



Luminant



2010

ENVIRONMENTAL
REVIEW

About LUMINANT

Luminant, a subsidiary of

[Energy Future Holdings Corp.](#),

is a competitive power generation business, including mining, wholesale marketing and trading, and development operations. Luminant has more than **15,400 megawatts of generation in Texas**, including 2,300 MW fueled by nuclear power and 8,000 MW fueled by coal. The company is also the **largest purchaser of wind-generated electricity in Texas** and fifth largest in the United States. EFH is a Dallas-based energy holding company that has a portfolio of competitive and regulated energy subsidiaries, primarily in Texas.

Visit www.Luminant.com for more information.



Bald eagles, such as this one at Big Brown, and other wildlife abound on Luminant lands.

GENERATING PLANTS AND MINES

FUEL TYPE	UNITS	CAPACITY (MW)	COUNTY
NUCLEAR			
■ Comanche Peak	2	2,300	Somervell
COAL			
● Big Brown	2	1,150	Freestone
◆ Big Brown			Freestone
◆ Turlington			Freestone
● Martin Lake	3	2,250	Rusk
◆ Beckville			Panola
◆ Oak Hill			Rusk
◆ Tatum			Panola
● Monticello	3	1,880	Titus
◆ Thermo			Hopkins
◆ Winfield			Titus/Franklin
● Oak Grove	2	1,600	Robertson
◆ Kosse			Limestone/Robertson
● Sandow	2	1,137	Milam
◆ Three Oaks			Lee/Bastrop
NATURAL GAS¹			
▲ DeCordova	4 CTs	260	Hood
▲ Graham	2	630	Young
▲ Lake Hubbard	2	921	Dallas
▲ Morgan Creek	6 CTs	390	Mitchell
▲ Permian Basin	1, 5 CTs	865	Ward
▲ Stryker Creek	2	685	Cherokee
▲ Trinidad	1	244	Henderson
▲ Valley	3	1,115	Fannin

■ NUCLEAR ● COAL ◆ MINES ▲ NATURAL GAS CTs COMBUSTION TURBINES

GENERATION SUMMARY

FUEL TYPE	CAPACITY (MW)	PLANTS	UNITS
Nuclear	2,300	1	2
Coal	8,017	5	12
Natural Gas ¹	5,110	8	26
TOTAL	15,427	14	40

¹ Includes 390 MW representing six leased CTs, 1,655 MW representing four units mothballed and not currently available for dispatch, and 1,268 MW representing eight units operated for unaffiliated parties

