



REPUBLIC OF ZAMBIA



Customs Handbook

For Solar PV Products
in Zambia

April 2022



Africa Clean Energy
Catalysing Africa's Solar Markets



TETRA TECH
International Development

© April 2022

This report was co-authored by the Africa Clean Energy Technical Assistance Facility and funded by The Foreign, Commonwealth & Development Office (FCDO)

Disclaimer

This report is provided on the basis that it is for the use of the UK Foreign, Commonwealth and Development Office only. Tetra Tech International Development Ltd will not be bound to discuss, explain or reply to queries raised by any agency other than the intended recipients of this report. Tetra Tech International Development Ltd disclaims all liability to any third party who may place reliance on this report and therefore does not assume responsibility for any loss or damage suffered by any such third party in reliance thereon.

Contents



LIST OF ACRONYMS	4
FOREWORD	5
ACKNOWLEDGEMENTS	6
1 HOW TO USE THIS HANDBOOK	7
2 ZAMBIA'S FISCAL POLICY FRAMEWORK FOR ENERGY ACCESS	8
2.1 CUSTOMS DUTIES	8
2.2 VAT EXEMPTIONS	10
3 ENERGY ACCESS PRODUCT IMPORTATION GUIDE	12
3.1 SOLAR LANTERNS	13
3.2 SOLAR HOME SYSTEMS	14
3.3 ENERGY ACCESS APPLIANCES AND TOOLS	16
3.4 MINI GRIDS	17
3.5 MISCELLANEOUS ENERGY ACCESS EQUIPMENT	19
4 SOLAR PV IMPORTATION PROCEDURES	20
4.1 IMPORTATION PROCESS MAP	21
4.2 PROCEDURES FOR IMPORTATION OF GOODS FOR CONSUMPTION	22
4.3 FORMS	25
4.4 FEES	26
5 MITIGATING IMPORTATION CHALLENGES	27
5.1 HOW TO OBTAIN PRE-CLEARANCE	27
5.2 ISSUE RESOLUTION AT THE BORDER	28
5.3 ISSUE RESOLUTION AFTER CUSTOMS CLEARANCE	28
6 PROVISION FOR ANNUAL REVIEW OF THE CUSTOMS HANDBOOK	30

Abbreviations



ACE TAF	Africa Clean Energy Technical Assistance Facility
AMDA	African Minigrid Developers Association
APC	Additional Procedure Code
ASYCUDA	Automated System for Customs Data
CE	Customs and Excise
CIGZ	Cities and Infrastructure for Growth Zambia
EA	Electricity Act
ERB	Energy Regulation Board
FCDO	Foreign, Commonwealth and Development Office
FIAP	Fiscal Incentive Assessment Programme
GOGLA	Global Off-Grid Lighting Association
GRZ	Government of the Republic of Zambia
IEC	International Electrotechnical Commission
IFC	International Finance Corporation
LED	Light-emitting diode
MOE	Ministry of Energy
MOFNP	Ministry of Finance and National Planning
NEP	National Energy Policy
OGS	Off-Grid Solar
OGTF	Off-Grid Task Force
OPPI	Office for Promoting Private Power Investment
PACRA	Patents and Companies Registration Agency
REA	Rural Electrification Authority
SAEP	Southern Africa Energy Programme
SHS	Solar Home Systems
SI	Statutory Instrument
SIAZ	Solar Industry Association of Zambia
VAT	Value Added Tax
ZABS	Zambia Bureau of Standards
ZDA	Zambia Development Agency
ZMW	Zambian Kwacha
ZRA	Zambia Revenue Authority

Foreword



In 2008, the Government of the Republic of Zambia (GRZ) removed customs duty and zero rated the VAT on several solar products through the Issuance of Statutory Instruments (SI) No. 32 and 33. This has led to a rapid evolution of the Off-Grid Solar (OGS) market and an influx of new solar-powered products on the market. This growth, however, was not without its challenges, some of which include discrepancies in the interpretation and application of the fiscal policy on solar PV products by both private and public actors.

With the advent of new solar powered technologies, it has become increasingly clear that additional exemptions are necessary. This led to the amendment of S.I. 32 and S.I. 33. In 2021, S.I. 32 was revoked and replaced by S.I. 102 of 2021 (Customs and Excise (Electrical Machinery and Equipment) (Suspension) Regulations). Also, S.I. 69 of 2014 (Value Added Tax Act - Zero-Rating), which revoked S.I. 33 of 2008, was amended by SI 104 of 2021. Furthermore, S.I. 102 was amended by adding some more products, by issuance of S.I. 17 of 2022.

The Government has also seen the need to provide additional clarification on the OGS products included on the exemption schedules. This Customs Handbook provides comprehensive guidance to stakeholders on the process of importing Solar PV products. Further, the Customs Handbook seeks to clarify the tax and duty exemptions for a range of Solar PV products being sold in Zambia. This will minimize varying interpretations and misapplication of tax exemptions by stakeholders. The Handbook is envisioned to contribute towards efficiency and easy access to solar products at costs that reflect the incentives provided and therefore increasing rates of access to electricity in Zambia, which are currently low.

In the Vision 2030, Zambia aspires to become a prosperous middle-income country by the year 2030. Accordingly, the Government of the Republic of Zambia set itself an energy sector target of universal access to clean, dependable, and affordable energy by 2030. Thus, provision of the tax incentives to the energy sector and clarifying these incentives, serves to actualize the achievement of this Vision by inspiring investor confidence, increasing private sector participation, as well as by promoting transparency in the sector.

Francesca C. Zyambo (Mrs),
PERMANENT SECRETARY,
MINISTRY OF ENERGY

Acknowledgements



This comprehensive Customs Handbook was developed in collaboration with the Government of the Republic of Zambia (GRZ), and in particular the Ministry of Energy, Ministry of Finance, Solar Industry Association of Zambia (SIAZ), African Mini grid Developers Association (AMDA), Global Off-Grid Lighting Association (GOGLA), Cities and Infrastructure for Growth Zambia (CIGZ), Off-Grid Task Force (OGTF), and the Southern Africa Energy Program (SAEP); while the Africa Clean Energy Technical Assistance Facility (ACE TAF) provided technical and financial support to the development of this Handbook.

The Customs Handbook is one of the avenues that the Government will use to clarify importation processes and reduce areas of misinterpretation by stakeholders. This will contribute to efficiency, increased access to solar products and ultimately to the attainment of the Government's goal of universal energy access.

I, therefore, want to thank the Government, SIAZ and all the other partners for supporting the development of this Handbook. I also thank all the stakeholders that participated in the consultative process leading up to the conclusion of this document. Special thanks go to the UK Government Foreign and Commonwealth Development Office (FCDO) funded programme, ACE TAF for the technical and financial support that it provided to develop this Handbook.

Finally, my gratitude goes to the Ministry of Finance, Ministry of Energy, and the Zambia Revenue Authority staff for their dedication to improving energy access for all Zambians.

