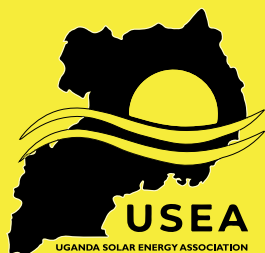


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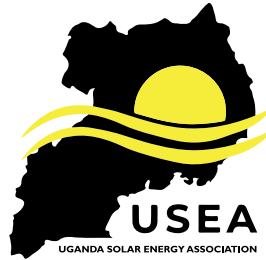
Uganda Solar Energy Association Handbook on
SOLAR TAXATION

Supported by



Developed by





Uganda Solar Energy Association (USEA)

Vision

A vibrant institution that promotes the provision of solar energy solutions that match national, regional and international standards

Mission

To Strengthen Uganda's solar industry, facilitate business growth and promote self-regulation

In the bid to push for Universal access to affordable, reliable and sustainable energy, goal 7 of the United Nations sustainable development goals ensures access to affordable, reliable, sustainable and modern energy for all by 2030. This requires expanding access to electricity as well as improving energy efficiency and increasing the share of renewable energy.

The government of Uganda, in the 10- year Rural Electrification Strategy and Plan (RESP) of 2013- 2022, set a target to increase access to electricity in rural areas to 26% by 2022 with the view of achieving this universal access by 2030. While this plan does not contain a clear roadmap with milestones, specific actions and related budget for solar market acceleration, they do reflect the commitment of the Government to supporting off-grid renewable energy as part of its electrification policy and objectives.

Therefore the solar industry members organized within the USEA Umbrella align with government to reach these electrification goals and coordinate the development of such policy briefs.

Foreword

Energy access remains elusive for most Ugandans due to affordability and remote locations. The Uganda Solar Energy Association (USEA) is committed to and has made major efforts in the lobbying for tax incentives, thus allowed a fall in pricing of solar products. More Ugandans are therefore getting connected to home solar systems, thus significantly increasing national access to energy. Currently, energy access is estimated at 23%, with the un-met energy need standing at over 77%. Solar energy is, therefore, an alternative power source, yet many Ugandans still can't afford.

Before the advent of tax incentives on solar generation equipment, the cost of doing solar business was extremely high. And for end users, it further meant digging deeper into their pockets. Uganda's tax policy, then, provided for tax exemption on selected solar items like solar panels, but did not cater for other solar products. This kept the cost of doing business albeit a little lower, significantly high, making solar energy out of reach for the rural poor that need it the most. Recent improvements in tax policy provide for exemption of additional items such as solar batteries. This decision is seen by many stakeholders as a right step towards promoting Solar Energy Sector and electrifying the rural poor. USEA now boasts of having at least 1.5 million homes connected to solar systems through its

membership, an achievement that would otherwise not have been possible without some tax incentives. However, there are still some grey areas within the tax laws

Inconsistent application of the tax laws remains a hinderance to the growth of the solar sector and to energy access. USEA has embarked upon a process in collaboration with relevant government bodies to streamline the taxation policy for solar products. Whereas taxation laws are in place, some areas remain ambiguous and subject to interpretation. This handbook is part of many USEA initiatives to guide USEA members, URA customs officials, revenue collection officials, government officials and other stakeholders to understand how to apply taxes related to the sector in accordance with the existing law. We continue to strive for the growth of the sector and hope that this handbook is helpful to the intended readers.

Joyce Nkuyahaga
BSc. (Elec) MSc. (Elec) MBA. (Fin)



The development of the USEA hand book on solar taxation is a result of a recommended action by off-grid solar industry players who support the Energy Africa Uganda compact to bring clarity, certainty and consistence pertaining the administration and treatment of taxes and incentives for solar products. Energy Africa compact focuses on improving the enabling environment for businesses to sell solar systems, removing policy and regulatory barriers to market expansion, coupled with strong support through seed capital and working capital for private sector businesses. A major part of Energy Africa compact is that it brings together a range of partners to ensure a coherent approach. USEA is among the supporter of the Energy Africa Uganda compact.

The USEA Handbook on Solar taxation is produced with support from UNCDF in partnership with UK Aid with support from UK Government.





Preamble

The progress in the East African Community in rolling out solar energy access to millions of target communities that are currently disadvantaged by limited access to national electricity grids has been strongly enabled by the exemptions provided within the EAC Customs Management Act and in specific favourable treatment within the Common External Tariff

However, the off-grid solar industry has been continually hampered by inconsistent interpretation and application in fiscal policy incentives and lack of support for the sector, both within individual countries and across the region. The lack of clarity in import regulations, customs and tax policy has led to continual delays in importation for companies and has contributed to unhelpful misunderstandings between solar energy players and tax and customs authorities.

USEA intends to bridge this communication gap by developing a handbook for solar taxation in Uganda for all stakeholders including customs officials, importers, shipping and clearing agents as a reference resource on off-grid products, parts and accessories.

This is in line with the spirit of trade facilitation, simplification, modernization and harmonization of export and import processes.

This hand book will act as a comprehensive guide to solar products, parts and accessories as a reference document and training resource for individuals, firms, officials and organizations involved in the movement, release and clearance of off-grid solar products.

The essence of this book is that;

- a) It identifies the most common exempted, non-exempted and zero rated solar products and energy efficient appliances (core components, products, parts and accessories critical for delivering off-grid solar energy access)
- b) It identifies and provides applicable national/ regional tariff codes
- c) It identifies and provides applicable duties and taxes in the EAC in particular Uganda
- d) It acts as a reference customs handbook for tax matters on solar products



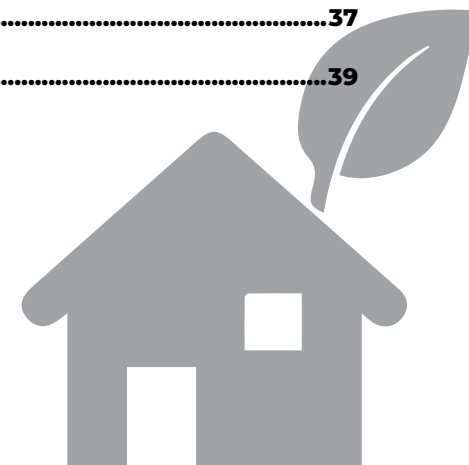


Table of Contents

Foreword.....	i
Preamble	iii
List of Acronyms	vii
Section 1 Brief Overview of the tax laws and regulations with respect to the solar sector.....	1
Corporation Tax.....	2
Value Added Tax (VAT).....	3
Withholding Tax and Infrastructure Levy	4
Customs Duties (Import procedures and required documents).....	5
Pre-Export Verification of Conformity (PVoC)	9
Section 2 Regional Updates East African Community	11
The East African Community (EAC)	12
Section 3 Common exempted, and non-exempted solar products	15
From Micro PV to Mini-grids to Utility Scale	16
PV Pico versus Solar Home Systems	23
Section 4 Customs Harmonized System Coding, Classification and Tax Treatment of solar products	25
FAQs Frequently Asked Questions.....	43
Appendices.....	45
Appendix 1.....	46
Appendix 2	47
Appendix 3.....	51
Disclaimer	57

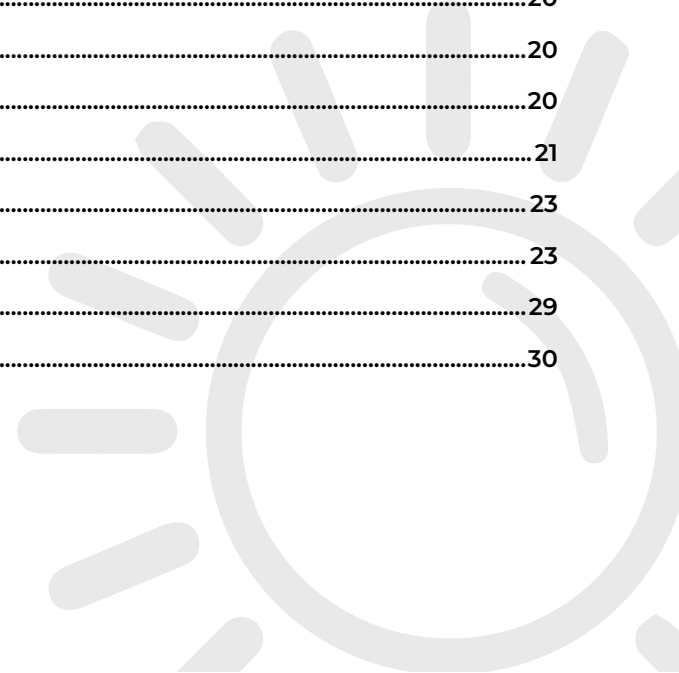
List of Tables

Table 1- Common terms used in customs.....	6
Table 2- Import procedures and required documents.....	7
Table 3- Differences between a Deep cycle battery and a normal car battery	20
Table 4- Range of solar powered units	22
Table 5- Pico –PV System	26
Table 6- Solar Home System (SHS)	27
Table 7- Examples of some brands from solar players and systems in each level	28
Table 8- Key Components.....	31
Table 9- Core Loads/Applications i.e. lighting.....	35
Table 10- Enhanced DC Powered Efficient Appliances	37
Table 11- Other enhanced loads for Productive Use.....	39



List of Figures

Figure 1: Micro-grid.....	16
Figure 2: Photovoltaic Array.....	17
Figure 3: Photovoltaic Cell	17
Figure 4: Charge Controllers.....	18
Figure 5: Inverters	19
Figure 6: Flooded Lead Acid Batteries	20
Figure 7: Absorbent Glass Matt (AGM)	20
Figure 8: Gel batteries.....	20
Figure 9: Lithium-ion battery.....	20
Figure 10: Illustration of a typical stand-alone PV System powering DC and AC loads	21
Figure 11: Pico System Illustrations	23
Figure 12: Plug and play SHS illustrations.....	23
Figure 13: Illustrations of some market SHS systems.....	29
Figure 14: Illustrations of some market SHS systems.....	30



