

REPORT BY TEXTILE REUSE AND RECYCLING PLAYERS ON THE STATUS OF THE INDUSTRY IN EUROPE

JUNE 2005

I- OBJECTIVE OF THE STUDY

The objective of the study was to take stock of the textile reuse and recycling situation in 7 European countries (France, the United Kingdom, the Netherlands, Germany, Poland, Spain, Belgium), and to strive to include as many players as possible (non-profit organisations, manufacturers and socio-economic enterprises).

II- METHOD

Seven leaders involved in textile recycling in 7 different European countries analysed the textile reuse and recycling situation according to agreed criteria. Some data was collected during meetings with the main industry players with other data transmitted over the phone and Internet.

III- RESULTS

A - CURRENT SITUATION

A1: Description and scope of the crisis

The same observation was made throughout Europe: recycling enterprises have been declining at a rate of 10 to 20% each year for the past three years. Many of them have simply disappeared and some have relocated to countries with cheaper labour (for example from France to North Africa or from the UK to the United Arab Emirates). Poland is the only exception to this trend.

A2: Description of the textile reuse and recycling industry

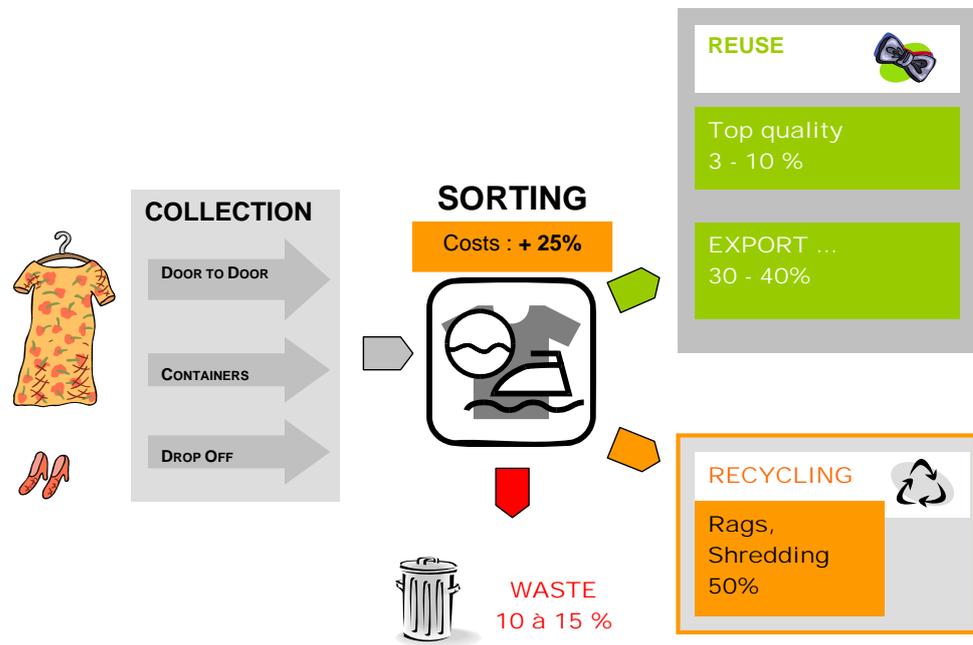
New textiles:

2004 Textile and Clothing European Map	
	turnover
DE	24 481,2
FR	26 007,2
IT	49 249,1
UK	14 633,5
ES	12 490,0
BE	8 438,9
DK	3 770,2
NL	3 267,7
IE	455,8
PT	7 164,5
AT	3 650,9
FI	1 110,3
SE	993,2
GR	3 032,4
SI	1 221,0
SK	568,4
CZ	2 074,6
PL	3 246,9
EE	464,1
LT	895,1
LV	250,6
HG	1 269,2
MT	162,8
CY	105,0
EU-25 - estimates with Man-made Fibres and small companies	<i>millions €</i> <u>207 578</u>
<u>EU-25 CHANGES</u> <u>2004/2003</u> <u>estimates</u>	<u>-2,7%</u>

A2- 1: Quantities

Across Europe, an estimated 15 to 20% of potential existing tonnage is really collected. Germany and Poland are two exceptions. Germany has an ecological tradition and collects roughly 70% of its potential tonnage. Poland is an importer of textiles from western countries and has only taken its first hesitant steps toward collecting textiles for recycling. The total tonnage collected in Europe has been more or less stable over the past few years.

