Raising standards for consumers

POSITION PAPER

Keeping hazards in the circle?

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Preface: The goal of circular economy

ANEC believes it cannot be taken for granted that a circular economy automatically leads to reduced material and energy flows, and that recycling is economically and environmentally beneficial per se. An economic system whereby solutions are found to keep the same - or even lead to increasing - material consumption rates can remain destructive and unhelpful: material circles can still be created with high effort using a lot of energy, or **other resources leading to significant pollution or introduction of problematic chemicals in new product cycles.**

It needs to be avoided that the proposed measures in support of the circular economy are biased towards recycling at the expense of prevention or reuse for which no targets have been set. This is of greater concern as criteria and conditions for useful recycling have not been formulated.

ANEC believes what we actually need is a 'resource-saving' economy which eliminates 'useless' consumption, i.e. consumption that does not add anything to the quality of life (such as the consumption of plastic bags or other forms of unnecessary disposable packaging; products that are not used, such as wasted food; or products for which demand is artificially created). Support for reuse systems, or enhancing the durability of products, may be more beneficial than the recycling of short-lived products.

We find that avoiding production and consumption of products designed for a waste society would also be an important contribution to satisfy the first priority of the waste hierarchy: prevention of waste. It was a priority that was not sufficiently reflected, for instance, in the legislative proposal amending Directive 94/62/EC on packaging and packaging waste which missed the opportunity to introduce ambitious requirements in support of reuse, and avoidance of excessive packaging.

Recycling cannot be regarded as an end in itself. Recycling makes sense only if embedded in an overall concept of resource-saving, leading to high quality products (rather than down-cycling) in an economic way that avoids detrimental effects on health or environment**. For instance, it is not acceptable to expose consumers to increased levels of hazardous substances in support of one-sided recycling support policies.** It is essential to apply the principle of prevention also to hazardous substances by primarily eliminating them at the outset of the product cycle, rather than trying to tackle the issue at the end of the process.

Introduction

These comments reflect our views on the circular economy concept and take account of the four problems in the interface of chemical, product and waste legislation identified in the Stakeholder Consultation paper, as well as in the Roadmap on "Analysis of the interface between chemicals, products and waste legislation and identification of policy options".

ANEC believes the foreseen EC Communication, intended to undertake an *"Analysis and [prepare] policy options to address the interface between chemicals, products and waste legislation, including how to reduce the presence and improve the tracking of chemicals of concern in products*", is crucial as a basis to develop policies that can deliver a circular economy which truly responds to the objective of the socially-acceptable reduction of the use of resources, and of environmental and human health impacts.

The first issue the communication would need to tackle from our perspective relates to the significant gaps in legislation for protecting health & environment from hazardous chemicals in (consumer) products. The stakeholder consultation paper fails to address this most important aspect adequately. The problem of contamination of waste, and products made from waste products, is not just limited to "legacy substances" which were subject to restrictions but remain in waste streams. The problem is also related to substances not restricted in virgin materials and the products made from them.

1. Main issues in interface of chemicals, product, waste

ANEC finds the first two problems identified in the consultation result from what we see as the biggest concern: **Substances of concern in products (and products made of waste).**

ANEC has long emphasised that the present specific European regulatory provisions for chemicals in (consumer) products do not go far enough. They are either inadequate or missing:

- Inadequate because of serious gaps - as in food contact materials where only plastics materials are (almost) comprehensively regulated; or in the absence of (a legal instrument to set) clear limits for specific substances (e.g. medical devices), or lack of a high level of protection (e.g. toys);
- (almost) non-existent for many everyday products, such as paper and printed matter, packaging, clothing and other textile products, furniture, floor coverings, personal protective equipment, child care articles, sports equipment, construction products, car interiors.

ANEC believes that the development of a European regulatory framework for chemicals in products becomes even more urgent in view of the objectives set in the 7th EAP to develop a non-toxic environment and the goal of a circular economy.

