Let's talk about it

PlasticsEurope
Association of Plastics Manufacturers

LET'S BE CLEAR ABOUT SAFETY

Pharmaceutical blister packaging: medicines are packed safely in plastics **1963**

Plastic blood bags replace glass bottles and make blood transfusions safer **1970**

Pedestrian airbags are installed in cars **2012**

PLASTICS MAKE YOUR LIFE SAFER

Plastic pipes invention secures safe transportation of drinking water **1939**

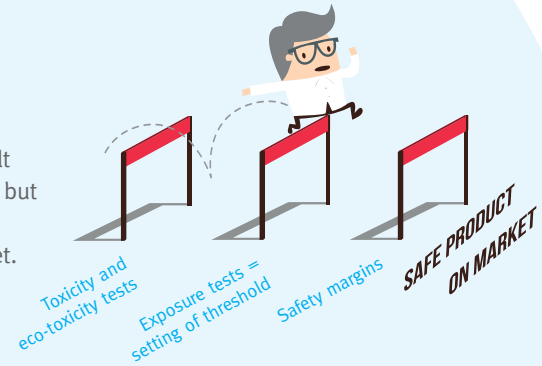
Seat belts become mandatory in all EU countries to increase road safety **1991**

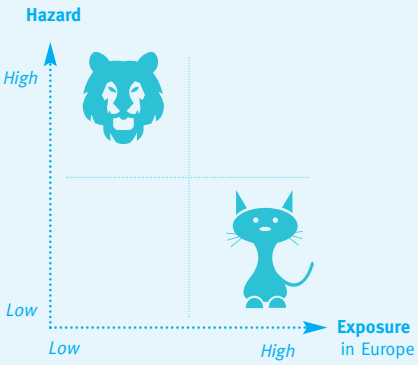
3D printed plastic skull saves woman's life **2014**

PLASTICS ARE SAFE. REALLY? REALLY!

In public debates, plastics are often perceived as harmful and have become a cause for concern which touch upon the most precious: our health and our environment. Such concerns must be carefully addressed by the manufacturers but also be confronted with reality.

Reality is that the safety of plastics is tested.
Plastics are put on the market once they have been proven to be safe for people and the environment. Safety testing is not only the result of numerous regulations plastics are subject to, but is first and foremost an intrinsic part of product development, before being placed on the market.





Risk depends on hazard and exposure

Reality is that safety is about hazard, risk and benefits.
How to best guarantee safety? With chemicals, it is very tempting to get rid of a substance because it could potentially pose a risk. And indeed, why risk being potentially exposed to hazard if one can avoid it? In fact, such an approach overlooks two important factors. First, the same chemical may bring well proven benefits to society (including safety benefits). Second, it is possible to know whether harm is likely to occur when performing risk assessments.
In order to best guarantee safety, it is therefore key to identify risks and weigh them against benefits.

WHAT YOU CAN DO

1. Seek for conclusive evidence, i.e. check if data has been gathered, interpreted and communicated according to a few broadly supported rules. Why? Because not all scientific findings are relevant for policy making.
2. Make sure regulation foresees the possibility to assess risks when dealing with chemicals.
3. Apply informed precaution, i.e. the application of the precautionary principle should be based on solid evidence and lead to decisions open for review.

LET'S SAVE ENERGY AND RESOURCES

PLASTICS SAVE ENERGY AND RESOURCES

PLASTICS SAVE ENERGY IN BUILDINGS

40% *of all CO_2 emissions in Europe come from buildings*

340 MILLION TONNES *could be saved if 50% of buildings were insulated to the highest standards using plastics insulation*

PLASTICS SAVE ENERGY IN CARS

95 G/KM *is the maximum amount of CO_2 cars in Europe are allowed to emit in 2020*

40-50% *this is how much plastic parts in cars are lighter than those made of alternative materials*

PLASTICS SAVE ENERGY IN PACKAGING

50% *of all European goods are packed in plastics*

ONLY 17% *is what plastics account for by weight of all packaging*

60 MILLION TONNES *saved per year thanks to light weight plastic packaging*

PLASTICS SAVE FOOD

179 KG/PERSON *of edible food is wasted in Europe each year*

60% *of food waste in Europe is avoidable, most of it in households*

UP TO 10 DAYS *That's how much longer plastic packaging keeps beef fresh and safe to eat*

PLASTICS GIVE MORE THAN THEY TAKE. REALLY? REALLY!

The low carbon economy is at the core of the EU's climate and energy agenda and sectors that rely on fossil materials such as the plastics industry are sometimes seen as an obstacle to those ambitions.

