



# Update of Metro Sustainability Efforts

A Report to the Ad Hoc Sustainability and Climate Change Committee

March 19, 2009

# Outline

- **Legislative, Planning, and Policy Efforts**
- **Climate Change Management**
- **Renewable Energy and Energy Audits**
- **Environmental Management Systems**
- **Sustainability-Related Capital Projects**
- **Other Related Efforts**
- **Questions/Discussions**

# Legislative, Planning, and Policy Efforts

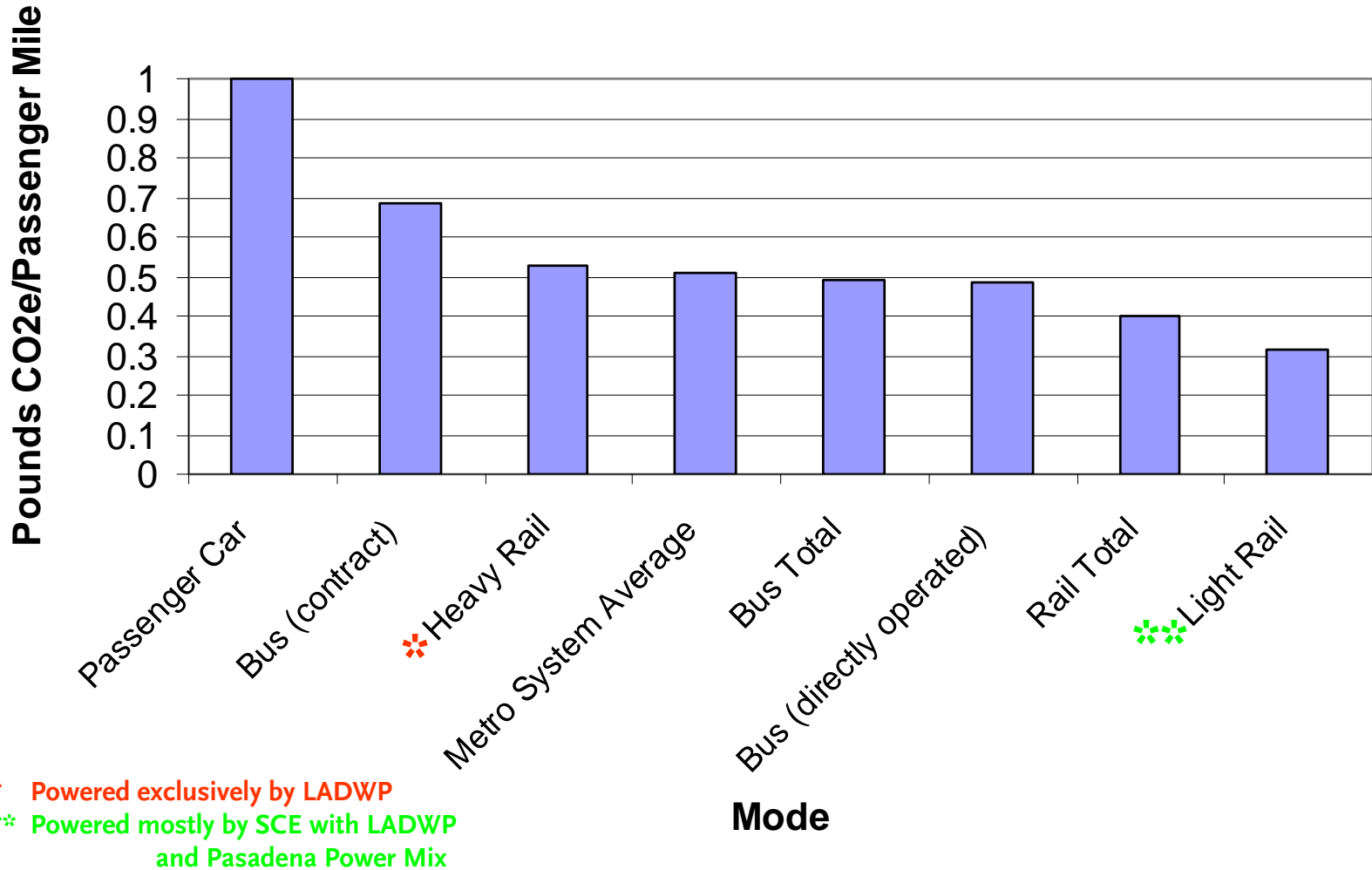
- **AB 32 Scoping Plan adopted by ARB**
  - Early implementation plan activities should be in place on January 1, 2010
- **Attended SB 375 SCAG Regional Workshops**
  - Began collaboration with SCAG to ensure transportation projects are consistent with Sustainability Communities Strategies
  - Provided technical support to Regional Targets Advisory Committee
- **Participation as a member of the LA Regional Collaborative for Climate Action and Sustainability as a Vision Team member**
  - Contribute \$15,000 for initiation of regional Collaborative projects
- **Began outreach process to Councils of Government regarding SB 375 sub-regional implementation**
- **All modal Call for Project applications have been updated to incorporate a sustainability criteria to encourage “Green” principles and strategies**
- **Initiated collaboration with LAUSD and the County of LA on joint energy initiatives**

