



**Mbay Mobility**

Leading a clean  
transport revolution  
across West Africa





# Our goal is to push the UN Sustainable Development Goals by leading a clean transport revolution in West Africa – starting in Dakar, Senegal

Mbay aims to lead the Electric Vehicle (EV) ecosystem in West Africa

Focusing on **EV supply** & our **EV financing solution**



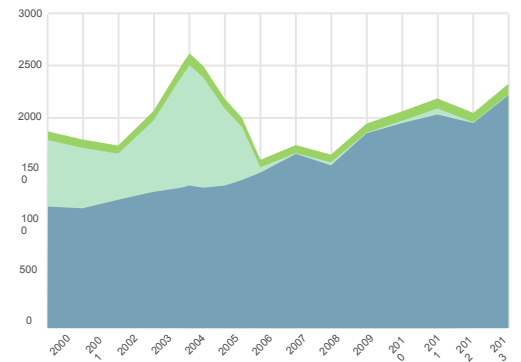


# West African cities face increasing traffic-related pollution problems, caused by old cars using dirty, expensive fossil fuels

**Carbon footprint** in Senegal is increasing due to road transport

01

Direct CO<sub>2</sub> emissions (ktCO<sub>2</sub>)

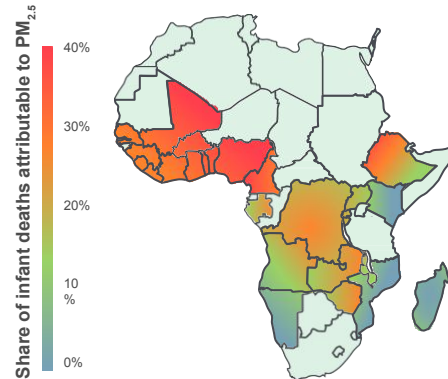


**100%** of cars in Senegal run on fossil fuels, emitting **2.2m** tons of CO<sub>2</sub> per year

Sources: [Bertrand Tchanche "Dynamics of Greenhouse Gas \(GHG\) Emissions in the Transportation Sector of Senegal"](#)

**Air pollution** is a growing threat to people's health

02



**1 out of 4** infant deaths in West Africa are now related to air pollution

Source: [Stanford university study](#)

**Taxis** are responsible for a large part of these problems

03



Old taxis are **45% of traffic flow** and cause **40% of air pollution** in Dakar

Source: [CGR Consultants & World Bank](#), [Bertrand Tchanche "Dynamics of Greenhouse Gas \(GHG\) Emissions in the Transportation Sector of Senegal"](#), [Madinga Doumbia et al "Emissions from the Road Traffic of West African Cities"](#), [CEIC](#), [CGR](#), [Troignon G. et al "Cost Benefit Analysis of Replacing Conventional Taxis by EV Taxis in Dakar, Senegal"](#), [Oeconomia Expertise SARL](#), 2021



# Mbay supplies affordable, robust and comfortable EVs that generate significant cost-savings



## Overall Dimensions:

**377 x 165 x 157 cm**

Compact for parking, steering and pedestrians



## Range: 250 km

Easily covers the taxi day run



## Charging time: 40 mins to 11 hours

Can be charged at night when demand is lower



## Max speed: 100 km/h

Can access speedways in Dakar



## Min ground clearance: 128mm

Can cope with non-paved roads



## Air conditioning

Passenger comfort in hot West African climate



## Maintenance benefits

Easy and less costly maintenance

## Potential suppliers:



**CHANGAN™**



**Dongfeng**



**Wuling Motors**



## Mbay's EVs are perfect for commercial uses like small goods delivery and taxis, generating immediate savings and up to \$65k (40m CFA) extra income over 15 years

