Africa Energy Efficiency Policy in Emerging Economies Training Week

Transport

Nairobi
18-21 March 2024

International Energy Agency

Review: What we learnt yesterday and questions

Alison Pridmore, Ian Skinner

Review

Please answer one (or more) of the following:

- What did you find most interesting from the sessions yesterday?
- What was the biggest surprise?
- What could you take forward in your work?

- Any questions / or reflections

Training roadmap

Format of the day

Day 3 Agenda	
9:00 - 09:30	Review what we learnt yesterday and questions
09:30 - 10:30	8. Toolkit: Policy Package Vehicle Electrification Insights
10:30 - 11:00	Coffee and Tea Break
11:00 - 12:30	9. Making it Happen: Best Practice for Two-Wheeler and Bus Electrification
12:30 - 13:30	Lunch
13:30 – 15:00	10. Toolkit: Financing Vehicle Efficiency
15:00 – 15:30	Coffee and Tea Break
15:30 – 17:00	Group Exercise and next steps

ENERGY COMMISSION
Securing Ghana's Energy Future Today

DRIVE ELECTRIC INITIATIVE (DEI-Gh)
An E-mobility Initiative of the Energy Commission of Ghana

THE DRIVE ELECTRIC INITIATIVE GHANA (DEI-Gh)

Insights into the application of a policy package approach

Doris Edem Agbevivi

Project Coordinator

20th March, 2024

Policy Package – Energy Efficient Cities

National policy makers play an important role in accelerating urban energy transitions. Cities connect directly with communities and people to enhance implementation and better inform policy. National and city-level alignment in energy efficiency policy is a key dimension of clean energy transitions. Energy Efficient cities can use digital tools to make smarter, better-informed decisions and improve quality of life for all.

REGULATION

- **National Governments help create the environment** for cities to take action through setting an overall vision including plans and targets.
- **Local regulations and codes** incorporating solutions such as smart data and metering help unlock system wide efficiencies.
- **Planning** should be integrated and cross sectoral, taking a long term view.
- **International standards and benchmarks** are important in enabling seamless communication across technologies and applications, critical for efficient urban energy systems.
- **National action that facilitates business models** for clean urban energy services, such as Public Private Partnerships and ESCOs, unlock new sources of finance.

INFORMATION

- **National initiatives can be used to build energy efficiency capacity in cities** through creating training opportunities and partnerships, informed by international best practice.
- **Digitalisation creates new sources of data** e.g. on air quality, energy consumption and traffic. Analysis and communication of this data can improve the operation of urban energy systems.
- **Digital solutions for energy efficiency in cities,** require open, transparent access to data, with privacy protected. National governments can facilitate by developing guidelines and mechanisms to enable data use and sharing across sectors and levels of government.
- **Sharing information on energy efficiency best practice** and proven cost effective technologies can help cities better understand and implement efficiency opportunities to improve performance.

INCENTIVES

- **Investing in city level action and enabling funding to flow** from national to local level, through targeted funding models, can give the best return on investment and accelerate inclusive clean energy transitions.
- **National governments can use their influence to leverage international programmes** aimed at cities, for example by creating innovation areas to attract digital and clean energy technology talent.
- **Seed funding and complementary finance from national government**, can mobilise and help scale up private capital for investment in energy efficient cities.
- **Green procurement** for example through the incorporation of energy efficiency performance criteria into municipal tenders, mobilises the purchase power of public bodies, acting as a major driver for market deployment of efficient products.

EA. 2023 Energy Efficiency Policy toolkit

INFORMATION → REGULATION& INFRASTRUCTURE → INCENTIVES

Drive Electric Initiative Ghana (DEI-Gh)

An initiative of the Energy Commission in collaboration with the Ministry of Energy to create demand and drive the productive utilisation of our excess electricity supply in the system. Launched on October 7th 2019

- Increase electricity demand sustainably to match supply as a way of partially addressing the electricity generation over capacity;
- To prevent Ghana from becoming a dumping ground for internal combustion engine (ICE) vehicles which are becoming outmoded in the European Union and other countries; and
- To usher in an era of green and sustainable technology for the future and help to deal with environmental pollution as vehicular population grows
- Promoting electric vehicles on our roads to create demand and drive the productive utilisation of excess electricity in the system
- Usher us into an era of green and sustainable technology for the future

Vision: to substantially reduce GHG emissions and promote green and sustainable transport and other environmentally friendly benefits while driving increased penetration of renewables in the long term.

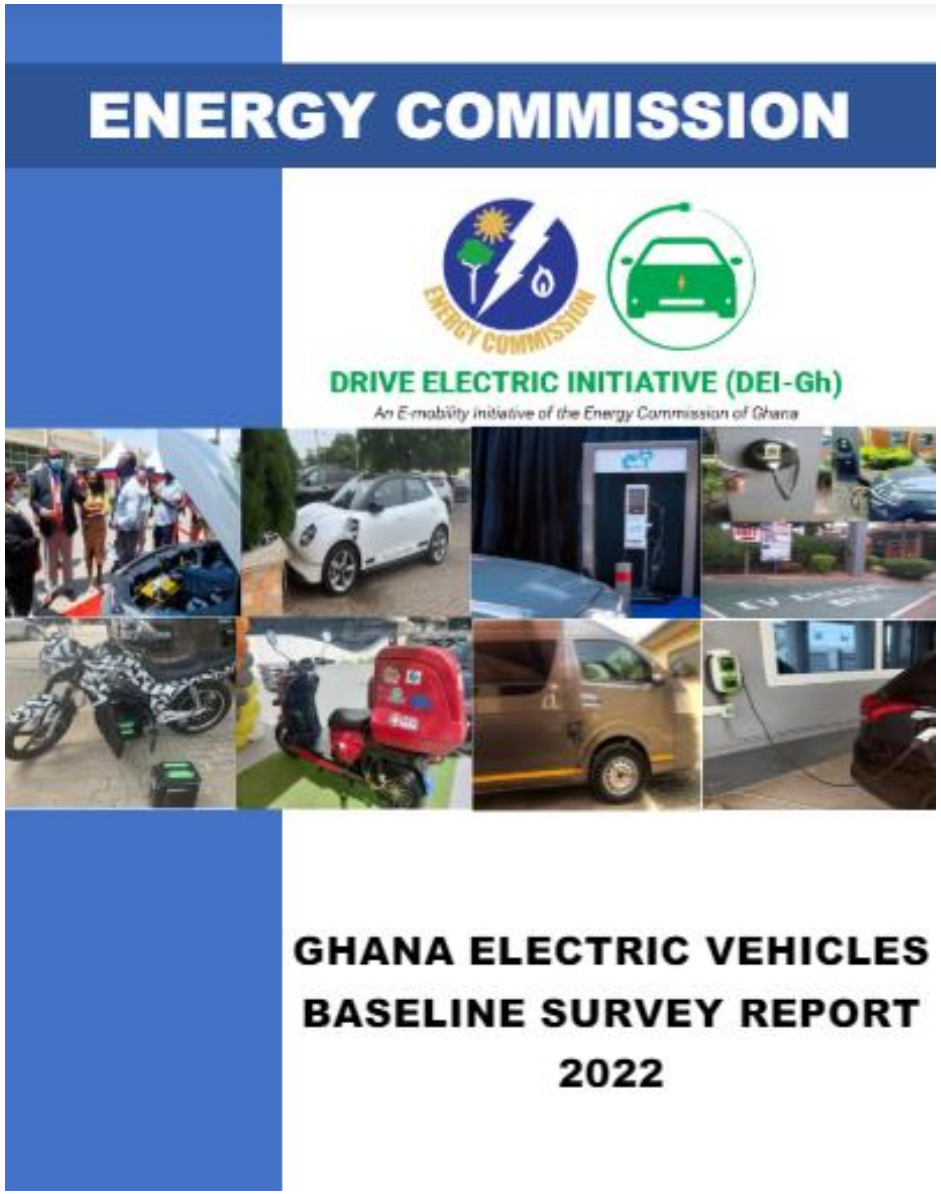
Mission : to increase the use of electricity by promoting productive use of electricity in powering vehicles while initiating green alternatives which will lead to the reduction in harmful emissions and negative environmental impacts associated with transport systems.

