativas en el comercio. El Codex es el organismo competente con la experiencia científica necesaria para desarrollar directrices sobre el uso de contenido reciclado que garantice la inocuidad en envases de alimentos y bebidas.</p> <p>Esto permitirá orientar a las autoridades nacionales competentes y a las empresas, así como la armonización a nivel global.</p>	<p>Alianza Latinoamericana de Asociaciones de la Industria de Alimentos y Bebidas (ALAIAB)</p>

<p>GFSI is in favor of Codex to develop guidance on food safety considerations related to the use of recycled material in food packaging and think it will be useful for the entire food chain and SDGs.</p> <p>The rate of collection and recycling of certain materials (especially plastic) remains insufficient to significantly reduce the environmental impact and pollution.</p> <p>International guidance from Codex Alimentarius Commission on the principles for safe and suitable recycling of food packaging could significantly support global harmonization, secure trade and ensure the development of sustainable solutions and ensure a science-based framework for the safety and compliance.</p> <p>GFSI believes that developing guidance on food safety considerations related to the use of recycled materials in food packaging would be highly useful for Codex. As the global standard-setting body for food safety, Codex plays a crucial role in ensuring the safety and quality of food products traded internationally. With the increasing focus on sustainability and the use of recycled materials in packaging, providing clear guidance on how to safely incorporate these materials into food packaging would help address concerns about potential contamination. The guidance would also help to reduce potential trade barriers with a harmonized standard approach in the use and acceptance of recycled packaging materials in food contact applications.</p>	<p>Consumer Goods Forum</p>
<p>FIVS believes there may be some use for Codex to develop guidance on food safety considerations related to the use of recycled material in food packaging. As countries start imposing more stringent targets for the reuse of recycled materials in food packaging, in line with their sustainability targets, some Codex guidance might prove useful to avoid creating unintentional trade barriers.</p>	<p>FIVS</p>
<p>FIA is fully supportive for CODEX to develop such a guidance for the use of recycled material in food packaging. Such a guidance will establish a robust framework that countries can rely on for recycled food contact materials. Considering the recent uptake of approvals for various recycling technologies and incorporation of recycled packaging materials, having a consistent approach in evaluating the safety of recycled food packaging will be important. Moreover, the guidance can also seek to harmonise global practices as the food industry supports the need for suitable packaging materials while ensuring the protection of consumer health. Additionally, the guidance should provide clear guidelines and definitions pertaining to the sources for post industrial and post consumer recyclates as well as necessary safety and toxicological assessment.</p>	<p>Food Industry Asia</p>
<p>Yes. ICBA supports the development of Codex guidelines, which are aligned with its food safety mandate.</p> <p>As stakeholders around the world strive to eliminate plastic pollution and increase circularity, there is a corresponding need to develop guidelines around the use of food-grade recycled packaging. ICBA believes Codex is the appropriate body with the requisite scientific expertise to develop guidelines on the use of recycled content in food packaging. These guidelines will be timely and can inform related efforts on the global stage, such as the UN Plastics Pollution Treaty.</p>	<p>ICBA</p>

<p>IDF welcomes and strongly supports Codex starting a new work item related to the development of Codex guidance on food safety considerations related to the use of recycled materials used in food packaging. This new work item will enable national competent authorities and food business operators in ensuring the safety of recycled food packaging and will also enable harmonization of emerging regulations.</p> <p>Recognizing the global interest in reducing plastic waste and the need for sustainable practices that enable recycling of plastics used in the food system, we firmly believe that Codex development of food safety guidelines for recycled material in food packaging not only contributes to environmental sustainability goals but also prioritizes consumer safety. It is imperative to ensure that recycled materials used in food packaging application meet stringent safety standards to protect consumers from potential health risks, facilitate food business operators accessing sufficient, safe recycled packaging options, and ensure fair practices in the food trade. Such guidance can establish a robust framework and a common set of food safety standards that countries can rely on to assure the safety of recycled food contact materials. Considering the global trend towards circularity and regulators encouraging the inclusion of recycled food contact materials, a harmonised approach to evaluating the safe use of recycled material in food packaging is important to protect public health and also mitigate any disruptions of global food trade. It is essential that, the guidance includes the complete supply chain from infeed sources of post-industrial and post-consumer recyclates as well as chemical and microbiological decontamination steps using a risk assessment approach.</p>	IDF/FIL
<p>ISDI believes that the Codex initiative to develop a guidance on food safety considerations related to the use of recycled material in food packaging would be principally beneficial. Given the global challenges posed by waste and the need for sustainable practices, harmonization and guidance steered by Codex would help in inclusion of recycled material for food packaging. Whilst Food Contact Materials, in general, are not extensively covered within the Codex framework, Codex Alimentarius includes provisions in respect of food hygiene, contaminants and other aspects of food safety, therefore ISDI welcomes and supports the Codex initiative which fully respects Codex' mandate.</p>	International Special Dietary Food Industries
<p>Yes, absolutely. SSAFE unanimously supports the development of guidance on food safety for recycled food contact materials. This work would help ensure consumer safety from recycled packaging materials while also supporting international by harmonizing core principles and requirements of recycled materials in food packaging.</p>	SSAFE
<p>Yes, it would be useful to have an harmonized international guideline for food grade material that can guide clearly the humanitarian agencies to ensure food safety for the people that we serve.</p>	World Food Programme
Are there any aspects in addition to those outlined in CAC/46 CRD36 that should be considered for future work?	
<p>Australia is supportive in principle of this work. CAC/46 CRD36 provides a good basis for starting this work and identifying future work.</p>	Australia
<p>Brazil understands that it would be appropriate to expand the scope of the work to encompass other recycled materials that come into contact with food, including utensils, containers, and equipment used in food preparation and serving</p> <p>We would like to emphasize that safety concerns related to the use of recycled materials vary depending on the type of material in contact with the food, with some materials posing lower concerns (e.g., glass and metal) than others (e.g., plastic and paper). Therefore, such aspects need to be considered as part of the proposed work. Additionally, we recommend that any work on recycled plastic take into account the efforts coordinated by the WHO on the plastic treaty (Intergovernmental Negotiating Committee on Plastic Pollution). Ensuring safety standards for recycled food packaging are globally harmonized, it would facilitate free trade of food and food packaging materials across borders.</p>	Brazil

<p>Safety and fair-trade aspects of recycled materials in food application are of utmost importance and hence need to be given a priority. This potential new work item should also have the ambition to provide guidance on restricting use of harmful substances or limiting the exposure to them (e.g via conditions of challenge tests). In addition, the guidance should provide criteria for an efficient system of traceability that enables the tracking and monitoring of collected and sorted post-consumer packaging materials, by types of materials/ polymers and by function. While we acknowledge the importance of other recycled materials, such as paper, glass, and metal, we believe that recycled plastic should be given a priority. It will allow Codex to make significant progress in guiding national authorities on best practices to achieve the global Plastic waste management goals as well as national objectives in this regard ensuring safety of recycled materials in direct contacts with food and beverages. To be noted, that the guidance should not solely focus on currently scaled-up recycling technologies but should also foster the development of emerging recycling techniques that hold promise for a sustainable future.</p>	<p>Cameroon</p>
<p>It is considered that packaging design will be an important factor to facilitate re-use or recycling. Globally harmonized safety standards around recycled food packaging will also facilitate free trade across borders.</p>	<p>Canada</p>
<p>Chile hace hincapié en la importancia de asegurar que cualquier futura directriz del Codex sobre el uso de materiales reciclados en envases de alimentos esté respaldada por la evidencia científica pertinente. La inocuidad alimentaria es una prioridad para la industria de Alimentos y Bebidas, por lo que es crucial contar con orientación sobre límites de uso, origen de materiales por tipo y función, entre otros aspectos. Es fundamental generar confianza entre reguladores y consumidores respecto a la inocuidad de nuestros alimentos, y seguir las directrices del Codex al respecto contribuiría a consolidar esa confianza armonizando las normativas y procurando la coherencia regulatoria a nivel nacional. En ese marco resulta entonces fundamental asegurar que las normas de inocuidad para los envases reciclados de alimentos estén armonizadas a nivel internacional, lo que a su vez facilitaría el comercio internacional de estos materiales. Por último, es importante enfatizar que este trabajo no se centre solamente en tecnologías y materiales existentes, sino que promueva el desarrollo de nuevas tecnologías para garantizar una real circularidad de materiales en los sistemas velando siempre por un lado por la inocuidad y por el otro para evitar la pérdida y desperdicio de alimentos.:</p> <p>Así mismo es crucial considerar las legislaciones nacionales vigentes que obligan y/o incentivan la inclusión de material reciclado en envases como referencia (e.i. PUSU / REP (AGREGAR LEY) o la RESOLUCIÓN GMC N° 30/07 Reglamento Técnico MERCOSUR sobre envases de polietilentereftalato (PET) postconsumo reciclado grado alimentario (PET-PCR grado alimentario) destinados a estar en contacto con alimentos la cual establece requisitos generales y los criterios de evaluación, aprobación/autorización y registro de envases de PET elaborados con proporciones variables de PET virgen y de PET post-consumo reciclado descontaminado, destinados a estar en contacto con alimentos.</p> <p>En el CAC/46 CRD 36 que se presenta en el Apéndice I, plantea correctamente la preocupación de que los envases reciclados puede ser una nueva fuente de incorporación de contaminantes en los alimentos. En relación a aspectos adicionales, creemos que sí bien, a nivel internacional se están realizando el levantamiento de información sobre la toxicología o efectos negativos para la salud humana debido al consumo de microplásticos, y aun no se tienen resultados del todo concluyentes debido a la diversidad de su composición, sin duda a futuro se debería considerar en el Codex Alimentarius, levantar la discusión sobre la presencia de microplásticos en alimentos de origen marino y en agua embotellada, y probablemente establecer recomendaciones o directrices en esta línea, ya que la preocupación en los consumidores está presente.</p> <p>En el CAC/46 CRD 36 que se presenta en el Apéndice I, plantea correctamente la preocupación de que los envases reciclados puede ser una nueva fuente de incorporación de contaminantes en los alimentos. En relación a aspectos adicionales, creemos que sí bien, a nivel internacional se están realizando el levantamiento de información sobre la toxicología o efectos negativos para la salud humana debido al consumo de microplásticos, y aun no se tienen resultados del todo concluyentes debido a la diversidad de su composición, sin duda debería a futuro se debería considerar en el Codex Alimentarius, levantar la discusión sobre la presencia de microplásticos en alimentos de origen marino y en agua</p>	<p>Chile</p>

<p>embotellada, y probablemente establecer recomendaciones o directrices en esta línea, ya que la preocupación en los consumidores está presente.</p>	
<p>As mentioned in the replies to the previous question, pertaining to food contact materials, safety is of utmost importance, and should be attached to higher priority. And clear definitions and terms of the food contact materials will be the prerequisites for discussing the related issue. In addition, the impact on fair practices in international trade should be considered.</p>	China
<p>R/. Para futuros trabajos, se sugiere abordar aspectos adicionales a los mencionados en el documento CAC/46 CRD36. Es crucial establecer un marco claro que especifique qué tipos de alimentos son adecuados para la aplicación de estas directrices sobre el reciclado en envases. Esto implica evaluar el riesgo alimentario no solo en términos de la posible contaminación con materiales tóxicos reciclados, sino también identificar qué alimentos pueden beneficiarse de esta tecnología de reciclaje, considerando su naturaleza y riesgo inherente.</p> <p>Costa Rica reitera su respaldo a esta propuesta de trabajo, en línea con el mandato del Codex de proteger la salud y promover prácticas comerciales justas.</p> <p>La inocuidad alimentaria es esencial en toda la cadena de producción, por lo que es crucial contar con pautas claras sobre los límites de uso, el origen de los materiales reciclados según su tipo y función, entre otros aspectos. Esto no solo generaría confianza entre los reguladores y los consumidores, sino que también aseguraría el cumplimiento de las directrices del Codex, fortaleciendo así la confianza en la inocuidad de los alimentos.</p> <p>Es vital armonizar las normativas de seguridad para los envases reciclados de alimentos a nivel mundial, lo que facilitaría el comercio internacional de estos materiales. Además, es importante destacar que estos esfuerzos deben enfocarse en fomentar el desarrollo de nuevas tecnologías de reciclaje para garantizar un futuro sostenible, en lugar de centrarse exclusivamente en las tecnologías y materiales existentes.</p>	Costa Rica
<p>There are no aspects in addition to those outlined in CAC/46 CRD36 that should be considered for future work.</p>	Egypt
<p>Safety requirements related to the collection of high quality materials used as inputs in the recycling of plastics is an important aspect that was not identified in CAC/46 CRD36 and should be considered for work on recycling plastics.</p>	EUMS
<p>Safety and fair-trade aspects of recycled materials in food application are of utmost importance and hence need to be given priority. This potential new work item should also have the ambition to provide guidance on restricting the use of harmful substances or limiting exposure to them (e.g. via conditions of challenge tests). In addition, the guidance should provide criteria for an efficient system of traceability that enables the tracking and monitoring of collected and sorted post-consumer packaging materials, by types of materials/ polymers and by function. While we acknowledge the importance of other recycled materials, such as paper, glass, and metal, we believe that recycled plastic should be given priority. It will allow Codex to make significant progress in guiding national authorities on best practices to achieve the global Plastic waste management goals as well as national objectives in this regard ensuring the safety of recycled materials in direct contact with food and beverages. To be noted, that the guidance should not solely focus on currently scaled-up recycling technologies but should also foster the development of emerging recycling techniques that hold promise for a sustainable future.</p>	Ghana
<p>Guatemala indica que es importante incluir el análisis sobre cuántas veces se puede utilizar el material reciclado, proporciona orientación sobre la restricción de uso de sustancias nocivas o la limitación de la exposición de ellas, analizar un proceso de trazabilidad de materiales recogidos y clasificados, por tipos de materiales /polímeros y por función. Se puede considerar muchos materiales reciclados, como por ejemplo el papel, el</p>	Guatemala

