FACTS & FIGURES: FUEL CELLS POWERING A DATACENTER



The fuel cell power plant installation at Dry Creek Water Reclamation Facility powers a Microsoft datacenter in Cheyenne, WY

- · Operating on renewable biogas
- Virtually zero criteria pollutants, avoiding the creation of smog and acid rain
- Up to 80% total efficiency with combined heat and power (CHP) configuration
- Reduces up to 2.9 tons of CO₂ emissions per year in comparison to WY electric grid
 - Equivalent to avoiding the greenhouse gas emissions produced by about 610 cars in one year

The fuel cell power plant operating on **renewable biogas**, when compared to the WY grid, avoids:

- 3.5 tons less NOx emitted per year
- 3.5 tons less SOx emitted per year
- 2,910 tons less CO₂ emitted per year

The fuel cell power plant is also capable of operating on **clean natural gas**, and, when compared to the WY grid, avoids:

- 3.5 tons less NOx emitted per year
- 3.5 tons less SOx emitted per year
- 1,736 tons less CO₂ emitted per year

		NOX (lb/MWh)	SOX (Ib/MWh)	CO ₂ (lb/MWh)
	WECC Rockies Region, non-base load	2.78	2.96	2,206
	Average US Fossil Fuel Plant	1.55	3.7	1,745
	DFC Fuel Cell on Nat Gas 47% efficiency	0.01	0.0001	940
	DFC Fuel Cell on Nat Gas CHP 80% efficiency	0.006	0.00006	550
	DFC Fuel Cell on Biogas CHP 80% efficiency	0.006	0.00006	0

