

The **UNKNOWN LIFE** *of* **PLASTICS**



Why are many products packed in plastics today?
And what should be done with the packaging when it becomes waste?

PLASTICS ARE VALUABLE

During the *production* and the *use phase*

PLASTIC PACKAGING IS **LIGHTER** THAN ALTERNATIVE MATERIALS, THEREBY

- ▶ Saving energy
- ▶ Reducing CO₂ emissions
- ▶ Saving resources



50%
of all European goods are packed in plastics



However, plastics account for only **17%** of all packaging waste

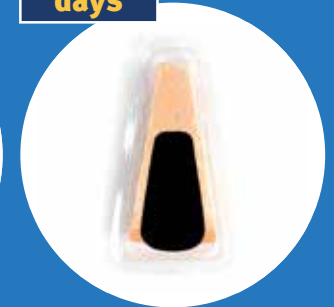
PLASTIC PACKAGING **HELPS PREVENT** FOOD WASTE.

Modern packaging increases Parmesan cheese shelf life from 20 to 50+ days

20
days



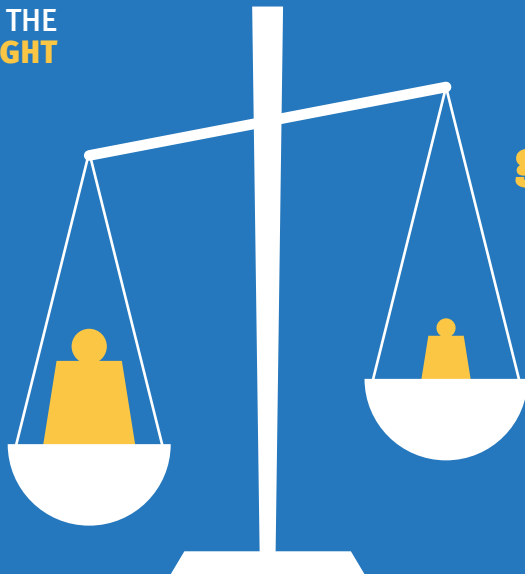
50+
days



PLASTICS REDUCE THE **VOLUME AND WEIGHT** OF PACKAGING:

88
grammes
alternative materials

Average packaging weight for 1 kg of product



22
grammes
plastics

Using plastic packaging for all products would:



