

# Solid Waste Management Outreach Programme



## RECYCLING



**The Integrated Solid Waste Management Programme (ISWMP)**, a Programme implemented by the Solid Waste Project Unit, is the long term plan for managing solid waste in Barbados. The ISWMP is centred on waste minimisation. The application of the 4Rs (Reduce, Reuse, Recycle, Recover (energy)) is a very important aspect of the Programme and within the last few years there has been a very strong emphasis on the third of these 4Rs, Recycling. The concept of the 4Rs is a hierarchy where the first R, Reduce, focuses on decreasing the quantity or toxicity of waste produced. The second, Reuse, suggests alternate uses for an item rather than disposal after its first use. The third of the 4Rs, Recycle, means to take an item and change it into something else by putting it through a process so that it can be useful once again. The fourth R, Recover speaks to the recovery of energy from waste and includes processes such as incineration and the use of landfill gas. In a landfill, garbage decomposes to produce methane and this methane can be used as a fuel to produce energy.

Barbados is a Small Island Developing State (SIDS) in the Eastern Caribbean. With a land area of 430 km<sup>2</sup>, and a population of approximately 270,000, it is easy to understand that land is a very scarce resource.

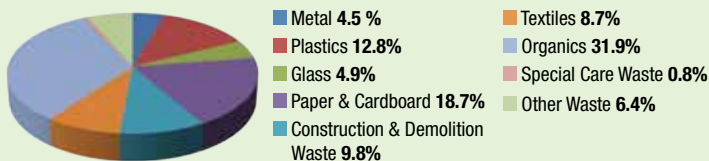
Three waste characterisation studies were commissioned by the Government of Barbados to establish an estimate of the quantity and composition of the municipal solid waste stream in Barbados. The first waste characterisation study was conducted in 1993, the second in 2005 and the third in 2015. In 1993, approximately 265 tonnes of solid waste were disposed to landfill per day. In 2005 that number soared to a staggering 1000 tonnes of solid waste per day. In 2015 the average weight remained around the 1000 tonnes per day mark. It must be noted however that this is the combined amount of waste which includes municipal solid waste, construction waste and green waste. The results of the three waste characterisation studies are summarised in Table 1. With the information outlined in this brochure, persons should understand that it is through the efforts of all individuals seeing waste as a resource, ensures a cleaner, healthier Barbados now and for future generations.

## WASTE CHARACTERISATION STUDY – 2005

Waste Category	1993 (265 tonnes)	2005 (1000 tonnes)	2015 (1000 tonnes)
Organic non yard waste	33	30.6	31.9
Organic yard waste	26		
Paper	20	23.9	18.7
Plastic	9	16.2	12.8
Glass	5	7.2	4.9
Metals	5	6.8	4.4

Table 1: Summary of the results of the Waste Characterisation Studies 1993, 2005 and 2015

\*Note that in 2005 and 2015 the total quantity of organics is not broken down into yard and non-yard waste.



A viable recycling programme for Barbados would significantly reduce the quantity of waste going to landfill thereby increasing its lifespan. By extension, recyclable items would be considered resources rather than wastes.

Returning items for reuse or recycling is not a new practice for Barbadians. The Returnable Containers Act (1986) an Act to provide for the control of the sale of beverages in beverage containers, the payment of a deposit on beverage containers, a refund for the return of those containers and the final disposal of unused or usable containers, has worked well to reduce the amounts of some glass and plastic beverage containers entering the landfill. The Act however does not adequately address other containers or other waste. For this reason the Act is being revised to ensure that it is more relevant to today's situation as the number and types of items that can be recycled have increased. That being said there are still several types of wastes currently being recycled in Barbados. These include paper, plastics, glass, ferrous (containing iron) and non-ferrous metals, used cooking oil, used automotive oil, newsprint, cardboard and batteries. Information on recycling these types of items is expanded in this brochure.

## THE SUSTAINABLE BARBADOS RECYCLING CENTRE



The physical component of the Integrated Solid Waste Management Programme includes a Waste Management Centre at Vauclose St. Thomas which represents a Public Private Partnership (PPP) initiative called the Sustainable Barbados Recycling Centre or SBRC. This comprises a Transfer Station with a Materials Recovery Facility, a Construction & Demolition Waste Facility, and Yard Waste Facility. At the entrance to SBRC there is a scale house where all vehicles that transport waste into or out of the facility are weighed. The weights are recorded so that information on waste generation can be used to assess trends in the quantities of wastes disposed

of in Barbados. To date the daily waste generation rate in Barbados fluctuates between 900 and 1200 tonnes per day. After processing at the SBRC Facility, the amount of waste that leaves the Facility for disposal is reduced to approximately 670 tonnes of which 300 tonnes goes to landfill. All household and institutional waste collected is taken to this Facility to be processed. All organic wastes are used to produce mulch and compost which can be used for local agricultural and horticultural purposes. The Construction and Demolition Waste Facility receives clean loads of construction waste including topsoil, marl and demolition waste like wood and concrete. The Yard Waste facility receives coconut shells, waste from landscaping and wood pallets for the production of several types and grades of mulch and compost. These mulches and compost are available by the tonne directly from the SBRC facility or by the bag from several hardware and home improvement stores around the country.

