



Proposal To Bring Natural Gas To 14 Shadow Wood Neighborhoods

The Natural Gas Study Team

Why was this project initiated?

- ▶ Hurricane Irma prompted the desire from many residents to consider installing a whole-home standby generator
 - ❑ Natural gas is the preferred fuel to either propane or gasoline
 - ✓ No need to refill fuel tank
 - No need to purchase/bury a propane tank
 - No need to find/buy/transport gasoline
 - ✓ Most cost effective to operate for all appliances
 - ❑ Only 15 neighborhoods within Shadow Wood currently have natural gas available
 - ❑ **14 single-family neighborhoods (517 homes) do not have natural gas**
 - ❑ Multi-family neighborhoods (five condo's) have not been included due to difficulty of locating meters and running supply lines into the units
- ▶ The SWCA decided to approach TECO to see what options might be available to make natural gas available to these 517 homes

The SWCA, in conjunction with TECO, has compiled the cost and credit dollar amounts for this presentation from historic data supplied by TECO and other National Energy Associations. These values should not be considered “exact” as individual residence and homeowner usage environment varies. Each home owner should apply their own assessment of costs and cost recovery benefits.

2



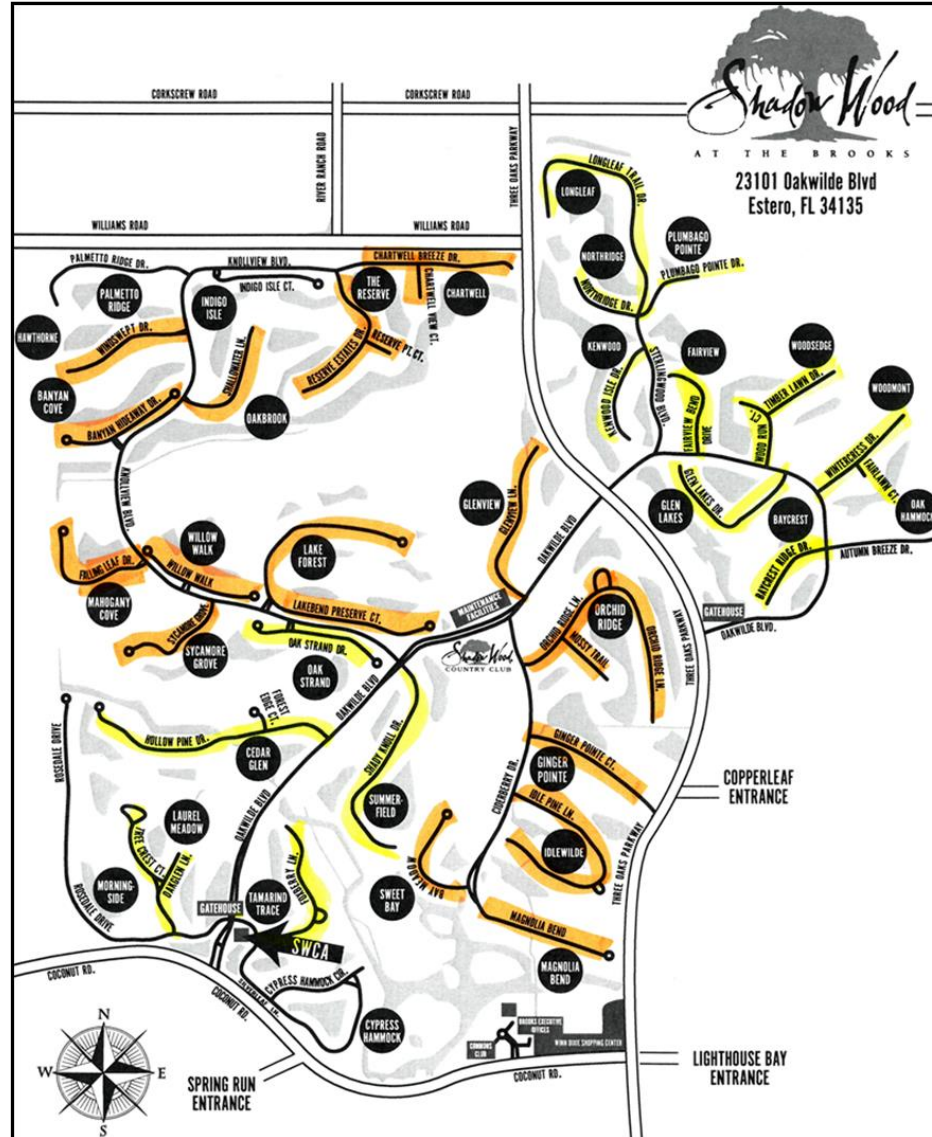
What Neighborhoods Are Included?

