





























## Introduction

### Welcome to this reuse and repair toolkit!

This Toolkit aims to provide practical advice and inspirational ideas for reuse organisations that are looking to reduce their costs and make more of the items they receive.



It brings together useful information to help those reuse organisations looking to expand on current direct reuse operations and introduce cost effective repair activities. Items covered include:

- Making the business case for investing in new or additional reuse and repair activities.
- A checklist of regulations and other important information organisations need to be aware
  of when looking to undertake reuse and repair of certain materials.
- Suggestions on how to overcome common barriers to reuse and repair.
- Ideas for creating new products from waste materials.
- Marketing your reuse and repair services to the local community.
- Selling your reused and repaired products on the open market.
- Ideas for partnering with other organisations to help expand your reuse and repair activities.
- Links to publicly available information around creating new products and advice on attracting and working with volunteers.

The focus of the toolkit is on reuse, repair and upcycling activities relating to furniture, electrical and electronic equipment and textiles (clothing and soft furnishings), although some of the information and techniques provided can be applied to other products and material types.

You can either work through the various sections in order, or use the index to find a particular piece of the information; for example, removing watermarks from furniture.

The toolkit has been produced by Hampshire County Council and the Centre for Sustainable Design, in conjunction with repair experts Stephen Sheffield (furniture), Ginny Farquhar (textiles) and Vic Clements (electrical and electronic equipment). It has been specifically written using the experience and learning gained through the increasing reuse and repair capacity and capabilities in Hampshire project, working with charitable reuse organisations. The project was funded by the **Waste and Resources Action Programme (WRAP) Innovation in Waste Prevention Fund** which was funded by DEFRA as part of their Waste Prevention Fund for England.

Hampshire County Council would like to thank WRAP for the provision of funding to support this toolkit. The Authority is also grateful to the following partners who have contributed their time and expertise in developing and delivering this project<sup>1</sup>:

- Basingstoke and Deane Borough Council
- The Centre for Sustainable Design® at the University for the Creative Arts
- Community Furniture Project, Basingstoke
- Eastleigh Borough Council
- Furniture Helpline, Bordon
- Hart District Council
- Jacob's Well Care Centre, Gosport
- Project Integra, Hampshire's integrated waste management partnership
- Rushmoor Borough Council
- SCRATCH, Southampton
- Ugly Duckling Project, Andover

**DISCLAIMER:** Please note that all information in the toolkit, including hyperlinks to external websites, is correct to the best of our knowledge at the time of production (December 2015).

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1. Although not a signatory partner in the project, Hampshire County Council would also like to thank Hopkins Recycling Ltd, for their assistance and support throughout the project.

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## 1. Background

This toolkit brings together information and experiences gained by project partners through developing and delivering a project to increase reuse capacity and capabilities in Hampshire, funded by the Innovation in Waste Prevention fund. This project ran from November 2014 to December 2015 and involved five charitable reuse organisations in collections were passed on for reuse and Hampshire.

The Innovation in Waste Prevention fund was launched in 2014 by WRAP, following an action to provide funding to support community-based innovative waste prevention, reuse and repair actions in England's Waste Prevention Programme. The the UK through partnership working. aim of the fund was to generate more action to prevent waste at a local level through partnership working between local businesses, local authorities and civil society.

Hampshire's project supported by the Innovation in Waste Prevention fund aimed to increase the reuse capacity and capability of a select number of reuse organisations who predominantly form Hampshire's Furniture Reuse Network<sup>2</sup>.

This was achieved by delivering a training programme which encouraged the reuse organisations to consider ways to increase income generation through reuse and repair activities, as well as practical training in basic

repair skills. The training programme was complemented by the provision of tools and equipment to enable the reuse organisations to put into practice newly acquired reuse and repair skills. In addition to this, suitable items from Hampshire's Household Waste Recycling Centres and kerbside bulky repair from the Waste Disposal Authority and four Waste Collection Authorities.

This toolkit summarises all the key learning and experiences gained from developing and delivering this project with the aim of encouraging more reuse and repair activity in



2. Hampshire Furniture Reuse Network was set up to help local people in crisis obtain affordable (possibly free) furniture, white goods and electrical items. It currently includes 5 furniture reuse charities across Hampshire.

# 2. Why Reuse and Repair?

## Making the business case to do more

Reuse, and to some extent, repair activities are the core operations of reuse organisations which operate to generate income to support social charitable causes. There are a huge range of reuse organisations that deal with, and accept, different types of materials on different scales. They all have an important role to play in diverting suitable items away from waste systems and supplying affordable household items.

More reuse organisations are expanding their reuse and repair activities, as they realise the opportunity to make their business more sustainable and impactful on an environmental, social and economic level. This comes at a pivotal moment in time when some reuse organisations are feeling the pinch from reduced funding whilst local authorities strive to achieve the 50% recycling target by 2020 and the drive to move towards a circular economy picks up pace at a national and international level: all of these challenges can be addressed through greater levels of reuse.

To help justify any action required to expand on current reuse operations, a business case may be required. The following section contains some tangible indicators taken from some unpublished work by the Social Purpose Group in conjunction with a group of local authorities called 'South East 7'3, which you can apply to your own business and performance data to present the rationale to your Board of Trustees to build upon current business activities.

This information may also be of use when seeking to demonstrate the wider benefits of reuse and repair in order to develop closer working relationships with other organisations, such as local authorities.

**DISCLAIMER:** Indicators referenced in the sections below are taken from some unpublished work developed by Social Purpose Group on behalf of the South East 7 looking at increasing reuse capacity in South East England. The indicators reflect their knowledge of Furniture Reuse Organisations at the time of writing (2014) and are subject to change over time.

Hampshire County Council takes no responsibility for the results of any actions undertaken as a result of the use of information (which should not be relied upon as a substitute for formal advice) in this toolkit. Hampshire County Council, its employees and agents will not be responsible for any loss, however arising, from the use of, or reliance on the information in this toolkit.

3. South East 7 is a working partnership formed of seven Local Authorities in South East England; Kent County Council, Medway Council, East Sussex County Council, West Sussex County Council, Brighton and Hove Council, Hampshire County Council and Surrey County Council.

#### **Social Benefits**

#### Greater support to those in need

Every one tonne of reused household goods is estimated to **assist 15 low income households** in the provision of affordable items.

Reuse services are estimated to **save low income beneficiaries** an average of **£150** on the purchase of essential household goods.



Broadening your specification of accepted household items to include those which require minor repair will help meet a greater demand of affordable household items for more families, and in turn, save them money in purchasing new essential goods.

#### **Providing jobs opportunities**

By expanding on reuse and repair activities, you may require the help of more staff and volunteers to deal with more material.

It is estimated that for **every 66 tonnes of goods** collected and processed by a reuse organisation each year, it creates **one full-time job** and **one full-time equivalent volunteer**/work placement trainee opportunity.

These opportunities can make a huge difference to disadvantaged, long term unemployed and isolated people. As well as helping to boost their confidence in the workplace by being part of a team, it also enables them to gain a whole range of skills from practical repair, creative upcycling, marketing and promotion to interpersonal and social skills. Reuse and repair activities can contribute towards, or be linked to, recognised qualifications such as NVQs, LASER or City and Guilds Qualifications.

#### **Economic Benefits**

#### Generating more income

Selling reused and repaired goods through retail outlets generates income to support operations and subsidise the provision of affordable goods to those in need.



It is estimated that the average sale price of every one tonne of household items reused can generate up to **£700** for a reuse organisation (subject to sale prices of items).

Consumers are becoming increasingly aware of the benefits from preventing materials being sent for disposal and the market of upcycled products is growing; for example the online service Gumtree has seen an 89% increase in adverts for upcycled products over the last year<sup>4</sup>.

To supplement your 'core' reuse business operations, consider producing creatively repaired or upcycled products made from waste materials which can demand a higher resale value when marketed through the right channels (more on this later in the toolkit!).

#### Are you maximising best use of the space available to you?

How many tonnes of items reused are you achieving each year at your premises? It is estimated that on average, **15 tonnes** of material can be reused **per square foot** of premises each year.

If you have scope to achieve greater reuse (and repair) within the space available to you, there are some cost effective solutions you could put in place to maximise your reuse operations. Simple measures such as rearranging the display or storage of materials can help create small areas whereby you can set up dedicated spaces for minor repair activities.

#### Make a saving on waste disposal costs

Are you paying for the disposal of items collected by your organisation which are beyond reuse and repair? Items targeted for reuse are typically bulky in nature and are often only suitable for disposal via landfill which is charged at a premium rate (usually over £100 per tonne).

You could save on disposal costs by breaking items beyond repair into their component parts and creating 'material banks' to support further repair and upcycling activities in your organisation. This may also help to make further savings on the cost of purchasing materials to carry out repair activities.

**Health and safety:** Please consider the risks and health and safety implications before breaking items down into their individual components, in particular with electricals and electronic equipment.

# Case study: trial on collaborative working to increase reuse and repair, Basingstoke.

Part of Hampshire's Innovation in Waste Prevention project involved exploring ways to enable the reuse charities project partners access to waste material (via Household Waste Recycling Centres (HWRCs) and kerbside bulky collections) to increase the supply of reusable and repairable goods. Community Furniture Project in Basingstoke, teamed up with the site staff running Basingstoke HWRC to see how they could help further increase reuse on the site and reduce how much waste is thrown away.

In the space of just 10 weeks, Community Furniture Project collected 90 reusable and

repairable items (such as chest of drawers, side tables and bed frames) from the site which would have gone for disposal, on top of those items already diverted for reuse on-site. This helped to generate just under £200 extra income for the charity and assisted 16 more families in the supply of affordable household goods.





#### **Environmental Benefits**

#### Improving environmental performance

WRAP's research<sup>5</sup> into the potential for reuse of waste indicated that when minor repair is combined with direct reuse activities, it can increase the amount of items diverted for reuse from 24% to 40% (based on items collected at the kerbside) or from 32% to 51% (based on items taken to your local Household Waste Recycling Centre). This demonstrates the potential to increase supply of material if minor repair activities are included in your business operations.

Demonstrating your capacity and capability to carry out repair can help to build working relationships with local authorities. This can increase the supply of material for your reuse operations whilst the provision of data on levels of reuse and repair can support local authorities in achieving performance targets.

#### **Reducing carbon emissions**

It is estimated that every tonne of goods diverted for reuse can save 3.45 tonnes of carbon dioxide emissions: that's the equivalent of saving the same amount of carbon dioxide emissions produced by powering an average sized house for nearly 3 months<sup>6</sup>!

#### Making better use of resources

By reusing and repairing more items, you are helping to prolong the use of materials which makes better use of our natural resources!

<sup>5.</sup> http://www.wrap.org.uk/sites/files/wrap/UK%20bulky%20waste%20summary.pdf

<sup>6.</sup> http://www.yousustain.com/footprint

# 3. Before You Begin: Know the Law



## Legislative and other important information required for reuse and repair activities

Before you begin, or make changes to, reuse and repair operations within your organisation, it is important to ensure that you are aware and comply with the relevant legislation as well as consider the implications on insurances, licenses, exemptions and planning permission. Having these items in place before you start is considered essential or good practice, and will protect you, your staff and your organisation.

The boxes below provide a guide to the relevant regulations, standards and exemptions you should consider in relation to the type of activities you are planning to carry out. Please see Appendix 1 for further information and details about the items listed here.

**Disclaimer:** Please note that the information in this section and Appendix 1 is correct to the best of our knowledge, however, it may not be entirely comprehensive as legislation and relevant requirements may differ depending on the activities and scope of reuse and repair activities. Reuse organisations are advised to seek their own legal advice and/or consult the Environment Agency, and other relevant regulatory bodies, when planning/ delivering reuse and repair activities. You should not assume that this toolkit and the information contained within it is error-free or that it will be suitable for the particular purpose which you have in mind when using it. Hampshire County Council takes no responsibility for the results of any actions undertaken as a result of the use of information (which should not be relied upon as a substitute for formal advice) in this toolkit. Hampshire County Council, its employees and agents will not be responsible for any loss, however arising, from the use of, or reliance on the information in this toolkit.

### If you are dealing with waste...

If your organisation produces, collects or handles materials and products that are discarded without the intention of reuse, for example carrying out house clearances, you are dealing with waste. As a result of this, you have a legal duty of care to ensure any waste you produce, store, transport and dispose of is kept safe and does not cause harm to humans or the environment.

