



**NDC-TEC  
RECOMMENDATIONS  
FOR A SUSTAINABLE  
GREEN PUBLIC  
PROCUREMENT  
POLICY**

SCS Hohmeyer | Partner and W. Whiteley Consultants  
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# NDC-TEC RECOMMENDATIONS FOR A SUSTAINABLE GREEN PUBLIC PROCUREMENT POLICY



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## Acronyms/Abbreviations

<b>AC</b>	Award Criteria
<b>ANT</b>	Antigua and Barbuda
<b>BMWK</b>	Bundesministerium für Wirtschaft und Klimaschutz (German Ministry for Economic Affairs and Climate Action)
<b>BYD</b>	Build Your Dreams (Chinese car manufacturer)
<b>CARICOM</b>	Caribbean Community
<b>CPU</b>	Central Procurement Unit
<b>CSME</b>	CARICOM Single Market and Economy
<b>CSRD</b>	Corporate Sustainability Reporting Directive
<b>EV</b>	Electric Vehicle
<b>FRIP</b>	Framework Regional Integration Policy on Public Procurement
<b>GCF</b>	Green Climate Fund
<b>GIZ</b>	Deutsche Gesellschaft für Internationale Zusammenarbeit
<b>GOJEP</b>	Government of Jamaica Electronic Procurement
<b>GPP</b>	Green Public Procurement
<b>GRENLEC</b>	Grenada Electricity Services Ltd.
<b>ICE</b>	Internal Combustion Engine
<b>IDB</b>	Inter-American Development Bank
<b>IKI</b>	Internationale Klimaschutzinitiative (International Climate Initiative)
<b>ILO</b>	International Labour Organization
<b>INGP</b>	Inter-American Network on Government Procurement
<b>ISO</b>	International Organization for Standardization
<b>JPS</b>	Jamaica Public Service Company
<b>LCC</b>	Life Cycle Costing
<b>LCV(s)</b>	Light Commercial Vehicle(s)
<b>LDV(s)</b>	Light Duty Vehicle(s)
<b>LUCELEC</b>	Saint Lucia Electricity Services Ltd.
<b>MSME(s)</b>	Micro, Small and Medium-Sized Enterprise(s)
<b>NAP(s)</b>	National Action Plan(s)
<b>NDC</b>	Nationally Determined Contribution
<b>NDC-TEC</b>	Supporting the implementation of <b>NDCs</b> in the Caribbean – transforming the transport and energy sectors towards a low-carbon and climate resilient future
<b>NPPC</b>	National Public Procurement Centre
<b>OAS</b>	Organization of American States

<b>OECS</b>	Organisation of Eastern Caribbean States
<b>PAU</b>	Procurement Administration Unit
<b>PP</b>	Public Procurement
<b>PPP</b>	Public Procurement Policies
<b>PV</b>	Photovoltaics
<b>RPMCU</b>	Regional Procurement Monitoring and Compliance Unit
<b>SDG(s)</b>	Sustainable Development Goal(s)
<b>SGPP</b>	Sustainable Green Public Procurement
<b>SGPPP</b>	Sustainable Green Public Procurement Policy
<b>SME(s)</b>	Small and Medium-sized Enterprise(s)
<b>SPP</b>	Sustainable Public Procurement
<b>TS</b>	Technical Specifications
<b>TCO</b>	Total Cost of Ownership
<b>UNEP</b>	United Nations Environment Programme
<b>WTO GPA</b>	World Trade Organization Agreement on Government Procurement
<b>ZEV</b>	Zero Emission Vehicle

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# NDC-TEC

## Recommendations for a sustainable green public procurement policy



## Abstract

The report analyses the readiness and pathways for implementing Sustainable Green Public Procurement Policy (SGPPP) in the transport sector across five Caribbean countries - Antigua & Barbuda, Belize, Grenada, Jamaica, and Saint Lucia - as part of the NDC-TEC project funded by the German Ministry for Economic Affairs and Climate Action through the International Climate Initiative (IKI). The project aims to accelerate the transition to electric mobility (e-mobility) and renewable energy in support of national climate goals and the Paris Agreement.

### Key Findings:

- **Legal and Policy Frameworks:** Most countries have established procurement laws and central procurement units, but these frameworks rarely mandate sustainability or lifecycle criteria for vehicle procurement. Only Grenada has an enacted Sustainable Procurement Policy, while Jamaica and Saint Lucia are developing similar policies. The CARICOM Protocol on Public Procurement and the Framework Regional Integration Policy (FRIP) encourage green procurement, but adoption and enforceability remain limited, with few countries formally signed on.
- **Institutional and Capacity Gaps:** Procurement units are generally familiar with green procurement concepts but lack technical expertise, standardized tools, and training in lifecycle costing and sustainability evaluation. There is a shortage of skilled personnel and limited coordination between key ministries, hindering effective policy implementation.
- **Market and Infrastructure Readiness:** The e-mobility market is nascent, with few electric vehicles (EVs) in government fleets and limited public charging infrastructure. Local dealers can supply EVs but service and recycling infrastructure, especially for batteries, is underdeveloped. Jamaica leads in battery recycling initiatives, but most countries lack end-of-life management systems.
- **Regional Disparities:** Procurement practices, legislative readiness, and policy ambition vary widely among countries, leading to fragmented progress. Many countries have not ratified regional procurement protocols, reducing policy coherence and harmonization.
- **International Best Practices:** The report reviews global standards such as ISO 20400 and EU Green Public Procurement criteria, recommending their adaptation for the Caribbean context. It highlights the importance of integrating sustainability at all stages of procurement, from pre-qualification to contract management, and emphasizes the use of digital battery passports for EVs.

**Recommendations:**

- Amend national procurement laws to mandate sustainability and e-mobility standards.
- Sign and strengthen the CARICOM Procurement Protocol to include binding green provisions.
- Build institutional capacity through targeted training and regional procurement hubs.
- Adopt lifecycle costing and international green procurement criteria for transport.
- Develop centralized data systems and pilot projects to test and refine SGPPP approaches.
- Invest in charging infrastructure, grid upgrades, and battery recycling.
- Ensure technical training for vehicle technicians and emergency responders.

**Conclusion:**

While Caribbean countries have shown political commitment to e-mobility and sustainable procurement, significant legal, institutional, and market barriers remain. Achieving ambitious e-mobility targets by 2030 will require harmonized legal frameworks, capacity building, infrastructure investment, and regional cooperation. The report offers a roadmap for aligning procurement systems with climate and development goals, positioning the Caribbean as a potential global model for climate-resilient transport policy.

## 0. Executive Summary

### 0.1 Aim and context of the project

The consultancy is part of the project ‘*Supporting the implementation of NDCs in the Caribbean – transforming the transport and energy sectors towards a low-carbon and climate resilient future*’ (NDC-TEC), funded by the German Ministry for Economic Affairs and Climate Action (BMWK) through the International Climate Initiative (IKI). The project offers tailored support to Antigua & Barbuda, Belize, Grenada, Jamaica and Saint Lucia in the implementation and raising the ambition of their NDCs in the energy and transport sectors. Grenada, Jamaica and Saint Lucia are the ‘flagship countries’ of the project implementing flagship projects.<sup>1</sup>

The objective of the consultancy is to develop recommendations for the improvement of public procurement policies and practices with respect to transportation based upon the best international practice in sustainable green public procurement policies and an account of the present procurement policies and practices in the five project countries.

### 0.2 Structure and methodologies of the project

In the first part of the consultancy on SGPPP in transport the basics of good public procurement (PP) practices are briefly summarized (Chapter 2.1.1 of the report), the international best practice in sustainable green public procurement (SGPP) are discussed (Chapter 2.1.2) and the special criteria for SGPP used in transport are reported (Chapter 2.1.3). Whenever the practices of public procurement are concerned the abbreviation PP is used and whenever the public procurement policies are discussed, the abbreviation PPP is used.

Following the discussion of the best international practice the focus is put on the regional public procurement situation in the Caribbean in general (CARICOM and OECS) (Chapter 2.2) and then narrowed down to the specific procurement situations in the five project countries (Chapter 2.3).

The consultancy was organized in three major task areas, a desktop literature review, a mapping of stakeholders and structured stakeholder interviews, and market and data analysis. On this basis preliminary recommendations for the future development of sustainable green public procurement practices and policies were derived for the project countries and the region.

Based upon the results of the detailed stakeholder mapping the relevant institutions and key individuals were asked for their participation in online interviews. As soon as

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<sup>1</sup> See: giz (2024a) p. 3

the interviews were set up, a series of structured interviews based upon the questionnaire developed were carried out.

In the third step, vehicle supply chain dynamics, maturity and sources of origin were analyzed based on published and internal import data and car dealer interviews and the structure and capital vintage of the public sector vehicle fleets in the project countries were analyzed based upon data supplied by GIZ. Unfortunately, sufficient data were only available for Saint Lucia. Thus, the planned analysis could only be carried out for one of the three flagship countries.

In a final step the interview results were analyzed and used together with the results of the literature review and the results of the market and fleet analysis as the basis for the development of the draft recommendations for sustainable green public procurement in the transport sector in the project countries. Based upon a comparison of the regional procurement legislation and practices in the transport sector and the international best practice, opportunities for improvement were identified and recommendations for the improvement of the regional procurement legislation and practice were made.

### **0.3 Main findings of the report**

From the desktop review and the in-depth interviews conducted, a number of findings can be reported about the situation of public procurement in the five project countries analysed:

- The CARICOM framework for public procurement:
  - Allows the use of sustainable green procurement by the member countries,
  - Has not been signed and implemented by most CARICOM member countries,
  - Is not followed by some signatory countries,
  - Does not have much impact on the procurement policies and practices in the member countries.
  
- The three flagship countries of the project:
  - Have established and functional procurement processes,
  - Have a special procurement act or law,
  - Are members of the Inter-American Network of Government Procurement (INGP),
  - Have central coordinating procurement units and decentral procurement units with procurement officers at the different ministries executing the procurement process,

- Use the principle of 'best value for money' as basis for procurement decisions,
  - Have central procurement units familiar with the concepts of green and sustainable procurement,
  - Are not using Live Cycle Costing,
  - Need additional training of most procurement officers in green and sustainable procurement,
  - Are lacking specific selection criteria for sustainable green procurement in transport procurement,
  - Have not signed the CARICOM procurement protocol,
  - Are at the very beginning of the introduction of e-mobility,
  - Have only a few EVs in the government fleets.
- Only Grenada has an enacted Sustainable Procurement Policy.
  - Antigua and Barbuda are still lacking a professionally organized public procurement system, although the country is signatory to the CARICOM Protocol on Public Procurement.
  - Belize has established a professionally organized procurement system. No conclusions can be drawn towards the consideration of aspects of sustainable procurement, as virtually no interview could be conducted for Belize due to major national activities taking place during the time of the consultancy.
  - The political ambitions concerning the fast introduction of e-mobility (until 2030) in Antigua and Barbuda (100% of new vehicle sales EVs by 2030), in Jamaica (100% GOJ fleet being EVs, 12% of privately owned and 16% of public transport fleet being EVs by 2030) and Saint Lucia (30% EV sales by 2030), will be very difficult to realise, as they assume adoption rates for e-mobility, which are close to impossible in the short remaining time.

It can be concluded that the flagship countries are already on their way towards sustainable green public procurement (SGPP), but that there are still a number of further steps to be taken to fully establish SGPP. The recommendations given in sub-chapter 0.4 are to be seen as an attempt to contribute to the process.

Although, the procurement policies and practices of the Caribbean countries differ widely, many recommendations could help other countries in the region to improve their procurement policies and practices as well.

## 0.4 Summary of recommendations

Recommendations for the improvement of the procurement situation, especially for the transport sector and e-mobility have been derived for three distinct areas:

- 1) Legislative and policy reforms.
- 2) Improvements of the procurement processes.
- 3) Improvements of general conditions for e-mobility.

The recommendations are summarized in Table 1 (Legislative and policy reforms), Table 2 (procurement processes) and Table 3 (general framework for e-mobility) below. More detailed background information on the recommendations can be found in Chapter 5 of the report.

Area of improvement	Recommendation	Short reason for the recommendation
Legislative Reform	<i>Update and Expand Procurement Legislation Reform</i>	Existing procurement laws should be amended or complemented by policies that mandate SGPP considerations including criteria such as life cycle costing, monetization of environmental costs, emissions reduction, and energy efficiency for vehicles.
	<i>Adopt Sustainable Green Public Procurement Policy</i>	Countries without a Green Procurement Policy should develop a National SGPP policy with clear objectives, implementation guidelines, and sectoral targets particularly in the transport sector.
	<i>Introduce Model Procurement Clauses</i>	In countries currently revising their procurement legislation or implementing e-mobility strategies, the adoption of Model Procurement Clauses or “green rider” templates should be strongly encouraged.
	<i>Legal and Regulatory Support for Private Sector Participation</i>	Clear legal provisions and incentives should be included to encourage the participation of local suppliers and service providers in e-mobility procurement. This includes encouraging partnerships, local assembly, maintenance services and charging infrastructure; critical to creating a self-sustaining market ecosystem.

*Table 1: Recommendations for legislative reform*

Area of improvement	Recommendation	Reason for the recommendation
Improve procurement processes	<i>Implement a structured standard approach for sustainable green procurement</i>	In order to fully implement sustainable procurement, it is recommended that structured procurement processes following the UNEP or the OAS/INGP handbook approaches should be implemented in each country.
	<i>Improve the training of all procurement officers in sustainable green procurement</i>	Although, the central procurement units of the three flagship countries of the project are quite knowledgeable about sustainable green public procurement, the procurement officers executing the decentralise procurement processes have hardly been introduced to systematic sustainable procurement processes and criteria.
	Install regional procurement help desk	To address persistent technical and staffing limitations across the Caribbean, countries should be encouraged to establish Regional Sustainable Procurement Help Desks to benefit from shared services.
	<i>Improve the basic needs assessment for the procurement of government cars</i>	In some project countries the technical specifications of procured government cars are well beyond the actual necessities of the use of the vehicles.
	<i>Develop specific criteria for vehicle and EV procurement</i>	Based upon the criteria developed by the EU for transport procurement and the international attempts to introduce battery passports, criteria for general vehicle and transport service procurement as well as specific criteria for the procurement of EVs should be developed.
	<i>Develop socio-economic procurement criteria for vehicle and EV procurement</i>	Based on the IISD/INGP/OAS socio-economic criteria for transport, technical specifications and award criteria for vehicles and transport services should be developed.
	Improve the monitoring of procurement success	A major gap in Caribbean public procurement systems is the absence of performance data and sustainability metrics. PPC Jamaica has just introduced a performance mechanism recently.
	<i>Implement EV policy targets for public fleet into procurement plans</i>	The ambitious targets of some project countries (e.g. Jamaica) for the conversion of the government fleet to EVs need to be integrated into the national procurement plans.
	<i>Better connection of the Caribbean countries to the INGP network</i>	Although, all project countries are members of the Inter-American Network of Government Procurement (INGP), the trend-setting work of the INGP on sustainable green procurement has not been integrated into the procurement policies of the Caribbean countries.

Table 2: Recommendations for the improvement of the procurement processes

Area of improvement	Recommendation	Reason for the recommendation
Improvement of general conditions for e-mobility	<i>Set standards for charging infrastructure</i>	In order to facilitate the acceptance of EVs, the charging infrastructure needs to be standardized to accommodate different charging standards at the public charging stations.
	<i>Prepare the electrical grid for the accommodation of e-mobility</i>	With the ambitious national and regional expansion plans for e-mobility the national electricity grids need to be reinforced, and intelligent charging needs to be enabled.
	<i>Increase share of domestic renewable electricity as fast as possible</i>	The main advantages of the transition to e-mobility like the massive reduction of greenhouse gases or the drastic reduction of fuel imports for hard currency are dependent on the share of domestic renewable energy used for e-mobility.
	<i>Establish professional battery recycling system</i>	In order to minimize possible environmental damages and to save scarce mineral resources car batteries need to be recycled. Presently most Caribbean countries are lacking a professional battery recycling system.
	<i>Introduce mandatory battery passports</i>	In order to enable full battery recycling and to minimize upstream environmental impacts of car batteries, digital battery passports like the EU passport should be made mandatory.
	<i>Introduce minimum safety standards for EVs and especially e-buses</i>	Experience shows that a lack of minimum safety standards for e-buses has led to dumping price competition in one project country at the expense of passenger safety. Therefore, minimum safety standards need to be introduced to ensure passenger safety.
	<i>Educate the teaching staff of academic and skills training institutions for e-mobility</i>	As soon as the introduction of e-mobility will reach substantial market shares, academic and skills training institutions will have to train a major share of all EV service technicians.
	<i>Equip academic and skills training institutions with state-of-the-art technical equipment</i>	Presently academic and skills training institutions are lacking state-of-the-art technical equipment for the training of service technicians for e-vehicles.
	<i>Train all fire fighters and tow truck drivers in the handling of EV accidents</i>	Any fire fighter or tow truck driver confronted with the handling of an EV accident needs to have a solid understanding of the dangers and implications of the situation. The planned fast-growing share of EVs in the project countries will necessitate that all fire fighters and tow truck drivers will have special training for the handling of EV accidents.

**Table 3:** *Recommendations for the improvement of the framework conditions for e-mobility*

In a final stakeholder validation workshop held online on May 22<sup>nd</sup>, 2025, the participants were asked to rank the different recommendations according to their

importance on a five-step scale from 'Not at all important' to 'Very important' and according to the level of deficit on a second five step scale from 'No deficit' to 'Severe/extreme deficit'. For each recommendation the numerical values (1 – 5) for the two answers were multiplied and aggregated across all answering participants. Thus, each recommendation was ranked on a scale from 1 to 25 points. The highest possible score of 25 points expresses the situation that a recommendation was seen as 'Very important' (5 points) and the level of deficit was seen as 'Severe/extreme' (5 points) at the same time, while the lowest possible score of 1 point reflects the judgement that this recommendation was qualified as 'Not at all important' (1 point) and 'No deficit' (1 point). The lowest level of importance assigned to any recommendation was 'Slightly important' (2 points), while the lowest level of deficit was seen as 'Milde deficit' (2 points).

The resulting ranking is shown in Table 4 below. The fractions on the importance scale are due to the calculation of average values across the different stakeholders.

Area of improvement	Recommendation	Importance according to stakeholder feedback	Rank according to stakeholder feedback
III.6	<i>Introduce minimum safety standards for EVs and especially e-buses</i>	22.5	1
I.2	<i>Adopt Sustainable Green Public Procurement Policy:</i>	20.3	2
II.1	<i>Implement a structured standard approach for sustainable green procurement</i>	20.0	3
III.2	<i>Prepare the electrical grid for the accommodation of e-mobility</i>	20.0	4
III.8	<i>Equip academic and skills training institutions with state-of-the-art technical equipment</i>	20.0	5
I.3	<i>Introduce Model Procurement Clauses</i>	19.0	6
II.4	<i>Improve the basic needs assessment for the procurement of government cars</i>	18.7	7
II.7	<i>Improve the monitoring of procurement success</i>	18.7	8
I.1	<i>Update and Expand Procurement Legislation Reform</i>	18.3	9
II.6	<i>Develop socio-economic procurement criteria for vehicle and EV procurement</i>	18.3	10
III.4	<i>Establish professional battery recycling system</i>	17.5	11
III.9	<i>Train all fire fighters in the handling of EV accidents</i>	17.5	12
II.2	<i>Improve the training of all procurement officers in sustainable green procurement</i>	17.3	13
II.8	<i>Implement EV policy targets for public fleet into procurement plans</i>	17.3	14
I.4	<i>Legal and Regulatory Support for Private Sector Participation</i>	17.0	15
III.7	<i>Educate the teaching staff of academic and skills training institutions for e-mobility</i>	15.0	16
III.1	<i>Set standards for charging infrastructure</i>	14.8	17
III.5	<i>Introduce mandatory battery passports</i>	14.8	18
II.5	<i>Develop specific criteria for vehicle and EV procurement</i>	14.7	19
III.3	<i>Increase share of domestic renewable electricity as fast as possible</i>	14.0	20
II.9	<i>Better connect the Caribbean countries to the INGP network</i>	11.7	21
II.3	<i>Install regional procurement help desk</i>	10.3	22

**Table 4:** *Ranking of recommendations by the participants of the stakeholder validation workshop*

It is interesting to note that three out of the five recommendations seen as most important are referring to the 'Improvement of the general conditions for the introduction of e-mobility' (*Minimum safety standards, Preparation of the electric grid*

and *Equipment for training institutions*), while only two recommendations referring to the core of procurement policies and processes - the *Adoption of a sustainable green procurement policy* ('Legislative reform') and the *Implementation of a standard approach to green public procurement* ('Improvement of the procurement process') - ranked under the five most important recommendations. Nevertheless, the ranking shows a mixture of all recommendations for the three different areas, underlining the importance of the attempt to cover more than just improvements of the procurement policies and processes.

# 1. Context, objective and structure of the report

The consultancy is part of the project ‘Supporting the implementation of NDCs in the Caribbean – transforming the transport and energy sectors towards a low-carbon and climate resilient future’ (NDC-TEC), funded by the German Ministry for Economic Affairs and Climate Action (BMWK) through the International Climate Initiative (IKI). The project offers tailored support to Antigua & Barbuda, Belize, Grenada, Jamaica and Saint Lucia in accelerating the implementation and raising the ambition of their NDCs in the energy and transport sectors. Grenada, Jamaica and Saint Lucia are the ‘flagship countries’ of the project implementing flagship pilots and other country specific interventions.<sup>2</sup>

The project has six activity areas as shown in Figure 1.

## Major Activity Areas:

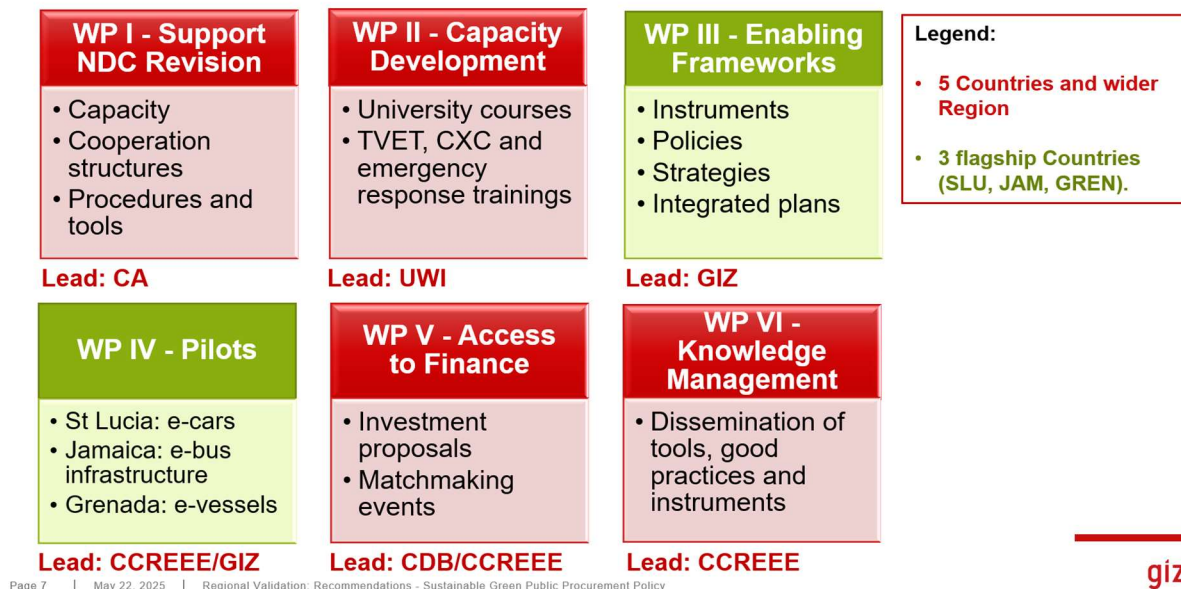
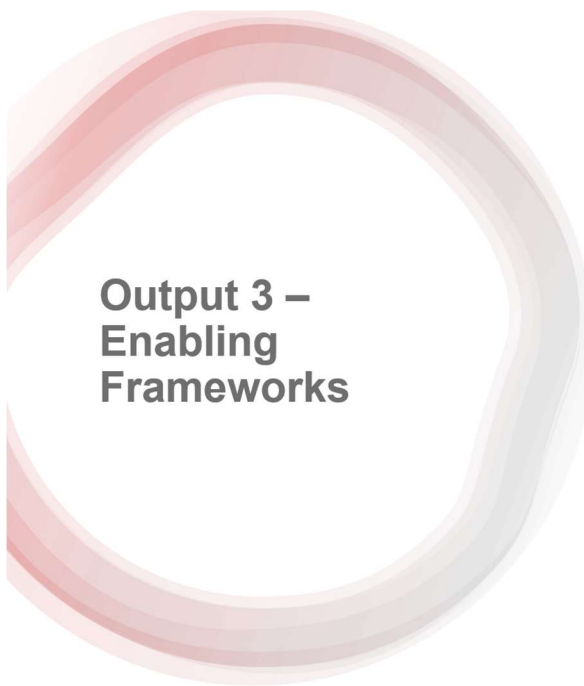


Figure 1: The six activity areas of the NDC-TEC project (Source: GIZ 2024b, Slide 7)

The consultancy on Sustainable Green Public Procurement Policy (SGPPP in the following) in Transport is conducted as part of Work Package III (Enabling Frameworks) under which several consultancies are carried out as Figure 2 shows.

<sup>2</sup> See: giz (2024a) p. 7

**Related Consultancies:**

- **Incentive Mechanisms Consultancy (Regional)** – In Progress (15 September 2024 - 30 November 2025)
- **End-of- Life Management Consultancy (Regional)** – In Bid Evaluation Phase (15 January 2025 - 15 January 2026)
- **Sustainable Green Procurement Policy Recommendations (Regional)** – Awarded (1 December 2024 – 31 August 2025)
- **Transport Policy (Saint Lucia)** – ToR finalized and submitted to Procurement via HQ (1 March 2025 - 31 March 2026)
- **Other work to be determined.**

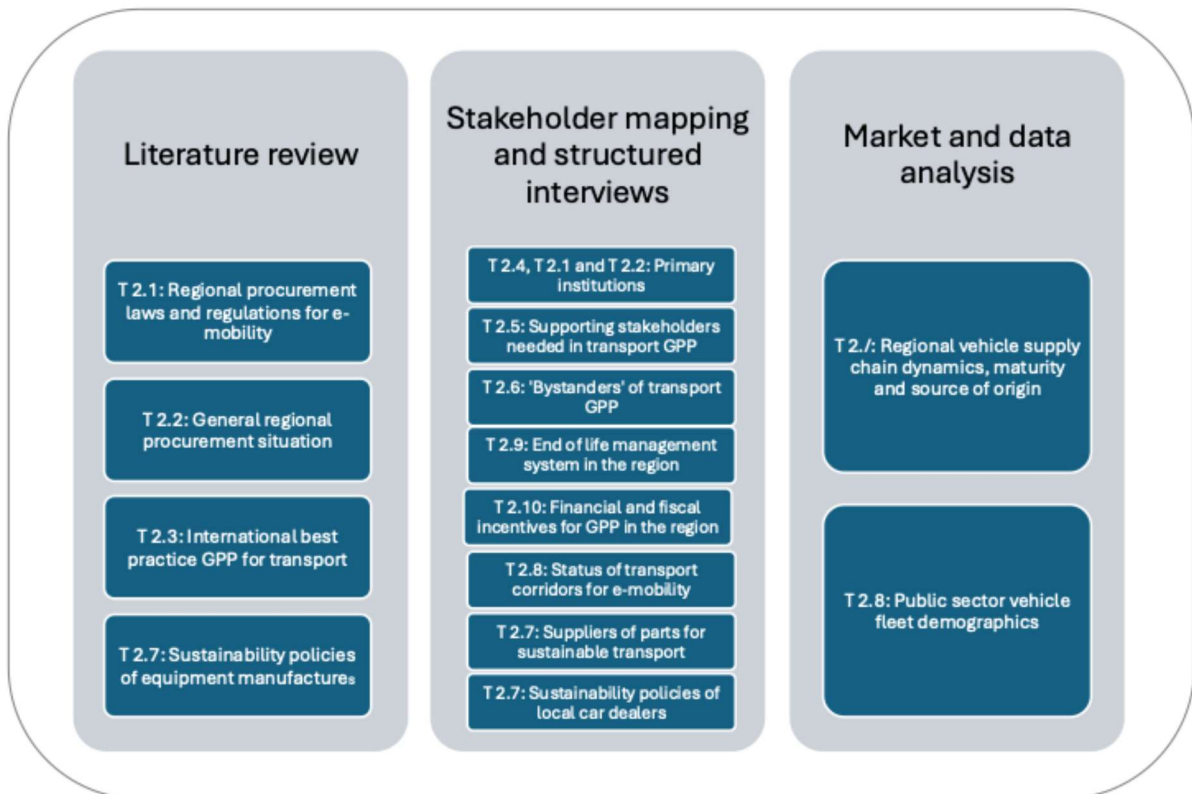
*Figure 2: The consultancies related to activity area 3 (Source: GIZ 2024b, Slide 7)*

The objective of the consultancy is to develop recommendations for the improvement of public procurement policies and practices with respect to transportation based upon the international best practice in sustainable green public procurement policies and an account of the present procurement policies and practices in the five project countries.

In the first part of the consultancy on SGPPP in transport the basics of good public procurement (PP) practices are briefly summarized (Chapter 2.1.1), the international best practice in sustainable green public procurement (SGPP) are discussed (Chapter 2.1.2) and the special criteria for SGPP used in transport are reported (Chapter 2.1.3). Whenever the practices of public procurement are concerned the abbreviation PP is used and whenever the public procurement policies are discussed, the abbreviation PPP is used.

Following the discussion of the international best practice the focus is put on the regional public procurement situation in the Caribbean in general (CARICOM and OECS) (Chapter 2.2) and then narrowed down to the specific procurement situations in the five project countries (Chapter 2.3).

The consultancy was organized in three major task areas, a desktop literature review, a mapping of stakeholders and structured stakeholder interviews and market and data analysis. On this basis preliminary recommendations for the future development of sustainable green public procurement practices and policies were derived for the project countries and the region. Figure 3 shows the different tasks of the desktop review of the consultancy and the methodologies used for them.



*Figure 3: Methodologies chosen for the different tasks of the consultancy*

In the second part of the consultancy the relevant national and regional stakeholders active in or affected by green public procurement for the transport sector were first mapped and key individuals were identified for later online interviews. These included:

- Primary institutions in the 5 project countries (subtask T 2.1, T 2.2 and T 2.4)
- Supporting stakeholders needed in transport Green Public Procurement (GPP) (subtask T 2.5)
- Affected beneficiaries and ‘bystanders’ of transport GPP effects (subtask T 2.6)
- Suppliers of parts, goods and services for sustainable transport (subtask T 2.7)
- Local and regional car and equipment dealers (subtask T 2.7)
- National authorities in charge of road management (subtask T2.8)
- Actors in the end-of-life management system for vehicles and batteries (subtask T 2.9)
- Actors in the financial and fiscal sectors concerned with GPP financing (subtask T 2.10).

In parallel a questionnaire based upon the results of subtasks T 2.1 to 2.3 was developed for structured online interviews of the different stakeholders covering all relevant questions of the review in order to complete subtasks 2.1, 2.2, 2.4, 2.5, 2.6, 2.9 and 2.10.

Based upon the results of the detailed stakeholder mapping the relevant institutions and key individuals were asked for their participation in online interviews on Zoom, an approach that has been used successfully by the Team Leader in other projects in the region. As soon as the interviews were set up, a series of structured interviews based upon the questionnaire developed were carried out. The interviews lasted about one hour each.

In a third step vehicle supply chain dynamics, maturity and sources of origin were analyzed based on published and internal import data and car dealer interviews (subtask 2.7) and the structure and capital vintage of the public sector vehicle fleets in the project countries were analyzed based upon data supplied by GIZ (subtask T 2.8). Unfortunately, sufficient data were only available for Saint Lucia. Thus, the planned analysis could only be carried out for one of the three flagship countries.

In a final step the interview results were analyzed and used together with the results of the literature review of subtasks T 2.1 to T 2.3 and the results of the market and fleet analysis as the basis for the development of the draft recommendations for sustainable green public procurement in the transport sector in the project countries. Based upon a comparison of the regional procurement legislation and practices in the transport sector and the international best practice, opportunities for improvement were identified and recommendations for the improvement of the regional procurement legislation and practice were made.

The draft report was presented to the core stakeholders of the five project countries and discussed with them in a stakeholder feedback workshop. The feedback collected was then used to refine the report.

The final draft was then presented to GIZ for final remarks, which were incorporated in the final version of the report.

## 2. International best practice SGPP

Sustainable green public procurement needs to follow basic principles and procedures, which are the same for different goods and services. Procurement for sustainable transport and e-mobility is a special case due to the high environmental relevance of the transport sector and the large contribution of its carbon dioxide emissions to global warming. At the same time public procurement of transport services and vehicles constitute a major share of public spending. It can create substantial leverage for the introduction of sustainable transport and zero emission vehicles.

In the following the basic principles and procedures of good public procurement (PP) are discussed in subchapter 2.1.1 and the specifics of green public procurement (GPP) and sustainable public procurement (SPP or SGPP) are developed in subchapter 2.1.2, before the specific aspects of sustainable green public procurement (SGPP) for the transport sector are discussed (sub-chapter 2.1.3). These discussions are based upon the present best international practice in sustainable public procurement in general and its specific application to the transport sector and e-mobility.

In the subchapter 2.2 the regional procurement situation at the level of CARICOM and OECS is analysed based upon a thorough review of the existing legislation while subchapter 2.3 is looking into the specific situation of the five focus countries of the NDC-TEC project.

At the end of this desktop review-based chapter, some first recommendations for improvement of the regional and national procurement practices are derived.

### 2.1. Basic principles of public procurement

National and international procurement standards have been developed to deliver high-quality services to the public and to counteract corruption in the procurement of goods and services, as non-transparent procurement processes can lead to substantial economic losses and corruption can be a main obstacle to social and economic development<sup>3</sup>.

International procurement standards and conventions like the UNCITRAL Model Law on Public Procurement<sup>4</sup> and the United Nations Convention against Corruption<sup>5</sup> are based on the procurement **principles of transparency, competition and objective criteria for decision making**<sup>6</sup>. These general principles assure the integrity of the

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<sup>3</sup> UNODC (2016), p. 1

<sup>4</sup> UN/UNCITRAL (2014)

<sup>5</sup> United Nations (2005)

<sup>6</sup> UNODC (2016), p. 5

procurement process. They are reflected as well in the procurement standards of international organisations like the World Trade Organization Agreement on Government Procurement (WTO GPA)<sup>7</sup> or in the funding guidelines of development banks like the World Bank or of international donor organisations like the European Union<sup>8</sup>. Article 9 of the United Nations Convention against Corruption specifies very clearly the conditions to be fulfilled by public procurement processes (see Box 1)<sup>9</sup>

#### **Article 9. Public procurement and management of public finances**

Each State party shall, in accordance with the fundamental principles of its legal system, take the necessary steps to establish appropriate systems of procurement, based on transparency, competition and objective criteria in decision-making, that are effective, inter alia, in preventing corruption. Such systems, which may take into account appropriate threshold values in their application, shall address, inter alia:

(a) The public distribution of information relating to procurement procedures and contracts, including information on invitations to tender and relevant or pertinent information on the award of contracts, allowing potential tenderers sufficient time to prepare and submit their tenders;

(b) The establishment, in advance, of conditions for participation, including selection and award criteria and tendering rules, and their publication;

(c) The use of objective and predetermined criteria for public procurement decisions, in order to facilitate the subsequent verification of the correct application of the rules or procedures;

(d) An effective system of domestic review, including an effective system of appeal, to ensure legal recourse and remedies in the event that the rules or procedures established pursuant to this paragraph are not followed;

(e) Where appropriate, measures to regulate matters regarding personnel responsible for procurement, such as declaration of interest in particular public procurements, screening procedures and training requirements.

