

Webinar 2019-12-17

Best practices of tackling plastics recycling in a Circular Economy by using European Standards

Questions asked by Attendees	Answers from the Presenter
How does the EU support final recyclators of plastics? We are a leading producer of plastic transport pallets made 100% from recycled plastics. Despite large corporations are marketing their green approach, they have not hear on re-using waste for their daily operations. If there is an alternative for primary sources, recycled products should be favoritized.	We invite you to consult the website of DG Environment: https://ec.europa.eu/dgs/environment/
With the announcement of the European Green Deal, could you please explain how the JTC 10 standards contribute to the Circular Economy?	 The JTC 10 standards were developed in light of three goals: Extending product lifetime Ability to re-use components or recycle materials from products at end-of-life. Use of re-used components and/or recycled materials in products Thus the standards contribute to the Circular Economy by supporting the goals above.
Are there any other material efficiency aspects which have not been covered in the JTC 10 standards?	While repair/reuse and remanufacturing have been covered, one aspect which hasn't yet been tackled explicitly is "refurbishment". In addition, JTC 10 is currently analyzing the documents in light of the circular economy/green deal and looking into topics, which haven't been covered by the standardization request.
What is the European Commission doing about plastics pollution?	We invite you to consult the website of DG Environment: <u>https://ec.europa.eu/dgs/environment/</u>
Does CEN TC 249 develop standards in relation to single use of plastics directive?	Standards in relation to single use of plastics (SUP) is currently covered by <u>CEN/TC 261 on Packaging</u> .

Questions & Answers



Questions asked by Attendees	Answers from the Presenter
What is EU policy related to chemical recycling?	We invite you to consult the website of DG Environment: <u>https://ec.europa.eu/dgs/environment/</u>
There are so many different types of plastics? What about a type classification for better Recycling?	Different functional properties require different types of plastics, which are difficult to match by one polymer only.
How will be plastic recycled in future, which contains Titanium Dioxide?	TiO2 has been classified as a 'Carcinogen category 2' for its inhalation hazard, with classification code H351 (inhalation). The classification is to be applicable to liquids as well as powders of mixtures containing 1% or more of titanium dioxide in the form of or incorporated in particles with aerodynamic diameter \leq 10 µm. In plastics products containing TiO2 the substance is bound and therefore no powder, which means that an impact on recycling is unlikely.
To Mr Bosmans, why in the Commission work program for standardisation 2020 there's not an action on Waste Framework directive 2018/851 and on Packaging Directive 2019/852?	We invite you to consult the website of DG Environment: <u>https://ec.europa.eu/dgs/environment/</u>
How to achieve food contact compliance for recycled plastics? This is needed for most of packaging.	This has been implemented for bottles made from PET, which is packaging too. A similar approval process should be applicable for other packaging too.
European contribution to marine littering is about 2 %. What are EU actions to contribute to global issue i.e. lack of waste management in developing countries?	We invite you to consult the website of DG Environment: <u>https://ec.europa.eu/dgs/environment/</u>
Plastics mostly come from oil. What is possible in returning plastics to oil as fuel as long as we continue to use oil as an energy source?	Why to use as fuel and not as feedstock for new plastic production via chemical recycling? This could close the carbon loop further in addition to mechanical recycling for those waste streams, which currently are recovered energetically.
How much time is needed to prepare a single standard from the very beginning regarding the plastic strategy and do you also mean to prepare standards for	Several steps are needed to get a standard: (1) Proposal to develop an EN; (2) Acceptance of the proposal; (3) Drafting;



