# Operating Guide Collections

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# **1. OVERVIEW**

## a. Introduction

Paid–for collections are at the very heart of the community wood recycling business model. Not only do they supply the wood that gets sold or used in some other way to fulfil our environmental goals, they also generate the first income stream.

It makes good environmental and business sense that community wood recyclers collect all sorts of timber and wood-based products from a very broad range of customers. When deciding what sort of collection work to accept there are two key questions:

- Can we use the collected material in the most environmentally beneficial way?
- Will the collection fees be sufficient to make the job worthwhile?

With our unique collection and reuse methodology it is unlikely that there will be a better way for potential customers to dispose of their wood waste, but as financially self-supporting social enterprises it is important that we (generally) only take on work that is financially viable.

## b. Our niche

Our collection model of using 3.5 tonne pickup trucks, with 12 cubic yard (yd<sup>3</sup>) cages, competes most effectively with small skips. Any organisation using a 6 yd<sup>3</sup> or 8 yd<sup>3</sup> skip (the most popular sizes) to dispose of their waste is a potential customer – as we can usually

save them money. Research and experience shows that (in May 2017) an 8yd<sup>3</sup> skip will cost between £140 (£17.50 yd<sup>3</sup>) and £220 (£27.50 yd<sup>3</sup>) nationwide. So if we charge a bit less, in addition to all of the other benefits, potential customers will have the *financial* incentive to use community wood recyclers.

Organisations such as Local Authorities, skip companies and timber mills generate huge quantities of wood waste and dispose of it



using the largest containers (40 yd<sup>3</sup> or 50 yd<sup>3</sup> bins) with which we can't compete and so are not potential customers.

The community wood recycling niche is the environmentally and socially superior alternative to the 8 yd<sup>3</sup> skip, servicing organisations generating low volumes of wood waste.



## c. Builders - our most important collection customers

Although community wood recyclers collect from any organisation that generates any type of wood waste, it is the construction industry (responsible for a high proportion of all the wood waste generated nationally) that is our most important customer. This is because they continuously generate large amounts of wood waste and a significant proportion of what they discard is reusable and can be sold. They are loyal customers too; if the quality of service remains high, experience shows that they will continue using indefinitely, taking the service from site to site. Some of the very first builders to use the scheme in Brighton in 1998 are still customers in 2017.

## d. Why do our customers use us?

#### i. Cost

Waste disposal is very competitive and price is always important. So we sell our collection service on cost; on our ability to save customers money by reducing their disposal costs, through both lower charges and reduced void (the wasted space in a badly filled skip).

Some studies estimate void space to be more than 20% of the skip; making the true cost of that skip 20% more (*see Resources 1.*)

#### ii. Environmental

Recent statistics show that around 60% of all wood waste generated in the UK is recycled. So it is quite likely that the wood that ends up in your customers' skips will be separated, chipped and used as fuel in power stations, or remade into chipboard, mulch or animal bedding (see Real Work training module 8).

But our model focuses on *reuse*; a significantly superior outcome to "downcycling" wood waste into chips. Reusing timber helps reduce demand for virgin timber (and the energy and pollution associated with processing, importing and distributing it).

We estimate that **recycling** a tonne of wood waste by chipping it releases an additional half tonne of CO2 into the atmosphere compared with **reuse**.

In addition, by using smaller, less energy-intensive, less polluting vehicles (compared with skip lorries) that actually take 50% more wood waste per load (12 yd<sup>3</sup> instead of just 8 yd<sup>3</sup>) our collection methodology itself is far better for the environment.

#### iii. Social

Our model of wood recycling is highly labour-intensive and by working with us, customers are helping to create jobs, training and volunteering opportunities for marginalized people. For example, in 2016, community wood recyclers collected more than 17,000 tonnes of wood waste and gave paid employment to 187 people; one permanent job for every 91 tonnes of wood waste collected (*see Resources 2*).



Few activities in the waste and recycling sector will create more jobs per tonne of material handled.

More and more companies are realising the added-value a partnership with community wood recyclers can bring. We can help them to fulfil their environmental and CSR objectives; comply with the increasing amount of legislation that is being introduced to try to modify their behaviour; give them "the edge" in their tenders and quotes and strengthen their marketing and PR – potentially giving them an advantage over their competitors.

## e. Pricing collections

Collection charges should be competitively priced against any alternative waste disposal methods on offer to potential customers, but must be sufficient to cover the overheads of providing the service.