*Box 1: Article 9 of the United Nations Convention Against Corruption (Source: UNODC (2016), p.5)*

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<sup>7</sup> WTO (2012)

<sup>8</sup> See UNODC (2016), p. 5

<sup>9</sup> UNODC (2016), p.5

## 2.2 International development of sustainable public procurement

During the last decades the discussion on procurement has turned its attention to the inclusion of different aspects of sustainable development, which can be promoted by the introduction of sustainability criteria in the public procurement process<sup>10</sup>.

Sustainable development has three main pillars as shown in Figure 4 The economic, the social and the environmental dimension. Whereas the economic dimension has always been at the heart of public procurement, the environmental and social dimensions have moved into the focus of procurement as much as the concept of sustainable development has become a key concept for development.

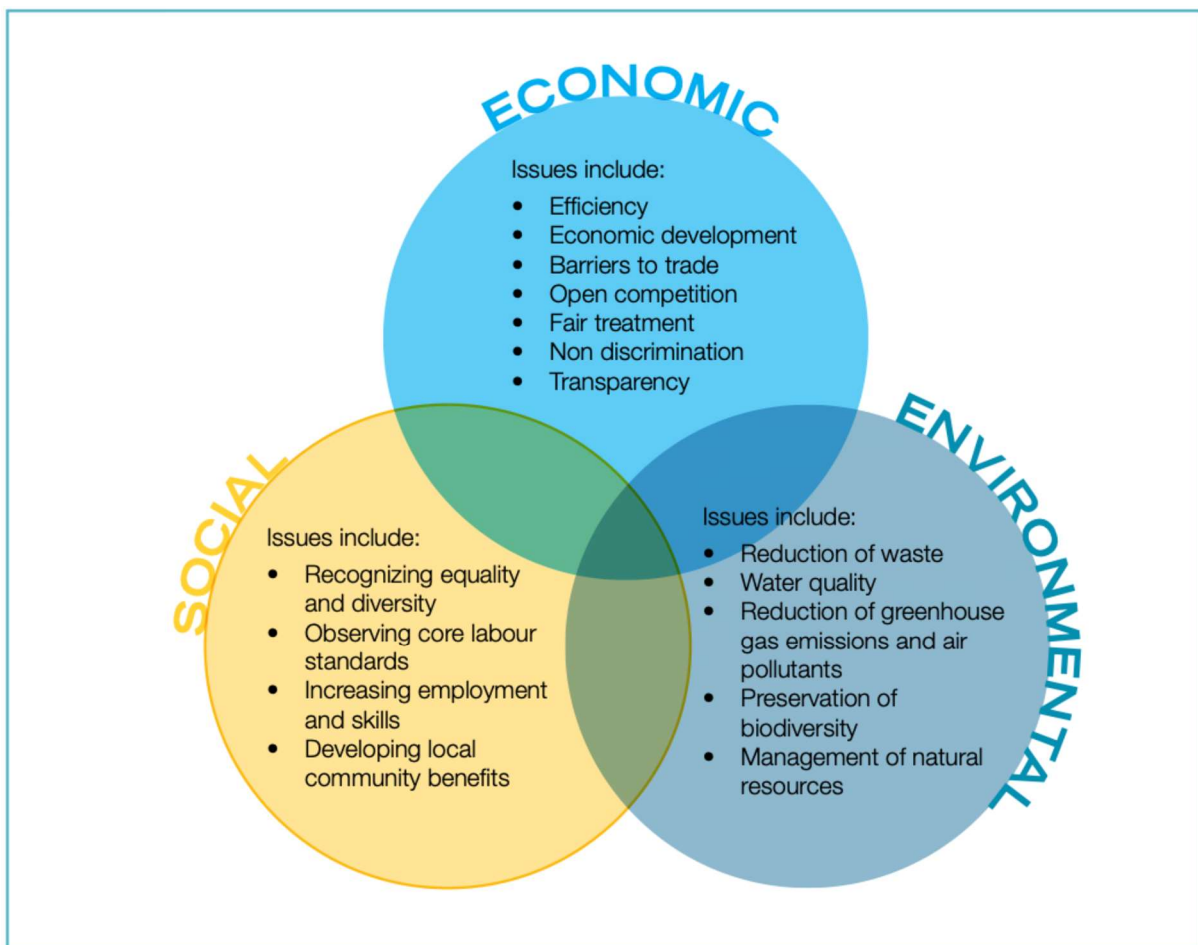


Figure 4: The three pillars of sustainable development (Source: UNEP 2011, p.10)

Sustainable public procurement or sustainable green public procurement (SPP or SGPP) were discussed in the literature as early as 1997<sup>11</sup>. Nevertheless, SPP/SGPP only developed international practical momentum after 2005, when Switzerland launched the Marrakech Task Force on Sustainable Public Procurement, which was

<sup>10</sup> See Walker et al. (2012), p. 201

<sup>11</sup> Cooper, Frank and Kemp (1997) and Noci (1997)

one of the Task Forces under the Marrakech Process on Sustainable Consumption and Production<sup>12</sup>. By 2020 many countries around the world had adopted SGPP as their standard public procurement approach. In Goal 12.7 of the 2030 UN Sustainable Development Goals (SDGs) UN member countries have pledged to *'promote public procurement practices that are sustainable in accordance with national policies and priorities'* (SDG target 12.7).<sup>13</sup> **UNEP defines sustainable public procurement (SPP) as 'a process whereby public organisations meet their needs for goods, services, works, and utilities in a way that achieves value for money on a whole life-cycle basis in terms of generating benefits not only to the organization, but also to society and the economy, whilst minimizing damage to the environment'**<sup>14</sup>. Thus, SPP shifts the focus of public procurement from the purely economic perspective of achieving set technical and quantitative criteria at lowest cost, to objectives linked to the three pillars of sustainable development (economic, social and environmental) as depicted in Figure 4 above. According to the World Bank SPP systems are typically designed to promote green growth, environmental protection, development of small and medium-sized enterprises (SMEs), promotion of minority- and woman owned businesses, innovation, standards for responsible business conduct and broader industrial policy objectives<sup>15</sup>.

Green public procurement (GPP) is a part of sustainable public procurement, which concentrates on the use of public procurement to achieve environmental policy objectives. The **European Commission defined green public procurement (GPP) as 'a process whereby public authorities seek to procure goods, services, and works with a reduced environmental impact throughout their life cycle when compared with goods, services, and works with the same primary function that would otherwise be procured'**<sup>16</sup>.

In 2017 the International Standards Organization (ISO) released a Guidance on Sustainable Procurement (ISO 20400)<sup>17</sup>, which can be seen as a clear indication that sustainable procurement is becoming standard practice around the world.

The best international practice in sustainable procurement is reflected in a number of publications like UNEP (2021), the Procura+ Manual of the European Sustainable Procurement Network<sup>18</sup>, the Handbook for the Inter-American Network on Government Procurement<sup>19</sup>, and in the ISO 20400 Guidance on Sustainable Procurement<sup>20</sup>. Best practices in green public procurement are reflected e.g. in the World Bank overview of green reforms in country procurement systems<sup>21</sup> and the

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<sup>12</sup> See: UNEP (2021)

<sup>13</sup> Cited after World Bank (2021), p.15

<sup>14</sup> Cited after World Bank (2021), p.15

<sup>15</sup> See World Bank (2021), p.15

<sup>16</sup> Cited after World Bank (2021), p.15

<sup>17</sup> ISO (2017)

<sup>18</sup> ICLEI (2016)

<sup>19</sup> International Institute for Sustainable Development (2015)

<sup>20</sup> ISO (2017)

<sup>21</sup> World Bank (2021)

OECD Review on Harnessing Public Procurement for the Green Transition<sup>22</sup> or in the joint U.S.-EU Catalogue of Best Practices on Green Public Procurement<sup>23</sup>. The international best practice in the setting of specific criteria for road transport for green public procurement can be found in the extensive EU catalogue Procurement Criteria for Road Transport<sup>24</sup>.

Three of these publications can be seen as the handbooks and guidelines with the greatest practical value for the systematic establishment of sustainable green public procurement. Therefore, they are briefly characterised in the following paragraphs.

The UNEP Sustainable Public Procurement Guidelines (2021) provide a practical roadmap for governments and organizations to embed sustainability in public procurement, offering a structured approach, real-world examples, and alignment with international sustainability targets. They are intended as a step-by-step guide for policymakers, experts, and consultants to establish or improve SPP systems, adaptable to different national contexts. At the moment the document can be seen as one of the most useful practical handbooks on sustainable green public procurement.

The Procura+ Manual is a comprehensive guide designed to help public authorities implement sustainable public procurement (SPP) in practice. Developed by ICLEI – Local Governments for Sustainability, it provides step-by-step guidance, practical tools, and ready-to-use criteria to integrate environmental and social considerations into public purchasing. The Procura+ Manual is a central reference for public authorities aiming to make procurement more sustainable, cost-effective, and aligned with broader policy goals. It combines practical advice, legal compliance, and real-world examples to drive the adoption and mainstreaming of SPP across Europe and beyond.

The Handbook for the Inter-American Network on Government Procurement (INGP) is a practical guide designed to help government procurers in Latin America and the Caribbean implement sustainable public procurement (SPP) policies and practices. Developed in cooperation with the INGP - a network of public procurement directors from 34 countries in the Americas - the handbook aims to make public procurement a catalyst for inclusive green growth and better governance. The Handbook for the Inter-American Network on Government Procurement is a step-by-step, practical resource for integrating sustainability and inclusivity into public procurement across Latin America and the Caribbean. It offers actionable guidance for embedding environmental and social criteria throughout the procurement cycle, supporting SMEs and underrepresented suppliers, and maximizing the positive impact of public spending on society and the environment.

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<sup>22</sup> OECD (2024)

<sup>23</sup> US and EU Trade and Technology Council (no year)

<sup>24</sup> EU (2022)

From the international discussion it can be concluded that there is agreement on the approaches to be taken.

In 2021 the OAS together with the INGP (Inter-American Network of Government Procurement) has published a Model Directive for the Promotion of Sustainable Public Development<sup>25</sup>, which contains all key elements for a sustainable public procurement policy. In 2024 the INGP published the declaration 'Enhancing Sustainability through Public Procurement'<sup>26</sup>. Through the declaration the INGP urges its '*member countries to promote measures with sustainability criteria, which allow the promotion of strategic actions to address socio-economic and environmental challenges, including combating climate change, and the transition to clean and renewable energy*'.<sup>27</sup> Thus, the model directive and the declaration could form a solid foundation for the Caribbean countries to develop sustainable green public procurement policies and practices, as all CARICOM member countries are members of INGP.

In the following, a best practice approach to sustainable green procurement will be presented based on the available literature and the published selection criteria for road transport vehicles and services will be reported. As the international discussion on sustainable green procurement has not fully addressed the sustainability of EVs, possible selection criteria for sustainable EVs will be discussed on the basis of the present discussion about e-mobility and its environmental life-cycle impacts. Some additional criteria with respect to the life cycle impacts of car batteries will be discussed in this report, which have not been included in the established international criteria for the procurement of vehicles so far.

## 2.3 International best practice of sustainable public procurement

As defined in ISO 20400 '*sustainable procurement is procurement that has the most positive environmental, social and economic impact possible across the entire life cycle and strives to minimize adverse impacts*'<sup>28</sup>.

ISO 20400 names the following principles for sustainable procurement<sup>29</sup> for different kinds of organizations. In the sense of the norm, governments can be seen as a specific type of organization:

- **Accountability:** *An organization should be accountable for its own impacts on society, the economy and the environment. In the context of procurement, this*

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<sup>25</sup> OAS (2021)

<sup>26</sup> INGP (2024)

<sup>27</sup> INGP (2024), p.2

<sup>28</sup> ISO (2017), p.7

<sup>29</sup> ISO (2017), p. 7

*specifically includes accountability for impacts and for those on the organization's supply chains, with a life cycle perspective on goods or services.*

- **Transparency:** *An organization should be transparent in those decisions and activities that impact the environment, society and the economy. In the context of procurement, this specifically includes being transparent in its procurement decisions and activities and encouraging its suppliers to be transparent. Transparency is the basis for stakeholder dialogue and collaboration.*
- **Ethical behaviour:** *An organization should behave ethically and promote ethical behaviour throughout its supply chains.*
- **Full and fair opportunity:** *An organization should avoid bias and prejudice in all procurement decision-making. All suppliers, including local suppliers and small and medium-sized organizations (SMOs) should have a full and fair opportunity to compete.*
- **Respect for the rule of law and international norms of behaviour:** *An organization should strive to be aware of any violations throughout its supply chains. It should actively encourage its suppliers to abide by these rules and assess and address compliance as situations require.*
- **Respect for human rights:** *An organization should respect internationally recognized human rights.*
- **Innovative solutions:** *An organization should seek solutions to address its sustainability objectives and encourage innovative procurement practices to promote more sustainable outcomes throughout entire supply chain.*
- **Focus on needs:** *An organization should review demand, buy only what is needed and seek more sustainable alternatives.*
- **Integration:** *An organization should ensure that sustainability is integrated into all existing procurement practices to maximize sustainable outcomes.*
- **Analysis of all costs:** *An organization should consider the cost incurred over the life cycle, value for money achieved, and the costs and benefits for society, the environment and the economy resulting from its procurement activities.*
- **Continual improvement:** *An organization should work towards continually improving its sustainability practices and outcomes and encouraging organizations in its supply chains to do the same.*

The development of sustainable green public procurement (SGPP) can be seen as a general approach of setting up the necessary framework for SGPP and the

implementation of sustainability into the actual procurement process. The UNEP handbook<sup>30</sup> defines four phases of the introduction process of sustainable public procurement as shown in Figure 5. The handbook uses the term sustainable public procurement (SPP) as the all-encompassing term including the green (environmental) aspects of sustainable green procurement.

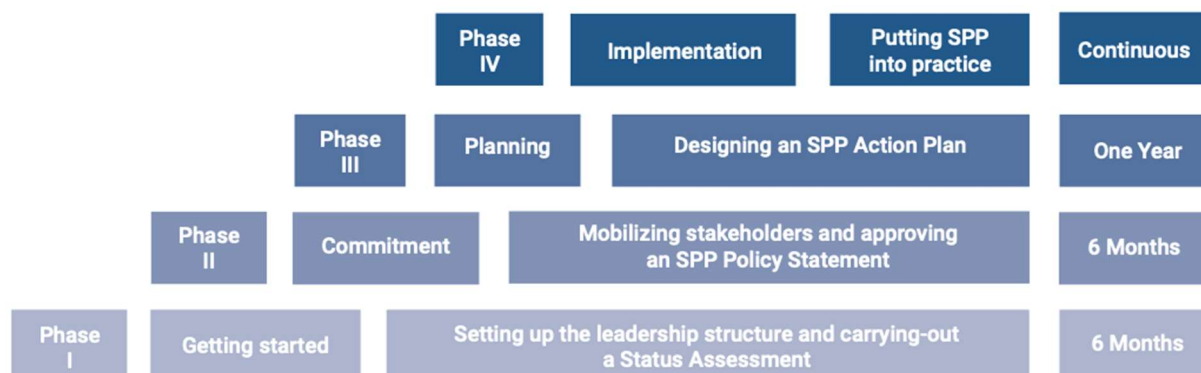


Figure 5: The four phases of the SPP approach (Source: UNEP 2021, p.30)

During the **first phase** the process needs to get started by setting-up a leadership structure, which will be responsible for driving and guiding the SPP programme. It is necessary that the leadership is taken by high level decision makers for public procurement policies. During the first phase, the status of the procurement processes in the country and the legal framework need to be assessed as the necessary starting points of the development of sustainable public procurement process. In addition, relevant stakeholders need to be identified for their later inclusion in the process<sup>31</sup>.

<sup>30</sup> UNEP (2021)

<sup>31</sup>See: UNEP (2021), p. 30

Figure 6 gives an overview of the stakeholders, who may significantly impact or be impacted by SPP.

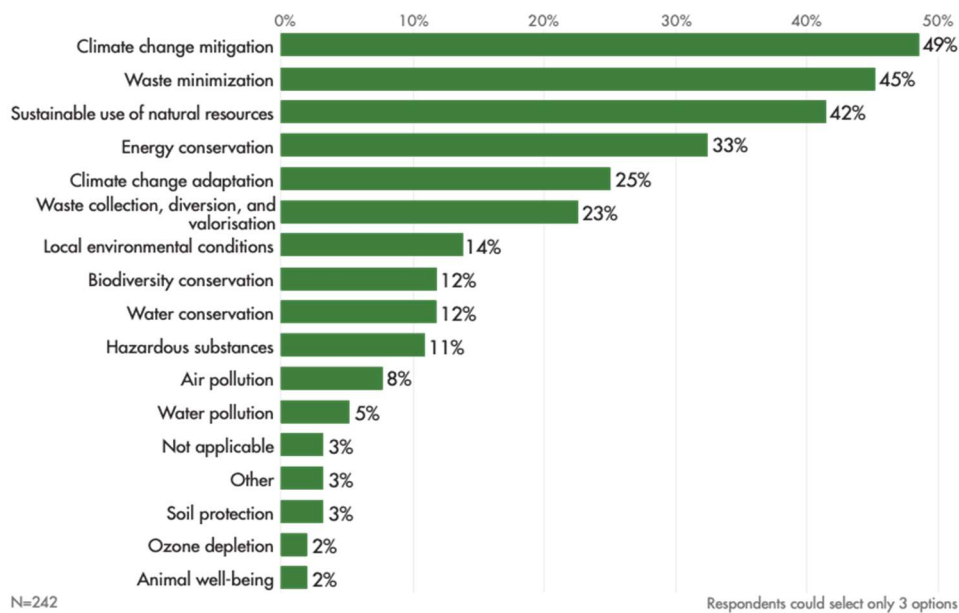


Figure 6: Stakeholder mapping for SPP (Source: UNEP 2021, p.43)

In the **second phase** the necessary commitment to SPP needs to be secured. A SPP policy statement is drafted in consultation with stakeholders and approved by decision-makers. In this phase SPP policy priorities need to be identified. Initial commitment from key stakeholders to the SPP process needs to be secured. If needed, additional funding for the SPP process needs to be secured in this phase<sup>32</sup>. Figure 7 shows the most frequently addressed environmental issues in SPP policies according to the 2022 Global Review of Sustainable Public Procurement<sup>33</sup>, while Figure 8 shows the most frequently addressed socio-economic issues.

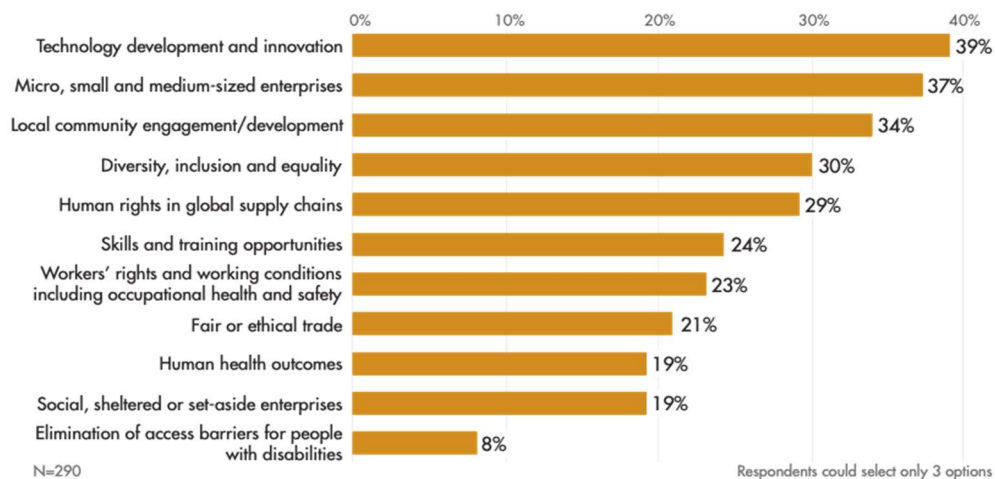
<sup>32</sup> See: UNEP (2022), p. 30

<sup>33</sup> UNEP (2022)



Source: 2017 SPP Global Review and 2021 Stakeholder Survey.

Figure 7: Priority environmental issues identified by survey participants for their organizations to address through SP (Source: UNEP 2022, p.15)



Source: 2017 SPP Global Review and 2021 Stakeholder Survey.

Figure 8: Priority socio-economic issues identified by survey participants for their organizations to address through SP (Source: UNEP 2022, p.16)

In the **third phase** the SPP action plan is developed in consultation with key stakeholders and approved by decision-makers. In the action plan targets, key actions, a timeline, roles and responsibilities as well as a budget are defined<sup>34</sup>.

In the **fourth phase** SPP is implemented into the procurement process according to the action plan developed in phase three. During this phase public procurement policies may be revised, if necessary, priority products for SPP are identified and sustainable procurement criteria are determined. Capacities for SPP and a communication strategy are developed and implemented, and a monitoring and evaluation system should be established. Based on the monitoring and evaluation, the SPP process is continuously improved<sup>35</sup>.

According to UNEP (2021) the implementation phase should be structured in the following nine main activities<sup>36</sup> (The arrows → point to the results of an activity):

- *establishing the organizational structure*
- *revising the legal framework → Laws and regulations supporting SPP in place*
- *prioritising products, check market readiness, determine feasible and verifiable sustainability requirements for the prioritized products, develop sustainable purchasing criteria and integrate them in procurement guidelines → Sustainable Procurement Guidelines for the Priority Products drafted;*
- *conducting pilot implementation → Criteria and procedures tested; Sustainable Procurement Guidelines for the Priority Products finalized;*
- *mainstream SPP to Integrate sustainability considerations in existing procurement processes, procedures, and tools. SPP Handbook and tools are in place;*
- *building the capacity of → Stakeholders trained on SPP;*
- *communicating actively with stakeholders and general public to keep them informed;*
- *monitoring and evaluating to keep decision-makers informed about progress and obstacles; and*
- *identify funding opportunities to keep funding for the implementation process secured.*

An example for an **organizational structure** for GPP is the implementation of GPP in the Republic of Korea, which is shown in Figure 9. Table 5 shows the responsibilities of the different entities in the organization.

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<sup>34</sup> See: UNEP (2021), p. 30

<sup>35</sup> See: UNEP (2021), p. 30

<sup>36</sup> UNEP (2021), p. 56

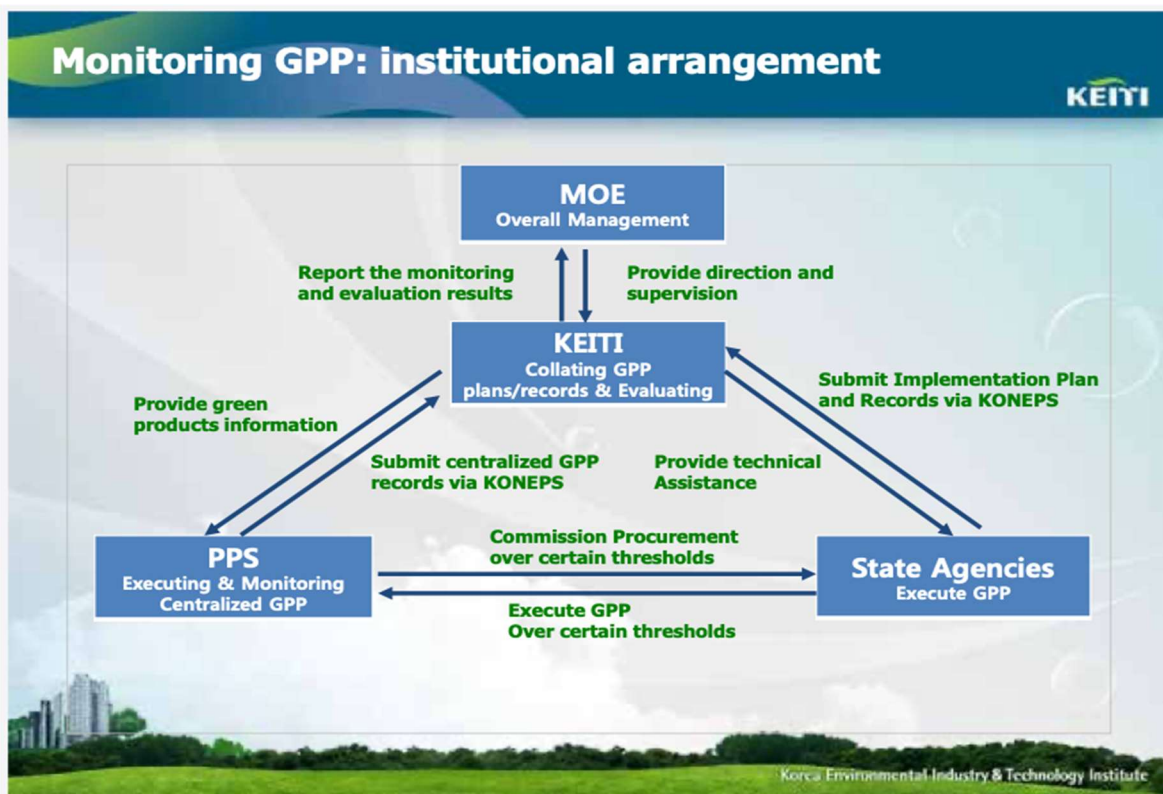


Figure 9: Institutional framework for GPP implementation in the Republic of Korea (Source: UNEP 2021, p.57)

The Ministry of Environment (MoE)	<ul style="list-style-type: none"> <li>• Overall management of the GPP policy, definition of strategic goals and priorities</li> <li>• Establishment and monitoring of regular five-year action plans for the deployment of the GPP Act</li> </ul>
Public Procurement Service (PPS)	<ul style="list-style-type: none"> <li>• Operation of the Korean Online E-Procurement System (KONEPS) to facilitate the actual purchase of green products</li> <li>• Compilation of procurement records of public institutions</li> <li>• Communication of green product information provided by KEITI to public institutions</li> </ul>
Korea Environmental Industry and Technology Institute (KEITI)	<ul style="list-style-type: none"> <li>• Central role in GPP Implementation</li> <li>• Management of the Green Procurement Information System (GPIS-I, <a href="http://gd.greenproduct.go.kr/">gd.greenproduct.go.kr/</a>) and the Green Product Information System (GPIS-II, <a href="http://www.greenproduct.go.kr/">www.greenproduct.go.kr/</a>)</li> <li>• Provision of education and awareness raising on GPP</li> <li>• Monitoring and evaluation of GPP records and performance</li> <li>• Transfer of know-how both nationally and internationally</li> <li>• Cooperation with stakeholders including other ministries, NGOs, research institutes and business</li> </ul>
Public institutions	<ul style="list-style-type: none"> <li>• Development of an annual implementation plan with voluntary targets for GPP and institutionalization of GPP in their own organization</li> <li>• Monitoring and reporting of green purchase records to MoE annually</li> <li>• Designation of a Green Procurement Official within their own organization (since 2013)</li> </ul>

Table 5: Responsibilities in GPP implementation in the Republic of Korea (Source: UNEP 2021, p.57)

If the legal review in phase one has shown substantial gaps in the necessary legal and policy framework for SPP, these gaps should be addressed to ensure a successful SPP implementation. According to UNEP (2021) the **legal revision** may include such elements as<sup>37</sup>:

- *reviewing SPP-related legal frameworks from other countries as a reference;*
- *revisiting the SPP Policy Statement if not yet endorsed by parliament; and*
- *revising or redrafting of the public procurement regulations to pursue SPP based on the recommendations of the Legal Review.*

For the **development of sustainable procurement guidelines** several important activities have to be carried out. Although eventually all products/works/services should undergo sustainable public procurement procedures, SPP does not have the same leverage if applied for different products, works or services, products/works/services. Therefore, activities with high possible impact should be identified and prioritized for SPP in order to maximize the short-term positive impacts of SPP. For this selection several factors should be considered, which could include<sup>38</sup>:

- *National sustainable development priorities.*
- *Product groups with significant public procurement volume.*
- *Product groups that contribute to SPP objectives in a timely and costeffective way.*
- *Market availability of sustainable alternative products.*
- *Market influence of public procurement.*
- *Existence of appropriate means of verification for environmental or social attributes.*
- *Scope for improvement taking into account Total Cost of Ownership or Life Cycle Costing.*
- *Goods and services with particular importance for the country.*

Figure 10 shows sustainable development priorities by SDG most often prioritized for SPP according to UNEP (2022). Actually, all seventeen SDGs are addressed by SPP, although to a different extent. Figure 11 shows the product groups most often prioritized for SPP.

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<sup>37</sup> UNEP (2021), p. 58

<sup>38</sup> See UNEP (2021), p. 59

*Vehicles* rank consistently high on the list of priority products. In the 2017<sup>39</sup> as well as in the 2022<sup>40</sup> UNEP survey vehicles ranked third in importance, while most other products like *Energy* or *Office Paper* substantially change in ranking<sup>41,42</sup>.

To prioritise products, works and services UNEP (2021) suggests a detailed screening process, which consists of the following seven steps<sup>43</sup>:

- *establishing a long list of potential priority product groups;*
- *carrying out a spend analysis;*
- *conducting a preliminary market study;*
  
- *assessing environmental risks;*
- *assessing socio-economic risks;*
- *determining means of verification of the sustainability attributes; and*
- *ranking the products through a Master Table.*

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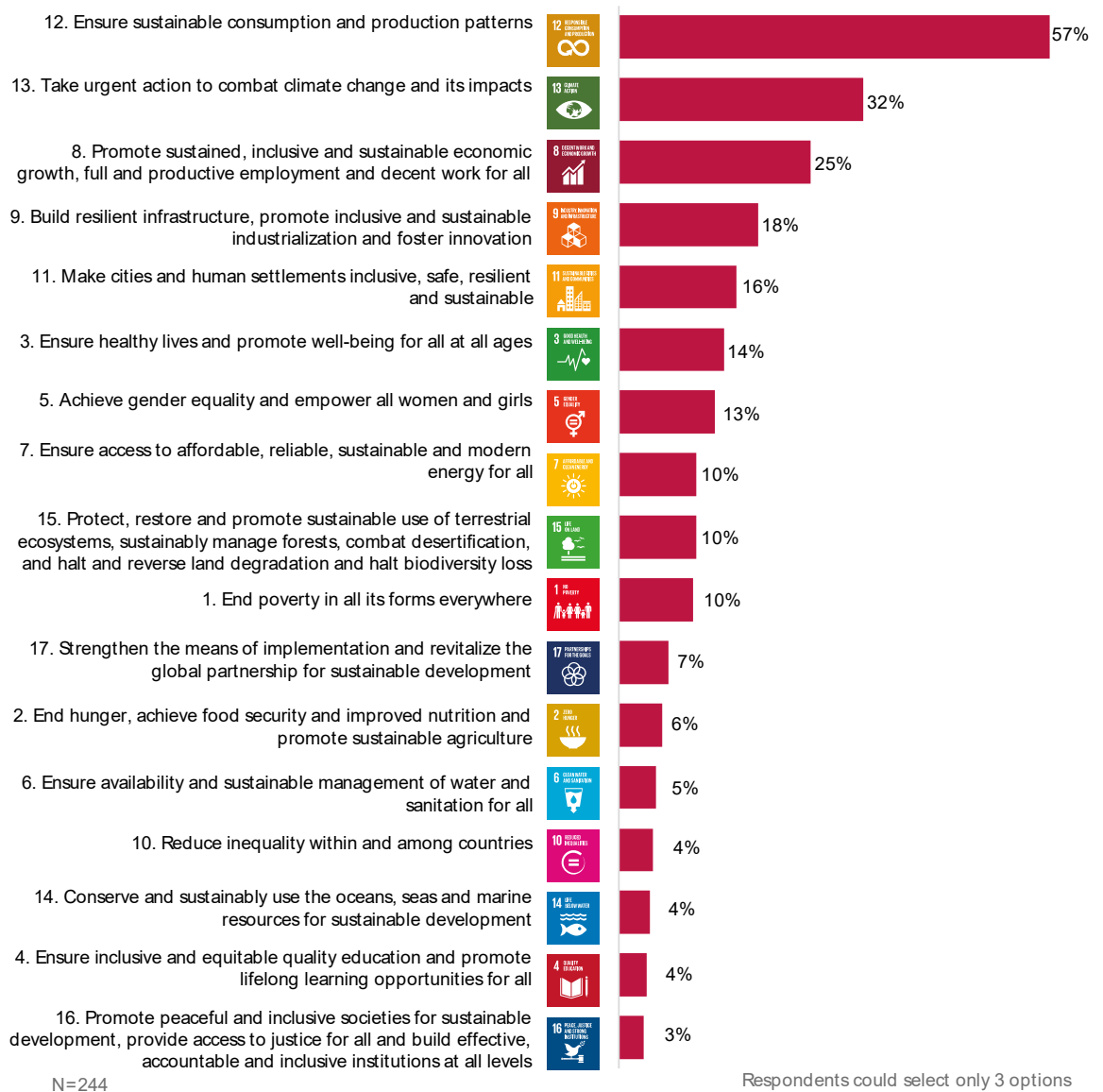
<sup>39</sup> UNEP (2021), p. 59

<sup>40</sup> UNEP (2022), p. 19

<sup>41</sup> UNEP (2021), p. 59

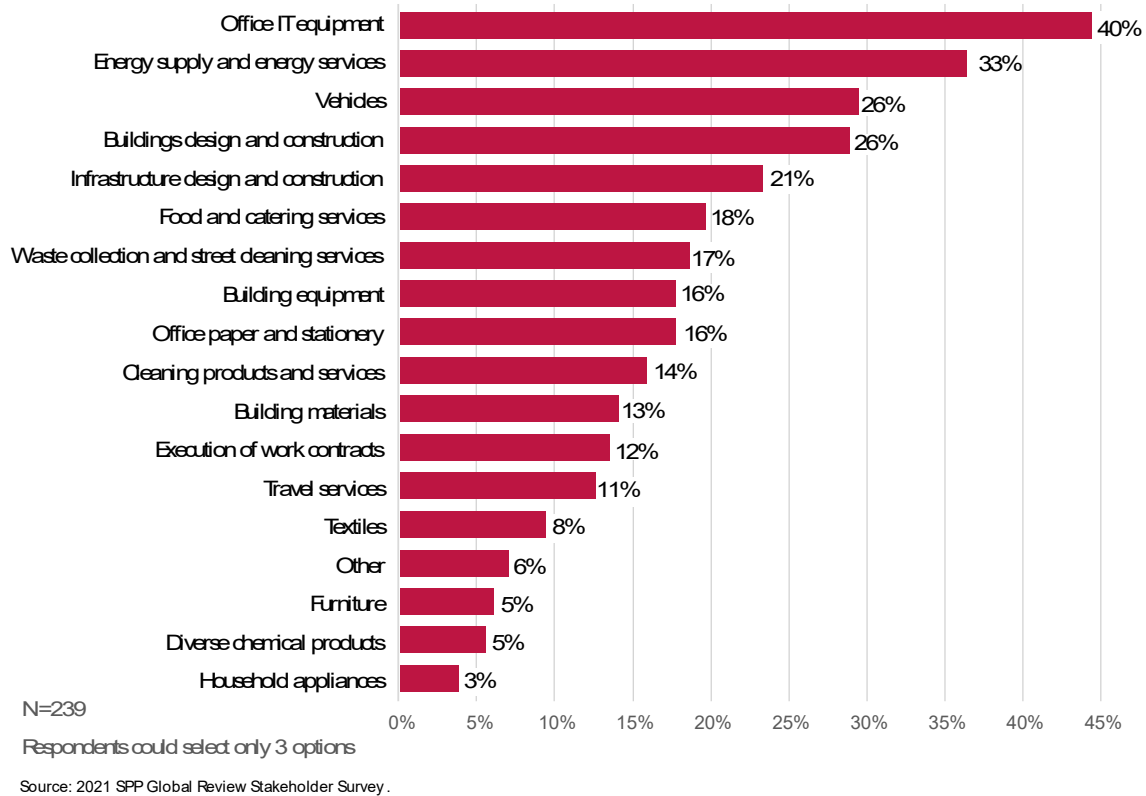
<sup>42</sup> UNEP (2022), p. 19

<sup>43</sup> UNEP (2021), p. 60



Source: 2021 SPP Global Review Stakeholder Survey .

