Waste Prevention, Recycling and Reusing

Businesses are being forced to change the way they manage waste. Faced with regulations, public pressure, landfill shortages and the need for increased resource efficiency, companies are moving away from the waste treatment approach and towards waste prevention.

A number of waste prevention techniques are available, and they are commonly summarized as the so-called 4Rs: reduction, reuse, recycling and recovery.

Reduction, reuse and recycling are known in the industry as the 3Rs. Companies sometimes focus only on the first three in resolving waste management problems. In more innovative companies, 4Rs solutions often emerge as a result of industry benchmarking or technological breakthroughs.

The waste management hierarchy is as follows:

1. Wherever possible, waste reduction is the preferable option.
2. If waste is produced, every effort should be made to reuse it if practicable.
3. Recycling is the third option in the waste management hierarchy. Although recycling does help to conserve resources and reduce wastes, it is important to remember that there are economic and environmental costs associated with waste collection and recycling. For this reason, recycling should only be considered for waste which cannot be reduced or reused.
4. Finally, it may be possible to recover materials or energy from waste which cannot be reduced, reused or recycled. (burning timber for heating)

Empirical evidence suggests that by practising waste prevention, reusing products, recycling, and making environmentally conscious purchases, businesses can cut costs and increase profits. Cost savings take the form of:

- Lower waste disposal costs;
- Lower waste treatment costs;
- Lower energy costs;
- Savings on materials and supplies;
- A reduction in regulatory compliance costs;
- Lower storage costs;
- Cost recovery through the sale of recyclable materials;
- Cost recovery through sales of 4Rs technologies.

In the furnishing industry industrial waste could be in many forms such as timber off-cuts, saw dust, sanding dust, shavings, upholstery foam, fabrics, used solvents, laminated plastic off-cuts and packaging materials. Finding ways to recycle this waste is both environmentally and economically sound.
With waste minimisation through careful planning for economical reasons, the amount of waste suitable for recycling has been reduced in the furniture industry.

In larger companies, the timber off cuts can be finger jointed together to make longer pieces, and laminated to make thicker pieces.

Saw dust is being used as mulch around strawberries and blueberries and also as roughage in animal feed. Saw dust is also compressed to form wood briquettes (artificial logs) for burning in domestic heaters.

Particle board and timber off cuts can be used in the manufacture of particleboard as the middle layer.

In smaller businesses, the recycling of waste products is usually uneconomical and most waste is disposed at landfill tips.

As tip fees increase over time, the manufacturers will be forced to come up with alternatives for their waste materials. An option is to have a pick up facilitator whom would then have enough waste to be commercially viable.