

Flooring Sustainability Partnership

Annual Report 2012



Delivering targets towards the joint Government
and industry strategy for sustainable construction.

Foreword

Having now been firmly established in its own right out of the Flooring Resource Efficiency Action Plan, I believe that the Flooring Sustainability Partnership (FSP) has a great opportunity to assist the flooring industry in improving resource efficiency and sustainability within the sector. This is clearly demonstrated in this second annual FSP Progress Report.



The FSP is a unique and diverse group of flooring companies and bodies, including those involved in the production, distribution, installation, recycling, reprocessing and disposal of flooring. The group has many common interests and areas of operation and I believe that one of its key strengths is its broad coverage of our diverse industry. This enables the FSP to act not only to improve the sustainability of flooring through the development and delivery of practical actions, better awareness, and understanding and sharing of best practice, but also to speak collectively to Government on this complex subject.

This role will become more important as new policy emerges and potential legislation is considered. The FSP has also proved to be a great networking opportunity for our sector and a forum to bring all types of organisations in the sector together, to discuss and engage in the debate around resource efficiency and sustainability in flooring and the challenges that lie ahead.

As one of the founding members of the FSP, on behalf of the Contract Flooring Association (CFA), I am delighted to have assisted in creating this invaluable forum. One of my key colleagues in this was Pete Thomas, who helped prepare the Flooring Resource Efficiency Action Plan which led to the FSP being established, and led several workstreams and priority actions. Sadly, Pete died in October 2011. His influence on the direction of the FSP was considerable, and his energy and personality will be sorely missed by us all.

I am now handing over the Chairmanship to Simon Macaulay of Anglo Recycling, but look forward to continued involvement within the FSP and the benefits that this will bring to CFA members and the wider industry alike.

Richard Catt – outgoing FSP Chairman, and CEO of the Contract Flooring Association

Executive Summary

This is the second annual Flooring Sustainability Partnership (FSP) Progress Report detailing the actions and achievements of FSP members during 2011. These include:

- The Flooring Sustainability Partnership met four times during 2011/12.
- The Flooring waste website (www.flooringwaste.co.uk) is up and running. This provides easily accessible information on different types of flooring wastes and a search facility which allows users to search for appropriate waste management facilities.
- A new online flooring waste reporting tool (www.wastereporting.co.uk/flooring) has been launched to assist the flooring sector in better understanding and managing its waste arisings.
- The FSP guidance document on the implication of end-of-life scenarios for floor coverings in the context of BS EN 15804:2012 has now been completed.
- 66,000 tonnes of carpet waste were diverted from landfill in 2011 – representing an increase in the diversion rate from 10% in 2010 to 16.5% in 2011.
- Carpet tile reuse increased by 86 % in 2011 compared to 2010, with over 800,000 tiles being reused.
- 447 tonnes of post consumer vinyl flooring were collected through the Recofloor scheme in 2011. This reflects a 134% increase on 2010. There are now 61 drop off sites at distributors across the UK and 436 collectors.
- 195 tonnes of packaging waste within the resin flooring sector was diverted from landfill (95.5% recycled/recovered). 35% of FeRFA contractors and 50% of FeRFA manufacturers now participate at some level in this scheme.
- The Resin Flooring Association (FeRFA) won the Environmental Initiative Award at the Trade Association Forum (TAF's) Best Practice Awards in July 2011 for its innovative new closed loop system to re-use waste plastic packaging.
- Manufacturing members of Recofloor have reduced their manufacturing vinyl waste to zero.

Moving forward into 2012, however, it is apparent that the FSP must refocus, and not be bound in its activities and/or its reporting solely by the original scope and content of the FREP. Things have moved on in the last two years; the challenge for the FSP is to remain a flexible organisation that can respond quickly and efficiently to the changing environment that it finds itself in. This includes the need to move beyond focusing only on the diversion of waste from landfill, and consider the full waste hierarchy as defined by Defra: start by seeking ways to **reduce** usage and therefore waste. Where this is not possible, the waste hierarchy then emphasises the need to try to **re-use** materials or **recycle** them – or **recover** something, usually energy, from them. In this hierarchy, landfill is only a last resort.

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1. Introduction

The UK flooring sector is estimated to produce 290 million m² of material annually – equivalent to 85 full-size football pitches every day. When the FSP was set up 18 months ago as a result of the work funded by WRAP and the BRE Trust, around 600,000 tonnes of flooring waste was disposed of in landfill each year and less than 2% was recycled. The total cost to the industry supply chain (including local authorities) in dealing with flooring waste was thought to be in excess of £45 million. Today, it is estimated that 16% of flooring waste is now recycled.

This is the second annual FSP Progress Report which details the actions and achievements during 2011 to reduce flooring waste to landfill by the organisations from across the flooring sector that make up the membership of the Flooring Sustainability Partnership (FSP).

The Flooring Resource Efficiency Action Plan (FREAP)¹ published in October 2010 continues to underpin the main areas of activity and interest of the FSP during 2011. This progress report provides a summary of progress against the original targets and actions detailed in the FREAP.

The FSP will now explore the wider implications of resource efficiency on areas beyond waste looking at carbon and water impacts of the sector for example. This is detailed further in section six of this report.

¹ The FREAP can be downloaded from WRAP's website:
http://www.wrap.org.uk/sites/files/wrap/Flooring_REAP.pdf

2. About the Flooring Sustainability Partnership

2.1 What is the Flooring Sustainability Partnership?

The FSP is a lobbying and networking organisation on issues of flooring sustainability, waste and recycling. It is the owner of the Flooring Resource Efficiency Action Plan and:

- provides a single point of contact for the “flooring sector”;
- facilitates networking between the individual segments of the industry;
- communicates best practice; and
- acts as a facilitator of financing to other flooring industry groups.



The FSP is a non-profit-making organisation.

2.2 What the Flooring Sustainability Partnership is not

- It is not a “governing body”.
- It is not a recycling scheme.
- It will not take funds from other groups.

2.3 Flooring Sustainability Partnership Vision

The FSP is a representative umbrella body on matters of sustainability for all flooring sectors in the UK. It is a voluntary organisation that relies solely on the input of time, energy, and passion of its members in bringing Industry people together with Government & local authority. It has a key role to play now and in the future in lobbying and influencing Government policy, and in co-ordinating, measuring and stimulating activity across industry to divert flooring waste from landfill, which still remains its biggest challenge. The FSP also provides a platform for opening up wider debate and driving forward sustainability issues within the industry, for setting the agenda for change and gaining widespread sector buy-in as part of this process.

2.4 Flooring Sustainability Partnership members list

A full list of FSP members is contained in Appendix B.

2.5 Flooring Sustainability Partnership constitution

The FSP constitution is contained in Appendix C.

2.6 Views from the membership: the role of the FSP

As well as reporting on progress against the action plan, this year's report contains some direct feedback from FSP member organisations, taken from a recent membership survey. All comments are anonymous and help provide valuable insights into how FSP members regard the organisation.

"[The FSP] is very important in terms of setting the agenda and gaining widespread sector buy-in. For us, as a large organisation committed to sustainability, the FSP is less important in terms of driving our internal agenda or increasing our knowledge base."

"Great strides have been made through cooperation and innovation amongst the industry. We hope that this will eventually enable carpet materials to be extracted from municipal waste streams for recycling at little or no cost to local authorities."

"It's important to have a vehicle to demonstrate the industry's proactive approach to waste management."

"I think it can play an important role if it is focused on what it can influence / measure and report on. I think it can be the "voice" of the flooring industry if it can identify clear deliverables. I don't think it has to date – or at least, if it has these have not been communicated well enough or acted upon by senior management within each business. Commitment has to come from the top of each member organisation."

"In our view, the FSP is a useful reporting tool, which can be used to measure resource efficiency across the flooring sector and to lobby government on common issues affecting all flooring types. As far as improving resource efficiency and reducing waste is concerned, this is the role of the sector leads and the individual trade associations who are members of the FSP. It is important to minimise duplication of effort in reporting as well as with regard to the activities undertaken."

"We see the FSP as playing an important role in co-coordinating, measuring and stimulating activity to divert domestic flooring waste from landfill."

"[It's] very important to have a representative body for all flooring sectors – particularly as a link to influencing Government legislation."

"I think it is important that there are bodies like FSP driving forward sustainability issues within the industry."

3. 2011 Progress against FREP Targets

This chapter provides a summary of progress during 2011 against the main FREP Targets. These targets relate to each of the five main flooring sectors covered in the FREP; Broadloom Carpet, Carpet Tiles, Resilient Flooring, Hard Flooring, and Resin Flooring.

