





DESIGN OF AN OECS INCENTIVE PROGRAM FOR REDUCTION OF MARINE LITTER

ASSESS OECS GUIDELINES ON FISCAL
INCENTIVES AND MODEL POLICY TO
PROMOTE EFFECTIVE WASTE MANAGEMENT
OUTPUT 4

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ACRONYMS AND ABBREVIATIONS

ADF Advanced Disposal Fee

AIR Inc All Islands Recycling Inc

BOLT Build Own Lease Transfer

CARICOM Caribbean Community

DFC Design Finance Construct

EPR Extended Producer Responsibility

GDP Gross Domestic Product

NDC Nationally Determined Contributions

NSWMS National Solid Waste Management Strategy

NORAD Norwegian for Agency Development Cooperation

OECS Organization of Eastern Caribbean States

PPP Public Private Partenrship

ReMLit Reduction of Marine Litter

SDG Sustainable Development Goal

SIDS Small Island Developing States

SWMA Solid Waste Management Agency

UN United Nations

UNFCCC United Nations Framework Convention on Climate Change

UNEP United Nations Environment Program

OUTPUT 4

ASSESS EXISTING GUIDELINES ON FISCAL INCENTIVES AND MODEL POLICY TO PROMOTE EFFECTIVE WASTE MANAGEMENT

1.0 Introduction

This Report will examine the role of fiscal incentives in promoting effective waste management in OECS ReMLit Participating countries. A review of the fiscal constraints impacting member states will be presented highlighting the challenges faced by member states in financing waste diversion programs from their current domestic resources. The Report will examine the provisions for waste diversion in the waste management legislation and the targets set for waste reduction. Given the constraints faced by Governments in financing the waste diversion programs, a brief review of the role of the private sector in filling this gap will be presented. The Report will examine the use of fiscal incentives as a policy tool to attract private investment in waste management, diversion, recycling and reuse.

This study will also undertake a review of the existing fiscal incentive regimes in the OECS member states to determine how they impact on waste generation, disposal and management at the individual, household, and business (public and private sector) levels. Finally, the Report will recommend OECS guidelines on fiscal incentives and model policy to promote waste reduction and effective disposal and management at all levels of society inclusive of households, the private sector and the public sector with a particular focus on promoting and supporting a circular economy, including actions that foster waste reduction, recycling, diversion and disposal.

2.0 The Fiscal Environment of ReMLit Participating Member States

The OECS Member States have experienced persistent fiscal constraints over an extended period of time. This has restricted the fiscal policy space for financing priority areas of expenditure and the precarious fiscal positions of these states have been exacerbated by the economic impacts of Covid-19 which continues to affect member states, especially those states dependent on the tourism sector. These adverse economic developments, which are forecasted to continue into the foreseeable future, have had significant implications for the solid waste management sector and in particular for the agencies charged with the responsibilities for the waste management sector, whose revenues depend upon inter alia, the number of visitor arrivals, imports and government transfers. The fiscal situation, as measured by the percentage of the debt to GDP for ReMLit participating states are shown in Table 1 below:

Table 1: Public Sector Debt as a Percentage of GDP

Countries	2019	2020
Antigua and Barbuda	76.3	93.6
Dominica	83.1	117.6
Grenada	59.8	69.8
Montserrat	6.4	6.3
Saint Lucia	61.0	89.8
Saint Vincent and the Grenadines	74.9	84.7

Source: Eastern Caribbean Central Bank

All of the countries, with the exception of Montserrat were above the international benchmark of 60 percent of GDP in 2020. This clearly indicates that these countries have very little / no fiscal policy space to finance increased expenditures from their resources. Moreover, sectors like education, health, security, and the economic sectors tend to be given priority over solid waste management. Montserrat is a British Overseas Territory and receives grant funding from the United Kingdom Government to finance its expenditures.

As a result, the solid waste management agencies (SWMA), most of whom rely on central government support for funding, have not been able to focus on waste reduction, diversion including recycling, composting and waste to energy as these activities require significant investments in infrastructure and increases in operating costs. This has caused SWMAs to perforce undertake predominantly landfilling activities. It is estimated that over 90 percent of solid waste is landfilled in the OECS Member States. This is in breach of the Waste Management Legislation¹ which requires the development and approval of National Waste Management Strategies (NWMS). It is important to note that none of the countries have approved NWMSs. The legislation requires that the NWMSs have to be approved by Cabinet. Grenada and Saint Lucia are the only countries to have prepared NWMSs and they have not been approved by Cabinet.

Based on the aforementioned legislation countries were required to prepare these strategies to include the review of national waste diversion and reduction options and the establishment of standards and procedures to be implemented in the reduction, recycling of, recovery, reclaiming and reuse of waste and the use of recycled substances. Member states were required by the legislation to implement actions to meet targets for waste reduction. In the case of Grenada, Saint Lucia and Saint Vincent and Grenadines the following targets were set:

- Reducing by 20 percent all solid waste by January 01, 2010 through source reduction, recycling and composting activities; and
- Providing further reductions in solid waste at rates of no less than 5 percent per decade after the year 2010 until such time as a 50 percent reduction is achieved through source reduction, recycling and composting activities.

In the case of Dominica, the Strategy does not prescribe specific targets while in the case of Antigua and Barbuda the legislation mentions recycling, but does not elaborate on source reduction through recycling and composting and does not prescribe targets.

¹ All of the ReMLit participating countries with the exception of Montserrat have waste management legislation.

Based on the foregoing, most of the OECS member states are likely in breach of the waste management legislation and it is necessary that revised targets be set and actions undertaken to reach these targets. Dominica has not as yet set any targets for waste reduction.

Moreover, the strategies require financing and cost recovery mechanisms to ensure the financial viability of all waste management activities. These mechanisms have not been instituted and as a consequence, waste diversion strategies have not been pursued. Financing and cost recovery mechanisms require the imposition of additional charges on households and businesses which have significant economic and political implications for member governments. In the current harsh economic and financial environment most OECS member Governments would be loath to increase such charges to households and businesses given the negative impact Covid-19 has had and continues to have on the employment of workers and profitability of businesses.

Given that the current landfills are likely to reach their capacity limits in the near future and that domestic financing options for cost recovery may not be politically feasible to implement at this time, the OECS member states need to determine the options for the way forward as a matter of urgency for solid waste management. The OECS member states would find it difficult to continue on the path of landfilling as it may prove highly challenging to identify new land for constructing new landfills, especially given the very small sizes of these islands coupled with the fact that community members are likely to strongly object if a decision is taken to locate a landfill in their community². In addition, the capital costs of constructing a landfill are significant and member governments do not have the funds to finance new landfills. As a result, member states would have to rely on multilateral sources of financing as was done previously in the late 1990s³. Notwithstanding all of the above challenges, the continued practice of landfilling is not consistent with the policies outlined in the Waste Management Legislation of implementing waste reduction and diversion strategies.

3.0 The Role of the Private Sector

Based on the foregoing, OECS Member State Governments clearly cannot continue on the path of landfilling waste. Moreover, the Member Governments and their respective SWMA do not have the available financing required for the infrastructure required for waste diversion programs. The role of the private sector would therefore be critical in filling in the financing gaps that currently exist in solid waste management, namely, waste reduction, reuse, recycling and composting. It is to be noted that most of the member states engage the services of the private sector in waste collection and transportation services through contracts and therefore have some experience in engaging with the private sector.

The Authorities can use a range of policy tools to promote private sector investment in the waste management sector. These include public private partnerships (PPPs) which are usually long-term partnerships between the public sector and private sector with the aim of introducing private sector resources and expertise in order to help provide and deliver public sector assets and services. PPPs

² The identification of a new landfill site in the south of the Island of Saint Lucia has proved particularly problematic following the closing down of the previous landfill site in Vieux Fort.

³ In Saint Lucia the cost of constructing a landfill is estimated at approximately \$90 million.

include a wide variety of arrangements from loose, informal and strategic partnerships, to design build finance and operate (DBFO) type service contracts and formal joint venture companies. Governments can also use subsidies, loan guarantees and incentives including fiscal incentives.

Special consideration must be given to waste diversion programs if the OECS Member States are to achieve the objectives of waste reduction, reuse, recycling composting and recovery. These waste diversion programs will assist in diverting as much waste as possible from landfills while recovering the inherent market value of recyclables and recoverable waste stream materials. As indicated earlier, the lack of funding has been a major limiting factor in implementing waste diversion programs. The development of the enabling environment for these programs is a pre-requisite to establish these programs. In the case of recycling which is expected to play a major part in the strategies of the OECS countries to reduce solid waste and contribute to zero waste and the circular economy, the sector operates in the absence of policy and legislative support. The sector is not regulated, there are no recycling standards and is mainly populated by individuals and small businesses who collect various materials, notably scrap metal, plastic bottles, paper and cardboard. Saint Lucia is the only country in which a comprehensive study was undertaken of the recyclers operating in the sector. In Saint Vincent and the Grenadines there have been studies / documentation on the operations of All Islands Recycling (AIR) Inc.

The major challenges and constraints impacting the recycling in Saint Lucia is likely to apply to the other OECS Member States given that the sectors share similar characteristics. The major outcomes of the study are presented in Text Box 1.

Text Box 1

Study of Recycling in Saint Lucia

In 2013 a study was undertaken by the Solid Waste Management Authority in Saint Lucia with the assistance of the Government of the Republic of China (Taiwan). This study revealed that there were 21 recyclers involved in the collection of waste material for reuse/recycling within Saint Lucia or for export in 2013. The items recycled included metals, plastics, paper/cardboard, glass, e-waste, waste oil, tires, wood pallets, and batteries. The study also categorized recyclers into two groups, namely, those who were involved in exporting their products and those who serviced the domestic market. With respect to export, Asian markets appeared to dominate as destinations for recyclable materials collected in Saint Lucia, followed by European destinations to a lesser extent. Metal is the most widely exported material. While large quantities of plastics were collected, they were commonly kept in storage until international market pricing improved.