A2-2: Organisation of the industry:



In all of the countries studied, the same three types of players in the second-hand clothing industry were found (traditional companies, socio-economic enterprises and charities).

A large majority of the players know each other and often work together in different ways, purchasing all the clothing collected, purchasing clothing after the top-quality has been skimmed off or purchasing a humanitarian image from non-profit organisations. In the Netherlands and the UK, for example, traditional companies have specialised in sorting, leaving the collection work up to other organisations. In other countries such as Germany, competition seems to be fiercer between the various players.

The socio-economic sector is especially active in France and Belgium, and demonstrates a keen desire to promote social integration. The volunteer sector is very widespread in The UK, with over 120,000 volunteers working every year for the charity sector.

Overall, for the countries included in the study, an estimated 1,500,000 tonnes of textiles are collected per annum, all businesses combined. Only one country in Europe has set a target for textile collection, namely the Netherlands. The target amount is 5 kg of textiles per capita per annum.

A3: Causes of the industry crisis

A3-1 Decline in the quality of the textiles collected:

All players in the countries studied agreed that the quality of collected textiles has been trending downwards constantly for several years. The rise in textile imports from Asia and the growth of low-cost clothing stores across Europe are the principal reasons behind this decline.

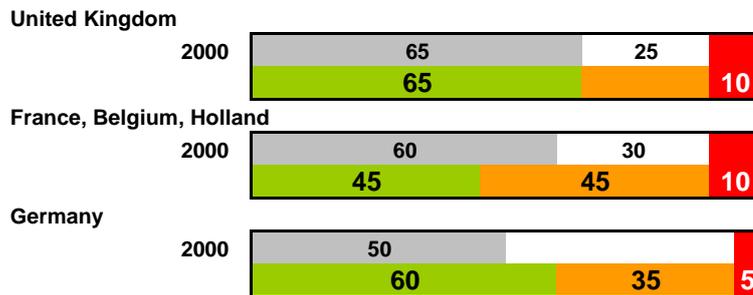
Consumer habits are changing. The portion of household spending dedicated to textiles is decreasing: the English prefer to buy clothes more frequently but of lesser quality while the Dutch keep their clothes longer...Individuals are increasingly choosing to sell their best quality used clothing over the Internet.

Two other trends have also played a part in this quality fall-off. First, in Belgium, individuals have to pay for their rubbish collection, by weight or per bag. They therefore prefer to dispose of all their textile waste in (free) bins. A similar situation exists in the Netherlands, where the government has drummed the target of 5 kilos of recycled clothing per capita per annum into the heads of its citizens, driving the Dutch to fill the bins with anything resembling textiles.

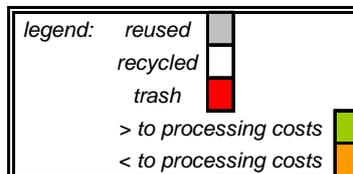
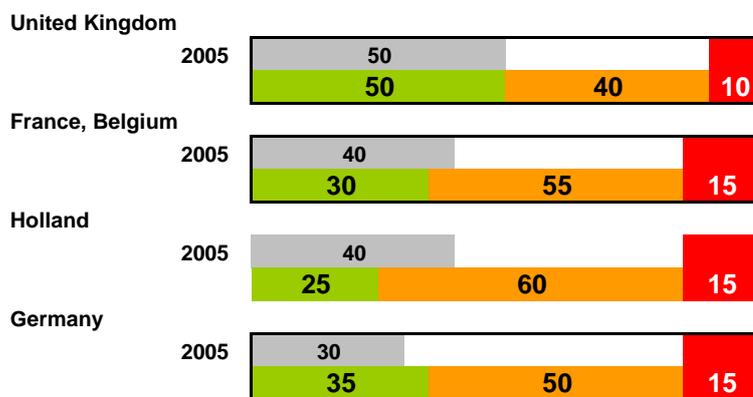
A3-2 Change in the type of textiles collected:

