









Topic:	 Overview of assessment process, with a description of the different steps and tools.
Goals:	To establish a common understanding on how to proceed when assessing new technologies within the European PET Bottle Platform between Petcore Europe, UNESDA and Natural Mineral Waters Europe
Date:	➤ March 2024

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Organization and goals of the Platform

Goals

The main objective of the European PET Bottle Platform is to evaluate technologies / products and to allow new PET bottle innovations, while optimizing the economic and environmental consequences for the European PET recycling industry.

It will do so by promoting the recyclability of PET bottles on the market by:

- Establishing European harmonized guidelines for PET bottles recyclability and that will beaccepted across the whole value chain.
- Encouraging industry to test new PET bottle concepts and/or materials before market launch according to the harmonized guidelines.
- Giving advice and recommendations to the different stakeholders.
- Sharing information and knowledge across the whole value chain.

Supporting members





Principles

The roles of the stakeholders in the platform are:

- UNESDA and NMWE: They reflect the voice of the beverage and waters. Thus. They represent the end users in the platform (consumers and customers)
- > Petcore Europe: represents the full PET value chain from resin production up to bottle filling



The Platform is comprised of a Steering Board the Technical Committee and the General Secretary

- The Steering Board (SB) is established to;
 - > Define priorities of the Platform (strategic level);
 - Allocate resources;
 - > Review and validate the recommendations of the Technical Committee.
 - > Secures that there is not any conflict of interest related to the validations' evaluation
- The Steering Board is composed one representative of each member organization, plus one as a backup. The representation seats in the SB are:
 - Petcore Europe, 2 representatives
 - UNESDA 1 representative
 - > NMWE, 1 representative

The members of the SB are assigned by the respective association

Each delegation has one vote (3 in total)

Each delegation must have one position in the discussions



The backup person will be invited and may participate in the SB meetings, following the rules that has been mentioned above

- The SB may decide to invite a new organization to participate to EPBP for enhancing the area of EPBP focus or for other reasons driven by the market changes.
- SB may ask an EPBP member to step out in case that they cannot comply with the modus operandi principles
 - > The decision is taken by unanimous voting in the absence of the involved member
- The representative can give mandate to another participant from the same member organization, as a backup. Each representative is responsible for keeping his/her back up, up to speed for the various developments and activities. The backup representative may participate in the SB meetings.
- In SB meetings the position of each organization is expressed by only one representative
- The Steering Board is Chaired or Co-Chaired by representatives elected by the body by majority voting
- The Steering Board will meet every 2 months
- If a member of the Steering Board or her/his back up cannot attend a decision-making meeting, the Board will allow decisions to be supported by other means (for example email, fax or teleconference). All requests for a decision must be returned within twenty days of receipt or will have been deemed to be accepted.
- Decisions in the Steering Board are taken unanimously.
- There must be representation of all organizations in the SB meetings. In case that one of the three organizations is not represented in the SB meeting, the meeting may take place, but decision cannot be made.-
- The minutes from the Steering Board meetings will be sent to the member organizations and submitted for approval within 20 days after the meeting by approval of the minutes or at the next meeting whatever comes first.
- The **Technical Committee (TC)** is established to:
 - Assess new PET bottles using the most recent test results and technical assessments.
 - Establish and publish harmonized European guidelines for PET bottle recyclability and testing protocols
 - Issue a technical opinion following a review of and summarizing the test results, conclusions and recommendations (incl. communication), to be valid by the Steering Board.
 - Ensure the feedback to the Applicant and the communication to the member organizations and/or other stakeholders (for details and examples see tool 9).
- The Technical Committee is composed of:
 - a minimum of one and a maximum of three designated representatives for UNESDA and NMWE
 - > Up to 6 designated representatives from Petcore Europe

If a vacancy occurs due to resignation or for any other reason, the member organization may nominate a new representative. The nomination must be approved by the Steering Board.

- Each member of the Technical Committee is bound with an NDA that is signed between the member and EBPB designated signatories
- The Technical Committee meetings are closed sessions. The Technical Committee can however invite other participants, if required for the assessment process.
- The Technical Committee meets on a monthly basis
- The Technical Committee will always try to arrive at a consensus for all decisions. If no



consensus is reached, the case is sent to the Steering Board for final discussion and decision. Decisions must be aligned at the level of organization member. In case of voting each organization must be aligned in one position. The voting follows the rules that were mentioned in the SB section.