<p>vidrio y el metal, sin embargo, se considera que debemos priorizar el plástico reciclado.</p> <p>Cabe señalar que las orientaciones no deben centrarse únicamente en las tecnologías de reciclado actualmente ampliadas, sino que también deben fomentar el desarrollo de técnicas de reciclado emergentes que prometan un futuro sostenible.</p> <p>Guatemala reitera su apoyo a esta labor y hace hincapié en la importancia de garantizar que las futuras directrices del Codex sobre el uso de material reciclado en los envases de alimentos se centren en los mandatos del Codex:</p> <ol style="list-style-type: none"> 1) garantizar la inocuidad de los alimentos y 2) facilitar las prácticas de comercio leal. <p>En primer lugar, la seguridad alimentaria es un tema fundamental para nuestra industria. Necesitamos que los reguladores y los consumidores confíen en la seguridad de nuestros productos, y seguir las directrices del Codex sobre este asunto ayudaría a infundir esa confianza. En segundo lugar, estamos interesados en garantizar que las normas de seguridad para los envases de alimentos reciclados se armonicen a nivel mundial, lo que facilitaría el libre comercio de este material a través de las fronteras.</p>	
<p>Ensuring the safety and fair-trade compliance of recycled materials used in food applications is paramount and warrants top priority. To establish safety of recycled packaging, it is pertinent to establish minimum food safety acceptance criteria specification tailored to specific material type. This will help establish baseline of acceptance criteria when processed recycled materials are proposed in food contact.</p> <p>Furthermore, while recognizing the significance of other recycled materials like paper, glass, and metal, India advocates for prioritizing recycled plastics within the Codex framework. Doing so would enable significant strides toward guiding national authorities in implementing best practices to fulfill global plastic waste management objectives and national sustainability targets, particularly regarding the safety of recycled materials in food and beverage applications. It is crucial to emphasize that the guidance should not exclusively focus on current recycling technologies but also foster the advancement of emerging recycling methodologies promising a sustainable future.</p>	India
<p>No</p>	Indonesia
<p>Yes, there are several additional aspects that should be considered for future work. Future work should consider the environmental, social, economic, and technological aspects of using recycled materials in food packaging. These include the impact on jobs and livelihoods, the economic feasibility of using recycled materials, and the need for research and development of new technologies for recycling and using recycled materials in food packaging.</p>	Iran
<p>No</p>	Malaysia
<p>New Zealand supports the considerations outlined in CAC/46 CRD36 for guidance to address, namely the appropriate recycled material feedstocks for food packaging, and the technologies to produce the materials, and criteria to determine the materials appropriateness. New Zealand would also like considered toxicity testing approaches to help inform risk assessments for these materials, due to the complex mixtures of additives and contaminants that could in theory be introduced from non-food contact polymers.</p> <p>New Zealand food manufacturers are concerned about the increasing divergence in international requirements for the manufacture and use of recycled food packaging, along with potential limitations in meeting these requirements (lack of local infrastructure, lack of source material).</p>	New Zealand

Paraguay cree conveniente que el documento debe abarcar la trazabilidad del producto a fin de conocer el origen de la fuente de las materias primas a reciclar con el objetivo de evitar que el uso de materiales reciclados provenientes de la recolección indiscriminada de residuos, que puedan comprometer la inocuidad o afectar las características organolépticas de los alimentos.	Paraguay
Los aspectos de seguridad y comercio justo de los materiales reciclados en la aplicación alimentaria son de suma importancia y, por lo tanto, se les debe dar prioridad. Este posible nuevo elemento de trabajo también debería tener la ambición de proporcionar orientación sobre cómo restringir el uso de sustancias nocivas o limitar la exposición a ellas (por ejemplo, mediante condiciones de pruebas de exposición). Además, se sugiere que el documento proporcionar criterios para un sistema eficiente de trazabilidad que permita el seguimiento y monitoreo de los materiales de embalaje posconsumo recolectados y clasificados, por tipos de materiales/polímeros y por función. Si bien reconocemos la importancia de otros materiales reciclados, como el papel, el vidrio y el metal, creemos que se debe dar prioridad al plástico reciclado, esto permitirá al Codex hacer avances significativos en la orientación a las autoridades nacionales sobre las mejores prácticas para lograr los objetivos globales de gestión de residuos plásticos, así como los objetivos nacionales en materia de sostenibilidad, garantizando la seguridad de los materiales reciclados en contacto directo con alimentos y bebidas. Cabe señalar que la orientación no debe centrarse únicamente en las tecnologías de reciclaje actualmente ampliadas, sino que se sugiere fomentar el desarrollo de técnicas de reciclaje emergentes que sean prometedoras para un futuro sostenible.	Peru
It is necessary not only to establish a general standard for recycled food contact materials, but also to review a mutual recognition system between countries.	Republic of Korea
Singapore would like to suggest other components of packaging apart from recycled materials, such as inks and adhesives that are marketed as recyclable, to be considered for future work.	Singapore
Codex should consider establishing comprehensive safety requirements for all food packaging materials. These requirements should encompass all materials used in food contact applications, regardless of their source (virgin or recycled). The overarching goal of these standards should be to protect consumer health and promote fair trade practices.	Thailand
The United States has not identified any additional aspects that should be considered for future work.	USA
El Codex hasta el momento no tiene normativas sobre materiales en contacto con alimentos. Hay criterios de evaluación de material en contacto con los alimentos que son similares.	Uruguay
<p>ALAIAB reitera su apoyo a este trabajo y enfatiza la importancia de garantizar que cualquier directriz futura del Codex sobre el uso de material reciclado en envases de alimentos y bebidas con la evidencia científica pertinente, permanezca enfocada dentro de los mandatos del Codex. En primer lugar, la inocuidad de los alimentos es una cuestión fundamental para nuestra industria, por lo que necesitamos garantizar que exista unas directrices sobre el uso, el origen por tipo de materiales y su función, entre otros aspectos. En segundo lugar, se requiere que las normas que garanticen la inocuidad para los envases reciclados de alimentos y bebidas estén armonizadas a nivel mundial.</p> <p>Cabe recalcar que este trabajo no debería de centrarse en tecnologías y materiales de reciclado existentes, sino fomentar el desarrollo de nuevas tecnologías para asegurar un futuro sostenible.</p> <ul style="list-style-type: none"> - Adicionalmente se deberían tener en cuenta las normas ya existentes, por ejemplo, MERCOSUR cuenta con las siguientes normativas: - RESOLUCIÓN GMC Nº 30/07 REGLAMENTO TÉCNICO MERCOSUR SOBRE - ENVASES DE POLIETILENTEREFALATO (PET) POSTCONSUMO REICLADO - GRADO ALIMENTARIO (PET-PCR GRADO ALIMENTARIO) DESTINADOS A ESTAR EN CONTACTO CON ALIMENTOS la cual 	Alianza Latinoamericana de Asociaciones de la Industria de Alimentos y Bebidas (ALAIAB)

<p>establece requisitos generales y los criterios de evaluación, aprobación/autorización y registro de envases de PET elaborados con proporciones variables de PET virgen y de PET post-consumo reciclado descontaminado, destinados a estar en contacto con alimentos.</p>	
<p>Based CAC/46 CRD36, GFSI believes that defining what is critical on food safety from a recycling material perspective is fundamental, typical definition elements in this work encompasses;</p> <p>Contaminant threshold limits for food safety; these limits are predicated on harmonizing the methods of analysis for the identified contaminants. Minimum standards on GMP: Proper sanitation and hygiene practices during the recycling process are necessary to minimize risks. Packaging made from recycled materials must have structural integrity and protect food from external factors such as moisture, oxygen and light.</p> <p>As a starting point, CODEX could provide a mapping of the current national legislation in the world. Identifying the current status quo to define where there are opportunities to harmonize and where there are challenges that need to be addressed could be a relevant starting point. A survey that could be referenced in harmonized standards in CODEX for recycled materials worldwide would also bring clarity and relevant information.</p>	<p>Consumer Goods Forum</p>
<p>Safety and fair-trade aspects of recycled materials in food application alongside safety are of utmost importance and hence should be given the priority. This potential new work item should also have the ambition to provide guidance on restricting use of harmful substances or limiting the exposure to them (e.g via conditions of challenge tests). In addition, the guidance should provide criteria for an efficient system of traceability that enables the tracking and monitoring of collected and sorted post-consumer packaging materials, by types of materials/ polymers and by function. It will allow Codex to make significant progress in guiding national authorities on best practices to achieve the global plastic waste management goals as well as national objectives in this regard, ensuring safety of recycled materials in direct contacts with food and beverages. Moreover, the guidance should not solely focus on currently scaled-up recycling technologies but also foster the development of emerging recycling techniques that hold promise for a sustainable future.</p>	<p>Food Industry Asia</p>
<p>ICBA reiterates its support for this work and emphasizes the importance of ensuring that any future Codex guidelines on the use of recycled material in food packaging remain focused within Codex mandates of (1) ensuring food safety and (2) facilitating fair trade practices. On the first, food safety is a foundational issue for our industry. We need regulators and consumers to have confidence in the safety of our products, and following Codex guidelines on this matter would help instill that confidence. Secondly, we are keen to ensure that safety standards for recycled food packaging are globally harmonized, which would facilitate free trade of such material across borders.</p>	<p>ICBA</p>
<p>Safety and fair-trade aspects of recycled materials in food packaging application are of utmost importance and hence need to be given a priority. This potential new work item should also provide guidance on restricting use of harmful substances or limiting the exposure to them (e.g via conditions of challenge tests). In addition, the guidance should provide criteria for an efficient system of traceability that enables the tracking and monitoring of collected and sorted post-consumer packaging materials, by types of materials/ polymers and by function. While we acknowledge the importance of other recycled materials, such as paper, glass, and metal, we believe that recycled paper and plastic should be given a priority. It will allow Codex to provide robust, evidence and risk-based guidance to national authorities on best practices to ensure safety of recycled materials in direct contacts with food and beverages while also contributing to plastic waste management goals.</p>	<p>IDF/FIL</p>
<p>ISDI would like to highlight that special considerations for safety requirements would be of essence for recycled materials, that may be used for populations with special dietary requirements, infants, and young children, to ensure same level of safety as from virgin materials.</p> <p>Current practices have been optimised over years of scientific research and expertise to ensure the safety of the materials intended to come in contact with products for these special populations. It may be beneficial to initially focus on recycled plastic, allowing Codex to make significant progress in facilitating national authorities on best practices to achieve the global Plastic waste management goals as well as national objectives.</p>	<p>International Special Dietary Food Industries</p>

<p>The Codex Guidance should include the complete supply chain, from identifying the contamination sources and limiting exposure to harmful substances from the post-consumer and post-industrial feedstocks, validation/qualification of recycling processes steps and associated objectives for decontamination efficiency for recyclates and, considerations around potential residual sensory aspects. Wherever relevant, guidance on how to approach the toxicological assessment & relevance of the identified substances should be addressed.</p> <p>The different materials properties and specificities (between plastics but also between materials) should also be taken into account to define the approach to assess the safety of recycling process.</p> <p>In addition to the above ISDI recommends that fair-trade aspect of recycled materials in food application is also of importance and should be given a priority. The guidance should also cover traceability systems that enable the tracking and monitoring of collected and sorted post-consumer packaging materials, by types of materials/ polymers and by function.</p>	
<p>This potential new work item should, in addition to those aspects outlined in in CAC/46 CRD36, also consider:</p> <ul style="list-style-type: none"> • Guidance on restricting the use of and limiting exposure to harmful substances • Guidance on traceability to track and monitor recycling packaging materials • Recognising the diversity of recycling systems around the world • Encouraging the development and adoption of new recycling technologies • Encouraging the communication, development and adoption of recyclable material collection 	SSAFE
<p>WFP recommends to expand the use of recycled materials in food packaging to include all food grade materials. Indeed, there is an increase of new materials (e.g. bio based plastic) that could benefit from the guidance.</p>	World Food Programme
Would you be interested in participating in work on this topic?	
<p>Yes, pending any resource constraints. Australia supports an international approach to consideration of this issue and notes that this work needs to be science based and risk proportionate. Any required input from FAO/WHO expert committees such as JECFA should also be considered.</p>	Australia
<p>Yes. Brazil would be interested in participating in work on this topic.</p>	Brazil
<p>YES, to actively participate in this very important agenda. We stay committed to actively contributing to this endeavour.</p>	Cameroon
<p>Yes, Canada would be interested in participating in work on this topic.</p>	Canada
<p>Si, Chile queda a disposición para ello.</p>	Chile
<p>If Codex members are willing to further discuss on this topic, China will be happy to join the discussion.</p>	China
<p>Si</p>	Costa Rica
<p>Egypt would interest to be participating in work on this topic</p>	Egypt

The EUMS support, in principle, Codex work on recycled plastics for food contact. We would be interested to participate in this work and share our experience in terms of legislative requirements.	EUMS
Ghana would be interested in participating in the work.	Ghana
Guatemala indica que si desea participar en la elaboración de trabajo alrededor de este tema e insta a los Comités Nacionales del Codex y Observadores del Codex a que participen activamente.	Guatemala
Yes, India would like to actively contribute to this endeavor.	India
Yes, Iran would be interested in participating in any future work undertaken by Codex on developing guidance in this area.	Iran
Malaysia supports the works for Codex to develop this guidance. However, Malaysia at the moment does not have expertise on this topic.	Malaysia
New Zealand is interested in participating in this work.	New Zealand
Si	Paraguay
Si. Perú contribuiría en la elaboración de las orientaciones sobre las consideraciones relativas a la inocuidad de los alimentos relacionadas con el uso de material reciclado en el envasado de alimentos.	Peru
The Republic of Korea is interested in this task.	Republic of Korea
Singapore would be interested to participate in the work on this topic.	Singapore
Thailand is interested in participating in work on this topic.	Thailand
Si	Uruguay
The United States would be interested in participating in and leading work on this topic.	USA
Sí. Alentamos a los Comités Nacionales del Codex y a los observadores a que participen activamente en este programa tan importante. Mantenemos nuestro compromiso de contribuir activamente a este esfuerzo.	Alianza Latinoamericana de Asociaciones de la Industria de Alimentos y Bebidas (ALAIAB)
GFSI is interested in participating in work on this topic and will be happy to collaborate with CODEX on that matter.	Consumer Goods Forum
If Codex chooses to initiate work on this topic, FIVS would be interested in participating in it.	FIVS