See Appendix A for full details of the individual Material Action Plans (MAPs) for each flooring sector, and progress against the individual actions set.

3.1 Broadloom Carpet: Progress against targets

	Target	Lead Organisation	Status
1	By 2012, the manufacturing members of Carpet Recycling UK to commit to operating with zero manufacturing waste going to landfill	Carpet Recycling UK (CRUK)	On track. During 2011, 6,000 tonnes of carpet waste were diverted from landfill by seven UK-based manufacturing members of Carpet Recycling UK – representing a diversion rate of 85% and a 50% increase on 2010. All Carpet Recycling UK manufacturing members are expecting to reach zero manufacturing waste to landfill by the end of 2012. Several have already achieved this target.
2	By 2015, 25% of carpet waste to be diverted from landfill	CRUK	Ongoing. 66,000 tonnes of carpet waste were diverted from landfill in 2011 – representing an increase in the diversion rate from 10% in 2010 to 16.5% in 2011. This figure is fairly evenly split between recycle and reuse (32,000 tonnes) and energy recovery, mainly in cement kilns (34,000 tonnes). The proportion of carpet sent for recycling has risen from 33% in 2010 to 48% in 2011 as new outlets have developed and established outlets have grown.
3	By end 2010, a carpet industry accord to be in place	CRUK	Achieved. Carpet Recycling UK and its members have set a target to achieve 25% landfill diversion by 2015.

3.2 Carpet Tiles: Progress against targets

	Target	Lead Organisation	Status
1	By 2012, the manufacturing members of Carpet Recycling UK commit to operating with zero manufacturing waste going to landfill	CRUK	On track. Most CRUK manufacturing members have already achieved zero manufacturing carpet waste to landfill. All manufacturing members expect to meet the target set.
2	By 2015, 25% of carpet tile waste be diverted from landfill according to the waste hierarchy	CRUK	Ongoing. The CRUK target of 25% landfill diversion by 2015 applies to all types of carpet waste arising including carpet tile waste.
3	In 2011, refurbish and reuse 1,000,000 carpet tiles	Carpet Tile Reuse Network	Not achieved. In 2011, over 800,000 tiles were reused. However, this was an 86% increase compared to 2010 and with 8 carpet tile reuse organisations now operating in the UK, the upward trend should continue.

3.3 Resilient Flooring: Progress against targets

	Target	Lead Organisation	Status
1	In 2011, to increase by 25% the quantity of post installation vinyl offcuts recycled compared to a 2010 baseline	Recofloor	Achieved. In 2011, 447 tonnes of post consumer vinyl flooring were collected through the Recofloor scheme - an increase of 134% on 2010. There are now 61 drop off sites at distributors across the UK and 436 collectors.
2	By end 2011, the manufacturing members of Recofloor to reduce their manufacturing vinyl waste to zero	Recofloor	Achieved.
3	By 2012, to increase the amount of resilient flooring waste being recycled or otherwise diverted from landfill by 25% compared to a 2010 baseline	CFA	Ongoing.
4	Zero waste to landfill from the manufacture and importation of resilient flooring to be achieved by a date to be determined	CFA	Ongoing. One UK manufacturer has already a zero waste to landfill policy. Several distributors are sending waste to Recofloor.

3.4 Hard Flooring: Progress against targets

	Target	Lead Organisation	Status
1	By end 2010, issue guidance note on the correct disposal of installation wastes	The Tile Association (TTA)	No progress. Action scheduled in 2012/13. This is on the agenda of the next meeting of the TTA Environmental Working Group.
2	By end 2010, set benchmarks for segregation of installation waste where practical	TTA	Action abandoned. Due to the closure of the only UK manufacturing operation and resultant loss of resource and expertise, this has been abandoned.
3	By mid 2010, the Tile Association to sign up to the WRAP Construction Commitments: Halving Waste to Landfill	TTA	Achieved.
4	Investigate the possibility of the other trade associations representing Hard Floorings signing up to the Construction Commitments: Halving Waste to Landfill by 2011	TTA	Achieved. All other trade associations representing Hard Floorings were approached.

3.5 Resin Flooring: Progress against targets

	Target	Lead Organisation	Status
1	By 2012, increase the level of packaging being recycled within the Resin flooring sector by 10% based on a 2010 baseline.	The Resin Flooring Association (FERFA)	Ongoing. The September 2011 dashboard reports indicate that 98.7% of all packaging waste is now being recycled or recovered. Results for the full year show 195 tonnes were diverted from landfill, with 95.5% recycled or recovered. Monthly reporting will allow FERFA to track progress against the 10% target reduction. The scheme is being widely promoted, with 35% of FERFA contractors and 50% of FERFA manufacturers at end September 2011 participating at some level. The scheme won the TAF Best Practice Environmental Initiative Award in July 2011. Details available on FERFA website www.ferfa.org.uk

4. 2011 under the microscope: FSP Case studies

Many different members of the FSP have taken major strides forward towards more sustainable operations during 2011. This chapter features a series of case studies from some of those member organisations that showcase the achievements and environmental programmes they have delivered.

4.1 An award-winning scheme for recycling packaging

The packaging recycling scheme developed by FeRFA, the Resin Flooring Association, won the 2011 Environmental Initiative Award at the Trade Association Forum (TAF's) Best Practice Awards.

Now in its ninth year, the TAF's Annual Best Practice Awards recognises, rewards and promotes best practice amongst Trade Associations in the UK.

The FeRFA recycling scheme is a major initiative that brings contractors and manufacturers

together in a collection and recycling programme for waste packaging - a key target area of the FREP. The scheme is an industry first, offering a closed loop system to re-use waste plastic packaging and is having an immediate and positive impact on the environment, saving money and resources by managing waste more efficiently. FeRFA partners Countrywide Waste Management collect waste packaging (hazardous and non hazardous) then decontaminate it and reprocess it for future use. In some areas, up to 100% of waste is being recycled.

One organisation that has been quick to see the opportunity is Central Flooring Services (CFS). Having moved into new premises, CFS set up a dedicated recycling area. Their staff now bring as much waste back from their jobs as possible, so that it can be collected by Countryside Waste – not only reducing the amount sent to landfill but also cutting down on the use of skips on site. .

Metal and white plastic resin tubs that are collected are decontaminated and reprocessed so that they can be used again, and the aggregate bags are also recycled. Whereas before CFS had to empty its general waste skip weekly, it is now doing so just once a month.

Being part of this scheme also helped CFS to achieve ISO14001 accreditation. Full details of the FeRFA Recycling Scheme can be found on the FeRFA website, www.ferfa.org.uk.

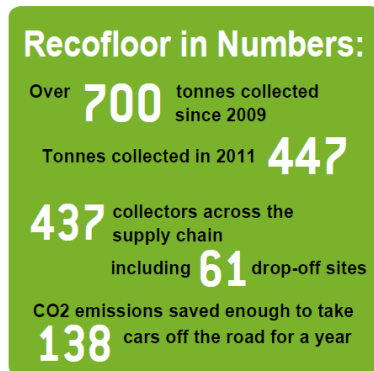


The Environmental Initiative Award was presented by ex-England rugby player Martin Bayfield to FeRFA CEO Helen McGachie and FeRFA Administrator Lisa Hennessey

4.2 A record-breaking year for Recofloor

Recofloor continued to break waste vinyl flooring recycling records in 2011 collecting 447 tonnes for reprocessing – well over double the 189 tonnes recovered in 2010.

This figure is evenly split between smooth vinyl offcuts (34%), safety flooring offcuts (33%) and smooth uplifted vinyl (33%).



Founded by leading flooring manufacturers Altro and Polyflor as the UK's first joint industry-led take-back initiative, Recofloor has grown to 437 members across the supply chain, from waste transfer stations to flooring contractors and distributors. Nine drop-off sites and 192 new flooring contractors came on board during 2011.

The scheme is managed by resource recovery specialists Axion Consulting, and senior consultant Jane Gardner attributes Recofloor's success to a combination of its ease of use and increased awareness, along with an evolving regulatory and legislative environment.

"Recofloor's straightforward, cost-effective and efficient collection system has diverted a total of 700 tonnes of waste vinyl flooring from landfill since it was launched in 2009," says Jane. "This benefits the environment, reduces collectors' waste disposal costs and recycles material back into products, such as new flooring."

