UNILATERAL INDUSTRY SELF-COMMITMENT CONCERNING BIODEGRADABLE AND COMPOSTABLE POLYMER PRODUCTS

BASICS

1. A material or product is called biodegradable under specific environmental conditions if it is able to undergo within a given time a certain degradation process that is caused by biological activity and can be measured by a standardised test method.
2. For a material to be called compostable it has to be biodegradable and disintegrate in a composting system in such a way that this disintegration occurs during the period of end-use of the compost.
3. The compost must meet relevant quality criteria with regard to limitations of the heavy metal content, not being eco-toxic and having no obviously distinguishable residues.
4. Biodegradable and compostable polymers can be produced from agricultural renewable raw materials (RRM) as well as including also RRM in combination with materials from fossil origin.
5. Polymers that are biodegradable and compostable cannot be easily distinguished from conventional polymers in particularly not by their sole appearance.
6. In order to organise the appropriate sorting of plastic the accessibility of all recovery options for an eco-efficient waste management is necessary.
7. A way to clarify their waste management and to prevent difficulties would be by way of labelling products made of biodegradable/compostable products materials.
8. In this context it is important to ensure that the use of a registered label is exclusively restricted to those materials and final products, respectively, which fulfil the requirements of the certification procedure.
9. Certification has to be performed by accredited certification bodies.
10. Third parties are invited to participating in the self-commitment provided they are accepting the agreed structure and procedure.

THE ADDED VALUE

11. With this self-commitment the industry concerned would subscribe to a high standard concerning the compostability of their products and would collectively signal to other stakeholders and consumers the environmental advantage to observing such a production standard and this should contribute to a wider use of that standard also in other sectors where plastics are produced and used. For instance, the standard can also be applied in the production of catering products, waste bags for organic waste, hygiene products or semi finished goods.

PROPOSED ACTION

DEFINITIONS

12. The norm EN 13432 incorporates the definitions of biodegradability and compostability by reference and is recommended for the application of compostable packaging according to the Directive on Packaging and Packaging Waste 94/62/EC. EN 13432 can also be the basis for other compostable plastic products, for instance, catering products, waste bags, hygiene products or semi-finished goods.

13. The norm EN 13432 requires that a material/product to be defined biodegradable and compostable has to fulfil the following criteria:
    - Biodegradation level: >90 % in comparison with cellulose (positive standard) in 180 days under conditions of controlled composting measured through respirometric methods (EN 14046);
    - Disintegration level: >90 % in 3 months (EN 14045);
    - Ecotoxicity: Toxicity tests (germination and plant tests)
    - Chemical testing: according to "product safety"

OBJECTIVE

14. The participants commit themselves to observe in the production process and marketing of biodegradable/compostable materials a standard in accordance with the norm EN 13432 "Requirements for packaging recoverable through composting and biodegradation" with the guarantee to complete biodegradation under composting. For the labelling of products they shall use a product certification based on that standard (see Annex II).

PARTICIPANTS

15. The participants listed in Annex I, producers of biodegradable materials represent over 90 % of the EU market for biodegradable plastics. This innovative sector is represented in specific market segments e.g. packaging, agricultural foils and household/domestic products.

16. Late entrants to this self-commitment are welcomed provided they are prepared to sign-up to the terms and conditions of this self-commitment. This would widen the environmental and economic added value of this

commitment, even at the global level if globally operating companies decided to joining in, thereby enabling the EU-industry to play a leading role in the setting of such standards in accordance with their overall commitments to sustainability.

TARGETS

17. Targets as such cannot be quantified. However, this commitment has to be seen as a starting point for a wider use of the EN 13432 standard. Openness and flexibility of this self-commitment should encourage others to joining in.

MONITORING AND REPORTING

18. The monitoring of the self-commitment will be carried out under the supervision of IBAW and DIN CERTCO. All certification institutes (EA accredited, the European Co-operation for Accreditation and the European network for the certification of compostability will be involved (members see Annex II). Progress will be assessed every 2 years. Information to be supplied to the European Commission will relate to the number of companies involved and the volumes of certified materials and products produced.

DURATION

19. The self-commitment shall last for 10 years. The commencement date is dd/mm/2004 and the termination is dd/mm/2014.

REVISION

20. The participants agree to review the commitment, in consultation with the European Commission, if deemed necessary.

SAFEGUARD

21. The commitment is based on current standards, Technologies and products. It does not exclude or prescribe any determined means to achieve compliance. It leaves participants free to use whatever methods they choose to meet their obligations under the present self-commitment.

PUBLICATION

22. The self-commitment and any other relevant information shall be made public by relevant reports made by stakeholders concerned and may be published on the European Commission's website.

COMPLIANCE AND ENFORCEMENT

23. IBAW together with DIN CERTCO will act as the coordinator (see Annex II). IBAW is the International Biodegradable Polymers Association. It will collaborate with DIN CERTCO and other EU certification bodies performing certification based on EN 13432. IBAW / DIN CERTCO will act as the coordinator with the EU network of EN 13432 certification and will collect relevant information for the monitoring.

