The IEA 9th Annual Global Conference on Energy Efficiency

Special Event: Driving forward with electric mobility

Wednesday 22 May 2024: 14:30 – 17:30 EST
Bougainville, Safari Park Hotel, Nairobi, Kenya

Background

Electric vehicles are rapidly gaining market share around the world. Electric cars accounted for around 18% of all cars sold in 2023, up from only 2%, 5 years earlier. Two/three wheelers represent the most electrified road transport segment, with around 8% being electric. In 2023, electric buses accounted for 3% of total bus sales and under today policy settings the stock of electric buses increases sevenfold by 2035. Energy efficiency investments in 2022 saw particularly strong growth in electric vehicles, and more than 50 countries, home to 60% of the world's population now have policies to encourage electric vehicles, with 30 countries setting target dates to phase out new sales of internal combustion engine cars.

Switching to more efficient vehicles has been highlighted as a key measure for doubling energy efficiency progress this decade. To achieve a doubling of global annual energy intensity improvement between now and 2030, cars need to become 5% more efficient each year. A rapid increase in the shares of plug-in hybrid, battery and fuel cell electric vehicles will be key. For example, the share for two/three wheelers across these three categories will need to increase from 16% in 2022 to 78% in 2030, and from 13% to 67% for cars and vans. Investments in public chargers for electric vehicles will also need to increase, in particular for cars and vans, in order to enable wider adoption. Electrification will be the prominent lever towards net zero, with electricity representing three-quarters of energy consumption in road transport in 2050.

However, despite positive progress there remain key barriers for policy and investment, in particular in a number of emerging and developing economies (EMDES). While sales of electric vehicles are increasing globally, they remain significantly concentrated in just a few major markets – China, Europe and the United States. Car model availability can be an issue in some EMDEs, with historically many of the options on sale heavily geared towards the higher end, such as SUVs, large and luxury models. However, smaller and much more affordable models launched in 2022 and 2023 have quickly become bestsellers.In EMDEs, price signals and charging infrastructure availability can help in the economic case. While establishing and tightening fuel economy standards and vehicle imports restrictions alongside grid improvements is also key. Fuel economy standards in many countries follow tank-to-wheel efficiencies that do not consider the production of the fuel. However, with electric vehicles on the rise, production efficiencies increase in importance as they can vary widely, especially depending on the share of fossil fuel inputs in electricity generation.

Organised in partnership with UNEP and GIZ, this session will explore opportunities and challenges for expanding access to electric mobility whilst ensuring sustainable energy systems. These actions will be discussed in terms of what is needed in the transport sector to achieve a doubling of energy efficiency progress by 2030.

International Energy Agency

MINISTRY OF ENERGY AND PETROLEUM

Agenda

14:30-14:45	**Opening remarks** • Jerotich Seii, Vice Chair, Ministry of Transport Taskforce on Electric Mobility • Pak Dadan, Secretary-General of Energy and Mineral Resources, Ministry of Energy and Mineral Resources (MEME), Indonesia
14:45-15:45	**The Role of Transport in Doubling Energy Efficiency** *This session will aim to highlight global best cases for doubling energy efficiency in the transport sector. Experts from government, international organisations and the private sector will explore lessons learnt, including the role regulation has played in driving vehicle electrification. It will also look at the broader benefits of doubling, with a particular focus on two wheelers and buses.* **Moderator:** Jane Lumumba, Africa Director, Climate Champions Team • Professor Wang Hewu, Professor, School of Vehicle and Mobility, Tsinghua University • Rob de Jong, Head of Sustainable Mobility, UNEP • Professor Izael Da Silva, Deputy Vice-Chancellor, Strathmore University • Graziella Roccella, Chief Research and Product Design Officer, Planet Smart City
15:45-16:00	Coffee break
16:00-17:20	**Financing and Business Models for Electric Mobility** *This session will consider finance and business models relating to electric vehicles. Panellists will explore key barriers to access to financing for electric vehicles and highlight how are these being overcome through effective regulation combined with incentives. They will also explore the role the private sector can play in accelerating uptake of electric transport solutions, and the potential for innovative leasing and bulk procurement. Experts will also discuss the steps that can be taken to ensure financing is inclusive.* **Moderator:** Michael Schuster, Team Lead Sustainable Mobility Kenya, GIZ • Dr. Edi Assoumou, Energy Efficiency Expert in Transport, AFREC • Bertha Mvati, Head of Vehicle Asset Finance, BasiGo • Antoinette Gous, Manager, Carbon Trust • Robert Mburu, Head of Asset Finance, Kenya Commercial Bank (KCB) • Faith Chege, Portfolio Manager, EEP Africa • Raul Leitis, Business Development Project Manager, Mogo Auto
17:20-17:30	**Closing remarks**