Calculations by Axion show that by capturing and recycling 700 tonnes of smooth and safety flooring vinyl – in preference to using virgin material in new products – Recofloor has delivered a savings equivalent to over half a million kilograms of CO₂ emissions. Put another way, this equates to driving an average family petrol car 1.6 million miles (nearly 67 times around the equator) or taking 138 cars off the road for a year. Jane continues: "Because Recofloor is flexibly tailored to engage each supply chain sector, from small 'one man bands' to large flooring contractors, it enables recycling of smaller volumes of material that would otherwise be landfilled. We have also increased the number of drop-off sites and collection points around the UK and some members tell us they have reduced their skip sizes as a result of the scheme's regular waste vinyl flooring collections."

4.3 Ready for ReENTRY®2.0: InterfaceFLOR prepares to launch advanced recycling programme

2012 will see the full UK launch of InterfaceFLOR's ReENTRY®2.0 recycling programme – a highly advanced way of recycling carpet tiles that separates face fibres from the backing.

ReENTRY®2.0 builds on InterfaceFLOR's existing reclamation and recycling solutions for carpet backing, incorporating a new patent pending technology that cleanly separates the face fibre from the backing. Separated type 6 and 6,6 nylon fibre are recycled into new 6 and 6,6 nylon, while separated backing, such as the company's GlasBac®, are recycled into new backing using InterfaceFLOR's Cool Blue™ backing technology.



The recycling programme is suitable for both commercial and residential carpet, and both broadloom and carpet tiles. It not only diverts waste from landfill and reduces reliance on raw materials, but is a highly energy efficient approach, requiring less energy than other recycling processes. Any materials unused by InterfaceFLOR are passed to other recycling partners, ensuring no reclaimed carpet ends up in landfill. What's more, the new modular carpet, known as Convert™, offers a full colour spectrum that helps raise the bar for sustainable carpet products without compromising performance or aesthetics.

4.5 1500 m² of used carpet tiles recycled in a month

Loughton Contracts used Carpet Tile Recycling of Nottingham who certified the collection and recycling of 1500 m² on the Loughton Contracts CitiGroup project in August 2011.

4.6 Shaw Industries 'take back' scheme wins USA GSA Evergreen Award

Shaw Industries Group's carpet take back scheme won the 2010 USA GSA (General Services Administration) Evergreen Award.

The scheme involves Shaw Industries taking back carpet tiles to its Evergreen plant in Augusta, Georgia. There, tiles are broken down and recycled. Currently, the company takes back quantities over 4000m². and it is now starting a take back scheme for lower quantities. This scheme received the 2010 Evergreen Award under the furnishings and floor coverings category.



Shaw continues to take industry-leading strides toward sustainability, which include delivering the one-billionth square foot of EcoWorx, its PVC- free carpet backing and saving its 150,000th barrel of oil by recycling 250 million lbs of carpet back into the company's Evergreen facility. Altogether, its recycling processes have saved 400 million pound of carpet that reached the end of its useful life from entering landfills.

4.7 Recycling post installation vinyl waste: Tarkett's ReUse programme

With over 45 years of recycling experience, Tarkett has developed a comprehensive programme that makes recycling simple for its partners.

Under the programme, known as ReUse, contractors request special ReUse collection bags from Tarkett. They use the bags to collect post installation off-cuts or roll ends of all Tarkett ranges, ensuring they're as clean as possible. When the ReUse bags are full, Tarkett will pick them up from site, delivering new bags at the same time. Waste is then taken back to Tarkett's factory in Lenham and a certificate is issued to confirm the volume of waste collected and recycled.



The service is designed for onsite collection at all medium to large contracts, or alternatively directly from the contractor's premises. Reusable waste includes homogeneous and heterogeneous vinyl, luxury vinyl tiles, PVC sports floors, welding rods and end of rolls. Tarkett can also recycle safety floorcoverings and linoleum waste.

As Tarkett operates its own recycling facilities, it can offer a fast turn-around of waste materials, meaning that waste collected from larger contracts can be reprocessed and returned within new flooring to the same site in a closed-loop system. Collecting waste

within normal delivery cycles also avoids the impact of additional haulage, and significant energy savings can be achieved when processing recycled vinyl waste.

Working closely with end users, main contractors, distributors and installers, Tarkett's ReUse programme provides a practical, tried and tested solution for recycling. All parties sign an Agreement to be a partner in the collection of post installation material and a Partnership Certificate is issued acknowledging cooperation and environmental contribution.

4.8 Recycling 777 tonnes with Desso Refinity®

In 2011, European carpet tile and broadloom manufacturer Desso recycled 777 tonnes of carpet materials in 2011 via its Refinity® carpet tile separation facility.

Refinity separates the yarn and other fibres from the backing from carpet tiles, producing two main material streams for recycling. Polyamide yarn is converted back to the basic material and manufactured into new yarn. Carpet tile bitumen backing is re-used in the road and roofing industries.

At Quest Diagnostics in Hounslow, Desso supplied 1,410m² of Stratos carpet tiles and recycled all the uplifted Nylon 6 pile bitumen-backed material through the Refinity® process. Carpet fibres went to Aquafil for new fibre production and the bitumen into road surfacing. For the project's main flooring contractor, Monmouthshire-based Kinetic Workplace Design, this was an ideal solution, as managing director Vince Taylor explained. "The environmental aspects of Desso's Take Back® scheme appealed to all parties in this project. It also made complete financial sense - saving 40% on skip hire costs and landfill charges. Desso timed deliveries of new carpet tiles with collecting uplifted material for recycling. I will be actively promoting Take Back™ as it is well worth doing."

Desso's Take Back® scheme was also used by High Wycombe-based flooring contractor Boyce Business Interiors to provide new flooring for WRAP at its head office in Banbury. The solution met WRAP's 'green solutions' specification, replacing 180 m² of old Bitumen Back carpet tiles with new tiles containing yarn made from 100% recycled content. John Astins, Boyce Director, said: "This scheme is a good way forward; fitting in with WRAP's requirements and enabling us to dispose of carpet responsibly at a comparable cost to that for landfill."

4.9 Sharing best practice: collecting case studies

Carpet Recycling UK (CRUK), BRE and WRAP have produced a series of case studies documenting resource efficiency in carpet manufacture, use and refurbishment.

Projects were selected to highlight different examples of resource efficiency, from reducing waste, the quantity of materials used or embodied carbon and water, to increasing recycled content or durability to end-of-life re-use and recycling solutions.

The case studies explore innovative measures such as minimising product weight, using recycled content in the pile fibre as well as backing, reducing production waste, offering take back for re-use and recycling, and designing products which don't require adhesives, thereby extending product life and re-use potential. The companies featured are Abingdon Flooring, Desso, Egetæpper, Forbo, InterfaceFlor UK, Milliken, Quadrant and Reeds Carpets.

Gareth Brown, WRAP's Construction Products Programme Manager commented, *"Of the 400,000 tonnes of carpet waste created by the sector, approximately 16% is now being diverted from landfill. This work, in partnership with CRUK and BRE, is part of WRAP's programme to identify and facilitate the implementation of resource efficiency improvements in construction and refurbishment - and it supports the flooring sector's Resource Efficiency Action Plan which is driving change across the industry."*

The case studies will be presented by WRAP at the CRUK conference on 11th July.

4.10 Views from the membership: achievements in 2011

In the FSP's recent membership survey, member organisations were asked to summarise their key achievements in terms of sustainability in the last year. Here are some of the responses received.

"We have joined CRUK and off-cuts of smooth and safety vinyl are now collected by RecoFlor for recycling."

"We had a number of projects in place in 2011 to improve material use efficiency, and to move up the waste hierarchy. None of these projects were directly attributable to FSP membership, however, there is a clear incentive to ensure that we remain at the forefront of sustainability efforts in the sector."

"The group has focussed its thinking on the recycling of non-flooring waste created by the business. All cardboard, polythene, pallets etc are now fully recycled: in Leeds we have halved our skip costs in 2011 compared to 2010. All of our businesses now collect used carpet tubes, paying drivers to collect them. We then re-process & re-use them, reducing packaging costs: our new tube purchases are minimal. We are in the process of setting out a plan to accept clean off-cut waste through our trade counters and are very aware of the PR and marketing benefits of such a plan. We have also commenced a trial on recovering PU underlay with carpenters."

"We have formed waste teams, improved measurements, appraised waste carriers (changed in cases), sought different waste solutions and improved quality."

"At FeRFA - The Resin Flooring Association, we had plans in place regarding a recycling scheme prior to involvement with the FSP. We had identified that whilst we do not generate material waste, we do generate waste packaging (plastic and metal containers) which previously has been disposed of via landfill. The recycling scheme was launched in March

2011 to FeRFA members and the industry. Targets have been set to reduce waste packaging to landfill - 10% in year 1, 20% in year 2 – and this information is now being monitored and published on a monthly basis. We currently have a third of members involved, our target is to have all members involved in an approved recycling scheme, and signed up to the Halving Waste to Landfill commitment..