• The minutes from the Technical Committee meetings will be sent to the member organizations and submitted for approval within 20 days after the meeting by approval of the minutes or at the next meeting whatever comes first.

• The **General Secretary (GS)** is responsible for:

- Setting up and coordinate the TC meetings
- Keeping and circulating the minutes of the meetings
- Maintaining the site updated and uploads all available technical information in the discussion forum
- Being the connection link between the applicant and the TC
- Being the connection link between the SB and TC
- Collecting and preparing all needed documentation for the TC to review and decide
- Setting up the SB meetings
- Coordinate with the Chair(s) the SB meetings
- Keeping and circulating the minutes of the meetings
- Communicates with the applicants any request from the SB or TC and the final decisions
- The General Secretary (GS) is nominated by one of the 3 EPBP entities.
 - The GS can be an employee in one of the organizations or have a consultancy contract with one of the organizations
- The nomination salary or consultancy fees and travelling expenses is approved by the SB



Overview tools

The aim of these tools is to simplify and to accelerate the assessment process. The process will be transparent and easy to use.

WH	IAT	DETAILS
2.	Application form	Details on bottle innovation, material involved, marketpenetration has to filled by Applicant
3. par	Agreement with Applicant (third 'ty)	Each assessment process starts with an agreement, to be signed by Applicant and all members of the Platform.
4.	Test design & report	Each request leads to tests based on the standard test procedures depending on the specificpackaging design (material, closure, label, etc.).Benchmark are B2B properties.
		Test results are described in a test report, which includes an Executive Summary, details of equipment, test conditions, test results and comments.
5.	Evaluation report	Evaluation report includes a description of the test results, recommendations and comments, to be evaluated by the Steering Board. It may also include a proposal for communication.
6.	Feedback report	Feedback report is sent to the Applicant with overview, decision, explanation of impact in value chain, recommendation and next steps.

Tool 2: Application form

EPBP Technology/Product Approval: Application form

Please fill in the following fields according to your best knowledge.

Date: Date of the application form.

Contact details

Company

Name:	Company Name
Address:	Company Address
Website:	Company Website

Contact person

First Name:	Contact First Name		
Last Name	Contact Last Name		
Address:	Contact Adress		
Phone:	Contact Phone	Email:	Contact email

General information

Type of package:	Type of Innovation (resin, additive, label, adhesive etc.)
Commercial name:	Commercial Name of the Product/Technology
Patent number(s):	Patent associated
Supplier(s):	Eventual Supplier
Product description:	Product description
Estimated market:	Select the estimated market of the innovation
Commercialization:	Choose an item.
Market sector	Other. Please type

Research partner (if required):

Company name:

Company Name

Contact person:	Contact Person
Phone number:	Phone Number
Email:	Contact email

Detailed information (category):

Innovation category:	Innovation Category		
Technology type:	Choose an item.		
Food contact approved	Choose an item.		
Chemical formula or mater	ial name, weight, and total percentage of eacl	n componen	t:
Main body (please provide details of the sample structure: any resin layers, coatings, barriers, tie layers, laminated adhesives, masterbatch, mineral fillers, printing inks, etc. as well as their specific concentrations by weight in the sample structure)	Body Structure description XXX Sub-component 1 description Sub-component 2 description Sub-component 3 description Total	XX,xx g XX,xx g XX,xx g XX,xx g	YY,yy % YY,yy % YY,yy %
In case of laminating adhesive, please provide the following information:	aromatic / aliphatic solvent-based / solvent-free g/m2 and % per weight of adhesive		
In case of printing inks, please provide the following information:	Resin: Solvent: Pigment: Binder: Filling material: Ink assistant: g/m2 and % per weight of Ink:		
Closure system (please provide details of the closure design – polymers, additives/fillers, etc. and its weight)	Closure design description Sub-component 1 Sub-component 2 Total (% on the total sample weight)	XX,xx g XX,xx g XX,xx g	YY,yy % YY,yy % YY,yy %
Label/Sleeve: (please provide any information relating to the structure, adhesive, printing inks)	Label/Sleeve structure XXX Adhesive (type and weight) Printing inks (type and weight) Total (% on the total sample weight)	XX,xx g XX,xx g XX,xx g	YY,yy % YY,yy % YY,yy %

Control material selected (<i>if known</i>) and TDS (<i>if available</i>)	
Available recycling studies:	
Documentation:	

Comments

Exclusions from the Technical Committee

The applicant may ask the exclusion of any member-Company representative from the Technical Team for securing that confidential information will not be disclosed to Competitors. Company representatives that is requested to be excluded:

-
-
-

<u>Annexes</u>

Please find herewith the following annexes.