You must comply with:

- Environmental Protection Act (1990)
- The Waste (England and Wales) (Amendment) Regulations (2012)

You will require:

- A Waste Carriers licence
- T12: Exemption for manually treating waste

You may require:

- Planning permission to change the use of your site.
- An environmental permit (if the level of waste you deal with exceeds what is defined in your exemption)

# If you are passing on reused, repaired, refurbished or upcycled items to the general public...

You must comply with:

- Provision and Use of Work Equipment Regulations (1998)
- The Consumer Rights Act (2015)
- General Product Safety Regulations (2005)

# If you are reusing and repairing furniture and/or textiles...

You must comply with:

- Furniture and Furnishings (Fire Safety) Regulations (1988)
- British Standards 5852
- Any upholstery must pass the 'cigarette test' and fillings must be fire retardant (indicated by the correct labels)

# If you are reusing and repairing Waste Electrical and Electronic Equipment (WEEE)...

You must be aware of and comply with:

- The Electrical Equipment (Safety) Regulations (1994)
- General Product Safety Regulations (2005)
- Directive 91/689/EEC on Hazardous Waste
- The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations (2012)
- The Health & Safety at Work Act (1974)

#### You may require:

- T11 Exemption when repairing and refurbishing WEEE
- Staff to be trained in PAT testing
- PAS 141 Standard

# Health and safety when dealing with Waste Electrical and Electronic Equipment (WEEE)

- The main risk in refurbishment and repair of electrical and electronic equipment is of
  electrocution. Any mains powered EEE is potentially lethal. When working inside an
  item of EEE, ensure it is disconnected from the mains and that any large capacitors are
  discharged to ground.
- Always ensure EEE under inspection is powered via a Residual Current Device (RCD).
- Anything operating below 25V AC or 60V DC is considered safe to work on but beware of external mains power to internal Power Supply unit.

#### **Insurance**

To carry out reuse and repair activity, as a minimum you will need to have the following insurances to the appropriate levels which will vary depending on the nature, size and structure of your organisation:

- Public Liability Insurance
- Employers Liability Insurance
- Products Liability Insurance

## 4. How Do I Repair...?

## Cost effective solutions to common reuse and repair problems

In 2015, the Furniture Reuse charities signed up to the project were asked to list their most frequent barriers to carrying out more reuse. The most common barriers identified were;

- General wear and tear,
- Items being in need of minor repair, and
- Not having the relevant skills and/or tools and equipment.

This section aims to provide basic practical advice and guidance on how to repair common instances of damage on furniture, textiles and electronic equipment to help reuse organisations address common barriers to doing more reuse.

Before embarking on repairs of any type, it is wise to consider whether you have the necessary repair skills in house and whether it is economically viable to carry out the repair. You can use the flow charts in each of the product categories to help you decide whether or not repair is a viable option for you.

**Health & Safety:** Please ensure the necessary personal protective equipment is used when carrying out any type of repair activity.



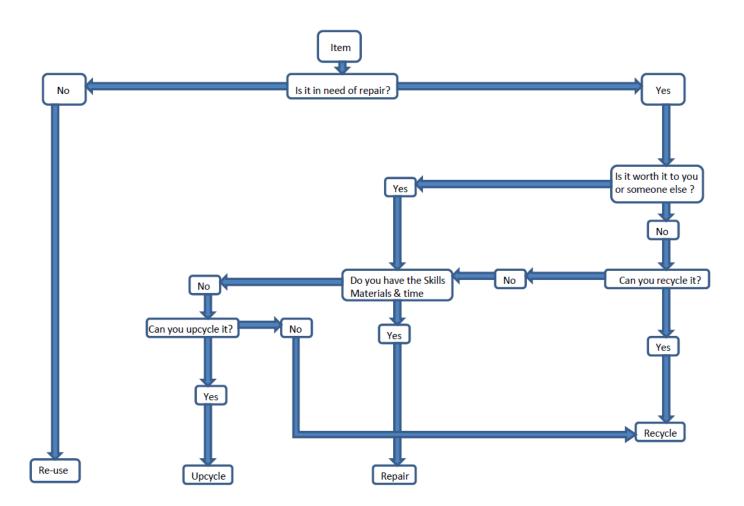






### **Furniture**

This flow chart can help you to decide whether or not it is economical to repair your item of furniture. If you decide that you want to repair, the following guidance aims to help you carry out simple fixes to a range of problems, as well as improve the presentation of reusable items which can increase their sale value. There are links to further tutorials and advice in the Resource Directory.



If you decide that it is worth repairing your item of furniture, here are some effective ways of treating common problems.

#### **Removing Scratches**

Some surface scratches can be removed using chemical cleaning solutions such as sugar soap or oxalic acid, however deeper scratches may require further work.

**Top Tip:** Tiny scratches or 'dinks' can often be disguised by rubbing a walnut over the area. The natural walnut oil will cover the imperfection.

One way of filling deeper scratches is to use wax filler sticks. These sticks only melt at a very high temperature and are therefore suitable to fill cracks in tables where hot items (e.g. cups of tea) are likely to be placed. The filler sticks come in a range of colours and can be blended to create a match to the colour of the wood of your table. They are usually under £5 to purchase and a small amount of wax goes a long way!

Use a soldering iron to melt and apply the wax to fill in the scratch and it will harden almost instantly. Fine sandpaper can be applied to sand the wax flat, then use a fine artist's brush or a pen with a refillable reservoir and apply a wood stain over and around the filled area. You are looking to emulate the surrounding pattern of the wood as closely as possible. You can then go over the area with furniture wax to further blend it in to the rest of the surface.

**Top Tip:** You can fill some scratches with a mixture of sawdust and clear drying glue. When sawing down more expensive wood types, keep the sawdust to mix with glue and use to fill scratches in furniture made of that type of wood.

Repairing a scratch on a table:







#### **Removing Dents**

A quick and easy way of removing dents in furniture is to wet the dented area thoroughly with water then place a damp cloth over the top of the dent and carefully hold the nose of a hot iron over the dent for a few seconds. The heat of the iron will encourage the wood to soak up the water and the dent should pop out. Be aware that the heat of the iron may leave a mark on varnished wooden furniture items, beforehand you may need to use sugar soap or a similar product to remove the varnish/ coating and reapply once the dent has been dealt with.

#### Removing a dent:



#### **Removing Watermarks**

Using sugar soap:



A vigorous rub with sugar soap solution will often remove watermarks along with other surface imperfections, however this may require you to refinish your piece with wax, varnish or shellac. If sugar soap doesn't work, you could try applying oxalic acid. Oxalic acid is used to bleach stains or imperfections from wooden furniture and can also be used to restore the natural colour of the wood. It usually comes in crystal form and will need to be mixed with water before it is applied. The packaging will usually give the proportions required to mix the oxalic acid solution.

To use: After removing the finish on the piece of furniture, apply the oxalic acid mixture so that it can soak into the wood. Leave it for at least 10 minutes and then rinse thoroughly. Please remember to wear gloves and safety glasses!

Many people recommend applying white toothpaste (paste, rather than gel based) to get rid of light watermarks. Gently rub the toothpaste along the lines of the watermark with a soft cloth and it should start to disappear relatively quickly. Do not rub too hard or for too long as this may damage the coating of the piece. Your furniture can then be refinished with polish.

**Top Tip:** Always test on a small unseen area of the furniture first to ensure that the use of chemicals to repair the item will not damage the finish.

#### **Removing blisters**

First try placing a damp cloth over the blister and holding a hot iron on the cloth for a minute or so until it starts getting dry.

Sometimes the heat and moisture will reactivate the glue and stick the blister back down. Don't hold the iron on the area for too long though, otherwise you will cause a water mark!

If that technique is unsuccessful, you can try opening the blister and apply glue to stick it down.

Using a scalpel or utility knife, carefully slit the length of the blister, making sure that you cut with the grain in the veneer rather than against it.

Scoop up a small amount of wood glue onto the blade of your knife and very gently work it under one edge of the blister, so that it coats the underside of the veneer. You may need to water down the glue slightly to make it thin enough to work under the edge of the blister. Press down firmly on the side of the blister for a minute.

Repeat the process above on the other side of the blister. Press down firmly on both sides of the blister, towards the middle, so that any excess glue is squeezed out from under the veneer. You could use a cold iron over some waxed paper to do this.

Use a damp cloth to carefully wipe away any excess glue in the split or on the surface of the table, then wipe it dry.

Use a clamp, or if the blister is in the middle of a table, some old books, to weight down the repaired blister until the glue is dry.

#### **Polishes and Finishes**

There are a wide range of finishes you can use on your furniture to give it a 'polished' look. We have listed some of the most popular and cost effective ones for you.

#### Oils - such as Linseed, Tung, and Teak

The use of wood oils can be effective at bringing out the character of the wood and are easy to apply and maintain, but may not offer as a robust finish as other products such as varnishes. These are very runny so several coats can be required to get the finish you want.







Removing a blister

#### Applying shellac:



#### **Shellac**

Shellac is a resin secreted by the female lac bug. It is processed and sold in different forms; premixed,

aerosols or as dry flakes which dissolve in alcohol-based solvents to make liquid shellac. Shellac, in its liquid form, dries quickly and gives a more natural effect to wood furniture than some more traditional varnishes, but may not be as durable.

To produce your Shellac finish from shellac flakes, it should be thinned using denatured alcohol before application. Dissolve approximately 250g Shellac flakes to 1 litre of methylated spirit (meths) and mix in an airtight container such as a jam jar. The flakes will take a few days to dissolve, but can be stored and reused over long periods of time. Shellac does not react well with water and must be stored with this in mind.

When applying Shellac to furniture, use a 'rubber' rather than a brush, to avoid leaving brush marks on the finished piece. Dip the rubber into the shellac, squeeze out the excess and apply to the furniture piece in long, smooth sweeps.

**Health & Safety:** Always use rubber gloves when applying Shellac!

**Top Tip:** Save money on purchasing a 'rubber' by creating your own using regular cotton wool stuffed in to an old (clean) sock.

Shellac typically dries quickly (one coat can take between one minute and 30 mins to dry) allowing multiple coats to be applied in a short space of time.



**Polyurethanes** 

Polyurethanes are essentially a plastic in the form of a liquid so can provide a harder finish to wooden furniture than shellac and varnish. They are available in both water and oil-based options and come in a variety of forms from satin to gloss, but are less of a penetrating mixture and more of a coating. They can be expected to yellow slightly with age and UV exposure.

Polyurethanes are available in two forms; 1 pac or 2 pac. 1 pac is unmixed polyurethane, whereas 2 pac is mixed with a hardener. Using 2 pac is likely to give a more durable finish but creates more wastage as the mixture will start to harden as soon as it is mixed, meaning that any leftover mixture cannot be reused.

#### Lacquers

Lacquers are a type of wood finish that produce a hard, durable finish. These are usually solvent based and therefore dry quickly. They can come in clear or coloured finishes and can produce varying levels of sheen.

Lacquers are typified by their solvent base (butyl acetate, xylene or toluene – not meths). The advantage to using a lacquer is that they are thinner than other finishes, so can be sprayed onto furniture to create a smooth finish.





Varnishes provide a hard, transparent finish to wood furniture which is usually glossy. They are effective at protecting the surface and waterproofing furniture items. The length of time varnish

takes to dry tends to be shorter in dry and warm environments.

There are different types of varnishes; Acrylic varnishes are water soluble and have the advantage of allowing little or no yellowing from UV exposure. Oil-based varnishes can be applied using natural bristle brushes and can take a bit longer to dry than water-based ones therefore should be applied in a well-ventilated room.

#### Waxes

Wax is often used on wooden furniture to give an aesthetic and attractive finish and is best used on carved items when you want a low sheen. Wax offers very little (if any) protection to the wood as it melts at low temperatures but is a natural water repellent.

There are a number of different waxes on the market from soft wax to beeswax. For example, Carnauba wax gives a very high shine and is often sold in flake form which can be melted with beeswax. Many museums use Renaissance wax as it claims to give a fingerprint free finish.



Cleaning table before applying wax

*Health & Safety:* All solvents are highly flammable! Appropriate personal protective equipment and ventilation should be used at all times when working with them.

### **Upholstery**

When dismantling upholstered furniture for the first time, you will be amazed at how many components are involved. It is vital to keep track of where pieces have come from as you remove items so you know how to re-build them again. A good idea is to take photographs at every stage of the process and to keep fabric whole so you can use this as your pattern for cutting replacement fabric.

It is always best to seek advice from professional upholsterers before attempting anything too demanding.

You can find out more about upholstery by attending courses, reading books on the subject and researching online for 'how to' videos.

#### Some common components of an upholstered chair:

#### Webbing:

This is the scaffold and support essential for spreading weight when a chair is sat on.

#### **Wool Wadding:**

Some wadding is mixed with other materials such as paper and wood chips. This provides the soft padding for the seat and gives it its shape.

