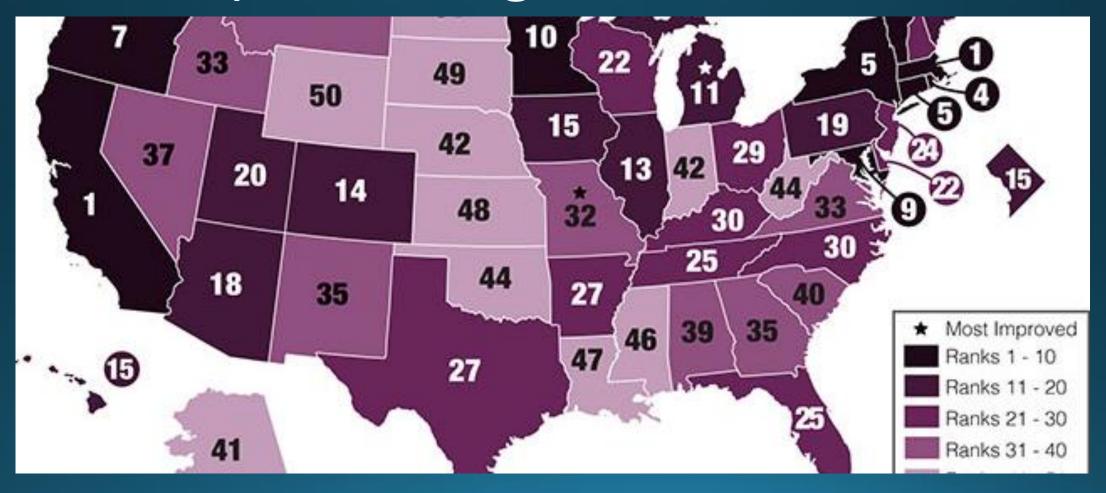


Recent and Upcoming Legislative, Regulatory and Policy Changes

Larry Howe (TXSES, NTREG, PSA) Cyrus Reed (Sierra Club)

North Central Texas Energy Forum
October 26, 2016

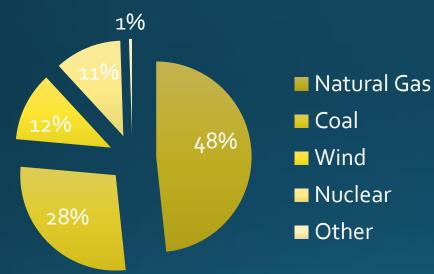
Texas: Still not a top leader on Energy Efficiency according to ACEEE



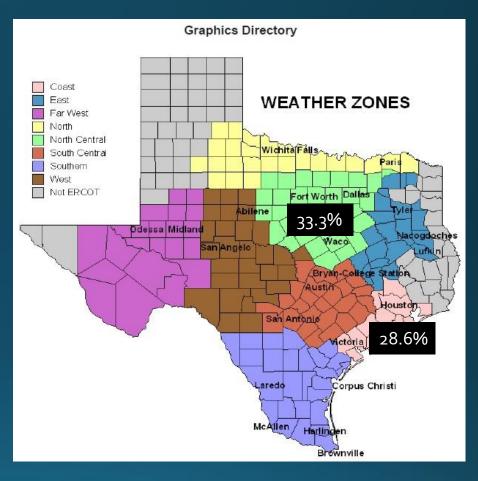
Electricity Generation & Consumption in Texas

340,033,353,000 kWh in 2014, 347, 522,948 in 2015

% of Generation in ERCOT, 2015



Electricity Source	MWhs in 2015	% Change from 2004
Natural Gas	167,911,033	+27%
Coal	97,654,710	-15%
Wind	40,786,278	+1240%
Nuclear	39,384,317	-3%
Other	1,786,611	-17%
Total	347,522,948	+21



North Central Average Residential 16,220 kWh annual usage 10% higher than average of all other weather zones

SB 898 is still the law! Set goals and report on your progress

- Under SB 898, certain political subdivisions are required to set goals for reducing energy use, and providing an annual report to SECO.
- Each political subdivision, institutions of higher education or state agency affected counties is required to:
- Establish a goal to reduce electric the electrical consumption by the entity by at least 5 (five) percent each year for 10 (ten) years, beginning September 1, 2011.
- Submit a report annually to SECO regarding the entity's progress and efforts to meet the 5% goal to reduce electrical consumption.
- Reports due each year by November 30th.

