Newsletter on Eco-labelling and Eco-friendly Products



Vol. 01, No. 03

January - March 2007



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Ministry of Environment and Forests, Government of India ENVIS Centre on: Eco-labelling and Eco-friendly products

Foreword

ueer as it may sound, but if you were to patiently compile a list of things that you can recycle, it might build into a pile of amazing facts. Apart from the usual stuff of PET bottles, glass, paper, aluminium cans, appliances, cars, and many more things, the list tenaciously builds up with innumerable tangibles and intangibles like glances, tears, smiles, thoughts, dreams, memories and going by the theory of reincarnation - even life!



Good waste management practices hold a very important key to the success of recycling strategy. Figures suggest 60 per cent of all household waste could be recycled or composted, but the largest nation in the UK, England, appears to be reusing only 17.7 per cent. The story is no different with the other nations. The US doing their recycling bit at 28 per cent, the Danes at 32 per cent, the Germans at nearly 40 per cent and the Austrians leading the recycling brigade at nearly 70 per cent of the waste getting recycled. Though, a glimpse of waste management practices in the EU indicates that the good burying or landfilling still seems to be a favourite among the stakeholders.

Identifying the ideology and the methodology of recycling of the waste is very important, which surprisingly does not cost the earth but requires a caring and sustainable approach on the part of the urban planners. Swiss experience tells us the story that recycling is as simple as arranging the apple cart. In Switzerland, there are bottle banks at every supermarket, with separate slots for clear, green and brown glass. Every town has a free paper collection once a month, and that does not mean just old newspapers; most people recycle everything made of cardboard or paper, from cereal packets to old telephone bills. But the Swiss do not recycle just because they care about the environment; there is a strong financial incentive. Recycling is free, but in most parts of Switzerland throwing away rubbish costs money - each rubbish bag has to have a sticker on it, and each sticker costs at least one Euro.

In Germany, there are at least five types of rubbish bin in the courtyards of apartment buildings and inside houses. Luckily, the bins are color-coded, to avoid any confusion - a yellow bin for packaging (old milk cartons, etc.), a blue bin for paper and cardboard, bins for glass (separated into ones for clear, brown and green glass), a "bio" bin designed for left-over food and plant waste. Finally, there is a black bin for the rest of the rubbish (or for those people who do not bother to sort out their rubbish). Perhaps, in this country we can begin with black bins in the courtyards so as to mercifully avoid the overflowing of the rubbish out of the streetside skips.

We share common sights with Greece and Italy - the recycling bins so common in most European cities are a rare sight in these countries. It is not all that too bad for us, after all. India too, is in the news for adopting a very innovative way to recycle its waste by creating the Rock Garden of Chandigarh. Hailing it as a monument to recycling, **National Geographic** further portrays it as "...a glorious testament to the artistic and intrinsic value of trash".

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The Advantages Of Recycling

Wan L., Portage, MI

These days people are uncertain what they can do to help save the whales or the rain forest. But they can start increasing their friendship with the environment by recycling the waste of their everyday lives. Most of our household waste goes to the dump. Let's say you have a two-liter soda bottle, should you recycle it or throw it away? If you recycle it, you could increase the raw material to make new products (like pillow stuffing, carpeting, or jacket insulation).

By recycling material in your daily lives, you will perpetuate the lifetime of useful material without using up new resources. For example, aluminum cans are about 25% cheaper to recycle than to make from new raw materials and require only five percent of the energy. But still only one million tons of aluminum cans are recovered while 1.7 million are discarded every day and end up in landfills or as pollutants.

Steel is another good example. It is 100% recyclable and can be reprocessed for use almost indefinitely. But, like aluminum, more steel is discarded than recycled. Almost two million tons of steel is recovered while 10.4 million tons are discarded. If we recycled all our steel and aluminum, we could save 11 million tons of metal.

If we recycled all our recyclable waste materials, think of what a difference we could make in our lives, environment, and our natural resources.

In practice though, recycling can be troublesome and at times expensive. If a company takes the time to think carefully and plan accordingly, then over time, the process and efficiency of recycling will improve and the payback will be enormous.

As you may have realized, recycling is a powerful way for renewing our supply of natural resources, and will do much good of all mankind and our Mother Earth.