Dingani Banda (Mr),

**COMMISSIONER GENERAL
ZAMBIA REVENUE AUTHORITY**







1. How to Use this Handbook



With the evolution of the off-grid solar (OGS) sector in recent years and the rising volume of OGS products into Zambia, there is a need to provide more clarity on the exemption status of commonly imported OGS products. This comprehensive Customs Handbook aims to help clarify importation processes and reduce areas of misinterpretation by private and public sector actors.

Section 2 of this handbook is a concise overview of fiscal policy in Zambia, with a focus on relevant Statutory Instruments 102 and 104 of 2021, and Statutory Instrument 17 of 2022.

Section 3 consists of a detailed importation guide for solar lantern, SHS, mini grid, and other energy access products that are commonly imported into Zambia. The guide provides the following information for integrated kits and component parts:

-  Product description
-  HS Code
-  Packing and shipping information
-  Illustrations
-  Applicable duty rates
-  Applicable VAT

Section 4 provides an importation process map as well as step-by-step description of each stage of the importation process. This section also includes information about the forms and fees required for importation.

Section 5 provides a brief overview of mitigation procedures in the event of importation challenges before clearance, at the border and after customs clearance.

Section 6 outlines plans for regularly updating future versions of this Customs Handbook.

2. Zambia's Fiscal Policy Framework for Energy Access



The Government of the Republic of Zambia (GRZ) adopted a goal of universal electrification in 2006 as part of the Vision 2030, Zambia's first ever written long-term strategy document. Support for the industry was further enshrined in subsequent National Energy Policies (NEPs), most recently NEP 2019.

In 1999, the substantive customs duty rate on solar panels was removed. The primary legal basis for further energy access fiscal incentives in Zambia are the Customs and Excise (Electrical Machinery and Equipment) (Suspension) Regulations, 2008 and the Value Added Tax Act (Zero-Rating)

(Amendment) (No. 2) Order, 2008, more commonly referred to as Statutory Instruments (SIs) 32 and 33 of 2008. However, since being gazetted in 2008 there have been no major revisions to these SIs.

However, in 2021, S.I. 32 was revoked and replaced by S.I. No. 102 of 2021 (Customs and Excise (Electrical Machinery and Equipment) (Suspension) Regulations). Also, S.I. 69 of 2014 (Value Added Tax Act - Zero-Rating), which revoked S.I. 33 of 2008, was amended by SI 104 of 2021. Additionally, S.I. 102 was again amended by the addition of some more products by S.I. 17 of 2022.

2.1 CUSTOMS DUTIES

SI 32 of 2008 suspended customs duties on the following products:

- ⦿ Florescent Lamps and bulbs
- ⦿ Solar Geysers
- ⦿ Solar Batteries
- ⦿ Inverters for Solar Power
- ⦿ Generators (both diesel and Petrol propelled)

SI 32 of 2008 did not include solar panels as the substantive duty rate for solar panels had been set at 0% in the First Schedule to the Customs and Excise Act (also known as the Customs Tariff Book) since 1999. Egg incubators have also been set at 0% since 1999. Both products continued to attract VAT at the applicable Standard rate.

In 2012, the Government removed the substantive customs duty rates on:

- Solar batteries
- Solar power inverters and generators.
- Sewing machines including solar sewing machines

These changes were done through the amendment to the First Schedule of the Customs and Excise Act (Customs Tariff Book) via the Customs and Excise (Amendment) Act No. 9 of 2012.

Table 1 List of Solar PV Products whose substantive duty rates have been removed

Product	Product description	HS Codes	Year removed
Solar panels	Photosensitive semiconductor devices, whether or not assembled in modules or made up into panels	8541.40.00	1999
Egg incubators	Solar productive use tool	8436.91.00	1999
Static converters	Inverters for solar power	8504.40.00	2012
Lead acid battery for piston engine	Solar batteries	8507.10.00	2012
Other lead acid accumulator	Solar batteries	8507.20.00	2012
Nickel cadmium batteries	Solar batteries	8507.30.00	2012
Nickel iron batteries	Solar batteries	8507.40.00	2012
Other accumulators	Solar batteries	8507.80.00	2012
Diesel generator (<75kVa)	Generators	8502.11.00	2012
Diesel generator (75-375kVa)	Generators	8502.12.00	2012
Diesel generator (>375kVa)	Generators	8502.13.00	2012
Petrol generator	Generators	8502.20.00	2012
Sewing machines	Solar productive use tool	8452.10.00	2012

Thus, only two products from SI 32 of 2008 still have substantive duty rates of 15% that are suspended through the SI (fluorescent lamps and bulbs and solar geysers). In 2019, with support from an intervention backed by the Off-grid Task Force (OGTF), SI 32 was amended to add Light-emitting diodes (LED) to the Schedule. This was via the issuance of the Customs and Excise (Electrical Machinery and Equipment) (Suspension) (Amendment) Regulations, 2019 (or SI 1 of 2019 for short). In addition, GRZ issued another SI 86 of 2019 to suspend duty on several products, including Nickel Metal Hydride and Lithium-ion batteries as shown in Table 2. SI

86 of 2019 suspends customs duty on products purchased by a person who is not a holder of a mining license.

Further, in 2021, with an intervention backed by the Africa Clean Energy Technical Assistance Facility (ACE TAF) and Ministry of Energy, Solar Charge Control Units and Solar Street Lights were added to the Schedule. This was via issuance of S.I. No. 102 of 2021 (Customs and Excise (Electrical Machinery and Equipment) (Suspension) Regulations which revoked S.I. 32. S.I. 102 was further amended by the addition of some more products, by S.I. 17 of 2022.

Table 2 - Products currently with substantive duty rates suspended through SI 86 of 2019, SI 104 of 2021 and as amended by SI 17 of 2022

HS Code	Description of Goods	Status of Suspension of Duty & Statutory Instrument No.
8413.81.00	DC pump irrigation	Suspended by SI 86 of 2019
8501.71.00	Photovoltaic DC generators: Of an output not exceeding 50 W	Suspended by SI 86 of 2019
8501.72.00	Photovoltaic DC generators: Of an output exceeding 50 W	Suspended by SI 86 of 2019
8501.80.00	Photovoltaic AC generators	Suspended by SI 86 of 2019
8507.50.00	Nickel-metal hydride	Suspended by SI 86 of 2019
8507.60.00	Lithium-ion	Suspended by SI 86 of 2019
8507.80.00	Other electric accumulators, including separators therefor, whether or not rectangular (including square).	Suspended by SI 102 of 2021
8537.10.00	Solar chargers for a voltage not exceeding 1,000V	Suspended by SI 102 of 2021
8539.31.00	Fluorescent, hot cathode	Suspended by SI 102 of 2021
8539.51.00	Light-emitting diode (LED) modules	Suspended by SI 102 of 2021
8539.52.00	Light-emitting diode (LED) lamps	Suspended by SI 102 of 2021

Table 2 - Products currently with substantive duty rates suspended through SI 86 of 2019, SI 104 of 2021 and as amended by SI 17 of 2022 (Continued)

