United Nations Development Programme Project Document Country: Fiji

Project Title

Creation of a Deposit & Refund Beverage Container Recycling System in Fiji

UNDAF Outcome(s):

The mainstreaming of environmental sustainability and sustainable energy into regional and national

policies, planning frameworks and programmes; and

Pacific communities sustainably using the environment, natural resources and cultural heritage.

their

Environmental sustainability and sustainable energy are mainstreamed into regional and national policies, planning frameworks, and programmes; and

use their environment, as well as natural and cultural Fiji communities effectively manage and sustainably

Expected Output(s):

Expected CP Outcome(s):

programmes, conservation, sustainable use and equitable sharing of benefits from natural resources, including biodiversity, fisheries (marine) Policy, legislative and management frameworks developed and strengthened capacity at all levels improves implementation of environment renewable energy. freshwater), and the promotion of sustainable

Implementing Partner:

Fiji Department of Environment

Responsible Parties:

UNDP Fiji Multi-Country Office

Brief Description

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successfully used in other Pacific Island Countries faced with similar problems, and are also widely used in the Pacific Rim to address waste resource recovery. CDL uses Extended Producer Responsibility recyclable and can be recovered from the waste stream. Currently the vast majority either go to landfill—at a cost to local government—are burnt in small fires, or become litter with associated pollution impacts. Deposit & refund recycling systems, using Container Deposit Legislation (CDL) have been Fiji consumes some 50 million beverage containers per annum. These items are in very large part easily to inform of the deposit and refund recycling system; and (iv) seek further funding to set up the Managing Agency which operates the deposit & refund system. Processing for export of recycled materials is done by existing companies through contract with the Managing Agency. The Managing Agency is expected to be set-up within an existing industry and financially self sufficient. determined that the best model to enact is that where the local beverage industry operates the logistics of day-to-day project activities; (ii) develop the required regulation (iii) conduct an advocacy programme will assist the Department of Environment to: (i) establish a Project Management Unit to manage the and during the preparatory phase of this project. This study has also determined that a regulation under the existing Environment Management Act 2005 can provide the necessary legal framework. The project the system through a Managing Agency, as seen in South Australia and British Columbia, Canada, and consistent with Stakeholder Consultations conducted by the Department of the Environment in 2004, (EPR) economic tools to maintain a dollar value of the waste to assist recovery. A Feasibility Study has

Agreed by (Implementing Partner):	Agreed by Coordinating Agency:	Implementing Partner:	Start date: End Date I DAC Masting Dates	Atlas Award ID:	Key Result Area (Strategic Plan):	Programme Period:
ag Partner)	Agency:	Fiji Department of Environment	February 2010 February 2011 Persember 2009	Phase I: 00062401	Environment and Sustainable Development	2008 - 2012
Date:	Date:	In-kind Contributions	o Donor o Dovernment Optionded budget:	• Other:	Total resources required: Total allocated resources: Regular	2010 AWP budget:
1/4/10		and the same of th			US\$100,000 US\$100,000	US\$100,000

Date:

Agreed by UNDP:

I. SITUATION ANALYSIS

minimization; improving final disposal; monitoring and litter control; use of economic incentives. position where it will adopt best practise for sustainable waste management. These policies are intended to move Fiji from an over-reliance on dumping wastes and littering to a and low resource recovery from the waste stream. Those policy areas are enumerated as: sound 2008 - 2010, Part Two, specific policies to improve the current situation of poor waste collection The Fiji Government has identified in their National Solid Waste Management Strategy for Fiji regulation enforcement; efficient pricing using economic instruments; waste

resource. A large quantity of easily recyclable material can be extracted from the waste stream, using a Container Deposit Legislation (CDL) system, which attaches a value to the waste items easily recyclable beverage containers in many parts of the world, including in the Pacific Islands. through a deposit and refund mechanism. These systems have proved very successful in recovering could be applied. There are approximately 50 million beverage containers used in Fiji each year to which this system materials and the costs of disposal, as well as the loss in potential value of the material as a reusable identified that waste represents mismanaged money in terms of both the original cost of the of waste has direct and indirect linkages to human development. in turn causes adverse effects on the Fijian environment and economy. The generation and disposal Due to rapid urbanisation and urban population growth, there is an increase of waste outputs, which The Fiji Government has

to their relative high value. The system proposed for Fiji and implemented by this project would thirds of beverage containers are plastic bottles, inclusion of the aluminium cans also prevalent would allow creation of a system that was more commercially viable as a stand-alone system, due It is a condition of every plastic bottle permit that the permit holder will, separately or jointly with other holders of plastic bottle permits, maintain one or more plastic bottle collection centres for entirely industry- run, with the Department of Environment providing the necessary regulatory follow the main elements of the design that used in British Columbia, Canada, and would be efficient, and a fairer system, if all beverage containers were treated in the same way, as whilst two to establish a system of cash payments for the return of bottles for recycling. It would be far more Disposal and Recycling Regulations states that holders of plastic bottle permits should endeavour collection of used plastic bottles from consumers or retailers. stipulate that facilities that import or manufacture plastic bottles must hold a plastic bottle permit. New regulations pertaining to waste disposal and recycling were introduced into Fiji at the start of 2009. Part 7 of the Environment Management (Waste Disposal and Recycling) Regulations Regulation 31 (4) of the Waste

clear example, and proof of concept, for this proposal, as it is a private sector operated deposit & refund recovery system, whilst showing that overall concept is imbedded in the culture of Fiji. industry made a detailed joint written submission indicating strong preference for any deposit & refund recycling system to be industry operated and managed. There exists in Fiji a private The Department of Environment held two consultation rounds with the recycling and beverage industry in 2004 in an attempt to get agreement on introducing container deposit legislation. The were returned through payment of a refund, for refilling. The current beer bottle system provides a deposit/refund system run by the Fosters Pacific brewery to recover their beer bottles for refilling. bottles have a monetary value. Until the mid 1990s, soft drinks in Fiji came in glass bottles, and This system works very well, and as a result, it is rare to see local beer bottles as litter, as the

bottles, for example at Lautoka dumpsite, where scavengers can access the dump (unlike Naboro near Suva), a small team of women works in the most unhealthy conditions to sort through piles of Currently in Fiji, Coca Cola Amatil Ltd. and Natural Waters of Fiji Ltd. (Fiji Water) accept PET plastic bottles for recycling, and pay cash for the bottles, but the value offered is low, and recovery rates are around 30% of their local consumption. Only the most disadvantaged seek out PET introduction of CDL, allowing these people to move their livelihoods away from dumpsites similar people shifted their efforts to public places and roadsides to collect discarded cans and garbage and pick out plastic bottles and aluminium cans. In Kiribati, after the introduction of CDL, bottles, and the value of their collections was approximately five times as valuable after the