The study revealed that the recyclers faced and continue to face considerable challenges including low market prices, high operational costs, a low level of recycling awareness and promotion, financial constraints, and a low level of governmental support for recycling.

The major findings of the study are presented below:

- Market conditions for recovered recyclables are critical and currently limiting the potential
 expansion of recycling and recovery processes in Saint Lucia. The recyclers who were
 interviewed indicated that the lack of available markets is a consistent issue associated with
 their recycling activities.
- Concern was expressed by the recyclers that they get very little support from the government.
- There appears to be minimal interaction between the active recyclers in terms of enhancing the common factors that affect their business prospects.

The next section of this report will examine and assess the role that fiscal incentives can play in stimulating private sector investment in solid waste management to achieve waste reduction, reuse, recycling, composting and recovery.

4.0 Fiscal Incentives

4.1 Market Based Instruments and Incentives

There are a wide range of instruments that can be used to address solid waste management. These include:

- Legal and Regulatory instruments such as for example, bans on Single Use Plastics (SUPs) and Styrofoam.
- Direct Investment in waste management infrastructure
- Awareness based instruments such as for example, public information campaigns and
- Market based instruments.

Market-based instruments (MBIs) include taxes, charges, fees, fines, penalties, liability and compensation schemes, subsidies and **incentives** and tradable permit schemes. The major principles underpinning MBIs are the polluter pays principle, the user/beneficiary pays principle, and the principle of full cost recovery. It is important to note that all three of these principles are enshrined in the waste management legislations of the OECS.

Incentives are one of the tools used by Governments to pursue their development strategies. They are utilized to compensate for deficiencies in the business environment that cannot be easily remedied. They can also be used to correct market failure and to address externalities. Incentives can be classified as financial, fiscal or other (including regulatory incentives). Most countries employ a wide variety of incentives to realize their investment objectives. Developed countries tend to employ financial incentives such as grants, subsidized loans or loan guarantees. Financial incentives represent a direct cost to the Government and are a drain on the country's budget. As a result, financial incentives are not usually offered by developing countries. These countries, which include the OECS member states, tend to offer fiscal incentives that do not require upfront use of government funds.

4.2 Types of Fiscal incentives

Fiscal Incentives or tax incentives can be defined as any incentives that reduce the tax burden of enterprises in order to induce them to invest in particular projects or sectors. Fiscal incentives are exceptions to the general tax regime. Fiscal incentives would include, for example, reduced tax rates on profits, tax holidays, accounting rules that allow accelerated depreciation and loss carry forwards for tax purposes, and reduced tariffs on imported equipment, components, and raw materials, or increased tariffs to protect the domestic market for import substituting investment projects. The majority of fiscal incentives granted by developing countries relate to investment in manufacturing, exploration and extraction of mineral reserves, promotion of export and, increasingly, the tourism and leisure sectors.

The most common fiscal incentives that are granted include reductions in the standard rates of corporate income tax and tax holidays. These are followed by exemptions from import duties on capital equipment, raw materials and semi-finished components, duty drawbacks, accelerated depreciation, specific deductions from gross earnings for income-tax purposes, investment and reinvestment allowances and deductions from social security contributions.

The main categories of fiscal incentives are shown in Table 2 below:

TABLE 2 Main Categories of Fiscal Incentives

Category	Specifications
Profit/income-based	Reduction of the standard corporate income tax rate; tax holidays, loss
	carry forward or carry back to be written off against profits earned later (or earlier)
Capital investment-based	Accelerated depreciation; investment and reinvestment allowance
Labour-based	Reduction in social security contributions; deductions from taxable
	earnings based on the number of employees or on other labour-related
	expenditure
Sales -based	Income-tax reductions based on total sales
Value added-based	Income tax reductions or credits based on the net local content of outputs, granting income-
	tax credits based on net value earned
Based on other particular	Income-tax deduction based on, for example, expenditures relating to marketing and
expenses	promotional activities
Import-based	Exemption from import duties on capital goods, equipment or raw materials, parts and
	inputs related to the production process
Export-based	a) Output-related (e.g. exemptions from export duties; preferential tax
	treatment for income from exports; income tax reduction for special
	foreign exchange-earning activities or from manufacturing exports; tax
	credits on domestic sales in return for export performance)
	b) Input-related (e.g. duty drawbacks; tax credits for duties paid on
	imported materials or supplies; income-tax credits on net local content
	of exports; deductions of overseas expenditures and capital allowance
	for export industries)

Source: UNCTAD

4.3 Fiscal Incentives Regimes in ReMLit Participating OECS Member States

The Member states of the OECS have varying fiscal incentives regimes which have been implemented to promote investment in specific sectors that are referenced in the enacted legislation in the member state. This section will provide an overview of the suite of fiscal incentives legislation that have been used to promote investment in the various sectors in member states.

4.3.1 Fiscal Incentives Act

The Fiscal Incentives Act was passed in 1974 as part of a CARICOM agreement to provide harmonized fiscal incentives to industry. This Act remains in force in all of the member states except Antigua and Barbuda and Grenada which have enacted new legislation to promote investment in their respective countries. The Fiscal Incentives Acts share many common elements which are highlighted below:

- Industry is defined as a manufacturing or processing industry and includes deep sea fishing and shrimping where they form part of an integrated processing operation, but does not include agriculture and tourism.
- II. Local Value Added means the amount (expressed as a percentage of the total sales of an approved product) by which the amount realised from the sales of an approved product over a continuous period of twelve months, exceeds the aggregate amount of the following, namely—
 - (a) The value of imported raw materials, content of components and parts thereof, fuel and services;

- (b) Wages, salaries or both paid during the twelve month period to persons who are not nationals of a member state;
- (c) Profits distributed or remitted directly to persons who are not resident in a member state;
- (d) Interest management charges and other income payments, or any of them, accruing directly or indirectly to persons who are not resident in a member state, other than a branch or agency of a bank not resident in a member state;
- (e) Depreciation in the imports of plant, machinery and equipment, or any of them
- III. An approved enterprise may be granted a benefit under this Act only if it is classified under one of the following—
 - (a) Group I Enterprise

Group II Enterprise

Group III Enterprise;

- (b) Enclave Enterprise.
- IV. The classification of an approved enterprise as Group I, Group II or Group III Enterprise, is dependent on the estimated local value added as computed above in II. The qualifying criteria for an approved enterprise to be classified is shown in Table 3.

TABLE 3 Criteria for Classifying Enterprises

Enterprise	Criteria
1	An enterprise in respect of which the local value added is at least 50 percent of the amount realised from the sales of an approved product.
II	An enterprise in respect of which the local value added is at least 25 percent but less than 50 percent of the amount realised from the sales of an approved product.
III	An enterprise in respect of which the local value added is at least 10 percent but less than 25 percent of the amount realised from the sales of an approved product.

Source: Fiscal Incentives Acts

- V. It is to be noted Cabinet may, in its discretion and subject to such conditions as it may deem fit to impose, grant to an enterprise complete or partial exemption from income tax as from the production day for a period specified in the Third Schedule (referred to as the tax holiday period)
- VI. The provisions of the law relating to income tax for the time being in force shall apply to an approved enterprise, from the first day following the day on which the tax holiday ends, except that

- a deduction as an initial allowance for capital expenditure shall only be in respect of expenditure incurred after the expiration of the period of exemption from income tax.
- VII. Notwithstanding the provisions contained in the Income Tax Act, on the expiration of the tax holiday under that Act, the net losses incurred during the period may be carried forward for the purposes of set-off in computing the profits taxable under the said Act for the approved enterprise for the five year period following the tax holiday period.

The tax holiday periods for approved enterprises are shown in Table 4 below:

Table 4 Tax Holiday Period

Classification of approved enterprises	Tax holiday period
Group	Years
Group I Enterprise	15
Group II Enterprise	12
Group III Enterprise	10
Enclave Enterprise	15

Source: Fiscal Incentives Acts in the OECS Member States

Based on the definition of industry, recycling and/or composting would qualify as an approved enterprise given that both recycling and composting are processing industries. In addition, recycling and composting involve activities that use waste products as inputs which have relatively low value and require significant capital and labour costs to transform the waste materials into recyclable products. The recycled and compost products would therefore meet the criteria for local value added and likely qualify as a Group I Enterprise.

4.3.2 Grenada Investment Promotion Act Chapter 131 B (Act No. 22 of 2009)

Grenada abolished all of its individual legislations that provided specifically for granting fiscal incentives to the various sectors in the economy and enacted an umbrella legislation, namely, the Grenada Investment Promotion Act 131 B (Act No. 22 of 2009) (GIPA). The GIPA provides a comprehensive fiscal incentives legislation covering all of the priority industries and sectors as well as the priority projects which the Government of Grenada considers will make a substantial contribution to the socio-economic development of Grenada.

The implementation of the GIPA resulted in the repeal of the following acts of parliament:

- (a) The Hotels Aid Act, Chapter 138;
- (b) The Fiscal Incentives Act, Chapter 107;
- (c) The Qualified Enterprises Act, Chapter 155; and
- (d) The Investment Code Incentives Act, Chapter 155.

The GIPA establishes the Grenada Industrial Development Corporation (GIDC) to function as a one stop shop for investors and is the primary agency of Government in relation to the facilitation of investments and coordinates and promotes investment in Grenada and also advises the Government on matters relating to investment policy.

The main priority categories of investment identified in the GIPA are shown in Table 5.

