

S4S Sustainable Management of Glass Waste Project Hotels & Resorts Survey



Prepared For: Sustainability for Seychelles



Prepared by S. Bunce, Environmental Scientist

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Purpose of the Glass Waste Recycling Project

Sustainability for Seychelles is undertaking a pilot project to establish a system for sorting, collecting, crushing and using waste glass, in order to eliminate it from the Seychelles waste stream. To do this, S4S has secured a budget of SR 1.6m from a combination of ReCoMap and co-financers.

Project Funding

This project is funded by the European Union ReCoMap regional programme for the sustainable management of coastal zones. The programme is an initiative of the Indian Ocean Commission and affects seven Indian Ocean countries including: the Seychelles, Mauritius, Comoros Islands, Madagascar, Kenya, Tanzania and Somalia. ReCoMap is a 5-year programme which commenced in August 2006.

The specific objective of ReCoMap is to strengthen the capacity of all stakeholders in order to promote sustainable management of marine and coastal resources. In addition, the programme aims to reduce poverty through improved conservation and sustainable management of natural resources.

Purpose of the Hotels & Resorts Survey

The purpose of the survey is to discuss with small & large hotels and resort owners, operators and/or staff: level of interest in recycling; how they may participate in the glass recycling project; and suggestions for improvements before the project is initiated.

Survey Method

Initial contact was made after an explanatory article appeared in the Seychelles Hotel & Tourism Association (SHTA) newsletter. Meetings were arranged by phone or by drop in. Depending on availability, a range of people responsible for different elements of the hotel/resort business were interviewed, from reception staff to hotel manager.

Four questions were asked during each interview:

1. What are your views on glass recycling (and the glass recycling project initiated by S4S if they are aware of it)?
2. How does recycling work in your establishment?
3. How would *glass* recycling work at your establishment?
4. Does your hotel/resort have any needs in order to participate in glass recycling?

The following additional information was collated: date of visit; hotel name; hotel general location, island name; contact person's name (as well as other relevant personnel names if provided), phone number(s), mobile number(s), email address(es), general notes and names of the survey team.

Results

The results of the survey are collated in the Annex.

Figure 1 illustrates the general findings to the question: ***What are your views on glass recycling (and the glass recycling project initiated by SAS if they are aware of it)?***

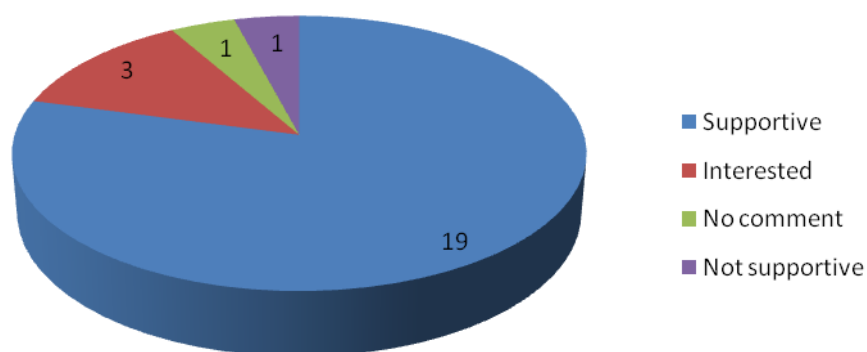


Figure 1: Survey results indicating support for Glass Recycling Project among Hotel and Resort Staff.

All those who indicated support of any level e.g. very supportive to generally supportive are included in the 19 supporters. Those who did not wish to commit to full support but would like more information and to ensure that the programme would not cost the hotels anything were counted as interested (3). The individual who indicated “not supportive” was however interested in providing more comments and feedback, and finally, the no comment was from a staff member who did not wish to express an opinion at that time.

The most common response to the question: “How does recycling work in your establishment?” was that some level of SeyBrew products and/or PET bottles recycling is undertaken. In some cases, management is directly involved and in others the staff benefit from the money that can be collected from returning bottles to SeyBrew and/or selling on PET bottles. A number of hotels indicated recycling of tomato sauce bottles and jars by return to the producer, Solei. In two cases it was indicated that jam jars are recycled by staff for use in home canning and large gallon cooking oil cans are reused by staff for water storage.