Information- Awareness Creation

- Local Awareness Creation and consultations
  - Conferences
  - Forums
  - Exhibitions
  - Stakeholder engagements
  - Mobile Awareness

- International Partnerships and Collaborations
  - Conferences
  - Meetings

- Stakeholder Consultations
- Reports



https://www.energycom.gov.gh/newsite/index.php/initiatives/drive-electric-initiative-main/dei-downloads

1st E-mobility Conference and Exhibition

1st Public Charging Forum

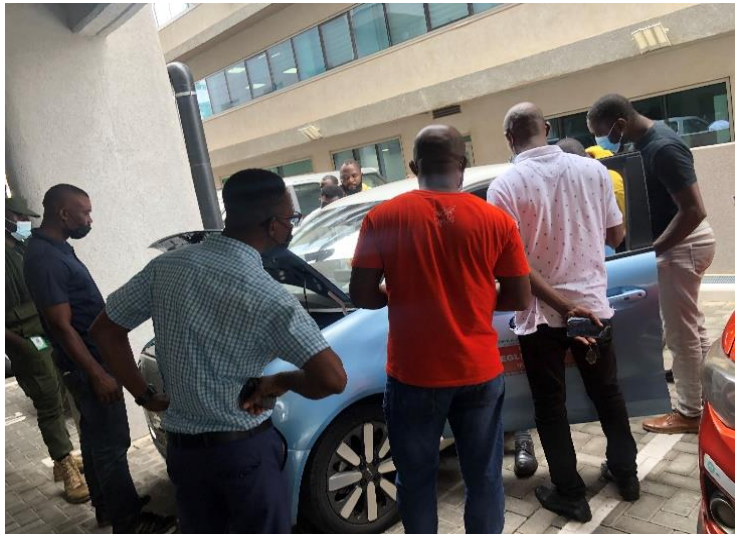
- Public Charging Forum was organized to bring on board stakeholders from the energy, petroleum, oil and gas sectors, automobile companies, and other international agencies, public and private sector to share and discuss relevant ideas regarding charging infrastructure.

- To introduce current and potential charging station operators in Ghana to the charging market for collaboration, discuss best practices around the world, analyse the business potential of charging station operation and the crucial role of energy in e-mobility

Local Stakeholder consultations with OMCs

Local Partnerships, collaborations and Stakeholder consultations

- Ministry of Transport
- DVLA
- GRA
- GSA
- EGLE Motors
- Hyundai
- British High Commission
- Norwegian High Commission
- AOMC



INFORMATION

International Partnerships and collaborations and Stakeholder consultations

- UN-DESA
- UNDP
- AFD
- EVI
- GIZ
- International Energy Agency
- Dundee City Council, UK
- Urban Foresight UK
- Stellenbosch University
- Columbia Climate School
- Rice University
- Wallbox Chargers
- FASTNED
- Transport Decarbonization Alliance

THE POLICY PACKAGE APPROACH

- **Awareness Creation**
- Local institutional collaboration
- International institutional collaboration
- Country best case scenarios and knowledge sharing from around the world
- Encourage business networks and collaboration
- Exhibitions
- Mobile awareness/billboard

EV Baseline Survey

- Baseline Committee with Institutional reps
- National Survey
- Baseline Report
- Stakeholder review

Charging Infrastructure

- Standards for the infrastructure
- Regulations
- Enforcement

EV Charging Standards and Regulations

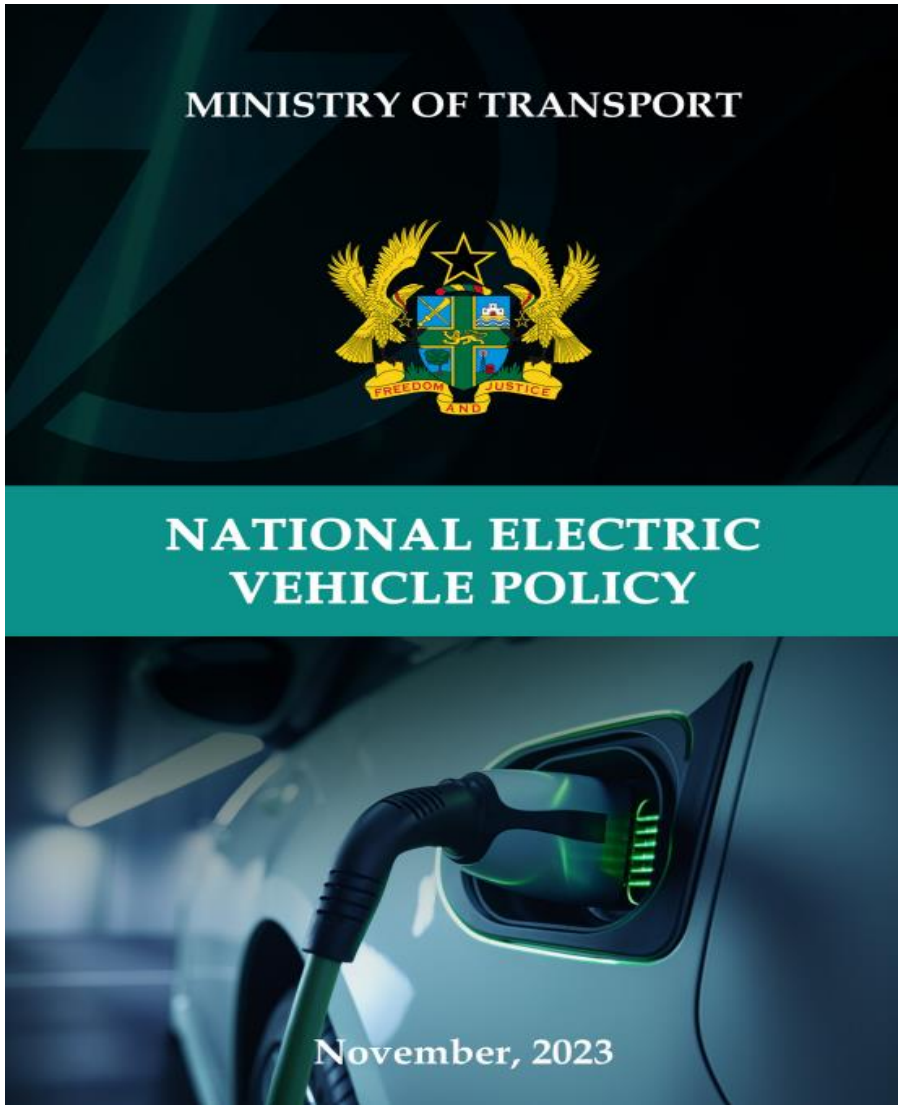
- National Electro-technical Committee with Institutional reps
- IEC Standards adaptation to country standards

