Why Electric Cars?

Dan Davids
President

Plug In America
The Arrival of Plug-in Electric Vehicles

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President

Plug In America
Toyota RAV4EV 1997-2003
• Saving Cars
  – GM EV1
  – Ford Ranger EV
  – Honda EV Plus
  – Th!nk City
  – Toyota RAV4 EV
  – Chevrolet S10 EV
  – Chrysler EPIC minivan
Toyota: Don’t Crush Linda’s Car!

Meet Howard Stein & the RAV4 EV Toyota sold him.

Howard loves his electric car. Why? Because he doesn’t pay oil companies, foreign dictators or terrorists just to get to work.

Howard has driven his electric car 30,000 miles and never stopped once for gas or an oil change. That’s because it’s 100% electric.

It’s never had a smog test either, because the RAV4 EV doesn’t even have a tailpipe. It is a zero-emission vehicle.

Howard leased the car, but he liked it so much, he bought out the lease. He is now the proud owner of his RAV4 EV.

Meet Linda Nicholes & the RAV4 EV Toyota refuses to sell her.

Linda drives a RAV4 EV obtained through a commercial lease. She wants to buy it, just like her husband, Howard, bought his individual-lease RAV4 EV. But Toyota has said, “No.” It plans to destroy her car and hundreds of other people’s RAV4 EVs. In fact, Toyota has already begun destroying them.

Linda feels great knowing that her family fuels both cars with clean solar energy from the panels on their home.

But even though everyone agrees we must import less oil, Toyota wants Linda to go back to gasoline. It just doesn’t seem right.

Toyota should be fair to all its satisfied RAV4 EV customers and let all leaseholders purchase their vehicles.

Ask Toyota to stop crushing the zero-emission, zero-gasoline RAV4 EVs. In the spirit of Kyoto, let Linda and all RAV4 EV leaseholders buy their cars.

Write: Mr. Jim Press
U.S. Corporate President
Toyota Motor Corporation
U.S.A.
P.O. Box 2991
Torrance, CA 90509

Email: jim_press@toyota.com
Phone: 800-331-4334

DontCrush.com
• **Saving Cars**
  – GM EV1 *(destroyed)*
  – Ford Ranger EV *(some saved)*
  – Honda EV Plus *(destroyed)*
  – Th!nk City *(saved, returned to Norway)*
  – Toyota RAV4 EV *(800 saved)*
  – Chevrolet S10 EV *(some saved)*
  – Chrysler EPIC minivan *(destroyed)*

• approx 1,000 cars saved (out of 5,000)
• Saving Cars ✓
• Advocacy
• Policy
• Industry
• Consumer
PLUG-IN VEHICLES

GM
FORD
CHRYSLER
THINK ABOUT WHAT IT CONSUMES BEFORE BUYING.
CHECK WWW.EVERYDAYS.RE.

believable plastic products
EVERYDAYS
MY NEXT CAR:

NO PLUG? NO DEAL!

www.PluginInAmerica.org
"There! Another batch of clean coal."
Battery Technology

- Chemistry
  - Lead Acid
  - NiMH
  - Lithium Ion
- Performance
  - Reliability & Abuse Tolerance
  - Charge Cycles
  - Calendar Life
- Remaining Challenges
  - Thermal Management
  - Cost
Panasonic Ni-MH Battery Module
• Charging Infrastructure
• Chicken/Egg Problem?
• Standards
• Access
Fully Charged

The majority of U.S. commuters travels less than 40 miles round trip per day, the typical distance a fully-charged electric charge will power a car before the gasoline engine offers assistance.

<table>
<thead>
<tr>
<th>Percentage of commuters</th>
<th>29%</th>
<th>22%</th>
<th>17%</th>
<th>10%</th>
<th>7%</th>
<th>5%</th>
<th>3%</th>
<th>8%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who travel up to ...</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>70</td>
</tr>
</tbody>
</table>

Note: Does not total 100% due to rounding

Source: Electric Power Research Institute, a utility-funded research organization
PAY TO PARK
8AM-7PM MON-SAT

CHARGING STATION
ELECTRIC CAR PARKING ONLY
WHILE CHARGING

PARKING PERMITS NOT VALID
RECHARGE YOUR DEVICE’S LIFE
STAY CONNECTED • KEEP IN TOUCH • NEVER MISS A BEAT!
Charging Station

Recharge up to three hand-held electronic devices at one time.
Fabric lined drawer and tray prevent scratching.
Ideal for cell phones, PDAs, MP3s and personal items.
Cherry wood finish.)
• Saving Cars ✓
• Advocacy and Education ✓
  – Policy
  – Industry
  – Consumers
• Arrival and Acceptance
  – Education
  – Consulting
Summary

- Vehicles on the road
- Infrastructure build-out
- Consumer acceptance