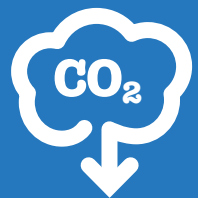
reduce by around

800kg
an average truck load

Save up to
2 litres
of diesel
per 100 km



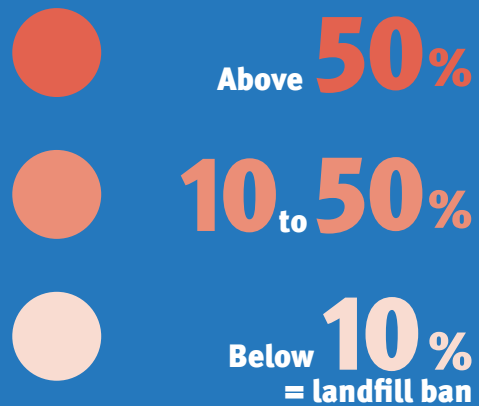
Decrease
5kg
of CO₂
per 100 km



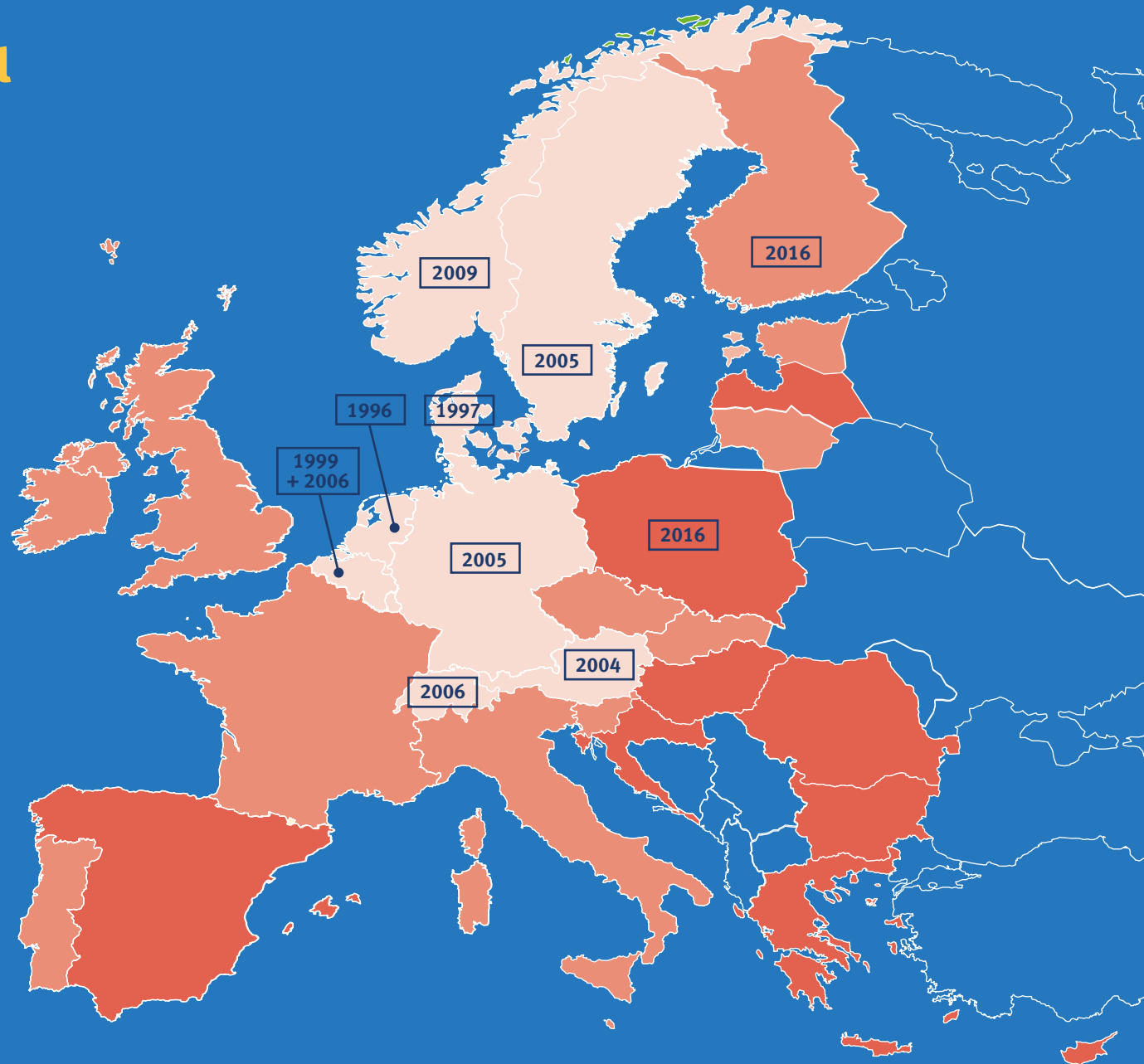
WHEN PACKAGING BECOMES WASTE

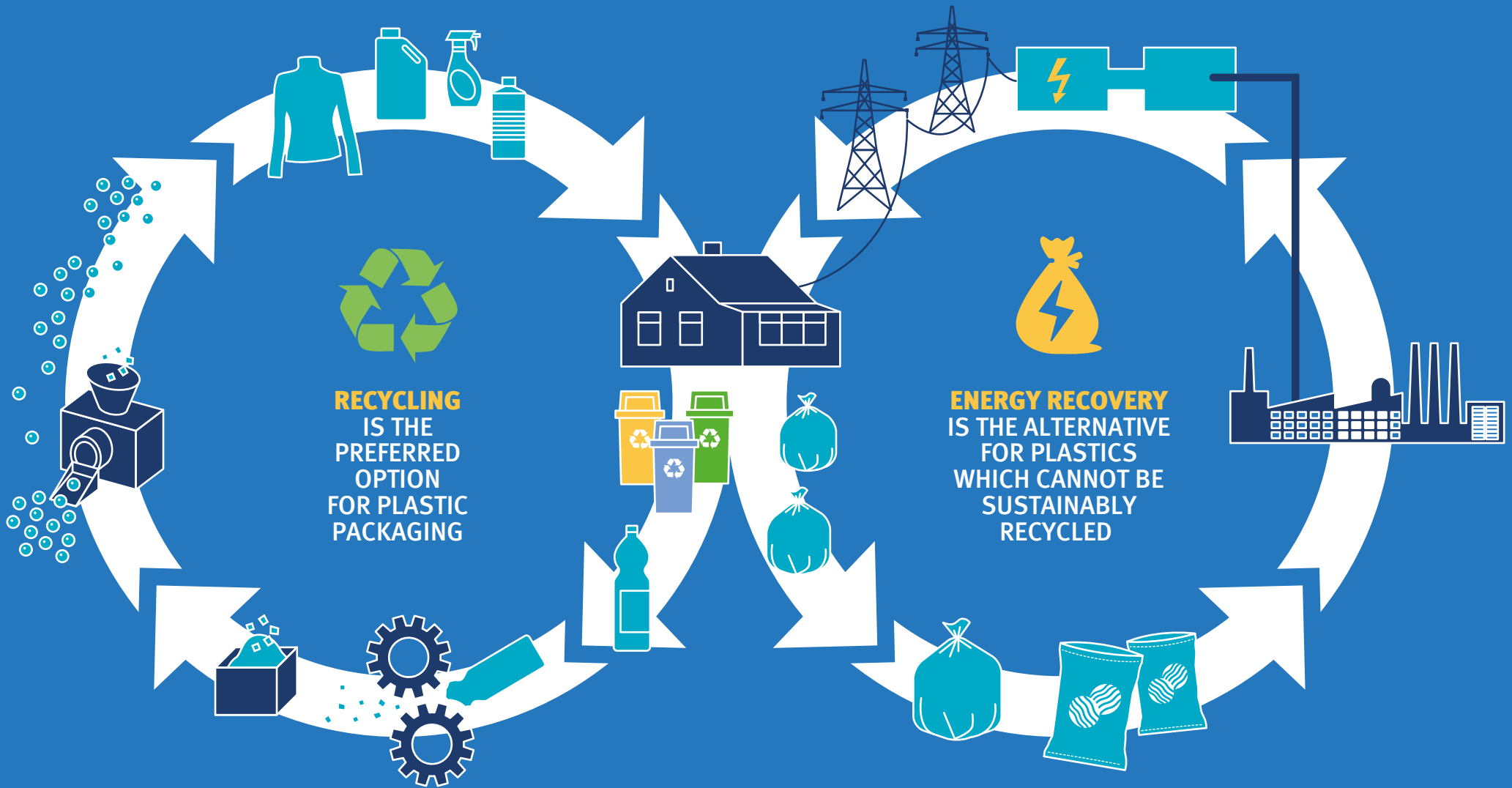
Plastic waste sent to landfill (2014 data)

IN MANY COUNTRIES PLASTIC WASTE STILL **ENDS UP IN LANDFILLS** HOWEVER SOME COUNTRIES HAVE **BETTER SOLUTIONS**



Date of landfill ban in force





ZERO PLASTICS TO **LANDFILL** BY 2025

Stopping the landfilling of recyclable and other recoverable waste, including plastics, by 2025 in Europe brings economic and environmental benefits

