

## Importation and taxation of electric vehicles in Kenya

Proposals for alignment of the registration process

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## The Project Context

This study is made possible through support from the ‘Advancing Transport Climate Strategies’ (TraCS) project funded by the German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety's, International Climate Initiative. The project aims to support developing countries in systematically assessing GHG emissions from transport, in analysing emission reduction potentials and in optimising the sector’s contribution to the mitigation target in countries’ NDC. TraCS feeds into other international cooperation projects run by the Government of Germany.

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## List of Acronyms

AWB	Air waybill
BEV	Battery electric vehicle
CoC	Certificate of conformity
CIF	Cost, insurance and freight
CRSP	Current retail selling price
EV	Electric vehicle
GHG	Greenhouse gasses
GVW	Gross vehicle weight
ICE	Internal combustion engine
ICCT	International Council on Clean Transportation
IDF	Import declaration fee
KEBS	Kenya Bureau of Standards
KRA	Kenya Revenue Authority
MOTIHUD & PW	Ministry of Transport, Infrastructure, Housing, Urban Development and Public Works
MTCO <sub>2</sub> E	Million Tonnes of Carbon Dioxide Equivalent
NCCAP	National Climate Change Action Plan
NDC	Nationally Determined Contribution
OBL	Original Bill of Landing
PHEV	Plugin hybrid vehicle
PVoC	Pre-Export Verification of Conformity
RDL	Railway development levy
SDoT	State Department of Transport
TIMS	Transport Integrated Management System
TraCS	Advancing Transport Climate Strategies project
VAT	Value added tax
YOM	Year of manufacture

# 1. Introduction

Kenya aims to reduce its overall greenhouse gas (GHG) emissions by 30% by the year 2030 compared to the business as usual (BAU) scenario. In 2016, the country enacted the Climate Change Act which mandated every state agency to set up a Climate Change Coordination Unit. The role of the unit is to coordinate mainstreaming of all climate change duties in the sector/agency. Since 2017 the Advancing Transport Climate Strategies (TraCS) project has been supporting the institutionalization of the Climate Change Coordination Unit at the State Department of Transport (SDoT).

According to the Transport Sector Climate Change Annual Report 2018/2019, the Kenyan transport sector accounts for about 20% of Kenya's total GHG emissions, which amounts to 11.25 MtCO<sub>2e</sub> as at 2015. The emissions are increasing at a faster rate than in any other sector. The sector's emissions target is to reduce 3.46 MtCO<sub>2e</sub> by 2030 against BAU by adopting a sustainable and low carbon mobility pathway. From an analysis done by TraCS, an increased uptake of electric mobility has the second highest mitigation potential, contributing to a reduction of about 0.6 MtCO<sub>2e</sub> against the BAU scenario. This is largely due to a relatively low grid emission factor in the country's electricity grid, occasioned by high shares of renewable energy.

Electric mobility is therefore a key area of action to contribute to Kenya's NDC and as a result has been highlighted as a key action in the National Climate Change Action Plan (NCCAP) 2018-2022. To progress this, TraCS has convened various stakeholder consultations involving public and private sector experts with the objective of identifying barriers that hinder further uptake of electric mobility in Kenya. This report is a result of these efforts and aims to identify barriers, particularly those attributed to taxation and importation of electric vehicles.

The report is one out of three reports on electric mobility by Strathmore University and Knights Energy. The study is funded by the Advancing Transport Climate Strategies in Rapidly Motorising Countries project (TraCS), a project implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and funded through the International Climate Initiative (IKI) of the German Federal Ministry for Environment, Nature Conservation and Nuclear Safety (BMU).

Kenya not being a manufacturer of vehicles, importation and taxation plays a key role in the availability and affordability of vehicles. Taxation is a determinant of the final price of electric vehicles and in order to improve the uptake of a new technology, taxation often plays a role in increasing awareness and uptake in the new stages. The study will identify the impact of taxes on early adoption of electric mobility in Kenya and propose mitigation measures that can enable accelerated adoption of this technology.

## 2. Importation and Taxation of Electric Vehicles in Kenya

### 2.1. Importation

The process of importation of vehicles in Kenya begins with the Pre-export Verification of Conformity (PVoC) program which is guided by the Kenya Bureau of Standards (KEBS). Usually, all vehicles imported in the country must satisfy the criteria and guidelines set out by the government in the Kenya Standard Code of Practice for Inspection of Road Vehicles<sup>1</sup> (KS1515:2000). The key requirements that must be complied with even before inspection are:

- The vehicle must be Right Hand Drive (unless with special authorization from the Ministry of Transport e.g. returning residents operating from left hand drive countries).
- The vehicle must be less than 8 years old from the year of first registration.
- The difference between manufacture and registration must be less than one year in the country of origin.

