Shuttle service



Figure 1. The *Odong-odong UPI*, an electric vehicle (EV) developed and operated by Universitas Pendidikan Indonesia.



Figure 2. Front view of *Odong-odong UPI*, the electric vehicle owned and operated by Universitas Pendidikan Indonesia.



Figure 3. The *Odong-odong UPI* was assembled and modified by students of the Automotive Engineering Education (PTO) Study Program.



Figure 4. The *Odong-odong UPI* used as a public transportation vehicle for the Universitas Pendidikan Indonesia academic community.



Figure 5. A tablet interface used for real-time monitoring of the battery power status in the *Odong-odong UPI* electric shuttle bus.



Figure 6. Charging process of the *Odong-odong UPI* electric vehicle at the workshop of the Automotive Engineering Education Study Program, Universitas Pendidikan Indonesia.



Figure 7. The operational route of the *Odong-odong UPI* electric shuttle bus within the Universitas Pendidikan Indonesia campus area.



Shuttle Bus Listrik Ramah Lingkungan: Dari Bengkel ke Jalanan Kampus

Humas UPI | 17/06/2025 | Inovasi | No Comments

Bandung, UPI

Kontribusi nyata terus dilakukan oleh mahasiswa Universitas Pendidikan Indonesia (UPI), khususnya oleh mahasiswa Program Studi Pendidikan Teknik Otomotif Fakultas Pendidikan Teknik dan Industri (FPTI). Melalui proyek kolaboratif antara dosen dan mahasiswa dalam mata kuliah, mereka berhasil merancang *shuttle bus* listrik sebagai bentuk kontribusi terhadap pengembangan teknologi ramah lingkungan. *Shuttle bus* tersebut secara simbolis digunakan oleh Rektor Universitas Pendidikan Indonesia periode 2020-2025, Prof. Dr. M. Solehuddin, M.Pd., M.A., bersama jajaran pada acara *Pamatri Pameungkeut Geugeut Rektor* sebagai tanda berakhirnya masa jabatan Rektor masa bakti 2020-2025.

Figure 8. Media coverage of the *Odong-odong UPI* electric vehicle operation within the Universitas Pendidikan Indonesia campus, conducted by the university's Public Relations Office.

The Universitas Pendidikan Indonesia (UPI) operates its own electric public transport vehicles, locally known as *"Odong-odong UPI — The Real EV."* These vehicles, officially named Electric Shuttle Bus Evo-1 and Evo-2, represent the university's innovation in developing sustainable campus mobility. The fleet currently consists of two 14-seat units (Evo-1 and Evo-2) and one 10-seat unit, all fully electric and designed to support low-carbon transportation within the campus area. The development and operation of these electric shuttles reflect UPI's commitment to green technology, energy efficiency, and the practical implementation of electric vehicle research by the Automotive Engineering Education Study Program under the Faculty of Engineering and Industrial Education.

The *Odong-odong UPI* electric vehicle (EV) is equipped with a 96-volt battery system and a capacity of 200 ampere-hours (Ah), providing sufficient power for extended on-campus operations. The vehicle utilizes a 20-kilowatt Brushless Direct Current (BLDC) motor, which offers high efficiency, low maintenance, and smooth performance suitable for short-distance transportation within the university area.

The implementation of electric vehicles within the Universitas Pendidikan Indonesia (UPI) campus is expected to foster greater awareness and habitual use of public transportation among members of the academic community, ultimately encouraging a more sustainable lifestyle on campus. The *Odong-odong UPI* electric shuttles operate during regular working hours (07.00-08.00 and 15.00 - 16.00). It is serving as a convenient and eco-friendly mode of transport across designated routes. Three main shuttle posts are

currently in operation, each identified by a distinct route color (green, reda, and yellow) to ensure efficient passenger distribution and accessibility. In addition, several designated stopping points are strategically located throughout the campus area to facilitate ease of access for passengers and promote the use of shared, low-emission transportation (Figure 7).

In addition to serving the UPI academic community, the *Odong-odong UPI* electric shuttles are also utilized for special or incidental events. These include transporting invited speakers when meeting or seminar venues are located farther apart within the campus, as well as providing campus tours for visiting delegations from outside the university. This extended use demonstrates the versatility and functional value of the electric vehicles, supporting UPI's commitment to sustainable, inclusive, and service-oriented campus mobility.

The media coverage aims to inform the public and campus visitors that electric vehicles are now operating within the Universitas Pendidikan Indonesia (UPI) campus to support on-campus transportation. This initiative is particularly beneficial for the elderly, individuals with health conditions, and persons with disabilities who may have difficulty walking long distances. By disseminating this information, UPI seeks to promote accessibility, inclusivity, and awareness of its commitment to sustainable and people-oriented mobility within the campus environment.

