Turkish Plastics Industry Foundation

Plastics Save Food

- **Food waste is a major obstacle to achieving more resource efficiency**

Food waste is not just a waste of the food itself but indeed of all the energy, water, materials, labour, time and money necessary to produce it. One kilogram of beef, for example, requires 15,500 l/kg of water and In total, the production and consumption of food is responsible for 20-30% of the entire environmental impacts of the EU. Especially in developing countries, better and more suitable packaging would help get more food from farm to fork, while in developed countries, packed food remains fresh for longer, both in shops and at home. About 90 million tonnes of food are wasted in the EU each year, an average of 180kg per person, and most of it is wasted at household level (40-60%).

- **Different plastic packaging needed to save different types of food**

Plastic packaging not only protects food from external factors (damage during transport, shock absorption, deterioration caused by air or oxygen, germs etc.), it also increases the shelf-life of the packed food. Food producers need to be able to choose from the widest possible range of packaging and materials in order to tailor packaging to the specific needs of the product, the supply chain and consumers, enabling them to reduce waste as much as possible. For example, *Parmigiano* cheese, an expensive and sensitive product, is packed in a high barrier film consisting of seven layers of different plastics. If such a high-tech multi-layer film were not available, producers would have to use far more material to provide the same level of protection, at least double if only one type of plastic were used, and the shelf life would be reduced immensely.

- **Recycling targets beyond the optimum level restricts packaging innovations**

Some of the most resource efficient packaging is composite packaging made of very thin layers of different materials, including different plastics, which are currently, from a cost-benefit perspective, often not worthwhile to recycle. From a resource efficiency perspective, however, the recyclability of a packaging is often only of minor importance compared to the benefits it provides, including energy and resource savings, prior to it becoming waste. Setting recycling targets for plastic packaging beyond the optimum levels risks discriminating against some of the most resource efficient packaging solutions, and thereby discourage innovation in the future and produce more waste overall.

Key recommendations:

1. Support a mandatory food waste reduction target in the revised proposal on waste

A mandatory food waste reduction target will increase people's awareness that reducing food waste is key to becoming more resource efficient.

2. Acknowledge the role of packaging in strategies to reduce food waste

The unique properties of plastic packaging should be taken into consideration when developing strategies to reduce food waste. Future technology developments, such as smart

tags providing warnings on temperature changes and humidity levels affecting the food, biosensors detecting bacteria or viruses, will further increase its role in saving food.

3. Set ambitious but realistic plastic packaging recycling targets

In order to reduce the total impact of waste (packaging and food), food producers need different types of packaging and materials with different characteristics, some of which can currently not be recycled eco-efficiently. Unrealistically high recycling targets for plastic packaging will prevent the most resource efficient packaging solutions from being used and discourage innovation.