Sustainable approaches for museum waste

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The Sustainable Business Partnership CIC
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FMF Upskilling for Sustainability Project

6 sessions - 3 on Zoom and 3 in person (hopefully!)

Today - 40 mins “Sustainable approaches for museum waste”

Future Topics:
- Heat (and energy)
- Water
- Visitor carbon footprint
- Retrofitting of historic buildings and use of traditional materials and skills
- Creating sustainable interpretations / exhibitions
Today’s session

We will cover:

- Legal responsibilities
- Catering
- Cleaning & Toilets
- PPE
- Communications

1) What waste companies does your museum use for your different waste streams?
2) What do you pay?
3) What things are difficult to get rid of?
The world before Covid-19 looks very attractive right now. In light of the disease, mass unemployment and social distancing, a return to pre-pandemic normality seems appealing. Yet we should remember what normal was.

Normal was obtaining 85% of our energy from fossil fuels and losing seven million people a year to air pollution.

Normal was careening toward a global temperature rise of over 3.5 Celsius by the end of the century, with island nations facing obliteration.

Normal was one in eight species threatened with extinction, continued squeezing of wild spaces into smaller and smaller corners, and the rampant illegal trade in wildlife.

Normal contributed to causing this pandemic.

#BuildBackBetter
Business Waste – Your Legal Responsibilities

You must:

• Keep waste to a minimum by doing everything you reasonably can to prevent, reuse, recycle or recover waste (in that order) - the waste hierarchy

• Sort and store waste safely and securely

• Complete a waste transfer note for each load of waste that leaves your premises

• Check if your waste carrier is registered to dispose of waste

• Not allow the waste carrier to dispose of your waste illegally (and report them to Crimestoppers if they do)

• You have extra responsibilities if you’re dealing with hazardous waste.

• Source: www.gov.uk
Food and drink material hierarchy

**Prevention**
- Waste of raw materials, ingredients and product arising is reduced – measured in overall reduction in waste.
- Redistribution to people.
- Sent to animal feed

**Recycling**
- Waste sent to anaerobic digestion; or
- Waste composted

**Recovery**
- Incineration of waste with energy recovery.

**Disposal**
- Waste incinerated without energy recovery.
- Waste sent to landfill.
- Waste ingredient/product going to sewer.

Source: Wrap
See also: [www.gov.uk](http://www.gov.uk)
Prevention options
Food Standards Agency Guidance on reusable customer containers

You should review your food safety practices for accepting your customers’ reusable equipment. This can include reusable cups or containers. It is the business’s decision as to whether you can continue to accommodate this. If so, you will need a procedure to minimise contact between staff and customer equipment. This should reduce the potential risk to your staff, equipment and premises from surface contamination. You can do this by:

• making sure staff do not touch the customer’s equipment. You can ask customers to leave their cups on the counter and then pour the drink into the cup from your own container.

• asking staff to wash the container and their hands in hot soapy water. It should be dried before using with your equipment.

If you are unable to accommodate reusable customer containers, you should explain to customers that you are unable to use their equipment at this time.

When you have decided on the best option for your business, you should record this in your food safety management system and your COVID-19 risk assessment. Staff should be trained in any change to procedure.

• Link
Reusable containers safe during Covid-19 pandemic, say experts

Scientists seek to reassure public as campaigners fear battle to reduce single-use plastic waste is losing ground

**Coronavirus - latest updates**
**See all our coronavirus coverage**

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*The Guardian*

Sandra Laville
Mon 22 Jun 2020
06.00 BST

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*Link to Greenpeace & UPSTREAM statement*

*Link to article*
1. Reusable systems can be used safely by employing basic hygiene.
2. Available evidence indicates that the virus spreads primarily from inhaling aerosolized droplets, rather than through contact with surfaces.
3. Disposable products present similar issues as reusable ones.
4. Reusable products are easily cleaned.

Best Practices for Reusable Products in the Retail Space
1. Comply with food safety / health codes.
2. Use additional hygienic practices for COVID. The bottom line is that reusable items are safe to use when cleaned with soap and water, and there is no substitute for thorough hygiene.
3. Employ contact-free systems for customers’ personal bags and cups.
4. Ensure that workers are protected.
Recycling options
Food Recycling

1. Food waste is generated at your business.
2. We collect your food waste in wheeled bins.
3. Our food truck will exchange your full bins for clean, freshly washed bins.
4. Close the loop by buying back electricity from nPower.
5. Biofertiliser is spread onto farmland to help grow more food.
6. Anaerobic Digestion (AD) is used to convert your food waste into biogas and liquid biofertiliser.
7. The biogas is used to produce clean renewable electricity.
Compostable vs Biodegradable

- **Compostable** - materials which biodegrade in a composting process through the action of naturally occurring micro-organisms and do so to a high extent within a specified timeframe. BS EN 13432

- **Biodegradable** - materials which can be completely biodegraded (bio-assimilated) by micro-organisms such as bacteria, fungi and algae. Most materials will biodegrade given enough time thus the term can be potentially confusing.