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through collection at municipal household waste pick up, and in landfill costs. For the Suva conurbation, where actual cost estimates can be derived from hard numbers, it is estimated that the cost of collecting and dumping the used beverage containers is approximately \$130,000 per annum spread across all the councils. In addition, the landfill space is worth between \$58,000 – \$95,000 per year, depending on the values used for landfill costs for Naboro landfill from government studies. The value of recyclable materials lost to landfill has be estimated at between one half and over one million dollars per annum (depending on the commodity prices, which give the lower range in the current - early 2009 - unstable situation of all commodity markets). The Economic Analysis referred to is provided as an attachment. by a deposit & refund system was conducted, and indicates that significant costs are incurred An Economic Analysis of the impact of the 50 million beverage containers not currently covered

Association with the UNDAF and CPAP

environmental sustainability and sustainable energy into regional and national policies, planning The United Nations Development Assistance Framework (UNDAF) for the Pacific Sub-region 2008 - 2012 documents a Key Outcome for the Pacific as being "the mainstreaming of and operational. The introduction of a CDL recycling system is in line with mainstreaming environmental sustainability into national policies. This project is in line with MDG 7 which is: frameworks and programmes. The Multi-Country Programme Document 2008-2012 identified a through creating a commercially self-sustaining model by creating the legislative framework to 'Ensure Environmental Sustainability', for it recovers what would otherwise be waste, and does so corresponding indicators was that self-sustaining solid waste management systems be established environmental services for protection of marine, land and water resources. desired outcome of the Sustainable Environmental Management section to support capacity of allow this to take place. One of the

"Competing demands on the environment and differentiated impacts of climate change, waste management and poor natural resource management pose significant challenges to Fiji." 4.6 also UNDP support in convening new partnerships with potential donors, the private sector and effective community participation, towards climate change adaptation and waste management recycling facility initiatives that will potentially be the highlight of Fiji Government / UNDP collaboration during this programming period." The CPAP also specifically seeks to "adopt a The Country Programme Action Plan (CPAP) has four strategic management areas, of which this project comes under #4: Environment and Sustainable Management. The CPAP states at 2.6: notes "Improved access to resources that support livelihood options will be strengthened through deposit and refund payments. The quantity of waste potentially diverted from landfill, the cost percentage of all beverages sold in Fiji, will be a simple piece of information to determine from the very clear outcomes and measurable indicators, for the recovery rate of beverage containers, as a Further: "Clear programme objectives, realistic targets, measurable indicators...." This project has more Strategic and targeted focus on key outcomes to maximise impact." (document emphasis).

savings of doing so, and the avoided greenhouse gas emissions achieved through recycling are all easily determined for this project.

in the CPAP at point 4.3. A significant impact of CDL in other Pacific Island countries has been of the community, and income generation through partnerships with the private sector, as envisaged reduce poverty through supporting creation of employment opportunities at the lowest skill levels people who turn in cans and bottles for refunds. cash finding its way to women with no separate income as they comprise a clear majority of the This project will also contribute to poverty reduction, and thus two of the Millennium Development Goals, as not only does it contribute to environmental sustainability, but it also has potential to

Previous work by UNDP in the Pacific Islands on beverage container recycling systems

recycling operations financed through the CDL system during the previous programming cycle, which are still operating successfully. The project that created the Kiribati system was financed through its implementation stage by UNDP and part of the project specification was to produce a model that could be used in other Pacific Island Countries (PICs). To date, this model has been private sectors in Vanuatu and the Republic of Marshall Islands. replicated in Kosrae and Yap, FSM. Interest has also been expressed from the governments and/or provision of Technical Assistance and project funding, to establish commercially self-sustaining its global technical expertise, knowledge of innovative approaches, and global standards to support its environmental work in the Pacific. UNDP has previously assisted Kiribati and FSM, through The UN is a significant global player on environmental issues, and has comparative advantages in

II. STRATEGY

Rationale for System Structure

those where government plays a logistical or implementing role, and those where government has no role save to pass legislation and regulate. In recent years, New South Wales, Western Australia, containers system implemented will be based on an industry run design. Further rationale for this design is detailed in the Preparatory Assistance Project Brief. The design developed for Fiji draws beverage industry seeks to play a central role in any recycling system, as explicitly stated during previous rounds of industry consultation conducted in 2004 with the Department of Environment system. Given that a great amount of relevant work is available to draw upon, and that the local containers, and in all three instances these detailed studies have recommended an industry run and New Zealand have looked at the potential to introduce deposit & refund recycling of beverage Container deposit systems operate in a variety of ways, and this can be found as two main types: system and delivers particularly high recovery rates. in particular on aspects of the British Columbia system, which is widely accepted to be a very good run system in Fiji in the Fosters Pacific brewery, the deposit & refund recycling of beverage on this issue, and especially, given that there is already a very successful example of an industry

System Design

accommodated under this arrangement at no change to the current arrangement, as they will fulfil the requirements already, can file their own Product Stewardship Plan based on their existing recovery system; drinks producers and importers will have an Appointment Agreement with the Managing Agency. The existing Fosters Pacific Brewery bottle recovery system can be material processors. The legislation can set the requirement that all first level sellers of beverages out the refunds, and also interacts with the beverage producers and importers and the recycled system, and so will not be required to participate with the Managing Agency. The Preparatory Assistance has conducted an Economic Analysis that clearly shows that it would be much more paid out. This is similar to the provisions of the existing Plastic Bottle Permit under the regulations. Product Stewardship Plan in place that requires a minimum deposit to be paid, and refunds to be The Managing Agency is a Producer Responsibility Organisation which holds the deposits, pays participate in a collective system. The largest industry producers of drinks have been directly expensive for a local beverage producer or importer to set up their own recovery system rather than The system will work through the Managing Agency taking on the responsibility to operate the (producer or importer) need a permit to do so, and a condition of that permit is that they have a Managing Agency structure. consulted on this point and clearly understand the advantages of cooperating under a single

refund - typically going to landfill. Where the system recovers 90% of beverage containers available for refund in Fiji, there would be approximately \$460,000 available per annum to operate representing different interests, this should result in sound governance. The Managing Agency can The Managing Agency will be a small administrative group, comprising three to four employees. The legal structure would be of a non-profit nature, that of a 'company limited by guarantee' (the subsequently, where excess unredeemed deposits are accumulating, the Managing Agency Board Excess funds in the first year or so will be required to build capital strength in the revolving fund; the Managing Agency, which is something around 2 to 3 times the estimated funding requirement revolving fund, but do not get paid out as that particular beverage container is not presented for be self-financing through use of unredeemed deposits: these are deposits that are paid into the along with perhaps a representative from the Consumer Council or similar. With a governing body local equivalent to a 'Non-Profit'), with a board comprising local beverage and recycling industry, improved waste management and recycling. The legal structure of the Managing Agency will will be expected to direct that they be spent on anti-litter campaigns of similar work to promote

deposit and refund recycling systems where a perverse incentive can exist to avoid recovering prevent any distribution of 'profits' occurring. This point deals with a weakness in some overseas beverage containers where someone can profit from the unredeemed deposits.