List of Acronyms

AC	Alternating Current
AGM	Absorbed Glass Matt
ASYCUDA	Automated System for Customs Data
CA	Clearing Agent
CET	Common External Tariff
DC	Direct Current
DO	Delivery Order
DCB	Deep Cycle Battery
DTA	Double Taxation Agreement
EAC	East African Community
EACCMA	East African Community Customs Management Act 2004
EACREE	East African Centre of Excellency for Renewable Energy and Efficiency
EAREF	East Africa Renewable Energy Federation
FAQ	Frequently Asked Questions
FF	Freight Forwarder
GATT	General Agreement on Trade and Tariff
HSC	Harmonized System Code
ICC	International Chamber of Commerce
ID	Import Duty
ILV	Infrastructural Levy
ISA	International Solar Alliance

ITA	Income Tax Act Cap 340
KW	Kilo Watts
LED	Light Emitting Diode
MTF	Multi-Tier Framework (Survey)
MOU	Memorandum of Understanding
PAYG	Pay As You Go
PL	Packing List
PV	Photovoltaic
PVoC	Pre-Export Verification of Conformity.
SAD	Single Administrative Document
SHS	Solar Home System
UNBS	Uganda National Bureau of Standards
UNCDF	United Nations Capital Development Fund
UNCTAD	United Nations Conference on Trade and Development
URA	Uganda Revenue Authority
USEA	Uganda Solar Energy Association
VAT	Value Added Tax
VATA	Value Added Tax Act Cap 349
WCO	World Customs Organization.
WHT	Withholding Tax
Wp	Watt peaks

Section 1

**Brief Overview of the tax laws
and regulations with respect to
the solar sector**



Corporation Tax

Solar companies are required to comply with corporation tax obligations. Uganda's corporation tax regime is governed by the Income Tax Act Cap 340 (ITA). The corporate tax rate is 30%.

A company is tax resident in Uganda for a year of income if it is incorporated under Ugandan law, the management and control of its affairs are exercised in Uganda or the majority of its operations are carried out in Uganda.

A resident corporate entity is subject to tax on its worldwide income. A non-resident person is subject to tax only on Uganda-sourced income.

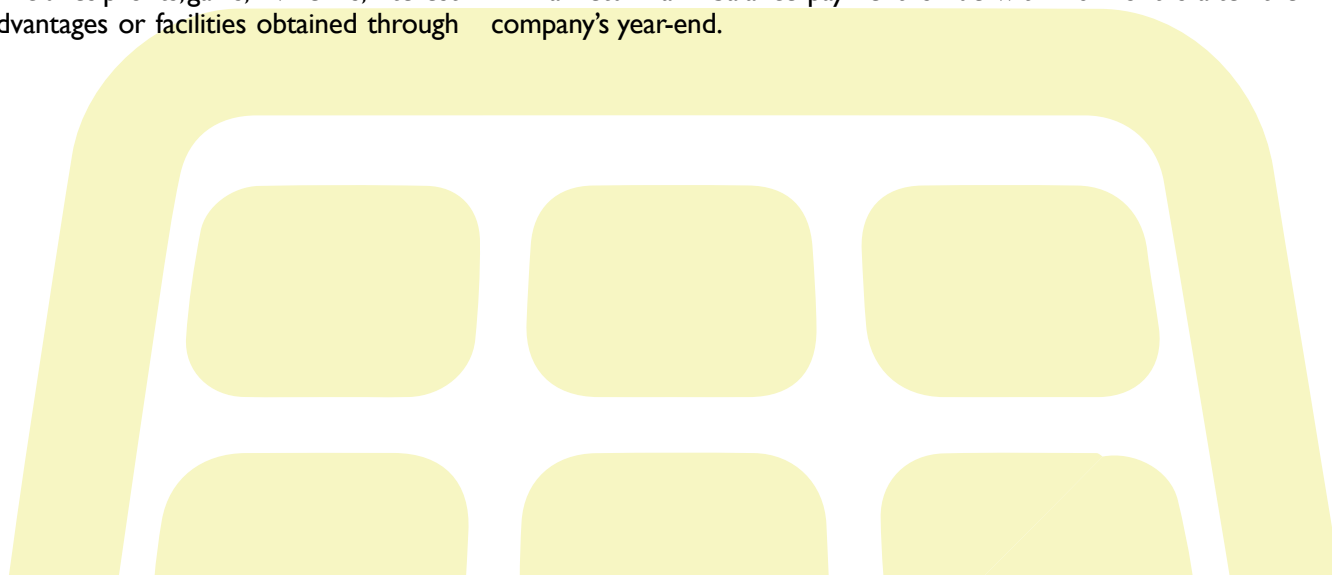
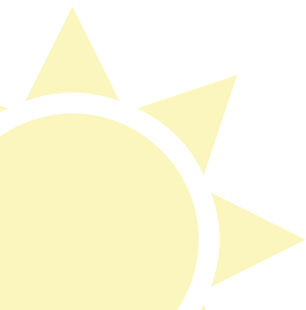
Under the ITA, taxable income includes profits, gains, dividends, interest and non-monetary benefits, advantages or facilities obtained through gainful means etc.

Expenditure and losses incurred by a company during the year of income are deductible from taxable income to the extent to which they were incurred in the production of income included in gross income.

A provisional income tax return must be filed within 6 months of the commencement of the company's accounting year and an amendment to the return may be submitted by the end of the accounting year if the estimated tax liability is revised.

The estimated tax for the year is payable in two installments; before the end of the first 6-month period and before the company's year-end.

A final return and balance payment is due within 6 months after the company's year-end.



Value Added Tax (VAT)

VAT (also referred to as Goods and Services Tax in some jurisdictions) is a consumption tax. It is charged on every taxable supply made by a taxable person, every import of goods other than an exempt import and the supply of imported services other than an exempt service, by any person. Supplies are categorized into Standard rated, exempt or zero rated supplies. In Uganda, the rate applied to standard rated supplies is 18%.

Accounting for VAT

VAT in Uganda is accounted for on accrual basis unless the tax payer gets permission from the commissioner to account for VAT on a cash basis.

Under the VAT Act, a supply of goods or services takes place on the earliest of the date on which-

- a) The goods are delivered or made available, or the performance of the service is completed;
- b) Payment for the goods or services is made: or
- c) A tax invoice is issued.

Input VAT

A taxable person is allowed input VAT on taxable supplies made to the person and import of goods made by that person.

When a tax payer deals in the supply of both taxable and exempt supplies (like is the case with many solar companies), they are required to apportion the Input credit every month when filing a return and also make an end year adjustment at the end of each calendar year.

VAT Reporting Obligations

All taxable persons are required to file a return for every tax period (calendar month) and pay tax (if any) within 15 days after the end of the month.

Exempt Supplies

Section 20 of the VAT Act states that an import of goods is an exempt import if the goods are exempt from customs duty under the Fifth Schedule of the EAC CMA 2004 except compact fluorescent bulbs with a power connecting cap at the end, and lamps and bulbs made from Light Emitting Diodes

(LED) technology for domestic and industrial use or would be exempt had they been supplied in Uganda.

Section 19 of the VATA, Cap 349 provides that a supply of goods or services is exempt if it is specified under the Second Schedule of the Act. Some of the goods in the schedule of the VAT Act relating to the solar industry include the following;

- The supply of photosensitive semiconductor devices, including photovoltaic devices, whether or not assembled in modules or made into panels; light emitting diodes, solar water heaters, solar refrigerators and solar cookers.
- The supply of deep cycle batteries, composite lanterns and raw materials for the manufacture of deep cycle batteries and composite lanterns.
- The supply of any goods and services to the contractors and subcontractors of solar power

Withholding Tax and Infrastructure Levy

Withholding tax

Withholding tax is a system of tax collection in which a payer (withholding agent) in respect of specified payments is required to deduct a specified portion of the payment entitled to the payee and remit that portion to the Revenue authority.

Section 123 (1) of the ITA requires the withholding agent to remit to the URA the amount that was withheld or should have been withheld within 15 days after the month in which the payment subject to withholding tax was made by the withholding agent.

Some of the payments that attract withholding tax if they are derived by residents or are sourced in Uganda include; Payments to resident professionals; Natural resource payments; Management charges; Interest and dividends.

Any payments of professional fees, consultancy fees or management fees will attract withholding tax at the rate of 6% (residents) and 15% (non-residents).

Goods or services supplied to the government of Uganda or government institutions also attract WHT at the rate of 6% (residents) and 15% (non-residents supplying services).

Imports of goods into Uganda also attract WHT at the rate of 6% and this is paid by the importer unless exempted from WHT.

Infrastructural levy

This is a levy that is imposed on goods imported from outside the East African Community (EAC) in order to collect funds needed for regional infrastructure projects.

All imported goods (from outside EAC), except those exempted under the law, are subject to a levy of 1.5 per cent on the customs value of imported goods.

The levy is intended to mobilize funds for regional infrastructure projects that will assist in improving the infrastructure (e.g railway infrastructure development) and reduce the cost of transport and the cost of doing business in the region.

Customs Duties (Import procedures and required documents)

Customs duty is levied on goods imported or exported from Uganda at specific or ad valorem rates. The East African Community Customs Management Act 2004 (EACCMA, 2004), the East African Community Common External Tariff (EAC CET) form part of the legal framework for customs operations in Uganda and the region as a whole.

Solar Energy technology has been evolving over time and (with many new products and combinations of products) this poses a challenge in the classification and hence taxation of these products. Due to the changing technology, some importers may be taxed unfairly even when the government policy is to promote the use of renewable energy.

Documents for importation of goods

The following import documents may be required for purposes of making a declaration to customs:

- a) A Bill of lading or airway bill;
- b) An Insurance certificate;

- c) Commercial invoices
- d) A Certificate of Origin
- e) Permits for restricted goods
- f) Purchase order
- g) Packing list
- h) Sales contract; and,
- i) Any other supporting documents

Valuation of imported Goods

Goods imported into the country from without the EAC must be valued for taxation purposes i.e. a customs value must be determined. The customs value forms the basis for computation of customs duties which include import duty, Value Added Tax, Withholding tax, Excise duty and other duties e.g. environmental levy, infrastructure levy. Applicable tax rates are defined in the Common External Tariff (CET).

