PALKI

# Final Report

## Zayed Sustainability Prize

## Phase II Plan

Organisation: PALKI MOTORS PTE. LTD.

Prize Category: Energy

Year of Award: 2025

# 1. Introduction

## 1.1 Description of the Project(s) Implemented Since Winning the Prize

Since receiving the Zayed Sustainability Prize in 2025, **Palki Motors has focused on strengthening its electric vehicle manufacturing capability, regulatory readiness, and organisational systems** to enable long-term, scalable deployment of electric mobility solutions for underprivileged ride-sharing drivers in Bangladesh.

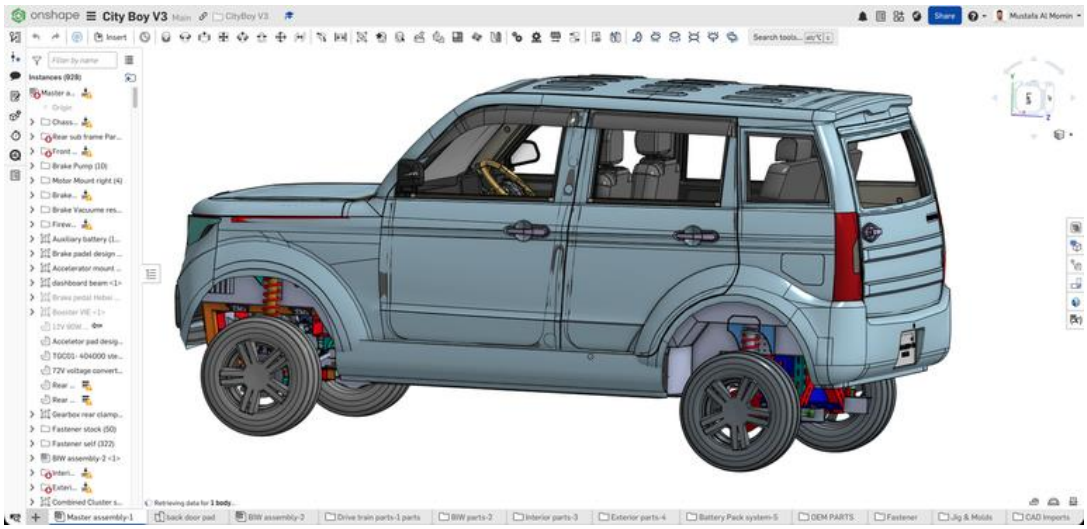
During the reporting period, Prize funding was used primarily to **stabilise operations, improve product readiness, and prepare the foundation for compliant scale**, rather than rapid volume expansion.

Visual materials included in this report consist primarily of real-world operational photos and independently produced third-party videos to ensure authenticity and avoid staged representation.

Key activities undertaken include:

### Development of an Income-Optimised Electric Vehicle Platform

Palki Motors completed the design and engineering of an upgraded electric passenger vehicle platform aimed at reducing operating costs and improving durability and comfort for commercial drivers. The design incorporates an improved chassis, drivetrain, and range optimisation based on direct driver feedback.




*Early design sketches and CAD renders of the Cityboy electric vehicle, showing evolution from prototype to production-ready design.*


*Chassis and drivetrain layout of the Cityboy platform, optimised for commercial ride-sharing use.*


*Independent YouTube video reviewing Cityboy design, comfort, and real-world usability (produced by an external creator).*

Watch Video: Cityboy Review

### Production System Formalisation

The organisation standardised its production system by developing a complete Bill of Materials (BOM), defining assembly workflows, and introducing basic takt-time planning. These steps reduced dependency on ad-hoc manual processes and improved consistency and quality control.


*Inside Palki Motors' micro-factory showing structured assembly processes and tooling.*

### Market Validation Through Pre-Orders

Since inception, Palki Motors has received **46 customer pre-orders**, demonstrating strong demand from commercial drivers. These pre-orders are supported by customer advance payments deposited into the company's bank accounts and are fulfilled progressively as production capacity and regulatory approvals allow.

### Vehicle Deliveries

As of the reporting date, 26 **electric vehicles have been fully manufactured and delivered to customers**, including **13 vehicles delivered after winning the Zayed Sustainability Prize in 2025**. All impact metrics in this report are calculated strictly based on these delivered and operational vehicles.