TABLE 5 Priority Areas of Investment

Tourism	Manufacturing	Agriculture and Agri-Business
Education and Training	ICT Services	Financial Services
Health and Wellness Services	Creative Industries	Energy

Source: Grenada Investment Promotion Act

In addition, priority projects are identified. These are listed below:

- accelerating technology transfer and/or acquisition;
- enabling technology based capital formation;
- enhancing foreign exchange savings/earnings;
- reducing dependence on imported energy;
- enhancing skills development and skill-based employment;
- increasing the sustainable use of local resources;
- providing incremental economic diversification with significant value added; and
- creating positive linkage between emerging and traditional economic sectors.

A breakdown of each priority sector is provided identifying the areas in which investment incentives would be granted. The major criteria for fiscal incentives include primarily economic factors, namely, the size of the investment, employment, foreign exchange earnings etc. There are two declared benefits that can be granted by the GIDC. In relation to income tax, the benefit that is allowable is an investment credit at a specified percentage of the purchase price of fixed assets and in relation to customs duty the benefit shall be relief from 100 per cent of the whole of the customs duty levied on [plant, machinery, spare parts, raw materials or components thereof] for the purpose of manufacturing the declared products. It is to be noted that Grenada has moved away from the granting of tax holidays to instead providing investment allowances.

A review of the GIPA reveals that recycling and composting would be considered under the priority project area "increasing the use of sustainable resources".

4.3.3 Antigua and Barbuda Investment Authority Act

In Antigua and Barbuda, the Investment Authority Act is the major piece of legislation providing for, inter alia, the registration of business enterprises that may benefit from lawful incentives and concessions from

investments in the country. Investment is defined broadly in the Act and includes a lawful contribution to establish or expand a commercial enterprise.

An investor shall be entitled under the aforementioned Act for the following incentives and concessions:

- Exemption from payment of Customs Duty
- Reduction of Property Tax
- Exemption from Income Tax
- Reduction of Stamp Duty
- Exemption from Withholding Tax

The amount of incentives and concessions depend upon the size of the investment and the number of employees in the proposed business. There may also be incentives and concessions under particular laws that relate to particular types of business. Antigua and Barbuda grants tax holidays through the exemption of income tax. This is similar to those countries that have retained the Fiscal Incentives Act but unlike Grenada which has moved to a system of investment allowances.

The definition of investment appears to make it broad enough to include investments in businesses like recycling and composting.

4.3.4 Other Legislation Granting Fiscal Incentives in the Tourism, Agriculture and Fisheries Sectors

OECS Member States have enacted other legislation to promote investment in certain sectors. In the tourism sector, Saint Lucia has enacted the Tourism Incentives Act Ch 15.30 which makes provision for income tax and customs duty exemptions and the Tourism Stimulus and Investment Act No. 12 of 2014 which provides for the further development of the tourism sector and to provide special incentives, tax relief and exemptions for proposed new and existing tourism projects. Dominica, Montserrat and Saint Vincent and the Grenadines have enacted Hotels Aid Legislation which provides for duty free concessions for the construction, renovation and expansion of hotels. It is to be noted that the Hotel Aids Legislation is dated legislation, going back in some cases to the 1960s.

Saint Lucia appears to be the only country that has enacted legislation for the agriculture and fisheries sector, namely, the Agriculture and Fisheries Incentives Act, No.13 of 2014. This Act provides for duty free and income tax exemptions for approved agricultural and fisheries projects. It is to be noted that the Approved Agricultural Projects include waste disposal systems, tools, equipment or materials to be used for producing, processing or providing agricultural produce or products or fish and fish products and establishing, developing and equipping a facility. This legislation is rather comprehensive in providing for fiscal incentives by way of income tax and customs duty exemptions for facilities, equipment and disposal systems for solid waste management.

4.3.5. Discretionary Incentives and Concessions

Cabinet can use its authority under various legislation including the Customs (Control and Management) Act to waive customs duties, the Income Tax Act to waive income taxes, the Customs Service Charge Act

to waive customs service charge and the Excise Tax Act to waive the excise tax. These are usually termed ad hoc concessions that are approved by Cabinet on a discretionary basis. These incentives/ concessions can be for any goods, services and organizations and Cabinet can approve these waivers as a general policy or on a case by case basis. In Saint Lucia the Cabinet of Ministers in 2019 approved the following waivers of import duties, excise tax and service charge for vehicles and equipment relating to solid waste collection and management:

- Specialized vehicles used in the waste collection, including compaction vehicles, skip trucks, and roll-on/roll-off vehicles.
- Waste containers to be utilized at households, government institutions, and communities for waste storage and collection purposes.
- Recycling equipment such as specialized separate compartment vehicles for the independent collection of recyclables, as well as balers, chippers, shredders, and forklifts.
- Landfill operations equipment such as compactors, bulldozers, and articulated trucks.

The aim of these waivers is to improve the economic potential and prospects for private sector investment as well as the economic viability of waste management processes and services. Other member states in the OECS have adopted similar approaches in respect of approving duty free concessions for the importation of trucks for the collection and transportation of solid waste.

4.3.6 Waste Management Legislation

Five of the six countries have enacted Waste Management Legislation. The only country that has not implemented specific waste management legislation is Montserrat which continues to operate under the Public Health Act. Of the five countries that have implemented the aforementioned legislation, four of the Acts provide for fiscal and financial incentives / instruments. The Act in Antigua and Barbuda does not make provision for fiscal / financial incentives.

The sections dealing with fiscal/ financial incentives in Dominica, Grenada and Saint Lucia are more-or-less identical. In these countries the applicable section states "The Minister responsible for finance may make regulations to provide for the establishment of fiscal incentives and inducements required to implement the Strategy and other provisions of this Act." In the case of Saint Vincent and the Grenadines the legislation states "The Minister responsible for Finance may make regulations creating financial instruments for the financing of waste management activities implementing the Waste Strategy and the provisions of this Act." It is to be noted that whereas the legislation for the three countries contain provisions for fiscal incentives and inducements required to implement the strategy by way of regulations, the legislation in Saint Vincent and the Grenadines provides for regulations to be made for the creation of financial instruments for the financing of inter alia, the NWMS.

The only country to have implemented regulations is Saint Vincent and the Grenadines, namely, the Solid Waste Management Regulations (SRO 11 of 2006). These Regulations do not, however, provide for the creation of financial instruments as stipulated in its waste management act. Dominica, Grenada and Saint Lucia do not have regulations as yet and therefore have not established fiscal incentives and inducements required for implementing the waste strategy and other requirements in accordance with the respective acts in those countries.

5.0 Assessment of Fiscal Incentives

5.1 Summary of Fiscal Incentives Offered by OECS Member States

This section will examine the assessment of fiscal incentives at the individuals, households and business (private and public sectors) levels in relation to waste generation, disposal and management. A summary of the fiscal incentives regimes put in place by the participating ReMLit OECS member states is presented below:

- All of the Member states have enacted fiscal incentives legislation that would allow a recycling business to qualify as an industry based on the definition in the Act⁴ subject to meeting the criteria for valued added stipulated in the Acts.
- Regulations for the creation of fiscal incentives and other inducements for the implementation
 of the national waste strategies have not been enacted. The Regulations in Saint Vincent and
 the Grenadines, the only country to have implemented regulations, do not provide for the
 creation of financial instruments.
- Some member states have passed ad hoc concessions for duty free concessions for the
 importation of waste collection trucks. Saint Lucia has gone furthest in providing for duty free
 concessions for trucks, specialized vehicles, equipment, including recycling equipment, including
 balers, shredders, chippers and forklifts, equipment for landfill operations and waste receptacles
 for households, government institutions and communities for waste storage and collection
 purposes.

5.2 Factors Influencing the Impact of Fiscal Incentives on Private Investment in the Waste Management Sector

Fiscal incentives are tools used by Governments to stimulate private sector investment. The efficacy of fiscal incentives will, however, depend upon whether there is an enabling policy and legislative framework for private sector investment. In the case of the solid waste management sectors in the OECS Member States, Governments have not put in place the enabling policy and legislative framework and therefore fiscal incentives have been ineffective in catalyzing the necessary private sector investments in the waste management sector aimed at reducing waste generation, disposal and management. This policy and regulatory gap can be filled in Member Governments by the creation of regulations under the respective waste management acts.

It is to be noted that while OECS Participating ReMLit member states have a number of fiscal incentives in place, there are notable deficiencies in the fiscal incentives regime for the waste management sector at the household and business levels which would need to be addressed in order to achieve the objectives of the waste management hierarchy. These shortcomings in the fiscal incentives regimes at

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⁴ Industry is defined as a manufacturing or processing industry and includes deep sea fishing and shrimping where they form part of an integrated processing operation, but does not include agriculture and tourism.

the household and business level will be presented in Section 5 on the recommendations for improving the fiscal incentives regime.

The perceived profitability of businesses operating in the waste management sector is also another critical factor in determining whether the private sector will invest in a particular sector. In particular if the sector is deemed to be unprofitable and high risk, it is likely that the sector will not attract significant private sector investment. The Waste management sector currently attract individuals and small scale companies because of the low and unstable prices offered for recyclables in the export markets and limited opportunities in the domestic market. Given that there is market failure in the waste management sector, investment in critical waste management infrastructure may not occur unless Government intervenes through direct investment, subsidies, engaging in public private partnerships (PPPs) or other innovative financing instruments including blended finance, green credits and green bonds. Given the lack of funding available by Member Governments, PPPs and innovative financing instruments may offer the best options available for funding the infrastructure and the processing facilities.

Member Governments need to ensure that the waste management sector is adequately financed in order to create and sustain improvements in the sector. Member Governments may also need to ensure that the fiscal incentives regime is supported by the implementation of cost recovery measures aimed at providing cost recovery in areas which may not have significant political and economic costs to the Member Governments.

Fiscal incentives should be seen as one tool in the policy toolbox of Member Governments to achieve the objectives of the waste hierarchy. There are other tools in the policy toolbox that are more effective in certain segments promoting waste reduction, recycling composting and recovery and in some cases there may be need to combine fiscal incentives with other policy instruments to achieve the desired increase in private sector investment in the sector. For example, a number of initiatives taken by member governments such as prohibitions on single use plastics and Styrofoam and the deposit refund system have been successful in Member States.

