

IPRO 313: CZAR CAR

Clean

Zinc

Air

Refuelable

This feasible electric car will

Revolutionize the Way You Drive!

WHY?

- NO** emissions
- NO** limits
- NO** charge time*

* Although 10-15 minutes will be necessary for refueling about every 300 miles

WHAT?

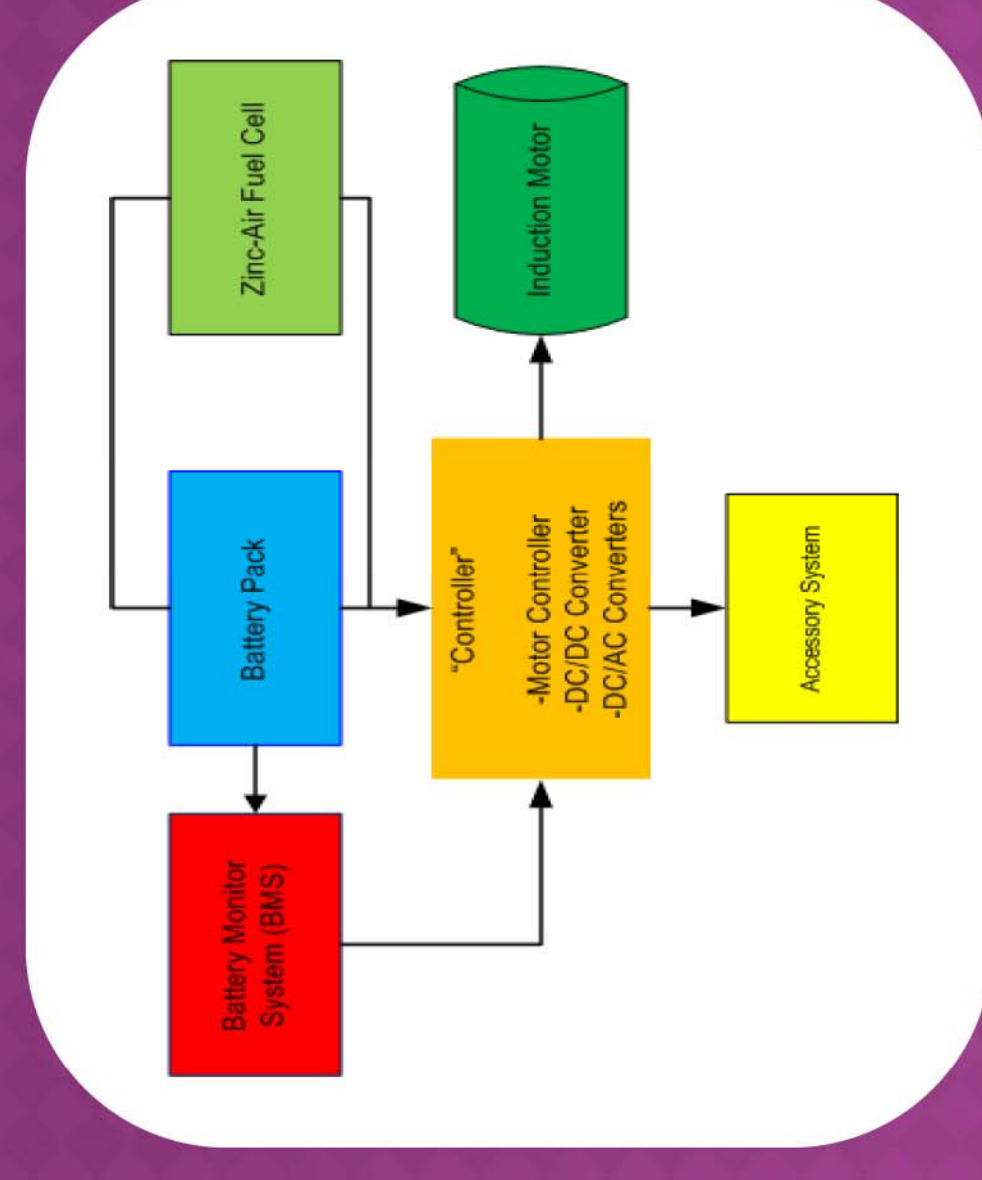
Vehicle Development:

