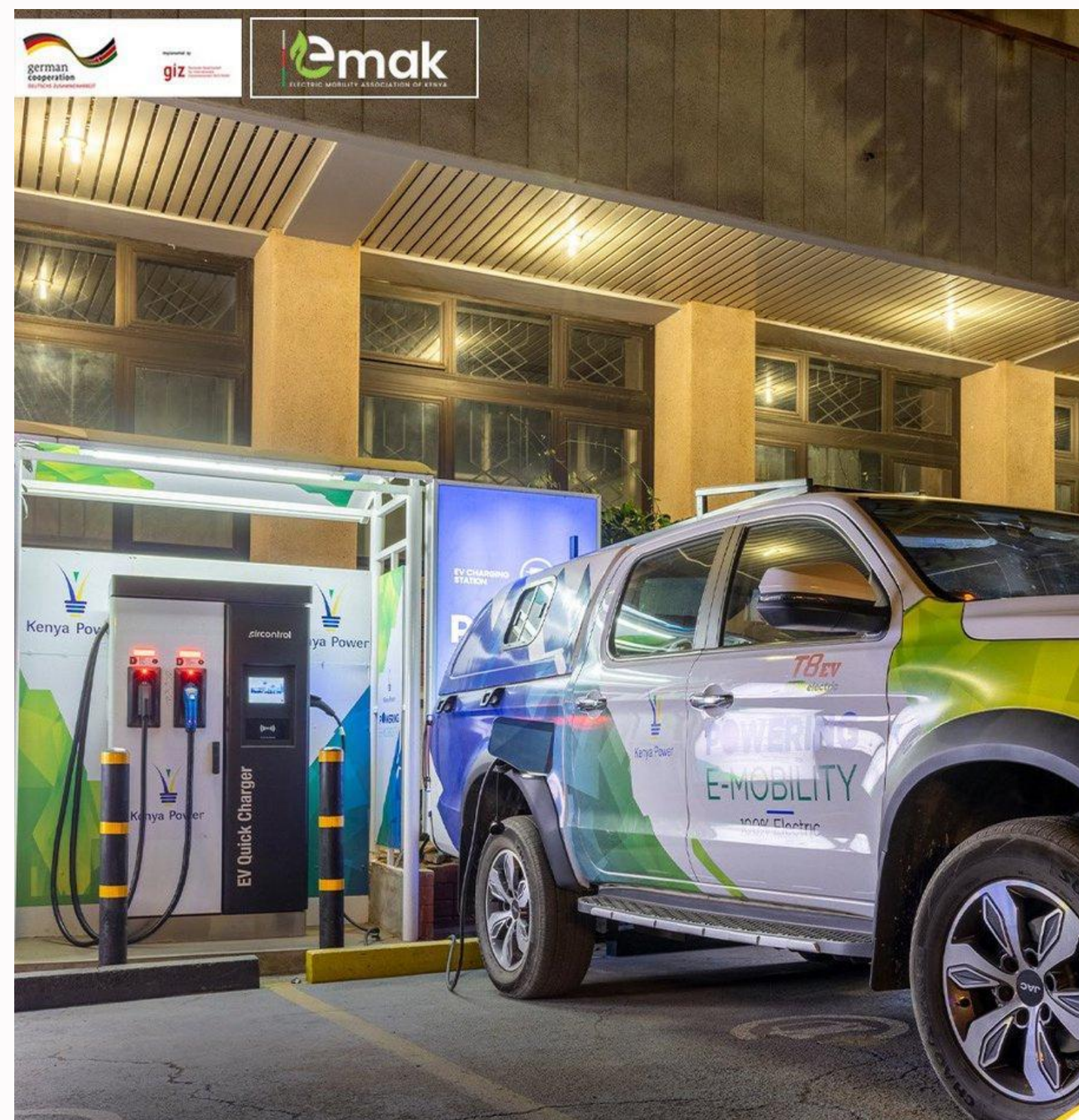




30 May 2025

Finance Bill 2025

EMAK

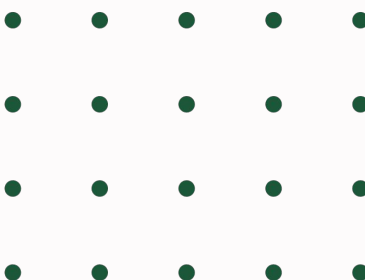


EV Registration in Kenya



Agenda

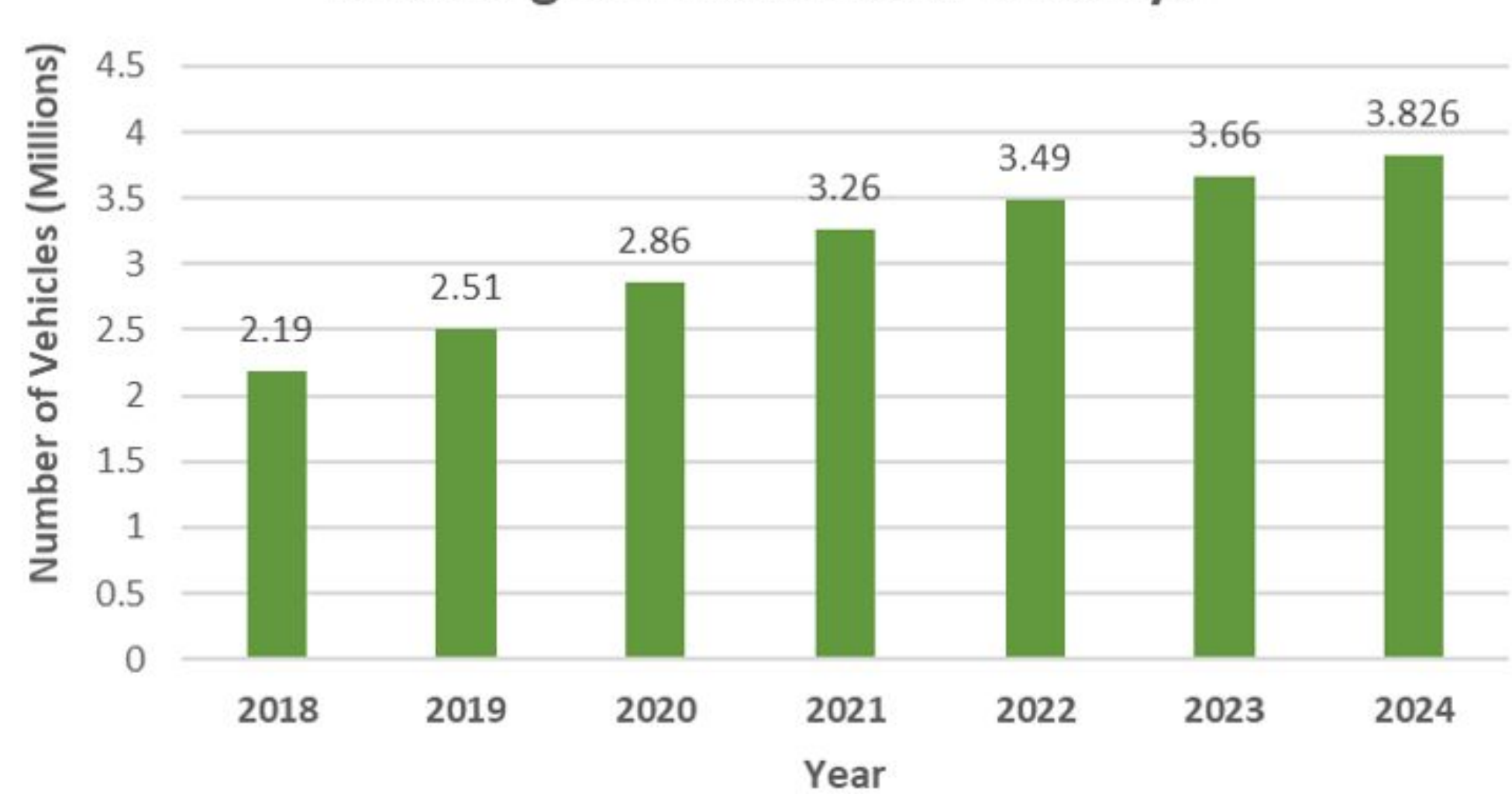
- Status of EV 2018 to 2024
- Forecasted Growth of EV (2025 - 2030)
- Impact (Fuel, Electricity and Emission)
- Global Trends