Reference : (http:/teenink.com/Past/1997/8929.html)

Recycling - The Consumer Cycle

We all know that we should be recycling. But do you know what actually happens to the stuff you send for recycling? Recycling basically goes through three steps. The consumer is involved directly in two of the steps: collection and purchasing.

1. Collection. The consumer's responsibility. Depending on your community, you can recycle in at least one of several ways. Check with your community to see if there is curbside recycling in your area. Normally the city issues you a recycle bin and instructions on what types of glass, plastic and paper can be put in the bin. Not all plastics are accepted by all recyclers, so pay close attention to the number on your plastic container. Some areas also have drop-off center, where you can take all of your recyclables to. Some states have a deposit on materials, such as aluminum or glass bottles. You pay a deposit when you purchase the item and can return it for a refund when you are finished. There are also buy-back centers, such as newspaper centers, where you arepaid a certain amount by the weight of the materialyou bring in.

Processing and Manufacturing. 2. Once the materials have been returned by the consumer, they are then taken to a processing center. All of the materials are sorted and at this time are purchased by companies who use them for manufacturing purposes. There is a market for these recycled materials, just as there is for the new product. The manufacturers who have purchased the sorted material then clean it and process the material into an end product. These products can be partially or completely composed of recycled materials. The most common items that use recycled products are glass and aluminum soda bottles/cans, newspaper and cardboard. These materials can also be used in new ways, such as plastic fencing (from recycled plastic bags and bottles), road asphalt (from recycled glass) and even carpeting.

3. **Purchasing**. Now the consumer comes back into the picture. You can make the choice to purchase items that contain recycled materials. The more these recycled items are purchased, the more in demand they will become and the more successful recycling as a whole will be. When purchasing recycled materials, you need to look for phrases such as: "contains x% post consumer content" or "recycled content". There is a definite difference between these 2 terms. Post



consumer content is product that has been used and is now reclaimed through the recycling process. You will likely see this term used for paper products such as paper towels, or printer paper. Recycled content is material that is considered waste, or leftover from processing another product and might otherwise be land-filled, which is used in a different product and was not procured through a recycling program. Products that contain this material are items such as toner or ink cartridges.

Recycling is very important for the health of our planet. When consumers participate in steps 1 and 3, they then bring recycling into a continuous full circle.

(Http/recyclingguideto.com/a/336383/Recycling++The+Consumer+Cycle.html)

Is Recycling Always A Feasible Option?

Did you know that lots of materials can be recycled and that almost every material needs different recycling techniques? It is a fact that recycling is a necessity in our lives and that we need to recycle materials as long as we have the desire to continue living. It is just that simple. Without reusing the resources we will obviously run short of any more of them, because we only have so much available.

Recycling refers to a series of processes involving collecting of recyclable materials that otherwise considered as waste and sorting them into forms of fibers and reproduction into usable products at factories.

Although the recycling rate has doubled in the last fifteen years, recycling is still evolving in the US and the figures are far less than satisfactory. It was estimated that about 64 million tons of waste materials were recycled in 1999, but today the estimates are that 28% of the waste material in the US is recycled.

The recycling growth rate for individual recyclable material is even better. Paper recycling jumped to 42%, plastic soft drink bottles recycling reached 40%, aluminium beer and soft drink can recycling reached 55%, steel packaging recycling is at a staggering 57%

and recycling of appliances is about 52%.

Since recycling is so vital for the continuity of the life cycle, its success is of the utmost importance to our society and to make it really work everyone needs to participate and do their part at different phases of the recycling loop. This includes governmental authorities, industries, businesses and individuals at home. Some people take it lightly. I know many people did in my area when the municipality first started a waste collection sample program by distributing those green and black bins to houses and very few cared to follow the instructions, which caused the municipality to give up the program for a while before restarting it after several years.

We need to improve the awareness of the importance of recycling and let everyone do their part. Municipalities are doing a good job at this regard and are also ready to issue \$25 fine tickets for those who don't comply. Excuses like I ran short of bins does not help any more.

Collection of the recyclable materials is just the first step in the recycling process and to be a success, many processes need to be followed, but the role of the individuals is mainly in this first vital step. Society will be hugely rewarded in terms of the environmental and financial standpoint. The environmental part might be obvious, but an example of a financial gain is that manufacturing aluminium cans from recycled aluminium waste is much less expensive and less energy intensive than the process of providing raw materials and the manufacturing of cans from scratch.

