



EPA Climate Leaders Combined Heat & Power

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The Largest Provider of CHP Capacity in the U.S.



- 33 facilities with a capacity of 11,000 megawatts
- Maximum steam load of 17 MMlb/hr
- 20 percent of total CHP share in United States

Products & Services



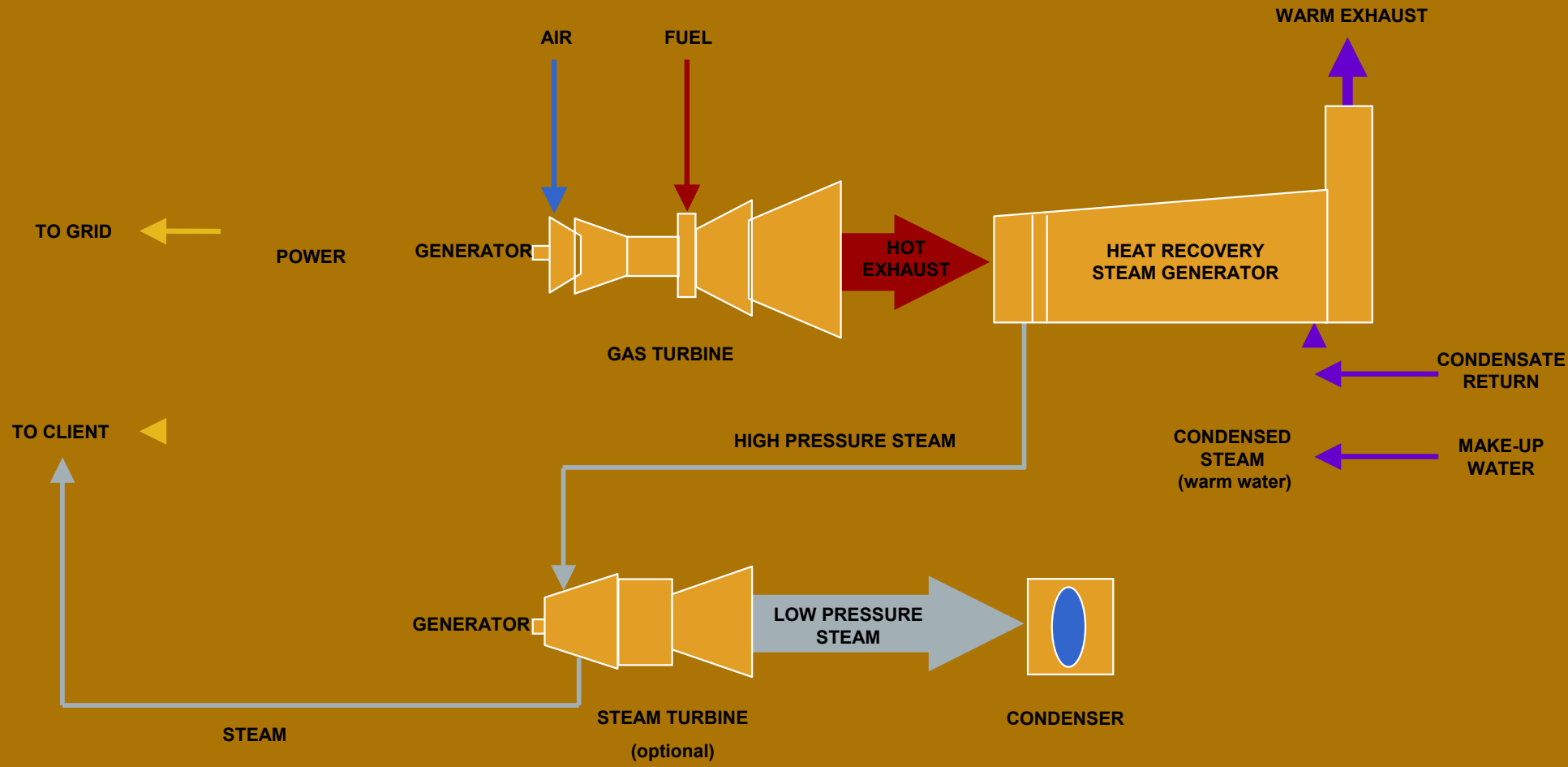
- Steam or hot water (cogeneration)
- Direct-connect power
- Customizable contracts
- Custom power management
- Other utilities



Who Benefits?

- Large industrial facilities:
 - Refineries
 - Chemical plants
 - Pulp and paper plants
 - Manufacturing facilities
- Colleges and universities
- Urban utility providers
- The public through cleaner air

Cogeneration



Cogeneration

PLANT THERMAL EFFICIENCY
(Btu Fuel per kWh Power)