HS Code	Description of Goods	Status of Suspension of Duty & Statutory Instrument No.
8541.41.00	Light-emitting diodes (LED)	Suspended by SI 17 of 2022
8541.42.00	Photovoltaic cells not assembled in modules or made up into panels	Suspended by SI 17 of 2022
8541.43.00	Photovoltaic cells assembled in modules or made up into panels	Suspended by SI 17 of 2022
8541.49.00	Other photosensitive semi-conductor devices	Suspended by SI 17 of 2022
8543.70.00	Other machines and apparatus being DSM devices (for smart meters)	Suspended by SI 86 of 2019
9405.41.00	Other electric luminaires and lighting fittings: Photovoltaic, designed for use solely with light-emitting diode (LED) light sources.	Suspended by SI 102 of 2021

2.2 VAT EXEMPTIONS

SI 33 of 2008 provided for zero-rating of VAT on solar panels as well as the other products that were listed in SI 32 of 2008. This was replaced by Statutory Instrument (SI) No. 69 of 2014 as the Principal VAT Zero-Rating Order. S.I. 69 was amended in 2019 to include:

LED Lighting

It was further amended in 2021, the Value-Added Tax Act (Zero-Rating) (Amendment) Order, 2021 (or SI 104 of 2021 for short) by the addition of more products. The VAT zero-rated solar PV products as at 30th April 2022 is listed in Table 3 below.

Table 3 - Zero-rated solar PV products through SI 104 of 2021

HS Code	Description of Goods	Status of VAT (Exempt/ Zero rated /Standard)
7321.11.00	Solar cooker /oven	Zero rated by SI 104 of 2021
7321.81.00	Other Solar appliances	Zero rated by SI 104 of 2021
8413.81.00	DC pump irrigation	Zero rated by SI 104 of 2021
8419.12.00	Solar water heaters	Zero rated by SI 104 of 2021
8504.40.00	Static converters	Zero rated by SI 104 of 2021
8502.11.00	Diesel or semi-diesel generators of an output not exceeding 75KVA	Zero rated by SI 104 of 2021
8502.12.00	Diesel or semi-diesel generators of an output exceeding 75KVA but not exceeding 375 KVA.	Zero rated by SI 104 of 2021
8502.13.00	Diesel or semi-diesel generators of an output exceeding 375 KVA.	Zero rated by SI 104 of 2021

Table 3 - Zero-rated solar PV products through SI 104 of 2021 (Continued)

HS Code	Description of Goods	Status of VAT (Exempt/ Zero rated /Standard)
8502.20.00	Generating sets with spark- ignition internal combustion piston engines	Zero rated by SI 104 of 2021
8507.10.00	Lead-acid, of a kind used for starting piston engines	Zero rated by SI 104 of 2021
8507.20.00	Other lead-acid accumulators	Zero rated by SI 104 of 2021
8507.30.00	Nickel-cadmium	Zero rated by SI 104 of 2021
8507.80.00	Other electric accumulators, including separators therefor, whether or not rectangular (including square).	Zero rated by SI 104 of 2021
8537.10.00	Solar chargers for a voltage not exceeding 1,000V	Zero rated by SI 104 of 2021
8539.31.00	Fluorescent, hot cathode	Zero rated by SI 104 of 2021
8539.51.00	Light-emitting diode (LED) modules	Zero rated by SI 104 of 2021
8539.52.00	Light-emitting diode (LED) lamps	Zero rated by SI 104 of 2021
8541.41.00	Light-emitting diodes (LED)	Zero rated by SI 104 of 2021
8541.42.00	Photovoltaic cells not assembled in modules or made up into panels	Zero rated by SI 104 of 2021
8541.43.00	Photovoltaic cells assembled in modules or made up into panels	Zero rated by SI 104 of 2021
8541.49.00	Other photosensitive semi-conductor devices	Zero rated by SI 104 of 2021
8543.70.00	- Other machines and apparatus being DSM devices (for smart meters)	Standard rated
9405.41.00	Other electric luminaires and lighting fittings: Photovoltaic, designed for use solely with light-emitting diode (LED) light sources.	Zero rated by SI 104 of 2021

SI 104 of 2021 also provides exemptions for Liquified Petroleum Gas (LPG), and Agricultural Equipment and Accessories. This customs handbook, however, does not include these items as the focus is on solar equipment and related products.

3. Energy Access Product Importation Guide



This section provides a comprehensive overview of energy access equipment commonly imported into Zambia. The section is divided into the following subsections:

1. Solar lanterns
2. Solar home systems (SHS)
3. Energy access appliances and tools
4. Mini grids
5. Miscellaneous

For each component product, the following information is provided:

- Product
- Product description
- HS Code
- Applicable tax rates (Import duty & VAT) as of 30th April 2022.
- Illustration


For integrated systems, the following information is provided:

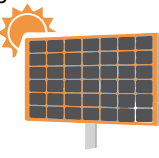


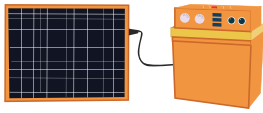
- Product or system category
- Component parts
- HS Code (for integrated system)
- Illustration
- Shipment details
- Packing details
- Additional features considered under this category
- Requirement for correlation of components to complete systems
- Applicable duty rate (for integrated system)
- Applicable VAT (for integrated system)



3.1 Solar lanterns

Solar lanterns (integrated kits)

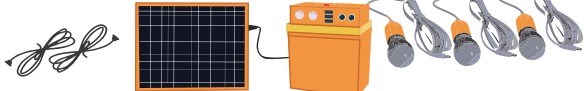
Product or system category	Solar lantern
Component parts	LED light, solar panel, built-in rechargeable battery, integrated control unit 
HS Code	Classified in accordance with the General Interpretative Rules (GIRs) of Classification
Sub-types considered under this category	Solar lantern with integrated radio
Shipment details	Single consignment
Packing details	System components packed in the same box System components packed in separate boxes i.e., solar panels and solar lanterns packed separately
Additional features considered under this category	May include secondary cables (e.g., USB).
Requirement for correlation of components to complete systems	None
Applicable duty rate	Dependent on Classification
Applicable VAT	Not applicable

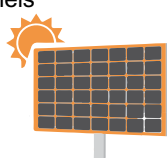


Solar Lantern Component parts				
Product	Product Description	HS Codes	Import Duty	VAT
 Solar Panels	Photovoltaic cells not assembled in modules or made up into panels	8541.42.00	0%	0%
	Photovoltaic cells assembled in modules or made up into panels	8541.43.00	0%	0%
	Other photosensitive semi-conductor devices	8541.49.00	0%	0%
 LED Lighting	Light-emitting diodes (LED)	8541.41.00	0%	0%
	Light-emitting diode (LED) modules	8539.51.00	0%	0%
	Light-emitting diode (LED) lamps	8539.52.00	0%	0%
 Lithium-ion battery	Solar Batteries	8507.60.00	0%	16%
 Solar charge control units	Solar chargers for a voltage not exceeding 1,000V	8537.10.00	0%	0%




