

# Hybrid Electric Conversion Society of PDX.edu

## MISSION STATEMENT

The mission of the **Hybrid Electric Conversion Society of PDX.edu** is to provide students an opportunity for hands-on participation in the design, building, testing, & operation of sustainable transportation technology in the form of open source/specification plug-in serial hybrid electric drive conversion kits for pickup trucks ( and other body-on-frame vehicles ).

The Society will work to advance the world-wide conversion of the hundreds of millions of existing body-on-frame vehicles with antiquated mechanical drives into modern plug-in serial hybrid electric drive vehicles that will have higher efficiency, lower pollution, and greater functionality.

The CONVERSION of existing body-on-frame vehicles with antiquated mechanical drive is BOTH far more cost effective than buying expensive new hybrid vehicles AND eliminates the problem of what to do with the hundreds of millions of existing vehicles with antiquated mechanical drives that have relatively low efficiency, high pollution, and reduced functionality.

The Society will work to encourage ( by supporting the development of open specifications for sub-system interoperability ) the development of Oregon companies providing products ( and jobs ) for the coming **global hybrid electric conversion**.

Sustainable alternative non-food/fossil fuels will be pursued.  
Multi-bio-fueled centrifugal turbo-alternators will be pursued.  
The “long tail” of hybrid electric conversion technology will be pursued.

Collaboration with other (inter & intramural) student groups will be pursued ( particularly open specifications development and racing ).

Student participation levels can range from heavy-duty engineering to simply coming out and waving the Viking colors as we defeat OSU in intermural competition.