Policy

- Set Policy Targets
- Institutional Responsibilities

Electric Vehicle Standards

- National Electro-technical Committee with Institutional reps
- Working group with industry to select standards

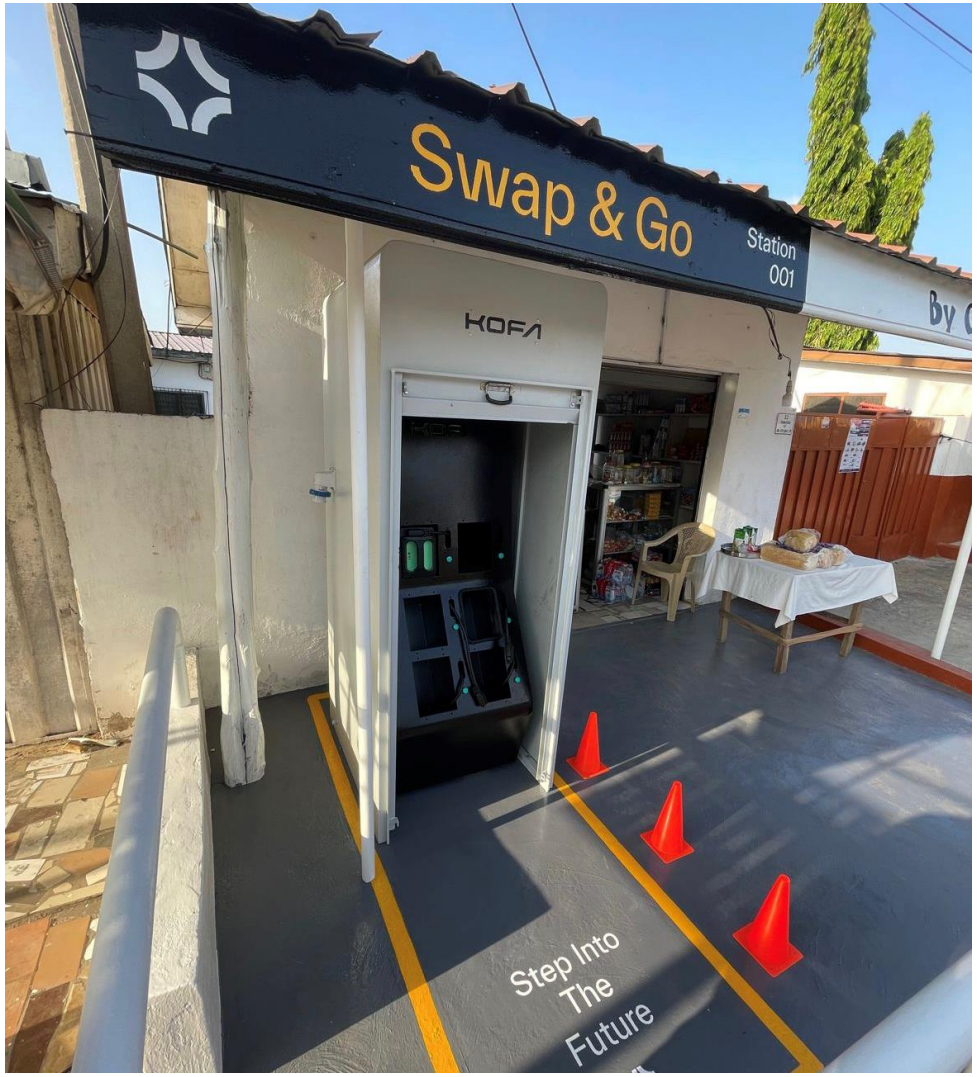


Charging Infrastructure

https://www.energycom.gov.gh/newsite/index.php/initiatives/drive-electric-initiative-main/public-charging-stations

Charging Infrastructure

Battery Swap



EV Charging & Battery Swap Standards

The TC had a total of twelve (12) meetings to review and adopt (either identified or modified) forty-eight (48) standards which were mainly IEC and some ISO and IEEE standards.

❑ **CHARGING CABLES FOR ELECTRIC VEHICLES FOR RATED VOLTAGES UP TO AD INCLUDING 0,6/1 KV**

❑ **ELECTRIC VEHICLE CONDUCTIVE CHARGING SYSTEM:**

- GS IEC 61851-1: 2023
- GS IEC 61851-21-1: 2023
- GS IEC 61851-21-2: 2023
- GS IEC 61851-23: 2023
- GS IEC 61851-24: 2023
- GS IEC 61851-25: 2023

