

IPRO 317

Nana: A Sustainable Restaurant

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Mission Statement

- Vision is to market and advertise effectively and innovatively within at least a 1 mile radius of Nana increasing awareness to the general public, become environmentally friendly and eventually significantly increasing the number of customers to enjoy the distinct Nana organic experience



Business Subgroup

- Goals/Objectives
 - Engage Local Community
 - Advertise/Market
 - Implement constructive feedback
 - Dinner Expansion Issues
 - Financial Analysis Expansions
 - Research for potential funding



Advertise/Market

- Radio Advertising
- Online Advertising
- Newspaper Advertising
- IIT Campus Events
- Demographics



Engage Local Community

- Demographics (Bridgeport; 2000 Census)
 - Total Population - 92,472
 - Hispanic (60%)
 - White (35%)
 - Other (5%)
 - Median Age - 27.2



Advertise/Market



Advertise/Market

- Student Coupon

Student Coupon – 15% Off!

**Come to Nana on 33rd and Halsted for
15% off a breakfast or lunch item!**

**See menu and other information at
nanaorganic.com**

**Please have student ID present
Valid only on Mondays and Tuesdays
Expires 3/30/2010**



Feedback: Areas To Improve

- Time to wait for table
- Time to wait for food
- Unable to accommodate large crowds
- Mediocre food
- Over priced for extremely SMALL portions
 - Both juices and meals

http://www.yelp.com/biz/nana-chicago#hrid:1_FAWuV6b6U6sht79PrHfQ/src:search/query:nana%20chicago

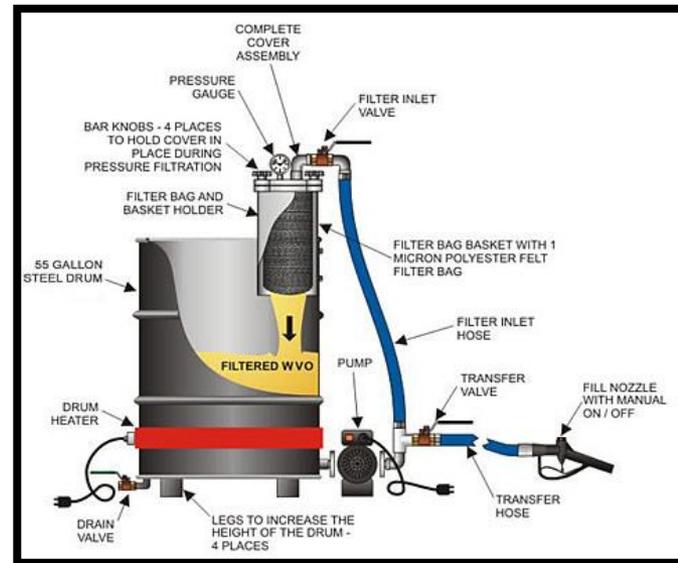
<http://chicago.metromix.com/restaurants/american/nana-bridgeport-sox/814747/content>



Environmental Subgroup

WVO- waste vegetable oil

- Process:
- -WVO must be settled (1-2 weeks)
- -Processed to remove contaminants.
- -Vehicle must be converted in order to properly burn WVO.
(conversion kit)



Elsbett 1 tank system vs. 2 tank system

1 Tank system:

- Utilizes 1 fuel tank
- Can operate on just WVO
- During sub-zero months regular diesel fuel may be necessary. (not in subject vehicle)

2 Tank system:

- Switches between diesel tank and WVO tank
- Necessary during long periods of engine Idling



-Subject Vehicle:2010 Volkswagen Jetta Wagon, TDI



-14.5 Gallon Fuel Tank, Automatic Transmission

-Economy 2010 VW Jetta: 30 MPG-City, 42 MPG-Highway, 34 MPG-Combined

-Local Diesel Fuel Price (2-17-10, 3400 Milwaukee Ave, Gas Depot): \$2.89/gallon

UPFRONT COSTS

-Conversion Kit	\$1,000
-Install (8hrs at \$95)	\$760
-Filtration (drum/unit)	\$240
<u>TOTAL UPFRONT COST</u>	\$1,990
5% Contingency	\$99.50
<u>TOTAL WITH CONTINGENCY</u>	\$2,089.50