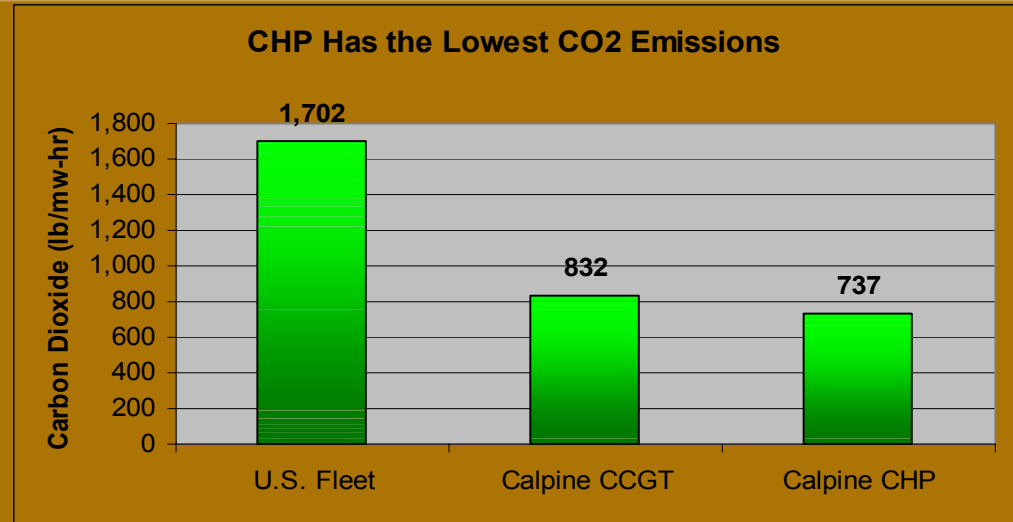


Outsourcing (Calpine-owned and –operated assets)

- Focus your resources on your core business
- Eliminate capital demands associated with utilities
- Supplement your emissions reduction program
- Profit from our power plant expertise and economies of scale

* Platts RDI Base Case Unit Emissions Rates (CEMS data), June 2002

Lower Air Emissions



Environmental Benefits

- Supplement emissions reduction program
- Generate emission reduction credits
- Generate excess NO_x allowances
- Positive public image

The U.S. average fossil fuel fleet's emission rates were obtained from the U.S. DOE's Electric Power Annual for latest available year (2002).

Steam or Hot Water



Reliable, Low-cost Steam or Hot Water

- Boost efficiency with cogeneration process
- Meet your needs with a custom-designed plant
- Supplement or replace existing steam generation
- Reduce emissions
- Choose from flexible back-up steam options
- Lower costs by converting your waste fuels into steam

Direct-connect Power



Low-cost, Flexible Power Supply

- Rely on dependable power from a dedicated resource
- Increase efficiency with cogeneration
- Reduce environmental impact

Custom Power Management



Full Requirements Service

- Pay for only the power you need

Interruptible Power Options

- Profit from high power prices

Dynamic Scheduling

- Optimize your power supply
- Reduce costs

Success Stories: Customers



STEAM HOST	LOCATION	SIZE (MW)	CONFIG.	PLANT NAME
Agnews Developmental Ctr	San Jose, CA	29	1x1	Agnews
Atlantic Packaging	Ontario, Canada	8	1x1	Whitby Cogen
Bayer	Baytown, TX	830	3x1	Baytown
BP	Decatur, AL	852	3x1	Morgan
BP Chemical	Hull, UK	1,200	3x1	Saltend
Celanese Ltd./Old World Industries	Pasadena, TX	412	3x2	Clear Lake
Chevron/Phillips Petroleum	Pasadena, TX	787	3x2	Pasadena
Citgo/Elementis/Flint Hill	Corpus Christi, TX	537	2x1	Corpus Christi
Cosmar	Saint Gabriel, LA	531	2x1	Carville
Cutrale Juices/Florida Distillers	Auburndale, FL	46	1x1	Auburndale
Dow Chemicals	Pittsburg, CA	71	3x0	Pittsburg
Dow Chemicals	Texas City, TX	471	3x1	Texas City
Dupont	Parlin, NJ	118	2x2	Parlin
Energy Park	Pryor, OK	124	1x2	Pryor
Equistar	Morris, IL	178	3x1	Morris
Farmers Processing	Watsonville, CA	30	1x1	Watsonville
Gilroy Foods	Gilroy, CA	131	1x1	Gilroy

Success Stories: Customers



STEAM HOST	LOCATION	SIZE (MW)	CONFIG.	PLANT NAME
Gilroy Foods	King City, CA	46	1x1	King City
International Paper	Jay, ME	52	3x0	Androscoggin
International Paper	Pine Bluff, AR	213	1x1	Pine Bluff
Kennedy Intl. Airport	Jamaica, NY	105	2x1	Kennedy Int'l
Lyondell Citgo	Houston, TX	574	2x1	Channel
Norske Skog	BC, Canada	69	1x1	Island Cogen
Northrop Grumman	Bethpage, NY	54	2x1	Bethpage
Shell	Deer Park, TX	1,019	4x1	Deer Park
Solutia	Decatur, AL	838	3x1	Decatur
State Univ of NY	Stony Brook, NY	40	1x1	Stony Brook
Sterling Fibers	Pace, FL	250	1x1	Santa Rosa
SunSweet Growers	Yuba City, CA	50	1x0	Greenleaf 2
Sutter Dryers	Yuba City, CA	50	1x1	Greenleaf 1
Trigen	Philadelphia, PA	74	1x1	Gray's Ferry
USS Posco	Pittsburg, CA	566	2x1	Los Medanos
Voridian	Gaston, SC	641	2x1	Columbia

Success Stories: Baytown Energy Center



The Challenges

- Reduce utilities emissions as part of site-wide compliance plan
- Reduce utility costs to increase competitive advantage
- Take advantage of cogeneration technology

*Recognized at Texas
Technology Showcase 2003*

The Solutions

- Constructed a 700 MW cogeneration facility
- Direct-connected to supply all Bayer power loads
- Supplied Bayer steam needs from custom facility with N-2 reliability
- Allowed retirement of existing gas boilers
- Substantially reduced Bayer site emissions