- **Oxo-degradable** - Plastics that contain an additive that breaks the molecular chain within the polymer when exposed to heat or ultraviolet light over an unspecified length of time. Can take a long time to degrade and concerns about microplastics remaining in the environment and also this material causing contamination to conventional plastic recycling system. Also not a suitable input into UK composting system.

Source: [www.organics-recycling.org.uk](http://www.organics-recycling.org.uk)
Vegware Compostables

We will ensure there is a suitable set up on site

Vegware compostables are stored in wheeled bins

Our truck will collect wheeled bins from your premises and transport them to our yard

Compost is produced for use in agriculture and landscaping to nourish soil

We deliver Vegware compostables to a specialist in-vessel composting facility

Compostables go through quality control
COFFEE CUP RECYCLING

90% of the material from your coffee cups is transformed into deluxe quality paper.

10% of the material from your coffee cups is transformed into plastic products.

Paper Round collects your recycling in sacks or wheeled bins.

Our truck will collect your coffee cup recycling from your premises and take it to our yard.

Your coffee cup recycling goes through quality control and is then bailed for onwards transportation.
• Launched in 2018, the National Cup Recycling Scheme financially incentivises waste contractors to collect paper cups, offering them an additional £70 per tonne of cups, on top of the commercial fee they receive for the material from the reprocessors.

• As a result of the initiative, paper cups are now one of the highest valued materials on the market, making them commercially attractive for waste collectors to include as part of their recycling offering to customers.

• The scheme was set up by Valpak and Costa Coffee and it is co-funded by other major brands looking to offer cup recycling to their customers including McDonalds, Café Nero, Pret, Greggs and Burger King.
Waste Carriers signed up

ACM Environmental  First Mile  Solutions / Closed Loop
B&M (Bagnall and Morris) Grundon Simply Waste Solutions /
Biffa Options Management Ltd Camo Ltd
BPR Printed Cup Company Suez
Bywaters Pronto-Pak Veolia
Cawleys Reconomy / Helistrat Weir Waste Services
Chambers-Group Rishton Waste Paper
DHL Envirosolutions Select Environmental What Rubbish
D S Smith Services
Enviro-Tek Simply Cups / Simply Waste
Recovery options
Waste Coffee Recycling

Waste coffee grounds are generated at your business.

Paper Round collect waste coffee grounds in wheeled bins and caddies.

The waste coffee recycling truck collects waste coffee grounds from your premises and transports them to the bio-bean factory.

Bio-bean produces biomass pellets used for heating buildings.

Bio-bean recycles waste coffee grounds into advanced biofuels and biochemicals.
Disposal options
Heavy duty orange sacks are double bagged by your cleaners and placed inside an 80l pedal bin.

Once full, bags are removed and secured using cable ties.

Used PPE is incinerated, minimising risk of infection to your staff and cleaners.

Securely fastened sacks are stored in orange 240l wheeled bins and quarantined for 72 hours if required*

We deliver PPE sacks to an energy-from-waste facility where the materials are incinerated.

We will empty wheeled bins from your premises.
Toilets

• Design that improves hygiene is often good for sustainability too!
  • Sensor taps
  • Tap flow set low to reduce splash from the basin
  • Efficient hand dryers instead of paper towels
  • Designing exits that don’t require human contact

Other things to consider
• Simple doors without handles or easily cleaned handles
• Hand sanitiser
• Clear soap dispensers with sensor dispensing
Communications

• Review hard copy communications – flyers, leaflets, contract requirements. Virus can live on paper for up to 4 days

• Be as paper free as possible including invoicing outward and inward

• An electronic signature is capable in law of executing a document (including a deed) provided that the person signing intends to do so and that any further required formalities, such as a witness, are satisfied.

• Source Sept 19: The Law Commission
How long does Coronavirus live on surfaces?

- **Glass**: Up to 4 Days
- **Cardboard**: 24 Hours
- **Plastic**: 3 – 7 Days
- **Stainless Steel**: 3 – 7 Days
- **Copper**: Up to 4 Hours
- **Paper**: Up to 4 days
- **Wood**: Up to 2 days

Source: [Healthline](https://www.healthline.com)

Although the virus can be detected on these surfaces for a particular length of time, the viability of the virus, due to environmental and other conditions, is not known.
Thank you for your time

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