LUMINANT LOCATIONS

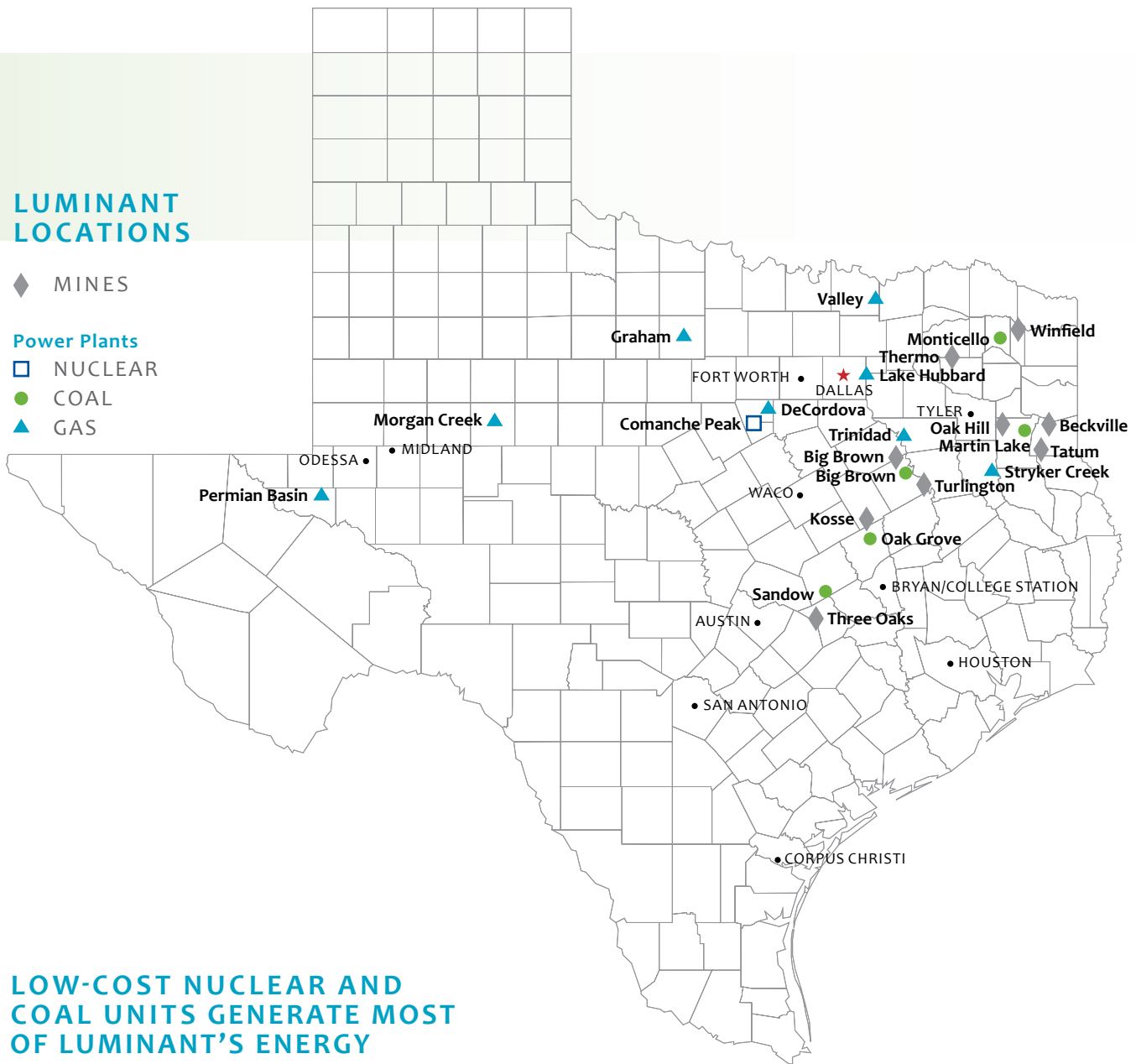
◆ MINES

Power Plants

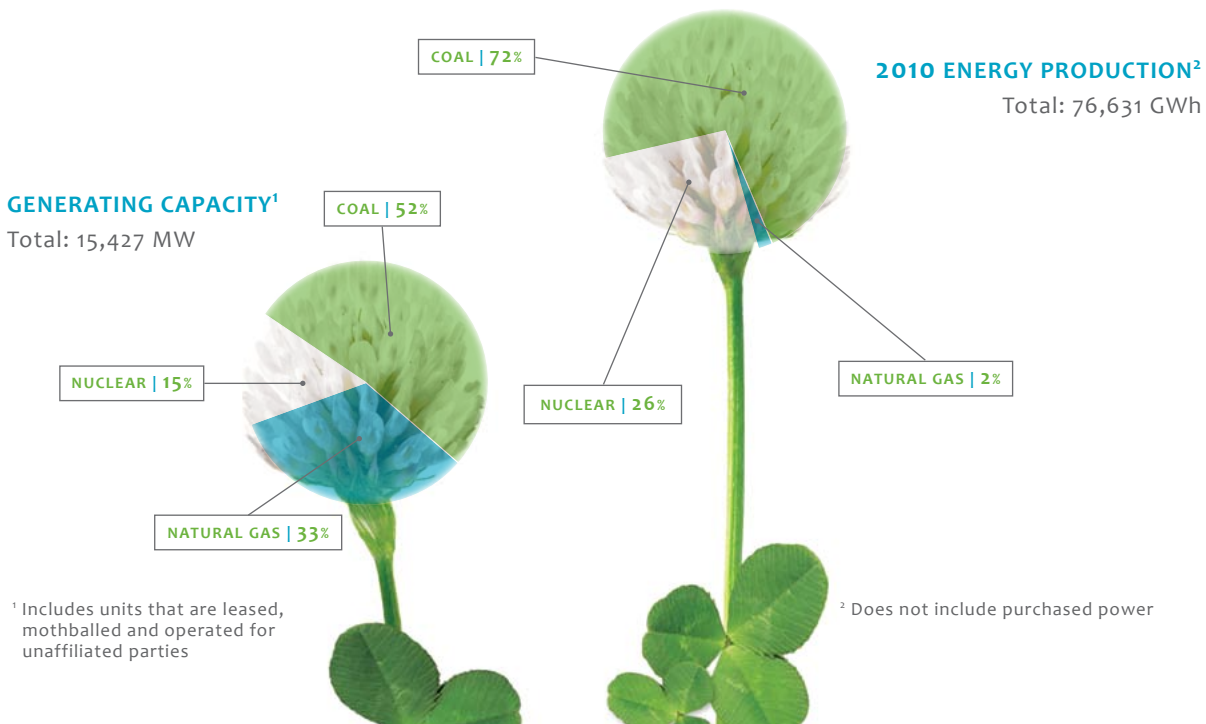
□ NUCLEAR

● COAL

▲ GAS



LOW-COST NUCLEAR AND COAL UNITS GENERATE MOST OF LUMINANT'S ENERGY



¹ Includes units that are leased, mothballed and operated for unaffiliated parties

² Does not include purchased power

CLEAN-AIR PROGRESS

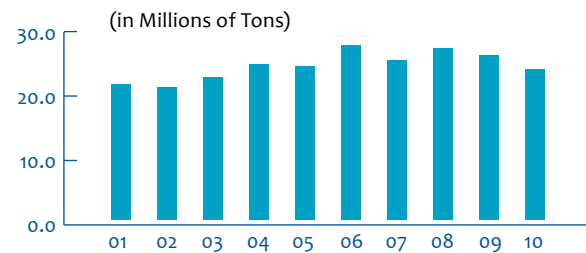
- Texas is leading the way in clean power generation. While the state is by far the nation's top electricity generator, its power plants rank among the cleanest in key emissions rates.
- As Texas' power plant emissions continue to get cleaner, Luminant is proud to be a leader in the progress the state is making to create an even cleaner energy future.
- With a wind-energy portfolio of 900 MW and a commitment to increase purchases to 1,500 MW, Luminant has led in promoting Texas wind generation since the industry's infancy. Today, Luminant remains the No. 1 wind purchaser in Texas, and the state is the unrivaled national producer of wind-generated energy.
- Luminant has added 2,200 MW of new coal-fueled units equipped with advanced environmental controls. Oak Grove 1 and 2 and Sandow 5 are the nation's first 100 percent lignite units to use activated sorbent injection technology to control mercury emissions. Oak Grove's key emissions rates are the lowest of any Texas lignite plant and at least 75 percent lower than the national average for coal plants.
- An industry leader in mercury control, Luminant has voluntarily equipped all its coal units with sorbent injection systems. Additional voluntary technology retrofits and other improvements are also reducing nitrogen oxide and sulfur dioxide emissions across the coal fleet.
- For two decades, Luminant's voluntary climate change program has been among the nation's

largest individual company efforts, avoiding, reducing or sequestering more than 421 million tons of carbon dioxide.