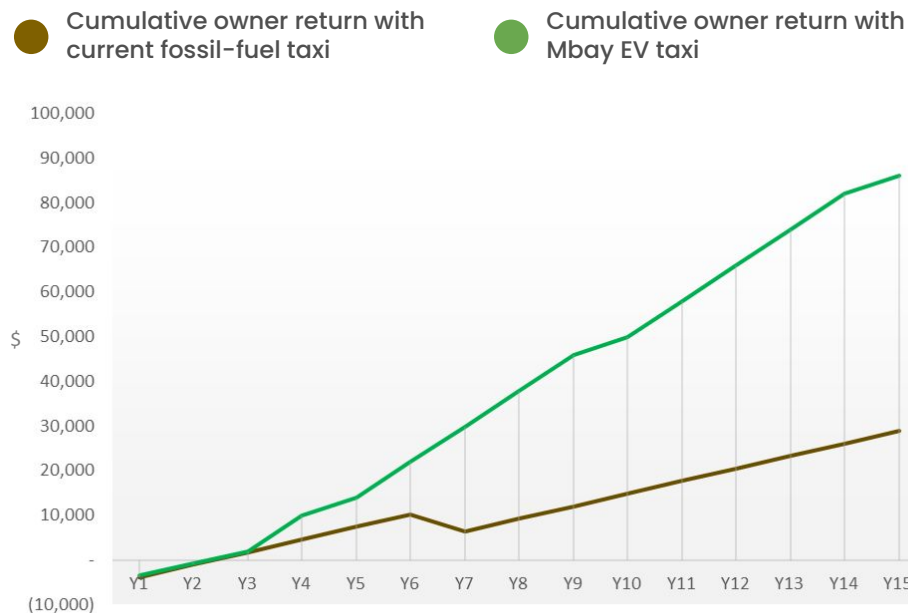
### Fossil Fuel Tax

**\$29k cumulative return**

### Mbay EV Tax

**\$94k cumulative return**

- EV purchase financed over 3 years
- Three battery replacements over 15 year period
- One ICE vehicle replacement in 15 year period





# Mbay's financing solution unlocks bank credit for EV purchases. This makes our EVs even more affordable, increases market size and accelerates EV adoption

## Mbay's pay-as-you-go financing product:



Mbay sells EVs on credit, and retains ownership until repayments completed



Mbay receives monthly payments over 3 year lease-to-own period



Onboard GPS hardware tracks the EV location and driving behaviour



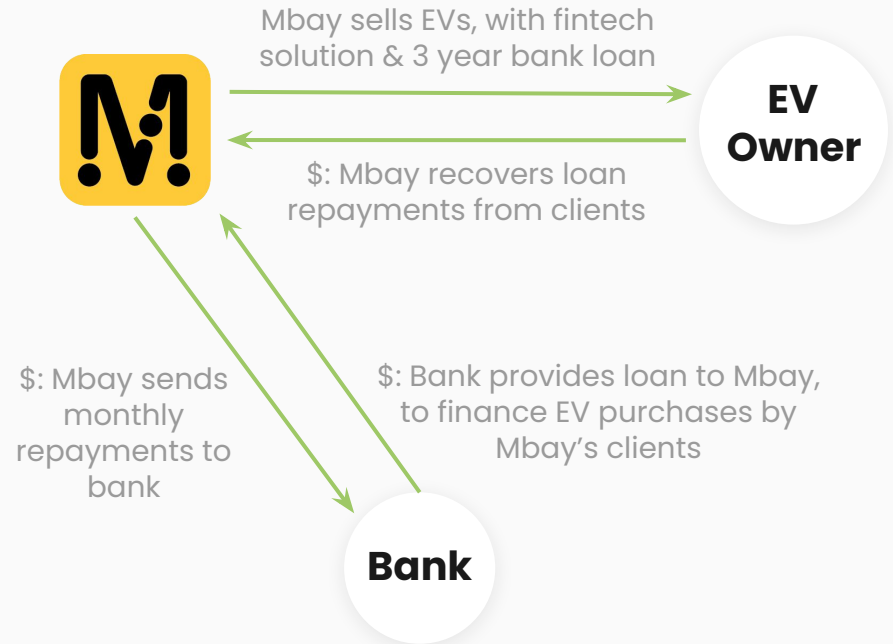
Onboard pay-go system immobilises the EV if payment not received



EV reactivated once payment received



EV recovered if payments not resumed





## Key takeaways:



**Network: is vital** – networks (public & private) are vital in developing economy for new tech to navigate bureaucracy, reach clients/partners/investors, unblock things



**Focus: saying no is so important** – even limited success brings suggestions and offers of new activities, but distraction will damage core business



**Patience/resilience: nothing will happen fast** – relatively new technology in new context, with no existing ecosystem and regulatory framework; ndank ndank!



**Customer focus/service: know client's needs** – private sector Qs maintenance, charging, insurance... public sector Qs public health, grid capacity, fiscal impact, ODA



**Talk, talk, talk: minor risk, major benefit** – so much to learn, so much to polish, and so much to iterate. You won't fail because someone stole your idea



**If you would like more info, we can organise a call and send you more materials**

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