Yes, FIA would stay committed to provide any necessary help and information to support the further development or progress of this guidance.	Food Industry Asia
Yes	ICBA
Yes, IDF would be interested in participating in work on this topic and could support progress by drawing on the substantial expertise which sits within its members.	IDF/FIL
ISDI is interested to participate in work on this topic and would stay committed to actively contributing to its endeavour. In this respect, ISDI is of the opinion that CCFH is likely the best placed committee to address the issue but notes that the committee's mandate may need to be adapted.	International Special Dietary Food Industries
SSAFE is fully committed to supporting this new work item should it go ahead.	SSAFE
Yes, WFP with its packaging expert would be willing to contribute.	World Food Programme
For Members	
Do you currently have national programs in place to review and assure the safety of recycled material in food packaging, or are such programs under development?	
Under Australian food law, food businesses must use packaging that is not likely to contaminate food. Legislation also sets out maximum levels for some contaminants in food from contact with packaging material. Recycled packaging materials are subject to the same requirements.	Australia
<p>Any material intended to come into contact with food must meet the general requirements of Regulation RDC n. 91/2001, by the National Health Surveillance Agency – ANVISA.</p> <p>The permission or restriction on the use of recycled materials in contact with food is defined by the ANVISA, including migration limits. The production of recycled material must be notified to ANVISA prior to its production.</p> <ul style="list-style-type: none"> - Regulation RDC 27/1996 establishing the Technical Regulation for glass and ceramic packaging and equipment intended to come in contact with food; - Regulation RDC 123/2001 establishing the general provisions on elastomeric packaging and equipment in contact with food; - Regulation RDC 20/2008 establishing the Technical Regulation for post-consumer recycled polyethylene terephthalate (PET) packaging; <p>This regulation allows recycled PET packaging to have different proportions of virgin PET and recycled PET, including 100% recycled PET, as long as they meet all the safety requirements set out in this regulation;</p> <ul style="list-style-type: none"> - Regulation RDC 88/2016 establishing the Technical Regulation on materials, packaging and equipment intended to come into contact with food; 	Brazil

<p>- Regulation RDC 498/2021 establishing the Technical Regulation on provisions for metal packaging, coatings, utensils, lids and equipment in contact with food.</p>	
<p>Canada has a voluntary program to review the safety of recycled materials (https://www.canada.ca/en/health-canada/services/food-nutrition/food-safety/packaging-materials.html) and guidelines to support the food packaging industry (https://www.canada.ca/en/health-canada/services/food-nutrition/legislation-guidelines/guidance-documents/guidelines-determining-acceptability-use-recycled-plastics-food-packaging-applications.html).</p> <p>Canada is in the process of developing options on a possible mandatory food packaging program, largely driven by plastic recycling initiatives. The program would consider global regulations and technological practices; therefore, Canada has keen interest in the development of a globally-applicable Codex guidance in this area.</p>	Canada
<p>En relación a la inocuidad de material de envases reciclados no existe normativa específica en la actualidad (Si existe para envases en general), sin embargo, en Chile cuenta con la LEY 21368 que REGULA LA ENTREGA DE PLÁSTICOS DE UN SOLO USO Y LAS BOTELLAS PLÁSTICAS que tiene como objetivo proteger el medio ambiente y disminuir la generación de residuos, mediante la limitación en la entrega de productos de un solo uso en establecimientos de expendio de alimentos, y que en su contenido considera aspectos de la certificación de los plásticos para asegurar la calidad requerida . Esto va en la línea y compromiso de Chile con los ODS.</p> <p>Actualmente, existe una Iniciativa de la autoridad sanitaria (Ministerio de Salud de Chile) que modifica el Reglamento Sanitario de los Alimentos DS 977/1996 en el Título II Párrafo III “De los envases y utensilios” que incluye análisis de los materiales de envases. Este programa NO está en funcionamiento aún. El borrador del reglamento de envases se encuentra en la división jurídica de MINSAL, en revisión para salir a consulta pública y no tiene fecha exacta para salir a consulta pública. Esta revisión establece los requisitos generales y específicos para los materiales y objetos destinados a entrar en contacto con alimentos; hace responsables a fabricantes, comercializadores, importadores, distribuidores y usuarios de dichos materiales y objetos, según corresponda, de dar cumplimiento de los requisitos que establece el reglamento; los responsabiliza de que tales materiales no contaminen ni generen cambios del valor nutritivo ni alteraciones organolépticas de los alimentos.</p>	Chile
<p>China has established a relatively complete national food safety standard framework for food contact materials, but the risk management model for recycled food contact materials is under developing. At present, the China National Food Safety Risk Assessment Expert Committee has finished the risk assessment of recycled polyethylene terephthalate (rPET) and recycled food contact metals.</p>	China
<p>El sector privado ha desarrollado programas voluntarios de material reciclado, por ejemplo: Una guía modelo para facilitar el uso de PET reciclado en el embalaje de botellas de plástico. Estas directrices modelo están destinadas a ser utilizadas por países de todo el mundo para fomentar las mejores prácticas y la armonización en lo que respecta al PET de calidad alimentaria.</p>	Costa Rica
<p>Yes, Egypt has Reg. 17/2022 regarding technical rules binding limits for food contact materials and articles (Chapter II Materials and articles in contact with food from recycled plastic (Chapter II on recycled plastic materials and Chapter IV & V on Metals and Paper).</p>	Egypt
<p>The plastic legislation Regulation (EU) 2022/1616, takes into account all the listed factors and comprehensively regulates the recycling of plastics intended for contact with food. This requires the authorisation of mechanical Polyethylene Terephthalate (PET) recycling processes and sets out a procedure for the establishment of other suitable recycling technologies. The Regulation on the recycling of plastic food contact materials allows for the development of novel technologies, and several such technologies are under development in the EU.</p> <p>Safety is determined by means of a characterization of maximum foreseeable contamination levels in input material, and then by ensuring adequate decontamination during recycling so that the residual contamination in the recycled material does not pose any risks to consumer health. Currently only PET Post Consumer Waste containing maximum 5 % of materials and articles that were used in contact with non-food materials or substances is permitted, as well as recycling of all plastics from a closed and controlled chain.</p>	EUMS

<p>For metal and glass there are no requirements as these are presently not considered to be required to ensure adequate protection of consumer health. This view is based on the nature of the production process. Due to the high temperatures used during the recycling of these materials it is unlikely that organic contaminants would remain, and inorganic contaminants would be subject to limits already applicable to these materials.</p> <p>In the case of paper and board, specific requirements do not yet exist at the level of the European Union, even though for these materials specific requirements would seem necessary. It is also worth to note that the Council of Europe developed the Technical guide on paper and board used in food contact materials and articles (Resolution CM/Res (2020) 9) on the safety and quality of materials and articles for contact with food which includes certain general principles around recycled paper and board and in addition some migration limits for some known contaminants. To demonstrate compliance with the requirements of the Technical Guide of the Council of Europe, it has to be ensured that the migration of all constituents and all possible impurities is below the limits applicable to them. When using recovered cellulose-based fibres, precautionary considerations and measures are needed to fulfil also the General requirements. The use of input materials of suitable quality is necessary and a cleaning process may be applied. These measures are part of the recycling process that should be performed in accordance with good manufacturing practices. Relevant quality criteria always have to be specified and checked. Additional measures such as the use of functional barriers (on the paper or board or as an internal bag) or functional adsorbents (added to the recycled material to retain substances in the paper or board) might be needed in order to ensure and demonstrate compliance of the final material or article.</p> <p>Finally, it is worth to note that the EU legislative framework is complemented with national legislation that varies across Member States and that a revision of the EU legislation on food contact materials is currently under consideration.</p>	
<p>Guatemala indica que actualmente no cuenta con programas, normas o reglamentos que regulen el uso de material reciclado utilizado en envases alimentarios.</p>	Guatemala
<p>India has developed Guidelines for recycling of post-consumer PET for food contact applications & Acceptance criteria for recycled PET resin for food contact applications.</p>	India
<p>Indonesia currently has regulations regarding food packaging that govern the maximum migration limits of packaging materials used for food packaging purposes, and these are supervised by competent authorities. These regulations also apply to food packaging made from recycled materials.</p> <p>In addition, Indonesia is also currently developing regulations concerning guidelines for implementing good manufacturing practices for the production of packaging made from recycled PET materials.</p>	Indonesia
<p>Iran lacks specific national programs to review the safety of recycled food packaging materials, but the Iranian government is considering developing such programs in the future, considering factors like feedstock and recycling process controls. General food safety regulations are applied, but developing such programs would be worthwhile considering the importance of this issue.</p>	Iran
<p>Japan would comment together on a., b., and c. as below.</p> <p>(1) Recycled plastic</p> <ul style="list-style-type: none"> ○Japan adopts the Positive List System for synthetic resins applicable to apparatus, containers or packaging (“ACP”) for food, and recycled material is also required to conform to the System. In addition, recycled materials (except chemical recycling) other than polyethylene terephthalate and polystyrene are prohibited to use food contact materials. ○Japan also has established the guidelines for risk management for recycled plastic material. (The guidelines for usage of recycled material as raw materials in synthetic resins for manufacturing apparatus, containers or packaging for food (noticed in March 2024)) 	Japan

<p>○As examples, the following matters are concretely prescribed in the guidelines;</p> <p>■Regarding material-recycling;</p> <ul style="list-style-type: none"> • It is required to establish appropriate management standards and to confirm satisfaction of the standards when using post-consumer material such as waste, while it might be possible that unexpected substance is contaminated. (e.g. to confirm (by surrogate contaminant testing) that the amount of contaminants that move to food from packaging made from material-recycled polymers is not enough to harm human health (not more than 0.01 mg/kg).) • Since pre-consumer material such as offcuts from process of manufacturing ACP for food made from virgin material is high-quality enough to be seldom contaminated, it is approved to use for ACP for food. <p>■Since chemical-recycling is the treatment that decomposes waste into monomers, etc. and polymerizes them to recycled material, chemical-recycled material is approved to use for ACP for food in case it is assured that contaminants are sufficiently removed.</p> <p>(2) Recycled paper Used paper (recycled paper) is prescribed not to be used for applications in which water or oil in paper significantly increases or for applications that require long time heating.</p>	
<p>Currently there is no national programme that specifically focus on the safety of recycled material in food packaging. It is the responsibility of the food manufacturer or food packaging material suppliers to ensure all packaging to be used in the preparation, packaging, storage, delivery or exposure of food for sale in Malaysia should not contain any toxic or tainting substance, or which contributes to the deterioration of the food. In addition, routine check of food contact material is conducted to ensure it compliance to national legislation.</p>	Malaysia
<p>In New Zealand, the Ministry for the Environment (MfE) is responsible for setting overarching policies and standards related to waste management and recycling. In 2020 plastic packaging was one of six products declared as priority products under the current Waste Management Act 2008. Declaration as a priority product creates a requirement to develop a product stewardship scheme for subsequent accreditation.</p> <p>The Packaging Forum and the New Zealand Food and Grocery Council are currently co-designing the plastic packaging product stewardship scheme with MfE. Scheme details are under construction, and MfE will have a regulatory role in scheme monitoring and compliance.</p> <p>Food safety requirements – food packaging In New Zealand, food manufacturers are responsible for ensuring that food safety risks are identified and managed appropriately. This includes the assessment and management of risks associated with packaging materials. A summary of New Zealand’s current food safety requirements for packaging is provided below.</p> <ul style="list-style-type: none"> • Animal Products Act (APA) - under the APA 1999, businesses are responsible for hazard identification and mitigation. Part 1, section 5: “products manufactured must be fit for intended purpose having regard to its nature, packaging and identification. Manufacturers are required to have a Risk Management Programme (RMP) that is designed to identify, control, manage, eliminate or minimise hazards and other risks during processing of animal material and products.” The Animal Products Regulations also requires packaging to be designed, made, stored and used in a way that ensures it is fit for purpose. • Food Act - As with the APA, the Food Act 2014 also requires businesses to identify and mitigate hazards, including those associated with 	New Zealand

<p>materials that come into contact with food. The Food Act also specifically requires that food related accessories (including packaging) are sourced, stored and used in a way that does not compromise the safety and suitability of the food.</p> <ul style="list-style-type: none"> • Wine Act - Under the Wine Act and the Wine Regulations 2021, operators must ensure that any packaging is designed, made, stored and used in a manner that ensures the wines fitness for its intended purpose. • FSANZ Food Standards Code - The Australia and New Zealand Joint Food Standards Code (FSC) contains general and specific information requirements for food packaging including: <ul style="list-style-type: none"> • 1.1.1 - general information on packaging requirements for all foods. • 1.4.1 - includes Maximum Levels (MLs) for contaminants that could be present in food as a result of migration from food packaging. 	
<p>Sí existe, en Paraguay se encuentra vigente el registro nacional de envases a través del Decreto 6.115/2011 que establece la obligatoriedad del registro de los envases en contacto con alimentos y reglamentado por la Resolución 380/2011 por la cual se establecen las condiciones y los requisitos para la obtención y renovación del Registro Nacional de Envases en contacto con alimentos, cuyo control compete al Instituto Nacional de Alimentación y Nutrición - INAN, dependiente del Ministerio de Salud Pública y Bienestar Social.</p>	Paraguay
<p>No contamos con programas nacionales para revisar y garantizar la seguridad del material reciclado en los envases de alimentos. El marco regulatorio vigente de Perú establece lo siguiente: “Artículo 119.- Prohíbese la utilización de envases fabricados con reciclados de papel, cartón o plástico, salvo en los casos del uso de envases fabricados a partir de envases PET de grado alimentario reciclado, que garantice su inocuidad para el contacto con alimentos y bebidas, debiendo contar con un certificado de conformidad emitido por un organismo de evaluación de la conformidad acreditado por un organismo de acreditación” .</p>	Peru
<p>Singapore does not have a national program specifically on the safety of recycled materials. Our Food Regulations, require that all food contact materials, recycled or otherwise, must not impart hazardous substances to the food in contact with it.</p>	Singapore
<p>Thailand has implemented national programs to control the use of recycled materials in food packaging. These programs establish regulations and standards based on the type of material used.</p> <p>1. Notification of the Ministry of Public Health (No. 435), B.E. 2565 (2022), issued by Virtue of the Food Act, B.E. 2522 (1979): Specification of Qualities or Standards of Food Packaging Made from Plastic</p> <p>This regulation applies to both virgin and recycled polyethylene terephthalate (PET) plastic used in food packaging. The safety of recycled PET plastic is determined by:</p> <ul style="list-style-type: none"> • Overall migration limits • Migration limits of specific heavy metals, such as lead and cadmium • Migration limits of primary aromatic amines (PAAs) • Specific migration limits of certain substances, such as acetaldehyde and 1,4-butanediol <p>2. Thai Industrial Standard (TIS) 2948-2562: Paper for Food Contact</p> <p>This standard outlines the requirements for recycled paper used in food packaging, focusing on its chemical characteristics. These characteristics include:</p> <ul style="list-style-type: none"> • Lead content • Cadmium content • Mercury content • Presence of antimicrobial substances • Presence of phthalates <p>Additionally, Thailand is developing national programs to further promote a circular economy and sustainable packaging management. These</p>	Thailand