In addition to the key requirements at inspection, the vehicle is checked for the Certificate of Roadworthiness<sup>2</sup> (COR) which is presented by the owner of the vehicle to KEBS appointed inspection agents. This certificate is required for a Pre-export verification of conformity to standards at origin so as to obtain the Certificate of Conformity<sup>3</sup> (COC) for cars coming from Japan / Dubai / Singapore / South Africa / UK even though there are partial imports from other regions.

Vehicle documentation after the inspection process include: Vehicle purchase invoice, radiation contamination inspection, vehicle maintenance and ownership history, certificate of road worthiness, certificate of conformity, vehicle inventory documentation, the Original Bill of Lading<sup>4</sup> (OBL) or an Air Waybill<sup>5</sup> (AWB) must show the details of the motor vehicle e.g. chassis and engine numbers, make, model, color etc. These documents are critical for the clearing process at port of entry.

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<sup>1</sup> KS1515:2000 - <https://infotradekenya.go.ke/media/Kenya%20Standard%20Code%20of%20practice%20for%20inspection%20of%20road%20vehicles.pdf>

<sup>2</sup> A Certificate of roadworthiness ensures vehicles are checked for any mechanical and structural defects and any quality of repair.

<sup>3</sup> A Certificate of conformity after a PVOOC which is a conformity assessment procedure applied at the country of supply/origin to ensure compliance of imported products with applicable Kenya Standards, approved specifications or applicable regulations.

<sup>4</sup> An original bill of lading (OBL) is a contract of carriage that serves as a title of the cargo and confirms the carrier's receipt of the cargo.

<sup>5</sup> An air waybill (AWB) is a document that accompanies goods shipped by an international air courier to provide detailed information about the shipment

## 2.2. Clearing process

On arrival of the vehicle in the country it can be cleared by the importer or a hired clearing agent. The process of clearing begins by presentation of all the vehicle documentation at port of entry to port officials. This documentation contains release documentation from shipping line, pre-export inspection documentation, certificate of conformity and vehicle purchase invoice. The vehicle goes through an inspection process by KEBS to check if the vehicle complies with Kenyan standards. Vehicles that arrive without COCs are prohibited<sup>6</sup> from entering the country.

Where the vehicle shipment meets the requisite standards, the vehicle documentation is submitted to the Kenya Revenue Authority (KRA) for detailed capture and tax determination. KRA is a government agency whose main functions are the assessment, collection and accounting of all revenues that are due to the Kenyan government, in accordance with the laws of Kenya. The flow chart below illustrates the importation process for vehicles in Kenya.