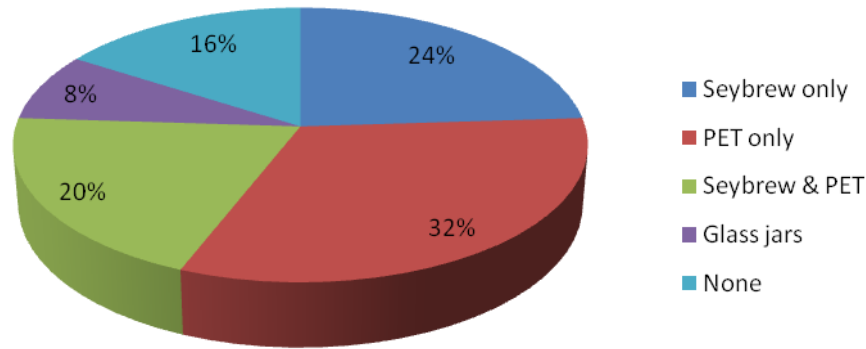


Figure 2: Survey results indicating products presently recycled as a percentage of 24 Hotels and Resorts surveyed.

Figure 2 demonstrates that 25% of the hotels surveyed recycle Seybrew glass products only. While 33% recycle PET products and 17% recycle both Seybrew and PET products. Note the fact that 33% of hotels/resorts only recycle PET bottles may be a reflection that these hotels/resorts do not sell Seybrew products. Only 2% recycle glass jars and bottles and 17% do not recycle any glass or plastic products. During the survey we discovered some interesting additional information:

- One business recycles tires (as retreads) for company vehicles to increase life of the tires;
- One business recycles tin cans;
- One business recycles ink toners; and
- One business aims to avoid products that produce waste and therefore was counted as a non-recycling company.

The responses to the question **“How glass recycling would work at your hotel?”** were varied but included storage would not be a problem, and that staff would most likely actively participate. A few hotel/resort operators indicated that visitors often leave recyclable items separate from the waste bin and/or ask whether recycling is available. Only one operator said his business would not participate for the reason that there is no financial or immediate benefit to his business and it would create more work for him. Refer to Attachment 1 for more details.

The most common (but not unanimous) responses to the question **what are the needs of the hotel/resort in terms of glass recycling?**

- Provision of (wheeled) bins clearly marked for glass recycling;
- Weekly collection; and
- Some education for hotel/resort staff so the message is received from someone other than management.

It is noted that some staff are well informed and may not require education regarding the how and why’s of glass recycling but one manager suggested the Hotel and Tourism School should provide education in this area. In addition, due to the dependence of tourism on a clean environment,

several operators indicated a desire for more public education about the harm of litter and provision of general information about recycling for the public.

Recommendations & Conclusions

Over all, the survey suggests there is good support (78%) for the glass recycling project if the hotels/resorts are availed with the required storage bins, glass collection and staff education (optional).

Storage Bins

500 glass recycling bins have been paid for under the ReCoMap project. The bins will be labelled with stickers identifying them as GLASS ONLY bins.

The following table outlines the recommended number of bins that should be allocated to each hotel based on number of hotel rooms. If restaurants are associated with the facility then additional bins may be provided.

Table 1: Recommended number of Recycle Glass Bins based on number of hotel rooms.

No of Rooms	No of Bins
<20	2
21-40	4
41-100	6
101-200	8
>200	10

Based on the 24 hotels surveyed and Table 1 recommendations, **83** bins are allocated and should be collected by the hotels upon notification via email that the bins are available for collection. Note: this includes bins for Trois Freres Distillery at Au Cap (2), Apana Glass Workshop (5) and Apana Gallery (5) at Baie Lazare also included in Attachment 1.

There are 73 hotels listed in the October 2008 Accommodation Guide for Mahé. Based on the number of rooms listed in the guide by accommodation and Table 1 recommendations, **160** bins of the 500 bins are required to fulfill the accommodation demand on Mahé. The balance of 77 bins (i.e. 160-83) should be collected by the hotel management upon notification via the SHTA newsletter that the bins are available for collection.

The remaining 340 bins (of the total 500 bins on order) can be distributed between Mahé restaurants, bars, night clubs, redeem centers, public buildings (District Administration buildings, community centers, hospital/rehabilitation centres, ministry offices).