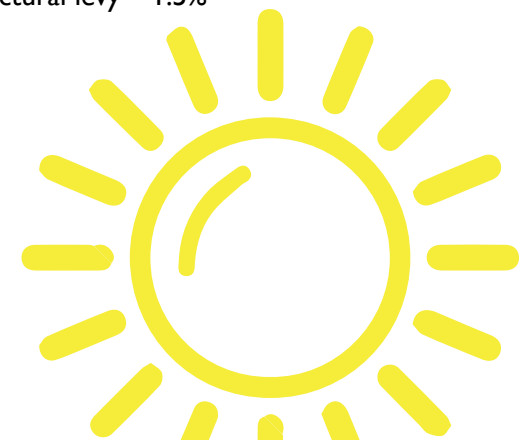
Goods are valued using the following methods adopted by GATT (General Agreement on Tariff and Trade) and applied chronologically –

- a) Transaction value;
- b) Transaction value of identical goods;
- c) Transaction value of similar goods;
- d) Deductive value;
- e) Computed value; and,
- f) Fall back value;

Rates of duty

Generally, the following rates will apply to an import of goods from outside the community:

- a) Import Duty – 0%, 10% or 25%
- b) VAT - 18%
- c) WHT - 6%
- d) Excise Duty – varies
- e) Infrastructural levy – 1.5%



The common terms used or parties involved during the import process of these products;

Table I- Common terms used in customs

Terms	Definition
Importer	For customs purposes, this is the person who makes (or on whose behalf an agent) makes the import declaration, and who is liable for payment of the duties (if any) on the imported- sometimes regarded to as the consignee on the shipping documents.
Airway Bill or Bill of Lading	This is a negotiable document issued by either the airline or shipping line as a contract of carriage of products. It's also a receipt of cargo accepted for transportation, and must be presented for taking delivery at the destination.
Single Administrative document (SAD)	This is a declaration document filed with the URA customs team by the importer or his agent to undergo the necessary import customs clearance formalities.
Customs Agent	A person licensed to act as an agent on behalf of the importer. He declares or produces the SAD to the URA.
Shipping/Freight Bill	This is a document required by URA Customs authority for clearance of the goods for shipment.
Commercial Invoice	This is a customs document provided by the person or corporation that is exporting products across the international borders to Uganda.
Delivery Note	The document accompanying a consignment of products that lists their description and quantity. Normally a signed copy by the importer is returned to the seller/exporter.
Packing List	This is a document that details the contents, and often dimensions and weight, of each package or container being exported by the exporter
International Commercial Terms	<p>These are series of pre-defined commercial terms published by the ICC, accepted worldwide in assignment of Costs and responsibilities between the buyer and the seller. In brief, the commonly used terms in Uganda include;</p> <ol style="list-style-type: none"> 1. Cost And Freight, 2. Cost, Insurance and Freight 3. Delivery Duty Paid 4. Ex-works and 5. Free On Board/Airport

Summary of the import process

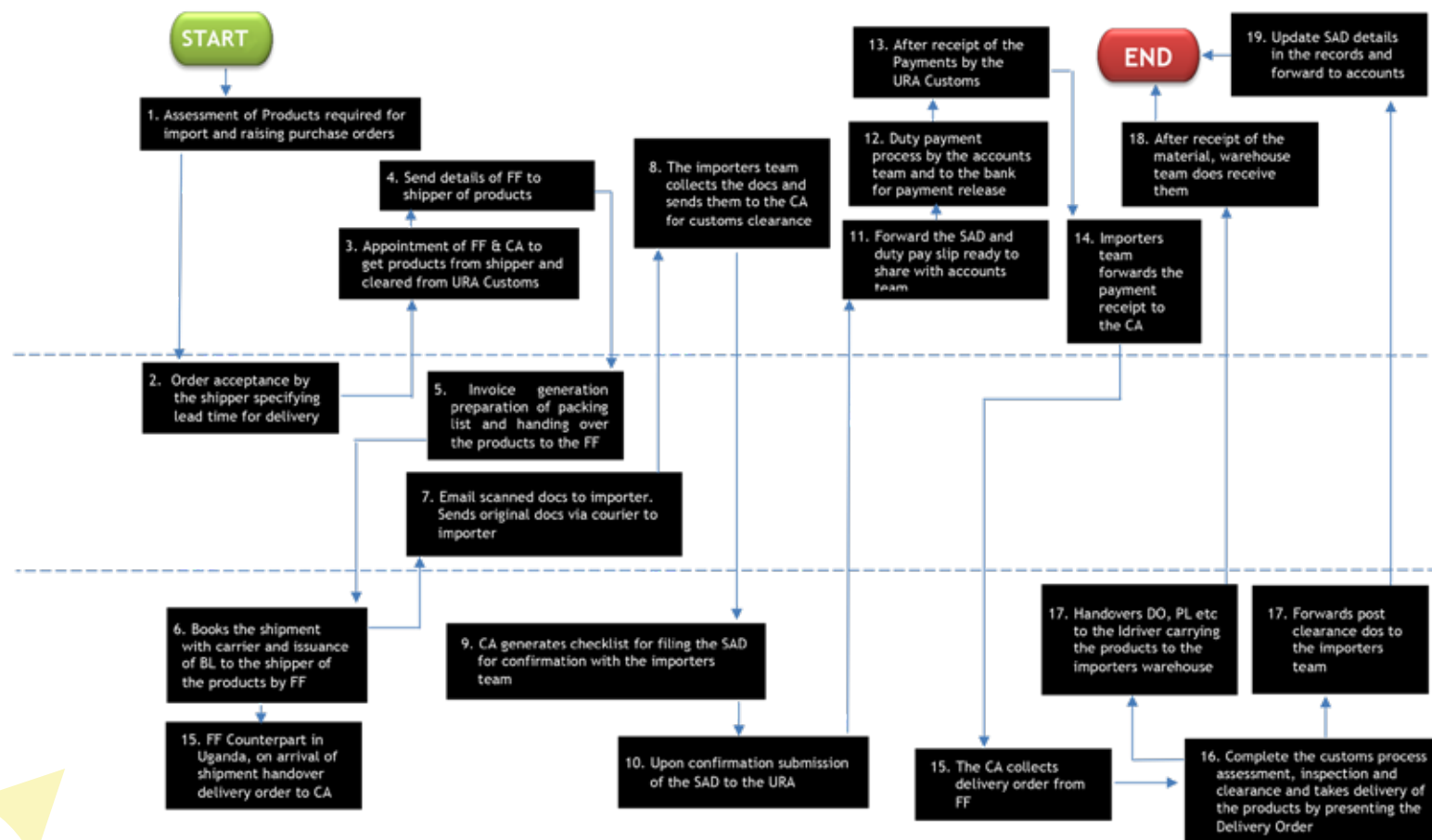
Table 2- Import procedures and required documents

Process Particulars	Details
Objective	Explain import process of goods i.e. from issuance of a purchase order to products receipt by the importer of the products
Mode of import	Air or Sea
Primary Actors	<ul style="list-style-type: none"> Origin Countries Importers Bankers Importer teams Purchase team Customs Agent Freight Forwarders Accounts department URA Local transporters

Process Input	<ul style="list-style-type: none"> Assessment of the components requirement and placement of order to the shipper
Process Output	<ul style="list-style-type: none"> Customs clearance of the components and their receipt by the importer at its premises/warehouse
List of Documents Involved	<ul style="list-style-type: none"> Bill of lading or airway bill. An Insurance certificate. Certificate of conformity from UNBS Commercial invoices. Examination order issued by URA Customs A Purchase order Packing list Delivery note Single Administrative document Payment slips and receipts from the Bank Sales contract



Import process flow chart-process map for import and customs Clearance for solar products



Pre-Export Verification of Conformity (PVoC)

Uganda also has Pre-Export Verification of Conformity (PVoC) requirements.

PVoC is an inspection and verification programme carried out on goods by appointed inspection agents in the country of export. Verification of compliance to technical regulations and standards is provided for in Article 5 of the World Organization (WTO) Agreement on Technical Barriers to Trade (TBT).

The objective of PVoC is to minimize the risk of unsafe and substandard goods entering Ugandan and protect consumers against dangerous, shoddy and substandard imported products.

Group 2 of the list of products under compulsory standards subject to the PVoC programme are the electrical and electronics including all solar equipment and all sorts of equipment relating to, producing or operated by electricity.

PVoC for Exports to Uganda

Exportation to Uganda now requires a Certificate of Conformity for products regulated under the Uganda Pre-Export Verification of Conformity to Standards Programme (PVoC).

To assure the customers of the solar products of the quality and safety of imported goods, the Government of Uganda through the Uganda National Bureau of Standards (UNBS) has implemented a series of guidelines known as a Pre-Export Verification of Conformity to Standards Programme (PVoC).

The PVoC verifies the conformity of all regulated products and enforces their standards. Compliance to PVoC requirements are applicable in addition to any existing import processes. Every consignment of regulated products exported to Uganda must have a Certificate of Conformity.

UNBS is responsible for the adoption and application of the standards for both imported and domestically manufactured products in the Ugandan market. The PVoC Standards Programme is a conformity assessment and verification procedure applied to specific Goods/Products at the respective exporting countries, to ensure their compliance with the applicable Ugandan Technical Regulations and Mandatory Standards or approved equivalents.

The Importer's responsibility is to ensure that their suppliers are conversant with import quality requirements and that their consignments are accompanied with a Certificate of Conformity (CoC) from the authorized PVoC Agent

The Exporter's responsibility is to ensure that their products or goods meet the regulations and quality requirements of Uganda before shipment by obtaining the necessary Certificate of Conformity (CoC) from the authorized PVoC Service Provider for all products subject to the PVoC programme.

In Uganda, authorised PVoC service producers include Intertek International and SGS Uganda Limited.



