

# American Solar Energy Society, Renewable Fuels and Sustainable Transportation Division Mission

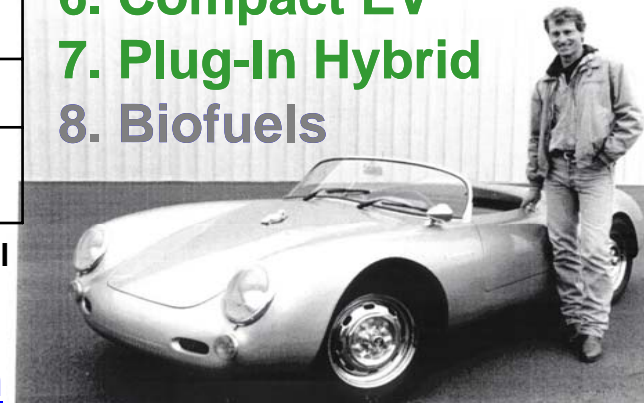
- Support the widespread development and use of clean renewable fuels.
- Lobby for improved fuel efficiency and emissions standards.
- Support the rapid transition to zero emission renewable technologies.
- Promote sustainable community planning to reduce fossil fuel dependence.



Vehicle Type	\$ Gas 50 Mi. /Day	kWh 50 Mi. /Day	\$/year 50 Mi. /Day	Gal/yr 50 Mi. /Day	Tons of CO2/Yr Tailpipe	+Tons of Upstream CO2/Year
10 MPG Gas	17.50	200	\$6400	1829	21.0	27.3
20 MPG Gas	8.75	100	\$3200	915	10.5	13.6
30 MPG Gas	5.85	67	\$2130	609	7.0	9.1
40 MPG HEV	4.40	50	\$1600	457	5.2	6.8
50 MPG HEV	3.50	40	\$1275	364	4.2	5.5
Plug-in HEV 25 Mile range	1.75	10	\$820	182	2.5	3.0
Plug-in HEV 50 Mile range	0	22	\$396	0	0	.4
Battery EV	0	12	\$216	0	0	.2
Solar/Pedal/ Electric	0	2	0	0	0	0

## Mobility without Pollution

1. Consolidate Trips
2. Walk or Bike
3. Pedal Electric
4. Ultra-light EV
5. Electric Rail
6. Compact EV
7. Plug-In Hybrid
8. Biofuels



Assumptions: \$3.50/gal, \$.05/kWh nighttime rate, 40kWh/gal, 23#sCO2/gal

To join the RFST Division go to [www.ases.org](http://www.ases.org)  
 RFST Chair: Steve Heckerth, [steve@renewables.com](mailto:steve@renewables.com)

Heckerth pictured with one of the Electric Porsche Spyderys he built in the early '90s