TIME OF REPAYMENT

-Gallons of Diesel Fuel Used Weekly	14.5gal
-14.5 gallons at \$2.89	
\$41.91	
-Savings after 50 weeks (RE-PAID)	\$2,095.50
-Savings- YEAR 1 (52 weeks)	\$90.11
-Savings- YEAR 2 (104 weeks)	
\$2,095.50	

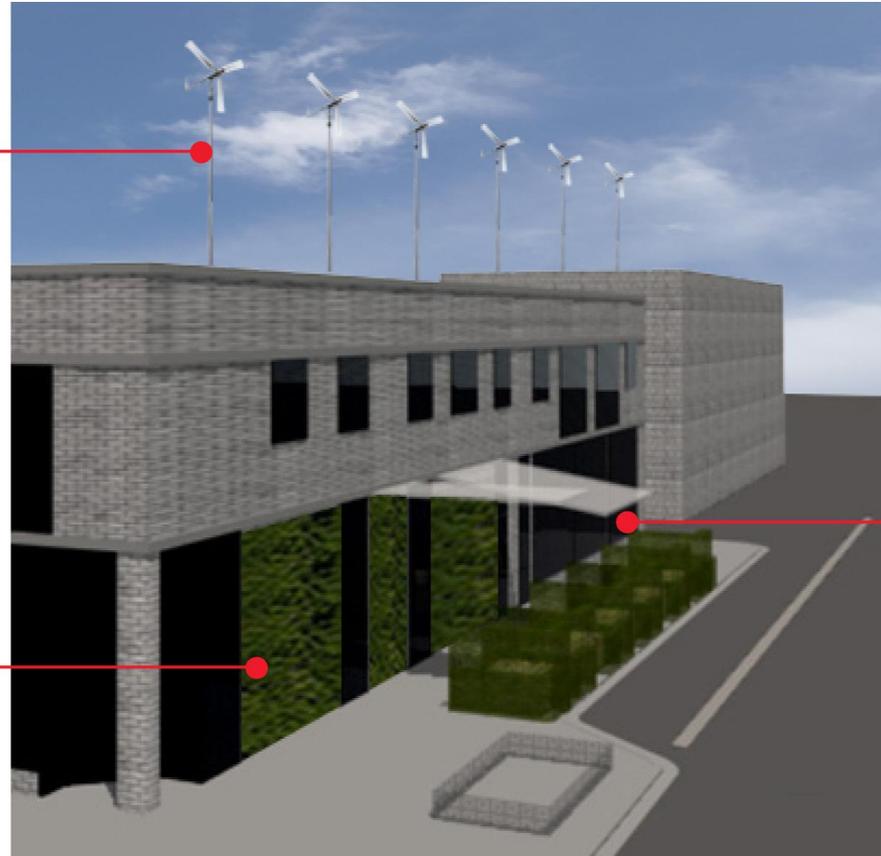


Composting and Rain Catching



Building Subgroup

WIND TURBINE
/SOLAR PANEL



SHADING/
OUTDOOR CAFE

GREEN WALL
INSULATION



Solar panel system/ Wind turbine



Cost, debate, and breakeven time with 50% electricity offset when 90 kWh usage per month

System Specifications

Solar Radiance: 4.47 kWh/sq m/day
Avg. Monthly Usage: 90 kWh/month
System Size: 0.42 kW
Roof Size: 41 sq ft
Estimated Cost: \$3,345.22

Incentives

Federal Incentives Tax Credit: 30%

Savings

Estimated Cost: \$3,345.22
25 Year Savings: \$1,943.03
Break Even: 25.34 years

Rotor Diameter: metres (0 to 150m).
Mean Wind Speed: metres per second (0 to 12m/s).
Cut-in Speed: metres per second (0 to 7m/s).
Cut-out Speed: metres per second (10 to 25m/s).
Turbine Efficiency: percent (10 to 59%).
Weibull Shape Parameter: (1-3, so use 2 if unsure)

Calculate kWh
[restore default values](#)