Is this an accurate analysis? One should have a closer look at reality. Contrary to what one may think, plastics contribute to the rise of the low carbon economy. Thanks to their energy efficiency potential, plastics help save more energy than it takes to produce and recover them. For instance, with plastic packaging, up to 9 times more CO_2 emissions are saved during its use phase compared to those resulting from their production and recovery.

DID YOU KNOW?

96% of crude oil and gas goes directly into energy production for heating, transport and electricity. Only 4% is used for the production of plastics.

WHAT YOU CAN DO

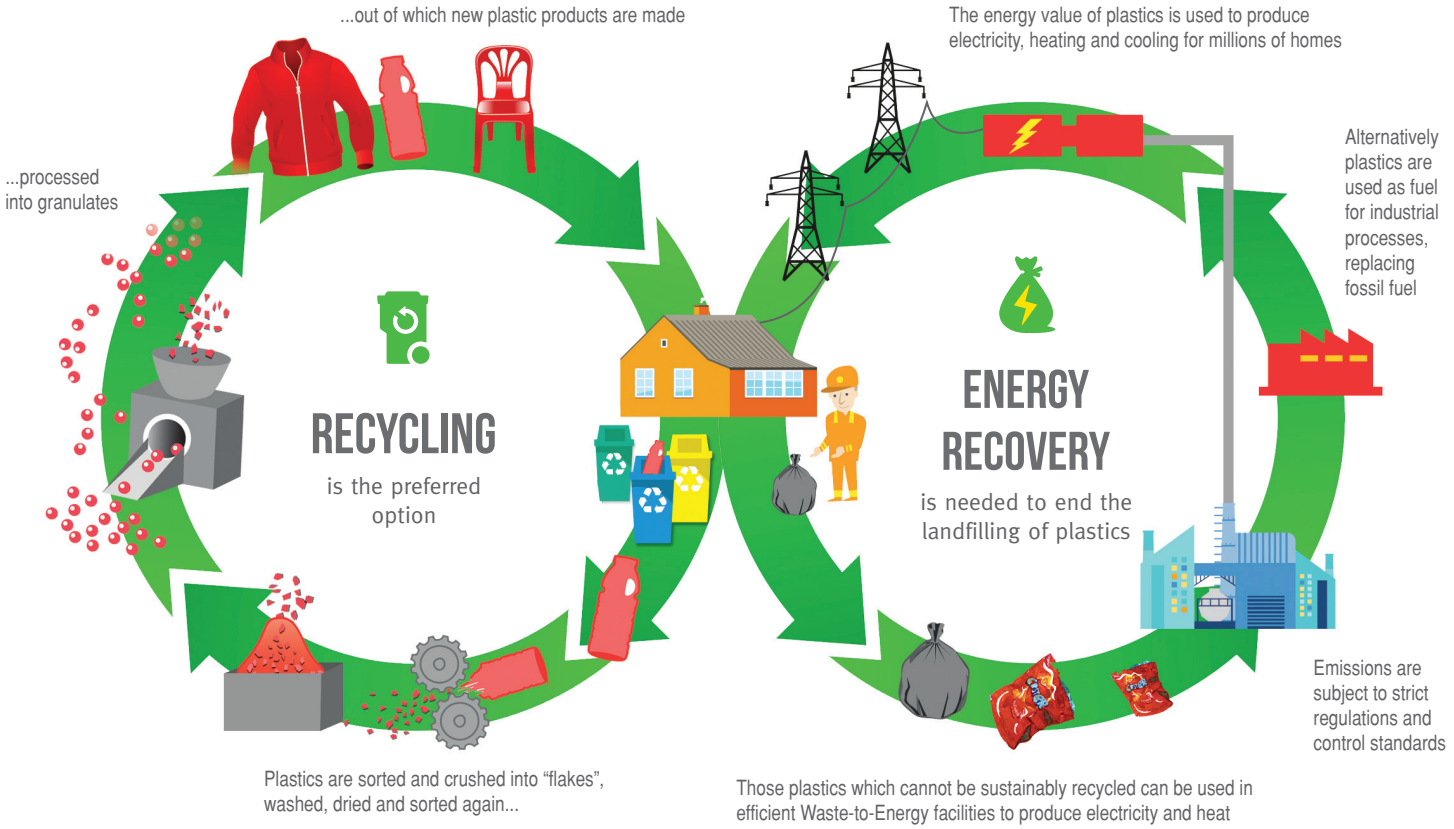
1. Consider all life cycle stages of a product (production, use and waste) in order to understand its true impact on the environment.
2. Accelerate renovation of buildings in Europe by increasing the overall annual renovation rate from 1% today to 3% by 2020.
3. Promote lightweight materials when drafting new rules on CO_2 emissions from passenger cars.

