

# Briefing on job creation potential in the re-use sector

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## Introduction

Extending product lifetimes through re-use is beneficial for the environment and can create significant local employment. Some estimates show that for 10,000 tonnes of waste products and materials, 1 job can be created if incinerated, 6 jobs if landfilled, 36 jobs if recycled, and upto 296 if refurbished and re-used<sup>1</sup>. Later in this report we present data that suggests even greater potential for re-use at 800 jobs/10,000 tonnes of material. However the sector faces challenges to grow due to a lack of concrete policy support mechanisms, which are all too often focussed only on improving recycling rates.

The Commission's revised Circular Economy Package provides an excellent opportunity to boost "Jobs, Growth and Investment". We believe that putting re-use at the heart of this legislation in order to develop re-use centres and networks can do just that.

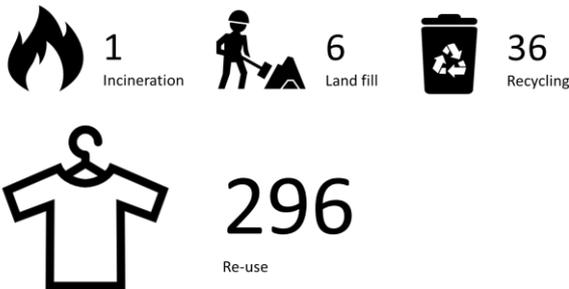
In order to shed light on employment potential through progressive policies supporting re-use such as separate re-use targets, this paper highlights some data from expert studies and from RREUSE's extensive network of re-use social enterprises. These organisations, most of which are SMEs operating as social enterprises, have many years of experience providing job and training opportunities in the re-use sector for disadvantaged workers, giving thousands of people a fresh

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<sup>1</sup> <sup>1[1]</sup> EPA (2002) Resource conservation challenge: campaigning against waste. Available [online](#). and the institute for local self reliance [here](#)

start on the labour market. They also help millions of low income households have access to affordable essential goods across Europe.

## JOB CREATION POTENTIAL 10,000 TONNES OF USED GOODS



Source: US EPA (2002) and the Institute for Local Self Reliance



rethink - think again

Whilst EU Member States are not currently required to collect data on re-use, and there are no national-level statistics on job numbers in the sector, data from these organisations gives a good indication of the number of jobs that a given amount of material re-used can create.

In addition the importance of supporting the role of social enterprises in a circular economy was highlighted recently in the Commission’s communication on Green Jobs:

*“...social enterprises have significant potential for providing high quality employment in areas such as...the circular economy with activities related to reuse, repair or recycling. The identification of effective up-scaling strategies for green social enterprises and raising awareness about opportunities could inspire others to be entrepreneurs.”<sup>2</sup>*

## 1. The opportunity: job potential in the re-use sector



There are several countries and regions, including France and Flanders in Belgium which have large established re-use centres and networks that cover the whole country or region.

The sector is well placed to provide jobs and training opportunities for a range of people of all skill levels. Amongst others, opportunities exist in upholstery, electronics repair, tailoring, warehouse logistics, professional vehicle operation, painters, removal and hospitality services. All these types of jobs require a range of skill levels, from manual to professional.

<sup>2</sup> EC (2014) Tapping into the job creation potential of the green Economy available online COM(2014) 446 final available [online](#)

## 2. Job creation potential for re-using household goods

Many re-use centres handle multi-material streams and will sell all types of products and materials found around the house, from furniture, electronics to bric-a-brac. Statistics from these types of re-use centres can help generate estimates of job potential of the re-use of household goods, without considering any material streams in particular.

A recent study by the European Environment Bureau (EEB) suggests that with ambitious re-use targets, 300,000 jobs could be created in Europe just in this sector. Recent additional statistics from the RREUSE network would support this estimate. Traditional re-use centres dealing with multi-materials on average can create around 70 - 80 jobs / 1000 tonnes of material collected and re-used<sup>3</sup>.

In Flanders, Belgium there is already a re-use rate of 5 kg re-used material / capita being achieved by a network of approved re-use centres from the social economy, supported by a separate re-use target. The re-use centres collect around 64,000 tonnes of material annually, of which half is re-used. This activity employs 5000 people as a result, and is equivalent to re-using around 1% of Municipal Solid Waste (MSW) generated in the Flemish region<sup>4-5</sup>. There is now a discussion in Flanders to increase this target to 7 kg by 2022.

If we were to apply this 1% as a starting point for a preparation for re-use target in Europe in relation to municipal waste generation in Europe, 243,311,000 tonnes in 2013 (EUROSTAT), and taking 80 jobs / 1000 tonnes of material re-used, this could potentially create around 200,000 jobs, 1.5% would equal 300,000 jobs, 2% would equal 400,000 jobs and so forth.