*Electric vehicle handover to a commercial driver beneficiary.*

### Regulatory Readiness and Compliance

The Cityboy V2 model successfully completed testing at the Bangladesh University of Engineering and Technology (BUET). For the Cityboy V3 model, all required technical documentation and compliance materials have been prepared in anticipation of submission to the Bangladesh Road Transport Authority (BRTA).

### Organisational Strengthening and Governance

A comprehensive Company Handbook and Standard Operating Procedures (SOPs) were developed and implemented, enabling decentralised execution and reducing operational dependency on the CEO. The formalisation of SOPs and factory workflows has also enabled safer, more structured working conditions, supporting the participation of women and young professionals in technical and operational roles within the organisation.

### OEM Sourcing and Cost Optimisation

Through direct OEM sourcing from individual suppliers, Palki Motors achieved an approximate **20% reduction in component costs**, strengthening unit economics and long-term financial sustainability.

### Rigorous Testing and Iterative Improvement

All delivered vehicles underwent extensive road testing, and customer feedback was incorporated into design and production updates prior to delivery.

Watch Video: Road Testing

*Independent video showing Cityboy vehicles undergoing real-world road testing.*

## 1.2 What Winning the Zayed Sustainability Prize Has Meant for the Organisation

Winning the Zayed Sustainability Prize significantly strengthened **Palki Motors' credibility, visibility, and partnership potential**, particularly during a critical phase focused on regulatory readiness and institutionalisation.

### Global Visibility and Recognition

- Finalist, INMerge Innovation Summit 2025 (Azerbaijan)
- Finalist, ISC3 Innovation Challenge 2025 (Germany)

Watch Video: ISC3 / International Event

*Event video featuring Palki Motors at an international innovation or sustainability forum.*

### Investor and Ecosystem Confidence

- Selected by the Draper Investment Committee as one of six companies fast-tracked for potential seed-stage investment consideration for **$1.2M in funding**.


*Palki Motors presenting to raise $5M seed round following the Zayed Prize.*

### Strategic Partnerships Enabled

- Partnership with Launch Automotive Technology for future production line development
- Collaboration with the Bangladesh Hi-Tech Park Authority, resulting in allocation of **1.25 acres of land** for future manufacturing expansion

*Palki Motors team at an industry or government engagement following the Zayed Prize.*


*Palki Motors won national gold medal as recognition to manufacture cars in Bangladesh.*

# 2. Status of Implementation and Impact

## 2.1 Progress to Date

- **Total customer pre-orders:** 46
- **Total vehicles fully delivered:** 26
- **Vehicles under construction:** 29
  - Cityboy V2: 8
  - Cityboy V3: 13
  - ReVolt V2 Pickup: 7
  - ReVolt V3 Pickup: 1
- **Vehicles delivered after winning the Zayed Prize (2025):** 13
- **Operational focus:** Commercial ride-sharing and last-mile delivery

While post-award vehicle deployment remains intentionally limited, this reflects a deliberate and responsible implementation strategy. During the reporting period, Palki Motors prioritised regulatory compliance, production stabilisation, and quality assurance to avoid premature scaling in a safety-critical sector. This approach ensures that subsequent deployments are compliant, reliable, and financially sustainable, rather than rapid but potentially fragile.

## 2.2 Impact Metrics (Based on Delivered Vehicles Only)

Although the current scale of deployment is modest, the delivered vehicles operate at high utilisation rates, generating continuous environmental and livelihood impact that compounds over time.

| Area of Impact | Results | Remarks |
|---|---|---|
| **Direct beneficiaries** | 26 drivers | Vehicle owners and operators |
| **Indirect beneficiaries** | ~374,400 passengers | Based on actual operational vehicles |
| **$CO_2$ emissions avoided** | ~150 tonnes/year | Calculated from verified GPS mileage |
| **Employment generated** | 26 direct | Drivers |
| **Trainings conducted** | 41 | Driver awareness and EV operation |
| **Awareness & outreach** | ~4,000,000 people | Social media reach |
| **New partnerships** | 3 | Automotive, banking, IoT finance |