❑ **ELECTRIC VEHICLE WIRELESS POWER TRANSFER (WPT) SYSTEMS**

- GS IEC 61980-1: 2023
- GS IEC 61980-2: 2023
- GS IEC 61980-3: 2023

❑ **INFORMATION EXCHANGE FOR ELECTRIC VEHICLE CHARGING ROAMING SERVICE**

- GS IEC 63119-1: 2023
- GS IEC 63119-2: 2023

❑ **ELECTRIC VEHICLE BATTERY SWAP SYSTEM**

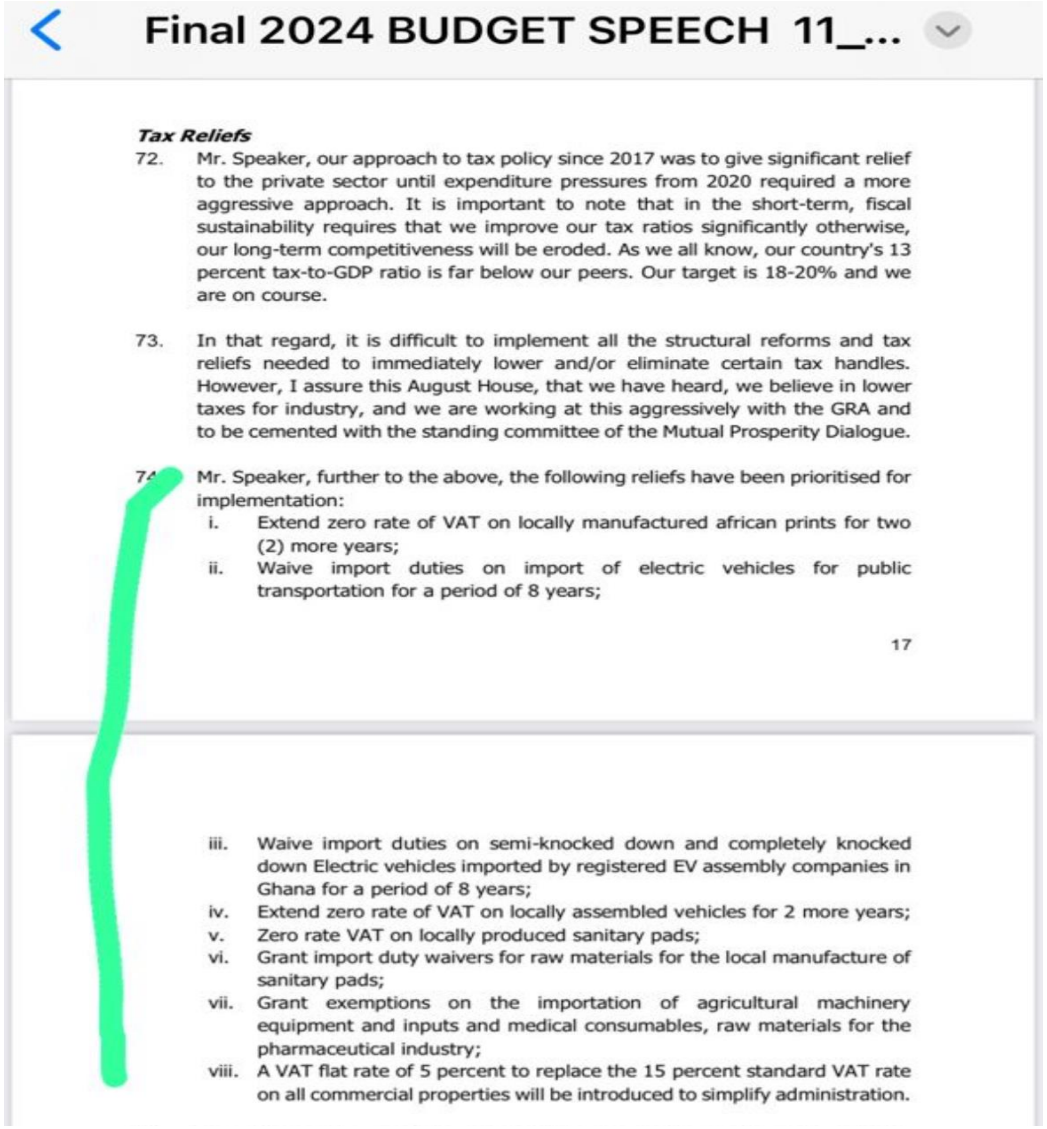
- GS IEC TS 62840-1: 2023
- GS IEC 62840-2: 2023
- GS IEC PAS 62840-3: 2023

THE POLICY PACKAGE APPROACH

Policy, Standards and Regulations

- Local institutional collaboration
- Policy Steering Committees
- National Electrotechnical and automobile committees with relevant institutional representatives
- Extensive work over a period of time (virtual/ in person)
- Standards discussed and adopted or adapted
- Public stakeholder consultations across regions
- In the case of regulations, parliamentary review and adoption

THE POLICY PACKAGE APPROACH


Final 2024 BUDGET SPEECH 11_...

Tax Reliefs

72. Mr. Speaker, our approach to tax policy since 2017 was to give significant relief to the private sector until expenditure pressures from 2020 required a more aggressive approach. It is important to note that in the short-term, fiscal sustainability requires that we improve our tax ratios significantly otherwise, our long-term competitiveness will be eroded. As we all know, our country's 13 percent tax-to-GDP ratio is far below our peers. Our target is 18-20% and we are on course.

73. In that regard, it is difficult to implement all the structural reforms and tax reliefs needed to immediately lower and/or eliminate certain tax handles. However, I assure this August House, that we have heard, we believe in lower taxes for industry, and we are working at this aggressively with the GRA and to be cemented with the standing committee of the Mutual Prosperity Dialogue.

74. Mr. Speaker, further to the above, the following reliefs have been prioritised for implementation:

i. Extend zero rate of VAT on locally manufactured african prints for two (2) more years;
ii. Waive import duties on import of electric vehicles for public transportation for a period of 8 years;

17

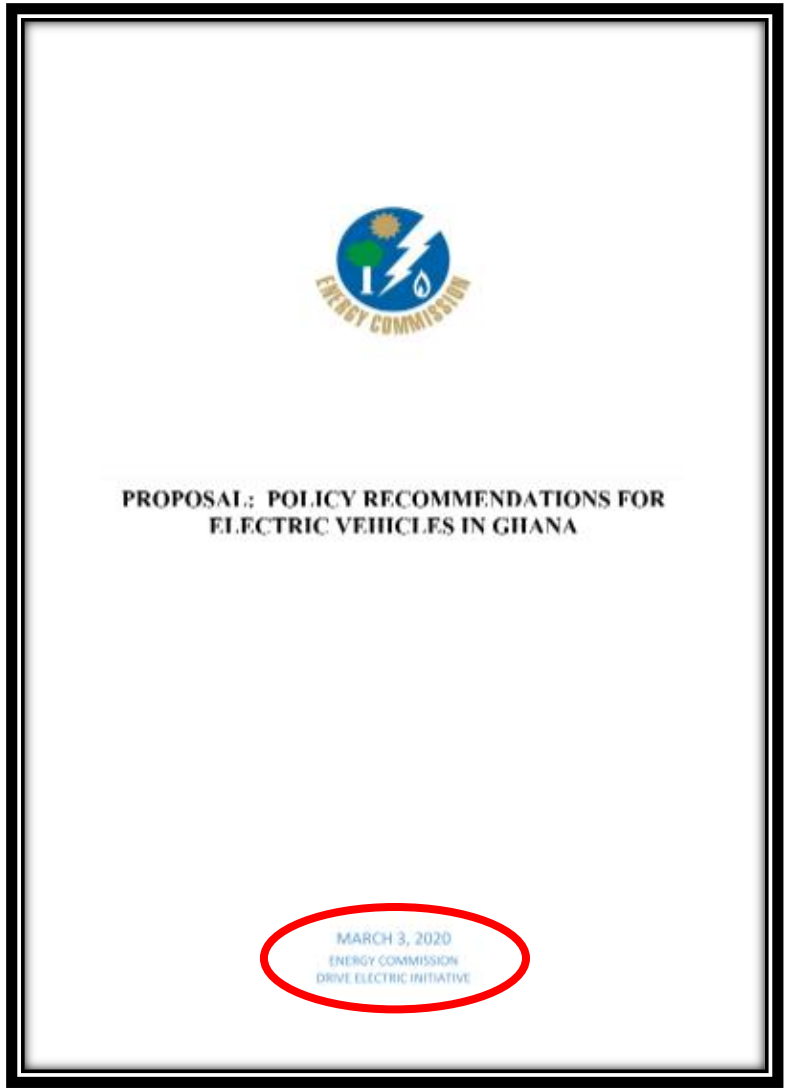
iii. Waive import duties on semi-knocked down and completely knocked down Electric vehicles imported by registered EV assembly companies in Ghana for a period of 8 years;
iv. Extend zero rate of VAT on locally assembled vehicles for 2 more years;
v. Zero rate VAT on locally produced sanitary pads;
vi. Grant import duty waivers for raw materials for the local manufacture of sanitary pads;
vii. Grant exemptions on the importation of agricultural machinery equipment and inputs and medical consumables, raw materials for the pharmaceutical industry;
viii. A VAT flat rate of 5 percent to replace the 15 percent standard VAT rate on all commercial properties will be introduced to simplify administration.