“We have joined several flooring recycling schemes: Polyflor/Altro and Carpenters Underlay.”

“Carpet Recycling UK and Recofloor were set up specifically to address waste issues within the carpet sector and resilient flooring respectively. As such all the actions taken are set up to increase uptake of recycling raise awareness and include the supply chain to improve waste management practices.”

“[Our] carpet diversion rate from landfill of 66,000 tonnes represents an increase from 10% in 2010 to 16.5% in 2011. The recycled and reused portion was 32,000t, and 34,000t was used in energy recovery mainly via cement kilns. The total proportion of carpet recycled has grown from 33% in 2010 to 48% in 2011 as new outlets have developed and established outlets have grown.”

“Carpet diversion rate for the 7 UK-based manufacturers grew to 6,000 tonnes, an increase of 50% on 2010. This represents a diversion rate of 85% in 2011. All these manufacturers will achieve zero waste to landfill during 2012. Recycling was by far the majority outlet at 5,000t with only 1,000t used for energy recovery.”

“Recycling capacity increased as the number of specialist facilities able to handle carpets via re-use, recycling and energy recovery increased. It was encouraging to see the growth in the use of fibres from carpets for equestrian surfaces and felts. There are now 32 specialist outlets contributing to the total diversion results.”

“We have trialled new methods of removing post-consumer domestic waste from our customers using a third party organisation.”

“Desso has a recycling facility for bitumen-back carpet tiles. This was set up in 2010 and in 2011 we have formalised a reverse logistics take back facility and doubled the material input. with take back in the UK in 2011 of 240 tonnes.”

“InterfaceFLOR diverted 83% of waste from landfill in 2011 from one UK factory operation, which was a 21% increase on the previous year. It has set a factory waste to landfill target of zero for 2012.”

“During 2011 (March – December), FeRFA diverted 194.25 tonnes of waste from landfill, of which 94% was recycled and/or recovered. We receive monthly dashboard reports giving information on type/quantity of waste collected, and type/quantity recovered and/or recycled.”

5. Looking forward: going beyond waste and recycling

In the first years of the FSP, the focus has been predominantly on targeting, management and diversion of flooring waste from landfill. This still remains a central focus and goal for the FSP. However, the scope of resource efficiency is broadening and encompasses many facets of sustainability: these will be central to the FSP in its work and new actions going forward.

5.1 Understanding the full scope of resource efficiency

WRAP defines resource efficiency as consideration of the following elements:

- materials quantity;
- materials wastage;
- recycled content;
- embodied carbon;
- water use;
- embodied water;
- life span (e.g. durability);
- end-of-life potential (e.g. re-use; recyclability); and
- resource scarcity and security.

All of these apply to the entire flooring sector. Resource efficiency is most commonly determined through the design, manufacturing and construction process. However, there is also considerable scope to influence efficiency by embedding resource-efficient practices throughout the supply chain (including transport, storage, packaging) and reviewing and improving the way that flooring products and materials are used on site, in use and at the end of life.

The FSP and its members are very much aware of the impacts of their products across the entire product lifecycle: indeed, as case studies on the WRAP website provide, many are already actively implementing initiatives that address the above elements.

5.2 Views from the membership: plans for the future

The membership survey asked member organisations about their plans and priorities for 2012. Here are some of the responses.

“Shaw Industries is working on behalf of plastic recyclers to identify toxic materials. We have a target to reduce factory waste to landfill to zero in 2012. We expect to re-launch our end-of-life offer in 2012, with more attractive and sustainable end-of-life options.”

“Remain involved with FSP and CFA to support their ambitions.”

“We are now working towards zero landfill in all our UK operations sites.”

“We will continue to promote the Recycling scheme and endeavour to sign up all of our members. Waste reduction targets versus achievement will be published monthly on the FeRFA website.”

“CRUK [plans] to increase landfill diversion rate to 20% (80,000t) via reuse, recycling and energy recovery – representing an increase of 14,000t on 2011. We will also increase the number of outlets for reuse, recycling and energy recovery from 32 in 2011 to 40 in 2012, so that choice, collection and transport logistics can be improved across the UK. Finally we will assist carpet manufacturing members to collectively reach their goal of 100% landfill diversion this year.”

“Desso currently returns all collected material to the Refinity recycling plant in the Desso factory in the Netherlands. Work is in progress to identify/ separate materials in the UK for distribution to one of three waste streams – Re-use, Waste for Energy, Desso Refinity recycling plant – depending on material type. This is in preparation for the opening of a UK unit replicating the Desso Refinity plant in the Netherlands.”

“Country Style Group fully intends to dramatically increase the volume of material we divert from landfill. This will be achieved by engaging more with local retailers and increasing our profile within the sector.”

6. Important changes: Waste Carrier's Regulations and Take Back Schemes

Part of the FSP's role is to communicate best practice and act as an intermediary between industry and government. This section focuses on an important change to the regulatory environment which will affect the whole industry – providing an opportunity for the flooring sector to increase the provision of take back and recycling of flooring waste.

While many member organisations are already aware of this change – which came into force on 29 March 2011 under the new Waste (England and Wales) Regulations 2011 – below is a brief summary of the implications.

6.1 Background

All waste producers have a legal responsibility to ensure that waste produced is stored, transported and disposed of as controlled waste without harming the environment. Every flooring business is a waste producer at some level. However, the new Waste (England and Wales) Regulations 2011 have introduced a new two tier approach to waste carrying, which effectively separates organisations whose primary business is carrying waste – and mainstream construction/demolition businesses – from smaller fitters and installers. The table below summarises the two tiers and who falls into each category.

Table 1: Waste (England and Wales) Regulations 2011 two tier waste carrier requirements

	Who falls under this category	Do you need to register?	Fee	Duration
Upper Tier	1, Person who carries controlled wastes for profit within Great Britain and is not the waste producer. 2. Waste producer of construction and demolition waste.	Yes - immediately	£154	3 years Renewal £105
Lower Tier	Person who is the waste producer carrying own waste and does not profit from managing this waste (excluding construction or demolition waste).	Yes - by end of December 2013	No fee	Indefinite – no need to renew

6.2 What this means for the flooring sector

The key implication of these new regulations for the flooring sector is that many fitters/ installers who remove flooring installation waste (e.g. offcuts and packaging) and uplifted flooring from a job are likely to fall into the lower tier – as long as they are not making a profit from waste removal activities. This means that, although they must still register with the Environment Agency as a waste carrier, they will not have to pay a fee. It is hoped that this change may encourage more flooring fitters/ installers to offer a take-back service to their clients – which in turn should lead to increased recycling of flooring waste through this route.

Fitters/ installers wanting to offer such a service should ensure they adhere to the following guidelines:

- waste must be collected in a secure container;
- it should be stored temporarily at a secure collection point back at the depot;
- no more than 50 cubic meters can be stored at any one time; and
- waste can be stored for no longer than 3 months.

This activity does not fall within the waste framework directive exemption framework and therefore does not need to be registered with the Environment Agency.

The diagram below illustrates the process outlined above.