In order to understand the difficulties experienced by the textile reuse and recycling sector, it is important to note the proportion of collected textiles that can be reused for profit, reused at a loss, recycled (by definition at a loss) and disposed of, as shown in the industry organisation diagram below.

SITUATION IN 2000



SITUATION IN 2005



A3-3 Other identified causes:

The principal method of textile waste elimination is incineration. Landfill sites have been officially closed in France and are about to be closed in Germany. A notable exception to this is the UK where over 70% of municipal waste is still sent to landfill sites for disposal.

The cost of incineration is steadily rising across Europe: in the Netherlands, it has climbed 40% in five years. Belgium wins the prize for the most expensive incinerators, at €150 a tonne.

A3-4 Legislation:

Textile waste and second-hand clothing collectors and processors are seriously affected by the lack of clarification as to “when waste ceases to be waste” as far as recovered textiles are concerned. The E.U. framework directive on waste (75/442 as amended by 91/156) and the E.U. waste list do not distinguish between “originals” (collected materials) and “ready for immediate use” second-hand clothing or processed textiles (rags, recycled fibres, etc.). This situation complicates or hampers the international shipment of recovered textiles as although the materials are non-hazardous, i.e. “green” waste, “red” control procedures and “bans” are imposed by some non-E.U. countries that are in need of such materials.

This situation affects the E.U. exports as other OECD countries such as the USA, Australia and Japan exclude second-hand clothing for instance from their waste legislation.

B - REASONS TO SAVE THIS INDUSTRY

B1: Environmental benefits

B1-1: At source: reduce the impact of new textile production

The advantage of recycling through reusing clothing is to prolong its useful life and thus reduce the need to produce new cotton or synthetic fibres. In France, ways to recycle the non-reusable portion of collected textiles are under study and should significantly enhance the life cycle of textiles used for clothing: pyrolysis generates energy without emitting greenhouse gases, and the production of insulation material for buildings can potentially play a significant role in energy management policies. In Germany, the industry recycles or reuses 10 out of 12 kilos per capita per annum. A significant percentage of recycled products are used by the automobile industry to create thermal and acoustic insulation material for motor vehicles. Moreover, the manufacturing sector uses 15% of collected textiles as rags. In Poland, the waste from recycling is used to make paper or rags for industry.

It is difficult to obtain life cycle assessments based on sufficiently detailed hypotheses. Nevertheless, certain observations can be made [source: Lisbeth Dahllöf, Life cycle assessment applied in the textile sector: the usefulness, limitations and methodological problems – a literature review, Chalmers Tekniska Högskola, Göteborg 2003, revised 10 November 2004]:

Certain environmental problems, linked to new textile production, have been identified:

- ◆ Depletion of water resources: 26,000 litres of water are needed to grow one kilo of cotton. Cotton growing is the main culprit behind the shrinking of the volume of the Aral Sea, which has declined by 60% in 40 years; in the south-western United States, catchment waters are used for irrigation faster than the water is renewed.
- ◆ At the same time, soil salinisation is also a problem.
- ◆ Hazardous chemical substances:

For cotton: "Cultivated on just 3% of the world's agricultural land, it uses 11-15% of the world's pesticides and 7.5% of the world's artificial fertilisers." Source: The Cotton Story – published by the Hemp Union. WHO estimates that 20,000 people die each year from poisoning caused by the pesticides used on cotton crops. Roughly 50% of pesticides used in third-world countries are used to treat cotton crops.

