

INDUSTRIAL CASE STUDIES

Industrial Facilities Benefit from PACE

Texas Property Assessed Clean Energy (TX-PACE) enables industrial site owners to obtain affordable, long-term financing covering up to 100 percent of the cost for energy efficiency, water conservation, and on-site generation technologies. TX-PACE secures private financing for a term as long as the projected useful life of the improvements, resulting in utility cost savings that exceed the amount of the repayment.



R.J. LIEBE ATHLETIC LETTERING COMPANY NAVARRO COUNTY, TEXAS

Liebe is the first manufacturing plant to complete a TX-PACE project. The TX-PACE assessment financed over 20 years provided the Missouri-based company a financially viable way to restore an aging, inefficient facility and relocate much of its operations to the new site. The flexible financing tool allowed Liebe to bypass the significant capital investment needed, retrofitting the lighting to LEDs, and installing HVAC for the first time in the plant's history. Reopening this facility will create 60-80 permanent manufacturing jobs in Corsicana and will save approximately 187,177 kWh of electricity annually.



HELLER HELLER

Photo Credit: PRLog http://bit.ly/2caf5

PACIFIC ETHANOL, MADERA CA

Pacific Ethanol, Inc. (NASDAQ:PEIX), a leading US producer and marketer of low-carbon renewable fuels, used \$10 million in PACE funding to purchase and install a 5 MW photovoltaic (PV) power system at its ethanol plant. This project is the first ever commercial solar electricity system at a US ethanol plant and the largest solar PV system to be funded through PACE.

Pacific Ethanol's PACE project is saving the facility more than \$1 million annually and is cash flow positive from year one. The system also qualified for the Energy Investment Tax Credit, displaces more than 30% of the grid electricity previously used, and drives premium pricing at the plant due to improvements in its carbon-intensity core.

HELLER MACHINE TOOLS, TROY MI

Heller Machine Tools, a world-leading manufacturer producing state-of-the-art machine tools and production systems for metal cutting processes, used PACE to finance \$978,607 in deep energy retrofits for its 100,000 sq ft production facility. Energy consumption and related costs were reduced by 23% - a savings of \$1.6 million over 15 years.

Measures included:

- HVAC Networked building controls Compressed air upgrades Partial roof replacement Lighting replacement
- Server room cooling

TYPICAL EXAMPLES OF QUALIFIED IMPROVEMENTS:

Chillers, boilers, and furnaces • HVAC, BMS, BAS, EMS controls • Lighting • Water heating systems • Energy management systems and controls • Roofing • Windows • Doors • Insulation • Elevator modernization • Pool equipment • Cogeneration • Heat recovery and steam traps • Solar panels • Wind turbines • Water management systems and controls • Irrigation equipment • Rainwater collection systems • Toilets • Faucets • Greywater systems... and more!

- Mike Bernhagen, General Manager of Liebe

THE FINANCIAL IMPACT OF INDUSTRIAL TX-PACE

This example compares self-funding and conventional funding with TX-PACE financing:

- · Industrial Facility
- Project involves a \$2.5M 1.3MW CHP system
- Annual net savings of \$473,000 (5.3 yrs simple payback)
- The project does not pass the company's hurdle rate for investment in energy efficiency (i.e. the ROI is probably not high enough)
- Conventional funding for 5 years at 4.0%
 (20% down payment)
- TX-PACE funding available for 20 years at 6.0%.
- Energy prices held constant. NPV discount rate at 8%.



FINANCING SCENARIO COMPARISON SUMMARY			
	Self-Funded	Conventional Loan	TX-PACE Loan
Out-of-Pocket Investment	(\$2,500,000)	(\$500,000)	\$o
Savings (First Year)	\$473,000	\$473,000	\$473,000
Annual Payment	\$o	(\$561,568)	(\$217,961)
Cash Flow Impact Year 1	(\$2,027,000)	(\$588,568)	\$255,039
Net Project Cash Flow Year 2	(\$1,554,000)	(\$677,136)	\$510,077
Years to Positive Project Cashflow	5.3	7.0	IMMEDIATE
Debt Service Over Finance Term	0	(2,807,839)	(2,368,742)
10-Year Project NPV	\$673,869	\$431,691	\$1,711,330
Property Value Increase (20-Year NPV)	\$2,143,984	\$1,901,806	\$2,504,007

YOUR TX-PACE ASSESSMENT CAN INCLUDE:

- Materials and labor costs
- Permit, lender and inspection fees
- Program application and administration fees
- Project development and engineering fees
- Independent third party review and verification fees
- Legal, consulting and other fees
- Incidental installation, modification or improvement costs