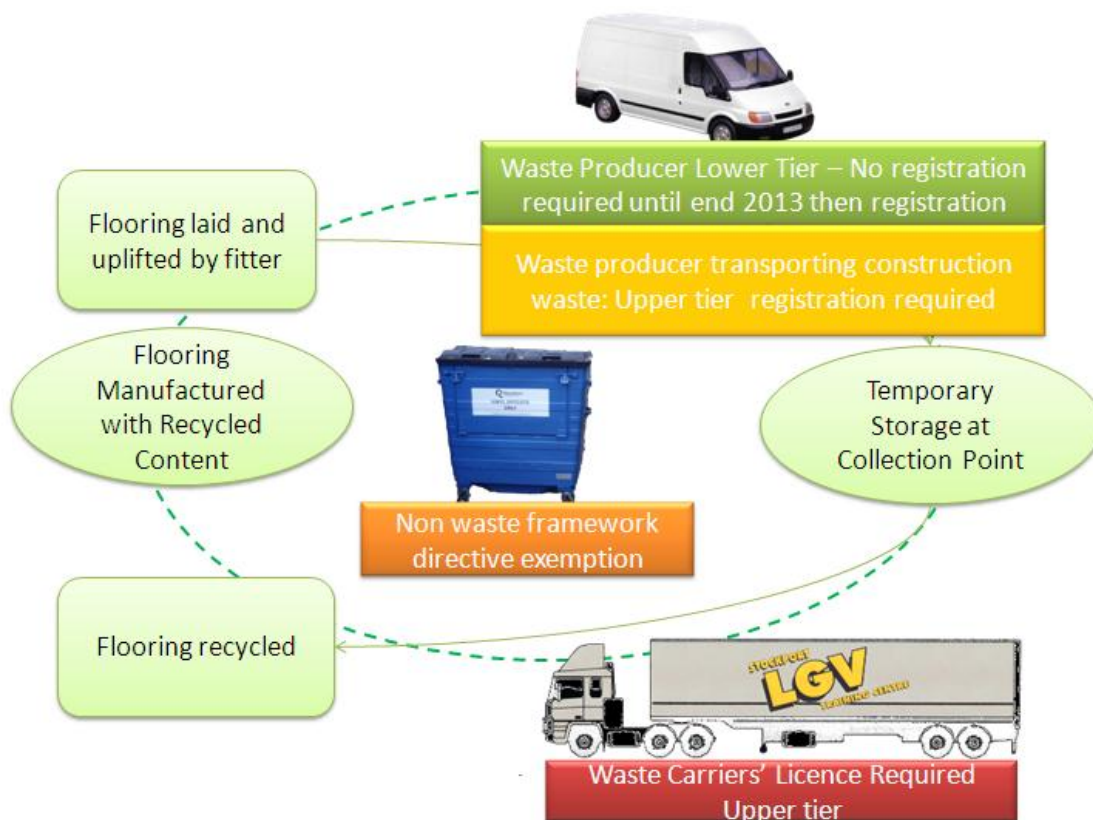


Figure 1: Flooring waste take-back process

Appendix A: FREP Action Plans

Overarching Flooring Sector Actions – 2011 Progress update

	Challenge	Action	Lead Organisation	Status
F1	Maintain the momentum and support generated in developing the Flooring Resource Efficiency Action Plan through to its implementation in 2010 and beyond	Establish the 'Flooring Sustainability Partnership' (FSP) to act as custodian of the Flooring Resource Efficiency Action Plan. The FSP shall meet no less than three times per year to monitor and report back on progress made against targets and actions set out in the Flooring Resource Efficiency Action Plan	Contract Flooring Association (CFA) BRE	The Flooring Sustainability Partnership has met four times during 2011/12.
F2		Agree a Constitution, Secretariat and Chair (should change every year) for the Flooring Sustainability Partnership. Members of the FSP to include trade bodies, organisations, key delivery bodies, Government departments etc	Flooring Sustainability Partnership (FSP)	The new Chairman of the FSP is Simon Macaulay of Anglo Recycling on behalf of CRUK. Simon takes over from Richard Catt (CFA) who has chaired the FSP since 2010. Continued secretariat support was provided by Pete Thomas Associates & BRE during 2011. Going forward into 2012, secretariat support will be provided by BRE. FSP Constitution - See appendix B.
F3		Secure necessary funding for resources required to support the running of the Flooring Sustainability Partnership Secretariat	CFA	£26,900 of funding to support the FSP during 2011/12 was secured via WRAP & BRE Trust. Beyond April 2012, the FSP will need to look at a self-sustaining business model for the continuation of the group.
F4	Lack of robust data collection across the flooring sector on the quantities of waste produced and recycled	Establish an industry wide data collection scheme to support better reporting and targeting of flooring waste. Such a scheme should establish a consistent reporting structure to obtain the waste arisings and recycling and reuse rates for the different flooring types	CFA Research consultancy e.g. BRE	A flooring waste data collection tool has been developed between the FSP and BRE. The Tool is available at www.flooringwaste.co.uk
F5		The Flooring Sustainability Partnership to define the targets for reducing waste in the flooring sector. For instance, total material diverted from landfill or material sent to Energy from Waste		The FSP as constituted is not an appropriate body to set waste reduction targets across the whole flooring sector. Individual organisations within the FSP have set specific reduction targets and the programmes to achieve them. These are listed in the reports on the individual sectors.

Overarching Flooring Sector Actions – 2011 Progress update – continued

	Challenge	Action	Lead Organisation	Status
F6	Knowledge gap, and lack of dissemination of existing and potential end markets, for flooring waste in the UK	Undertake further trials to provide data for an information paper on the end markets for flooring waste in the UK to help better inform the whole flooring industry about the opportunities for recycling flooring waste	Research consultancy Carpet Recycling UK	No new direct end market studies have been undertaken during 2011. Carpet Recycling UK continues to undertake trials to find end markets for carpet waste. See www.carpetrecyclinguk.com for further details.
F7		Develop a standard style of specification for each type of flooring waste that can be sent for reuse, recycling, recovery	FSP	Action abandoned.
F8	Lack of sustainable economic instruments and mechanisms to support the recycling of flooring waste	Investigate the potential for a Flooring Recycling Note (FRN) scheme which could operate in a similar way to that of the Packaging Recovery Notes (PRNs), thus providing much needed financial incentives to support the development of collection, sorting and end markets for the flooring industry	CFA	Investigated during 2010. It is felt to be excessively complicated and costly without the driver of legislative compliance.
F9		Further investigate other economic instruments and mechanisms that could support the recycling of flooring waste in the UK. To include possible replication of Recofloor scheme for other flooring types. This should include logistic challenges for collection		No progress made.
F10	Provide awareness and easily understandable guidance for flooring waste producers	Continue to develop and populate the flooring waste website making it a one stop shop and main dissemination vehicle for the Flooring Sustainability Partnership	FSP BRE	Website available here - www.flooringwaste.co.uk
F11	Potential future Government legislative / policy changes on certain materials types restricted from being sent to landfill	Flooring Sustainability Partnership to open dialogue with government and other relevant bodies regarding the potential restriction of material and product types to landfill including flooring waste assessment to be carried out on the potential impacts on the flooring industry were a restriction on certain flooring material sent to landfill to come into force. Based on the findings from the above assessment, FSP to ascertain if they would support a restriction on certain flooring material types sent to landfill	FSP Construction Products Association BRE	This remains a 'watch this space' item. As yet, no announcements have been made on the potential restriction on certain flooring material sent to landfill.
F12	Much flooring is imported, therefore dialogue is needed with similar European trade associations to ensure the UK is not working in isolation.	Flooring Sustainability Partnership to establish dialogue with a flooring trade body at European level as a large percentage of flooring is imported Flooring Sustainability Partnership to promote its activities including the development and implementation of the Flooring Resource Efficiency Action Plan to ensure overseas recognition	FSP	No resources available during 2011 to pursue the promotion of the FSP abroad and work with European partners. The next review of the harmonised standard EN14031 is likely to take place by 2014. This may offer the FSP an opportunity to lobby for the inclusion of recycling.

Overarching Flooring Sector Actions – 2011 Progress update – continued

	Challenge	Action	Lead Organisation	Status
F13	Need for the UK flooring industry to respond to the ever changing landscape of product standards and their impact on the sector and its approach to sustainability e.g. CEN TC 350	Flooring Sustainability Partnership to establish a standard agenda item focusing on UK, European and International product standards and their impact on sustainability, and the way in which it responds as an industry	FSP	The very sad loss of Pete Thomas, who was involved in standards committees including CEN TC 350, has left a gap in FSP representation in this area. The FSP needs to identify which individual(s) are best placed to fill the gap.
F14	Understand resource efficiency implications of the increasing use of flooring systems	Undertake short study to assess current resource efficiency impacts for common flooring systems and potential improvements	FSP BRE	No progress. Action abandoned due to low priority.
F15	Lack of waste data to undertake full life cycle assessments which can affect environmental decision making	Provide robust waste data on flooring types to organisations such as BRE to use for assessing environmental impact	FSP	No progress. No such data is currently available, nor has any funding been identified to fund a collection trial that would compile such data.
F16	Maximise the potential for the reduction of flooring waste during the early stages of a project	Develop evidence and provide to clients, designers and specifiers of the benefits of reducing installation waste by better design and ordering	FSP WRAP	No progress.