Section 2

**Regional Updates East
African Community**

The East African Community (EAC)

The East African Community (EAC) is a regional intergovernmental organization of six (6) Partner States, comprising Burundi, Kenya, Rwanda, South Sudan, Tanzania and Uganda, with its headquarters in Arusha, Tanzania.

Some of the opportunities

Ample renewable energy sources (Hydro, Solar, Geo Thermal, wind etc. Besides neighboring countries with huge hydro power reserves e.g. Ethiopia and DRC will boost electricity supply)

In the first Sustainable Energy Forum for East Africa, the governments of the EAC Partner States were called upon to strengthen individual and collective national commitments toward addressing the special energy needs of the East African region in the context of the Sustainable Development Goals. The Partners states were called upon;

- To strengthen the capacity of East African Centre of Excellence for Renewable Energy and Efficiency (EACREE) to be the lead institution in the EAC region in promoting equitable universal

access to modern, efficient, reliable, affordable, renewable energy to all households, businesses, industries and institutions in order to stimulate sustainable socio-economic development of the region;

- That the EAC Partner States, Development Partners, Civil Society Organizations and the Private Sector to pursue initiatives such as energy efficiency, solar photovoltaic and thermal systems, waste-to-energy programmes and alternative transportation, geared toward achieving Sustainable Development Goal

The (EACREE) and the International Solar Alliance (ISA) signed a Memorandum of Understanding (MoU) to increase cooperation on Sustainable Development of Solar Energy in the East Africa Community (EAC) region.

The MoU aims to deepen their co-operation in support of the promotion of sustainable solar energy systems and related services, innovative business models, sharing best practice, tapping into global expertise and project financing opportunities and raising the profile of local/regional expertise and projects.



The areas of cooperation identified in the MoU include the following:

- Jointly support the strengthening of national and regional policy, regulatory, legal and institutional frameworks in support of the development of solar energy markets in the EAC region.
- Joint development and implementation of programs and projects on solar energy development in the EAC region.
- Joint development innovative financing instruments for sustainable solar energy and solar hybrid projects.
- Building human, institutional and corporate capacities at regional, national and local level to foster the development and implementation of solar projects.
- Developing regional standards for solar technologies and certification system for solar experts
- Organization of technical workshops, conferences and training courses on solar energy development and awareness campaigns African, regional and international partners; and
- Collaborate towards setting up of Solar Technology Applications and Resource Centres (STAR-C) in EAC region.

East Africa Renewable Energy Federation

East Africa Renewable Energy Associations met in Kigali on the 26th of May 2018 and launched the East Africa Renewable Energy Federation (EAREF). EAREF was founded in order to scale up the access to the renewable energy technologies within the region of East Africa. The founding associations were Burundi Renewable Energy Association (BUREA), Uganda Renewable Energy and Energy Efficiency Alliance (UNREEEA), Kenya Renewable Energy Association (KEREAA), Rwanda Energy Private Developers (EPD), and Tanzania Renewable Energy Association (TAREA)

EAREF will work in close collaboration with East Africa Community reflecting regional local interest.



Section 3

Common exempted, and non-exempted solar products



From Micro PV to Mini-grids to Utility Scale

In Uganda currently, the application of PV technology now ranges from calculators to utility scale power generation. In between you have solar lanterns, PV lighting systems, water pumping systems and community scale micro-grids. As the scale increases so does the complexity of the system.

This Section highlights the variation in scale by discussing solar lanterns and solar home systems along with their system components.

PV System Components and their description

Photovoltaic systems consist of some or all of the following components:

- | | | |
|------------|------------|--------------------------------|
| ● PV Panel | ● Wiring | ● Charge controller |
| ● Load | ● Inverter | ● Battery (Deep Cycle Battery) |

Whether a system has some or all of these components is dependent on factors such as the size, the type of load powered, required current (AC or DC or both) and how it is used (all day or a few hours a day).



Figure 1: **Micro-grid**

Therefore Groups of PV cells are electrically configured into modules/panels which can be connected into arrays to achieve desired power and voltage outputs

A photovoltaic array is the complete power-generating unit, consisting of any number of PV modules and panels

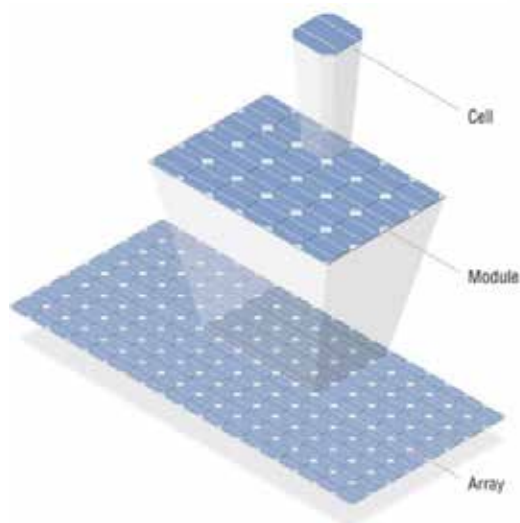


Figure 2: **Photovoltaic Array**

Pv Panel

Photovoltaic (PV) or solar cells are the building blocks of solar panels. They are made of semiconductor materials. They convert sunlight into direct current (DC) electricity.



Figure 3: **Photovoltaic Cell**

Charge Controller

The solar charge regulator/ charge controller is a voltage and/or current regulator which is connected between the solar panel and the battery. Its main function is to manage the charge and discharge of the battery and keep the battery pack in good condition.

The charge controller regulates the voltage and current flowing from the solar panel(s) to the battery since most solar panels can produce more than the rated voltage (for example a solar panel rated 12 volts can produce up to 20 volts). Without the regulation, the battery will be damaged due to overcharging. This is so because maximum voltage for most batteries is between 14 and 15 volts.

The figure 5 shows a typical solar charge controller. However, they come in various forms and designs depending on the application and manufacturer. They vary in terms of their working voltage or system voltage and the current that they are supposed to handle during operation.

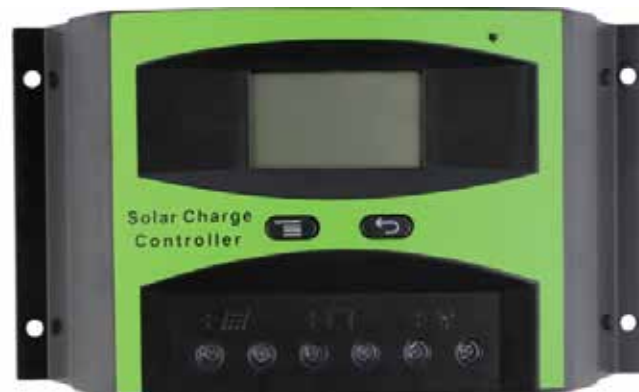


Figure 4: Charge Controllers

Inverters

This is a device that converts DC electricity into AC electricity, allowing the PV system to be used for appliances that require AC current. Inverters come in various forms and designs,

There are 3 basic types of inverters which are Square wave, Modified (quasi) square wave and Sine wave.



Figure 5: Inverters



This is the Micro-type that comes as an integral part in most of the Plug and Play Kits

Deep Cycle Batteries

In the context of renewable energy, when batteries are referred to, it usually means deep cycle batteries (DCB). DCBs are an energy storage units in which a chemical reaction occurs that develops voltage and results in electricity. These batteries are designed to be cycled (discharged and recharged) many times. These batteries are significantly different from the normal/ ordinary car battery as illustrated below;

Table 3- Differences between a Deep cycle battery and a normal car battery

Deep cycle batteries	Normal car batteries
These are aligned with thick plates inside	These are aligned with thin plates inside.
These are designed to power at a steady rate over a long period.	These are designed to deliver a burst of energy for a short time.
Used in stationed conditions (can't resist shock)	Used in mobile conditions (can actually resist shock)
Enough capacity for the continuous charging	Its capacity is too small for continuous charging

Currently there are four different types of deep cycle batteries. These are the flooded batteries, gel batteries and Absorbed Glass Mat (AGM) batteries, and more recently – lithium-ion. These are all made differently.

Among conventional deep cycle batteries, the flooded battery is the most common, which is similar in appearance to the standard lead acid battery in your car. The gel batteries, as the name suggests, have a gel-like substance in them and the AGM batteries consist of acid suspended in a glass mat separator. The Flooded, AGM and gel batteries are used most frequently in off-grid scenarios with the gel as the most recommended type.



Figure 6: Flooded Lead Acid Batteries

Flooded lead acid batteries: or wet cells, are the oldest type of rechargeable battery still in use. This type of battery contains a liquid in an unsealed container. This means that the battery must be kept upright and in a well-ventilated area to ensure safe dispersal of the hydrogen gas produced by these batteries during overcharging

Common brands Include: Luminous, Trojan, Surrette and Deka, Sukam



Figure 7: Absorbent Glass Matt (AGM)

Absorbent glass mat: (AGM) is a class of lead-acid deep cycle battery in which the electrolyte is absorbed into a fiberglass mat. The plates in an AGM battery may be flat like wet cell lead-acid battery, or they may be wound in a tight spiral. The internal resistance of AGM batteries is lower than traditional cells, they can handle higher temperatures, and self-discharge more slowly

Common brands Include: Giant Power, Sun Xtender and the Concorde, Luminous



Figure 8: Gel batteries

Gel Batteries: A gel battery (also known as a “gel cell”) is a sealed, valve regulated lead-acid deep cycle battery and has a gel electrolyte. Unlike flooded lead-acid (wet cell) batteries, these batteries do not need to be kept upright.