The public sector is a significant generator of waste and can play an important role in waste prevention and reduction, and in achieving the objectives of the waste management hierarchy through its practices and procurement policies. The public sector can develop and implement green / sustainable procurement policies and procedures. These procurement policies seek to procure goods and services with a reduced environmental impact. The public sector can implement these green / sustainable procurement policies for items such as water, food and other supplies for its operations and give priority for recycled products in its purchases of certain goods including furniture, equipment etc. Moreover, it can establish policies for banning bottled water, single use coffee cups, single use food containers and moving to refillable containers for soap instead of purchasing soap in plastic containers. The public sector can be a leader in source separation and can partner with recyclers for the collection of recyclables.

Finally, given the central role of the solid waste management agencies in the legislation for waste generation, disposal and management, it is important that these agencies be restructured with a greater focus on integrated resources recovery, investment and PPPs.

As a result of the aforementioned shortcomings in the waste management sector, it is unsurprising that the current fiscal incentives regimes in the OECS have been largely ineffectual in achieving waste reduction, reuse, recycling, composting and recovery at the household and business levels.

6.0 Recommendations for Promoting Effective Waste Management Using Fiscal Incentives and Other Related Policy Measures

The implementation of the current fiscal incentives regimes in the OECS has been largely ineffective in promoting a reduction in waste generation, disposal and management. This is due in large measure to the perceived unprofitability of the sector and the absence of the required investment in waste infrastructure to promote source separation, recycling, composting, recovery and reuse. There is clearly a need to take an integrated approach to waste management requiring a range of actions and policy measures identified in the preceding section. The recommendations proposed in this section will identify the series of actions, policies, legislative and regulatory frameworks, cost recovery, and other measures required for effective waste management and promoting the circular economy and zero waste.

The recommendations are listed below:

- 1. The most important area that needs to be addressed is the development of the legal and policy regulatory framework for the waste management sector. This will include the establishment of the incentive and cost recovery framework for the waste management sector and can be achieved by the enactment of regulations to the Waste Management legislation in the respective member states. The Regulations must in particular include provision for the licensing of recyclers and certification standards for operating in the industry. The policy framework will in particular be guided by the principles underpinning the waste management framework including the circular economy, zero waste, cost recovery, polluter pays, and the extended producer responsibility. These will be articulated later in the report.
- 2. The incentive framework for households needs to include provisions for waste minimization in an effort to promote zero waste. In the case of households there may be need to provide incentives for recycling through the provision of waste receptacles and bags for recyclables or other alternative provisions that reduce the cost of recycling to households. If households are provided with free waste receptacles and bags, this will come at an increased cost to the SWMA and therefore a new revenue source needs to be identified to fund this activity in order to build sustainability in financing the recurrent costs of such a venture. The bins will eventually have to be replaced and the bags provided on an ongoing basis. This approach therefore cannot be undertaken as a project given that the recurrent costs of replacing bins and providing bags would have to be funded through a sustainable revenue stream. This is the approach that Barbados has taken towards recycling. An alternative approach that the OECS states may wish to consider is to remove the applicable taxes and duties on bins and bags used for recycling. Government may also wish to offer an income tax credit for individuals who participate in recycling. Given that many low income households may not be able to afford bins and bags for recycling, a targeted approach may need to be taken to provide communal bins for recycling and

bags to such households. Based on surveys carried out in Saint Lucia, there appears to be strong support for recycling among the public⁵.

- 3. The incentive framework for businesses will need to be amended to make fiscal incentives for businesses conditional on making provisions for waste minimization in the design of their operations. Businesses must in particular be required to prepare a waste management plan outlining how they intend to minimize waste in their operations including the possibility of recycling waste as a condition to receiving approval for fiscal incentives.
- 4. The tourism sector is one of the principal sectors to benefit from waste reduction, disposal and management as marine litter which emanates predominantly from land-based sources negatively impacts the sector. The largest sub-sector in the tourism sector is accommodation. Hotels in the accommodation sub-sector tend to benefit substantially from fiscal incentives by way of tax holidays and exemption of customs duties for construction and refurbishment. It is to be noted that many hotels have already adopted eco-friendly policies as it is increasingly recognized that the adoption of such policies enhances the brand image of the hotel. Some hotels have gone further by receiving certification for being eco-friendly. These include the Sandals Hotels, Bay Gardens in Saint Lucia and La Phare Bleu in Grenada. Hotels are also taking voluntary action in some cases to reduce single use plastics and are encouraging greater use of reusable containers where it is feasible.

Recent research undertaken in some of the OECS countries suggests that visitors tend to generate up to three times the amount of waste generated by residents. An environmental levy of US\$1.50 is levied on all visitors to the island as a cost recovery measure. This charge was implemented over 20 years ago and may not be adequate to recoup the full cost related to waste generated by visitors on the island. It is therefore strongly recommended that a review of this charge be undertaken with a view to determining the appropriate charge required to cover the full cost related to waste generation, disposal and management in the tourism sector. This is in keeping with the Polluter Pay Principle.

Member Governments can also make fiscal incentives to hotels and other operators in the tourism sector conditional on the adoption of the sound waste management measures as in the case of manufacturing industry. It is recommended that hotels prepare a comprehensive waste management plan outlining how they intend to reduce solid waste and comply with waste diversion programs including recycling and composting. The stakeholders in the tourism sector are likely to cooperate with the Solid Waste Management Agencies in their respective countries in effective waste management as visitors tend to be environmentally conscious.

5. In the agriculture sector, with the exception of Saint Lucia, there are no fiscal incentives provided to the agriculture sector for waste management. Farmers are not generally taxed on their incomes and so there is no need for income tax holidays/ exemptions. The Agriculture and Fisheries Incentives Act provides for duty free and income tax exemptions for approved

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⁵ Plastic Waste Free Island Project – Saint Lucia

agricultural projects. Approved Agricultural Projects include waste disposal systems, tools, equipment or materials to be used for producing, processing or providing agricultural produce or products or fish and fish products and establishing, developing and equipping a facility. This legislation is rather comprehensive in providing fiscal incentives through income tax and customs duty exemptions for facilities, equipment and disposal systems for solid waste management. It is strongly recommended that the other member states of the OECS follow the example of Saint Lucia in implementing a comprehensive suite of fiscal incentives for the agriculture and fisheries sector for waste management.

As part of the Good Agricultural Practices (GAP) program farmers were required to build pesticide pits for pesticides and other disposal pits on their holdings. Farmers should also be encouraged to adopt integrated plant nutrition systems in which farmers utilize the organic waste from poultry, sheep and cattle as a substitute for fertilizer and /or in combination with fertilizer for crops. Compost houses can be constructed in strategic areas for farmers to allow for the mixing of fecal waste from animals with green waste which can then be integrated into the plant nutrition system. Farmers who adopt this approach can receive premium prices for their organic produce and in so doing will be contributing to the circular economy as waste is recycled into a resource. Most small farmers do not have the resources to construct compost houses. It is therefore recommended that Government provide financial support to famers for the construction of compost houses. In the case of Saint Lucia, funding support was provided by the Government of the Republic of China (Taiwan). Other potential funding agencies include the Inter-American Institute for Cooperation of Agriculture (IICA) and the Food and Agricultural Organization (FAO).

A major problem area is the disposal of pig fecal waste, especially in cases where pig farms are located close to rivers and ravines and other waterways in which the pig fecal material can be washed into these waterways raising the level of coliform and other contaminants which eventually ends up in the ocean. Bio-gas digesters can be used to process the swine waste and to use the bio-gas generated as an energy source. It is recommended that Member Governments provide financing to farmers for the purchase or construction of bio-gas digesters. Funding agencies including those mentioned earlier can be approached for the purchase of bio-gas digesters.

Plastics is also used on farms. These include polyethylene, pesticide containers, bags containing fertilizer, animal feed etc. It is important that these wastes are effectively managed to prevent them from entering the oceans. It is recommended that Member Governments implement a deposit refund system for pesticide disposal cans and bags (fertilizers, animal feed etc). Farmers would be required to pay a deposit and receive a refund upon the return of the pesticide containers and the bags. A further review of the value chain for agriculture reveals that farmers should be encouraged to use reusable containers for transporting their produce from the farm and to the market. Farmers can be offered duty free exemptions on the purchase of these reusable containers. Similarly, consumers should also be incentivized to carry reusable bags for their purchases of agricultural produce in order to minimize the use of single use plastic bags. Plastic bags can be sold at a premium which would discourage the use of plastic bags.

- 6. In the fisheries sector, much of the waste ends up directly in the ocean, by way of lost or damaged fishing lines, traps, nets, ropes and other fishing apparel which can result in the phenomenon known as ghost fishing resulting in the entanglement of marine species. These items can also cause damage to vessels by entangling propellers and rudders. The following incentives can be offered to fishermen:
 - ✓ Damaged/abandoned fishing gear buy-back system A charge can be levied on the fishing gear at the time of purchase and the amount refunded when it is returned
 - ✓ Incentives to fishermen for reporting and retrieval / removal of debris
 - ✓ Financial support for waste disposal systems in fishing boats and fish processing facilities
 - ✓ To exempt from duties and taxes bio-degradable fishing gear as an incentive to move away from fishing gear made of plastic material.
 - ✓ Fishermen can be offered duty-free exemptions on reusable containers for the transportation of fish from the boat to the market.
 - ✓ Consumers should also be encouraged to carry resusable containers for fish purchases thus minimizing the use of plastic bags. Single use plastic bags can be taxed at a high rate to encourage consumers to switch to reusable containers.
- 7. It is recommended that all Member States implement a Deposit Refund System for Plastic Beverage Bottles and Cans. Deposit and refund systems are market based instruments that combine a tax or disposal fee (deposit) when purchasing a product with a recycling subsidy (refund) when the product is collected and / or recycled⁶. Deposit refund systems are commonly used for single use plastic beverage containers. The empirical literature has shown that deposit and refund systems have been found to be very successful in the recycling of single use plastic beverage bottles.