Broadloom Carpet Material Action Plan – 2011 progress update

	Challenge	Action	Lead Organisation	Status
1	To identify uses and markets for post consumer carpet. There are insufficient outlets that will take post consumer carpet	During 2010, seek funding for trials on developing new uses for post consumer carpet	CRUK	CRUK has run more than 60 self-funded small-scale development trials on new uses for post consumer carpet, working with machine manufacturers as well as manufacturers of construction products to find new high value outlets for carpet waste. There was no external funding available for technical research and development projects in 2011.
2		Complete the investigation into the use of various carpet wastes as animal bedding		The report <i>Livestock Bedding Trial based on wool rich Carpet Wastes</i> , prepared by Redwing Landbase and funded by WRAP, is available for download from the CRUK member's website. The report identified wool-rich carpet shred as suitable for use in animal bedding. However, the EA does not permit this end use due to synthetic content.
3	At present recycling carpet may show an economic shortfall so existing recyclers do not see a business case for getting involved	By end 2010, seek funding to carry out a series of collection and processing trials, to complete data gaps on the economics of different end of life options for carpets	CRUK	CRUK carried out small-scale self-funded collection trials with retailers in South Wales working with the recycler Griffiths Waste Management to establish: <ul style="list-style-type: none"> • how retailers currently dispose of their waste.; • volumes of waste available; and • which collection options fit in best with the way they work. Findings were disseminated at a seminar held at the Harrogate Flooring Show in September 2011. There was no external funding available for full-scale collection trials.
4		By end 2010, develop a business and environmental case for recycling carpet waste that illustrates potential shortfalls and defines sources of support that may be available		CRUK supports recyclers by providing technical information and advice. It is however often difficult to put together a full business case, as the market for recyclates constantly fluctuates. CRUK keeps an up-to-date list of possible funding opportunities for recyclers, which is circulated in the CRUK bi-monthly newsletter.
5	For best recycling, different fibre types need to be segregated but it is difficult to identify the different materials used in carpet	By end 2010, produce a cost/benefit analysis for purchasing "Near Infra Red" (NIR) equipment which can be programmed to identify the different types of carpet and allow proper segregation of the carpet streams into saleable streams	CRUK	There are currently 2 recyclers in the UK that have a handheld NIR sorter and there is a demo machine available for trials. Full details regarding handheld NIR devices can be downloaded from the CRUK website.

Broadloom Carpet Material Action Plan – 2011 progress update - continued

	Challenge	Action	Lead Organisation	Status
6	Current identification and separation equipment is expensive	By end 2010, develop a proposal for potential funding bodies for low cost leasing options for "Near Infra Red" equipment which can identify the different types of carpet	Carpet Recycling UK KTNs	CRUK has investigated potential leasing options for this equipment and established that there are no leasing options currently available through programmes such as the WRAP e-quip programme.
7		Through collaboration with the Knowledge Transfer Networks (KTNs) of the Technology Strategy Board (TSB), investigate the possibility of funded research projects to develop alternative identification techniques		CRUK has decided to prioritise establishing outlets for the various type of carpet construction before looking into developing alternative identification techniques.
8	There is no evidence that any of the recycling routes for carpet are the best environmental option	By end 2010, develop a set of Product Category Rules (PCR) that allows comparative Life Cycle Assessments to be carried out between different end of life processes. During 2011, produce Life Cycle Assessments for each potential end of life option being considered	FSP	The FSP has completed its guidance document on the implication of end-of-life scenarios for floor coverings in the context of BS EN 15804:2012. This is available for download from http://www.flooringwaste.co.uk/FSPDocs.aspx
9	There is no reliable data available at present on which to base decisions and targets	During 2010, participate in large scale segregation trial on all flooring waste to produce separate waste streams and identify their uses	CRUK Axion Recycling	CRUK has worked with its recycling members to establish volumes of waste arising from flooring fitters and retailers as well as local authority sites in areas in which the recycling members operate. There has been no funding for large-scale segregation trials.
10		By end 2010, establish an industry wide data collection scheme to support better reporting and targeting of flooring waste	FSP	A free online flooring waste data collection tool was launched in summer 2011. The tool is based around the principles of the BRE SMARTWaste Tool and covers flooring waste measurement and reporting. It is available at: www.wastereporting.co.uk/flooring
11	Waste carpet is generated in small quantities across hundreds of thousands of locations with no common system for collecting it	In 2010, Headlam to carry out a trial to examine the viability of using their transport to collect clean carpet offcuts from installers	Headlam	Headlam is collecting PU underlayment from one specific manufacturer via its trade counters. Headlam is restricted because the manufacturer is only able to accept its own materials back due to issues of raw material traceability. The material needs to be clean and un-adhered for similar reasons. There are no pick-up or delivery costs incurred in the handling of the material, as it is all carried out by vehicles which are already either delivering or back-hauling. Until some of the collection issues are resolved with the underlayment scheme, Headlam is not collecting carpet itself.
12		During 2010, John Lewis to trial through one of their stores, a flooring take back scheme using their own installers for both post installation and post consumer waste	John Lewis	Action abandoned.

Broadloom Carpet Material Action Plan – 2011 progress update - continued

	Challenge	Action	Lead Organisation	Status
13	There is no visible commitment to waste reduction and recycling from large sectors of the carpet supply chain	By mid-2011, produce a voluntary accord between the UK carpet industry and government to meet the proposed targets. This to be signed by companies and trade associations across all sectors	Carpet Foundation CRUK CFA	CRUK and its members are working towards achieving 25% diversion of carpet waste from landfill by 2015. CRUK aims to involve the entire carpet supply chain in this process and is working with the Carpet Foundation to engage with retailers and contractors.
14	How much will people pay to have their old carpet removed and how this can be used to finance recycling operations	By end 2010, develop and carry out a short survey on what people will pay for removal of old carpet flooring	Carpet Foundation	The Carpet Foundation carried out a survey of all its members and the results were shared by CRUK at a seminar held at the Harrogate Flooring Show in September 2011. A copy of the findings can be downloaded from the CRUK website: http://www.carpetrecyclinguk.com/event_presentations.php
15	Underlayments will need to be segregated by material type to be recycled	By mid-2011, commission a report to identify those underlayments that are recyclable and produce a specification for the material to be sent to recycling	CFA	Trials with the recycling of PU-based underlayments have indicated that restrictions on what can be collected are required to ensure that underlayments can be recycled. Issues relating to traceability of raw materials are severely limiting the reuse of old underlayment back into new material.
16	The lack of Environment Agency approval is a current barrier to several potential outlets for the disposal of wool rich carpet	Continue working with the Environment Agency to obtain required permissions for the use of wool rich carpet waste on land. By end 2010, produce an options appraisal for the Environment Agency to demonstrate that wool rich carpet is one of the only viable end markets for wool-rich carpet, and that their blocking this application is impacting on the recycling of other types of carpet	CRUK Environment Agency	CRUK continues to lobby the Environment Agency for acceptance of wool-rich carpet shred in growing media and to land. Growing trials funded by Envirolink Northwest to assess the use of WRCS as a soil improver for brownfield sites have been carried out. Funding is being sought for further trials to demonstrate benefits of synthetic fibres in growing media.
17	Because a large majority of carpet is installed in domestic situations, the disposal of the carpet waste is through the local authority either by collections or through civic amenity sites	By mid-2011, initiate a funded project to look at issues on segregation working in collaboration with a local authority which has the capacity on their civic amenity sites to provide a segregation facility for flooring waste This will require project funding to be identified as well as a willing MRF to sort material into potentially useable end streams	CRUK LARAC (the Local Authority organisation) Material Recycling Facility (MRF)	CRUK is working to increase the awareness of local authorities regarding outlets for carpet waste. The following case studies have been issued to demonstrate how CRUK recycling members are working with local authorities: <ul style="list-style-type: none">• Bradford City Council and 4 Recycling;• Bristol City Council and Greenback Recycling; and• Mid UK and Rutland Council.
18	Carpet is frequently changed for reasons other than it wearing out which results in higher environmental impacts and the disposal of carpet which still has a lot of service life remaining	By mid 2011, develop a scheme with a large retailer that allows potential social enterprise reusers of suitable carpet to be notified in time to arrange collection	CRUK	Rather than working with an individual retailer, it has been decided to focus on raising general awareness throughout the supply chain regarding the fact that carpet and carpet tiles have a second life. This is done through events, in press releases and in the bi-monthly CRUK newsletter.
19		During 2011, investigate sources of funding to carry out initial trials of a reuse scheme	CRUK	CRUK's reuse members work together to provide a national collection service for carpet tiles.

Broadloom Carpet Material Action Plan – 2011 progress update – continued

	Challenge	Action	Lead Organisation	Status
20	Retailers do not have the information to give to their customers to assist them in recycling their old carpet	By mid 2011, develop a proposal for a carpet recycling scheme that could be supported by WRAP and could potentially carry their Recycle Now brand	CRUK Carpet Foundation	CRUK is working with Carpet Buying Groups, The Carpet Foundation as well as member manufacturers to increase awareness amongst retailers regarding the fact that there are a growing number of outlets for carpet waste.
21	Uncertainty over possible restrictions on the disposal of a range of materials, including carpets, to landfill is causing uncertainty among potential recyclers	Ensure the industry responds to government on any proposed restrictions of materials to landfill	FSP	Both the FSP and CRUK responded to the initial consultation. The Government Review of Waste Policy issued in June 2011 states that the case for restrictions on sending textiles to landfill will be reviewed over the course of the current Parliament.