Incentives

- Waive Import duties on import of electric vehicles for public transportation for a period of 8 years
- Waive duties on semi-knocked down and completely knocked down electric vehicles imported by registered EV assembly companies in Ghana for a period of 8 years
- Extend zero rate of VAT on locally assembled vehicles for 2 more years

THE POLICY PACKAGE APPROACH

Incentives


PROPOSAL: POLICY RECOMMENDATIONS FOR ELECTRIC VEHICLES IN GHANA

MARCH 3, 2020
ENERGY COMMISSION
DRIVE ELECTRIC INITIATIVE

- Proposal to Ministry of Finance
- Constitution of a task force on duties exemptions
  - *Energy Commission*
  - *Ministries of Transport, Energy and Trade*
  - *GRA-Customs etc.*
- Tax policy meetings
- Adoption of incentives in line with country policy direction
- Ports Authorities take over to implement

ENERGY COMMISSION
Securing Ghana's Energy Future Today

THANK YOU

dagbevivi@energycom.gov.gh
Project Coordinator, DEI

Follow us

EnergyCommissionGhana
EnergyCommissionGhana
EnergyCommissionGhana

To read more on this initiative and other achievements visit Drive Electric Initiative (DEI) (energycom.gov.gh)

Making It Happen – Electric Bus Electrification

ELECTRIC DRIVE AFRICA

Golden Arrow Bus Services & GreenCape Case Study – South Africa

Cape Town based Golden Arrow Bus Services (GABS) one of South Africa's large mass transit intracity bus service companies ran a pilot study for electric buses on its routes in collaboration with GreenCape.

GABS has been providing road based public transport to the community of Cape Town for 160 years and currently employs more than 2 500 people. Its fleet of 1 171 internal combustion engine buses serve over 220 000 passengers per day along 1 300 routes.

On average, a bus travels 60 000km per year. For this amount of travel per year, the Total Cost of Ownership (TCO) for electric vehicles could be quite attractive. GABS pilot study was implemented to give them a real life case study on this and more. GABS wanted to practically test electric buses under local conditions, to compare real South African data and to test whether introducing electric buses will be commercially viable for their operations.

GABS is also very keen on reducing their carbon footprint and have already installed solar plants at their depots.

ELECTRIC DRIVE AFRICA

Range (kms)	300
Turning radius (metres)	13.4
Approach/departure angle	≥ 8.6° / ≥ 8.6°
POWERTRAIN	
Motor type	AC Synchronous
Max power	150kW x two[5]
Max torque	550N-m x two
Battery type	Lithium Iron Phosphate (LFP)
Battery capacity	324kWh
Charging capacity	80kW
Charging time	3 hours

Included in the 1.7MWp installed generation capacity is the solar carport development at the GABS depot near Cape Town International Airport. It is understood that rooftop solar PV at all six of the existing depots is insufficient to produce enough renewable energy to charge a fleet of 1 100 electric buses.

Therefore, GABS is looking at solar carports and ground mounted solar PV installations where possible to fill the gap in renewable energy that is required for their future operations. It is estimated that GABS will need a peak installed generation capacity of 80 to 100MW of renewable energy to charge a fully electric bus fleet of 1 100 vehicles.

Figure 3: Solar PV rooftop installation at the GABS head office in Epping, Cape Town (Source: GABS)

Figure 4: Solar PV Car Port at the GABS depot near the Cape Town International Airport (Source: GABS, 2022)

The Big Opportunity- EVs and PV, a Match Made in Heaven?

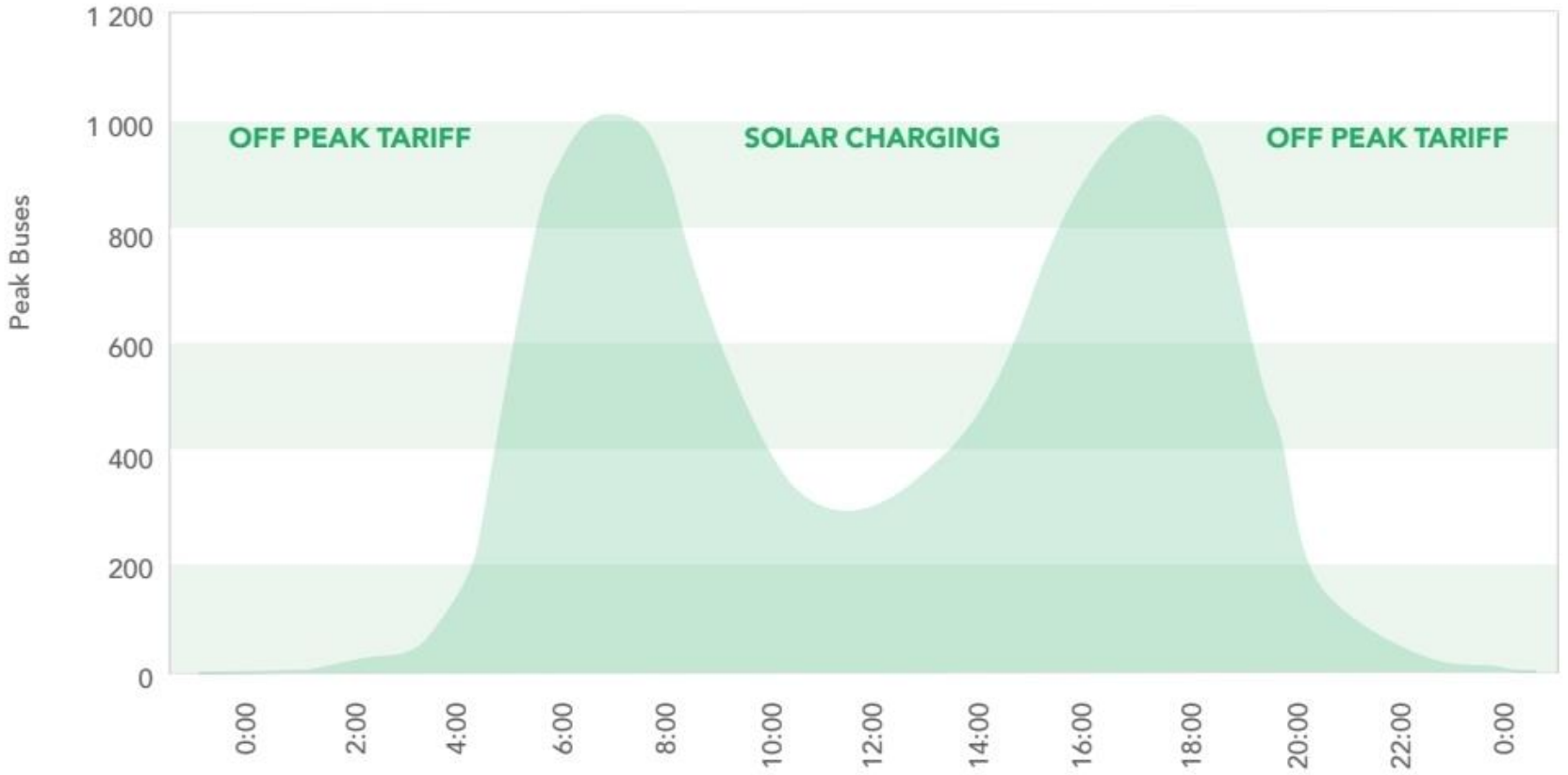


Figure 5: GABS peak bus utilisation and opportunity charging potential (Source: GABS, 2022)

ELECTRIC DRIVE AFRICA

7 Operational cost-benefit analysis

An operational cost-benefit analysis showed that, at current prices, GABS could save R657 000 in fuel costs per bus per year by switching from a diesel bus to an electric bus. Even though an electric bus is two to three times the cost of a diesel bus (due to import duties and ad valorem taxes), the fuel savings that are accrued by the bus fleet operator result in the electric bus paying for itself over its lifespan of 8 to 12 years.