For wool: sheep are treated with pesticides, of which the majority is lost in liquid waste (the sheep are "bathed"); pesticide residues sometimes remain in the wool produced.

Treatment of textiles: the various products used to condition textile fibres are often used in weakly controlled environments, especially with small industries in less-developed countries.

B1-2: Avoid incineration whenever possible

With the treatment of household waste through incineration, all the issues related to the operation of HWIPs are raised, namely emission of smoke and dioxins and contribution to the greenhouse effect. Without the recycling industry in the Netherlands, for example, 72,000 tonnes of used textiles would be incinerated.

To conclude, recycling enables us to reduce the consumption of water, fossil fuels, pesticides, chemical substances used in new textile production and, above all, to reduce the toxic emissions produced during incineration.

B2: Social benefits

In Belgium, socio-economic enterprises employ 600 salaried workers and an additional 2,081 volunteers are involved in recycling in general. In France, the recycling industry offers roughly one thousand jobs to promote integration, thereby meeting a crucial social need. In the Netherlands, this sector employs 600 people in jobs to promote integration. These people would have little chance of finding employment elsewhere. Many women and people from minority ethnic groups can be found working in this sector. In the United Kingdom, traditional recycling organisations are often set up in underprivileged communities. Members of the Textile Recycling Association estimated that between 20 and 50% of their employees are people with no qualifications who would have difficulty finding any employment outside the sector. The charity sector in the UK generates £100 million from the sale of second-hand clothing through its network of 7,000 charity shops. This network of shops plays a significant role in promoting the integration of unqualified workers. Moreover, the profits generated are injected into development projects in the UK (family support services, hospices, etc.) and around the world. Some 120,000 volunteers contribute to this distribution network, which has become a true institution in terms of social cohesion.

Our partner in Spain also underscores the important role played by textile collection and recycling in raising public awareness about socially responsible consumption and respect for the environment.

The consumption of second-hand clothing meets a real need in Europe, mainly for the underprivileged. In the Netherlands, an estimated 3/4 of clothing sold in second-hand shops is purchased by people between 30 and 65 years old, who are living on less than average income. Also in the Netherlands, between 50 and 100 tonnes of second-hand clothing are donated and 300 to 400 tonnes are sold at reduced prices (generally a 50% discount) to needy people. In Poland, the PENTOR market research company estimates that 25% of the Polish population buys second-hand articles. The reasons put forward for these purchases are: the reasonable price, the opportunity to access

unique and good quality clothing (especially for the middle class), and the inability to buy new clothing. In light of the rise in unemployment and the general growth of poverty, enterprises in the recycling sector are relying on the market maintaining its current levels at the least, provided the collected clothing is of good quality.

B3: Economic benefits

In France, the industry directly employs a total of 2,600 people. This figure includes 600 jobs in the traditional market economy sector and 2,000 jobs in the social economy sector (1,000 in the commercial social sector and 1,000 in the charity sector). The estimated job creation potential ranges from 1,500 to 2,000 additional jobs in the commercial sector and over a thousand in the charity sector. In Belgium, there are thirty-odd businesses in the traditional market sector. According to COBEREC, the industry employs roughly 1,500 people in all, not including socio-economic enterprises, which employ nearly 600. In Poland, it is difficult to estimate the number of jobs related to the recycling industry because a large number of these businesses are family-run and relatively small, and are not included in the statistics. Moreover, the recycling business indirectly maintains jobs in transportation and the production and provision of containers. In Spain, roughly 150 jobs in this industry have been identified in Catalonia alone while in Germany, the industry directly and indirectly employs 10,000 people. In the Netherlands, 1,400 people work in this industry, including 600 people in jobs to promote integration. In the United Kingdom, the traditional sector is estimated to employ a total of 5,000 to 10,000 people. The charity sector has a workforce of 9,500.