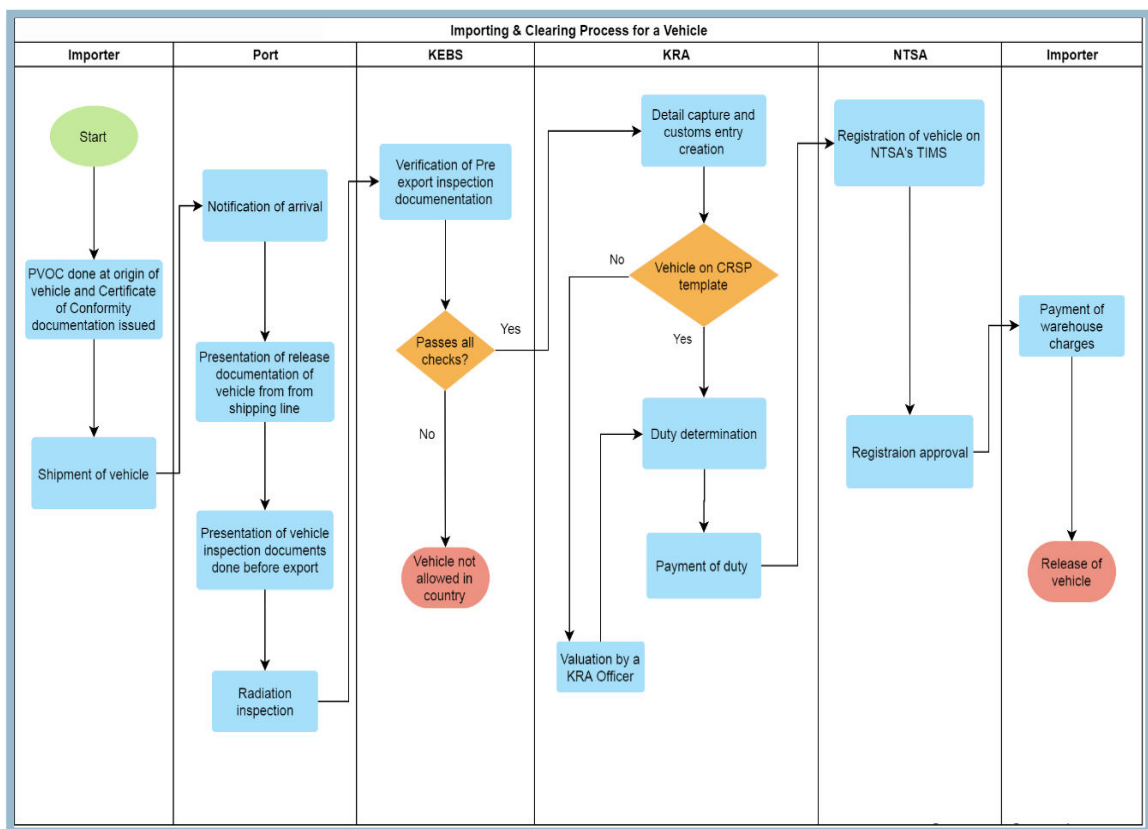


Figure 1: Process flow of importing, clearing and registration of a vehicle

<sup>6</sup> [https://www.kebs.org/images/PVOC\\_MANUAL\\_Issued\\_on\\_21st\\_August\\_2020.pdf](https://www.kebs.org/images/PVOC_MANUAL_Issued_on_21st_August_2020.pdf)



## 2.3. Taxation

Tax determination for vehicles is guided by the Current Retail Selling Price (CRSP) and the Motor Valuation Template which governs both electric vehicles (EV) and internal combustion engine (ICE) vehicles. These guidelines are published<sup>78</sup> and periodically reviewed to update the database when new models of vehicles are manufactured or available for import. Currently, this template guides tax calculations using the following vehicle characteristics:

- Model
- Engine capacity
- Body type
- Drive configuration
- Seating
- Fuel type
- Gross vehicle weight (GVW)
- Current retail selling price (CRSP)
- Year of manufacture (YOM)

The year of manufacture is used to calculate the depreciation rate, while the current retail selling price (CRSP) is provided by the vehicle manufacturer. KRA obtains the CRSP value from licensed local dealers, for example Toyota Kenya for Toyota, Simbacolt for Mitsubishi, Nissan Kenya for Nissan etc. If a vehicle doesn't have a local dealership, KRA reaches out to the manufacturer for the pricing.

The year manufacture (YOM) and CRSP are the two vehicle features that determine its customs value which is used to compute the total tax to be paid.

### Tax Computation

The total tax to be paid is a summation of:

- Import duty: 25% of customs value
- Value added tax (VAT): 14% of [Customs value + Import duty + Excise duty]
- Railway development levy (RDL): 2% of Customs value
- Import declaration fees (IDF): 3.5% of Customs value
- Excise duty\*: Calculated as a percentage of [Customs value + Import duty].

Excise duty varies depending on engine capacity and has recently been reduced to 10% for Electric Powered Vehicles as shown below in table 1.

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<sup>7</sup><https://www.kra.go.ke/images/publications/NEW%20CRSP%202020%20EFFECTIVE%207TH%20JULY%202020.xls>

<sup>8</sup> <https://www.kra.go.ke/images/publications/New-Motor-Vehicle-Valuation-Template--Effective-7th-July--2020.xls>

Table 1: Excise duty rate from the Financial Act in November 2019

Engine Capacity	Excise duty
<1500	20%
1500 - 3000	25%
>3000	35%
Electric powered	10%

## 2.4. Comparative Analysis of ICE vs EV Taxation

In this section, a comparative demonstration is done of the tax calculation when importing a Nissan Leaf (Electric) vs a Toyota Premio (ICE) in Kenya. The two vehicles were chosen for the comparative analysis as they are similar in cost, insurance and freight (CIF) pricing from well-known Japanese export dealers. This comparison is purely for demonstration purposes to show the effect of the excise duty on the total duty to be paid even when the vehicles are similarly priced at source.



Figure 2: 2013 Models of Nissan Leaf and Toyota Premio

Source: BE FORWARD, 2020

Table 2 gives an overview of the different dimensions of the two cars.

Table 2: Size dimensions of the two cars

Dimensions	Nissan Leaf (2013)	Toyota Premio (2013)
Length (mm)	4,440	4,595
Width (mm)	1,770	1,695
Height (mm)	1,549	1,475
Wheelbase (mm)	2,700	2,700
Gross vehicle weight (GVW)	1,902	1,475 – 1,605

The specifications and the current retail selling price (CRSP) of these vehicles extracted from the motor vehicle valuation template by the KRA, the vehicle details from the template are as depicted in table 3.

Table 3: Current CRSP from KRA effective 7th July 2020

Model	Engine Capacity	Body Type	Fuel	Drive Configuration	CRSP (KES)
Leaf	-	S/Wagon	Electric	-	4,810,550
Premio T240 1.5l	1490	Saloon	Petrol	2wd	2,704,600

The tables below are also extracted from the KRA motor vehicle valuation template and they represent the tabulation of taxes. The tabulation for the Nissan Leaf and the Toyota Premio is as follows:

Table 4: Tabulation of total tax to be paid for a 2013 Nissan Leaf & 2013 Toyota Premio

	Nissan Leaf	Toyota Premio
Current Retail Selling Price	4,810,550	2,704,600
Depreciation	70%	70%
Extra Depreciation	0%	0%
Customs Value	810,198	379,593
Import Duty 25%	202,549	94,898
Excise Value	1,012,747	474,491

<b>Excise Duty<sup>9</sup></b>	101,257	94,898
<b>VAT Value</b>	1,114,022	569,389
<b>VAT 14%</b>	155,963	79,715
<b>RDL 2%</b>	16,204	7,592
<b>IDF Fees 3.5%</b>	28,357	13,286
<b>Grand Total</b>	<b>504,348</b>	<b>290,389</b>

As extracted from table 4, the total duty paid on a used Nissan Leaf is almost double the total duty paid on a Toyota Premio and demonstrated below.