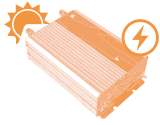

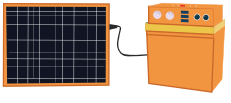



3.2 Solar Home Systems

Solar Home Systems (Integrated Kits)

Product or system category	Solar home system (complete kit)
Component parts	<p>Solar powered lighting system comprising of a solar panel, multiple LED lights, battery, inverter, charge control unit, casing and cabling.</p> 
HS Code	Classified in accordance with the General Interpretative Rules (GIRs) of Classification
Additional features considered under this category	<p>Control unit and battery can be separate or integrated</p> <p>Includes primary cables/ interconnecting cables (i.e. panel to control unit and lights to the control unit)</p> <p>Includes secondary cables (i.e. USB cables for charging phones and rechargeable torch)</p> <p>Includes rechargeable torch charged from the system</p> <p>Solar lighting system can be charged vis USB</p>
Shipment details	Single consignment
Packing details	<p>System components packed in the same box</p> <p>System components packed in separate boxes e.g., solar panels, lights, secondary cables, batteries and control units packed separately</p>
Applicable duty rate	Dependent on Classification
Applicable VAT	Not applicable

Solar Home Systems (Component Parts)				
Product	Product Description	HS Codes	Import Duty	VAT
 <p>Solar Panels</p>	Photovoltaic cells not assembled in modules or made up into panels	8541.42.00	0%	0%
	Photovoltaic cells assembled in modules or made up into panels	8541.43.00	0%	0%
	Other photosensitive semi-conductor devices	8541.49.00	0%	0%
 <p>LED Lighting</p>	Light-emitting diodes (LED)	8541.41.00	0%	0%
	Light-emitting diode (LED) modules	8539.51.00	0%	0%
	Light-emitting diode (LED) lamps	8539.52.00	0%	0%
 <p>Lithium-ion battery</p>	Solar Batteries	8507.60.00	0%	16%






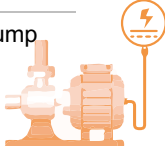


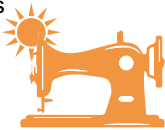

Solar Home Systems (Component Parts)

Product	Product Description	HS Codes	Import Duty	VAT
Lead acid batteries 	Solar batteries	8507.20.00	0%	0%
Static converters 	Inverters for solar power (Electrical transformers, static converters and inductors)	8504.40.00	0%	0%
Hybrid inverters 	Inverters for solar power (Electrical transformers, static converters and inductors) with charge control units	8504.40.00	0%	16%
Solar charge control units 	Charge control units for solar power (for a voltage not exceeding 1,000 V)	8537.10.00	0%	0%
Solar cables 	Insulated wire, cable (including co-axial cable) and other insulated electric conductors, whether or not fitted with connectors.	8544.49.00	25%	16%
Solar switches 	Electrical Apparatus for switching and protecting electric circuits.	8536.50.00	15%	16%
Solar breakers 	Electrical Apparatus for switching and protecting electric circuits.	8536.20.00	15%	16%



3.3 Energy Access Appliances and Tools

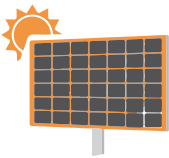










Energy Access Appliances and Tools

Product	Product Description	HS Code	Import Duty	VAT
Solar cooker/oven 	An apparatus for cooking food using the energy of direct sunlight	8416.20.00	0%	0%
DC fan 	Air or vacuum pumps, air or other gas compressors and fans	8414.51.00	15%	16%
DC fridge or freezer 	Refrigerators, freezers and other refrigerating or freezing equipment	8418.20.00	25%	16%
DC radio 	Reception apparatus for radio broadcasting	8527.19.00	25%	16%
DC television 	Video recording and reproducing apparatus	8528.71.00	25%	16%
DC irrigation pump 	Pumps for liquids, whether or not fitted with a measuring device.	8413.81.00	0%	0%
Egg incubators 	Solar productive use tool	8436.91.00	0%	16%
Hair clippers 	Shavers, hair clippers and hair-removing appliances, with self-contained electric motor	8510.20.90	15%	16%
Sewing machines 	Solar productive use tool	8452.10.00	0%	16%
Solar dryer 	Solar productive use tool	8479.89.00	10%	16%

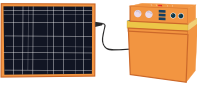







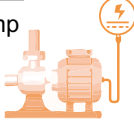





3.4 Minigrids

Minigrid Component Parts


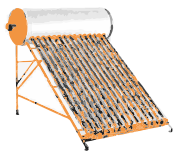


Minigrid Component Parts				
Product	Product Description	HS Code	Duty	VAT
Solar Panels 	Photovoltaic cells not assembled in modules or made up into panels	8541.42.00	0%	0%
	Photovoltaic cells assembled in modules or made up into panels	8541.43.00	0%	0%
	Other photosensitive semi-conductor devices	8541.49.00	0%	0%
LED Lighting 	Light-emitting diodes (LED)	8541.41.00	0%	0%
	Light-emitting diode (LED) modules	8539.51.00	0%	0%
	Light-emitting diode (LED) lamps	8539.52.00	0%	0%
Lead acid battery for piston engine 	Solar batteries	8507.10.00	0%	0%
Other lead acid accumulator 	Solar batteries	8507.20.00	0%	0%
Nickel cadmium batteries 	Solar batteries	8507.30.00	0%	0%
Nickel iron batteries 	Solar batteries	8507.40.00	0%	0%
Nickel-metal hydride battery 	Solar batteries	8507.50.00	0%	16%
Lithium-ion battery 	Solar batteries	8507.60.00	0%	16%
Other accumulators 	Solar batteries	8507.80.00	0%	0%
Static converters 	Inverters for solar power (Electrical transformers, static converters and inductors)	8504.40.00	0%	0%
Hybrid inverters 	Inverters for solar power (Electrical transformers, static converters and inductors) with charge control units	8504.40.00	0%	16%

Minigrid Component Parts

Product	Product Description	HS Code	Import Duty	VAT
Solar charge control units 	Charge control units for solar power	8537.10.00	0%	0%
Diesel generator (<75kVa) 	Diesel generator	8502.11.00	0%	0%
Diesel generator (75-375kVa) 	Diesel generator	8502.12.00	0%	0%
Diesel generator (>375kVa) 	Diesel generator	8502.13.00	0%	0%
Petrol generator 	Petrol generator	8502.20.00	0%	0%
Solar Cable 	Insulated wire, cable (including co-axial cable) and other insulated electric conductors, whether or not fitted with connectors.	8549.49.00	25%	16%
Solar breakers 	Electrical Apparatus for switching and protecting electric circuits or making connections to or in electric circuits.	8536.20.00	15%	16%
Solar switches 	Electrical Apparatus for switching and protecting electric circuits.	8536.50.00	15%	16%
DC irrigation pump 	Solar productive use tool	8413.81.00	0%	0%
Standard 20-foot shipping container 	Shipping container for power electronics	8609.00.00	5%	16%
Integrated Nodal Distributed Grid Management 	DSM devices (for smart meters)	8543.70.00	0%	16%
PV Module Support Structure (With SADC certificate) 	Steel solar module rack	7308.90.90	15%	16%



3.5 Other commonly imported solar equipment

Product	Product Description	HS Code	Import Duty	VAT
Florescent Lamps and bulbs 	Energy efficient lighting	8539.31.00	0%	0%
Solar Geysers 	Solar geyser	8419.19.00	0%	0%
Solar Street Lights 	Energy efficient lighting	9405.41.00	0%	0%
BOS - Electrical Components 	Balance of electrical system	8536.90.00	15%	16%

4. Solar PV Importation Procedures



Section 32 (1) of the Customs and Excise Act, Chapter 322 of the Laws of Zambia, provides that goods shall not be imported into Zambia without an entry and declaration being made and without such duties as may be imposed by law being paid or secured.