Figure 10 SDGs reportedly addressed by SP activities within participant's organization (Source: UNEP 2022, p.18)



*Figure 11: Priority product and service categories for applying SP practices according to the UNEP survey (Source: UNEP 2022, p.19)*

From the **long list** of potential priority product groups the most relevant product groups should be identified aiming at achieving the greatest impact on the relevant sustainability goals. The UNEP Sustainable Public Procurement Surveys can be taken as a starting point for such list.

In the next task of the implementation, the **level of spending** on the different listed product groups can be assessed and product groups can be prioritised accordingly. At the same time a **preliminary market study** should be carried out in order to assess the availability of green or more sustainable alternative products in the local market. Such market study can involve life cycle assessment and life cycle costing, to determine if the alternatives are more expensive, but are expected to have substantial environmental advantages<sup>44</sup>. If local markets of smaller economies are not supplying goods, works and services of the desired environmental or social qualities, it may be necessary to introduce the foreseen requirements to the local suppliers through different forms of market consultations at this time. This can be done during the preliminary market study or in a later market readiness study. The Handbook for the

<sup>44</sup> See UNEP (2021), p.62

Inter-American Network on Government Procurement<sup>45</sup> introduces a number of methods for consulting suppliers as shown in Table 6.

METHOD	ACTIVITY
Desk-based research	<ul style="list-style-type: none"> <li>Acquiring basic information through online market research or reviewing reports</li> </ul>
Preliminary market consultations	<ul style="list-style-type: none"> <li>Public pre-tender discussions to gather market information for later procurement</li> <li>Inform potential suppliers of the procuring authority's needs</li> <li>Identify what the market can be expected to provide</li> <li>Identify short- and long-term cost implications</li> <li>Seek market advice on drafting of tender documentation</li> </ul>
Competitive dialogues	<ul style="list-style-type: none"> <li>Discussions with selected suppliers during the procurement process (i.e. post-tender launch)</li> <li>Allow suppliers to explain proposed solutions to broadly defined requirements</li> </ul>
Trade fairs/ Industry days/ Technology updates	<ul style="list-style-type: none"> <li>Public or private forums at which new technologies and processes are presented</li> </ul>
Facilitated dialogues	<ul style="list-style-type: none"> <li>Organizations such as clean technology clusters/ platforms and Chambers of Commerce can act as neutral third parties to facilitate exchange of information on technologies entering or approaching the market</li> </ul>

*Table 6: Methods for consulting suppliers (Source: IISD 2015, p.18)*

According to the handbook the preliminary market consultations, which are still part of the implementation step, should be facilitated by a third party, but the consultations can help procurers to better understand which environmentally and socially preferable options are available in the market, while suppliers get a first-hand opportunity to understand how environmental and social criteria will be incrementally integrated into public tenders<sup>46</sup>.

In a next task of the prioritisation process, still part of the implementation phase, the possible **sustainability impacts** of the different product/works/service groups need to be identified. For the environmental impacts this may include greenhouse gas emissions, other air pollutant emissions, liquid or solid emissions, hazardous substances, raw material extraction, energy and water consumption, biodiversity

<sup>45</sup> IISD (2015), p. 18

<sup>46</sup> International Institute for Sustainable Development (2015), p. 18

impacts and others<sup>47</sup>. Table 7 shows an example of environmental impact scoring for different product groups.

The life cycle approach was utilised to assess the impacts of each product. An estimation method was applied using information from secondary sources to identify the environmental impacts of products -- from production to consumption and disposal. A linear numeric scoring scale was developed from 1 to 3, the higher score, the more serious impact the product may cause to the environment.

Production/ Service type	Green house Effect	Air Pollution	Water Pollution	Solid Waste	Toxic Waste	Energy Consumption	Water Consumption	Ecosystem Effects	Total
1. Office paper	3	3	2	3	2	2	2	2	19
2. Wooden Desk	1	1	2	2	2	2	2	2	14
3. Wooden Chair	1	1	2	2	2	2	2	2	14
4. Printer/Photocopy Machine	1	1	2	3	3	1	0	0	11
5. Fluorescent lamp	1	1	0	2	2	2	0	0	8

*Table 7: Example of environmental impact scoring (Source: UNEP 2021, p.63)*

Similarly, social impacts like improved working conditions, gender balance, support for local industry, MSMEs or fair trade can be analysed and scored for the different product groups. Table 8 shows an example of socio-economic scoring.

The ranking is based on the scale from 1 to 3, where 1 is the least relevant, and 3 is the most relevant.

Production/ Service type	Promoting gender equality	Work opportunities for people with disabilities	Work opportunities for people from ethnic minorities	Promoting MSMEs	Score
1. Office paper	2	1	2	3	8
2. Wooden table	1	1	2	2	6
3. Wooden chair	1	1	2	2	6
4. Printer/Photocopy machine	2	0	0	1	3
5. Fluorescent lamp	2	0	0	2	4

*Table 8: Example of socio-economic impact scoring (Source: UNEP 2021, p.64)*

In a final step it must be determined whether the sustainability attributes can be verified either through existing and accessible standards, labels or by other means (laboratory tests, self-declarations, etc.).

At the end of the process all product groups of the long list can be compared on the basis of the different criteria and can be ranked according to their priority score. An example of such a prioritisation master table is given in Table 9.

<sup>47</sup> See: UNEP (2012), p.63

Type of products	Ecolabels or certification systems in place (2)	Total amount of contracts value (3)	Market and price (4)	Environmental impact (5)	Socio-economic impact (6)	Total Score (2+3+4+5+6) Consumption	Final ranking
1. Eco-friendly paper	10.0	6.7	7.5	7.9	6.7	38.8	1
2. Laptop	10.0	5.0	6.3	6.3	2.5	30.0	2
3. Fluorescent lamp	10.0	3.3	6.3	3.3	3.3	26.3	3
4. Wooden table	5.0	3.3	6.3	5.8	5.0	25.4	4
5. Wooden chair	5.0	3.3	6.3	5.8	5.0	25.4	4

*Table 9: Example of a master prioritization table (Source: UNEP 2021, p.65)*

Once the priority product/works/service groups have been established, it is necessary to analyse the market readiness for the top priority groups in more detail in order to see, what the market is ready to deliver, at which price and for which sustainability criteria<sup>48</sup>. The analysis will have to address important aspects such as<sup>49</sup>:

- *What are the new developments with regard to this product or service?*
- *What can the 'best in class' actors supply? At what price and with which sustainability attributes?*
- *Do ecolabels support the identification of more sustainable alternatives?*
- *What is the nature of MSME participation in the market (retailers, producers, etc.)? Are they producers? What is their size distribution and dynamism?*
- *Are there policies in place to support companies in improving their social and environmental performance, either through training or technical assistance?*
- *Are there financial instruments/subsidies available to make necessary investments?*
- *What are the potential threats/opportunities that SPP might create for MSMEs and for the local market? And*
- *Which measures and existing programmes can contribute to the development of a local market for sustainable products and increase supplier competitiveness?*

The market analysis should be based on a supply and a demand analysis. The supply analysis will aim to assess the capabilities of the local market to supply the selected products at a competitive price. The following activities could be carried out for the supply analysis<sup>50</sup>:

- *analysis of the sustainability attributes of the products available on the market;*

<sup>48</sup> See: UNEP (2021), p. 66

<sup>49</sup> UNEP (2021), p. 66

<sup>50</sup> See: UNEP (2021), p.66

- *determination of the existing means of verification for the sustainability attributes;*
- *identification of the level of availability, prices and market shares of the selected products;*
- *description of the market players involved in the market segments considered:*
  - *What is the number and size of the enterprises involved in the manufacturing / import / commercialization of the targeted products?*
  - *Are the selected sustainable products locally produced, or imported?*
  - *Do companies in the targeted sectors have environmental and social management systems in place and / or other sustainable development credentials? Corporate social responsibility?*
  - *What are the companies' strategies in terms of transition to sustainable/circular production methods/products?*
  - *What are the average prices in the country? How do these prices compare with international prices and with the prices of conventional items (price premium)?*
- *Analysis of the potential threats and opportunities for the local production which could arise from the introduction of these procurement criteria in the public procurement of goods and the compliance with an eco-labelling scheme.*
- *Analysis of the potential for the development of selected products and services, nationally and abroad.*

The demand analysis should consider the past, present and future public procurement demand for the priority products/works/service groups identified. It should also identify the main obstacles and opportunities for the purchase of more sustainable products by public entities<sup>51</sup>

Once the market readiness analysis has been concluded, specific **sustainable procurement guidelines** for priority products can be developed. *Sustainable Procurement Guidelines can be seen as a practical translation of sustainability considerations into directly applicable procurement criteria for the selected product groups. The Sustainable Procurement Guidelines should address the whole procurement cycle with suggestions for selection criteria, technical specifications, award criteria and contract performance clauses*<sup>52</sup>. The state-of-the-art EU model looks at:<sup>53</sup>

- key sustainability impacts;
- technical specifications;
- related means of verification;
- selection criteria; and

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<sup>51</sup> See: UNEP (2021), p. 67

<sup>52</sup> UNEP (2021), p. 68

<sup>53</sup> See: UNEP (2021), p.68

- award criteria and contract performance clauses.

*The development of Sustainable Procurement Guidelines is an iterative process during which ambitious criteria are tested on the market – and revised according to market readiness. This may mean that it is not about achieving the highest standard imaginable, but about doing better than the status quo. The new sustainable purchasing requirements included in the Sustainable Procurement Guidelines should be developed through broad stakeholder consultations (and tested through pilot tendering)<sup>54</sup>.*

The EU Green Public Procurement (GPP) criteria for different product groups can serve as a model of how to develop criteria. They are periodically updated and are based on the most significant environmental impacts of the product and the life cycle. They are differentiated into ‘core’ and ‘comprehensive’ criteria<sup>55</sup>.

The criteria are organized into technical specifications which must be met and award criteria, which can each be met to a different extent. In both cases the criteria are further subdivided into Core Criteria, which focus on the key areas of environmental performance, and Comprehensive Criteria, which consider more aspects of higher levels of environmental performance<sup>56</sup>.

Once the specific sustainable procurement criteria have been set, **pilot tenders** should be launched to test the Sustainable Procurement Process outlined before. The pilot tenders should be conducted in compliance with the national procurement rules and regulations based on the specific sustainable procurement criteria developed.

A number of factors should be investigated:

- *Did the existing Sustainable Procurement Guidelines (if such were developed prior to the pilot process) provide sufficient guidance for the condition of the pilot?*
- *What were the main challenges faced in the pilot process?*
- *How did the market respond to the tender and the sustainable procurement requirements?*
- *Did the delivered products or services fully meet the sustainability criteria?*
- *What were the economic implications of the purchase of these sustainable products?*
- *Did the pilot procurement demonstrate that the developed criteria are relevant and can be applied in this specific context?*

Based upon the results of the pilot tenders, the sustainability considerations can be integrated into the procurement process.

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<sup>54</sup> UNEP (2021), p. 68

<sup>55</sup> See: UNEP (2021), p. 70

<sup>56</sup> See EU (2022), p.3

According to the Handbook for the Inter-American Network on Government Procurement<sup>57</sup> sustainability aspects can be integrated into the nine-step procurement process shown in Figure 12 mainly at the following four different steps:

- *Step 3: Define Pre-Qualification Criteria*
- *Step 4: Write Technical Specifications*
- *Step 6: Evaluate Bids and*
- *Step 8: Design Contract Conditions.*

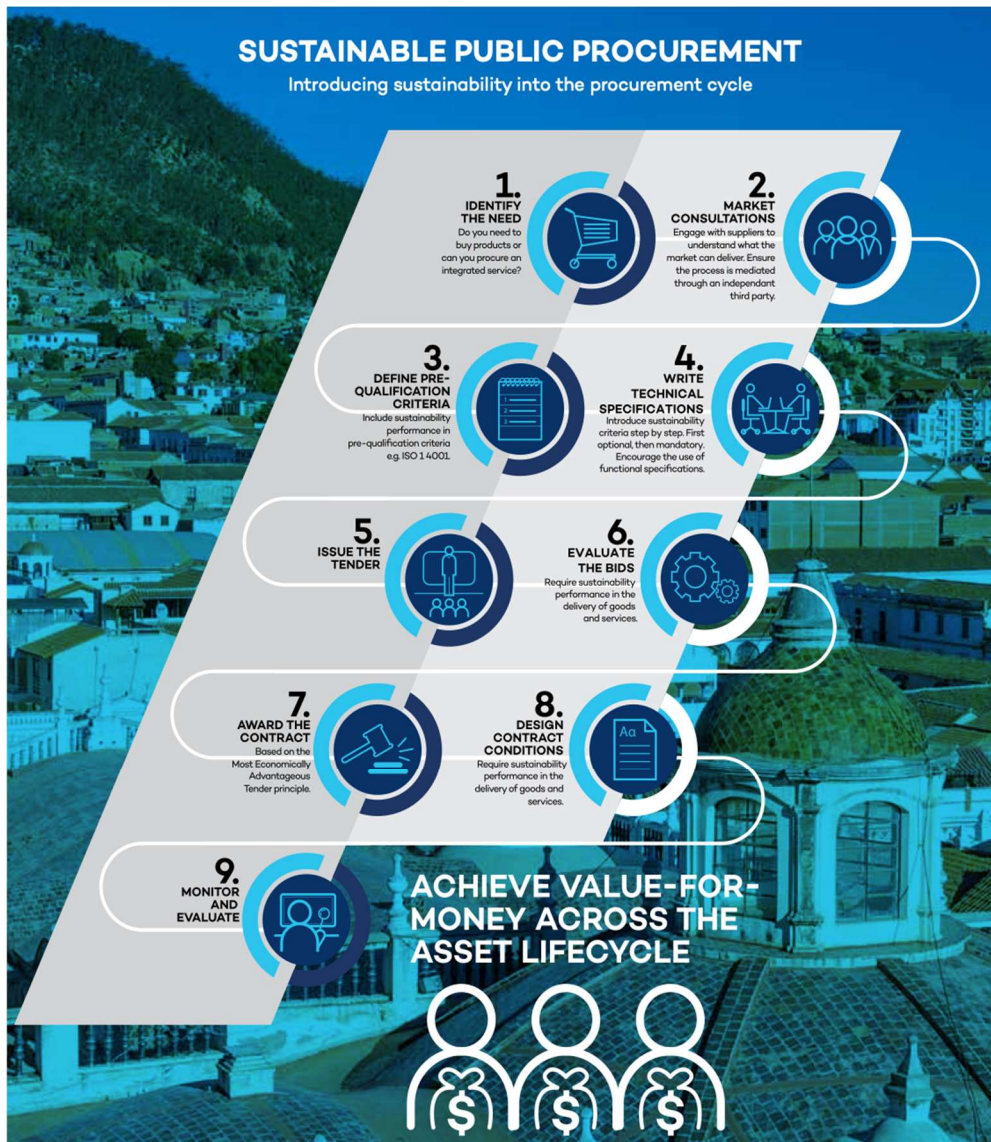


Figure 12: The nine steps of the public procurement process (Source: IISD 2015, p. 17)

It is understood that in Step 2 (Market Consultations) the market participants are familiarised with the sustainability criteria, which should be applied, but the

<sup>57</sup> IISD (2015), p. 17f

consultations are mainly meant to collect information about the goods and services the market can deliver. Therefore, the handbook does not see this step as a stage at which the sustainability criteria are actively integrated.

Environmental and social performance can be integrated into the **supplier pre-qualification** to make sure that a supplier will be able to supply the specified goods and services according to the specified conditions. Such pre-qualification criteria could be<sup>58</sup>:

- Demonstrated ability to meet qualification criteria on environmental management systems such as ISO 19011:2011
- Operate using Environmental Management Systems as per ISO 14001
- Demonstrate compliance with International Labour Organization (ILO) standards along the supply chain.

The integration of environmental and social performance into the **technical specifications** should only be done for mature products and after gathering substantial experience with SPP for a certain product group. For products, which are not fully mature and the experience with SPP is limited, environmental and social performance criteria should only be integrated into **award criteria**, but not into technical specifications. In this way proactive suppliers can be rewarded while suppliers, who cannot offer the fulfilment of the criteria are not automatically excluded. Over time as the products develop, some environmental criteria can be shifted from award criteria to technical specifications, if the criteria can be met by good standard technologies<sup>59</sup>.

In the **evaluation of the tenders** SPP criteria apply in the consideration of the best value for money or similar wider concepts including all life cycle costs. According to the Procura+ Handbook of ICLEI (2016) Life Cycle Costing (LCC) may consider the following cost categories:

- *costs relating to acquisition.*
- *costs of use, such as consumption of energy and other resources; maintenance costs;*
- *end of life costs, such as collection and recycling costs; and*
- *costs imputed to environmental externalities linked to the product, service or work during its life cycle (e.g. greenhouse gases and other pollutant emissions, or other*

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<sup>58</sup> See: IISD (2015), p. 19

<sup>59</sup> See: IISD (2015), p. 19

climate change mitigation costs) if their monetary value can be determined and verified.

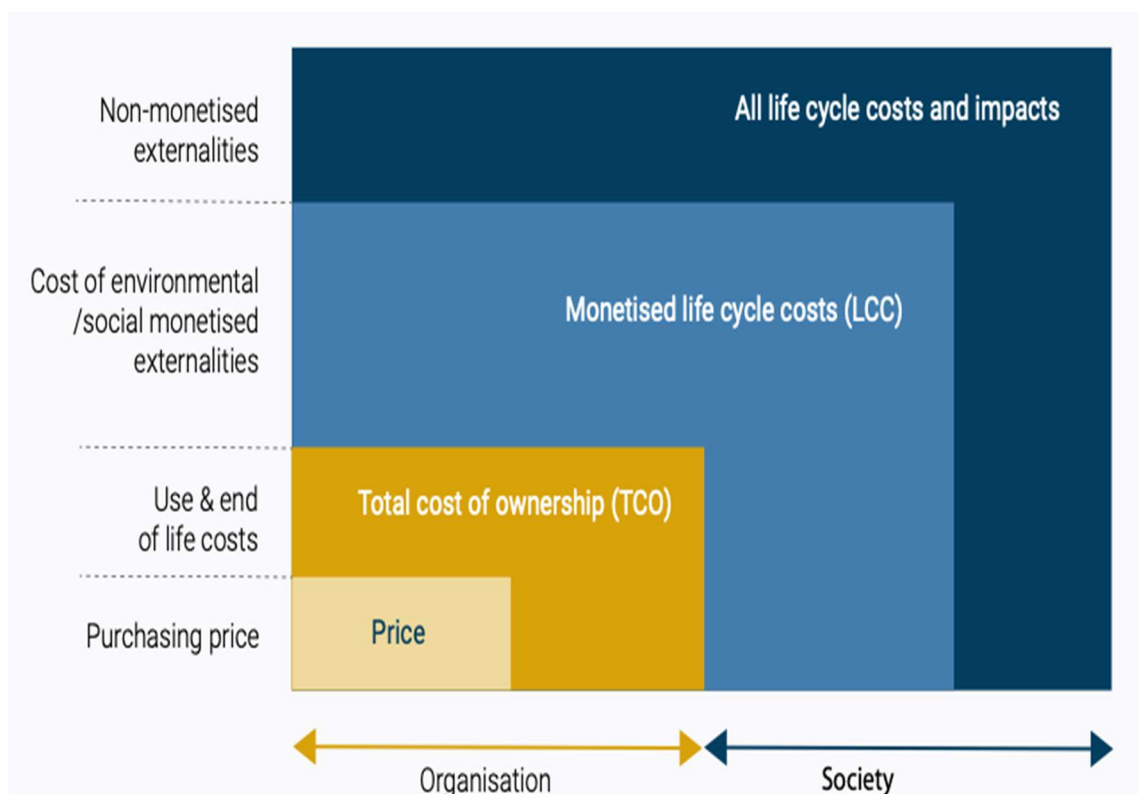


Figure 13: Life cycle costing (Source: UNEP 2021, p.17)

The different costs are only partially borne by the user of a product or service as Figure 13 shows and even the LCC approach is not able to capture all induced costs, as some life cycle impacts have not been monetised so far.

Nevertheless, quite a number of environmental costs, including the cost of climate change (social costs of carbon) have been monetised in recent years. Thus, these costs have sometimes been included in the calculations of *Best Value for Money*. 'In the UK the CRC (Carbon Reduction Commitment) Energy Efficiency Scheme, which limits CO<sub>2</sub> emissions of large public authorities... has given financial value to CO<sub>2</sub> emissions... The Clean Vehicles Directive (of the EU) also presents a methodology for monetising environmental externalities'<sup>60</sup>.

<sup>60</sup> ICLEI (2016), p. 76

**Short overview of recent Social Cost of Carbon (SCC) Estimates<sup>61</sup>**

The social cost of carbon (SCC) represents the estimated economic damages associated with emitting one additional metric ton of CO<sub>2</sub> into the atmosphere. It is a crucial metric for policymaking, guiding climate regulations, and carbon pricing. Recent research and policy updates have led to significant changes in SCC values across Germany, Europe, and the United States.

**Germany**

- In late 2024, the German Environment Agency (UBA) increased its official SCC value from 200 to 300 euros per metric ton of CO<sub>2</sub>. This adjustment aligns with the latest research, which finds that the true societal cost is at least 270 euros per ton, and possibly closer to 300 euros, when accounting for broader and more persistent climate impacts.
- This is currently the highest official SCC figure used by a government agency globally, reflecting the most comprehensive and up-to-date scientific assessment.

**Europe (Broader Context)**

- While Germany leads with its 300 €/tCO<sub>2</sub> figure, there is no unified SCC value adopted across all of Europe. The new research suggests that previous European estimates, averaging around 125 €/t CO<sub>2</sub>, significantly underestimate the true costs.
- The latest academic synthesis, incorporating 1,800 studies, places the mean SCC at 283 USD (approx. 270 euros) per ton of CO<sub>2</sub> for 2020, with an interquartile range of 97 to 369 USD. This suggests that, for European policy alignment with current science, SCC values should be in the 270-300 €/t CO<sub>2</sub> range.

**United States**

- In December 2023, the US Environmental Protection Agency (EPA) updated its central SCC estimate to 190 USD per ton of CO<sub>2</sub> (2020 dollars, using a 2% discount rate).
- The EPA also provides a range depending on the discount rate:
- 2.5% discount rate: 120 USD/tCO<sub>2</sub> (2020)
- 2% discount rate: 190 USD/tCO<sub>2</sub> (2020)
- 1.5% discount rate: 340 USD/tCO<sub>2</sub> (2020)

Recent academic work, however, indicates that the SCC should be over 280 USD per ton of CO<sub>2</sub>, more than double the average published in earlier literature and higher than the current EPA value. Some studies suggest even higher values, with recent literature reviews and expert surveys pointing to a “true” SCC that could be twice as large as most published estimates.

**Box 2: *Recent estimates for the social costs of carbon (Source: Moore et al. 2024)***

Including the monetised environmental costs of transport in the procurement decisions through life cycle costing can substantially improve the overall economics of EVs and other zero emission vehicles (ZEV) as compared to ICE driven vehicles. At the same time, it has to be stated that at the moment the pure internal total costs of ownership (TCO) of ICE vehicles can still be lower in the Caribbean than the TCO of EVs or other ZEVs.

Presently the necessary data required for full life cycle costing are hardly available for small island countries like the countries of the Caribbean. It will take a major effort and some outside (donor) support to derive data on e.g. the total cost of ownership and the external costs of procured products and services and to train the procurement staff in the analysis of these costs.

If non-monetised environmental or social effects are considered in the evaluation of tenders, a clear methodology for weighing the different effects must be established.

This is often done by a point system, which distributes the maximum number of performance points between the different criteria and then evaluates each tender based on the performance with respect to the different criteria. Table 10 shows an example for such an evaluation table.

	TENDER A	TENDER B
Financial criterion: lowest purchasing price (50 points)	USD 10,000 50 points	USD 13,000 35 points
Financial criterion: operating cost (10 points)	4 points	8 points
Environmental criterion: energy efficiency (20 points)	10 points	20 points
Environmental criterion: use of recycled paper (10 points)	5 points	10 points
Social criterion: 5% of employees are from vulnerable groups (10 points)	0 points	10 points
<b>Total</b>	<b>69 points</b>	<b>83 points</b>

*Table 10: Example of a master prioritization table (Source: UNEP 2021, p.65)*

Once a contract is awarded, there is a last step in the procurement process, which can contribute to the environmental and social performance of the contractor. **Contract conditions** can be designed to compel suppliers to deliver on the social and environmental performance aspects stipulated in the tender. Such provisions can require that suppliers collect the packaging of their products for recycling use or that they collect their products at the end-of-life for recycling<sup>61</sup>. Such a provision could possibly cover batteries or entire EVs.

## 2.4 International criteria for the procurement of vehicles

A core area of sustainable green procurement is the specification of technical, economic, environmental and social selection criteria. While the basic needs have to be specified based on the individual service that is expected from the product, work or service, environmental and socio-economic criteria can often be specified for an entire group of products, works or services. In the case of this consultancy the focus is on transport. Therefore, different internationally used criteria sets are reported to give a

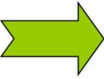
<sup>61</sup> See: IISD (2015), p.24

first idea of the possible choices for such selection criteria for transport and transport services.

As already mentioned, the EU has elaborated a whole set of environmental criteria guidelines for different product and service groups. One of these criteria sets are the 'EU Green Public Procurement Criteria for Road Transport'<sup>62</sup>, which cover seven different product and a service groups<sup>63</sup>:

- *Purchase, lease or rental of cars, light commercial vehicles (LCVs) and L-category vehicles.*
- *Provision of mobility services.*
- *Purchase or lease of buses.*
- *Provision of public bus services.*
- *Purchase or lease of waste collection trucks.*
- *Provision of waste collection services.*
- *Provision of post, courier and moving services.*

L-category vehicles are a classification under EU law for powered two-, three-, and four-wheel vehicles, such as motorcycles, mopeds, tricycles, and quadricycles (including some microcars and quads).

Key environmental impacts during a product's lifecycle	EU GPP approach
<ul style="list-style-type: none"> <li>• greenhouse gas (GHG) and air pollutant emissions produced by energy consumption during the use phase,</li> <li>• GHG and air pollutant emissions produced along the supply chain of the energy carriers,</li> <li>• environmental impacts produced during the manufacture of batteries for electric vehicles,</li> <li>• noise emissions produced by the vehicle and tyres during the use phase.</li> </ul>	 <ul style="list-style-type: none"> <li>• require criteria on type-approval CO<sub>2</sub> emissions for cars and LCVs, and specific technologies for heavy-duty vehicles and L-category vehicles,</li> <li>• require criteria based on air pollutant emissions performance for cars and LCVs, and specific technologies for heavy-duty vehicles and L-category vehicles,</li> <li>• require criteria on rolling resistance of tyres,</li> <li>• require criteria on energy efficiency of electric cars and LCVs,</li> <li>• require criteria on battery warranties,</li> <li>• require criteria on vehicle and tyres noise emissions,</li> <li>• require service providers to have key competences and to apply key environmental management measures and practices,</li> <li>• require service providers to provide adequate and frequent training for their staff,</li> <li>• require criteria on tyres and lubricants for maintenance activities.</li> </ul>

*The order of impacts does not necessarily reflect their magnitude.*

**Table 11: Key environmental impacts during the lifecycle of transport products and services and the EU GPP approach taken (Source: EU 2021, p.9)**

For each product or service group technical specifications and award criteria are discussed and criteria values are suggested. Table 11 presents the key environmental

<sup>62</sup> EU (2022)

<sup>63</sup> EU (2022), p. 4

impacts of transport identified and the required criteria and actions for green public procurement.

These environmental impacts are then dealt with in the *technical specifications (TS)* and the *award criteria (AC)* for each of the seven product and service groups. Table 12 shows the different categories of technical specifications and award criteria for the 'Purchase, lease or rental of cars, light commercial vehicles (LCVS) and L-category vehicles'. For each technical specification and award criterion the table shows, whether these are used as core and/or comprehensive criteria.

No	Criterion	Core	Comprehensive	
<b>CATEGORY 1: 'PURCHASE, LEASE OR RENTAL OF CARS, LIGHT COMMERCIAL VEHICLES (LCVS) AND L-CATEGORY VEHICLES':</b>				
<b>SUBJECT MATTER:</b>				
- 'Cars and LCVs': M1 and N1 vehicles, as defined by Regulation (EU) 2018/858;				
- 'L-category' vehicles as defined by Regulation 168/2013.				
<b>TECHNICAL SPECIFICATIONS</b>	TS1	CO <sub>2</sub> emissions and energy efficiency	X	X
	TS2	Air pollutant emissions	X	X
	TS3	Energy consumption displays	X	X
	TS4	Traffic information and route optimisation		X
	TS5	Minimum warranty of the battery	X	X
<b>AWARD CRITERIA</b>	AC1	Lower CO <sub>2</sub> emissions	X	X
	AC2	Energy efficiency	X	X
	AC3	Improved air pollutant emissions performance	X	
	AC4	Zero tailpipe emission capability	X	
	AC5	Speed limiter		X
	AC6	Extended warranty		X

*Table 12: Technical specifications and award criteria for cars and LDVs according to the EU GPP approach taken (Source: EU 2021, p.10)*

For each technical specification and award criteria specific target or threshold values are given. Table 13 shows a part of the criteria specified by the EU.

<p><b>TS2. Air pollutant emissions</b>  <i>Note: this criterion applies to M<sub>1</sub> and N<sub>1</sub> vehicles with a reference mass<sup>1)</sup> not exceeding 2 610 kg. M<sub>1</sub> and N<sub>1</sub> vehicles with a reference mass exceeding 2 610 kg will have to comply with TS2 air pollutant emissions values of category 3 (Section 6.2).</i></p> <p>Until 31 December 2025:  The real driving emissions (RDE) of all new cars and LCVs must not exceed 0.8 times the Euro 6 limit values for NO<sub>x</sub> and PN (not including the applicable measurement margin<sup>2)</sup>.  <i>Vehicles purchased for use in areas with air quality issues<sup>3</sup> must have zero tailpipe emissions.</i></p> <p>From January 2026:  Vehicles must have zero tailpipe emissions.</p> <p><b>Verification:</b>  The tenderer must provide the vehicle's certificate of conformity.</p>	<p><b>TS2. Air pollutant emissions</b>  Vehicles must have zero tailpipe emissions.</p> <p><b>Verification:</b>  The tenderer must provide the vehicle's certificate of conformity.</p>
<p><b>TS3. Energy consumption display</b>  (Same for core and comprehensive criteria)</p> <p>The vehicles must be equipped with a mechanism that shows the driver their fuel consumption figures.</p> <p><b>Verification:</b>  The tenderer must provide the vehicle's technical sheet that includes this information.</p>	
	<p><b>TS4. Traffic information and route optimisation</b></p> <p><i>Note: Contracting authorities may request that this criterion be fulfilled if the vehicle will be used in urban areas with congestion issues or driven to places that the drivers are not familiar with, and if no other information</i></p>

*Table 13: Technical specifications for cars and LDVs according to the EU GPP approach taken (Source: EU 2021, p. 15)*

The award criteria are specified in a similar way, as Table 14 and Table 15 show, but different from the thresholds given in the technical specifications the level of achievement of a certain criterion is converted into points, which will be awarded. The calculation of the awarded points is often based on a certain calculation formula, like in the case of energy efficiency. As these are only criteria for green public procurement, there is no mentioning of socio-economic criteria, which are dealt with in a separate EU document<sup>64</sup> (Buying Social) giving the general guidelines and examples for several products and services. Transport is not explicitly addressed in this document.

In the case of the Caribbean, it will be necessary to introduce the different criteria to the local vehicle dealers as part of the pre-procurement process and to prepare them for supplying such data as part of the normal process. At the same time the procurement staff dealing with the acquisition of vehicles need to be trained in the

<sup>64</sup> EU (2021a)

evaluation and comparison of these criteria, a task which may require some additional outside (donor) help.

