Copenhagen, September 21st, 2018

Plastic pledge - Confederation of Danish Industry (DI)

1. Circular economy is a high priority for DI

DI works to further the competitiveness of Danish companies, and circular economy is an important part of this effort. DI's ambition is that Danish companies will be among the most resource efficient in the world in 2025.

Plastics are useful - when used right, reused and recycled

Plastics are used by many members of DI either in production or in packaging. By being lightweight, cheap, and versatile, and for instance contributing significantly to combatting food waste, plastics are both useful and unavoidable. Unfortunately, due to its ubiquity, plastic can end up in nature.

Naturally, companies want to contribute to avoid littering and make better use of plastics as a resource. Therefore, DI appreciates the pledging campaign initiated by the Commission, and with this paper we contribute with our pledges as well as a short description of the challenges we face.

2. Pledge for recycled plastic 2025

DI members will use 202.412 tons more recycled plastics in 2025

DI represents a broad range of companies in Denmark, and has collected pledges for use of recycled plastics across multiple industries, and we are proud pledge an additional 202.412 tons recycled plastics used in 2025.

The plastics industry is the largest contributor to this pledge, but also the food industry, the personal hygiene industry, the packaging industry and others are part of the initiative.

Due to the relatively short time frame, all the companies involved have not yet finalized their pledges, and therefore we estimate that this pledge is only the tip of the iceberg when it comes to demand for recycled plastics in Denmark in the coming years.

3. Secondary pledges

Stakeholders work together for circular plastic packaging

In the spring of 2018 the Danish Plastics Federation initiated Forum of Circular Plastics Packaging, gathering the companies along the value chain as well as members of parliament and

NGO's to create shared solutions to the plastics challenge (publication attached hereto). One of the outcomes of the Forum is a design manual for reuse and recycling of plastic packaging for private use (attached hereto).

Design manual for better reuse and recycling of plastic packaging

The design manual offers guidance on materials, colors, covers and forms of the packaging that are suitable for reuse or recycling. The prioritized plastic types represent the greatest quantity of plastics in Danish household waste - corresponding to 75% in all. The manual will be updated yearly to keep pace with the development and implementation of new sorting and management technologies and material types and quantities.

Design for better recycling of plastic packaging
Many companies have preempted the design manual and are already committed to reworking the design of their packaging to make the products more readily recyclable. Most companies have worked for packaging optimization and minimizing for years, and the next step is thinking reuse and recycling more systematically – both in choice of material and in design.

In the food industry, thin flexible films that are optimized to limit food waste and spoilage, are widely used, and the companies work towards the use of single material types rather than multi-material laminates where possible.

Deposit systems and other systems for long term reuse
Denmark has a deposit system for beverage containers that delivers a 90% return rate, and 100% recycling of the plastics in the system. In the summer of 2018 the Minister of Environment and Food resolved to expand the system to take in more types of bottles.

Different sectors within the food industry have traditionally used large plastic crates to transport their products, particularly to and from retailers. This works in a "deposit like" system. The crates have a lifespan of 10-15 years, and the plastic can be recycled after use. They are an example of plastic as a very durable material, quite the opposite of "single use plastics".

Bioplastics and compostable plastics
The term "bioplastics" is used in Denmark both in the sense of plastics made of biological material, and in the sense of being compostable or biodegradable. The biodegradable material is a challenge for the recycling system, but has an advantage due to the low CO_2 footprint.

Innovative Danish companies currently work towards developing better bioplastics made of biological material. And in different sectors there are companies interested in for instance packaging made of bioplastics in either sense, depending on demand and technological development.

4. Conditions for meeting the pledges

Many factors can change from now and until 2025, and despite the companies contributing to the pledges work to fulfill it to the best of their abilities, several factors may impede them from reaching the set goals.

Security of supply

Sourcing is a challenge

The most important precondition for the companies to deliver what they have pledged, is availability of recycled plastics. At this point, sourcing is somewhat of a challenge, and the price of recycled plastics is on the rise.

It goes without saying that there must be a business case for the use of recycled plastics and for changing design of packaging.

Quality

Price is far from the only important criteria, though. Quality in terms of color, odor, robustness and available plastic components is also paramount. This is especially true in the food and personal hygiene industry where packaging is required to adhere to food contact material grade.

Color, odor, robustness and other properties

Concerns about quality and lack of availability of food contact material grade recycled plastics (or knowledge hereof), is keeping companies in the food industry from shifting towards recycled plastics. The same is the case in other industries where the plastics used must have particular electric- or flame-retardant properties, and it is difficult to substitute existing approved materials.

Technology

Among companies there is increasing awareness about the importance of knowing, in detail, the properties of the materials used in production – as a precondition for a functioning circular economy. This goes for plastics as well, and with more detailed knowledge, it will be easier to substitute or demand specific properties of future recycled substitutes.

Finally, the actual amounts may deviate due to development of new technology. For instance, there is a constant development towards weight reduction of plastic packaging. This will reduce the total amount of plastic used *and* the amount of recycled plastic used.

5. Challenges and potentials

At this point, supply of sufficient recycled plastic of the right quality is the biggest challenge the companies face to live up to or even surpass the pledges given. At DI we would like to highlight two things impeding sufficient supply - one national, one on EU-level: The organization of the Danish waste sector, and

the need for a level playing field between virgin and recycled materials.

Organization of the Danish waste sector
The organization of the Danish waste sector is undergoing political negotiations for the third consecutive year. The uncertainty itself is problematic in a sector with rapid technological development and need of significant investment to live up to the potential of the circular economy.

Today, Danish municipalities have the waste disposal right, holding off private companies from investing in the sector, let alone make use of plastics in municipal waste. On the contrary, municipalities have strong incentives for incinerating the waste, as the municipalities own the incinerators.

Add to that, the 98 Danish municipalities use more than 30 different methods of sorting, reducing drastically the business case for recycling.

Level playing field for virgin and recycled materials
It is important that common EU-regulation exists and supports a level playing field for virgin and recycled materials. Important steps have been taken in this direction, and the next step should be a reform of the Waste Shipment Regulation (WSR).

The EU needs a waste shipment regulation that supports efficient use of technology and treatment plants across the EU, easy cooperation between companies across borders, as well as the necessary protection of health and the environment.

The overall objective of the regulation should be to promote recycling. Therefore, it should administratively and economically be less burdensome to transfer waste for recycling than for disposal or other recovery. This would also lessen the incentive to transfer waste illegally.

Furthermore, high quality and transparency in the waste treatment should be honored. The IE-directive on emissions is insufficient to ensure quality in the recycling or the handling of waste.