Glass Collection

Glass collection will be undertaken at no additional cost to hotels and other facilities where bins are located. Landscape and Waste Management Agency (LWMA) will be responsible for the ongoing collection of glass from the glass recycling bins located at predefined locations (e.g. hotels, redeems centres, DA offices, etc). Due to the breakable nature of glass, a transport method that prevents risks is required. Possible transport options include:

- Lining the back of a truck with a fibre glass liner (similar to some water storage tanks);
- Exchanging full bins for empty bins (however this will put a lot of wear and tear on the bins); or
- Using designated compactor trucks if they are well enough sealed that glass will not escape on to roads and create a hazard.

Staff Education

Five hotel contacts requested staff education regarding glass recycling including more general information about waste management and reasons for it. Due to budget limitations S4S will provide a free workshop for hotel management staff at a central location in Victoria at which management can express interest in provision of further staff training to be provided on site by S4S at a cost of approximately RS 500 depending on the location, number of people attending and length of training requested. The training will include, but may not be limited to:

- What are the 3 Rs (reduce, reuse, recycle);
- The reasons for recycling glass on Mahé e.g. reduce litter and harm to tourism amenity; reduce space requirements at landfill etc.
- How the glass will be recycled and used post crushing on Mahé;
- Other ways of recycling glass e.g. Apana Glass Works, canning etc.;
- Who will be responsible for the glass collection and recycling in the short and long terms;
- How hotel staff will sort and prepare glass for collection by LWMA; and
- How the public can be involved with glass recycling at home.

Annex

Date of Visit	Hotel	Location	Island	Personnel Name	Phone No. & Mobile No.	Email Address	Views on glass recycling project	How recycling works at present?	How glass recycling would work at your hotel/venue?	What are the needs of the hotel in terms of glass recycling?	# of Bins Required	Site Visit Team
12.03.2010	Trois Freres Distillery	Au Cap	Mahé	David Boulle	None Provided	None Provided	Supportive	Want to help S4S find ways of collecting Distillery bottles via hotels, restaurants etc.	Keep 1 or 2 bottle collection bins on site as public drop off point as it is on a main road.		2	Michele Martin & Iris Carolus (S4S), Johan Mendez (PUC) and Frederique Mendez (architect)
17.03.2010	Ephelia Resort	Port Glaud	Mahé	Cedrick Thomas	None Provided	None Provided	Supportive	Sustainable practices to date include: employment of Seychellois staff, use of locally sourced foods where possible, re-use of gray water, waste heat from generator used to heat water for the resort, low maintenance landscaping, planting orchard. Ephelia internal environmental committee would like S4S to join to provide advice and guidance.		Provide a few glass recycling bins for each restaurant on site.	6	Michele Martin (S4S)
29.04.2010	The Four Seasons Resort	Anse Soleil	Mahé	Mohamed Habeeb (Mr.)	None Provided	None Provided	Supportive	Mr.. Habeeb is taking a personal initiative which is supported by management to recycle PET and glass bottles. The bottles are stored in room (photo available) specially designed for the bottles and are collected through a special contract, twice a month.	The existing arrangement would be expanded to allow for spirit and wine bottle storage and collection.	4 Seasons can benefit by receiving glass receptacles to be placed in the storeroom to maximise space. Recommended 4 Seasons consider buying glass crusher to save space and reduce frequency of glass waste collection. Possibility to do this as a community service. However cost of a small bar crusher is ~AUD 10,000.00.	6	Andrew Jean-Louis & Michele Martin(S4S)
03.07.2010	Bird Island Lodge	Bird Island	Bird Island	Mr.s. Jo Savy	None Provided	None Provided	Supportive	Currently sort glass and metal, in small recycling centre (photo available)	Considering flying glass back to Mahé as it would not cost more financially but also considering whether dumping crushed glass at sea is okay?		0	Andrew Jean-Louis & Michele Martin(S4S)
28.07.2010	La Digue Island Lodge	La Digue	La Digue	Wilfred Fanchette (Food & Beverage Manager)	None Provided	None Provided	Supportive	Lodge sorts waste: glass bottles, pet bottles, carton, and organic waste. PET bottles are usually returned by staff to the redeem centre. Lodge has a new, air conditioned waste storage room. All waste is stored here overnight in separate bins for different wastes however bins are not labeled. Maintenance staff collects the waste every evening and bring it to the waste room.	Already separating materials so just require collection.	La Digue is not included in the glass recycling project at this stage but sorting is in place so when glass collection is available the La Digue Lodge should be notified.	0	Michele Martin (S4S)

