

Environmental Scan of the Costs to Implement Green Initiatives

Overview

Through the research into green food truck initiatives, a number of potential green initiatives were identified. While the report on green food truck initiatives focused mainly on environmental regulations, the need to understand the potential costs to food truck operators to implement green initiatives was identified.

This environmental scan provides approximate costs to implement various green initiatives. The costs identified reflect the additional costs to implement the initiative, in excess of the costs of base-model equipment. Depending on the food truck operator's menu and needs the price of outfitting a truck can average between \$50,000 to \$110,000. In addition to equipment costs, there are also additional operating costs identified; the overall impact of these operating costs will depend on the volume or usage of the green alternative.

Findings

The information in the table below was collected in 2014 June and July from internet websites offering environmentally friendly options, as well as e-mail correspondence from food truck outfitters, manufactures and waste management companies.

Table 1: Cost to go Green

#	Green Initiative(s)	Benefits	Estimated Additional Costs or Costs to Retrofit
1	Bio-Diesel / Ethanol	Reduced reliance on non-renewable energy	Fuel Costs: (-7% to +7%) ⁱ Engine Conversion: (\$0 - \$4,500) ⁱⁱ
2	Low-emission Generators	Reduced air pollution	Most generators meet California emissions standards. Approximately \$100 for Evaporative Emissions (EVAP) testing port to check emissions. ⁱⁱⁱ
3	Energy-Saving Equipment and Appliances	Energy savings of 10% to 35%	\$50 to \$330 for each appliance ^{iv,v}
4	Solar Panels	Reduced reliance on generators or electrical hook-ups	\$1,000 to \$4,000 ^{vi, vii} for solar panels and system, installation costs not included
5	Electrical Tie-Ins and Alternative Energy	Quieter and more efficient electricity than generator	\$50 to \$500 for cords depending on length ^{viii} , + Costs of 30 or 50 Amp tie-in infrastructure/ plugs at sites
6	Proper Propane Storage	Public Safety	N/A – currently a City requirement for food truck permits
7	Compostable Service-ware	Waste reduction	2 to 5 times more expensive than conventional service-ware ^{ix}
8	Composting Kitchen Waste	Waste reduction	Approximately \$75 to \$125 per month for organics collection ^x
9	Recycling Cooking Oils	Waste reduction	\$0, Some local companies will provide this service free of charge with contract. ^{xi}

#	Green Initiative(s)	Benefits	Estimated Additional Costs or Costs to Retrofit
10	Wastewater Reduction	Reduce water use and avoid unauthorized dumping	\$0 to \$20 to use grey water dump station ^{xii}
11	On-Site Recycling, Compost and Trash Bins	Waste reduction	Approximately \$75 to \$125 per month for organics collection and \$75 to \$100 per month for recycling collection ^{xiii}
12	On-Site Washrooms	Sanitary hygiene	\$200 per month for portable outhouse ^{xiv} , permanent infrastructure will vary in price
13	Quiet Generators	Noise reduction	Approximately an additional \$3,500 to \$11,500 for a quiet generator ^{xv}
14	Locally Sourced Food	Reduced transport costs, promotes local businesses	Highly variable based on seasonality and menu offerings
15	Organic, Sustainable, or Ethical Food	Promotes natural, sustainable and ethical practices	Highly variable based on menu offerings

Recognition

Special thanks and appreciation are extended to the following companies for providing insights into the costs of outfitting and operating food trucks with environmentally friendly equipment and activities.

- Pizza Trucks of Canada – Manitoba based food truck and trailer manufacturer
- Bluplanet Recycling – Calgary based waste management and diversion company

ⁱ (US Department of Energy, 2014)

ⁱⁱ (Jeffries, 2009)

ⁱⁱⁱ (Pizza Trucks of Canada, 2014)

^{iv} (Harris, 2014)

^v (Yost, 2010)

^{vi} (RV Solar Store, 2014)

^{vii} (Go Power!, 2014)

^{viii} (Camping World, 2014)

^{ix} (Nexday Supply, 2014)

^x (BluPlanet Recycling, 2014)

^{xi} (Eco Dine, 2014)

^{xii} (Sanidumps.com, 2014)

^{xiii} (BluPlanet Recycling, 2014)

^{xiv} (PortaPal, 2014)

^{xv} (Pizza Trucks of Canada, 2014)

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