In 2014,
8
million
tonnes (mt)
of plastics
ended up in landfills



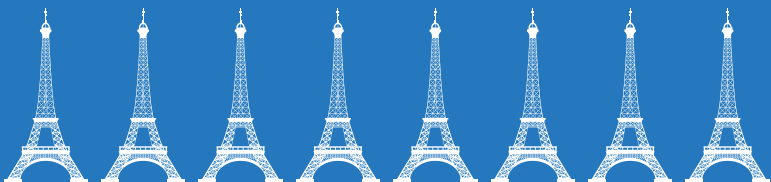
Making use of the
100
million
barrels of oil
needed to produce
these plastics



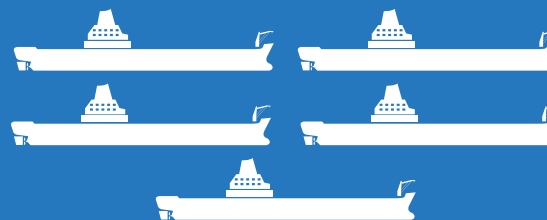
€
Worth
8
billion
Euro



The weight of
800
Eiffel Towers



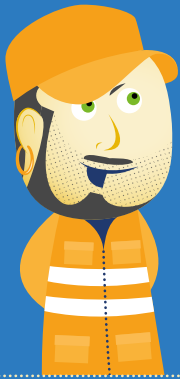
50
large oil tankers



1.3x
the EU budget
for tackling
youth
unemployment



RECYCLING IS THE PREFERRED OPTION FOR PLASTIC PACKAGING



Plastics recycling today works well for packaging which is easy to collect and sort, for example for plastic bottles and commercial packaging films