AWARD CRITERIA (AC)	
<p><b>AC1. Lower CO<sub>2</sub> emissions</b> (same for core and comprehensive)</p> <p>Until 31 December 2025: points will be awarded to vehicles with lower type-approval CO<sub>2</sub> emissions than those required in TS1, in proportion to the reduction achieved.</p> <p><b>Verification:</b> See above TS1</p>	
<p>Where</p> <ul style="list-style-type: none"> <li>• <i>NOx<sub>high</sub></i> and <i>NOx<sub>low</sub></i> are the highest and lowest NOx emissions in mg/km among the submitted offers</li> <li>• <i>PN<sub>high</sub></i> and <i>PN<sub>low</sub></i> are the highest and the lowest PN emissions in #/km among the submitted offers</li> <li>• <i>NOx</i> and <i>PN</i> are the NOx and PN emissions of the offer being evaluated</li> <li>• <i>PN<sub>Oxmax</sub></i> and <i>PPN<sub>max</sub></i> are the maximum points to be awarded for each air pollutant</li> </ul> <p><b>Verification:</b> The tenderer must provide the vehicle's certificate of conformity.</p>	
<p><b>AC4. Zero tailpipe emission capability</b> <i>Note: this criterion applies to M<sub>1</sub> and N<sub>1</sub> vehicles with a reference mass not exceeding 2 610 kg. M<sub>1</sub> and N<sub>1</sub> vehicles with a reference mass exceeding 2 610 kg will have to comply with the AC3 improved air pollutant emissions performance levels of category 3 (Section 6.2).</i></p> <p>Until 31 December 2025: Points will be awarded to those vehicles that are capable of driving with zero tailpipe emissions, according to the WLTP range that the vehicle can travel without any tailpipe emissions above the default range set by the local authority. <i>The contracting authority will set the minimum zero tailpipe emissions WLTP range reference threshold according to the expected use profiles in the call for tender (a proposed default range could be 50 km<sup>3</sup>). Vehicles that are not equipped with an internal combustion engine will be awarded more points than those equipped</i></p>	

**Table 14: Award criteria for cars and LDVs according to the EU GPP approach taken (Part 1) (Source: EU 2021, p. 1ff)**

<p><b>AC2 Energy efficiency</b> (same for core and comprehensive)</p> <p>Points will be awarded to vehicles with lowest energy consumption expressed in kWh/100km according to the WLTP test procedure. The following formula will apply:</p> $Points_{offer} = \frac{Energy_{highest} - Energy_{offer}}{Energy_{highest} - Energy_{lowest}} \times Points_{max}$ <p>Where</p> <ul style="list-style-type: none"> <li>• <math>Points_{offer}</math> is the number of points awarded to the offer under evaluation</li> <li>• <math>Energy_{highest}</math> and <math>Energy_{lowest}</math> are the highest and lowest energy consumption expressed in kWh/100km among the submitted offers</li> <li>• <math>Points_{max}</math> is the maximum number of points that can be awarded</li> </ul> <p><b>Verification:</b> The tenderer must provide the vehicle's certificate of conformity.</p>	
<p><b>AC3. Improved air pollutant emissions performance</b></p> <p>Note: this criterion applies to <math>M_1</math> and <math>N_1</math> vehicles with a reference mass not exceeding 2 610 kg. <math>M_1</math> and <math>N_1</math> vehicles with a reference mass exceeding 2 610 kg will have to comply with AC3 improved air pollutant emissions performance levels of category 3 (Section 6.2).</p> <p>Until 31 December 2025:</p> <p>Points will be awarded proportionally to air polluting emissions performance to vehicles that have an RDE level better than the Euro 6 limit values for NOx and PN (not including the applicable measurement margin).</p> <p>Points will be awarded based on the following formula:</p> $Points = \left( \frac{NOx_{high} - NOx}{NOx_{high} - NOx_{low}} \right) \times PNOx_{max} + \left( \frac{PN_{high} - PN}{PN_{high} - PN_{low}} \right) \times PPN_{max}$	
<p>with an internal combustion engine.</p> <p><b>Verification:</b> The tenderer must provide the vehicle's certificate of conformity.</p>	
	<p><b>AC5. Speed limiter</b></p> <p>Points will be awarded to vehicles equipped with a speed limiting device, i.e. an on-board device that automatically limits a vehicle's speed to a certain maximum.</p> <p><b>Verification:</b> The tenderer must present the vehicle's technical sheet that includes this information.</p>
<p><b>AC6 Extended warranty</b> (Same for core and comprehensive)</p> <p>Points will be awarded to tenders that offer an extension of the minimum warranty set by the TS5 minimum warranty in proportion to the value of the extension.</p> <p><b>Verification:</b> Same as TS5</p>	

**Table 15: Award criteria for cars and LDVs according to the EU GPP approach taken (Part 2) (Source: EU 2021, p. 1ff)**

The Handbook of the Inter-American Network on Government Procurement (INGP) gives mandatory and optional requirements for cars and light-duty vehicles. Although, these are technically outdated due to the date of publication (2015), they include more than environmental criteria. In the category 'Sourcing' criteria for the compliance with the standards of the ILO (International Labour Organization) are introduced throughout the supply chain<sup>65</sup>. This list includes eight different standards from the right to organise to minimum age and child labour. Table 16 shows the suggested mandatory

<sup>65</sup> IISD (2015), p. 35

requirements and Table 17 shows the optional requirements for cars and light-duty vehicles.

### EMISSIONS

Many Latin American countries have adopted the EU or U.S. emissions standards by reference, so these standards must be incorporated into the vehicle procurement process. Some countries have developed their own emission standards, such as Brazil's PROCONVE. These are the EU standards for CO<sub>2</sub> emissions:

VEHICLE TYPE <sup>4</sup>	CO <sub>2</sub> g/km
Mini	110
Small	120
Compact	130
Mid	150
Large	170
High/Exclusive	270
Offroad/Family Wagon	210
Small vans (N1, class I)	150
Other vans (N1, class II and class III)	220

### EXHAUST EMISSIONS

Vehicles must comply with the EURO 5 exhaust emissions standard, the US TIER 2 Ban 5 standard or an equivalent standard. These standards regulate pollutants such as carbon monoxide, oxides of nitrogen, particulates and hydrocarbons.

### ECO DRIVING

Appropriate driving practices help reduce fuel consumption and emissions. Operators must be provided with vehicle-specific driving instructions.

### RECYCLED CONTENT

25 per cent of the aluminium and steel used in the production of the vehicle must be recycled (second fusion), and the amount of recycled material must be provided as a percentage of total vehicle weight.

### SOURCING

The tenderer must provide proof of compliance with the international working standards (ILO Core Conventions) listed below throughout the supply chain:

- Freedom of Association and Protection of the Right to Organise (No. 87)
- Right to Organise and Collective Bargaining (No. 98)
- Forced Labour (No. 29)
- Abolition of Forced Labour (No. 105)
- Discrimination (Employment and Occupation) (No. 111)
- Equal Remuneration (No. 100)
- Minimum Age (No. 138)
- Worst Forms of Child Labour (No. 182)

### WARRANTY AND DURABILITY

- A guarantee for a period of at least one year or 20,000 km, whichever occurs first, must be provided.
- Availability of parts must be guaranteed for at least five years from the time production ceases on the particular model. Bidders must also demonstrate the availability of parts by country or region.

Table 16: Mandatory requirements for cars and light-duty vehicles according to the INGP Handbook (Source: IISD 2015, p.35)

## EMISSIONS

Optional CO<sub>2</sub> emissions requirements can be more stringent than the mandatory requirements.

Emissions do not exceed the following values:

VEHICLE TYPE <sup>5</sup>	CO <sub>2</sub> g/km
Mini	90
Small	100
Compact	110
Mid	130
Large	150
High/Exclusive	200
Offroad/Family Wagon	170
Small vans (N1, class I)	130
Other vans (N1, class II and class III)	180

Tenders of vehicles with even lower emissions, such as those powered by alternative fuels, can be awarded a higher score in the evaluation by making emissions part of the award criteria.

## EXHAUST GAS EMISSIONS

Vehicles comply with the EURO 6 exhaust emissions standard or equivalent.

## GEAR SHIFT INDICATORS

Vehicles are equipped with a gear shift indicator that increases efficiency by telling drivers when to shift gears up or down.

## TIRE PRESSURE MONITORING SYSTEMS (TPMS)

Vehicles are equipped with TPMS. (Tire pressure influences fuel consumption through its impact on rolling resistance of the vehicle.)

## FUEL CONSUMPTION DISPLAY

Vehicles are equipped with a mechanism that displays fuel consumption information to the driver and assists the driver in more eco-efficient driving.

## AIR CONDITIONING GASES

There are various types of air conditioning gases, some of which have damage the ozone layer and/or contribute to climate change.

If the vehicle is fitted with an air-conditioning system designed to contain fluorinated greenhouse gases, the specific gas has a global warming potential (GWP) ≤ 150 (related to CO<sub>2</sub> and a time horizon of 100 years). If the GWP is higher, the leakage rate from the system does not exceed 40g of fluorinated greenhouse gases per year for a single evaporator system, or 60g of fluorinated greenhouse gases per year for a dual evaporator system.

The tenderer provides the name, formula and GWP of the refrigerating gas used in the air conditioning system. If a mixture of gases is used, the GWP is calculated as follows, with:

- $GWP = \sum (\text{Substance } X1 \% \times GWP(X1)) + (\text{Substance } X2 \% \times GWP(X2)) + \dots + (\text{Substance } Xn \% \times GWP(Xn))$
- where n is the number of gases and % is the contribution by weight with a weight tolerance of +/- 1 %.<sup>6</sup>
- If GWP is > 150, leakage tests results must be provided.

## RECYCLED CONTENT

75 per cent of the aluminium and/or steel used for the production of the vehicle is recycled (second fusion).

## RECYCLABILITY

Vehicles and their parts are recyclable or reusable. The components are made of materials that can be easily separated for recycling.

## SOURCING

The tenderer provides proof of compliance with international working standards (ILO Core Conventions), as under the mandatory requirement but verified through an independent third-party.

## WARRANTY AND DURABILITY

The supplier guarantees the vehicle for at least three years or 100,000 km, whichever occurs first.

Professional end-of-life service maximizes efficiency and value. The tenderer offers:

- An end-of-life take back and recycling service within the country/region of use of the vehicle; and/or
- A used vehicle refurbishment program.

Table 17: Optional requirements for cars and light-duty vehicles according to the INGP Handbook (Source: IISD 2015, p.36)

## 2.5 Digital battery passports for EVs

In the future the criteria for vehicles should allow more room for the specific aspects of EVs, as vehicles with internal combustion engines will be more and more replaced. For EVs the life cycle of the battery will become a key criterion for the environmental and socio-economic impacts of e-vehicle based transport. Thus, the life cycle of the battery production and recycling of the batteries at the end of their useful lifespan in the vehicles will play a key role. These aspects can be catered for, if battery passports, like the passports planned by the EU<sup>66</sup> are made mandatory for the procurement of EVs.

As Figure 14 shows, the mandatory digital battery passport will contain a wealth of information relevant for sustainable public procurement.

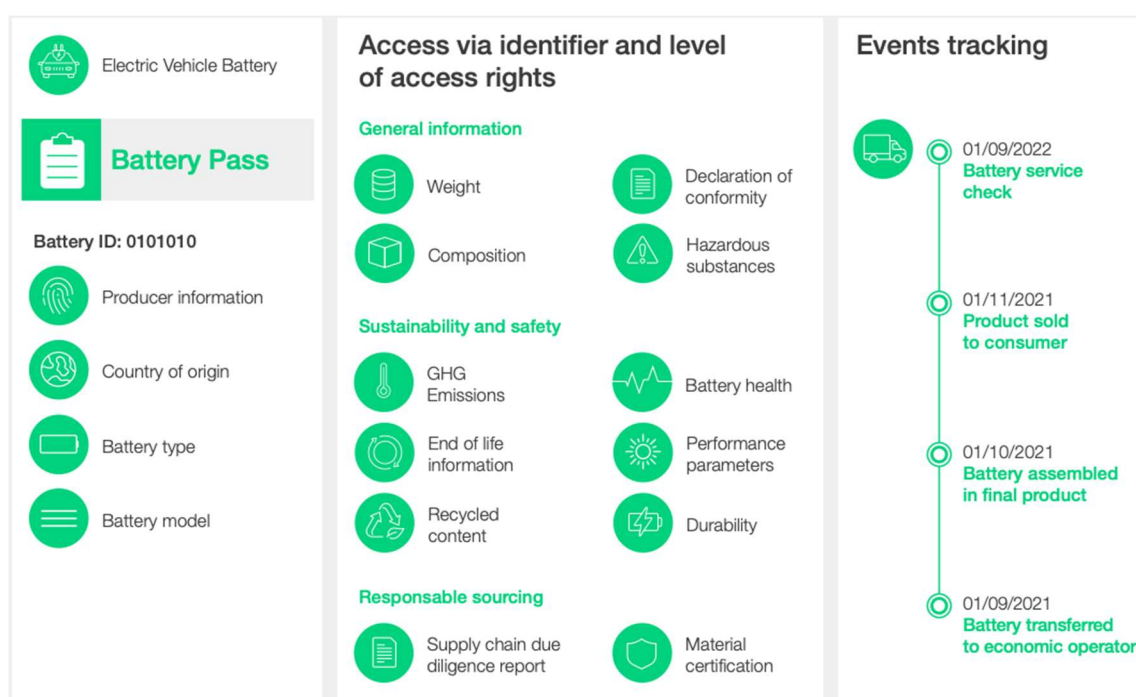


Figure 14: Mandatory reporting requirements for the EU battery passport (Source: World Economic Forum 2023, p.4)

The content clusters shown in the passport overview graph can be briefly described in the following way<sup>67</sup>:

**General battery and manufacturer information:** Battery identification; manufacturer's identification; manufacturing place; manufacturing date; battery category; battery weight; battery status.

<sup>66</sup> EU (2023)

<sup>67</sup> World Economic Forum (2023), S. 3

**Compliance, labels, certifications:** *Separate collection symbol; symbols for cadmium and lead; carbon footprint label; meaning of labels and symbols; EU declaration of conformity and its ID; compliance of test results.*

**Battery carbon footprint:** *Declared carbon footprint; share of battery carbon footprint per life cycle stage; carbon footprint performance class; web link to public carbon footprint study; administrative information about the manufacturer; information about the geographic location of the battery manufacturing facility.*

**Supply chain due diligence:** *Information on responsible sourcing as indicated in the report on due diligence policies (the due diligence report is the only mandatory supply chain due diligence requirement for the digital battery passport).*

**Battery materials and composition:** *Battery chemistry; critical raw materials; materials used in the cathode, anode, and electrolyte; hazardous substances; impact of substances on the environment and on human health or safety.*

**Circularity and resource efficiency:** *Design for circularity information (i.e. disassembly and dismantling information, spare parts information; safety instructions); recycled and renewable content (i.e. recycled content for cobalt, lithium, nickel, and lead; renewable content share); end-of-life battery information (i.e. information on waste prevention and collection).*

**Performance and durability:** *Battery performance reporting (e.g. battery capacity, energy round trip efficiency), durability data (e.g. expected lifetime in cycles/calendar years).*

The development of battery passports is supported by China, the largest battery manufacturer in the world. China has launched the development of a Chinese digital battery passport with similar requirements to facilitate trade with the EU<sup>68</sup>. Figure 15 gives an overview of the other international initiatives for the development of battery passports. On this basis it is to be expected that a standardised battery passport will become mandatory in most countries around the world. Thus, it can be expected that EVs will be equipped with batteries with a digital battery passport, which can be used

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<sup>68</sup> World Economic Forum (2023), p. 5

as an important source of information and product qualification in sustainable green public procurement in transport.

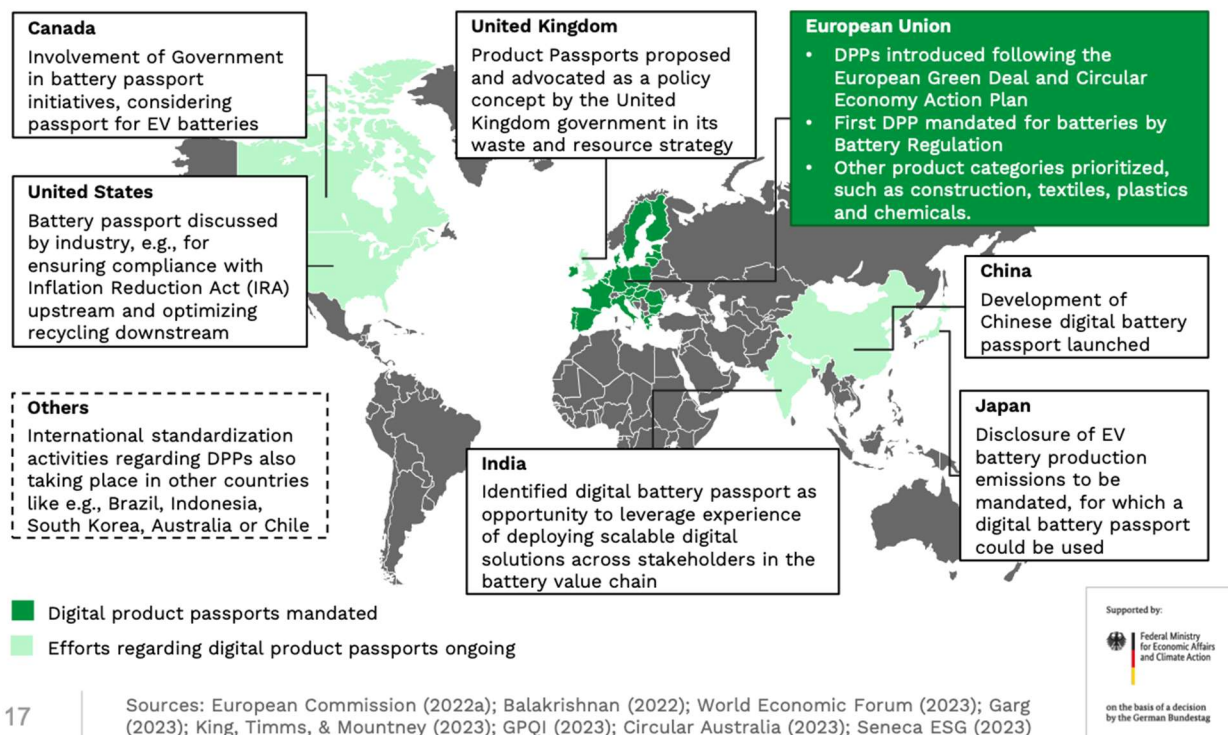


Figure 15: Overview on other global digital battery passport (Source: Batterypass.eu (2023), slide 17)

The main passport requirements for electric vehicles are briefly described in Table 18 and Table 19.

Sustainability and safety requirements	Carbon footprint	2025: Carbon footprint declaration (label) 2026: Carbon footprint performance class requirements 2028: Maximum life cycle carbon footprint threshold (levels to be determined)
	Recycled content	Minimum shares of recovered materials in batteries from 2031: <ul style="list-style-type: none"> <li>- 16 % cobalt</li> <li>- 85 % lead</li> <li>- 6 % lithium</li> <li>- 6 % nickel</li> </ul> From 2036: <ul style="list-style-type: none"> <li>- 26 % cobalt;</li> <li>- 85 % lead;</li> <li>- 12 % lithium;</li> <li>- 15 % nickel</li> </ul>
Labelling and information requirements	Labelling and marking	2025: Symbol for separate collection 2026: Label for general information 2027: QR code giving access to the battery passport
	Information on SOH and expected lifetime	2024: Battery management system to include parameters for determining SOH and expected lifetime
Obligations of economic operators as regards battery due diligence policies	Battery due diligence policies	2025: Economic operators placing batteries on the market need to fulfil due diligence obligations and set up battery due diligence policies
	Economic operator's management system	2025: Adoption and communication of due diligence policy on raw materials and social and environmental risks System of controls and supply chain transparency documenting: <ul style="list-style-type: none"> <li>- raw material</li> <li>- supplier</li> <li>- country of origin</li> <li>- market transactions from extraction to the immediate supplier</li> <li>- quantities of the raw material present in the battery, etc.</li> </ul>
	Risk management obligations	2025: Identification of risks of adverse supply chain impacts and implementation of a response strategy

**Table 18: Overview of selected requirements of the EU Batteries Regulation for electric vehicles (Part 1) (Source: Rizos and Urban 2024, p.6f)**

Management of waste batteries	Collection of EVBs	2025: Producers of EVBs need to take back waste EVBs free of charge from end users Producers of EVBs need to provide take-back and collection systems and deliver collected waste EVBs to treatment facilities
	Targets for recycling	Permitted facilities need to ensure that waste batteries undergo preparation for reuse, repurposing or recycling
	efficiency and recovery of materials	Recyclers need to achieve the minimum recycling efficiency targets below by 2025: <ul style="list-style-type: none"> <li>- 75 % by average weight of lead-acid batteries</li> <li>- 65 % by average weight of lithium-based batteries</li> <li>- 80 % by average weight of nickel-cadmium batteries</li> <li>- 50 % by average weight of other waste batteries</li> </ul> By 2030: <ul style="list-style-type: none"> <li>- 80 % by average weight of lead-acid batteries</li> <li>- 70 % by average weight of lithium-based batteries</li> </ul> Recyclers need to achieve these minimum material recovery targets by 2027: <ul style="list-style-type: none"> <li>- 90 % for cobalt, copper, lead and nickel</li> <li>- 50 % for lithium</li> </ul> By 2031: <ul style="list-style-type: none"> <li>- 95 % for cobalt, copper, lead and nickel</li> <li>- 80 % for lithium</li> </ul>
Battery passport requirements	Battery passport	2027: Establishment of battery passport containing: <ul style="list-style-type: none"> <li>- Information on battery model</li> <li>- Information specific to the individual battery (Annex XIII)</li> <li>- Different accessibility layers</li> </ul> To be accessible through QR code compliant with specified standards
	Technical design and operation	2027: Fully interoperable with other EU DPPs Access free of charge based on access rights

**Table 19: Overview of selected requirements of the EU Batteries Regulation for electric vehicles (Part 2) (Source: Rizos and Urban 2024, p.6f)**

As battery passports already contain all the information requirements necessary for sustainable green public procurement, they can simply be made mandatory as a technical requirement in a first step. Nevertheless, it has to be kept in mind that the implementation of the passports has just started in the EU. Thus, such requirement can be introduced at a somewhat later time in the project countries based on the experiences gained with the implementation of the digital battery passport in the EU. At a later stage some of the information can be used to derive award criteria, if different battery manufacturers show diverging levels of achievement with respect to the different indicators.

## 2.6 Comparative Global Insights

Lessons from advanced jurisdictions illustrate the critical importance to implementation of SGPP policies being embedded into procurement frameworks:

- **European Union (EU):** Enforces Green Public Procurement (GPP)<sup>69</sup> through Directives 2014/24/EU and 2014/25/EU, mandating environmental criteria and lifecycle costing in public tenders<sup>70</sup>, underpinned by National GPP Action Plans with regular monitoring.
- **Organisation for Economic Co-operation and Development (OECD):** Promotes sustainable procurement as a strategic policy tool, integrating environmental, social, and economic considerations into procurement guidelines<sup>71</sup>.
- **South-South Cooperation:** Costa Rica and Uruguay, which have made significant strides in public procurement relevant to e-mobility. Costa Rica's Public Procurement Law requires inclusion of sustainability clauses and mandates lifecycle costing, serving as a useful reference for Caribbean adaptation. Uruguay's ICE to EV transition strategy includes fiscal incentives, standardized technical criteria for tenders, and fleet transition plans, creating a robust model for small developing states.
- **Portugal** operates a centralized green public procurement (GPP) system under its National Strategy for Green Public Procurement. This system features a unified e-procurement platform that mandates the use of environmental criteria in public tenders and tracks compliance across ministries. Lifecycle costing and carbon footprint assessments are standardized, and procurement officers receive targeted GPP training.

► *Relevance to the Caribbean:* These examples of embedding SGPP policies and legislation into procurement frameworks demonstrate how a legal framework coupled with a digital backbone and training can operationalize sustainability targets.

These examples highlight the transformative effect of **robust legal mandates to support SGPP**.

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<sup>69</sup> EU (2016)

<sup>70</sup> European Commission (2025)

<sup>71</sup> OECD (2021)

## 3. Regional procurement laws and regulations for e-mobility

### 3.1 Introduction

The transition of the Caribbean Community (CARICOM) toward sustainable transportation and low-emission development strategies including transitioning from internal combustion engine (ICE) vehicles to electric vehicles (E-vehicles) is critical in meeting national climate goals and global obligations under frameworks such as the 2015 Paris Agreement and the United Nations Sustainable Development Goals (SDGs)<sup>72</sup>, particularly SDG 11 (Sustainable Cities) and SDG 12.7 (Sustainable Public Procurement). As nations across the region commit to reducing greenhouse gas (GHG) emissions, the transition from primarily ICEs in transportation to electric mobility (e-mobility) is seen as an achievable objective and a major contribution to meeting national climate goals. However, achieving this transition at scale, especially within the public sector, requires more than policy commitment; it hinges on the ability of governments to **operationalize these goals through effective and aligned public procurement frameworks**.

Public procurement serves as a strategic tool for governments to influence markets and accelerate green transitions. In the Caribbean context, however, the fragmentation of procurement frameworks, limited capacities, and absence of enforceable green mandates hinder the adoption of electric mobility technologies. This literature review assesses the regional and national procurement environments to evaluate readiness or otherwise for the procurement of e-vehicles for use in the public sector and supporting infrastructure.

### 3.2 Regional procurement frameworks

#### 3.2.1 The Treaty of Chaguaramas and Revised Treaty

The Revised Treaty of Chaguaramas (2001)<sup>73</sup>, the foundational legal document of CARICOM, started efforts to establish a harmonized regional procurement regime through the CARICOM Single Market and Economy (CSME). **Article 239: Undertaking** states that “The Member States undertake to elaborate a Protocol relating, inter alia, to: (b) government procurement”<sup>74</sup>. The **culmination of Article 239's aspirations in the CARICOM Protocol on Public Procurement (2019)**<sup>75</sup>

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<sup>72</sup> UN (no year), SDG 13

<sup>73</sup> CARICOM. (2001)

<sup>74</sup> CARICOM (2001), Article 239

<sup>75</sup> CARICOM (2019)

represents a key milestone in the attempt to standardize procurement practices, though challenges in uptake persist.

While the Treaty offers a strategic legal umbrella for cross-border cooperation, its implementation is uneven due to varying levels of legal reform and political will among Member States.

### 3.2.2 CARICOM Protocol on Public Procurement (2019)

Adopted in 2019<sup>76</sup>, the CARICOM Protocol on Public Procurement lays out the principles for integration of national procurement markets as “**a single, unified, and open regional market**”<sup>77</sup>. Articles within the Protocol, particularly Article 1<sup>78</sup> and Article 34<sup>79</sup> recognise and speak to Green Procurement and encourage the adoption of Green Public Procurement (GPP) practices.

The Protocol is based upon five fundamental principles of the procurement process<sup>80</sup>:

- a) *national treatment and most favoured nation treatment;*
- b) *transparency;*
- c) *accountability;*
- d) *best value for money; and*
- e) *procedural fairness.*

At the same time the Protocol explicitly mentions the use of green procurement as a means for the acquisition of goods, services and works to cause minimal environmental effects, which, in the understanding of the Protocol include<sup>81</sup>:

- a) *improved recyclability;*
- b) *high recycled content;*
- c) *greater energy efficiency;*
- d) *utilising clean technology or clean fuels;*
- e) *reduced water consumption;*
- f) *reduced emissions of irritating or toxic substances during installation or use; and*
- g) *reduced production of toxic substances during use or disposal.*

Green procurement can be connected to the basic principle of *best value for money*, if such criteria are introduced in the description of the goods, works or services procured. Article 34 of the CARICOM Protocol speaks to Public Procurement and the Environment and it confirms that ‘*Nothing in this Protocol shall be construed as precluding a Contracting Party from employing its best endeavours to incorporate*

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<sup>76</sup> CARICOM Secretariat (2021), p. 3

<sup>77</sup> CARICOM (2019), p. 11

<sup>78</sup> CARICOM (2019), p. 7

<sup>79</sup> CARICOM (2019), p. 32

<sup>80</sup> CARICOM (2019), p. 11f

<sup>81</sup> CARICOM (2019), p. 7

*green procurement considerations in its public procurement*<sup>82</sup>. Thus, the CARICOM Protocol on Public Procurement includes the basic provisions for green public procurement (GPP). At the same time it does not explicitly mention sustainable public procurement (SPP), which can be considered as the international best practice including all aspects of GPP as well.

Despite its progressive stance, the protocol is not legally binding across all member states since only three of the fifteen member states of CARICOM have signed on to the protocol to date.

Public procurement systems across CARICOM countries exhibit varying levels of maturity and sophistication. Most nations are in the process of reforming legacy systems to achieve better value for money, transparency, and efficiency. Despite shared aspirations for sustainable development, there is **no uniform legal requirement** for sustainable green public procurement (SGPP), and it is to be noted that only 4 of the 15 Member states of CARICOM have signed on to the protocol to date. This limited adoption contributes to **fragmentation and policy inconsistency**.

Nevertheless, the **Public Procurement Manual for the Community Public Procurement Regime** published in 2021 gives an interpretation of 'Best Value for Money' which does include the aspect of sustainability<sup>83</sup>:

*'The **best value for money** is defined as the most advantageous combination of cost, quality and sustainability to meet the requirements of the procuring entity. In the context of value for money:*

***cost** means consideration of the whole life - cycle cost;*

***quality** means meeting a specification which is fit for purpose and sufficient to meet the contracting entity's requirements;*

***sustainability** means economic, social and environmental benefits.'*

Although the CARICOM Protocol falls short of reaching the full best practice standard of SPP, its interpretation in the Procurement Manual of 2021 uses the terminology of the original Protocol to include sustainability through the interpretation of the basic principle of 'Best value for money'. The Protocol would be a good regional platform to introduce the additional aspects of SPP in a similar way, as the environmental aspects of GPP are explicitly included in Article 34 of the Protocol itself. Unfortunately, as of early 2025, the Protocol has only been signed by seven out of thirteen CARICOM member countries (Antigua and Barbuda, Barbados, Belize, Dominica, St. Vincent and the Grenadines, St. Kitts and Nevis and Suriname). Large CARICOM countries like Jamaica and Trinidad and Tobago as well as the three flagship countries of the NDC-TEC project (Grenada, Jamaica and Saint Lucia) have not signed the protocol so far.

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<sup>82</sup> CARICOM (2019), p. 32

<sup>83</sup> CARICOM Secretariat (2021a), p. 23

Possible reforms could include:

1. Re-negotiation of protocol to achieve an agreement which is acceptable to all member states and adopted by their signing on to the protocol.
2. Aligning procurement principles with Nationally Determined Contributions (NDCs) under the 2015 Paris Agreement.
3. Developing **National Action Plans (NAPs) for Green Public Procurement (GPP)**<sup>84</sup> including instituting minimum green procurement thresholds across public tenders.
4. Establishing legal mandates for low-emission vehicle acquisition. **Mandatory clauses** for the procurement of electric vehicles (EVs) and clean technologies<sup>85</sup> to be introduced.

### 3.2.3 Framework Regional Integration Policy on Public Procurement

The **Framework Regional Integration Policy (FRIP, 2021) on Public Procurement** was developed by the CARICOM secretariat to operationalize the **Revised Treaty of Chaguaramas**, particularly **Article 239**<sup>86</sup>, which mandates Member States to elaborate a protocol on government procurement. The FRIP serves as a foundational **soft-law instrument**, offering a roadmap for aligning national procurement systems with regional integration objectives under the **CARICOM Single Market and Economy (CSME)**. Although it lacks binding legal force, the FRIP is instrumental in promoting convergence, transparency, and cooperation among Member States in the modernization of procurement systems.

The FRIP provisions align with the best international practice including the Model Law on Procurement of Goods, Construction and Services by the United Nations Commission on International Trade Law (UNCITRAL)<sup>87</sup>.

#### **Strategic Relevance to Green and E-Mobility Procurement**

The FRIP explicitly recognizes **environmentally sustainable procurement** as a regional priority, encouraging Member States to align their practices with international commitments under the **2015 Paris Agreement** and **Sustainable Development Goal (SDG) 12.7** on Sustainable Public Procurement (SPP)<sup>88</sup>. This emerging focus creates a normative basis for the integration of **green public procurement (GPP)** into national frameworks, particularly in areas critical to the green transition such as **electric mobility**, renewable energy, and energy-efficient infrastructure.

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<sup>84</sup> US-EU Trade and Technology Council (no year), p. 5

<sup>85</sup> US-EU Trade and Technology Council (no year), p. 5

<sup>86</sup> CARICOM (2021)

<sup>87</sup> Caribbean Framework (2015)

<sup>88</sup> CARICOM Secretariat (2011)

While the FRIP does not impose legal obligations, it plays an influential role in **guiding legal reform**, especially for countries currently revising public procurement laws or designing **climate-sensitive procurement strategies**. Its alignment with international best practices and emphasis on non-discrimination, transparency, and value for money make it a credible framework for embedding sustainability into national procurement regimes.

While the FRIP remains a non-binding policy instrument, its strategic orientation toward environmental sustainability and regional harmonization provides a crucial foundation for **embedding e-mobility objectives into the procurement law and practice adopted by the various member states**. By integrating FRIP's provisions into enforceable national frameworks, supported by regional oversight and capacity-building mechanisms, CARICOM can leverage procurement as a catalyst for the **transition from ICE vehicles to E-vehicles**.

### 3.2.4 CARICOM regional electrical vehicles strategy (REVS)

The Caribbean Community (CARICOM), through its **Regional Electric Vehicle Strategy (REVS)**<sup>89</sup>, has articulated a coherent and forward-looking blueprint to support the transition toward sustainable electric mobility across its Member States. This strategy offers essential insights for shaping procurement policies, particularly in the context of small island developing states (SIDS) with shared infrastructure, fiscal, and market constraints. The framework for the REVS was developed as a collaboration between CARICOM and CCREEE.

At the heart of the REVS are **three strategic imperatives: Innovation, Intelligence and Electrification**<sup>90</sup> which provide a holistic framework for guiding national and regional procurement activities. These pillars emphasize the need for the development of innovative business models and financing mechanisms, the deployment of smart infrastructure with integrated data systems, and the transformation of electricity and transport sectors through renewable-powered electrification. Together, these strategic directions establish a foundation for procurement decisions that are future-proof, regionally coordinated, and technologically adaptable.

A key procurement consideration identified in the REVS is the **prioritization of high-use fleets** particularly within the public and commercial sectors as an entry point for mass deployment. The REVS advocates for the **standardization of vehicle and charging infrastructure technologies** across the region. This is critical not only to ensure interoperability and simplify procurement logistics but also to allow for **joint procurement initiatives** or pooled purchasing arrangements, potentially reducing costs and enhancing bargaining power in vehicle acquisition processes.

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<sup>89</sup> CARICOM (2022)

<sup>90</sup> CARICOM (2022)

Additionally, the REVS acknowledges the interplay between energy and transport, calling for procurement policies that are **synchronized with grid modernization plans**, including the deployment of **Distributed Energy Resources Management Systems (DERMS)**<sup>91</sup>, **smart meters**, and **renewable energy integration**. These features underscore the importance of investing in both hard and soft infrastructure in tandem with electric vehicle acquisition.

Another important dimension highlighted by the strategy is **institutional and human capacity development**. The REVS recommends the establishment of **technical and vocational training programs**, the integration of **data and machine learning concepts** into secondary and tertiary education curricula, and the **training of first responders and technicians**. These initiatives are essential considerations at the procurement stage, given impact on the long-term maintenance and sustainability of the e-mobility systems.

Moreover, the strategy introduces the **CCREEE Project Preparation Facility (PPF)** as a regional mechanism to support both public and private sector stakeholders in preparing bankable projects for funding. The availability of **tailored financing instruments**; including EV leasing, pay-as-you-go models, and bundled energy-mobility packages; also facilitates procurement under constrained fiscal conditions while encouraging private sector participation.

The REVS gives recognition to the importance of addressing **indigenous and riverine transport needs** through tailored procurement strategies and pilot projects, ensuring that electrification efforts extend beyond road transport to support a truly inclusive transition.

The CARICOM REVS provides a comprehensive regional policy backdrop to complement national-level procurement efforts. Its emphasis on harmonization, strategic investments, capacity building, and stakeholder integration lays the groundwork for sustainable and efficient procurement practices that support the electrification of the Caribbean's transport sector.