Subsection (2) further provides for the entry of imported goods be made at the customs port of first arrival for one of the following purposes for:

- ☼ **Consumption** - This is the importation where customs import procedures are conducted and concluded at the customs port of first arrival. Regulation 14 (2) of the Customs and Excise (General) Regulations, 2000 (SI 54 of 2000) provides for the entry of goods for consumption on importation at the customs port of entry.
- ☼ **Warehousing in a bonded warehouse** – This is the importation procedure where an importer of any dutiable goods may warehouse them in any warehouse duly licensed under section 55 of the Customs and Excise Act without payment of duty on the first importation and all goods so warehoused are subjected to the provisions of the Customs and Excise Act and any regulations or rules made thereunder. Importation for

warehousing is provided for under Section 57 of the Customs and Excise Act.

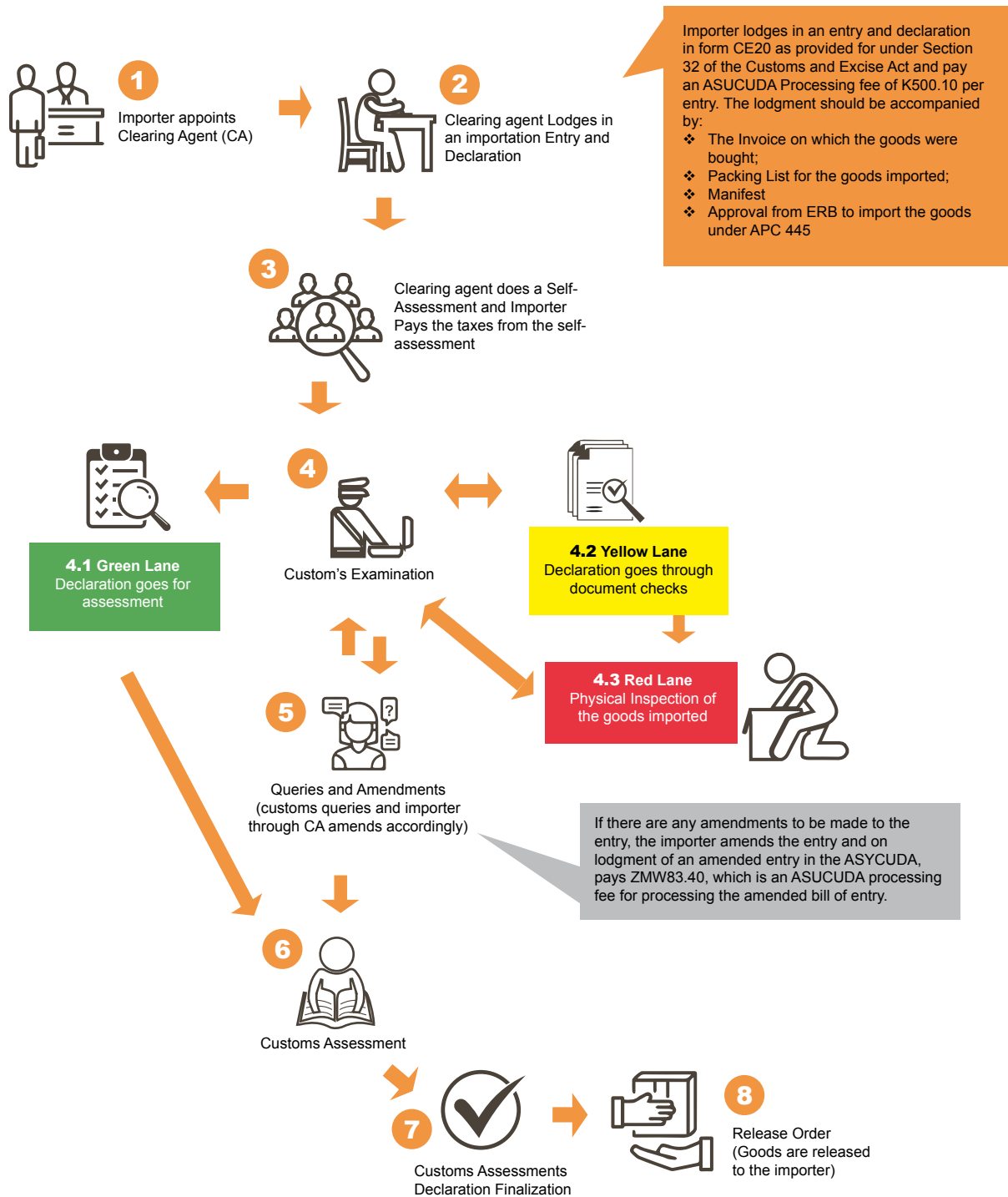
- ☼ **In-bond carriage to an inland place for further entry** - This is where an importer of any dutiable goods may, subject to approval by the Commissioner General, remove the goods in bond to a customs warehouse in accordance with Section 195 of the Customs and Excise Act and the provisions of the Customs and Excise Act relating to bonded warehouses, in so far as they are applicable to, and compatible with, such purposes, terms and conditions, apply to customs warehouses.

It must be noted that almost all the importation of goods for energy access is done for consumption where customs import procedures are conducted and concluded at the customs port of first arrival. This is because the other two forms (i.e., for warehousing in bonded warehouses and for in-bond carriage to inland place) for further entry are more costly as the importers incur additional costs in warehouse/ storage charges, removal of bond fees payable to the agents and handling costs at agency premises.



4.1 Importation Process Map

Below is the importation process map for Zambia. This importation process map may also be printed separately for customs agents or other stakeholders.





4.2 Procedures for Importation of goods for Consumption

This is the importation procedure and process for the importation of solar PV products where the customs procedures are conducted and finalized at the port of entry. This handbook does not differentiate between importation at a border crossing and at an airport as ZRA has only one official importation process.

Under the Taxpayer Charter, the Zambia Revenue Authority (ZRA) makes an undertaking to process a clean customs declaration within 1.5 days.

The importation procedure is as follows:



Step 1 – Appointment of a Clearing Agent by the Importer

The person intending to import goods is required by Section 184 of the Customs and Excise ACT to appoint a Customs Licensed Agent (clearing agent). In this regard the first requirement of a person intending to import goods into Zambia is to appoint a clearing agent who will help with the customs formalities at the border on their behalf.



