Heavy Duty Vehicle Electrification

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Product Development

April 2, 2018
Heavy duty vehicle comparison

- Heavy-duty vehicles:
  - Less than 1% of population
  - About 3% of vehicle miles traveled (VMT)
  - Operate longer hours than light duty vehicles (LDVs)
  - Operate in more populated areas than LDVs

- LDV commonalities
  - Reduced battery costs
  - Smart charging
  - DC fast charging
Grid Technology

- EVs as the perfect load
- Off-peak and controllable in real time
- Grid Balance
  - Load vs Generation
  - 60 Hertz
- Renewable Intermittency
  - Solar
  - Wind
- Balancing DCFC with grid needs
  - Storage
  - Policy
Panel

- School buses
- Airport ground support equipment (GSE)
- Transit buses
- Funding