REACH does not, and will not, compensate for these deficits for a number of reasons not detailed here. The major one is that articles – particularly imported ones - are barely covered by REACH apart from a limited number of Annex XVII restrictions (which are introduced at a snail's pace). Our position paper, "Hazardous chemicals in products - The need for enhanced EU regulations", suggests a roadmap on achieving a strategy to address chemicals in products comprehensively. Our paper explores how current regulatory requirements can be enhanced and outlines a programme for key consumer product areas. The approach relies on implementation and/or strengthening of sectoral product legislation as regards the chemical dimension (e.g. for textiles, materials in contact with the drinking water supply) and, where useful, a framework for establishing chemical rules for a broad range of products (e.g. falling in the scope of the General Product Safety Directive). The envisaged chemical provisions in the suggested product legislation should, where appropriate, also reflect possible recovery options.

The report of DG GROW on the evaluation of European Chemicals legislation also recognised the need for action to fill in those gaps identified for consumer articles covered by the General Product Safety Directive[1].

[1] See DG GROW evaluation report http://ec.europa.eu/DocsRoom/documents/22063/attachments/1/translations/ and ANEC-BEUC Position Paper: Regulatory fitness check of Chemicals legislation except REACH - A consumer view (https://www.anec.eu/images/Publications/position-papers/Chemicals/ANEC-PT-2016-CEG-019.pdf)

2. Getting things right at the onset – The production stage

A good example for the problems which may occur when using recycled materials without adequate control of the virgin materials is the occurrence of mineral oil saturated hydrocarbons (MOSH) and aromatic hydrocarbons (MOAH) in foods. According to the European Food Safety Authority's (EFSA) Panel on Contaminants in the Food Chain (CONTAM) residues of these compounds found are of potential health concern. According to the German Institute for Risk Assessment (BfR) the intake of mineral oil mixtures with high aromatic content should be avoided as it cannot be ruled out that some compounds are carcinogenic.

Suspected sources of MOSH and MOAH contamination are primary food packaging – in particular, packaging made from recycled materials – as well as secondary packaging. Other sources include printing inks applied to paper and board (a likely source for the contamination of recycled paper and board), additives or adhesives used in the manufacture of food packaging.

It is obvious that the elimination of the mineral oil hydrocarbons which are of health concern cannot start at the level of recycling materials. In fact, these substances must be eliminated directly at source, i.e. banning the use of the relevant MOHs in the printing inks (not only for food packaging, but also for printing in other areas such as other packaging or newspapers), additives, adhesives and so on.

It has been estimated that waste paper may contain up to 10.000 chemicals. In a recent study, 157 substances have been identified as problematic[2]. It goes without saying that virgin paper also contains a great number of additives. We are not aware of any systematic review of these substances. In fact, no specific European legislation applies to paper and board or printing inks – not even in the field of food contact materials. This is a serious omission which was subject of a resolution by the European Parliament calling upon the Commission to "prioritise the drawing-up of specific EU measures for paper and board, varnishes and coatings, metals and alloys, printing inks and adhesives"[3].

According to BfR, only insufficient toxicological data is available for 90% of currently-used printing inks (about 5.000 is the number indicated by the European Printing Ink Association) which makes a comprehensive health risk assessment of the use of printing inks on food contact materials impossible[4].

The above examples serve only for illustrative purposes. Similar considerations apply to other materials such as plastics. From this follows that the first step in the

[2] Pivnenko, Kostyantyn; Eriksson, Eva; Astrup, Thomas F. "Waste paper for recycling: Overview and identification of potentially critical substances". Waste Management. 45: 134–142.
[3] http://www.europarl.europa.eu/sides/getDoc.do?type=TA&language=EN&reference=P8-TA-2016-0384
[4] http://www.bfr.bund.de/en/frequently_asked_questions_about_printing_inks_and_primary_aromatic_amines_in_food_contact_materials-191650.html

procedure must be to ensure that problematic substances are eliminated from the production of virgin materials and products produced from them such as packaging. The Packaging Directive (94/62/EC), however, includes limits only for heavy metals - the sum of concentration levels of lead, cadmium, mercury, and hexavalent chromium present in packaging or packaging components must not exceed 100ppm by weight (i.e. 0.01%).

Apart from that, there is a so-called "essential requirement" in Annex II which provides: "*Packaging shall be so manufactured that the presence of noxious and other hazardous substances and materials as constituents of the packaging material or of any of the packaging components is minimized with regard to their presence in emissions, ash or leachate when packaging or residues from management operations or packaging waste are incinerated or landfilled*". The requirement is rather vague and does not seem to take into account adverse health effects arising from the direct exposure of users of packaging (which is rather questionable).