LET'S STOP THE LANDFILLING OF PLASTICS

9.6 MILLION TONNES *of plastic waste are landfilled every year in Europe*

16-19 MILLION *more citizens potentially supplied with energy recovered from plastic waste*

40% *of plastic packaging was recycled in Germany in 2012 (based on input)*



PLASTIC WASTE IS A RESOURCE

The amount of plastics that can be sustainably recycled has increased in the last decades due to improved identification and sorting technology. While future technologies will further increase this potential, recycling is not always the most suitable option for all plastics. This is why energy recovery must remain a viable option.

PLASTIC WASTE IS A VALUABLE RESOURCE. REALLY? REALLY!

You can do a lot with plastics once they have become "waste".

An estimated 9.6 million tonnes of plastics are still going to landfills in Europe every year, an amount representing about 100 million barrels of oil worth around 8 billion €. Instead, these plastics should be either recycled into new products or – if that is not sustainable – used to produce electricity, heating and cooling for up to 19 million citizens. Alternatively, these plastics could also replace fossil fuels in industrial production. Therefore, plastics should be treated as a valuable resource and must not end up in landfills. Our target is "ZERO PLASTICS TO LANDFILL BY 2020".

Improved waste management is also crucial to reduce the risk of littering. When it comes to marine litter in particular, plastic manufacturers give priority to actions that prevent plastics from ending up as litter in the oceans. You can find out more about the Global Action Plan on Marine Litter under *www.marinelittersolutions.com*.

WHAT YOU CAN DO

1. Stop the landfilling of recyclable and other recoverable waste in order to stimulate recycling.
2. Set ambitious but realistic EU recycling targets based on the current level of the best performing larger EU Member States.
3. Ensure that energy recovery remains a viable option for those plastics which cannot be sustainably recycled.

LET'S BRING COMPETITIVENESS BACK

PLASTICS ARE A SOURCE OF GROWTH AND INNOVATION IN EUROPE

THE MULTIPLIER EFFECT OF PLASTICS FOR SOCIETY AND THE ECONOMY

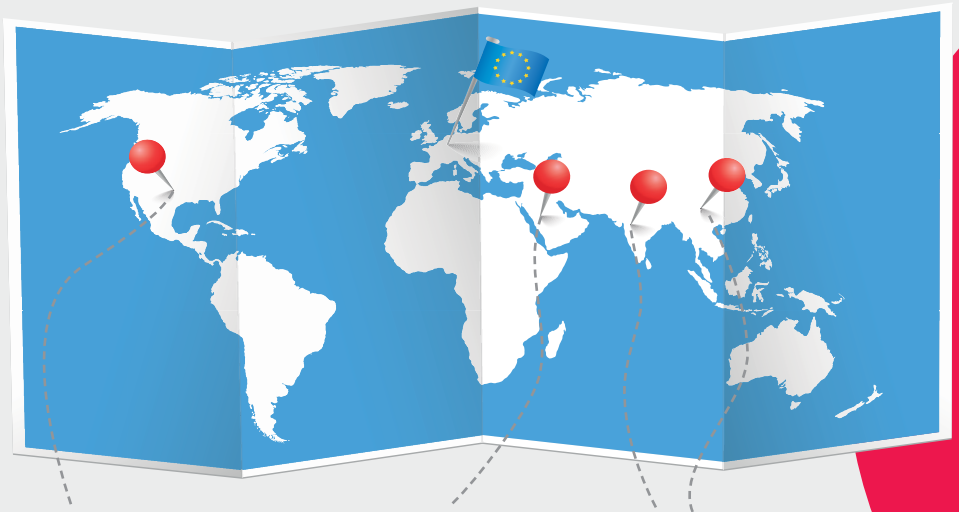
The growth of the plastics industry has a multiplier effect on numerous important sectors of the European economy. It is an enabling industry which makes many innovative products and technologies possible: wind turbines, lightweight cars, modern healthcare, intelligent textiles, etc.

None of these sectors would grow without plastics. Innovation and growth in Europe depend on manufacturing, in particular the plastics industry. For instance, in Italy, the *European House Ambrosetti* has come to the conclusion that:

- a **100 €** increase in GDP in the national plastics supply chain **generates 238 €** of GDP in the national economy.
- **every job created** in the plastics sector **leads to 2.74 subsequent jobs**.

MANUFACTURING IN EUROPE HAS A BRIGHT FUTURE. REALLY? REALLY!

Europe must create the necessary conditions to face global challenges



Energy challenge
Compete with reduced energy cost in North America due to shale gas

Raw material challenge
Compete with direct access to fossil resources in the middle East

Investment challenge
Compete with investments in China and a strong growth in plastics conversion in India

WHAT YOU CAN DO

1. Ensure the provision of reliable and competitively priced raw materials and energy.
2. Promote science education and training in Europe.
3. Build consistent and complementary policies.

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Plastics
The Material for the 21st Century