TNMP’s
Commercial Energy Efficiency Programs
2016 Kick-Off

December 3, 2015

www.TNMPefficiency.com
Agenda

- Introductions
- Program Overviews
  - Commercial Solutions
  - SCORE/CitySmart
- 2015 Results and Success Stories
- 2016 Updates and Key Changes
- Reminders
- Q&A
Where is TNMP?
Introductions

TNMP (Program Administrator)
- Stefani Case, Energy Efficiency Manager
- Ashley Mitchell, Energy Efficiency Specialist

CLEAResult (Program Implementer)
- Fred Wu, Program Manager
- Michael Skeen, Program Consultant (North/Central)
- Aaron Aguilara, Program Consultant (West)
- Josh Campbell, Program Consultant (Gulf)
- Chelsea Proeschel, Program Consultant (Small Business)
- Boone Drummond, Energy Engineer
- Emmett Ballard, Commercial Energy Auditor

www.TNMPefficiency.com
Team Roles

Program Administrator

Program Implementer

www.TNMPefficiency.com
Program Background

✴ Why does TNMP offer energy efficiency programs?
✴ How is energy efficiency a resource?
✴ Who can participate?
✴ What programs are offered?

Residential  Commercial

www.TNMPefficiency.com
Program Overviews
Vendor Neutrality

We are connectors in the markets we serve
- No ties to manufacturers or installation firms
- Program *does not* sell products or charge for services
- These are *no-cost* Programs

We want projects to happen *efficiently*
For commercial business customers

Offers:
- Cash Incentives (varies per measure)
- Opportunity Assessments, Plan Review, and Engineering Analysis
- Technical Assistance
- Communications Support

Updates:
- Incentive rate for Solar PV systems added
# 2016 Commercial Solutions Incentives

<table>
<thead>
<tr>
<th>Equipment</th>
<th>kW Incentive</th>
<th>kWh Incentive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lighting</td>
<td>$100/kW</td>
<td>$0.02/kWh</td>
</tr>
<tr>
<td>LEDs*</td>
<td>$150/kW</td>
<td>$0.03/kWh</td>
</tr>
<tr>
<td>HVAC DX</td>
<td>$125/kW</td>
<td>$0.03/kWh</td>
</tr>
<tr>
<td>Chiller</td>
<td>$150/kW</td>
<td>$0.03/kWh</td>
</tr>
<tr>
<td>Motors*</td>
<td>$150/kW</td>
<td>$0.03/kWh</td>
</tr>
<tr>
<td>VFD*</td>
<td>$100/kW</td>
<td>$0.02/kWh</td>
</tr>
<tr>
<td>Window Film*</td>
<td>$50/kW</td>
<td>$0.02/kWh</td>
</tr>
<tr>
<td>Roofing*</td>
<td>$150/kW</td>
<td>$0.03/kWh</td>
</tr>
<tr>
<td>Solar PV</td>
<td>$225/kW</td>
<td>$0.05/kWh</td>
</tr>
<tr>
<td>Other</td>
<td>$150/kW</td>
<td>$0.03/kWh</td>
</tr>
</tbody>
</table>

*includes load factor cap
For K-12, higher education, and local government

Offers:
- Cash Incentives: $150/kW + $0.02/kWh
- Energy Performance Benchmarking
- Energy Master Planning
- Opportunity Assessments, Plan Review, and Engineering Analysis
- Technical Assistance
- Communications Support

Updates:
- Incentive rate for Solar PV systems added

www.TNMPEfficiency.com
Benchmarking

★ Compare facility energy usage by square footage, type, vintage, etc.
★ Provides a starting point (if needed) to set energy management goals
Benchmarks

**Energy performance benchmarking analysis**

### Municipal-wide summary

**City of**

<table>
<thead>
<tr>
<th>CLEAResult benchmarks</th>
<th>Median*</th>
<th>Baseline</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy use index (kBtu/sq.ft)</td>
<td>70.1</td>
<td>69.3</td>
<td>56.4</td>
</tr>
<tr>
<td>Energy cost index ($/sq.ft)</td>
<td>$1.52</td>
<td>$1.23</td>
<td>$1.07</td>
</tr>
<tr>
<td>Energy cost per occupant</td>
<td>$865</td>
<td>$1,091</td>
<td>$834</td>
</tr>
<tr>
<td>EPA portfolio manager score</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* Median for a similar profile of municipal buildings in your climate region.