production or import of beverages. note at this point that this is not a point-of-sale system; the deposits are collected at the time of to ensure that deposits are paid at import of beverages covered by the legislation. It is important to expense. Potential 'Free Riders' are likely to be small scale importers, and provision can be made payments by the regulation, to ensure that 'free riders' cannot operate at the other participants' The industry participants will be expected to collaborate, along with the potential to enforce deposit

recovery system, and it is highly likely that existing beer bottle collectors will immediately add collectors lower down the chain will work in a similar way as the existing beer bottle system works. the end processors who can claim against the revolving fund holding the deposits. Handling fees to equipped recycling companies, who will pay out the final refunds, and only those recyclers will be no need for compulsion on this point. Return of beverage containers will operate through a separate any store that sells beverages, or else those stores must pay out refunds. To keep the system simple followed to avoid disruption to retailers. Retailers can be collectors, should they desire, but there is in Fiji these requirements do not need to be put in place. The Fosters Pacific beer bottle collection must also pay out refunds, or that a collection point must be available within a certain distance of Some deposit & refund beverage container recycling systems require that retailers of beverages 'Handling Fee' from each unit. The Managing Agency would licence a small number of suitable has a demonstrated ability to recover beer bottles even from outer islands, and this model should be aluminium cans and other glass bottles to their collection rounds, as they will gain a

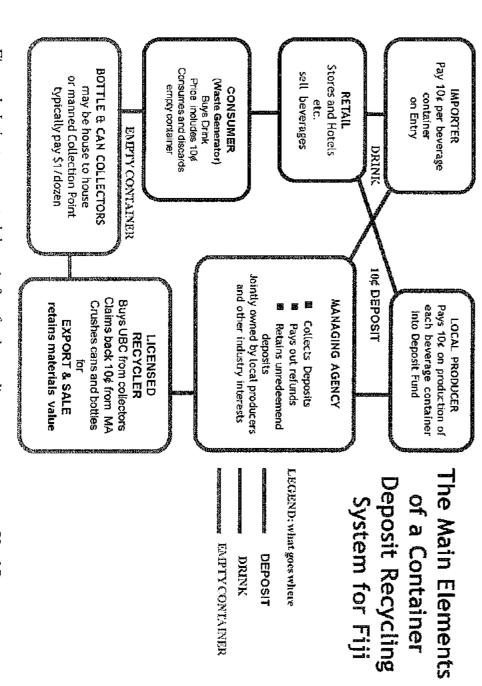


Figure 1: Industry operated deposit & refund recycling system to recover Used Beverage Containers (UBC)

Deposit Regulation Phase I: Establishment of Project Management Unit, Advocacy programme, and Container

Establishment of Project Management Unit (PMU)

at the Project Board level. from the operation of Naboro Landfill. The department would participate in overseeing the Project II, the Department of Environment would assume the role of regulator based on lessons learned a Communications Strategy and assist with establishment of Phase II (Managing Agency). In Phase drafting and passage of Container Deposit Regulation, undertake an advocacy programme through With the model proposed, the Department of Environment will establish a PMU to oversee the

Advocacy programme

make a major impact on Fiji, and also draw public attention to the extensive work of the provided major benefits. An extensive campaign Communications Strategy (Annex I) has been developed alongside this Project Document. This advocacy programme will have the potential to management practises amongst the general public. This strategy worked very well in Kiribati, and There is tremendous potential to use the public attention generated by the implementation of refunds on cans and bottles in Fiji to aggressively address littering behaviour and poor waste in considerable detail in the Communications Strategy. A skilled social marketing communications as every advert would carry a Department of Environment and UNDP logo. This work is explained Department of Environment and UNDP in improving people's lives in Fiji in a very practical way, residents to improve behaviour towards waste management. specialist would be crucial; the campaign would need to be innovative to encourage all Fiji

Legal Framework: Container Deposit Regulation

required for putting in place regulations to set up the system described above can be done under the existing Environment Management Act 2005. The ideal course would be to amend Part 7 of the Fiji are contained in the existing regulations, but only applied to plastic bottles. A legal opinion obtained through the Environmental Law Association of Fiji (Annex II) found that the powers is sufficiently developed to collect funds and pay out refunds. Implementing the legal framework is consistent with the CPAP outcome: Environmental sustainability and sustainable energy are all beverage containers. The first task of the project will be to draft suitable wording for the new existing regulations which deals only with plastic bottles and replace it with provisions that cover Much of the powers required setting up a deposit & refund beverage container recycling system in mainstreamed into regional and national policies, planning frameworks and programmes becomes law. Actual implementation of the measure will need to wait until the Managing Agency Part 7 and ensure that the governmental processes are followed through and that the statute

Phase II of the Project

An Implementation Plan (attached) has been produced which provides considerable detail concerning the individual activities required, and the coordination of those activities. In addition, a broadcasting the public awareness message to be promoted in Phase II. Detailed legal analysis has been conducted on the current legislative framework, and two separate legal opinions sought to the economic benefits through reduced waste collection and landfilling costs, and some analysis of the number of beverage containers affected by the proposed system, the financial flows expected through the revolving fund holding deposits and paying out refunds. This analysis also looked at addition, the detailed Economic Analysis, referred to above, provides the foundation of determining ensure that the legal strategy outlined below is based on sound and valid principles of law. In detail concerning media outlets and costs in Fiji, as well as an analysis of the potential means of comprehensive Communications Strategy has been developed which also contains considerable

the results produced to initial assumptions. These documents should be consulted in order to further illuminate the strategy provided below. The results of these studies have been presented to key the employment impacts of introducing the system. That analysis also determined the sensitivity of industry players both in public consultations and in individual meetings

Partnership with Private Sector to form the Managing Agency

Agency until such time as the funding in the Managing Agency has developed to allow self-financing and handover by the PMU. This is expected to take place after about six months of Directors governance structure, and hiring and training staff. The project will facilitate all these processes, through a strategy of the Project Management Unit taking on the role of the Managing One clear obstacle for the private sector to setting up such a system as described would be the initial financing, coordination, and setting up of the Managing Agency. This will involve locating operation of the revolving fund, funded through the mechanism of unredeemed deposits described premises for an office, office equipment, a legal structure and constitution, formation of a Board of

confidential (such as production sales data), and also ensure that the Managing Agency has a fair and equitable legal constitution that is not dominated by any single industry partner or group of be duplicated by the Managing Agency whilst the project is running. If the industry is required to pay the cost of setting up the Managing Agency, this will be a very complex process to apportion legal formulation and registration of the Managing Agency, it will be given a suitable name, for example 'Recycle Fiji'. market place - have confidence in the integrity of the initial set-up of the Managing Agency. At the interests. It is very important that the private sector participants - who are competitors in the that can set up the Managing Agency, and ensure that commercially sensitive data is kept fairly and develop successfully. The project will act, through the NGO partner, as a neutral entity This approach will result in a far more efficient use of resources, as project activities do not need to

the greatest incentive to get the local industry to willingly participate in the setting up of a deposit each of which could individually process the entire annual output of PET bottles and aluminium cans for export. These balers are in private ownership and would remain so; the current owners would expect to be key stakeholders in the Managing Agency. arrangements with the Managing Agency. There exists in Fiji at least two large functioning balers, conducted by existing companies who already have the equipment in Fiji, under contractual clear exit strategy for the project right from the start. There is no need for the project to invest in large capital equipment for recyclables processing or collection, as these functions will be & refund beverage container recycling system in Fiji. The strategy outlined also provides for a very strategy of the Project Management Unit handing over to the Managing Agency, will be potentially Ownership of any office equipment acquired by the project will pass to the Managing Agency. This resources into doing this themselves, especially when they have no expertise in this area. likely to be accepted by the local beverage industry, as they will not have to put time, effort and This approach will make the setting up of the Managing Agency a process that will be far more