Green Power Partnership

- The overall vision of the Green Power Partnership (www.epa.gov/greenpower) is to protect human health and the environment by expanding U.S. renewable energy markets through the voluntary use of green power. Some key strategic program elements associated with this program include:
 - Educating our stakeholders on voluntary procurement pathways within U.S. renewable energy markets
 - Motivating our stakeholders to use green power
 - Recognizing leadership in green power procurement
- Currently 1,403 partners, 89 from Texas. A few examples from North Texas shown in this table

Name	Organization Type	GP % of Total Electricity Use ▼	Partner Since
Boulder Associates / Dallas, TX Office	Architecture Srvcs.	100%	3/26/2013
Children's Health in Dallas	Health Care	25%	6/27/2016
Cinemark USA, Inc.	Recreation	19%	3/31/2016
City of Dallas, TX	Govt. (Local, Municipal)	100%	12/7/2007
City of Irving, TX / West Irving Library	Govt. (Local, Municipal)	100%	4/6/2016
Dallas/Fort Worth International Airport	Transportation	40%	7/16/2009
GEA of Texas / Dallas Facility	Industrial Goods & Srvcs.	100%	3/24/2011
GP Hotel Dallas LLC	Hotels & Lodging	10%	4/21/2016
Hyatt Regency / Reunion & DFW Airport Hotels	Hotels & Lodging	10%	8/3/2005
Southwest Airlines Co. / Dallas & Houston Operations	Transportation	40%	4/28/2009
SuitSupply Dallas Inc.	Retail	100%	7/24/2015
The da Vinci School	Education (K-12)	136%	9/30/2015
University of Texas Arlington / Parking Garages	Education (Higher)	96%	1/27/2011

Idea – Encourage more businesses, schools, and municipalities to participate!
However, the challenge – City of Dallas Govt usage represents 0.6% of total NCENT Weather Zone usage

Georgetown University Energy Prize

(www.quep.org)

- Millions of homeowners, more than 60 local governments, and over 100 utilities
 are represented by the 50 communities competing to develop a cleaner, more efficient energy future.
- The Georgetown University Energy Prize will:
 - Challenge a large number of communities to work together with their local governments and utilities to create and begin implementing long-term plans for the continual improvement of energy efficiency;
 - Stimulate replicable innovations in community energy efficiency;
 - Educate the public about the total energy and environmental costs of the full fuel cycle;
 - Educate the public and engage students in energy efficiency issues, methods, and benefits, and encourage lasting behavior change;
 - Help to grow markets for products and services that facilitate energy efficiency and renewable, clean energy production;
 - Reward the community as a whole, and not specific individuals
- Timeline:
 - 2014 organize, applications, develop community plans, select participant cities
 - 2015-2016 measure usage and savings
 - 2017 compile results and select winner
- Unfortunately no communities from Texas
- Idea Let's identify an area university to promote and organize
 a North Texas Energy Prize competition for North Texas cities!



Idea – Provide Energy Education for Citizens

Provide Annual Reporting to local citizens

- Increase energy awareness & literacy
- Provide baseline usage data for comparisons
- Provide emphasis for conservation, efficiency, and cleaner energy sources

Total annual electricity usage

- Totals provided by electric utilities operating in the city
- Grouped by utility customer type residential, commercial, industrial
- Example report could include:
 - Total Residential usage (kWh)
 - Total Commercial usage (kWh)
 - Total Industrial usage (kWh)
 - Total all (kWh)
 - Per capita based on total residential usage (kWh)
 - Per capita based on total all (kWh)

Do similar annual reporting for natural gas usage

PUCT Project No. 45078 Rulemaking to amend 16 TAC (DG interconnection)

- Relating to Interconnection of On-site Distributed Generation
- The proposed amendments address with whom an electric utility will execute the Agreement for Interconnection and Parallel Operation of Distributed Generation (IA) in light of the fact that certain types of distributed generation may be owned or operated by parties other than the utility's end-use customer.
- PUC staff original strawman proposal options:
 - #1 anticipates that only an end use-customer would be a signatory to the agreement
 - #2 would allow parties other than an end-use customer to execute the agreement
- Project remains ongoing at this time

HOA Change Favors Local Solar

- 2011 Legislation <u>HB-362</u> passed in the 82nd Legislative session (2011), limits HOAs and POAs from restricting solar devices outright.
 - This bill updated the Texas Property Code, Sec. 202.010 & 202.011.
- 2015 Legislation The "neighborhood in development" loophole had allowed residential developers the option to block solar installations until the last lot was sold.
 - <u>SB-1626</u> shrunk this loophole by allowing it to only apply for developments with fewer than 51 planned residential units (effective 9/1/2015).
- Local jurisdications are encouraged to promote local solar PV and have solar-friendly ordinances and permitting requirements. See www.gosolartexas.org/governing-solar

Meeting HB 1736 and SECO Rules: Building Energy Code

- Both HB 1736 and subsequent SECO rulemaking implement Energy Chapter of 2015 IRC and 2015 IECC as the minimum state code as of November 1, 2016;
- All cities in Texas should be updating their energy codes
- Local amendments are allowed but must be equal or more energy efficiency in non-attainment and affected counties.
- ESL working with NCTCOG and Homebuilders on a flexible option to meet some concerns in Dallas area
- Sierra Club has been working in Houston and Austin to add "Solarready" requirement for new buildings
- Dallas and Fort Worth are taking their time but planning to adopt new codes soon

Promote Solar-Ready Homes

New Construction – Promote/Require "Solar Ready!