Common brands Include: Deka, Champion, Sonnenschein



Figure 9: Lithium-ion battery

Lithium-Ion: A relative newcomer to the field, being omnipresent in consumer electronics like cell phones and laptops. Lithium ion is physically smaller and lighter for a given capacity. Shows better performance characteristics, including a greater depth of discharge and less self-discharge, if properly sized and managed, can survive more charge cycles and requires less user maintenance

Diagrammatic illustration of a schematic of a typical stand-alone PV system powering DC and AC loads

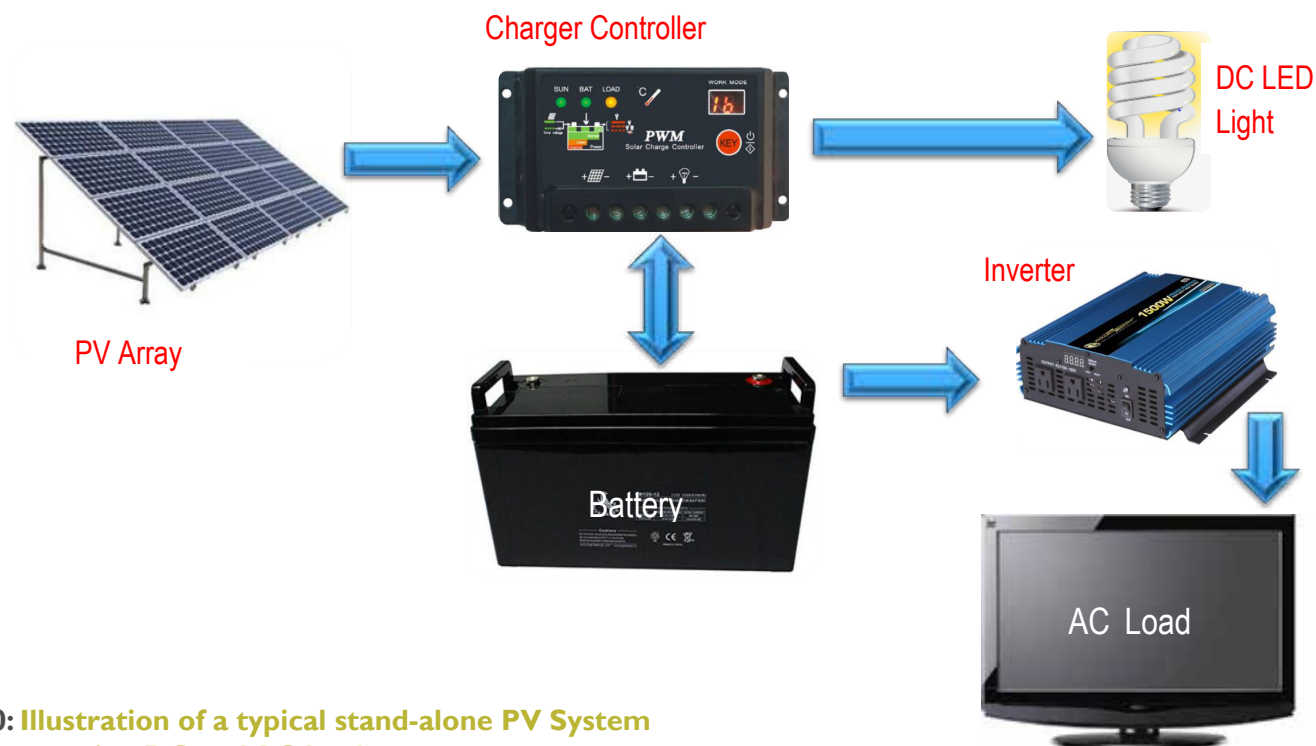
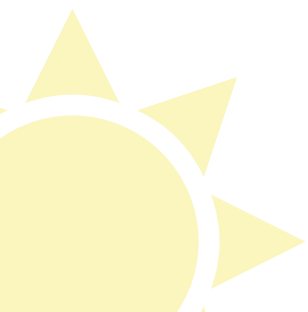


Figure 10: Illustration of a typical stand-alone PV System powering DC and AC loads

Table 4- Range of solar powered units

Tier 1				Tier 2 & Tier 3			Tier 4 & 5
Definition	Task lighting and Phone charging 4 hours of power/day 1 hour power/evening Lighting of 1,000 lmhr/day			General lighting, Phone Charging, Television and Fan (if needed) 4 hours of power/day or 8 hours of power/day 2 hour power/evening or 3 hour power/evening Electrical lighting, air circulation, television, and phone charging are possible. Any medium-power appliances			Mini-grids with a capacity 5.5 KW to 15KW
Technology	**Solar lanterns			Stand-alone solar home systems			Utility scale generators/ mini-grids
	Pico-PV Systems <10.999Wp			Solar Home System >11Wp			
Category	Single Light only	Single Light & Mobile Charging	Multiple Light & Mobile Charging	SHS, Entry Level (3-4 lights, phone charging, powering radio, fan etc)	SHS, Basic capacity (as for Entry plus power for TV, additional lights, appliances & capacity)	SHS, Medium capacity (as for Basis with extended capacities)	SHS, Higher capacity (as above but with extended capacities)
Solar Module Capacities	0 – 1.499 Wp (indicative)	1.5–2.999 Wp (indicative)	3–10.999 Wp (indicative)	11– 20.999 Wp	21 – 49.999 Wp	50 – 99.999 Wp	100Wp +

****A solar lantern meets Tier 1 on the MTF for a household if it provides at least 1,000 lumen-hours (lmhr) / day and sufficient energy to keep a well-used mobile phone operational**



PV Pico versus Solar Home Systems

Pico-PV <10.999Wp

'Solar Light & Lantern'

Portable solar powered light whether integrated or external solar panel and/or storage unit and whether with or without phone charging function. In case of separate storage unit or panel, includes wires and plugs. Includes all housing, wiring, switches, and adaptors for phone charging. Storage unit is charged through solar panel.



Figure 11: Pico System Illustrations

SHS >11Wp

'Solar Home System'

System with external storage unit and panel with several appliances coming without AC/ DC adapter to be charged/ run by the solar panel through storage unit. Includes all housing, wiring, and switches and a control unit. Components are specifically designed to work together as one solar home system to be sold to customers as one product, whether they come packaged in one box or in separate boxes and assembled in-country.



Figure 12: Plug and play SHS illustrations

Section 4

**Customs Harmonized System
Coding, Classification and Tax
Treatment of solar products**



Table 5- Pico –PV System





Solar System	Solar Module Capacity (Wp)	Description	Classification		Tax Treatment			
			Pictorial (Illustrations)	HS Code	ID (%)	VAT (%)	WHT (%)	ILV (%)
	0 – 1.499 Wp (indicative) Single Light Only	These lanterns can perform only one or two basic functions such as acting as a task light and/or as a solar torch/flashlight.		8513.10.90	10%	Exempt	6%	1.5%
	1.5 – 2.999 Wp (indicative) Single Light & Mobile Charging	These products come with more functionality than single light lanterns. These have single light and mobile charging facilities		8513.10.90	10%	18%	6%	1.5%
	3–10.999 Wp (indicative) Multiple Light & Mobile Charging	These products come with Multiple Light & Mobile Charging		8501.31.10 (Please note that importers of above portrayed systems suffer different tax and customs treatment on the powered appliances and accessories such as the radios, Televisions, Fans and the LED Bulbs)	0%	Exempt	6%	0%

Table 6- Solar Home System (SHS)




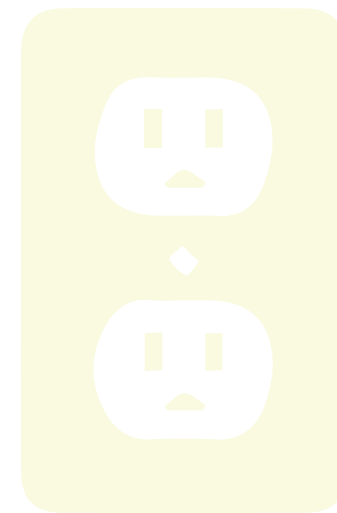
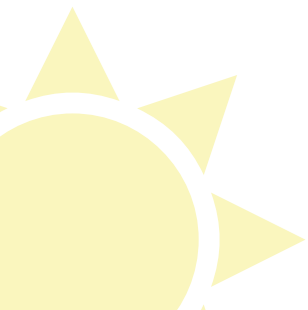
Solar System	Solar Module Capacity (Wp)	Description	Classification		Tax Treatment			
			Pictorial (Illustrations)	HS Code	ID (%)	VAT (%)	WHT (%)	ILV (%)
SHS >11Wp 	11 – 20.999 Wp SHS, Entry Level (3-4 lights, phone charging, powering radio, fan etc)	The light units of these products are separated from the charging/ battery unit. This allows the lighting to be provided in different rooms as per the customers need unlike lanterns which can only supply lighting at one location at a time.		8501.31.10 or 8501.10.10 (Please note that importers of above portrayed systems suffer different tax and customs treatment on the powered appliances and accessories such as the radios, Televisions, Fans and the LED Bulbs)	0%	0%	6%	0%
	21 – 49.999 Wp SHS Basic capacity (as above plus power for TV, additional lights, appliances & extended capacity)	These are typically used for lighting up houses with multiple rooms, which would need more than one light and for using fans, TVs, radios and other small electrical appliances as needed.		8501.31.10 or 8501.10.10 (Please note that importers of above portrayed systems suffer different tax and customs treatment on the powered appliances and accessories such as the radios, Televisions, Fans and the LED Bulbs)	0%	0%	6%	0%



Table 7- Examples of some brands from solar players and systems in each level

Tier 1				Tier 2		Tier 3	Tier 4&5	
Category	Pico-PV Systems <10.999Wp			Solar Home System >11Wp				
Spec/ Loads	Single Light only	Single Light & Mobile Charging	Multiple Light & Mobile Charging	SHS, Entry Level (3-4 lights, phone charging, powering radio, fan etc)	SHS, Basic capacity (as for Entry plus power for TV, additional lights, appliances & capacity)	SHS, Medium capacity (as for Basis with extended capacities)	SHS, Higher capacity (as above but with extended capacities)	Mini-grids
Examples	Pico Plus D.light S100	Solantis SunStar Solantis SunLight Solantis SunMobile Charge (Sunking) D.light S500	VPI M-Kopa 5 SHS Fenix 10W	VP2 M-Kopa 400 Fenix 17W D.light D30	VP3 Fenix 34W Sologrid 120 Power hub	VP4 Solantis 50W Sunking Home 400 Sologrid 130 Power hub	VP5 VP6 Sologrid 140 Power hub	Sunfold Power Pack from Tiger Power

Solar generators of Heading 85.01 (Panels, Charge Controller and the Deep Cycle Batteries) using additional note 2 to Section XVI of the East African Customs Common External Tariff can all be regarded as solar generators and development equipment.