Without Natural Gas Lines (14 neigh) in yellow:

Baycrest	Cedar Glen
Fairview	Glen Lakes
Kenwood	Laurel Meadow
Longleaf	Northridge
Oak Strand	Plumbago Pointe
Summerfield	Tamarind Trace
Woodmont	Woodsedge

Established Natural Gas Lines (15 neigh in orange):

Banyan Cove	Chartwell
Ginger Pointe	Glenview
Hawthorne	Idlewilde
Lake Forest	Magnolia Bend
Mahogany Cove	Oakbrook
Orchid Ridge	Sweet Bay
Sycamore Grove	The Reserve
Willow Walk	



What are the Costs?

- ▶ Initial up-front construction of distribution lines throughout neighborhoods by TECO:
 - ❑ **Final cost per home will be determined by number of residents participating**
 - ❑ Cost will be less than the cost of installing a buried 500 gallon propane tank
- ▶ **TECO requires the hook-up of at least one qualifying appliance**
 - ❑ Purchase price of appliance
 - ❑ Installation of gas plumbing inside home to hook up
 - ❑ Potential opportunity to lease appliances (including installation & maintenance)
- ▶ \$20 monthly minimum “Meter Charge”
- ▶ Not a cost, but the disruption associated with installation
 - ❑ Outside supply line - main and lateral line to the home
 - ❑ Internal supply piping from meter to individual appliances



What are the Benefits?

- ▶ Can be used as a fuel supply for numerous home appliances (see list later)
- ▶ Cheaper to operate vs. electricity, propane or gasoline
- ▶ Uninterrupted fuel supply (critical to standby generator operation)
 - ❑ No need to refill propane tanks
 - ❑ No need to refill/carry gas cans
- ▶ More uniform heat for cooking
- ▶ Short “heat-up time” for hot tubs (<30 mins.)
- ▶ Conversion rebates available from TECO
- ▶ TECO installation costs can be spread out (initial installations only)
 - ❑ 50% at project initiation
 - ❑ 50% spread out over the first 12 months of TECO billing
- ▶ 3% or greater increase in home value
- ▶ A tie-breaker when selling a home



What appliances are candidates for natural gas conversion?