#### Hessian:

Hessian is a cloth used to cover webbing & springs. It supports the stuffing & wadding. It comes in two qualities; loose weave which is cheaper but weaker, and tight weave which is more expensive but stronger.

#### **Springs:**

These are available in different sizes and made from steel or spring steel, so are usually very hard-wearing.

#### Foam:

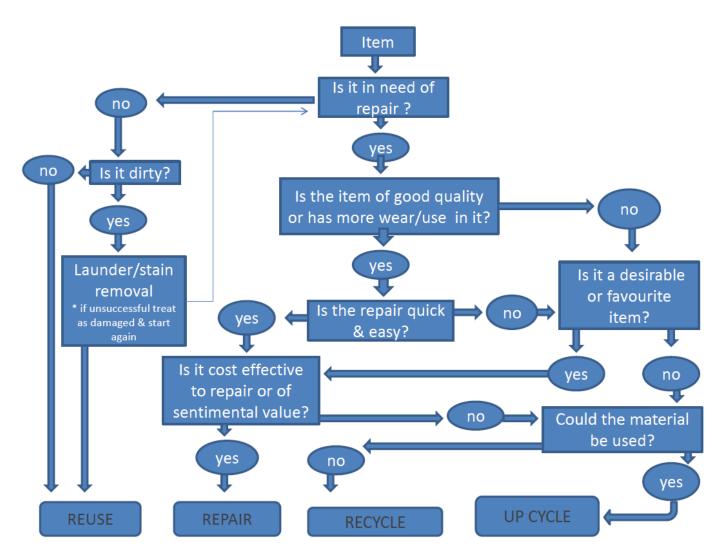
It is important for this to be fire rated if it is to be replaced to ensure your repaired piece of furniture complies with the **Furniture and Furnishings (Fire Safety) Regulations 1988** (please see the regulations and licences section of the toolkit). Foam is available in different grades, colours and sizes, however it can be relatively expensive to replace.

#### **Textiles**

The most common problems associated with textiles such as curtains, cushions or sofas/chairs are:

- staining,
- rips and tears,
- missing or broken zips

This flow chart can help you to decide whether or not it is economical to repair your item. If you decide that you want to continue with the repair, the following guidance aims to help you carry out simple fixes to a range of problems. There are also links to further tutorials and advice in the Resource Directory (section 8).





#### **Stain Removal**

- Stain removal is easier if you treat the stain straight away. Old stains can be more stubborn.
- Always vacuum the textiles on your futniture item first to remove any dirt.
- Know your fabric; check the care label and manufacturers instructions before cleaning.
- Some fabric sofas do have removable covers that are designed to withstand a gentle washing machine cycle.

#### To treat a stain:

- Scrape off any liquids or hardened residues on the fabric.
- Use a plain white cotton cloth (to avoid colour transfer) to blot fresh stains.
- Start from the outside and work towards the centre of the stain.
- Always test a detergent or spot cleaner on an inconspicuous area of the item first.
- If using water, do not saturate upholstery fabric. Use only cool or warm water.
- Leave to dry naturally as any excess heat will set a stain that remains in the fabric.

**Top tip:** You can deodorise sofa and chairs and remove nasty odours using baking soda. Sprinkle on to your furniture and leave overnight, then use a soft brush attachment to vacuum up the powder.

#### **How to Insert a Zip**

#### Tips for removing and re-stitching zips

When replacing zips, use the original zip as a guide noting how it was positioned.

Remove the old zip carefully using a stitch unpicker or fine point embroidery scissors.

Mark the original zip placement lines on to the fabric with tailor's chalk.

#### Inserting a simple lapped zip

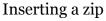
A lapped zip is ideal for both dressmaking and soft furnishings. One side of the seam covers and conceals the zip.

- 1. Pre-neaten the two raw edges of the seam where the zip will be positioned with a machine zigzag stitch.
- Sew a seam with right sides together
   (2cm seam allowance) leaving a gap (as per markings) for zip.
- 3. Press the seam open with an iron, along the whole seam.
- 4. With your fabric and zip **right sides up**, place the zip under the gap. Position the right folded edge close to the zipper teeth and pin. Bring the left folded edge to meet the first folded edge. Pin this side 1cm away.

- 5. Tack into position with small even tacking stitches. Tack the right side close to zipper teeth and tack left side approx 1cm from the folded edge.
- 6. Remove the standard machine presser foot and attach a standard **zipper** foot. Set the machine to a straight stitch and change the needle position accordingly.
- 7. With the zip slightly open, line up the zipper foot to the top right hand side of your zip so it is about 2mm away from the zipper teeth. Start to stitch, stopping with needle down into your fabric just before you get to the metal pull. Stop, lift presser foot and zip up the zip. Lower the presser foot and continue until you get to the bottom of the zip.
- 8. With the needle in the down position, lift the presser foot, turn, lower the foot and stitch a 'bar' across the bottom of the zip (Please note: take care not to stitch over the metal at the bottom of the zip). Turn again and continue stitching up the other side of the zip (approx 1cm from the folded edge) remembering to open and close the zip to allow you to stitch closely without the metal pull getting in the way.
- 9. Remove your tacking stitches.









## How to Appliqué

This technique involves stitching a piece of fabric onto a larger piece to create a pattern or design. Appliqué is a great method for adding decoration and covering stains and holes.

**Top tip:** A simple way to create a neat pattern on fabric is to draw the pattern onto fusible webbing, a fabric adhesive on peel-off paper backing. Use a double-sided iron to attach this to your fabric. The fusible webbing can easily be removed once you have drawn around your pattern.

- **Appliqué Method**
- 1. First draw your design on a piece of paper.
- 2. If your design has an obvious direction, it needs to be drawn in reverse on the fusible webbing so that it appears in the right direction on the fabric. An easy way to draw in reverse is by holding the design up to a window and with the blank side of the paper facing you, draw through onto the paper.
- 3. For designs with separate components, it is a good idea to draw them separately onto the fusible webbing.
- C To STEE

- 4. Next lay the fusible webbing, smooth side up, over your design and with a pencil, trace through the outlines.
- 5. Cut roughly around your shapes leaving a margin of about ¼in (5mm) outside the pencil line. With a hot iron (no steam), over a pressing cloth, fuse the bondaweb, paper side up, onto the **wrong side** of your fabrics.
- 6. Cut out using fabric scissors and peel off the backing paper.



- 7. Place the motifs into position on your chosen cloth, glue side down.
- 8. Fuse your motifs onto the fabric using a pressing cloth and hot iron.
- 9. The appliqué motif can be secured onto the fabric by either hand stitching, freehand machine embroidery or satin stitch appliqué. Using a complimentary coloured thread, carefully zigzag around the outside edge of the motif to secure.



Images supplied by aliceandginny2010 ww.aliceandginny.co.uk

## **Patching Tears in Fabric Furniture**

- 1. Small and medium size tears can be easily repaired using iron-on patches which can be purchased from any fabric/hobby type shop.
- 2. Insert the patch into the tear with the adhesive side upwards and adjust it so that the tear sits in the middle of the patch.
- 3. Place a clean white cloth over one side of the tear and iron that side until the patch sticks firmly to the cloth. Be careful not to scorch or damage the upholstery!
- 4. Make sure that the patch is lying flat under the other side of the tear.
- 5. Place the cloth over the other side of the tear and iron over the patch, closing up the tear as you do so.
- 6. If necessary, apply fabric adhesive to the tear after ironing for a stronger bond.

**Top Tip:** Instead of trying for an invisible mend, why not create a fun effect by using lace doilies or contrasting fabric to appliqué over tears or holes?



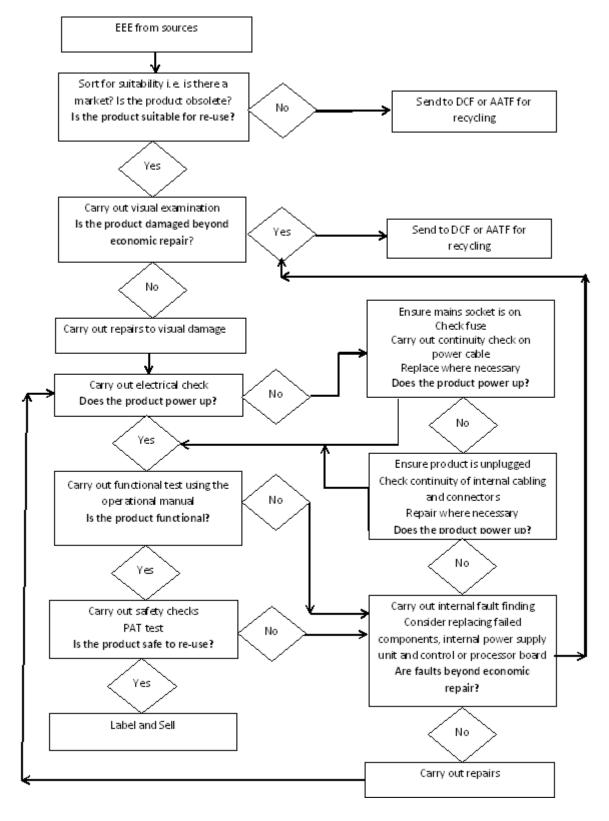
## **Electricals and Electronic Equipment**

There are a number of common faults and problems experienced with electricals and electronic equipment, many of which can be easily diagnosed and rectified.

You can use the flow chart in this section to help you diagnose common faults and decide whether it is economically viable to undertake repairs. If you do decide to repair the item, the following guidance provides a number of possible solutions to common problems experienced with household electrical appliances. The Resource Directory at the end of the toolkit also contains links to websites that may be able to give you further advice and guidance on electrical repair.

**Health & Safety:** Electricity can kill! Before performing any type of repair (no matter how small) on electricals and electronic equipment, you should ensure that a risk assessment is carried out and any risks are minimised and managed. Only trained and qualified staff should carry out repairs, to ensure that they are able to keep themselves and those around them safe. All items should be switched off and unplugged before carrying out repairs and it is good practice to use residual current devices.

## Electrical and electronic equipment flow chart





Common electrical faults and possible solutions are provided in the following tables.

# **Repairing CD/DVD Players**

Fault	Possible Solutions
Visible damage to enclosure, plug, or cables.	Repair or replace damaged parts where economically justified.
Won't start/power up.	First check continuity of the power cable, plug and fuse using a multi-meter.
	Check wiring and connectors inside the machine for bad connections. Replace or repair where required on solder joints, connectors, or cracked flex cable traces.
	If the item has a direct current, inspect the battery compartment and clean contacts if there are signs of corrosion. If there is evidence of major corrosion and battery leakage, then the item may be beyond economic repair.
Lights flash or error code and won't start.	Search online for the error code description.
Disc read error.	May be as a result of problems such as dirty optics lens, prism, or turning mirror. Use a CD cleaner (CD with small brushes). If the problems persist, you can remove dust with cotton buds and alcohol.
Sticky rotation.	Problem may be caused by dust, lack of lubrication, or pet hair. Inspect, clean/lubricate or replace broken (plastic) parts, gear teeth, brackets, or mountings.

# **Repairing Dishwashers**

Fault	Possible Solutions
Visible damage to enclosure, plug, cables, inlet hose(s) and waste pipe.	Repair or replace damaged parts where economically justified.
Won't start/power up.	First check continuity of the power cable, plug and fuse using a multimeter. Check the mains filter and capacitor (SAFETY CHECK: discharge dishwasher first as the mains filter and capacitor may retain some residual charge even when unplugged).  Check wiring and connectors inside the machine.
Lights flash or error code and won't start.	Search online for error code description.
Machine won't drain.	Check the waste pipe for blockages. Check the drain pump for any trapped objects/faults. Check the main recirculation motor for faults. Replace faulty parts where economically justified.
Door won't close.	Check for obstructions and the door catch mechanism. Replace the catch if broken.
Machine is noisy.	If the machine is knocking, check for misaligned/bent drawers or spray arms.  For all other noises; check the recirculation motor, check the drain pump for jams/trapped objects or faults or check the main recirculation impeller housing for any trapped objects.
Won't wash.	The spray arms could be blocked, the 'C-tube' split, the motor capacitor is faulty or the main recirculation motor impeller is jammed/ faulty.  Clear blockages and replace faulty parts where economically justified.
Leakage from door.	The spray arms are split/ faulty or the door seal is damaged. Replace spray arms or seal.
Leakage from underneath.	This could be many things including, hose/waste pipe leaking, faulty pump, recirculation motor seal leaking, or a damaged sump seal.