Carpet Tiles Material Action Plan – 2011 progress update

	Challenge	Action	Lead Organisation	Status
1	The cost of landfill is becoming an increasing burden to the flooring contractor but it is still frequently cheaper than any available recycling or recovery option	By end 2010, seek funding to carry out trials, the results of which can be publically disseminated, to determine the practicality and economics of using carpet tiles in roadstone and in carpet tile backing	CRUK	A project funded by Envirolink Northwest has been carried out to establish cost-effective options for reducing the size of bitumen-backed carpet tiles and potential end uses for the resulting product.
2		By end 2010, produce a guidance note including case studies which can be issued to flooring contractors outlining the economics of different routes for diverting carpet tiles from landfill	CRUK	CRUK has put together a series of case studies regarding outlets for carpet waste. These are available at : http://www.carpetrecyclinguk.com/case_studies.php
3		By mid 2011, complete a study into the viability of potential systems for the funding of the recycling of carpet tiles	CFA	Action abandoned. No resource to action due to the sad loss of our good friend and colleague Pete Thomas.
4		Determine the current product flow for the 70% of tiles being uplifted by small flooring contractors	CFA	Action abandoned No resource to action – see point 3 above.
5		Undertake a series of trials to determine the most cost-effective way reducing the size of bitumen backed carpet tiles	CRUK	See action point 1 above
6	There are a large number of potential end markets for carpet tiles which are not yet developed, costed and communicated to the people who have the tiles to dispose of	A report to be commissioned in 2010 into the various options for dealing with end of life carpet tiles from both economic and environmental points of view. The report to be widely disseminated in 2011	CRUK CFA	CRUK is continuously working with recyclers and manufacturers to establish end-of-life outlets for carpet tiles.
7		By end 2010, develop a set of Product Category Rules (PCR) that allows comparative Life Cycle Assessments to be carried out between different end of life processes	CFA	The FSP has completed its guidance document on the implication of end-of-life scenarios for floor coverings in the context of BS EN 15804:2012. This is available for download from http://www.flooringwaste.co.uk/FSPDocs.aspx
8		During 2011, produce Life Cycle Assessments for each potential end of life option being considered	CFA	Action abandoned – see point 3 above.
9	The UK is the only main market for bitumen backed tiles, which limits the potential for investment in recycling technology	Hold workshops to highlight both the potential for increasing the recycled content of carpet tiles and improving their recyclability	CRUK	Manufacturers are carrying out a lot of commercially-sensitive self-funded research into increasing the recycled content of carpet tiles and improving their recyclability. The CRUK conference 2011 and the CRUK seminar held at Ecobuild 2011 both focused on developments and innovation in design for recycling.

Carpet Tiles Material Action Plan – 2011 progress update - continued

	Challenge	Action	Lead Organisation	Status
10	There are limited outlets for the disposal of carpet tiles via Energy from Waste	The industry will continue to assist the provision of Energy from Waste (EFW) outlets by working closely with recyclers and energy from waste providers	CRUK	Several outlets which will accept carpet tiles for EfW have now been established. Please refer to CRUK specialist recycler list for details: http://www.carpetrecyclinguk.com/downloads/specialist_carpet_recyclers_current.pdf
11	Surface fibre can be removed from tiles for recycling but the costs are un-quantified	During 2010, carry out publically funded trials to collect data on the cost and environmental benefits of removing the surface fibre prior to recycling or disposal and to suggest a way forward on barriers such as lack of processing capacity for recovered fibre	CRUK	Individual companies continue to carry out trials, but there has been no public funding available for these trials.
12	The current replacement cycle for carpet tiles is driven by fashion and trends rather than the actual lifetime of the tiles. This increases the environmental impact and the amount of carpet tiles being recycled	By end 2010, research the reasons why carpet tiles are replaced before the end of their wear life and develop a document to show the increase in environmental impacts caused by early replacement of carpet tiles	CRUK	A report entitled <i>Carpet Re-use Market Research & Strategy</i> has been completed by WRAP, but has not been published.
13	There is a lack of awareness of the refurbished carpet tile market	By end 2010, produce a Market Assessment for Vintage Carpet tiles which will survey tile refurbishers and manufacturers offering refurbished floorings to determine the size of the current market	CRUK	Action complete – see 12 above.
14		By mid 2010, develop and disseminate in conjunction with the Carpet Tile Reuse Network a specification for uplifted tiles to be acceptable to a refurbisher. Will cover state of the tiles, the way they must be packed and storage prior to delivery	Carpet Tile Reuse Network	CRUK has published several case studies which highlight the way carpet tiles are collected and reused and recycled.
15		Develop a template specification to enable architects/designers or contractors to easily specify recycling for end-of-life carpet tiles	Carpet Tile Reuse Network	The new SKA environmental assessment and benchmark system now incorporates qualifying points for the re-use of carpet tiles, based on input from CRUK and its members.
16		By mid 2010, receive and disseminate an Environmental Profile from BRE for the use of refurbished carpet tiles	CRUK BRE	Vintage carpet tiles have been assessed by BRE and received an A+ rating for use in schools and an A for use in offices.
17		By mid 2010, discuss with PRI/03, the BSI committee responsible for carpets, whether there is scope for the introduction of a BS Specification for refurbished tiles	CFA	Action abandoned. No resource to deliver. Initial contacts indicate that there would be considerable difficulties involved not only in the production of such a standard but also in ensuring that any specific product conformed to it. This is particularly an issue regarding flammability (one of the main issues as far as carpet standards is concerned) because this can be impacted by the previous use of the tile.
18		Seek funding for a part time coordinator to develop the carpet tile reuse sector	Carpet Tile Reuse Network	No funding available.

Carpet Tiles Material Action Plan – 2011 progress update - continued

	Challenge	Action	Lead Organisation	Status
19	Uncertainty over possible restrictions on the disposal of a range of materials, including carpet tiles, to landfill is causing uncertainty among potential recyclers	Establish a means for formulating a flooring industry view to respond to any government proposals on the restriction of various materials waste to landfill	CFA	Both the FSP and CRUK responded to the initial consultation. The current government position is that it will not be introducing landfill restrictions on specific materials.

Resilient Flooring Material Action Plan – 2011 progress update

	Challenge	Action	Lead Organisation	Status
1	There is no reliable data available at present for the whole sector on which to base decisions and targets	By end 2010, meet with the main manufacturers of all types of flooring and WRAP / BRE to produce a agreed set of definitions for the reporting of flooring waste	CFA WRAP BRE	The flooring waste reporting tool was launched in 2011 and is available at www.wastereporting.co.uk/flooring/
2		By end 2010, to assist in drawing up bids for funding for a large scale segregation trial on all flooring waste streams to produce separate waste streams and identify their uses	CRUK CFA	CRUK focuses on finding end uses for carpets and carpet tiles. There has been no funding available for a large-scale segregation trial on all flooring waste streams. However, information is gathered by working with recycling members.
3		In 2011, participate in large scale segregation trial on all flooring waste stream to produce separate waste streams and identify their uses	CRUK CFA	Funding not available so collection trial did not proceed.
4	Several resilient floorings are not easily recycled by mechanical means and thus cannot be segregated from the main waste stream making any recovery option difficult	By end 2010, the importers and suppliers of rubber flooring to produce an agreed guidance document on best practice for post use handling of rubber flooring	CFA Suppliers	No further progress in 2011. Outline format for guidance produced. No agreement on best practice between different material types.
5		By end 2010, the suppliers of linoleum will carry out trials to assess the compostability of post use linoleum under UK conditions and its suitability for use in Energy from Waste	Linoleum Manufacturers	No further progress in 2011. One manufacturer has agreed to take back its own post-installation linoleum which is being recycled into new materials. In common with other materials, the manufacturer is not able to use other suppliers' materials or those which have been uplifted due to the constraints imposed by REACH.
6	There are insufficient end markets to process the available waste if the volume of post installation flooring collected increases	As an ongoing activity, flooring stakeholders will continue to identify and develop further uses for low grade vinyl flooring waste	Axion Recycling CFA	No fundamentally new uses have been identified to date. The full implementation of REACH has not been felt by the secondary use market. However, the need for authorisation for 2 raw materials which are ubiquitous in uplifted vinyl flooring may well have a negative impact on some of the current markets for low quality vinyl waste.
7	The quality of the segregated waste streams is too variable to allow easy recycling	During 2010, in conjunction with CRUK for the carpet and carpet tile sectors, develop a format for quality standards for segregated flooring waste and in discussions with the recyclers produce a series of standards under a common brand	CRUK CFA	No funding available.
8		During 2010, continue to implement segregated collections of post installation and post consumer waste	Recofloor	Recofloor has increased collections by 75% in 2011 compared to 2010.