Questions asked by Attendees	Answers from the Presenter
product biodegradability?	 (4) Enquiry (commenting); (5) Adoption by weighted Formal Vote; (6) Publication of the European Standard. Usually this process lasts 3 years. <u>CEN/TC 249 "Plastics"</u> has been active in the sector of product biodegradability since 1999. 17 standards have already been published and still active.
What's with toys consisting of plastics? How will they be recycled? Is there a special strategy?	At present there is no separate collection of toys for recycling implemented. They are currently disposed mainly with household waste, which is goes to energy recovery.
Any standardization on requirements for different levels for recyclats?	Standards for defining minimum qualities of recyclates for different applications are under evaluation.
Contrary to industry goals is to reduce consumption. However, why not promote reduce consumption, even through penalization/cost? This might help in the improvement of collecting used plastics.	Reducing consumption is already on top of the waste hierarchy.
Is there any cooperation or coordinating actions between the work that has been carried out by consultant EUNOMIA and the work of CEN/CENELEC within the CPA or outside as well, regarding recycling content or design for recycling etc? It is well known that the EC is cooperating with EUNOMIA regarding the mentioned topics above.	CEN/CENELEC has signed the CPA as well and is contributing accordingly.
To Mr Mantel, are the published standards of CEN/TC 249 mentioned in the EU law, giving presumption of conformity to EU requirements?	No, the standards giving presumption of conformity to the EU requirements have been published by <u>CEN/TC</u> <u>261 - Packaging.</u>
Could you send via email the standards mentioned related to plastic recycling?	Unfortunately, we cannot send standards by email. They can be purchased from the CEN and CENELEC members List with CEN members: <u>https://standards.cen.eu/dyn/www/f?p=CENWEB</u> <u>:5:::NO:::</u> List of CENELEC members: <u>https://www.cenelec.eu/dyn/www/f?p=104:5</u>



Questions asked by Attendees	Answers from the Presenter
Would a biodegradable plastic, which at the end of life is disposed for compostability, fit the circular economy frame?	Since 1994, the Directive on Packaging and packaging waste (94/62/EC) stipulates that packaging waste can be recovered in the form of composting. Such packaging must be "Biodegradable" as defined by the Essential Requirements of said Directive. Therefore, biodegradable plastic packaging that complies with the essential requirements can be recycled by means of said form or recycling, which includes "organic recycling". Framework Waste Directive 2008/98/EC defines "recycling': any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations.
Is it possible to repeat the number of the EN standard about characterization of plastic waste?	We invite you to consult the website of DG Environment: <u>https://ec.europa.eu/dgs/environment/</u>
It seems to me the major problem is in the chain of use of plastics. If the manufacturer were to be responsible for collecting the used material back, success will improve through awareness on the users.	This is defined in the EPR scheme.
How is the content of regulated dangerous substances being controlled in the characterization of plastic wastes?	Products made from plastics waste need to comply with <u>REACH</u> in the same way as from virgin material.
Are you dealing with composite plastics constructed of different plastic materials like multi-layer sheets/foils could these materials be recycled?	In terms of JTC 10 standard on recyclability of energy- related products, composite plastics/different plastic materials are implicitly covered in the assessment.
In your view. How should the work on plastics be aligned to existing standardization and regulatory work? For construction products the Construction Products Regulation (CPR) is key producing harmonized standards (hENs)	One way to align existing standardisation and regulatory work is via a standardization request of the European Commission. This allows the harmonisation of a standard to EU legislation.



Questions asked by Attendees	Answers from the Presenter
for the industry.	
Are there plastic materials that could be recycled indefinitely? Or some properties are lost/changed during recycling?	No, plastics cannot be recycled indefinitely.
How many companies make PP recycle available that complies with EN15345 for example? If I google that standard no. there isn't a single company advertising that they can make compliant recycled PP available. I would suggest that means penetration of the standards into the market is very low to non-existent. Certainly no recycle company that has contacted me has ever been aware these standards exist.	EN 15345 Recycled Plastics - Characterization of Polypropylene (PP) recyclates is the European standard that defines a method of specifying delivery conditions for Polypropylene (PP) recyclates. It gives the most important characteristics and associated test methods for assessing a single batch of PP recyclates intended for use in the production of semi- finished/finished products. EN 15345 is intended to support parties involved in the use of recycled PP to agree on specifications for specific and general applications.
Single used plastics directive is in contradiction with recyclability and environmental aspects. You can't find any better material for recyclability than plastics so it does not make any sense to replace it with worse materials when it comes to recyclability and total environmental impact. How do you comment? Banning a material is not the answer to marine littering.	We invite you to consult the website of DG Environment: <u>https://ec.europa.eu/dgs/environment/</u>
What is the definition of energy related products?	2009/125/EC 'Energy-related product', (a 'product'), means any good that has an impact on energy consumption during use which is placed on the market and/or put into service, and includes parts intended to be incorporated into energy-related products covered by this Directive which are placed on the market and/or put into service as individual parts for end-users and of which the environmental performance can be assessed independently.
 Is there a distinction made between mechanical and chemical recycling? From a standardization point of view 	 <u>CEN-CLC/JTC 10 standards</u> currently do not make an explicit distinction of mechanical/chemical recycling. However, this is something that will be discussed during the revision of the relevant standards.