Potential to generate gender neutral income, employment and poverty alleviation

Experience elsewhere in the Pacific Islands, specifically in Kiribati and Kosrae, FSM, clearly shows that economic benefits flow to those in the community with the lowest incomes. Currently, the UBC from household and community wastes streams where they remain in the home; also, bottle delivered to an existing recycler, to 10¢ each. Women will gain in particular as they recover collections would increase by a factor of about five times, from about 1.8¢ each today for a PET scavengers can be found in some dumps (e.g. Lautoka) collecting plastic bottles and cans. These would shift to public areas to collect discarded bottles and cans, and the value of their

approximately 45 million used beverage containers will be recovered per year at 90% recovery. All than cash. Jobs on bottle collector trucks and stationary collection points will be created as community groups seeking to fundraise may ask for cans and bottles from their constituents rather these jobs are of a low skilled, low education level, can be filed by men and women, and will be available to the lowest income earning sector.

Key Observation

and can be operated entirely by the private sector. income sectors, create economic activity associated through collection and export of the materials, would divert significant quantities of waste away from landfill, create employment for the lowest potentially hard to enforce, and only recently became law (January 2009). The system proposed existing regulations by covering all beverage containers. The existing regulations as written are Environment Management (Waste Disposal and Recycling) Regulations and would strengthen the refund beverage recycling system could be implemented through an amendment to Part 7 of the improving natural resource management and promoting environmental sustainability. A deposit & National Solid Waste Management Strategy at Part Two: Policies; and through Fiji's pursuit of The proposed project is fully in line with Fiji's national development objectives, as provided in the

Links to the CP and UNDAF

lowest income sectors. increases partnership with private sector whilst generating sustainable outcomes for women and the further as this extract from the UNDAF below indicates, through sustainable development that This is consistent with the UNDAF at 'Equitable economic growth and poverty reduction', and



UNDAR Outcome 1:

Pacific island countries develop and implement evidence-based, regional, pro-poor and National Sustainable Development Strategies (NSDS) to address population, poverty and economic exclusion, issues, stimulate equitable growth, create economic opportunities and quality employment, and promote sustainable livelihoods.

Fig 2: UNDAF Outcomes. Source: UNDAF for the Pacific Sub-region, 2008 – 2012, page 11

III. ANNUAL WORK PLANS: 2009 - 2010

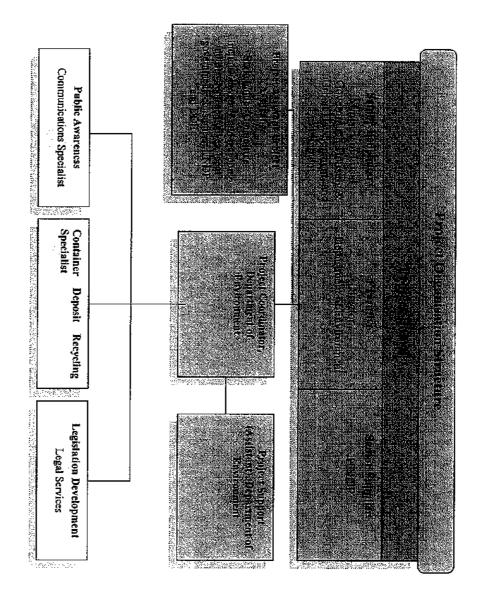
PHASE I: 2010 - 2011

EXPECTED	PLANNED ACTIVITIES		2(10		2011	RESPONSIBLE	PLANNED B	UDGET
OUTPUTS		Q1	Q2	Q3	Q4	Q1	PARTY	Budget Description	Amount US\$
Output 1 Establish Project Management Unit (PMU) to manage	Recruit PMU staff (Coordinator and Assistant). Advertise posts, shortlist candidates, interview and appoint	х	X				Department of Environment	72000	1,000
and coordinate Phase I Indicators: Project Management Unit	Set-up office within Department of Environment. Procure office equipment and supplies		x				Department of Environment	722000 72500	3,000
operational.	1.3. Salaries:		Х	X	Х	X	Department of	71400	25,000
	- Coordinator		$ _{\mathbf{x}}$	Х	х	X	Environment		12,500
Target: PMU operational by 4 th Quarter 2009	- Assistant 1.4. Travel costs		х	х	х	Х	Department of Environment	71600	5,000
			Sub-to	tal	1	·····			46,500
Output 2 Formulate and institute	2.1 Draft Container Deposit Regulation		x	х	х	x	Dept of Environment, Legal specialist	74100	10,000
legal framework for industry operated depo- refund beverage contain recycling system. Indicators: Regulation passed by Cabinet; regulation gazetted;	- present to Cabinet for passage - Gazette Regulation		х	х		х	Office of the Attorney General Department of Environment, UNDP Fiji MCO, CDR Specialist,	In-kind	In-kind
commencement date confirmed. Target: Container Deport Regulation in force by 4 quarter 2010		Х	Х	х	Х	х	Department of Environment, UNDP Fiji MCO, NGO Partner	71200 71600	10,000 5,000
			Sub-1	rotal	ا,ا		1		25,000

	1			1	1	Department of	72400	3,000
Output 3	3.1 Draw up contact list and					Environment	74200	3,000
Provide stakeholders with	details for all potential						74500	1,000
information concerning	stakeholders and provide						74300	1,000
introduction of CDL recycling system and set-up	information packs as							
Managing Agency	follows:		Х	X	X			
Indicators: information	- Inform all local beverage producers & importers of							
materials generated and	reporting requirements,		X	x	X			
distributed	- Inform bottle collectors &				1			
Targets: Beverage	small recyclers and					İ		
producers and importers;	community groups							
bottle collectors, recycling						<u> </u>		
companies, community groups; later, all beverage	3.2 Develop and produce					Department of		
consumers.	public materials for				ļ	Environment	74200	3,000
	distribution via stakeholder						74200	3,000
	networks.	1			1			
	- Draw up flyers - print and distribute for		X	X	X			
	redistribution							
			Х	X	X			
	3.3 Draft advertisements for print media					Department of	74200	3,000
	- Public announcements					Environment		
	regarding deposits &		Х	x	х		72400	2,000
	refunds							
	- generate press releases and		X	X	X			İ
	news items around the theme							
	0 4 B							
	3.4 Engage in stakeholder consultations to:					Department of	72000	3,500
	- Discuss and agree on	i i			X	Environment		
	possible Managing Agency		ļ		1"		71400	10,000
	(MA) arrangements				x		71400	10,000
	- Hand-over from PMU to				^			
	MA							28,500
		Sul	o-total	SASTAN SALESIAN PARAMETER		in the state of th		40,000
		Anna Carlotta Anna	-	er i i		ji.		\$100,000
		TOTAL	PETASE	1				3100,000