Although rates can be discounted to try to win business quickly, for example at start-up when overheads might be particularly low (e.g. during a rent–free period or before paid staff are recruited), the pricing "mantra" should be to "charge what the market can stand"; in other words, get as much as you can for your products and services. Of course a *profitable* enterprise can discount where it sees fit, but being squeamish about charging a fair rate for a fair job is the fastest way to insolvency.

The level of discount needed to win the work will vary from client to client (depending on factors such as how they regard the environmental and social benefits), but will be learnt quickly.

When pricing work ask the customer what they usually pay or have been quoted; this will help you to avoiding significant under-pricing. And remember that certain collection customers will pay considerably more for waste disposal than builders (who are very good at squeezing down costs). In July 2017 the charge to most of the NCWRP's "national" builder clients is £16 per cubic yard – equivalent to £128 for an 8 yd<sup>3</sup> skip.

# **2. LEGAL AND PAPERWORK**

Before carrying out any collections there are certain legal obligations that need to be met. You must obtain a Waste Carriers License and Environmental Permit Exemption. You must fulfil all H&S obligations, such as completing risk assessments and method statements, and make sure that all collection staff are properly trained, have CSCS cards and are protected by the correct Personal Protective Equipment (PPE). You must have a roadworthy vehicle and certain insurances in place.

## a. Motor vehicle issues

#### i. Insurance

It is a criminal offence to drive a vehicle that is not insured or to allow others to drive a vehicle of which you are the Registered Keeper knowing that it is not insured.

There are two main types of motor insurance:

- Comprehensive; this cover will meet the cost of repairing your vehicle if it is damaged, regardless of who caused the incident and will pay out if your vehicle is stolen. It will cover any items left in the vehicle too.
- Third Party; this level of cover will only meet the cost of compensating any third party that is involved in an incident with your vehicle (e.g. their repair costs or compensation for injury to driver/passengers). You must pay for any repairs to your own vehicle.

It is cheaper to insure specific "named drivers". The younger the driver, the more expensive they are to insure.

In the event of any incident ensure the driver always completes an '*Incident Report Form*' (see Resources 3).

#### ii. MOT

It is a legal requirement that vehicles are roadworthy and have a MOT certificate. These are valid for one year.

#### iii. Road tax

Vehicle Excise Duty is compulsory and the cost depends on which emission band the vehicle is in; the lower the CO2 released, the cheaper the annual tax. Please visit **www.dvla.gov** for more information.

## b. Waste Carriers, Broker and Dealer License

Any organisation *collecting* any material that could be construed as waste must register for a Waste Carriers License issued by the Environment Agency (EA) **www.environment-agency.gov.uk** 

If a business collects waste from another business (like we do) they need the more comprehensive registration - as a Waste Carrier, Broker or Dealer.

The fee (as at July 2017) for this level of registration is £154 for three years (renewals are  $\pm$ 105) for registration as what is known as an "upper tier applicant", but this can be waived for charitable and not-for-profit groups that apply as lower tier applicants. Although the



application process can be carried out online and is straightforward it can take several weeks to receive your confirmation, so apply in good time.

## c. Environmental Permit Exemption

Any organisation that wants to *store and sort* anything that might be construed as waste needs an Environment Permit, also issued by the Environment Agency. Obtaining such a permit is time consuming and potentially costly, but in cases where the volume of waste likely to be handled falls below certain thresholds an Exemption can be obtained.

Community wood recyclers fall into this category and should apply for such an exemption via the EA website. However, they are site specific so can't be applied for until the premises have been obtained. These Exemptions are easy to apply for and are free but must be renewed every three years.

In written guidance received from the EA, our activities fall under Exemption numbers **T6** (treatment of waste wood and plant matter by chipping, shredding, cutting or pulverising) and **U9** (use of waste to manufacture finished goods) (see Resources 4).

## d. Training of collection staff

Everyone working on or collecting from construction sites must have a Site Labourer Construction Skills Certification Scheme (CSCS) card. This covers basic H&S on building sites and is issued upon successful completion of a one day course and a simple multiple choice exam. Please look online for your nearest CSCS Test Centre. The course costs around £100 and the tests around £50 per person.

Fortunately, at this time many sites will allow entry of site to volunteer collection staff without the card as long as drivers and supervisory staff have them. But going forward, site access will not be allowed to those without a valid card, so do not delay in taking the test and putting your key collection staff through it.