# **Repairing Free Standing Table Lamps**

Fault	Possible Solutions
Visible damage to mounting, plug, cables.	Repair or replace damaged parts where economically justified.
Won't light.	Change the bulb and test.
	If replacing the bulb does not work, ensure the lamp is unplugged and check inside the bulb holder. If it has oxidized (i.e. it is black in colour), scrape off the black areas carefully with a blunt knife or screwdriver to reveal the metal (usually copper) underneath then try again.
	If the bulb still does not work, check the continuity of the power cable, plug and fuse using a multi-meter.
	If necessary, replace the plug/fuse/cable. (SAFETY CHECK: always replace a damaged plug or cable).
	Check the switch and wire connections inside the lamp. If the switch is broken then replace and reconnect any loose internal wires.



# **Repairing Toasters**

Fault	Possible Solutions
Visible damage to enclosure, plug, cables, knobs, switches.	Repair or replace damaged parts where economically justified.
No power.	The plug wire is frayed or damaged, or there might be a poor contact/loose wire connection.
	Check continuity of the power cable, plug and fuse using a multi-meter.
	If necessary, replace the plug/fuse/cable.  (SAFETY CHECK: always replace a damaged plug or cable).
No heating, timer doesn't work and toasting lever won't stay down.	There might be a break in the nichrome wire, so check continuity first using a multi-meter. You can tie the break if there is enough play in the wire or use a heat protected crimp.
v	If the Nichrome wire is OK but the toasting lever won't stay down, there may be a crumb obstruction or the spring mechanism is blocked or broken.
	Replace where required.
Toaster will not stay on.	Check wiring, lock and release mechanism.
Constant burning smell.	Clean crumb tray and remove stuck debris.
Browning dial will not operate.	There may be a jammed mechanism or dislodged wire/connector.



# **Repairing Kettles**

Fault	Possible Solutions
Visible damage to container, plug, cables, knobs, switches, power plate connector.	Repair or replace damaged parts where economically justified.
No power.	Check continuity of the power cable, plug and fuse, and heating element using a multi-meter.  (SAFETY CHECK: Always replace a damaged plug or cable).
Element is broken.	This can be removed and replaced, taking care to ensure the seal between element and kettle wall is sound.  A new rubber washer can be fitted between what is usually a fibre washer and the connection. This will need tightening after a few boils.
Switch stuck in 'off' position.	Inspect switch mechanism; plastic parts may be broken, if is the case, they will need replacing.
Leaks.	Leaks on chrome or aluminium kettles are difficult to fix as most adhesives do not bond well. This probably means the kettle is beyond economic repair.
Lime-scale build-up.	Descale by boiling water with white vinegar or a proprietary descaler product.



# Repairing Tumble Dryers—Vented and Condensing

Fault	Possible Solutions
Visible damage to enclosure, plug, cables, vent hose(s).	Repair or replace damaged parts where economically justified.
Won't start/power up.	First check the continuity of the power cable, plug and fuse using a multi-meter.
	Check wiring and connectors inside the machine.
Not heating but drum turning.	Replace thermostats (SAFETY CHECK: never bypass thermostats as there is an extreme fire risk!).  There is a possible need to replace the heating element. Inspect for any breaks in the nichrome wire or test for continuity using a multi-meter.
Drum not turning.	Inspect the belt, motor and jockey wheels. Replace items as required where economically justified.
Noisy.	Inspect the bearings, jockey wheels and motor bearings. Replace items as required where economically justified.

# **Repairing Vacuum Cleaners: Uprights with Bags**

Fault	Possible Solution
Visible damage to suction head, tubes, bag, handle, plug and mains flex.	Repair or replace damaged parts where economically justified. SAFETY CHECK: Any worn flexes must be replaced.
Won't start/power up.	Check the mains flex cable, plug fuse, on/off switch wiring using a multi meter.
Brush roller not working.	Check the settings (carpet mode) and for hair and thread accumulation. Carefully remove blockages with tapered pliers. Also check the drive belt and replace if it is broken.
No/reduced suction.	Check for blockages in pipes and bag (replace/ empty bag). Clear pipes and hose blockages using a long thin object such as a cane.
	Check hose for any tears/split. Repair these with glue/tape or replace the hose.
	Check fan area and ducts for clogging. Clear if required. Check the motor brushes for wear and clean or replace where necessary.

# **Repairing Washing Machines**

Fault	Possible Solutions
Visible damage to enclosure, plug, cables, inlet hose(s) and waste pipe.	Repair or replace damaged parts where economically justified.
Machine won't drain.	Gravity drain the machine and check for any blockages in the waste pipe/pump and filter.
	Clear any blockages.
Water leak.	Check the door seal, waste pipe and inlet pipe(s) for splits or damage.  Replace as necessary.
Not spinning.	Check the correct load of washing is being used in the machine. Check the filter for blockages. Also check the pump at the bottom front of the machine and remove any lint from the filter.
	Check the carbon brushes on the motor, which if are worn, should be replaced.
Drum won't turn.	This could be due to a number of issues, including: Worn brushes Belt problem Faulty motor Faulty motor controller Obstruction by loose part or items stuck in drum e.g. bra wire, coins.
	Replace any faulty parts if economically justified and/or remove obstructing items.
Machine is noisy.	Check to see if items are stuck in drum, e.g. bra wire, coins, and remove. Also check drain pump for any obstructions.
Machine is 'bouncing' on the spin cycle.	Check the adjustable feet and the concrete weights on top of the drum.  If there is play in the weights, you can tighten the top bolts.
Machine is smelly.	Clean any mould and detergent build up in the powder drawer and folds of the door seal.
	Check all the filters and waste pipe for any blockages, then run the machine on a hot programme with detergent/cleaner.

# 5. Getting Creative

# Making new products by 'Upcycling'

Upcycling is the art of reusing unwanted items by converting them into something better or more desirable and, in so doing, increasing the resale value of the item.

Upcycled items can be bespoke, for example producing single one-off pieces of furniture or more mass produced, where the availability of materials is such that many similar items can be created for sale.

There are many sources of creative inspiration for upcycling ideas and the following pages of this toolkit give ideas, information and advice on creating and marketing these products. Look at Section 8 for a useful list of links to further creative ideas.

Upcycled products can often be sold for greater amounts than furniture which has been repaired. Pitching your upcycled products at a higher price bracket than your 'core' items will help to generate income to support your essential activities. Introducing upcycling activities can also help upskill and inspire the creative talents of your existing staff and volunteers, as well as help attract additional volunteers with a wider skillset into your organisation.

The 'marketing' section (section 6) gives a range of advice and guidance around marketing and promoting your upcycled products, which may require a different approach to your 'core' items to enable you to realise the value these types of products have to offer.

When thinking about creating upcycled products from the materials you obtain, a good place to start is by encouraging staff and volunteers to contribute any ideas that they have on how to upcycle items. You may find staff are already working on such ideas at home which could be applied in the workplace. All ideas put forward could then be discussed as a group and a collective decision made on which ideas they would like to progress.

You may want to consider developing a simple form or process to formalise an approach to creating upcycled products which staff and volunteers can use to put forward future ideas. In such a form, you could include the need for a sketch of the idea, a list of what materials it would require and some rationale about the market opportunity. Forms could be passed on to the manager and discussed once a month with a group of volunteers and employees to decide whether to take the idea on.

# **Your Upcycling Toolbox**

To start with, you will find many upcycled items can be made with basic woodwork or needlework tools, similar to those you require to carry out repairs. As you become more adventurous in the products you create, you may find you need more specific equipment. The following table shows some of the basic tools and equipment, along with their typical prices, you are likely to need to start your upcycling adventure!

	Tool/Equipment	Approximate Price from High Street DIY stores (as of December 2015)
	Sewing machine	£140
ත	Iron and ironing board	£25 for both
lin	Fabric Scissors	£10
cy	Stitch Unpicker	£1
Up	Needles	£1
le	Box of threads	£9 for 10
Textile Upcycling	Buttons	Depends on type, you could also use recycled buttons from old clothing.
	Elastic	5 metres for £1
	Interfacing	1 metre for £4
	Fusible webbing	£5 for a metre (usually comes in 90cm widths)
	Scrap fabrics	n/a
	Fabric glue	£3 per 120ml
	Upholstery Foam	£10 per metre
	Staple gun for upholstery	£10 - £25
	Pliers Set	£7
S ho	Wire stripping pliers	£5
nic ing	Wire Cutters	£5
Electronics Upcycling	Soldering Iron and Stand	£9
ect Jpc	Lead free solder	£17 for 500g
田田	Crimping set	£17 for a 500 piece set
	Crimping tool	£13

	<b>Tool/Equipment</b>	Approximate Price from High Street DIY stores
		(as of December 2015)
	Varnish	Varies according to type, but around £20 per litre
	Furniture Oil	£8 per 500ml
	Shellac flakes	£20 per 500g (can be purchased in some DIY stores of via internet outlets)
	Primer/undercoat	£17 per 1litre
	Chalk paint	£19 per 1litre
	Furniture wax	£12 per 370g
	Paint brushes	Pack of 3 for £4
ಶ	Decoupage kits	£3 for a pack of decoupage paper
lii.	Image transfer paste	£7 per 473ml
Š	Safety specs	£1
Up	Latex gloves	Pack of 100 for £5
e	Claw Hammer	£9
	Bench Saw	£30 - £50
Wood and Furniture Upcycling	Hacksaw	£2.50
Fu	Power Drill	From £15 - £150 depending on type
pu	Selection of Sandpaper	£2.50 - £7 depending on type
l a	Sanding Block	£3
	Chisel set	£40
Š	Bench plane	£40
	Belt Sander	£139.99
	Sugar soap	£2 for 430g
	Set square	£5
	Steel ruler	£3
	Nails and Screws	Assorted pack from £3
	Screwdriver Set	£25
	G clamps	£7
	Scraper tool	£5
	Wood glue	£7 per 1 litre

# **Upcycling Project Ideas**

As part of the training provided to the charities involved in Hampshire's Innovation in Waste Prevention project, ideas were captured on creating upcycled products from typical materials and products donated to the charities. This section outlines some of the simple, yet popular ideas proposed by the charities which could help you take that first step in creating your own upcycled products.



Image supplied by Community Furniture Project Basingstoke

# Concept 1 Making new furniture and household items from pallets and waste wood

# **Description:**

There are a huge range of indoor and outdoor products which can be made from waste wood, taken from items such as pallets, wood off-cuts or from disassembled furniture which cannot be economically repaired. These can usually be made with basic woodworking tools and painted or stained to create a unique product.

# **Inspiration:**

Broken down furniture pieces can supply unusually-shaped solid wood pieces to create bespoke products, whereas wood pallets provide many pieces of pre-cut lengths of untreated wood which can be useful to produce quantities of the same product. Ideas for how you could use these materials include:

- Accessories made for pets, including dog and cat kennels, bird tables, scratching posts as well as bed baskets.
- Garden items such as planters and bird boxes made from wood pallets.

**Top Tip:** look for opportunities to market or sell garden items with independent local Garden Centres.

• Those with more accomplished woodworking skills can produce coffee or side tables out of pallets or larger wood offcuts. Think about using techniques and products such as image transfer paste, mosaic using pieces of broken crockery, or decoupage to produce unique and imaginative pieces.



Image supplied by Community Furniture Project Basingstoke

- Blanket boxes are a good way of turning waste wood into desirable and useful new items. Use appropriate stains or paints with stencils to create branded or personalised designs which show the story behind the item.
- If you have good quality untreated wood offcuts, these could be shaped and treated into kitchen chopping boards.
- Long strips of solid waste wood can be turned into coat hook racks using handles and knobs taken from unwanted pieces of furniture as the hooks.

**Top Tip:** Paint the backboard in a bright colour, and mix up the handles and knobs to create a fun and colourful effect.

**Top Tip:** To keep costs and timescales to a minimum, think about creating a 'Bank' of materials/components commonly needed for repair and upcycling activities so that these are readily available for staff and volunteers to use.