In spite of all the glory of recycling rewards, it is not always an economically feasible option to be mandated by the government in all cases. Recycling success depends on the local level and the structure of the community and its available resources. The availability of the markets for the collected materials and costs of the recycling program should be considered well before starting the collection process. It should be confirmed from the beginning that enough resources are available to make recycling are economically feasible option.

Reference:http://recyclingguideto.com/a/338000/is+Recycling+always+a+Feasible+option?.html



Q&A On the Environmental Benefits of Recycled Paper By Environmental Defense and the Alliance for Environmental Innovation

Q Is recycled paper better for the environment than virgin paper?

A Yes! It's common sense that making new paper from old paper is easier on the Earth.

Here's why:

It helps preserve forests, because it reduces demand for wood;

It conserves resources and generates less pollution during manufacturing, because the fibers have already been processed once; and

It reduces solid waste, because it diverts usable paper from the waste stream.

Rigorous scientific research supports the benefits of recycled paper, and government agencies, environmental groups, and many other large purchasers have adopted policies mandating its use. You can be assured that you are doing the right thing for the environment by buying recycled paper, and the higher the level of post consumer recycled content, the better. Read on for answers to more specific questions about why recycled paper is the right choice for the environment.

How Paper Recycling Benefits Forests

Incorporating recycled fiber reduces the amount of virgin fiber (i.e., trees) needed to produce a given amount of paper. This helps to reduce pressure on forests and the environmental impacts of commercial forestry.

Q Does paper recycling save trees?

A Recycling reduces the total number of trees that are cut down to make paper and can reduce overall demand for wood. But more importantly, paper recycling saves forests. By substituting used paper for trees, recycling reduces the overall intensity of forest management needed to meet a given demand for paper, and the pressure to convert natural forests and ecologically sensitive areas like wetlands into tree plantations. With recycling, not only will fewer trees be harvested to make paper, those trees that are harvested can be produced using methods that have less impact on the environment. Thus recycling helps preserve the full range of values that forest ecosystems provide, including clean water, wildlife habitat and biodiversity.

Q Doesn't the paper industry replant more trees than it cuts down?

- Α Generally yes, but replanting trees is not the same thing as preserving forests. Growing demand for paper has fueled the rapid conversion of natural forests to tree plantations. In the U.S. South, where most of the trees used to make paper are grown, the area of natural pine forest declined from about 72 million acres in 1953 to 33 million acres in 1999. During the same period, pine planting grew from 2 million acres to 32 million acres, and are projected to reach 54 million acres in 2040, in large part at the expense of natural forests. While pine plantations are excellent at growing wood, they are far less suited than natural forests to providing wildlife habitat and preserving biodiversity. By extending the overall fiber supply, paper recycling can help to reduce the pressure to convert remaining natural forests into tree farms.
- Q Do the young trees in plantations consume more carbon than older trees?
- A If you're concerned about climate change, you want older forests, not younger ones. While



younger trees may *absorb* carbon more rapidly, older trees *store* vastly more carbon, thereby reducing concentrations of greenhouse gases in the atmosphere. Moreover, every time trees are cut down for paper, much of the carbon they have for paper, stored is released. By reducing the demand for virgin fiber, recycling can reduce the frequency at which trees are cut and increase the total stock of carbon in forests. Recycling also helps maintain the stock of carbon stored in paper by reusing it multiple times, instead of allowing it to decompose in landfills and produce methane, a potent greenhouse gas.

Q Do younger trees release more oxygen than older trees?

A There is plenty of oxygen already in the atmosphere, so this is not an environmental concern. If it were, older trees would still be preferred to younger trees, since they release much more oxygen over their lifetime, even if the rate slows as they age.

How paper Recycling Reduces Pollution During Manufacturing

Making paper from used paper is generally a cleaner and more efficient process than making paper from trees, since much of the work of extracting and bleaching the fibers has already been done. That means less total energy, water, and chemical use, and lower releases of air and water pollutants.

Q Which takes more energy to produce, recycled or virgin paper?

A Producing recycled paper uses much less total energy than producing virgin paper. Depending on the grade, producing recycled paper may use more or less <u>purchased</u> energy (a subset of total energy), in the form of fossil fuels and purchased electricity. Virgin freesheet grades require slightly less purchased energy to produce than recycled ones, because some of their energy needs are met by burning wood-derived process waste. Virgin groundwood papers, by contrast, require more purchased energy to produce than do recycled groundwood papers.

