



Central Texas Clean Air Partners Strategies for Cleaner Air

- Employee commute solutions programs (encouraging transit use, vanpooling, carpooling, teleworking, biking, walking, flexible schedules),
- use of cleaner fleets,
- clean energy practices (e.g. GreenChoice),
- low-emission construction or landscaping activities,
- Energy and water conservation practices



DCMCCT Construction Achievements

Notable Features

- Construction Waste Management (91% recycled - 32,000 tons)
- Fly ash substituted for Portland cement in concrete mix
- 100% of existing runway pavement/base reused (47,000 tons)



DCMCCT CONSTRUCTION CO2 REDUCTION

- Construction Waste Management Equivalent to 1300 tons CO2 reduction
- Fly Ash in Concrete Equivalent to 3,234 tons of CO2 release to atmosphere avoided
- Total CO2 Reduction of 4,534 tons Equivalent to
 - the annual greenhouse gas emissions from 786 passenger vehicles or
 - the CO2 emissions from the *electricity* use of 534 homes for one year

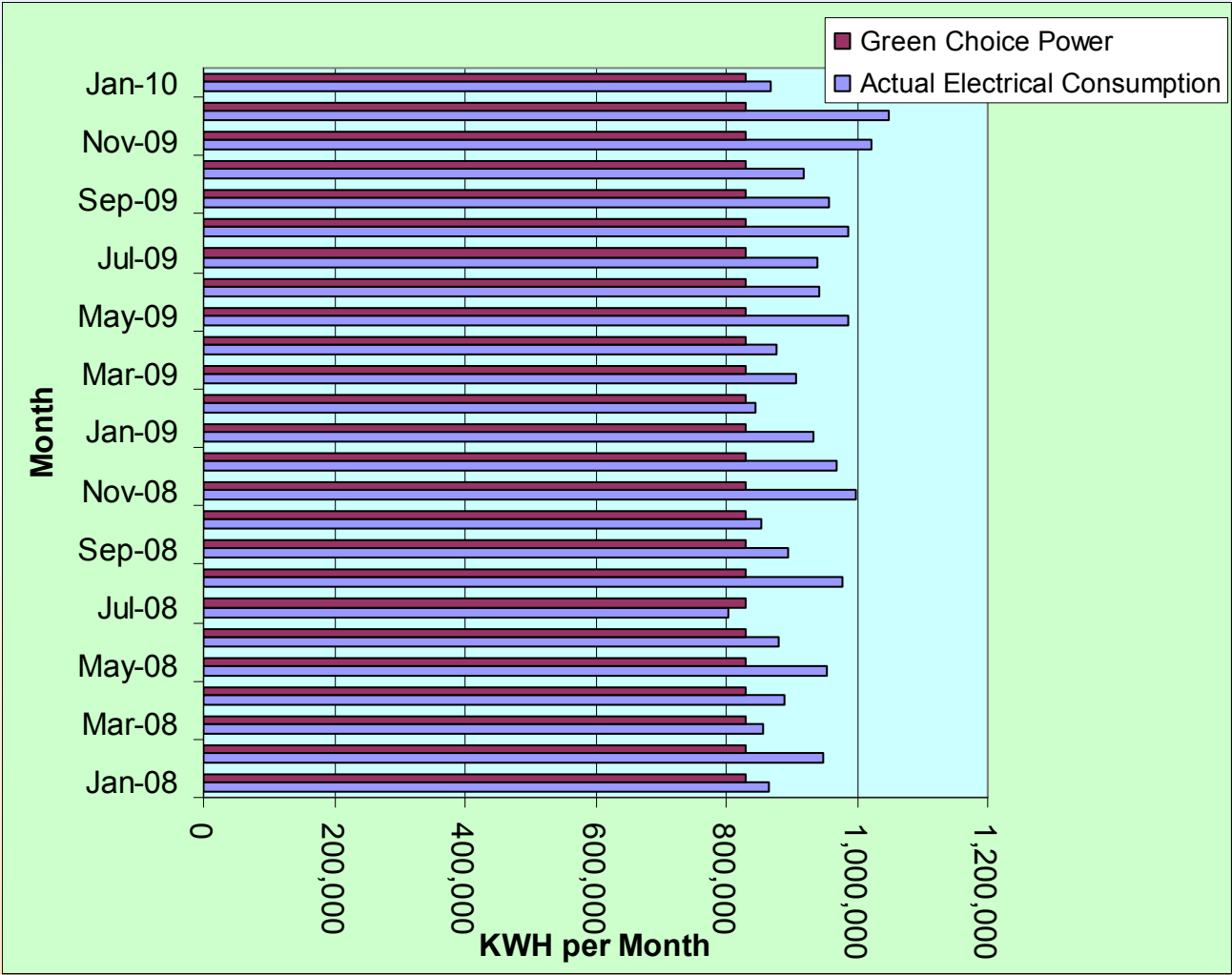
DCMCCT EMPLOYEE COMMUTE SOLUTIONS

- 2 Bus Stops within $\frac{1}{4}$ mile of main entrance
- 21 Car/Vanpool Parking spaces representing 5% of staff FTE
- 60 Alternative Fuel Vehicle Parking spaces equal to 5% of on-site parking spaces
- 51 Bike Racks

DCMCCT Green Power / CO2 Reduction

- January 2008 began 15 year contract with Austin Energy for 830,000 KWH per month of Green Choice power
- CO2 reduction from Green Choice is 964,500 lbs/month using average of 1,162 lbs per MWH of AE grid power
- Equivalent to 149,400 MWH of renewable sourced green power over 15 year period
- Total atmospheric CO2 reduction from Green Choice over 15 years = 86,800 tons

DCMCCT Electrical Consumption and Green Choice Power



DCMCCT Green Power / CO2 Reduction

- 2009 average electrical consumption equaled 947,000 KWH
- Green Choice Power equivalent to 87% of the total average electrical consumption.
- Approximate CO2 reduction from the CHP for the remaining 13% electrical consumption of the hospital was 27 tons/month.
- Total atmospheric CO2 reduction for 2009 is over 1,000,000 lbs per month or 6,000 tons per year
- Equivalent to the annual greenhouse gas emissions from 1,041 passenger vehicles

AE CCHP Exhaust Emissions

Design calculations and modeling indicate the following emissions rates for the energy center compared to the existing Austin Energy electric grid

CONSTITUENT	AE GRID	MEC	REDUCTION
	(LB/MWH)	(LB/MWH)	
Nitrogen Oxides	0.6	0.11	82%
Sulfur Dioxide	2.59	0.02	99%
Carbon Dioxide	1162	699	40%

DCMCCT Recycling Program

- Average from 4 tons/month first year of operation to 9 tons/month for last 6 months of 2009
- Equivalent to 145 trees/month
- 60,000 gal water/month
- 760 cu.ft landfill volume/month
- 60 barrels of oil/month