## 2.3 Beneficiary Testimonials

> *"Before switching to an electric vehicle, a large portion of my daily income went toward fuel and maintenance. With the electric car, my operating costs are significantly lower, which has made my income more predictable and stable."*
>
> **— Mr. Shajudding, Commercial Driver**

*Portrait of Mr. Shajudding with his electric vehicle during work hours.*

> *"The vehicle is comfortable, reliable, and suitable for daily commercial use."*
>
> **— Salazar, Customer**


*Customer interacting with the vehicle during daily operation.*

Watch Video: Beneficiary Story

*Third-party video capturing a beneficiary's experience before and after switching to an electric vehicle.*

# 3. Use of Prize Funds

## 3.1 Prize Fund Utilisation (USD)

| Area | Amount (USD) |
|---|---|
| Inventory (components & materials) | 200,000 |
| Operational expenses | 100,000 |
| Capital machinery | 100,000 |
| Technology development | 50,000 |
| Capacity building & training | 50,000 |

Reported revenue includes customer advance payments received against confirmed pre-orders, recorded as deferred revenue and recognised upon vehicle delivery in accordance with standard accounting practice.


*Capital machinery and tools procured using Prize funds.*

*Inventory of key components purchased to stabilise production.*

## 3.2 Indicative Use of Final Tranche

| Planned Area | Amount (USD) | Purpose and Expected Impact |
|---|---|---|
| Operational & production working capital | 180,000 | Ensure uninterrupted production and fulfilment of pre-orders |
| Micro-factory process development | 160,000 | Improve quality, safety, and scalability |
| Human capital & technical capacity | 110,000 | Strengthen engineering and production teams |
| QA, testing & regulatory compliance | 50,000 | Support certification and long-term reliability |
| **Total** | **500,000** | |

# 4. Progress Report — Second Tranche Disbursement Request

## 4.1 Vehicle Delivery Status

At the time of the initial report submission in January 2026, one (1) vehicle had been formally delivered to a customer. However, this figure did not reflect the full production activity underway at that time. Twelve (12) additional vehicles were simultaneously under active construction at Palki Motors' factory in Dhaka, Bangladesh, bringing the pre-Prize delivery total to thirteen (13) vehicles.

Following the Prize win, an additional thirteen (13) vehicles were manufactured and delivered, bringing the total fleet delivered to twenty-six (26) vehicles as of the date of this report. The accelerated delivery pace reflects the operational improvements and production system formalisation enabled by the Prize funding.

## 4.2 Explanation of Deviation from Original Plan

Palki Motors acknowledges that the use of prize funds deviated from the plan originally submitted to the Zayed Sustainability Prize. This section provides a full and transparent account of the reasons for that deviation and the outcomes it produced.

### Background

The Zayed Sustainability Prize award was received in May 2025. At the time of application, Palki Motors had submitted a plan to invest the first tranche ($500,000) as follows:

| Timeline | Activity | Funds (USD) |
|---|---|---|
| Q1–Q2 2025 | Manpower costs (engineers, technicians, sales and marketing teams, factory workers) | $350,000 |
| Q1 2025 | Working capital to produce 10 units/month | $100,000 |
| Q3 2025 | R&D expenses (battery performance enhancement, EV charging optimisation, cost reduction strategies) | $50,000 |
| **Total** | | **$500,000** |

However, the actual utilisation of the first tranche differed materially from the original plan:

| Area | Amount (USD) |
|---|---|
| Inventory (components & materials) | $200,000 |
| Operational expenses | $100,000 |
| Capital machinery | $100,000 |
| Technology development | $50,000 |
| Capacity building & training | $50,000 |
| **Total** | **$500,000** |

Palki Motors acknowledges that this reallocation represents a significant departure from the original submission. The primary shift was from a manpower-heavy plan ($350,000 earmarked for salaries) to a capital- and inventory-led investment strategy. This was a deliberate, board-level decision driven by developments that occurred after the Prize win, which fundamentally changed the company's strategic landscape and warranted a reallocation of resources.