- Electric converted Chevy S-10 truck
- Controller and engine selection
- Secondary battery selection
- Cooperation with Pioneer Conversions



Chevy S-10 Specifics

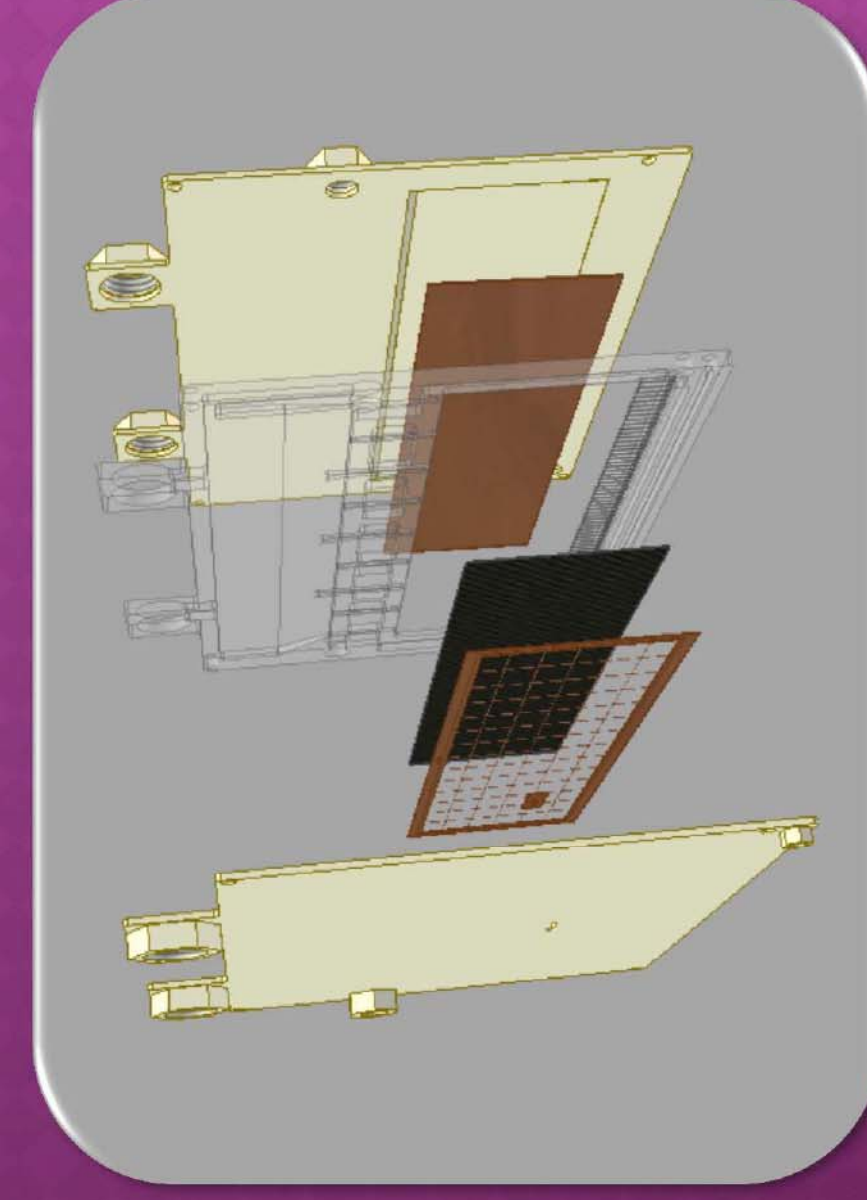
- Donated by Argonne Laboratories
- Conversions by Enova Systems
- No Documentation
- 3-Phase AC Induction Motor
- 300V Battery Pack