B4: Impact in southern countries

B4-1: Source of clothing

In many countries on the African continent, over 80% of the population dress themselves in second-hand clothing. Western clothing is very popular and second-hand clothing is often of better quality than the new clothes offered, for example, by Pakistani merchants. The standard of living of the middle class has improved, thanks to the availability of quality used clothing. For the lower classes, these are the only clothes they can afford.

B4-2: A fully-fledged economic sector

In developing countries (mainly in Africa), this business provides many jobs: people unload containers, importers stock and sell clothing, local merchants purchase a bale of clothing, open it, have the clothes washed and ironed, and so on. The industry triggers the creation of many small workshops and shops locally that help “put food on the plate” for families in the most remote areas. It is estimated that one bale of second-hand clothing can sustain a family of 10 people for one month. In more concrete terms, a study led by Dr. Simone Field on the impact of second-hand clothing in Kenya supported the assertion that this industry directly and indirectly employs 5 million people in this country where unemployment is up to 40%. A Dutch study conducted in 1999 revealed that the recycled textile business created 30,000 jobs in Poland and 3,000 jobs in Zimbabwe and that the jobs created in Estonia, Ghana and Benin outnumber the jobs lost in local textile industries. Furthermore, this study supported the view that the recycling jobs created offered better quality employment than that provided by the local textile industry (with higher pay being just one example). This industry also largely contributes to bringing women into the workplace. Another benefit brought by importing used textiles, highlighted by our partner in the Netherlands, is that import duties generate income for the southern countries.

B4-3: Conditions for a balanced North-South partnership

Measuring the impact:

The French players in the industry stress the imperative to restore a north-south balance (an essential condition for any sustainable development action), which must be verified and optimised on a case-by-case basis for each partnership operation. The Dutch textile recycling industry is currently backing a study to establish an audit system to ensure that the used clothing business does not negatively impact the importing southern countries in any way.

Establishing balanced relationships:

German reuse and recycling players emphasised that partnerships between northern suppliers and southern importers are generally forged through long-term commercial relationships. Ideally, the Belgians would like further steps to be taken to be able to audit the distribution network in southern countries. Although most textile bale exports are resold to wholesalers, the true benefit

for the local population can only be assessed, as we have just shown, among the local buyers and end consumers. When an NGO is able to audit a local distribution network, this network tends to be concentrated in the hands of a population that is particularly underprivileged or victim of a major problem (refugee camps in war environments, cities that have suffered a natural disaster or spectacular epidemic, etc.), which provides attractive leverage for development in certain cases. Oxfam Solidarity works closely with Oxfam International and Terre asbl in this field and in Belgium, works in tandem with Autre Terre, a member of the OXFAM group.

C - POSSIBLE SOLUTIONS

C1: Financial aid and potential solutions in progress

C1-1: Aid from local and national governments

In Flanders, the communal authorities allocate €0.18/kg to collectors. The Brussels Region offers €0.035/kg of reused products (quantity collected - quantity of waste). In the Walloon Region, negotiations are in progress.

In Catalonia, a project with the Catalan Waste Agency will set up a waste sorting program in which funding is allocated based on the number of kilos collected. Negotiations with the Agency for specific grants per type of treatment are currently underway as well as efforts to mobilise towns to set up a waste sorting system.

In the Netherlands, the government has set a collection target of 5 kg of used textiles per capita per annum, representing a total of 85,000 tonnes per annum. Furthermore, discussions have been initiated with the relevant authorities at various levels to improve collection quality.

In the United Kingdom, a government-funded program aimed at enhancing recycling capacity does exist, but no direct aid is allocated to local players at this time.

The French government has funded a portion of the research and development work currently in progress.

Financial aid in the project partner countries is small in scale and remains well below the level required to sustain the industry.

C1-2: Solutions to reduce incineration

In Belgium and elsewhere, the only operational alternative to incineration at this time is the landfill centre (*Centre d'Enfouissement Technique*), commonly known as a "dump".

