

GIIRS Emerging Market Assessment Resource Guide: *Workplace Reducing, Reusing, Composting & Recycling Guide*

What's in this Guide?

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- II. Reasons to Implement These Programs in your Workplace
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I. Definitions: Reducing, Reusing, Recycling and Composting

Reducing, reusing and recycling are different waste management strategies that help preserve resources and minimize waste. Specifically, their purposes are:

- Reduce – buy less and use less
- Reuse – use a product more than once instead of discarding it after a single use
- Recycle – convert a used item into a new usable product
- Compost – use decayed organic material as fertilizer

II. Reasons to Implement These Programs in your Workplace

Reducing, reusing, recycling and composting in your workplace have positive business and environmental impacts.

Business impacts¹:

- Reduces operation costs by using less raw materials and office supplies.
- Minimizes total waste output, which in turn lowers costs associated with waste transportation, storage and disposal.
- Appeals to investors whose criteria demand strong environmental practices.
- Maintains good community relations and enhances public image.

Environmental impacts:

- Saves natural resources by slowing down the depletion of non-renewable resources and preserving undisturbed land and natural diversity.
- Reduces air and water pollution.
- Conserves landfill space by minimizing unnecessary waste output.

¹ SME Toolkit (2011). *Creating an Environmental Management System* Chapter 1: Introduction.

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III. Ways to Implement These Programs in your Workplace²

Successfully implementing a company-wide program requires the full commitment of top manager/s and the support and compliance of all employees. Companies should build awareness among all employees in order to convey the relevance of such programs and their impacts on the business. (For a comprehensive Environmental Management System, see the GIIRS EM Resource Guide: Creating an Environmental Management System.)

Reduce

Ways to limit the quantity of items used, such as paper, energy and water, in order to minimize waste.

In an office:

- Use a computerized filing system to minimize paper printouts.
- Set default on printers and copiers to double sided pages.
- Use 100% recycled printing paper.
- Communicate by email or centrally located bulletin boards.
- Share hard copies of documents.
- Encourage workers to consider their consumption of office supplies and to use only what is necessary.
- Unplug machines and electronics when not in use.
- Turn off lights when not in use.

In a factory:

- Turn off lights and unplug machines and electronic when the workday ends.
- Encourage workers to consider how they use input materials and to use only what is necessary.
- Rent rather than buy equipment and machines that are only used occasionally.
- Eliminate unnecessary layers of packaging.
- Buy essential products in bulk to reduce packaging and transportation costs.

Reuse

Ways to use an existing item again or to repurpose an existing item for a different use.

In an office:

- Write on scrap paper when taking notes or producing rough drafts of documents.
- Use received boxes and packaging for outgoing packages.
- Shred or crumple used paper to use as packing material.
- Use mugs and reusable dishware instead of disposal cups and plates, when eating or drinking.
- Join the Freecycle Network,³ which connects individuals and businesses to exchange items for free.

² Adapted from the US Environmental Protection Agency website resources www.epa.gov

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In a factory:

- Purchase used/refurbished equipment.
- Use rechargeable batteries, remembering to recycle them when no longer usable.
- Maintain and fix equipment and machines regularly in order to prolong their lifespan.

Compost

Ways to use decomposed organic substances (food and plant waste) as fertilizer.

In an office:

- Compost food waste in the office, for use on-site in a yard/garden or for contribution to a local composting business or organization.
- Compost on-site with three basic composting ingredients: *browns* (including dead leaves, branches, twigs), *greens* (including grass clippings, vegetable waste, food scraps and coffee grounds) and *water*. For specific instructions, see the composting guide from the US Environmental Protection Agency in the Resources section below.

In a factory:

- Identify a local composting company that can periodically pick up materials from your factory that may be composted, such as cotton and wool rags, burnt wood ashes, sawdust, and wood chips.
- Implement a composting program in the factory for organic materials.

Recycle

Ways to use parts of or all of a material to manufacture another product.

In an office:

- In many countries, the government or recycling companies will recycle paper, glass, aluminum and/or plastic. Identify how to recycle these materials locally and arrange a periodic pickup.
- Install easily accessible recycling bins for paper, plastic, and metal.
- Educate employees about the recycling program. Discuss what materials are accepted and how to recycle them appropriately.
- Recycle used printers and ink cartridges. Contact your supplier for more information.

In a factory:

- Concrete and asphalt can be crushed and used as an aggregate in pavements or as structural fill.
- Coal fly ash, slag, and spent foundry sand can be recycled in concrete, road embankments and kinds of fillings.
- Coal ash can be used in the manufacture of cement and ceiling tiles.

³ Freecycle Network is a global network that provides a platform for local groups and businesses to donate and receive free items for reuse and recycling. To learn more, visit: <http://www.freecycle.org>

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- Flue gas, desulfurization gypsum, foundry sand, and pulp and paper byproducts can be used in manufactured soil and agricultural amendments.

Examples:

Owens Corning, the global leader on glass fiber technology, went 100% paperless by only communicating via email, and by using a software program to store all company documents and images.

A group of growers in Nicaragua share tractors and other farming equipment and have saved significantly on equipment costs.

In Zaire, a health clinic serving 50,000 outpatients per year runs completely on solar panels powering everything from x-ray equipment to air conditioning. The clinic's use of this renewable energy has reduced its energy costs and helped preserve finite natural resources.

India's Oil and Natural Gas Company, was rated among the nation's greenest companies due to its Mokshada Green Cremation Initiative⁴, which decreased its wood consumption by over 60% and reduced its burning time by a fourth.

IV. Resources

The Bureau of International Recycling has resources for recycling and reusing ferrous metals, non-ferrous metals, paper, textiles, stainless steel, plastics and tires.

<http://www.bir.org/about-bir/introduction/>

The US Environmental Protection Agency (www.epa.gov) has many web resources on reducing, reusing, composting and recycling. One resource that is particularly useful is the Backyard

Composting Guide - <http://www.epa.gov/osw/conservation/rrr/greenscapes/pubs/compost-guide.pdf>

For country-specific resources, check your national environmental affairs department.

⁴ <http://www.mokshda.org/>