<p>programs include the drafting of two national Acts. One Act will address waste prevention and management throughout the entire supply chain, while the other will establish an organization responsible for packaging management.</p>	
<p>In the UK only plastic recycling is subject to specific controls in respect of food contact material legislation. All other materials that can be recycled (e.g. metal, glass, paper and board) are subject to the general requirements under food contact material legislation. The Packaging (Essential Requirements) Regulations 2015 set out the essential requirements that packaging must meet before it is placed on the market, and this includes restrictions on heavy metals in packaging. The UK takes a risk-based approach to the regulation of food contact materials. As such food contact materials can only be placed on the UK market if, when used in accordance with normal and foreseeable use, they do not transfer their constituents to food in quantities that could:</p> <ul style="list-style-type: none"> • endanger human health; or • bring about an unacceptable change in the composition of the food; or • bring about a deterioration in the organoleptic characteristics thereof. <p>Plastic recycling operators producing output recycled plastic for food packaging must work towards obtaining an authorisation. Plastic recycling operators will need to make a regulated product application should they wish to continue making recycled plastic for food packaging available for the market. All other recycled material (e.g. paper and board) does not require an authorisation, but business operators need to comply with the legislative requirements on food contact materials, including best practice.</p>	<p>United Kingdom</p>
<p>No, Existe Normativa Mercosur para uso de PET-PCR (PET postconsumo reciclado descontaminado de grado alimentario), la que aún no ha sido internalizada.</p>	<p>Uruguay</p>
<p>The major categories of materials used to manufacture food packaging are metal, glass, paper, and plastic. As glass and metal are generally impervious to contaminants and are readily cleaned via the processing conditions/temperatures used in recycling, post-consumer use contamination is not a major concern for these materials. Provided recycled glass and metal are sourced from appropriate feedstock there is little opportunity for food safety issues from their use in food packaging. In addition, pulp from reclaimed fiber in paper and paperboard may be used for food-contact articles provided it meets the criteria in the United States Title 21 of the Code of Federal Regulations (21 CFR) 176.260 (Pulp from reclaimed fiber). However, the United States is unaware of the use of recycled pulp in food packaging in the United States that is not separated from food by a barrier. For these reasons the United States does not have national programs in place to assess the safety of recycled metal, glass, or paper in food packaging.</p> <p>In the United States recycled plastics for food contact applications are not authorized separately from virgin plastics, i.e. recycled plastics are subject to the same authorizations, limitations, and specifications as virgin plastics. As such, no action from the United States Food and Drug Administration (US FDA) is required to market food contact articles made from recycled plastics, provided that the articles comply with all applicable authorizations. Manufacturers are responsible for ensuring, that like virgin plastic, recycled plastic is of purity suitable for its intended use and meets all existing specifications. The requirements are described in Title 21 of the Code of Federal Regulations (21 CFR) parts 174 through 179.</p> <p>While no government authorization is required in the United States for recycled plastics that comply with all applicable authorizations, US FDA does review voluntary submissions regarding the ability of a recycling process to produce recycled plastic material that is suitable for food contact applications. If, after review US FDA finds that the recycling process is expected to produce recycled plastics of a purity suitable for the intended use, US FDA will issue a no objection letter (NOL) for the subject recycling process.</p>	<p>USA</p>

What factors do these programs encompass (feedstock specifications, recycling process technology, etc.)?	
<input type="checkbox"/> General principles of the safety of food packaging materials <input type="checkbox"/> Existing regulations of food packaging materials <input type="checkbox"/> Feedstock sources, including: limiting to food-safe plastics; sorting and inspection procedures; and appropriate use of food-grade additives <input type="checkbox"/> Recycling process technology and its efficiency to remove external contaminants	Canada
La iniciativa que aún no está puesta en consulta pública comprende condiciones generales y condiciones de comercialización para los materiales en contacto con alimentos (en general), incorpora también recomendaciones para la implementación de la regulación con énfasis en la fiscalización sobre plásticos reciclados y planta de reciclaje de plástico para alimentos. contempla además una serie de definiciones para definición de polímero, aditivos para plásticos (lista), lista de sustancias autorizadas, límite de migración global, límite de migración específica, simulantes alimentarios.	Chile
Al tratarse de programas de empresas privadas, no se cuenta con detalles del alcance.	Costa Rica
The Egyptian regulation 17/2022 - Includes specifications and restrictions of raw materials (Input) - Ensure that the technology of recycling process is internationally licensed - Good monitoring of the recycling technology used. - Conducting tests and analyzes on the final recycled product to ensure safety in accordance with binding legislation EU 1616/2022& EU 10/2011 for r-PET and binding laws and legislation for other recycle materials such as paper and metals internationally and locally.	Egypt
The plastic legislation (Regulation (EU) 2022/1616) takes into account all of the listed factors and comprehensively regulates the recycling of plastics intended for contact with food.	EUMS
The guidelines encompass factors such as PET feedstock, recycling processes (Super-Clean Recycling Process, Melt-in Recycling Process, Paste-in Recycling Process, and Enhanced Chemical Recycling Process), testing. In addition, No Objection Letter/Approval letter from USFDA or EU is a mandatory requirement.	India
Feedstock specification. Currently, the production of packaging from recycled materials for food packaging purposes that is regulated is limited to feedstock derived from PET. This is because there are no regulations yet to ensure the safety of feedstock from recycled materials other than PET.	Indonesia
N/A	New Zealand
Se tienen en cuenta los factores mencionados (materias primas, tecnología del proceso de reciclaje). Para el PET- PCR se tiene en cuenta la Resolución Mercosur RES.GMC N°30/07, Reglamento Técnico Mercosur sobre envases de polietilentereftalato (PET) postconsumo reciclado grado alimentario (PET- PCR grado alimentario) destinado a estar en contacto con alimentos, incorporado al ordenamiento jurídico nacional por el Decreto N° 1.319/2011. Para Celulósico o papel incluida en la Resolución Mercosur RES.GMC N°40/15 Reglamento Técnico Mersocur sobre Materiales Envases y Equipamientos Celulósico destinados a estar en contacto con Alimentos, incorporados al ordenamiento Jurídico Nacional por Decreto N°1.337/2019. Para materiales metálicos se encuentra incluido en la Resolución Mercosur RES.GMC N° 46/06 que permite el uso de materiales metálicos	Paraguay

reciclados siempre que los mismos sean sometidos a un proceso que le permita cumplir las especificaciones en este documento. Incorporado al Ordenamiento Jurídico Nacional por Decreto N° 12.085/2008.	
<p>Only food contact polyethylene terephthalate (PET) bottles can be used as a mechanical(physical) recycling food contact material, and all food contact plastic can be used as a chemical recycling food contact material.</p> <p>The mechanical recycled material certification system is conducted through two-stage management system between the Ministry of Food and Drug Safety (MFDS) and the Ministry of Environment (ME).</p> <p>※ (ME) Approve the recycling processes to ensure safety and quality of in-put material (e.g. flakes). (MFDS) Approve the recycling processes to ensure safety and quality of recycled plastic</p>	Republic of Korea
For plastic recycling, operators need to provide the requested information to enable a comprehensive assessment to be carried out. This includes type of plastic and the technology used. Full details on the decontamination steps and results of challenge testing with appropriate chemical surrogates are also required to demonstrate that the final material is safe.	United Kingdom
La Normativa abarca el tratamiento del material reciclado.	Uruguay
The US FDA evaluates the safety of recycled plastics by reviewing the feedstock (original use), source control measures intended to ensure the quality of the feedstock, recycling process (mechanical, chemical, etc.), efficacy of the recycling process to remove chemical contaminants, and the intended conditions of use of the recycled plastic.	USA
How is safety determined (for example, by general or specific migration limits)?	
<input type="checkbox"/> General safety requirements and specific migration limits (defined in the guidance) <input type="checkbox"/> Consideration of the packaging design, the conditions of use (i.e., temperature and time) of the packaging, and the types of foods intended to be packaged <input type="checkbox"/> De minimis approach (defined in the guidance)	Canada
si, la iniciativa contempla límite de migración global, límite de migración específica, simulantes alimentarios, listas positivas de sustancias que pueden utilizarse para elaborar materiales plásticos en contacto directo con alimentos y consideración de sustancias de mayor ocurrencia según 90% de las notificaciones de la RASFF 2010-2016	Chile
<p>Al tratarse de programas de empresas privadas, se desconocen los detalles y su alcance. Sin embargo, a nivel nacional existe una normativa relacionada con los RPET; en ese sentido, el programa debe cumplir con lo establecido en el artículo 6 Procedimiento par a demostrar la conformidad del RTCR 480:2016:</p> <p>6.1 Los fabricantes, importadores, distribuidores, fraccionadores, procesadores, mayoristas y minoristas de los productos abarcados en el ámbito de aplicación de este reglamento, o quienes los utilicen como parte de un bien mayor, deberán demostrar que cumplen con las disposiciones contenidas en el presente reglamento.</p> <p>Para ello, la tecnología de reciclaje debe contar con una certificación emitida por una entidad de evaluación de la conformidad (persona jurídica o física) debidamente acreditada o reconocida por el Ente Costarricense de Acreditación (ECA) o ante una entidad acreditadora que posea reconocimiento mutuo o multilateral con el Ente Costarricense de Acreditación, para los alcances requeridos en este Reglamento.</p> <p>Esta certificación debe demostrar que dicha tecnología es apropiada, en el sentido que los productos elaborados cumplen con los parámetros establecidos en este reglamento, y además, que la tecnología está siendo utilizada de conformidad con las especificaciones y procedimientos establecidos por el fabricante de la misma. (Ver Anexo A).</p> <p>El organismo de evaluación de la conformidad debe indicarlo así y respaldar la certificación emitida, con los siguientes documentos para cada</p>	Costa Rica

<p>caso en particular:</p> <p>6.1.1 Fabricantes de PCR y/o resina RPET:</p> <p>a. Carta del fabricante de equipo detallando la tecnología adquirida por la empresa.</p> <p>b. Carta de no objeción a dicha tecnología emitida por la autoridad competente del país de origen de la misma.</p> <p>c. Reporte de Estudio de Migración de materiales emitido por un laboratorio Certificado en la calificación inicial de la resina RPET ante una autoridad de reconocida capacidad técnica.</p> <p>d. Descripción de los controles de proceso y calidad que la empresa realiza al material PCR o a la resina RPET que garanticen la conformidad de la misma.</p> <p>6.1.2 Importadores, distribuidores, fraccionadores y procesadores de resina RPET en artículos precursores:</p> <p>a. Carta de no objeción a dicha tecnología y proceso de reciclaje utilizados por el fabricante de PCR o resina RPET, emitida por la autoridad competente del país de origen de la misma.</p> <p>b. Reporte de Estudio de Migración de materiales emitido por un laboratorio Certificado en la calificación inicial de la resina RPET ante una autoridad de reconocida capacidad técnica.</p> <p>c. Especificación técnica de la resina RPET que incluya: Viscosidad Intrínseca, Punto de Fusión, Color en formato CIE Lab, residuos ajenos al PET, forma del gránulo, peso del gránulo, densidad granular, densidad neta, contenido de humedad, contenido de Acetaldehído y contenido de Limoneno, como mínimo.</p> <p>d. Descripción de los controles de calidad que la empresa realiza a la resina RPET, que garanticen la conformidad de la misma al ser recibida del proveedor.</p> <p>e. Descripción de los controles de proceso y aseguramiento de calidad que la empresa realiza al artículo precursor fabricado con resina RPET que garanticen la conformidad del mismo.</p> <p>6.1.3 Fabricantes, importadores, distribuidores, fraccionadores, procesadores, mayoristas y minoristas de envases:</p> <p>a. Especificación técnica del artículo precursor que incluya: Dimensiones generales, peso total, marca y porcentaje de uso de resina RPET y resina PET virgen si aplica.</p> <p>b. Descripción de los controles de proceso y aseguramiento de calidad que el proveedor del artículo precursor fabricado con resina RPET realiza y que garanticen la conformidad del mismo.</p>	
<p>Safety is determined by the results of final product analyzes that prove the efficiency of the decontamination efficiency of the technology used in recycling, in addition to the results of Surrogate Contaminant and Specific Migration limits.</p>	<p>Egypt</p>
<p>Safety is determined by means of a characterization of maximum foreseeable contamination levels in input material, and then by ensuring adequate decontamination during recycling so that the residual contamination in the recycled material does not pose any risks to consumer health.</p>	<p>EUMS</p>
<p>To ensure safety of recycled PET, extraction test and migration test has to be complied. (Limt for decontamination step: decontamination shall be below 220ug/kg limit and 10ug/kg limit in extraction test and migration test respectively for each surrogate contaminants).</p>	<p>India</p>
<p>The safety of such food packaging is ensured by complying with specific migration limits that must be adhered to when the food industry registers its products for circulation.</p>	<p>Indonesia</p>
<p>New Zealand Food Safety uses specific national and international Maximum Levels for some contaminants to determine safety, and surveillance and monitoring data to inform risk assessments for chemicals that lack maximum levels.</p>	<p>New Zealand</p>