### Monthly utility data

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>kWh</td>
<td>289,922</td>
<td>261,884</td>
<td>317,520</td>
<td>281,928</td>
<td>179,445</td>
<td>159,450</td>
<td>153,385</td>
<td>205,681</td>
<td>200,415</td>
<td>158,502</td>
<td>147,117</td>
<td>192,549</td>
</tr>
<tr>
<td>kW</td>
<td>1,058</td>
<td>1,126</td>
<td>1,184</td>
<td>1,092</td>
<td>1,096</td>
<td>1,101</td>
<td>1,084</td>
<td>925</td>
<td>925</td>
<td>925</td>
<td>845</td>
<td>1,031</td>
</tr>
<tr>
<td>Cost</td>
<td>$24,284</td>
<td>$23,213</td>
<td>$27,206</td>
<td>$24,466</td>
<td>$17,581</td>
<td>$16,526</td>
<td>$15,653</td>
<td>$18,526</td>
<td>$19,181</td>
<td>$16,694</td>
<td>$15,134</td>
<td>$19,445</td>
</tr>
<tr>
<td>Thperms</td>
<td>440</td>
<td>605</td>
<td>668</td>
<td>576</td>
<td>1,804</td>
<td>10,648</td>
<td>12,721</td>
<td>16,968</td>
<td>18,765</td>
<td>9,422</td>
<td>1,214</td>
<td>299</td>
</tr>
<tr>
<td>Cost</td>
<td>$724</td>
<td>$671</td>
<td>$625</td>
<td>$648</td>
<td>$1,693</td>
<td>$9,687</td>
<td>$11,713</td>
<td>$15,217</td>
<td>$16,194</td>
<td>$7,619</td>
<td>$1,217</td>
<td>$539</td>
</tr>
</tbody>
</table>

### Annual energy use/cost summary

<table>
<thead>
<tr>
<th>Category</th>
<th>Baseline</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usage- Electricity (kWh)</td>
<td>2,717,791</td>
<td>2,553,598</td>
</tr>
<tr>
<td>Usage- Gas (therms)</td>
<td>102,249</td>
<td>74,330</td>
</tr>
<tr>
<td>Usage- Electricity (MMBtu)</td>
<td>9,273</td>
<td>8,713</td>
</tr>
<tr>
<td>Usage- Gas (MMBtu)</td>
<td>10,225</td>
<td>7,433</td>
</tr>
<tr>
<td>Usage- Total energy (MMBtu)</td>
<td>19,498</td>
<td>16,148</td>
</tr>
<tr>
<td>Usage- Electricity % of total</td>
<td>48%</td>
<td>54%</td>
</tr>
<tr>
<td>Cost- Electricity ($)</td>
<td>253,423</td>
<td>238,113</td>
</tr>
<tr>
<td>Cost- Gas ($)</td>
<td>92,778</td>
<td>86,444</td>
</tr>
<tr>
<td>Cost- Total energy ($)</td>
<td>246,201</td>
<td>205,558</td>
</tr>
<tr>
<td>Cost- Electricity % of total</td>
<td>73%</td>
<td>78%</td>
</tr>
<tr>
<td>Electricity cost per kWh</td>
<td>$0.09</td>
<td>$0.09</td>
</tr>
<tr>
<td>Gas cost per therm</td>
<td>$0.91</td>
<td>$0.91</td>
</tr>
</tbody>
</table>
Energy Master Planning