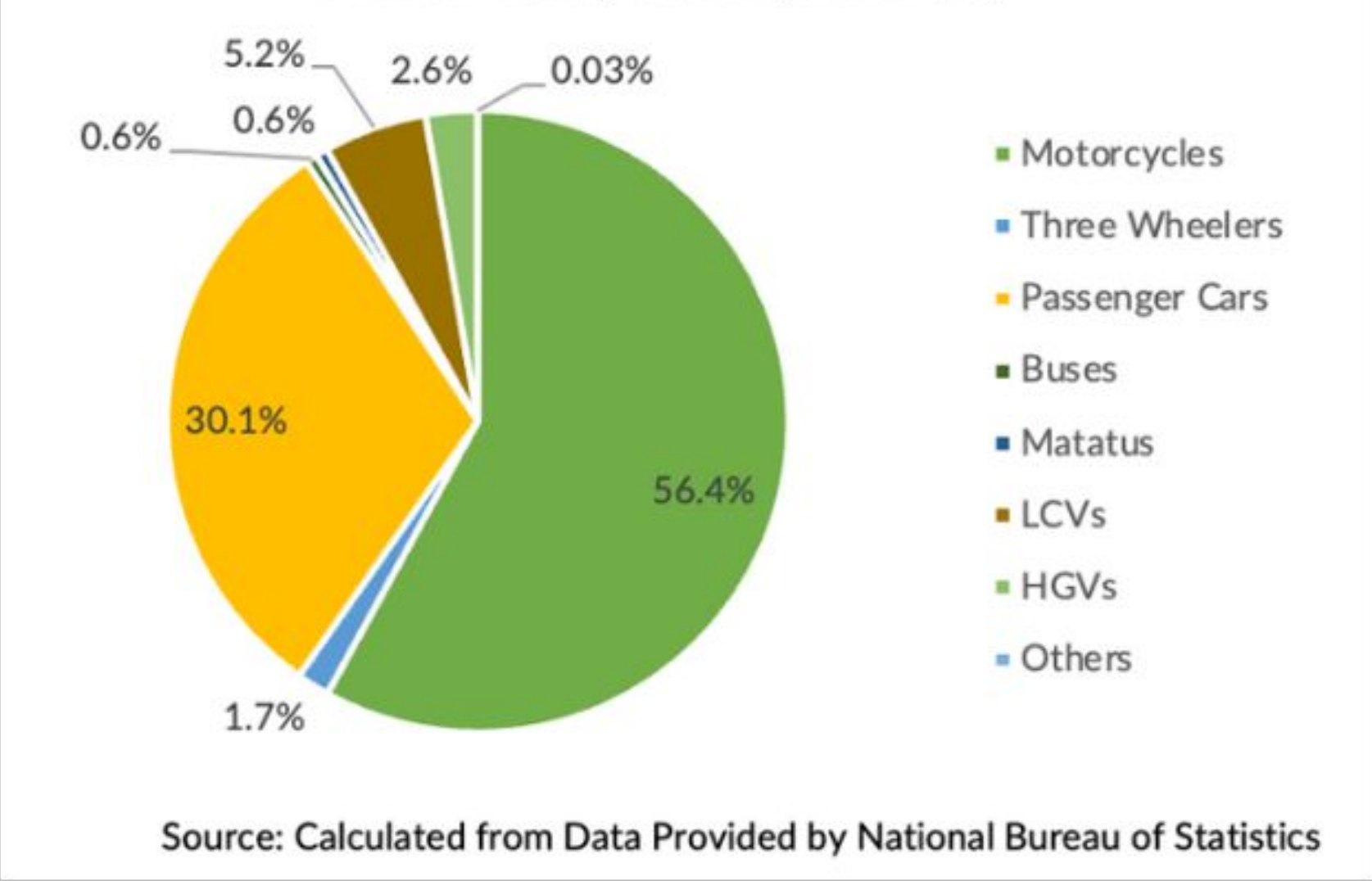
Kenya Vehicle Registration (2018 - 2024)



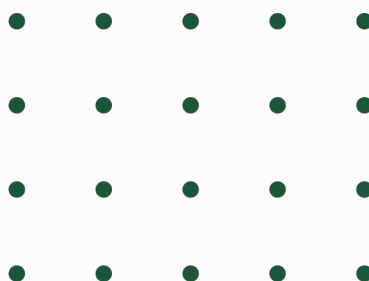
Total Registered Vehicles in Kenya



Vehicle Composition, 2023 (%)



- Only 0.2% of the total registered vehicles (excluding bicycles) are EVs
- Most of the ICE vehicles on Kenyan roads (over 88%) are second-hand imported ICE cars as compared to locally assembled ICE vehicles
- The primary competitor for local assemblers is the second-hand import market rather than EVs of any category

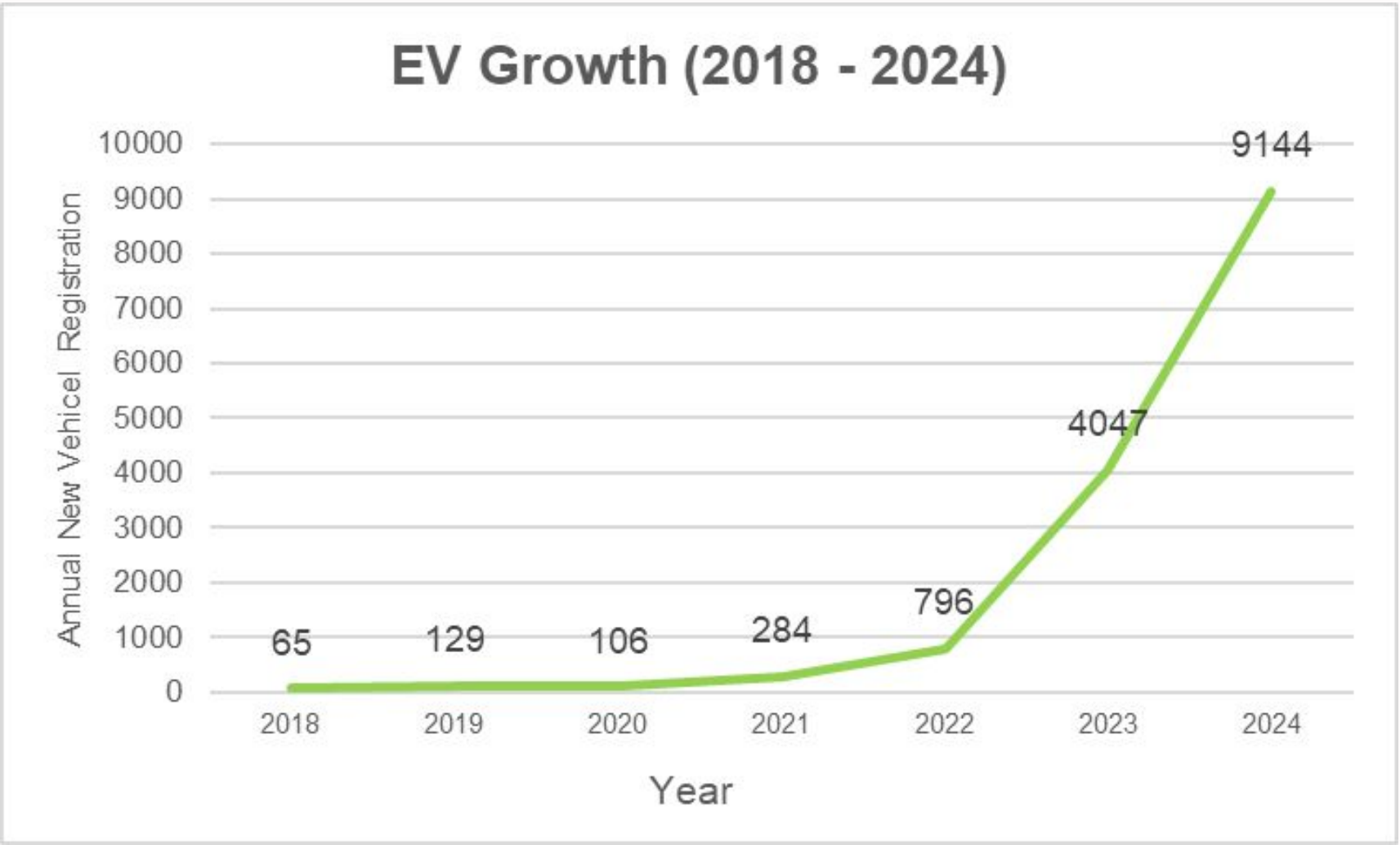


EV Registration in Kenya



Vehicle Category	2018	2019	2020	2021	2022	2023	2024	Total	%
Bicycles	0	0	0	0	321	1353	3850	5524	38%
Passenger Cars	11	15	31	58	35	45	123	318	2%
Buses	0	0	0	0	3	18	32	53	0%
Motorcycles	44	96	28	144	366	2557	4862	8097	56%
3 Wheeler	0	4	21	35	40	39	185	324	2%
Fork lift	8	13	24	40	22	33	87	227	2%
Other Vehicles	2	1	2	7	9	2	5	28	0%
Total	65	129	106	284	796	4047	9144	14571	100%