- Potential expansion of the Comanche Peak nuclear plant could provide up to 3,400 MW of additional generating capacity with the lowest air-emission rate (zero) of any conventional generation technology available.
- Luminant is also exploring new and emerging solutions to produce even cleaner, more efficient power for the future.

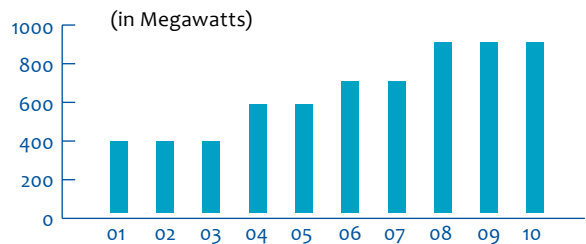
Voluntary Climate Change Program

Total since 1991: 421.6 Million Tons of CO₂ Avoided, Reduced or Sequestered



Purchased Wind Capacity

Current total capacity: 913 Megawatts



Reclaimed land at Monticello provides a mix of forage species, including crimson clover, for livestock grazing and corridors of trees, shrubs and forbs for wildlife habitat.



LAND STEWARDSHIP

- For 40 years, Luminant has been mining lignite to fuel its nearby coal generation plants, which produce electricity for a large part of the state's population.
- The company's coal-mining operations are the largest in Texas and the 13th largest in the nation. Lignite production of 27.5 million tons in 2010 is expected to increase to about 33 million tons with full operation of three new coal units.
- Luminant has set the reclamation standard for four decades, restoring the land for use as forests, pastures, wildlife habitat and cropland.
- Before mining its first ton of lignite—and before the law required it—Luminant developed a plan to reclaim the land. Its goal is to quickly return mined lands to productivity and achieve full release of all regulatory reclamation obligations.
- Luminant has reclaimed almost 68,000 acres—including over 1,700 acres in 2010—with bond liability release secured on over 29,800 acres.
- More than 30 million trees have been planted, almost 1.2 million of them in 2010. Since 1996, Luminant's reforested areas have been recognized as a certified Tree Farm; about 60 percent of the acres Luminant reclaims are reforested.
- Water resources have dramatically increased, with over 5,100 acres of wetlands, ponds and stream channels created or enhanced.
- A number of endangered, threatened and protected species, including the interior least tern, bald eagle, timber rattlesnake and alligator snapping turtle, and an abundance of other wildlife benefit from Luminant's restored mined lands and reservoirs. In addition to the work of Luminant's environmental professionals, its unique Environmental Research Program provides valuable studies related to wildlife recovery, enhancement and management.
- Luminant has received nearly 90 awards for reclamation excellence, including an unprecedented five Director's Awards, the highest honor from the U.S. Department of the Interior's Office of Surface Mining.

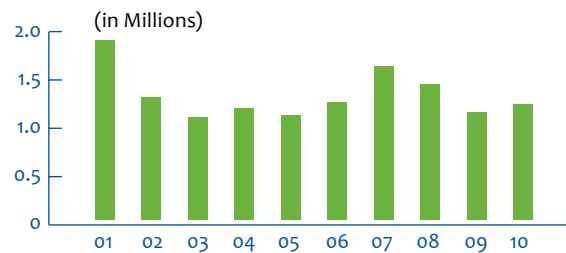
Mining and Reclamation

		TOTAL (in Acres)
MINED	2010 To Date	1,922 61,109
RECLAIMED ¹	2010 To Date	1,729 67,883
RELEASED	2010 To Date	676 29,840

¹ Includes mined acreage and non-mined acreage disturbed to support mining

Trees Planted

Total since 1975: 30.2 Million Trees



White clover, a forage crop for cattle and other livestock, flourishes on Luminant's reclaimed pastures.

WATER CONSERVATION AND WASTE REDUCTION



Luminant's Squaw Creek Reservoir, which serves as the cooling source for the company's nuclear plant, boasts some of the best bass fishing in Texas.