The related harmonised European standards, EN 13428:2004 'Packaging - Requirements specific to manufacturing and composition - Prevention by source reduction' and EN 13430:2004 'Packaging - Requirements for packaging recoverable by material recycling' – which were subject of severe criticism by parties including ANEC – do not add any meaningful requirements as far as chemicals are concerned. They can be considered an alibi: standards produced under the leadership of industry intended to avoid any substantive obligations. Therefore, ANEC calls for a considerable strengthening of the chemical provisions in the Packaging Directive.

In April 2014, the European Parliament voted in plenary to phase out, from certain packaging[5], substances that are carcinogenic, mutagenic or toxic to reproduction of category 1A or 1B, in accordance with Part 3 of Annex VI to the CLP Regulation (Regulation (EC) No 1272/2008). In addition, substances having endocrine disrupting properties fulfilling certain criteria were also suggested to be prohibited. A threshold of 0,01% was established for both kinds of substances. From ANEC's perspective, this was a good step in the right direction. Unfortunately, the Council did not support the approach.

One could also think of specific provisions to facilitate recycling aimed at reducing the variety of materials by e.g. excluding multi-layer packaging composed of different materials or by specifying certain types of packaging including their chemical composition as "fit for recycling" with a view to obtaining - in combination with collection/sorting systems allowing separation of different materials - homogenous single-type waste streams (a prerequisite for primary recycling resulting in high quality products). For instance, one could specify a limited number of materials for containers/canisters for liquid products for specific purposes (e.g. for construction)

[5] Report on the proposal for a directive of the European Parliament and of the Council amending Directive 94/62/EC on packaging and packaging waste to reduce the consumption of lightweight plastic carrier bags (COM(2013)0761 – C7-0392/2013 – 2013/0371(COD))

including a limited number of additives, colourants, paper labels and so forth using positive lists of allowed substances.

ANEC recommendations concerning the production stage:

- Research is required to systematically collect and assess chemicals used in the manufacture of products, including those that could adversely affect recycling.
- As a matter of priority, legal provisions for chemicals in virgin materials used in the manufacture of products including (food) packaging must be strengthened by implementing or enhancing sectoral product legislation.
- This involves (but is not limited to) the elimination of SVHCs and other substances of concern from those materials or products in a generic fashion (e.g. following the proposal by the European Parliament to phase out CMRs and EDCs in the Packaging Directive).
- Additionally, one could develop specific provisions to facilitate recycling aimed at reducing the variety of materials including their chemical composition to make them "fit for recycling".
- To ensure homogenous and clean single-type waste streams (a prerequisite for primary recycling resulting in high quality products) efficient collection and sorting systems allowing separation of different materials for different purposes are required.

3. Insufficient information about substances of concern in products and waste

It is well known that the information provisions in Articles 7 and 33 of REACH do not work and are hardly enforced. In particular, Article 33(2) covering the obligations of suppliers to provide information on SVHCs in articles "on request by a consumer" is fundamentally flawed. Various projects by consumer and environmental NGOs have shown that often the requested information is not delivered in an adequate and timely manner. It also remains unclear whether a "no reply" means that SVHCs are absent or the supplier did not respond. Apart from that, it is impractical for consumers to approach the suppliers individually. Finally, the information requirements are confined to few substances (i.e. only substances that have been included in the Candidate List). The obvious way forward is to require that the information requirements are broadened (at least for certain articles) to cover e.g. all CMRs and that the information is made available online (not on request).

However, it may be appropriate to complement these information provisions by article specific ones which should be incorporated in the relevant (envisaged) sectoral legislation. As an example, it may be useful to require a full declaration of all

substances used, including their quantities in certain cases (e.g. materials in contact with food or with the drinking water, toys).

Irrespective of this - and bearing in mind that the implementation may take many years - research need to be initiated in priority areas to investigate the substances used. In the previous section, the examples of paper/board and printing inks was given. It pointed to the great number of substances and the lack of toxicological data in allowing a proper assessment of their health and environmental risks. It is apparent that the name of substances, and even quantitative information on the concentrations used in articles, may not be sufficient to draw any conclusions regarding health and environmental impacts. The example of MOSH and MOAH shows e.g. that there is some health concern which cannot be adequately assessed at this point. In fact, one can only limit the substances based on the precautionary principle.