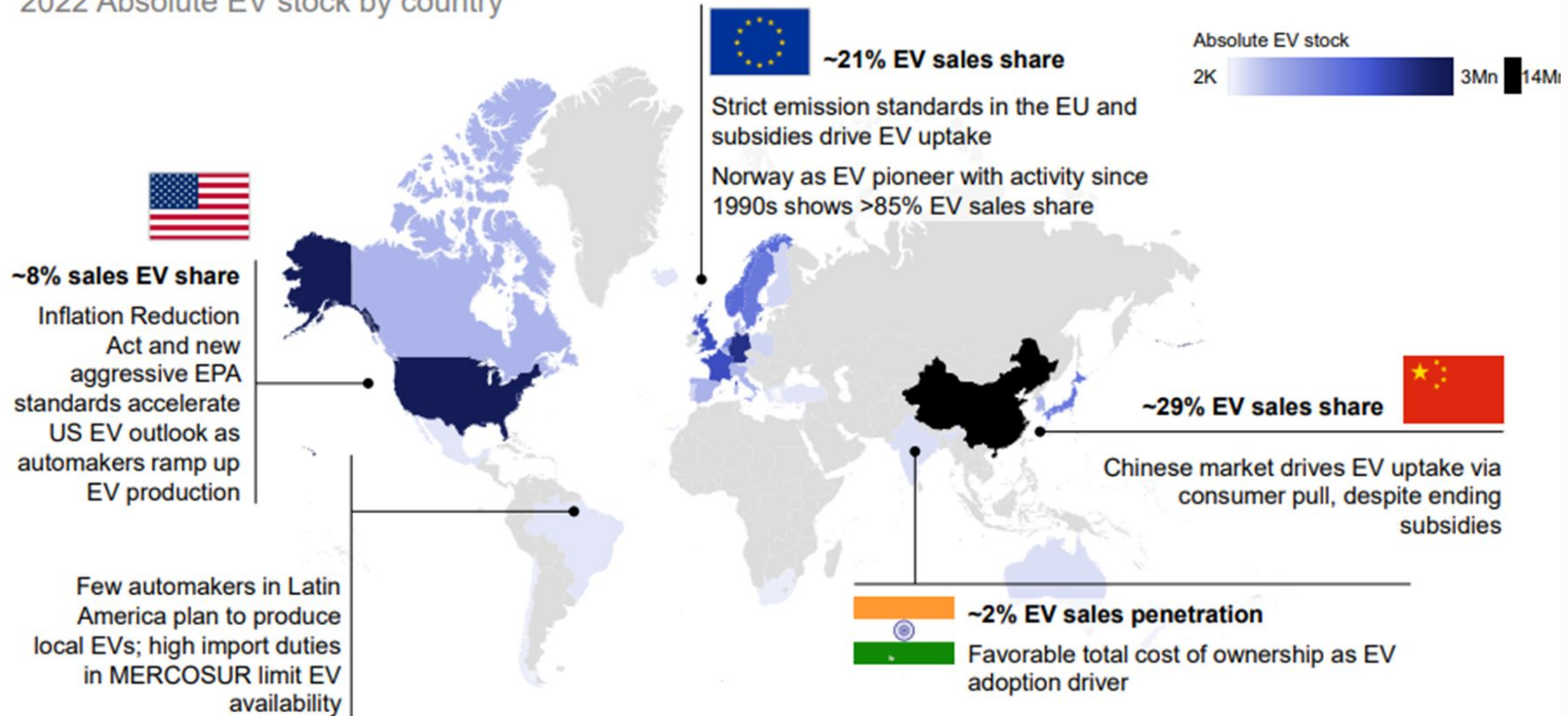
Type of Vehicle	EV Share (2018 - 2022)	EV Share (2023)	EV Share (2024)
Electric Motorcycles (%)	0.06%	3.35%	7.07%
Electric Tuk-Tuks (%)	0.31%	0.66%	4.55%
Electric Passenger Cars (%)	0.04%	0.07%	0.18%
Electric Buses & Minibuses (%)	0.02%	0.74%	1.11%
Other Vehicles (%)	0.13%	0.20%	0.36%
Total EVs Registered	0.06%	1.61%	3.13%


















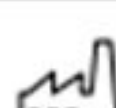







- Kenya National Efficiency and Conservation Strategy committed to 5% EV's by 2025
- Total EV registration in Kenya is 14,571 Vehicles (0.2% of Total registered Vehicles in Kenya, not including Bicycles)
- EV Registration increased from 4,047 in 2023 to 9,144 in 2024 (**225 % increase from 2023**)
- Over 90% of the passenger EV cars registered (45 in 2023 and 123 in 2024) are commercial vehicles (Uber, Bolt etc)

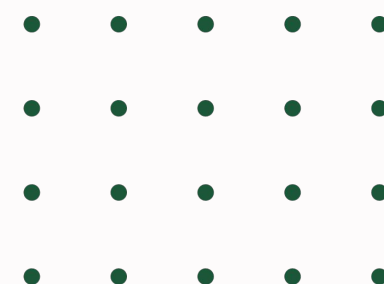
Global Trends

2022 Absolute EV stock by country



Global Trends

Proposed focus countries	Market maturity		Regulatory activity	Key adoption drivers ¹
	E4W	E2W		
 US (California)	 E4W stock: >2.9m E4W penetration: ~1% (EV sales share ~8%)	Market growing, with 31,649 E2W sales in 2022	 Multiple national and state initiatives; earliest EV-related policy issued in 2009 (grants for electric buses, trucks); variety of schemes	 
 Norway	 E4W stock: >750k E4W penetration: ~27% (EV sales share ~88%)	Small 2W market (<5K 2W)	 EV Pioneer – government-driven EV initiatives since 1990s; continuous review of required initiatives to drive maximum EV adoption	
 China	 E4W stock: >14m E4W penetration: ~5% (EV sales share ~30%)	Market growing, with >7.6 Mn E2W sales in 2022	 Multiple national and province initiatives; variety of schemes	
 India	E4W stock: 170k E4W penetration: 0.3% in National auto sales in Q3 2023	Market growing, with 727,649 E2W sales in 2022 (~5% EV penetration)	 Multiple national and state targets set. Financial subsidies across consumer purchases and industry manufacturing, implemented by government programmes such as FAME II and PLI	 
 Rwanda	EV market with similar conditions to Kenya	Growing market, with E2W stock of ~50,000	 Variety of initiatives focused on carbon emission reduction and EV infrastructure development	 
 Nigeria	E4W sales penetration: ~6-8% in 2022/23	Large 2W parc	Limited government initiatives, incl. government targets on EV penetration (100% by 2060) High presence of fintech/ ride-hailing companies with leasing innovations Unstable/ unreliable electricity supply likely to be a barrier in EV adoption	
 South Africa	E4W sales penetration: <0.2% in 2022	Car-focused market	Limited government initiatives, incl. government targets on charging station infrastructure (40 solar powered stations per annum) and EV penetration of public fleet (5% by 2025)	



Global Trends

ICE dumping

Current situation



40%

of all used light duty vehicles¹ exported globally end up in Africa

41

African countries considered to have weak or very weak regulations² on used vehicles

0

African countries require vehicle to pass annual in-service emission test

600K

Deaths annually associated to air pollution in Africa

3x

Higher fatality rate from car crashes vs. Europe & 2x vs. world)

Potential EV impact



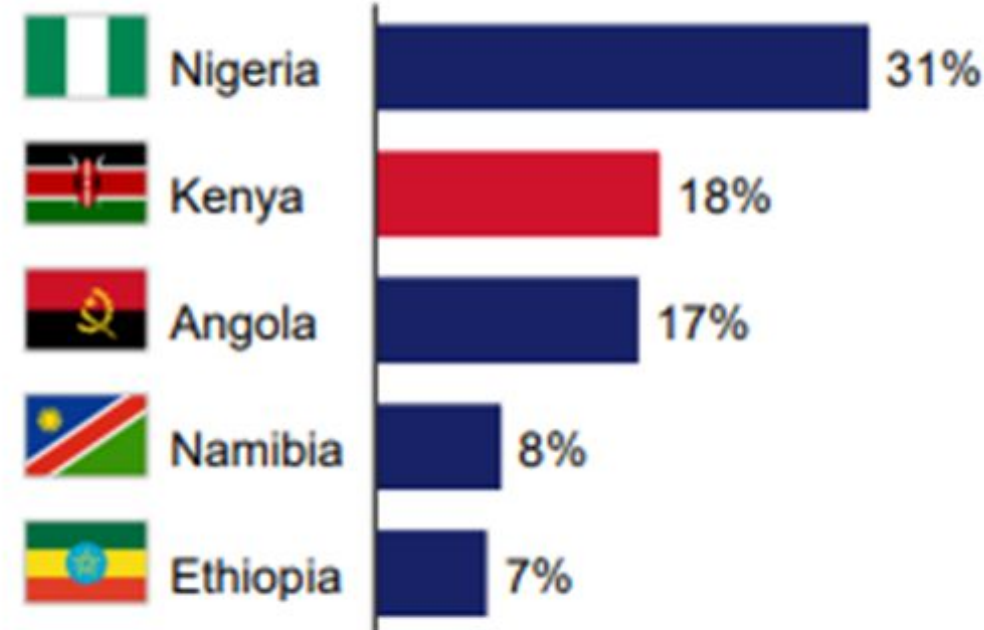
Emission reduction from transport (for Kenya: currently ~12MtCO₂e)