The NCWRP provides a training module entitled "*Safe Working on Building Sites*". It is a part of the Agreement with our "national" customers that **all** collection staff are trained in this module and that the training be recorded and the names of those trained held by the NCWRP (*see H&S section*).

## e. Risk Assessments and Method Statements

These are part of your H&S system and outline the key risks in carrying out collections and how the work will be carried out to minimize risk. Occasionally they have to be site-specific (see H&S section).

## f. Waste Transfer Notes (WTN)

It is a legal requirement to provide the customer with and keep a copy of a waste transfer note for every collection (*see Resources 5*).

Among other information, the note details the type and volume of waste, the location from which it was collected and its destination. The style of the WTN must be compliant with EA guidelines, so to ensure it does, please use the NCWRP template.

Used as the basis for collection invoicing and for analysis of the collected material, the importance of always completing the notes *fully and correctly* can't be overstated.

## g. Collection Agreement

To help maintain a professional approach, receive prompt payment of invoices and reduce possible areas of misunderstanding, always get collection customers to complete a written Agreement before carrying out collections (*see Resources 6*).

## h. Summary of reuse/recycling

Each month collection customers should receive a breakdown of what has happened to the previous month's collected timber. These can be produced in Excel format from templates available from the NCWRP (*see Resources 7*).

## i. Certificate of Recycling

Upon completion of a site, a certificate can be presented showing the total volume of wood collected. Useful for builders' PR, marketing and staff motivation, these can be issued at cost price by the NCWRP or available as a free template (*see Resources 8*).

## j. Invoicing

Ensure from the outset that customers understand and will adhere to (what are widely accepted) payment terms of 30 days from date of invoice. Large companies are very often habitual late payers and will need regular chasing.

Show professionalism by invoicing promptly (if they are sent late, they will be paid late). Ensure that invoices contain all the key information necessary for the client to make payment (i.e. collection date, site address, amount in yd<sup>3</sup> collected *- see Resources 9*).

# **3. MARKETING**

## a. Marketing the collection service to builders

Winning business is always a challenge and involves a lot of hard work. So we recommend some serious and continued effort is put in to marketing your enterprise.

# We recommend that an entrepreneur spends at least 90 minutes of every working day working on marketing his or her enterprise.

There are many ways to get work and over the years community wood recycling enterprises have tried numerous approaches. Below we outline some of the more effective and affordable collection marketing methods that are well-proven and that are still working.

However you decide to market your service (which will probably encompass all the following methods), *always* collate key information about each client/potential client. To do this you can use a cloud-based CRM (customer relationship management) system; they cost from around £20 per month and there are many available (the NCWRP uses and recommends High Rise).

Such systems are pretty versatile and allow you to record info, store copies of emails, diary further contact and do a host of other useful tasks. At the very least, compile a customer/potential customer database and collate all useful information about them on their own "customer details form" and on an Excel database (see *Resources 10, 11*).

# *Either way this information carefully stored will assist you in your ongoing marketing efforts and will become a really valuable asset.*

Always ask new enquirers where they found out about you and record this information so you can build up a picture of what marketing approach is most successful.

#### i. Visiting sites

A really effective way of winning collection business is to "cold call" building sites and to try to meet the site manager. He/she might see you immediately or ask you to make an appointment. Cover your area systematically and call on every site, noting key information; and ask others (friends, family, volunteers etc.) to alert you to any sites they pass.

Face to face meetings will help you to build personal relationships with potential customers; they get a clear understanding of what you offer and have the opportunity to ask questions and you get a better understanding of the way they work and their views. Also, if you get referred up the buying or management chain, you have not alienated the site manager by starting above him/her. A template "presentation pack" is provided *(see Resources 12),* along with some tips on face to face selling *(see Resources 13).* 

Visiting each site is a slow process however, and to get your service known quickly amongst as many local builders as possible we recommend that you mailshot them.

#### ii. Mailshots

Because potential customers can be clearly defined and easily targeted through lists on Yell.com or in the local Yellow Pages, bulk mailings are a reasonably cost–effective way for community wood recyclers to "cover the ground" quickly. Good response rates have been achieved – with enquiries still coming in several months after the mailing. Of course it is cheaper to email, but it is more difficult to get lists of builders' email addresses unless you buy them. And these days there is a huge amount of marketing traffic sent by email, so posted material might just get a better chance. We provide a sample mailing *(see Resources 14)* along with a sample "short" and "full" brochures that we can personalise for your enterprise that expand on the information in the flyer *(see Resources 15, 16);* this can be given to those interested in receiving further information.