Whilst there are many re-use centres working with multi-materials as stated above, there are also those specialising in the re-use of certain product categories and it is worth taking a look at employment potential, and the kind of jobs which could be supported here.

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<sup>3</sup> Based on data collected by RREUSE's member network, our assessment of the overall impact on job creation is that re-use operations lead to, on average, 75 jobs per 1,000 tonnes of material collected; Flanders has an employment target of 3,000 Full Time Equivalent (FTE) jobs alongside a multi-material re-use target of 5 kg re-used material per capita to be achieved by 2015 by a network of approved re-use centres. If we take the statistics reported from best practice re-use activities in Flanders, we can indicate that a re-use network, collecting 64,000 tonnes of material, of which half is re-used (32,000 tonnes), can create over 5000 jobs in the re-use sector<sup>3</sup>. This is equivalent to around 80 jobs/1000 tonnes material collected; This figure is not dissimilar to the Greater London Authority's 2008 report Third Sector Reuse Capacity in London study of reuse in London which reported a figure of 75 jobs/1,000 tonnes<sup>3</sup>.

<sup>4</sup> According to the EEA around 5 million tonnes of MSW was produced in Belgium in 2010, of which 60% was produced in Flanders – available [online](#)

<sup>5</sup> It is noted that not all material collected for re-use has initially been legally classified as Municipal Solid Waste. However, when the total amount of material re-used (32,000 tonnes) is compared with Municipal waste generation in Flanders (3 million tonnes) we get a figure of around 1%.

### 3. Job creation potential of re-using different types of product

#### 3.1. WEEE



The re-use, refurbishment and repair of electronic goods provides training and development in specialist and transferable skills, and thus adds value to the whole economy. Re-use centres can work with all different categories of electronics and many also combine recycling activities with re-use activities. For these organisations it is clear that re-use and repair can employ more people per tonne of electronics than recycling an equivalent amount. For example, Rehab Recycle, a social enterprise conducting ICT refurbishment and WEEE recycling in Ireland, found that the reuse of B2B IT generated 10 times more employment per tonne than the recycling of an equivalent amount of e-waste<sup>67</sup>. For large household appliances (LHA), the Envie network in France estimates that they can create 5 times more jobs in collection and re-use of LHA than an equivalent amount recycled.

Internal statistics from the RREUSE network show that social enterprises working in WEEE refurbishment can create 15 and 110 jobs and training opportunities / 1000 tonnes of WEEE collected and refurbished. Some research estimates much higher figures. For ICT, the Solid Waste Association of North America (SWANA), estimated in 2003 that for every 1000 tonnes of used electronics, 200 jobs are needed to refurbish equipment for re-use and only 15 required to recycle it<sup>8</sup>.

Therefore, considering that the amount of WEEE collected in Europe in 2010 was 3.4 million tonnes<sup>9</sup>, a conservative estimate as a recent study shows the true figure to be three times this amount<sup>10</sup>, and 25% of this potentially re-useable (WRAP, 2014)<sup>11</sup> if this amount was collected with view of being potentially re-used, around 55,000 jobs in Europe could be created across Europe in this field. This is based on an average estimate of 63 jobs/1,000 tonnes of WEEE collected for re-use<sup>12,13</sup>. If we used the upper internal RREUSE figures of 110 jobs / 1000 tonnes of electronics refurbished that would work out as 93,500 jobs in Europe. Using SWANAs estimate above it would work out as 170,000 jobs.

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<sup>6</sup> M. W. O'Connell, C. Fitzpatrick & S. W. Hickey (2012), Evaluating the sustainability potential of a white goods refurbishment program. Available [online](#).

<sup>7</sup> For comparison, the Illinois Department of Commerce and Economic Opportunity (US) also estimated that for every 1,000 tonnes of electronics, 15 jobs can be created in recycling whilst refurbishment could offer up to 200 jobs. State of Illinois (2006), A Report on Electronics Equipment Disposal and Recycling. Available [online](#).

<sup>8</sup> DCEO (2006) a report of Waste Electronics Disposal and Recycling available [online](#)

<sup>9</sup> EUROSTAT 2013 data. Available [online](#).

<sup>10</sup> A recent report by suggest that this figure only represents 35% of the WEEE actually collected – the rest is not officially report – See Huisman et al. 2015 Countering WEEE Illegal Trade (CWIT) Summary Report available [online](#)

<sup>11</sup> WRAP 2012 Facts and Figures on WEEE re-use available [online](#)

<sup>12</sup> RREUSE conducts annual member surveys with systematic questions. This data is based on the responses of 20 of members from 10 Member States and the USA

<sup>13</sup> AERESS (2013) reports 105 employees managing 7,506 tonnes of WEEE at 14 jobs/1,000 tonnes of WEEE re-used; FRN UK (2013) reports 91 jobs/1,000 tonnes of WEEE refurbished/re-used; ENVIE reports 649 employees managing 18,341 tonnes collected of WEEE at 35 jobs/1,000 tonnes WEEE refurbished/re-used; Rehab Recycle report around 110 jobs / 1000 tonnes. Average of these = approx. 63

## 3.2. Textiles



The Commission's Joint Research Centre (JRC) estimated that 12.2 million tonnes of textiles waste is generated annually in Europe with nearly 70% of this total either landfilled or incinerated.