Step 2 – Lodgment of Entry (Entry and Declaration)

On importation of the goods, an importer is, through their clearing agent, required to make an entry and declaration (lodge and entry in the ASYCUDA system) in form CE20 as provided for under Section 32 of the Customs and Excise Act. The Declaration should be made within 24 hours of goods arriving at the borders and must be accompanied by the following documentation:

- (a) Original Invoice on which the goods were bought;
- (b) Packing List for the goods imported; and
- (c) Manifest (road manifest if goods are imported by road, Airway bill if goods are imported by air,
Railway advise note if goods are imported by rail).

For pre-clearance of goods intended to be imported in accordance with Section 32B of the Customs and Excise Act, an importer intending to import goods is required to make an entry and declaration in form CE20 for duty assessment purposes, at least seven days before the goods arrive at a port of entry where customs formalities are to be conducted.

If the goods imported or intended to be imported, are listed in SIs 102 and 104 of 2021, and SI 17 of 2022 and have substantive duty rates and/or are VAT standard rated, the importer could choose to import such goods under APC 445. In this regard, the importer will need a letter of approval from ERB in addition to the documentation listed above.

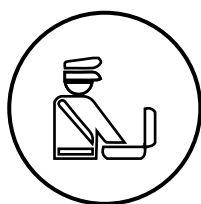


Step 3 – Self assessment and payment of any taxes due

On lodgment and entry, the importer, through their clearing agent, needs to make an own assessment and pay the assessed taxes. Taxes are required to be paid within five days (exclusive of Saturdays and Sundays and any public holiday) of the issue of an assessment notice. This is in accordance with Section 85 of the Customs and Excise Act, which requires every person who makes entry of goods imported, or to be imported, on making entry, to assess the customs value of the goods determined in accordance with the Fifth Schedule of the Customs and Excise Act.

The Fifth Schedule to the Customs and Excise Act provides for valuation of the goods for purposes of the tariff. It guides the importer on how to arrive at the value for duty purposes which the importer declares and on which they apply the customs duty rate and VAT to arrive at the assessed taxes. For Instance, Clause 2 of the Schedule guides on how to determine the transaction value, that is the price paid or payable for the goods when sold for export to Zambia, as the primary basis for valuation. It also provides what other costs should be added to arrive at the value for duty purposes such as transportation costs, insurance costs and any other charges associated with the importation of the goods. Using this guidance, an importer then calculates their own value for duty purposes on which the taxes are applied to arrive at own assessment of the taxes payable.

However, if Customs are not satisfied with the values declared by the importer, they may apply valuation reference materials (i.e. using identical or similar goods, which could have been imported and their values are in the ASYCUDA) to test declared customs values by the importer. If after doing this, Customs establishes that the assessment made by the importer under Section 85 of the Act is inconsistent or is incorrect, Section 86 of the Act gives powers to Customs to amend that assessment, and that amended assessment becomes the customs value for purposes of applying the customs duty rate and VAT to arrive at the correct assessed taxes.



Step 4 – Custom's Examination

The next stage is where Customs makes an examination. The Entry can go to Red Lane, Yellow Lane or Green Lane in the ASYCUDA system.

- (a) If the entry goes to **RED Lane**, Customs will have to undertake physical inspection of the goods to determine if the declaration is in line with the actual goods imported.
- (b) If the entry goes to **YELLOW Lane**, Customs may only do a documentary check. Documentary checks are mainly to verify that all required documentation is attached. For instance, if importer declares the import under APC 445 and all the required import documentation is attached except the letter of approval ERB, Customs will check and request for the approval letter from ZRA to be attached. Another example is where the value of the goods as declared on the invoice is very different from the Value in the ASYCUDA system; again,

Customs will undertake such documentary check to establish why the values are different. However, Customs could decide to send the goods to the Red lane even if the ASYCUDA assigned them the yellow lane in which case the goods would have to undergo a physical inspection.

- (c) If the entry goes to the **GREEN Lane**, it means everything is in order and Customs will release the goods. However, currently this is discontinued in the ASYCUDA system as per ZRA policy in place that requires all importations to be checked to avoid misclassifications.

In most cases, importation under ACP 445 is assigned the RED Lane and go through physical inspections as a safeguard measure by Customs to deter importers from including other items that may not qualify to be imported under ACP 445.



Step 5 – Queries and Amendments

This step is done at the time of examination of the entry in step 4. It's a stage where Customs query the declaration made in form CE20 and the importer, through their clearing agent, may decide to make an amendment to the declaration. This is normally the stage that delays the clearing of goods because it depends on how long the importer takes to respond to the queries and provide additional information/amendments required by Customs and for the Customs to respond to the response from the importer especially where an importer disputes the query.

For example, an importation can be declared under APC 445 but an approval from ERB is not attached to the declaration. Customs will then query that declaration and request for the approval letter from ERB. The importer will have to provide the letter from ERB, in which case the query will be cleared. If the importer fails to provide the letter to ZRA, it means the entry will have to be amended and the importer will be assessed the taxes payable and pay the taxes in accordance with the Fifth Schedule of the Customs and Excise Act.

Another example is error of misclassification or valuation. If the examining officer determines that the goods have been misclassified or undervalued, the officer may query the entry and requests for an amendment which the importer may agree to or may not agree to. If the importers agree to make the necessary amendments to the entry, the amended entry will have to be accompanied by payment of amendment fees, reassessed taxes and the accompanying penalties. If on the other hand the importer disagrees to the query, this will trigger an appeal process as outlined in Section 5.2 and the goods will only be cleared after the appeal process is completed.



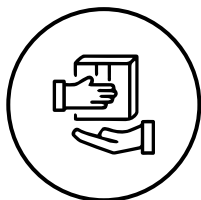
Step 6 – Custom’s Assessment

Once the examining officer clears the entry it then goes for assessment to now determine if the self-assessed taxes declared under step 3 were correct. At assessment level, queries and amendments could still occur. The assessor could query the entry in which case it goes back to the examination officer to consider the query raised at assessment level.



Step 7 – Assessed Declaration Finalization

If everything is clean after undergoing the above steps (i.e. all documentation provided and no queries and amendments or further queries and amendments), Customs accepts the shipment and entry and declaration made by the importer. The Chief Examination Officer/Manager undertakes final checks and finalizes the assessed declaration and releases the goods.



Step 8 – Release order

Once the Examination Officer undertakes the final checks and assessed taxes are paid or there is no tax to be paid as in the case of a declaration qualifying under APC 445, then a release order is issued, and the goods are released by Customs to the importer for consumption.

