



OUT  
ENTER  
TOW AWAY ZONE  
NO PARKING  
THIS SIDE

# E-JEEPNEY PROJECT

A project backed by Arowana, Tembo, and Sarao Motors

June 2025 – Asia Clean Energy Forum



# 1. TEMBO OVERVIEW



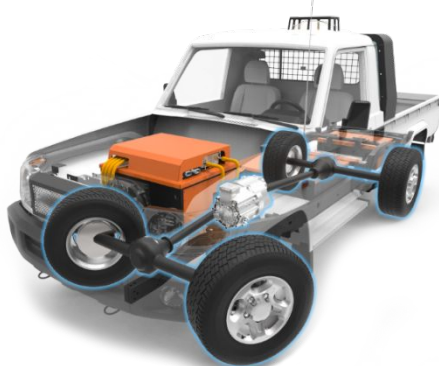
# We provide EV conversion kits to off-road vehicle fleet operators



**Base Vehicle**  
(ICE-powered)



**Battery system**



**Drivetrain**



**Software**

TEMBO CONVERSION KIT



Off-Road



Underground



Open-pit Mine



Arctic Mine

# We have assembled a team of global EV experts and business leaders

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## Automotive Industry Experience

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## Financial & Local Experience

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## 2. JEEPNEY INDUSTRY





# The Philippine Jeepney: From a war relic to a top cultural icon

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Surplus Willys Jeeps  
Retrofitted by Filipinos



Affordable public transport  
Urban and rural terrain



Creative expression  
Symbol of Filipino culture



**>200k**

units on the road

**>60m**

regular passengers

**~40%**

of public transportation

# Retrofitting is in the Jeepney's DNA, with most built from salvaged parts

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## Labour-Intensive Building

- Manually built body and chassis
- Off-the-shelf truck components

## Used Components Supply Chain

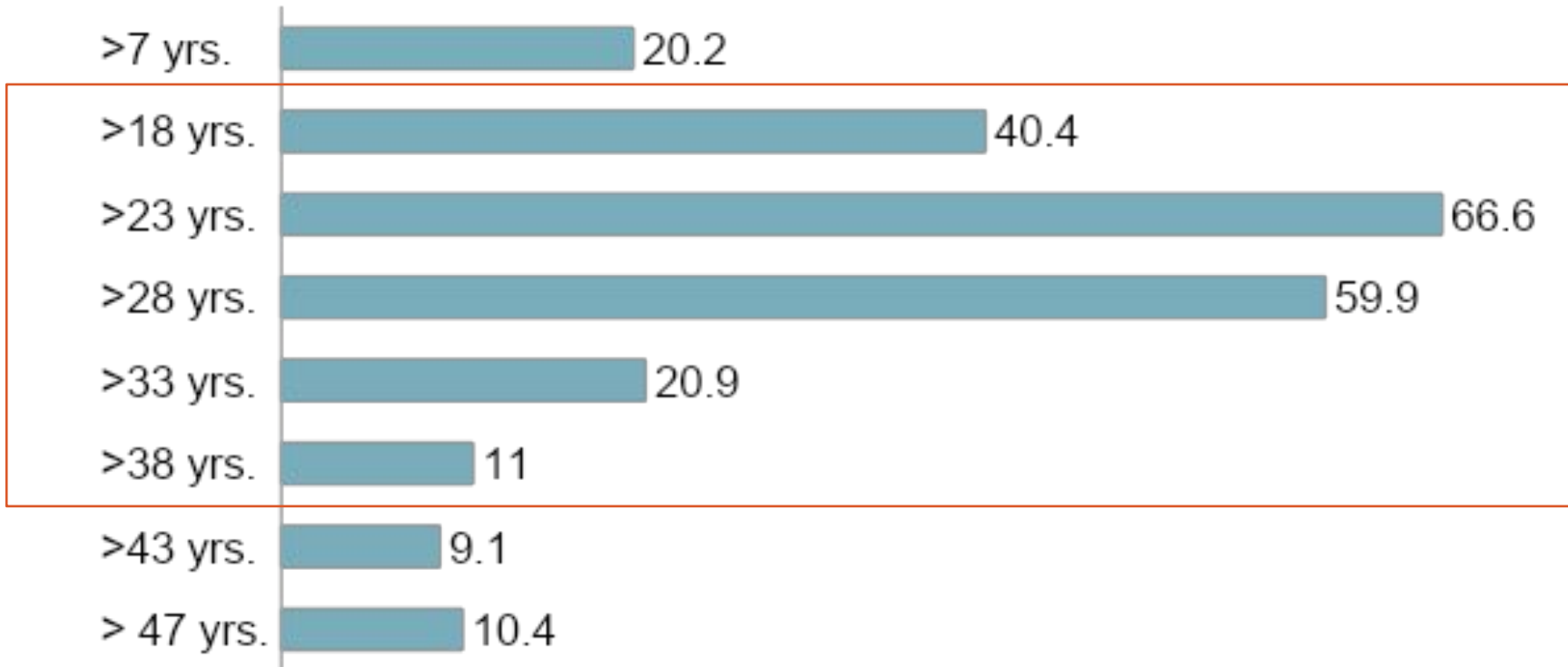
- Aftermarket supply chain hub
- Most components are from Japan