Recycling technology for plastics is still at an early stage since plastics is the youngest material. In order to realise its full potential, more innovation in plastics recycling technology is needed



Young material, young technology

Mechanical recycling refers to operations that aim to recover plastics via mechanical processes (sorting, shredding, washing, drying and pelletising), thus, producing recyclates that can be converted into new plastic products

Mechanical



recycling

Chemical

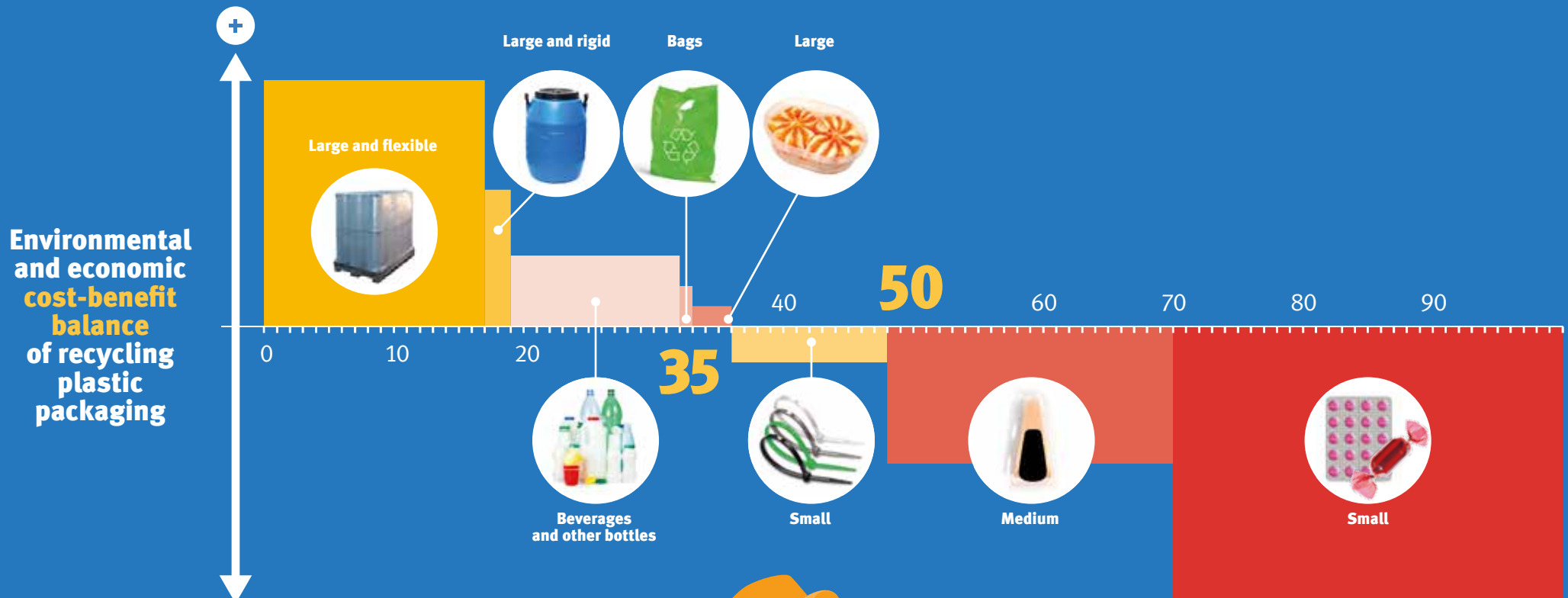


recycling

Chemical recycling is a promising technology which would turn plastics back into their basic chemical building blocks. This would enable plastics to be reintroduced in the production process. As is the case already for other materials such as glass, paper and metal

Making sense of recycling

There is an optimum level for plastic packaging recycling, which is between 35% and 50% in Europe today. Going beyond the optimum level would increase costs for society or have no environmental benefits



With the currently available technology recycling is good for the economy & the environment up to a level between 35% and 50%

Plastic facts

How to improve recycling rates?