<p>En el caso del PET - PCR se determina primero con la aprobación de la tecnología de lavado, control de proveedores de materia prima (que provengan de colecta selectiva), implementación de Buenas Prácticas de Manufactura y los ensayos de migración total y específica.</p> <p>Para el caso de los materiales celulósicos, control de proveedores de materia prima (que provengan de colecta selectiva), implementación de BPM y los ensayos de migración total y específica establecidos en RTM.</p> <p>Para el caso de materiales metálicos, implementación de BPM y los ensayos de migración total y específica.</p>	Paraguay
<p>Safety of r-PET is determined by confirming the challenge test and the final product conform to the criteria and specification.</p> <p>- Challenge test: Confirm that flakes contaminated with surrogate contaminants* have been removed to meet criteria** through the recycling process.</p> <p>* Chlorobenzene(polar, volatile), Toluene(non-polar, volatile), Benzophenone, Methyl Salicylate(polar, non-volatile), Methyl stearate, Phenylcohexane(non-polar, non-volatile), Copper-2-ethylhexanoate(heavy metal)</p> <p>** Maximum migration level(≤ 0.01 mg/L), Maximum residue level(≤ 0.22 mg/kg), Decontamination Efficiency(Residual concentration(Cres) < Modelled concentration(Cmod))</p> <p>- Migration specifications for PET materials(mg/L): Lead(≤ 1), Consumption of potassium permanganate(≤ 10), Overall migration(≤ 30), Antimony(≤ 0.04), Germanium(≤ 0.1), Terephthalic acid(≤ 7.5), Isophthalic acid(≤ 5), Acetaldehyde(≤ 6)</p>	Republic of Korea
<p>Plastic recycling operators will need to provide evidence of their own assessments following independent challenge testing. This is fundamental for the purposes of evaluating the suitability of the recycling operation. Regular monitoring may also be required for compliance purposes. Enforcement officers have the right to require necessary paperwork on any recycled material intended for food contact applications. A declaration of compliance and supporting documentation such as a laboratory certificate needs to accompany plastic and recycled plastic food contact materials.</p>	United Kingdom
<p>La normativa establece los criterios</p>	Uruguay
<p>To determine safety the US FDA evaluates the ability of the recycling process to control the sourcing of the recycled material to ensure that only material from appropriate original uses (e.g., originates from food contact uses, excludes industrial waste containers, etc.) is included in the feedstock, as well as the ability of the recycling process to remove incidental contamination that may occur during the collection process or secondary use by the consumer.</p> <p>The US FDA recommends surrogate contaminant testing to demonstrate the ability of a recycling process to remove contaminants to a level that FDA would consider to be of negligible risk for a contaminant migrating from recycled plastic, which corresponds to a dietary concentration of <0.5 parts per billion (ppb). The surrogate contaminants US FDA recommends have a variety of chemical and physical properties and represent common materials accessible to the consumer to simulate consumer misuse. Suggested contaminants and testing conditions can be found in the US FDA Recycling Guidance document.**</p> <p>As mentioned above, US FDA determines safety based on the ability of the recycling process to remove potential contaminants to a dietary concentration of < 0.5 ppb. This level is set based on carcinogenicity, which US FDA considers to be the most sensitive toxicological endpoint for dietary exposure. To set this requirement, US FDA determined a probability distribution of carcinogenic potency by surveyed carcinogenic potency data for hundreds of known carcinogens. This survey determined that most known carcinogens pose < 10⁻⁶ lifetime cancer risk if present in the daily diet at < 0.5 ppb. A 10⁻⁶ lifetime cancer risk is generally not considered a public health concern by most international regulatory bodies. Additionally, it is very unlikely that an unstudied compound would both be a carcinogen and have an intrinsic carcinogenic potency far greater than the typical potency observed for studied compounds. The 0.5 ppb threshold is also 2,000 times lower than the dietary concentration at which the vast majority of studied compounds are likely to cause noncarcinogenic toxic effects and 200 times lower than the chronic exposure</p>	USA

<p>level at which potent pesticides induce toxic effects.</p> <p>The United States is aware of a 0.05 ppb limit from the European Food Safety Authority (EFSA), which account for genotoxic compounds. However, different sets of assumptions are used by US FDA and EFSA for converting this dietary threshold into a maximum residual level for a contaminant in recycled plastic. When viewed in terms of the maximum residual levels for contaminants to be present in recycled plastic, the two agencies converge to approximately the same result for recycled polyethylene terephthalate (PET). Furthermore, US FDA has concluded that the safety limit of 0.5 ppb, rather than 0.05 ppb is sufficiently conservative for two reasons: 1) containers that previously held hazardous waste and industrial containers are excluded from the feedstock, and 2) post-consumer feedstock is not expected to be contaminated with genotoxic compounds as consumers do not generally have access to these contaminants.</p> <p>**Guidance for Industry: Use of Recycled Plastics in Food Packaging (Chemistry Considerations) available at: https://www.fda.gov/regulatory-information/search-fda-guidance-documents/guidance-industry-use-recycled-plastics-food-packaging-chemistry-considerations</p>	
Do these requirements vary depending upon packaging type (e.g., plastic, metal, paper)?	
<input type="checkbox"/> Yes these requirements vary depending upon packaging type.	Canada
<p>La regulación vigente establece requisitos de acuerdo con el tipo de envase. El reglamento sanitario de alimentos de Chile establece en el art. 18 del “los envases que se reutilicen deberán ser de material y construcción tales que permitan una limpieza fácil y completa”. Así como en el art. 24 “los establecimientos de alimentos en que se mantengan o almacenen materias primas alimentarias, alimentos en proceso, alimentos terminados y envases de alimentos deberán diseñarse de tal forma que éstos estén protegidos de la contaminación y/o alteración”. Y en el título II y párrafo III de los envases y utensilios, establece requisitos sanitarios de éstos.</p> <p>La Ley 21638 establece requisitos por tipo de material de envase, indicando además, que “el porcentaje mínimo de materias producidas a partir de recursos renovables que debe incorporar en su composición, el que no podrá ser inferior a 20%”. Así como indicaciones en el Artículo 6° en cuanto a la Certificación de plásticos.</p> <p>La iniciativa que aún no está en vigencia se enfoca en materiales plásticos, se entiende que luego se extenderán las regulaciones pertinentes a cualquier material y objeto en contacto con alimentos, las cuales estarán contenidas en el Decreto 977 Reglamento Sanitario de los Alimentos</p>	Chile
Si	Costa Rica
Yes, requirements vary depending on the type of packaging (Chapter II concerning the requirements and limits for recycled plastic materials food contact and Chapter IV & V on Metals and Paper).	Egypt
Yes, In the case of paper and board, specific requirements do not yet exist at the level of the European Union, even though for these materials specific requirements also seem necessary. A revision of EU legislation on food contact materials is in progress.	EUMS
As of now, India has recycling guidelines only for recycled Polyethylene terephthalate (rPET).	India
Yes, it is vary depending upon packaging type	Indonesia

N/A	New Zealand
Si varían	Paraguay
Currently, the standard for recycled food contact materials ONLY certifies recycled plastics derived from mechanically recycled PET materials.	Republic of Korea
To a degree, given that there will be differences based on the final material. However, the ultimate objective is to ensure the recycled material meets the current legislative requirements. There are additional legislative requirements in place for plastic and recycled plastic.	United Kingdom
Solo reglamenta el Pet reciclado.	Uruguay
Regardless of packaging type, recycled materials must be of suitable purity for their intended use and comply with all limitations and specifications in any applicable authorization.	USA
Do you currently have recycling requirements for food packaging, or are such mandates under development? Do these mandates vary depending upon packaging type (e.g., plastic, metal, paper)?	
The federal Department of Climate Change, Energy, the Environment and Water (DCCEEW) does not legislate requirements for the recycling of food packaging. The regulation and management of waste and resource recovery in Australia is primarily the responsibility of state and territory governments. State and territory Environment Protection Agencies issue owner or operator licensing for recycling (material recovery) and reprocessing of materials, including requirements for quality assurance and controls to meet requisite environmental standards. The Australian Government is reforming national packaging regulation that will see new Commonwealth laws introduce mandatory design requirements, minimum thresholds of recycled content in packaging materials and plastic polymers, and identify chemicals of concern to be eliminated from packaging. The new packaging laws may also establish mandatory requirements for traceability and labelling of recycled content in packaging, including food contact packaging.	Australia
Canada is developing environmental regulations (https://www.canada.ca/en/environment-climate-change/services/managing-reducing-waste/reduce-plastic-waste/recycle-content.html) that would require minimum levels of recycled content in plastic packaging and establish labelling rules (e.g., recyclable, compostable). The recycled content requirements would only apply to plastic packaging and would exempt primary (food contact) packaging, other than beverage containers, but would include secondary and tertiary food plastic packaging. Canada is considering a separate instrument to address primary plastic food packaging.	Canada
Además, como se expresó en el punto anterior, existe la Iniciativa de la autoridad sanitaria (MINSAL) que modifica el Reglamento Sanitario de los Alimentos. Esta revisión establece los requisitos generales y específicos para los materiales y objetos destinados a entrar en contacto con alimentos, condiciones generales y condiciones de comercialización para los materiales en contacto con alimentos (en general), Incorpora también recomendaciones para la implementación de la regulación con énfasis en la fiscalización sobre plásticos reciclados y planta de reciclaje	Chile

de plástico para alimentos. Contempla además una serie de definiciones para definición de polímero, aditivos para plásticos (lista), lista de sustancias autorizadas, límite de migración global, límite de migración específica, simulantes alimentarios.	
<p>En Costa Rica, se encuentra vigente el Reglamento técnico RTCR 480: 2016 Envases plásticos. Envases de tereftalato de polietileno reciclado (RPET) grado alimentario destinados a entrar en contacto con alimentos No. 40393-S que tiene como objeto, establecer los requisitos para la fabricación de envases y artículos precursores elaborados a partir de tereftalato de polietileno1 reciclado (RPET), incluso si estos son mezclados con tereftalato de polietileno (PET) virgen, destinados a entrar en contacto con alimentos; a fin de garantizar la inocuidad del alimento envasado. En el apartado 6.1 se indica: “Los fabricantes, importadores, distribuidores, fraccionadores, procesadores, mayoristas y minoristas de los productos abarcados en el ámbito de aplicación de este reglamento, o quienes los utilicen como parte de un bien mayor, deberán demostrar que cumplen con las disposiciones contenidas en el presente reglamento.</p> <p>Para ello, la tecnología de reciclaje debe contar con una certificación emitida por una entidad de evaluación de la conformidad (persona jurídica o física) debidamente acreditada o reconocida por el Ente Costarricense de Acreditación (ECA) o ante una entidad acreditadora que posea reconocimiento mutuo o multilateral con el ECA, para los alcances requeridos en este Reglamento.</p> <p>Esta certificación debe demostrar que dicha tecnología es apropiada, en el sentido que los productos elaborados cumplen con los parámetros establecidos en este reglamento, y además, que la tecnología está siendo utilizada de conformidad con las especificaciones y procedimientos establecidos por el fabricante de la misma. (Ver Anexo A).</p> <p>El organismo de evaluación de la conformidad debe indicarlo así y respaldar la certificación emitida, con los siguientes documentos para cada caso en particular:</p> <p>6.1.1 Fabricantes de PCR y/o resina RPET:</p> <ol style="list-style-type: none"> Carta del fabricante de equipo detallando la tecnología adquirida por la empresa. Carta de no objeción a dicha tecnología emitida por la autoridad competente del país de origen de la misma. Reporte de Estudio de Migración de materiales emitido por un laboratorio Certificado en la calificación inicial de la resina RPET ante una autoridad de reconocida capacidad 	Costa Rica
Egypt has recycling requirements within mandatory Reg. 17 / 2022 on technical regulations binding limits for food contact materials and articles (Chapter II on recycled plastic materials and Chapter IV & V on Metals and Paper). - Yes, conditions vary depending on the type of packaging.	Egypt
Yes, under new EU legislation on packaging and packaging waste extensive requirements are being set out, for plastic beverage bottles a minimum recycled content percentage of 25% will be required by 2025.	EUMS
Guatemala indica que actualmente no se tienen requisitos específicos para el reciclado de envases alimentarios, se tienen un Reglamento emitido por el Ministerio de Medio Ambiente, en el que se establece la separación de todos los desechos en orgánicos e inorgánicos.	Guatemala
As explained in our response to question (a), India has developed guidelines for recycling of PET only, as of now. There is no mandatory requirement for recycling in food packaging.	India
Yes. Regulations regarding food packaging requirements in Indonesia are the same for both recycled and non-recycled materials, with values varying depending on the type of packaging (plastic, metal, paper).	Indonesia

The general requirement is applicable to all food packaging. However, currently there is no specific requirements on recycled materials for food packaging.	Malaysia
The Ministry for the Environment (MfE) is currently undertaking a waste reform programme which includes developing new waste legislation to replace the current Waste Minimisation Act 2008 and the Litter Act 1979. The new legislation will support delivery of initiatives outlined in the Waste Strategy, a 30-year waste roadmap. Goal 5 of the strategy focuses on resource recovery systems or recycling. https://environment.govt.nz/publications/te-rautaki-para-waste-strategy/	New Zealand
En Paraguay existe actualmente para plástico, papel y metálicos.	Paraguay
No se cuenta con requisitos de reciclaje de envases alimentarios. Contamos con el Reglamento sobre Vigilancia y Control Sanitario de Alimentos y Bebidas, aprobado por Decreto Supremo N° 007-98-SA en cuya modificatoria aprobada con Decreto Supremo N.° 038-2014-SA, consigna que: "(...) Artículo 119 A. Certificación sanitaria de envases para alimentos y bebidas. A solicitud de parte, la DIGESA expedirá el certificado sanitario de envases para alimentos y bebidas por lote a certificar (.); no obstante, a la fecha no se ha implementado.	Peru
Singapore currently does not have any recycling requirements for food packaging.	Singapore
The Notification of the Ministry of Public Health (No. 435), B.E. 2565 (2022), issued by Virtue of the Food Act, B.E. 2522 (1979): Specification of Qualities or Standards of Food Packaging Made from Plastic, and the Thai Industrial Standard (TIS) 2948-2562: Paper for Food Contact provide recycling requirements for plastic and paper materials used in food packaging, respectively. These regulations consider several factors in determining the specific requirements. These factors include: <ul style="list-style-type: none"> • The type of raw materials used • The production process employed • The type of recycling method utilized • The qualifications or characteristic information of the recycled materials • Studies on the potential migration of chemicals from the packaging into the food • Safety and toxicological data of the chemicals used in the recycled materials • The intended food type to be contained within the recycled packaging 	Thailand
As covered earlier, there are specific legislative requirements for the marketing of plastic and recycled plastic intended to be brought into contact with food. The Food Standards Agency (FSA) and Food Standards Scotland (FSS) regularly review latest evidence in relation to plastics and other packaging materials to ensure the legislation is comprehensive and sufficiently protective of consumers.	United Kingdom