Additional evidence link:

- https://berita.upi.edu/shuttle-bus-listrik-ramah-lingkungan-dari-bengkel-ke-jalanan-kampus/
- https://fpti.upi.edu/post-detail/1261
- https://www.instagram.com/lppmupi_untukindonesia/reel/C4HVmbTPcs-/
- https://www.instagram.com/p/C6ePnKDJbYM/?img_index=1

Currently, Universitas Pendidikan Indonesia (UPI) is also engaged in a collaboration with the electric vehicle (EV) industry in Bandung City. The partnership involves PT Marlip Indo Mandiri, a local EV manufacturer, in the development of an electric public transportation system named "Angklung." This initiative aims to replace the conventional city transportation fleet (*angkot*) in Bandung with environmentally friendly electric buses. A total of 5,000 units are planned for production to serve all public transport routes across the city. The *Angklung* electric bus has successfully passed a series of performance and safety tests, marking a significant milestone toward sustainable urban mobility.

Through this collaboration, the *Angklung* EV buses are expected to provide a convenient and sustainable transportation option for the UPI academic community, enabling students and staff to commute from their homes to the campus using eco-friendly public transport.



Figure 9. Information banner displaying the collaboration between Universitas Pendidikan Indonesia (UPI) and PT Marlip Indo Mandiri.



Figure 10. A series of touch and performance tests conducted on the *Angklung* electric bus.

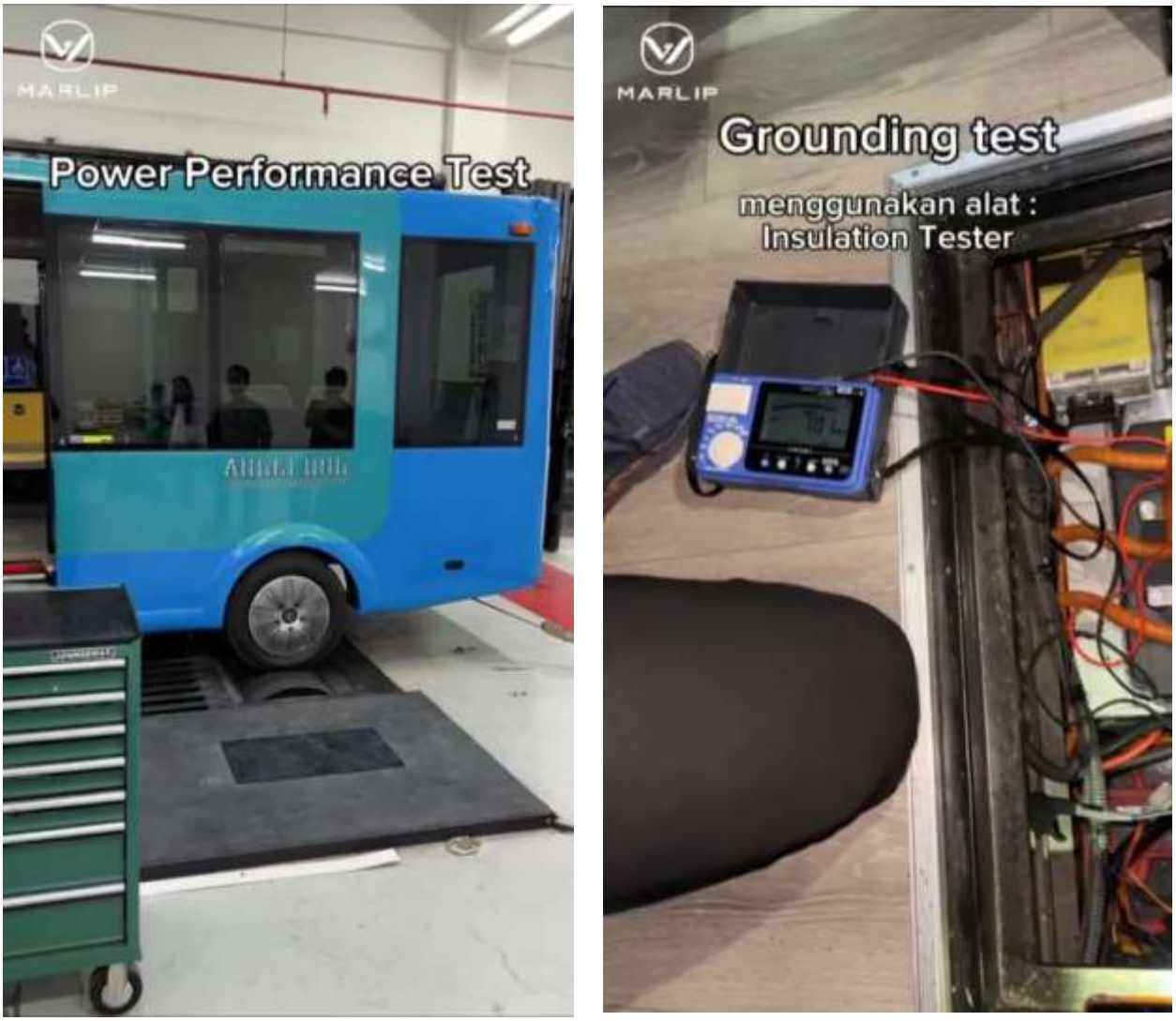


Figure 11. Performance and grounding tests of the *Angklung* electric bus were conducted as part of the vehicle's safety and operational evaluation process.