Pictorial illustration of some brands (Plug and Play SHS kits) from solar players -SHS above 11wps



SG 120 from Sologrid



VP-1 from Village Power



M-KOPA 5 SHS



Fenix Readypay SHS (Fenix 10W)



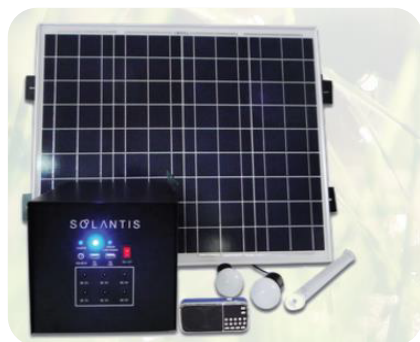
D.light D30



Greenlight Planet Home 60

Figure 13: Illustrations of some market SHS systems

Pictorial illustration of some brands (Plug and Play SHS kits) from solar players -SHS above 11wps



Solantis SHS 50Watts



Institutional assembled systems from Solar Today



Start Pack from Solar Now

Figure 14: Illustrations of some market SHS systems

Table 8- Key Components





Component	Description	Classification		Tax Treatment			
		Pictorial (Illustrations)	HS Code	ID (%)	VAT (%)	WHT (%)	ILV (%)
PV Solar module	Photosensitive semiconductor devices, incl. photovoltaic cells, whether or not assembled in modules or made up into panels.		8541.40.00	Exempt	Exempt	6%	0%
			Or 8541.90.00	Exempt	Exempt	6%	0%
**Solar Charge Control Units whether or not with USB Charging capability	Boards, panels, consoles, desks, cabinets and other bases, equipped with two or more apparatus for electric control or the distribution of electricity, including those incorporating instruments and numerical control apparatus. (For a voltage not exceeding 1,000 V)		8537.10.00	10%	18%	6%	1.5%
	Boards, panels, consoles, desks, cabinets and other bases, equipped with two or more apparatus for electric control or the distribution of electricity, including those incorporating instruments and numerical control apparatus. (For a voltage exceeding 1,000 V)		8537.10.00	0%	18%	6%	0%

**The most common brand includes the Morning star family

Component	Description	Classification		Tax Treatment			
		Pictorial (Illustrations)	HS Code	ID (%)	VAT (%)	WHT (%)	ILV (%)
DC to AC Inverters	Electrical transformers, static converters (for example, rectifiers) and inductors.		8504.40.00	0%	18%	6%	0%
**Solar PV cables	Insulated (including enamelled or anodised) wire, cable (including co-axial cable) and other insulated electric conductors, whether or not fitted with connectors		8544.49.00	25%	18%	6%	1.5%

**The solar cables are believed to be integral parts of development and generation especially the interconnecting cables from the panel to the charge controller or the control unit. Depending on how they are presented to URA at importation determines whether they will be classified as part of solar generation that is exempt or part of transmission and powering that is taxable

Component	Description	Classification		Tax Treatment			
		Pictorial (Illustrations)	HS Code	ID (%)	VAT (%)	WHT (%)	ILV (%)
Solar Metering Units	Electricity meters		9028.30.00	0%	18%	6%	0%
Batteries/ Valve-Regulated Lead-Acid batteries – Electric accumulators, including separators therefor, whether or not rectangular (including square)	Flooded lead acid batteries		8507.20.00	**35%	Exempt	6%	1.5%
	Absorbent glass mat: (AGM)		8507.20.00	**35%	Exempt	6%	1.5%

Component	Description	Classification		Tax Treatment			
		Pictorial (Illustrations)	HS Code	ID (%)	VAT (%)	WHT (%)	ILV (%)
	Gel Batteries		8507.20.00	**35%	Exempt	6%	1.5%
Batteries- Lithium-ion	Lithium- ion		8506.60.00	**35%	Exempt	6%	1.5%
Solar Power Display Meter	Measuring and checking instruments		9031.80.00	0%	18%	6%	0%
Metallic Unit boxes	Units that combine the solar charge controller and the control unit. May also contain other components such as batteries May be sealed Significant variation in appearance		7326.90.90	25%	18%	6%	1.5%

** Legal Notice No EAC/57/2018 released on the 30th June 2018- Electric accumulators in Uganda to stay application of the EAC CET and apply a rate of 35% for one year

Table 9- Core Loads/Applications i.e. lighting

Component	Description	Classification		Tax Treatment			
		Pictorial (Illustrations)	HS Code	ID (%)	VAT (%)	WHT (%)	ILV (%)
LED Lights	Other electric lamps and lighting fittings		8539.50.00	25%	18%	6%	1.5%
	Lighting emitting diode- (LED) lamps		8539.50.00	25%	18%	6%	1.5%
	Other Electric filament or discharge lamps		8539.39.00	25%	18%	6%	1.5%
Solar LED sensor light	DC LED lights powered from solar sensitive to motion, including all housing, wiring, and switches		9405.40.00	25%	18%	6%	1.5%
Solar PV Breakers/ Surge Protectors	Electrical Apparatus for switching and protecting electric circuits or making connections to or in electric circuits		8536.20.00	10%	18%	6%	1.5%





Component	Description	Classification		Tax Treatment			
		Pictorial (Illustrations)	HS Code	ID (%)	VAT (%)	WHT (%)	ILV (%)
Solar Switches	Electrical Apparatus for switching and protecting electric circuits or making connections to or in electric circuits- other switches		8536.50.00	10%	18%	6%	1.5%
Solar LED Bulb Holders	Electrical Apparatus for switching and protecting electric circuits or making connections to or in electric circuits- Lamp holders		8536.61.00	10%	18%	6%	1.5%
Solar Bridge Rectifiers/ Transistors/ Diodes/	Transistors An electrical device which acts as a valve or a switch in a circuit.		8541.10.00	0%	18%	6%	0%
	Diodes- A diode is an electronic device which allows current to flow in one direction and avoid the reverse. The electricity from the PVs goes through a diode into the rest of the circuit. The diode prevents energy from flowing back into the PV array.		8541.10.00	0%	18%	6%	0%

Table 10- Enhanced DC Powered Efficient Appliances

Appliance	Description	Classification		Tax Treatment			
		Pictorial (Illustrations)	HS Code	ID (%)	VAT (%)	WHT (%)	ILV (%)
TVs and their requisite cables	Video recording and reproducing apparatus		8528.72.90	25%	18%	6%	1.5%
Radios and their requisite cables	Reception apparatus for radio-broad casting, whether or not combined, in the same housing with sound recording or reproducing apparatus		8527.19.00	25%	18%	6%	1.5%
Multi-Media Speakers and Public Address Systems	Loudspeakers, whether or not mounted in their enclosures Audio-frequency electric amplifiers; electric sound amplifier sets.		8518.29.00	25%	18%	6%	1.5%
Fans and their requisite cables	Air or vacuum pumps, air or other gas compressors and fans; ventilating or recycling hoods incorporating a fan, Whether or not fitted with filters.		8414.59.00	25%	18%	6%	1.5%





Appliance	Description	Classification		Tax Treatment			
		Pictorial (Illustrations)	HS Code	ID (%)	VAT (%)	WHT (%)	ILV (%)
Solar Refrigerators	Refrigerators, freezers and other refrigerating or freezing equipment,		8418.29.00	25%	Exempt	6%	1.5%
Solar Projectors	Image projectors, other than cinematographic; photographic (Other than cinematographic) enlargers and reducers.		9008.50.00	10%	18%	6%	1.5%
Solar Torches	Portable electric lamps designed to function by their own source of energy (for example, dry batteries, accumulators, magnetos)		8513.10.90	10%	18%	6%	1.5%
Solar Mylar Films /blankets	Other plates, sheets, film, foil and strip, of plastics, non-cellular and not reinforced, laminated, supported or similarly combined with other materials.		3920.20.10	10%	18%	6%	1.5%






Table II - Other enhanced loads for Productive Use

Appliance	Description	Classification		Tax Treatment			
		Pictorial (Illustrations)	HS Code	ID (%)	VAT (%)	WHT (%)	ILV (%)
Solar Water Pump or Irrigation Pumps and Control Units	**Pumps for liquids, whether or not fitted with a measuring device; liquid elevators.		8413.81.00	0%	18%	6%	0%
	Both submersible and surface pumps						
	Control Unit (Part of the pump)		8413.91.00	0%	18%	6%	0%
Solar Irrigation Sprinklers	Mechanical appliances whether or not hand operated for projecting, dispersing or spraying liquids-		8424.81.00	0%	0%	6%	0%
	Agricultural or horticultural Sprayers						

**The most common brands include; the Grundfos- SQ Flex, Pedrollo, KSB, Lorentz and DAB

Please note that the supply of irrigation works, sprinklers and ready to use drip lines is exempt under the second schedule of Value Added Tax Act Cap 349.