The CARICOM REVS (May 2022) report is very comprehensive and serves as a useful resource document due to the inclusion of critical information such as:

- Table 1: National plans, strategies, and incentives for electric vehicles in various CARICOM Member states
- Appendix A: Listing of relevant reports reviewed for the development of the REVS.
- Appendix B – F: Overview of transport electrification in 5 member states.

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<sup>91</sup> CARICOM (2022)

### 3.2.5 Regional and Multilateral E-Mobility Support Mechanisms

**IDB and GCF Programs** - The Inter-American Development Bank (IDB) and the Green Climate Fund (GCF) launched a \$284 million regional program in 2022<sup>92</sup> to promote e-mobility in Latin America and the Caribbean.<sup>93</sup> The initiative spans infrastructure development, institutional capacity building, and regulatory reform, and is aligned with the NDCs of participating countries.<sup>94</sup> While funding and technical assistance are robust, the **success of these programs depends on national procurement readiness**, which remains inconsistent. Many recipient countries have yet to adopt green procurement frameworks, and existing laws often lack the provisions needed to support the acquisition of EV fleets or charging infrastructure through public tenders.

**Caribbean Development Bank (CDB)** – The CDB has also been actively supporting sustainable energy and transportation projects. The Bank’s Sustainable Energy for the Eastern Caribbean (SEEC) Program includes components addressing energy efficiency in transport and opportunities for electric vehicle integration. The program highlights procurement reform as a critical enabler of success, urging governments to standardize technical specifications and establish transparent evaluation criteria. In 2021, CDB commissioned a consulting firm to assess and propose solutions for creating a sustainable public transport system, using Grenada and Saint Lucia as case studies.<sup>95</sup>

**United Nations Environment Programme (UNEP)** – The UNEP through its Electric Mobility Programme for Latin America and the Caribbean<sup>96</sup> has worked with countries on national e-mobility readiness assessments, policy development, and pilot implementation. In collaboration with governments and regional stakeholders, UNEP has supported countries including **Jamaica and Saint Lucia** by conducting **National Electric Mobility Readiness Assessments**, which evaluate policy environments, infrastructure needs, legal frameworks, and public procurement capabilities.

These assessments have been followed by **technical assistance in policy formulation**, institutional training, and stakeholder engagement processes; each designed to build national ownership and cross-sectoral coordination for electric mobility. In the context of procurement, UNEP’s engagement has laid the foundation for **harmonized green procurement guidelines**, including recommendations on integrating sustainability criteria, lifecycle costing, and emissions reduction benchmarks into public tenders.

The UNEP also facilitates the **Global Electric Mobility Programme**, which promotes knowledge-sharing and the development of standardized procurement templates, model clauses, and technical specifications for EVs and charging infrastructure. This

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<sup>92</sup> IDB (2022), p.1

<sup>93</sup> IDB (2022), p.3

<sup>94</sup> IDB (2022)

<sup>95</sup> CDB (2024)

<sup>96</sup> UNEP (2024a)

support has helped in encouraging the **adoption of national electric mobility policies and pilot implementation strategies** that reflect sustainability principles and global best practices. Furthermore, UNEP advocates for the alignment of procurement instruments with countries' **Nationally Determined Contributions (NDCs)** and SDG 12.7 on sustainable public procurement, reinforcing the environmental and climate relevance of government purchasing decisions.

By bridging policy development and procurement readiness the UNEP contributes to the creation of enabling environments where **public procurement functions as a lever for climate action** thereby supporting not only the uptake of electric vehicles in government fleets but also the maturation of green markets in the Caribbean.

### **3.3 General procurement situation in the project countries**

#### **3.3.1 Jamaica**

**Public Procurement:** Public procurement in Jamaica is governed by legislation comprising The Public Procurement Act (2015), Amendment to Public Procurement Act (2018), Public Procurement Regulations (2018), Public Procurement (Reconsideration and Review) Regulations (2018), and Amendment to Public Procurement Act (2025)<sup>97</sup> which provide a strong legal foundation for government purchasing.

The legislation is primarily geared towards inter alia encouraging participation in public procurement, promoting integrity in the process and ensuring transparency, competitiveness, and value for money achieved<sup>98</sup>. The Act does not address SGPP and does not mandate the inclusion of environmental or lifecycle sustainability criteria when undertaking procurement exercises.

The Act provides for a unit to be established within the Ministry of Finance called the Office of Public Procurement Policy (OPPP) and for that unit to, inter alia, “be responsible for the development of public procurement policy, providing policy implementation guidance, training and advice to persons participating in public procurement”<sup>99</sup>. This unit does not participate in any procurement exercise process. There is no centralised procurement unit for public procurement; procurement exercises are initiated and managed by the relevant procuring entity (Government Ministries and other State organisations).

The Act also provides for the establishment of a Public Procurement Commission (PPC) and for that Commission to, inter alia, be responsible for “ensuring prudence in

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<sup>97</sup> Government of Jamaica (2015)

<sup>98</sup> Government of Jamaica (2025), Clause 5

<sup>99</sup> Government of Jamaica (2015), Clause 7

the use of public funds, promoting efficiency and integrity in the procurement process, registration of contractors and suppliers of goods and services, and to approve or endorse the award of procurement contracts”<sup>100</sup>.

There is no reference in the Act to Sustainable Green Public Procurement (SGPP).

**E-Mobility:** A significant advancement came with the launch of the Electric Mobility Policy (2023)<sup>101</sup>, which outlines the Government of Jamaica’s commitment to transitioning the public vehicle fleet from ICE vehicles to E-Vehicles by 2030<sup>102</sup>. The policy includes provisions for:

- Public education and awareness campaigns;
- Technical capacity building for institutions and agencies.
- This policy aligns with Jamaica’s National Energy Policy and Nationally Determined Contributions (NDCs), making electric mobility a significant factor in mitigating the adverse effects of greenhouse gases (GHG’s) on climate change. However, the transition faces implementation barriers, including:
  - Limited procurement staffing capacity;
  - Lack of standardized templates and criteria for green or e-mobility-related tenders.
  - Lack of mandatory public procurement policies and guidelines to support the planned fleet transition.
  - Lack of mechanisms, tools or guidelines for evaluating environmental performance or sustainability during the procurement process.

The country’s primary electricity provider, the Jamaica Public Service Company (JPS) and a private company, Evergo Jamaica have developed a total of 87 EV charging stations across the island. They have also announced plans to increase the number of public EV charging stations significantly over the next five years. This expansion supports infrastructure readiness for wider adoption. Nonetheless, the challenge remains in ensuring that public procurement systems are sufficiently developed to support the planned fleet transition. By the time of writing the Government of Jamaica had purchased six electric buses for the Jamaica Urban Transit Co.

Despite this progress, the implementation of green public procurement (GPP) policies remains limited as compliance with said policies are generally not mandatory. Moreover, the absence of a centralised procurement unit presents coordination challenges; currently there are 198 different public sector procuring entities in Jamaica. Procuring entities generally lack clear guidance on how to incorporate lifecycle costing, greenhouse gas emissions, or supplier sustainability indicators into tender evaluations. Jamaica’s framework is also limited due to not being a signatory to the CARICOM protocol on Public Procurement.

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<sup>100</sup> Government of Jamaica (2015), Clauses 10 & 11

<sup>101</sup> MSETT (2023), p. 25

<sup>102</sup> MSETT (2023), p. 25

**Collaborative Platforms and Donor Engagement:** Jamaica participates in the GCF Electric Mobility Readiness Programme<sup>103</sup>, which promotes peer learning on procurement and policy development. Donor engagement through the European Union, UNEP, and the Climate Technology Centre & Network (CTCN)<sup>104</sup> has also focused on providing advisory services for public procurement integration. These engagements have enabled the formulation of model tender documents and cost-benefit analysis tools for EV procurement, all of which remain largely underutilized. Strengthening coordination between procurement offices, environmental agencies, and the Ministry of Transport could help operationalize these tools in practice.

### 3.3.2 Saint Lucia

**Public Procurement:** Saint Lucia has undertaken legal reforms to modernize its procurement landscape. The **Public Procurement Act (Amended by Act 13 of 2020)**<sup>105</sup> provides a framework for public procurement generally and serves, inter alia to “simplify, clarify and modernize public procurement, make public procurement procedures transparent and to ensure that the best value is obtained”<sup>106</sup> but it does not mandate the inclusion of environmental or life cycle sustainability criteria.

The legislation is primarily geared towards encouraging participation in public procurement, promoting integrity in the process and ensuring transparency, competitiveness, and value for money achieved<sup>107</sup>. The Act does not address sustainable green public procurement and do not mandate the inclusion of environmental or lifecycle sustainability criteria when undertaking procurement exercises.

The Act provides for the establishment of a Central Public Procurement Board which shall, in respect of a public procurement of a major value inter alia, receive and publicly open tenders, select persons to a Tender Evaluation Committee, review the recommendations of the Tender Evaluation Committee and where the Board accepts the recommendations of the Tender Committee, the Board may approve the award of the public procurement contract.”<sup>108</sup>

The Act also provides for the establishment of Public Procurement Committees by the procuring entities which shall, inter alia, “in respect of public procurement of an intermediate value to approve public procurement contracts, deliberate on the findings of Tender Evaluation Committees, and advice on award of public procurement contracts.”

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<sup>103</sup> GCF (2025)

<sup>104</sup> UN CTCN (2025)

<sup>105</sup> Government of Saint Lucia (2021)

<sup>106</sup> Government of Saint Lucia (2021), Clause 3

<sup>107</sup> Government of Saint Lucia (2021), Clause 3

<sup>108</sup> Government of Saint Lucia (2021)

There is no reference in the Act to SGPP; however, a draft public procurement policy document is currently being developed and is expected to include recommendations in support of SGPP.

It is noted that St. Lucia is not a signatory to the CARICOM protocol on Public Procurement.

**E – Mobility: A National Transport Policy** has been developed for Saint Lucia with technical assistance provided under the **GIZ Caribbean E-Mobility Project**<sup>109</sup>, which has supported:

- The drafting of the national transport policy prioritizing low emission transportation;
- Development of institutional knowledge for electric fleet transitions;
- Pilot programs within select public agencies.

A National Energy Policy (2023 to 2030) and Action Plan have also been developed for Government of Saint Lucia. “The Energy Division of the Ministry of Infrastructure, Ports, Transport, Physical Development and Urban renewal (MIPTPDUR) has overall responsibility for implementing the Action Plan”<sup>110</sup>.

The National Energy Policy identifies 7 goals and 30 supporting objectives including a goal to decarbonise the transport sector with a supporting action plan to develop a roadmap for the penetration of EVs and hybrid vehicles in the government vehicle fleet by 2030.

These initiatives have contributed significantly to the building of national expertise and stakeholder awareness, but the transition faces implementation hurdles due to weak enforcement mechanisms, and the lack of developed templates and specifications to support EV procurement.

**Tax Incentives for Hybrid and Electric Vehicles:** To promote the adoption of environmentally friendly vehicles, the Government of Saint Lucia extended reduced import duty and excise tax rates for hybrid and electric vehicles<sup>111</sup>. This policy aligns with the objectives of the **Organisation of Eastern Caribbean States (OECS) Commission-led Solar Challenge “Race to the Sun”**, the **National Energy Policy (2023–2030)**, and Saint Lucia’s **Nationally Determined Contributions (NDCs)** updated in 2025<sup>112</sup>, highlighting the transport sector’s role in reducing greenhouse gas emissions.

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<sup>109</sup> GIZ (2025)

<sup>110</sup> Government of Saint Lucia (2023)

<sup>111</sup> Government of Saint Lucia (2024)

<sup>112</sup> Government of Saint Lucia (2025a)

### 3.3.3 Grenada

**Public Procurement: The Public Procurement and Disposal of Property (Amendment) Act No. 1 of 2018 (The Act)** provides a legal foundation for government procurement.

The Act provides for the establishment of “a body to be called the **Office of Public Procurement**”<sup>113</sup> (**The Office**). The Office is managed by a Board and is responsible for, inter alia, initiating public procurement policy and propose amendments to the Act, maintaining register of Works contractors and suppliers of goods and services, develop, promote and support the training and professional development of procurement officers, and for procurements above the prescribed thresholds, approving the membership of the evaluation committee, conducting the tender opening, providing prior approval for use of procurement methods other than open competitive tendering, and providing a ‘Certificate of No-objection for contract award’.

The Act also provides for the creation of a Central Procurement Unit within the Ministry of Finance<sup>114</sup>. This unit is responsible for, inter alia, “carrying out, on behalf of selected or all procuring entities, the purchase of common-use items” and “conduct procurement on the behalf of the Ministry of Finance”.

The Act also provides for each procuring entity to “establish a procurement unit, for the purpose of managing and conducting procurement on behalf of the procuring entity”<sup>115</sup>.

Following the amendment of the Act, the government of Grenada implemented Grenada’s **Sustainable Public Procurement Policy (2019)**<sup>116</sup> marking a notable step toward environmentally responsible purchasing. The policy promotes resource efficiency and environmental considerations in procurement decisions<sup>117</sup>.

The Procurement policy reflects Grenada’s commitments under its Climate Resilience Strategy and Nationally Determined Contributions and is supported by capacity-building initiatives under international donor programs, however there is no reference to e-mobility.

Institutional weaknesses need to be addressed and in particular a legislative framework to support the SPP policy to be developed and enacted.

There are also no standardized tools, specifications or procedures for evaluating environmental performance or sustainability during the procurement process.

The development of a green procurement guide and E-Vehicle procurement toolkit are yet to be initiated, leaving gaps in the operationalization of Grenada’s SPP policy.

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<sup>113</sup> Grenada (2018), Clause 4

<sup>114</sup> Grenada (2018), Clause 6

<sup>115</sup> Grenada (2018), Clause 7

<sup>116</sup> Government of Grenada (2019), p. 2

<sup>117</sup> Government of Grenada. (2019)

It is noted that Grenada is not a signatory to the CARICOM protocol on Public Procurement.

**E-Mobility:** Under its "**Vision 2030**" initiative, Grenada aims to achieve 100% green electricity and transport sectors by 2030. To support the transition from ICE to E-vehicles the government has provided tax incentives. As of 2024, all duties, taxes, and fees on the importation of electric vehicles (EVs) and charging stations have been removed. Hybrid vehicles are subject to only 25% of the usual duties, taxes, and fees.<sup>118</sup>

As of 2024 the government has also committed to ensuring that 100% of new vehicle purchases are electric or hybrid, setting a precedent for sustainable transportation.

Grenada is also actively collaborating with international partners to advance its e-mobility agenda

- **UNEP and GEF Project:** project titled "Accelerating the Introduction of Low-Emission and Climate-Resilient Electric Mobility in Grenada" is underway, aiming to reduce fossil fuel consumption and greenhouse gas emissions. The project, running from March 2023 to January 2026, has a total value of approximately \$7.19 million.<sup>119</sup>
- **GIZ Partnership:** In January 2025, the Ministry of Climate Resilience received a **BYD Atto 3 electric vehicle as part of the NDC-TEC project**, implemented in collaboration.<sup>120</sup> with the German Agency for International Cooperation (GIZ). This initiative marks a significant step in integrating EVs into the government fleet and promoting their adoption across the island.

### 3.3.4 Belize

**Public Procurement:** Belize's public procurement framework is governed by various legislative instruments aimed at ensuring transparency, accountability, and efficiency in the acquisition of goods, works, and services across government entities. The primary legislation includes the **Finance and Audit (Reform) Act**,<sup>121</sup> which governs public financial management and embeds procurement oversight mechanisms. The **Contractor General Act**<sup>122</sup> establishes an independent authority to monitor and investigate procurement processes. Additionally, the **Prevention of Corruption Act**<sup>123</sup> and the **Belize Constitution Act (specifically Section 121 on the Code of**

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<sup>118</sup> Now Grenada (2023)

<sup>119</sup> UNEP (2023)

<sup>120</sup> Now Grenada (2023)

<sup>121</sup> Government of Belize (2020a)

<sup>122</sup> Government of Belize (2020b)

<sup>123</sup> Government of Belize. (2000a)

**Conduct**)<sup>124</sup> establish ethical standards and legal safeguards to ensure integrity in public procurement.

To support the implementation of these legal instruments, Belize has developed a **Public Procurement Procedures Handbook**<sup>125</sup> with tailored sections for public officials and private sector stakeholders. There is however no reference to SGPP in the current legislation.

Belize is also a signatory to the **CARICOM Protocol on Public Procurement (2019)**<sup>126</sup>.

**E-Mobility:** Belize has advanced its e-mobility agenda as part of its broader climate and sustainability commitments. One major initiative is the **“Towards Low Carbon Transport”**<sup>127</sup> project, launched in collaboration with the United Nations Development Programme (UNDP) and the European Union (EU). With a budget of approximately €4.5 million, this initiative pilots the integration of electric buses into the public transport system. It targets the Western Corridor and Belize City, aiming to reduce emissions and modernize intercity and intra-urban mobility. By late 2024, three electric buses equipped with features such as air conditioning, onboard Wi-Fi, and USB ports were delivered, enhancing commuter experience and signalling a shift toward green public transport.<sup>128</sup>

To facilitate the transition, **Belize Electricity Limited (BEL)** launched the **Electric Vehicle Charging Station Ecosystem Pilot Project in 2022**<sup>129</sup>. The project includes the installation of twelve charging stations nationwide to support electric vehicle (EV) uptake. Further engagement came through the **Belize E-Mobility and Logistics Transformation (BELT)**<sup>130</sup> concept, introduced in late 2024 through multi-stakeholder consultations. This initiative, supported by the Ministry of Economic Development and other partners, seeks to scale e-mobility integration by expanding electric bus fleets and strengthening the associated infrastructure.

### 3.3.5 Antigua and Barbuda

**Public Procurement:** Antigua and Barbuda’s procurement regime is governed by the **Tenders Board Act (1991) amended in 2002**, which does not reflect contemporary procurement principles as specified in the UN Convention Against Corruption<sup>131</sup> in Chapter 2 above. A Procurement and Contract Administration Act (2011) was drafted

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<sup>124</sup> Government of Belize. (2000b)

<sup>125</sup> Belize Ministry of Finance (2013)

<sup>126</sup> CARICOM. (2019)

<sup>127</sup> Government of Belize Press Office (2022)

<sup>128</sup> UNDP Belize (2024):

<sup>129</sup> San Pedro Sun (2022)

<sup>130</sup> Government of Belize Press Office (2024)

<sup>131</sup> UNODC (2016), p. 5

but has still not been enacted. This regulatory gap creates uncertainty in procurement governance and hinders modernization of the public purchasing system.

Antigua and Barbuda is a signatory to the **CARICOM Protocol on Public Procurement (2019)**<sup>132</sup>.

In 2021, the United Nations Environment Programme (UNEP) developed a Sustainable Public Procurement Action Plan for Antigua and Barbuda.<sup>133</sup> The plan noted that, at the time, there had been no substantive initiatives by the government to implement SPP, and awareness within the public sector was low. The Department of Environment within the Ministry of Health introduced the **Sustainable Procurement Policy in 2022**<sup>134</sup>, signalling a shift toward environmental responsibility.<sup>135</sup> The policy encourages:

- The inclusion of environmental preferences in procurement decisions;
- Non-discriminatory treatment of vendors offering sustainable goods or services.

This is a progressive step, especially in the absence of formal legislation, but the policy is non-binding and its application is limited to procurements undertaken by the Department of the Environment. It is not referenced by other procuring entities undertaking procurement exercises. Implementation of the policy is further limited due to the absence of:

- Clear guidelines or templates for evaluating sustainability in tenders;
- Procurement staff adequately trained in SGPP formulation including lifecycle costing;

**E-mobility:** In 2023, Antigua and Barbuda unveiled an ambitious plan to transition its fleet of over 180 government-owned ICE vehicles to EVs by 2030. This initiative is part of a broader environmental strategy aimed at reducing the country's carbon footprint and promoting sustainability. The transition would be implemented in phases, encompassing various vehicle types, including cars, buses, vans, ambulances, and trucks. Since 2025, Antigua and Barbuda in partnership with **UNEP and funded by the Global Environment Facility (GEF)** now has nine (9) electric mini buses in their public transportation fleet.<sup>136</sup> The Department of Environment also owns and operates six (6) SUVs, One (1) car, and two (2) cargo vans at present. There are 3 chargers at its office which are level 2, 7 kW with type 2 connectors. Several ministries have also begun purchasing EVs as well.

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<sup>132</sup> CARICOM. (2019)

<sup>133</sup> UNEP (2021b)

<sup>134</sup> Government of Antigua and Barbuda, (2022)

<sup>135</sup> Government of Antigua & Barbuda, (2022)

<sup>136</sup> Caribbean Alliance Insurance (2025)

### 3.4 Cross-country comparison

Country	Jamaica	St. Lucia	Grenada	Belize	Antigua & Barbuda
<b>Public Procurement Framework</b>	<ul style="list-style-type: none"> <li>Public Procurement Act (2015, amended 2018, 2025)</li> <li>Regulations (2018)</li> </ul>	Public Procurement Act (Amended 2020)	<ul style="list-style-type: none"> <li>Public Procurement Act (Amended 2018)</li> <li>SPP Policy (2019)</li> </ul>	<ul style="list-style-type: none"> <li>Finance &amp; Audit (Reform) Act</li> <li>Contractor General Act</li> </ul>	<ul style="list-style-type: none"> <li>Tenders Board Act (1991, amend. 2002)</li> <li>Draft Act (2011 – not enacted)</li> </ul>
<b>Central Procurement Body</b>	<ul style="list-style-type: none"> <li>No centralized body</li> <li>OPPP for policy</li> <li>PPC for oversight</li> </ul>	Central Public Procurement Board	Central Procurement Unit + Office of Public Procurement	<ul style="list-style-type: none"> <li>No single body</li> <li>Multiple oversight layers</li> </ul>	Tenders Board (outdated framework)
<b>SGPP Integration</b>	No SGPP in legislation	Draft policy in progress	Yes – through SPP Policy (non-legislative)	No SGPP reference	Sustainable Procurement Policy (non-binding; DoE only)
<b>CARICOM Protocol Signatory</b>	Not a signatory	Not a signatory	Vision 2030: 100% green electricity & transport	Signatory (2019)	Signatory (2019)
<b>E-Mobility Policy/Support</b>	<ul style="list-style-type: none"> <li>Electric Mobility Policy (2023)</li> <li>Fleet transition by 2030</li> </ul>	<ul style="list-style-type: none"> <li>National Energy Policy (2023–2030)</li> <li>Pilot initiatives supported by GIZ</li> </ul>	<ul style="list-style-type: none"> <li>Full EV duty/tax exemption</li> <li>Hybrids at 25%</li> </ul>	<ul style="list-style-type: none"> <li>UNDP/EU project: e-buses</li> <li>BEL charging station network</li> </ul>	<ul style="list-style-type: none"> <li>GEF/UNEP support</li> <li>EV fleet transition plan (180+ vehicles)</li> </ul>
<b>EV Incentives</b>	<ul style="list-style-type: none"> <li>Some tax incentives</li> <li>Growing charging network</li> </ul>	<ul style="list-style-type: none"> <li>Reduced duties/taxes for EVs &amp; hybrids</li> </ul>	<ul style="list-style-type: none"> <li>Full EV duty/tax exemption</li> <li>Hybrids at 25%</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>
<b>Key Gaps</b>	<ul style="list-style-type: none"> <li>No SGPP mandate</li> <li>Lack of technical capacities and tools</li> <li>Funding constraints</li> </ul>	Central Public Procurement Board	<ul style="list-style-type: none"> <li>Lack of technical capacities and tools</li> <li>SPP not yet codified</li> </ul>	<ul style="list-style-type: none"> <li>No SGPP mandate</li> </ul>	<ul style="list-style-type: none"> <li>Outdated Procurement Legislation</li> <li>Limited Staffin</li> <li>Funding constraints</li> </ul>

Table 20: Comparison of the national procurement situation in the five project countries

A cross-country comparison summarized in Table 20 reveals that while policy signals are increasingly aligning with sustainability goals, **binding legal mandates**,

**standardized procurement tools**, and **institutional capacity** remain weak across the region.

### **3.5 Summary of the regional Procurement Situation**

**Introduction:** The Caribbean procurement landscape is characterized by diversity in policy frameworks, institutional maturity, and implementation capacity. This disparity undermines efforts to establish a unified regional approach to SGPP, especially as it relates to the transition to EVs. The challenges are systemic and affect all stages of the procurement cycle.

#### **Key challenges:**

##### **• Fragmented Legislative Frameworks**

Procurement laws across CARICOM Member States differ widely in scope, structure, and alignment with sustainable development objectives. While some countries have enacted modern legislation that includes principles of transparency and competitiveness, others rely on outdated legal instruments that do not reflect current best practices in public procurement or sustainability integration. This fragmentation creates legal uncertainty, complicates cross-border procurement opportunities, and makes it difficult to implement regional policies such as the CARICOM Protocol on Public Procurement or the Framework Regional Integration Policy (FRIP). Harmonization efforts are further stymied by varied levels of political commitment and legislative inertia within individual states.

##### **• Institutional Weaknesses**

Many procurement entities in the region suffer from limited staff and technical resources. Procurement officers often lack specialized training in sustainability, life-cycle costing, and environmental impact assessment which are skills essential to executing effective SGPP. Moreover, national procurement offices are often located within ministries that may not have direct mandates for environmental or transport policy, leading to disjointed implementation efforts. The absence of institutionalized procurement training programs, continuous professional development, and centralized support structures (e.g., sustainable procurement help desks or regional resource centers) exacerbates the problem, leaving procurement teams ill-equipped to respond to the complex requirements of e-mobility procurement.

##### **• Limited Monitoring & Evaluation**

Robust monitoring and evaluation systems are critical for tracking the effectiveness of green procurement initiatives; this is significant for updating of NDC's in order to achieve the long-term objectives for reduction in greenhouse gas. Yet, most countries lack the necessary infrastructure to collect, analyze, and report on SGPP data. Key performance indicators such as reduction in greenhouse gas emissions, lifecycle cost,

or proportion of tenders with sustainability clauses are rarely tracked. Without these mechanisms, governments are unable to measure the actual environmental and economic impact of their procurement activities, which in turn limits evidence-based policymaking and could weaken donor confidence in funding green transition programs.

- **Low Protocol Adoption**

Despite the potential of the CARICOM Protocol on Public Procurement to create a cohesive regional procurement market, adoption remains low, with only a few Member States having formally ratified the instrument. This lack of widespread ratification limits the protocol's influence and curtails opportunities for economies of scale in sustainable procurement practices, such as joint purchasing of EVs or charging infrastructure. The slow pace of adoption reflects both a lack of legislative alignment at the national level and broader institutional reluctance to cede procurement sovereignty to a regional mechanism. As a result, policy coherence suffers, and the region struggles to present a unified front in negotiating international support necessary.

### **3.6 Key Observations for the five project countries**

#### **Resource Constraints Undermining EV Procurement Readiness**

The literature reveals that both regional and national entities face significant limitations in terms of financial and human capital, which severely hamper their preparedness for the transition to EVs. This is especially critical given that the upfront costs of electric vehicles, charging infrastructure, and associated services such as training and system upgrades are typically higher than conventional alternatives. The lack of **dedicated budget lines for sustainable procurement** means that many public institutions are unable to allocate resources toward green purchasing priorities.

In addition, the absence of **multi-year financing strategies** makes it difficult to plan or phase EV acquisitions in a fiscally sustainable manner. International experience underscores the effectiveness of dedicated climate or green procurement funds in driving market adoption and ensuring policy adherence - an approach that remains to be implemented in the Caribbean.

The lack of dedicated financial streams not only affects the acquisition of EV fleets but also impedes the recruitment and retention of essential personnel. There is a notable gap in skilled human resources such as engineers, legal drafters, policy analysts, and project managers who are crucial for drafting technical specifications, constructing legal frameworks, and managing infrastructure rollouts.

Without this expertise, governments operate with skeletal project teams, frequently working with insufficient support and minimal cross-sectoral coordination. This

undermines the ability of ministries to prepare competitive tenders, evaluate green criteria, and ensure regulatory compliance throughout the procurement lifecycle. Furthermore, short tenures and high turnover within procurement agencies diminish institutional memory, slowing progress on ongoing projects.

### **Fragmented Capacity and Structural Gaps**

Technical capacity at both regional and national levels remains fragmented, often relying on **overburdened agencies, under-resourced procurement units, or short-term consultants**. This unsustainable model hinders the development of institutional knowledge essential for SGPP such as Green Procurement Desks, means that GPP is treated as a peripheral issue rather than a core public investment strategy.

**Regional harmonization is further challenged** by varying levels of procurement maturity, legal readiness, and technical infrastructure. For instance, while some countries have developed sustainable procurement legislation, others lack even basic legislative frameworks. The absence of a **centralized regional mechanism** prevents the sharing of templates, supplier data, performance benchmarks, and lessons learned.

Key challenges include:

- **Policy-Implementation Gap:** While most countries have developed climate and energy policies referencing electric mobility, these are not consistently operationalized through procurement systems. E-mobility is rarely embedded in national procurement strategies, resulting in **disconnects between policy ambition and practical delivery mechanisms**.
- **Legal Lag:** Procurement laws in several Caribbean countries remain **outdated**, lacking the mandates or enabling language required to implement SGPP, lifecycle costing, or supplier sustainability evaluations. The slow pace of legislative reform means that even where policy exists, the legal basis for enforcing compliance or evaluating green tenders is missing.
- **Data Deficiency:** Countries rarely collect or analyze data on procurement outcomes related to environmental performance, emissions reduction, or lifecycle cost savings. Without robust **monitoring, reporting, and verification frameworks**, it is not possible to assess the impact or cost-effectiveness of e-mobility procurement efforts. Additionally, **centralized procurement dashboards** used effectively in countries like Portugal and South Korea are generally absent.
- **Inter-Ministerial Disconnect:** Successful e-mobility transition requires coordinated planning across the ministries of finance, energy, environment, transport, and public works. However, **institutional silos** remain the norm, and procurement teams are rarely integrated into national climate or infrastructure planning processes. This disconnect leads to **duplicated efforts, delayed**

**procurement cycles**, and missed opportunities for bundled tenders or cross-sectoral pilots.

## 4. Development of the EV markets in the flagship countries

### 4.1 Regional supply chain dynamics, maturity and sources of origin

As most Caribbean countries have adopted the transition towards e-vehicles as part of their climate mitigation strategies, the regional supply of EVs will be critical for achieving these targets. Thus, the following section looks into the regional vehicle supply situation of the three flagship countries of the project.

#### 4.1.1 Grenada

In the case of Grenada, the car statistics given by the IRF (International Road Federation) give 46,270 cars as the total number of passenger cars in use in the year 2021<sup>137</sup>. With the exception of 2020 the number of passenger cars seem to have grown by 2,000 – 3,000 cars per year (see Figure 16), which would result in a turnover of the entire stock of cars in 15 to 23 years. The massive increase in the year 2020 shown in Figure 17 is obviously due to a change in the categorisation of cars and other vehicles between 2019 (old definition) and 2020 (new definition). The increase in the number of cars by 8,700 cars in 2020 seems to result from a shift of vehicles from the category vans, pickups and road tractors into the category of cars. As Figure 17 shows the number of vehicles in this category normally grows by about 600 vehicles per year, but in 2020 the number of vehicles dropped sharply by 5,800. Assuming a normal increase by 600 vehicles in this category would point to a reassignment of about 6,400 vehicles to the category *cars*.

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<sup>137</sup> IRF (2025)

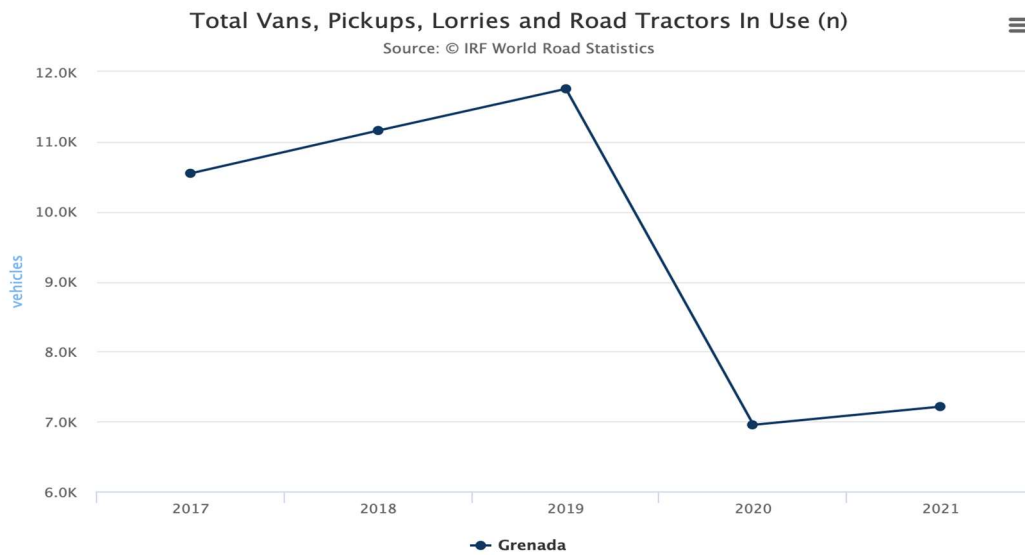


Figure 16: Number of passenger cars in Grenada 2017 - 2021 (Source: IRF (2025))

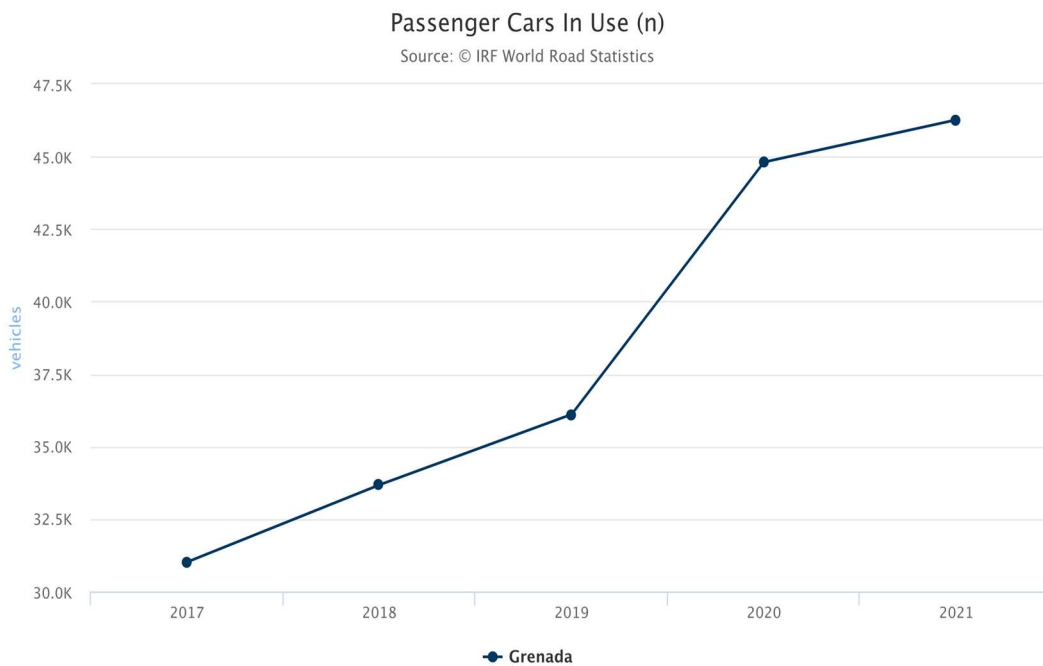


Figure 17: Number of vans, pickups and road tractors in Grenada 2017 - 2021 (Source: IRF (2025))

Adding 2,300 new cars to this number would explain the sharp increase in the number of cars in 2020. According to non-published trade statistics 2,550 cars were imported in 2020.