<p>The United States currently has no federal mandate for recycling requirements in food packaging. However, some states within the United States have issued or are in the process of considering minimum recycled content requirements for at least some food contact articles.</p>	<p>USA</p>
<p>What factors were considered in setting these requirements?</p>	
<p>The Brazilian regulatory framework for food contact materials is harmonized in MERCOSUR and organized by type of material (e.g., plastics, paper, board, glass). Recycling of paper and board, metals, and glass is permitted for food contact purposes under specific regulations. Concerning plastics, only recycled PET (polyethylene terephthalate) is currently permitted.</p> <p>The recycling requirements vary among different materials as follows:</p> <ul style="list-style-type: none"> • For PET, companies must submit a dossier containing the information specified in Resolution nº 20/2008, which includes results from a challenge test with surrogate contaminants to demonstrate the efficacy of the decontamination process, along with requirements for feedstock traceability, specific migration limits, and sensorial analysis of the final packaging. • Multilayer PET with the intermediate layer being recycled PET may be used in contact with non-alcoholic beverages following the requirements of Resolution 987/1998. • For paper and board, only materials originally intended for food contact can be recycled, with established residual limits for specific substances according to Resolution 88/2016, including limits for benzophenone, bisphenol A, and phthalates, and a requirement that primary aromatic amines and diisopropylnaphthalene must not be detected. • Recycled metal is allowed for food contact purposes if the product meets the requirements outlined in Resolution 854/2024 for metals in contact with food. • Glass used for food packaging may be recycled to manufacture new packaging according to Resolution 27/1996. 	<p>Brazil</p>
<ul style="list-style-type: none"> <input type="checkbox"/> The current limited supply /availability of food safe/grade feedstock <input type="checkbox"/> Recycling process/technologies readiness <input type="checkbox"/> The requirements focus mainly on pollution, but food safety is also considered 	<p>Canada</p>
<p>La ley 21638 que establece en el Título III la Regulación de las botellas plásticas, consideró si es plástico de un solo uso o reutilizable, la calidad de plástico, la cantidad de plástico reciclado y aspectos sobre la calidad del plástico. De igual forma existe preocupación en la industria por la escasa capacidad instalada que tiene Chile para realizar las certificaciones y análisis requeridos en la regulación propuesta por la autoridad sanitaria.</p>	<p>Chile</p>
<p>Based on the current work, in the next step, the relevant competent authorities in China will determine their risk management measures based on the risk assessment results and existing risk management models.</p>	<p>China</p>
<p>La información se encuentra en el artículo 5 “Especificaciones” del reglamento RTCR 480:2016: Resina RPET 5.1 La resina RPET grado alimentario será elaborada a partir de materia prima nacional o importada. 5.2 Los establecimientos que elaboran resina RPET grado alimentario, podrán utilizar materia prima del tipo mencionado en el numeral 4.8. Asimismo, deben procesarla por medio de una tecnología de reciclado físico y químico con alta eficiencia de descontaminación, que ha sido validada mediante un procedimiento de verificación normalizado (prueba de desafío ("challenge test") o equivalente). Dicho procedimiento debe estar avalado o reconocido por la institución competente del país de origen o procedencia de la tecnología, con el fin de obtener resina RPET del tipo descrito en el numeral 4.12.</p>	<p>Costa Rica</p>

<p>5.3 Con el objetivo de prevenir alguna contaminación del producto final, los establecimientos deben:</p> <p>5.3.1 Contar con un procedimiento de prevención de la contaminación, sobre la base de análisis de riesgos y puntos críticos de control.</p> <p>5.3.2 Contar con un área para el almacenamiento de la resina RPET de forma que se evite cualquier contaminación y adulteración. Se pueden aplicar condiciones de almacenamiento tales como: el uso de liner de polietileno sobre la resina en el caso de embalaje en sacas; en el caso de embalaje en silos, utilizar contenedores construidos con principios de diseño higiénicos (materiales inertes que no contaminen la resina y superficies lisas); y la resina no debe estar almacenada donde reciba directamente la luz solar.</p> <p>5.3.3 Contar con áreas de almacenamiento separadas física y funcionalmente para materias primas y productos terminados, para prevenir la contaminación cruzada.</p> <p>5.3.4 El producto debe estar debidamente identificado.</p> <p>5.3.5 El lugar de almacenamiento debe permanecer aseado y ordenado.</p> <p>5.3.6 Las operaciones de carga y descarga deben realizarse evitando la contaminación del producto.</p> <p>Envases RPET</p> <p>5.4 Para garantizar que los envases RPET son seguros para ser utilizados en la industria alimentaria y que no modifican el sabor y olor de los productos envasados, los niveles de sustancias ajenas en el envase RPET grado alimentario no deben exceder un límite de arrastre de 10 microgramos por kilogramo ($\mu\text{g}/\text{kg}$). Esto sería equivalente a una ingesta de 0,5 microgramos por kilogramo de alimento, basado en una dieta de 1500 gramos de alimento sólido y 1500 gramos de alimento líquido por persona al día.</p> <p>5.5 Para el caso de envases RPET grado alimentario, las sustancias ajenas individuales no deben exceder los niveles establecidos de conformidad con los siguientes parámetros:</p> <p>Tabla N°1: Límites máximos de sustancias ajenas para envases de RPET</p> <p>5.6 Se deben realizar ensayos en aquellos casos en que el envase de RPET presente niveles superiores al valor establecido en la Tabla 1. Para el RPET, los ensayos serán realizados durante 30 días a 40 grados Celsius para el llenado a temperatura ambiente. Para el llenado en caliente serán realizados durante 2 horas a 70 grados Celsius y luego durante 30 días a 40 grados Celsius. El nivel de sustancias ajenas debe ser menor a 10 microgramos por kilogramo.</p> <p>Los envases que cumplan con un valor inferior a 220 microgramos por kilogramo o que logren demostrar que las sustancias ajenas en las condiciones mencionadas arriba no exceden los 10 microgramos por kilogramo, demuestran que la tecnología empleada tiene la capacidad para cumplir los requisitos solicitados en el presente reglamento.</p>	
<p>Factors are taken into consideration when determining requirements:</p> <ol style="list-style-type: none"> 1- International license for the recycling process. 2- Requirements and restrictions for raw materials (Input) used in the recycling industry. 3- Ensuring the efficiency of the decontamination process. 4- Ensuring the safety of the final recycled product. 	Egypt
<p>The more sustainable use of food packaging that encompasses approximately 50% of all packaging waste, as well as the prevention of litter.</p>	EUMS
<p>The establishment of these requirements is based on a risk assessment conducted by the relevant competent authority, taking into account several factors, including the type of packaging materials, the type of food being packaged, and other factors.</p>	Indonesia
<p>Yes, Iran has recycling requirements for food packaging. These requirements vary depending upon the type of packaging material. For example, there are specific requirements for the recycling of plastic, metal, and paper packaging. In most cases, only the use of new packaging materials is allowed in national standards.</p>	Iran
<p>N/A</p>	New Zealand

Se tuvieron en cuenta la protección de la salud del consumidor y la inocuidad de los alimentos	Paraguay
As the certification system for mechanically recycled PET for food contact materials is implemented, there is a demand for acceptance of other plastics such as polypropylene(PP) and polyethylene(PE), so we are reviewing of the possibility of use. We are not yet under consideration of recycling other packaging type (e.g. metal, paper) for food contact materials.	Republic of Korea
The current legislation on food contact materials is risk-based and underpinned by latest scientific data.	United Kingdom
Normativas de otros países, y bibliografía.	Uruguay
As the United States has no federal mandates, we have no comment.	USA
What types of technologies are currently approved for use or are currently under development to ensure the safety of recycled material suitable for use in food packaging? Are you evaluating new, innovative recovery/recycling processes that could allow for the use of non-food contact materials to be used in food-contact packaging applications?	
<p>The use of rPET in beverage bottles and rHDPE in milk bottles is well established in Australia.</p> <p>Australia is developing advanced recycling capacity for hard-to-recycle plastics. This is expected to include the use of mixed post-consumer food and non-food grade soft plastics feedstocks in the manufacture of food-grade resin. Information on Australia's prospective advanced recycling projects are reported in the annual Australian Plastic Flows and Fates study published on the DCCEE website.</p> <p>The Australian Government's Recycling Modernisation Fund includes funding for a Plastic Technology Stream which aims to deliver national solutions for hard-to-recycle plastics. Eligible activities include advanced recycling projects.</p> <p>These initiatives complement work being undertaken in other international fora. Australia is actively participating in the development of an international treaty on plastic pollution under the auspices of the United Nations Development Programme. Separately, Australia, with other countries, is coordinating a Dialogue on Plastic Pollution under the World Trade Organization, which highlights several mechanisms to address plastic pollution through trade measures, such as improved food safety requirements, in particular for goods with recycled plastic content.</p>	Australia

<p>Currently it has been approved physical recycling. There is ongoing discussion regarding the possibility of expanding approval for other types of recycled plastics, depending on data availability regarding the safety of different technologies. Special consideration is being given to chemical recycling processes. The Brazilian Health Regulatory Agency (Anvisa) published recently guidance indicating that chemical recycling processes resulting in complete depolymerization, yielding monomers of high purity indistinguishable from starting materials, may be used without specific technology authorization, provided that the resulting substances comply with the regulations for monomers, set by Resolution 56/2012. Other cases require a specific safety assessment by the health regulatory agency.</p> <p>Resolution 56/2012: https://antigo.anvisa.gov.br/legislacao#/visualizar/28917</p>	Brazil
<p><input type="checkbox"/> A few mechanical and chemical recycling processes have been reviewed and deemed acceptable.</p> <p><input type="checkbox"/> Only chemical recycling processes have potential to transform non-food contact materials into food-contact materials for plastics.</p>	Canada
<p>La industria chilena nos ha informado que actualmente existe el reciclaje mecánico realizado en las plantas “Botella a Botella” bajo una trazabilidad adecuada, que ha permitido el desarrollo de plantas de reciclaje de botellas PET de manera adecuada (PETSTAR, por ejemplo). Es importante fomentar la investigación y desarrollo en tecnologías relativas al reciclaje químico de posiblemente otros tipos de envases, cuya naturaleza de procesamiento permite obtener los monómeros precursores de las resinas plásticas, y con ello se potencia la circularidad de los envases plásticos postconsumo; La industria alimentaria está en constante innovación para asegurar que los materiales empleados en el envasado de alimentos no se conviertan en desechos. A medida que siguen investigando el potencial de tecnologías avanzadas, el enfoque principal será asegurar que estas tecnologías generen materiales reciclados seguros para su aplicación en alimentos y bebidas.</p>	Chile
<p>The studies on physical recycling and semi-chemical recycling technologies for rPET have been carried out at the current step. In addition, evaluation on the recycling process of recycled aluminum and steel cans were undertaken.</p>	China
<p>En el ámbito de la industria alimentaria, el sector privado innova constantemente para garantizar que los materiales utilizados para el envase de alimentos no se conviertan en residuo. A medida que se continúa explorando el uso de tecnologías avanzadas, se centran en garantizar que estas tecnologías produzcan materiales reciclados inocuos para su uso en alimentos.</p> <p>Las tecnologías utilizadas deben estar certificadas por un ente certificados, en cumplimiento con las normas ISO respectivas. El artículo 7 “Verificación de la demostración de la conformidad del RTCR 480:2016 establece:</p> <p>7.1 Para efectos de la verificación del cumplimiento de las disposiciones contenidas en el presente reglamento, los establecimientos productores, importadores y comercializadores de los productos RPET cubiertos por este reglamento (resina, artículos precursores y envases), deberán contar con la certificación emitida por un organismo de evaluación de la conformidad debidamente reconocido o acreditado por el Ente Costarricense de Acreditación. Este documento deberá estar a disposición de las autoridades competentes para su corroboración, en el momento que sea solicitado por parte de las autoridades del Ministerio de Salud en el proceso de verificación y control en el mercado nacional. Para efectos de la importación de envases RPET que sean parte de un bien mayor (alimentos y bebidas envasados), el importador, distribuidor, mayorista y minorista de ese bien deberá demostrar que dichos envases cumplen con las disposiciones de este reglamento, en el momento que sea solicitado por parte de las autoridades del Ministerio de Salud en el proceso de verificación y control en el mercado nacional. Adicionalmente, el Ministerio de Salud podrá aplicar las medidas de verificación y control que estime convenientes, de conformidad con sus criterios y lo establecido en la Ley General de Salud.</p> <p>7.2 Cuando los envases (nacional, importado o que sea parte de un bien mayor) indiquen que han sido elaborados total o parcialmente con resina RPET, se deberá demostrar el cumplimiento de las disposiciones establecidas en el presente reglamento técnico.</p>	Costa Rica