Appliance	Description	Classification		Tax Treatment			
		Pictorial (Illustrations)	HS Code	ID (%)	VAT (%)	WHT (%)	ILV (%)
Solar Water Heaters	Machinery, plant for conversion of sunlight into heat for water heating using a solar thermal collector.		8419.19.00	0%	Exempt	6%	0%
Solar Cookers	An apparatus for cooking food using the energy of direct sunlight, typically by means of reflective panels that concentrate the light on to a dark-colored pot in an insulated box		8516.60.00	10%	Exempt	6%	1.5%
DC Hair Cutters	Shavers, hair clippers and hair-removing appliances, with self-contained electric motor.		8510.10.00	25%	18%	6%	1.5%
DC Hair Clippers	Shavers, hair clippers and hair-removing appliances, with self-contained electric motor.		8510.20.00	25%	18%	6%	1.5%

Appliance	Description	Classification		Tax Treatment			
		Pictorial (Illustrations)	HS Code	ID (%)	VAT (%)	WHT (%)	ILV (%)
DC Hair Straighteners	Other hair dressing apparatus		8516.32.00	10%	18%	6%	1.5%
Solar Servers	Automatic data processing machines and units thereof; Magnetic or optical readers, machines for transcribing data onto data media in coded form and machines for processing such data, not elsewhere specified or included.		8471.70.00	0%	18%	6%	0%
DC Monitors	Monitors and projectors, not incorporating television reception apparatus; reception apparatus for television, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus.		8528.59.00	25%	18%	6%	1.5%
DC Powered Maize Mill	Machines and mechanical appliances having individual Functions Mixing, kneading, crushing, grinding, screening, sifting, homogenizing, emulsifying or stirring machines		8437.10.00	0%	18%	6%	0%
Solar Street Lights	Other Electric Lights and Lighting Fittings		9405.40.90	25%	18%	6%	1.5%



FAQs

Frequently Asked Questions

Q1. Now that spare parts to the SHS are taxed, how do I price them to cover my costs (taxes) and make a profit?

Answer: This will depend on the actual taxes paid at importation, some of the components or spare parts attract lower import duties than the others. It's important to take note of these duties as they help inform the retail price to charge. Ensure that you consider the following factors when you price: cater for the cost of the product, the expenses incurred to get the product to the customer and your profit margin.

Q2. Why do LED bulbs suffer import duty at importation yet they are regarded as an integral part of the system generation and development?

Answer: USEA acknowledges that some previous tax exemptions have been abused by fraudulent businesses to maximize their profits and not to develop the industry and to reach the access goals. Therefore USEA and its members are absolutely committed to support government/URA in fighting this abuse and to ensure that tax incentives are only used by companies that are delivering the results that government decided that they want to incentivize – BDO, acting on behalf of USEA, has applied for a ruling on the LEDs and we hope this ruling will put the matter to rest.

Q3. Why do deep cycle batteries (DCBs) suffer import duty yet they are listed in the 5th schedule of the EAC CMA 2004 as exempt goods from Import duty

Answer: Importers of DCBs as standalone have been subjected to import duty under Heading 85.07 (“Electric accumulators, including separators therefor, whether or not rectangular (including square) Lead-acid, of a kind used for starting piston engines”). This classification attracts import duty of 25%. For this reason importers of DCBs for solar as stand-alone have been paying taxes.

The DCBs that should benefit from duty exemption (under paragraph 26 of the fifth schedule of the EAC CMA) are those used for development of solar energy. The URA has argued that DCBs can be used for other purposes other than solar development and therefore not every importer should benefit from duty exemption.

The URA and USEA have reached an agreement that once an importer provides proof (clearance letter from Ministry of Energy and USEA) that they members of USEA, they should benefit from the exemption.

Q4. The Pay As You Go solar players normally have marketing agents who are not their employees and whose role is to only look for clients and get some commission on the same. Are these agent regarded as employees or independent consultants who only suffer WHT

Answer: This is dependent on the relationship and the contract the company has with the sales agents. It important to note that the company does not control their working style and hours, do not provide them with tools of work, office space, company identification cards, transport expenses etc.

Appendices

A large array of solar panels is installed in a desert landscape. The panels are tilted and mounted on a metal frame. In the background, there is a small house with a dark roof and a car parked nearby. The sky is blue with some light clouds. The word "Appendices" is overlaid in large white text.

Appendix 1

Areas to note from world customs

USEA and the industry players would like to also take cognizance of key definitions and guidance provided by the World Customs

Organization with respect to classifying various products as follows.

Legal Note 3 to Section XVI (which contains Chapter 85) of the World Customs Organization

HS Nomenclature states that:

Unless the context otherwise requires, composite machines consisting of two or more machines fitted together to form a whole and other machines designed for the purpose of performing two or more complementary or alternative functions are to be classified as if consisting only of that component or as being that machine which performs the principal function.

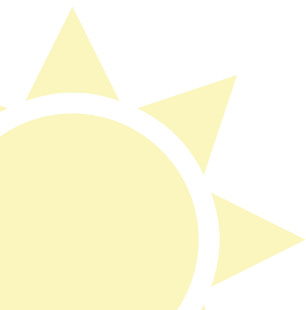
Legal Note 4 to Section XVI (which contains Chapter 85) of the World Customs Organization

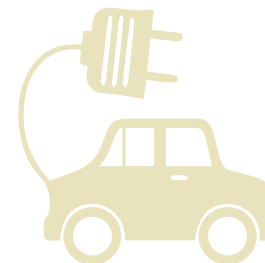
HS Nomenclature states that:

Where a machine (including a combination of machines) consists of individual components (whether separate or interconnected by piping, by transmission devices, by electric cables or by other devices) intended to contribute together to a clearly defined function covered by one of the headings in Chapter 84 or Chapter 85, then the whole falls to be classified in the heading appropriate to that function.

General Rules for The Interpretation of the Harmonized System i.e. GRI 3(B) states that:

Mixtures, composite goods consisting of different materials or made up of different components, and goods put up in sets for retail sale, which cannot be classified by reference to 3 (a), shall be classified as if they consisted of the material or component which gives them their essential character, insofar as this criterion is applicable.





Appendix 2

The General Interpretation Rules (GIRs)

There are six General Rules of Interpretation. Rules one to four are related and must be applied in sequence. Rules five and six stand on their own to be applied as needed.

RULE 1

The titles of Sections, Chapters and sub-Chapters are provided for ease of reference only; for legal purposes, classification shall be determined according to the terms of the headings and any relative Section or Chapter Notes and, provided such headings or Notes do not otherwise require, according to the following provisions [i.e. GIRs 2 to 6]:

Explanation: This is the first Rule to be considered in classifying any product. For practical purposes, this means that the Section and Chapter titles can be used as guidelines to point the way to the area of the Tariff in which the product to be classified is likely to be found. However, articles may be included in or excluded from a Section or Chapter even though the titles might lead one to believe otherwise. Thus in order to classify a product, one must carefully

check the Notes associated with any Sections and Chapters under consideration to see if the product is mentioned specifically as being included or excluded. Then it is necessary to go down to the Heading level and find a Heading that is worded in such a way as to include the product in question. Many goods should be correctly classifiable by reference to Rule 1 alone.

RULE 2

- a) Any reference in a heading to an article shall be taken to include a reference to that article incomplete or unfinished, provided that, as presented; the incomplete or unfinished article has the **essential character** of the complete or finished article. It shall also be taken to include a reference to that article complete or finished (or falling to be classified as complete or finished by virtue of this Rule), presented unassembled or disassembled.
- b) Any reference in a heading to a material or substance shall be taken to include a reference to mixtures or combinations of that material or substance with other materials or substances. Any reference to goods of a given material or substance shall

be taken to include a reference to goods consisting wholly or partly of such material or substance. The classification of goods consisting of more than one material or substance shall be according to the principles of Rule 3.

Explanation: Rule 2 (a) deals with the classification of unfinished, incomplete, unassembled or disassembled goods. Unfinished and incomplete goods can be classified under the same Heading as the same goods in a finished state provided that they have the essential character of the complete or finished article. As well, unassembled or disassembled goods may also be classified the same as the complete finished product. This rule does not apply if the text of the Heading or the relevant Legal Notes exclude the unfinished or unassembled product in question

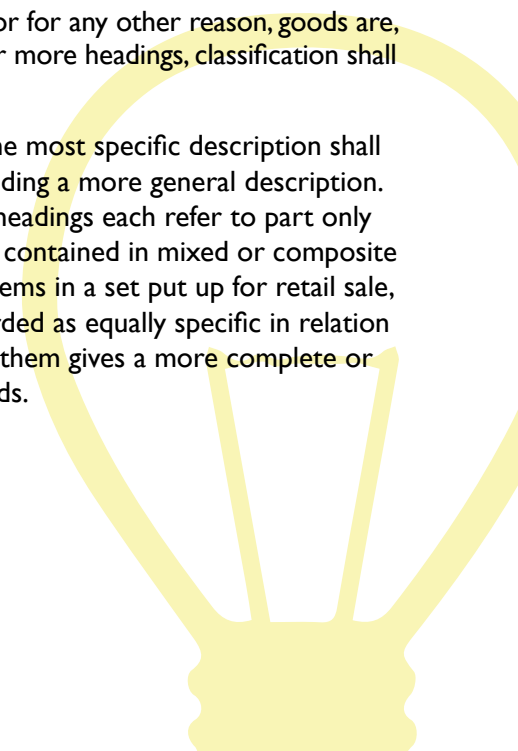
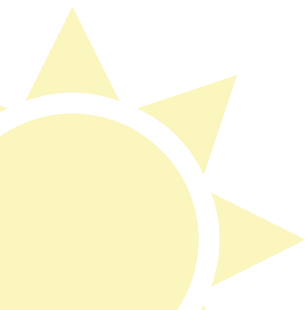
Explanation: Rule 2 (b) lays the groundwork for dealing with products, not classifiable through the use of Rule 1 or Rule 2 (a), which are composed of a mixture of materials or substances. It basically states that a Heading referring to a given material or substance includes mixtures of that substance with others. Similarly,

a reference to a product composed of a given material or substance includes products composed either wholly or partly of the material or substance. This means that a mixed product may seem to be eligible for classification under two or more Headings. However, a given product can legally only be classified under one Heading. Rule 3 must be used to decide between alternate Headings

RULE 3

When by application of Rule 2 (b) or for any other reason, goods are, *prima facie*, classifiable under two or more headings, classification shall be effected as follows:

- a) The heading which provides the most specific description shall be preferred to headings providing a more general description. However, when two or more headings each refer to part only of the materials or substances contained in mixed or composite goods or to part only of the items in a set put up for retail sale, those headings are to be regarded as equally specific in relation to those goods, even if one of them gives a more complete or precise description of the goods.



