

Analisa Rencana Pencapaian Pengembangan SKLU di Indonesia dengan Pendekatan Sistem Dinamis = Policy Analysis of SPKLU Development Plan in Indonesia: a System Dynamic Approach

Maya Rhamdhanika, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=9999920532724&lokasi=lokal>

Abstrak

Pertumbuhan jumlah Stasiun Pengisian Kendaraan Listrik Umum (SPKLU) diharapkan dapat mendorong penggunaan Kendaraan Bermotor Listrik Berbasis Baterai (KBLBB). Penelitian ini bertujuan untuk melakukan pengujian model menggunakan skenario yang telah disusun sehingga didapat rekomendasi kebijakan yang efektif untuk mendukung pertumbuhan SPKLU sehingga mempengaruhi adopsi KBLBB. Terdapat dua driving forces yang mendorong tercapainya objektif, yaitu daya tarik KBLBB (EV attractiveness) dan pertumbuhan SPKLU (SPKLU Growth). Daya tarik KBLBB dipengaruhi lima faktor pendorong utama yaitu harga beli, jarak tempuh, kesiapan infrastruktur, perbedaan harga dengan kendaraan bermotor mesin konvensional, dan waktu pengisian baterai. Sedangkan pertumbuhan SPKLU dipengaruhi tiga faktor utama yaitu suplai listrik dari pembangkit, biaya pembangunan dan investasi, serta charge volume. Terdapat tiga skenario untuk pengujian kebijakan pada model yaitu skenario Advertisement Income, Private Investment, dan EV tax incentives from Government. Keberhasilan program percepatan KBLBB yang didorong oleh faktor infrastruktur dilihat dari rasio jumlah SPKLU terhadap jumlah KBLBB. Di antara ketiga skenario tersebut, skenario Private Investment dan EV tax incentives from Government merupakan skenario yang efektif untuk mencapai objektif.

.....The growth in the number of Public Electric Vehicle Charging Stations (SPKLU) expected to encourage the use of Battery-Based Electric Motorized Vehicles (KBLBB). This study aims to test the model using a scenario prepared to obtain practical policy recommendations to support the growth of SPKLU so that it affects the adoption of KBLBB. Two driving forces encourage the achievement of objectives, namely the attractiveness of KBLBB (EV Attractiveness) and charging infrastructure growth (SPKLU Growth). The attractiveness of KBLBB is influenced by five main driving factors, namely the purchase price, mileage, infrastructure readiness, price differences with conventional motorized vehicles, and battery charging time. Meanwhile, SPKLU growth is influenced by three main factors: electricity supply from generators, construction and investment costs, and charge volume. Therefore, there are three scenarios for testing the policy on the model, namely Advertisement Income, Private Investment, and EV tax incentives from Government scenarios. The success of the KBLBB acceleration program which is driven by infrastructure factors, is seen from the ratio of the number of SPKLU to the number of KBLBB. Among the three scenarios, the Private Investment scenario and EV tax incentives from the government scenario are the most effective scenarios to achieve the objectives.