In France, a solution to reduce the use of highly polluting traditional incineration techniques is currently under study. The aim is to set up a thermal treatment facility using total internal pyrolysis. Pyrolysis of waste is currently

recognised worldwide as the only solution which meets environmental protection requirements. Destruction of waste through slow combustion generates combustible gases that may be used locally for other types of production. Unfortunately, there is a strong chance that this project will not be completed due to the financial difficulties experienced by the industry.

C1-3: New products to make better use of second-hand textiles

For construction:

In Belgium, tests were conducted by Terre with a view to manufacturing acoustic panels. This project was suspended because the manufacturer was unable to treat such a heterogeneous mix of textiles.

In the Netherlands, the recycling industry is backing a study on ways to use recycled textiles in the construction industry. Again, for this project, the heterogeneous mix of collected textiles poses a problem, especially due to the increasing proportion of synthetic fibres.

In France, a research and development programme is in progress to design, manufacture and market a line of High Environmental Quality insulation materials. The prototypes completed in 2002 were successfully tested by the Laboratory for Mechanics and Housing Research of the Université d'Artois, following which a CSTB certification procedure was launched. Taking into account the cost of production and distribution margins, the price of the new products must be significantly lower than products labelled "ecoproducts" (panels made of hemp, flax, sheepswool and down) and comparable to mid-range and high-end mineral panels, which currently account for a reported 60% of the insulation market.

C1-4: Reorganising the industry

In some countries, the industry is being reorganised to enhance its efficiency and thus survive the crisis. This is true of the Netherlands, where some recycling players have attempted to increase the size of their company by creating a greater proportion of special employment contracts to promote integration. These measures are nonetheless inadequate. We are unfortunately seeing an increasing number of recycling organisations relocating to countries where labour costs are lower.

C2: Textile Reuse and Recycling Contribution Project

The levy of contribution would offset the impact of the decline in textile quality and the drop in market prices. In the Netherlands, it is estimated that an ecotax of between 0.1 and 0.3% would cover the cost of collecting textiles, thereby making the industry viable. The Dutch industry is attempting to negotiate the introduction of an ecotax on a national level, without much success as the Dutch government has declared it is waiting for directives from the European Union prior to taking this step.

C3: Developing new markets

No development of new markets can be considered without innovation. This implies costly investments in research and development, but which could have attractive outcomes in terms of environmental protection. Some studies are in progress, as we have seen. They need time to be completed. Other projects may also be launched.

C3-1: Applications in construction:

It may be interesting to explore the possibility of manufacturing acoustic insulation panels once again, which Belgium has looked at. The programme to develop HEQ insulation currently under study in France must be carried through to the end.

Our partners in the United Kingdom also suggest that the European Union and national governments encourage innovation in this field by opening up new markets. For example, a directive recommending that the insulation of public buildings be derived from recycled textiles would help this industry flourish.

C3-2: Applications in agriculture and horticulture:

Composting? It might be worthwhile to search for opportunities to collect, sort and compost natural fibres. In theory, cotton can be composted if it is mixed with other organic products. The economic feasibility of this type of solution would have to be assessed.

Gardening? It might be possible to use a synthetic fabric base for lawns to stop weeds from spreading.

Conclusions :

The textile recycling sector in Europe, despite differences in its organisation and contexts, is facing a number of common difficulties that put its very survival in question. The drop in collect quality, all throughout Europe, leads to a drop in the reusable portion of the collect and of the part that can be sold at above processing costs. As a result, collecting, reusing and recycling is no longer profitable. The entire sector is threatened of disappearance in the very short term.

The stakes of this sector in terms of environment, social inclusion and development in Southern countries are real. The disappearance of the sector would affect much more than local players' direct interest.

To this day, the actors have already tried to develop solutions, i.e. in trying to develop new markets. However, in the face of the current state of the textile market (massive degradation of quality, competition of very low priced goods) developing new markets alone won't suffice, especially in the short term, to save the sector. A collaboration with the institutions and government is needed, that will allow the emergence of lasting solutions.