Table 5: Grand total of bringing an EV from Japan and out of the port

VEHICLE	CIF (KES)	DUTY (KES)	GRAND TOTAL (KES)
<b>Toyota Premio</b>	1,008,525.70	290,389.00	1,298,914.70
<b>Nissan Leaf</b>	993,590.15	504,348.00	1,497,938.15

Given that the pricing before taxation expressed in CIF of these two vehicles is almost equal, the general assumption would be that the cost of having either delivered to your doorstep would be somewhat similar or even cheaper for the EV because besides the lower cost of the Nissan Leaf, the excise duty on electric vehicles is 10% less than that of the Premio. However, as shown, when one purchases the Nissan Leaf, the final cost of the vehicle is considerably higher due to its higher CRSP (almost double the CRSP of the Toyota Premio, cf. table 3) which leads to a higher custom value.

<sup>9</sup> 10% for the electric powered Nissan Leaf and 20% for the Toyota Premio.

## 2.5. Case Studies of EV Taxation in Asia and Europe

Table 6: Case studies of EV taxation regime and incentives from around the world

Taxes/ incentives	Germany	France	Norway	UK	China	Japan
<b>Registration tax</b>	Waived the registration tax for electric vehicles with the annual tax being determined by CO <sub>2</sub> emissions (€2 for every gram above 95 gCO <sub>2</sub> /km).	Vehicles that emit less than 120gCO <sub>2</sub> /km are exempted from paying registration tax.	The vehicle weight of PHEV is reduced by 26% for the calculation of the import tax. HEVs get a weight advantage of 10% and until 2016, the engine power was also part of the calculation scheme.	Zero emission vehicles are exempt from paying the first tax payment when registering a vehicle. Taxes begin at GBP 10 for CO <sub>2</sub> emissions of between 1 to 50g/km, and go to as high as GBP 2,175 for vehicles emitting over 255g/km <sup>10</sup>	Tax incentive on the manufacture of EVs	
<b>Annual vehicle tax</b>	Electric company car tax deduction: Set at a monthly rate of .5% of the vehicle price which is half the standard tax rate paid for an internal	Annual tax exemption of EUR 160 applied on low emission vehicles.	EVs are exempt from Annual road traffic insurance tax.  BEVs and PHEVs pay the minimum amount	EVs (zero emission vehicles) are generally exempt from paying annual vehicle taxes.	There is an annual vehicle tax exemption for BEVs and PHEVs.	Full battery-electric and plug-in hybrid vehicles are exempted from tonnage tax and 50% reduction from automobile/road tax.

<sup>10</sup> Vehicle tax rates - GOV.UK (www.gov.uk)

	<p>combustion engine vehicle.</p> <p>Annual road/vehicle tax benefit: All newly registered EVs from 2016-2020 receive a ten-year exemption from motor vehicle tax. EVs are granted 50% reduction of base amount based on EV weights after the exemption.</p>	<p>Annual company car tax emission for BEVs.</p>	<p>(USD53) in ownership tax.</p> <p>BEVs qualify for a 40% reduction in company car taxes.</p>	<p>BEVs are exempt from company car tax.</p>		
<p><b>Purchase subsidies</b></p>	<p>The subsidy is only applicable for vehicles with a purchase price of up to EUR 60,000.</p> <p>Full Electric BEVs receive EUR 4,000</p>	<p>New BEVs and PHEVs qualify for a purchase bonus of up to EUR 5,500 and EUR 1000 respectively.</p> <p>Scrappage and replacement scheme:</p>	<p>BEVs are exempt from the 25% VAT of the purchase amount.</p>	<p>New BEVs qualify for a GBP 3,000 in purchase subsidies.</p>	<p>Electric cars are exempted from the purchase tax which is usually 10% of purchase price.</p>	<p>The government provides a 2.7% reduction in acquisition tax for EVs.</p>

