



# **Low Cost/No Cost Tips for Sustainability in Cultural Heritage**

Lorraine Finch

Copyright ©2021 Lorraine Finch

No part of this publication may be reproduced in any way without the author's permission except when quoted and referenced with full and correct attribution.

Website: <https://lfc.co.uk>

Connect with me on Twitter: @conserve\_lfcp and Instagram: @thecaringconservator

# Contents

Welcome

Let's Get Started

Chapter 1. Equipment and Materials

Chapter 2. In the studio

Chapter 3. Energy

Chapter 4. Water

Chapter 5. Digital

Chapter 6. Travel and transport

Chapter 7. Money

Chapter 8. Inspiring others/Influencing stakeholders/Changing behaviour

Chapter 9. Recycling

Chapter 10. Think

Conclusion

References

About the author

# 1. Equipment and Materials

All of the equipment and materials that you use have associated greenhouse gas emissions [GHG]. The main sources are:

- The raw materials
- Manufacture
- Transportation
- Energy used to power them
- Disposal

With regards to transportation most of us think in terms of the transport from the supplier to us, but what about the shipping? Most of what we use has at one point travelled on a container ship; '50,000 merchant ships carry more than 11 billion metric tonnes of cargo annually = 80% of world trade.' Every merchant ship runs on fossil fuels.<sup>1</sup> 'If maritime shipping were a country it would be the world's sixth largest polluter.'<sup>2</sup>

Globally trade has increased five to six fold in the previous 50 years. That's twice the population using 5.5x more stuff.<sup>3</sup> Earth Overshoot Day marks the date when our demand for ecological resources and services in a given year exceeds what the planet can regenerate in that year. In 2021, it fell on July 29th!

Think about the equipment and materials that you use. What are they? You might want to create a list. You'll be surprised by the amount you use. Think about not only equipment and materials you use to care for the heritage but ALL of those that you use - including your office and staff kitchen. In this guide, equipment and materials refers to everything that is used in the workplace whether that's the HVAC, leafcaster, hand tools, printer, chairs, shelves, mobile phone and so on ....

## Tips

- ★ Equipment and tools should be carefully looked after, repaired frequently to maintain energy efficiency, and refurbished (where possible) rather than thrown away. They should be replaced by new only when they have reached the end of their life. Don't ask for new or upgraded equipment unless you really need it.
- ★ Extend equipment life spans with careful handling and frequent maintenance.

---

<sup>1</sup> Shady Ships. Retail Giants Pollute Communities and Climate with Fossil-Fueled Ocean Shipping. 2021, p.22

[https://www.pacificenvironment.org/wp-content/uploads/2021/07/SIZ\\_Shady-Ships-Report.pdf](https://www.pacificenvironment.org/wp-content/uploads/2021/07/SIZ_Shady-Ships-Report.pdf)  
(Accessed August 2021)

<sup>2</sup> Shady Ships. Retail Giants Pollute Communities and Climate with Fossil-Fueled Ocean Shipping, loc. cit., p.22

<sup>3</sup> Project Drawdown. Climate Solutions 101, 2021. <https://drawdown.org/climate-solutions-101>  
(Accessed July 2021)

- ★ Repair equipment rather than replacing it. At the end of its life, make sure it's disposed of safely. Equipment no longer needed may still be useful to others. Think how it can be reused, donated, repurposed, recycled or stored. WEEE<sup>4</sup> recycling schemes can ensure safe disposal. (WEEE estimates that almost a quarter of used electrical products taken to household waste recycling centres each year could be reused, with a gross value of £200 million.)<sup>5</sup>
- ★ Use equipment that is appropriately sized for the job, e.g. no large fridge if all you have in it is milk and sandwiches, or a tub of starch paste.
- ★ When you replace equipment:
  - make sure that you purchase energy efficient equipment
  - buy the best quality you can afford to ensure that you can use it for as long as possible
  - purchase that which is designed to have a long usable life, which can be repaired, for which spare parts are readily available long term and which can be recycled at end-of-life, designed for disassembly, i.e. can be broken down at end of life, where the components can be reused and where the constituent items are easy to recycle. Avoid those which have been designed for premature obsolescence and which are difficult to repair. Your mantra for equipment should be *Durable, Repairable, Recyclable*
- ★ Check whether the manufacturer has a take back scheme for recycling at the end of the usable life of the equipment.
- ★ Look for equipment and materials that have reused components and recycled content, e.g. printing paper or boxes for short term storage.
- ★ Use what you have. Having equipment and materials sitting in a cupboard unused is a climate cost.
- ★ Use materials fully, e.g. write on both sides of a piece of paper, cut open tubes to ensure that you use all of the product and reuse waste paper as scrap for notes or to protect surfaces when pasting out.
- ★ Reuse everything.
- ★ Organise. That way you'll know what materials and equipment you have, and where they are. This will stop you from buying something and then discovering that you already have three of them.
- ★ Label materials to ensure that you know what you have and to avoid buying more than you need. It's a good idea to add the purchase date, the date you opened it and the use by date (if appropriate) because some materials such as Microchamber and pheromone pest traps lose their efficacy in storage.
- ★ Carry out a waste audit to identify what waste you are creating. This will help you to work out how you can reduce the waste you produce, and how you can reuse and recycle waste.

