



RELATIVE MERITS OF ALTERNATIVES TO SINGLE-USE PLASTIC CARRIER BAGS

Materials most favoured by environmentally aware consumers nearer the top – but see Notes*. We include just one of many suppliers here, because this is an ethical, fair trade producer used by the iconic plastic-bag-free Modbury. "Consumer" = shops, distributors and shoppers.

Material	Advantages	Disadvantages	Source / further information
Hessian / jute	<p>Environmental: long-life- reusable; bio-degradable at end of life.</p> <p>Consumer: sturdy, rigid, durable, can hold a lot; liked by green consumers.</p>	<p>Environmental: needs land, water, fertilizer to grow; biodegrading releases methane.</p> <p>Consumer: bulky.</p>	<p>http://www.reusethisbag.com/25-reasons-to-go-reusable.asp http://www.wrap.org.uk/retail/carrier_bags/carrier_bags.html</p>
Organic cotton	<p>Environmental: durable, reusable; better than non-organic; bio-degradable at end of life.</p> <p>Consumer: sturdy, can hold a lot; washable; liked by green consumers; thin ones very portable; heavy-weight ones easy to pack.</p>	<p>Environmental: land and water use in production; biodegrading releases methane.</p> <p>Consumer: limited organic colour range.</p>	<p>http://www.reusethisbag.com/25-reasons-to-go-reusable.asp http://www.wrap.org.uk/retail/carrier_bags/carrier_bags.html http://www.bags2keep.co.uk/</p>
Cotton	<p>Environmental: long-life; reusable; biodegradable at end of life.</p> <p>Consumer: takes dyes well; sturdy, durable, can hold a lot; washable; thin ones very portable; heavy-weight ones easy to pack.</p>	<p>Environmental: land, water and chemical use in production; biodegrading releases methane; chemical dyes.</p> <p>Consumer: few</p>	<p>http://www.reusethisbag.com/25-reasons-to-go-reusable.asp http://www.wrap.org.uk/retail/carrier_bags/carrier_bags.html http://www.bags2keep.co.uk/</p>

<p>Recycled fabrics</p>	<p>Environmental: re-uses fabric remnants; durable, reusable; may be bio-degradable at end of life. Consumer: each one unique; sturdy, can hold a lot; washable; liked by green consumers.</p>	<p>Environmental: few Consumer: not easily mass-produced.</p>	<p>http://www.reusethisbag.com/25-reasons-to-go-reusable.asp http://www.morsbags.com/</p>
<p>Starch-based bags (corn)</p>	<p>Environmental: bio-degrade easily; renewable resource. Consumer: acceptable alternative for food wrapping; biodegradable, may be compostable.</p>	<p>Environmental: misuse of a food crop; limited re-use; biodegrading releases methane; can contaminate plastics recycling. Consumer: biodegrade too easily; more expensive than plastic.</p>	<p>http://www.wrap.org.uk/retail/carrier_bags/carrier_bags.html http://www.discountbiodegradablebags.co.uk/ http://www.e-voice.org.uk/greenerkingston/files/view/Degradable-Biodegradable_bags_factsheet_PS_190607.doc</p>
<p>Starch-based bags (potato)</p>	<p>Environmental: biodegrade easily; made from renewable waste product. Consumer: acceptable alternative for food wrapping; biodegradable, may be compostable.</p>	<p>Environmental: limited re-use; biodegrading releases methane; can contaminate plastics recycling. Consumer: biodegrade too easily; more expensive than plastic.</p>	<p>http://www.wrap.org.uk/retail/carrier_bags/carrier_bags.html http://www.discountbiodegradablebags.co.uk/ http://www.e-voice.org.uk/greenerkingston/files/view/Degradable-Biodegradable_bags_factsheet_PS_190607.doc</p>

Polyester / Polypropylene	Environmental: long-life, reusable; can be made from recycled materials, e.g plastic bottles. Consumer: light and portable, but sturdy, can hold a lot; durable.	Environmental: not recyclable or bio-degradable. May be oil-based. Consumer: few	http://www.reusethisbag.com/25-reasons-to-go-reusable.asp
Nylon	Environmental: long-life, reusable; Consumer: very light and portable, but sturdy, can hold a lot; durable; cheap.	Environmental: oil-based product; not recyclable or bio-degradable. Consumer: few	http://www.reusethisbag.com/25-reasons-to-go-reusable.asp
<i>Below this line are the least sustainable and least acceptable materials</i>			
Paper	Environmental: Can be made from recycled paper; recyclable if uncoated. Consumer: few; cheap; takes logos etc well.	Environmental: rarely if ever reused; heavy environmental costs of paper production and recycling; heavy and bulky in waste and transport. Consumer: not waterproof; limited capacity.	http://www.enviroliteracy.org/article.php/1268.html http://legacy.london.gov.uk/assembly/reports/environment/bag-to-basics.pdf http://www.wrap.org.uk/retail/carrier_bags/carrier_bags.html
Degradable PE	Environmental: can bio-degrade in 18 months to four years in the right conditions (i.e. not landfill), does not release methane. Consumer: like other plastics, waterproof; light.	Environmental: may be oil-based; needs light and heat to biodegrade; limited reuse; may contaminate other recycling. Consumer: few	http://www.wrap.org.uk/retail/carrier_bags/carrier_bags.html http://www.wrap.org.uk/downloads/Biopolymer_briefing_26_jan_09_final1.de875513.4907.pdf http://www.discountbiodegradablebags.co.uk/ http://www.e-voice.org.uk/greenerkingston/files/view/Degradable-Biodegradable_bags_factsheet_PS_190607.doc http://www.european-bioplastics.org/media/files/docs/en-pub/050606_Position_Degradable_PE.pdf

<p>Long-life / heavy weight plastic</p>	<p>Environmental: reusable for ; Consumer: waterproof; cheap; takes logos etc well.</p>	<p>Environmental: oil-based product; not as durable as many other materials; heavier and bulkier in waste and transport, and takes even longer than light-weight single-use plastic to break down; recycling limited; environmental costs of recycling – including transport abroad. Consumer: deteriorate quite quickly, limited reuse.</p>	<p>http://www.mcsuk.org/what_we_do/Clean+seas+and+beaches/Litter+campaigns/Plastics http://legacy.london.gov.uk/assembly/reports/environment/bag-to-basics.pdf</p>
<p>Single-use plastic</p>	<p>Environmental: occasionally recycled Consumer: free; light; waterproof; takes logos etc well</p>	<p>Environmental: very limited reuse; wide-spread litter (with associated costs); oil-based product; takes 100s of years to break down; limited recycling; environmental costs of recycling – including transport abroad. Consumer: limited capacity.</p>	<p>http://legacy.london.gov.uk/assembly/reports/environment/bag-to-basics.pdf http://www.enviroliteracy.org/article.php/1268.html http://www.mcsuk.org/what_we_do/Clean+seas+and+beaches/Litter+campaigns/Go+plastic+bag+free http://www.mcsuk.org/what_we_do/Clean+seas+and+beaches/Litter+campaigns/Plastics http://www.messageinthewaves.com/</p>



*** Notes:** All types of carrier bag, whether made from plastic, paper or jute, will have some impact on the environment during the manufacturing process, transportation and ultimate disposal. So the best way to reduce their carbon footprint is to simply re-use them as many times as possible and then recycle them at the end of their useful life.

There is little or no evidence that shoppers or visitors to events need more bags, and by far the most sustainable (and cheapest) option is to encourage them to carry and use the ones they already own.