4.3 FORMS

The following are the required importation forms in accordance with the provisions of the Customs and Excise Act:

(1) The Customs and Excise Entry and Declaration Form (Form CE 20): An importer is required to make an entry and declaration of goods imported in Form CE20 as required by Subsection (2) of Section 32 of the Customs and Excise Act. Form CE20 is set out in the Eighth Schedule of the Customs and Excise (General) Regulations, 2000 (SI 54 of 2000). An importer is also required to attach the following documents to Form CE20:

- (a) Original Invoice on which the goods were bought;
- (b) Packing List for the goods imported; and
- (c) Manifest (road manifest if goods are imported by road, Airway bill if goods are imported by air, Railway advise note if goods are imported by rail).

(2) The Customs and Excise Query Notification and Request to Amend an Entry Form (Form CE120): In an event that the declaration made in Form CE20 is incorrect, the importer may request to amend the entry using Form CE120. Form CE120 is set out in the Eighth Schedule to the Customs and Excise (General) Regulations, 2000 (SI 54 of 2000).

(3) Letter of approval from ERB: This is only required for importation under APC 445 (i.e., when importation is done in SIs 102 and 104 of 2021, and SI 17 of 2022) where the substantive customs duty and VAT are to be waived. Under the current licencing framework which is now in the process of being revised following the enactment of the Electricity Act No.11 of 2019 and Energy Regulation Act No. 12 of 2019, ERB gives approval for importation of solar PV products for own use.

For imports for own use, the importer is exempt from being licenced by ERB. The importer has to

make a declaration in the ERB prescribed form and once accepted, ERB issues the letter of approval.

The general requirement for licencing is in accordance with Section 3 of the Electricity Act (EA), which provides for the licensing for Generation; Transmission; Distribution; and Supply of electricity whether hydropower or renewable energy such as solar.

The Energy Regulation (Licensing) Regulations, 1998 (SI 2 of 1998) as read together with the Electricity Act sets out procedures for licensing for energy undertakings. The procedures include a formal application to undertake a licensed activity in the energy sector such as generation, or supply of electricity using any form of energy, including solar. Only importation for own personal use is exempt from the licencing framework.

Specific documentations to be filed in support of the application include:

- a) 5 Years (for first time applicants) or 3 Years (for renewals) Business Plan
- b) Latest Signed Audited Financial Statements (for incorporated entities) by an audit firm registered with Zambia Institute of Chartered Accountants (ZICA) (from the previous years but not more than 2 years) (if business is already operational for over 2 years)
- c) Certificate of incorporation or certificate of registration of the applicant issued by relevant agencies within Zambia
- d) Proof of funds, i.e., bank statement (six months' bank statement for business already in existence for more than 6 months) or commitment letter from sponsor (on the same terms as the applicant)
- e) Current list of shareholders and directors issued by the relevant registration agencies in Zambia
- f) Latest annual returns from the relevant registration agency in Zambia
- g) Latest and valid Tax Clearance Certificate from Zambia Revenue Authority (ZRA)
- h) Submission of all plant commissioning test reports and financial models
- i) Review of licence application for meeting application requirements
- j) Technical and Financial assessment of the licence application
- k) Invoicing for licence assessment fees of 0.1% of total cost of investment, subject to passing technical and financial assessment
- l) Payment of license assessment fees
- m) Issuance of provisional license
- n) Gazetting for public comments for 30 days as per law
- o) Issuance of standard generation licence within 60 days

4.4 FEES

All fees to be paid under the Customs and Excise Act are prescribed in the First Schedule of the Customs and Excise (General) Regulations, 2000 (SI 54 of 2000) and are payable to the ZRA as ASYCUDA processing fees at the time of the lodgement of an entry into the ASYCUDA. The following are the fees prescribed to be paid by importers:

- Fees to be paid on the entry of goods: The fee to be paid on entry of goods is set out in Part 8 of the First Schedule as provided for under Regulation 134 of SI 54 of 2000 and is currently set at a sum equal to one thousand six hundred and sixty-seven fee units (ZMW500.10) for each entry; and
- Fees to be Paid on any correction to a bill of entry: The fee to be paid on any correction to a bill of entry that is required to be made subsequent to the lodgement of the entry is provided for under Regulation 130 of SI 54 of 2000 and is currently set at a sum equal to two hundred and seventy eighty fee units (ZMW83.40) for each corrected entry.

5. Mitigating importation challenges



Importation delays are a major challenge for a landlocked country like Zambia. Among the trade facilitation initiatives that ZRA is currently undertaking to mitigate importation delays are pre-registration and pre-clearance. These processes are provided for under Section 32B of the Customs and Excise Act.

Pre-registration is the lodgement of documents with Customs prior to importation of the goods. This process is legally required. Pre-clearance is the facility that allows importers to lodge their documents with Customs and then proceed to assess the declaration and release the documents before the goods actually arrive at the border. However, the customs interventions which require the presence of the actual goods are carried out when the goods arrive at the border. For example, the law provides that, where Customs deem it necessary, the pre-cleared goods may be subject to a physical inspection at the time that the goods arrive at the customs port. This can be done randomly by Customs or if the Risk Management system in the ASYCUDA assigns a RED lane to the declaration.

5.1 HOW TO OBTAIN PRE-CLEARANCE

Subsection (1) of Section 32B of the Customs and Excise Act requires the person or company intending to import goods to make a declaration of the goods intended to be imported at least seven days before the goods arrive at a port of entry (border) where customs formalities are to be conducted. It also provides for Customs to accept the entry of goods for customs purposes five days prior to the arrival of the goods at the border.

Requirements for pre-clearance

For pre-clearance of goods, the person intending to import the goods should meet the following requirements:

- ☉ Declare the goods before they arrive at the border;
- ☉ Ensure that the goods match the declaration;
- ☉ Ensure that they attach the following documents:
 - o Invoices
 - o Airway bills (if importation is by air), cargo/road manifests (if importation is by road) or Railway advise note (if importation is by rail)
 - o Approval letter from ERB (if the goods to be imported have substantive customs duty and VAT rates, which the person intending to import wants waived by declaring the importation under APC 445)
- ☉ Original documents should be submitted to Customs officers at the border at the time the goods arrive.

Amendment to the pre-clearance declaration

Should there be differences between the declaration and the actual goods when they arrive at the customs port, either the importer or Customs may request for an amendment to the declaration. However, any false declarations may lead to seizure of the goods. In addition, where Customs deem it necessary, the pre-cleared goods may be subject to a physical inspection at the time that they arrive at the customs port.

Benefits of Pre-clearance

Some of the benefits of Pre-clearance include the following:

- It allows for a shorter clearance time of goods by Customs, as the customs formalities will have already been undertaken even before the goods arrive at the customs port;
- It reduces dwell time by importers at the borders; and
- It reduces congestion at the borders and also reduces cost of doing business

5.2 ISSUE RESOLUTION AT THE BORDER

There are instances where issues arise during or after Customs clearance that may not be resolved amicably, which require an appeal procedure. If a query is raised by an examining officer on the ASYCUDA system, the ZRA procedures require that the query is resolved within 48 hours. If the importer does not respond to the query within 48 hours, Customs will enter a force acceptance and the entry will have to be amended accordingly. However, an importer may reject the query raised by the examining officer. If the importer rejects the query, the query is sent to the Centralized Process Centre (CPC) Manager/Station Manager to resolve it.