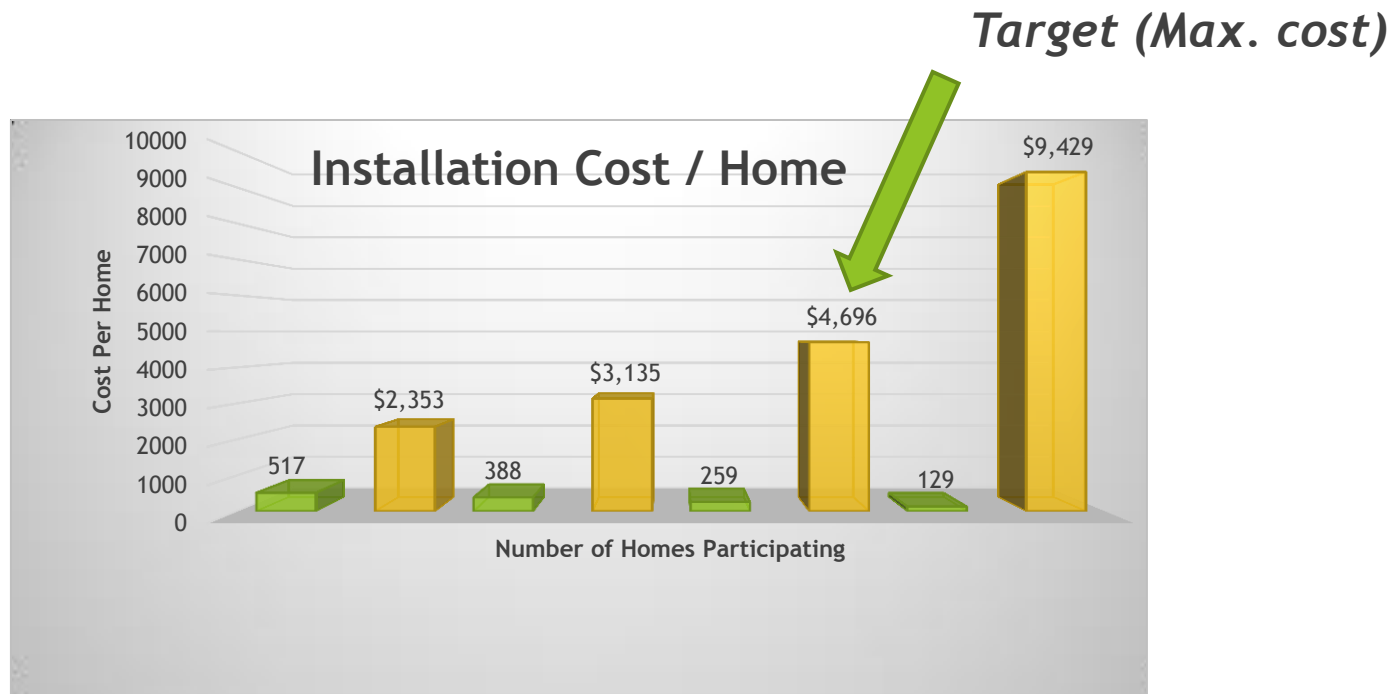
- ▶ Those that qualify as the initial one appliance requirement by TECO
 - ❑ Water heater (tank or tankless)
 - ❑ Pool/spa heater
 - ❑ Cooktop/oven
 - ❑ Outdoor kitchen (grill)
 - ❑ Clothes dryer
- ▶ Those that do not qualify as the initial one appliance requirement
 - ❑ Standby generator
 - ❑ Fireplace

Conversion from propane is often relatively simple—only need to change orifice



What will it cost to get hooked up?

- ▶ Total project cost from TECO is \$1,216,338
- ▶ Actual cost per home will depend on the number of residents, out of the 517 possible, that commit to being hooked up. **Need at least 50% participation!**



The more participants -- the lower the cost!



What rebates are available from TECO?

From the TECO website:

With natural gas, you can add value to your home with natural gas appliances and save on your overall energy costs. Plus, through the Peoples Gas energy conservation program, you may be eligible for cash-back allowances, designed to help you start saving right away. Some restrictions apply.

Per the Florida Public Service Commission (FPSC), the following allowances are effective for appliances.

Natural Gas Appliance	Replace Electric with Natural Gas	Replace Natural Gas with Natural Gas	Replace Oil with Natural Gas
Tank Water Heating	\$500	\$350	\$0
High Efficiency Tank Water Heating ²	\$550	\$400	\$0
Tankless Water Heating ³	\$675	\$550	\$0
Central Heating or Wall Furnace ⁴	\$725	\$500	Up to \$330
Cooking ⁵	\$200	\$100	\$0
Clothes Drying	\$150	\$100	\$0
Space Heating ⁶	\$65	\$0	Up to \$330