Resilient Flooring Material Action Plan – 2011 progress update – continued

	Challenge	Action	Lead Organisation	Status
9		By end of 2010, initiate trials to ensure that the Near Infra Red (NIR) detectors can identify all sorts of vinyl flooring	CFA Recofloor	No funding available to carry out required trials.
10	The quality of the segregated waste streams is too variable to allow easy recycling	By end 2010, carry out sorting trial to segregate vinyl for recycling from other resilients suitable for energy recovery	CFA	No funding available for the main collection trial, which would have supplied the mixed waste stream.
11		Participate in the meetings of ISO 219 and CEN TC 134 to discuss the options available for specifying recyclability within either European (CEN) or International (ISO) flooring standards	CFA	The FSP attended a meeting of CEN TC134 and raised the potential of including sustainability and recycling within EN14031 Harmonised standards. This was not considered feasible under the present timetable as the review had to go to vote by the end of March 2011. The next review of the harmonised standard is likely to take place within the next 2 years which may offer an opportunity to include recycling.
12	There are several types of vinyl flooring that contain materials that make them non recyclable	By end 2010, discuss the problems caused by non recyclable floorings with distributors and their suppliers and investigate whether a suitable alternative can be identified which can be recycled by conventional mechanical means	CFA	Action abandoned No resource within CFA to deliver. Initial contacts were not positive as the current structure of these products meets the requirements of certain specific site conditions very cost-effectively.
13		By end 2010, contact European manufacturers and discuss aspects of recyclability of floorings sold into the UK	CFA	Action abandoned No resource within CFA to deliver. Issues were initially raised in meetings of TC 134. Unfortunately the main suppliers of materials which are non-recyclable do not participate in either the European trade associations or the standards organisations.
14	EU chemical policy at present makes it virtually impossible to recycle post use vinyl flooring back into new flooring, due to the classification of several formerly common additives as Substances of Very High Concern (SVCH)	The vinyl flooring industry to participate in wider Industry discussions with the EU Commission and the European Chemical Agency to obtain a derogation from SVHC requirements for recycling of post consumer waste as a closed loop process back into flooring	Vinyl PLUS	The vinyl industry has been working through ECVI and EuPC on the general issue of recycling materials that contain legacy additives that are today considered problematic under REACH.
15		By end 2010, carry out trials to see if the main Substances of Very High Concern (SVHCs) can be detected in post use flooring and segregated automatically	CFA	No progress. Funding not available for trials.

Hard Flooring Material Action Plan – 2011 progress update

	Challenge	Action	Lead Organisation	Status
1	A lack of knowledge amongst both domestic and commercial hard flooring installers regarding the best practice for handling of flooring waste results in material being sent to landfill	By end 2010, the Tile Association Technical Committee to set up a working group to produce a guidance note on the best practice for the disposal of waste from tile installations The guidance note to be completed by mid-2011 and publicized widely	TTA	Action abandoned. The closure of the sole UK floor tile manufacture and the departure of the main contact from the industry has resulted in no action being taken. The TTA is now looking how this note can be produced by its own technical committee, but based on all tile products not just flooring.
2		During 2011, the Tile Association to liaise with The Stone Federation and National Federation of Terrazzo, Marble and Mosaic Specialists (NFTMMS) in issuing similar guidance notes on the disposal of waste from the installation of their products	TTA The Stone Federation NFTMMS	To be taken forward in 2012/13. The Stone Federation and TTA will set up a working group in 2012 to address this action and the wider area of sustainable products.
3		The Tile Association to recommend to B/539, the BSI committee responsible for Ceramic Tiles and Other Rigid Tiling, the inclusion of waste disposal in flooring installation codes of practice when next revised	TTA	On hold The relevant code of practice is not expected to be revised for several years. There is therefore no opportunity to revise this currently, although the TTA can still make an approach to committee B/539 to raise the subject of the inclusion of waste disposal in flooring installation when next revised.
4	Processing waste from the cutting and polishing of stone and terrazzo is carried out wet to reduce dust. This results in a slurry which is frequently a problem to dispose of other than by sending to landfill	By end 2010, the respective trade associations will communicate the results of a case study carried out by Quiligotti which shows that the cutting waste can be recovered and reused back into cement	TTA The Stone Federation NFTMMS.	Action abandoned. Quiligotti has been unable to provide any resource since the closure of its parent company and is unlikely to be in a position to do so in the immediate future, following a management buyout in December 2011
5	Some hard floorings may be thicker than required for technical reasons resulting in higher transport costs, higher waste depletion and eventually greater waste following demolition	During 2010, Quiligotti to carry out trials with the intention of reducing the thickness of standard terrazzo tiles by 18% without impairing the performance of the product. Product will not be placed on the market until the end of 2011, subject to full product testing and customer acceptance	Quiligotti	Action abandoned. See action 4 above.

Resin Flooring Material Action Plan – 2011 progress update

	Challenge	Action	Lead Organisation	Status
1	The small containers in which the liquid component materials are delivered to site are in general not recovered or recycled because of the residues remaining in them and thus end up in landfill. Some containers may even have to be registered as hazardous waste because of the residues remaining in them	By end 2010, the Resin Flooring Association to survey their members to assess the quantity and type of container packaging used	Resin Flooring Association (FERFA)	Plastic and metal containers are used as packaging for resin flooring materials, both of which are being collected and recycled by Countrywide Waste Management. 89% of hazardous waste packaging is currently being either recycled or recovered (based on participating contractors and manufacturers).
2		By end 2011, the Resin Flooring Association, working with the plastic container suppliers, to develop a strategy to explore the possibility for recycling used plastic containers	FERFA	Trials are currently being undertaken with FeRFA manufacturers and Protech Plastics Containers on the use of plastic containers produced from a percentage of recycled plastic. Results will be available by end 2011.
3	The final flooring is installed at a large number of installation sites making the collection of containers logistically and financially problematic with no centralised collection system	FERFA to investigate whether the change to waste management exemptions, which began on 6 th April 2010, may reduce the need to register if collecting containers for onward shipment to a recycler Subsequently, by end 2010, the Resin Flooring Association to issue guidance to their members on the change to exemptions for the collection of containers	FERFA	FeRFA's partner Countrywide Waste Management is able to provide a UK-wide service to handle all waste collection, either site-based or yard-based. Increasing take-up of the scheme is based on CWM's ability to provide a cost-effective service.

Appendix B: FSP Membership

Organisation	
4Recycling	Independent Floorcovering Distributors Association
Altro	InterfaceFLOR UK
Anglo recycling	Johnsons Tiles
Armstrong	JSP
Axiom Group	Karndean
Burmatex	Loughton Contracts
Carillion	Mercado
Carpenter Ltd	Milliken
Carpet and Flooring	Nora
Carpet Recycling UK	Paragon Carpets
Carpetright	Polyflor
Contract Flooring Association	Recoflor
Country Style Group	SATRA
Desso	Shackerley
Environmental Sustainability KTN	Shaw
FERFA	Tarkett
Forbo	The Tile Association
Gerflor	Tyndale Flooring
Gradus	WRAP

Appendix C: Flooring Sustainability Partnership Constitution

Purpose

The intent of the Flooring Sustainability Partnership (FSP) is to improve the sustainability of flooring through the development and delivery of practical actions, better awareness and understanding amongst all parts of the flooring supply chain, and thus contribute towards the goal of improving the flooring sector's resource efficiency and reducing the total amount of waste both produced and sent to landfill by the sector.

Membership

Membership of the FSP is open to any company or trade association involved in the production, distribution, installation, recycling, reprocessing and disposal of flooring as well as relevant government departments, independent delivery bodies, regulatory agencies and research organisations.

Chair and Deputy Chair

The FSP will appoint a Chair and Deputy Chair. The post of Chair and Deputy Chair will be for one year only and will rotate between the different sectors represented.

Secretariat

The Secretariat will be responsible for maintaining the list of FSP members and their contact details, of liaising with the Chair to decide the agenda of meetings, for circulating relevant papers and minutes of meetings.

Communications

The FSP will meet at least 3 times a year to discuss relevant sustainability issues relating to the flooring industry, and initially to monitor and report on progress towards the targets defined in the Flooring Resource Efficiency Action Plan.