IV. MANAGEMENT ARRANGEMENTS

Management Unit. The Project Management structure is shown below: agreeing on the Managing Agency that will take on board responsibilities handed over by the Project operating procedures, both financial and personnel. A crucial step of the project - the exit strategy - is project document. The Department of Environment will advice and guide the PMU and ensure that quarterly reports and other reporting requirements are fulfilled to schedule, and provide employment contracts and management of the project and ensure that PMU staff are fulfilling their correct functions as detailed in this The project will be nationally implemented by the Department of Environment, responsible for day-to-day



Description of Management Structure

representatives from the Ministry of Local Government, Housing & Urban Development, and Environment as the Senior Beneficiary to ensure the realisation of project benefits from the beneficiaries' viewpoint. This group, the UNDP as Senior Supplier to provide guidance on the technical feasibility of the project, and project and will comprise of the Director of the Department of Environment as the Executive to chair the exceeded. Reviews by this group to ensure quality programming is undertaken are to be made at designated decision group shall provide guidance to the Project Management Unit, when needed, including project revisions. As illustrated above, a Project Board will be responsible for making executive management decisions for the Board. This group is consulted by the Project Manager for decisions when project tolerances have been points during the running of the project, or as necessary when raised by the Project Manager or Project

responsibility for facilitating project coordination with other relevant departments. Environment will ensure the timely and effective delivery of project outputs and the proper use of project The Department of Environment will be the implementing partner resources, for the project and will have The Department of

Project Management

The Project Manager position in the Project Management Unit (PMU) will ensure that day-to-day operations of the project are being implemented consistent with the project document. He or she will be responsible to financial and personnel systems that have previously been audited, and are acceptable to UNDP. The Director will be responsible to ensure that project reporting procedures are completed to UNDP reporting schedules, and that the project is executed consistent with the Executing Entity Agreement attached at the Director of Department of Environment. The Director will ensure that the project is executed following Annex II.

Project Support

operation of the revolving fund, arrangements between the beverage producers, Managing Agency, and the recycling processors, and requirements to ensure that all stakeholders are adequately informed of the new Technical Support will be provided to the project through engagement of a Container Deposit Recycling Specialist, who will report to the Department of Environment and will advise on all aspects of project recycling system, and their participation in that system. implementation, in particular the introduction of the Container Deposit Regulation, the setting up and

Exit Strategy

Agency to the Managing Agency Board. Once it has been clearly determined by the Department of Environment, in consultation with the Managing Agency Board and the Project Board, that the Managing Agency is ready to be financially self-supporting through the accumulation of excess unredeemed deposits in the revolving fund – greater than an amount to be considered prudent reserves for normal operations), the PMU will hand over operation of the Managing

time the project will hand over operations to the staff hired by the Managing Agency. Provision has be made in the budget and work plans to allow for some overlap (a maximum of three months) so that project staff final reporting processes completed. fund. Once the Managing Agency is operating in a self-sufficient manner, the PMU can be would up, and can train new Managing Agency Staff where this is required to ensure smooth operation of the revolving The Managing Agency Board of Directors will be required to hire staff for the Managing Agency. At this

Regulatory Role for Department of Environment

to this project document as an attachment. As a result of this experience, DOE would prefer that their participation stays as a purely regulatory role, whilst participating at an oversight level as part of the Project this can create some undesirable situations. A short study has been conducted on this point and is provided Department of Environment remains that of regulator, and not direct day-to-day implementer. Where the DOE is expected to participate in some other way in any deposit & refund beverage container recycling system, the situation is likely to result, sooner or later, in a conflict of interest, and then problems may result. Upon completion of Phase I and successful handing over of PMU to Managing Agency, the role of the Landfill; in management of the landfill their rôle is both regulator and manager of the landfill contract, and DOE has indicated that this is the preferred mode as a result of their experience with the operation of Naboro

Financial Arrangements

project execution and project deliverables and accountability to Government and UNDP. The Project will be implemented by the Department of Environment (DOE) with overall responsibility for

Funds provided by UNDP will be placed in a development fund account held by the Ministry of Finance.

project interacts with any government activities. The project will be Nationally Executed (NEX) by the National Government of Fiji through the Department of Environment. The Department of Environment will provide advice, professional assistance, and direction wherever the

Environment Officer for the Department of Environment. The Department of Environment will: The DOE will maintain a role on the Project Board, and the focal point of contact will be the Principal

- 0 Be responsible for the financial control of the project through the national implementation modality
- Sign-off on all budget and work-plan revisions;
- 0 other national, state and regional organisations for efficient and effective project implementation; Work with the project and assume responsibility for entering into necessary work arrangements with
- objectives of the project; Support the project by providing guidance and authority to engage services consistent with the
- the needs of the project as indicated in the quarterly work plans provided; and Receive advances from UNDP equivalent to the Financial Requests filed quarterly consistent with
- Forward financial advances received from UNDP to the PMU consistent with Financial Requests received from the PMU.

Environment will write a memo to the Ministry of Finance advising them of the project to which those funds are dedicated. The Ministry of Finance will then issue a Department Warrant and release the funds to the Funds will be released quarterly to the Fiji Ministry of Finance, and at that time the Department of Department of Environment.

of expenditure by the PMU through the Department of Environment to the UNDP Fiji MCO. with the work plans and project document. Further cash advances will be contingent upon timely reporting The Ministry of Finance will be responsible for the initial warrant and disbursement of funds in accordance

V. MONITORING FRAMEWORK AND EVALUATION

will be monitored through the following: In accordance with the programming policies and procedures outlined in the UNDP User Guide, the project

Within the annual cycle

- ٧ On a quarterly basis, a quality assessment shall record progress towards the completion of key results, based on quality criteria and methods captured in the Quality Management table below.
- V and resolution of potential problems or requests for change. An Issue Log shall be activated in Atlas and updated by the Project Manager to facilitate tracking
- V Based on the initial risk analysis submitted (see annex 1), a risk log shall be activated in Atlas and regularly updated by reviewing the external environment that may affect the project implementation.
- V Based on the above information recorded in Atlas, a Project Progress Reports (PPR) shall be submitted by the Project Manager to the Project Board through Project Assurance, using the standard report format available in the Executive Snapshot.
- V a project Lesson-learned log shall be activated and regularly updated to ensure on-going learning Report at the end of the project and adaptation within the organization, and to facilitate the preparation of the Lessons-learned
- V actions/events a Monitoring Schedule Plan shall be activated in Atlas and updated to track key management