Increased air quality & safety through fewer "dumped" vehicles

Oil dependence

Fuel share of total imports, Selected Sub-Saharan countries, 2021, %



Decrease in oil dependence and shift to alternative sources

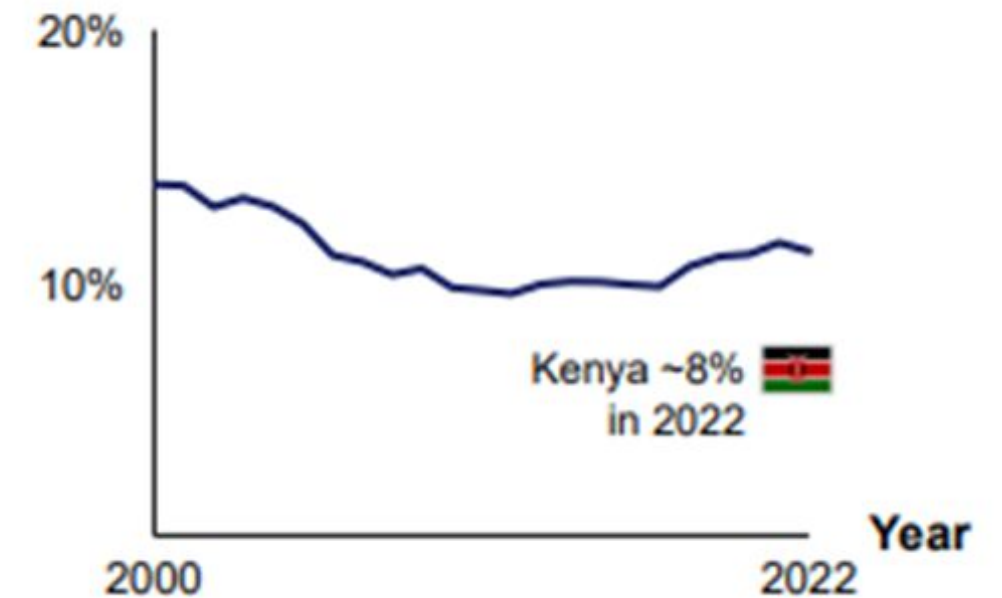


Positive impact on economy due to high import bills on oil (for Kenya: KES ~628Bn in 2022/ ~4.1Bn USD, 348.3Bn in 2021/ ~2.3Bn USD)

Economic potential

Manufacturing share of GDP, Sub-Sahara, 2022, % of GDP

% of GDP





Mitigation of job losses in different parts of EV value chain (e.g., traditional mechanics, assemblers)



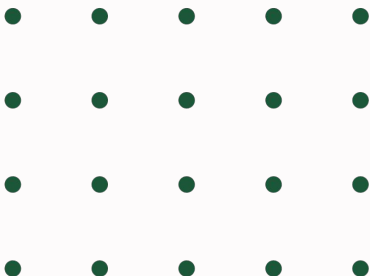
Potential increase in profit for 2W taxi drivers (e.g., Boda Boda) through lowered operational costs

EV 2024 Overview (2 Wheelers)



Description						Kiri/ Ecoboda/ Zeino/ Private users	TVS/ BAJAJ/ HONDA/ SKYGO
Swap Station	Nairobi and Environs = 24	Nairobi-31 Mombasa-20 Malindi-2 Kilifi-3 Ukunda-1 Kombani-1 Eldoret-3 Kapsabet-2 Total = 76	Kisumu -5 Kakamega-2 Mbale-1 Luanda-1 Webuye -1 Rongai - 1 Ngong -1 Kisii - 2	Nairobi and Environs - 10	Nairobi and Nakuru - >110	Nairobi	N/A
Product Cost	\$1700	Others - \$1,350 Ekon - \$1,180		\$2100	\$1420	\$1400	\$1500
Number of Motos	Nairobi and Environs >1500	Nairobi-1200 Coast-1200 Eldoret-100 Kisumu-100 Kisii-50 >2500		Nairobi and Environs >2000	Nairobi and Environs >1000	>1700	Across all Counties >2M
Range/Swap Price	75-80 km / \$2.00	75-80 km / \$2.23		70-80 km / \$2.30	65 km/ \$1.40 per Swap or \$2.70 unlimited		
Market Share	20%	32%		26%	13%	13%	100%

Roam hybrid model of swap and home charging. The assumption on the table above is 100% SOC and 8 hr rental (Rental 20 ksh/hr and SOC is 1.50 ksh/% consumed)

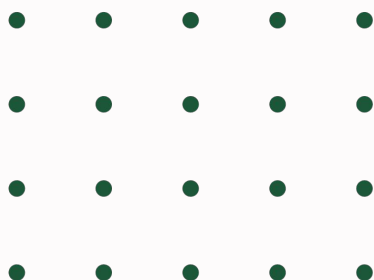
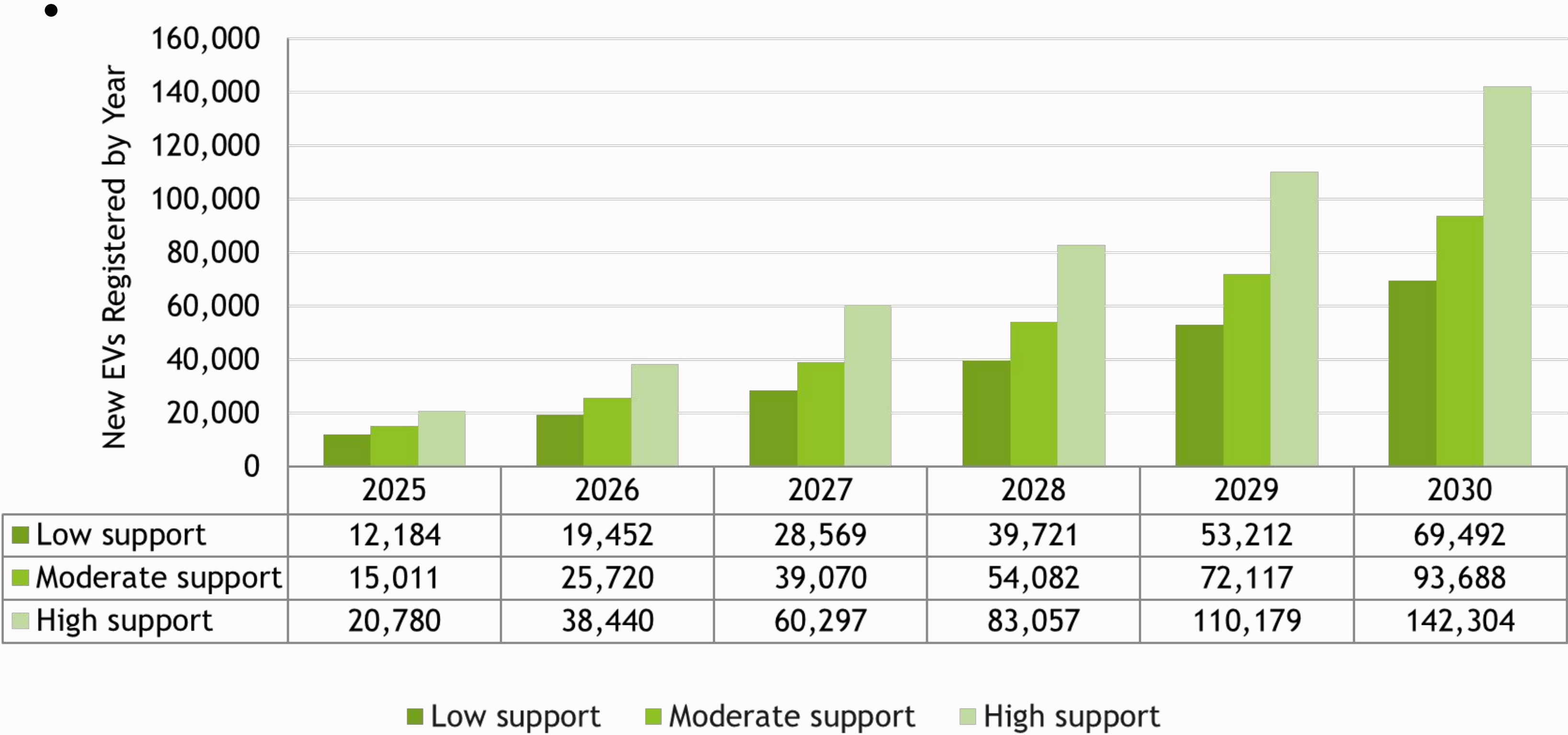