There is also a public drop-off area for persons interested in bringing recyclable items directly to the Facility.

All recyclables entering the Facility are diverted towards recycling as far as possible and only those residual items which cannot be reused or recycled are taken for disposal to the sanitary landfill. These efforts, along with those of the local recyclers as well as other diversion efforts, have ensured that minimal waste enters the Mangrove Sanitary landfill and the SBRC boasts a 70% diversion rate thereby conserving our valuable land resource.

All garbage - household, commercial and institutional waste.	<b>Sustainable Barbados Recycling Centre</b> Vaucluse St. Thomas Tel: 425-2255 Website: <a href="http://sbrcinc.com">sbrcinc.com</a>
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Diversion of items from the waste stream could also occur long before the Sanitation Service Authority reaches your door. Items like glass, plastic, paper and organics can be separated from your household waste stream and diverted towards recycling. Fruit and vegetable peelings, lawn clippings and plant prunings can be composted at home. For further information on composting at home please see Brochure Number 4: Home Composting, under the Integrated Solid Waste Management Programme.



# PLASTICS



In Barbados most plastics can be diverted towards recycling. These include beverage bottles, containers for cleaning agents, plastic containers containing cream, shampoo and other beauty care agents, car bumpers and other plastics.

ITEM RECYCLED	NAME OF ENTITY
PET, LDPE and HDPE plastic Juice plastic bottles, detergent bottles, buckets water bottles etc.	<b>B's Recycling</b> , Cane Garden St. Thomas Paul Bynoe (438-9285) paul.bynoe@gmail.com
PET beverage bottles	<b>Supermarket Bottle Return Depots</b>



# GLASS

All glass is either reused or recycled in Barbados. Some glass containers are washed, sterilised and reused, while other glass is broken into cullet and exported for recycling. Places where glass could be taken for recycling are shown in the following table.

<b>GLASS</b> Ketchup bottles, jam jars, rum bottles, wine bottles and all other glass	<b>B's Recycling</b> , Cane Garden St. Thomas Paul Bynoe (438-9285) paul.bynoe@gmail.com
Glass beverage bottles Beer	<b>Supermarket Bottle Return Depots</b>

## PAPER



Currently, mainly office paper and magazines are collected for recycling in Barbados. The paper is shredded, baled and exported for recycling. Ace Recycling is the agency responsible for recycling paper in Barbados and their information is given in the following table.

Paper (Office Paper), magazines, telephone directories	<b>ACE Recycling</b> , Guinea Plantation St. John Reginald Parris (423-0510 or 423-2279) acerecycling@caribsurf.com rriornworks.com
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## NEWSPRINT

With over 300,000 news papers being sold every week, it is very necessary for this type of waste material to be diverted from disposal. This along with other types of paper accounts for 18.7% of the total waste stream. Newspaper is re-used or recycled in Barbados. It is either shredded, baled and shipped off island for recycling, or shredded and re-used as packaging material. Please see below for options on where you can take newsprint. **Please note that ACE Recycling also takes used directories.**

News print	<b>Dice-A-Bed &amp; Groganic</b> 8 Gibbons, Christ Church Stephen Foster (428-6874)  <b>ACE Recycling</b> Guinea Plantation, St. John Reginald Parris (423-0510 or 423-2279) acerecycling@caribsurf.com rriornworks.com  <b>Earthworks Pottery</b> Edgehill Heights 2 St. Thomas (425-0223)
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## CARDBOARD



Most of the items that we use as consumers from food to furniture are packaged in cardboard. This results in very large quantities of cardboard waste being generated in Barbados. Fortunately cardboard is one of the items currently being baled and exported for recycling purposes. Recyclers managing cardboard are listed in the following table.

Cardboard	<p><b>B's Recycling, Cane Garden</b> St. Thomas Paul Bynoe (438-9285) paul.bynoe@gmail.com</p> <p><b>ACE Recycling, Guinea Plantation</b> St. John Reginald Parris (423-0510 or 423-2279) acerecycling@caribsurf.com rriornworks.com</p>
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## AUTOMOTIVE BATTERIES



Lead acid automotive batteries are assembled, packed in containers and shipped overseas for recycling. Information on battery recyclers is shown below.

