



My name is Mark Schaffer and I specialize in advising stakeholders in the design and promotion of standards for excellence in environmental goals with bodies such as EPEAT, IEEE and NSF. In my work, I have often been promoting improved eco-design standards for business-class equipment, including products made by IBM, HPE and Oracle.

Eco-design is not just about the chemicals used in components, or packaging, or even electrical use. Good eco-design also includes considerations of how to encourage longer useful life of products in order to amortize the sunk costs of environmental damage in the manufacturing process. The UN estimates that 80% of the total carbon costs of use lie with the manufacturing side, not the use side. It therefore behooves sustainability efforts to include ways to amortize use over long periods of time – and that always involves repair.

Despite the obvious sustainability value of keeping equipment in use and out of the waste system, in my experience manufacturers do not want to allow any standards that reward high-repairability in scoring systems. Manufacturers highly influence standards voting and as of today – repairability of design is still not a valued criteria. Worse, standards bodies have yet to adopt any scoring advantages for manufacturers which support competition for repair services, leaving out the difficulties of making repairs when manufacturers block access to necessary service materials.

I urge you to consider the high environmental value of restoring the marketplace for repair of all things digital.

A handwritten signature in black ink that reads 'Mark Schaffer'. The signature is fluid and cursive, with a long horizontal stroke at the end.

President  
Schaffer Environmental LLC  
[mark@knowsgreen.com](mailto:mark@knowsgreen.com)