- Promote Solar-Ready code provisions to developers and home builders
- Adopt <u>2015 International Residential Code Appendix U</u>. Houston recently adopted the solar-ready provision while adopting the 2015 International Energy Conservation Code. See <u>Houston's New Residential Construction Code Favors Solar Energy</u>. Which North Texas city will be first in the area?
- Austin's Electric Utility Commission and Resource Management Commission have recommended similar provisions – currently being reviewed by Solar, Plumbing and Mechanical Board and could go to City Council in December for Adoption
- Opinion article Calling all Architects: Help us Recover from "Pointy Roof Disease"

Existing Construction – Show citizens the home's "Sun Number"

- "Sun Number" rates a home's potential for solar using a scale of 1-100. The higher the number, the better suited a home is for solar and the more money you could save.
- Zillow.com see Sun Number value and details in "Facts" section in property listing
- <u>SunNumber.com</u> enter to address at website to see Sun Number value and more info



ERCOT Discussions Could Impact Energy Issues

- ERCOT has been changing rules on its procedure for giving Reliability Must Run contracts. If large gas or coal plants retire, what is process? What assumptions?
- PUC also assessing this process (PUC Project 46369)
- PUC stakeholders also discussing how new resources can participate in price formation through Loads in SCED discussion and NPRR 777 (ERCOT directed dispatch of price-responsiveness distributed generation)
- 2017 could see back-up generators, storage, demand response and onsite solar directly participating in market pricing
- ERCOT also reviewing Ancillary Services and debating adding new products like Fast Responsive Reserve Service, Eliminating or Reducing "non-spin" reserves and adding a Inertia Service.

EPA Rules and Coal Plants Still an Issue

- EPA rule on Haze which would require further controls on Luminant, NRG and AEP coal plants is in settlement talks;
- EPA rule on SO2 non-attainment areas is still being developed, but could include areas around coal plants;
- Clean Power Plan still to be determined, probably by next Supreme Court;
- New Ozone standard of 70 PPB, as well as review of TCEQ 85 and 75 PPB SIP for Dallas could lead to further Nox controls on coal plants.

Assuring Clean Air; TERP and Drive a Clean Machine

- Legislation and legislative discussions are likely on LIRAP and TERP programs;
- Extension and expansion of TERP
- Energy storage what about energy efficiency?
- How much money and how do we spend it?
- Tweaks to the LIRAP Drive a Clean Machine program upping amounts of grants and allowing leasing?

Attacks on Renewables?

- Discussion on Economic Development Act and 313 Agreements: Could renewable energy projects be removed?
- Renewable Portfolio Standard Yes we already meet it, but important for RECs and market and possible CPP implementation
- Some specific language making it easier for utilities to "Tax" solar?
 - le recent El Paso Electric

Financing Efficiency: Leg Action?

- Specifically authorizing WHEEL –Warehouse for Energy Efficiency Loan – in Texas;
- Implementing PACE through a statewide program
- Depending on decisions at FMHA, potentially revisiting PACE residential programs
- Clarifications on On-Bill Financing and On-Bill Repayment?

What about Utility Efficiency Programs

- Texas has 15 years of successful utility IOU energy efficiency programs;
- Our goals at 0.4 percent of peak demand are now much smaller than most states that have an Energy Efficiency Resource Standard
- We have a great Measurement and Verification Process
- Utilities are beginning to explore new programs like building energy code compliance, water-energy nexus and even getting involved in PACE
- Legislative action to either increase the goal or allow greater incentives to go beyond the goal probably unlikely.. But
- CPP compliance and future interest could lead to more of a focus in the future
- Look for changes in 2019!
- Legislature may be open to ordering a new Energy Efficiency Potential study

For more Information:

Cyrus Reed
Conservation Director
Lone Star Chapter, Sierra Club
512-740-4086
Cyrus.reed@sierraclub.org

Larry Howe
Co-Founder, Plano Solar Advocates
Vice-Chair, Texas Solar Energy Society
rlhowejr@gmail.com