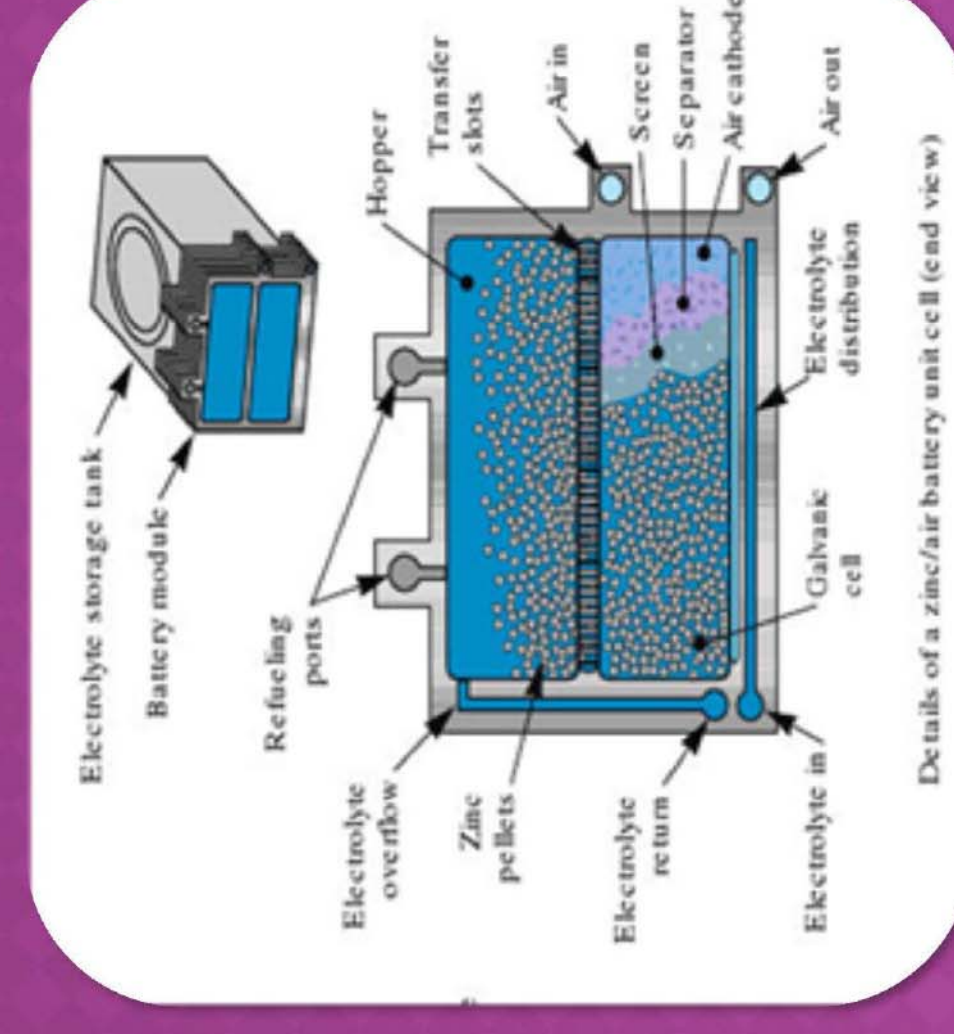
HOW?

History:

- Invented by John F. Cooper, Lawrence Livermore National Labs
- Tested thoroughly
- Basic principle used by Power-Air corp



Battery Construction:



Specifications:

- Roughly 1V per cell
- Fueled by a complex series of reactions between Zn metal, O₂, and KOH (aq)
- Consistent power output

WHO?

Acknowledgements:

- Exelon Corporation and IIT WISER for their financial support
- Argonne National Labs for donated S-10 vehicles
- Pioneer Conversions and Fox Valley Electric Automobile Association for their advice



B a t t e r y P a c k

