

For Immediate Action: Power Conditioning

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JETRO received an inquiry from a Japanese company that works alongside Toyota on their Fuel Cell Vehicle project. The company is now looking to identify a U.S. partner that manufactures and/or designs Power Conditioning System for this project in the US to jointly develop a system.

What is a Power Conditioner for Fuel Cells?

Power conditioning includes controlling current (amperes), voltage, frequency, and other characteristics of the electrical current to meet the needs of the application. Fuel cells produce electricity in the form of direct current (DC). In a DC circuit, electrons flow in only one direction. The electricity in your home and workplace is in the form of alternating current (AC), which flows in both directions on alternating cycles. If the fuel cell is used to power equipment that uses AC, the direct current will have to be converted to alternating current.

Both AC and DC power must be conditioned. Current inverters and conditioners adapt the electrical current from the fuel cell to suit the electrical needs of the application, whether it is a simple electrical motor or a complex utility power grid. Conversion and conditioning reduce system efficiency only slightly, around 2%–6%.

If you're aware of a company that's interested, please send the following no later than January 22nd:

- Company name & URL
- Contact person & email address
- Permission to give this information to a Japanese company.

JETRO is a non-profit government agency that provides no cost tax, legal, HR and visa consultations, free temporary office space in 6 Japanese cities, and other resources to American companies looking to establish a corporate presence (e.g. branch office, R&D facility or joint venture) in the world's third largest market.

Setting up business in Japan? Talk to JETRO first!