We recommend that repeat mailings are sent regularly – every 4 to 6 months – so that you keep reminding potential customers of what you do. For maximum impact vary the mailing. Start by providing simple information about the service, then send some stats (e.g. the amount of wood you have rescued; the jobs you have created), then a voucher for a free or reduced price collection. Follow up as many as you can by phone (*see Resources 17*).

To carry out mailings efficiently prepare an Excel spreadsheet and use Mailmerge or a similar program to create address labels. Continually add to your spreadsheet as you gather information from any responses. As mentioned, make sure you always get and record key information. Once you have prospects' email addresses, you can keep in touch regularly for very little effort. Spreadsheets can easily be uploaded to your High Rise CRM system.

#### iii. Telephone calling

Calling local firms and asking for an appointment to visit to discuss your service can also be effective. In any event a proportion of each mailing (see above) should be followed up by phone within 1 week of sending. Use the feedback to learn about what recipients thought of the mailing and gather the other useful information.

#### iv. PR

Such an innovative venture with such important environmental and social outcomes should receive lots of column inches in the local press. Nationwide, community wood recyclers generate regular features in all sorts of local publications – along with radio and even TV coverage. Contact your local publications and nurture good relations with journalists from the outset. This sort of marketing will reach a wide range of potential retail and collection customers (see Resources 18).

#### v. Social media

This is the best way to raise the profile of your enterprise and to get customers into your business. It is absolutely crucial that you have a large presence on Facebook, Twitter and on all the other platforms. Although collections customers are likely to be businesses rather than members of the public, it is still a good way to promote the collection service. In addition, get yourself listed on other websites – as well as in appropriate print media. We have produced a simple guide to social networking *(see Resources 19).* 

#### vi. Vehicle signage

A properly signed vehicle will act as a big moving billboard and bring in enquiries. Just think of how many miles it will travel each



day and how many people will see it. So make sure that you have quality decals on the doors and bonnet as well as good sized signs (foamex-type boards are cheap, light and long-lasting) on the cage sides and back doors.



## b. Other customers

Non-builder organisations might not generate such large quantities of wood waste, but they provide a good source of collection fee income and a wide range of saleable resources.

We strongly recommend that you market to as many other sectors as possible.

You will still be competing with skips, but these organisations are less price-driven than builders (they use skips less frequently), so are willing to pay more. We must never forget our core business but when it comes to generating income we need to be pragmatic.

So if your enterprise will get fairly paid to collect and can provide the best environmental solution (usually reuse) for the collected material, then you should do the work. In addition, having a range of customer types makes your business more robust, as you will not be so affected by developments within a particular industry (e.g. the fluctuating demand for woodchip, leading to volatile gate fees for grade 3 disposal).

And remember that if community wood recyclers don't collect it is very likely that no one will and potentially reusable items will end up in a skip.

#### i. Timber / builders merchants

These will generate things like offcuts from sawing to size, low quality/damaged lengths they can't sell and pallets. Like builders they are very price-driven. There are usually not too many in a given area, so visit them.



#### ii. Pallet /packaging waste producers

Outside of the building industry organisations such as manufactures, importers, wholesalers, distributors and logistics firms are our biggest potential client base. There are a huge number of such firms, operating from industrial and trading estates all over the country, that generate regular quantities of pallets and packaging waste. Most will be using small skips to dispose of their waste, so community wood recyclers should be able to compete. Because they are in different market sectors it is not so easy to locate and sell to them (unfortunately there is no listing on Yell.com under the heading of "companies using lots of pallets").

Leafleting industrial estates is effective, just keep an eye out as you drive around or study local maps for the locations of such estates. Keep a batch of flyers in the vehicle and brief your drivers, so they can leave information and get the contact details of any appropriate businesses they come across.

#### iii. Sawmills, carpenters/joiners and wood product manufacturers

These produce waney-edge boards, green timber and hardwood/softwood offcuts. They will potentially generate good quality reusable timber. Like builders, they will be listed in directories.