If the matter is not resolved by the CPC Manager, an appeal process then starts and at this point, it will be done outside the ASYCUDA system. An importer can appeal to the Regional Assistant Commissioner. If the Regional Assistant Commissioner fails to resolve the matter, the importer can make appeal to the Deputy Commissioner – Operations at ZRA Head Office. The importer can make further appeals to the Commissioner and then to the Commissioner General, respectively.

If the matter does not get resolved by the Commissioner General. Importer can still appeal to the Revenue Appeals Tribunal as provided under Section 190 of the Customs and Excise Act.

If still not satisfied, an importer can seek further recourse to the Court of Appeals and the Supreme Court, respectively.

5.3 ISSUE RESOLUTION AFTER CUSTOMS CLEARANCE

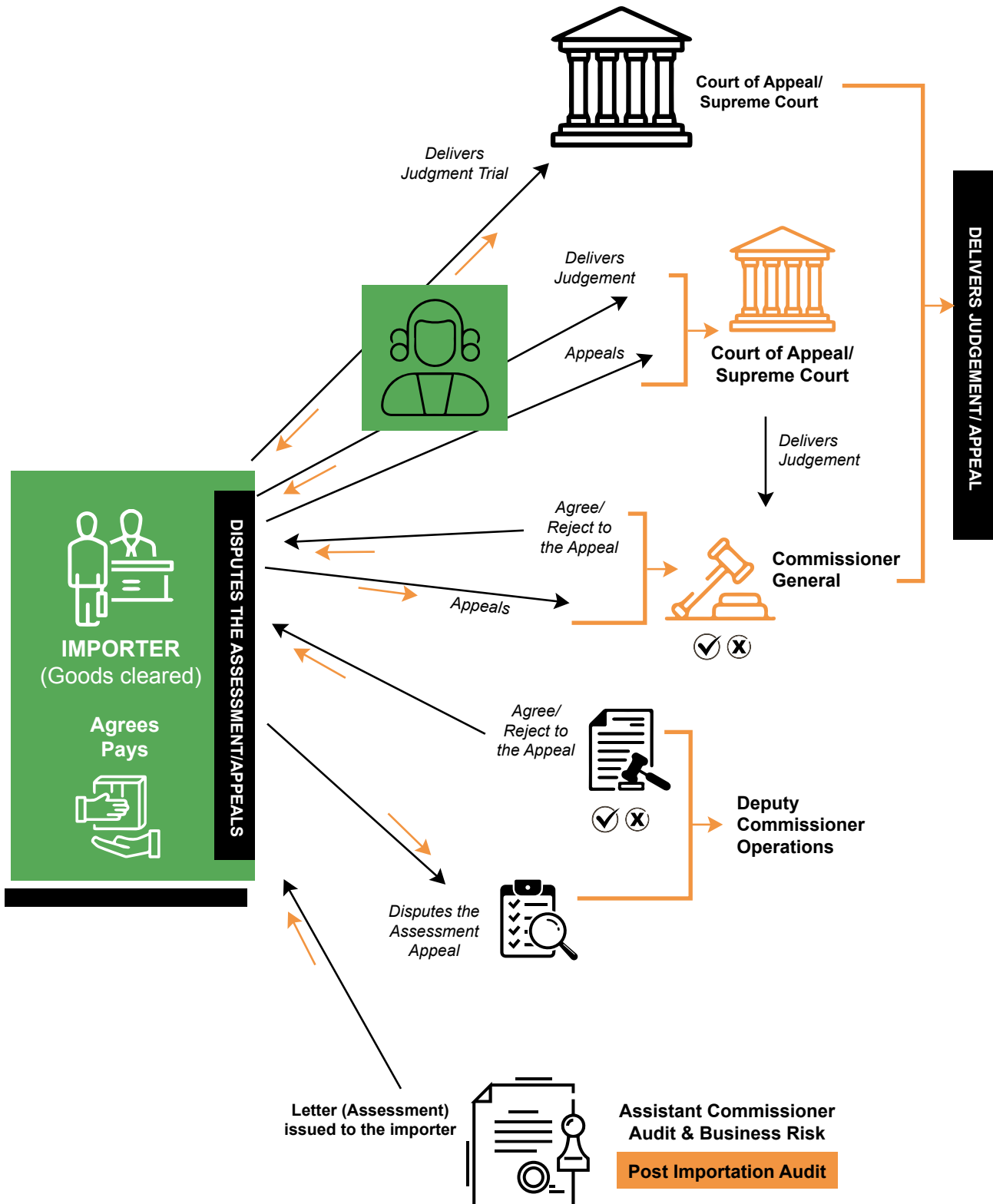
There are also instances where goods are cleared by Customs at the border and released for consumption but when ZRA carries out post importation audits and discovers some anomaly and revisits the declaration. Under this circumstance, the Assistant Commissioner, Audit and Business Risk issues a letter to the importer which letter is regarded as an assessment.

Once the letter is issued by the Assistant Commissioner, Audit and Business Risk, the importer is given 5 days within which to respond or appeal to the assessment as contained in the letter issued by the Assistant Commissioner, Audit and Business Risk. However, there is no time limitation on when ZRA should respond once the importer appeals against the ZRA assessment during the post audit, which means ZRA can take as much time as necessary. However, at the end of the dispute and should the importer lose the case, ZRA will charge interest and penalties for the entire period from the time of importation until the case is resolved.

If the importer disputes the assessment in the letter from the Assistant Commissioner, Audit and Business Risk, the importer can appeal to the Deputy Commissioner – Operations at ZRA Head Office and if still not satisfied, the importer can make a further appeal to the Commissioner General.

If the matter does not get resolved by the Commissioner General, the Importer can then appeal to the Revenue Appeals Tribunal as provided for under Section 190 of the Customs and Excise Act. If either party (importer or ZRA) are not satisfied with the Revenue Appeals Tribunal judgement, they can seek further recourse to the Court of Appeals and the Supreme Court, respectively. Below is the appeal process map.

Below is the appeal process map.



6. Provision for annual review of the Customs Handbook



This Customs Handbook is intended to be a living document that provides guidance on the applicable tax treatment of energy access products and importation processes into the Republic of Zambia. To remain effective, the Ministry of Energy, in collaboration with the Ministry of Finance and Zambia Revenue Authority will provide the Handbook with updates, whenever there are any tax policy or tax administrative changes on these products.

A Fiscal Incentive Assessment Programme (FIAP), a set of tools for GRZ to assess the impact of fiscal incentives on providing energy access in Zambia, has been introduced and will assist in informing any policy or administrative changes that the Government will be making regarding the tax treatment of solar PV products. An annual review of this Customs Handbook and the FIAP will be undertaken to update them accordingly.



Customs Handbook

For Solar PV Products
in Zambia



Africa Clean Energy
Catalysing Africa's Solar Markets



**ZAMBIA
REVENUE
AUTHORITY** | *My Tax
Your Tax
Our Destiny*



TETRA TECH
International Development