The deposit and refund system for plastic beverage containers in Saint Vincent and the Grenadines has been highly successful and is worthy of replication by the other OECS member states. The deposit and refund system utilizes a public private partnership model and is explained in more detail in Text Box 2.

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⁶ Walls (2011)

All Islands Recycling (AIR) Inc.

The Environmental Protection Act Chapter 427 (No. 13 of 1991) of the Laws of Saint Vincent and the Grenadines provides for the imposition of a deposit levy on certain beverages in non-returnable bottles. This levy is applied at a rate of 50 cents (EC) per bottle and collected by the Customs and Excise Department (CED). The deposit is levied at the point of entry of the product in Saint Vincent and the Grenadines or at the point of production in Saint Vincent and the Grenadines. The Deposit levy collected is to be refunded to the depositor on the reexport of the bottles in the cartons of original export or if bottle disposal arrangements are made and executed by the depositor in a manner acceptable to the competent authority within six months of the payment of the deposit.

AIR Inc. saw an opportunity in the recycling market for plastic bottles and established a business for collecting plastic bottles on behalf of the private sector companies that paid deposits to the CED. The Company has established a bottle bank and has made arrangements with the CED for the payment of the deposit to the depositors for the return of bottles. AIR Inc. charges the depositors an administrative fee of 15 percent for the collection and export of the bottles. The benefits of this arrangement by AIR Inc. has resulted in a drastic reduction in the littering of bottles and has created employment for a number of low income individuals, especially women. There are currently 350 harvesters involved in the collection and sale of plastic bottles to AIR Inc. with the top earners, a very small minority, earning about \$3000 Eastern Caribbean (EC) dollars per month.

This model has worked well in St. Vincent and the Grenadines and could be one that can be replicated across the OECS. Currently AIR Inc. crushes the plastics into bales for the export markets.

According to the company, approximately 50 percent of plastic bottles are recycled while a further 45 percent is disposed of in the landfill. This business model has therefore had a significant impact on reducing plastic waste in Saint Vincent and the Grenadines by diverting waste from the landfill and reducing the leakage of plastics into the environment. The company is also engaged in discussions with the authorities to expand the environmental levy to capture other products including aluminium cans.

The deposit and refund scheme can also be extended to other product types as mentioned above. The Government of Saint Vincent and the Grenadines will be putting in place a deposit refund system for other recyclables including aluminum cans. As indicated earlier, the model used in Saint Vincent and the Grenadines has proven to be a successful sustainable model and it is therefore recommended that the other OECS Member States implement this model.

8. It is recommended that the Extended Producer Responsibility (EPR) Schemes for certain categories of waste be implemented by OECS Member States. The concept of EPR has become

an established principle of environmental policy in an increasing range of countries. There are two types of EPR schemes. Under the first type the producer is physically responsible for taking back his products (take- back schemes) while under the second type the producer is financially responsible to finance the waste treatment of his products. Various take back instruments are the most commonly used instruments internationally and apply to several waste streams including tires, batteries, e-products, oil and bio-waste. Advanced Disposal Fees (ADFs) and deposit refund systems apply to most of the other schemes. ADFs are product based fees added at the point of sale. ADFs add end-of-life management costs to the cost of the product, thereby internalizing costs that are often externalized to the environment. Unlike the deposit return scheme they are non-refundable to the consumer.

In the case of Grenada and Antigua and Barbuda, an environmental levy is imposed upon a range of goods, including white goods, tires, used vehicles etc. The objective of this levy is to provide for meeting the disposal costs of these items at the end of life of these goods. In principle this is a very convenient method of financing the end of life disposal costs for these goods and may be considered an ADF. It is to be noted, however, that the Governments, given their tight fiscal positions, have not always remitted these funds to the Waste Management agencies.

It is recommended that EPRs be used for funding a range of goods to meet the disposal costs of those goods. A mechanism needs to be devised to ensure that those funds are remitted to the Waste Management agencies so that they can appropriately dispose of these items. The issue of whether to adopt an ADF or a take back scheme is one that needs to be considered by OECS Member States. It appears that an ADF system may be simpler to implement administratively but there is a need to ensure that the mechanisms for collection of the goods are put in place. The computed ADF should be closely linked to the cost of disposal to allow for full cost recovery.

9. A major strategy of member governments to encourage waste minimization and diversion must be to stimulate the growth of recycling. Increasing the recycling rates in OECS Member States coupled with composting will contribute immensely to the reduction in waste generation, disposal and management. The waste characterization studies have shown generally that organics make up the largest percentage share of solid waste, followed by the recyclable products including plastics, paper and cardboard, glass, and metals. Currently, the recyclers in the market are operating on a small scale and are burdened by a lack of financial resources, high transportation and freight cost, high labor cost and low economic value of most recyclable commodities. Given the foregoing, a well-established and promoted recycling system supported by the Authority / Governments would help to expand the size and scope of the industry.

International experience has that shown that market conditions for recovered recyclables are critical and currently limit the potential effectiveness and expansion of recycling processes including those in OECS Member States. It is also clear that the recyclers operating in the local markets are unable to raise the capital required to finance the infrastructure required for expansion of their businesses even if they are offered fiscal incentives.

A necessary and sufficient condition for the growth of the recycling industry would be the development of the enabling environment for the industry by establishing the policy and legislative framework for the recycling industry. In this regard, Government will need to create regulations for the recycling industry including introducing a licensing and /or certification process for recyclers. The Authority will need to collaborate closely with the recyclers in order to support their growth and development, prioritizing in particular recycling systems that encourage innovation at a national level in environmentally friendly and promote zero waste products, including packaging using local raw material. This would require implementing a number of support measures including financial and technical support and fiscal incentives. It is therefore recommended that the following fiscal incentives and other related support be provided for the recycling industry:

- ✓ Assistance with the purchase of recycling equipment, as many recyclers are unable to afford such equipment. Member Governments may provide special loan facilities at the Development Banks with guarantees to assist in the purchasing of such equipment.
- ✓ Establishing waste processing facilities for recyclers. This could involve the
 establishment of a major recycling center for the support of the small scale recyclers.
 A PPP arrangement can be developed for the funding of the recycling center.
- ✓ Duty free concessions for recycling equipment and other financial support measures.
- ✓ Providing technical support to recyclers in developing sustainable business plans to be presented to banks for funding purposes.incld

Given that imports account for a substantial percentage of the total goods consumed in the OECS Member states, incentives, by way of duty free exemptions / a lower rate of duty/tax can be imposed on imported goods in sustainable packaging to encourage individuals to purchase these goods. It is to be noted that pressure is being exerted on multinational companies which account for a substantial percentage of imported goods to adopt green/ sustainable packaging.

10. Organics contribute over 30 percent to solid waste and is the largest waste stream. A major strategy for reducing solid waste is to use the organics to manufacture compost. The Waste Management Agencies can collaborate with the potential private sector enterprises in the manufacturing of compost. The experience of Barbados in developing a major centralized composting plant can be studied by OECS Member State. Further details are provided in the Text Box below.

Text Box 3

The Case of Barbados – Sustainable Barbados Recycling Centre,(SBRC) Inc

SBRC Inc was established in early 2008. The company entered into a 20 year contract under a Build, Own, Operate and Transfer (BOOT) Agreement to establish a centralized location for the handling of all the wastes on the island. Waste is disposed of in an environmentally and cost effective manner and has contributed to prolonging the life of the Government Sanitary Landfill located at Mangrove in the parish of St. Thomas, Barbados.

SBRC Inc receives and processes the solid waste on the island. The principal objectives are to divert the waste from the landfill to prolong its life and to reuse and recycle materials. The company accepts all household waste, construction and demolition waste, green waste and rock and soil.

The company processes organic waste to produce green waste mulch, coconut wood mulch, hand-picked coconut fibre, wood chips and top soil. These products are sold at all major retailers in Barbados.

- 11. It is recommended that prohibitions can be implemented in cases where waste streams are particularly harmful to the environment and where feasible substitutes are available. The ban on single use plastics and Styrofoam is a successful policy which has been implemented in all countries in the OECS ReMLit countries. Antigua and Barbuda and Grenada has gone furthest by banning the single use plastic shopping bags. In the other countries a charge on single use plastic shopping bags has been implemented by Massy, a large supermarket chain. The ban on single use plastic shopping bags and the charge on single use plastic shopping bags have been particularly effective as most households have switched to reusable bags. In the case of the ban of other single use plastic bags, consumers have shifted to bio-degradable alternatives. A reduction in the duties on bio-degradable alternative has contributed to this shift.
- 12. Solid Waste Management Agencies need to be adequately financed to meet the additional costs of implementing the waste diversion programs. It is to be noted that while offering fiscal and other incentives will be important in bringing in additional investment into the sector, these incentives are not a substitute for underfunded waste management agencies which are struggling to meet their operational costs. Grenada appears to have the best model for financing waste management. The waste management agency does not rely on a fiscal transfer from central government and is financially independent. The mix of revenue streams include a tax on households through the levy on electricity bills, a tax on visitors through the environmental levy, a deposit and refund system for beverages containers, an environmental

levy on a wide range of goods as well as cost recovery measures, for example a tipping fee at the landfill. It is therefore strongly recommended that the following activities be undertaken:

- ✓ Review existing revenue measures to determine whether there is a need to increases these fees, especially those that have remained constant for a long period of time. These would include the environmental levy on vehicles and ship generated waste fees.
- ✓ Introduce new revenues streams, especially in those OECS Member countries that are dependent on fiscal transfers from central government, including Dominica, Montserrat, Saint Lucia and to a lesser extent, Antigua and Barbuda and Saint Vincent and the Grenadines. The measures that may be considered could include an environmental levy on households to cover the cost of waste generation, an environmental levy on white goods and other goods that are deemed to be environmentally harmful to the environment, and the implementation of the tipping fee in countries where it has not been implemented.
- ✓ Evaluate existing cost recovery measures for new services that are to be introduced. This could apply to take back systems for certain categories of goods.
- 13. OECS waste management agencies have traditionally functioned as bureaucracies and have not been structured to function commercially with a focus on generating new revenue streams, cutting costs and encouraging private sector investment into the industry. Given the renewed focus on implementing waste diversion programs, it is important that a small business unit be established within the SWMA to focus on stimulating private sector investment either directly or through PPPs. The Grenada SWMA recently undertook a review of their organizational structure and created a new position of integrated resources manager with the incumbent being responsible for carrying out the functions of implementing waste diversion programs through private sector investment. Currently, the SWMA in Grenada is currently in negotiations with two international companies for two waste diversion program using the PPP model. It is strongly recommended that other waste management agencies follow the example of Grenada and set up a business unit to promote private sector investment and to inculcate a new philosophical approach and mindset to waste management.
- 14. Finally, it is clear that the OECS waste management agencies have been approaching matters of solid waste management independently and apparently there is very little/ no coordination and cooperation being undertaken by the respective agencies. There is a need for these OECS waste management agencies to cooperate, coordinate and pursue harmonized approaches in waste management that is consistent with the aim of the Treaty of Basseterre and in particular, the economic union and the single market and economy. The OECS Commission can play a central coordinating role in order to ensure that there is harmonization in policies on waste management, including on fiscal incentives, private sector investment, recycling, other waste diversion programs, cost recovery, revenue generation and other areas of mutual benefit in waste management. There are obvious benefits in pursuing a regional approach as waste management agencies may be able to collaborate in the pursuit of joint venture PPPs with investors in waste diversion programs, review revenue and cost-recovery approaches as regional solutions in such matters can lead to greater political acceptability of such approaches rather

than pursuing those matters independently. There are obvious advantages in taking a harmonized approach in waste management.

7.0 OECS Guidelines on Fiscal Incentives and Model Policy to Promote Waste Reduction, Effective Disposal and Management

This Report has provided an assessment of the performance of the ReMLit States in waste reduction, effective disposal and management. This assessment has included a review of the institutional, regulatory and legal frameworks for SWM, the constraints in implementation and an analysis of the effectiveness of the fiscal incentives regimes in waste reduction, effective disposal and management. The Report outlines fourteen (14) recommendations to address the gaps/ deficiencies in effective solid waste management in member states. Given the fiscal challenges of OECS Member states and the inability of Governments to fund waste reduction and diversion programs, increasing emphasis will have to be placed on the private sector to provide the funding required for the investments in the waste management sector. This new approach will require the development of a new fiscal incentives regimes and model policy for waste reduction, effective waste disposal and management are presented below. The guidelines for this new approach are presented below.

7.1 OECS Guidelines on Fiscal Incentives to Promote Effective Waste Management

- The types of fiscal incentives to be provided to the waste management sector eg. tax holidays, accelerated capital depreciation and exemptions of customs duties on equipment and other capital goods
- ii. The formula to be used to quantify the magnitude and duration of fiscal incentives. This would include an assessment of what should be the length of tax holidays and accelerated depreciation and the percentage exemptions to be granted on customs duties on equipment and other capital goods.
- iii. The authority of Cabinet in granting discretionary fiscal incentives to the waste management sector
- iv. The review of the criteria for granting fiscal incentives, in particular the need to incorporate effective waste management criteria in addition to the economic criteria e.g. magnitude of investment, employment and foreign exchange earnings.
- v. The need to consider granting fiscal incentives to households to promote source separation. Incentives to be considered include tax credits on income for households.
- vi. The various other policy options available to Government in promoting effective waste management. These would include deposit return systems, EPR e.g. take back systems and Advanced Disposal fees. The need to assess whether these options are more effective than fiscal incentives for particular segments of waste management activities
- vii. The possibility of incorporating other innovative financing mechanisms in conjunction with fiscal incentives to promote effective waste management. These would include PPPs and other innovative financing instruments including blended finance, joint ventures, and blue / green bonds.

⁷ A more detailed assessment of these guidelines are presented in Annex 1.

These guidelines for fiscal incentives should be considered in conjunction with the following guidelines on model policy to promote effective waste management.

7.2 Guidelines for Model Policy on Waste Management

The guidelines for model policy to promote waste reduction, effective disposal and management should be consistent with the member states international and regional obligations / agreements as well as the specific national circumstances of OECS member states in relation to solid waste management. These are listed below:

- International and Regional Agreements / Conventions The OECS Member States are party to a number of international and regional agreements, including the SDGs, the Paris Agreement, the Basel Convention, the Rotterdam Convention, the Stockholm Convention and the Montreal Protocol.
- ii. Developing a new policy and regulatory framework which is built upon the following principles in solid waste management:
 - a. Zero Waste
 - b. Circular Economy
 - c. Waste Hierarchy
 - d. Extended Producer Responsibility
 - e. Polluter-Pay-Principle
- iii. The role of the Private Sector in relation to fiscal incentives, PPPs, and innovative financing mechanisms
- iv. The role of the Public Sector in relation to policy formulation, including the development of green procurement policies
- v. The role of Households in source separation
- vi. Reviewing the role of SWMAs in making these agencies more business oriented given the proposed expanded role of the private sector in SWMA. There is also the need to give greater priority to public awareness programs.
- vii. Research and Data Collection functions need to be included in the responsibilities of SWMAs. Policies need to be evidence-based and there is a need to collect data on solid waste on a periodic basis to facilitate timely policy decisions.
- viii. Collaboration and Stakeholder Participation to encourage greater ownership among stakeholders in solid waste management and to allow stakeholders to participate in the decision-making process
- ix. Institutional Coordination to ensure that all agencies involved in Solid Waste Management have clear roles and responsibilities and to identify areas where these agencies should cooperate and coordinate more effectively.
- x. OECS Collaboration to identify areas in which members states should collaborate on solid waste management issues. There appears to be very little collaboration taking place currently. It is recommended that the OECS Commission can coordination and lead on issues of collaboration in solid waste management.

8.0 Next Steps

This Report has undertaken an analysis of fiscal incentives and related policy on waste reduction, effective disposal and management and provided guidelines on fiscal incentives and model policy to promote and support a circular economy including fostering actions related to recycling, diversion and disposal. This provides a sound basis on which to proceed to Deliverable #5 which involves developing an OECS Incentives Program.

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ANNEX 1 – Detailed Guidelines on Fiscal Incentives and Model Policy to Promote Effective Waste Management

OECS Guidelines on Fiscal Incentives and Model Policy to Promote Waste Reduction, Effective Disposal and Management

Lesson Learned

The foregoing assessment of the performance of the OECS Member States in waste reduction, effective disposal and management has outlined a number of deficiencies in their approaches to sound waste management practices and the Report outlines 14 recommendations to address these deficiencies. Moreover, there are a number of lessons to be learned following the implementation of the OECS Solid Waste Management Project over the period 1995-2003. This project resulted in the creation of the institutional, policy and legal framework for solid waste management by the enactment of waste management legislation which provided for the establishment of SWMAs and the policy and operational framework for the management of the waste management sector. The Waste Management Acts makes provision for the development of NWMSs which provided for inter alia, options for waste reduction and diversion and established targets for waste reduction in four of OECS RemLit participating countries. The strategy identified the polluter pay principle and cost recovery from those who benefit from these waste measures. The legislation also provided for private sector investment into the waste management sector through the establishment of fiscal / financial incentives by way of regulations to implement the NWMS and other provisions in the Act.

The policy and legal framework provided a sound basis upon which to manage solid waste and to develop waste reduction effective disposal and diversion programs. There were, however clear policy slippages in the implementation of the waste management legislation arising from a number of factors including:

- ✓ None of the Member States developed approved NWMSs which would have provided for the implementation of waste reduction and diversion options;
- ✓ Apart from possibly Grenada and, to a lesser extent, Saint Vincent and the Grenadines, none of the countries developed sustainable financing mechanisms for solid waste management;
- ✓ The Countries did not enact specific regulations for fiscal / financial incentives for the promotion of private sector investment into the waste management sector
- ✓ The lack of a monitoring and evaluation framework for solid waste management.
- ✓ The absence of an accountability framework for performance by solid waste management agencies

Since the passage of the waste management legislation in the OECS states, there have been major developments at both the international, and regional levels resulting in the need for the member states to accordingly revise the legal and policy frameworks to reflect the new commitments and obligations agreed upon by the member states. At the domestic level it has become even more imperative to proceed with utmost urgency in waste reduction and diversion options as landfills approach their end of life capacities and the projected increases expected in solid waste generation.

One of the lessons learnt from the past is the lack of a strategic approach in managing solid waste issues and a focus on addressing operational matters. In addition, there is a lack of coordination and cooperation among OECS states resulting in a lack of a harmonized approach and sub-optimal outcomes at the country levels.

OECS Guidelines on Fiscal Incentives and Model Policy

There is a need for a new approach to be adopted by OECS Member States to bring about the desired changes in waste reduction, effective disposal and management. This new approach will build on past successes but recognizes that there must be major transformational changes on the part of all stakeholders (Government, Solid Waste Management Agencies, private sector, civil society and households) operating in the waste management sector. Given the fiscal challenges of OECS Member states and the inability of Governments to fund waste reduction and diversion programs, increasing emphasis will have to be placed on the private sector to provide the funding required for the investments in the waste management sector. In this regard, OECS guidelines on fiscal incentives and model policy, which provide a roadmap for waste reduction, effective waste disposal and management are presented below.