★ Convene decision makers to set energy management criteria and goals
★ Set the path and take control of your own energy destiny
Technical Assistance

• Move projects forward by helping participants identify, develop, and procure cost-effective EE investments

• Provide vendor neutral recommendations and/or design guidelines

www.TNMPefficiency.com
Communications/PR Support

www.TNMPefficiency.com

Energy Efficiency Programs Bulletin
VOLUME 4, ISSUE 2 | Winter 2015

Saint Jo ISD Utilizes Small School District HVAC Loan Program

In 2014, the State Energy Conservation Office (SECO) announced a Pilot HVAC Loan Program, enabling small public K-12 independent school districts (ISDs) to replace old and inefficient HVAC systems. With support from TNMP’s SCORE Program, Saint Jo ISD received a SECO loan to replace multiple HVAC units at its elementary school, high school, and art building. The elementary school alone had seven new units installed, allowing 25 tons of more efficient cooling capacity. TNMP program staff assisted Superintendent Larry Smith by reviewing HVAC bids and efficiency levels proposed in the district. Together, they estimated program incentives for each solution that allowed a comparison of upfront costs versus potential energy savings.

The facility and students are sure to enjoy improved comfort, and the school district appreciates the one-time incentive check from TNMP for $1,300 in addition to ensuring utility bill savings.

New LEDs Light the Way for Parishioners at Friendswood United Methodist Church

Friendswood United Methodist Church near Houston had been investigating a lighting upgrade for the sanctuary and other parts of its facilities, including a gym and study hall. Program representatives from the TNMP Commercial Solutions Program made recommendations to the church, providing a variety of energy efficiency tips and costs. Because the program doesn’t sell or install anything, these vendor-neutral recommendations were enough to get church leadership on board with an immediate retrofit. The church ultimately upgraded over 125 fixtures in the sanctuary to LED technology, resulting in significant maintenance savings and an estimated $20,000 with a year in reduced energy consumption. Way to go, Friendswood United Methodist Church!

Saving Money at the Corner Store

Energy efficiency can save your business money, particularly if 40 percent of your electric bill comes from refrigeration. Supermarkets, grocery stores and convenience stores that take advantage of energy saving opportunities can increase store appeal and greatly reduce operating costs. In 2015, TNMP worked with a number of national grocery and convenience stores to raise the efficiency of their operations and enhance customers’ shopping experience. Additionally, TNMP has already worked with Sprouts, Walmart and Wal-Mart Express, Kroger, H-E-B, WinCo Foods, Wegmans, Race Track and 7-Eleven in 2015 to improve the efficiency and quality of convenience stores.

www.TNMPefficiency.com
SCORE/CitySmart Lite

★ For K-12, higher education, and local government customers

★ Offers:
  • Cash Incentives: $175/kW + $0.02/kWh
  • Focus is on cash incentives, with partners who opt for SCORE/CitySmart Lite trading out the additional support and services available to other partners
Small SCORE

For specified K-12 school districts in underserved areas of TNMP’s service area

Offers:

• Cash Incentives: $250/kW + $0.02/kWh
• Please contact your regional program representative for additional details
2015 Program Results*

<table>
<thead>
<tr>
<th>Demand Savings (kW)</th>
<th>Annual Energy Savings (kWh)</th>
<th>Cash Incentives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,528</td>
<td>6,600,000</td>
<td>$336,548</td>
</tr>
</tbody>
</table>

- 54 different partners (customers) participated
- 149 energy efficiency projects completed
- $5.3M in lifetime energy savings

www.TNMPefficiency.com
Success Story: West Texas

★ Pecos-Barstow-Toyah ISD
  • Replaced approx. 200 tons (40 units) of HVAC equipment
  • Upgraded interior and exterior lighting to LED district wide (5 school buildings and 4 support buildings)