<p>There are new technologies under development to ensure the safety of recycled material suitable for use in food packaging. The Egyptian regulation does not allow the use of non-food contact materials in food contact application.</p>	Egypt
<p>The only technologies approved for recycling plastic packaging is the mechanical recycling of PET and recycling of material originating from a fully closed and controlled trade loop that hasn't been provided to consumers. The Regulation on the recycling of plastic food contact materials allows for the development of novel technologies, and several such technologies are under development in the EU.</p> <p>Subject to restrictions, currently only PET Post Consumer Waste containing maximum 5 % of materials and articles that were used in contact with non-food materials or substances is permitted, as well as recycling of all plastics from a closed and controlled chain.</p>	EUMS
<p>Guatemala indica debido a que no se cuenta con alguna reglamentación, no se tiene ningún proceso o reglamento que establezca la autorización de la tecnología empleada.</p>	Guatemala
<p>As of now, India has not approved any technology of recycled material suitable for use in food packaging</p>	India
<p>Iran is exploring innovative recycling technologies to ensure food safety and broaden its use of recycled materials. Current approved technologies include washing, grinding, and melting for food packaging. The Iranian government is also exploring chemical and enzymatic recycling processes, which could use non-food contact materials for food-contact packaging applications. Chemical recycling breaks down recycled material into chemical components, while enzymatic recycling uses enzymes to break down the material into its components. Biodegradable polymers are also being considered for their potential use in food packaging.</p>	Iran
<p>N/A</p>	New Zealand
<p>Paraguay utiliza la tecnología Starlinger o Tecnología de descontaminación de productos plásticos para PET, aprobados por la UE y la FDA. En el país actualmente, nos se están investigando procesos de recuperación o reciclajes nuevos e innovadores.</p>	Paraguay
<p>No se tiene información.</p>	Peru
<p>The mechanical recycled material certification system is conducted through two-stage management system between the Ministry of Food and Drug Safety(MFDS) and the Ministry of Environment(ME). Currently, one company has been approved; and two companies are being reviewed. Non-food contact materials(e.g. offcut and scraps) can be used as raw materials if they are hygienically managed to prevent contamination.</p>	Republic of Korea
<p>Singapore does not have any technologies that are currently approved for use or are currently under development to ensure the safety of recycled material suitable for use in food packaging.</p>	Singapore
<p>Based on the Notification of the Ministry of Public Health (No. 435), Thailand currently approves the following recycling technologies for PET plastics used in food packaging:</p> <ul style="list-style-type: none"> • Primary recycling (pre-consumer scrap): This process involves reusing plastic parts (offcuts) or scraps generated within the factory during food packaging manufacturing. These materials have never come into contact with food and are considered the safest option. 	Thailand

<ul style="list-style-type: none"> • Secondary recycling (physical reprocessing or mechanical recycling): This method involves processing used food packaging through physical methods like grinding, washing, and potentially using quality-enhancing chemicals. The plastic is then melted and extruded into pellets for reuse in packaging production. However, the notification emphasizes that these processes must not alter the basic structure of the polymers, ensuring safety. • Tertiary recycling (chemical reprocessing): This process involves chemically breaking down used food packaging to regenerate them into a form of starting materials. 	
<p>There are currently no approvals or authorisations for recycled plastic operators written in the legislation. The FSA and FSS have established the Regulated Product Application Service which enables assessment of recycled plastic processes. The FSA and FSS are aware of the development of innovative technologies such as chemical recycling. It is considering whether a different assessment approach is necessary given that some of these technologies do not have a strong history of producing recycled plastic for food packaging.</p>	United Kingdom
Sin comentarios.	Uruguay
<p>When reviewing voluntary submissions on plastic recycling processes, US FDA considers each technology on a case-by-case basis. US FDA has issued favourable opinion letters on mechanical recycling processes for many polymer types and chemical recycling processes for PET and polylactic acid (PLA).</p> <p>US FDA accepts submissions for an opinion on any plastic recycling process. If the data submitted demonstrate that the recycled material produced by the subject recycling process is expected to be of a purity suitable for its intended use and the manufacturer can ensure that the recycled material complies with all applicable authorizations, then US FDA would have no objections to the subject recycling process and feedstock.</p> <p>As the US FDA does not review recycling processes for glass, metal, and paper, the United States does not have data concerning the recycling technologies or feedstocks of these materials.</p>	USA
For Observers:	
<p>The United States has also received feedback and information on the questions asked in the circular letter from regulated industry in the United States. A summary of those comments is provided below.</p>	USA
Do you currently have voluntary programs to facilitate the use of recycled material in food packaging?	
<p>Sí. En los últimos años, la industria de alimentos y bebidas ha colaborado para desarrollar programas voluntarios de material reciclado, como por ejemplo: una guía modelo para facilitar el uso de PET reciclado en el embalaje de botellas de plástico. Estas directrices modelo están destinadas a ser utilizadas por países de todo el mundo para fomentar las mejores prácticas y la armonización en lo que respecta al PET de calidad alimentaria. Los expertos en la materia de la industria pueden proporcionar más detalles sobre estas directrices modelo, que pueden ofrecer información valiosa sobre el trabajo futuro del Codex y sobre el uso de PET reciclado en envases de alimentos.</p> <p>Si bien reconocemos la importancia de otros materiales reciclados, como el papel, el vidrio y el metal, creemos que se debe dar prioridad al plástico reciclado. Esto permitirá al Codex avanzar significativamente en la orientación de las autoridades nacionales sobre las mejores prácticas para alcanzar los objetivos mundiales de gestión de residuos plásticos, así como los objetivos nacionales, garantizando la inocuidad de los materiales reciclados en contacto directo con alimentos y bebidas.</p>	Alianza Latinoamericana de Asociaciones de la Industria de Alimentos y Bebidas (ALAIAB)

<p>GFSI is generally aware that its members and industry stakeholders have validation programs for food contact materials and are making use of recycled contact materials.</p>	<p>Consumer Goods Forum</p>
<p>Yes. Over the last few years, ICBA members have collaborated to develop a model guideline to facilitate the use of recycled PET in the packaging of plastic bottles.¹ These model guidelines are intended for use by countries around the world to encourage best practices and harmonization as it relates to food-grade rPET. Today, several countries have leveraged these guidelines. ICBA subject matter experts would be glad to provide further details about these model guidelines, which may offer valuable insights into future Codex work concerning the use of recycled PET in food packaging.</p> <p>1 You can review the model guidelines at https://foodindustry.asia/hubfs/Toolkits/FIA%20Model%20Standards%20for%20Food-Grade%20Recycled%20PET.pdf</p>	<p>ICBA</p>
<p>Industry generally supports the flexibility provided by US FDA's recycling review program for plastics and the clear guidance on factors to be considered to determine the safety of recycled material for use in food packaging. While the US FDA's program is voluntary most packaging and end-product customers and suppliers require manufacturers of recycled material to demonstrate that their recycling processes have been reviewed by the US FDA and that their recycled materials are safe for use in food-contact applications. The NOLs issued by the US FDA fulfill these industry requirements through an extensive review process.</p> <p>Industry also appreciates that the US FDA program allows for innovation by evaluating and providing NOLs for advanced recycling technologies, such as chemical processes. As the US FDA's Recycling Guidance document¹ outlines general principles applicable to all recycling processes, it also provides industry with the flexibility necessary to update processes as technology advances and to utilize the principles outlined in the guidance to determine if these advanced recycling techniques generate recycled material that is safe for use in food packaging.</p> <p>Industry encourages that any Codex guidelines also allow for flexibility in the recycling processes and provide general principles applicable to all recycling processes rather than overly prescriptive requirements, not based on safety, that favor one type of recycling technology over another.</p> <p>In addition to utilizing the US FDA review program, some Industry members have also developed their own guidance to further ensure the suitability of recycled material for food-contact applications. These industry guidance documents provide information on supply chain communication, which helps manufacturers in determining how to establish the suitability of their recycled material and how to communicate this information to customers. Industry states that these documents encourage best practices and harmonization within the recycling industry.</p>	<p>USA</p>
<p>As of today WFP receives packaging with recycled materials for corrugated box (fluting mainly) and for tin cans.</p>	<p>World Food Programme</p>
<p>If yes, what criteria were considered in developing this program to ensure food safety?</p>	
<p>Por ejemplo, la industria de alimentos y bebidas ha realizado un trabajo extenso para el desarrollo de pautas modelo para facilitar el uso de material de resina PET reciclado en operaciones de embotellado y embalaje. Se han considerado diferentes criterios, y se puede brindar apoyo técnico en el desarrollo de futuras directrices del Codex en este espacio.</p>	<p>Alianza Latinoamericana de Asociaciones de la Industria de Alimentos y Bebidas (ALAIAB)</p>

<p>Over the course of the past few years, FIA members have collaborated to develop a model guideline to facilitate the use of recycled PET. These model guidelines are intended for use by countries as reference to encourage best practices and harmonisation in relation to food grade r-PET. Today, the use of recycled content for food packaging is primarily under 2 programmes. First is a method of allocating recycled content within products using mass balance accounting. This is an accepted practice when it is not feasible to directly measure recycled content; mass balance allocation typically requires certification from external auditors, using standards such as the International Sustainability and Carbon Certification (ISCC) standard. The second programme is that of mechanically recycled process which will have to accord to regulations of the particular market where recycled content is used. While the incorporation of recycled content in plastic packaging may/will become mandatory in some markets, the criteria may vary for each packaging type and it is understood that food safety can be considered at a greater extent when designing such targets. As many markets either reference the US FDA no objection letter for recycled materials or the EU's regulations, having a CODEX guideline on the use of recycling technology for production of recycled content will not only ensure a more harmonised approach but also reduce the ambiguity regarding the use of recycled content, in particular for markets which closely reference CODEX.</p>	Food Industry Asia
<p>Our industry has done extensive work while developing model guidelines to facilitate the use of recycled PET resin material in bottling and packaging operations. We have considered different criteria, and we would be glad to provide technical support in the development of future Codex guidelines in this space.</p>	ICBA
<p>Several members of the IDF have provided the following information relative to their national dairy sector:</p> <p>Australia:</p> <p>In addition to the National Packaging Targets referred by the Australian Government, the ANZPAC plastics pact has a target of 25% recycled content in plastic packaging.</p> <p>While it is clear, that there is a global trend towards voluntary and/or mandatory targets for inclusion of recycled materials in packaging, the approach to ensure recycled food contact material is safe is not consistent and often absent. There currently are some markets where use of recycled material in FCM is banned due to a lack of safety assurance.</p> <p>In response to this Dairy Australia is working with APCO and members of the Sustainable Packaging Working Group to develop a "Validation Framework for Use of Recycled HDPE In Food Grade Packaging". This Validation Framework will consider multiple aspects of the recycled material supply chain such as:</p> <ul style="list-style-type: none"> • Risk Assessment of the Value Stream <ul style="list-style-type: none"> o Assessing potential failure modes and an analysis of the impacts for each step in the value stream - from kerbside collection of mixed materials through to bottle manufacture and all steps in-between. • Source Stream Assessment <ul style="list-style-type: none"> o Assesses options to ensure that the origin of the recycled plastic can be identified and that collection systems absolutely ensure separation from hazardous waste. o Evaluate potential contamination risks associated with the source. Needs to consider initial concentration, decontamination efficiency, dilution factors, migration rates, consumption factors, and toxicological outcomes, as appropriate to the consumption of dairy products • Supplier Assessment <ul style="list-style-type: none"> o Comprehensive assessment of a recycling facility which ensures that their processing methods meet the stringent requirements for food grade materials and considers such aspects as: <ul style="list-style-type: none"> <input type="checkbox"/> Processing Methods <input type="checkbox"/> Good Manufacturing Practices <input type="checkbox"/> Vendor Management Systems <input type="checkbox"/> Quality Control Systems <input type="checkbox"/> Traceability Systems • Decontamination technology assessment 	IDF/FIL

- o Describe and evaluate the decontamination process which may be used to remove contaminants. Undergo challenge testing and contaminant screening to ensure the decontamination process is up to the required standard.
 - Certificate of Assurance/Vendor Assurance Program
- o The Certificate of Assurance (CoA) is an essential document that formalizes the compliance of recycled HDPE with established quality and safety standards.
 - Product Level Validation
- o Test the physical and chemical properties of the post-consumer recycled (PCR) HDPE to ensure they meet the required standards for food-grade packaging materials.
- o Conduct migration tests using food simulants to assess the potential transfer of contaminants from the recycled HDPE into food. Perform these tests under conditions that simulate actual use, including temperature and contact time.
 - Performance Qualification
- o Conduct performance qualification on site in live production environment with PCR HDPE

Canada

Currently, the unavailability of food-grade recycled material poses one of the most significant challenges for many dairy processors. This issue has been recognized by Environment and Climate Change Canada, leading to exemptions for dairy primary and secondary packaging under proposed regulations for recycled content. With the increased importance of recycled content in packaging, dairy processors are exploring options for incorporating recycled material into their secondary packaging.

As part of the dairy sector, we aim to integrate recycled material into our primary packaging once suitable material quality and availability become feasible under the EPR programs.

In general, there is a need for:

1. Taking a holistic approach and examining the entire life cycle of plastics.
2. Forming an industrial coalition for broader reach and sustainable outcomes – no single entity can address this challenge alone.
3. Advancing the development and deployment of suitable equipment and technological innovations to produce high-quality and substantial volumes of recycled material for future supply chains

United States

Packaging was identified as a material issue in the 2021 U.S. Dairy Materiality Assessment update and aligns with the US Dairy Innovation Center's Strategic Plan priority to accelerate the circular economy. In response to the identification of packaging as a material issue, the Packaging Team developed and launched new processor packaging metrics to establish a baseline to measure and demonstrate improvement and equip processors to address customer demands, consumer expectations, regulatory requirements and more.