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29.07.2010	Apana Glass Workshop	Baie Lazare	Mahé	Lucy Luc	None Provided	None Provided	Supportive	Collect glass from Eden Island, sort by colour for use in glass artworks.		Provide 5 bins at workshop to store reject glass and 5 bins at gallery/library for free collection.	10	Michele Martin (S4S)
02.08.2010	Coco D'Or	Beau Vallon	Mahé	Veronique Renaud (Financial controller)	247 331 or 524 457	cocodormanagement@secyhelles.sc	Interested	Jam jars are recycled by staff. Tom Sauce bottles are recycled by staff back to original company e.g. Creole hot sauce.	Wine & spirit bottles would require weekly collection	None indicated	4	Sarah Bunce (S4S), Mia Dunford, Shivi Bhuller (Sustainable Tourism contract)
02.08.2010	Coral Strand Hotel	Beau Vallon	Mahé	Mr. Peter Johnson (Engineer); Mr. Terry Vel (Assistant Maintenance Manager); Antoine Khanny (Food & Beverage Manager).	Terry 621 828 or 714 009; Antoine 714 002	terryvel@coralstrand.sc	Interested but it cannot be inconvenient to service people. Interested to receive proposal of how it would work.	At present it is up to individual staff to take the initiative to get deposits back on PET bottles and jars.	Likely be up to staff to take initiative to recycle as it is not presently promoted by management. However there would likely be interest in the Green Star Rating system presented by Mia and thus interest in recycling may be increased.	A financial incentive is recommended on wine and spirits would ensure staff undertook separation but receptacles at the bar and skips for bulk collection would need to be provided.	8	Sarah Bunce (S4S), Mia Dunford, Shivi Bhuller (Sustainable Tourism contract)
02.08.2010	Panorama	Beau Vallon	Mahé	Mary Rakic and Slobadon		panorama@seychelles.net	Very supportive of environmental initiatives and keeping Seychelles clean as long as it doesn't cost them money.	At present the gardener ensures all plastic bottles are separated and recycled. Waste is collected by Star once/week at a cost of RS 700 (up from RS 160 last year!). Leaves and garden waste are composted. Panorama pays gardener etc to clean public areas as it impacts on their guests. Vegetable waste is sometimes collected by farmer for feed/compost.		Bins clearly marked GLASS bins. Breakage of bins is an issue as Star staff is quite hard on the bins. Star is not quick to replace broken bins. Education regarding litter and the harm it is doing the environment and tourism. Recycling must not put the hotel out of pocket. Need for metal recycling, including aluminum cans, as there are more beer and soda cans.	2	Sarah Bunce (S4S), Mia Dunford, Shivi Bhuller (Sustainable Tourism contract)
02.08.2010	Augerine Small Hotel	Beau Vallon	Mahé	Betty Sandapin	247 257	augerine@seychelles.sc	Generally supportive	PET bottles are collected by beach guys or staff. Some kitchen waste is given to their 2 tortoises. Otherwise everything is collected by Star. Try to educate tourists re towels/water saving and energy saving.	Best if staff is educated by external interest as the 10 staff generally see management initiatives as money saving initiatives and not necessarily for their benefit or the environments benefit.	Provide clearly marked GLASS bins and regular collection.	2	Sarah Bunce (S4S), Mia Dunford, Shivi Bhuller (Sustainable Tourism contract)
03.08.2010	Sun Properties & Resort	Beau Vallon	Mahé	Laura & Dan	285 555	sun@seychelles.net	No comment	Presently recycle beer bottles with Seybrew and buy gallon containers of oil and water to decrease number of small containers which may then be used by staff for water storage etc at home.	Shouldn't be a problem. Note the hotel should have enough space to store empty wine bottle in short term before collection.	Follow-up with Dan.	2	Sarah Bunce (S4S), Mia Dunford, Shivi Bhuller (Sustainable Tourism contract)