To recycle more, Member States should:

1. Stop landfilling of **recyclable** and **other recoverable** waste by 2025



2. Improve separate collection of bio-waste and **dry-recyclables** such as plastic packaging



3. Support **innovation** in plastics recycling



Zero Plastics to Landfill by 2025 will boost recycling

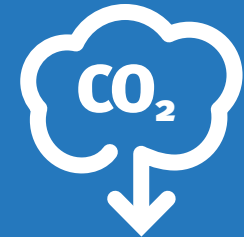


5 mt
of plastics
additionally
recycled



Prevent

7 mt



emissions



Equivalent
to taking

2.4
million

cars off the road



WHAT ARE THE **ALTERNATIVES?**

Waste which cannot be recycled sustainably should be used as an energy source, thereby generating an additional 300 TWh of electricity and heat each year, enough to:

provide
30 million
people with electricity,
heating and cooling



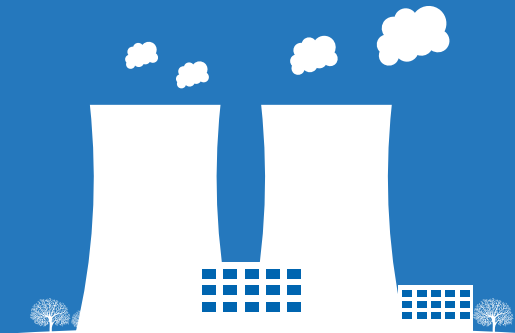
save
70 million
barrels of crude oil used in industrial
production, e. g. of cement



substitute
23%
of Europe's gas import from Russia



or replace over
300
coal power stations



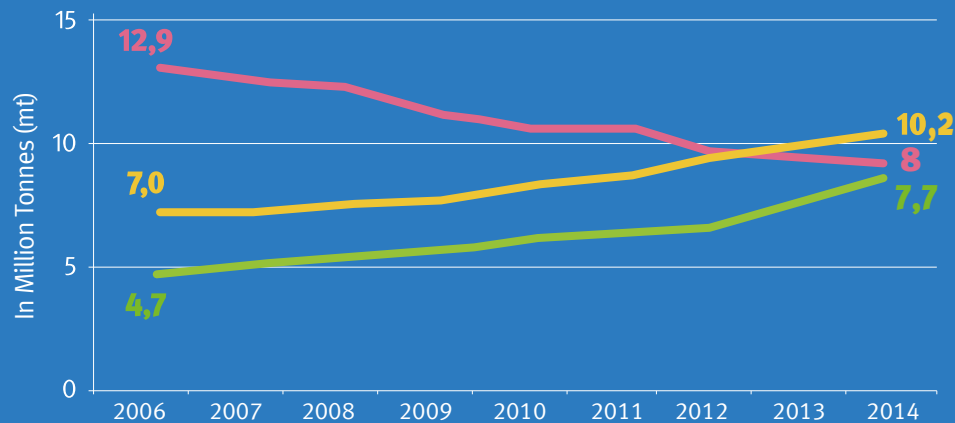
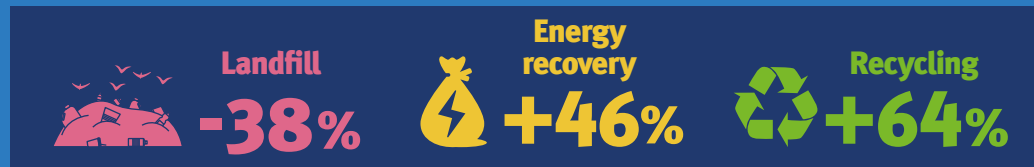
FROM BEGINNING TO END: PLASTICS ARE VALUABLE!