	<p>PHEV with at least 40km of all electric range and vehicles with a maximum emission rate of 50g of CO2 receive EUR 3,000.</p> <p>- Government grants funding if manufacturer also provides half the grant.</p>	<p>Owners of old ICE vehicles are granted an additional bonus of USD 1120 for an EV replacement.</p> <p>Electric quadricycles with a power rating between 2-3KW are eligible for a 20-27% bonus or up to USD 1,010 depending on the rated power.</p> <p>Non-taxable households qualify for a 20% subsidy of the purchase cost of an electric bicycle.</p> <p>Electric buses, taxis and other EVs used in SMEs and driving schools qualify for a</p>				
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		subsidy of USD 9,000, USD 3,370 and USD 6,740 respectively.				
<b>Fringe benefits</b>	EVs qualify for an E-badge sticker that grants them access to special traffic lanes, loading lanes, bus lanes, free parking and reserved parking.	Free unrestricted access to low emission zones.  Discounted or free parking on public streets  Reduced toll fees.	In some municipalities, BEVs have access to bus lanes, enjoy up to 50% discount on parking, toll roads and ferries.	Free parking for EVs in major cities.  BEVs are exempted from congestion charges on the city of London.	By 2020 a city like Beijing allowed only the use of electric buses in its urban centers  Include parking fee incentives. The availability and extent of incentives vary across cities. Electric vehicles are entitled to a reduction of parking fee	



### 3. Recommendations

There is need for **cohesion between government institutions involved in effecting different aspects of electric mobility**. This includes establishing an electric mobility inter-agency team consisting of relevant public sector institutions (e.g. KEBS, KRA, NTSA, SDoT, Ministry of Energy, Ministry of Environment), stakeholders, and private sector. This will be the central point of coordination for electric mobility information to the public, strategy and policy development. This will also involve building capacity of these public officers by training them and enhancing their understanding of the critical aspects of electric mobility.

For electric vehicle components, a policy for tax reliefs or exemptions for electric vehicles components should be developed. This will spur industry growth in local assembly, conversion, and manufacturing of electric vehicles. Additionally, electric vehicle batteries should also be added to the vehicle characteristics descriptions as currently there is only engine capacity.

Electric vehicles should be incentivized through favorable taxes. This is because the technology is new and as a consequence, electric vehicles are considerably more expensive compared to their ICE counterparts. However, analysts and industrial insiders predict that EVs will reach price parity with ICE vehicles between 2025 and 2030.

For the Kenyan market, the mode of vehicle taxation depends on the initial cost of vehicles represented in the CRSP values. This dependence on initial cost for taxation is detrimental to EV ownership as it results in high customs value when compared to a similarly priced ICE in the used market. This is shown in table 4 and it leads to heavy taxation of EVs compared to the ICE, thus making the purchase of EVs more expensive.

The most practical approach to counter this issue is the introduction of tax incentives to enable parity or lower taxation of EVs compared to ICE. To achieve this, the study proposes the following:

#### **a. Import duty and VAT exemption for electric vehicles**

A policy for incentivizing importation of electric vehicle components by using tax reliefs or exemptions should be considered to spur growth of local electric vehicle value chain. This can include the waiving of import duty and VAT on electric vehicles to reduce the cost to consumers and enable their adoption. This can be applied across the region for a limited period of time till the number of EVs in the country achieve price parity with ICE. As seen in table 4, zero rating of the import duty and VAT on a 2013 Nissan Leaf would reduce the total duty from KES 504,348 to KES 125,581.

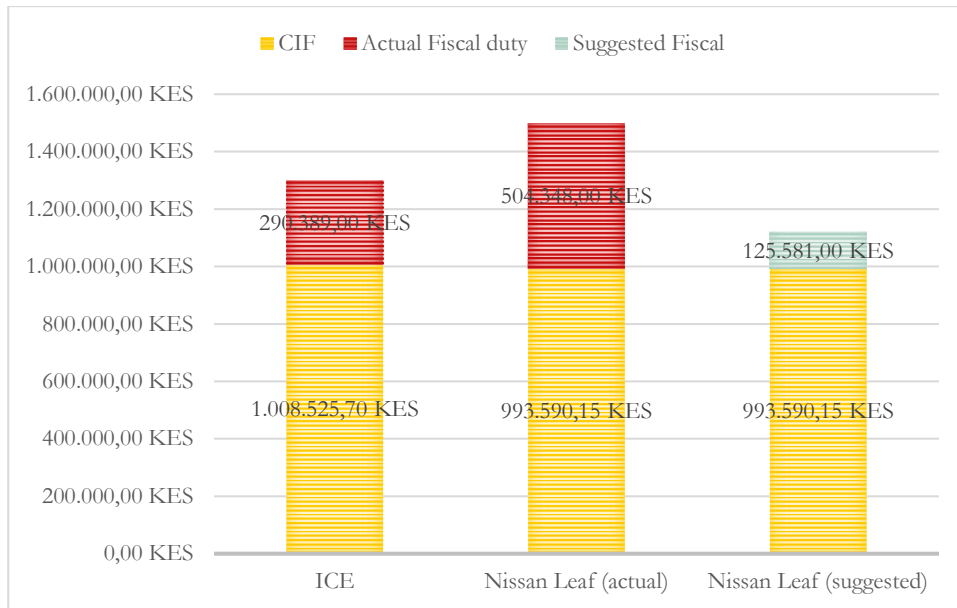


Figure 3: Comparison of actual Vs proposed import taxes on electric vehicles

Such a policy has been used before in the solar industry to incentivize uptake of solar power. The East Africa Community Customs Management Acts 2004 (EACCMA, 2004) provided for import duty exemption of specialized solar powered equipment and accessories. Later provisions similar to EACCMA 2004 were included in Kenya's legislation where the Fifth Schedule of the Value Added Tax Cap 476 Revised Edition 2012 provided for zero-rating of specialized solar equipment and accessories that exclusively use and/or store solar power. The local solar industry saw a significant growth thanks to that policy.