Q Is it better to use wood as an energy source rather than fossil fuel?

A Both energy sources have significant-if different-environmental impacts. Extraction and use of fossil fuels for energy depletes a non-renewable resource and releases air pollutants and greenhouse gases. But there are analogous impacts associated with extracting and using wood for energy.

> First, growing and harvesting trees can deplete a non-renewable resource-natural forests. As noted above, intensive management practices used to grow trees for paper including both the part of those trees that goes into the paper itself and the part that is burned for energy-can adversely affect water quality, biodiversity, habitat for endangered plants and animals, and the integrity of natural forest ecosystems. Thus, while intensive management can arguably regenerate the quantity of wood, it cannot renew many of the ecological values of natural forests.

> Second, burning wood for energy creates air pollution just as burning fossil fuels does. On a lifecycle basis, when all energy sources are considered, releases of air pollutants are generally much lower for recycled than for virgin paper.

> Third, even when recycled paper production uses more fossil fuel than its virgin counterpart, on a lifecycle basis the recycled system generates fewer greenhouse gas emissions-see next question.

Q How does switching to recycled paper reduce greenhouse gas emissions?

A The environmental advantages of recycled paper hold true even when more fossil fuel-

derived energy is used to produce it. (As noted above, this is true only for freesheet grades.) In the landfill, where 80% of discarded paper ends up, the decomposition of paper produces methane, a greenhouse gas with 21 times the heat-trapping power of carbon dioxide. Paper recycling recovers used paper from the waste steam, directly reducing the amount of paper landfilled. Thus for recycled papers, any increase in greenhouse gas emissions during manufacturing is more than outweighed by reductions in emissions from landfills.

Q Given that paper mills are typically located near forests and far from sources of wastepaper, what about the energy needed to transport recovered paper to mills?

A Lifecycle analysis shows that even after the energy used to collect, transport, and process used paper is accounted for, the recycled paper system uses much less total energy than the virgin paper system. This is because the energy needed to recover used paper and get it back to the mill is quite small relative to the energy saved by using recovered paper rather than trees to manufacture new paper.

> Don't forget that making virgin paper also requires energy to cut, collect and transport trees to the mill, all of it fossil fuel-derived. And while the distances are shorter, the magnitude is greater between 2.2 and 4.4 tons of wood are cut and transported for every ton of virgin pulp, versus 1.4 tons of waste paper for a ton of recycled pulp. Thus, the energy required to obtain and process trees (for virgin paper) and used paper (for recyled paper) is quite comparable.

Q What other manufacturing impacts are reduced by switching to recycled paper?

A Aside from reducing total energy use and greenhouse gas emissions, switching to recycled paper cuts emissions of other air pollutants such as nitrogen oxides (which contribute to smog), and particulates (which contribute to respiratory problems). It also reduces the volume and improves the quality of wastewater from the paper mill.

Q Why does wastewater volume matter?

Wastewater volume is a meaningful environmental measure, as it indicates both the amount of fresh water needed in production and the potential impact of wastewater discharges - that's why it's often regulated. The withdrawal and return of large amounts of water from rivers and streams can have major ecological impacts, which are made even worse at drier times of year and during droughts. And even treated wastewater carries with it various processrelated pollutants. Our side-by-side comparison found that on average, virgin paper production requires substantially more water and yields waste-water that has significantly higher levels of major water pollutants than does recycled paper production.

Q What about the sludge from recycled paper mills?

A Recycled mills do generate more solid waste, mostly in the form of sludge, than virgin paper mills. However, that increase is more than offset by the reduction in solid waste that comes from diverting paper from the waste stream. And the same inks, coatings, and fillers present in recycling mill sludge would go into the ground anyway if the paper were landfilled instead of recycled. Finally, recyclers are increasingly finding ways to reclaim and reutilize some components of recycled paper sludge, which can't happen if that paper goes to a landfill or incinerator.

Q Aren't pulp and paper mills much cleaner than they used to be?

A Many are, thanks to environmental regulations implemented during the last several decades. They would be even cleaner if they increased their use of recycled fiber.



How Paper Recycling Reduces Solid Waste

Recycling paper means that less of it is disposed of in landfills and incinerators.