#### iv. Schools, colleges and universities

There is likely to be a large number of schools and other educational establishments in your catchment area and most will have regular clear outs of wood items/redundant furniture. Items collected will potentially include things like science lab worktops (often made of teak that can be sold at a premium), desks and other school furniture, canteen, sports or other equipment, shelving, pallets and packaging waste.

Details of local schools are also listed in Yellow Pages, on Yell.com, on Local Authority websites and on other internet sites. As there are so many of them, they should be mailed, with a proportion followed up on the phone. Other institutions can be visited and appointments sought to speak to the appropriate person *(see Resources 20).* 

#### v. Museums, libraries, galleries and theatres

These generate wood and other interesting, potentially saleable, items including: stage sets, display cases, exhibitions stands, shelving, plinths and storage boxes/crates. There are usually not too many in a given area, so visit them *(see Resources 21).* 

#### vi. Large retailers, big office blocks and hotels

These will generate lots of shop fittings, office furniture and plenty of other reusable stuff that you will be able to sell, along with pallets, packing crates, boxes and equipment. There are usually not too many in a given area, so visit them *(see Resources 22).* 

## c. Encouraging participation in collections

As the community wood recycling collection model represents a (slight) change in normal working practice for builders used to dumping everything in the skip, they will need to be encouraged and reminded to take part and to separate their wood. Give the appropriate hand-out to the site manager and offer to distribute the hand-out for the site staff – or at least offer to print and leave a batch for them to distribute (*see Resources 23, 24*). In addition, keep in regular contact with site managers and other customers that have registered with you and have promised collections. Calling every couple of weeks is good.

# **4. OPERATIONS**

#### a. Vehicle

The community wood recycling business model uses 3.5 tonne GVW (gross vehicle weight) pick-ups. This is because most people with a car driving license will be confident enough to drive them, they are cheaper to insure, operate and maintain and they can be more easily manoeuvred on tight sites.

We do not use box-type vans because the size of the load is harder for our customers to visually inspect and they are less versatile when collecting long lengths or pallets and packaging waste.

So the optimum vehicle is a 3.5 tonne, twin-wheeled, diesel pick-up, fitted with a metal cage of at least 12 cubic yards. Such a vehicle will have a load capacity of around 1.2 tonnes. There should be a metal bar running across the vehicle on the front of the cage on which to lean over-sized pieces, and have "ears" to prevent the timbers resting on it from moving from side to side.



The rear of the truck should have twin gates with strong spring catches on both top and bottom to ensure there is no risk of the doors opening unexpectedly. It should be possible to secure the doors flat against the cage sides, although the vehicle should never be driven with the cage doors open.



To help evaluate the load size fairly and efficiently, the vehicle should have the capacity of the cage signwritten on it. In addition, clearly visible "proportion full" marks should be placed up both sides of the cage.

Correct estimation of our collection customers' load size is vitally important to maintain confidence in our charging methodology. Any over-estimation of the volume we put in our trucks will result in the loss of that customer.

Ensure that vehicles undergo a routine daily safety check before leaving for collections. Use the NCWRP template *(see Resources 25)*.

## b. Collection equipment

### i. Personal Protective Equipment (PPE)

On all building sites, the following **must always** be worn:

- High visibility clothing
- Protective helmets
- Boots with steel toe and midsole protection
- Protective gloves
- Eye glasses (if not worn, must be on the person)

Entry to site will be forbidden without all of the above.

#### ii. First Aid

A first aid kit should be carried on the vehicle at all times and a collection team member should hold an "Appointed person" first aid certificate.

#### iii. Tools

To enable the safe and cost-effective collection of oversized or odd-shaped material the following hand tools should be stored on the vehicle:

- Hard-point (or bow) saw for fast cutting of over-sized timber.
- Club hammer (4lb) for disassembling trusses or other large items.
- Crowbar (24inch, 'gorilla'-type is best) for disassembling oversize pallets/crates.
- Rope (20m x 6mm) for strapping down the load, especially for securing long timbers over the cab.
- Large adjustable spanner or socket set for removing metal plates etc.
- Broom and dustpan.

## c. Collection staffing

To make the most efficient use of the vehicle collections should be carried out by three collection staff. Single-handed collecting is very physically demanding, bad for H&S, erodes morale and will tie up the van for longer than necessary (preventing further collections) so should be avoided in all but exceptional circumstances.