#### How to:

Build a bird box from a wooden pallet:

http://www.ehow.co.uk/how 6352630 build-birdhouse-wooden-pallet.html

Build a kennel from waste wood:

http://dogs.lovetoknow.com/wiki/How to Build Dog Kennels

Ideas and guides on making coffee tables from pallets:

http://www.1001pallets.com/pallet-furniture/pallet-coffee-tables/

Instructions on making a blanket box: http://www.wikihow.com/Build-a-Blanket-Box

Tutorials and inspiration on making a variety of coat racks: http://www.homedit.com/19-easy-diy-coat-rack-design-ideas/

Suggestions and instructions on projects from wooden pallets: <a href="http://diyready.com/19-cool-pallet-projects-pallet-furniture/">http://diyready.com/19-cool-pallet-projects-pallet-furniture/</a>

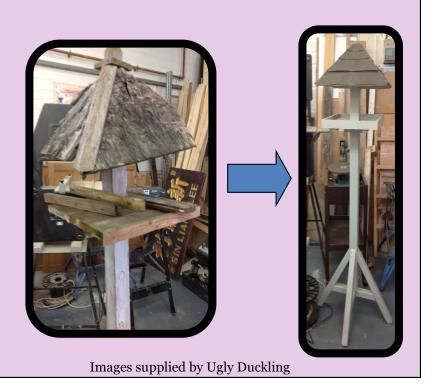
http://www.1001pallets.com/

How to build a potting bench out of reclaimed picket fencing: http://www.myrepurposedlife.com/2015/06/reclaimed-wood-potting-bench.html

A wide range of upcycling ideas and related instructions: http://www.diynetwork.com/how-to/make-and-decorate/upcycling

Tutorial on making a wooden chopping board from offcuts: <a href="https://nz.lifestyle.yahoo.com/better-homes-gardens/diy/h/16425509/how-to-make-a-chopping-board-from-a-hardwood-offcut/">https://nz.lifestyle.yahoo.com/better-homes-gardens/diy/h/16425509/how-to-make-a-chopping-board-from-a-hardwood-offcut/</a>

Upcycling case study: This bird table was brought in to the Ugly Duckling charity for repair by a customer. Staff completed the repairs and turned it in to a brand new bird table for the cost of £25.



# Concept 2 Upcycling to create new items from unwanted or broken furniture

# **Description:**

If furniture cannot be economically repaired or is unlikely to sell, you may wish to consider 'upcycling' it to create a new or transformed piece. There are many ways of transforming furniture items, from using paint, transfers or stencils to give an item a new look, to creating a completely new piece of furniture using parts from an old unwanted one.



# **Inspiration:**

Check out websites such as Pinterest for ideas and inspiration. Here are some ideas to get you started which have been suggested by the charity parners involved in the project:

- Turning sideboards into rabbit hutches.
- Renovating unwanted tall chest of drawers to create dressers by removing drawers and use the spaces to store items.
- Apply a design using stencils or use decoupage to update dated pieces of furniture to create a new fashionable look. There are a huge range of paints or techniques you can use to do this.
- If you receive donated baby cots which do not meet the required bar width regulations, the bars can be removed and used to create magazine racks.
- To get an 'antiqued' or shabby chic look, use a chalk-based paint and wax. Chalk-based paints can be applied directly to varnished wood without any sanding or preparation required.

**Top Tip:** Chalk-based paints can be mixed to create new shades. An average tin costs around £20 and will cover a couple of large items.



• Covering or upholstering pieces of furniture, chairs or tables can make them more desirable and add to their value.

**Top Tip:** Turn small side tables into stools by upholstering them.

- Join together the solid wood frames of old dining chairs with wood planks to create a bench.
- To achieve the 'distressed' look on furniture, sand over random areas then apply wax to seal the paint. Solid woods such as oak and pine work well as the grain will show through after sanding.
- Paint and decorate drawers from broken or unwanted pieces of furniture to make funky storage boxes or wall display units.

**Top Tip:** Think about attaching casters from old office chairs to the bottom of the drawers so that they can slide under beds to create extra storage space.

#### How to:

Tutorials showing how to make benches from dining chairs:

http://www.countryliving.com/remodeling-renovation/home-makeovers/advice/a2769/chair-bench-project-0509/

http://www.thisoldhouse.com/toh/how-to/overview/0,,20691614,00.html

Twenty ideas on how to reuse old drawers:

http://www.architectureartdesigns.com/20-div-ideas-how-to-reuse-old-drawers/

Image supplied by Community Furniture Project Basingstoke

Step by step guides and videos on repainting and distressing old furniture: <a href="http://www.diynetwork.com/how-to/skills-and-know-how/painting/how-to-repaint-wood-furniture">http://www.diynetwork.com/how-to/skills-and-know-how/painting/how-to-repaint-wood-furniture</a>

http://www.bhg.com/videos/m/69999529/how-to-paint-furniture.htm

http://www.addicted2decorating.com/diy-project-accent-furniture-how-to-paint-distress-and-antique-a-piece-of-furniture

Ideas and tutorials on items which can be made from cots: <a href="https://uk.pinterest.com/kistme2/diy-crib-repurposed">https://uk.pinterest.com/kistme2/diy-crib-repurposed</a>

A guide to upholstering furniture: <a href="http://www.upholster.com/howto/slipseat.html">http://www.upholster.com/howto/slipseat.html</a>

A hundred ideas for repurposing and upcycling old and broken furniture items: <a href="http://www.diyncrafts.com/6081/repurpose/100-ways-repurpose-reuse-broken-household-items/8">http://www.diyncrafts.com/6081/repurpose/100-ways-repurpose-reuse-broken-household-items/8</a>

Upcycling case study: The bench below was created using three old chairs which were donated to the Ugly Duckling charity. The bench then sold for £70.

The bench then sold for £70.

The bench then sold for £70.

# **Concept 3 Using donated fabrics to create bags**

# **Description:**

Bags are one of the simple yet popular ways of creating value from donated fabrics. There are a variety of bags to make, from simple draw string bags to lined handbags which could be targeted at a higher price market.



Image supplied by Jacobs Well Care Centre

# **Inspiration:**

Fabric bags are commonly used by people every day for different purposes. They make good gifts, and with the 5p charge for plastic shopping bags now in force, there is a higher profile for these durable and useful items. You could even offer a 'bespoke' service where the customer chooses the fabric and style they like and you produce the bag to order.

Some ideas for different types of bags you could make include:

- Drawstring bags, which can be used for a variety of ideas, for example PE or gym kits, storing and sorting baby toys or accessories or holding tent poles as part of your camping gear.
- If you have donated waterproof fabric, such as fabric from unwanted tents, you can use it to line drawstring bags so that they become water-resistant. These can then be sold as items such as washbags.
- Make satchel style handbags, with either long or short straps, using contrasting fabric for the linings.
- If you have strong but rather drab donated fabric, consider using it to make robust storage bags, such as fishing tackle bags, heavy duty shopping bags or potato/onion bags.
- Create fabric storage 'buckets' or trays by covering upside down unwanted lampshades or reinforcing fabric sides with card to make boxes. These can be used to store things such as craft materials, stationery or sewing equipment.
- Consider producing smaller padded or quilted bags for phones or glasses.

# Top Tips For Making Bags:

- Think about using appliqué to personalise your bags.
- *Use the cords from a tent to provide the drawstring for a bag.*
- *Use buttons or zips taken from donated clothing as fasteners.*

#### How to:

How to make a messenger bag:

http://snip.ly/qOeQ#http://zaaberry.blogspot.ca/2011/09/kids-messenger-bag-tutorial.html

Tutorial on how to make a fabric pencil case:

http://aspoonfulofsugardesigns.com/2012/01/how-to-make-pencil-case/

Guides on making tote bags from old t-shirts and jeans:

http://www.mommypotamus.com/no-sew-t-shirt-tote-bag-tutorial/

http://jimmiescollage.com/2011/06/denim-jeans-tote-bag-tutorial/

Step by step guide on making lined washbags:

http://thisisladyland.com/make-your-own-luxe-washbag-in-9-easy-steps/

Ideas and instructions on making a fabric storage boxes:

http://www.makeit-loveit.com/2011/09/fabric-storage-boxes-per-your-request.html

A guide to making a fabric mobile phone pouch:

http://www.madetobeamomma.com/2013/09/cell-phone-pouch.html

**Selling price:** Bags can be sold for £5 - £20 depending on size of bag and amount of production time.

Images supplied by Community Furniture Project Basingstoke







# Concept 4 Upcycling donated fabrics into gifts and household items.

# **Description:**

From doorstops to aprons, there are scores of ways you can use donated clothing, curtains, upholstery and other textiles to make desirable and versatile items. A useful starting point could be to take stock of the fabrics you have already and sort them into colours, types or combinations which would compliment each other. Think about using techniques such as appliqué to decorate or personalise the items you produce.

# **Inspiration:**

Deconstruct old shirts to create fun cushions.

**Top Tip:** Use the shirt pockets to hold TV remote controls.

- Use softer fabrics, such as fleece or towels to make hot water bottle covers.
- Cut up fabric into squares and bundle up with ribbon. These can be sold as 'fat quarters' for patchwork.
- Utilise pretty patterned fabrics and any donated ribbons or buttons to make vintage aprons.

**Top Tip:** Use a contrasting fabric to make the waistband or pocket.

- Scraps of fabric can be used to make rag rugs.
- Products for pets such as blankets/jackets and bandanas are always popular and can be made in a range of sizes.
- Make a range of seasonal items to sell at certain times of year, for example heart cushions and blankets at Valentines or Christmas decorations, including stockings.
- Vintage items such as tea cosies can be made using old blankets as the linings.
- Household items such as door stops or draught excluders can be made relatively quickly and to great effect.

### How to:

A guide to making dog bandanas:

http://hubpages.com/animals/make-a-bandana-for-dogs

Instructions on making an apron out of pieces of fabric:

http://www.sew4home.com/projects/kitchen-linens/fat-quarter-garden-apron

Steps showing how to make a sausage dog draught excluder:

https://www.ovoenergy.com/blog/lifestyle/make-your-own-sausage-dog-draft-excluder.html

Guidance on making old t-shirts into cushions:

http://jezebel.com/5849901/how-to-turn-a-t-shirt-into-a-pillow

Ideas and tutorials on making fabric Christmas decorations:

http://chickenscratchny.com/2013/07/22-fabric-christmas-ornament-tutorials.html



# Concept 5 Upcycling electrical and electronic goods and parts

# **Description:**

Although it can be more technically challenging to upcycle electrical and electronic goods and parts, there are a number of creative ideas which you could consider, large and small, and the effects can be stunning.

**Health & Safety:** As with all upcycling, health and safety should be a priority. When dealing with any electrical and electronic equipment, it is important that you are aware of the relevant legislative and health and safety considerations.

# **Inspiration:**

- Upcycling lamps or creating them with other materials is a popular way of creating new or different items if you have a lot of the same types of lamps in stock.
- Smaller electronic parts, such as wires or circuit boards can be used to create colourful jewellery such as pendants, earrings, brooches or cufflinks.
- Create modern features using old-fashion items, for example turn old 'bucket' style televisions or computer monitors into display cabinets or even fish tanks!
- Think about using unwanted components as features to decorate household items, for example a collection of old spark plugs could be used as cupboard door handles.



#### How to:

Ideas for making jewellery from circuit boards and electronic components: <a href="http://weburbanist.com/2009/09/02/42-fantastic-fusions-of-tech-and-art-in-geek-jewelry/">http://weburbanist.com/2009/09/02/42-fantastic-fusions-of-tech-and-art-in-geek-jewelry/</a>

Tutorial on making bracelets out of old computer parts: http://www.makeuseof.com/tag/how-to-make-cool-bracelets-out-of-computer-parts/

How to turn your old computer monitor into a fish tank or display cabinet: <a href="http://www.instructables.com/id/Turn-Your-Old-CRT-Computer-Moniter-Into-A-Fish-Tan/">http://www.instructables.com/id/Turn-Your-Old-CRT-Computer-Moniter-Into-A-Fish-Tan/</a>

A guide to making drawer handles from old nuts and bolts: http://www.lansdownelife.com/2010/02/drawer-pulls-made-from-nuts-and-bolts.html

Ideas and inspiration for using old electrical components: <a href="http://www.keenforgreen.com/b/8-unusual-ways-recycle-your-old-electronic-components">http://www.keenforgreen.com/b/8-unusual-ways-recycle-your-old-electronic-components</a>





# **6. Marketing and Promotions: From Workshop to Shop Window**

As part of your decision making process on what materials and products you are going to upcycle, it is wise to consider how to sell your items and how you are going to let people know about them . It is good practice to develop an overall policy and/or strategy which sets out your plan on how to implement this which should take account of different approaches you might need to take according to different materials, such as furniture, clothing and electrical and electronic equipment.

You may also wish to think about ways that you can work with other organisations, such as Local Authorities, to increase awareness of, and provide input into developing your reuse and repair activities further.

This section lists some of the key aspects to take into account when developing your marketing and promotions approach and outlines some opportunities and ideas for consideration.

# Who are your target audiences?

Think about the market(s) you wish to target with your repaired and/or upcycled products e.g. where they are based, age, gender and socioeconomic group. This might vary depending on the type of product or material you are dealing with, for example furniture, clothing and electrical/electronic goods.



How do you plan to sell to your customers? Could you sell directly, e.g. in your showroom or shop, or via your website, or indirectly through a distributor, e.g. a third party showroom or website?

You may wish to consider making links with organisations that have more direct access to your target market, for example housing associations, vintage shops, or private landlords. You may not get such a good price for the sale of items, but it may increase throughput and help to discover market trends.