WATER

- Clean water is essential every day for the operation of Luminant's power plants.
- Luminant captures, monitors, treats when necessary and reuses or releases water at its generating facilities, mines and other operations to ensure good water quality and regulatory compliance.
- As the largest private owner of Texas reservoirs, Luminant owns and operates 14 lakes and also has power generation facilities on five others. Luminant is active in planning for water conservation and use of water resources and maintains representation on regional water planning groups.
- The company's reservoirs provide thousands of acres of aquatic habitat for wildlife, and some of the largest are open to the public for fishing, boating and other recreational activities.

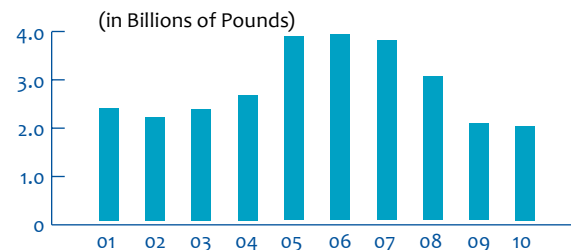
WASTE

- Luminant's programs to reduce chemical use, replace hazardous substances with nonhazardous ones and minimize and reuse materials continue to achieve major environmental benefits.
- Hazardous waste generation in 2010 was just 3 percent of the amount produced in 1991 when tracking began.

- Since 1993, Luminant has recycled more than 38 billion pounds of materials, including almost 2.1 billion pounds in 2010. Materials range from paper, aluminum and antifreeze to lead-free batteries, oils, tires and coal combustion byproducts. The reuse of materials decreases energy costs, reduces carbon emissions and saves landfill space.
- Combustion byproducts from Luminant coal plants make up the largest quantity of recycled materials. Since 1986, 41.8 billion pounds, including over 2 billion pounds in 2010, have found new life in the roofing, concrete and carpet industries as well as in oil-field and road-paving projects.

Coal Combustion Byproduct Sales

Total since 1986: 41.8 Billion Pounds



COMMUNITY COMMITMENT

- The safety of the public and employees is always Luminant's top priority.
- Luminant's operations produce a significant economic benefit to Texas through power plant payrolls, purchases, contracts, taxes and other expenditures. Among the state's largest property taxpayers, Luminant pays more than \$100 million annually. By a wide margin, the company is the largest taxpayer in the communities where it operates plants.
- Luminant invests billions of dollars in new infrastructure. Its \$3.25 billion investment in the recent construction of new power facilities generated employment for thousands of construction workers. Today, the completed units and mines provide hundreds of high-quality jobs for rural areas of the state.
- For its 4,200 employees, Luminant means jobs and career opportunities, good wages and healthcare for them and their families, and retirement and savings programs.
- Luminant also takes pride in powering its communities through philanthropy, leadership and volunteerism. Its charitable contributions totaled over \$1.2 million in 2010, and employees pledged over \$600,000 in support of United Way and TXU Energy Aid.
- Educational outreach is an essential part of Luminant's environmental commitment:
 - The unique Luminant Environmental Research Program has produced outstanding scientists and environmental professionals and has provided Luminant with sound environmental solutions since 1971.
 - The Luminant Scholar Program increases young students' environmental awareness and has provided \$150,000 in scholarships and grants since 2008.
 - Luminant's teacher-education summer partnerships with universities and the Texas Mining and Reclamation Association help teachers understand the link between energy needs and the environment.
 - Since 2002, Luminant and employees at its Comanche Peak nuclear plant have supported local high school environmental science classes in monitoring the Paluxy River water quality. In 2010, Luminant began a partnership with the school district, Texas Parks and Wildlife and other groups to restore habitat for the bobwhite quail and eastern bluebird at the company's Squaw Creek Park and Reservoir.



In a long-term partnership between Luminant and Glen Rose High School, environmental science students monitor the quality of the Paluxy River watershed.

LUMINANT

Lincoln Plaza
500 N. Akard St.
Dallas, Texas 75201

www.Luminant.com



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