



Turkish Plastics Industry Foundation

Plastics Save Energy

- **Plastics contribute to the success of the low carbon economy roadmap**

The Energy Roadmap 2050 sets the ground for a much more efficient production and use of energy. Energy efficiency is at the core of such ambition. Contrary to popular belief, plastics contribute and will keep contributing to energy efficiency. Not only do most plastics products require less energy in their production than alternative materials but many of them also contribute to save a significant amount of energy during their use. The *denkstatt* study shows that today's plastics products market have enabled energy savings equivalent to 53 million tonnes of fossil fuel. If all plastics solutions available on the market were actually used today, we would save 12 tonnes of CO₂ for each tonne of CO₂ emitted during plastics production (12:1 ratio).

- **Plastics save energy in packaging**

The *denkstatt* report on plastics packaging shows that its use saves more energy in comparison with other materials, thereby contributing to an energy efficient society. Indeed, if food was packed in a material other than plastics, the overall weight of packaging would be four times higher, the related energy consumption would double, greenhouse gas emissions would nearly triple, while increasing food waste. The plastics industry is committed to the efficient use of plastics in its products. For example, the weight of plastic washing-up liquid bottles has been reduced by 36% over a 20 year period, from 67g in the 1990s to 43g in 2010.

- **Plastics save energy in building & construction**

Buildings account for roughly 40% of the EU's energy consumption and greenhouse gas emissions; plastics can help to reduce this energy consumption. 9 out of 10 buildings currently in use will still be standing and occupied in 2050; therefore renovation of existing buildings and construction of energy efficient new buildings are necessary to meet the objectives that our country set itself in this field. Plastics can play a key role as they offer a unique combination of environmental performance, cost-effectiveness and reliability over time.

- **Plastics save energy in transports**

The most energy efficient cars would not perform nowadays and will not exist in the future without plastics materials. In line with the objective of cutting CO₂ emissions in transport by 60% by 2050, plastics not only contribute to reduce the overall weight of the vehicle – which translates into lower fuel consumptions – but also provide the car industry with high performance materials which play a vital role in developing low carbon solutions such as hybrid, electric and hydrogen cars.



PAGEV is
Member of



PlasticsEurope
Association of Plastics Manufacturers



WFO WASTE FREE
OCEANS





Turkish Plastics Industry Foundation

Key recommendations:

1. Consider the benefits of lightweight plastics packaging when deciding on waste targets

Plastic packaging not only saves energy but is a valuable resource after their use. Therefore they should not be landfilled but used either for recycling or energy production. However unrealistic targets could pose a threat to the availability of plastic packaging on the market.

2. Promote lightweight materials in CO₂ emissions regulation

The European Union will soon start developing its new ambitions on CO₂ emissions from cars. Turkey is taking firm steps for domestic car production. Such ambitions must allow and promote lightweight materials.



Plast Eurasia
İstanbul 2015

PAGEV is
Member of



PlasticsEurope
Association of Plastics Manufacturers



WFO WASTE FREE
OCEANS

