



# Resurrecting the Electric Car (or the infrastructure, at least!)

chelsea sexton

Lightning Rod Foundation

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# We've been down this road before...



Toyota RAV4-EV



Honda EV Plus



Ford Ranger EV



Chrysler EPIC Mini-Van



GM EV1



Nissan Altra



Ford Postal Van



Nissan Hypermini



Chevrolet S-10  
Electric



Toyota eCom



Ford Th!nk City





# “Unknowns”

- What happens when we have large-scale deployment?
- What if cars pool geographically?
- Can the grid handle the extra load?
- Will people charge off-peak?
- Does battery size matter?



# and some Perspective...

- “Large-scale” PH/EV offering
- Geography
- Grid load
- Time of day charging
- Public charging is convenience-Based
- Potential of policy



# Infrastructure Priorities

- Single-family home
- Multi-family home
- Workplace
- Public



- Standardized connectors/communication
- “Gadget-driven”/pull model
  - conspicuous non-consumption
- Stimulus opportunities

# Home



- Service Providers
  - volume can't be supported by incumbents
  - no dealer responsibility
  - utility home wiring
  - national service provider(s) overlay
  - incentives need to be metric-based
- Process
  - timing
  - need to streamline to accommodate volume
  - create consistently positive consumer experiences
  - unfamiliarity creates delays, leaves drivers stranded

# Public/Workplace

- Level 2 is the sweet spot
  - speed vs. ubiquity and universality
  - 3.3 and 6.6 kW, minimum
  - some Level 1 useful for workplace charging
  - transition plan for existing infrastructure
- Incumbent expectations re: monetization
- Infrastructure as incentive
- Usage Policies
- Public funding
  - current lack of stakeholder support for 3rd party monetization
  - RFP/public goods test
  - warranty/vandalism endowment





# Education

- Retail Consumers
- Public/Private Fleets
- Communities- Project Get Ready, etc.
- City Planners, Permitting, Utility, etc.
- Electricians
- Workforce
- Schools



# 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:** 800-331-4331

## DontCrush.com

This appeal is paid for by DontCrush.com. Dontcrush.com is a group of RAV4 EV drivers, ex-EV1, EV+ and Think City lessees, and electric car advocates. It is supported by the American Lung Association, Sierra Club, Electric Auto Association, Natural Resources Defense Council, Union of Concerned Scientists, Rainforest Action Network, Global Exchange, Earth Resource Foundation, California Cars Initiative, Environment Now and Earth Communications Office. To find out how you can help save these clean cars, visit our website: [www.dontcrush.com](http://www.dontcrush.com). Write to us at [info@dontcrush.com](mailto:info@dontcrush.com).

**TOYOTA** moving backward ◀

# Early Adopters

- Deeply tolerant, protective
- Ambassadors
- Love to give feedback
- Want to be a part of something, even at a disproportionate cost to themselves
- Organized
  
- Built-in focus group
  - temper virgin input



# Need Market Assessment

- Community/social networking-based
- Bi-directional information
- Multiple constituents
- Public funding eligible
- Private partnership







# lightning rod foundation

p.o. box 1135 el segundo, ca 90245 p: 310.616.6045  
e: [chelsea@lightningrodfoundation.org](mailto:chelsea@lightningrodfoundation.org)  
w: [lightningrodfoundation.org](http://lightningrodfoundation.org)