If you have resources available, it is advantageous to undertake some form of market research. This could provide insight into what your target market is for purchasing your upcycled products and whether they are the same people that regularly buy your 'core' products. It could also offer some ideas about how to sell to members of the public as well as businesses and other organisations. There are cheap online packages for less than £10 per month that could be used to develop an online market research questionnaire. This could be distributed as a weblink that you could include in any local promotions about your organisation.

**Top Tip:** Enlist the support of a local business or university to help develop and analyse your market research questionnaire.



Once identified, talk to the people who might be interested in buying upcycled products. Perhaps there are local groups or special interest organisations that you may be able to present to and tell the story of your organisation; use the opportunity to discuss your ideas on upcycled products and gain insights on what sort of things they would be interested in buying and at what price.

Look at sites like eBay and Gumtree to see what products of interest are being sold and purchased in postcodes of interest. Understanding what people buy and sell online in local areas of interest is a useful starting point in understanding and targeting local markets. Create or maintain demand for your upcycled products by keeping on top of trends in colours, design and the latest 'must have' products.

Consider locally what competitive products/services exist and who your direct competitors are. One way you can help stand-out against competitors is by developing your own Unique Selling Proposition (USP) around the upcycling and charitable activities your organisation is involved in.

**Top Tip:** Develop a brand/logo to represent the upcycled products element of your organisation. These can be printed onto stickers or labels at an affordable price to attach to upcycled products.

Research local retailers and businesses, such as restaurants and cafés, who might want their stores to have a unique or local feel. Perhaps your upcycled products might feature some local identity/heritage or be individually designed to fit the type of shop. Utilise your contacts with local businesses to gauge the sort of things that may be of interest to add to the in-store/business environment.

**Top Tip:** Consider approaching local amateur dramatic societies and higher education establishments that may be interested in renting period or vintage furniture for their productions.

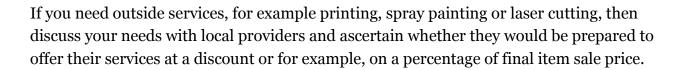


# **Making the Products**

What in-house processes do you need to develop in order to make upcycled products? Do you have the required skills and available labour to upcycle the products?

Undertake training with your staff and volunteers to ensure the skills and expertise are available in-house to

make upcycled products. Consider inviting local crafts people to come and talk to your staff and volunteers to share ideas.



**Top Tip:** Consider making links with a local art college or university which offers courses in subjects relevant to upcycling, e.g. art, design, technology, textiles or fashion. They may offer opportunities to engage students in coming up with unique and original designs to your furniture.





Do you have a pricing policy?

Research the market and find out what your target audience(s) might pay for upcycled products. Pricing should take account of different approaches associated with furniture, clothing and electrical & electronic equipment. Compare your prices against other local organisations to ensure they are competitive and you have not priced your upcycled products outside the market.

Look at current market rates to help understand how the perceived added value of upcycling affects promotion, pricing and adds margin.

Images supplied by Ugly Duckling



# **Promotion**

What communications channels do you use and what other methods can you put in place to engage with potential customers?



Talk to your local newspaper about how to raise the profile of your organisation. Perhaps you can stimulate local interest in your products by telling the story of your organisation. Think about photographic opportunities relating to your products and organisation. Local newspapers often favour stories that provide good photographic content. Perhaps you could invite your local MP to visit your site, or celebrate an anniversary and invite local stakeholders to attend including local media.

What 'added value' services can be attached to your upcycling concept? Communicating your status as a social enterprise/charity in communications with your customers pre and post purchase will help to emphasise the value of your product and proposition. The knowledge that your organisation is delivering benefits to the local community and environment will be a powerful selling point for some customers.

**Top Tip:** Do you have a story to tell about how your upcycled product was produced? You could create a unique code for each product sold which, when searched on your organisation website, tells the customer the story behind how the product was made and by whom.

Word of mouth is a powerful way of gaining business, so try to make as many links with your local community as possible. Develop connections and communicate with special interest groups, e.g. local green organisations or organisers of local craft fairs, whose members may be potential customers as well as offer relevant communication channels to broaden word of mouth about your business.

**Top Tip:** Talk to a local public relations company who may be willing to provide some pro bono advice or services, including help with writing and disseminating a press release.

Image supplied by Community Furniture Project Basingstoke

As many people use the internet to search for information, it is a good idea to keep your organisation website up-to-date and make it appealing using images where possible. If you use social media, like Twitter or Facebook, as part of your existing promotions, encourage followers to retweet or 'like' content relating to your products or services. Get website or Facebook visitors involved by asking for their opinions about your latest products.

If you sell your product(s) online, then it almost goes without saying that the quality of photography needs to be high. If you are selling your products through your own showroom or shop, then you will need to consider how best to merchandise your products for sale.

Targeted distribution of flyers and posters which describe your organisation and the sorts of products that are available can be effective at generating new business. Hand-out flyers at local events and seek permission from your Local Parish or District/Borough Council and surrounding businesses to display your posters. Use community information boards and other public notice boards to display your leaflets.

Further information and guidance on marketing and promotions can be found in the Resource Directory section (section 8) of the toolkit.

# 7. People Power: Partnership Working and Building Your Workforce

Expanding your existing reuse and repair activities may be feasible within your current capacity and capabilities. There may come a point when growth in such activities exceeds these limits and it will be time to consider increasing your supply of products and materials as

well as workplace space and numbers of staff and volunteers to continue to meet demand.

# **Working in Partnership**

Rather than 'going it alone', consider whether there are any local businesses and organisations that you could work in partnership with who could support your business by increasing supply of

materials and generating demand for reused and repaired products. Some local businesses and premises, such as hotels, offices, leisure centres, schools, restaurants, cruise liners and furniture stores may periodically replace or get rid of furniture and other household-type stock despite these items still being fully functional and in good condition. Make contact with those premises in your local area to see whether gaining access to these items could result in mutual benefits for all.

**Top Tip:** If you do not already belong to a local furniture reuse network, have you thought about setting up a 'credit' system with your neighbouring reuse organisations? This could be a great help when you receive an emergency call for a household pack but lack stock in some essential items. Calling upon your neighbours to meet the demand for items in an emergency situation would put them in 'credit' which could be repaid by your organisation in their time of need. It also saves your organisation the trouble of going out to purchase new items which can come at a high cost.

# **Engaging with Local Authorities**

Local councils provide a myriad of services and duties in their local areas which are delivered by different departments. Their statutory duties and responsibilities will vary between local District/Borough Councils and County Councils where a two-tier system is in place. Opportunities to engage and work in partnership with local authorities may arise in different departments depending on a number of factors, such as their policies and priorities, service delivery models and procurement processes.

During delivery of the Innovation in Waste Prevention project, project partners identified ways in which the reuse charities involved could engage and work with Hampshire's local authorities to deliver mutual benefits, some of which have already been successfully put in place. These ideas are summarised below which may spark some thoughts on how to approach local authorities in your local area.

# Accessing materials and products for reuse and repair through waste services

Research what reuse services are already provided through the local Household Waste Recycling Centres and identify ways in which your organisation could further increase reuse performance through interaction with current delivery of the service. Put forward a proposal to the Council identifying the potential benefits of your involvement. Alternatively, if the service is operated by a contractor, find out when the contract is up for retender and seek to attend stakeholder engagement events.

- Similarly with kerbside bulky waste collection services, look into how this service is delivered locally, for example in-house or by a contractor, frequency and performance, and consider how your organisation could compliment service delivery through various interventions. Find out if and when contracts for kerbside services are due to end, and consider bidding to deliver kerbside bulky collections on your own or in partnership with a waste contractor.
- Pass on your contact details to your local council's call centre so they have your details to-hand to divert callers enquiring about reuse.
  - What key questions should be considered to enable residents to determine whether a household item is suitable for reuse and/or repair? Talk to your local District/Borough Council to see whether these can be incorporated into call services for kerbside bulky waste collections to prompt residents to consider reuse alternatives.

# Increasing supply of donations through marketing and promotions

- Are there some key actions carried out by members of the public that could increase your ability to reuse items, such as keeping the fire label on and storing items under cover prior to collection?
   Contact council communications teams to investigate whether these messages can be integrated into their communications with the general public.
- Many councils have an Economic Development function who may offer advice or support to local businesses as well as run networking conferences and events. Get in touch with them to see how they can help promote your reuse organisation.
- Your local Councillor could be a great advocate for your organisation. Why not invite them to visit your organisation in action so they can see first-hand the benefits your organisation brings to their constituency.

# Increasing reuse and repair capacity and capabilities

- Looking to expand your premises or move to a larger site to accommodate more reuse and repair? Talk to the estates/property team in your local council to see whether they have any vacant properties on their books that may come at a cheaper rent price.
- Need more hand tools to support minor repairs activities? Why not run a tools amnesty event in conjunction with your local council? Consider approaching your local waste disposal authority to see whether site staff at the local Household Waste Recycling Centres can put any discarded tools from the public to one side.



# Increasing provision of reused and the local community. Some of the ideas repaired goods to those in need considered as part of Hampshire's Inno

- If your council owns housing stock, consider contacting them to see if there is scope to work with them to supply essential household items when residents first move in.
- District and borough council housing departments are responsible for rehousing homeless families, those families at risk of eviction and/or vulnerable individuals. The need for affordable household items in a short timeframe is often high, to prevent delay in rehousing or financial difficulties to these families. Work with the council to provide packages of essential household items which have been reused or repaired. If the • families are unable to pay for the items, there may be scope to put agreements in place whereby the value of the package is paid off in exchange for volunteering time at your reuse organisation.

# Attracting more volunteers to carry out reuse and repair activities

More staff and volunteers may be required to maintain your turnover rate in stock as well as increase your skills capacity to carry out these activities. There are a number of different routes and networks you can utilise to attract more volunteers into your organisation from the local community. Some of the ideas considered as part of Hampshire's Innovation in Waste Prevention project are listed in this section.



# **Community groups**

There are many organisations which have members who may be keen to make links with you, due to the nature of your business. These include:

- The <u>UK Men's Shed Association</u> is an organisation set up to offer places where men (and women!) can share tools and resources to work on repair projects of their own choosing in a safe and social environment. There are a growing number of branches across the country.
- Transition Towns are local organisations which carry out various community activities with the aim of building resilience to peak oil and climate change, whilst improving social wellbeing. Some Transition Towns run repair cafés which offer a source of local volunteers skilled in repair.

- If you are in an area which currently, or have previously been, home to the Armed Forces, think about contacting the local garrison support service, British Legion or Soldiers, Sailors, Airmen and Families Charity (SSAFA) who may offer opportunities to engage with individuals who have relevant practical skills in repair.
- Your local branch of Community Action, an organisation which offers information and support for voluntary and community groups, is likely to have a wealth of knowledge about local organisations, groups and communities in your area who you could also approach.

# **Engaging young people**

Consider contacting your local college or university. As well as the potential for attracting volunteers, they may be able to help you run community courses in repair as a way of increasing income generation, or the opportunity to engage with creative design students on your upcycled products.

Contact local youth clubs and schools to see if there are opportunities for young people or students to get involved at your organisation through work experience. You may be able to incentivise young volunteers to join by helping them work towards recognised qualifications.



The <u>National Citizen Service (NCS)</u> is a year round, government-backed programme for people aged 15-17 years old that builds skills for work and life that are not covered in schools. Part of the programme involves participants developing a social action project around local issues which they are encouraged to put into action. This could include supporting the growth of your reuse organisation!

**Please note:** When working with young and vulnerable people, people working at your organisation may be required to carry out a <u>Disclosure and Barring Service check</u> (previously known as Criminal Records Bureau checks).

# **Housing Associations**

Your local housing association(s) may have communication networks with residents that you could access to advertise for volunteers. Some housing associations also have grants or awards aimed at local charities that may be applicable to your organisation.

# **Involving Your Local Community**

Your local council is likely to advertise volunteering opportunities on its website. They may also be happy to promote any of your open days or activities directly to their staff or to the wider population through their networks, e.g. in local libraries.

Volunteering England has lots of advice and resources available to their members to help you encourage volunteers to join your organisation. Membership fees start from £47 per year.

<u>'Do It – Be More'</u> offers free advertising for volunteer placements and includes local opportunities on a publicly available searchable database by area.

Think about holding community open days to help spread the word about your activities and recruit new volunteers. Open days give you the opportunity to showcase your achievements as an organisation and demonstrate to potential volunteers the difference they can make through volunteering. The offer of refreshments often helps to pull in the crowds as well!

Why not open up your facilities to local groups or clubs in the evenings or at weekends? By drawing people into your place of work, it may help to attract volunteers as well as foster a sense of community engagement. You could also consider using expert members of your workforce to run local furniture repair or sewing courses, or hobby clubs as a source of income generation.