Table 7: Total tax after exempting Import duty and VAT for a 2013 Nissan Leaf used in this demonstration

	Current duty structure for 2013 Nissan Leaf	Proposed duty structure for 2013 Nissan Leaf
<b>Current Retail Selling Price</b>	4,810,550	4,810,550
<b>Depreciation</b>	70%	70%
<b>Extra Depreciation</b>	0%	0%
<b>Customs Value</b>	810,198	810,198
<b>Import Duty 25%</b>	202,549	-
<b>Excise Value</b>	1,012,747	810,198
<b>Excise Duty 10%</b>	101,257	81,020
<b>VAT Value</b>	1,114,022	891,218
<b>VAT 14%</b>	155,963	-
<b>RDL 2%</b>	16,204	16,204
<b>IDF Fees 3.5%</b>	28,357	28,357
<b>Grand Total</b>	504,348	125,581

Kenya currently imports a very small numbers of EVs; lower taxes will offset the loss in collected revenue by increasing the number of imported electric vehicles. This is because a reduction in tax will result in an increase in EV importation volumes which in turn will raise more taxes for KRA compared to the current punitive regime which disincentivizes EV importation.

All this is besides the non-financial incentives since the electric vehicles sector seeks to reduce carbon emissions. Due to current prevalence of renewables in the Kenyan grid and off grid solar solutions in Kenya, the use of EVs is set to reduce carbon emissions significantly. This will enable the country to achieve its emissions targets towards climate change goals, create a new green industry, new businesses and jobs. It will also grow our energy demand, thus enable the consumption of surplus produced energy.

#### **b. Implementation of the fee bate system**

A review of the fee bate program extensively covered in the *Development of a Fuel Economy Labeling and Fee bate Programme for Motor Vehicles in Kenya* report was submitted to Energy Regulatory Commission by the University of Nairobi Enterprises and Services Ltd (UNES) in June 2016. In the report, a fee bate is defined as a combination of fees and rebates in which a ‘fee’ is levied on inefficient vehicles and a ‘rebate’ is rewarded to efficient vehicles. A fee bate system is further described as a set benchmark

emission (for instance, in gCO<sub>2</sub>/km), above which a fee is levied on the inefficient vehicles and a rebate system through which less polluting vehicles (efficient vehicles) are rewarded (University of Nairobi Enterprises and Services Ltd (UNES), 2016). The report can be reviewed to explore the potential of further mitigation strategies for carbon emissions reduction and how to incentivize the adoption of electric vehicles.<sup>11</sup>

One important prerequisite for the implementation of a feebate system is the availability of data: The adoption of feebates and similar programmes relies on CO<sub>2</sub> emissions data or fuel consumption data from the vehicles that enter the Kenyan market. Hence, a system needs to be in place that captures these data upon entry of the vehicle. Moreover, a data sharing framework between relevant institutions needs to be installed, in the Kenyan case these institutions are the ones mentioned in the first part of the recommendations section of this report, namely KEBS, KRA, NTSA, SDoT, and the Ministry of Energy, among others.