Fiscal Incentives

The impact of existing fiscal incentives on waste reduction, effective waste disposal and management has been minimal as Member States have not implemented a specific fiscal incentives regime for waste management. None of the Member States have implemented regulations for fiscal incentives in accordance with the waste management legislation. In developing the regulations for fiscal incentives, the following guidelines need to be taken into consideration:

- The types of fiscal incentives to be granted to the waste management sector. Fiscal incentives
 can be granted for tax holidays or accelerated capital depreciation and exemptions of customs
 duties on equipment and other capital goods.
- ii. Should a formula be used for determining the length of the tax holidays and or how accelerated depreciation is calculated? If a formula is used, OECS Member States would need to determine whether the current formulas used in their respective fiscal incentives regimes are appropriate for the waste management sector and if not to develop a new formula.
- iii. Should each case for fiscal incentives be submitted to Cabinet to determine what fiscal incentives should be granted on a case by case basis? This would make the granting of fiscal incentives discretionary.
- iv. Should current fiscal incentives regimes be made conditional upon the implementation of effective waste management programs and if so, what conditions should be imposed? Fiscal incentives are currently granted to industry, tourism, agriculture and fisheries under specific legislation. These incentives are normally granted based upon the value of investment and employment. OECS Member States should consider how to incentivize these entities operating in the respective economic sectors to adopt effective waste management practices.
- v. The type of fiscal incentives, if any, to be granted to households to promote source separation and recycling. In particular should government consider granting tax credits on income to promoting source separation as opposed to giving households waste receptacles and bags?

- vi. The need to consider whether other policy tools/ instruments are more effective than fiscal incentives in effective waste reduction management. This may include considering other incentive programs including deposit return systems and extended producer responsibility (take back systems and advance disposal fees).
- vii. The need to consider other policy tools, instruments and arrangements in conjunction with fiscal policy to promote sound waste management practices. These would include PPPs and the types of PPPs (BOLT, BOT, DFCs) and other innovative financing instruments including blended finance, joint ventures, and blue / green bonds.
- viii. These guidelines for fiscal incentives should be considered in conjunction with the following guidelines on model policy to promote effective waste management.

Guidelines for Model Policy on Waste Management

The guidelines for model policy to promote waste reduction, effective disposal and management should be consistent with the member states international and regional obligations / agreements as well as the specific national circumstances of OECS member states in relation to solid waste management. These guidelines are therefore intended to ensure that OECS member states give consideration to complying with the international and regional obligations / agreements and the specific national circumstances in relation to waste management.

1. International and Regional Agreements / Conventions

The OECS Member States are parties to a number of agreements at the international level. These include the Sustainable Development Goals (SDGs) and the Nationally Determined Contributions (NDCs).

SDG 12 calls for Sustainable Consumption and Production which requires inter alia, substantially reducing waste generation⁸, and ensuring that companies adopt sustainable business practices⁹. SDG 14 - Life Below Water -requires member states to conserve and sustainably use the oceans and marine resources for sustainable consumption. The guidelines for model policy in particular calls for the consideration of SDG 12 and SDG 14 as well as a number of the SDGs including SDG 13, Climate Action, SDG 15 Life on Land and SDG 8 Decent Work and Economic Growth.

The NDCs of Members States commits to the reduction of greenhouse gases (GhG) and the path to a low carbon development. Landfills account for a significant proportion of greenhouse gas emissions (methane) and therefore is a need to ensure that steps are being taken to reduce member states GhGs in keeping with their respective NDCs.

The model policy should also take into consideration other international conventions that OECS Member states would be party to in relation to sustainable waste management including, inter alia, the Basel Convention, the Rotterdam Convention, the Stockholm Convention and the Montreal Protocol.

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⁸ Target 12.5 of the SDGs

⁹ Target 12.6 of the SDGS.

At the regional level, model policy should be informed by the Cartagena Convention and at the OECS level by the Treaty of Basseterre and the Saint Georges Declaration of Principles of Environmental Sustainability.

2. National Circumstances

The national circumstances require OECS member states to review the legal, regulatory and institutional arrangements for waste management and to address the gaps and shortcomings in the existing arrangements. The role of all stakeholders in the waste management, including the solid waste management agencies, the public sector, the private sector, civil society and individuals will need to be reviewed in developing the guidelines for model policy. The following guidelines for model policy are suggested to be considered at the national level.

- i. Developing a new policy and regulatory framework which is built upon the following principles in solid waste management:
 - a. Zero Waste: The Zero Waste principle is based on waste management planning and development approaches that emphasize waste prevention as opposed to waste management after the waste has been produced. This approach aims to fundamentally change the way materials flow through society with the intent of resulting in no waste. The Zero Waste principle does not only focus on eliminating waste through recycling, reuse, and recovery processes but also encompasses restructuring production and distribution systems to reduce waste generation in the first place. OECS Member States, however, import a substantial amount of their goods and the manufacturing sectors are very small. As a result, a large amount of packaging material is imported and the Member Governments are not able to directly influence the packaging and waste internationally. There is however, increased pressure being placed on these manufacturers by their respective Governments to redesign their processes to minimize packaging material and /or to make their packing recyclable.

The Zero Waste principle provides a guiding direction for implementing National Strategies and Action Plans that are continually working towards eliminating waste. This principle will be particularly relevant in achieving the member government's intent to significantly reduce the required landfill disposal capacity in the future and/or eliminate the need for landfill disposal by 2030 as announced by one country¹⁰.

b. Circular economy: There is a need to transition away from our current linear model of make, take and throw away to a more sustainable consumption and production model in which we retain and recover as much value as possible from resources by reusing, repurposing and recycling and hence transforming waste into resources. The circular economy model is an internationally accepted model critical to addressing the triple threats of pollution, climate change and biodiversity loss.

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¹⁰ Saint Lucia approved a policy for eliminating the need for landfills by 2030.

- c. Waste Hierarchy: Waste hierarchy is a strategic tool that prioritizes actions for effective waste management. After waste prevention, the hierarchy focuses on the 3Rs processes including Reduce (reducing the amount of waste generated and directed to landfill disposal), Reuse (repairing products that can be reused, or finding alternative uses for waste stream components), and Recycle (returning waste with recoverable value for reprocessing and the manufacture of new products) processes. In the conventional waste hierarchy, these processes are followed by Recovery where beneficial waste properties (such as organic content for composting or combustible content for energy recovery) can be recovered and utilized. Finally, this waste management hierarchy recognizes that there will likely be a need for landfill disposal of residual waste even after fully implementing the 3Rs and the Recovery stage.
- d. Extended Producer Responsibility (EPR) This is a policy approach under which producers are given a significant responsibility financial and/or physical for the treatment or disposal of post-consumer products. Assigning such responsibility could in principle provide incentives to prevent wastes at the source, promote product design for the environment and support the achievement of recycling and materials management goals.
- e. Polluter Pay Principle The polluter pays principle is the commonly accepted practice that those who produce pollution should bear the costs of managing it to prevent damage to human health or the environment. It is to be noted that while this principle is a politically sensitive issue, applying the polluter pays principle can have a significant impact on optimizing and incentivizing waste generators to reduce the amount of waste they generate and/or actively participate in recycling and recovery programs.

ii. Developing a sustainable financing model for sound solid waste management based on the above principles

One of the key gaps in waste management in the OECS member states is the lack of a sustainable financing model for pursuing sound waste management practices. In particular, the creation of semi-autonomous agencies to manage solid waste should have ideally been accompanied by financial independence which would allow SWMA to have their own financing sources to meet the expenditure needs of the waste management sector. The guidelines for model policy must therefore address the need for a sustainable financing model and would include the following:

Review Existing Revenue Sources -The major constraint impacting upon Solid Waste Management Agencies in achieving the goals of waste reduction, effective disposal and management is the lack of a sustainable funding model. The funding models developed by OECS Member States are not aligned with the cost of the services provided by these agencies. Moreover, there is also the need to ensure that funding sources are resilient and reliant on more than one main source, such as for example, the environmental levy on visitors. The external shock caused by the Covid-19 pandemic has negatively impacted the tourism sector and resulted in a massive reduction in the revenue from the environmental levy on visitors.

Table 6 below provides the current major funding sources of solid waste management agencies in the OECS ReMLit participating countries.

Major Revenue Sources

Revenue	Antigua and Barbuda	Dominica	Grenada	Monserrat	Saint Lucia	Saint Vincent and the Grenadines
Fiscal Transfer	Yes	Yes	No	Yes	Yes.	No
Government Charge	No	No	Yes	No	No	Yes
Environmental levy on visitors	Yes	Yes	Yes	Yes	Yes	Yes
Environmental levy on goods	Yes	No	Yes	Yes	No	No
Environmental levy on business	Yes	Yes	No	No	No	Yes
Environmental levy on households	No	Yes	Yes	No	No	Yes.
Levy on Ship Generated Waste	Yes	Yes	Yes	Yes	Yes	Yes

Grenada and Saint Vincent and the Grenadines have the most diversified sources of revenue to fund their operations and are financially independent of central government. It is however, to be noted that Grenada and Saint Vincent and the Grenadines do not generate sufficient revenues to finance new waste diversion programs. There is a need to review some of the revenue sources given that they were implemented a long time ago. These include the environmental levy and the ship generate waste levy. Tipping fees have been provided for in the waste management legislation but have not been implemented in all of the OECS Member States.