Table 2: Operational Cost Benefit Analysis Per Bus

OPERATIONAL COMPARATIVE ANALYSIS	DIESEL BUS	ELECTRIC BUS
COST PER BUS (RANDS)	R2.7 million	R5.4 million to R8.1 million
ENERGY CONSUMED (UNITS PER 300KM)	120 litres of diesel	297 kWh of electricity
ENERGY COST (RANDS PER 300KM)	R2 480.00	R683.10
COST PER KM (RANDS)	R8.27	R2.28
FUEL SAVING PER YEAR PER BUS (RANDS)	R657 000	
RETURN ON INVESTMENT THROUGH FUEL SAVINGS	8 - 12 years	

Africa Energy Efficiency Policy in Emerging Economies Training Week

Transport

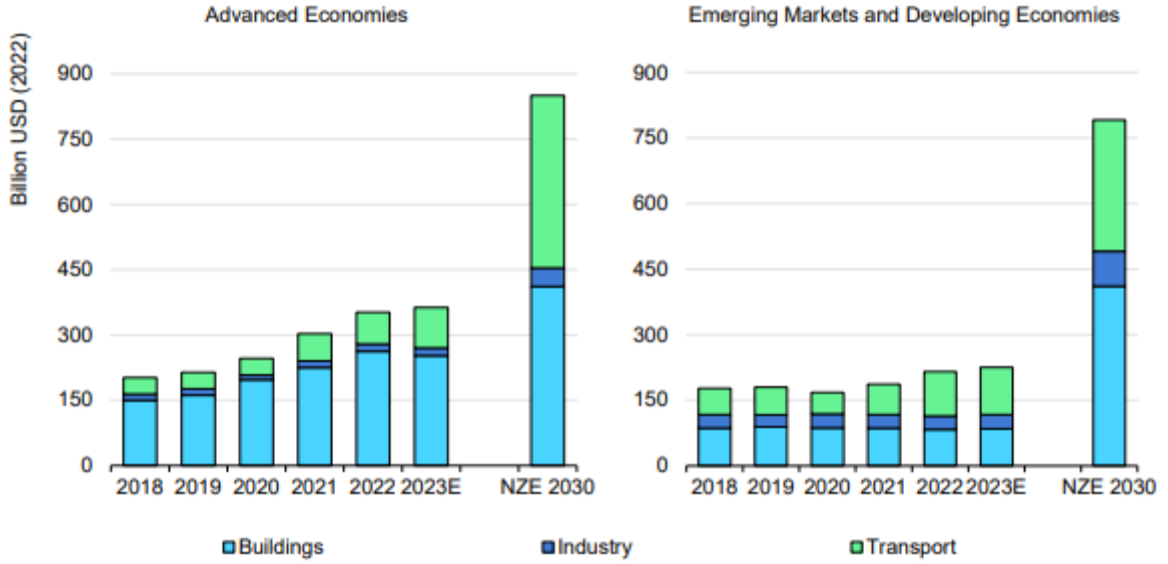
Nairobi
18-21 March 2024

International Energy Agency

Energy Efficiency Training Week – Energy Efficiency in Transport - Day 3: Financing Vehicle Efficiency

Why investment in efficiency and electric vehicles is important now

Investment in energy efficiency and end use in advanced economies and emerging markets and developing economies, 2018-2023e, and Net Zero by 2050 Scenario, 2030

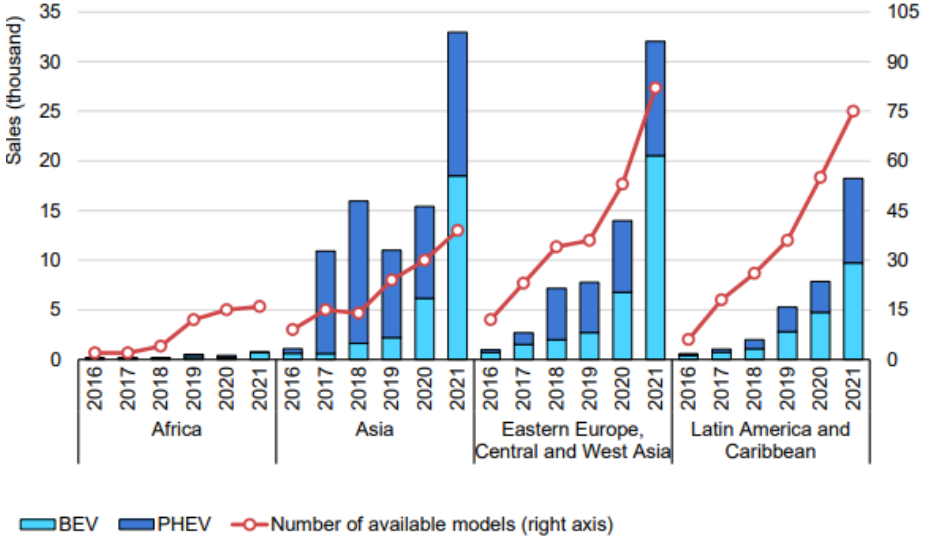


Source: IEA (2023), World Energy Outlook 2023.

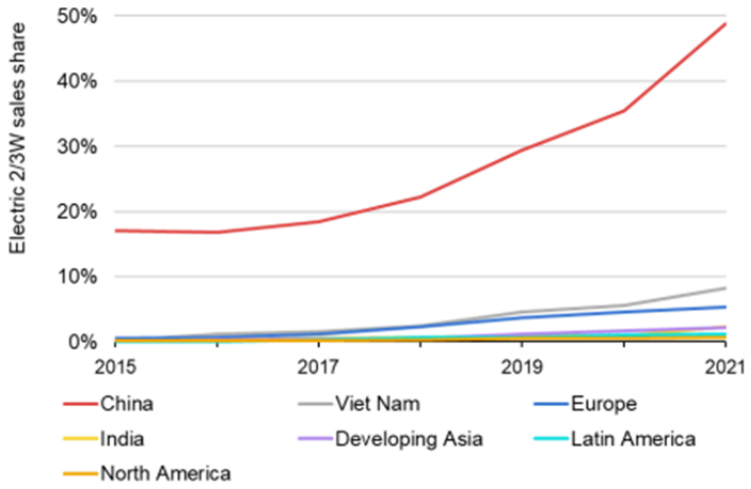
The savings potential is achieved through improvements in vehicle technology, electrification and alternative fuels

Emerging markets are starting to play a key role in electrification

Emerging markets – car sales and models available by region 2016-2021



Electric two/three-wheeler sales share by region 2015-2021



IEA 2022 Global Electric Vehicle Outlook, 2022

While limited awareness, the upfront cost barrier, limited financing options and higher cost of borrowing still inhibit large-scale adoption