- Non-Disclosure Agreement signed
- Available recycling study (optional)
- Documentations (optional)

First Name:	Applicant First Name
Last Name:	Applicant Last Name
Date:	Date of signature
Signature of an authorized representative and Company stamp:	

The European PET Bottle Platform EPBP is a voluntary industry initiative that provides PET bottle design guidelines for recycling, evaluates PET bottle packaging solutions and technologies and facilitates understanding of the effects of new PET bottle innovations on recycling processes. The EPBP initiative fully supports the economic and environmental sustainability of the European PET value chain.

The European PET Bottle Platform EPBP is committed to use all provided information with confidentiality.

Prior to application Applicant is kindly requested to visit EPBP site and understand the assessment procedures that are used by EPBP.

To whom to send the application

Please send the application to:

Argiris Dabanlis PETCORE Europe Technical Manager

Email: argiris.dabanlis@petccore-europe.org

Tool 3: Agreement with Applicant (third party)

Non-Disclosure Agreement

This Agreement is made on 20/04/2020 between

BETWEEN **NMWE**, Rue de l'Association 32, 1000 Brussels, Belgium. **Petcore Europe**, Avenue de Broqueville 12, 1150 Brussels Belgium **UNESDA**, Rue du Trône 14-16, 1000 Brussels, Belgium

All five of the above-mentioned entities, together and individually, hereinafter referred to as "EPBP".

AND To be filled in by Applicant

Hereinafter referred to as "APPLICANT".

WHEREAS

- A. EPBP is a is a voluntary initiative, grouping technical experts in the field of PET production, design and recycling; together, they aim to provide an objective evaluation of new technologies and an independent assessment of their impact on PET recycling processes across Europe.
- B. EPBP's main objective is to allow new innovations, and to support the introduction of new packaging, while optimizing the economic and environmental consequences for the European PET recycling industry. It will do so by:
 - Setting up test procedures to evaluate the influence of bottle innovations such as barrier materials, resin formulations, additives and non-PET components in or on PET bottles on R-PET recycling processes.
 - Assessing key technologies and total packaging concepts;
 - Giving independent advices and recommendations to the different stakeholders.
- C. EPBP has issued the "Assessment Process for Applicant version 14.07.2010" outlining the terms and conditions of an EPBP evaluation of new technologies and bottle innovations. The document also explains the steps and tools used for the completion of the test procedures and the evaluation of the test results.
- D. APPLICANT has requested EPBP to evaluate a bottle innovation project entitled project name to be filled in by applicant (hereinafter referred to as PROJECT) in relation to its influence on the quality of PET recycling processes and its re-use as secondary raw material in applications such as bottles, film, sheet, strapping and fibre.

E. EPBP will obtain from APPLICANT certain non-public confidential technical, scientific and commercial information, directly or indirectly, in writing or orally, including but not limited to test reports, processes, innovations, know-how, specifications, designs, samples, photographs, flow charts, test results and data solely for the purposes of the PROJECT.

Now in consideration of the disclosure by the APPLICANT of confidential information, the parties hereby agree that:

- 1. All information obtained by EPBP from APPLICANT shall be regarded and treated as confidential.
- 2. EPBP agrees to use the APPLICANTS's confidential information solely for the purposes of the PROJECT.
- 3. EPBP undertakes not to disclose the APPLICANT's confidential information to any third party without the prior written consent of the APPLICANT.
- 4. EPBP and APPLICANT agree that any information sharing will be carried out only to the extent permitted by laws and more precisely by European Union rules and regulations on free competition.
- 5. 'Confidential information' shall mean any and all information exchanged between EPBP and the APPLICANT for the purposes of the PROJECT, except for information which it can be shown by the receiving party, was:
 - (i) already is or hereafter becomes part of the public domain by publication or otherwise than through the breach of this agreement by EPBP, or
 - (ii) already in the possession of EPBP prior to the date of receipt of the information pursuant to this agreement, or
 - (iii) lawfully acquired by EPBP after the time of disclosure hereunder from a third party with full rights of disclosure.
- 6. The present agreement and any dispute, controversy, proceedings or claim of whatever nature arising out of or in any way relating to this Agreement, shall be governed and construed in accordance with the laws of Belgium, excluding its rules for choice of law.