Example Natural Gas Conversion Cost Worksheet

<u>NATURAL GAS COST ANALYSIS WORKSHEET</u>				
Cost To Install:				
Installation of supply line by TECO (assuming 50% participation)				\$4,696
If converting from electric:				
Internal gas plumbing work (~\$2,000 / appliance)				1 @ \$2,000 \$ 2,000
Cost of new gas appliances (~\$2,000 / appliance)				1 @ \$2,000 \$ 2,000
If converting from propane:				
Cost to convert existing propane appliances (\$150 / appliance)				@ \$150 \$ -
Cost to decommission existing propane tank:				
Simple (tank already empty--fill & cap) = \$100				
Complex (tank has propane in it--pump out/fill & cap) = \$450				
Total Cost to Install =				\$ 8,696 (1)
Anticipated Savings:				
Rebates from TECO (see list on back):				
Tankless Water Heater				\$ 675
Annual savings over electric or propane: (suggest using 5-year timeframe)				\$456 X 5 \$ 2,278
Total Savings =				\$ 2,953 (2)
Increased resale value of home (estimated to be 3% or more premium)				\$725,000 X 3% \$ 21,750 (3)
Total Cost/Saving From Converting to Natural Gas =				\$ 16,007 3 +2 -1
Note: SWCA is providing this worksheet as a tool for residents to use to make their own analysis of the cost involved with installing natural gas in their homes. It is the responsibility of each homeowner to assess their own individual cost and benefits of proceeding with the installation of natural gas service.				




Estimated Annual Savings:



Residential Energy Calculator

Use this calculator to compare natural gas versus other fuels and discover the environmental advantages of using natural gas in your home. [Disclaimer](#)



Select your location:

Select nearest city:

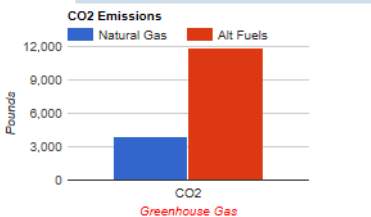
Electricity generation emissions profile:

Energy rates:

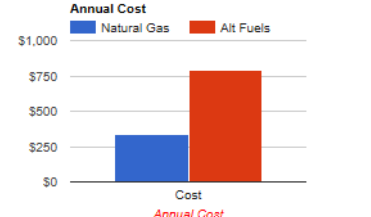
Use defaults? Natural Gas: \$1.0058 per Therm Electricity: \$0.10 per kWh

 Propane: \$2.95 per gal Fuel Oil: \$3.25 per gal

CO₂ Emissions



Annual Cost



Complete this section to compare natural gas and alternative fuel appliances in your home.

Home's square footage:

Number of occupants:

Natural gas heating:

Compare to heating:

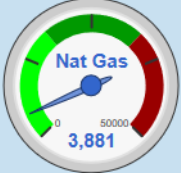
Natural gas water heating:

Compare to water heating:

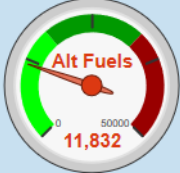
Clothes dryer loads per week:

Meals prepared on range/cooktop/oven?: Fuel type:

CO₂ Emissions (lbs/year)



Nat Gas
3,881



Alt Fuels
11,832

By using natural gas, you can save 4 tons of CO₂ annually. This is like taking 2.7 cars off the highway or adding 3.3 acres of trees.

Your potential annual savings using natural gas appliances instead of alternative fuel options.

\$455.69

Energy Use	Natural Gas	Alt Fuels	Annual Savings with Natural Gas	
	Therm / Year	Per Year	Therm / Year	Percentage
Space Heating	157.0	3,428 kWh	135.1	46.3%
Water Heating	87.5	2,706 kWh	143.2	62.1%
Clothes Dryer	37.2	967 kWh	45.3	54.9%
Cooking	50.0	792 kWh	17.5	26.0%
Total	331.7		341.1	50.7%