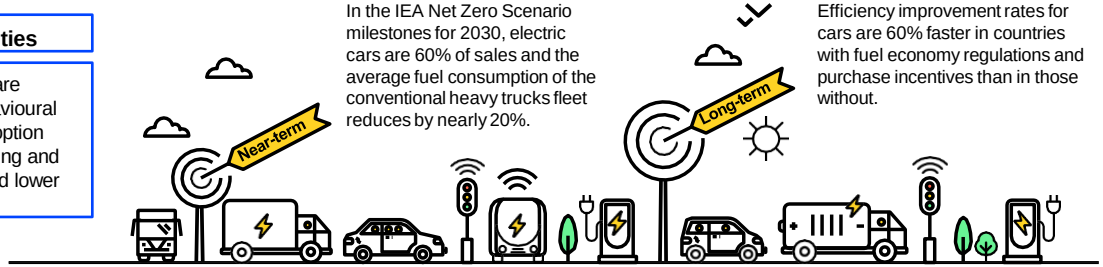
Policy Package – Vehicle Energy efficiency

Immediate opportunities

Significant fuel savings are achievable through behavioural actions including the adoption of best practices for driving and vehicle maintenance, and lower speeds.

In the IEA Net Zero Scenario milestones for 2030, electric cars are 60% of sales and the average fuel consumption of the conventional heavy trucks fleet reduces by nearly 20%.

Efficiency improvement rates for cars are 60% faster in countries with fuel economy regulations and purchase incentives than in those without.



REGULATION

- **Vehicle fuel economy standards** result in greatly reduced fuel use provided they are kept up to date, well monitored and properly enforced.
- **Regulating the import and export of used vehicles** can help improve fleet fuel economy and ensure road safety and air quality benefits.
- **Regulatory and market signals**, such as through stringent standards and target setting, help bring electric vehicles to the market, by providing an impetus to manufacturers to develop these technologies.
- **Regulation** can also help ensure the required infrastructure, for example standardised charging, is in place.

INFORMATION

- **Information campaigns** on carsharing practices and more fuel-efficient driving help people take informed action relating to energy and cost savings. Campaigns are more effective when based on behavioural insights and targeted strategies.
- **Labels inform consumers**, identifying the most efficient vehicles allowing people to choose vehicles that cost less to run. Labels for new and used vehicles help ensure benefits for all vehicle purchasers.

INCENTIVES

- **Incentives** can make vehicle costs cheaper at point of purchase, such as through grants or lower registration fees. They can also reduce on-going costs, through for example free parking and exemptions from congestion tolls.
- **Government grants** for strategic charging infrastructure, such as charging stations in homes and workplaces or fast charging along expressways, encourage the adoption of electric vehicles reflecting that purchase decisions are influenced by the availability of infrastructure.
- **Such incentives** facilitate the early adoption of electric vehicles and can be phased out as uptake grows.
- **Vehicle taxation and duties**, can be structured to incentivise the purchase of more efficient vehicles.

IEA, 2023 Policy Package Toolkit

Policy Package – Financing Energy Efficiency

Immediate opportunities

Growth in energy efficiency investment is lower than it needs to be, but enacting the right policies delivers social and economic benefits promptly, such as doubling the number of energy efficiency related jobs by 2030.

Stronger policy action can facilitate a tripling of energy efficiency-related investment to almost 1.8 trillion USD per year by 2030 in the IEA Net Zero Scenario.

Reaching net zero emissions requires an unprecedented acceleration in action. The share of total energy investment related to energy efficiency will need to continue to increase from around 20% of the total today to about 50% in 2050.

REGULATION

- **Long term strategies, targets and planning** emphasise government commitments to sustained change, attracting private investment.
- **Energy market structures** can facilitate the participation of private actors, including energy service providers, supporting investment over time.
- **Strong policy and governance frameworks** including transparency regulations, Minimum Energy Performance Standards and ESG (Environmental, Social and Governance) requirements, can attract international investment and ensure long term flow of capital.
- **Utility regulation** can spur investment and enable innovative financing approaches e.g. where outlay is recouped through energy bills.

INFORMATION

- **Training programmes and technical assistance** for financial institutions and project developers help improve understanding of business models, risks and opportunities.
- **Policies and digital tools** enhancing data availability and quality, including energy performance certificates, help to improve financiers' understanding, and to verify energy savings and payback periods.
- **Development of standardised contract templates and terms** help create trust, reduce transaction costs and simplify replication.
- **Dedicated information campaigns** raise awareness of preferential funding opportunities, and how to access them.

INCENTIVES

- **Streamlined and digitised administrative processes** for energy efficiency projects, including permits, licenses or subsidies and one-stop shops reduce barriers to investment.
- **Public funding** can support de-risking mechanisms, like guarantee funds or risk-sharing facilities, helping to attract private capital.
- **Coordination platforms** and matchmaking services between project developers and private investors can improve access to funding.
- **Policies promoting innovative mechanisms** such as bulk procurement, on-bill financing and leasing models can achieve scale and amplify actions.
- **Energy subsidy reform** helps phase-out poorly targeted fossil fuel subsidies while boosting direct support for energy efficiency measures, including for vulnerable groups.

IEA, 2023 Policy Package Toolkit

Streamlined processes

Energy Technology Lists and selectors

- **Energy Technology List:** list of pre-assessed and pre-approved energy efficient appliances and equipment, including vehicles that can automatically qualify for subsidies or funding
  - Procurement tool
  - De-risking instrument
  - Regular reviews of criteria as well as of technologies and products

- **EBRD Green Technology Selector**: online platform with country-specific directories of products and vendors
  - Pre-assessed and pre-approved technologies
  - automatically eligible for GVC financing through a participating financial institution
  - Regular adjustments of baseline and included technologies
  - Integrated in **Green Economy Finance Facilities**

Innovative mechanisms – bulk procurement

Bulk procurement programmes – Chile

Benefits of bulk procurement programmes

- Demand aggregation to achieve economies of scale and reduce transaction costs
- Standardised tendering, M&V
- Technical expertise

Chile: E-bus adoption in Santiago de Chile

- National e-mobility strategy
- Unified public transport systems
- Minimum quota for e-buses
- RED Movilidad goal: 2/3 of buses either electric or meeting EURO VI standard
- Shaded solar parking spots for charging at the terminal

C40, 2020

Results

- 2000 e-buses by July 2023 (31% of total fleet): largest fleet in Latin America
- 23 e-terminals installed at strategic points
- User favourability rating of 90%
- 75% cheaper energy costs compared to diesel
- 75% of drivers reported reduced noise levels