EV Buses Vs Fuel

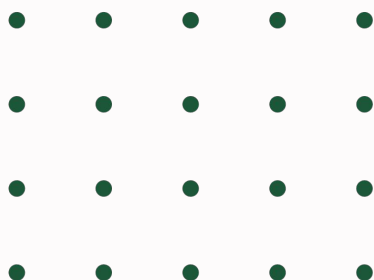
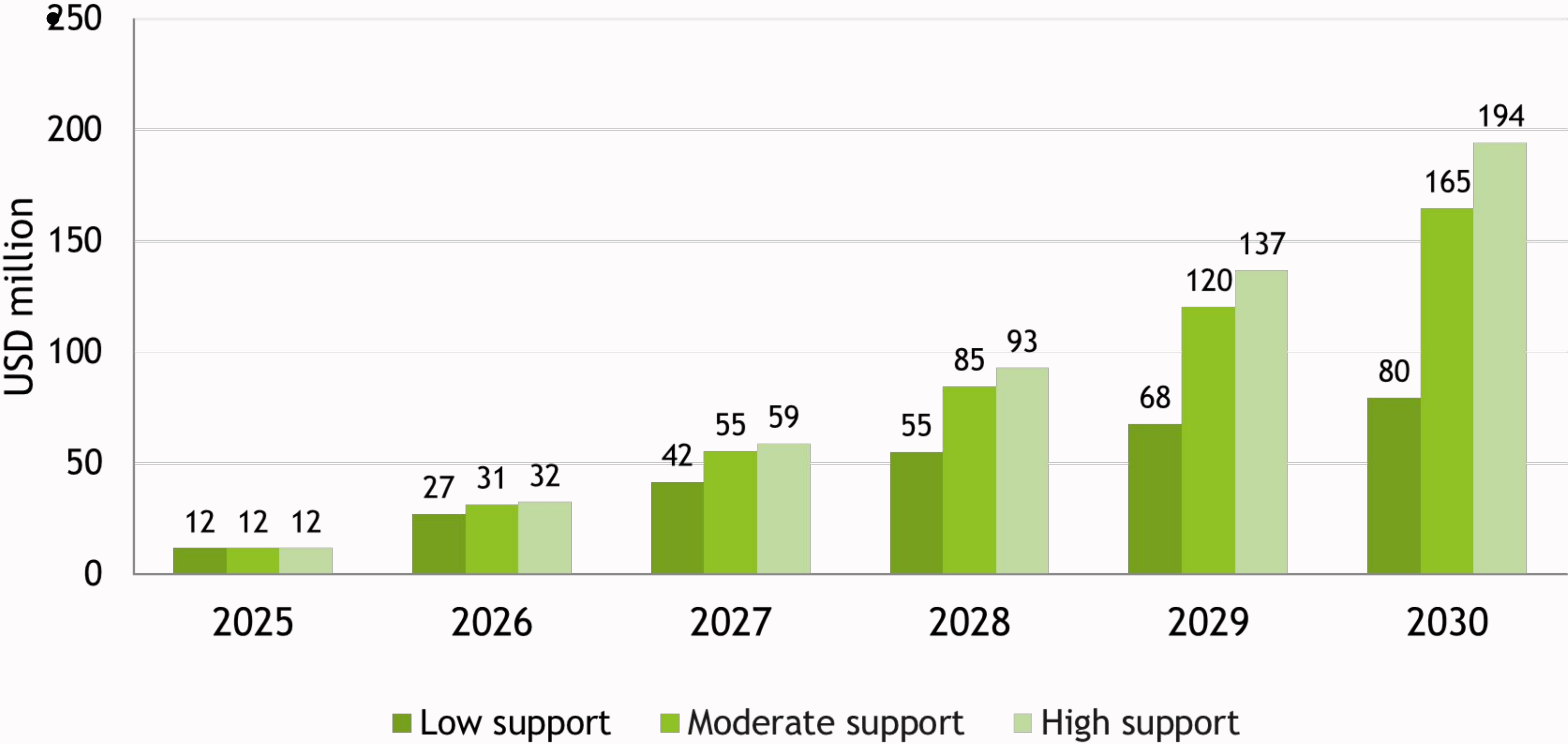


Description	Operation Option	Electric Buses			ICE (Fuel Buses)		
		16 seats	24 Seats	36 Seats	16 Seats	25 Seats	33 Seats
Principal Cost	Bus and Battery Cost	Ksh 7,000,000	Ksh 23,000,000	Ksh 25,000,000	Ksh 5,500,000	Ksh 6,000,000	Ksh 7,000,000
Purchase/ Lease	Bus Cost 4 years - IR 20%	Ksh 3,000,000 75,000/month	Ksh 6,500,000 162,500/Month	Ksh 8,500,000 212,500/Month	90,000 /Month	150,000/Month	200,000/Month
	Battery Leasing/Fuel Cost	Ksh 13/Km 97,500/Month	Ksh 25/Km 150,000/Month	Ksh 45/km 270,000/Month	180,000/Month	210,000/Month	390,000/Month
Leasing only	Bus/Battery (Including Energy Cost)	Kes 30/Km 200,000/Month	Ksh 40/Km 250,000/Month	ksh 70/Km 484,000/Month	270,000 /Month	360,000 /Month	590,000 /Month

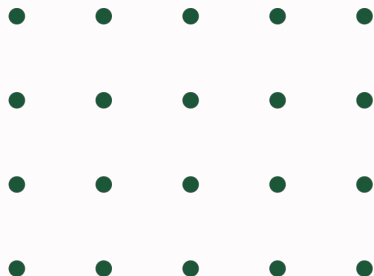
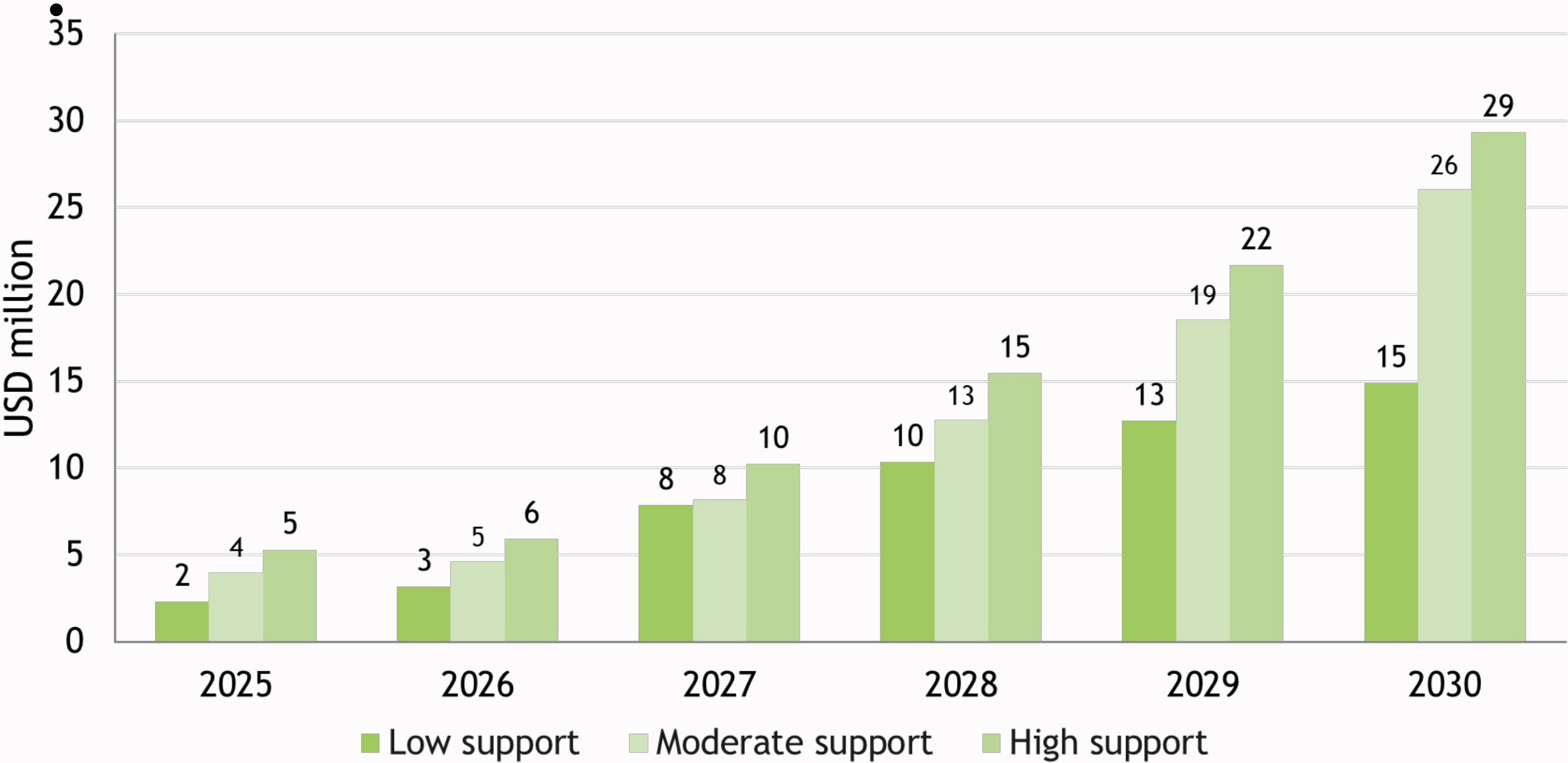
EV Forecasted Growth (2025-2030)