## d. Collection scheduling

As the number of collections grows pressure to maintain quick turnaround times will increase, as builders who are used to short waiting times won't necessarily be sympathetic to your increasing workload. Consequently, collections must be carefully scheduled and customers given clear information about when you will collect.

To help plan collections have a large dry-wipe-board divided into days and am/pm and when collection requests come in, schedule them in on the board for all to see at a glance; this will help prevent double-booking or unrealistic promises being made.

Give customers as much notice as possible if you are unable to collect when arranged. **Never just fail to show up**.

Maintaining a fast, professional collection service is a top priority and underpins the community wood recycling business model.

## e. Loading the vehicle

It is crucial for both safety and customer service that vehicle loading is carried out properly **every time**. Firstly, ensure the vehicle is *always* loaded in accordance with



the H&S procedures laid out in NCWRP training module: "Safe Working on Building Sites" (also see Operating Guide: H&S).

In addition, for safe, efficient and cost-effective loading:

- Always load the vehicle as tightly as possible to ensure that void is kept to a minimum so that customers get maximum value.
- Remove and discard any plastic wrapping (often on pallets) or other obvious contamination from wood (otherwise you'll have to dispose of it).
- Load sheet materials flat on the bottom of the cage.
- Where possible, place reusable items on top, so they can be easily separated from the remaining wood when unloading.
- Secure long (those longer than the cage) pieces over the cab first and then load the cage around them ensuring that the doors can be properly closed.
- If there is clearly more than 1 load on site, remove any obviously reusable material first (subject to it being safely accessible and having a full load) and return for the remainder.
- Never part-clear a pile or leave wood behind without informing the site of when you will return for the remainder.
- Always clear up any mess and leave the area tidy.

## f. Load evaluation

It is essential that collection customers **receive** and **perceive** they receive the best value at all times.

As mentioned, the building industry is highly competitive, margins are low and our collection service is used predominantly because it represents a cost saving on other disposal methods. So when evaluating a load, make sure that the person signing the Waste Transfer Note understands the charging mechanism, can see the cage size and proportion marks, inspects the load and agrees the volume *before* signing.

In our experience, once the site team is sure that community wood recyclers play fair (as we always do), then they will often not even check the load before signing. Under these circumstances any over-estimation of a load would be counter-productive and undermine our relationship of mutual trust.

If there is any discrepancy in a customers' evaluation of a load, community wood recyclers should negotiate until both parties can agree. For national (NCWRP-referred) clients settle for the customers' volume evaluation and contact the NCWRP

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within 24 hours. In the rare case that this occurs, photos of the load should be taken and forwarded to the NCWRP.

## g. Vehicle overloading

#### Care should be taken not to load the vehicle beyond its legally-permitted GVW.

Roadside spot checks are carried out by the Department of Transport and the driver of an overloaded vehicle will be prosecuted, receive a heavy fine and points on their license (leading to higher insurance costs). Visual inspections of the springs above the back wheels are no real indication of the weight on the vehicle, so should not be trusted, however, with experience, drivers will learn to better estimate the load size and stay within the weight limit.

# **5. SORTING TIMBER**

Once collected it is essential that we find the most environmentally beneficial use for as much of the wood as possible.

Sorting collections effectively enough to ensure that as much as possible is reused is highly labour-intensive, so it is crucial that enterprises have sufficient people to carry out the task. The whole community wood recycling model is based around re-use; it is our USP and it is a big reason why our customers choose to use us. They do not want us to be "humpers and dumpers" – simply picking up the wood and bringing it to the nearest chippers (if our customers left the wood in their general rubbish skip it is likely that it would be chipped anyway). So we must always put the maximum effort into sorting timber for reuse. Of course, as well as being the right thing to do environmentally and a good way of providing more work opportunities, effective sorting will reduce our chipping costs – and give us more nice wood to sell!.

How well you sort will improve over time as your experience of what sells, your customer base, available skills and financial resources grow.

As already mentioned we do not just collect from the construction sector; we will collect from a range of customers from all the different wood waste streams. Although the reuse potential of each waste stream will vary, lots of reusable (re-sellable) items will be found in each of them.

#### a. Wood waste streams

According to a 2011 report (**wrap.org.uk**), in 2010 the UK generated around 4.3 million tonnes (mt) of timber waste (not including 'green waste'). This waste wood comes from a number of different sources including:

#### i. Construction

The construction industry generates around .1mt of wood waste from all sorts of building sites – including new builds and refurbishments. It is our most important customer, with a large majority of our collection work coming from them.