24. The certification scheme (Annex II) includes the task to prove conformity between certified and labelled products in the market place with the requirements of the standards. The collaboration IBAW with DIN CERTCO and other certification bodies enables them to monitor the market place throughout Europe. A bi-annual report by DIN CERTCO and IBAW to DG Enterprise will inform about the results.

SUSTAINABILITY OF THE PROPOSED ACTION

25. Since this commitment is open to non-EU based companies, the value added is likely to be on the global level once internationally companies have joined. In this context it is proposed that the EN norm 13432 should be the model for an ISO norm, currently in discussion. The proposed action will have the following environmental, social and economic benefits:
    - Facilitating integrated waste management including organic recycling
    - Reducing soil and water pollution through the wider use of controlled biodegradable materials
    - Stimulating the development and use of new and advanced technologies
    - Promoting the growth of a highly innovative industry sector, represented especially by small and medium enterprises.
    - Securing existing and creating new, highly qualified jobs in the plastics industry as well as in agriculture.

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Annex I

Participating Companies:

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Supporting EU Federations:

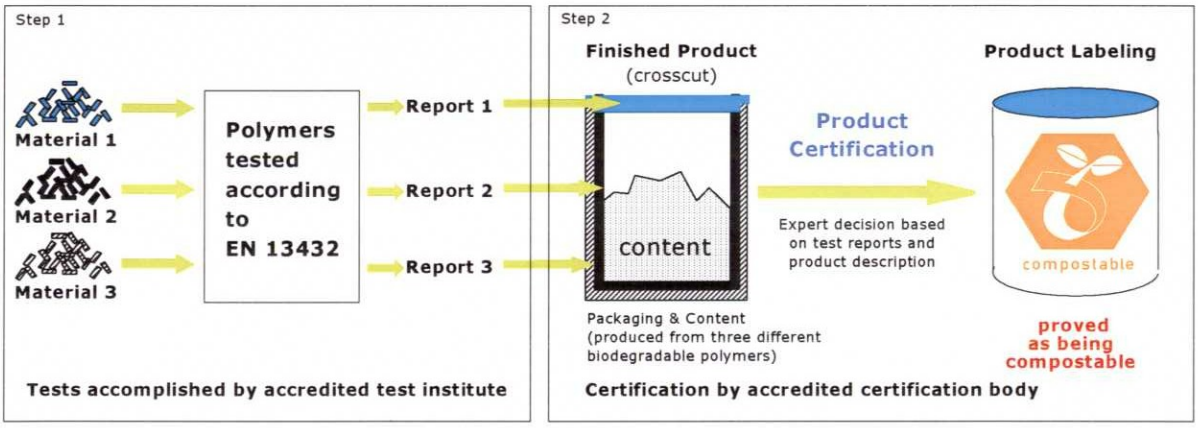
- **IBAW** (International Biodegradable Polymers Association and Working Parties)
- **PlasticsEurope** (The federation of plastics producers in Europe)
- **ERRMA** (The European Renewable Resources and Materials Association)
  Consisting of:
  - AGRICE (Agriculture pour la chemie et l'Energy, France)
  - FNR (Fachagentur Nachwachsende Rohstoffe, Germany)
  - NNFCC (The National Non Food-Crops Centre, United Kingdom)
  - PLATFORM (Association for renewable raw materials, Netherland)
  - VALBIOM (Valorisation de la biomasse asbl, Belgium)

Annex II

CERTIFICATION PROCEDURE

Certification of compostable polymer products based on EN 13432 is being performed by DIN CERTCO and other EU certification bodies according to quality management systems based e.g. on EN 45011 / EN 45012. DIN CERTCO, the certification organisation of DIN (German Institute for Standardization) established the scheme in 1997 and has gained internationally renowned expertise ever since, as witnessed e.g. by their participation in the International Network for Compostability Certification together with institutions from the U.S., Japan and Taiwan. Recently, cooperative working schemes have been established with other certification bodies in Europe in order to implement a harmonized supranational certification scheme. As from June 2004 participants are: The Composting Association (UK), Keurmerk (NL), COBRO (PL).

Certification Scheme



The certification of products has two steps:
In a first step, extensive tests for the verification of the compostability of the materials must be carried out and documented by approved test laboratories in accordance with recognised test methods defined in EN 13432. The respective certification institute selects and approves competent laboratories in accordance with its own quality management scheme and offers a list of approved test laboratories to applicants (material producers) who wish to have their materials certified. All test results and relevant documentation has to be submitted by the applicant to the certifying body.
In a second step the certification of products is being conducted by recognised experts (evaluation committee) on the basis of submitted documents that precisely characterise the product (material composition, geometry, content, colours, etc.). The members of the evaluation committee are selected by the certification institute and are representatives from the composting and plastics sciences.