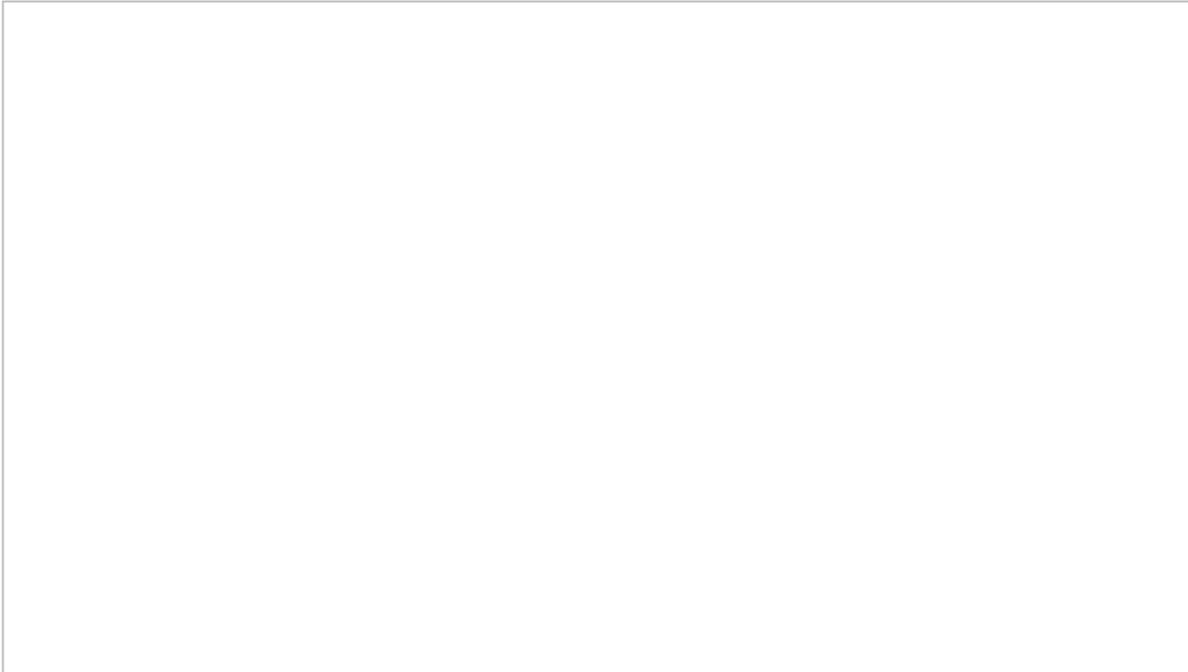


Finest quality carpets manufactured sustainably

Westex Carpets Ltd has incrementally reduced their impact on the environment focusing not only on the energy reduction but also on other components of the quality carpets production.



Description of the case study:

Westex wanted to embark on a process of environmental improvement that will enable it to fulfil its duty to its customers, employees, neighbours and the wider community being aware that its activities will affect them, both now and in the future.

This was a board-driven decision, there was no external drive, no real consumer drive, nor market drive. It was just the leadership decision being owner and manager at the same time. The involvement of the leadership is very important in the greening process because it is necessary to create the environmental awareness to build confidence within all company teams.

Description of the process

Westex Carpets key activities which have the potential for lowering our environmental impact have been the following:

1. Heat and power generation;
2. Carpet Environmental Impact and process waste generation and disposal;
3. Chemical and dye applications;
4. Water usage and conservation;
5. Factory noise and activity;
6. Traffic and delivery Management.

□

Firstly, we started with the warehouse lighting.

Replace 54 high bay 400W with 81 hi rack 80W fitting with occupancy sensors and daylight dimming.

25,582£ cost of installation - payback less than 1 year - 43% reduction in kW/hr.

The second measure was to use the heating of the machinery produced into the heating system, but there was not the business case, but thanks to the help of an external company, Westex was able to undertake a couple of projects allowing the use of heat from the machine into the heating system to be a winning decision.

There was then the decision to ameliorate the carpet machineries. The motivation of managers was the key successful aspect to address the complaint and absence of incentives. Managers started looking at components that were not previously considered, with the involvement of the financial unit, accepted to include environmental-related criteria into the procurement of new machineries. They understood the benefits and helped.

The warehouse is not only energy but also water demanding, but we are now addressing this. It is not only a matter of achieving incremental gain in natural resources efficiency, but also the necessity to obtain economic gains from the implementation of these measures.

Another future challenge is to go beyond our production process and focus on the post-production stages. Currently, CARPET RECYCLING UK struggles with the man-made carpets. The Westex team is therefore working on how to make their carpets recyclable by CARPET RECYCLING UK.

Enablers

For the implementation of some of the measures, Westex cooperated with professionals having the expertise in improving the industrial processes efficiency from an environmental and economic perspective.

Effects/Results

Currently, we are on target to achieve >0% process waste to landfill by 2015. 100% recycled. We have also achieved:

- Significant 2011 investment in UK based state of the art dye house gives us complete control of emissions and effluent.
- Continual product development in designing 're use' materials into new products.
- 10% per annum reduction of Westex carbon footprint through efficient energy and transport management.
- Ongoing, active contribution to industry wide life cycle analysis of wool and wool/nylon carpets.

Incremental 10% reduction in emissions by energy consumption and transport management constant amelioration

Barriers/challenges

Biggest disappointment is that currently enough environmental standards are in place in the industry, nor consumers awareness. We observed this not only in the UK but more generally in the whole European Union. One exception is Germany that has very high standards in the sector.

Weakness that we encountered is the lack of knowledge, skills and competences not only internally, within the company, but also externally. Westex is doing this organically, meaning without any external incentives. This is because there are no officially approved approaches available that Westex could have had a look at.

What was the type of green solution? Please select the type of solution.:

[Technology/Product](#) [1], [Organisational methods and \(green\) business plans](#) [2]

What does the featured solution contribute to?:

Resource efficiency

Which technology area(s) does the case study belong to?:

[Materials](#) [3], [Building materials](#) [4], [Resource efficiency](#) [5], [Energy efficiency](#) [6], [Water efficiency](#) [7], [Waste treatment and recycling](#) [8], [End of life product recovery](#) [9]

How was the green solution financed?:

[Private funds](#) [10]

Capital costs description:

It has been a matter of spreading the cost investing each year a determined amount throughout several years

Operating and maintenance costs:

Yes, low O&M costs

Would you characterize the green solution as:

Medium capital intensive investment (i.e. €10,000-€30,000)

Partners:

Company name

- [Westex Carpets](#) [11]

Relationship type:

Company that produced the green solution

Company that supplied or installed the green solution

Source URL: <http://greeneconet.eu/finest-quality-carpets-manufactured-sustainably>

Links

[1] <http://greeneconet.eu/type-green-solution/technologyproduct>

[2] <http://greeneconet.eu/type-green-solution/organisational-methods-and-green-business-plans>

[3] <http://greeneconet.eu/technology-area/materials>

[4] <http://greeneconet.eu/technology-area/materials/building-materials>

[5] <http://greeneconet.eu/technology-area/resource-efficiency>

[6] <http://greeneconet.eu/technology-area/resource-efficiency/energy-efficiency>

[7] <http://greeneconet.eu/technology-area/resource-efficiency/water-efficiency>

[8] <http://greeneconet.eu/technology-area/waste-treatment-and-recycling>

[9] <http://greeneconet.eu/technology-area/waste-treatment-and-recycling/end-life-product-recovery>

[10] <http://greeneconet.eu/financing/private-funds>

[11] <http://greeneconet.eu/westex-carpets>