According to the Grenada Transport Commission about 130 EVs were in operation in Grenada in early 2025. There were no e-trucks or e-buses in operation at the time. Although the car market is even smaller than in the case of Saint Lucia and just about one tenth of the size of the Jamaican market, some local car dealers import EVs. According to internal import statistics about 25% of the EVs have been imported from Japan, 20% from China and 18% from the UK. While the imports from Japan and China are cars produced in Japan and China, most of the 25 EVs imported from the UK have originally been produced in other countries. Germany (7), US (6) and Japan (5) were the main producers of these used cars imported from the UK. Different from Jamaica about 50% of the EVs are imported as new cars. There have not been any imports of e-buses or e-trucks into Grenada. According to unofficial statistical data of car imports into Grenada, Japan is dominating the market for internal combustion engine cars. While the market share of Japanese cars for the years 2010 to 2024 has been about 59%, it increased to more than 70% since 2021. The comparison to the imported EVs shows that Japan (25%) is losing substantial shares in the market due to strong EV competition from China (20%).

The aim of Grenada's transport and climate policy is that about 40% of the population will use EVs by 2030. This would mean that of a capital stock of cars of approximately 60,000 cars, 24,000 cars would be EVs. To achieve this target 4,000 EVs would need to be added each year. This is almost double the number of cars being added to the capital stock each year so far. Even in a very optimistic scenario such development is totally unlikely. It does not agree at all with the existing general market dynamics, and it does even agree less with the present number of EVs in Grenada.

#### 4.1.2 Jamaica

Jamaica has a comparatively large vehicle market and most international brands are offered by a substantial number of car dealers. As in the other island markets, cars and other vehicles are imported. According to leading Jamaican car dealers about 80% of the imported cars are used cars and only 20% are new cars. As cars are driven on the left side of the street, like in the UK, a regular car has to have the steering on the right side. This fact poses a major obstacle for the import of cars, because new as well as used cars with right hand steering are in far lower supply internationally and right-hand drive new cars are about 10% more expensive for exactly the same model.

At the time of writing new electric vehicles are imported from Germany, the United Kingdom and China, while buses and vans are mostly imported from China. New e-trucks have not been imported so far. Used EVs are imported from Japan, Singapore, Thailand and the UK. These imports are presently dominated by the Nissan Leaf model, which is available in relatively large numbers at a reasonable price. 6 E-busses, and some e-vans have been imported, while e-trucks have not been imported

by the time of writing. Components for cars were mainly imported from the USA, China and Japan, with some imports from Germany and Belgium<sup>138</sup>.

According to our interviewees, about 800 EVs were in service in Jamaica by early 2025, which is just about 0.14% of the total fleet of about 636,000 cars<sup>139</sup>. According to the judgement of leading Jamaican car dealers, these EVs are driven by owners, who are very climate conscious and relatively wealthy. Thus, the EV market can be considered to be still in the early adopter stage. The official target of 12% of the private car fleet to be electric by 2030<sup>140</sup> translates into roughly 76,000 cars. During the last years about 25,000 cars of all types were imported per year. If 75,000 additional EVs have to be imported in the six remaining years until the end of 2030, this would mean that more than half of all car imports to Jamaica would have to be EVs.

#### 4.1.3 Saint Lucia

With about 45,000 active cars<sup>141</sup> the vehicle market of Saint Lucia is only a fraction of the Jamaican market. Nevertheless, car dealers seem to be supplying all relevant brands to the local market. Like Grenada, Jamaica and Antigua, driving is on the left-hand side of the road and the cars need to be right hand drive. As in Jamaica or Grenada this increases the price of the cars by approximately 10%. According to government statistics<sup>142</sup> cars have an average age of about 20 years. With about 3,000 cars imported into the country per year<sup>143</sup> the capital stock of roughly 45,000 cars would be completely renewed in about 15 years. At the moment there is no specific information available about the sources of origin of the cars and the spare parts imported into Saint Lucia. Nevertheless, it seems to be reasonable to assume that there are similar patterns as in the case of Jamaica.

At the time of writing Saint Lucia had 114 electrical cars, which is about 0.25% of the total car fleet of Saint Lucia. While up to 2020 the annual number of EV additions was less than ten (10); twelve (12) EVs were imported in 2021; fifteen (15) in 2022 and forty-one (41) in 2023. Thus, the market for EVs is still in the early adopter stage, but it seems to be slowly picking up.

As the responses to a pre-procurement survey for the NDC-TEC project showed national and international car dealers and manufacturers are ready to supply a broad variety of vehicle types and brands to the market in Saint Lucia<sup>144</sup>.

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<sup>138</sup> MSETT (2023), p. 28

<sup>139</sup> IRF (2025)

<sup>140</sup> MSETT (2023), p.29

<sup>141</sup> DigiGov Saint Lucia (2025)

<sup>142</sup> Government of Saint Lucia (2025)

<sup>143</sup> Government of Saint Lucia (2025)

<sup>144</sup> CCREEE (2025)

## 4.2 Public sector vehicle fleet demographics

Detailed data for the government vehicle fleet were only made available by the government of Saint Lucia. No public sector fleet data were available for Grenada or Jamaica, the other two flagship countries of the project. Thus, the public vehicle fleet demographics will only be commented for the case of Saint Lucia.

### 4.2.1 Grenada

No data on public sector fleet demographics available.

### 4.2.2 Jamaica

No data on public sector fleet demographics available

### 4.2.3 Saint Lucia

In the case of Saint Lucia, the government statistics show 949 government vehicles registered since 1975. While about 22% of all government vehicles are less than six years old, more than 30% of the vehicles are 20 years and older, with about 16% being even 30 years and older. Figure 18 shows the age distribution of the registered government fleet. The average age of the fleet was 15.6 years. Since 2010 about 32 new government vehicles were registered per year. Thus, a full renewal of the fleet would take about 29 years at that average pace. Even an accelerated renewal of the government fleet of Saint Lucia to achieve a full transition to e-mobility will more likely take twenty instead of ten.

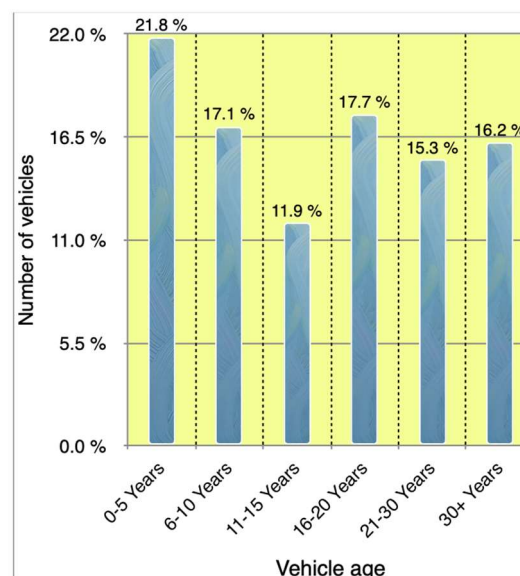


Figure 18: Age structure of the government vehicle fleet of Saint Lucia in March 2025  
(Source: Government of Saint Lucia (2025))

Only for 54% of the vehicles (510 out of 949) the type of engine (petrol, diesel, gas, hybrid or e-vehicle) was noted in the statistics. This part of the fleet was dominated by gas (274 or 54%) and diesel (229 or 45%) only 4 vehicles were using petrol, and three vehicles were fully electric. Figure 19 shows the registrations of government vehicles by fuel type since 1975. There was no hybrid vehicle in the differentiated part of the government fleet at the time. The three EVs were all bought in 2018, which points to the fact that these vehicles were purchased under a project financed by some international donor.

Considering the similarities in the economies of the Caribbean countries it is highly unlikely that the situation of the government fleets in Grenada or Jamaica will be fundamentally different from the situation in Saint Lucia. Thus, a transition to a 100% electrical fleet of government vehicles by 2030 as proclaimed in the *Electric Vehicle Policy* of Jamaica in 2023<sup>145</sup> seems to be rather unlikely.

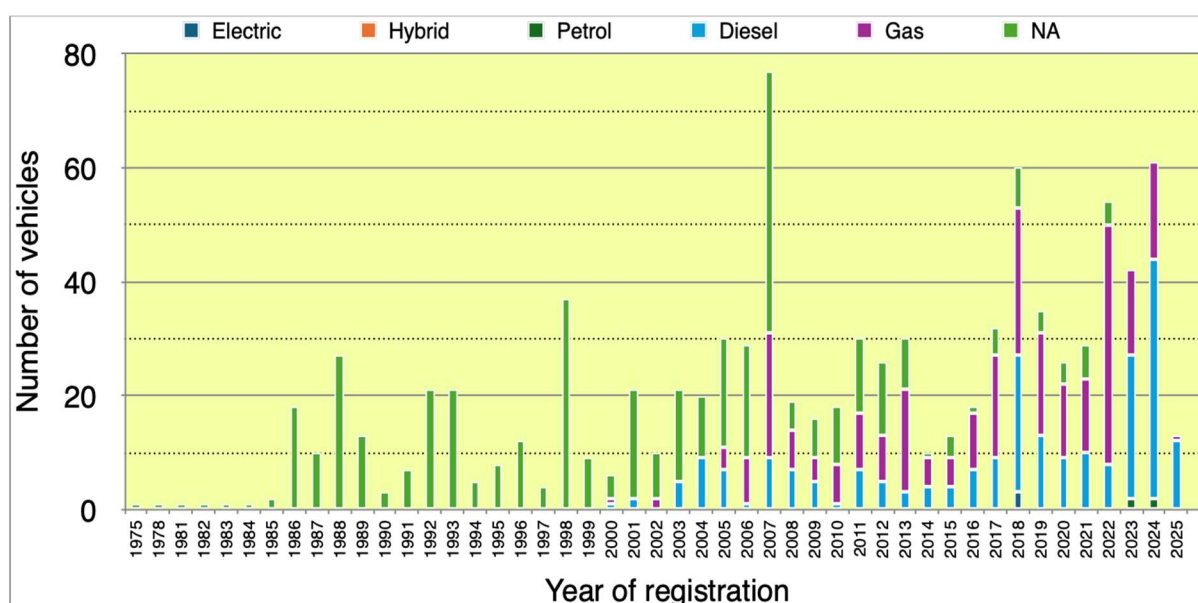


Figure 19: Detailed age structure of the government vehicle fleet of Saint Lucia in March 2025 (Source: Government of Saint Lucia (2025))

Based upon the information available for the government vehicle fleet of Saint Lucia, a full transition of the government vehicle fleets of the flagship countries to EVs will take between 15 and 20 years, unless older vehicles are taken out of service before the end of their lifetime. Even the transition to e-mobility of the government fleets within the next 20 years will require that all government vehicles procured from now on are specified as EVs only. This could be achieved by technical specifications setting the CO<sub>2</sub>-emission limit to 0g CO<sub>2</sub>/km like in the EU specifications given in Table 13 in Chapter 2.1.4 above. For Jamaica this radical step would translate into a fully electric fleet of government vehicles by 2040 to 2045, not 2030 as announced. Changing the

<sup>145</sup> MSETT (2023), p. 25

fleet of Jamaican government vehicles entirely to EVs by 2030 would mean to prematurely retire about 75% of all government vehicles.

## 5. Stakeholder analysis for transport SGPPP

The stakeholders for SGPPP can be subdivided into roughly three groups: the core procurement institutions, the necessary supporting stakeholders and the stakeholders affected by SGPPP. ISO 24000 differentiates between *Internal Stakeholders*, *Stakeholders in the Supply Chain* and *Other Stakeholders*<sup>146</sup>. For the purpose of this report we will differentiate stakeholders into *Primary Procurement Institutions*, *Supporting Stakeholders* and *Bystanders* according to the TORs of the consultancy<sup>147</sup>.

### 5.1 Primary procurement institutions in the five project countries

As outlined in Chapter 2, all five project countries have some form of a central procurement coordination and oversight. In all project countries these central units don't actually do factual procurement of products, works or services, but they set the rules for procurement and give advice and guidance to the decentralised procurement units of the different ministries or of subsidiary organisations. Table 21 summarizes the procurement situation in the five project countries.

Due to the different sizes of the countries and the form of organisation chosen, the number of procuring units varies. In the case of Grenada these are about 50 and in the case of Jamaica about 200 decentralised procurement units. In Saint Lucia the central Procurement Administration Unit has a staff of six (6) persons, in Grenada the central Public Procurement Unit has three (3) regular officers and nine (9) additional procurement officers for the procurement for World Bank Projects. In Jamaica the Office of Public Procurement Policy is supposed to be staffed with 32 persons, but as of March 2025 only nine (9) of the positions have been filled, while the Public Procurement Commission (PPC) had a staff of 46 persons. Including the large number of decentralised procurement units and officers, the flagship countries don't appear to be short of personnel for procurement.

All three flagship countries operate their procurement under a specific procurement act. In the case of Grenada, a Sustainable Procurement Policy has been enacted in 2019, while Jamaica operates under a public procurement policy statement based on the Procurement Act of 2015. The policy statement mentions nine objectives including 'Value for Money', but it does not mention environmental protection<sup>148</sup>. According to the Office of Public Procurement Policy presently criteria for green public procurement are under development for Jamaica. In Saint Lucia the situation is similar to Jamaica, as the Procurement Act of 2021 does not mention sustainable or green public

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<sup>146</sup> ISO (2017), p. 16f

<sup>147</sup> GIZ (2024), p. 4

<sup>148</sup> MOFPS (2025)

procurement, while it applies the principle of ‘Best Value for Money’, which would allow the introduction of sustainability criteria, which still need to be developed.

Country	Legal Framework(s)	Central Procurement Authority/Body	Other Key Bodies/Committees	Decision Hierarchy	Organizational Notes
<b>Antigua &amp; Barbuda</b>	Tenders Board Act (1991/2002); Procurement and Contract Administration Act (2011, not fully implemented)	Tenders Board (current), Procurement Board (planned/partial); Ministry of Finance	Ministries/Departments, Vendor Registration Unit, Auditor General, Commonwealth Secretariat	Ministry of Finance	Centralized at Tenders Board; line ministries conduct procurement; weak capacity; reforms ongoing.
<b>Belize</b>	Financial Orders (1965); Finance and Audit (Reform) Act; Public Procurement Procedures Handbook	Procuring Entities (ministries, agencies); Ministry of Finance; Contractor-General	National Assembly, Public Accounts Committee, Auditor General, Donor Agencies, Tenders Committees	Ministry/Procuring Entity	Decentralized: each entity manages its own procurement; oversight by Finance Ministry and Parliament.
<b>Grenada</b>	Public Procurement and Contract Administration Act (Cap 267A)	Public Procurement Authority (PPA); Board of Authority	Departmental Procurement Committees, Auditor General, Technical Evaluation Committees, Supplier Registry	PPA Board	PPA regulates/monitors; ministries implement; central supplier registry; regular audits.
<b>Jamaica</b>	Public Procurement Act (2015+), Regulations	Office of Public Procurement Policy (OPPP); Public Procurement Commission (PPC); Ministry of Finance	Ministries, Departments & Agencies (MDAs), Procurement Committees, Cabinet, Auditor General, Supplier Registration Branch	OPPP/PPC	PPA regulates/monitors; ministries implement; central supplier registry; regular audits.
<b>Saint Lucia</b>	Public Procurement Act No. 19 (2015), Amendment Act No. 13 (2020)	Ministry of Finance; Public Procurement Committee (PPC);  Central Public Procurement Board  Central Procurement Administration Unit	Accounting Officers, Tender Evaluation Committees, Cabinet, Auditor General, Supplier Registry	Ministry of Finance	Finance Ministry sets policy; PPC reviews large contracts; ministries procure; Cabinet approves major contracts.

*Table 21: Overview of the organization of public procurement in the five project countries*

In the following the public procurement systems of the five project countries are characterised in more detail, giving the legal framework, the key institutions and the roles of these institutions, the monetary thresholds and procurement methods used, the operational guidelines and tools, as well as aspects of oversight, professionalisation, capacity building as well as recent and ongoing reforms, as far as known. For some countries organization charts were made available, which have been included in the text.

### 5.1.1 Primary procurement institutions - Antigua and Barbuda

Antigua and Barbuda's public procurement organization is currently governed by the Tenders Board Act (1991/2002), with oversight by the Tenders Board and policy direction from the Ministry of Finance. Procurement is decentralized to ministries and departments but lacks dedicated procurement units and standardized procedures. The legal and operational framework is outdated, with a modern system (2011 Act) approved but not yet enacted. Efforts are underway to modernize the system, improve capacity, and implement best practices, but significant gaps in regulation, transparency, and professionalization persist<sup>149</sup>.

#### Legal Framework

*Tenders Board Act (1991, amended 2002)*: This is currently the primary legislation governing public procurement in Antigua and Barbuda. It establishes the Tenders Board and outlines the basic procedures for public procurement.

*Procurement and Contract Administration Act (2011)*: Although approved by Parliament, this Act has not yet been enacted or implemented. It was designed to modernize and expand the legal framework, introducing clearer procedures, broader institutional arrangements, and increased transparency. However, its provisions are not yet in force, resulting in significant legal and procedural gaps.

*Lack of Implementing Regulations and Tools*: There are no comprehensive regulations, procurement manuals, or standard bidding documents currently in use. This lack of supporting instruments further weakens the operational effectiveness of the legal framework<sup>150</sup>.

#### Key Institutions and Roles

##### *Tenders Board:*

- Central oversight body for public procurement, established under the Tenders Board Act.
- Reviews and approves procurement above certain thresholds.
- Maintains a (not fully implemented) supplier register.
- Responsible for ensuring compliance with the Act, but has limited capacity and incomplete records.

##### *Ministry of Finance and Corporate Governance:*

- Provides policy direction.
- Has spearheaded recent reform efforts and modernization initiatives.

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<sup>149</sup> See MAPS (2019)

<sup>150</sup> See MAPS Initiative (2019), p. 44f

- No dedicated cadre of procurement professionals exists; procurement responsibilities are often assigned to middle-level officials, mainly from the Ministry of Works and Housing.

#### *Procuring Entities (Line Ministries, Departments, Statutory Bodies):*

- Conduct procurement activities for their respective organizations.
- Handle contracts and amendments directly, with limited central oversight.
- No formal procurement units or officers in most entities; procurement is often managed by officials with other primary responsibilities.

#### *Chief Procurement Officer (proposed under 2011 Act):*

- Would lead a structured Procurement Unit and oversee procurement across government once the 2011 Act is enacted.

#### *Director of Audit:*

- Expected to review procurement processes and outcomes, but capacity is limited, and regular audits are not always conducted.

#### *Public Accounts Committee:*

- Holds some oversight responsibility but does not meet regularly.

### **Procurement Thresholds and Methods**

#### *Thresholds:*

- Defined in the Tenders Board Act and related regulations, but not fully aligned with international standards.
- Threshold values are supposed to be published by the Minister of Finance in the Official Gazette of Antigua and Barbuda, but no such values could be found at the time of writing.
- Centralized approval by the Tenders Board is required for higher-value contracts; lower-value procurement may be handled by individual entities.

#### *Procurement Methods:*

- Predominantly non-competitive, with frequent waivers for competitive tendering and limited justification.
- Competitive methods are outlined in the 2011 Act, but not yet implemented.
- Procurement is still largely paper-based, and public information is scarce.

### **Operational Guidelines and Tools**

#### *Absence of Standard Tools:*

- No standardized procurement manuals, model bidding documents, or contract templates are in use.
- The supplier register exists but is not fully operational.

#### *Procurement Portal:*

- The Tenders Board maintains a website with some information on procedures and opportunities, but transparency and accessibility remain limited.

### **5.1.2 Primary procurement institutions - Belize**

Belize's public procurement system features a decentralized structure, sufficient legal and procedural frameworks, and oversight mechanisms, all aimed at ensuring transparency, efficiency, and value for public funds.

#### **Decentralized Structure**

Belize operates a decentralized procurement system. Each ministry, department, or statutory body (collectively "Procuring Entities") manages its own procurement activities, subject to oversight and compliance with national laws and standards.

#### **Legal Framework**

- *Finance & Audit (Reform) Act*: The main law governing public procurement, supported by Financial Orders, Stores Orders, and other relevant legislation.
- *Procurement Handbook*: Standardizes procurement procedures and is issued by the Ministry of Finance.
- *CARICOM Protocol*: Sets regional procurement standards and thresholds; Belize is a signatory and aligns its practices accordingly.

#### **Key Institutions and roles**

- *National Assembly*: Holds ultimate authority, including approval of major procurements and asset disposals.
- *Ministry of Finance*: Issues procurement policy, oversees reforms, and publishes official guidelines.
- *Auditor General*: Audits procurement activities and ensures compliance with laws and standards.
- *Contractor General*: Provides oversight to ensure integrity and transparency in procurement processes.

#### *Operational Entities*

- *Procuring Entities (Ministries, Departments, Statutory Bodies)*: Each manages its own procurement activities in a decentralized system.

- *Chief Executive Officer (CEO)/Accounting Officer*: Supervises procurement and financial management within each entity.
- *Finance Officer*: Approves purchases under certain thresholds and provides technical support.
- *Tenders Committee*: Reviews and evaluates tenders; typically includes the CEO, Head of Department, and Finance Officer.

## **Procurement Thresholds & Methods**

### *Value Thresholds:*

- Goods/Services: USD \$150,000
- Works: USD \$3,000,000–\$4,000,000 (as per CARICOM and national rules)

### *Procurement Methods:*

- Open tendering
- Restricted tendering
- Direct procurement

(All detailed in the Procurement Handbook)

## **Operational Guidelines and Tools**

### *Public Procurement Procedure Handbook*

- Part I: Guidelines for public sector officials, covering all stages of procurement
- Part II: Guidelines for private sector suppliers, including MSMEs, on how to participate in public tenders.

### *Standard Bidding Documents (SBDs):*

- Templates: For goods, works, services, and consulting, tailored to different procurement values and methods.
- Guidance Notes: Instructions for completing and customizing SBDs for specific procurements.
- Request for Quotations (RFQ): For minor works and purchases between BZD 1,000–20,000.
- Open Tendering SBDs: For goods, small works, and large works above BZD 20,000.
- Request for Proposals (RFP): For consulting services, adaptable for both national and international competitive bidding

### *Procurement Planning:*

- Procurement Planning: Annual procurement plans are required, including market analysis and needs assessment.

### 5.1.3 Primary procurement institutions - Grenada

Grenada's public procurement organization is structured around a robust legal framework, centralized oversight by the Public Procurement Board and Authority, operational management by the Central Procurement Unit and procuring entities, and strong mechanisms for transparency and accountability. The system is being modernized with electronic procurement and ongoing reforms to thresholds and procedures, aiming for efficiency, fairness, and value for money in public spending.

#### Legal Framework

*Public Procurement and Disposal of Public Property Act No. 39 of 2014:* This is the primary legislation governing public procurement and the disposal of public property in Grenada. It came into force on April 21, 2015, and was further supported by the Public Procurement and Disposal of Public Property Regulations of 2015. The Act sets out the principles of good governance - accountability, transparency, integrity, and value for money - and provides the operational framework for procurement and asset disposal by all public entities, including ministries, departments, statutory bodies, boards, and commissions.

*Amendments and Thresholds:* The Act has been amended to increase the threshold for sole sourcing from EC\$15,000 to EC\$100,000, allowing for more flexibility in procurement for smaller contracts.

#### Key Institutions and Roles

Figure 20 shows the basic institutions and stakeholders of the procurement process in Grenada.

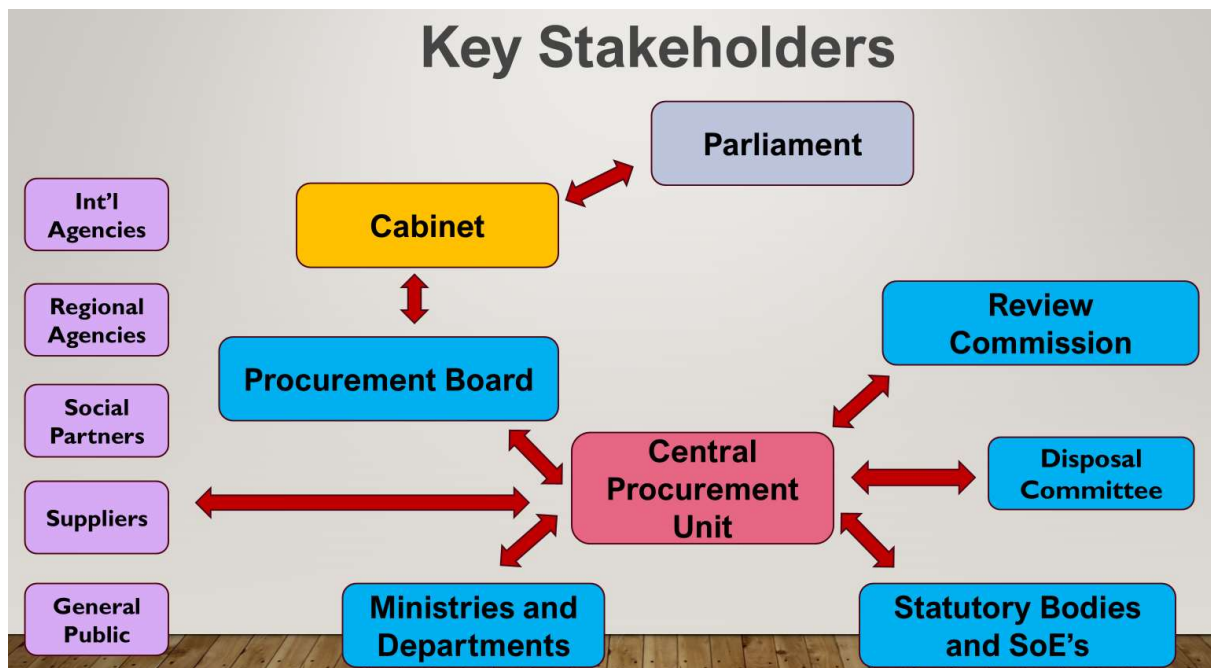


Figure 20: Key institutions and stakeholders in the procurement process in Grenada  
(Source: internal communication)

**Minister of Finance:** Oversees the procurement system, initiates policy, and proposes amendments to the Act and Regulations.

**Public Procurement Board:**

- Responsible for the overall functioning of the procurement system.
- Approves evaluation committees and issues Certificates of No Objection for contract awards above certain thresholds.
- Approves the use of procurement methods other than open competitive tendering.
- Issues directions to procuring entities to ensure compliance.
- Manages public procurement and disposal of public property in accordance with the Act.
- Initiates procurement policy and proposes legislative amendments.
- Monitors compliance and can debar suppliers or contractors.

**Public Procurement Authority:**

- Regulates and monitors public procurement.
- Advises the government on procurement issues.
- Implements policies and standards, ensures compliance, assesses operations, and supports capacity building.
- Issues standard forms and bidding documents for mandatory use.
- Publishes a quarterly Public Procurement Bulletin with procurement plans, notices, and contract awards.

*Central Procurement Unit (CPU):*

- Conducts procurement on behalf of government departments not authorized as independent procuring entities.
- Organizes the purchase of common-use items under individual or framework contracts.
- Manages the electronic government procurement (eGP) system for publication of contracts and bid submission.

*Review Commission:*

- Resolves disputes arising from suppliers or candidates who claim to have suffered loss or damage due to breaches of procurement duties.
- Adjudicates Board decisions on investigations and debarments.
- Composed of a chair (retired judge or attorney-at-law with at least 10 years' experience) and four commissioners with expertise in law, finance, procurement, or related fields.

*Chief Accountable Officer of Procuring Entity:*

- Approves contracts up to EC\$200,000.
- Appoints tender committees for procurements between EC\$15,000 and EC\$1,000,000.
- Reviews tender evaluation reports and submits documentation to the Board for higher-value contracts.

*Tender Committees:*

- Appointed within procuring entities for mid-value procurements.
- Evaluate bids and make recommendations for contract awards.

**Procurement Thresholds and Methods***Thresholds:*

Value thresholds are specified on the basis of the *Public Procurement and Disposal of Public Property Act of 2014*. At the time of writing they were at:

- Sole sourcing: Up to EC\$100,000 (recently increased).
- Chief accountable officer approval: Up to EC\$200,000.
- Above EC\$200,000: Requires Board review and Certificate of No Objection.

*Procurement Methods:*

- Open competitive tendering (default method).
- Restricted tendering.
- Sole sourcing (within threshold).

- Other methods as approved by the Board.

## **Operational Guidelines and Tools**

### *Electronic Government Procurement (eGP) System:*

- Centralized online platform for contract publication and bid submission.
- Supplier registration is required to access tenders and submit bids.
- Enhances efficiency, transparency, and accessibility.

### *Standard Bidding Documents:*

- Issued by the Authority for mandatory use by all procuring entities.

### *Procurement Planning:*

- All procurement must be based on approved plans and budget appropriations.
- Plans and notices are published in the Public Procurement Bulletin.

## **5.1.4 Primary procurement institutions - Jamaica**

Jamaica's public procurement organization is anchored in a robust legislative framework and overseen by the Office of Public Procurement Policy and the Public Procurement Commission. Operational management is decentralized to procuring entities, supported by the GOJEP e-procurement platform and standardized documentation. Oversight mechanisms, capacity building, and recent reforms such as higher procurement thresholds and streamlined procedures aim to ensure a transparent, efficient, and modern public procurement system.

### **Legal Framework**

*Public Procurement Act 2015 and Public Procurement (Amendment) Act 2018 (as amended):* The principal legislation governing public procurement in Jamaica, establishing the legal and institutional framework for procurement across all public entities.

*Public Procurement Regulations 2018:* Detailed regulations guiding the implementation of the Act.

*Public Procurement (Reconsideration and Review) Regulations 2018:* Provides procedures for complaints and reviews.

*Public Procurement (Registration and Classification of Suppliers) Regulations 2019:* Introduces rules for supplier registration and classification.

*Ministerial Orders:* Special and Differential Treatment orders for specific procurement scenarios.

## Key Institutions and Roles

### *Minister of Finance & Public Service:*

- Oversees public procurement policy and legislative amendments.
- Sets procurement thresholds and approves major reforms.

### *Office of Public Procurement Policy (OPPP):*

- Develops and implements procurement policy.
- Provides guidance, training, and advice to public bodies and suppliers.
- Monitors and evaluates the procurement system, develops best practice guidelines, and ensures value for money.
- Represents Jamaica in regional and international procurement negotiations.

### *Chief Public Procurement Policy Officer:*

- Leads the OPPP, manages staff, and implements strategies for the procurement system.
- Responsible for research, reporting, and communication with other government units.

### *Public Procurement Commission:*

- Registers and classifies suppliers and contractors.
- Approves high-value contracts above set thresholds (threshold recently raised from J\$30 million to at least J\$60 million).
- Ensures compliance with procurement regulations.

### *Procuring Entities (Ministries, Departments, Agencies):*

- Each entity manages its own procurement activities within the national framework.
- Responsible for planning, executing, and managing procurement processes.

### *National Public Procurement Centre (NPPC):*

- Focuses on building procurement capacity and professional development across the public service.

Provides training and supports the career pathway for procurement professionals.

Figure 21 shows an overview of the basic procurement decision structure in Jamaica, while Figure 22 shows the contract approval decision structure.

