

Building a Solar Tractor

Presented by
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The Original Inspiration

JOHN HOWE

of Waterford, Maine



Video



<http://www.youtube.com/watch?v=R26RdfqGvUE&eurl=>

http://www.solarcarandtractor.com//Videos_files/widget2_markup.html

The Next Step



- Remove Engine
- Replace with 120-volt DC electric motor
- Install battery pack

Improvements



- Modify the drive system
- Add a motor cooling system

Anticipated Farm Uses

- Light harrowing
- Grain drill
- Corn planter
- Cultivator
- Hay tedder / raking
- Logging & firewood winching
- Powering electric tools
- Transportation

Powering The Home



- Excess power can be returned to grid
- Emergency generator support

Our Conversion Budget

- 1950's Ford 8N or 9N tractor \$1,500
- Tractor upgrades 400
- Clean & strip tractor 200
- Drive system mechanical 500
- Drive system electrical 2,500
- Batteries (10-Deka 9C12) 3,000
- Labor (25 hours @ \$40/hr) 1,000
- Contingencies 900
- TOTAL tractor costs = \$ 10,000

Energy System Budget

- Solar panels (10 @ \$750 ea) \$ 7,500
- Charge controller 500
- Bridge rectifier 100
- TOTAL for energy system = 8,100

- **TOTAL PROJECT COST \$ 18,100**