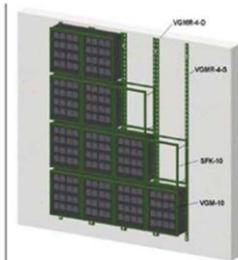
Predicted Turbine Output
119 kWh



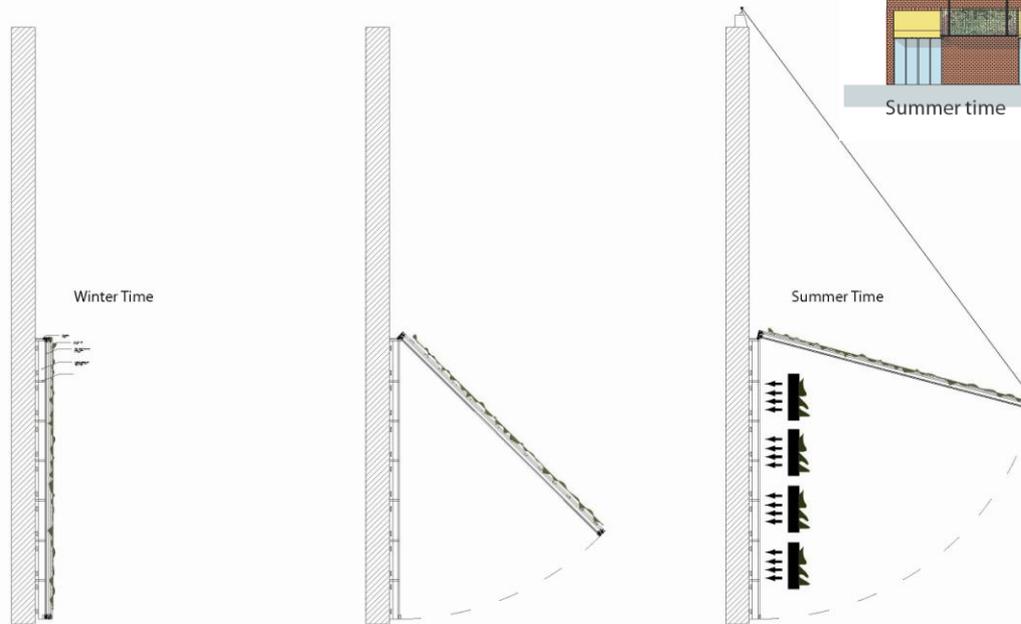
Green wall insulation system

Tournesol VGM Modular Living Wall System

- The superior solution for exterior living walls.
- VGM system's intensive soil volume creates spectacular visual impact, the hanging mechanism makes maintenance and change a snap.
- Cost Estimation (\$100~150 per 1ft²)



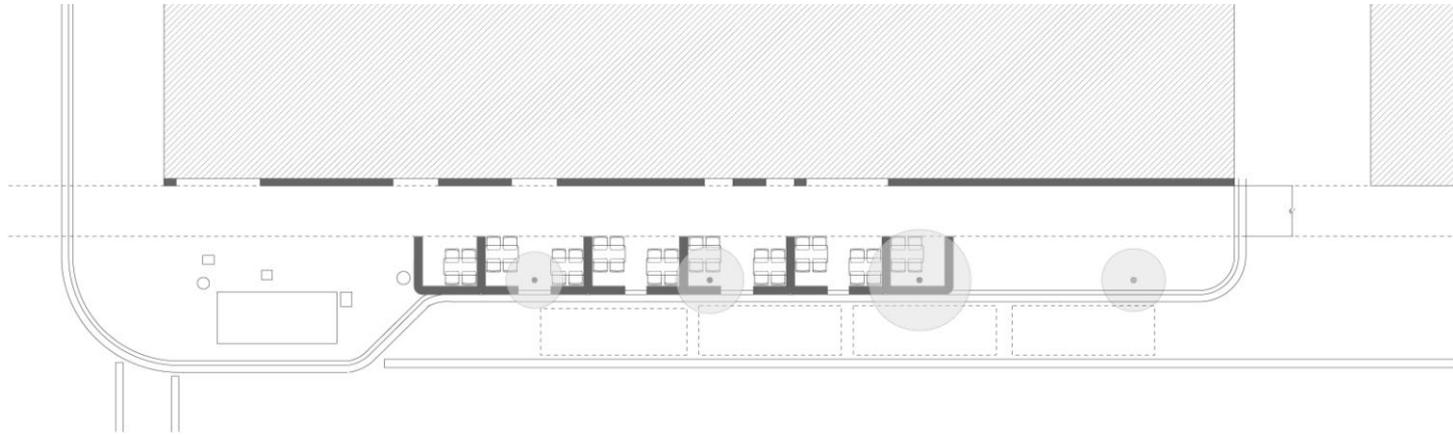
Shading system for Cafe



Operable Shading system



Out door Café system



Nana Website

<http://www.nanaorganic.com/>