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03.08.2010	Sunset Hotel	Glacis	Mahé	Fredricka & Mr. Stravis (Maintenance Staff); Elvis (Food & Beverage Manager)	261 111		Generally supportive	Water bottles are returned to supplier (Solap?) for reuse but otherwise none known of.	Shouldn't be a problem.	Interested in recycling wine, spirits etc bottles from the bar; as well as jam and other jars from the kitchen. Need to speak to Elvis (F&B).	4	Sarah Bunce (S4S), Mia Dunford, Shivi Bhuller (Sustainable Tourism contract)
03.08.2010	Le Meridien Fisherman's Cove	Bel Ombre	Mahé	Helga Deboek Assistant Manager			Generally supportive	Presently recycle beer bottles with Seybrew; ink toners to supplier; plastic bottles. All green waste goes to Star. Presently negotiating with a S. African company for installation of auto switches for rooms so lights are automatically turned off when no one is in the room. Bed linen is not changed daily but towels are.	Shouldn't be a problem.	Best if staff is educated by external interest so it is not always the management trying to teach them things. Storage containers and regular collection would be required.	6	Sarah Bunce (S4S), Mia Dunford, Shivi Bhuller (Sustainable Tourism contract)
03.08.2010	Casadina Guest House	Bel Ombre	Mahé	Jaqueline (Front Office Manager) & Danny Loizeau (Owner)	410 036		Very interested and supportive	Presently return beer and PET bottles for hotel income.	The hotel has a small restaurant (no bar) so they produce about 5 wine bottles per night.	Would like glass collection bin and regular collection.	2	Sarah Bunce (S4S), Mia Dunford, Shivi Bhuller (Sustainable Tourism contract)
03.08.2010	Beau Vallon Bungalows	Beau Vallon	Mahé	Jenny Lovange (Housekeeping)	247 382 or 515 025	bvbung@seychelles.net	General interest in recycling of all recyclables: glass, paper, metal etc.	No policy or action at present.	Would separate glass for collection and there is space to store glass for 1 week.	Follow-up with Veronica	2	Sarah Bunce (S4S), Mia Dunford, Shivi Bhuller (Sustainable Tourism contract)
03.08.2010	Divers Lodge Guest House	Beau Vallon	Mahé	Tania Honore (Front Desk) Teddy (Owner); Lussette Honore (Managing Director)	261 222	diverslodge@seychelles.net	Supportive	Presently recycle bottled water PET bottles; tomato sauce; Teddy takes cans for recycling.	Should work well if container and collection are provided. Note: access to property is via a narrow driveway so bin may have to be taken to main road.	Follow-up with Teddy about needs and metal recycling	2	Sarah Bunce (S4S), Mia Dunford, Shivi Bhuller (Sustainable Tourism contract)
03.08.2010	Bliss Hotel	Glacis	Mahé	Coralie Nougé (Manager)	761 498 or 413 169	contact@bliss-hotel.net	Very supportive of all environmental initiatives in Seychelles	All bathroom products are refillable ceramic containers. Tap water is filtered to avoid plastic bottles. Mini bar contains some plastic and glass bottles.	Very little glass waste is produced but they would separate and store whatever they have.	Would like glass collection bin and regular collection.	2	Sarah Bunce (S4S), Mia Dunford, Shivi Bhuller (Sustainable Tourism contract)
03.08.2010	La Villa	Machabee	Mahé	Jean & Marion Pool (Managing Director)	573 039 or 433 434	info@lavilla-seychelles.com	Very good idea. Very supportive couple (Seychellois-German)	Recycle PET bottles and compost food at present. Tourists already separate waste in their rooms and ask about recycling.	Tourists already separate waste in their rooms and ask about recycling. There should be no problem to separate and store glass for collection.	Provide clearly marked GLASS bins and regular collection. Would like to see more education/information given to Seychellois about electricity and water saving measures; waste management in general	2	Sarah Bunce (S4S), Mia Dunford, Shivi Bhuller (Sustainable Tourism contract)