★ Savings: 150.66 kW / 849,698 kWh / $67,975 saved annually

★ Incentives: $38,436

www.TNMPefficiency.com
Success Story: Central Texas

🌟 Gatesville ISD
  • Rural school district 40 mi. west of Waco
  • Replacement elem. school funded by 2013 bond

🌟 Savings: 61.36 kW / 192,360 kWh / $15,388 saved annually

🌟 Incentives: $12,576

www.TNMPefficiency.com
Success Story: North Texas

Prime Controls (Lewisville, TX)
- Retrofitted nearly 100 HID lights in warehouse to LED
- Replaced multiple rooftop units

Savings Summary: 17.94 kW / 135,872 kWh / $10,869 saved annually

Incentives Summary: $5,520

www.TNMPefficiency.com
Success Story: Gulf Coast

🌟 South Shore Harbor Resort
- Replaced lighting in lobby and common areas of resort/hotel

🌟 Savings: 92.56 kW / 714,347 kWh / $57,148 saved annually

🌟 Incentives: $28,478.86

www.TNMPefficiency.com
### Historical Program Results

- 927 projects completed since 2008
- Annual energy savings from installed measures > $4,000,000!

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Demand Savings (kW)</th>
<th>Energy Savings (kWh/yr)</th>
<th>Cash Incentives ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCORE/ CitySmart</td>
<td>8,585</td>
<td>23,130,500</td>
<td>$1,508,194</td>
</tr>
<tr>
<td>Comm. Solutions</td>
<td>3,897</td>
<td>17,671,066</td>
<td>$789,392</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>12,483</strong></td>
<td><strong>40,801,566</strong></td>
<td><strong>$2,297,586</strong></td>
</tr>
</tbody>
</table>

[www.TNMPefficiency.com](http://www.TNMPefficiency.com)
2016 Updates/Changes
## 2016 Program Goals

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Demand Savings (kW)</th>
<th>Energy Savings (kWh/yr)</th>
<th>Cash Incentives ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCORE/ CitySmart</td>
<td>725</td>
<td>2,900,000</td>
<td>$187,500</td>
</tr>
<tr>
<td>Comm. Solutions</td>
<td>775</td>
<td>3,487,500</td>
<td>$193,750</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>1,500</td>
<td>6,387,500</td>
<td><strong>$381,250</strong></td>
</tr>
</tbody>
</table>
2016 Important Updates

★ Incentive Rates
  • Commercial Solutions
    ◦ Solar PV added at $225/kW + $0.05/kWh
  • SCORE/CitySmart
    ◦ Solar PV added at $225/kW + $0.05/kWh

★ Lighting Projects
  • T12 baseline change

★ HVAC Projects
  • Chiller part load efficiency values now part of savings calculation
Reminders
Ineligible Measures

- Removable measures (e.g. most plug loads)
- Cogeneration or self generation (except renewable)
- Measures that require no capital investment
- Thermal energy storage

www.TNMPefficiency.com
Typical Project Process

1. Memorandum of Understanding or Project Agreement & Project Application Form
2. Pre-Inspection for retrofit projects
3. Construction
4. Post-Inspection
5. Engineering Verification & Incentive Payment

www.TNMPefficiency.com
Project Timelines

★ Program Year
  • January 1, 2016 – November 30, 2016

★ Diminishing Funding
  • Funding levels will diminish throughout the year
  • Get your projects completed early in the Program year

★ Partner must notify Account Leads of any scope changes

★ Partner must provide notice if a completion date target will be missed
Key Points

🌟 First-come, first-served
🌟 Contact a program representative to secure incentives for your projects!
🌟 Premium T8 bulbs only qualify with premium ballasts
  • Must be qualified in accordance with TRM 3.1
  • Standard T8s DO NOT qualify
🌟 LEDs
  • Must be qualified in accordance with TRM 3.1
🌟 HVAC
  • Must install above baseline, energy efficient units in accordance with TRM 3.1

www.TNMPefficiency.com
Program Website

Energy Efficiency Programs

Now is the time to reduce your energy usage and increase your savings. We have customized incentive programs for every customer, whether you are interested in residential or commercial programs. With something for everybody, TNMP puts the power to save in your hands.