### Prize-Catalysed Developments

The Prize win generated immediate and measurable impact across four areas:

### a) New Investment from the MENA Region

Following the Prize announcement, news coverage aired on national Gulf media outlets. Dr. Syad Faruk, a senior adviser to Palki Motors and former adviser to the UAE Vice President's Office, shared the announcement within his regional investor network. This directly resulted in **USD 400,000 in new investment from 17 MENA-region investors** — capital that would not have been accessible without the credibility conferred by the Prize.

### b) Strategic Partnership with Launch Automotive (China)

The Prize recognition led to an inbound partnership approach from Launch Automotive, a major Chinese automotive manufacturer. Their interest was directly informed by the fact that BYD — a company Launch Automotive follows closely — had won the same Zayed Sustainability Prize in 2016. Palki Motors' win placed us in the same category of credible, high-potential EV innovators, prompting Launch Automotive to visit our factory and initiate a formal commercial partnership. This partnership opens a pathway to high-quality, internationally-certified vehicle imports and CKD assembly that was not available to Palki Motors prior to the Prize.

### c) New Product Development: ReVolt V2 Electric Pickup Truck

With the Prize funds and new investor capital, Palki Motors designed and built the ReVolt V2 — an electric pickup truck developed specifically for Bangladesh's last-mile delivery sector. Two fully completed units were built following the Prize win and have generated 28 purchase enquiries currently in the process of being confirmed as formal orders.

To support continued production scale-up, Palki Motors currently holds partial inventory for 6 additional ReVolt V2 units. "Partial inventory" in this context means that the structural chassis, body panels, and primary mechanical components for these 6 vehicles have been sourced and are held at the factory. Final assembly — including drivetrain integration, electrical systems, and quality inspection — is pending and will be completed as confirmed orders are fulfilled. This inventory position reflects deliberate production planning rather than incomplete execution.

### d) Cityboy Version 3 Development

In parallel, the Prize win provided the strategic confidence and capital to move away from the older Cityboy Version 2 platform and accelerate development of the Cityboy Version 3 — a significantly upgraded passenger vehicle featuring improved range, speed, suspension, and drivetrain quality.

Palki Motors currently holds partial inventory for 4 Cityboy V3 units. As with the ReVolt V2, this means that the core structural and mechanical components for these 4 vehicles are procured and staged at the factory, with final assembly and quality certification in progress. These units are expected to be completed and delivered in the near term. This upgrade directly addresses the quality expectations of the commercial fleet operators and investor community introduced to Palki Motors through the Prize.

### Strategic Rationale for the Deviation

The original plan called for continued investment in the Cityboy Version 2 platform. The decision to pivot was a deliberate, board-level response to Prize-enabled opportunities that did not exist at the time of application. Investing in the older platform would not have positioned Palki Motors to capture the market demand and investor confidence unlocked by the Prize. The deviation from the original plan was not a failure of execution — it was a responsible reallocation of resources toward the highest-impact path forward.

## 4.3 Summary of Prize Impact to Date

| Impact Area | Outcome |
|---|---|
| **Vehicles Delivered** | 26 units |
| **New Investment Raised** | USD 400,000 (17 MENA investors) |
| **Strategic Partnerships** | Launch Automotive (China) |
| **New Products Developed** | ReVolt V2 Electric Pickup Truck |
| **ReVolt V2 — Completed Units** | 2 units |
| **ReVolt V2 — Partial Inventory** | 6 units (chassis & components staged; awaiting final assembly) |
| **Cityboy V3 — Partial Inventory** | 4 units (components staged; assembly in progress) |
| **Confirmed Order Pipeline** | 46 confirmed passenger + 28 pickup (pending confirmation) |
| **New Model Initiated** | Cityboy Version 3 |

# 5. Conclusion

## 5.1 Immediate Next Steps

The immediate priority for Palki Motors is securing **BRTA Type Approval**, beginning with Cityboy V2, followed by Cityboy V3. This will enable legal registration, unlock access to bank financing for drivers, and allow structured fulfilment of existing customer pre-orders. Production stabilisation, cost optimisation through OEM integration, and ecosystem development will continue in parallel.

The emphasis on readiness over rapid deployment during this phase reflects lessons learned from early-stage manufacturing in emerging markets, where premature scale can undermine long-term impact. By securing approvals, validating suppliers, and institutionalising processes first, Palki Motors positions itself to convert existing pre-orders into accelerated, compliant deployment in the subsequent phase.