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										i.e. litter.		
05.08.2010	Maia Luxury Resort and Spa	Anse Boileau	Mahé	Edouard Grosmangin	390000	edouardg@southernsun.sc	Interested	No recycling program at present. They are about to start with plastic and interested to know if there is a can recycling program as well.	Weekly collection, they have their own bins. Don't produce much glass they import mostly cans	Weekly collection	4	Sarah Bunce (S4S), Mia Dunford, Shivi Bhuller (Sustainable Tourism contract)
05.08.2010	T Club Allamanda	Anse Marie-Louise	Mahé	Jonathan Nowel (General Manager)	511 115 or 388 800	generalmanager@allamandatclubsheyelles.com	Supportive	Recycling: Separate all plastic for collection by a Seychelles plastic recycling organisation (FIND OUT NAME). Separate tin/metal and beer bottles for SeyBrew. Recycle tires to extend life by 3 months. Feels there is potential for tire recycling in the Seychelles. Hotel has recycled cardboard containers for amenities and they refill ceramic liquid soap and shampoo etc.	Already separating materials so separating and storage should not be a problem if bins can be supplied that would be beneficial and collection would be required.	No significant needs but would like collection and staff education regarding managing waste, resources and reasons would be welcome.	4	Sarah Bunce (S4S), Mia Dunford, Shivi Bhuller (Sustainable Tourism contract)
05.08.2010	Banyan Tree Resort	Le Reduit	Mahé	Mia (Corporate Social Responsibility Champion and Executive Secretary to Mr. Anders, Manager) and Marcel Oestebroek (F&B)	383500	seychelles@banyantree.com	Supportive	Collect plastics, store in bin liners and sell to local person for recycling.	Collect glass store in bins and store until collection for recycling.	Marcel indicated they would need wheeled containers for glass storage and regular collection (once per week). Along with education of staff regarding how & why recycling is necessary. It would be good if the education was provided in the hotel & tourism school.	6	Sarah Bunce (S4S), Mia Dunford, Shivi Bhuller (Sustainable Tourism contract)
05.08.2010	Lazare Picault	Baie Lazare	Mahé	Lionel Albert (Manager)	361111	lazarpc@seychelles.net	Supportive	Empty plastic bottles are collected and recycled.	Storage of empty wine and spirit bottles etc is possible but note they do not produce a lot particularly in the economic down turn when people are spending less.	None requested	2	Sarah Bunce (S4S), Mia Dunford, Shivi Bhuller (Sustainable Tourism contract)
27.08.10	Carefree Guesthouse & Restaurant	Anse aux Pins	Mahé	Nesta Adelaide (employee); Mr.s. Zeita Monte (Manager)	375237	honey@seychelles.net	Supportive; Nesta agreed that recycling is a good idea.	They recycle Seybrew products	Would like to sort plastic and glass for recycling collection. Nesta noted that Mr.s Monte would likely support recycling.	Would like glass collection bin and regular collection.	2	Sarah Bunce (S4S), Mia Dunford, Shivi Bhuller (Sustainable Tourism contract)

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27.08.10	Le Chateau Bleu	Anse aux Pins	Mahé	Jean Claude	764830 OR 376424	mail@chateaubleu.sc	Not supportive as he sees it as a burden on the small hotel owner with no immediate advantage to him.	No recycling is done at present.	As the manager, cleaner etc. glass recycling would not be undertaken.	Not applicable	0	Sarah Bunce (S4S)
27.08.10	Dauphins Heureux	Anse Royale	Mahé	Mr.. France Frichot (owner) and Wiliana (Reception)	none provided	none provided	Both Wiliana and Mr.. Frichot were supportive of the glass recycling project as it encourages cleaning up environment.	Seybrew products are only products recycled at present.	Both Wiliana and Mr. Frichot felt the staff would support glass recycling so it should be easy to introduce.	Would like glass collection bin and regular collection.	2	Sarah Bunce (S4S)
27.08.10	Le Relax	St Antoine	Mahé	Roland (Manager)	382900	mm@lerelax.com	Very supportive	Seybrew products are only products recycled at present.	Weekly collection would be required.	Would like glass collection bin and regular collection. Staff education is not required as they are keen to "Protect Seychelles"	2	Sarah Bunce (S4S)
27.08.10	Hotel la Roussette	Anse aux Pins	Mahé	Nicole (Acting Manager) Ronald Robert (Manager)	376 245	manager@hotel-laroussette.com	Nicole was supportive of the concept.	Seybrew products are only products recycled at present.	Glass recycling should be possible but Nicole would have to discuss/confirm with Ronald upon his return from overseas.	Would like glass collection bin and regular collection. Ronald may have other suggestions.	2	Sarah Bunce (S4S)
27.08.10	The Wharf Hotel & Marina	Eden Island (opposite)	Mahé	Derek Barbe (General Manager)	670 700 mobile: 710 150	gm@thewharf.sc	Generally supportive	Seybrew products are only products recycled at present.	Glass could not be sorted by colour but could be collected in designated bin from bar and kitchen.	Would like glass collection bin and regular collection.	2	Sarah Bunce (S4S)