This lowers air and water pollution at these facilities, as well as greenhouse

gas emissions that arise when paper breaks down in landfills.

Q Don't we have plenty of landfill space? If so, why recycle paper?

Α The environmental advantages of recycling extend well beyond saving landfill space, which varies cyclically as well as regionally across the United States. Paper recycling also reduces environmental impacts "upstream," in the forest and at the paper mill. By adding to the available fiber supply, paper recycling conserves wood and other forest resources, and reduces environmental impacts (energy use, air and water pollution, and solid waste) during manufacturing. Finally, by reducing paper's contribution to landfills, recycling avoids releases of methane and other pollutants, and reduces the need to site additional landfills where such releases would occur.

Q Why are methane releases from landfills an environmental concern?

A Methane, a gas with 21 times the heattrapping power of carbon dioxide, is a potent greenhouse gas and contributor to global climate change. The U.S. EPA cites municipal landfills as the single largest source of methane emissions to the atmosphere, and has identified the decomposition of paper as among the most significant sources of landfill methane.

Q If recycled paper is ultimately landfilled, how does recycling reduce solid waste?

A Each time paper is diverted from the waste stream and used to make recycled paper,

there is a direct reduction in solid waste. Think of it this way - if you use a piece of paper once, then erase and use it again before throwing it away, you create less waste than if you used two pieces of paper and threw them both away. Similarly, even if a sheet of recycled paper is eventually landfilled, the recycling process still reduces the total amount of paper landfilled.

Other Questions About Recycled Paper

Q What's the difference between postconsumer and preconsumer recycled content?

Α Postconsumer materials are finished products that have served their intended end use and would otherwise end up in a landfill or incinerator. Preconsumer materials include trim and scrap from manufacturing processes (e.g., the conversion of paper rolls into envelopes) and over issue publications. Unlike preconsumer fiber, postconsumer fiber is not typically included in paper at any significant level unless purchasers specify it. Buying paper with postconsumer recycled content achieves direct reductions in wood, water, and total energy use, releases of pollutants during manufacturing, and solid waste and greenhouse gas emissions from paper decomposing in landfills. It also supports business and community recycling programs, and creates an incentive for paper manufacturers to use more paper diverted from disposal.

Q What's so great about 10% postconsumer recycled content in catalog paper?

A Most paper called "recycled" is made from a blend of virgin and postconsumer fiber. Right now, due to functional and economic issues (including lack of demand) the most widely available and cost-competitive level of postconsumer recycled content in catalog paper is 10%. Given the amount of paper that the catalog industry uses (3.6 million tons in 2001),



even a switch to 10% yields big benefits, and is a critical first step to achieving higher levels in the future. Obviously, the higher the postconsumer recycled content, the bigger the environmental benefits.

How Paper Recycling Reduces Solid Waste

- Q Is it worth all the effort, if the percentage of recycled fiber that would end up in catalog paper is so small?
- It's easy to claim that because one is only a small Α part of the problem, it's not worth being part of the solution. Such an attitude accomplishes nothing, and in the case of the catalog industry, has no basis in reality. The catalog industry used 3.6 million tons of paper in 2001 - 12% of all printing and writing paper consumed in the United States. Obviously, if such large purchasers started specifying recycled paper; there would be a substantial increase in used paper recovery. But increasing the recovery rate is a secondary concern. What should be foremost in the minds of paper users are the environmental benefits of switching to recycled paper. If the entire catalog industry switched to just 10% postconsumer recycled paper, the savings in wood use alone would be enough to stretch a six-foot fence across the United States seven times. Higher levels of postconsumer recycled content will achieve even larger environmental gains.

Q Doesn't it make more sense to recycle all paper by putting it into lower grades of paper instead of printing and writing papers?

A Certainly not from an environmental standpoint. The benefits of substituting recycled for virgin fiber are generally larger in higher grades (especially those made from chemical pulp) than lower grades such as newsprint, corrugated boxes, and tissue. And from a supply perspective, there is more than enough recovered paper to supply recycled pulp for both printing and writing papers and lower grades.

