

A system that provides power to trucks so that the trucks will be air-conditioned while the truck drivers are waiting for cargo or taking a rest, thus contributing to the reduction of CO₂ emissions.

Measures to Stop Truck Idling

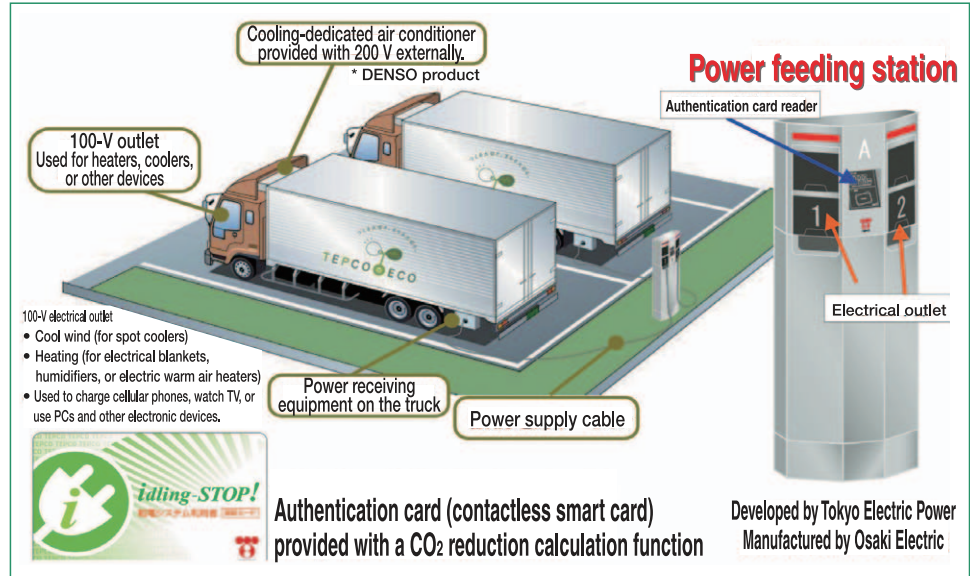
Features

- Local environmental improvement (reducing six tons of CO₂ emissions annually on each large truck basis).
- Promotes legal compliance with idling stop regulations.
- Contribution to careful driving with improvements in the environmental working conditions of truck drivers.

Overview

(Technical principles, actions, etc.)

- This system provides power from power feeding stations to air conditioners in trucks, thus making it possible to turn off the engines, reduce CO₂ emissions, and save fuel consumption, on the condition that the conventional air conditioners in trucks are replaced with specially designed ones.
- The system has a function that identifies users with their contactless smart cards, adds up the usage results of each user, and compares the amount of CO₂ emitted from each truck in an idling state and that emitted as a result of the power consumption of the truck so that the quantitative evaluation of CO₂ reduction will be possible. Furthermore, the system ensures ease of charge collection by identifying each user.



Outline of idling-stop external power feeding system

Introductory Track Record

- There are 105 power feeding stations operating in 28 areas throughout Japan, e.g., truck stations, gas stations, factories, wholesale marketplaces, rest areas on expressways, and truck standby areas at international airports. Each power feeding station can provide power to 195 trucks simultaneously (as of the end of July 2009).

Effects

- A truck used for long-distance cargo transportation needs to stand by at least four hours for cargo loading and discharge and the driver's rest. The truck must be in an idling state in order to air-condition the truck cabin. In fact, trucks using the waiting area at the Kansai International Air Port presently need to wait at least four hours.
- A large truck (with a loading capacity of 10 tons) in an idling state consumes approximately 1.56 liters of diesel oil. By using this system, 98% of CO₂ emissions from the truck can be saved. The usage fee for the system is approximately half the cost of fuel consumed while the truck is in an idling state. Therefore, this system will provide the user with a great merit as well. Furthermore, the driver can rest well without being irritated by vibration or noise with the engine turned off while the air conditioner is kept turned on, which will contribute to the safety driving of the truck.

Applicable field
Transportation industry
 Water
 Energy saving/Energy recovery
 Energy storage/Energy creation
 New energy
 Waste disposal/Recycling/Resource saving
 Air
 Soil
 Other

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