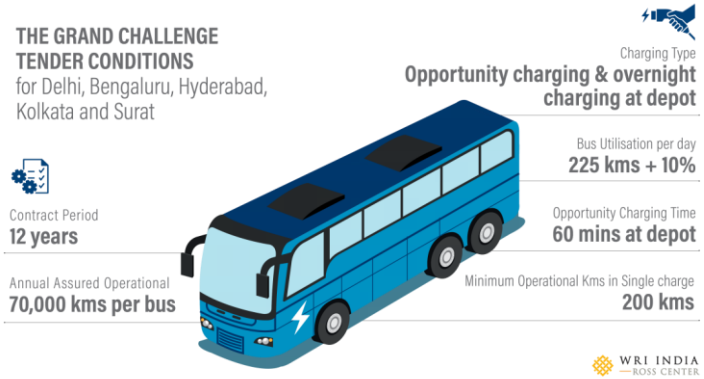
C40, 2020

Bulk procurement programmes - India

Grand challenge e-bus tender, India

- 5450 electric buses for 5 cities across India
- FAME-II subsidy applied
- New benchmark prices for public transport discovered (over 25% lower than diesel buses)
- Tender documents and guidelines took into account cities' conditions and requirements
- Gross cost contract: "Mobility as a service" model
  - Ownership and operation of e-buses and charging infrastructure handled by operators
  - Fixed cost per km with "minimum guaranteed run" (225 km/day or 70,000km p.a.)
  - 12 years contract period

CESL aiming to procure further 50,000 e-buses by 2030 within National Electric Bus Programme



Data Source: Convergence Energy Services Limited (CESL), designed by WRI India

Innovative mechanisms – leasing

Mobility as a service

- **Pay-per-use model:**

Client	Technology provider	Investor
• No upfront investment • Pays for services received • Lower whole-life equipment costs and access to BAT	• Invests in and owns the equipment • Bears costs of operations and maintenance • Long-term and predictable revenue stream and new clients	• Green funding opportunity • Option to purchase equipment and lease it back to the provider (monthly payments) • Collateral: equipment, contract provider-client, default guarantee

Mobility aaS: Battery swapping for 2-wheelers in Uganda

Uganda: Zembo's two-wheeler battery swapping

- Aimed at taxi (Boda Boda) drivers
- Lease-to-own option: Weekly repayment for vehicle, full ownership after 2 years
- Pay as you go for electricity used
- Zembo owns batteries and maintains them
- Charging via urban grid, solar-hybrid and off-grid solar charging stations owned by Zembo
- Vehicles equipped with GPS tracker Zembo 2023

Results:

- Boda Boda drivers earn up to 50% more
- Job creation at swapping stations
- Over 200 electric motorcycle taxis sold or leased, 27 charging stations installed with average 10 000 swap per month
- Zembo 2025 goal: 2000 vehicles and 60 swapping stations

Innovative mechanisms – loans

Green car loans and support measures for low-income households

- Interest-free or low-interest loans, partially with longer repayment schedules
- Can be particularly aimed at lowering the affordability barrier for low-income households

Examples:

- **Australian Capital Territory** offers interest-free loans of up to AUD 15 000 (>USD 10 000), with a repayment period of up to 10 years under its Sustainable Household Scheme
- **France** offers interest-free loans for EVs to lower-income households in low emission zones since 2023 in a two-year trial. New leasing scheme introduced cost of 100 euros per month.
- **Canada Infrastructure Bank** offers low- or zero-interest loans for the purchase of zero-emission buses with repayments through savings in operating costs
- In **Kenya**, three commercial lenders (NCBA, Family Bank, Kenya Commercial Bank) entered into strategic partnerships with e-mobility start-ups
- **State Bank of India** launched the country's first Green Car Loan at 20 basis points lower than commercial lending schemes. Several other banks now expanded their offer to different EV types

Alternative financing solutions

Alternative vehicle finance in India: REVFIN

- Digital consumer lending platform aiming to improve financial inclusion
- Provides loans to commercial EV drivers (e-2/3-wheelers, e-3W cargo vehicles and small fleets through OEMs) in 17 states
- Partnerships with 26 OEMs
- Digital non-traditional underwriting methodology
- Ability to offer loans to clients without (reliable) credit history
- IOT/tracking devices for performance monitoring and reducing repayment risks

REVFIN Results

- Claims less than 2% of non-performing assets
- Over 17 000 EVs financed
- Aims to finance 2 million EVs over the next 5 years

Africa Energy Efficiency Policy in Emerging Economies Training Week

Transport

Nairobi
18-21 March 2024

International Energy Agency

Vehicle efficiency policy design exercise

Alison Pridmore

Learning outcomes

This session will focus on developing your capabilities to:

- Design a new vehicle energy efficiency policy

Keep in mind – this is an opportunity to:

- Learn from your peers
- Discuss new ideas
- Explore combinations of measures to form a policy package
- Consider how policy would develop in the short and longer term
- Have fun

Instructions#1

- Your Minister has tasked your team of devising and implementing a new **vehicle energy efficiency policy**. They are keen for a range of policy options to be developed.
- The Minister is keen to understand how **challenges to implementation** will be addressed and **opportunities maximised**.
- Working in your allocated group prepare a **presentation** from your group to the Minster.
- The presentation should be no more than 10 minutes in length. Visual aids such as PowerPoint slides may be used.

Instructions#2

- In the development of your strategy, please consider the following questions:
  - What are your strategy **aims and objectives**?
  - Which **stakeholders** would you consult and involve?
  - What **policy measures** would you include in your programme? How would a **policy package** approach be incorporated?
  - How could the policy measures and strategy **change over time**?
  - What are **possible financing** opportunities for the strategy?
  - What **challenges** might you face and how will you overcome them?
  - What actions would be taken to ensure the strategy was **inclusive**?
  - How will you gather **data** and **report** progress?

Instructions#3

- Define 1 or 2 people to **lead presentation** of the team project
- Establish **presentation** developers
- Identify a **time-keeper**
- Have a **facilitator** to make help ensure everyone is encouraged to speak and contribute
- We suggest:
  - 5 minutes to establish roles
  - 30 minute discussion to develop key points of strategy (remember to cover regulation, information and incentives)
  - 15 minutes to develop slides

Each **group will have ten minutes** to present. We will be strict on time.

Learning outcomes

This session will focus on developing your capabilities to:

- Design a new vehicle energy efficiency policy

Keep in mind – this is an opportunity to:

- Learn from your peers
- Discuss new ideas
- Explore combinations of measures to form a policy package
- Consider how policy would develop in the short and longer term
- Have fun

Instructions#1

- Your Minister has tasked your team of devising and implementing a new **vehicle energy efficiency strategy**. They are keen for a range of policy options to be developed.
- The Minister is keen to understand how **challenges to implementation** will be addressed and **opportunities maximised**.
- Working in your allocated group prepare a **presentation** from your group to the Minster.
- The presentation should be no more than 10 minutes in length. Visual aids such as PowerPoint slides may be used.

Instructions#2

- In the development of your strategy, please consider the following questions:
  - What are your strategy **aims and objectives**?
  - Which **stakeholders** would you consult and involve?
  - What **policy measures** would you include in your programme? How would a **policy package** approach be incorporated?
  - How could the policy measures and strategy **change over time**?
  - What are **possible financing** opportunities for the strategy?
  - What **challenges** might you face and how will you overcome them?
  - What actions would be taken to ensure the strategy was **inclusive**?
  - How will you gather **data** and **report** progress?

Instructions#3

- Define 1 or 2 people to **lead presentation** of the team project
- Establish **presentation** developers
- Identify a **time-keeper**
- Have a **facilitator** to make help ensure everyone is encouraged to speak and contribute
- We suggest:
  - 5 minutes to establish roles
  - 30 minute discussion to develop key points of strategy (remember to cover regulation, information and incentives)
  - 15 minutes to develop slides

Each **group will have ten minutes** to present. We will be strict on time.