Annually

- V against pre-defined annual targets at the output level. updated information for each above element of the QPR as well as a summary of results achieved Review Report shall consist of the Atlas standard format for the QPR covering the whole year with shared with the Project Board and the Outcome Board. As minimum requirement, the Annual Annual Review Report. An Annual Review Report shall be prepared by the Project Manager and
- V appraise the Annual Work Plan (AWP) for the following year. In the last year, this review will be a remain aligned to appropriate outcomes. required. It shall focus on the extent to which progress is being made towards outputs, and that these final assessment. This review is driven by the Project Board and may involve other stakeholders as during the fourth quarter of the year or soon after, to assess the performance of the project and Annual Project Review. Based on the above report, an annual project review shall be conducted

¥. QUALITY MANAGEMENT FOR PROJECT ACTIVITY RESULTS

PHASE I

OUTPUT 1: Establish	Project Management	OUTPUT 1: Establish Project Management Unit (PMU) to manage and coordinate Phase I.	
Activity Results 1	Recruit PMU staff, se	Recruit PMU staff, set-up office, signing of contracts	Start Date: February 2010
(Atlas Activity ID)			End Date: February 2011
Purpose	To establish a PMU f	To establish a PMU for overall management and coordination of Phase $\mathfrak t$ activities	hase I activities
Description	Planned actions are cand associated travel.	Planned actions are outlined in the AWP and include recruitment of PMU staff, office set-up and associated travel.	t of PMU staff, office set-up
Quality Criteria		Quality Method	Date of Assessment
Draft ToRs for Coordinator and Assistant posts		ToRs finalized and advertised through Public Service Commission	February 2010
Applicants shortlister PMU staff appointed	d, interviewed and	Applicants shortlisted, interviewed and Interview Report, signed contracts PMU staff appointed	February 2010
Request for purchase of office equipment and supplies		Office equipment and supplies procured	February 2010

OUTPUT 2: Formula system.	te and institute legal	OUTPUT 2: Formulate and institute legal framework for industry operated Container Deposit Legislated recycling system.	Deposit Legislated recycling
Activity Results 2	Create Container Dep	Create Container Deposit Legislation in Fiji	Start Date: February 2010
(Atlas Activity ID)			End Date: February 2011
Purpose	Regulation to create private sector. Provid	Regulation to create container deposit system for all beverage containers to be operated by private sector. Provide Technical Assistance to the project.	containers to be operated by
Description	Planned actions are o of existing Waste I Environment.	Planned actions are outlined in the AWP and include drafting a new regulation to replace Part 7 of existing Waste Disposal and Recycling Regulations, and promulgation by Dept. of Environment.	w regulation to replace Part 7 promulgation by Dept. of
Quality Criteria		Quality Method	Date of Assessment
Draft regulation using legal services and TA	g legal services and	Draft regulation provided to DOE	April 2010
Regulation passed by Cabinet	Cabinet	Cabinet Minute	October 2010
regulation gazetted		Government Gazette	November 2010
Commencement date confirmed.	onfirmed.	Publication of amended regulations	December 2010
Ongoing provision of Technical Assistance	Technical Assistance	Project Management evaluation, regular mission reports	December 2010

isted and July 2010 isted and July 2010 se classes September 2010 listed, and campaign September 2010	Information packs & flyers distributed All producers identified, listed and contacted regularly As many participants of these classes identified and contacted and listed, and contacted with information Widespread public information campaign in national media Managing Agency established and hand-	s created for distribution s created for distribution cers and importers ons, recycling companies, aste collectors, community to fundraise onsumers agreement on Managing	Public materials created for distribution Beverage producers and importers Bottle collectors, recycling compar scavengers, waste collectors, commu groups seeking to fundraise All beverage consumers Stakeholders agreement on Management of Management of All beverage consumers
recycling system; provide avenues of ude information materials generated and s for recycling, and industry channels for	Inform stakeholders and general public about new recycling system; provide support to industry transition. Planned actions are outlined in the AWP and include information materials ge distributed through bottle and can collection networks for recycling, and industry beverage producers.	Inform stakeholders and ge support to industry transition Planned actions are outlined distributed through bottle and beverage producers.	Purpose Description
OL system Start Date: July 2010 End Date: February 201	Industry participants informed and participating in CDL system and Managing Agency established within industry	Industry participants and Managing Agenc	Activity Result 3 (Atlas Activity ID)
of CDL recycling system and set-up	OUTPUT 3: Provide stakeholders with information concerning introduction of CDL recycling system and Managing Agency	e stakeholders with infor	OUTPUT 3: Provide Managing Agency

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III. LEGAL CONTEXT

Government of Fiji, dated 30 October 1970), attached hereto. The project document shall be the instrument envisaged in the Supplemental Provisions to the Project Document (Standard Agreement on Operational Assistance between The United Nations and the

custody, rests with the executing agency. executing agency and its personnel and property, and of UNDP's property Consistent with the above Supplemental Provisions, the responsibility for the safety and security of the in the executing agency's

The executing agency shall:

- put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- assume all risks and liabilities related to the executing agency's security, and the full implementation of the security plan.

be deemed a breach of this agreement. when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan

The executing agency agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated included in all sub-contracts or sub-agreements entered into under this Project Document. maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm. This provision must be with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list

agreement] and all CPAP provisions apply to this document. This document together with the CPAP signed by the Government and UNDP which is incorporated by reference constitute together a Project Document as referred to in the SBAA [or other appropriate governing

implementing partner's custody, rests with the implementing partner. and security of the implementing partner and its personnel and property, and of UNDP's property in the Consistent with the Article III of the Standard Basic Assistance Agreement, the responsibility for the safety

The implementing partner shall:

- put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- assume all risks and liabilities related to the implementing partner's security, and the full implementation of the security plan.

be deemed a breach of this agreement. when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan

be accessed via http://www.un.org/Docs/sc/committees/1267/1267/ListEng.htm. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document". maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list received pursuant to the Project Document are used to provide support to individuals or entities associated The implementing partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds

III. ANNEXES

Annex I: Risk Analysis: An assessment of risks that may affect the project.

Specialist, Administrative Officer, Managing Agency Advisory Board Annex II: Terms of Reference for Key Positions: Project Coordinator, Container Deposit Recycling

Annex III: Definition for Management Arrangements

Attachments:

information on certain aspects and illumination of references found in this project Document: In addition, the and are provided on an accompanying CD, following documents are provided were produced as part of the Project Preparatory and should be consulted for more detailed

- -Recycling System in Fiji; Implementation Plan for the Creation of a Deposit & Refund Beverage Container
- ы The Economic Analysis of the Impacts of Container Deposit Legislation in Fiji;
- ç Summary of Estimated Economic Impacts of Introducing CDL in Fiji;
- 4 A Determination of the Need for New Legislation for CDL in Fiji;
- Ġ A Independent Legal Opinion Concerning the requirement for new legislation to implement Container Deposit Legislation in Fiji;
- 9 proposed for this project; Comparative Study of Management arrangements for the Naboro Landfill and those
- Project Management Options;
- œ Detailed Presentation to Beverage and Recycling Industry Stakeholders;
- Project Brief of January 2009;
- 10. The Utility of Conducting a Pilot Project in Suva City Council Area in order to Test a Container Deposit Recycling system in Fiji;
- 11. A selection of reports relating to Container Deposit Recycling Systems from the Pacific
- 5 List of other reports and documents relating to recycling in the Pacific Islands;