Half of the textile waste generated can be attributed to clothes: some 6 million tonnes. That's the equivalent of 5,500 Olympic swimming pools filled with textiles<sup>14</sup>. A number of studies indicate that a major proportion of these clothes still end up in landfill. However, if all textiles were separately collected, thousands of local jobs could be creating in sorting and valorising this material locally through textile sorting centres into their re-usable, recyclable and residual fractions.

Based on RREUSE data, social enterprises from the RREUSE network collect around 200,000 tonnes of textiles annually which are then sorted into reusable, recyclable and residual fractions, as well as sales of second hand clothes. This helps create over 3,865 jobs equivalent to around 20 jobs/1,000 tonnes used clothes and shoes collected and sorted<sup>15</sup>. Looking more widely in terms of job creation if all of these 6 million tonnes of clothes were collected and sorted rather than automatically landfilled or incinerated, around 120,000 local jobs could be created in this field. This is a conservative estimate given that linen, carpets, shoes and curtains have been excluded from this calculation.

A recent study by the Nordic Council of Ministers also backed up the vast potential for job creation in this sector. Doubling the amount of textiles collected and sorted in the Nordic region, would correspond to around 120,000 tonnes of textile, creating 4,400 new jobs and 30,000 additional work training opportunities, internships and community service opportunities<sup>16</sup>.

## 4. Conclusion

These statistics show that supporting re-use activities through concrete policy measures can have a positive impact on job creation. As such, the job opportunities and added social value supplied by the social enterprise re-use sector deserves further investigation and must have a relevant place in the transition towards a circular economy.

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<sup>14</sup> The assumption is based on 1 large container holding 28 tonnes / 64 m3 of used clothes (data collected from interviews with RREUSE members)

<sup>15</sup> Emmaus France and le Relais (2013) collect 100,000 tonnes of textiles per year and employ 2,500 people, most of them disadvantaged. This means 25 jobs/1,000 tonnes textiles collected and sorted; members of RESSOURCES (2013) employ 217 people and collect and sort 14,400 tonnes. This equals to 15 jobs/1,000 tonnes collected and sorted; AERESS members (2013) provide 15-25 jobs/1,000 tonnes textiles collected and sorted

<sup>16</sup> Nordic Council of Ministers (2015), The Nordic textile reuse and recycling commitment. Available [online](#).

## 5. Recommendations to EU policy makers

The new circular economy package provides the opportunity to develop re-use activities and create jobs locally. The following points provide suggestions on how current legislation could be adapted to help create more jobs in the re-use sector through the development of re-use centres and networks:

1. “Re-use” and “preparing for re-use” need concrete legislative support beyond legal definitions
2. Legal clarification is needed to allow reusable products, classified as waste, to reach “end of waste status”
3. A methodology for measuring preparation for re-use must be defined
4. Separate quantitative targets for preparation for re-use needed away from recycling in the Waste Framework Directive (precedents exist in France, Spain and Flanders, Belgium). Separate targets are also needed in the WEEE Directive.
5. The role of social enterprises in the re-use sector must be safeguarded and developed through the use of social clauses in procurement
6. Extended Producer Responsibility (EPR) rules must support waste prevention and preparation for re-use activities
7. Products must be design to be durable and easily repairable
8. Re-use, repair and preparing for re-use must be made more economically viable and competitive
9. Legislation must also encourage re-use of products such as packaging and construction/demolition waste

For further details on these points read our position papers:

- Putting re-use and repair at the heart of the EU’s Circular Economy Package available [here](#)
- Social Clauses: Why so important and how to implement them available [here](#)
- Improving product reparability: Policy options at EU level available [here](#)

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**The Reuse and Recycling EU Social Enterprises network (RREUSE)** is a European umbrella organisation for national and regional networks of social enterprises with re-use, repair and recycling activities. Approximately 130,000 workers, trainees and volunteers work throughout our 30 member organisations across 16 European countries and the U.S.A. Although structures and national contexts are diverse, RREUSE members share common elements such as the protection of the environment, the fight against poverty and, especially, the progress of disadvantaged people back into the labour market. RREUSE’s main goal is to put sustainable development into practice by encouraging job creation and social inclusion in the field of waste prevention and sustainable waste management activities