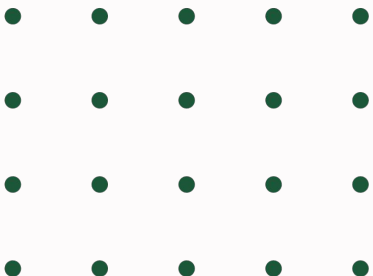
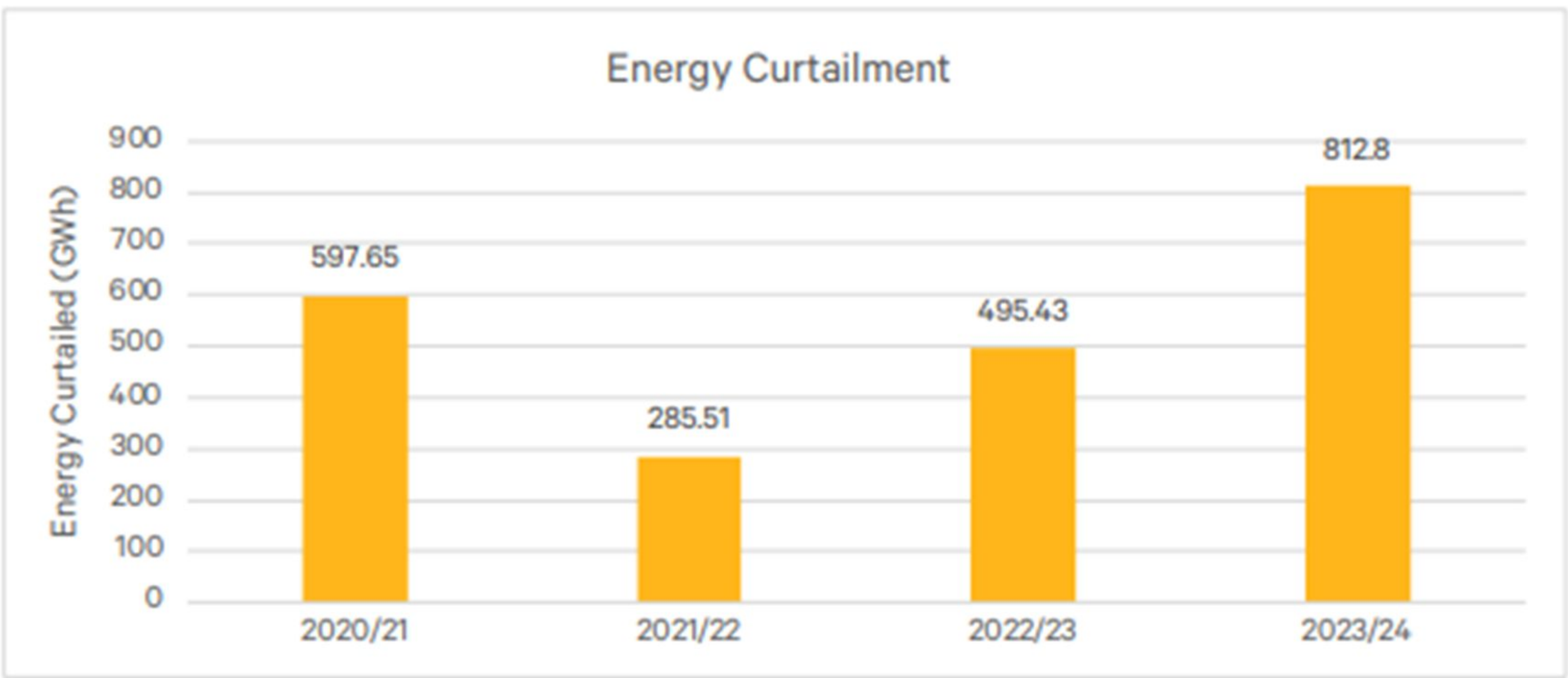
Government Savings on Fuel Imports



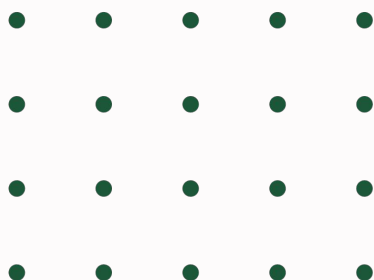
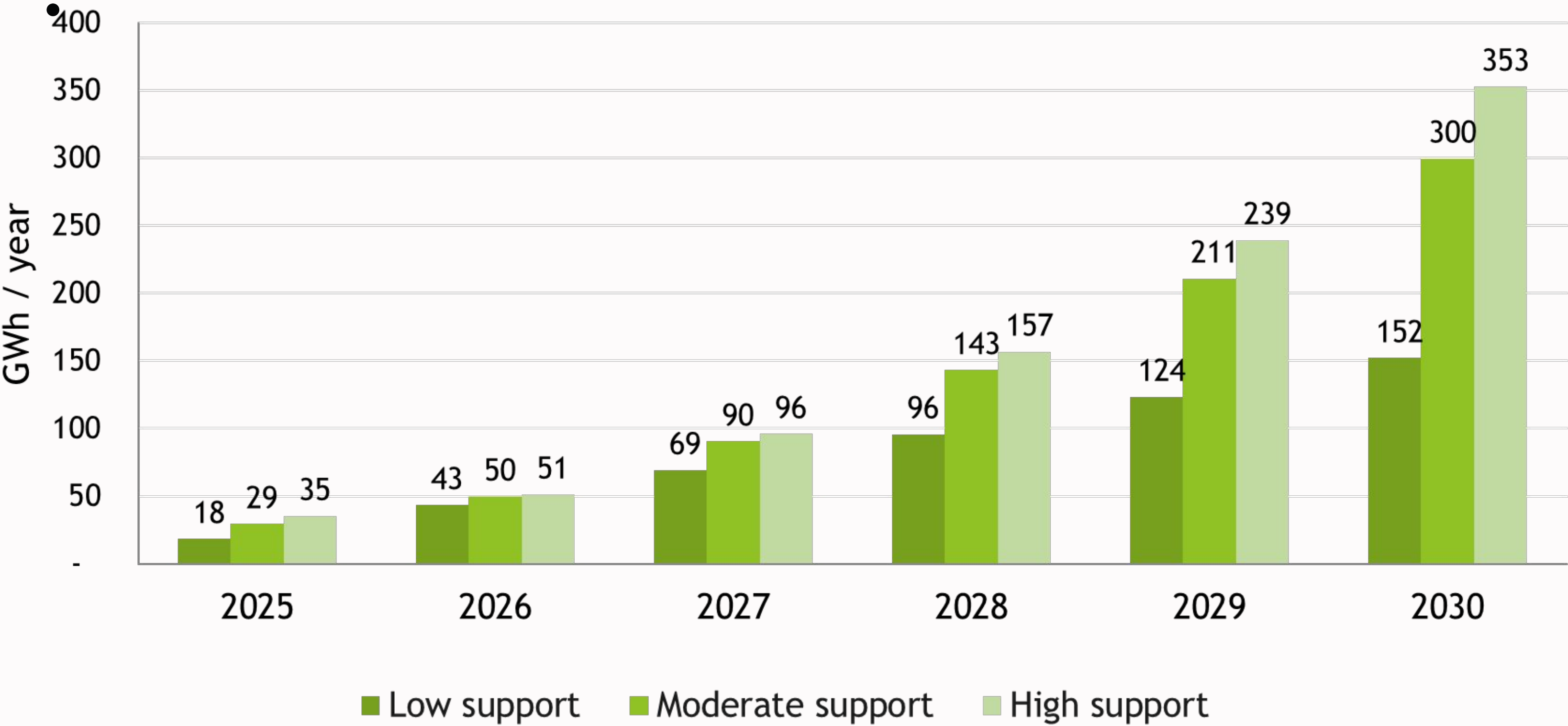
Tax Revenue From EV Charging