You could utilise your workplace as a location to hold a <u>repair café</u>; a meeting place containing tools, materials and expert volunteers to enable broken items bought in by the public to be repaired. Visitors can socialise and enjoy refreshments whilst watching repairs being carried out, or gain some handson experience in repairing items themselves. People can bring in a variety of items, from kettles to trousers and chairs to bicycles.



# 8. Resource Directory

This directory contains a wealth of practical information and guidance around reuse and repair to help you expand your activities in this area.

**Please note:** Reuse and repair should always be carried out in line with the relevant legislation, regulations and health and safety practices. The authors take no responsibility for any repairs carried out using the guidance below.

All information in the toolkit, including hyperlinks to external websites, is correct to the best of our knowledge at the time of production (December 2015).

# **Electricals and Electronic Equipment repair and maintenance**

WRAP guide on realising the value in waste electrical and electronic equipment <a href="http://www.wrap.org.uk/sites/files/wrap/WRAP%20WEEE%20HWRC%20summary%20Sheet.pdf">http://www.wrap.org.uk/sites/files/wrap/WRAP%20WEEE%20HWRC%20summary%20Sheet.pdf</a>

Espares is a British company that sells spare parts for domestic electrical and electronic goods. Its website contains easy to follow videos on product repair.

http://www.espares.co.uk/

Ifixit is a US business. The site is a wealth of information on repair and contains step-by-step guides with videos on how to repair a wide range of products.

https://www.ifixit.com/Device/Household

Ifixit's guide on how to use a multi-meter.

https://www.ifixit.com/Guide/How+To+Use+A+Multimeter/25632

A series of visually compelling guides from the Guardian newspaper on repair of everyday things, including some electrical products.

http://www.theguardian.com/lifeandstyle/series/live-better-how-to-mend

Basic guide to electronics for repair.

http://www.instructables.com/id/Acquire-Repair-and-Sell-Dysfunctional-Electronics/step1/Gain-Basic-Electronics-Knowledge/

UK White Goods supply spares for repair and maintenance of white goods. This website contains helpful information on white goods repair and health and safety practices. <a href="http://www.ukwhitegoods.co.uk/help/fix-it-yourself/all-appliances/2690-basic-electrical-safety/">http://www.ukwhitegoods.co.uk/help/fix-it-yourself/all-appliances/2690-basic-electrical-safety/</a>

A top-level guide on white goods repair. Follow the links to find guides on fault diagnosis and repair for a wide range of white goods.

http://www.ukwhitegoods.co.uk/help/fix-it-yourself/

Guidance on appliance cleaning.

http://www.ukwhitegoods.co.uk/help/cleaning-maintenance/

Guidance on treating odours in refrigeration equipment.

http://www.ukwhitegoods.co.uk/help/fix-it-yourself/cleaning-maintenance/2621-smelly-fridges/

Guidance on how to clean refrigerator gaskets.

http://www.howtocleanstuff.net/how-to-remove-mildew-from-refrigerator-gaskets/

Guidance on cleaning kitchen appliances.

http://www.realsimple.com/home-organizing/cleaning/cleaning-kitchen/cleaning-kitchen-appliances

General guidance on repair of small electrical appliances.

http://home.howstuffworks.com/how-to-repair-small-appliances1.htm

Guidance on vacuum cleaner repairs.

http://www.wikihow.com/Fix-a-Vacuum-Cleaner

How to repair a toaster.

https://www.ifixit.com/Wiki/Toaster Troubleshooting

How to repair lamps.

 $\underline{http://www.judgeelectrical.co.uk/domestic-electrical/lighting/table-floor-lamp-troubleshooting.html}$ 

# **Furniture Repair**

Basic guide to re-upholstery of a chair.

http://www.wikihow.com/Reupholster-a-Chair

Top tips on treatment of scratches in wooden furniture.

http://www.apartmenttherapy.com/quick-tip-2-how-to-cover-up-scratches-on-wooden-furniture-home-hacks-109198

Basic guidance on furniture restoration.

http://home.howstuffworks.com/home-improvement/home-diy/furniture-restoration/how-to-repair-wooden-furniture-surfaces.htm

Further ideas/guidance on furniture repair.

http://www.apartmenttherapy.com/30-ways-to-repair-or-restore-a-148723

# **Textiles repair**

General information on the growing trend of textiles repair.

http://www.theguardian.com/lifeandstyle/2014/may/19/the-rise-of-mending-how-britain-learned-to-repair-clothes-again

How to replace a zipper.

https://www.ifixit.com/Guide/Replace+the+Slider+on+a+Plastic+Tooth+Zipper/19448

How to patch clothes.

http://www.instructables.com/id/How-To-Patch-Your-Clothes/

Pinterest has lots of links to tutorials on sewing, up-cycling, stain removal and upholstery. https://uk.pinterest.com/

Make Do and Mend also has lots of information and resources around repair of clothing. www.makedoandmend-able.co.uk

Patagonia repair guides for clothes.

www.patagonia.com/eu/enGB/worn-wear-repairs

ifixit.com clothing repair guides.

www.ifixit.com/Device/Apparel

Love your clothes (WRAP's campaign on clothing reuse and repair), guides on clothing repair, care and reuse.

www.loveyourclothes.org.uk

# Courses in sewing, soft furnishing, upcycling and upholstery

Look around your area for local classes/workshops for sewing machine confidence building and techniques.

Database of sewing classes in the UK.

www.thesewingdirectory.co.uk/workshops-and-courses

Directory of make do and mend classes in the UK and Directory of craft courses in the UK. <a href="https://www.craftcourses.com/categories/textiles">www.craftcourses.com/categories/textiles</a>

The Good Life centre in London is an independent learning space situated in Waterloo, Central London. They offer practical boutique workshops in DIY, home maintenance, decorating, upholstery, woodwork & carpentry, furniture upcycling & restoration and various traditional hand crafts.

www.thegoodlifecentre.co.uk

Find a local repair café. www.repaircafe.org

# Online groups for advice

Make do and Mendable.

www.makedoandmend-able.co.uk

# **Laundering and Stain Removal**

Advice on cleaning and stain removal on soft furnishings and upholstery. www.cleanipedia.com

UK Fashion and Textiles Association is the UK representative of Ginetex, the organisation that owns access to all garment care labelling symbols. Details on caring for fabrics on this site: <a href="https://www.care-labelling.co.uk">www.care-labelling.co.uk</a>

# **Upcycling Inspiration**

Ideas and inspiration on upcycling. <a href="http://www.upcyclethat.com/">http://www.upcyclethat.com/</a>

Tents upcycled into bags, bunting and raincoats. www.withintent.co.uk

Upcycled clothing from wool knitwear. www.woollypedlar.co.uk

# Some notable repair and upcycling organisations

Ifixit <a href="https://www.ifixit.com/">https://www.ifixit.com/</a>
Restart <a href="https://therestartproject.org/">https://therestartproject.org/</a>
Repair Café Foundation <a href="http://repaircafe.org/en/">http://repaircafe.org/en/</a>
Goldfinger Factory <a href="https://www.goldfingerfactory.com/">http://www.goldfingerfactory.com/</a>

# **Marketing and promotions**

Various guides are available on use of social media to market products and raise your profile. <a href="https://charity-comms.s3.amazonaws.com/uploads/attachments/16/">https://charity-comms.s3.amazonaws.com/uploads/attachments/16/</a>
CharityComms Social Media Guide Part1.pdf

Guide showing how to light, dress and photograph your products for sale.

<a href="http://digital-photography-school.com/how-to-photograph-your-product-to-enhance-your-online-sales-in-4-easy-steps/">http://digital-photography-school.com/how-to-photograph-your-product-to-enhance-your-online-sales-in-4-easy-steps/</a>

# 9. Contact Details

Thank you for taking the time to read this toolkit. We hope that the content has been able to offer you and your reuse organisation some ideas on how to increase reuse and repair activities in your local area.

We would love to hear your stories on any changes you have been able to put in place as a result of reading this toolkit. Please pass on your feedback and any questions you may have to the authors of the toolkit at <a href="mailto:waste.prevention@hants.gov.uk">waste.prevention@hants.gov.uk</a>.

# 10. Glossary of Terms

# **Applique:**

In the context of textiles appliqué refers to smaller pieces of fabric which are attached to a larger piece of fabric of contrasting colour or texture. The technique can be used to cover tears or holes in fabric as well as for decorative purposes.

# **Bulky Waste:**

Any article of waste which exceeds 25 kilograms in weight; and/or any article of waste which does not fit, or cannot be fitted into:

(a) a receptacle for household waste provided in accordance with section 46 of the Environmental Protection Act 1990; or (b) where no such receptacle is provided, a cylindrical container 750 millimetres in diameter and 1 metre in length.

#### **Decoupage:**

Decoupage is the process of decorating a surface by gluing on shapes or illustrations cut from paper or card.

#### **Direct Current (D.C):**

Direct current is the flow of electric charge produced by sources such as batteries, power supplies, thermocouples, solar cells, or dynamos. The electric current flows in a constant direction, distinguishing it from alternating current (AC).

## **Embroidery Scissors:**

These are small, pointed scissors which allow precision trimming and cutting on textiles.

#### **Furniture Glue:**

There are a number of different glues which can be used in furniture repair. They range from ready mixed to those which need to be mixed with water to be activated.

#### **Furniture Wax:**

This is often used on wooden furniture to give an aesthetic and attractive finish and is best used on carved items when you want a low sheen. Wax offers very little (if any) protection to the wood as it melts at low temperatures but is a natural water repellent.

### **Fusible webbing:**

This is a double-sided sheet-like adhesive used to join together pieces of fabric without sowing. One side is web-like in texture and the other is paper which you can draw designs directly onto to cut around.

#### **Hessian:**

Hessian is a cloth used to cover webbing & springs when upholstering furniture. It supports the stuffing & wadding. It comes in two qualities; loose weave which is cheaper but weaker, and tight weave which is more expensive but stronger.

### **Lacquers:**

Lacquers are a type of wood varnish that produces a hard, durable finish. These are usually solvent based and therefore dry quickly. They can come in clear or coloured finishes and can produce varying levels of sheen.

# **Methylated Spirits:**

Often known as 'meths', methylated spirits are a type of ethanol and can be mixed with shellac flakes to produce liquid shellac (see 'Shellac').

### **Multi-meter:**

A multi-meter is a hand held electronic measuring instrument that combines several measurement functions in one unit. A typical multi-meter can measure voltage, current, and resistance. They are useful for basic fault finding.

# Oils – Linseed, Tung and Teak:

These oils can be used on furniture and can be effective at bringing out the character of the wood. They are easy to apply and maintain, but may not offer as a robust finish as other products such as varnishes. They are very liquid in nature and subsequently very penetrating so several coats can be needed to get the finish you want.

### **Oxalic Acid:**

Oxalic acid can be used to bleach stains or also be used to restore the natural colour of the wood. It usually comes in crystal form and will need to be mixed with water before it Reuse: is applied. The packaging will usually give the proportions required to mix the oxalic acid solution.

# **Polyurethanes:**

Polyurethanes are essentially a plastic in the form of a liquid so can provide a harder finish it). to wooden furniture than shellac and varnish.

They are available in both water and oilbased options, come in a variety of forms from satin to gloss but are less of a penetrating mixture and more of a coating. They can be expected to yellow slightly with age & UV exposure.

#### PPE:

Personal protective equipment (PPE) refers to protective clothing, helmets, goggles, or other garments or equipment designed to protect the wearer's body from injury or infection. The hazards addressed by protective equipment include physical, electrical, heat, chemicals, biohazards, and airborne particulate matter.

# Repair:

Restoring items that are damaged, faulty or worn to its original use.

#### **Residual Current Device (RCD):**

An RCD is a sensitive safety device that switches off electricity automatically if there is a fault. It is designed to prevent fatal electric shocks dealing with live electricity imperfections from wooden furniture and can also provide some protection against electrical fires.

Products/components that are brought into your organisation which are passed on for the same purpose for which they were conceived (for example, an oven is donated to a charity and is sold to another family as an oven with no alterations or repair work carried out to

#### **Rubber:**

This is a type of absorbent pad and can be used to apply shellac or oils to furniture to avoid brush marks. You can make your own by stuffing and old (clean!) sock with cotton wool.

# **Satin Stitching:**

This is often used in embroidery and is a series of flat stitches that are used to completely cover a section of the background fabric. A narrow satin stitch can be achieved on a sewing machine using a narrow zig zag stitch setting.