However, even if regulatory measures (including information provisions for products) are significantly strengthened, this will not necessarily improve the information on the waste side. At this level, one can only identify a limited number of priority substances to be measured. For materials such as glass, this is not relevant – glass bottles collected from households will normally not be contaminated. For other materials, this cannot be taken for granted. This reinforces the need for strategies to obtain clean materials (i.e. not contaminated by undesirable substances). As outlined in the previous section, the use of materials specified as suitable for recycling based on approved substances seems promising.

ANEC recommendations on the lack of information:

- Information provisions in Articles 7 and 33 of REACH need to be considerably strengthened by broadening their scope (at least for certain articles) to cover e.g. all CMRs and by requiring that the information is made available online (not on request).
- These strengthened provisions should be complemented by article specific ones which should be incorporated in the relevant (envisaged) sectoral product legislation.
- It may be useful to require a full declaration of all substances used including their quantities in certain cases (e.g. materials in contact with food or with the drinking water, toys).
- The room for manoeuvre for improved information on chemicals in waste is limited. At this level, one can only identify a limited number of priority substances to be measured.
- This reinforces the need to specify materials and products "fit for recycling" to be kept separate from the general waste streams by using appropriate collection and sorting systems (see also section before)

4. Presence of substances of concern in recycled materials (and in articles made from such materials, including imported articles)

As pointed out in earlier sections of this paper, priority must be given to considerably strengthen the provisions for (consumer) articles, particularly by implementing or improving sectoral legislation.

It is difficult to understand the statement in the stakeholder consultation paper, "Currently there is no general framework to deal with the presence of substances of concern in recycled materials and in articles made thereof". The recycled materials and articles made thereof have to comply with the applicable regulatory provisions for such materials and articles. It is the obligation of the manufacturer of any product to ensure that the materials used make it possible to comply with relevant REACH restrictions or provisions in any sectoral legislation. In case of doubt about the (continued) compliance with these provisions, recycling materials cannot and should not be used.

Substances subject to REACH restrictions that are present in recovered materials (substances, mixtures and articles)

ANEC does not support the concept of a differential treatment when the restricted substances are present in recovered materials, such as for the content of cadmium in recovered rigid PVC.

Authorisation obligations for recovered substances or mixtures

It seems absurd to assume that recyclers or users of recycled materials contaminated with SVHCs listed in Annex XIV to REACH would apply for authorisation. Most likely, such materials will not be used for economic reasons. There is no reason why this should be changed. However, to provide legal clarity, such use should be explicitly banned.

Application of authorisation requirements to the presence of substances of concern in EU-produced articles but not to their presence in imported articles

It is astonishing that the stakeholder consultation paper addresses a real issue – "the competitive disadvantage for EU producers with regards to their non-EU competitors" concerning authorisation requirements - but beats around the bush as regards possible solutions. It may be true that there is no evidence that long term benefits (as a result of increased competitiveness and innovation) or delocalisation (resulting from competitive disadvantage) have actually materialised. In fact, it is much too early to observe such potential effects bearing in mind the limited number of substances included in Annex XIV of REACH and the limited number of authorisations. It is significant that the authors of the paper discuss only issues of competition, ignoring

completely the implications for health and the environment. The real problem is that substances of very high concern are found in imported articles. Article 69 (2) provisions are inadequate as any restriction would require another resource-consuming investigation and would be initiated only with a significant delay (after the sunset date).

The solution can, of course, only be to ban the presence of SVHCs in imported articles by the sunset date. In such case a practical enforcement limit must be set (e.g. 0,1%). However, such provision can be regarded only as a first step in a tiered approach as some substances might pose risks at lower levels. For some articles (such as articles for children), a lower level may be appropriate (e.g. 0,01%), or the generic ban needs to be complemented by restrictions for specific substances in Annex XVII of REACH or separate product legislation.

ANEC recommendations on the presence of substances of concern in recycled materials:

- Substances that are present in recovered materials should not be treated differently from substances contained in virgin materials. In particular, it is not acceptable that higher limits for substances of concern are accepted in recycled materials.
- The recycling of materials that include SVHCs listed in Annex XIV to REACH above a threshold (e.g. 0,1%) should be disallowed after the sunset date indicated in Annex XIV.
- The presence of SVHCs listed in Annex XIV to REACH in imported articles above a threshold (e.g. 0,1%) should be disallowed after the sunset date indicated.
- This general exclusion provision should be complemented by lower thresholds (e.g. 0,01%) for SVHCs in certain products (such as articles for children), and/or by restrictions for specific substances in Annex XVII of REACH or separate product legislation.

