



Bringing Sustainability and Energy Efficiency To Jim's Steak and Spaghetti House



Abstract

We created a detailed list of alternative building materials, furnishings, goods and supplies, and best practices to Jim's Steak and Spaghetti House as an effort of promoting both financial savings and environmental sustainability. The list has been broken down into three segments, which are:

- Return on investment is less than two years.
- Minimal or zero financial cost but considerable environmental impact.
- Alternatives when replacing broken or damaged equipment.

Jim's Steak and Spaghetti House can use our research to assist in:

- Finding immediate savings through small investments into fixtures and furnishings.
- Reducing on site environmental risks.
- Making informed decisions when making purchases.

Company Background



Jim's Steak and Spaghetti House was founded in 1938. It's last major remodel and expansion was in 1962. It is currently owned and operated by Jimmie Tweel Carder. Jim's Spaghetti is one of Huntington's Staple Restaurants and best known for their spaghetti, fish sandwich, and homemade pie.

Method

The methodology for this project was conducted through working with:

- On-site Meetings
- Building and Equipment Assessments
- Equipment and Materials Research

Return On Investment In Less Than Two Years

The following table includes a list of products available that are environmentally friendly and have a return on invest of less than two years. These findings are based on industry averages and local utility costs.

Product Type	Initial Cost	Projected Savings Over 5 Years
LED Light Bulbs (50 bulbs)	\$400	\$1,770
Low Flow Aerators (8 faucets)	\$8	\$300
Pre - Rinse Spray Valves	\$170	\$2,000
Hand Dryers	\$400	\$3,600
Platescrape	\$270	\$10,000
Total Initial Cost	\$1,248	
Estimated Total Savings		\$17,670

Minimal or Zero Financial Cost With Considerable Environmental Impact

The following list of items are items that could be replaced with alternatives that are financially equivalent but are designed to be environmentally sustainable. The alternatives should be recycled, recyclable, processed chlorine free, and toxin free.

- Dinner Napkins
- Bath Tissue
- Pastry Box
- Receipt Paper
- Cleaning Chemicals
- Paper Cups
- Pie Pans
- Guest Checks
- Reusable Coffee Filters

Alternatives When Replacing Broken or Damaged Equipment

With much of the equipment in the restaurant operating past it's expected lifetime, we concluded it would be beneficial to include the amount of savings that could be had when using energy efficient products. The following table provides a reference to the type of savings that can be made when choosing Energy Star certified commercial products.

Product Type	Annual Savings	Savings On Utilities Over The Products Lifetime
Glass Door Refrigerators	\$40	\$420
Solid Door Freezers	\$50	\$500
Continuous-Type Ice Makers	\$140	\$1,220
Commercial Dishwashers	\$1,500	\$19,000
Commercial Standard Vat Gas Fryers	\$400	\$4,640

Impact Outside of Jim's Steak and Spaghetti House

The benefits of these changes to Jim's Steak and Spaghetti House reach further than those directly involved there. By using less water, energy, and toxic cleaning materials, there is a minimal impact on the surrounding environment. Secondly, this restaurant is a staple and standard for the surrounding area. With little promotion, the changes made here would likely be seen in neighboring small restaurants and businesses.

Conclusion

We recommend these changes and alternatives to Jim's Steak and Spaghetti House and would recommend these changes to any restaurant. Retrofitting the restaurant with a few affordable, sustainable, and energy efficient products not only helps the environment, but can have an impact on financial savings.

References

Broward Water Partnership, <https://conservationpays.com/toolbox/faqs/category/aerator/>.
PennState Extension, <https://extension.psu.edu/water-conservation-how-much-water-and-money-can-you-save>.
Energy Star, <https://www.energystar.gov/>.
Platescrape, <https://www.platescrape.com/>.

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