Most wood waste on these sites ends up in the skip along with all the other rubbish. The 8yd3 skip is the most common size, but building sites use skips ranging from 6yd3 up to 40yd3 (these largest of skips are known as "rolonofs").

This waste wood is mixed and includes a wide range of solid wood, sheet materials, doors, windows, pallets, cable reels and packaging waste.

Collections from refurbishment jobs will include more valuable stuff like old pine, older (higher quality) hardwoods, floorboards, reusable lengths and interesting reusable things like old counters and fitted units (e.g. from banks/post offices).

#### ii. Demolition

Demolition generated around 1mt of wood waste in 2014. Much of the stuff found in architectural salvage yards has been rescued by the demolition industry.

Community wood recyclers do not carry out a lot of collections from demo' sites because the desire for speedy demolition and tight H&S rules mean that most buildings are taken down by large machines and the material loaded straight into rolonofs for sorting at a waste transfer station.

#### iii. Wood processing and manufacture

This includes wood waste from timber mills, joinery shops, fencing, furniture and other wood products manufacture.

It will consist largely of offcuts of softwood, MDF/chipboard and some hardwood. Some of the larger businesses will reduce their disposal costs by having their own wood-fired heating systems.

#### iv. Wooden pallets and packaging

This type of wood waste in generated by a whole range of manufactures, importers, wholesalers and retailers and amounted to around 1mt in 2014.

It includes crates, boxes and cable reels and around half of the estimated 56 million (2009) pallets in the UK that are broken or just can't be reused.

#### v. Municipal waste wood

At around 1mt, this is the stuff from Council "tips". It is generally separated and taken to a high volume wood recycler.



Very little re-usable material comes from this waste stream. It mostly consists of items like broken furniture, old kitchen units, old fencing materials and bits of shed. Consequently, it is the lowest quality of all the different wood wastes.

## b. Grading collected wood

To help us sort our collections most cost-effectively and find the most environmentally beneficial use for the timber, we have developed a very simple way of categorizing waste wood depending on its end-use capability; it is a system of (often overlapping) grades.

#### i. Grade 1

This is wood that is good enough to be reused for its original purpose. It is the stuff we sell back to the community for DIY, building etc. All grade1 should be kept and offered for sale.

Primarily, it must be in good condition (ie. free from rot, woodworm) and free from significant holes, notches, shakes, cracks and splits that might undermine its integrity. It includes:

- Timber lengths around 1.8m long.
- Plywood more than 1m2.
- Other sheet materials in half sheets (ie. 4ft x 2ft).
- Pallets that can be resold.
- Doors (except commercial firedoors).
- Window frames (some old sash/casement).
- Most lengths/pieces of hardwood.
- Multiples (items in uniform length and width but shorter lengths).
- Interesting items that are "arty" or "crafty".
- The "sought-after" timber (see below).

On the Reuse and Recycling Summaries that we provide to our collection customers, this grade is known as "**High-grade Reuse**".

#### ii. Grade 2

This is also clean, sound wood as above, but in shorter lengths and smaller pieces of sheet material. It is more difficult to sell for DIY should be used to make products.



On the Reuse and Recycling Summaries that we provide to our collection customers this grade (if it is used for products) is also known as "**High-grade Reuse**".

Ultimately we collect a lot more grade 2 than we can turn into products, so any not used in this way should be classed as grade 3.

#### iii. Grade 3

This represents between 50% - 70% of the collected material. It is the offcuts, broken pallets, rotten and un-reusable stuff that does not fit into the other two grades. It is the stuff we must pass on to be chipped so to reduce our disposal costs, as much as possible of the untreated solid wood should be cut up for firewood and kindling.

On the Reuse and Recycling Summaries that we provide to our collection customers wood used for firewood and kindling is known as "**Low-grade Reuse**", while anything we take to the chipper we classify as "**Recycling**".

#### iv. Wood chipping grades

The wood chipping firms also have a grading system for sorting waste wood according to how the woodchip they produce will be used. It does not consider reuse, but divides waste wood into the four categories below. The gate fee for disposing of grade A timber will generally be lower than for the other grades.

Often when demand for chip is low, it is more difficult to dispose of the lower grades (C and D).

**Grade A:** Clean woodchip – produced from pallets and secondary manufacture etc and suitable for producing animal bedding and mulches.