Emissions	Natural Gas	Alt Fuels	Annual Savings with Natural Gas	
	lbs / Year	lbs / Year	lbs / Year	Percentage
NOx	3.1	7.8	4.7	60.7%
SOx	0.0	15.0	15.0	99.9%
CO ₂	3,881	11,833	7,952	67.2%

Energy Costs	Natural Gas	Alt Fuels	Annual Savings with Natural Gas	
	Dollars	Dollars	Dollars	Percentage
	\$334	\$789.33	\$455.69	57.7%

Annual Savings

10

Important Considerations:

- ▶ How many residents need to sign up to make the project a “GO”?
 - ❑ *It is anticipated that at least 50% (258 homes) will be needed to proceed (\leq \$4,700/home)*
- ▶ When will residents be asked to commit to sign up?
 - ❑ *Voting will take place April 22 - May 3*
- ▶ What if I wait until later to sign up?
 - ❑ Residents that choose to hook up at a later date will be required to pay a “connection fee” to SWCA that is 125% of what the initial residents pay in 2019
 - ❑ These fees will be deposited in an escrow account and credited back (as a credit to their annual SWCA assessment) to residents in the 14 neighborhoods that have already paid their connection fee
 - ❑ Lose the opportunity to spread out TECO hook up fee over 12 months
- ▶ When will the project start if approved? How long will it take TECO to install the distribution network?
 - ❑ Start in late 2019 with a three month construction span



Sample Ballot:



NATURAL GAS INSTALLATION COMMITMENT BALLOT

While this ballot is not a contractual commitment to have natural gas installed in your home, it will be used to determine if there is sufficient interest on the part of the residents of Shadow Wood, in the 14 affected neighborhoods, to proceed to make final arrangements with TECO to proceed with the project. Therefore, you should consider your vote to be a commitment to install the natural gas service once the project is approved. Your participation, along with all the others who commit to proceed, will establish the up front cost for the TECO construction and initial hook up. The project **WILL NOT** proceed unless at least 50% of the homes involved (259) commit to participate. This will establish the **MAXIMUM COST PER HOME TO BE \$4,700**. As more homes above the 259 minimum commit, the price per home will be reduced proportionately.

For homes that do not choose to participate at this time, but decide to do so at a future date, there will be a required "connection fee" payable to SWCA that is 125% of what the initial residents pay to participate in 2019. These fees will be distributed equally back to all residents in the 14 participating neighborhoods who have gas connected to their homes. This will be done annually through a credit to their annual SWCA Assessment billing.

Your cost for new appliance(s), or the cost of converting existing propane appliance(s), and the cost of any gas plumbing required inside your home is your own separate responsibility.

YES--I will commit to proceed with the installation of natural gas in my home--**UP TO A MAXIMUM OF \$4,700**.

NO--I do not want to have natural gas installed in my home.

* Name: _____

* Address: _____

Neighborhood _____

* Name and Address are required for eligibility verification and future follow-up



Summary:

- ▶ There are many benefits to convert to natural gas
 - ❑ Cheaper to operate than electric or propane
 - ❑ Conversion of existing propane appliance is relatively inexpensive
 - ❑ Clean and convenient—always available
 - ❑ Facilitates installation of standby generator
 - ❑ Highly valued by new home buyers -- increases home value / tie-breaker
- ▶ There are significant up front costs for installation
 - ❑ TECO installation cost will depend on number of residents that sign up
 - ❑ Must install one qualifying appliance (incentive rebates are available)
 - ❑ 50% of Initial TECO installation cost can be spread over 12 months (in monthly TECO bill)
 - ❑ “Connection Fee” still applies if homeowners wait to hook up at a later date
- ▶ Voting will take place April 22 - May 3 when eligible residents will be asked if they will commit to have natural gas installed

While the decision is up to each individual homeowner, adding natural gas is a collective benefit to the 14 neighborhoods affected and the ultimate end cost will be proportionate to the number of homeowners who participate.



Q and A



Thank You

The Natural Gas Study Team



COMMUNITY ASSOCIATION
Preserving and Enhancing Our Community