COMMITMENT IN ACTION: The Northeast Dairy Business Innovation Center (NE-DBIC) promotes the production, marketing and distribution of dairy products through investment and project strategies that support innovation in dairy business. The Dairy Packaging Innovation Grant was presented to Agri-Mark by the NE-DBIC in 2022 to support climate-forward dairy packaging initiatives addressing the full life cycle of packaging. In partnership with Agri-Mark's primary flexible film supplier, three approaches for packaging consumer-size (8 oz.) cheese will be tested based on:

- Packaging Measurement including material type and utilization
- Packaging recyclability with intent to maximize recyclable packaging materials
- Conduct trials to integrate recyclable material into product packaging
- Reduce overall packaging material content

The industry is moving toward the use of high-density polyethylene and more recyclable content in packaging products, but this focus on recyclability often comes into conflict with practical considerations of existing packaging machinery, packaging efficiency and speed, maintaining

<p>product quality and shelf life when moving to more recyclable materials. Many dairy processors are moving toward more flexible packaging that requires fewer overall materials; however, some of these packaging materials are not easy to recycle. Additionally, multi-laminated packaging materials offer extended shelf life and lower overall packaging material cost, but create significant technical recycling challenges in attempting to delaminate the packaging into their source materials for use in recycling.</p>	
<p>The ANZPAC plastics pact has a target of 25% recycled content in plastic packaging.</p> <p>In Australia there are the APCO targets, which currently are voluntary. The criteria vary depending on packaging type. Some sector specific guidance (such as the dairy industry roadmap) calls for the need to ensure food safety but does not provide a mechanism or guidance to do so.</p> <p>In Europe, recycled plastics which come into direct contact with foods have strict requirements – it is mandatory to have the safety evaluation and approval of the recycling process (covers rPET recycling) by EFSA or member states and limitation of non-food contact plastics to <5% in feedstock. This regulation also requires a monitoring during at least 18 months and reporting contaminants detected after migration (in the input and output material) is also needed.</p> <p>ISDI has observed that there is a global trend towards voluntary and/or mandatory targets however the approach to ensure recycled food contact material is safe is not consistent and often absent. There currently are some markets where use of recycled material in FCM is banned due to a lack of safety assurance.</p>	<p>International Special Dietary Food Industries</p>
<p>Over half of SSAFE’s members use follow/use voluntary food safety programs/standards to facilitate the use of recycled material in packaging.</p> <p>Select list of programs:</p> <ul style="list-style-type: none"> • Internally developed programs. • Internal food safety program based on EFSA / FDA and external expert'/partners' expertise. • Internal program to separate out various packaging materials for recycling (paper versus plastics, etc.) in restaurants. • Self-monitoring on materials and NIAS testing program on finished articles, exploration on novel recycling technologies (mechanical & chemical). • Customer requirements where available/requested, otherwise use internally developed claims. • Packaging regulations. • Plastic materials and articles intended to come into contact with food (EU No 10/2011) Use of Recycled Plastics in Food; EU 2022R1616 on recycled plastic materials and articles intended to come into contact with foods (note: these criteria vary depending upon packaging type (e.g., plastic, metal, paper). 	<p>SSAFE</p>
<p>Industry generally supports the criteria listed in the US FDA’s safety evaluation of recycled plastics based on dietary exposure, stating that the program is based on reasonable, sound scientific review. Industry asks that any Codex guidance evaluate the safety of recycled plastics based on risk rather than hazard and utilize principles pertaining to safety that are generally applicable and do not favor certain recycling technologies over others. Industry also values that the US FDA’s program allows for the specificity of evaluating the safety and suitability of recycled plastics based on their intended use.</p> <p>Industry has developed several of their own guidelines for use of recycled plastics in food-contact applications. These guidelines were developed based on extensive work and provide best practices in jurisdictions where more specific regulations do not exist.</p>	<p>USA</p>
<p>WFP requests all food manufacturers to provide Certificate of Compliance for food grade materials referring to Regulation (EC) No. 1935/2004 or FDA 21 CFR for packaging in contact with the food (direct contact or indirect if no functional barrier existing).</p>	<p>World Food Programme</p>

Do these criteria vary depending upon packaging type (e.g., plastic, metal, paper)?	
Yes	Alianza Latinoamericana de Asociaciones de la Industria de Alimentos y Bebidas (ALAIAB)
Yes	ICBA
Yes, we believe that there will be some variation in the guidance required for different recycled material types.	IDF/FIL
Some commonly applied criteria for plastics include pre-qualification of recycling process efficiency with surrogate contaminants and migration simulation. Specific migration studies and non-targeted screening for non-intentionally added substances are done by suppliers/end-users. The safety evaluation is based on the quality of the feedstock (min. 95% FCM), the decontamination efficiency (considering an acceptable migration level for unknown contaminants and based on residual content in material and migration modelling) and the applications (% recycled materials, daily intake, target consumers). In some regions, recycled paper and metals have GMP requirements, but no pre-market evaluation processes have been formalized yet. Specific migration testing and NIAS screening applied to all recycled materials in Europe. The requirements are not as stringent if the recycled material is behind a functional barrier. For e.g. recycled paper is not permitted to be in direct contact with food due to the absence of guidance to assess the safety in the EU.	International Special Dietary Food Industries
Industry is particularly focused on recycled plastics as they currently do not see safety or trade issues with the use of recycled glass or metal in food packaging.	USA
WFP requests compliance against the main international regulations which are different depending on the type of material (e.g. Regulation EU 10/2011 for plastics).	World Food Programme
Have you experienced issues, or do you expect to experience issues pertaining to food safety or trade related to the use of recycled material in food packaging? (for example, inability to find sufficient feedstock of recycled material of suitable quality, inhibition of trade related to recycling mandates or incorporation of recycled material into food packaging.)	
Sí, dos problemas que las industrias han experimentado al intentar utilizar material reciclado son: (1) Garantizar un suministro adecuado. Este aspecto es clave y se debe considerar el desarrollo de las tecnologías locales para que sea rentable y poder obtener el volumen necesario del material reciclado que sea inocuo (2) Obtener la aprobación de las autoridades reguladoras nacionales para su uso. Con la demanda creciente de material reciclado, es importante garantizar que haya una oferta suficiente de adecuada calidad y que las autoridades reguladoras nacionales reconozcan las normas establecidas para el material en contacto con alimentos. En la medida en que exista un mosaico de regulaciones, o regulaciones establecidas que no se basen en las mejores prácticas internacionales, esto impide la capacidad de operar de la industria de alimentos tanto a nivel nacional como internacional. La armonización global de las normas es fundamental.	Alianza Latinoamericana de Asociaciones de la Industria de Alimentos y Bebidas (ALAIAB)
The current global regulatory landscape for food contact materials and particularly recycled materials is very mixed and uncertain. The differences in the interpretation of safety assessments and suitability can hinder international trade, limit innovation to improve sustainability and minimize environmental impact. There has been a continued rise in demand coupled with: (i) significant challenges of sourcing sufficient feedstock of high quality, suitable recycled feedstock at present and (ii) a degrading of the feedstock quality available with emerging contaminant issues or poorly characterized chemical composition.	Consumer Goods Forum

<p>The industry has experienced several quality issues with recycled FCM and has concerns about current practices regarding the production or use of certain feedstock that may vary between markets. Additionally, the lack of uniformity on the standards for the use of various recycling technologies could result in trade complexities.</p> <p>We are also a concerned that supply shortages of food safe recycled materials in markets that mandate its use could lead to trade barriers and/or compromised health.</p>	Food Industry Asia
<p>Yes, two issues that ICBA members have experienced when trying to use recycled PET in the packaging of plastic bottles are (1) ensuring adequate supply of recycled material and (2) obtaining national regulatory authorities' approval for its use. With an increasing demand for recycled PET, it is important to ensure that there is a sufficient supply of recycled material of suitable quality and that national regulatory authorities understand and or recognize established food contact regulatory standards. To the extent there is a patchwork of regulations, or regulations established that do not rely on international best practices, it impedes our ability to operate both within national territories and across geographic boundaries. Global harmonization of rules will help foster a stable business environment and ensure regulatory certainty.</p>	ICBA
<p>IDF members have reported that supply shortages of food safe recycled material in markets that mandate its use could lead to compliance challenges.</p>	IDF/FIL
<p>The industry has experienced several quality issues with recycled FCM and has concerns about a lack of appropriate controls to ensure safe and suitable feedstock that may vary between markets. Additionally, the lack of uniformity on the standards for the use of various recycling technologies could result in trade complexities. Supply shortages of food safe recycled material in markets that mandate its use could lead to compromised public health.</p>	International Special Dietary Food Industries
<p>Two thirds of SSAFE members have experienced issues. Main ones mentioned:</p> <ul style="list-style-type: none"> • There are and will be issues. The safety of recycled packaging materials remains the key concern that requires a harmonized approach. For example, this can be due to possible migration risk of MOAH/MOSH if it takes effect or other contaminants (e.g. religious considerations) if there is no functional barrier. A patchwork of state or regional requirements would hinder business and create supply shortages. How many times can a recycled FCM be reused/recycled to ensure the final packaging would still meet the quality, performance, food safety and regulatory requirements? Currently there is no guidance on mixed layered food packaging or current technology doesn't allow to separate the layers for recycling purposes. • Introduction of new chemicals used in recycling processes. • Ambiguity and lack of clear guidance on legal and safe limits of food contact recycled material. • Increased related pressure to include recycled materials vs actual feedstock available. And degradation of feedstock quality when sourced from jurisdictions where packaging sorting or associated rules are not well defined. 	SSAFE
<p>Industry has expressed concern regarding ensuring adequate supply of recycled material. With increasing demand for recycled material in food packaging applications, it is important to ensure that there is a sufficient supply of recycled material of suitable quality. Industry supports the development of increased recycling infrastructure to ensure enough quality feedstock is created to enable the use of recycled plastics in food packaging. Additionally, global harmonization of rules will help foster a stable business environment and ensure regulatory certainty, further encouraging regional recycling capability and better ensuring the safety of food packaging for all consumers. Industry requests guidelines on the use of recycled material that are reasonable, support innovation, and work to facilitate solutions rather than create new barriers to trade and hinder the availability of recycled material on the market.</p> <p>Industry is also interested in creating a model that focuses on regional circularity of recycled plastics. Codex Guidelines based on generally applicable principles would help harmonize the regulations for regional recyclers, ensuring that food packaging manufactured from regionally collected material is accepted globally.</p>	USA

<p>Yes, it is known in the packaging industry that the access to food grade recycled material is not the same worldwide. It is also subject to shortage due to high demand (especially polymers).</p> <p>If the incorporation of recycled content at the packaging manufacturer isn't done and monitored properly it can lead to weak and defective packaging, especially for rigid plastic containers. Additionally, adding recycled content in packaging reduces mechanical properties (e.g. tensile strength for plastic packaging).</p>	<p>World Food Programme</p>
<p>What types of technologies are currently approved for use or are currently under development to ensure the safety of recycled material suitable for use in food packaging? Are you evaluating new, innovative recovery/recycling processes that could allow for the use of non-food contact materials to be used in food-contact packaging applications?</p>	
<p>La industria alimentaria innova constantemente para garantizar que los materiales utilizados para el envase de alimentos no se conviertan en residuo. A medida que continuamos explorando el uso de tecnologías avanzadas, nos centramos principalmente en garantizar que estas tecnologías produzcan materiales reciclados inocuos para su uso en alimentos y bebidas.</p>	<p>Alianza Latinoamericana de Asociaciones de la Industria de Alimentos y Bebidas (ALAIAB)</p>
<p>Paper and board, metal and glass solutions are widely available. The main focus on new technologies has been on recycling of plastics such as polyethylene terephthalate (PET), Polystyrene (PS), polypropylene (PP) and high density polyethylene (HDPE). This is where a guidance which included mechanical and chemical recycling of plastics would be very welcome.</p>	<p>Consumer Goods Forum</p>
<p>The industry is constantly innovating in this space to ensure we are fit for the future, and expanding our capabilities and processes to ensure our plastic does not become waste. As we continue to explore the use of advancing technologies, we have a key focus on ensuring the technologies produce food safe recycled materials but are also mindful of the potential for unintended environmental trade-offs and how they weigh against gains in the recycling process.</p>	<p>Food Industry Asia</p>
<p>Our industry is constantly innovating in this space to ensure we are fit for the future, and expanding our capabilities and processes to ensure plastic does not become waste. As we continue to explore the use of advancing technologies, we have a key focus on ensuring the technologies produce food safe recycled materials but are also mindful of the potential for unintended environmental trade-offs.</p>	<p>ICBA</p>
<p>As the industry navigates the landscape of sustainable packaging, it is essential to recognise the significance of the role of recycling technologies in producing and delivering quality and safe recycled material for use in food packaging. We believe that some food manufactures lack the resource and/or capability to assess the risks associated with recycled materials and are therefore dependant on assurances from packaging suppliers or governments. Packaging suppliers will therefore need to ensure they have appropriate controls in place to validate and verify safety of food contact materials.</p>	<p>IDF/FIL</p>
<p>In the EU, mainly mechanic recycling of rPET has been approved, although chemical recycling of PET is in scoping.</p> <p>Other technologies looking at different materials application and feedstock are also in scoping (at qualification & pre-market approval stage) for e.g. rPS (polystyrene), rPP/HDPE (polypropylene, high density polyethylene) have been approved in the US.</p> <p>As the industry navigates the landscape of sustainable packaging, it is essential to recognise the significance of the role of recycling technologies in producing and delivering quality and safe recycled material for use in food packaging. Food manufactures lack the resource and/or capability to assess the risks associated with recycled materials and are therefore dependant on assurances from packaging suppliers. Packaging suppliers will therefore need to ensure they have appropriate controls in place to validate and verify safety of food contact materials. Some industry members currently would not consider mechanical recycling processes which allow the in-feed of non-food contact materials.</p>	<p>International Special Dietary Food Industries</p>

<p>Half of SSAFE's members are evaluating new innovative recycling/recovery processes:</p> <ul style="list-style-type: none"> • Chemical recycling (not broadly authorized yet) • "Enhanced recycling" • Use of polyesters 	<p>SSAFE</p>
<p>Information from industry demonstrates that recycling technologies are constantly developing and expanding. Industry believes that any guidance established should allow for innovation and not be overly prescriptive regarding recycling technology, provided adequate measures are in place to ensure safety. As such, industry asks that discussions be open to addressing all recycling technologies, both traditional (mechanical) and advanced (chemical), and provide the opportunity for innovation.</p> <p>Industry considers that advanced recycling techniques offer improvements on the collection, sorting, recycling, and quality of recycled plastics. Advanced recycling technologies, such as chemical recycling, offer the opportunity to use broader feedstocks, such as non-food contact materials, in their recycling processes.</p>	<p>USA</p>