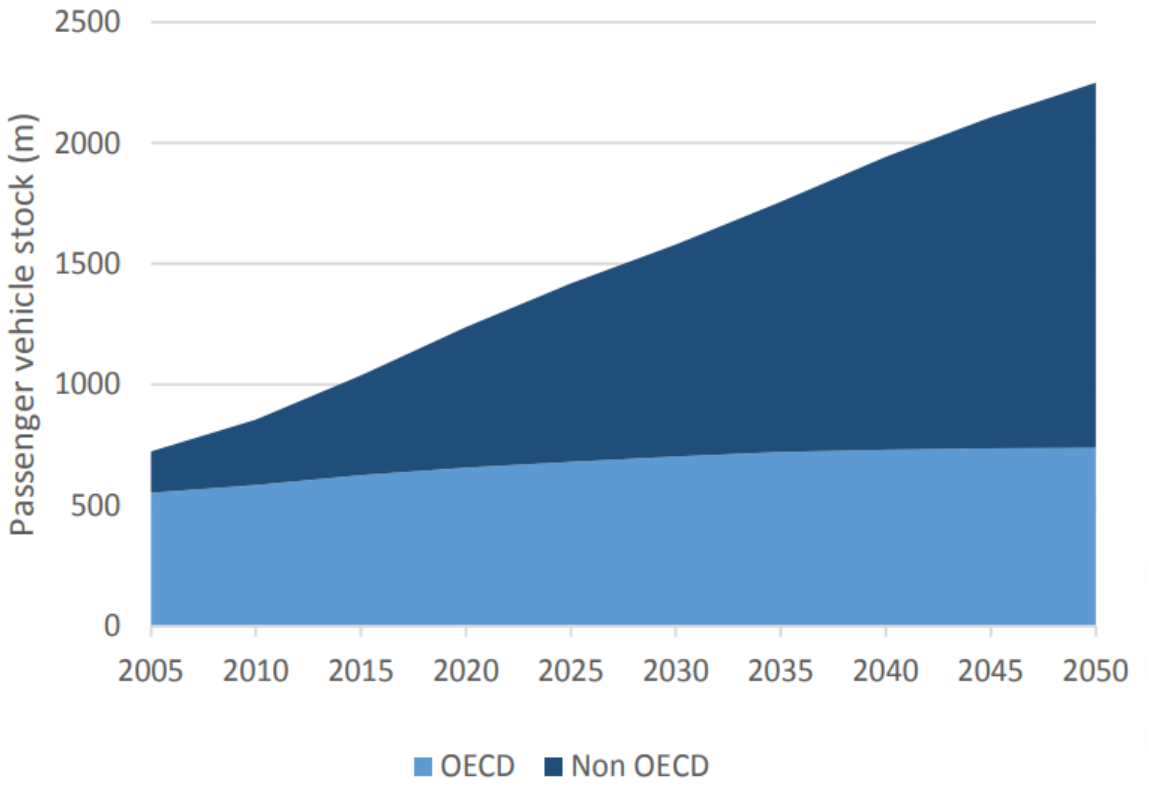
UNEP's Electric Mobility Programme

Amos Mwangi
amos.mwangi@un.org

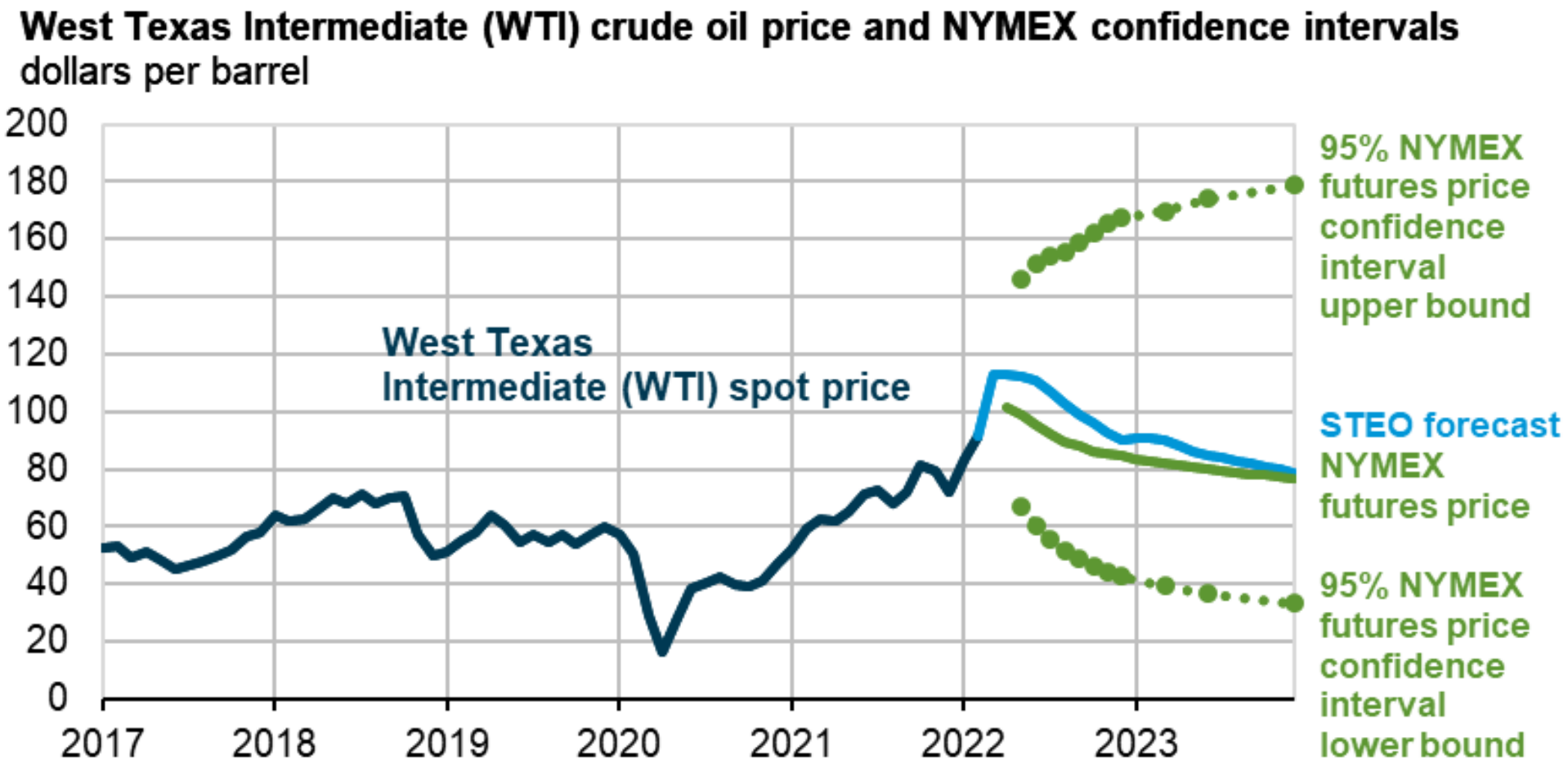
UN environment programme

The Global Challenge



- The global vehicle fleet is set to double by 2050
- All of this growth, 1+ billion vehicles, will take place in non-OECD countries
- The transport sector is set to go from one quarter to one-third of all energy related GHG emissions
- Many conventional vehicles are still going to be added, with a time-lag in fleet turnover of 20 years

6% annual fossil fuel reduction needed



Note: Confidence interval derived from options market information for the five trading days ending Mar 3, 2022. Intervals not calculated for months with sparse trading in near-the-money options contracts.

Sources: U.S. Energy Information Administration, Short-Term Energy Outlook, March 2022, CME Group, Bloomberg, L.P., and Refinitiv an LSEG Business

eia

UN environment programme

UNEP's Interventions

Share the Road (StR): Promoting walking and cycling infrastructure

Global Fuel Economy Initiative (GFEI): Supporting fuel efficient vehicle policies

Global Electric Mobility Programme

Electric Mobility: Leapfrogging to electric 2&3 wheelers, cars and buses

Partnership for Clean Fuels and Vehicles (PCFV): Reducing vehicle emissions through cleaner fuels and vehicles