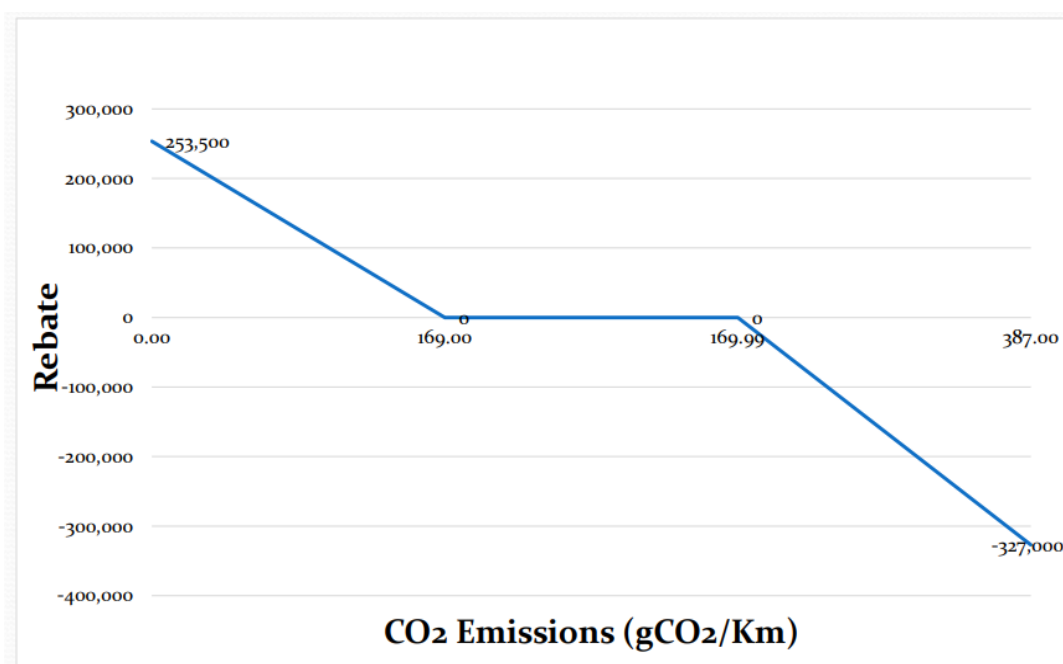


Figure 4: A demonstration of the feebate system

Source: Development of a Fuel Economy Labeling and Feebate Programme for Motor Vehicles in Kenya, 2016

**c. Updating of the Current Retail Selling Price (CRSP) List by the Kenya Revenue Authority**

Vehicle manufacturers regularly release new models and update existing models of their vehicles every other year. Most of these manufacturers have launched or are in the process of developing electric vehicles and they range from well-known traditional vehicle manufactures e.g. Toyota, Nissan, and

<sup>11</sup> The report can be accessed here: <https://www.globalfuelconomy.org/media/367814/feebate-2016-feebate-report.pdf>

Mercedes to new entrants like Tesla and BYD. As more options become available for consumers due to improved range and efficiency, a growth in electric car importation is likely.

The Kenya Revenue Authority is guided by the CRSP when calculating taxes to be paid for vehicles. The current retail selling price of a vehicle is provided to KRA by the vehicle manufactures, their representatives in the country or by determination by the KRA. The KRA motor vehicle CRSP only has one electric vehicle which is the Nissan Leaf because it is the most frequently imported electric car in the country. Therefore, on importation of an electric vehicle which does not yet exist in the database, determination of duty is bound to be a challenge and officials at the port do not have capacity to clear these vehicles. In some instances, improvisations are made where the EV is compared with a 'similar' ICE vehicle to determine duty.

Therefore, KRA should update the CRSP database with EV models that currently exist in Kenya or those that are mostly likely to get imported to Kenya in the near future. This database should also include two-wheeler and three-wheeler electric powered vehicles. Updating the CRSP will enable a smooth and clear process importation of electric vehicles into the country.

## References

- Hauff, Karin et al. "Taxation Of Electric Vehicles In Europe: A Methodology For Comparison". *World Electric Vehicle Journal*, vol 9, no. 2, 2018, p. 30. MDPI AG, doi:10.3390/wevj9020030.
- 17th Congress - Senate Bill No. 709 - Senate of the Philippines. (2016). Senate.Gov.Ph. [http://senate.gov.ph/lis/bill\\_res.aspx?congress=17&q=SBN-709](http://senate.gov.ph/lis/bill_res.aspx?congress=17&q=SBN-709)
- 17th Congress - Senate Bill No. 1540 - Senate of the Philippines. (2017). Senate.Gov.Ph. [https://www.senate.gov.ph/lis/bill\\_res.aspx?congress=17&q=SBN-1540](https://www.senate.gov.ph/lis/bill_res.aspx?congress=17&q=SBN-1540)
- 18th Congress - Senate Bill No. 174 - Senate of the Philippines. (2019). Senate.Gov.Ph. [https://senate.gov.ph/lis/bill\\_res.aspx?congress=18&q=SBN-174](https://senate.gov.ph/lis/bill_res.aspx?congress=18&q=SBN-174)
- Agunbiade, O., & Siyan, P. (2020). Prospects of Electric Vehicles in the Automotive Industry in Nigeria. *European Scientific Journal ESJ*, 16(7). <https://doi.org/10.19044/esj.2020.v16n7p201>
- Be Forward. (n.d.) URL: <https://sp.beforward.jp/nissan/leaf/bh230133/id/1808536/>
- Biona, M. M. (2019, July). Philippine Electric Vehicle Policy Analysis Report - Draft Report. ResearchGate; unknown. [https://www.researchgate.net/publication/335464260\\_Philippine\\_Electric\\_Vehicle\\_Policy\\_Analysis\\_Report\\_-\\_Draft\\_Report](https://www.researchgate.net/publication/335464260_Philippine_Electric_Vehicle_Policy_Analysis_Report_-_Draft_Report)
- Dane, A. (2014). The Potential of Electric Vehicles to Contribute to South Africa's Greenhouse Gas Emissions Targets and other Developmental Objectives How Appropriate is the Investment in Electric Vehicles as a NAMA? <https://www.semanticscholar.org/paper/The-Potential-of-Electric-Vehicles-to-Contribute-to-Dane/eda9c072f6b73019d3c492120934a6a9c206860c>
- Department of Finance. (2020). Package 1: TRAIN | Comprehensive Tax Reform Program • #TaxReformNow. Dof.Gov.Ph. <https://taxreform.dof.gov.ph/tax-reform-packages/p1-train/>
- Department of Heavy Industry. (2019, March). FAME INDIA II Scheme: Department of Heavy Industry, Ministry of Heavy Industries & Public Enterprises, Government of India. Dhi.Nic.In. <https://dhi.nic.in/UserView/index?mid=1378>
- Eco-Car Tax Break and Subsidies for Vehicles – Policies - IEA. (2019). Eco-Car Tax Break and Subsidies for Vehicles – Policies - IEA. IEA. <https://www.iea.org/policies/1995-eco-car-tax-break-and-subsidies-for-vehicles>
- E-Vehicles - Securing The Future of Philippine Industries. (2015). Securing The Future of Philippine Industries. <http://industry.gov.ph/industry/e-vehicles/>
- He, H., & Cui, H. (2019, June 18). China announced 2019 subsidies for new energy vehicles | International Council on Clean Transportation. Theicct.Org. <https://theicct.org/publications/china-announced-2019-subsidies-new-energy-vehicles#:~:text=In%20late%20March%2C%20China%20announced,be%20phased%20out%20after%202020.>
- He, H., Jin, L., Cui, H., & Zhou, H. (2018, October 18). Assessment of electric car promotion policies in Chinese cities | International Council on Clean Transportation. Theicct.Org. <https://theicct.org/publications/assessment-electric-car-promotion-policies-chinese-cities>

