

## Circular Design Checklist for Fishing Gear Producers and Assemblers

Source: Adapted from a generic eco-design checklist that features *product circularity* considerations in *italics* (non- exhaustive) in M. Charter, ‘Designing for the Circular Economy’, Routledge, 2018 <https://www.routledge.com/Designing-for-the-Circular-Economy/Charter/p/book/9781138081017>

Design Focus Area	Options for Design Improvement	Notes
<b>Design for Material Sourcing</b>	<i>Reduce weight and volume of product</i> <i>Increase use of recycled materials to replace virgin materials</i> <i>Increase use of renewable materials</i> <i>Increase incorporation of used components</i> <i>Eliminate hazardous substances</i> <i>Use materials with lower embodied energy and/or water</i>	
<b>Design for Manufacture/Assembly</b>	Reduce energy consumption Reduce water consumption <i>Reduce process waste</i> <i>Use internally recovered or recycled materials from process waste</i> Reduce emission to air, water and social during manufacture <i>Reduce the number of parts</i>	
<b>Design for Transport and Distribution</b>	<i>Minimise product size and weight</i> <i>Optimise shape and volume for maximum density</i> <i>Optimise transport and distribution in relation to fuel and emissions</i> <i>Optimise packaging to comply with regulation</i> <i>Reduce embodied energy and water in packaging</i> <i>Increase use of recycled materials in packaging</i> <i>Eliminate hazardous substances in packaging</i>	
<b>Design for Use (including installation, maintenance and repair)</b>	<i>Reduce energy in use</i> <i>Reduce waste in use</i> <i>Increase access to spare parts</i> <i>Maximise ease of maintenance</i> <i>Maximise ease of reuse and disassembly</i> <i>Avoid design aspects detrimental to reuse</i> <i>Reduce energy used in disassembly</i> <i>Reduce waste used in disassembly</i> <i>Reduce emissions to air, water and soil</i> <i>Eliminate potentially hazardous substances that can be release during use</i>	
<b>Design for End of Life</b>	<i>Maximize ease of materials recycling</i> <i>Avoid design aspects detrimental to materials recycling</i> <i>Reduce amount of residual waste generated</i> <i>Reduce energy used in materials recycling</i> <i>Reduce water used in materials recycling</i>	