Annex I: Risk Analysis

Œ	Туре	Date Identified; Author	Description	Comments (Impact, Probability, Frequency, Counter Measures)	Status	Status Change Date	Owner
	Financial	Project Document Stage: 23/02/09	Insufficient funds are secured by UNDP to fund project	Impact: Additional source of funding will need to be sourced, resulting in a delay in commencement / delivery or abandonment of project. Rated 5. Probability: Dependent upon resources committed to by UNDP and contributions by other partners, including industry. Rated 4. Counter Measures: Phase approach as currently undertaken through Phase I.	UNDP Environment Unit currently campaigning for TRAC funds. One industry organisation had verbally committed funds in 2008. Additional industry contribution will be sort.	November 2010	UNDP/DoE
	Financial	Project Document Stage: 23 / 02 / 09	Value of aluminium and PET drops	Impact: The value at export becomes too low for the recycler to commercially export materials. Such a situation would result in the collapse of the recycling industry in Fiji. Probability: The resource market is highly variable at present. The value of aluminium and PET has dropped significantly in the later half of 2008, but it is not known whether prices will continue to fall or rise. Rated 3. Counter Measures: The refund value of the beverage containers should allow for a handling fee to be high enough so that this situation would only occur in a general economic collapse. Managing Agency has opportunity to manipulate this situation to avoid difficulties in foreseeable circumstances.	As raw resources become more expensive to obtain, prices of recycled aluminium and PET will increase. The reason for recent drop in value is not related to availability of resources. Situation closely tied to World economic crisis		Managing Agency

ID	Туре	Date Identified; Author	Description	Comments (Impact, Probability, Frequency, Counter Measures)	Status	Status Change Date	Owner
	Financial	Project Document Stage: 23/02/09	Not enough money remains in the revolving fund to meet operational expenses	Impact: The project will require an injection of funds from either government or aid donors. Rated 5. Probability: The handling fees alone should be sufficient to make the system self sustainable. Counter Measures: Refund value to be worked out on the street, but should be sufficient to allow system to be self-sustainable, regardless of value of aluminium cans and PET bottles. Deposit rate should be set at 10¢	Based on recovery high recovery rate of 90% of all beverage containers, at 10¢ deposit, the system should generate around \$450,000/yr in unredeemed deposits, of which a maximum of \$200,000/yr would be needed to operate the Managing Agency. Lower recovery rates result in more unredeemed deposit funds available.		Managing Agency
	Financial	Project Document Stage: 23 / 02 / 09	Refund is too low to encourage people to recycle	Impact: 90% return rate is not achieved, cash in revolving fund builds up and recyclables being deposited in landfill or littered does not decrease significantly. Rated 4. Probability: Highly unlikely given potential for low income earners to make additional money and for groups to fundraise. Rated 2. Counter Measures: If a 90% return is not achieved, then the additional funds in the revolving fund will be used for advertising to promote refund system, to raise public awareness of potential to earn extra cash. Cash refund level is based on Fiji Bitter bottle refund, which has proved very successful in Fiji.	Proposed refund is the same as the Fiji Bitter bottle refund. High return rate of Fiji Bitter bottle currently experienced.		Managing Agency

ID	Туре	Date Identified; Author	Description	Comments (Impact, Probability, Frequency, Counter Measures)	Status	Status Change Date	Owner
	Financial	Project Document Stage: 23/02/09	Unredeemed deposits accumulate in excess to what is required to operate system	Impact: More cash in revolving fund than required to operate the recycling system. Rated I. Probability: Dependent upon rate of return of aluminium cans and PET bottles, income from sale of recyclable materials and operating expenses. Rated 2. Counter Measures: The legal set-up of the managing agency will specify that once funds in the revolving fund exceed a certain amount of money, then any excess should be spent on advertising or a system of small community grants concerning either recycling or of waste or environmental issues in general.	Unknown at present.		DoE
	Financial	Project Document Stage: 23 / 02 / 09	Consumers buy less drinks	Impact: Industry will lose money. General health of Fijians will improve due to less soft drink consumption, relating in less health expenses to the Government. Rated 3. Probability: Economic analysis has indicated that likely amount of money that each person will have less available to buy drinks is within variation shown annually in beverage consumption rates over the last 15 years. Rated 2. Counter Measures: Industry to promote return of recyclable materials to ensure extra cash is returned to consumers, giving them more money, possibly to buy more beverages.	Unknown at present, however price increases of 10¢ are thought unlikely to deter people from drastically changing their beverage consumption patterns.		Industry

ID	Туре	Date Identified; Author	Description	Comments (Impact, Probability, Frequency, Counter Measures)	Status	Status Change Date	Owner
	Financial	Project Document Stage: 23 / 02 / 09	Industry refuses to pay additional 10c per can / bottle due to initial high costs and deeply depressed economic conditions prevailing in Fiji.	Impact: Economic collapse. Rated 4. Probability: Any company that cannot afford initially to pay the deposit is not in an economically viable position anyway. Possible given current economic crisis. Rated 3. Counter Measures: Industry will have to revert to existing plastic bottle permits, which will end up costing them more money in the long run.	Industry asking for incentives, such as reduction in import duty on selected items, to offset initial costs of paying deposits.		UNDP/DoE
	Financial	Project Document Stage: 2/03/09 Alice Leney (PA)	Collapse in value of USD compared to FJD	Impact: budget severely constrained for local purchases and employee costs. Probability: Quite possible, USD has increased in value by 60% over last six months, and world economy is highly unstable; US economy in melt down. Counter Measures: Budget has been developed accordingly.	US Dollar very strong, budget is very good under current exchange rates.		UNDP
	Operational	Project Document Stage: 23 / 02 / 09	It is not easy enough for people to recycle	Impact: 90% return rate is not achieved, cash in revolving fund builds up and recyclables being deposited in landfill or littered does not decrease significantly. Rated 4. Probability: Unlikely due to proposed system being similar to existing Fiji Bitter bottle collection system, which works effectively. Rated 1. Counter Measures: During implementation, the effectiveness of using the Fiji Bitter bottle collection system will be assessed and reviewed if the desired return rate is not achieved.	Fiji Bitter bottle collection system has been studied and found to work very effectively at present and the same is expected of the aluminium can and PET bottle collection. Marginal cost to bottle collectors of picking up other cans and bottles very low as uses identical routes already travelled.		Managing Agency