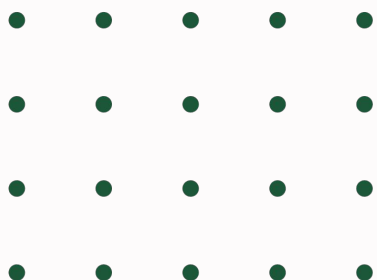
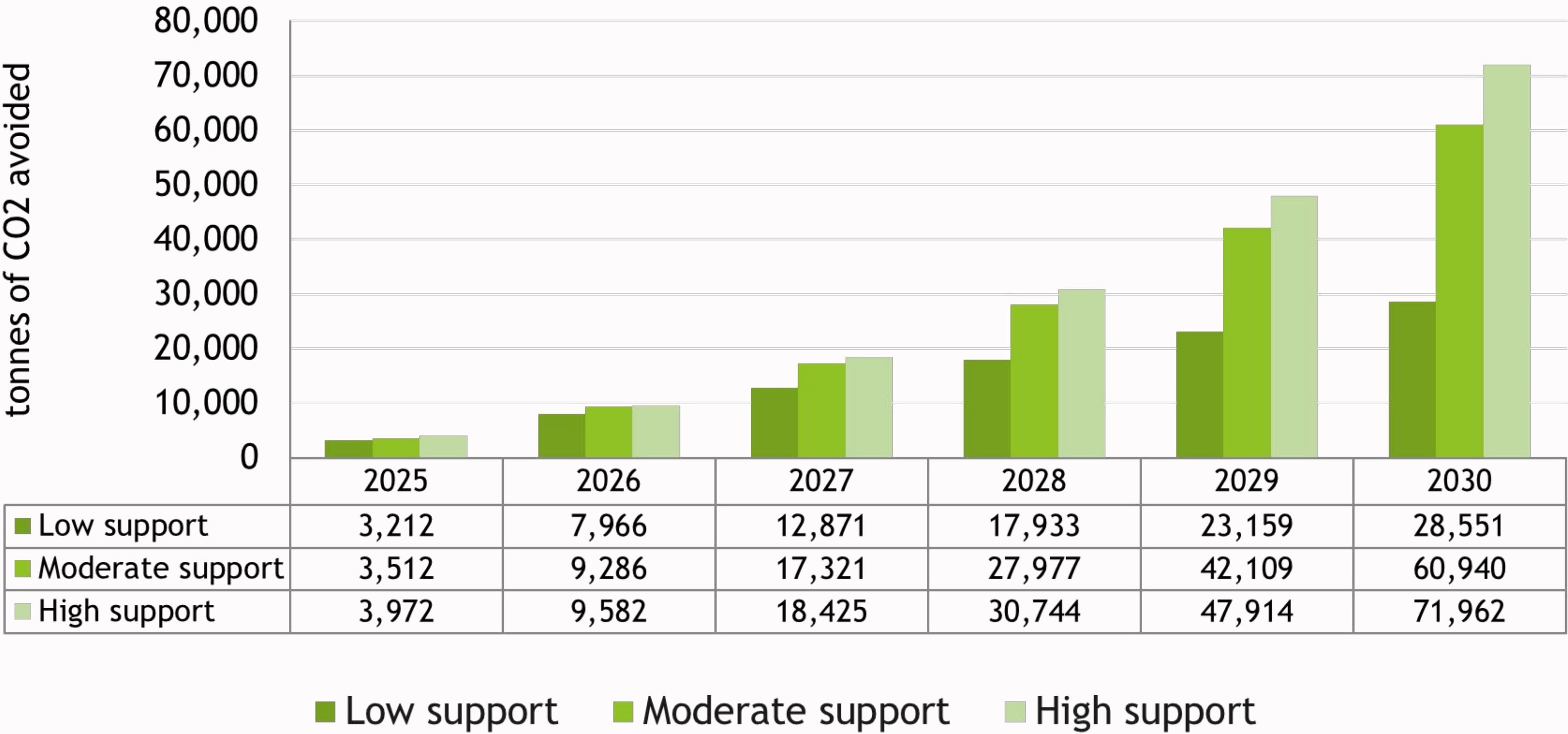
Energy Curtailment (GWh)



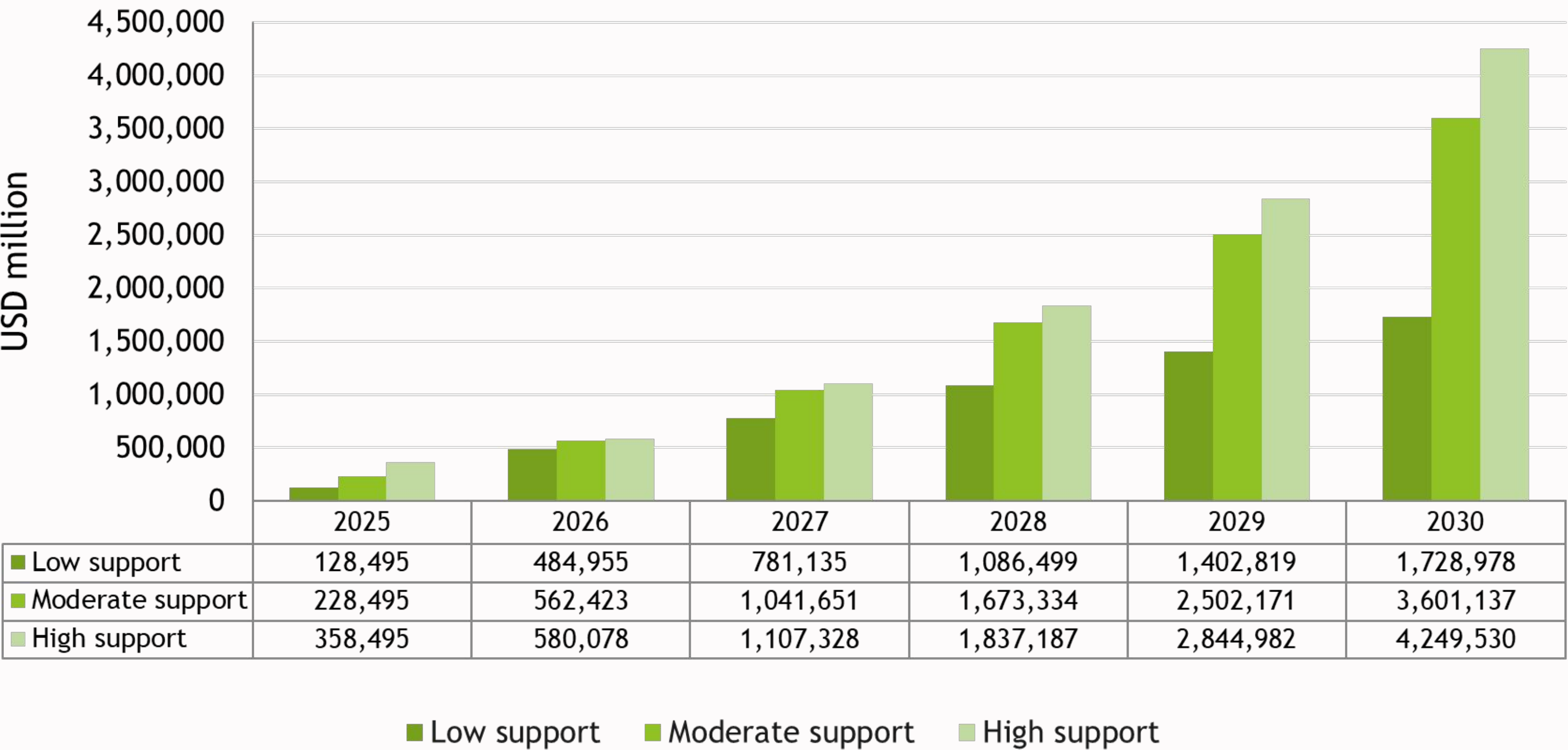
EV Energy Consumption (GWh)