- He, H., Jin, L., Cui, H., Zhou, H., Beijing, Berlin, Brussels, San, F., & Washington. (2018). ASSESSMENT OF ELECTRIC CAR PROMOTION POLICIES IN CHINESE CITIES. [https://theicct.org/sites/default/files/publications/China\\_city\\_NEV\\_assessment\\_20181018.pdf](https://theicct.org/sites/default/files/publications/China_city_NEV_assessment_20181018.pdf)
- Niu, I. (2019, April 7). China will dominate the world's electric cars market. Quartz; Quartz. <https://qz.com/1586938/china-will-dominate-the-worlds-electric-cars-market/>
- OFFICE OF MINISTER OF TRANSPORT GOVERNMENT OF NCT OF DELHI 8. (n.d.). <https://evreporter.com/wp-content/uploads/2019/12/Delhi-EV-Policy-2019.pdf>
- SBT Global Car Exporter. (n.d.). URL: <https://www.sbtjapan.com/dealers-cars/toyota/premio/DWC6898>
- Smart Energy International. (2020, April 3). What's putting the brakes on EV adoption in South Africa? Smart Energy International. <https://www.smart-energy.com/industry-sectors/electric-vehicles/whats-putting-the-brakes-on-ev-adoption-in-south-africa/>
- Smiti. (2019, August 6). Indian EVs Become Cheaper After Tax Rate Cut | CleanTechnica. CleanTechnica. <https://cleantechnica.com/2019/08/06/indian-evs-become-cheaper-after-tax-rate-cut/>
- The Beam. (2019, May 9). A Year In Review: The World Electric Vehicle Market | CleanTechnica. CleanTechnica. <https://cleantechnica.com/2019/05/09/a-year-in-review-the-electric-vehicle-market/>
- Umali, T. (2019, July 28). The Philippines releases standards for electric vehicles | OpenGov Asia. OpenGov Asia. <https://www.opengovasia.com/the-philippines-releases-standards-for-electric-vehicles/>
- Venter, I. (2020). Position paper to chart way forward for electric vehicle market in South Africa. Engineering News. <https://www.engineeringnews.co.za/article/position-paper-to-chart-way-forward-for-electric-vehicle-market-in-south-africa-2020-02-28>
- Hill, Katie et al. "Is Sub-Saharan Africa Ready For The Electric Vehicle Revolution?". World Economic Forum, 2020, <https://www.weforum.org/agenda/2018/07/sub-saharan-africa-electric-vehicle-revolution-evs/>.
- "Plug In Electric Vehicle Credit IRC 30 And IRC 30D | Internal Revenue Service". Irs.Gov, 2020, <https://www.irs.gov/businesses/plug-in-electric-vehicle-credit-irc-30-and-irc-30d>.
- "State And Federal Electric Vehicle Incentives". Clean Vehicle Rebate Project, 2020, <https://cleanvehiclerebate.org/eng/ev/incentives/state-and-federal>.
- University of Nairobi Enterprises and Services Ltd (UNES). Development of a Fuel Economy Labeling and Feebate Programme for Motor Vehicles in Kenya. June 2016.

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