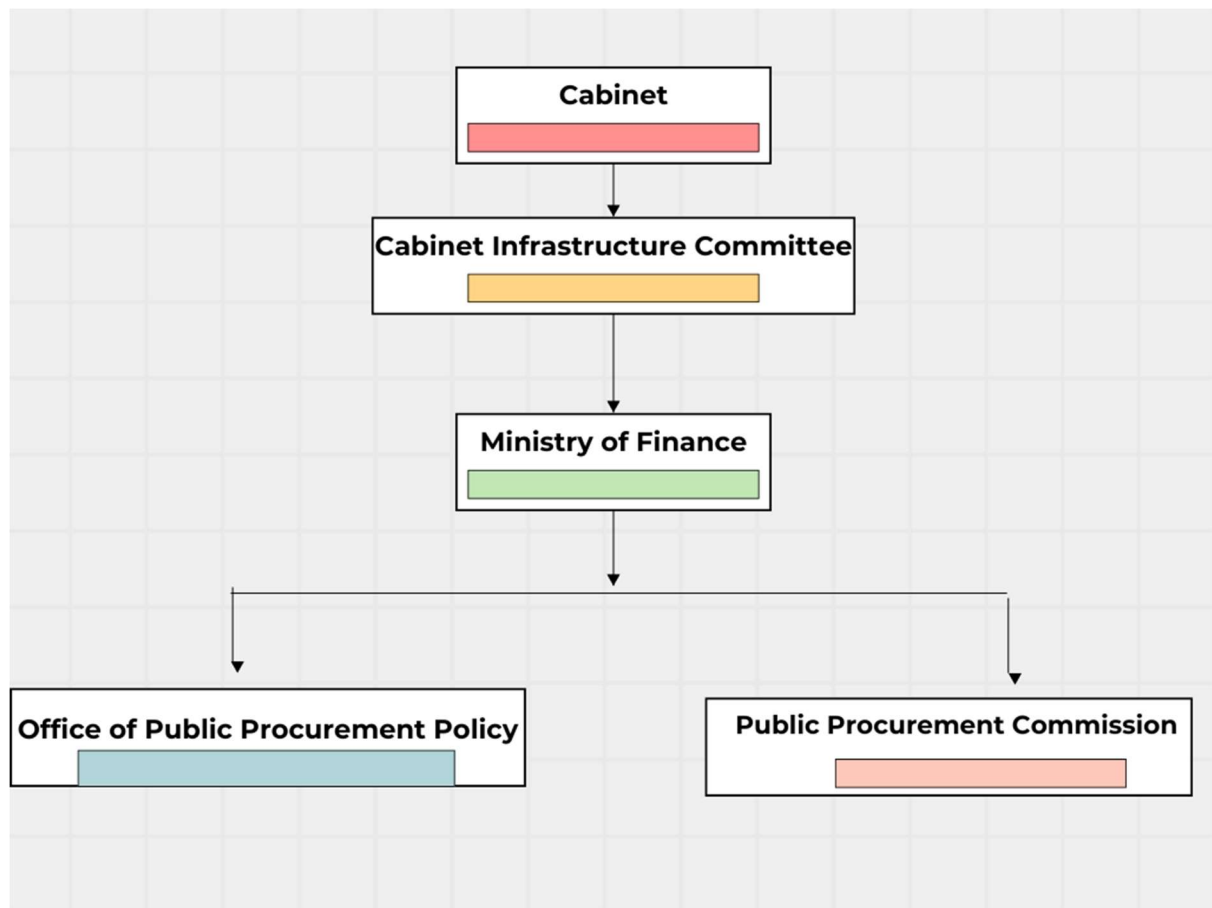


Figure 21: Procurement decision hierarchy in Jamaica (Source: Jamaica Ministry of Finance, personal communication)

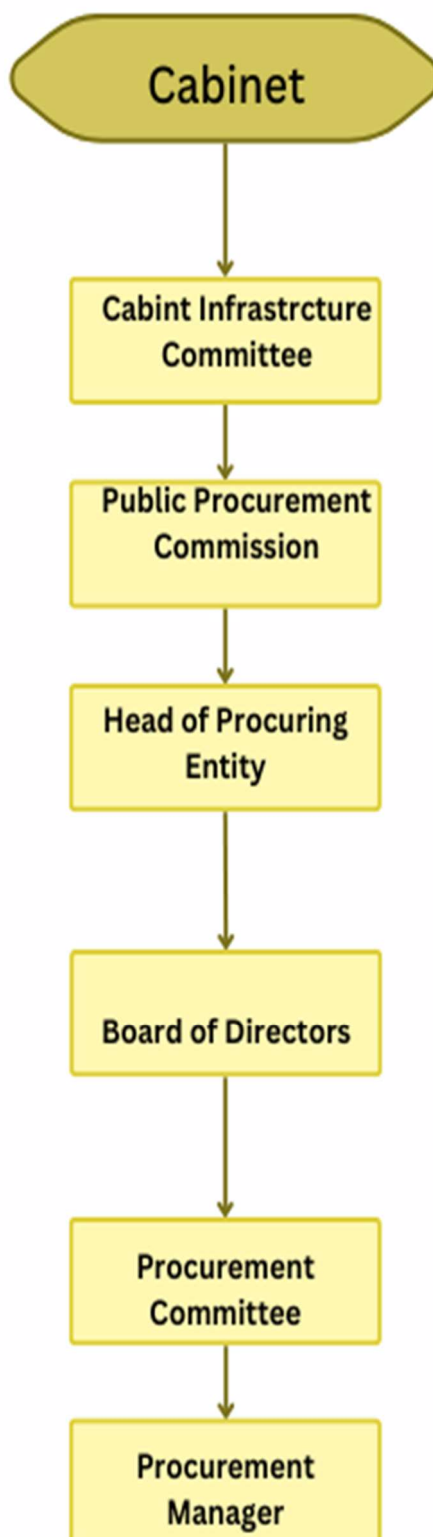


Figure 22: Contract approval decision structure for public procurement in Jamaica  
(Source: Jamaica Ministry of Finance, personal communication)

## Procurement Thresholds and Methods

### *Thresholds (as of 2025):*

- Single Source Procurement: up to J\$3 million for goods and services and up to J\$5 million for works<sup>151</sup>.
- Works: Threshold for direct contracting increased from J\$2 million to J\$5 million.
- Head of procuring entity / Board of directors (if applicable): up to J\$ 30 million (Tier 1)
- Public Procurement Commission Board Approval: Required for contracts between J\$30 million and J\$ 60 million (Tier 2).
- Cabinet (Tier 3) above J\$ 60 million.

The threshold values relate to the gross value of the contract. It is not mandatory for Procurement Committees to review contract award recommendations with estimated values above J\$30M; however, endorsement by the PPC is required prior to contract award.

Table 22 shows the responsibilities and procedures depending on different threshold values for procured contracts.

### *Procurement Methods:*

- Open competitive tendering (default method).
- Restricted tendering.
- Single source procurement (within threshold).
- Other methods as defined in regulations.

## Operational Guidelines and Tools

### *Electronic Government Procurement (GOJEP):*

- Central online platform for managing the full procurement lifecycle, from tender notification to bid submission, evaluation, contract award, and order tracking.
- Supports transparency, efficiency, and best practices in procurement.

*Standard Bidding Documents:* Issued by the OPPP for use by all procuring entities to ensure consistency and fairness.

*Procurement Planning:* Entities must base procurement on approved plans and budget appropriations.

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<sup>151</sup> MOFPS (2025a), p. 1f

Contract Thresholds	Approval Authority	Type of Approval
Contracts in excess of J\$150 Million	Cabinet	Grants the approval for the Award of Contract.
	Cabinet Infrastructure Committee	Endorses the recommendation for the Award of Contract.
	PPC Board	Grants no-objection or objection to the recommendation for the Award of Contract.
	PPC Sector Committees Oversight Branch (PPC SCOB).	Examines/checks the Submission for accuracy and compliance with the public procurement rules, making comments for submission to Sector for appraisal of the recommendation for the Award of Contract
	Head of Entity	Endorses the recommendation for the Award of Contract.
Contracts above J\$60 Million up to J\$150 Million	PE Board of Directors (if applicable)	Grants no-objection/objection to the recommendation for the Award of Contract.
	Cabinet	Grants the approval for the Award of Contract.
	PPC Board	Grants no-objection to the recommendation for the Award of Contract.
	PPC Sector Committees Oversight Branch (PPC SCOB)	Examines/checks the Submission for accuracy and compliance with the public procurement rules, making comments for submission to Sector for appraisal of the recommendation for the Award of Contract.
	Head of Entity	Endorses the recommendation for the Award of Contract.
Contracts above J\$30 Million up to J\$60 Million	PE Board of Directors (if applicable)	Grants no-objection/objection to the recommendation for the Award of Contract.
	PPC Board	Grants no-objection to the recommendation for the Award of Contract.
	PPC Sector Committees Oversight Branch (PPC SCOB)	Examines/checks the Submission for accuracy and compliance with the public procurement rules, making comments for submission to Sector for appraisal of the recommendation for the Award of Contract.
	Head of Entity	Endorses the recommendation for the Award of Contract.
Contracts above J\$1.5 Million up to J\$30 Million	PE Board of Directors (if applicable)	Grants no-objection/objection to the recommendation for the Award of Contract.
	Board of Directors (if applicable)	Grants no-objection/objection to the recommendation for the Award of Contract.
	Head of Entity	Grants the approval for the Award of Contract.
Contracts up to J\$1.5 Million	Procurement Committee	Endorses the recommendation for the Award of Contract.
	Head of Entity	Grants the approval for the Award of Contract.
	Procurement Manager (if applicable)	Endorses the recommendation for the Award of Contract.

Table 22: Responsibilities and procedures depending on different threshold values for procured contracts in Jamaica (Source: Ministry of Finance of Jamaica, internal communication)

### 5.1.5 Primary procurement institutions Saint Lucia

Saint Lucia has established a well-structured public procurement organization that balances oversight with operational efficiency. The system provides clear responsibilities across different value thresholds and incorporates modern electronic procurement capabilities. The legal framework emphasizes transparency, fairness, and value for money while establishing mechanisms for accountability through various checks and balances.

#### Legal Framework

Saint Lucia's public procurement is primarily regulated by the Public Procurement Act (Chapter 15.10), which provides a legal framework ensuring procurement is conducted in a transparent, efficient, and fair manner. This legislative framework was strengthened with the Public Procurement and Asset Disposal (Amendment) Act of 2020, which introduced significant changes to improve the system's governance. Additionally, the Public Procurement Regulations 2022 provide detailed operational guidelines for implementing the Act.

The legal framework establishes foundational principles for procurement, including transparency of process, equality of opportunity for tenderers, fairness of treatment, and achieving the best value for money. These principles guide all procurement activities regardless of value or complexity.

#### Key Institutions and Roles

Figure 23 gives a compact overview of the structure of the public procurement organization in Saint Lucia.

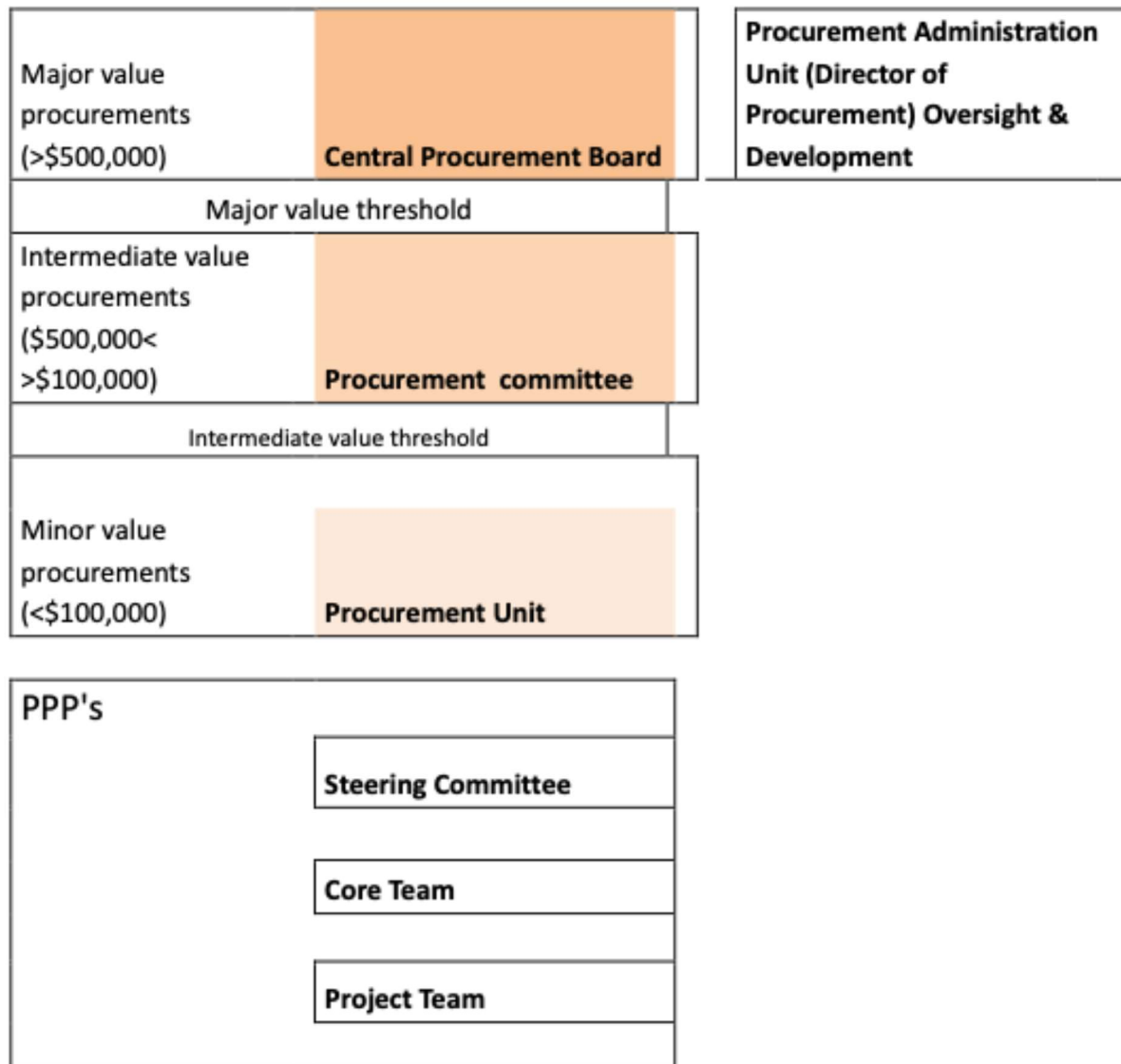


Figure 23: Organizational structure of public procurement in Saint Lucia (Source: Ministry of Finance Saint Lucia, internal communication)

### Minister of Finance

The Minister of Finance bears overall responsibility for public procurement policy in Saint Lucia. This role includes:

- Formulating and issuing directives and policies relating to public procurement
- Presenting annual reports to Parliament regarding procurement functions
- Appointing members to the Central Public Procurement Board
- Appointing members of the Steering Committee
- Delegating powers to the Permanent Secretary when appropriate

### *Director of Public Procurement*

The Director of Public Procurement is a public officer appointed by the Public Service Commission who oversees implementation of the procurement system. Key responsibilities include:

- Issuing instructions, procedures, manuals, and standard forms for implementing the Act
- Formulating policies related to public procurement
- Collecting information from the Board and procuring entities to monitor compliance
- Providing reviews for complaints about procurement processes
- Conducting audits and requesting information from procurement entities
- Publishing notices containing procurement plans for each procuring entity

### *Procurement Administration Unit (PAU)*

Established within the Ministry of Finance, the Procurement Administration Unit serves as the operational arm for system-wide procurement oversight. The unit is headed by the Director of Procurement and performs several critical functions:

- Ensuring systems are in place to meet regulatory requirements
- Monitoring and analyzing procurement activities across government entities
- Developing and maintaining operational manuals and templates
- Implementing training programs to build procurement capacity
- Preparing recommendations for legislative and policy improvements
- Preparing annual procurement reports and plans

### *Central Public Procurement Board*

The Central Public Procurement Board replaced the former Central Tenders Board and has authority over major value procurements. Its functions include:

- Establishing appropriate internal procedures for its operations
- Receiving and publicly opening tenders for major value procurements
- Selecting qualified evaluators to act as members of Tender Evaluation Committees
- Overseeing the examination and evaluation of tenders
- Reviewing recommendations from Tender Evaluation Committees
- Approving the award of public procurement contracts when accepting evaluation recommendations

The Board consists of the Permanent Secretary of Finance or nominee as chair, two vice chairpersons, and three public officers.

### *Public Procurement Committee*

Each procuring entity has a Public Procurement Committee responsible for intermediate value procurements. These committees:

- Approve procurement procedures, tendering documents, and contracts
- Manage clarifications to tenderers during the tendering stage
- Review and deliberate on findings from Tender Evaluation Committees
- Approve variations or amendments to ongoing procurement contracts
- Ensure procurement is conducted in accordance with the Act

The committee is appointed by the Director based on nominations from the accounting officer and includes a chairperson, a Finance Ministry representative, and three members from the procuring entity.

### *Public Procurement Unit*

Each procuring entity has a Public Procurement Unit responsible for managing its procurement procedures. The unit's functions include:

- Managing public procurement for the entity (except adjudication and contract awards)
- Supporting the Public Procurement Committee's functions
- Implementing decisions of the Committee
- Planning procurement activities for the entity
- Preparing specifications, tendering documents, and advertisements
- Maintaining records of procurement and registers of contracts awarded
- Monitoring contract management and ensuring outcome reports

### *Accounting Officer*

The Accounting Officer (typically the head of a procuring entity) plays a crucial role in the procurement process. Responsibilities include:

- Ensuring procurement procedures comply with the Act
- Recommending appointments to the Public Procurement Committee
- Certifying availability of funds before procurement begins
- Awarding procurement contracts upon completion of procedures
- Serving as the procurement contract administrator
- Approving minor value procurements (less than \$100,000)
- Maintaining proper documentation and records

Figure 24 shows the steps of public procurement process in Saint Lucia from the annual procurement plan to the final decision on a procurement contract.

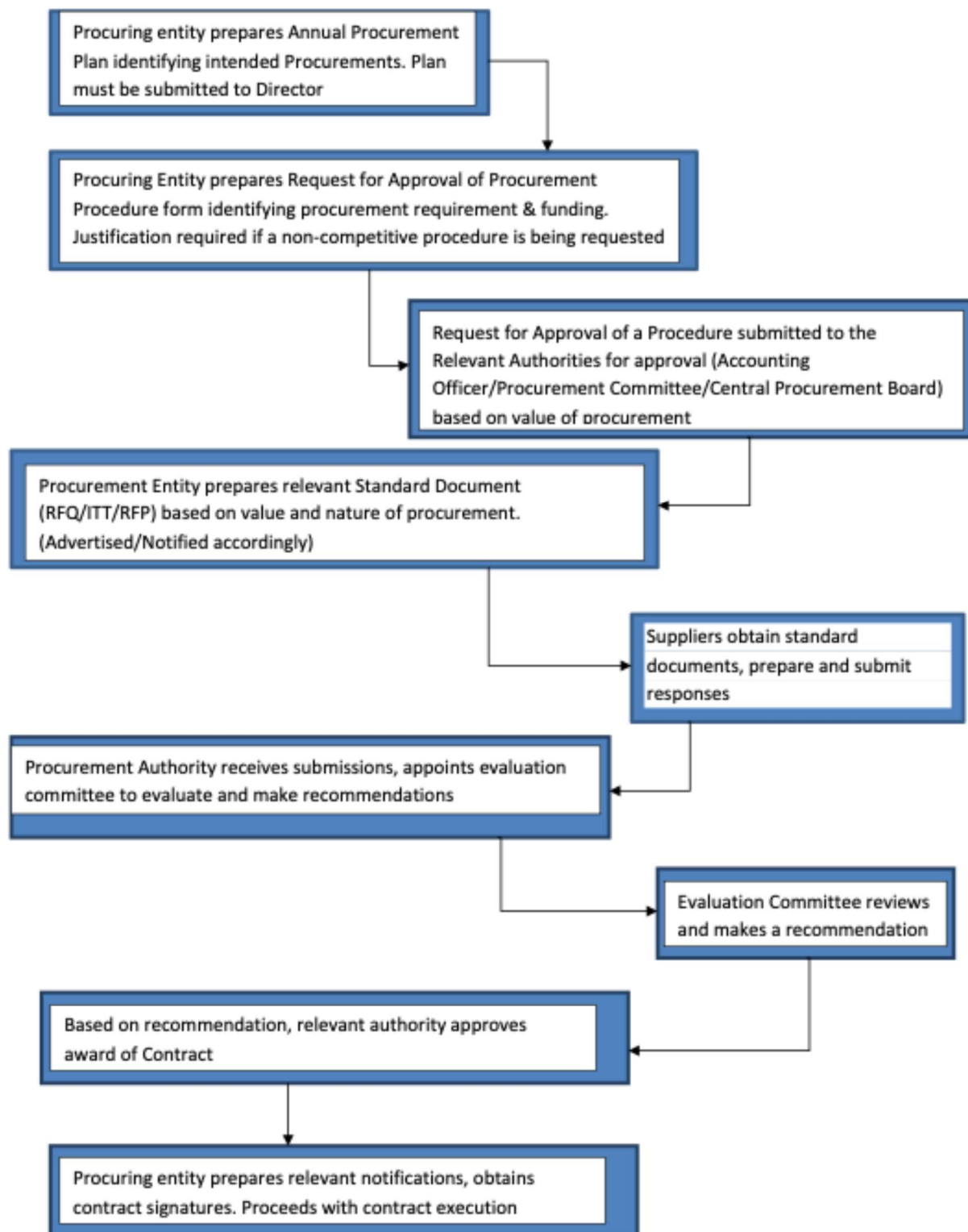


Figure 24: Steps of the public procurement process in Saint Lucia (Source: Ministry of Finance Saint Lucia, internal communication)

## **Procurement Thresholds and Methods**

### *Value Thresholds*

Saint Lucia's procurement system categorizes procurements by value, with different approval authorities for each level (threshold values in Eastern Caribbean Dollars ES\$):

- Minor Value (less than ES\$ 100,000): Managed by the Accounting Officer of the procuring entity.
- Intermediate Value (ES\$ 100,000 to ES\$ 500,000): Managed by the Public Procurement Committee.
- Major Value (ES\$ 500,000 and above): Managed by the Central Public Procurement Board.

### *Procurement Methods*

The Procurement Act provides for various procurement methods depending on the nature, value, and circumstances of the procurement:

- Open Competition: The standard method allowing broad participation
- Restricted Tendering: Limited to pre-qualified suppliers or specialized needs
- Direct Public Procurement: For specific circumstances where competition is not practical
- Emergency Public Procurement: For urgent situations requiring immediate action
- Request for Quotation: Typically used for minor value procurements
- Request for Proposal: Used primarily for consulting services

Additionally, there are two main types of competition based on geographic scope:

- National Competitive Tendering: Available only to bidders in Saint Lucia with publication in the Gazette and a newspaper of wide circulation
- International Competitive Tendering: Available to bidders both within and outside Saint Lucia

## **Operational guidelines and tools**

### *Public Procurement Manual*

- Comprehensive guidance for all stages of procurement, including planning, tendering, evaluation, and contract management.
- Includes templates, ethical standards, and model contracts

### *Procurement Guidelines*

- Detailed procedures for procurement planning, eligibility, conflict of interest, fraud prevention, and contract management.
- Outlines roles of Central and Departmental Tenders Boards, and provides step-by-step instructions for each procurement method.

### *Standard Bidding Documents (SBDs)*

- Templates for goods, works, and services, including:
  - Invitation to Bid
  - Instructions to Bidders
  - Forms of Bid and Contract
  - General and Specific Conditions
  - Technical Specifications and Drawings
  - Bid and Performance Security Forms

### *Annual Procurement Planning*

Procuring entities must prepare and submit procurement plans for each financial year:

- Plans must integrate with applicable budget processes
- Each plan must list required goods, works, and services
- Plans include implementation schedules and estimated values
- Entities must submit copies of plans to the Director of Procurement
- Plans are revised as appropriate during the year

### *Electronic Procurement System*

Saint Lucia has modernized its procurement system by implementing an Electronic Government Procurement (e-GP) application:

- The government signed a five-year contract with British firm In-Tend Ltd.
- The system aims to increase efficiency in procurement procedures
- Implementation was supported by the World Bank and UK Department

#### **5.1.6 Key results of the interviews with the procurement institutions**

All interviewed leading officers of the central procurement units of the three flagship countries were quite familiar with the concepts of sustainable and green procurement, but regarding transport they were lacking the necessary specific knowledge for the development of adequate criteria, which would need to be developed together with experts from the transport and environmental ministries. In some cases, where environmental criteria had been used in procurement, the costs of the procured products or services were higher than their alternatives. It seemed that in these

procurements no full life-cycle costing (LCC) had been applied, which makes it difficult to consider the full cost of a product or service as environmental impacts are not monetised and social impacts are not included by an appropriate point system. It seems to be necessary to make the necessary tools for life-cycle costing (LCC) available to the procuring units and to train the responsible officers in the application of LCC and the supporting tools.

Although the central procurement units are engaged in the training of the officers of the decentral procurement administrations and in some cases, like in Jamaica, supply a wealth of guidance handbooks and materials, it seems to be a major remaining task to train all procurement officers in the most important aspects of sustainable procurement. International donor organisations could help in funding such activities.

## **5.2 Supporting stakeholders needed in transport SGPP**

The necessary supporting national stakeholders in sustainable green public transport procurement can be subdivided into five main groups, these are first the suppliers of EVs and transport services including the service and repair of the vehicles, second the suppliers of charging infrastructure and electricity, third the recycling, disposal companies handling the vehicles and the batteries at the end of their life time, fourth the academic and skills training institutions supplying the skilled labour necessary to service EVs and fifth the qualified fire fighters, who are trained to handle accidents with EVs and their specific dangers.

### **5.2.1 Car dealers and EV manufacturers**

Although the market for EVs is in infancy in all project countries (interviewees estimated about 900 EVs in Jamaica and about 130 EVs in Grenada and 114 Saint Lucia without further differentiation), the **suppliers of EVs** seem to be well prepared to deliver a growing number of EVs as the markets develop. In Jamaica dealers are already prepared to deliver EVs to the market, which are not even in demand so far, like e-trucks. In Saint Lucia a pre-procurement market analysis for new government EVs produced a large number of dealers replies ready to supply different kinds of EVs although the e-vehicle market is minute at the moment. The listing of car dealers offering EVs in the project countries and the types and brands of EVs sold shows that the EV market is not short of supplies, although EVs can be more expensive in the Caribbean than in the main markets in Europe or the US.

#### ***Car dealers selling EVs in the five project countries***

By the time of writing of this report there were a number of local and regional car dealers selling EVs in the five project countries. Table 23 and Table 23 give an overview of the different types, brands and models of EVs offered in the project countries.

Due to the standards required by the international car manufacturers like Mercedes or Nissan the local car dealers have to upgrade their service departments to fulfil the preconditions for sales contracts with these manufacturers. Thus, as soon as new EVs are sold in a market, the dealers of the brands sold are fully equipped with the necessary service technologies. At the same time the manufacturers offer special training for the service technicians of their local dealers.

Country	Supplier/Dealer	Types	Brands/Models
Antigua	Megapower Antigua	Electric SUVs, vans, motorbikes, and luxury cars.	MG (MG4, MG ZS EV), Nissan (Townstar, ARIYA, LEAF), BMW (i3), Jaguar (I-PACE), Tesla, Hyundai, and others by arrangement.
	Harney Motors Ltd	ICE, hybrids and EVs.	Toyota, KIA, Ford
	Hadeed Motors Ltd	ICE, hybrids and EVs	Nissan and Suzuki.
	Caribbean Premium Motors Ltd	Various EVs and ICE trucks, SUVs, cars.	Honda, Hyundai (Hyundai Staria, Santa Fe, Tucson)
	Antigua Motors	ICE SUVs, cars.	Honda, Isuzu, and Chevrolet vehicles
Belize	Caribbean Motors	Fully electric cars.	Great Wall Motors (ORA R1, ORA IQ).
	King Motors	ICE trucks, SUVs and light duty vans.  Electric vehicles (details on models not specified, but new lines are launching soon).	HINO and JAC
	Nissan (in partnership with BEL).	Electric vehicles.	Nissan Leaf.
	Tech Hub	New ICE car, van, and trucks	JMC Brand
Grenada	Huggins Automotive	ICE and electric vehicles.	MG, Hyundai Ioniq, Nissan
	Greenpower	Electric vehicles.	Tesla and grey market EV importer.
	Eco Solutions	Grey market importer of EVs.	BYD, MG
	Go Mobility Inc	Hybrid and EV.	Haval GMW

*Table 23: EV car dealers in the project countries Antigua and Barbuda, Belize and Grenada and types, brands and models offered at the time of writing (Source: diverse car dealer homepages)*

Country	Supplier/Dealer	Types	Brands/Models
Jamaica	ATL Automotive Group	ICE vehicles, electric and hybrid cars.	Audi, Porsche, BYD, BMW, MINI.
	Stewart's Automotive Group	ICE vehicles, electric cars, including luxury and mainstream options; and bikes.	Mercedes-Benz (EQE), Land Rover, Jaguar, Mitsubishi, Suzuki, Honda bikes, BYD.
	BYD Jamaica	Multiple BYD electric vehicles.	Yuan Plus, Seal, Song Plus DM-i, Sealion, Shark.
	Jetcon Corporation	New and used ICE cars, SUVs and vans; and electric vehicles.	Beijing X55 and BJ40 models (BAIC), Tesla, Mazda, Subaru, Toyota BAIC, and Nissan motor vehicles. Nissan Leaf and other used electric vehicles. Used hybrid vehicles, Toyota Aqua, hybrid, Honda Fit hybrid
	Flash Motors Co. Ltd.	All electric cars/vans.	Riddara RD6
	Tropical Mobility	Electric cars, SUVs, bikes, scooters, buses, and ATVs	Tesla, bikes – various.
Saint Lucia	Megapower (regional supplier)	Electric cars, SUVs, vans, and buses	BYD, MG, Nissan, BMW, Jaguar, Hyundai.
	Local Dealers (limited listings)	Electric vehicles are emerging; most sales are through regional suppliers or imports.	
	M Motors	ICE, Hybrid, Electric	BMW, Mini, Foton, KGM
	JQ Motors	ICE, Hybrid, Electric (New to market)	BYD, GWM/Haval, MG, Ridarra, Farizon, Suzuki, Audi,
	Beachcomber Ltd.	ICE, Hybrid, Electric, cars, SUVs (New to market)	Toyota, Subaru, Lexus, Higer, Changan, Honda, Mercedes.
	Solisco Electric Mobility	Electric pick up/truck	Munro
	Northwest Ltd	ICE	Kia, Ford, Mazda, Isuzu
Peter and Co. Ltd.	ICE, Hybrid, trucks, SUVs	Nissan.	

*Table 24: EV car dealers in the project countries Jamaica and Saint Lucia and types, brands and models offered at the time of writing (Source: diverse car dealer homepages)*

Nevertheless, smaller service garages, who are not sales representatives of large EV manufacturers are still lacking the necessary specialised service technologies and specifically trained personnel. Thus, imported used EVs may not find the necessary service companies with adequate service technology and well-trained service personnel.

## **Green/Sustainability policies of equipment manufacturers and their impact on car dealers**

As discussed above, car and equipment manufacturers of EVs have a strong influence on the performance of the local car dealers selling their brands. This is mainly due to the sustainability policies implemented by the manufacturers, which try to cover the full life cycle of car manufacturing, use and recycling. On average EV manufacturers have implemented rather advanced sustainability policies including their entire value chains. Examples are BMW Group<sup>152</sup>, BYD<sup>153</sup>, Jaguar<sup>154</sup>, Mercedes<sup>155</sup>, Nissan<sup>156</sup>, Porsche<sup>157</sup>, Stellantis/Peugeot<sup>158</sup>, Tesla<sup>159</sup> or Volkswagen<sup>160</sup>. The approaches often follow the principles of the German Supply Chain Act<sup>161</sup>. The sustainability policies of the EV manufacturers lead to high sustainability and technical standards of the local dealership, as we have observed in the case of Mercedes' requirements for recycling contracts for car batteries, which are preconditions for local dealers to be allowed to sell Mercedes EVs.

The sustainability policies of major EV manufacturers are increasingly shaping the operations, requirements, and business models of their dealer networks. The main impacts include:

### **Transition to Renewable Energy and Green Operations**

- Manufacturers like BMW have set ambitious goals for their dealerships to operate on 100% renewable energy. For example, BMW Group BeLux aims for all its dealerships to use only renewable energy, pushing both large and small dealers to invest in green infrastructure such as solar panels and energy-efficient systems.
- BMW Brilliance's "Network Transformation Green Star Programme" is designed to enhance sustainable dealerships through green environment, green power, green operations, and green engagement, requiring dealers to align with these standards.

### **Enhanced Reporting and Compliance**

- Mercedes-Benz's sustainability strategy, aligned with the EU's Corporate Sustainability Reporting Directive (CSRD), means dealers must comply with stricter environmental and social reporting standards. This includes tracking resource use, emissions, and social responsibility measures in their operations.

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<sup>152</sup> BMW Group (2025)

<sup>153</sup> BYD (2024)

<sup>154</sup> Jaguar and Land Rover Automotive (2024)

<sup>155</sup> Mercedes-Benz Group (2024)

<sup>156</sup> Nissan Motor Corporation (2024)

<sup>157</sup> Porsche AG (2024)

<sup>158</sup> Stellantis (2024)

<sup>159</sup> Tesla (2023)

<sup>160</sup> Volkswagen Group (2024)

<sup>161</sup> Deutscher Bundestag (2021)

- Dealers are increasingly required to provide data and transparency on their own sustainability practices, including energy consumption and waste management, to meet manufacturer and regulatory expectations.

### **Circular Economy and Resource Efficiency**

- Jaguar Land Rover's focus on circular economy principles and resource efficiency extends to the dealer network, encouraging or requiring dealers to adopt practices such as recycling, efficient resource consumption, and sustainable waste management.
- Dealers may be asked to participate in programs for recycling parts, batteries, and materials, as well as to promote the reuse of components.

### **Supply Chain and Logistics Adjustments**

- Manufacturers like BMW are working to decarbonize their entire value chain, including logistics and aftersales services. Dealers are expected to adopt lower-carbon logistics solutions and support initiatives such as sustainable parts delivery and low-emission service operations.

### **Customer Engagement and Charging Infrastructure**

- Dealers are increasingly responsible for supporting the customer transition to EVs, including the installation and maintenance of charging infrastructure powered by renewable energy, as highlighted by BMW's efforts to expand renewable charging options for customers.
- Dealers serve as key touchpoints for educating customers on sustainability features and the environmental benefits of EVs.

### **Social and Governance Responsibilities**

- Manufacturers' emphasis on human rights, employee well-being, and ethical practices in the supply chain also affects dealers, who must align with these values in their hiring, training, and community engagement efforts.

Table 25 summarizes the most important aspects of the sustainability policies of the different EV manufacturers and their main impacts on EV car dealers.

Manufacturer	Supply Chain & Circular Economy	Social Responsibility & Governance	Main Impacts on EV Dealers
<b>BMW</b>	Closed-loop recycling, high share of secondary materials, design for circularity, battery recycling for cobalt, nickel, lithium	Human rights in supply chain, transparency, some gaps in fossil materials and climate lobbying	Dealers must invest in renewable energy and green infrastructure, align with circularity goals, and provide EV expertise and charging solutions.
<b>BYD</b>	Supplier code of conduct, biodiversity protection, focus on sustainable development	Social initiatives, engagement for human rights, but few concrete published measures	Dealers are expected to support sustainable supply chains, educate customers on EV benefits, and integrate EVs into their offerings.
<b>Jaguar</b>	Circular economy in production and supply chain, sustainable material use, battery recycling	Focus on ethical supply chains, occupational safety, diversity, transparency	Dealers need to adapt to new sales and aftersales models, train staff on EVs, and promote sustainable practices in operations.
<b>Mercedes</b>	Supplier requirements for emissions and water reduction, recycling progress, resource conservation	Strong human rights programs, responsibility along value chain, governance structures	Dealers must comply with stricter reporting, invest in EV tools and charging, and train employees on sustainability and EVs.
<b>Nissan</b>	Sustainable supply chain targets, but low progress on fossil-free and environmental compatibility	Commitments to human rights, little concrete implementation	Dealers should align with sustainability targets, offer EV-specific services, and educate customers on new technologies.
<b>Porsche</b>	Focus on recycling, durable materials, sustainable supply chains	Social responsibility and governance not detailed in sources	Dealers are encouraged to promote vehicle longevity, recycling, and support EV integration in sales and service.
<b>Stellantis</b>	Battery recycling, use of low-emission materials, circular economy, needs improvement in green steel/aluminium	Good supplier audits, room for improvement in labor and indigenous rights	Dealers must adapt to new EV service requirements, invest in training and infrastructure, and support circular economy initiatives.
<b>Tesla</b>	Investments in sustainable battery tech, recycling, disclosure of Scope 3 emissions	Progress in human rights due diligence, improvement needed in labor rights	Dealers (or direct outlets) focus on EV expertise, digital sales, and sustainable operations, with less reliance on traditional aftersales.
<b>Volkswagen</b>	Progress in battery recycling, pre-purchase of low-emission materials, but declining transparency in mineral supply chain	Human rights in supply chain, improvement needed in transparency and implementation	Dealers must support EV adoption, invest in charging infrastructure, and adapt to changing aftersales revenue streams.

*Table 25: Main aspects of sustainability policies of EV manufacturers and impacts on car dealers (Sources: sustainability reports of the different car manufacturers)*

Sustainability policies of EV manufacturers are driving dealers to modernize facilities, adopt new technologies, and align business practices with broader environmental and social goals. While these changes may require upfront investment and operational

adjustments, they position dealers to meet evolving regulatory requirements and customer expectations in the rapidly changing automotive market.