Questions asked by Attendees	Answers from the Presenter
what about the quality requirements of the mechanically recycled products? (most of the resulted products have a lower quality than virgin materials)	JTC 10 standards do not cover the quality of materials.
Unlike compostability, there is no relevant certification for true biodegradability. Is there any development undergoing for a dedicated standard for biodegradability in all environments?	Composting is a process where biodegradable packaging (including plastics) can be recovered as compost. Standards and certifications schemes are applied to packaging that can be recovered by organic recycling ("OK compost" by TUEV Austria, "Kompostierbart" by DINCertco; "Compostabile CIC" by CIC etc.). Biodegradability is instrumental to get such recovery since only truly biodegradable materials and packaging are suitable for composting. Packaging and products are not expected to be littered. It would be weird to develop a testing scheme to provide a "certification" to products for littering ("OK littering"?), as if it were a reasonable behaviour. It is not foreseen to certify packaging as suitable for littering.
Will there be notes circulated after the webinar listing all of the different standards, Technical Committees, and Working Groups mentioned by the panellists?	There will be no notes circulated but the recorded webinar is available on the CEN-CENELEC website: <u>https://www.cencenelec.eu/news/videos/Pages/VIDEO-</u> 2019-035.aspx
Is there any standard or draft available about recyclability terminology on plastic packaging that defines when a packaging could be considered recyclable or not?	To Rainer Mantel's knowledge not so far.
Where can I find out more information about plastics and circular economy?	We invite you to consult the website of DG Environment: <u>https://ec.europa.eu/dgs/environment/</u>
How can we check the percentage of recycled material in a batch or part?	The content of recyclates in products cannot be measured.
There is also a question of safety and the use of SVHC. How can we keep track of the substances present in products and recyclates?	Please see <u>EN 15343:2007 Plastics - Recycled Plastics -</u> <u>Plastics recycling traceability and assessment of</u> <u>conformity and recycled content</u>
Collection and separation are	At present not but this is under evaluation.



Questions asked by Attendees	Answers from the Presenter
fundamental to produce high quality recycled plastics. Are there standards for these 2 steps?	
If we try to define quality for recyclates, how would we go about this? Do we first choose a specific set of products to do this for or can it be done all at once for many types of plastic products?	Different applications require different qualities for different polymers.
Do you see a benefit in standardising certain plastic qualities?	Yes, if it is with respect to certain applications.
What about standards for recycled plastics for food-contact applications?	We invite you to consult the website of DG Environment: <u>https://ec.europa.eu/dgs/environment/</u>
Could you please elaborate on the next steps in CEN-CENELEC regarding chemical recycling?	This is under evaluation.
Europe is asking for reusable or recyclable packaging by 2030, but which % of recyclability will be the minimum one? Because the result of the harmonised standard EN 13430 is a percentage, and till now I think is the only way to demonstrate this recyclability.	We invite you to consult the website of DG Environment: <u>https://ec.europa.eu/dgs/environment/</u>
How do you consider to tackle legacy substances in long-duration-use products in relation to setting recycling targets/quota?	We invite you to consult the website of DG Environment: <u>https://ec.europa.eu/dgs/environment/</u>
In the logic of prevention of the use of virgin resource, it is required to recognise the reuse of material as much as possible, e.g. from industrial scrap. What is the point of the view on this matter?	We invite you to consult the website of DG Environment: <u>https://ec.europa.eu/dgs/environment/</u>
For FCM, what is the role of CEN?	We invite you to consult the website of DG Environment: <u>https://ec.europa.eu/dgs/environment/</u>