# Jeepneys are very durable, with a national fleet averaging 26 years old

Jeepneys in the Philippines by age ('000 units)



**~240k**

Jeepneys registered

**~200k** or

**83%**

more than 18 years old  
but still on the road<sup>1</sup>

**26 years**

weighted average age



# The durability of Jeepneys comes with emission problems



## Particulate Matter Emission

- Powered by old second-hand diesel engines
- Contribute up to 94% of PM 2.5 in urban areas
- Adverse respiratory and cardiovascular effects



## Government Modernisation Mandate

- Replacement of units older than 15 years
- Required: Euro-4-compliant or Electric





### 3. UNIQUE MODEL





# Beyond Technology: A Cultural and Social Responsibility

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## Cultural Heritage

Drivers  
Builders  
Passengers  
Mechanics



## Livelihood Preservation



## Modernisation



# Sarao and Tembo: Blending Culture and Innovation

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## TRADITIONAL JEEPNEY



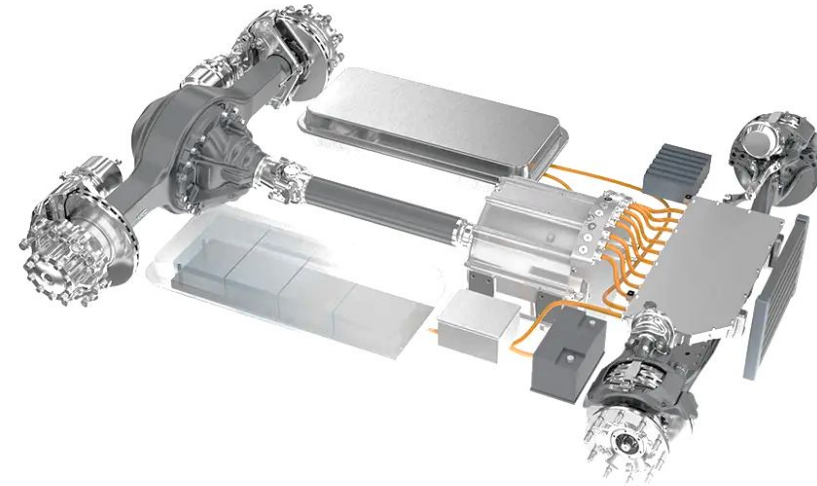
**Sarao Motors**



**Other Builders**



## ELECTRIC VEHICLE KIT





# Sarao and Tembo: Blending Culture and Innovation

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