---

<sup>4</sup> WEEE - Waste from Electrical and Electronic Equipment

<sup>5</sup> The Value of re-using household waste electrical and electronic equipment: 2011  
[www.wrap.org.uk/sites/files/wrap/WRAP%20WEEE%20HWRC%20summary%20report.pdf](http://www.wrap.org.uk/sites/files/wrap/WRAP%20WEEE%20HWRC%20summary%20report.pdf)

- ★ If you need to buy materials and equipment, make one or two big orders a year.
- ★ Coordinate orders with others to reduce deliveries even further. Contact your regional CDO (Conservation Development Officer) or MDO (Museum Development Officer) They may be able to organise a group purchase.
- ★ Buy only the amount you need.
- ★ Buy the right quantity for what is required e.g. one tube of paste or three sheets of board. Contact your suppliers before purchasing to ask if this is possible. If it's not possible, ask them why not. Make them accountable. 'Telling suppliers that ethical or environmental aspects matter to your business sends a clear message that ... things need to change!'<sup>6</sup>
- ★ Think about where your equipment and materials have come from. E.g. have they been shipped from the other side of the globe? Do they contain conflict minerals? Has rainforest been cut down to grow the raw material? Ask your supplier for information. Make them accountable.
- ★ Contact your suppliers and question them about their actions on environmental sustainability. Make them accountable.
- ★ Research your suppliers ethics and environmental practices. 'Ethical Consumer Magazine rates companies on their 'ethiscore' – an assessment of policies and actions towards people, politics, the environment and animals, looking at issues such as workers' rights, fossil fuel investment, and pollution.'<sup>7</sup>
- ★ Choose suppliers of your equipment and materials based on their climate strategy and transparency of emission data.
  - It is estimated that 60% of global Gross Domestic Product [GDP] is in the hands of consumers.<sup>8</sup> This gives us tremendous power to create change simply by shifting our spending to accountable and sustainable suppliers.
- ★ Request that your suppliers commit to the 1.5°C ambition and halve emissions before 2030. Include this in your procurement criteria and your supplier code of conduct.
- ★ Check out the certifications of both your suppliers and their products. Certifications such as BCorp, Fairtrade, FSC certified paper or Soil Association labels give you a guide of the sustainability of the product and sustainability ethos of the business.
- ★ Develop a sustainable purchasing policy. This is a list of your typical purchases including materials and equipment, with details about what can and cannot purchase, and what you and/or your colleagues should look for, or avoid, when trying to purchase sustainable options.

---

<sup>6</sup> Let's make our workplace sustainable. Lauren Wiseman. World Wide Fund for Nature [WWF] <https://www.wwf.org.uk/updates/top-20-tips-workplaces-sustainable>. Accessed October 2021.

<sup>7</sup> Wiseman, 'Let's make our workplace sustainable', loc.cit.

<sup>8</sup> [https://www.sustainable-markets.org/TerraCarta\\_Charter\\_Jan11th2021.pdf](https://www.sustainable-markets.org/TerraCarta_Charter_Jan11th2021.pdf)

- ★ Source locally as much of your equipment and materials as possible. This will reduce the GHG emissions associated with road transport and shipping.
- ★ Avoid last-minute, one-off deliveries by early decision making, and by avoiding last minute changes of mind.
- ★ Combine orders from single suppliers. This will avoid the need for multiple deliveries.
- ★ Deliveries are more sustainable if they're local, and use public transport or bike couriers.
- ★ Replace materials with those that have smaller environmental cost, e.g. blotter for evalon, plastic containing tea bags for planet based biodegradable tea bags or disposable ballpoint pens for refillable ballpoint pens. 'Compared to a traditional disposable plastic pen, refillable pens reduce waste by about 50%.'<sup>9</sup>
- ★ Use less hazardous materials
- ★ Reduce the amount of new equipment and materials you purchase. Here are some alternatives you can use:

### **Other Sources**

- Look out for museums and archives which are being refurbished.