Questions asked by Attendees	Answers from the Presenter
Do current standards sufficiently ensure material health of recyclate - phasing out legacy chemicals? Is increased uptake of recyclate possible when waste plastics may contain substances of concern?	As long as this in line with <u>REACH</u> this should be possible.
In order to organize a level playing field there is probably a need to reconsider the actual definition(s) of recyclate content since this is now merely defined form the point of view of the recyclers. Do we need to reconsider the internal scrap content in view of the waste directive and the material efficiency policy regardless of what stage of production has been looked at (plastics producers, converters, recyclers)?	We invite you to consult the website of DG Environment: <u>https://ec.europa.eu/dgs/environment/</u>
Can you develop a bit more about the material efficiency initiative on washing machines?	CLC/TC 59X (Performance of household and similar electrical appliances) set up a new working group (WG23) which will cover material efficiency aspects. The WG will answer a standardization request by the European Commission on material efficiency aspects (reparability).
Can we please have a summary of this important discussion, incl. the relevant standards?	There will be no summary circulated but the recorded webinar is available on the CEN-CENELEC website: <u>https://www.cencenelec.eu/news/videos/Pages/VIDEO-</u> 2019-035.aspx
Does the commission/CEN foresee different qualities of recyclates of a specific polymer? Products have specific material requirements. Are e.g. PP recyclates from different PP types suitable for reuse?	We invite you to consult the website of DG Environment: <u>https://ec.europa.eu/dgs/environment/</u>
Do you consider standards to reduce the number of plastic types in order to enhance the recyclability of plastics (as recommended by the Danish Design guide for plastic packaging which recommend only three types of plastic)	At present not.



Questions asked by Attendees	Answers from the Presenter
Harmonized standards: in what time frame do you think this will be possible considering the actual problems between CEN/CENELEC and the European Commission on the publication of harmonised standards (hENs)?	No date can be specified for the time being.
Please correct: standards of TC249 are not by definition harmonized! So far all standards are voluntary.	This should be correct, as so far no standards have been developed initiated by mandates from EU (?).
In which TC/regulations will mass balance definition and requirements for chemical recycling be defined?	We invite you to consult the website of DG Environment: <u>https://ec.europa.eu/dgs/environment/</u>
Where would you place the border of quality for mechanical and chemical recycling? Do these standards help with this?	We invite you to consult the website of DG Environment: <u>https://ec.europa.eu/dgs/environment/</u>
Are you tackling recyclability vs. fire safety or softeners? Circular = less safe. If we want increase recycling we have to decrease safety requirements on products and materials. Do you agree?	We invite you to consult the website of DG Environment: <u>https://ec.europa.eu/dgs/environment/</u>
Very interesting overview, but it would help to have all this captured in a summary document listing all the relevant standards and what they are about. Difficulty with standards is that they are (or appear to) developed piece by piece.	There will be no report circulated but the recorded webinar is available on the CEN-CENELEC website: <u>https://www.cencenelec.eu/news/videos/Pages/VIDEO-</u> 2019-035.aspx
Is there already a standardization project planned on "Chemical recycling"?	No, not in <u>CEN/TC 249</u> (Plastics)
Are there any solution approaches for the traceability of origin, recycling quotas and how often the materials had been recycled?	We invite you to consult the website of DG Environment: <u>https://ec.europa.eu/dgs/environment/</u>
What is the commission's view on the role of standards in an initial step of the	We invite you to consult the website of DG Environment:



Questions asked by Attendees	Answers from the Presenter
recycle chain: the quality of recycled plastic waste? Currently quality of this does differ largely, which does hamper uptake quality of recycling.	https://ec.europa.eu/dgs/environment/
Is there any standard regarding metrics	We invite you to consult the website of DG
and KPI to measure product circularity?	Environment:
	https://ec.europa.eu/dgs/environment/
How can standardization improve the	We invite you to consult the website of DG
construction products recycling? Are	Environment:
there any examples?	https://ec.europa.eu/dgs/environment/