**Grade B:** Industrial feedstock grade – including grade A, but mixed with construction and demolition waste; this is suitable for making panelboard.

**Grade C:** Fuel grade – this is made from all of the above material plus that from municipal collections and civic amenity sites and can be used for biomass fuel.

**Grade D:** Hazardous waste – this includes all grades of wood including treated material such as fencing and trackwork and requires disposal at special facilities.

## c. Sought-after timber

Some of the wood/items that we will collect are very easy to sell and so are worth looking out for and keeping in virtually any length/condition.

#### i. Scaffold boards

These are the biggest selling items in community wood recycling. They are really sought after as they are generally uniform in width, thickness and colour and so can



be made into lots of different products. They can be used for shelf units, planters, benches and work/table tops. The metal end straps are useful and can be reused. Due to the high demand for boards, many enterprises buy them in.

#### ii. Old pine joists

Another popular timber for product making. Although they are less regular in size, shape and colour than scaffold boards, they are highly sought after for shelves and table tops and even to be used to produce kitchen units and other furniture. The colour of old pine is deep and rich, and the nail holes, notches and general "aged" look improve its character and sale-ability. It is



also thicker and chunkier than scaffold board, so can give better proportions to certain designs.

#### iii. Floorboards

Floorboards, especially older ones, tend have good colour and character. They are sought after for repairing stripped floors and popular for simple items such as bookshelves, racks and units. The thickness of the timber lends itself to more delicate designs. They are popular in all widths; the wider the board, the greater the value.

The increase in the popularity of stripped wooden floors means they can also be sold as..... floorboards.

#### iv. Wide timber

This is always useful for shelving and making garden planters. Always keep any wood more than 6 inches wide and a metre long.

#### v. Pallets

"Euros" (800mm x 1200mm) are the most profitable and sell for up to £4 each; "standards" (1000mm x 1200mm) are also popular but because they are of variable quality, sell for between 25p and £3 each. Contact local pallet dealers to find out the sizes and quantities they will accept and what they will pay for each size/type.

Dismantling longer (e.g.plasterboard) pallets and selling the slats or using them to make "panels" or other items for sale is potentially even more lucrative (the separated blocks can be sold as firewood).

#### vi. Plywood

Even quarter sheets of plywood will find a ready market. 12mm and 18mm are the most popular, although all thicknesses will sell.



## d. Firewood & kindling

Selling firewood and kindling can produce significant income for your enterprise, so as much uncontaminated solid wood as possible should be separated to be cut to appropriate size and bagged for sale in winter.

The best way to produce it (if you have storage space) is as you go along – cutting and bagging it from the offcuts from customers cutting orders, product making and from the piles of appropriate wood put aside from each collection; that way you will already have multiple bags ready for sale when the weather gets colder. Storing bags outside is acceptable as long as they are stacked safely off the ground on pallets and under waterproof tarpaulins. See the firewood and kindling factsheet (*Resources 26*).

#### i. Firewood

To maximise sales, keep the quality of the firewood as high as possible, so use only clean solid wood of reasonable dimensions – such as 2"x2", 3"x2", or 4"x2". These sizes can fit nicely into Victorian grates. Of course for those with larger grates or wood stoves, larger dimensions can be used. The length should be around 8" to 10". Make sure that nails are removed or banged flat and that the sack is well filled and **always** carries a label with appropriate text (*see Resources 27*).

#### ii. Kindling

Making kindling is much more labour intensive than firewood but can be worth doing. It should also be relatively uniform in size and also made with uncontaminated wood. It is generally a higher-value product and sold in smaller quantities. It is best made with a sharp hand axe. Make sure kindling sacks are labelled (*see Resources 28*).

# **6. OTHER ISSUES**

## a. Adding value

Community wood recyclers have also been used to lift and collect whole floors of redundant floorboards, strip out retail premises before conversion and even demolish small buildings (wooden scout huts, garages). Doing such work generates income and helps ensure that any collected material will be kept in as reusable a condition as possible.

An easy and risk free way to charge for such additional work is to price the labour per hour, per person. Don't forget to include a sensible contribution for overheads; if your labour is paid at £8 per hour, the charges should be around £16 per hour.

Always ensure that you have the expertise, labour and time to complete the job satisfactorily before agreeing to it – and make sure that a Risk Assessment and Method Statement is produced before commencing (see H&S section).