All disputes relating to or arising out of or in connection with this Agreement shall be finally settled by arbitration in accordance with the Rules of CEPANI, the Belgian Center for Arbitration and Mediation. The arbitration shall be held in the offices of CEPANI in Brussels, Belgium and the English language shall be used in the proceedings. The arbitration decision shall be final and binding on the Parties and enforceable in any court of competent jurisdiction.

7. Should any clause or provision of this agreement prove to be or become null and void, invalid or unenforceable, this agreement shall continue to be valid as to its other provisions.

In such case the parties shall endeavour to replace the clause or provision in question by another one that approaches to the best extent possible the meaning and the effects of the clause or provision deemed void, invalid or unenforceable.

The present agreement shall take effect on the date of the last signature below. The parties shall be bound by the obligations and undertakings contained in this agreement as from disclosure and for a period of 5 (five) years from the completion of the project, unless terminated by the mutual written consent of the parties hereto.

Signed electronically by the duly authorised representatives of the parties.

For Name of Applicant Name : Date :

Signature :

For NMWE

Name : Date : Signature :

For UNESDA

Name : Date : Signature :

For Petcore Europe

Name : Date : Signature :

Tool 4: <u>Test design & report</u>

Quick tests

Laboratory analyses on the recyclability of new PET bottles in the existing recycling schemes are relatively expensive and usually have a time delay between sampling and getting useable results of several months. Besides, assessing the test results is a difficult task that requires training and experience. This is often seen as an inconvenience.

For these reasons, reliable, rapid and low-cost techniques for the quick assessment are developed to provide information necessary for the optimization of further tests.

Several quick tests (QT) are available, including (but not limited to):

- QT 500: Oven test
- QT 502: Sink Float separation test
- QT 504: Glue separation test
- QT 507: Label Bleeding March 2017
- QT 508: Labels and adhesives testing procedure June 22

All quick tests include a complete explanation of the scope, techniques, equipment and test conditions, as well as a "Summary Interpretation" explaining how to use the test results.

Quick tests can either be executed at the facility of the Applicant or by an independent test laboratory. The Applicant is asked to fully document all test methods, test conditions and measurements and to provide complementary observations for the evaluation of the test results by the Platform.

Evaluation of quick tests (see also tool 7)

The quick test is only accepted as a final test under the following conditions:

- The test is executed under the conditions described in the quick-test protocol by an independent test laboratory with no affiliation to the Applicant. The test laboratory has to be approved by the Technical Committee.
- The test results are clear-cut.
- The Technical Committee decides unanimously that the PET bottle is fully compatible within the existing PET recycling schemes.

In all other cases, further tests are needed to provide additional information about the impact of the tested PET bottle on PET recycling.

Test design

Based upon the different elements provided by the Applicant and/or the quick tests, the Platform designs specific test procedures for the purpose of assessing the impact of such PET bottles on the recycling.

The specific test procedures are up-to-date testing methods that produce qualitative and/or quantitative test results. The test procedures include:

- List of tests already done, test results and conclusions
- Complete step-by-step description of test procedure, with:
 - o Flow chart
 - o Material & equipment list
 - o Sample size
 - o Preparation of test samples
 - o Test conditions
 - o Detailed test procedures
 - o Analysis of data
 - o Repeatability (or reproducibility)

Several specific tests are available, including (but not limited to) oven test, optical sorting, metal detection, glue separation, bleeding labels, swim/sink, washing, extrusion, solid-stating, plaques, injection blow molding.

Execution of tests

The execution of the specific tests involves activities such as validating test environments, running the test, generating the test results and controlling the validity of the test results. Most test results are strongly affected by the precise method of testing or measuring. It is therefore vital to fully document all test methods, test conditions and measurements and to provide complementary observations if required.