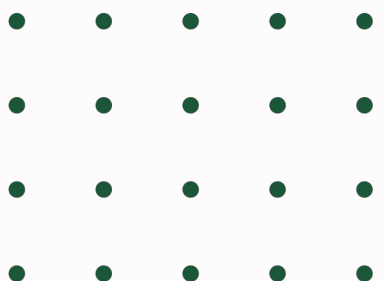
Carbon Emission Reduction



Revenue from Carbon Credit



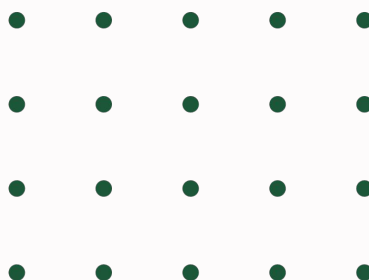
***Assumption 1 tonne = \$40**



Finance Bill, 2025 Proposals

Current Provisions	Finance Bill, 2025 Proposal	EMAK Proposal
<p>VAT Zero-Rated</p> <ul style="list-style-type: none">• The supply of motorcycles of tariff heading 8711.60.00• The supply of electric bicycles.• The supply of solar and lithium ion batteries.• The supply of electric buses of tariff heading 87.02	<p>Deletion from VAT Zero-Rated and Addition to VAT Exempt Supplies</p> <ul style="list-style-type: none">• The supply of motorcycles of tariff heading 8711.60.00• The supply of electric bicycles.• The supply of solar and lithium ion batteries.• The supply of electric buses of tariff heading 87.02	<p>Retain the current position as currently set out in the VAT Act, that is, VAT Zero-Rated status on items already set out in the Act</p>

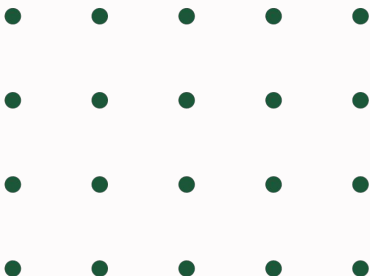
- The removal of EV supplies from VAT Zero Rating to VAT Exempt means that suppliers of EVs will not be able to claim back the VAT on the inputs into their business
- This poses the risk that EV supplies may be higher for consumers as the VAT on input becomes a sunk cost
- **Gap** - The proposals do not touch on incentives for 3-wheelers, LCV, HCV and 4-wheelers



Finance Bill 2025 Proposal



No	Clause	Tariff Number	2025 Finance Bill (Current Draft)	EMAK Recommended
1	The supply of motorcycles of tariff heading 8711.60.00	8711.60.00	VAT Exempt	VAT Zero rated (0%)
2	The supply of solar and lithium-ion batteries	8507.60.00	VAT Exempt	VAT Zero rated (0%)
3	The supply of electric bicycles	8711.60.00 (No HS Code for EV bicycles)	VAT Exempt	VAT Zero rated (0%)
4	The supply of electric buses	8702.40.XX	VAT Exempt	VAT Zero rated (0%)



Finance Bill 2025 Proposal (Gaps)




No	Clause	Tariff Number	2025 Finance Bill (Current Draft)	EMAK Recommended
1	EV 4-Wheeler Passenger Cars	8703.XX.XX	VAT - 16%	VAT Zero rated (0%)
2	EV 3-Wheeler - Tuk Tuks	8703.80.00	Excise Duty - 0%	Excise Duty - 0%
			VAT - 16%	VAT Zero rated (0%)
3	EV MHCVs & EV Trucks	8701.XX.XX and 8704.XX.XX	Excise Duty - 0%	Excise Duty - 0%



THANK YOU

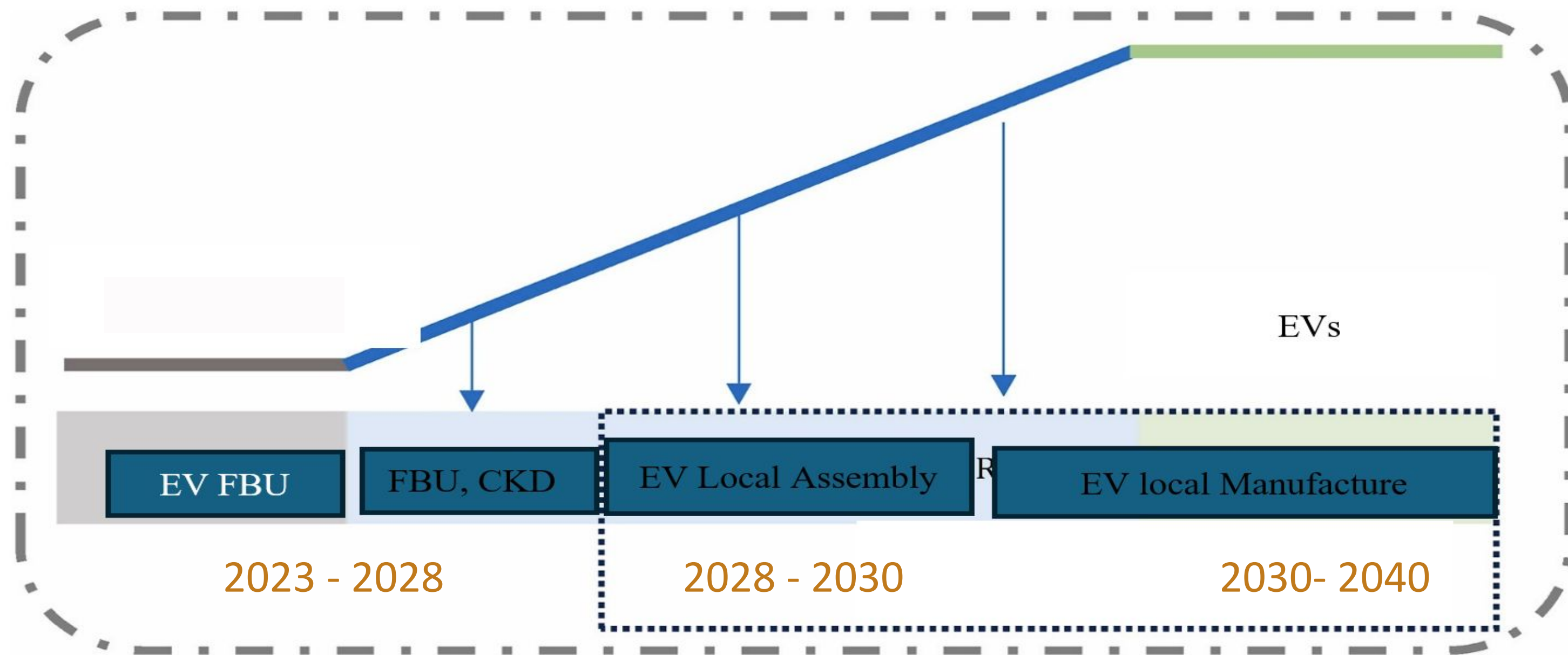
Hezbon Mose - President, EMAK

 254-701859785

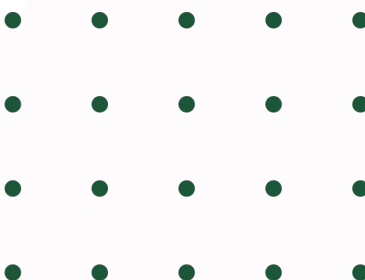
 mose.hezbon@Ampersand.solar



EV Path to Manufacturing



•



Import vs Localization (Example)

	Assemble In KE		
	Obtain CKD/Components Direct From Supplier (Assembler Licence)	Obtain CKD/Components Direct From Supplier (Without Assemblers License)	Comments
Base Cost of Goods/Customs Value (C)	\$628	\$700	Localized parts are \$72 if imported
Import Duty [I] (25% C)	\$94	\$175	
Excise Duty [E] (10% C+I)	\$0	\$88	
VAT (16% C+I+E)	\$0	\$0	
RDL (1.5% C)	\$9	\$11	
IDF (2.25% C)	\$14	\$16	
Total Duties and Tax [EAC].	\$118	\$289	
KEBS (0.6%)	\$4	\$4	
Cost of Transport/Shipping — Incl. Packaging (crates, etc.)	\$44	\$30	Localized parts need to be transported from different Suppliers+ Port to the assembler
Cost of parts Sourced in Kenya (11 part sourced in Kenya)	\$128	\$0	Cost of localization of 11 parts per LN 112 is \$128
Other Costs (Assemblers Licence)			
Bonded Per Motorcycle(2%*C)	\$13	0	Bonded WH is required with an Assemblers licence (per LN112). Bond, insurance and cancellation of Bond are a required for each shipment
Bond Insurance (3.5%* C)	\$22	0	
Bond Cancellation (\$115)	\$1	0	
Total Cost of Motorcycle	\$957	\$1,023	
	Saving with a Licence	\$66	