New Revenue Sources

Member States may also consider introducing new revenue sources to build a sustainable financing model for effective waste management. Member states can consider the following new revenue sources:

- ✓ Deposit Refund Systems for those member states that do not have this revenue source in place currently. Member states can consider the model implemented by Saint Vincent and the Grenadines as a best practice for OECS Member States
- ✓ Environmental levy on white goods, electronic goods and a range of other goods deemed inimical to the environment. Antigua and Barbuda and Grenada have implemented this measure which is an advanced disposal fee under the EPR.
- ✓ A levy on households to reflect cost recovery for waste generation by households. This has been implemented in Grenada, by way of a levy on electricity bills and in Saint Vincent and the Grenadines, by way of a charge on the water bill. Other member states may wish to consider the implementation of a levy on households as this has been proven to be the most resilient source of revenue.

iii. The role of the private sector

OECS Member Governments do not have the policy space to finance new waste diversion programs. The new waste diversion programs which include recycling and composting are revenue generating and provide business opportunities for the private sector. These opportunities may, however require the support of Member Governments through financial, technical and other measures. Currently, a number of individuals and small businesses operate in the recycling market engaged in the buying and selling of scrap metal, plastics and paper and cardboard. These operators in the recycling market are only able to capture a very small share of the recyclable products given that they lack proper waste infrastructure and processing facilities. Moreover, the industry appears not to be profitable as measured by the number of exits in the sector by recyclers. In Saint Lucia, a number of recyclers who entered the market have since departed. Recyclers would need to massively upscale their current operations in order to significantly increase the volume of recyclables to be sold on either the export market or the domestic market. This may also contribute to reducing the unit cost of production.

Given that the market conditions in the recycling markets are not attractive to consider major investments in waste infrastructure and processing facilities, Member Governments would need to provide support to capable recyclers / other new potential market entrants to invest in the industry. The guidelines for providing support to the private sector are as follows:

- Member Governments should conduct an economic feasibility analysis of the major recyclables to identify the most lucrative segments of the waste stream that should be recyclable.
- II. Based on the economic feasibility analysis, Member Governments would need to identify the types of support measures that are required to lower the cost of production to increase profitability in the recycling industry and attract private sector investment. The type of measures to be considered would include:
 - a. fiscal incentives in OECS Member States for which guidelines were provided in Section 6.2.1.
 - b. PPPs in which Member Governments may wish to engage the private sector through a deposit refund mechanism wherein Government and the private sector agrees to use a recycler to collect the recycled material in exchange for an administrative fee which is deducted from the deposit. Saint Vincent and the Grenadines has adopted such a model which can be replicated by the other OECS member states as it has proven to be sustainable. More sophisticated PPPs e.g. Build Own Lease Transfer (BOLT), Build Own Operate (BOO), Design Finance Construct (DFCs). Some OECS Member countries have included PPP policies in new procurement legislation or have developed a PPP policy framework approved by Cabinet.
 - c. Member Governments may also enter into joint venture arrangements with the private sector. Under the Solid Waste Management Acts, the agencies are permitted to borrow with the approval of the Minister for Finance. Green / Blue bonds may be raised for waste management activities. These green/ blue bonds can be provided at highly concessional rates and with long maturity dates. The funds received from the issue of the bonds can be used to co-finance

- investments with the private sector and thus reduce the risk of the investment to the private sector.
- d. Blended Finance can be used to crowd in private sector investments into the recycling and composting sectors. Blended finance schemes involve the government either providing concessional finance and grants to provide to the private sector to help lower the risk and increase the rate of return on private sector investments. Blended finance has been used by Member Governments to finance business transactions that can effectively become sustainable in the long term. Blended finance has been used successfully in loans granted by the Saint Lucia Development Bank for climate change related investments, for example rain water harvesting in which a grant element was provided as part of the loan. This financing mechanism was agreed upon with the World Bank which provided the funding to the Saint Lucia Development Bank.
- e. Green guarantees can encourage investors to lend to the private sector by Government sharing in the risk of the project. Two types of green guarantee structures can be considered. Credit guarantees or partial credit guarantees to encourage lending by financial institutions to green projects in order to crowd in private sector investments in sustainable infrastructure projects (including waste management projects in recycling). Performance risk guarantees covering uncertainty of cash flows to reduce risks related to new technologies, services or practices employed in a project.
- f. Obtaining funding from concessional sources, for example the Green Climate Fund (GCF), the World Bank and the European Investment Bank (EIB) which can be used to invest in waste management infrastructure for processing facilities to be operated by the private sector.

Member Countries can consider selecting from the above menu of financing options to support private sector investments in the waste management sector to encourage recycling, composting and waste to energy thus contributing to zero waste and the circular economy. It is important to note that fiscal / financial incentives may not be sufficient on their own to encourage private sector investment into waste diversion programs.

iv. The Role of the Public Sector

The public sector is a major generator of waste and can influence waste generation, recycling, reuse, composting and recovery. The central government and other public sector entities can use their procurement policies to discourage purchasing plastic beverage containers in favor of encouraging reusable containers, for example glass and to encourage reusable containers, cutlery and other utensils for serving at major official functions. The public sector can also consider adopting green procurement policies which would provide favorable consideration to recycled products, where available, in its purchases, for example, office furniture, subject to the products meeting quality standards.

v. The Role of Households

Households are required to play a key role in waste diversion programs including, in particular in source separation required for recycling and composting. In an effort to incentivize households to source separate different streams of waste, it would be important to consider the best incentive mechanism for households to source separate. One possible measure can be to provide the waste receptacles designed for waste separation and bags for the recyclable products. Fiscal measures can also be considered to encourage households to purchase biodegradable products through the exemption of customs duties and taxes and /or through the increase in taxes on products in plastic containers.

vi. Rethinking the Role of the Solid Waste Management Agencies

The waste management policy needs to rethink the role of waste management agencies. In particular, there is a need to transform the operations of solid waste management agencies to make them become more business oriented. This would be in keeping with the greater role that the private sector is expected to play in waste reduction, reuse, recycling and composting. One possible option to consider would be the establishment of a business unit in SWMAs which will be required to manage the commercial aspects of solid waste management operations, including examining PPP arrangements and other financing mechanisms for encouraging the private sector into investing in waste management. An alternative consideration would be for the Waste Management agencies to enter into cooperative arrangements with the national investment promotion agencies. There is also a need to make the waste management agencies more accountable and results-driven and to strengthen the governance arrangements in ensuring that these organizations are driven by performance.

The role of waste management agencies in public awareness and education needs to be strengthened to ensure that the changes to be made in the waste management sector are communicated clearly to all stakeholders.

vii. Research and Data Collection

Decisions that are to be made in the waste management sector should be driven by data. Data on the waste management sector is not being updated on a periodic basis as required by the national waste management strategies. There is a need to enhance the data collection systems to allow for more frequent update of solid waste management data so that the best decisions can be made. Research capabilities in the Ministry responsible for solid waste management should be strengthened so that the Ministry is kept abreast of state of the art changes in the sector.

viii. Collaboration and Stakeholder Participation

Waste reduction, effective waste disposal and management depends upon stakeholders undertaking their roles and responsibilities in the waste management system. There is a need to foster great collaboration among stakeholders to allow them to take ownership of the changes that are required to be implemented and to participate in the decision-making process. There is a need for more transparency and greater information dissemination to stakeholders on waste management issues.

ix. Institutional Coordination

There appears to be the need to clarify the roles of the principal central government agencies in waste management as there appears to be conflict and confusion in some of the responsibilities to be carried out in the waste management sector. An institutional coordination model should be developed clearly indicating the responsibilities of the different agencies and the areas in which they are required to cooperate and coordinate. This will ensure that a whole-of-government approach will be taken on waste management issues.

x. OECS Collaboration

The Waste Management agencies have not cooperated closely on waste management issues and appear to taking their own respective paths in addressing the critical issues of waste management. There is a need for these Waste Management Agencies to cooperate and coordinate more closely with each other on waste management issues as this allows for shared learning and the possibility of cooperating on matters such as joint procurement of equipment and other capital goods which could yield lower costs. The OECS Commission can lead in the collaboration process by ensuring that waste management agencies in the OECS meet regularly to discuss the critical issues impacting the waste management sector.

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MEETINGS

Country	
Antigua and Barbuda	
Name	Designation
None	Designation
Mrs. Ena Dalso Henry	Permanent Secretary, Ministry of Health, Wellness and the Environment
Dr. Helena Jeffery Brown	Technical Coordinator, Department of Environment
Mr. Daryl Spencer	General Manager, Antigua and Barbuda Solid Waste
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Mr. Emmanuel Dubois	Landfill Manager
Dr. Errol Samuel	President of the Antigua and Barbuda Chamber of Industry and Commerce
Dominica	
Mr. Florian Mitchel	General Manager, Dominica Solid Waste Management
	Corporation
Ms. Kimisha Thomas	Senior Policy Advisor, Ministry of Environment, Rural
	Modernization and Kalinago Upliftment
Mr. Simon Walsh	Former President of the Dominica Hotel and Tourism
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Ms. Nazarene Winston	Manager, Nature Isle Dive
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Mr. Allison Neptune	Operations Manager, Solid Waste Management Authority
Ms. Myrna Julien	Communications Manager, Solid Waste Management
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Mr. Allen Gilbert	Acted as Operations Manager
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Ms Athea Dowden	Commerce
Mr. Mike Sylvester	Permanent Secretary Ministry of Finance
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Ms. Ernestine Corbett	Director, Department of the Environment
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Ms. Annette Leo	
Lavina Alexander	Chief Sustainable Development Officer
Mr. Justin Sealy	Sustainable Development Officer
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Ms. Emlyn Jean	Accountant, Solid Waste Management Authority
Mr. Brian Louisy	Information and Communications Manager,
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Mr. Vern Emmanuel	Association
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Mr. Kemuel Jn Baptiste	Chief Extension Officer
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Ms. Kim Halbish	President of the Saint Vincent and the Grenadines, Hotel and
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Mr. Anthony Regisford	Executive Director, Saint Vincent Chamber of Industry and
	Commerce

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David Robin Programme Director, OGF December 03, 2021 ReMLit