

# Energy Efficiency in 2012

How many know you can get incentives from your Local Power Company to reduce our electrical consumption?

# Promoting local and regional economic development opportunities

Read more about TVA economic development



## I WANT TO KNOW ABOUT

- Saving Energy
- Docks and Shoreline Construction Permits
- Working at TVA
- Renewable Energy
- TVA History
- Land and Shorelines
- TVA's website for kids
- TVA Dams and Power Plants
- Doing Business With TVA

## LAKES & RECREATION

## TALK TO TVA



Latest News | TVA Balancing Portfolio, Reports 2nd Quarter Results

### Recreation Season

Enjoy activities on TVA-managed reservoirs like boating, fishing, hiking, camping and many other recreation opportunities. And check out our smartphone apps.

[Learn More](#)



### Save money on your energy bills

Get energy-saving information and services for your home, business or industry.

[Learn More](#)



# EnergyRight® Solutions for Business and Industry

SAVE MONEY. SAVE ENERGY. START NOW.



[PROGRAMS >](#)



FOR YOUR  
**HOME**



FOR YOUR  
**BUSINESS**



FOR  
**INDUSTRY**

## Successful Incentive Tips

- Submit end-user signed application FIRST to [TVAbusinessincentive@tva.gov](mailto:TVAbusinessincentive@tva.gov)
- For Custom Incentive projects notify local power distributor and TVA engineer FIRST
- **Receive written approval to proceed before purchasing or installing equipment (except for HVAC)**

## Who are my contacts?

Project and Engineering advice – Custom Applications

- Mike Clement, TVA      [mdclement@tva.gov](mailto:mdclement@tva.gov)      256-201-7717

ERS Program advice

- ERS Customer Care      866-233-0450

## RETROFIT ONLY

### Custom Incentive

- Incentive payment calculated at **\$.10** per kWh saved in one year
- If it conserves electric energy and is industry approved technology, it may qualify for custom  
Example: **Variable Speed Drive**
- PPN members can use **Lighting Workbook**

### Standard Rebate

- Prescribed list of technology with pre-set payment per qualifying measure
- Simple application process with quicker turnaround
- Require to use if lighting not purchased and/or installed by **Preferred Provider Network (PPN) Member**

## Preferred Partner Network (PPN) members

- Gexpro-Madison
- XtraLight Manufacturing, Inc. - Milton, GA
- Mayer Electric Supply--Birmingham, AL
- A/C Innovations Inc.
- Scott Lighting
- ARTAG (Alabama Retirees Technical Advisory Group)
- H C Blake Co.
- Mayer Electric Supply--Huntsville, AL
- Sain Engineering Associates Schneider Electric - Birmingham, AL
- TVW Electrical Supplies, Inc.

# ENERGYRIGHT® SOLUTIONS FOR BUSINESS AND INDUSTRY

## Preferred Partner Network (PPN) members (continued)

- Southpoint Solutions
- Inline Electric Supply
- IZ Systems a division of Blake & Pendleton
- Acuity Brands Lighting Company Birmingham, AL
- Alabama Lighting Associates
- Ecoefficient Energy Solutions
- GE Lighting - Southside, AL
- Graybar Electric-Huntsville, AL



## Incentive Percentage Cap

### Standard Rebate Offer

- Rebate pays up to \$200,000
- Maximum 70% of project cost

### Custom Offer

- Incentive pays up to 70% of Project Cost
- No limit on project size

**Incentives are subject to availability of funding**

## Standard Incentive

- Offers:
  - [Lighting](#) (Must use if not using a Preferred Partner Network Member)
  - [HVAC](#)
  - [Motors](#)
  - [Food Services](#)
- Applicants randomly selected for Pre and Post Measurement Review
- ALL applications require final receipts and invoices
- Rebate payments made by customer support center
- Must receive Application Approval Letter before beginning (except standard HVAC)
- Multiple Sites

## Custom Incentive

- Custom Incentives are available for projects that don't fall under the Standard Rebate (except for lighting Custom Incentive for lighting requires use of a PPN)
- Application initiates project scoping meeting
- Requires a Project Savings Estimate
- Requires customer approval of Project Savings Estimate
- TVA to perform all Pre and Post Measurement
- Incentive payment based +/- 10% of Project Savings Estimate
- Incentive payment based on \$0.10 per kWh saved

## Application Process

- End use customer submits application to Call Center
- Call Center obtains Power Distributor approval
- Pre measurement activity initiated, if applicable
- Call Center communicates Pre measurement results and install instructions
- End use customer contacts Call center once installation is complete
- Post measurement activity initiated, if applicable
- Project approval notice and payment made

# EnergyRight® Solutions HVAC Systems for Business and Industry

- Below is a list of the most common projects which energy savings is accomplished and can be Measured and Verified then an incentive can be provided.
  - Lighting Systems
  - Compressed Air Systems
  - Variable Speed Drives
  - HVAC Systems
  - Fans/Blowers Systems
  - Pumps Systems
  - Process Heating Systems
  - Steam Systems
  - Etc.