#### **EXAMPLES:**

- A museum refurbished and gave away all of their office furniture and supplies. They also gave for free surplus display cases and other exhibition materials, plus materials from the education department.
  - An archive which moved buildings gave away all of the surplus packing materials at the end of the project. This included plasztazote, boxes, boxboard, acid free tissue and much more.
  - Find schools which are being refurbished, particularly their labs. You'll be able to get hold of benches, glassware, microscopes, even extraction units.
  - Keep an eye out for shop refits. They often give away shelving and display units which make excellent workbenches. They may give away mannequins which you could use in the display, and clothing rails which could be used for you or the public to hang their coats on.
  - Ask at your dentists and hospital. They often have hand tools, furniture, X-Ray units (which can be used as light boxes) going spare.
  - Got to the podiatrist? Ask them for the small scissors and files they no longer use.
  - Check out your government's website. E.g. [GC Surplus](https://www.gcsurplus.ca/mn-eng.cfm?snc=wfsav&vndsld=0) (Canada)
- <https://www.gcsurplus.ca/mn-eng.cfm?snc=wfsav&vndsld=0>
- They sell surplus federal government assets from furniture to farm equipment, forfeited goods and large volume materials such as wood and metals. Good for furniture such as map plans and drawers.
- Contact your conservation/preservation suppliers. Many sell offcuts, end of rolls, old stock, materials that they have purchased to test, as a result you may be able to

---

<sup>9</sup> <https://www.treehugger.com>

buy in the small quantity that you require. I have got Tyvek, repair tissue, bondina, fly mesh, sprayers, weights, a drying rack and brushes for free in this way.

- Ask others. If you need only a small amount, put a call out on your socials. Use your networks.

- Use [Museums Freecycle](#) and [Freecycle](#). One conservator sourced lamps for their work bench, an ultrasonic cleaner and recording equipment using Freecycle

Museums Freecycle: <https://www.freecycle.org/town/MuseumUK>

Freecycle: <https://www.freecycle.org>

- Have a look at [Freegle](#). 'It's like online dating for stuff. Got something you want to give away? Looking for something?' They match you with local offers and gives for free.

Freegle <https://www.ilovefreegle.org>

- Try [eBay](#), [Gumtree](#), [Shpock](#), [jiscmail](#) and other online sites for trading used stuff

eBay: <https://www.ebay.co.uk>

Gumtree: <https://www.gumtree.com>

Shpock: <https://www.shpock.com/en-gb>

jiscmail: <https://www.jiscmail.ac.uk>

- Contact your police service. They hold auctions of lost property and seized items. This could be anything from a bike, a macbook to a power drill or a dyson vacuum cleaner.

Check out this guide '[Police Auctions: How to Legally Buy Stolen Stuff](#)'

<https://www.moneysavingexpert.com/shopping/police-auctions/>

- Nip down to your high street and have a look what's on offer in the second hand retailers such as Cash Converters, and the charity shops

- Ask for equipment donations from the public and from companies. This is great engagement and demonstrates what you and/or your organisation are doing to help the climate and the environment. You can include storytelling, i.e. need x to display/conservate/store y which was used by z.

### **Share and borrow**

- Borrow equipment and loan out yours to others in the sector and other organisations

- Have a pool of equipment and materials which you share with other departments in-house.

- Share your surplus materials with others, this could be through your networks, socials, putting it outside with a sign saying 'Free. Please Take'. You could set up an Upcycle station, if you work with others. Put anything here that can be reused such as clean jam jars, take away containers, cardboard boxes, packaging from parcels.

- Co-ordinate your work. If you need specialist equipment for a short period of time, work with another person or institution to reduce the GHG emissions associated with transporting the equipment to you. It will also reduce the cost to you.

EXAMPLE

- Two museums had a mould outbreak. They were located close to one another. They coordinated the work and shared the hire of a document cleaning station.

### **Hire**

- Hire. There's quite a lot of equipment that you can hire. From the conservation suppliers you can hire a Bassaire document cleaning station, vacuum packer, display cases and the Depulvera book cleaner. From High Street electrical stores you can hire vacuum cleaners, computers, fridge freezers, fridges, freezers, microwaves, ovens and computers. You can also lease lighting systems, hire plastic crates and bikes. You can even hire microscopes on a weekly or a monthly basis.

Hire a microscope: [www.laboratoryanalysis.co.uk](http://www.laboratoryanalysis.co.uk)