# Climate Change Management

- **Emissions Reduction Initiatives**
  - Reducing bus idling time/emissions
  - Upgrading Detroit Series 50 engines to Cummins 8.9 ISLG (2010 emission certified)
  - Transition of Non-revenue Fleet to Hybrid powered
  - Introduced six NABI hybrid 42 foot buses into service
  - Upgrading non-revenue tow trucks with Emission After-Treatment Devices as part of CARB emission reduction program for government fleets
- **Metro Greenhouse Gas Inventory Report**
  - Completed in December 2008
  - Methods
    - Used 2007 as the baseline year
    - Used The Climate Registry General Protocol
    - Inventory was conducted on the basis of operational control
    - Report on carbon dioxide, methane, and nitrous oxide
    - Hydrofluorocarbons (HFCs) and Perfluorocarbons (PFCs) will be reported in the future

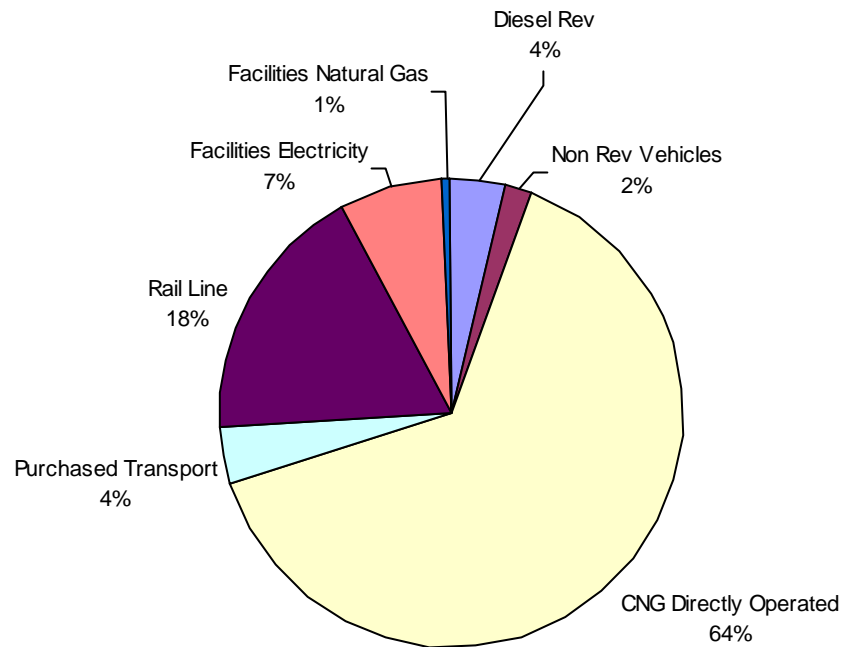
# Greenhouse Gas Inventory

## Metro Carbon Efficiency by Mode



# Greenhouse Gas Inventory

## Metro 2007 Greenhouse Gas Emissions



# Renewable Energy Update (February 2009)



## MSSC Solar/Conservation Project

- Solar Panels 100% Installed (6,720 panels)
- Inverters and meters scheduled for late February 2009 (i.e., power is generated)
- Lighting retrofit is 85% complete
- HVAC installation is 100% complete
- Compressed Air System retrofit is 90% complete
- Energy Management System is 70%
- Forecasted completion date is July 2009 (one month ahead of schedule)

# Renewable Energy Update (February 2009)





# Energy Audits

- **LADWP Energy Audits at Divisions 1, 8, and 15 completed**
  - Upgrade of existing lighting to modern high efficiency equipment
  - Install lighting controls
  - Prevent blowers from operating during peak hours
  - Develop an energy control strategy
- **Additional Energy Audits being conducted at Divisions 10 and 20**

# Environmental Management Systems

- **Environmental Management System (EMS) Pilot at Division 10**
  - **Bus Wash/Surface Water Diversion Project**
    - Study to improve water efficiency and effectiveness of bus cleaning process
  - **Environmental Management Information System**
    - Prototype being developed initially for underground storage tanks
    - Prototype completion date: April 2009

