



ENERGY AS MATERIAL RECOVERY?

ECOS position on proposed scope expansion of ISO/TC 300 on Solid Recovered Fuels activities related to material recovery.

ECOS is not in favour of the expansion of the scope and considers **ISO/TC 300 work specifically focused on thermal processes in controlled conditions with recovery of energy** (for both heat and electricity). ECOS considers the idea of developing standards for material recovery from SRF inappropriate, especially to promote plastic gasification, pyrolysis and incineration, both in terms suitability for ISO/TC 300 expertise and the negative environmental impacts that could result from such standards.

- **EU Plastics Policy:** Incentives for plastics to fuels, whether as heat, steam or as transport fuel are contradicting the policy direction the EU has taken in the *Plastics Strategy*, as well as both its circular economy action plans which in fact seek to limit waste exports and promote the development of local capacity for recycling;
- **Ecodesign:** Standards for other applications of SRF rather than only energy recovery will not drive better design of products by providing an outlet for poorly designed plastic products and disincentivise re-use and repair, especially in the EEE and textiles sector;
- **Basel Convention:** SRF standards for material recovery purposes could enable circumvention of the Basel Convention by considering such waste mixtures as recovered material, this cannot be supported;
- **Key Technical Issues in this proposal (Details in Annex I below):**
 - **Material Recovery:** Unsuitable term, non-compliant with revised EU Waste Framework Directive where fuels are not covered by this definition and would enable possible labelling of export waste as material;
 - **Waste Streams:** Lack of suitable controls to prevent harmful incineration of PVCs and other toxic substances found in a range of plastics to be considered as feedstock;
 - **Plastic Material:** Incineration is not an environmentally valuable waste treatment option for plastics;
 - **Relevant expertise:** Plastics technical committees are more suitable for developing standards that relate to mechanical, chemical, and physical recycling.

ECOS assert that this proposal should be rejected on the grounds explained in this paper, and recommend that as representative of your NSB, that you vote in opposition to this proposal until alignment with policy and technical issues are acknowledged and integrated into any such proposals in future.

Annex I: Technical Issues regarding Material Recovery, Waste Streams, and Plastic Material, and relevant expertise

Material Recovery – Misuse of definition

ECOS considers not satisfying the proposed terminology “material recovery” as a term to describe a range of processes including those listed in the documents of the scope extension proposal. This term might generate confusion in respect to the legislative definitions within the EU Waste Framework Directive (WFD). It is important to stress that the WFD defines under Art. 3, 15a “material recovery” as any recovery option, **other than energy recovery and the reprocessing into materials that are to be used as fuels or other means to generate energy.** This also means that **any activity where materials are processed into a type of fuel cannot be labelled as material recovery.**

According to the WFD, material recovery rightly only includes re-use, recycling and backfilling. The material recovery activities proposed therefore are not all in line with relevant EU legislation for the recovery of material aiming to prevent highly inefficient and polluting processes.

SRF Waste Streams – Sorting and Separating Polymers

Two major sources of SRF are the plastic fraction of Waste Electrical and Electronic Equipment (WEEE) and synthetic textiles. Current option for their subsequent treatment, recycling and/or disposal require some further type of sorting and grading, including for incineration with energy recovery.

It is highly recommended that in future SRF standards include further guidance for removal of PVC that contains chlorine and toxic additives which currently compromise mixed polymer waste recovery. When incinerated, PVC decomposes to give a range of persistent organic pollutants that are highly toxic, and which require the incinerator facility to be equipped with scrubbers and other abatement technologies. **Better sorting and separation would support better fuel recovery, as well as greater material recycling rates of suitable polymers.**

Incineration or recycling of PVC plastic is not a solution to its associated environmental and health problems during PVC production, use and post-consumption phase. While most plastics do not get recycled, PVC is the least recyclable of all plastics. This is because PVC items contain so many toxic additives that both mechanical and chemical recycling are impractical and expensive. Better, upstream, design solutions should subsequently be promoted when it comes to complicated plastics such as PVC.

Plastic and Efficient Recycling

ECOS wants to highlight that the term “plastic recycling” is commonly used as a term for operations that turn separately collected plastic waste into recycled plastic in an open or closed-loop process through mechanical, chemical or physical recycling. Key EU documents such as the *Plastics Strategy*, the circular economy action plans from 2015 and 2020, as well as corresponding EU legislation such as the Single-Use Plastics Directive¹ are using this approach to seek to promote upstream plastic waste solutions, e.g. through improved design of products, improved collection and separation of waste streams, as well as new sorting technology. The proposed scope extension by some national delegations of ISO/TC 300 includes chemical recycling steps of the plastic waste fraction which is supposed to be recycled on its own and not to be treated as part of SRF.

¹ <https://eur-lex.europa.eu/eli/dir/2019/904/oj>

ECOS stresses that plastic can be labelled as recycled only if it has not been subject to energy recovery and it is reprocessed into new materials that are not to be used as fuel. This is already a legal requirement in the EU Waste legislation. Moreover, plastics treatment activities should follow the waste hierarchy by promoting reuse and maintaining material quality and safety through recycling processes that have a low demand in energy. The proposed scope expansion could enable developing standards for the very resource-intensive chemical recycling of plastic which does not support these aims. **Standards for other applications of SRF rather than thermal processes with energy recovery could create negative competition with mechanical recycling.** They could also limit the effort to design products for easy repair, reuse and recycling of products especially in the EEE and textiles sector.

The case of plastic is emblematic. Beside the technical challenges posed by chemical recycling, pyrolysis and gasification of plastic waste, there are key aspects to consider. These activities would require high volumes of energy, in addition to separating individual polymer types, the knowledge about the composition of each polymer type, including additives, in order to generate materials that could be safely used. **There is therefore no clear business or environmental case for an SRF orientated approach to plastic waste without inefficient and wasteful usage of public funding support.**

ECOS is not in favour of incentives for plastic to fuel activities, whether as heat, steam or as transport fuel. Those will not drive public and private investments into the direction of developing local reuse activities and (mechanical) recycling capacity. Addressing the plastic issue requires ensuring there are no drivers for exporting waste challenges to third countries.

Expertise

ECOS recalls that the standardisation work on SRF has been promoted by those industrial sectors dealing with combustion and co-combustion of waste which are well represented in the technical committee, while there is no appropriate representation in ISO/TC 300 of chemical expertise nor the plastics sector.

As ISO/TC 300 specifically deals with solid recovered fuels to be used in thermal processes with energy recovery, it cannot be the committee dealing with material recovery nor chemical recycling of plastic. It would represent misuse of both time and expertise of those involved in ISO/TC 300.