### ***Sustainability policies of local car and equipment dealers***

The survey conducted for the consultancy showed that the local car dealers of new cars mainly follow the sustainability requirements of the manufacturers of the different brands. This trend is mainly induced by international legislation like the German *Supply Chain Act (Lieferkettengesetz)*, which was followed by the European *Corporate Due Diligence Directive*. As these laws and directives cover the entire life cycle of a product, they have immediate impacts on the car dealers and their sustainability policies. A good example is the requirement by Mercedes that a car dealer has to enter into a firm contract on battery recycling before he is allowed to sell Mercedes EVs. Although other manufacturers may not be as strict, the German Supply Chain Act has induced other international car manufacturers to require some battery recycling plan or policy of the car dealers, before they are allowed to sell the EVs of these manufacturers (see Table 25 above for the life-cycle policies of the car manufacturers).

In some instances, it can be observed that some Chinese (bus) manufacturers are more lenient on safety standards (e.g. fire protection) in order to reduce production costs and to gain cost advantages in the market. In the case of Jamaican car dealers this behaviour of the manufacturers reportedly carries over into the strategies of the local car dealers. Thus, it will be necessary to introduce some technical minimum standards for the import of EVs and EV parts to curtail dumping strategies of less restrictive international manufacturers and their respective vehicle dealers. Such minimum standards would not negatively affect all other manufacturers producing safe vehicles and equipment.

Minimum standards for EVs would also need to be applied to imported used cars, which in some countries (e.g. Jamaica) make up almost 80% of the EVs introduced into the markets. This should not only apply to minimum safety standards, but to some other important technical qualities of the imported EVs. A typical example for such criterion is the equipment with liquid (water) cooling instead of air cooling, as the latter has proven to lead to problems in tropical or subtropical climates.

### **5.2.2 Other supporting stakeholders**

E-mobility will require a new **charging infrastructure** and increase the demand for electricity substantially. For the public charging infrastructure, a network of public charging points needs to be established along the main transport corridors of each island. Depending on the size of the country it may suffice to have a few public charging points for small islands and in other cases, like Jamaica, a very substantial number of public charging stations needs to be established for full e-mobility. Although, some direct charging from private solar PV installations will happen, the bulk of the electricity will have to be supplied through the public grid, which must be strengthened

for the public as well as the private charging. Thus, the national **electricity company** needs to include the future electricity demand for e-mobility and the additional charging points in its resource plan in order to facilitate the expansion of e-mobility. The necessary public charging infrastructure can be operated by additional private **charging companies** or by the national utility company itself. In the case of Jamaica, we find a combination of both models with JPS (Jamaica Public Service) and a private company both operating public charging points. In the case of Jamaica JPS seems to be relatively well prepared for the new tasks, while the national utility companies in Saint Lucia (LUCELEC/Saint Lucia Electric Services Ltd.) and Grenada (GRENLEC/Grenada Electric Services Ltd.) seem to be just about to start to prepare for the challenges of e-mobility.

**Transport corridors** for EVs mainly play a role in Jamaica and Belize due to the size of the countries. In Antigua and Barbuda, Grenada and Saint Lucia the need for public charging stations is limited due to the size of the islands. Accordingly, JPS and EverGo are establishing public charging points along the main transport corridors in Jamaica, while in the case of Saint Lucia just four locations around the island will be necessary for public charging.

Presently the public charging infrastructure is only built up slowly as the adoption of EVs is still very slow in all project countries. As e-mobility will start to expand faster, the speed of the installation of public charging points will increase accordingly. According to representatives of a public utility company in Jamaica, it is unlikely that the availability of public charging infrastructure will have any negative impact on the adoption of e-mobility.

Even in Jamaica, the flagship country with the largest EV fleet, **academic and skills training institutions** training car service personnel are not equipped with the necessary service technologies and often lack trainers with the necessary specialised EV knowledge for teaching service technicians. The lack of training possibilities for EV service technicians beyond the large brand car dealers may develop into a serious bottleneck for ambitious e-mobility expansion plans, like the 12% e-vehicle target of Jamaica for the year 2030<sup>162</sup>, which equals approximately 90,000 cars or an addition of 15,000 EVs per year during the next six years. This is changing with the direct training of repair, service and maintenance technicians for electric vehicles, through Project eDrive “Building a Sustainable Electric Mobility Ecosystem for Inclusion and Access” (BSEME) funded by IDB and implemented through the JPS Foundation<sup>163</sup>, the University of the West Indies (Mona)<sup>164</sup> through NDC-TEC, and the Human Education and Resource Training-Jamaica Germany Automobile School (HEART-JAGAS). Considering that about 80% of the cars imported into Jamaica are used cars, the demand for service technicians for these e-cars will be very substantial.

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<sup>162</sup> MSETT (2023), p.25

<sup>163</sup> Corporate social responsibility entity of the Jamaica Public Service Company Ltd.

<sup>164</sup> Consortium Member of the NDC-TEC project.

As EVs pose specific problems for the **recycling of the batteries** at the end of their lifetime, recycling gains a very important role. Considering that most Caribbean Island countries don't have a well organised car recycling industry and that most old cars end up as derelict cars on some private property, professional battery recycling needs to be established as a main component of any substantial EV strategy. Luckily, most EV manufacturers make it a mandatory precondition for their local car dealers to have a recycling strategy or even a signed contract with a battery recycling company. The later was reported by a Jamaican car dealer in the case of Mercedes. So far professional battery recycling has only been organised in Jamaica by the company Tropical Batteries, which is planning to use old EV batteries for stationary purposes and is already signing contracts with local car dealers guaranteeing the future recycling of the car batteries. In the other project countries, no battery recycling has been organised so far, and it is unclear, how the car dealers are handling the car manufacturers request for securing car battery recycling. What is more, the high share of imported used cars does not include any contractual requirement for end-of-life battery recycling. Thus, the organisation of professional battery and car recycling should be a prime political priority.

According to some interviewed car dealers **fire fighters** who often have to deal with car accidents, need to be trained for the specific dangers of EVs and batteries. Fire fighters and other emergency responders were provided with training in accident response for EVs, under the GEF-7 project and a train the trainers workshop for firefighters and first responders in St Lucia 2024 under NDC-TEC. So far even in Jamaica, fire fighters are not trained for this specific task. With the number of EVs planned to be expanded in Jamaica by about 15,000 cars per year until 2030 the number of accidents involving EVs will increase dramatically. Thus, within a very short time all fire fighters need to be trained for this specific task and to be equipped adequately to deal with EV accidents.

A similar consideration applies to **tow truck drivers** being confronted with the handling of EVs after an accident. Again, special training for the handling of EVs will be necessary for this group.

### **5.3 Bystanders of Green Public Procurement in transport**

In the context of e-mobility, bystanders are groups or individuals who observe the transition to electric mobility but are not actively participating in, influencing, or directly benefiting from the process. They may be affected by the transition, but their role is largely passive, either due to lack of resources, information, or agency.

Depending on the specific way in which e-mobility is introduced, bystanders can be affected in a positive or a negative way. **Examples bystander groups positively affected** could be:

*Pollution-Burdened Communities:* These communities, often disproportionately exposed to air pollution, benefit from cleaner air as EV adoption reduces local emissions. The environmental justice aspect of e-mobility means improved respiratory health and quality of life in these areas.

*Renters and Residents of Multi-Unit Dwellings:* While still facing challenges, expanding public charging infrastructure and targeted deployment in underserved areas are beginning to address their needs, offering greater access to the benefits of e-mobility.

*Communities Served by Electrified Public Fleets:* Investments in electrifying public transportation and municipal fleets (e.g., school buses, delivery vehicles) particularly benefit low-income and pollution-burdened neighbourhoods by improving air quality and reducing health risks associated with diesel emissions.

#### *Bus Passengers:*

- **Quieter and More Comfortable Rides:** Electric buses are significantly quieter than diesel buses, both inside and outside the vehicle, creating a much more peaceful and pleasant environment for passengers. The absence of engine vibrations and smoother acceleration (thanks to electric drivetrains) reduces jolts and makes journeys more comfortable, especially during frequent stop-and-go city driving.
- **Improved Air Quality and Health:** E-buses produce zero tailpipe emissions, eliminating exposure to harmful pollutants such as soot and nitrogen oxides inside and around the bus. This leads to better air quality at bus stops and along routes, contributing to improved respiratory health for passengers and the general public.
- **Reduced Noise Pollution:** The low noise levels of electric buses benefit not only passengers but also urban residents, making waiting at bus stops and traveling through city streets more pleasant.
- **Enhanced Urban Experience:** The combination of quiet operation and zero emissions creates a more attractive and inviting public transport experience, encouraging more people to use buses and supporting the development of cleaner, more liveable cities.
- **Smoother Acceleration and Less Fatigue:** Electric buses offer smooth, jerk-free acceleration and deceleration, reducing passenger fatigue and discomfort, particularly on routes with frequent stops.

- **Perceived Safety and Modernity:** Passengers often perceive e-buses as safer and more modern, with advanced features such as regenerative braking and improved accessibility, further enhancing the overall user experience.

**Examples of bystander groups, which can be negatively affected** by the introduction of e-mobility, depending on the way e-mobility is introduced, are:

*Low-Income Households:* These groups often face barriers such as the high upfront cost of electric vehicles (EVs), lack of access to private charging infrastructure, and limited eligibility for incentives, making them less likely to participate in or benefit from the e-mobility transition. Policy discussions frequently mention them, but practical inclusion remains limited.

*Digitally Disadvantaged Individuals:* Older adults, people without smartphones, or those who are less tech-savvy may struggle with digital requirements for using e-mobility services (e.g., app-based charging or vehicle sharing), effectively sidelining them from adoption.

*Disabled Persons:* Although sometimes mentioned in policy discussions, accessibility issues (such as the design of charging infrastructure or vehicles) often remain unaddressed, leaving disabled individuals as bystanders to the transition. Special designs with kneeling features and designated wheelchair spaces in electric buses can alleviate this concern.

*Residents of Multi-Unit Dwellings or Rental Properties:* People living in apartments or rental housing often lack the ability to install private charging stations, making them less likely to adopt EVs compared to those in single-family homes.

*Non-Urban Populations:* Much of the e-mobility infrastructure and policy focus is on urban centers, which can leave rural or suburban residents less engaged or able to participate in the transition.

*Small Businesses and Independent Operators:* While fleet and large business vehicles are often targeted for electrification, smaller businesses may lack the resources or incentives to transition, making them passive observers of broader industry changes.

Besides the impacts on certain groups of bystanders, the shift to e-mobility will create some impacts on the general public, the labour force, consumers and NGOs. For the **general public** and environmental **NGOs**, the main effect of e-mobility will be the reduction of air pollution in the urban centres of the countries, as tail pipe emissions of NO<sub>x</sub> or particulate matter of vehicles will be reduced as much as e-mobility increases its share. For the **labour force** e-mobility will change the demand profile for service technicians and the new charging infrastructure will create additional jobs for its installation, while some jobs at gas stations will eventually be eliminated as internal combustion engines will be driven out of the market. Depending on the final cost of e-mobility **consumers** may be confronted with higher prices for e-cars as compared to internal combustion engine cars and with lower energy costs over the life cycle of the

cars. As e-mobility can reduce the need for fuel imports, if it is mainly based on internally generated renewable electricity, the transition to e-mobility can lead to higher national income for the country through reduced import spending, which will finally result in higher employment and higher income for the **average citizen**.

#### **5.4 End of life management systems in the region**

Except for Jamaica end-of-life management systems for cars and batteries are virtually not existing in the project countries. In all other countries cars presently end up as derelict cars on private property and public roads (e.g. St Lucia, Grenada and Antigua and Barbuda), with no recycling taking place. Some parts may be taken out of old cars as spare parts for other cars of the same make.

In the case of Jamaica, the company Tropical Battery is in the process of establishing a reuse and recycling system for car batteries. The reuse of old EV batteries is planned for stationary purposes. Tropical Battery has been a car battery manufacturer and distributor of international battery brands. It is engaged in battery recycling. Collected batteries are shipped to international certified centres for recycling. Besides its battery business Tropical Battery is active in the sale of solar panels and inverters. With the possible stationary use of old EV batteries, it can be expected that Tropical Battery will engage in stationary electricity storage when the share of intermittent renewable electricity grows in Jamaica.

Tropical Battery could well serve as a role model for the other Caribbean countries, which lack battery recycling capacities at the moment.

It is suggested that the recycling of car batteries and digital battery passports should be included in the procurement criteria for EVs to incentivise the creation of battery recycling systems in the project countries. In the beginning these criteria can be introduced as award criteria until such systems are fully established. As soon as the local market has adjusted, the criteria can be included in the minimal technical specifications.

#### **5.5 Financial and fiscal incentives in the region**

In the three flagship countries e-mobility is incentivised by tax reductions. This is mainly done through the reduction of import taxes, which are either partially reduced or totally eliminated for EVs. In Saint Lucia the excise tax on EVs is reduced as well. Table 26 gives an overview of the financial and fiscal incentives for EVs in the five project countries as of early 2025.

Country	Financial Incentives	Fiscal Incentives	Notes
Antigua	100% exemption from import duty and environmental levy on EV imports	Government commitment to 100% EV fleet by 2046; investment in charging infrastructure	Importers must still pay the ABST and Revenue Recovery Charge. The government aims for all new vehicle sales to be electric by 2030
Belize	Charging infrastructure development; pilot projects; financing support for EV purchase	Exemptions from import, revenue replacement, and excise duties, and business tax for approved activities	Fiscal incentives are available for approved activities under the Fiscal Incentives Act, including EV-related businesses and infrastructure.
Grenada	Removal of all duties, taxes, and fees on EV imports and charging stations	25% duties on hybrid vehicles; government fleet transition to EVs; concessional loans for EV purchases	Additional incentives include concessional loans to offset the higher upfront cost of EVs and support for home and public charging infrastructure.
Jamaica	Reduced import duty (10% for EVs 1-3 years old, 30% for 3-6 years); no GCT or SCT	No annual registration fees for EVs; environmental levy applies; cap on number of incentivized imports	No General Consumption Tax (GCT) or Special Consumption Tax (SCT) on EVs; environmental levy and administrative fees still apply. The reduced duty rate applies to a capped number of vehicles.
Saint Lucia	Reduced import duty and excise tax rates (5-10% ) for EVs and hybrids (to Aug 2024)	Government fleet EV procurement; tax concessions on hybrids and sustainable fuel vehicles; investment in charging infrastructure	Reduced import duties and excise taxes currently extended to August 2024; further policy revisions anticipated. The government is also investing in charging infrastructure and fleet transition.

*Table 26: Overview of the fiscal and financial incentives granted for EVs in the project countries*

## 5.6 Suppliers of goods, parts and services for sustainable transport

The supply of goods and parts for sustainable transport follows the demand for such goods and services. As in all project countries the demand for sustainable transport or e-mobility is minute, the supply of such goods or services is in infancy. Nevertheless, the example of Jamaica shows that private suppliers of EVs, charging infrastructure and battery recycling are well ahead of the market demand, setting their businesses up for the coming opportunities of sustainable transport and e-mobility. In addition, the example of the Barbados based EV dealer Megapower shows that once dealers are well established in one CARICOM country they tend to offer their services in growing EV markets of other CARICOM countries.

Nevertheless, there are reports of examples of public procurement of buses in the region, which will not go through professional local or regional dealers but through Chinese online sales platforms<sup>165</sup>. In such cases neither professional service nor appropriate spare parts may be available when needed. Thus, it will be necessary to include the availability of professional services and original spare parts over the lifetime of the procured e-vehicles in the procurement criteria to avoid stranded investments in the public vehicle fleet.

<sup>165</sup> Internal communication with GIZ

## 6. Recommendations:

### 6.1 Recommendations for legislative reforms

*Update and Expand Procurement Legislation Reform:* Existing procurement laws should be amended or complemented by policies that mandate SGPP considerations including criteria such as life cycle costing, monetization of environmental costs (like social costs of carbon), emissions reduction, and energy efficiency for vehicles. This would create a legal basis for prioritizing electric vehicles and related infrastructure in public tenders.

*Adopt Sustainable Green Public Procurement Policy:* Countries without a Green Procurement Policy should develop a National SGPP policy with clear objectives, implementation guidelines, and sectoral targets particularly in the transport sector. This policy could draw on international best practices and be aligned with CARICOM's regional sustainability goals.

*Introduce Model Procurement Clauses:* In countries currently revising their procurement legislation or implementing e-mobility strategies, the adoption of **Model Procurement Clauses** or **“green rider” templates** should be strongly encouraged. These clauses should include:

- Mandatory lifecycle costing and emissions criteria in vehicle tenders;
- Preferences for suppliers offering zero- or low-emission vehicles;
- Obligations for periodic reporting on environmental outcomes;
- References to internationally recognized sustainability standards.

Model clauses from frameworks such as those developed by the CARICOM, European Commission, OECD, and UNEP, to guide drafting and incorporated into:

- National Procurement Acts;
- Public Financial Management Regulations;
- Tender evaluation manuals and procurement guidelines.

Codifying these standards to be considered, as this not only ensures consistency and legal clarity but also lowers the entry barrier for procurement officers unfamiliar with SGPP.

*Legal and Regulatory Support for Private Sector Participation:* Clear legal provisions and incentives should be included to encourage the participation of local suppliers and service providers in e-mobility procurement. This includes encouraging partnerships, local assembly, maintenance services and charging infrastructure; critical to creating a self-sustaining market ecosystem.

The recommendations for legislative reform are summarized in Table 27 below.

Area of improvement	Recommendation	Short reason for the recommendation
Legislative Reform	<i>Update and Expand Procurement Legislation Reform</i>	Existing procurement laws should be amended or complemented by policies that mandate SGPP considerations including criteria such as life cycle costing, monetization of environmental costs, emissions reduction, and energy efficiency for vehicles.
	<i>Adopt Sustainable Green Public Procurement Policy</i>	Countries without a Green Procurement Policy should develop a National SGPP policy with clear objectives, implementation guidelines, and sectoral targets particularly in the transport sector.
	<i>Introduce Model Procurement Clauses</i>	In countries currently revising their procurement legislation or implementing e-mobility strategies, the adoption of Model Procurement Clauses or “green rider” templates should be strongly encouraged.
	<i>Legal and Regulatory Support for Private Sector Participation</i>	Clear legal provisions and incentives should be included to encourage the participation of local suppliers and service providers in e-mobility procurement. This includes encouraging partnerships, local assembly, maintenance services and charging infrastructure; critical to creating a self-sustaining market ecosystem.

Table 27: Recommendations for improvement in the legislative framework

## 6.2 Recommendations for Improvements in the procurement processes

*Implement a structured standard approach for sustainable green procurement:* In order to fully implement sustainable procurement, it is recommended that structured procurement processes following the UNEP<sup>166</sup> or the OAS/INGP<sup>167</sup> handbook approaches should be implemented in each country.

*Improve the training of all procurement officers in sustainable green procurement:* Although, the central procurement units of the three flagship countries of the project are quite knowledgeable about sustainable green public procurement, the procurement officers executing the decentralise procurement processes have hardly been introduced to systematic sustainable procurement processes and criteria. Therefore, it is recommended that all procurement personnel will be trained specifically for the execution of sustainable green procurement.

*Improve the basic needs assessment for the procurement of government cars:* In some project countries the technical specifications of procured government cars are

<sup>166</sup> UNEP (2021)

<sup>167</sup> IISD (2015)

well beyond the actual necessities of the use of the vehicles. The tendency to oversized cars for government officials and administrators seems to create an obstacle to the adoption of EVs into government fleets.

*Develop specific criteria for vehicle and EV procurement:* Based upon the criteria developed by the EU for transport procurement<sup>168</sup> and the international attempts to introduce battery passports, criteria for general vehicle and transport service procurement as well as specific criteria for the procurement of EVs should be developed for the Caribbean countries.

*Develop socio-economic procurement criteria for vehicle and EV procurement:* Based on the IISD/INGP/OAS socio-economic criteria for transport<sup>169</sup> technical specifications and award criteria for vehicles and transport services should be developed to better enable the inclusion of such criteria in vehicle procurement.

*Implement EV policy targets for public fleet into procurement plans:* The ambitious targets of some project countries (e.g. Jamaica) for the conversion of the government fleet to EVs need to be implemented into the national procurement plans.

*Better connect the Caribbean countries to the INGP network:* Although, all project countries are members of the Inter-American Network of Government Procurement (INGP), the trend-setting work of the INGP on sustainable green procurement has not been integrated into the procurement policies of the Caribbean countries. The project countries could substantially benefit from the expertise of the INGP.

*Monitoring procurement success:* A major gap in Caribbean public procurement systems is the absence of performance data and sustainability metrics. To enable policy tracking and improve procurement outcomes, countries should adopt regional green procurement indicators. This type of evidence-based monitoring approach enhances stakeholder trust and strengthens the case for further investment in green procurement reform.

*Install Regional Help Desk:* To address persistent technical and staffing limitations across the Caribbean, countries should be encouraged to establish Regional Sustainable Procurement Help Desks linked to a Regional Technical Support Facility, possibly administered by CARICOM or the Caribbean Development Bank (CDB), to benefit from shared services. This arrangement supports economies of scale, reduces duplication of effort, and accelerates regional alignment with sustainable procurement targets under the Paris Agreement and SDGs.

Table 28 summarizes the recommendations for the improvement of the procurement processes.

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<sup>168</sup> EU (2021)

<sup>169</sup> IISD (2015)

Area of improvement	Recommendation	Reason for the recommendation
Improve procurement processes	<i>Implement a structured standard approach for sustainable green procurement</i>	In order to fully implement sustainable procurement, it is recommended that structured procurement processes following the UNEP or the OAS/INGP handbook approaches should be implemented in each country.
	<i>Improve the training of all procurement officers in sustainable green procurement</i>	Although, the central procurement units of the three flagship countries of the project are quite knowledgeable about sustainable green public procurement, the procurement officers executing the decentralise procurement processes have hardly been introduced to systematic sustainable procurement processes and criteria.
	Install regional procurement help desk	To address persistent technical and staffing limitations across the Caribbean, countries should be encouraged to establish Regional Sustainable Procurement Help Desks to benefit from shared services.
	<i>Improve the basic needs assessment for the procurement of government cars</i>	In some project countries the technical specifications of procured government cars are well beyond the actual necessities of the use of the vehicles.
	<i>Develop specific criteria for vehicle and EV procurement</i>	Based upon the criteria developed by the EU for transport procurement and the international attempts to introduce battery passports, criteria for general vehicle and transport service procurement as well as specific criteria for the procurement of EVs should be developed.
	<i>Develop socio-economic procurement criteria for vehicle and EV procurement</i>	Based on the IISD/INGP/OAS socio-economic criteria for transport technical specifications and award criteria for vehicles and transport services should be developed.
	Improve the monitoring of procurement success	A major gap in Caribbean public procurement systems is the absence of performance data and sustainability metrics. PPC Jamaica has just introduced a performance mechanism recently.
	<i>Implement EV policy targets for public fleet into procurement plans</i>	The ambitious targets of some project countries (e.g. Jamaica) for the conversion of the government fleet to EVs need to be implemented into the national procurement plans.
	<i>Better connect the Caribbean countries to the INGP network</i>	Although, all project countries are members of the Inter-American Network of Government Procurement (INGP), the trend-setting work of the INGP on sustainable green procurement has not been integrated into the procurement policies of the Caribbean countries.

Table 28: Recommendations for improvement in the procurement process

### **6.3 Recommendations for improvements of conditions for e-mobility**

*Set standards for charging infrastructure:* In order to facilitate the acceptance of EVs, the charging infrastructure needs to be standardized to accommodate different charging standards at the public charging stations. Only if the car owners can rely on the public infrastructure for their EV charging they will accept e-mobility as a serious option. Charging points with multiple (fast charging) sockets could be installed considering such standard.

*Prepare the electrical grid for the accommodation of e-mobility:* With the ambitious national and regional expansion plans for e-mobility the national electricity grids need to be reinforced, and intelligent charging needs to be enabled by the roll-out of smart meters.

*Increase share of domestic renewable electricity as fast as possible:* The main advantages of the transition to e-mobility like the massive reduction of greenhouse gases or the drastic reduction of fuel imports for hard currency are dependent on the share of domestic renewable energy used for e-mobility. Therefore, the domestic generation of renewable electricity should be increased as fast as possible.

*Establish professional battery recycling system:* A major environmental impact of e-mobility is related to the life cycle of the car batteries. In order to minimize possible environmental damages and to save scarce mineral resources car batteries need to be recycled. Presently most Caribbean countries are lacking a professional battery recycling system.

*Introduce mandatory battery passports:* In order to enable full battery recycling and to minimize upstream environmental impacts of car batteries, digital battery passports like the EU passport should be made mandatory for all EVs and car batteries.

*Introduce minimum safety standards for EVs and especially e-buses:* Experience shows that a lack of minimum safety standards for e-buses has led to price dumping competition in one project country at the expense of passenger safety. Therefore, minimum safety standards need to be introduced to ensure passenger safety.

*Educate the teaching staff of academic and skills training institutions for e-mobility:* As soon as the introduction of e-mobility reaches substantial market shares, academic and skills training institutions will have to train a major share of all EV service technicians. This requires that the teaching staff of these institutions is well trained in all aspects of e-mobility in order to enable professional training for e-mobility by these institutions.

*Equip academic and skills training institutions with state-of-the-art technical equipment:* Presently academic and skills training institutions are lacking state-of-the-art technical equipment for the training of service technicians for e-vehicles. Considering the planned fast increase in the number of EVs this lack of equipment will

lead to an undersupply of well-trained EV service technicians. Thus, the relevant training institutions need to be equipped with the necessary technical facilities as soon as possible.

*Train all fire fighters and tow truck drivers in the handling of EV accidents:* Due to the large batteries of EVs and their chemical composition (e.g. the use of Lithium) accidents with EVs have to be handled differently by rescue personnel, especially by fire fighters. Thus, any fire fighter confronted with the handling of an EV accident needs to have a solid understanding of the dangers and implications of the situation. The planned fast-growing share of EVs in the project countries will necessitate that all fire fighters will have special training for the handling of EV accidents.

Table 29 summarizes the recommendations for the improvement of the general situation for the introduction of e-mobility.

Area of improvement	Recommendation	Reason for the recommendation
Improvement of general conditions for e-mobility	<i>Set standards for charging infrastructure</i>	In order to facilitate the acceptance of EVs, the charging infrastructure needs to be standardized to accommodate different charging standards at the public charging stations.
	<i>Prepare the electrical grid for the accommodation of e-mobility</i>	With the ambitious national and regional expansion plans for e-mobility the national electricity grids need to be reinforced, and intelligent charging needs to be enabled.
	<i>Increase share of domestic renewable electricity as fast as possible</i>	The main advantages of the transition to e-mobility like the massive reduction of greenhouse gases or the drastic reduction of fuel imports for hard currency are dependent on the share of domestic renewable energy used for e-mobility.
	<i>Establish professional battery recycling system</i>	In order to minimize possible environmental damages and to save scarce mineral resources car batteries need to be recycled. Presently most Caribbean countries are lacking a professional battery recycling system.
	<i>Introduce mandatory battery passports</i>	In order to enable full battery recycling and to minimize upstream environmental impacts of car batteries, digital battery passports like the EU passport should be made mandatory.
	<i>Introduce minimum safety standards for EVs and especially e-buses</i>	Experience shows that a lack of minimum safety standards for e-buses has led to dumping price competition in one project country at the expense of passenger safety. Therefore, minimum safety standards need to be introduced to ensure passenger safety.
	<i>Educate the teaching staff of academic and skills training institutions for e-mobility</i>	As soon as the introduction of e-mobility will reach substantial market shares, academic and skills training institutions will have to train a major share of all EV service technicians.
	<i>Equip academic and skills training institutions with state-of-the-art technical equipment</i>	Presently academic and skills training institutions are lacking state-of-the-art technical equipment for the training of service technicians for e-vehicles.
	<i>Train all fire fighters and tow truck drivers in the handling of EV accidents</i>	Any fire fighter or tow truck driver confronted with the handling of an EV accident needs to have a solid understanding of the dangers and implications of the situation. The planned fast-growing share of EVs in the project countries will necessitate that all fire fighters and tow truck drivers will have special training for the handling of EV accidents.

Table 29: Recommendations for the improvement of the general conditions for e-mobility

The suggested recommendations can help to improve the general procurement situation in the project countries as well as the systematic and fast adoption of e-mobility. At the same time the full introduction of sustainable procurement can help to maximize the benefits and to minimize the possible environmental impacts of the transition to e-mobility in the region.

Although, the procurement policies and practices of the Caribbean countries differ widely, many recommendations could help other countries in the region to improve their procurement policies and practices as well.

#### **6.4 Ranking of the recommendations by stakeholders**

In a final stakeholder validation workshop held online on May 22<sup>nd</sup>, 2025, the participants were asked to rank the different recommendations according to their importance on a five-step scale from 'Not at all important' to 'Very important' and according to the level of deficit on a second five step scale from 'No deficit' to 'Severe/extreme deficit'. For each recommendation the numerical values (1 – 5) for the two answers were multiplied and aggregated across all answering participants. Thus, each recommendation was ranked on a scale from 1 to 25 points. The highest possible score of 25 points expresses the situation that a recommendation was seen as 'Very important' (5 points) and the level of deficit was seen as 'Severe/extreme' (5 points) at the same time, while the lowest possible score of 1 point reflects the judgement that this recommendation was qualified as 'Not at all important' (1 point) and 'No deficit' (1 point). The lowest level of importance assigned to any recommendation was 'Slightly important' (2 points), while the lowest level of deficit was seen as 'Milde deficit' (2 points).

The resulting ranking is shown in Table 30 below. The fractions on the importance scale are due to the calculation of average values across the different stakeholders.

Area of improvement	Recommendation	Importance according to stakeholder feedback	Rank according to stakeholder feedback
III.6	<i>Introduce minimum safety standards for EVs and especially e-buses</i>	22.5	1
I.2	<i>Adopt Sustainable Green Public Procurement Policy;</i>	20.3	2
II.1	<i>Implement a structured standard approach for sustainable green procurement</i>	20.0	3
III.2	<i>Prepare the electrical grid for the accommodation of e-mobility</i>	20.0	4
III.8	<i>Equip academic and skills training institutions with state-of-the-art technical equipment</i>	20.0	5
I.3	<i>Introduce Model Procurement Clauses</i>	19.0	6
II.4	<i>Improve the basic needs assessment for the procurement of government cars</i>	18.7	7
II.7	<i>Improve the monitoring of procurement success</i>	18.7	8
I.1	<i>Update and Expand Procurement Legislation Reform</i>	18.3	9
II.6	<i>Develop socio-economic procurement criteria for vehicle and EV procurement</i>	18.3	10
III.4	<i>Establish professional battery recycling system</i>	17.5	11
III.9	<i>Train all fire fighters in the handling of EV accidents</i>	17.5	12
II.2	<i>Improve the training of all procurement officers in sustainable green procurement</i>	17.3	13
II.8	<i>Implement EV policy targets for public fleet into procurement plans</i>	17.3	14
I.4	<i>Legal and Regulatory Support for Private Sector Participation</i>	17.0	15
III.7	<i>Educate the teaching staff of academic and skills training institutions for e-mobility</i>	15.0	16
III.1	<i>Set standards for charging infrastructure</i>	14.8	17
III.5	<i>Introduce mandatory battery passports</i>	14.8	18
II.5	<i>Develop specific criteria for vehicle and EV procurement</i>	14.7	19
III.3	<i>Increase share of domestic renewable electricity as fast as possible</i>	14.0	20
II.9	<i>Better connect the Caribbean countries to the INGP network</i>	11.7	21
II.3	<i>Install regional procurement help desk</i>	10.3	22

**Table 30: Ranking of recommendations by the participants of the stakeholder validation workshop**

It is interesting to note that three out of the five recommendations seen as most important are referring to the 'Improvement of the general conditions for the introduction of e-mobility' (*Minimum safety standards*, *Preparation of the electric grid* and *Equipment for training institutions*), while only two recommendations referring to the core of procurement policies and processes - the *Adoption of a sustainable green procurement policy* ('Legislative reform') and the *Implementation of a standard approach to green public procurement* ('Improvement of the procurement process') - ranked under the five most important recommendations. Nevertheless, the ranking shows a mixture of all recommendations for the three different areas, underlining the importance of the attempt to cover more than just improvements of the procurement policies and processes.

## 7. Conclusions:

From the desktop review and the in-depth interviews conducted a number of conclusions can be drawn about the situation of public procurement in the five project countries analysed:

- The three flagship countries of the project:
  - have established and functional procurement processes, which are a solid basis for the introduction of sustainable green public procurement policies and practices.
  - all have a special procurement act or law giving a solid framework for public procurement.
  - are members of the Inter-American Network of Government Procurement (INGP) and could benefit far more from the experience of the INGP in sustainable green public procurement.
  - have central coordinating procurement units familiar with the principles of sustainable green public procurement and decentral procurement units with procurement officers at the different ministries executing the procurement process, which still need to be trained in the specific aspects of sustainable green public procurement.
  - use the principle of 'best value for money' as basis for procurement decisions, which is a key precondition for the application of sustainable green public procurement.
  - are not using full Live Cycle Costing for procurement, which is one of the major building blocks of sustainable green public procurement.
  - are lacking specific selection criteria for sustainable green procurement in transport procurement and especially for EVs, which are a necessary precondition for the successful implementation of sustainable green procurement in transport.
  - have not signed the CARICOM procurement protocol, which weakens the possible positive effect of including sustainable green public procurement in the CARICOM protocol.
  - are still at the very beginning of the introduction of e-mobility, which underscores the importance of sustainable green public procurement of EVs for the success of the overall process.
  - have only a few EVs in the government fleets, which is in sharp contrast to the stated policy goals for the introduction of EVs and the conversion of the government vehicle fleets to e-mobility.

- Only Grenada has an enacted Sustainable Procurement Policy in 2019, which can be seen as a good example for strong policy support for SGPPP. The other flagship countries should follow this positive example.
- Antigua and Barbuda are still lacking a professionally organized public procurement system, although the country is signatory to the CARICOM Protocol on Public Procurement. It will be necessary to establish a professionally organized public procurement system, before sustainable green public procurement can successfully be introduced.
- Belize has established a professionally organized procurement system. No conclusions can be drawn towards the consideration of aspects of sustainable procurement, as virtually no interview could be conducted for Belize due to the general elections taking place during the time of the consultancy.
- The political ambitions concerning the fast introduction of e-mobility (until 2030) will be very difficult to realise, as they assume adoption rates for e-mobility, which are close to impossible in the short remaining time. It is recommended to scale the proclaimed policy goals to high but realistic introduction rates for e-mobility in order not to lose public support for targets which prove not to be achievable.
- The CARICOM Protocol on Public Procurement could be a valuable instrument for a CARICOM wide introduction of sustainable green public procurement policies and practices, if more CARICOM member countries would finally sign it.
- The CARICOM Protocol on Public Procurement will only have a substantial positive impact on the introduction of sustainable green public procurement, if the signatory countries whole heartedly apply and follow it. Practices like in the case of Antigua and Barbuda, where the protocol is signed but never applied undermine the entire effort.

It can be concluded that the flagship countries are already on their way towards sustainable green public procurement (SGPP), but that there are still a number of further steps to be taken to fully establish SGPP.

Although, the procurement policies and practices of the Caribbean countries differ widely, many recommendations could help other countries in the region to improve their procurement policies and practices as well.

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