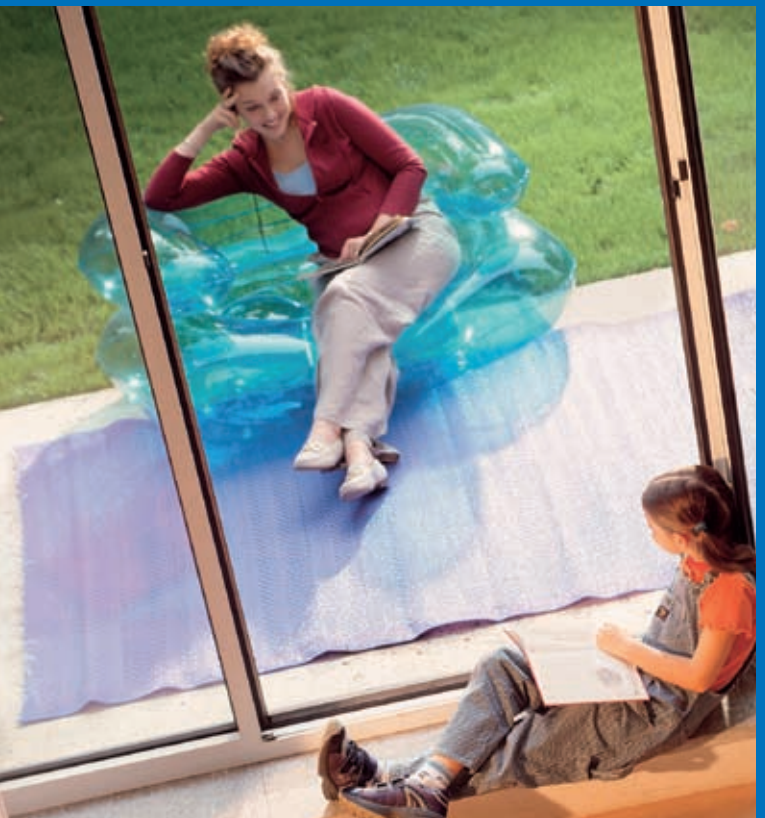
Plastics
the material for the 21st century

Since the first plastic was invented a century or more ago, plastics have revolutionised the way we live. Whether we're communicating, travelling, playing, caring for each other's health or protecting the environment, there's no sphere of human activity that hasn't been significantly advanced by the use of this remarkable material. And today, scientists and technologists are continuously working at the forefront of knowledge, in fields as diverse as space exploration, nanotechnology and medicine, to find new ways plastics can benefit people. Their research means that many solutions, for most of us as yet unimaginable, will soon enter our everyday lives - all thanks to amazing plastics. No wonder plastics are set to be the material for the 21st century.



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October 2007

EuPC
EUROPEAN PLASTICS CONVERTERS

PlasticsEurope
Association of Plastics Manufacturers

Climate protection

Plastics
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Plastics are amazing

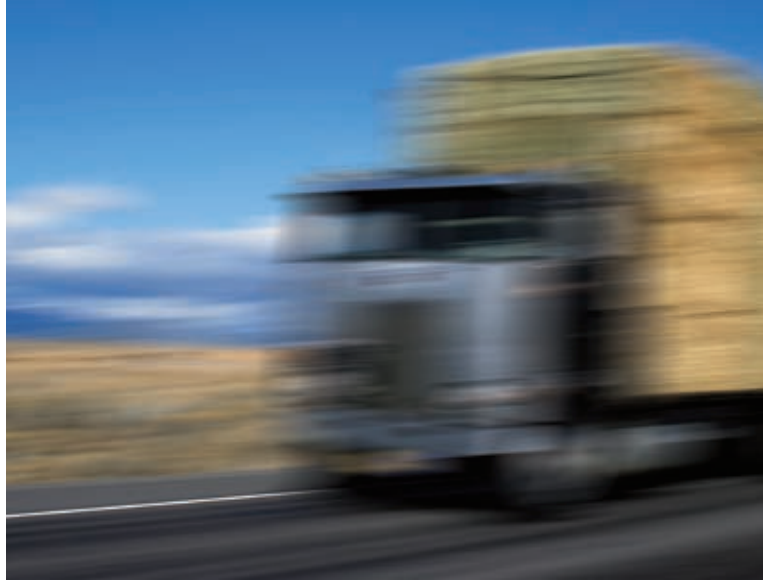
Plastics play a vital part in our lives: at home, at work, in schools and hospitals. We play with them, we travel with them, we wear them.
And sometimes, if parts of our body don't work, doctors can even replace them with new ones - made of plastic. Plastics keep us safe, they make life more comfortable and fun, and they're surprisingly good for the environment.
They come in many different forms: harder than steel, softer than silk, any colour or shape...
It's why designers and inventors love them. Plastics are amazing. We often take them for granted, but life wouldn't be the same without them.

Plastics help to save energy

A recent UN report concluded that climate change is being caused by the emission of greenhouse gases. And in 2007, an EU Commission report stated that "energy is the main factor in climate change, accounting for some 80% of the EU's greenhouse gas emissions". So, although energy is a vital part of our daily lives, tackling climate change through energy conservation and clean energy production is a responsibility we all need to share.

The sectors that consume most energy are transport and building. Plastics can play a significant role in helping these two sectors achieve greater energy efficiency and energy savings. They can do this in a variety of ways. For example, because plastics are up to 85% lighter than many other materials, they require much less fuel for their transportation. And because increasing the percentage of plastic components in vehicles or as packaging for soft drinks, results in lower fuel consumption, the environment will also benefit through lower emissions.

A report in March 2007 by the UNEP's Sustainable Construction and Building Initiative states that the construction sector (which accounts for 30-40% of all energy use worldwide) can help to combat climate change by reducing its CO_2 emissions. Recent European evidence also shows that the use of plastics in thermal insulation, together with smart design, can save up to 90% of the energy used in buildings for lighting and climate control.
This figure is based on a comparison with the current average energy consumption in existing buildings.



Plastics enable renewable energy

The EU is putting the increased use of renewable energy at the heart of its policies to combat climate change. If we are to maximise energy efficiency, innovations and technological advances are vital. Once again, plastics have a crucial role to play here: they enable the construction of solar panels, wind power plants and photovoltaic cells - all crucial weapons in the fight against climate change.
Plastic resins, for example, due to their mechanical strength and lightness, are currently the only materials that can be used to make rotor blades for large wind turbines.
And in the photovoltaic sector, scientists are exploring solutions in which plastics are not only a structural component, but may also be able to replace mineral silicon in its photovoltaic function.