# Environmental Management Systems

- **FTA Assisted EMS Development at Red Line Yard**
  - Fenceline study completed in November 2008
  - FTA had determined that Metro has a robust and commendable environmental program but opportunities exist
  - Staff commenced participation in Quarterly EMS sponsored workshops last January 2009
    - Representatives from bus, rail, and construction have attended
  - Final EMS assessment in end of 2009
  - **Goals**
    - Further improve worker environment
    - Consolidation of environmental best practices
    - ISO 14001 Certification

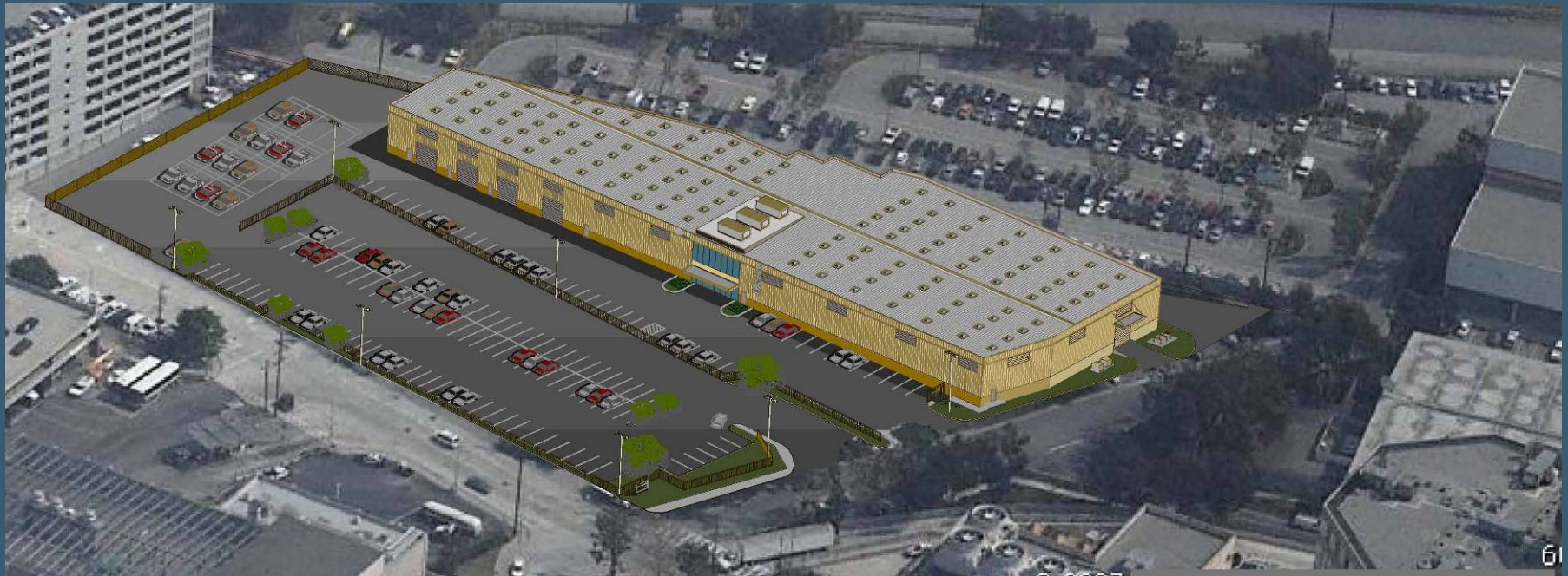
# Sustainable Capital Projects

- **Division 3 Maintenance Annex**
  - Goal of LEED Silver
  - Project is 35% complete
  - Completion scheduled for May 2009



# Sustainable Capital Projects

- **Bauchet Street Warehouse and Facilities Maintenance Shop**
  - Bids for Design/Build Contract expected March 2009
  - Start construction July 2009
  - Complete Project July 2010
  - LEED Silver Contractual requirement



# Sustainable Capital Projects

- **Metro Orange Line Extension**
  - Implementation of sustainability principles during preliminary engineering phase
  - Explore the feasibility of renewable energy along the alignment
- **Commitment in the Measure R Implementation to Incorporate Sustainability Environmental Elements**

# Other Related Efforts

- Green Chemicals Procurement Procedures
- Water Efficiency and Conservation Policy
- Document Summarizing Results of Sustainability Survey
  - Completed and distributed on December 2008
- Partnership with Local Educational and Other Institutions
  - Sustainability awareness training roll-out in February 2009
- Hiring of *Transportation Sustainability Energy Manager* completed
- Hiring of *Transportation Sustainability Policy Manager* is pending Board approval in March 2009
- Sustainability hotline: 213/922-1100 or [sustainability@metro.net](mailto:sustainability@metro.net)
- Planning for 2<sup>nd</sup> Annual Sustainability Survey
- Planning for the 2<sup>nd</sup> Annual Sustainability Summit

# Questions/Discussions