Specific tests must be executed by an independent test laboratory with no affiliation to the Applicant, using modern test equipment. The test laboratory has to be approved by the Technical Committee. In-house testing at the facility of the Applicant is exceptionally allowed under the following conditions:

- The Applicant concerned demonstrates that they were unable to comply with the original test procedures and/or that the technical conditions do not allow any other way.
- The Applicant owns in-house test laboratory with standard test equipment and for in-house laboratory procedures, equipment must be operated and evaluated according to similar test conditions as an independent test laboratory.
- The Platform gives special permission for in-house testing.
- The Platform appoints an auditor who will monitor the execution of the tests at the Applicant and who will certify the test results. The Applicant will cover the costs of the auditor.

Test results

The Applicant commits to disclose all test results to the Platform.

All test procedures must be fully documented. The Applicant, or a third party, presents a complete test report to the Platform in order to assess the compatibility of the PET bottle within the existing collection & sorting schemes and the PET recycling processes in Europe. This test report includes:

- Executive Summary
- Company name & contact person
- Product name and description
- Market sector & market volume
- Test design
- Research facility & contact person
- Detailed description of input material & sample preparation
- Material & equipment used
- Process conditions
- Test results & remarks (including repeatability)
- Further comments
- Summary

This report will be made available to all designated members of the Technical Committee under the conditions set forth in the agreement between the Platform and the Applicant.

Costs

The total assessment process by the Platform – from application and test design, to decision and communication – is free of charge. However, the Platform will not be responsible for any costs relating to the execution of the tests by the Applicant or a third party, or any other associated costs.

The platform reserves the right to apply an administrative fee that must be paid by the applicant, at the time that their application has been approved for EPBP review and validation.

Tool 5: <u>Evaluation report</u>

Evaluation & recommendation

The Technical Committee reviews all test results provided by the Applicant, as well as all relevant information available to the Platform. The Committee also provides critical guidance for the interpretation of these test results, and if necessary, develops further tests to provide additional information about the impact of the tested PET bottle on PET recycling.

The Technical Committee assesses the compatibility of the PET bottle within the existing collection & sorting schemes in Europe, and describes the possible consequences for the PET recycling process.

The Technical Committee issues a technical review, summarizing the test results, conclusions and recommendations to be submitted to the Steering Board. This technical review includes a proposal for external communication taking into account the publication guidelines.

Recommendations and communication proposals are accepted if the Technical Committee arrives at a consensus. In the event there is no consensus decision, the recommendation of the Technical Committee describes the different remarks and various points of view. In this case, the final decision is made by the Steering Board.

The General Secretary coordinates all this evaluation and communication to the SB

Validation

The Steering Board reviews the recommendations and the communication proposals of the Technical Committee, and validates the final approval for the specific innovation. The Steering Board communicates its decision (validation yes /no) to the Technical Committee. In the event the Steering Board does not agree with the recommendations of the Technical Committee, the evaluation report is returned to the Technical Committee with the remarks of the Steering Board. At this stage, the Applicant and/or the independent test laboratory can be invited to the Technical Committee to provide further information about the tested material and the test results.

The General Secretary ensures the communication of the results to the Applicant, the member organizations and other stakeholders.

General

The Applicant is encouraged to inform the Platform prior to implementing any modifications in the approved PET bottle.

Conflict of interest

The designated representatives will inform the Platform if he/she has a (potential) conflict of interest between existing assignments, obligations and responsibilities and the services set out in the European PET Bottle Platform, for instance any situation where the designated delegate will de facto not be able to respect this non-disclosure agreement.

Tool 6: Feedback report

The Platform, through the General Secretary, provides the Applicant with feedback related to their application, containing the following information:

- Overview of assessment process
- Impact on existing collection & sorting schemes
- Impact on the PET recycling process
- Decision of the Platform
- Next steps (if required)

The feedback given falls under one of the following categories according to the Design for Recycling Guidelines for PET bottles. For more details about each category, refer to tool 8.

- Full compatibility also known as category "YES";
- Limited compatibility--also known as category "CONDITIONAL
- Low compatibility also known as category "NO".

In any case, the Platform is prepared to discuss with the Applicant in order to find suitable solutions for the respective PET bottle. For that reason, the Platform provides a state-of-the-art knowledge, information and expertise pool by using the synergy effects of the different stakeholders represented in the Platform.

The Platform reserves the right to update and change the conditions of the approval for the respective PET bottle at any time, upon prior notice to the Applicant, in accordance to the most recent technologies, assessments and experience.

The Platform also reserves all rights to revoke the endorsement in case the related terms and conditions are not met, or the applicant is using the endorsement for misleading the market