Notes and further reading:

The scientific basis for these conclusions is the

analysis of the Paper Task Force, a three-year research project convened by Environmental Defense and involving Duke University, Johnson & Johnson, McDonald's, Prudential Insurance, and Time Inc. The Paper Task Force examined environmental impacts through the full lifecycle of

Paper, along with economic and functional issues across major paper grades. Its findings were extensively peer-reviewed by scientists, academics, environmental experts, and government and industry representatives. The full Paper Task Force report, with supporting technical papers and recent updates to the lifecycle environmental data can be found at www.environmentaldefense.org/article.cfm?ContentID=1689.

Ecomark yet to make mark in India

Lack of awareness keeps Indian firms from registering for ecomarked products

> Jumana Shah Ahmedabad

It is no secret that the vegetables one eats contain as much pesticide content as a soft drink. But what most people may not be aware of is that they have an option not to buy contaminated products by choosing eco-friendly products that come with an eco-label. However, in India not a single company has as yet come forward to register its products or services.

Eco-labelling was introduced in India as 'Ecomark' in 1991 for easy identification of environment-friendly products.

It is given to organic products and services produced without the use of chemicals and pesticides.

These issues came to light at a conference by Center for Environment Education and Consumer Education and Research Centre on 'Eco-labelling' on Monday. Experts highlighted problems like lack of awareness among consumers and manufacturers as the main problem 'Ecomark' not catching up in India.

"Ecomark is essentially a certification to make sure that the consumers get the best products. However, the product categories included are hardly relevant to the consumer," said Rajan Gandhi, director or Safety Action Group.

He added that 'Ecomark' is given to a company by the Central Pollution Control Board(CPCB) after a quality certification by the Bureau of Indian Standards(BIS), which requires a quality certification by the ISI. "But the BIS is perceived to be a corrupt organization and manufacturers believe the quality of their product is much better than the extent of ISI certification. They refuse to oblige and the matter ends there," he said.

The guidelines provided in Indian certifications are derived from international standards for quality to keep the products at par for exports, particularly in the European Union. However, IIM-A professor Anil Gupta feels India should not derive its own standards of certifying Indian companies.

DNA MONEY / Dt.13.03.07



RECYCLING NOTES

Good to recycle	Bad to recycle	Notes			
<u>Unbroken glass</u> <u>containers</u> Clear is the most valuable. Lids can go with metal.	Ceramics, pyrex, tablware, windows, lightbulbs, mirrors. Broken glass is hard to sort.	Only bottle glass is acceptable. Ceramics contaminate glass. Glass is normally color sorted for recycling.			
<u>Clean dry</u> <u>newspapers &</u> newspaper inserts	Rubber bands, plastic bags, product samples, water, dirt, mold or other contamination.	Pack newspapers tightly in large brown grocery sacks or tie with natural twine. Keep dry.			
Empty metal cans, caps, lids, bands and foil	Full cans, spray cans unless instructed, cans with paint or hazardous waste.	Metals can be recycled again and again.			
Plastic stamped 1 or 2 on the bottom. Some areas only accept clear plastic or certain shapes.	Plastic types #3, #4, #5, #6 or especially #7. Caps are usually a <i>different</i> type from the bottle - toss if unmarked.	Even a small amount of the wrong type of plastic can ruin a melt. Much plastic collected for recycling is actually landfilled.			
Grocery bags, most clear plastic bags especially if marked #2 or #4	Paper, water, dirt, mold or other contamination.	Reduce your need; reuse bags until they're torn. Use old bags to pick up dog waste. Many grocery stores have a barrel for recycling old bags.			
Mixed paper: junk mail, magazines, photocopies, computer printouts, cereal/shoe boxes, etc (some places also take corrugated cardboard And phone books)	Stickers, napkins, tissues, waxed paper, milk cartons, carbon paper, laminated paper (fast food wraps, some food bags, drink boxes, foil), neon paper, thermal fax paper. Any wet or food stained paper.	When in doubt, throw it out. Paper fiber can be recycled about 7 times before it gets too small. Plastic window envelopes are ok.			
Scrap aluminum such as Lawn chairs, window Frames and pots	Metal parts attracted to magnets. Non-metal parts.	Aluminum is not attracted to magnets.			
There is no need to remove labels or bands from cans and bottles. Clean only enough to prevent odors. Do not recycle containers with traces of hazardous materials. Do not recycle dirty or food stained paper.					
Motor oil(never dump into storm drains) and Tires.					
Automotive batteries, sealed lead/gel-cell batteries	Keep lead out of the environment; take to an automotive or security dealer for recycling or trade in.				
<u>Rechargeable batteries</u> (cordless Phone, camcorder, shaver, portable appliance, computer, etc.)	Throw alkaline and heavy duty batteries in trash unless prohibited (See California Universal Waste Note. Nickel-Cadmium rechargeable batteries contain toxins, please recycle.				
Laser/Ink printer cartridges	Send to one of the many recyclers o	r refillers.			
Household toxics(paints, oils, solvents, pesticides, cleaners)					
Computers, eyeglasses, household goods					