5. Uncertainties about how materials can cease to be waste

The provisions of Article 6 of the Waste Framework Directive (WFD) concerning the end-of-waste status have been subject of studies and debate for years. We do not believe that this consultation should replicate these discussions involving a number of issues (adequate procedures, development of end-of-waste-criteria, Member States obligations, lack of enforcement) going far beyond the chemical dimension.

Nevertheless, we would like to express dissatisfaction that, so far, only end-of-waste criteria for a limited number of materials (iron, steel and aluminium scrap, glass cullet and for copper scrap) have been adopted in the EU. End-of-waste criteria offer the

possibility to include, where appropriate, provisions for chemicals (Article 6 of the WFD provides that "the criteria shall include limit values for pollutants where necessary"). This includes not only possible restrictions but also self-monitoring requirements (how often must the producer of recycling materials analyse the materials, which sampling provisions and which analytical methods must be used, how to deal with fluctuating values etc.).

Article 6 1.(c) of the WFD provides that "the substance or object fulfils the technical requirements for the specific purposes and meets the existing legislation and standards applicable to products". Some of the existing end-of-waste-criteria require even a grading in accordance with customer/industry specifications or standards. It should be noted that recycling material may be used in different contexts where different product legislation or regulatory substance restrictions apply. It is unclear how this is taken into account when the end-of-waste status is declared. This needs further investigation and debate.

ANEC recommendations on the uncertainties about how materials can cease to be waste:

- The provisions of Article 6 of the Waste Framework Directive (WFD) need further investigation and debate.
- In particular, the need to accelerate the preparation end-of-waste-criteria is emphasised.
- Options for incorporating chemical provisions in these criteria need to be further explored taking into account also different uses of recycled materials subject to different chemical restrictions.

6. Difficulties in application of EU waste classification methodologies and impacts on recyclability of materials

It is absolutely clear that a lead content of > 0.3% requires that a PVC waste must be classified as hazardous (Repr. 1A). It is a shame that neither Member States nor the Commission have ensured proper enforcement of the current regulatory provisions. We agree that a "lack of action" in this respect will "not generate public confidence in the safety of the related waste management operations". However, a change of the rules intended to facilitate recycling of materials containing hazardous substances such as lead will not increase the public confidence either. In fact, such substances should be phased out.

ANEC recommendations on the difficulties in the application of EU waste classification methodologies:

- There is no need to take measures intended to facilitate recycling of materials containing hazardous substances. Such materials need to be phased out.
- The Commission and the Member States should ensure that existing rules are properly enforced.

Conclusions

We need real commitment, not only to reduce material and energy flows significantly (including those that occur outside Europe), but also to urgently put in place a strategy to achieve a non-toxic environment for Europe starting with a systematic approach to address chemicals in products relevant for consumers.

Key issues include the implementation or strengthening of sectoral product legislation; elimination of SVHCs and other substances of concern from materials, products and waste streams in a generic fashion complemented by substance specific restrictions; enhanced general and specific information provisions on chemicals in articles including online declaration requirements of hazardous chemicals present depending on the type of product (up to a full declaration), and enhanced end-of-waste criteria including chemical provisions (restrictions as well as monitoring obligations).

This needs to be complemented by improved recycling processes to ensure homogenous and clean single-type waste streams (a prerequisite for primary recycling resulting in high quality products), including efficient collection and sorting systems allowing separation of different materials for different purposes, as well as the development of specific specifications to facilitate recycling aimed at reducing the variety of materials, including their chemical composition, to make them "fit for recycling".

Finally, enforcement needs to be significantly improved.

ENDS.

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About ANEC

ANEC is the European consumer voice in standardisation, defending consumer interests in the processes of technical standardisation and conformity assessment, as well as related legislation and public policies.

ANEC was established in 1995 as an international non-profit association under Belgian law and is open to the representation of national consumer organisations in 34 countries.

ANEC is funded by the European Union and EFTA, with national consumer organisations contributing in kind. Its Secretariat is based in Brussels.

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