



MetroLINK

Renewable Energy Conference
Jeff Nelson, General Manager
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MetroLINK – At a Glance

- Illinois Quad Cities multi-city transit authority, serving Moline, Rock Island, East Moline, Silvis, Hampton, Carbon Cliff, Colona, and Milan
- Operate 12 fixed-routes with a fleet of 60 coaches, 15 paratransit fleet, 3 passenger ferryboats
- Sustainability vision – to be a leader in developing a sustainable Quad Cities via voluntary efforts to reduce vehicle emissions through alternative fuels, build efficient and sustainable infrastructure, and communicate transit benefits to the community



Sustainability Initiatives

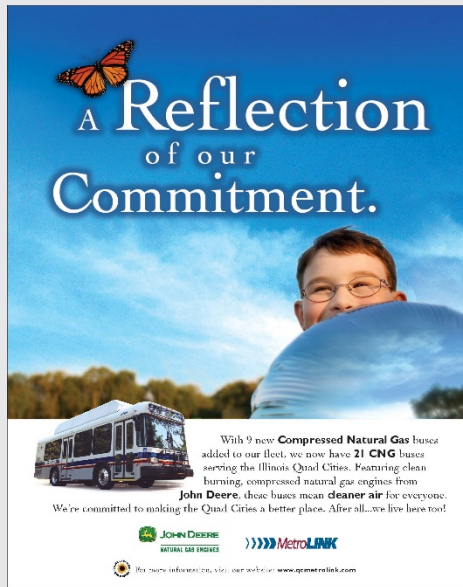
- All new infrastructure designed to USGBC LEED standards
- Operations and Maintenance Center features:
 - 1,344 individual, 255 W solar panels capable of producing 342.72kWp supplies a portion of the building's electrical needs
 - 32 solar panels supply all hot water needs
 - Bus wash with state of the art water reclamation
 - Energy recovery system, radiant floor slabs
 - Daylighting, occupancy controlled lighting, low VOC carpets, paints, adhesives, and composite materials
 - Bioswales to control storm water runoff
 - CNG fueling system and battery electric bus charging stations
- Mixed-fleet of alternative fuel vehicles including clean-burning diesel, (1998) compressed natural gas (2002), and battery electric technology (2018), hybrid electric paratransit vans (2010), bio-diesel (ferryboats)
- Public Relations campaigns and key community partnerships to support sustainability efforts (John Deere, MidAmerican Energy)
- American Public Transportation Association Sustainability Commitment

Budget Impacts

- Average cost per mile by fuel type:
 - Diesel - \$1.28
 - CNG - \$.83
 - Electric - \$.32
- Rooftop solar array has provided \$169,211 in savings to date.



Public Education Campaign (CNG Bus, 2003-2009)



WHY RIDE METRO?



Half of Metro's fleet runs on Compressed Natural Gas (CNG) buses which **reduce** exhaust pollutants by 70 to 85 percent.

Converting **one** diesel bus to CNG saves about **145 barrels** of petroleum annually.

A solo commuter switching their commute from a private vehicle can **reduce** CO² emissions by 20 pounds per day – more than **4,800 pounds** in a year.

Public transportation is estimated to **reduce** CO² emissions by **37 million metric tons** annually.

Save Something **GREEN**
GoGreenMetro.com



Education Campaign (Proterra Electric Bus 2018)

- Employee launch event: 3/1/18
- Public/media launch event: 4/16/18 at SouthPark Mall



Lessons Learned

- Learning curve for staff on building and vehicle systems
- Research, research, research vendor qualifications – garner input from other users of a proposed system or vehicle
- Utilize all funding sources available (rebate programs, clean energy grants, leasing, etc.)
- Engagement and education of staff early on is key to success
- Public education critical component
- Technology is evolving quickly