- Items NO incentive can be provided
  - Power factor correction
  - Compressed air leaks
  - Going from smooth to notched belts in air handlers
  - High efficient
  - Fuel switching

# EnergyRight® Solutions for Business and Industry



## Customer information

Site Name	
Company	

## Proposed Cost

Est. Existing Equipment Replacement Cost	\$0.00
Incremental Upgrade Cost	\$57,822.40
Project Cost	\$57,822.40
Estimated Incentive	\$12,086.54
Final Project Cost	\$45,735.86

## Proposed Savings

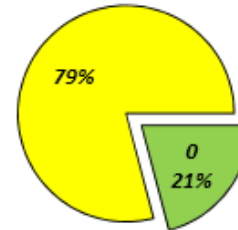
TVA Peak kW & kWh Savings	kW	42.72
	kWh	241,731
Annual Utility Bill Savings	kW	48.31
	kWh	233,954
	\$	\$23,395.38

## Return On Investment

Simple Payback	Project Cost Payback (yr)	1.95
	Incremental Cost Payback (yr)	1.95
Percent of Project Cost Paid by Incentive		21%

## Lighting Workbook For Business Applications

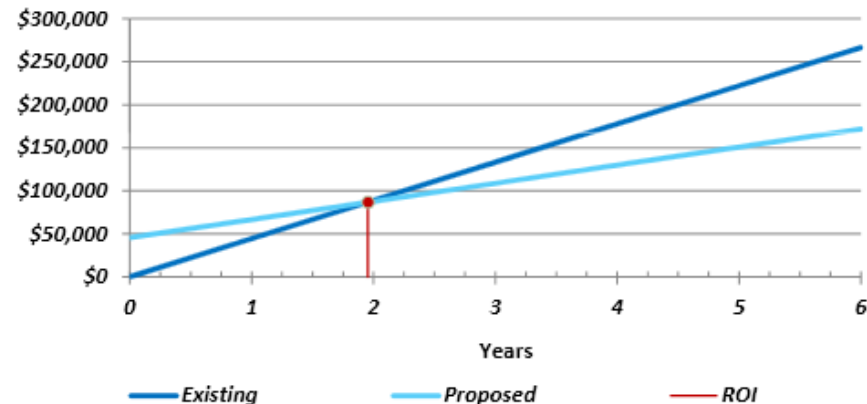
### Final Project Cost



### Return on Investment

Years	0	-\$45,735.86
	1	-\$22,340.48
	2	\$1,054.91
	3	\$24,450.29
	4	\$47,845.67
	5	\$71,241.06
	6	\$94,636.44

### Estimated Cumulative Lighting Costs



# EnergyRight® Solutions for Business and Industry



**Lighting Workbook For Business**  
Lighting Application  
V.10.7.11

### Customer Information

Project #	ERS00683-1
Project Site	XYZ Distribution
Company	XYZ Distribution

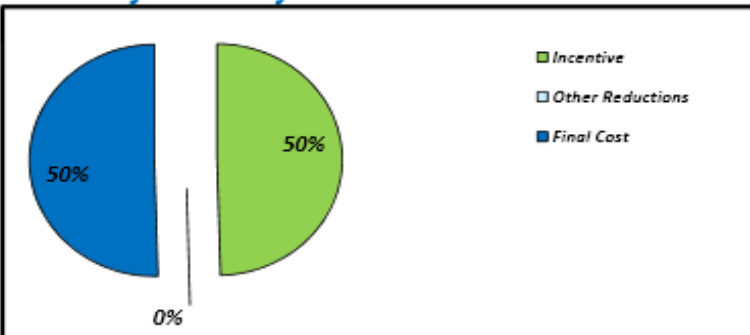
### Contractor Information

Company	Energy Solutions
Contact	D. O. Saver
Email	DoSaver@energy.com

### Incentive Payee

Company	D. O. Saver		
Address 1	Energy Solutions		
Address 2	2125 Energy Way		
City, State, Zip	Glowing	AL	99999

### Percent of Initial Project Cost



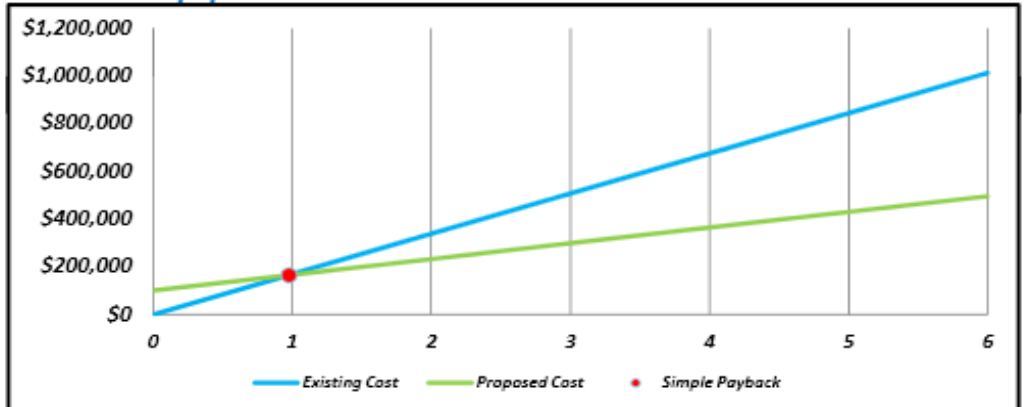
### Simple Payback

Initial Project Cost	\$199,554.00	Current View	<b>Final Project</b>
Incentive	\$98,933.18		
Other Reductions			
Final Cost	\$100,620.82	Without Incentive	<b>1.9 Years</b>
		With Incentive	<b>1.0 Years</b>

### Annual Usage

	Existing	Proposed	Total Savings Per Year	TVA Savings (Office Use Only)
kW	341.72	154.19	<b>187.53</b>	152.32
kWh	2,110,733	823,146	<b>1,287,587</b>	989,332
Utility Bill Costs	\$168,858.64	\$65,851.66	<b>\$103,006.97</b>	

### Estimated Equipment Electrical Costs





- Conclusion

- Data, Data, Data
  - Pressure, flow, power, hours
  - Performance curves
    - Original design parameters
  - Control Systems
    - Throttling valves, damper control, bypass lines
    - On/off, Variable Speed, Variable Displacement
- Know your limitations
  - Network with the experts

Become more efficient in 2012

Any questions?