#### **Shellac:**

Shellac is a resin secreted by the female lac bug. It is processed and sold in different forms; premixed, aerosols or as dry flakes. It can be dissolved in ethanol alcohol-based solvents to make liquid shellac, which can be used to give a more natural effect to wood furniture than some, more traditional varnishes.

# **Stitch Unpicker:**

Sometimes also called a 'seam ripper', this is a small handheld tool used for removing stitches from textiles.

# **Straight Stitching:**

This quick and simple stitch is usually used when sewing seams in fabric. As the name suggests, it is a straight stitch which does not cross or loop the thread.

### Sugar Soap:

This is non-abrasive soap, ideal for general purpose cleaning. It removes dirt, grease and small imperfections from furniture. It usually comes in flake form to be mixed with water before use. Sugar soap is widely available from many high street DIY stores.

# **Tacking Stitching:**

Tacking stitch is employed to hold the fabric in place while it is being sewn on the machine. It is usually hand sewn, using large straight stitches and is removed using a stitch unpicker once the final stitching has taken place.

#### Tailor's Chalk:

A hard chalk which is used to mark lines on textiles before stitching. It usually comes in white, although other colours can be purchased and is sold as a small triangle or stick.

#### **Upcycling:**

Reuse of discarded objects or material in such a way as to create a product of higher quality or value than the original.

#### Varnishes:

Varnishes provide a hard, transparent finish to wood furniture which is usually glossy. They are effective at protecting the surface and waterproofing furniture items.

# **Waste Collection Authority:**

Your local District or Borough council that has a statutory duty to collect household waste.

# **Waste Collection Authority:**

Your local District or Borough council that has a statutory duty to collect household waste.

# **Waste Disposal Authority:**

Your local County or Unitary Council, which is responsible for managing the disposal of waste collected by the Waste Collection Authorities, and for the provision of household waste recycling centres (HWRCs).

#### **Wax Filler Sticks:**

Used to fill deep scratches. These sticks only melt at a very high temperature and are therefore suitable to fill cracks in tables where hot items (e.g. cups of tea) are likely to be placed.

# Webbing:

Used in upholstery, webbing is the scaffold and support essential for spreading weight when a chair is sat on.

# **Wool Wadding:**

Used in upholstery, this provides the soft padding for the seat and gives the seat its shape.

# Zig-Zag Stitching:

This stitch is often used where extra strength is required, for example reinforcing button holes. It can also be very decorative and used when securing applique.

# Zips:

Used in a wide range of domestic textiles and clothing, there are various types of zips available. These include those with metal or plastic teeth, and 'concealed' zips where the teeth are hidden under overlapping pieces of fabric.

# **Zipper foot for Sewing Machines:**

A zipper foot is adjustable so that it can be moved to sit on either the left or the right side of the sewing machine needle. This adjustment allows you to sew round and fix a zip onto a garment/product without the presser foot getting stuck on the teeth of the zip. Most sewing machines come with a zipper foot as standard as part of the accessory kit.

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# Appendix 1: Detailed information on reuse and repair regulations and permitting

When undertaking reuse and repair activities within your organisation there are a number of regulations, licences and insurances that you need to be aware of and comply with.

Some key examples of these and accompanying links giving further information and guidance are listed below.

Name of Regulation/ Exemption/ Standard	What is the link to reuse/ repair?	When do you need to take this into account?	Cost impacts	Further Information
The Environmental Protection Act (1990)	The requirement to register for a waste carriers licence under duty of care if you are taking items that have been discarded.	As part of reuse organisation activities, if you transport, buy, sell, or dispose of material which has previously been discarded by someone without the intention of it being reused. For example, if you carry out house clearances and take away all items that are no longer wanted.	Registration costs £154	https://www.gov.uk/ waste-carrier-or- broker-registration
The Waste (England and Wales) (Amendment) Regulations 2012	Legal requirement to apply the waste hierarchy (i.e. prevention, reuse, recycling, recovery then disposal) when dealing with waste	If your organisation produces or handles waste (this includes producing, carrying, keeping or treating waste; and anyone responsible for the transfer of waste), you must seek to prevent and reuse waste before recycling then recovering items.	Cost savings could be achieved by reducing the amount of waste thrown away.	http:// www.legislation.gov.u k/uksi/2012/1889/ made
Waste exemption: T12 manually treating waste	Exempts you from the need to have an environmental permit if you sort, repair or refurbish waste for reuse	If you collect discarded furniture, bikes or garden tools to repair or refurbish them for reuse	Registration is free	https://www.gov.uk/ guidance/waste- exemption-t12- manually-treating- waste

Name of Regulation/ Exemption/ Standard	What is the link to reuse/repair?	When do you need to take this into account?	Cost impacts	Further Information
Waste Electricals and Electronic Equipment (WEEE) Regulations (2013)	If you receive used electricals and electronic equipment (EEE) for resale which are unsuitable for reuse and is intended to be discarded by your organisation.	Any EEE which becomes WEEE whilst in your hands, and as a result is intended to be thrown away, you become a waste 'producer' therefore must comply with the WEEE regulations. This means the WEEE must go to a Designated Collection Facility (DCF) or an Approved Authorised Treatment Facility (AATF).	There may be a charge associated with disposing of WEEE which has come from businesses	Full legislation is available at: http://www.legislation.gov.uk/uksi/2013/3113/contents/made  Further guidance for charities can be found at: https://www.gov.uk/guidance/collecting-used-and-waste-electrical-and-electronic-equipment
Waste exemption: T11 repairing or refurbishing waste electrical and electronic equipment (WEEE)	Exemption allowing you to repair, refurbish or dismantle waste electrical and electronic equipment (WEEE) so whole or parts of items can be reused or recovered.	If you collect waste electrical goods from businesses and households e.g. from Household Waste Recycling Centres or bulky waste kerbside collections, you will require a T11.	Registration costs £840 which lasts over three years	Further information and guidance can be accessed here:  https://www.gov.uk/ guidance/waste-exemption -t11-repairing-or- refurbishing-waste- electrical-and-electronic- equipment-weee  Form to register for a T11 https://www.gov.uk/ government/uploads/ system/uploads/ attachment_data/ file/479446/LIT_8405.pdf

Name of Regulation/ Exemption/ Standard	What is the link to reuse/ repair?	When do you need to take this into account?	Cost impacts	Further Information
The Electrical Equipment (Safety) Regulations (1994)	If you repair or refurbish waste electrical and electronic equipment (WEEE)	When you resell electrical products they must be safe and in compliance with the Low Voltage Directive (LVD). This applies to most electrical equipment designed for use with a voltage rating of between 50 and 1000 volts for alternating current (AC), and between 75 and 1500 volts for direct current (DC), although there are some exemptions.	Costs associated with safety procedures.	The legislation can be found at:  http:// www.legislation.gov.uk/ uksi/1994/3260/made  The regulations implement the Low Voltage Directive details: https:// www.gov.uk/government/ uploads/system/uploads/ attachment_data/ file/293397/07-616- product-standards- guidance-notes-electrical- equipment.pdf
Directive 91/689/EEC on Hazardous Waste	Relates to any waste you produce which is considered to be hazardous (harmful to humans or the environment), which includes WEEE	When producing, storing, moving or disposing of the hazardous waste, you have a duty of care to ensure you deal with it responsibly. If you produce more than 500kg a year of hazardous waste, you will need to register with the Environment Agency.	If you need to register, it costs £18 per premises.	https://www.gov.uk/how-to-classify-different-types-of-waste  Check if your waste is considered hazardous: https://www.gov.uk/how-to-classify-different-types-of-waste

Name of Regulation/ Exemption/ Standard	What is the link to reuse/ repair?	When do you need to take this into account?	Cost impacts	Further Information
The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012.	Repairing or refurbishing electrical and electronic equipment (EEE)	Electrical and electronic equipment containing certain hazardous substances (such as lead, mercury and cadmium) over specified amounts cannot be placed on the market. As a precaution, it may be best to use lead-free solder for repairs.	None	https://www.gov.uk/ government/publications/ restriction-on-the-use-of- certain-hazardous- substances-in-electrical- and-electronic-equipment- regulations-government- guidance-notes-rohs-2
Publicly Available Specification (PAS) 141	Quality protocol associated with the reuse of EEE and WEEE	PAS 141 certified schemes demonstrate a standard has been achieved in reuse and refurbishment of electrical and electronic equipment, giving assurance to customers	Methodology statement of PAS 141 can be purchased from the British Standards Institute at £65	http://shop.bsigroup.com/ SearchResults/?q=141
		that products are safe to use and fit for purpose.		More information about the benefits of PAS 141 can be found here: http:// www.wrap.org.uk/content/ pas-141-re-use-standard
Portable Appliance Testing (PAT)	The examination of electrical appliances and equipment to ensure they are safe to use (following reuse and repair)	PAT is a key activity when dealing with electrical equipment and is the minimum standard for some areas of legislation.	Attending a PAT course to become certified costs in the region on £400.	http://www.pat- testing.info/
			PAT testing is likely to range between £1 and £2 per appliance	http://www.hse.gov.uk/ electricity/faq-portable- appliance-testing.htm

Name of Regulation/ Exemption/ Standard	What is the link to reuse/ repair?	When do you need to take this into account?	Cost impacts	Further Information
Provision and Use of Work Equipment (PUWER) Regulations (1998)	Use of equipment in the workplace to carry out reuse and repair	Any tools or equipment provided for use by employees must be suitable for the job, maintained in a safe condition and inspected to ensure it remains safe for use.	Costs associated with maintaining tools and equipment	http://www.hse.gov.uk/ work-equipment- machinery/puwer.htm
The Health & Safety at Work etc Act (1974)	Health and safety of employees and volunteers in the workplace	Making sure staff have safe working areas and are trained to do their jobs and to use any equipment or chemicals provided.	Costs associated with training, provision of PPE, etc.	http://www.hse.gov.uk/ legislation/hswa.htm
Furniture and Furnishings (Fire Safety) Regulations 1988	The fire resistance levels of upholstered furniture.	When reusing upholstered furniture you must ensure that the item carries a permanent fire safety label (see examples in link).  When reupholstering or upcycling you must ensure you use materials with appropriate resistance levels.	There may be costs associated with obtaining expert advice on fire labels.	http://www.fira.co.uk/document/fira-flammability-guide-october-2011pdf.pdf
British Standards 5852	The British Standard on testing the fire safety for furniture.	Upholstered (and reupholstered) furniture must meet this standard.	The cost of the report on methods of test assessment on the ignitability of upholstered seating is £220	http://shop.bsigroup.com/ ProductDetail/? pid=0000000003005762 6

Name of Regulation/ Exemption/ Standard	What is the link to reuse/ repair?	When do you need to take this into account?	Cost impacts	Further Information
The Consumer Rights Act (2015)	The purchase of goods and services, including second-hand and upcycled goods.	Outlines consumer rights in the event that products purchased are faulty. You may be required to refund, replace or repair faulty products sold.	Cost of repair/ replacement or refund.	The full Act can be accessed here: <a href="http://www.legislation.gov.uk/ukpga/2015/15/notes">http://www.legislation.gov.uk/ukpga/2015/15/notes</a>
				The Citizen's Advice Bureau have issued a useful guide on the Act and its implications:
				https:// www.citizensadvice.org.uk/ about-us/how-citizens- advice-works/citizens- advice-consumer-work/the -consumer-rights-act- 2015/
General Product Safety Regulations (2005)	Applies to all products (new and second-hand) used by consumers.	When repairing or upcycling products for sale, or selling any items on, you have a duty to ensure they are safe to use. Customers can sue retailers if they are harmed by products.  Products should be checked for safety,	Product liability insurance is not a legal requirement but provides protection for your business against any costs or compensation	Further information and guidance can be accessed here: https://www.gov.uk/guidance/product-safety-for-manufacturers
		including PAT testing of EEE (as a minimum requirement)	Investment in PAT testing skills and equipment as a minimum requirement.	The legislation can be accessed here: <a href="http://www.legislation.gov.uk/uksi/2005/1803/contents/made">http://www.legislation.gov.uk/uksi/2005/1803/contents/made</a>

Please note that the information in this section and Appendix 1 is correct to the best of our knowledge, however, it may not be entirely comprehensive as permits/legislation and relevant policies may differ depending on the activities and scope of repair and reuse activities. Charities are advised to seek their own legal advice and/or consult the Environment Agency when planning/delivering repair and reuse activities and you should not assume that this toolkit and the information contained within it is error-free or that it will be suitable for the particular purpose which you have in mind when using it. Hampshire County Council takes no responsibility for the results of any actions undertaken as a result of the use of information (which should not be relied upon as a substitute for formal advice) in this toolkit. Hampshire County Council, its employees and agents will not be responsible for any loss, however arising, from the use of, or reliance on the information in this toolkit.