IĐ	Туре	Date Identified; Author	Description	Comments (Impact, Probability, Frequency, Counter Measures)	Status	Status Change Date	Owner
	Operational	Project Document Stage: 23 / 02 / 09	Fiji Bitter bottle trucks will not collect aluminium cans or PET bottles	Impact: A new method of collection will need to be devised, which will delay implementation and add considerable cost to the operating costs. Rated 5. Probability: Would not be logical, since the Fiji Bitter bottles, aluminium cans and PET bottles would be worth the same amount of money. Large bags could be tied to back of trucks, making collection easy. However, would result in less room for collection of bottles on truck. Rated 3. Counter Measures: Wide advertising that aluminium cans and PET bottles are worth the same amount of money as the Fiji Bitter bottles, so that bottle collectors do not have preference for only Fiji Bitter bottles.	Fiji Bitter bottle collectors in the past have refused to collect aluminium cans and PET bottles, however this was when the value of the cans and bottles were significantly lower than the value of the Fiji Bitter bottles. The arrangement on the back of the trucks would need to be altered, however this should not be a problem. Project can provide some initial assistance through provision of wool sacks to bottle collectors to kick-start system.		Managing Agency

ID	Туре	Date Identified; Author	Description	Comments (Impact, Probability, Frequency, Counter Measures)	Status	Status Change Date	Owner
	Operational	Project Document Stage: 23 / 02 / 09	Refunded aluminium cans and PET bottles are re-sold back to the Managing Agency	Impact: Two refunds are paid out on an item that only one deposit was paid, resulting in a decrease in funds in the revolving fund. Rated 4. Probability: Possible if the refunds system is not well managed. Systems must be in place so that refunds are only paid out once and only when bottles and cans are baled straight away to remove possibility of leaking of those cans and bottles out for potential refund collection again. Rated 2. Counter Measures: The system set up in Kosrae and Kiribati works very well and there is no chance of 'double-dipping' into the revolving fund. This same method of assurance will be employed here.	The system for payment of refunds should be set out in the legal rules associated with the system to ensure no 'double-dipping' into the revolving funds. A wealth of overseas experience of monitoring CDL systems to draw on to assist development of auditing procedures		Managing Agency

ĮD	Туре	Date Identified; Author	Description	Comments (Impact, Probability, Frequency, Counter Measures)	Status	Status Change Date	Owner
	Strategic	Project Document Stage: 23 / 02 / 09	Consumers not aware of new recycling system and do not return aluminium cans or PET bottles to collectors	Impact: Deposits are paid at import / manufacture, however no refunds are paid out. Cash in revolving fund builds up and recyclables being deposited in landfill or littered does not decrease significantly. Rated 5. Probability: Project implementation includes a considerable public awareness campaign. It is also in the interest of industry to promote the system because then their products will effectively cost less if they claim their refunds. Rated 2. Counter Measures: The Fiji Bitter bottle collection system is not advertised anywhere, however it works quite effectively. A public awareness campaign is planned at project start-up, and any build up of funds in the revolving fund once the system is operational can be used for further awareness building.	Effectiveness of public awareness campaign should be evaluated, so that future campaigns can utilise most effective methods (eg, radio, tv, newspaper, billboards, posters in shops, etc)		Managing Agency
	Strategic	Project Document Stage: 23 / 02 / 09	Public becomes aware of introduction of CDL a long time before the regulations take effect and start stockpiling cans and bottles for refunds	Impact: Cash flow problem at commencement of CDL refund payments. Rated 2. Probability: Bound to happen to some extent, but may not be widespread. Rated 3. Counter Measures: Constrain refund system in early stages to effectively limit refunds. Require deposits to be paid one to two months in advance of refund payments commencing in order to capitalise the revolving fund.	Some hotels already have a stockpile of aluminium cans and PET bottles, because it is too expensive for them to transport t to the mainland to go to landfill. Recently introduced CDL in similar sized country – Hawaii – can provide useful experience.		UNIDP

ΙD	Туре	Date Identified; Author	Description	Comments (Impact, Probability, Frequency, Counter Measures)	Status	Status Change Date	Owner
	Organisational	Project Document Stage: 23 / 02 / 09	Government does not support the establishment of a new independent management agency	Impact: Government insists that existing mechanisms (such as the Environment Trust Account, FIRCA etc) are utilised as the managing agency. Project gains Government support but loses the faith of industry. Potential resource issues keeping the managing agency within the Government and also conflict of interest when regulating. Rated 4. Probability: Department of Environment has expressed their support for an independent managing agency, however opinions of other Departments and Ministries not yet known. Rated 3. Counter Measures: The PA phase has undertaken a comparative analysis of different managing agency options, resulting in the proposed outcome. Other options can be explored further if Government desires; or do not proceed with project.	Will be gauged at LPAC. Stakeholder participation in government run system likely to be very low and difficult. Strong perception of such a system being revenue raising. Ownership of unredeemed deposits creates perverse incentives in the system. Implementation will be difficult, considerable danger of systematic failure if payments from deposit fund are too slow to match return rates and cause cash-flow problems at recyclers.		UNDP/DoE

ID	Туре	Date Identified; Author	Description	Comments (Impact, Probability, Frequency, Counter Measures)	Status	Status Change Date	Owner
	Organisational	Project Document Stage: 23 / 02 / 09	Industry does not support implementation of CDL	Impact: Regulator will have problems with industry paying their deposits. Difficulty in creating sufficient cooperation between Industry participants to form Board of Managing Agency. Rated 2. Probability: Industry will be vocal against implementation to start with, but it is of their benefit to be supportive once regulations are enforced. Rated 2. Counter Measures: Industry has been involved in the development of the EA project document. Incentives such as reduced duty will be researched to use as 'carrots'. Project Manager to ensure ongoing regular consultation with key industry partners right from commencement of project. TA to assist DOE in aggressively implementing existing Part 7 of the Regulation requiring all PET manufactures to set up recycling systems.	Recent roundtable discussions and subsequent one-on-one meetings have shown that industry is accepting that CDL implementation is imminent and they are currently asking for incentives to lessen their perceived burden.		UNDP/DoE

ID	Туре	Date Identified; Author	Description	Comments (Impact, Probability, Frequency, Counter Measures)	Status	Status Change Date	Owner
	Regulatory	Project Document Stage: 23/02/09	Government does not proceed, or delays occur, with passage of regulation through required processes.	Impact: Delay in creating legal framework for CDL or project will not be able to be implemented. Rated 5. Probability: Unknown due to political instability at present. The interim government is still passing regulations, including environmental regulations, indicating that they would be amenable to the new regulation. However, a six months delay is noted in passage of a simple amendment to existing waste disposal regulations. Rated 3. Counter Measures: As part of the PA, a legislation review has been undertaken by the Environmental Law Association to identify the best option for implementation. A Cabinet Paper has been be drafted to brief Cabinet on the project. All possible legal drafting work should be outsourced. Create Go / No Go decision point in project planning. Proceed with creation of Managing Agency but slow staff hiring schedules.	Unknown		DoE
	Regulatory	Project Document Stage: 23 / 02 / 09	Delays in forming Managing Agency and passage of legislation delay commencement of public awareness campaign.	Impact: Development of public campaign materials stalled. Rated 1. Probability: As above. Rated 3. Counter Measures: Continue with Public awareness materials development, but mindful that awareness campaign could be run as a standalone campaign if CDL is not implemented.	Unknown. Need for wide environmental campaigning on several issues.		