- b) Mixtures, composite goods consisting of different materials or made up of different components, and goods put up in sets for retail sale, which cannot be classified by reference to 3(a), shall be classified as if they consisted of the material or component which gives them their essential character, insofar as this criterion is applicable.
- c) When goods cannot be classified by reference to 3(a) or 3(b), they shall be classified under the heading which occurs last in numerical order among those which equally merit consideration.

Explanation: Rule 3 (a) states that where 2 or more Headings seem to apply, the one which provides the most specific description of the product in question should be used. This means that a Heading which names the actual product should be used in preference to one which only names a category to which the product could belong. Similarly, a Heading that describes the whole product should be used in preference to one which describes part of it. However, where two Headings both only describe part of the product, this rule cannot be used to tell which one to use even if one seems more specific or detailed than the other.

Explanation: Rule 3 (b) applies to mixtures, composite goods and sets that cannot be classified by use of the previous Rules. These should be classified as if they consisted of the material or component which gives them their essential character

Explanation: Rule 3 (c) is for use in cases where a good seems to fit in more than one Heading and the essential character cannot be determined. In this case, the product should be classified under the Heading which occurs last in numerical order

RULE 4

Goods which cannot be classified in accordance with the above Rules shall be classified under the heading appropriate to the goods to which they are most akin.

Explanation: This is a “last resort” rule, most often used with new products.

RULE 5

In addition to the foregoing provisions, the following Rules shall apply in respect of the goods referred to therein:

- a) Camera cases, musical instrument cases, gun cases, drawing instrument cases, necklace cases and similar containers, specially shaped or fitted to contain a specific article or set of articles, suitable for long-term use and presented with the articles for which they are intended, shall be classified with such articles when of a kind normally sold therewith. This Rule does not, however, apply to containers which give the whole its essential character;
- b) Subject to the provisions of Rule 5 (a) above, packing materials and packing containers presented with the goods therein shall be classified with the goods if they are of a kind normally used for packing such goods. However, this provision does not apply when such packing materials or packing containers are clearly suitable for repetitive use.

Explanation: Rule 5 specifies how to classify containers. Rule 5 (a) deals with containers which:

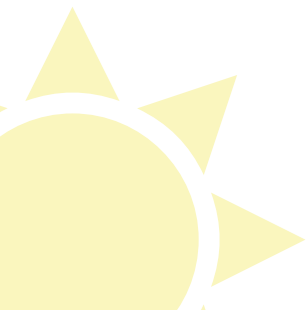
- Are shaped or fitted for the article they will contain,
- Are suitable for long-term use,
- Protect the article when not in use,
- Are of a kind normally sold with such articles,
- Are presented with the articles they are designed to contain.

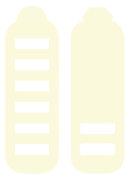
Containers which have these characteristics can be classified with the products which they contain. However, in cases where the container gives the product its essential character, it would be the container which would have to be classified

Explanation: Rule 5 (b) deals with other types of containers and packing materials. These should be classified with the goods they contain if they are of a kind normally used for packing such goods and are not suitable for repetitive use.

RULE 6

For legal purposes, the classification of goods in the subheadings of a heading shall be determined according to the terms of those subheadings and any related Subheading Notes and mutatis mutandis, to the above Rules, on the understanding that only subheadings at the same level are comparable. For the purpose of this Rule the relative Section and Chapter Notes also apply, unless the context otherwise requires.





Appendix 3

Customs Valuation Methods

Customs duties can be designated in either specific or ad valorem terms or as a mix of the two;

In case of a specific duty, a concrete sum is charged for a quantitative description of the good, for example Ushs.1 per item or per unit. The customs value of the good does not need to be determined, as the duty is not based on the value of the good but on other criteria.

In this case, no rules on customs valuation are needed and the Valuation Agreement does not apply. In contrast, an advalorem duty depends on the value of a good. Under this system, the customs valuation is multiplied by an advalorem rate of duty (e.g.5 percent) in order to arrive at the amount of duty payable on an imported item.

Customs valuation is a customs procedure applied to determine the customs value of imported goods. If the rate of duty is ad valorem, the customs value is essential to

determine the duty to be paid on an imported good.

The Agreement stipulates that customs valuation shall, except in specified circumstances, be based on the actual price of the goods to be valued, which is generally shown on the invoice. This price, plus adjustments for certain elements listed in article 8 of the GATT 1994, equals the transaction value, which constitutes the first and most important method of valuation referred to in the agreement.

Six methods of Custom Valuation (Sec 37,122 & 4thSchedule of the EACCMA)

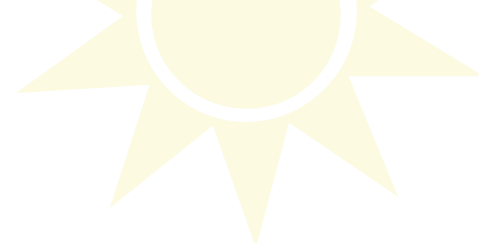
- Method 1 Transaction value
- Method 2 Transaction value of identical goods
- Method 3 Transaction value of similar goods
- Method 4 Deductive method
- Method 5 Computed method
- Method 6 Fall-back (Residual Method)

Method 1 Transaction value

The price actually paid or payable is the total payment made or to be made by the buyer to or for the benefit of the seller of the imported goods, and includes all payments made as a condition of sale of the imported goods by the buyer to the seller, or by the buyer to a third party to satisfy an obligation of the seller.

Conditions to be fulfilled;

- There must be no restriction on the disposition or use of the goods by the buyer, other than restrictions which;-
- Are imposed or required by law in the country of importation;
- Are limited to the geographic area in which the goods may be resold;
 - Do not substantially affect the value of the goods.
- There must be evidence of a sale for export to the country of importation (i.e. commercial invoices, contracts, purchase orders, etc.).



- No part of the proceeds of any subsequent resale, disposal or use of the goods by the buyer will accrue directly or indirectly to the seller, unless adjustment can be made in accordance with provisions in Article VIII of the GATT.
- The buyer and seller are not related, but even if so, the use of the transaction value is acceptable if the importer demonstrates that:
 - The relationship did not influence the price, or the transaction value closely approximates a test value

Method 2 Transaction value of identical goods

The transaction value is calculated in the same manner on identical goods if the goods are

- The same in all respects including physical characteristics, quality, and reputation;
- Produced in the same country as the goods being valued;
- And produced by the producer of the goods being valued.

For this method to be used, the goods must be sold for export to the same country of importation as the goods being valued. The goods must also be exported at or about the same time as the goods being valued.

Method 3 Transaction value of similar goods

The transaction value is calculated in the same manner on similar goods if;

- Goods closely resembling the goods being valued in terms of component materials and characteristics.
- Goods which are capable of performing the same functions and are commercially interchangeable with the goods being valued
- Goods which are produced in the same country as and by the producer of the goods being valued. For this method to be used, the goods must be sold to the same country of importation as the goods being valued. The goods must be exported at or about the same time as the goods being valued.

Method 4 Deductive value

Deduction of value from the price of the greatest aggregate quantity sold;

The Agreement provides that when customs value cannot be determined on the basis of the transaction value of the imported goods or identical or similar goods, it will be determined on the basis of the unit price at which the imported goods or identical or similar goods are sold to an unrelated buyer in the greatest aggregate quantity in the country of importation

The buyer and the seller in the importing country must not be related and the sale must take place at or about the time of importation of the goods being valued. If no sale took place at or about the time of importation, it is permitted to use sales up to 90 days after importation of the goods being valued. **The price per unit is the price at which the greatest number of units is sold.**



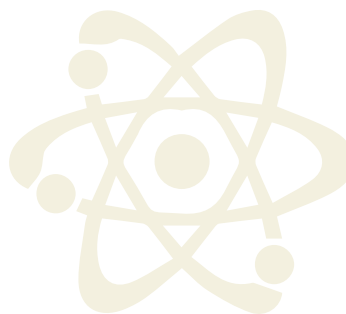
The greatest aggregate quantity is the price at which the greatest number of units is sold to unrelated persons at the first commercial level after importation at which such sales take place. To determine the greatest aggregate quantity all sales at a given price are taken together and the sum of all the units of goods sold at that price is compared to the sum of all the units of goods sold at any other price. **The greatest number of units sold at one price represents the greatest aggregate quantity.**

Method 5 Computed value

This method, determines the customs value on the basis of the cost of production of the goods being valued, plus an amount for profit and general expenses usually reflected in sales from the country of exportation to the country of importation of goods of the same class or kind.

Method 6 Fall-back method

When the customs value cannot be determined under any of the previous methods, it may be determined using reasonable means consistent with the principles and general provisions of the Agreement and of Article VII of GATT, and on the basis of data available in the country of importation. To the greatest extent possible, this method should be based on previously determined values and methods with a reasonable degree of flexibility in their application.





Disclaimer

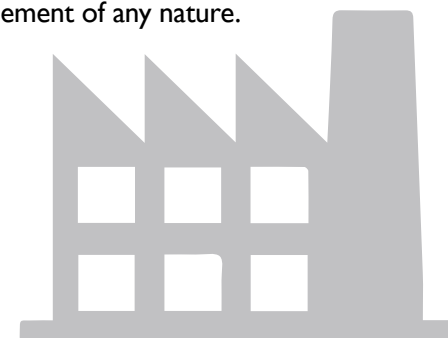
The information contained in this document is based on the Ugandan applicable tax laws (the Value Added Tax Act Cap 340, Income Tax Act 340, East African Community Customs Management Act 2004, the East African Community Customs External Tariff). This Hand book is an initiative of the Uganda Solar Energy Association.

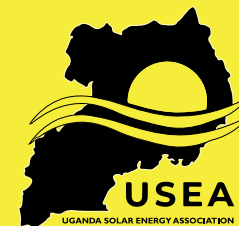
This hand book is a comprehensive guide to the most common imported solar products, parts, accessories and efficient powered appliances, it also acts as a reference document and training resource for individuals, firms, officials and organizations involved in the movement, release and clearance of off-grid solar products.

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