*Comparative image showing early prototype versus current production-ready Cityboy model.*

## 5.2 Five-Year Outlook (2026–2030)

Over the next five years, Palki Motors aims to transition from early-stage manufacturing to a scalable electric mobility platform rooted in local production and inclusive growth. The projections below represent aspirational targets contingent on securing regulatory approvals, manufacturing partnerships, and continued capital investment. They are presented to illustrate the potential trajectory, not as guaranteed outcomes.

### 2026 — From Prototype to Proof

| Production | Revenue | Jobs Created | $CO_2$-Free Pax-km |
|---|---|---|---|

| | | | |
|---|---|---|---|
| **120 units** | **$1.77M** | **120** | **1.73M** |

2026 is the year we target our most important threshold: operational breakeven, contingent on BRTA type approval and the commencement of CKD assembly. We plan to move from hand-built prototypes to a semi-automated production line capable of producing 10 high-quality cars per month. By standardizing the chassis, structure, and frame through jigs and fixtures, we aim to unify quality while keeping costs low. This year is intentionally focused — Dhaka and one additional district — so every vehicle on the road is dependable, serviceable, and profitable for drivers.

### 2027 — Scaling with Precision

| Production | Revenue | Jobs Created | $CO_2$-Free Pax-km |
|---|---|---|---|
| **1,200 units** | **$17.70M** | **1,200** | **17.28M** |

With demand validated, 2027 targets speed without compromise. We plan to invest in a Single-Point Incremental Forming (SPIF) machine, targeting a 10× jump to 100 units per month. This machine would transform throughput across the factory, reducing variability and lead times. Commercial expansion would reach up to 30 districts, pairing production scale with financing and after-sales readiness.

### 2028 — National Coverage, Industrial Maturity

| Production | Revenue | Jobs Created | $CO_2$-Free Pax-km |
|---|---|---|---|
| **3,600 units** | **$53.11M** | **3,600** | **51.84M** |

By 2028, the target is for electric mobility to become national infrastructure. The plan envisions deploying six SPIF machines and introducing automated welding, lifting capacity to 300 cars per month and reaching all 64 districts. At this stage, processes would mature, defects fall, and training systems scale alongside production.

### 2029 — Exporting the Factory, Not Just the Car

| Production | Revenue | Jobs Created | $CO_2$-Free Pax-km |
|---|---|---|---|
| **6,000 units** | **$88.52M** | **6,000** | **86.40M** |

In 2029, the aspiration is to take a bold step: exporting a micro-factory. With professional dies and stamping supporting 500 units per month, the plan is to establish our first overseas micro-factory in Nigeria. This would not be a sales outpost; it would be a replicable manufacturing system designed for local jobs, local supply chains, and local roads.

### 2030 — 1,250 Cars a Month, Built for People

| Production | Revenue | Jobs Created | $CO_2$-Free Pax-km |
|---|---|---|---|
| **15,000 units** | **$221.31M** | **15,000** | **216.00M** |

By 2030, the vision is for all production lines to run in harmony to deliver 1,250 cars per month, with a second exported micro-factory — this time in Ghana — operating as part of a distributed manufacturing network. These are ambitious targets that depend on successful execution of each preceding phase. The purpose, however, remains constant: cleaner cities, lower transport costs, and livelihoods that last.

*Over this reporting period, Palki Motors used the Zayed Sustainability Prize to do the hard, foundational work that determines whether an early-stage mobility solution becomes truly scalable: stabilising production, strengthening governance, improving product readiness, and preparing for full regulatory compliance. Rather than pushing rapid deployment in a safety-critical sector, we deliberately prioritised readiness — because in manufacturing, premature scale can undermine both impact and trust.*

Despite operating at a modest delivery scale during this phase, the vehicles already deployed are generating continuous, verified outcomes: reduced operating costs for commercial drivers, improved income stability, and measurable $CO_2$ emissions avoidance based on real-world mileage. These results validate both the need and the effectiveness of an income-optimised electric mobility platform built for Bangladesh's commercial transport realities.