Automotive Batteries	<p><b>B's Recycling, Cane Garden,</b> St. Thomas Paul Bynoe (438-9285) paul.bynoe@gmail.com</p> <p><b>Tropical Batteries (430-5652)</b></p>
	<p><b>ACE Recycling, Guinea Plantation</b> St. John Reginald Parris (423-0510 or 423-2279) acerecycling@caribsurf.com rriornworks.com</p>

## ELECTRONIC WASTE



Electronic waste or E-waste is waste consisting of any broken or unwanted electrical or electronic appliance including video and audio equipment, cell phones and other computer equipment. This type of waste is of particular concern to waste management authorities because many components of this equipment are non biodegradable and may be toxic.

### Electronic Waste (E-Waste)

Old televisions, videos, computers, cell phones, radios etc.

### B's Recycling

Cane Garden St. Thomas  
Paul Bynoe (438-9285)  
paul.bynoe@gmail.com

### Caribbean E-Waste Management

Malika Cummins  
(823-5334)  
mcummings629@hotmail.com

Cellphones and chargers

### Digicel Digicentres

Sheraton, DaCosta Mall. Haggatt Hall,  
Coconut Walk, Speightstown, Bridge  
Street

**Digicel** continues to encourage its customers and the public to recycle old cell phones and chargers instead of dumping them. Special recycle bins have been placed at all of the Digicenters for persons to deposit their old handsets and chargers.

## AUTOMOTIVE OIL

Used automotive oil is a source of fuel in some industrial processes. This oil is collected by Machinery and Allied Engineering Services and transported to the relevant industries.

Automotive Oil

### Machinery and Allied

Engineering Services  
Deighton Road, St. Michael  
Elson Branch (430-0207)  
maesinc@sunbeach.net



## METALS

Both ferrous and non-ferrous metals are recycled in Barbados. Ferrous metals are metals that contain iron and can be easily distinguished from non ferrous metals by using the magnet test. If the metal is ferrous a magnet will be attracted to it. If the metal is non-ferrous the magnet is not attracted to it. The recyclers that recycle the various types of metals are in the following table.



## NON-FERROUS METALS

Non Ferrous Metals (metals not containing iron) include aluminium drink cans.

**Recycling Preparation Inc.**  
 (RPI) Peter Chesham  
 Warrens Industrial Park  
 St. Michael (425-2541)  
[www.rpirecycling.com](http://www.rpirecycling.com)  
[rpi@caribsurf.com](mailto:rpi@caribsurf.com)



## ALL METALS

Ferrous Metals  
 Including tins (corned beef, tuna etc)

**B's Recycling, Cane Garden**  
 St. Thomas  
 Paul Bynoe (438-9285)  
[paul.bynoe@gmail.com](mailto:paul.bynoe@gmail.com)

All Metals except drink cans and food cans

**Scrap Man,**  
 Vaucluse St. Thomas (271-5579)

## WASTE COOKING OIL



In Barbados, Waste cooking oil is used in the production of biodiesel, an environmentally friendly alternative to diesel produced from fossil fuels. Further information on this type of recycling can be obtained by contacting the entity below. Cooking oil should be free of excess foreign matter and passed on soon after use to prevent it becoming rancid.

Waste Cooking oil

**Paradise Green Energy**

Green Hill, St. Michael

Joseph Del Castillo

(230-5695)

[paradisegreenenergy@gmail.com](mailto:paradisegreenenergy@gmail.com)



### RECYCLING – A PRACTICAL ASPECT OF YOUR LIFE BOTH AT WORK AND AT HOME.



**Wash items first**

You can be an active recycler both at home and at work with minimal disruption to your everyday life. At the office and in the home, recycling bays can be established which could vary from a few clearly marked plastic bags for collection of the recyclables to as elaborate as bins manufactured specifically for this purpose. When separating items for recycling please ensure that all items that previously contained food or drink are washed first.



**Get children involved**



- clearly identify all items to be collected.
- remind persons to wash all containers first.

In the workplace the paper shredder could be kept next to the photocopier so that spoiled copies could automatically be shredded.



# Sustainable Barbados Recycling Centre, Vaucluse, St. Thomas



*For further information on how to establish  
a recycling programme in your office,  
home or community, please contact the  
Project Management Coordination Unit.  
(Formerly) Solid Waste Project Unit*



**Project Management Coordination Unit  
Level 7 Warrens Tower II  
Warrens  
St. Michael  
Tel: 246-622-1606**

**E-mail: [solidwastebarbados@gmail.com](mailto:solidwastebarbados@gmail.com)**