PLATTE RIVER
POWER AUTHORITY

Going Electric

Electric Vehicle Program

Platte River's all-electric Toyota RAV4s are leased as part of the City and County of Denver's Take Charge project through a grant from the U.S. Department of Energy's Clean Cities program. These vehicles are factory-built, providing the reliability and convenience of a proven vehicle design, and are truly all-electric.

Program History

Platte River's Going Electric program began in 1992 with the purchase of a Soleq EVcort, a converted Ford Escort station wagon. In 1993, a second EVcort was purchased. Both vehicles were part of Platte River's pool vehicle fleet. Employees were trained and encouraged to used these vehicles, development of a "smart charger" in conjunction with Colorado State University's Engineering College, alternative transporation displays and loaning out the vehicles to elected officials and community and business leaders were all a part of Platte River's alternative transportation program.

1992 logo

Going Electric Program

Platte River's goals for the Going Electric program is to support and facilitate the commercialization of electricvehicles (EVs) and EV components through testing, evaluation and demonstration of EVs in its vehicle fleet. This supports Platte River's Board of Directors' adopted Environmental Policy and Principles.

The benefits of EVs include clean and quiet operation, zero tailpipe emissions, low operating cost, reliability, reduced demand for foreign oil, utilization of off-peak (usually between 7 p.m. and 9 a.m. weekdays) and solar power generation. By adding these two all-electric RAV4s to its vehicle fleet, Platte River did not purchase one gasoline-powered vehicle. In addition, by connecting the two charging units for the RAV4s to its 10 kW (kilowatt) photovoltaic plant at its Headquarters facility site, Platte River has made the two EVs truly zero-emissions vehicles.

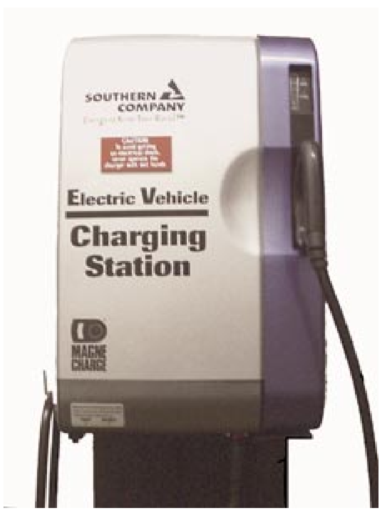
Objectives for the Going Electric program include:

- Increasing public awareness of the convenience and reliability of electric vehicles.
- Evaluate the year-round performance, operational costs, reliability and life-cycle costs of EVS in the front range of northern Colorado.
- Evaluate the usability and acceptability of EVs.
- Test EV component design improvements and technological improvements.
- Evaluate EV infrastructure, like charging stations, and develop and test infrastructure components.

COST

Average cost per mile, two RAV4s for 3 months—gasoline @ $1.50 gal./24 mpg

Electric	Gas
$3.87	$6.30



RAV4 Charging Station

Platte River's 2001 All-Electric Toyota RAV4

Sophisticated electronics combined with a quiet, powerful electric motor and a high-capacity battery pack, give the Toyota RAV4 EV improved power, smoother acceleration, greater driving range and unparalleled reliability.

Specifications

Acceleration
18 seconds, 0 to 60 mph
78 mph maximum speed

Range
126 miles (approximate maximum driving range

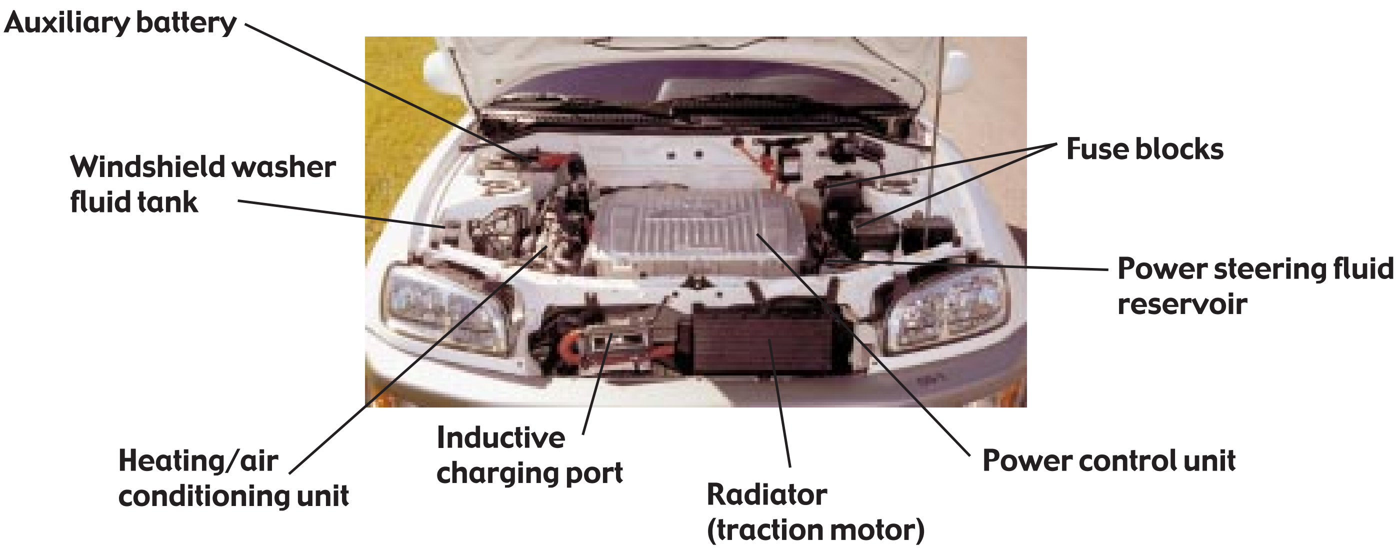
Batteries
12 volt x 24 modules = 288 volts
Nickel-Metal hydride (NiMH)

Battery Charger
Inductive, 220 volt, 40 amp
Charge time@ 220 volts = 6-8 hours
Source = photovoltaic array

Traction Motor
Permanent magnet motor, 50 kW direct current
67 hp/3100-4600 rpm

Braking System
Anti-lock system (ABS) with a sophisticated regenerative system that returns energy to the batteries when the vehicle is coasting or braking.

Toyota RAV4 Motor Compartment



Additional Sources of Information

Platte River Power Authority	www.prpa.org
Toyota	www.toyota.com
Clean Cities	www.ccities.doe.gov
U.S. Department of Energy	www.energy.gov
Alternative Fuels Data Center (AFDC)	www.afdc.doe.gov/afvehicles.html
National Renewable Energy Lab (NREL)	www.nrel.gov

Going Electric

Platte River Power Authority is owned by and provides electricity used by four communities in northern Colorado; Estes Park, Fort Collins, Longmont and Loveland. Its facilities are located in northern and northeastern Colorado in addition to its Medicine Bow Wind Project in Wyoming. Platte River also provides electricity and services to other utilities, agencies and businesses in the western United States.

PLATTE RIVER
POWER AUTHORITY

ESTES PARK • FORT COLLINS • LONGMONT • LOVELAND

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