



Plastic and Paper Packaging Comparison

	Paper	Plastic
Raw Material	<p>Sustainable / Renewable – paper is made from a sustainable and renewable resource.</p> <p>However, the demand for paper has created deforestation in areas of the world, which impacts on wildlife and indigenous communities.</p>	<p>Non-renewable – traditional plastics are made from petroleum, which is a non-renewable resource.</p>
Manufacturing	<p>Paper packaging is less environmentally friendly to manufacture than plastic. For example:</p> <ul style="list-style-type: none"> Paper production emits air pollution, specifically 70 percent more pollution than the production of plastic bags(3) 	<p>Surprisingly, plastic is a lot more environmentally friendly to manufacture than paper. For example:</p> <ul style="list-style-type: none"> Plastic uses 4 times less water during manufacturing than paper (4) Production of plastic packaging uses half the energy as alternative materials (5)
Transport	<p>Less efficient - paper is heavier than plastic, which means more CO2 emissions will be created when it is moved</p>	<p>Lightweight & efficient - plastic is incredibly lightweight and easy to store or move. This means less fuel and therefore CO2 will be created as a by-product when plastics are transported</p>
Performance	<p>Paper and plastic can perform equally well when protecting products if they are applied appropriately. How they are used will depend on the goods you are packing and shipping. For example, you may need to block and brace a product, or you may simply need void fill.</p>	



Plastic and Paper Packaging Comparison

	Paper	Plastic
Pollution and Litter	<p>Air pollution – paper production and transport result in increased air pollution (1, 3)</p> <p>Water pollution – paper production creates wastewater than can contain chemicals, heavy metals and nutrients that all impact marine and freshwater ecosystems (6)</p>	<p>Marine pollution – plastics in all forms pollutes marine environment, threatening wildlife(2)</p> <p>Land litter – 80% of the plastics found in the ocean is estimated to have come from land-based sources(5)</p>
Reusability Recycling & End of Life	<p>Widely Recycled – paper is widely recycled and can be reconverted to create more paper-based materials.</p> <p>However, paper can only be recycled a certain number of times before the fibres in it lose their structure and become unusable.</p>	<p>Reusable & Recyclable – plastic is often manufactured into reusable packaging and in some forms, it can be infinitely recycled.</p> <p>However, not all plastic is widely recycled across the UK. It will depend on your local authority which means many flexible plastics end up in landfill.</p>
Cost	<p>Slightly more expensive – paper is often more expensive than plastic equivalents based on unit price.</p>	<p>Cheaper – plastic tends to be cheaper based on unit price than its paper alternatives.</p> <p>It's important to note that, new taxes on virgin-material plastics could see prices increase in 2022.</p>



Sources

- Source 1 – [British Plastic Federation](#)
- Source 2 - [Ocean Conservancy](#)
- Source 3 – [Washington Post](#)
- Source 4 – [Clean Water Action](#)
- Source 5 – [British Plastic Federation](#)
- Source 6 – [Wikipedia](#)