

Transportation and Stationary Power Integration Workshop

Session II: State and Industry Perspectives



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Opportunities

- Potential multi-use options for CHP-hydrogen deployment
 - Forklifts in warehouses, replacing battery usage
 - Backup power applications
 - Bus routes, with fuel cell buses replacing conventional diesel transit buses
 - LDV Commercial Fleets
 - Airports: ground service vehicles
 - Military / Federal installations
 - Big box retailers
 - Grocery Stores
 - Car Dealerships
- One Megawatt of CHP Power capacity could support an output of ~450 kgs/day - enough for 27 transit buses.

Potential Average Annual Emissions Reduction for One Megawatt of Conventional Fossil Fuel Generation Replaced with Capacity from a Fuel Cell¹ With Hydrogen Production Supplied to Fuel Cell Powered Transit Buses (Replacement of Diesel Transit Buses)

	Stationary Applications	Transportation Applications
NO _x	11,213 lbs	27,537 lbs
SO ₂	9,373 lbs	47.1 lbs
CO ₂	7,218,240 lbs	4,940,568 lbs

A few questions...

- **What are the best ways for states, industry, and Feds to do TSPI type projects?**
- **What is the light duty vehicle OEM strategy?**
- **Are there viable renewable pathways?**
 - **biogas (WWTP)/ landfill gas ?**
 - **utility scale solar/wind power?**
- **Do we have the techno-economic analysis to develop a detailed strategy?**
- **What about the third party investment capital?**