DUE TO THEIR **LIGHTWEIGHT CHARACTERISTICS** AND THEIR ABILITY TO ACHIEVE MORE WITH LESS, PLASTICS ACHIEVE SIGNIFICANT RESOURCE SAVINGS

PLASTICS AS WASTE ARE A VALUABLE RESOURCE; THEY CAN BE USED **TO CREATE NEW PRODUCTS** OR TO **GENERATE ENERGY**

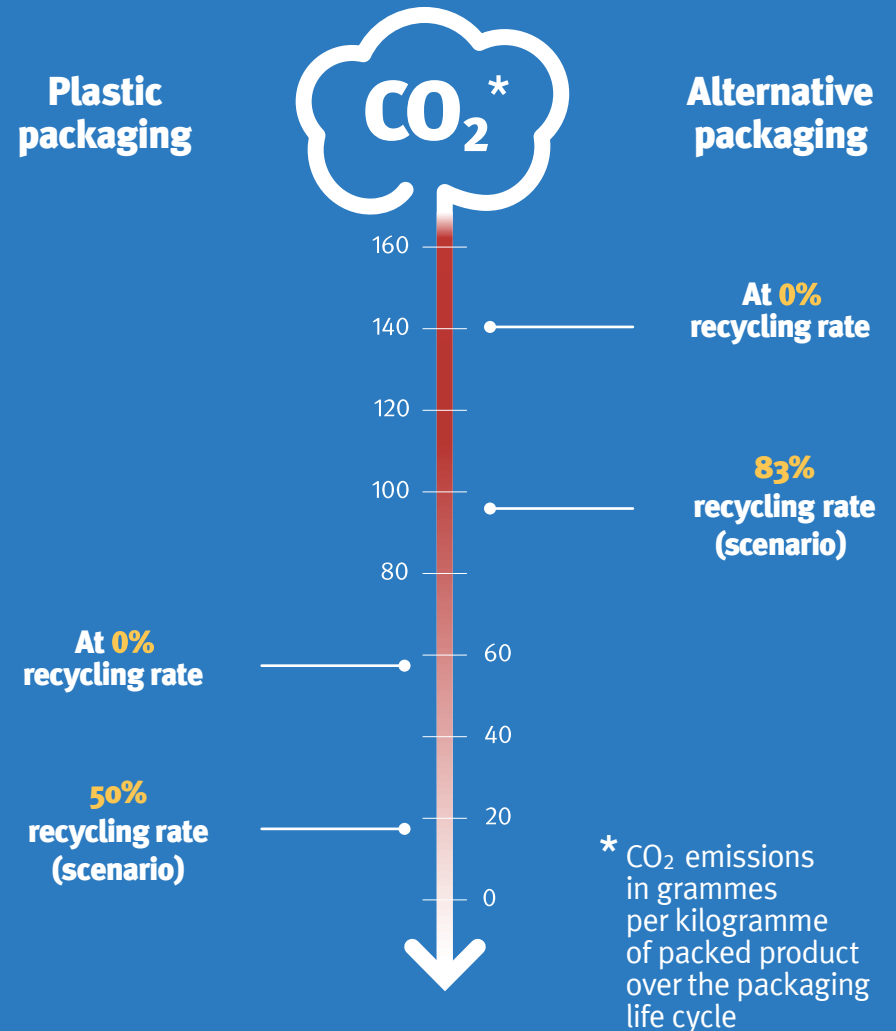
STOPPING THE LANDFILLING OF RECYCLABLE AND OTHER RECOVERABLE POST-CONSUMER WASTE WILL INCREASE RESOURCE EFFICIENCY AND MAKE SURE WE USE ALL THE **BENEFITS PROVIDED BY PLASTICS**

A **38% REDUCTION IN LANDFILLING** IN EUROPE HAS LED TO A **64% INCREASE IN RECYCLING** AND **46% IN ENERGY RECOVERY**



Plastic waste management 2006-2014

Plastic packaging **reduces CO₂ emissions**





**Stopping the landfilling
of recyclable and other
recoverable waste
would generate around
300,000
permanent industrial jobs
related to new sorting,
recycling and energy
recovery facilities**

PlasticsEurope
Association of Plastic Manufacturers



PlasticsEurope

Association of Plastics Manufacturers

PlasticsEurope AISBL
Avenue E. Van Nieuwenhuyse 4/3
B-1160 Brussels - Belgium

Phone +32 (0) 2 676 32 97
Fax +32 (0) 2 675 39 35

info@plasticseurope.org
www.plasticseurope.org
www.plastics-themag.com

 @PlasticsEurope

Source

<http://www.plasticseurope.org/plasticssustainability/circular-economy.aspx>

designed by:
Avalanche
Infographics



AVALANCHE
INFOGRAPHICS