Climate and Clean Air Coalition (CCAC): Reducing short-lived climate pollutants in transport

About UNEP's Global Electric Mobility Programme

- Supports more than 50 low and middle-income countries with more than USD 70 million in grants and over USD 250 million in loans
- Funded by the GEF, the German Climate Initiative, the EU, foundations and bilateral development aid
- Jointly implemented with partners such as ADB. EBRD. IEA, Centro Mario Molina Chile, UNDP, UNIDO and the ..... solutions plus
- Comprises a global support programme for e-mobility advocacy, the creation of regional communities of practice & e-mobility market-places
- Linked with other global and regional initiatives – TUMI Volt, ZEBRA, ZEV Alliance etc.

Pillars of the Programme

Electric 2&3 wheelers

- Economically viable
- Technically mature
- Charging at home outlets feasible
- High growth rates of two-wheeler market in Asia and Africa

Electric light duty vehicles

- Close to break-even with conventional cars
- Technically mature
- Highest mitigation potential of global transport energy use and emissions

Electric buses

- Economically viable on high-capacity lines
- High potential to improve local air quality
- Manageable charging infrastructure requirements

About the Global Thematic Working Groups

2&3 Wheelers

Light-Duty Vehicle

Heavy-Duty Vehicle

Charging, Grid Integration, Renewable Power Supply and Batteries

UN environment programme

International Energy Agency

- Develop and discuss global and regional targets for the shift to electric mobility;
- Provide policy advise and bring forwards the global harmonization of e-mobility standards and regulation;
- Develop analytical tools and knowledge products to support e-mobility projects world-wide
- Support e-mobility pilots with technical guidelines, methodologies for data collection and reporting;
- Develop business models and finance schemes ready for adaptation in national projects
- All knowledge products will be accessible through the emobility toolbox https://emobility.tools/

UN environment programme

About the Regional Support and Investment Platforms

The Regional Platforms are open to all countries and cities in the region, interested in developing electric mobility projects.

Supporting 50 Country Projects

Building capacity and creating awareness

Establishing roadmaps and strategies

Developing national policy frameworks

Creating business models and finance schemes

Piloting electric vehicles on the ground

Africa		
Burundi		UNEP
Cote d`Ivoire		UNEP
Ethiopia		UNEP
Ghana		UNEP
Kenya		UNEP
Madagascar		UNEP
Mauritius		UNDP
Mozambique		UNEP
Rwanda		UNEP / SOL+
Senegal		UNEP
Seychelles		UNEP
Sierra Leone		UNEP
South Africa		DBSA
Tanzania		UNEP / SOL+
Togo		UNEP
Tunisia		UNIDO
Uganda		UNEP
Zambia		UNEP

Asia		
Bangladesh		UNDP
India		UNEP / ADB
Indonesia		UNDP
Maldives		UNEP
Nepal		SOL+
Philippines		UNEP / SOL+
Sri Lanka		UNEP
Thailand		UNEP
Viet Nam		UNEP / SOL+

Central & Eastern Europe, West Asia, Middle East		
Uzbekistan		UNDP
Albania		UNIDO
Ukraine		UNEP / EBRD
Belarus		UNDP
Armenia		UNEP
Jordan		UNIDO

Latin America & the Caribbean		
Antigua & Barbuda		UNEP
Argentina		UNEP
Belize		UNEP
Colombia		UNEP
Costa Rica		UNEP
Chile		UNEP
Dominican Republic		UNEP
Ecuador		UNEP / SOL+
El Salvador		UNEP
Grenada		UNEP
Guatemala		UNEP
Honduras		UNEP
Jamaica		UNDP
Nicaragua		UNEP
Panama		UNEP
Paraguay		UNEP
Peru		UNDP
St. Lucia		UNEP
Uruguay		SOL+

UN environment programme

Kenya Support

- Initial ISO based Standards
- Fuel economy/Electric mobility baselining
- 2 wheeler demonstration
- Soot Free buses
- Cost Benefit Analysis of e-buses in Nairobi
- Fiscal Incentives
- Charging infrastructure and battery swapping

Thank you!

Amos Mwangi
amos.mwangi@un.org

UN environment programme