Find a Contractor
(Residential Customers - Existing Homes)
Find a Homebuilder
(Residential Customers - New Homes)
Find a Contractor
(Small Business Customers)

Homes  Business  Government  Education  Nonprofit

FAQs & Resources  |  News  |  Contact Us

www.TNMPefficiency.com
The 2016 Commercial Solutions Program is currently being offered to any TNMP non-residential distribution customer (retail, real estate, healthcare, hospitality & food service, manufacturing). Educational and government facilities should check out the TNMP SCORE or CitySmart Programs instead.

The Commercial Solutions Program provides cash incentives for energy savings based on the rates below. Participants can also access financing resources and public relations support through the Program.

**Executive Summary**

**Download the Program Manual**

<table>
<thead>
<tr>
<th>Measure</th>
<th>$/kW</th>
<th>$/kWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lighting</td>
<td>$100</td>
<td>$0.02</td>
</tr>
<tr>
<td>LEDs*</td>
<td>$150</td>
<td>$0.03</td>
</tr>
<tr>
<td>HVAC DX</td>
<td>$125</td>
<td>$0.03</td>
</tr>
<tr>
<td>Chiller</td>
<td>$150</td>
<td>$0.03</td>
</tr>
<tr>
<td>Motors*</td>
<td>$150</td>
<td>$0.03</td>
</tr>
<tr>
<td>VFD*</td>
<td>$100</td>
<td>$0.02</td>
</tr>
<tr>
<td>Window Film*</td>
<td>$50</td>
<td>$0.02</td>
</tr>
<tr>
<td>Roofing*</td>
<td>$150</td>
<td>$0.03</td>
</tr>
<tr>
<td>Solar PV</td>
<td>$225</td>
<td>$0.05</td>
</tr>
<tr>
<td>Other</td>
<td>$150</td>
<td>$0.03</td>
</tr>
</tbody>
</table>

*Retrofit projects only.

The Program Agreements, Equipment Survey Forms and other relevant forms are available for downloading from the following links. Please note that these files are available for viewing and printing as Microsoft® Excel® files or Adobe® PDF documents (which are available for viewing and printing only with Adobe Acrobat Reader®).

- Participation Agreement
- Project Application Form
- New Lighting Specifications
- HVAC Savings Form (Coming Soon)
- Lighting Savings Form (Coming Soon)

www.TNMPefficiency.com
Available Resources

★ Texas Energy Managers Meeting (TEMA)
  • http://www.texasema.org/

★ Texas Technical Reference Manual (TRM)
  • http://www.texasefficiency.com/

★ Consortium for Energy Efficiency List
  • http://cee1.org

★ Design Light Consortium List
  • http://www.designlights.org

★ ENERGY STAR© Approved LEDs List
  • http://www.energystar.gov/
Available Resources

⭐ Department of Energy

⭐ Amer. Council for an Energy-Efficient Economy (ACEEE)
  • [http://aceee.org/portal/programs](http://aceee.org/portal/programs)
Questions?

www.TNMPefficiency.com
Contacts

★ Stefani Case
  • stefani.case@tnmp.com
  • (214) 222-4174

★ Michael Skeen (North & Central)
  • michael.skeen@clearesult.com
  • (972) 505-3911

★ Josh Campbell (Gulf)
  • joshua.campbell@clearesult.com
  • (281) 902-1155

★ Aaron Aguilera (West)
  • aaron.aguilera@clearesult.com
  • (915) 255-4289
Contacts

★ Ashley Mitchell (Residential Programs)
  • ashley.mitchell@tnmp.com
  • (214) 222-4186

★ General
  • ee@tnmp.com or TNMP@clearesult.com