	<u>ECO-FRIENDLY RECYCLED</u> <u>PRODUCTS</u>
3	Mobius Loop This indicates whether the product can be recycled.
÷,	Mobius Loop with Percentage This indicates how much of the product is made from recycled materials.
6)	Tidyman Symbol Implies that you should dispose of the product carefully, do not litter.
2	Green Dot Indicating that the recovery of packaging material in some European countries has been paid for.
ૣ	European Ecolabel A European symbol that shows the product has been produced in an environmentally friendly manner.
3	Green Seal A symbol used by the USA to show that a product has been produced in an environmentally friendly manner.
俞	Glass This symbol indicates to recycle glass in bottle banks.
alu	Aluminium This symbol indicates that the product is made from recyclable aluminium.
î <mark></mark>	Steel This symbol indicates that the product is made from recyclable steel.
	Plastics These symbols indicate the type of plastic the product is made from:
A PETE	Polyethylene Terepthalate
ADPE	High Density Polyethylene
\$	PVC
A LOPE	Low Density Polyethylene
5	Polypropylene
<u>م</u>	Polystyrene
•	



The international recycling symbol

Reference : (http://en.wikipedia.org/wiki/Recycling)

Comparing Recycling with Normal Extraction

Aluminium	Recycling 1 kg of aluminium saves up to 8 kg of bauxite, four kg of chemical products and 14 kwh of electricity. It takes 20 times more energy to make aluminium from bauxite ore than using recycled aluminium.		
Glass	A 20% reduction in emissions from glass furnaces and up to 32% reduction in energy usage. For every 1000 kg of recycled glass used, approx 315 kg of <u>carbon dioxide</u> and 1,200 kg of raw materials are spared.		
Paper	1000 kg of paper from recycled material conserves about 7,000 US gal (26,000 L) of water, 17-31 trees and 4,000 kwh of electricity. Milling paper from recycled paper uses 20% less energy than it does to make paper from fresh paper trees grown on tree farms at the cost of more pollution caused by additional transportation and chemical cleaning		

Reference : http://en.wikipedia.org/Recycling

RECYCLING PLASTIC MATERIALS

If the logo is displayed on a dark background, it indicates that the packaging has been made from recycled material. If the logo is on a light background then the material is suitable for recycling. In order to successfully recycle plastic, it is vital that it is not mixed with other types. Even a small amount of the wrong type of plastic can destroy the melt. In order to combat this problem the industry has come up with a numbering system to help us differentiate between the various types of plastics. All products and packaging made from plastic should have the recycling logo with a number in the centre of it. The table below indicates what each number stands for:

1. PETE (polyethylene terephthalate)	some waterproof packaging
2. HDPE (high density polyethylene)	Milk, detergent and oil bottles, toys and plastic bags
3. PVC (polyvinyl chloride)	Food wrap, vegetable oil bottles, bubble wrap
4. LDPE (low density polyethylene)	Many plastic bags, shrink wrap, garment bags
5. PP (polypropylene)	Refrigerated containers, some bags, most bottle tops, some carpets, some food wrap
6. PS (polystyrene)	Throwaway utensils, meat packaging, protective packaging
7. Other (mixed plastics)	No recycling potential - must be Landfilled.
	(Society of the Plastics Industry - SDI)

http://www.recycling-guide.org.uk/products.html

Reference: http://www.naturalcollection.com/organic/recycling-guide.asp



CERC ENVIS



Environmental Labels World - Wide

	ASIA		EUROPE
	India		France
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PERIODICAL PRINTED & PUBLISHED BY Ms.PRITEE SHAH ON BEHALF OF CONSUMER EDUCATION & RESEARCH CENTRE, 'SURAKSHA SANKOOL', THALTEJ, SARKHEJ-GANDHINAGAR HIGHWAY, AHMEDABAD 380 054

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