

## **Preliminary Results for the Roosevelt-Ravenna Neighborhood Energy Survey**

### **Overview**

Since December 2008, the Roosevelt Neighborhood Association's Sustainability Committee and local non-profit Northwest Sustainable Energy for Economic Development (Northwest SEED) have been working on a community energy partnership project aimed to answer the following: How can a neighborhood plan for a clean energy future?

After researching similar efforts across the nation, community members identified an energy survey as a starting point to identify actions people in the neighborhood are already taking to conserve energy and actions they are interested in taking in the future. The results of the survey can be used to pinpoint projects that will have public support and a large impact.

### **Survey Development**

The survey was developed by Northwest SEED and refined with input from community members. Northwest SEED worked closely with Daniel Lawse, author of the Morton Meadows Neighborhood Energy Plan. Mr. Lawse had conducted an energy survey for the Morton Meadows of Omaha, NB in 2008 and was willing to allow the Roosevelt Neighborhood Association to utilize the Morton Meadows Survey. The Morton Meadows survey was designed as follows:

Some questions were not exclusively unique to this survey. Neighborhood energy surveys from around the country were gathered and studied for relevance ... After plans were studied, relevant questions were compiled from pre-existing surveys, and some were used in this survey. The initial Morton Meadows survey consisted of twenty-nine questions that included Likert scale questioning, nominal scale questioning, semantic differential and contingency questioning. (Lawse 11).

Northwest SEED used the same format and many of the same or similar questions. Working with Mr. Lawse, Northwest SEED was able to pare down the survey to those questions that would provide the most useful data. Northwest SEED brought this survey to the Roosevelt-Ravenna residents who provided input on the questions and their applicability to the neighborhood. This collaboration resulted in the final form of the survey.

### **Survey Distribution Methods**

From March to April, 2009, the survey was distributed both electronically and on paper. The survey was located online using the Survey Monkey webpage, which collects and tabulates results. The website link was distributed through email lists associated with other community activities, an article in the local newsletter, and flyers distributed door-to-door. Community members also distributed a paper version of the survey to those persons unable to connect to the internet site. **The electronic survey link accounted for XX of the total XXX surveys collected, with the remainder received in paper form.**

### **Value and Limitations**

The survey was not designed to provide statistically significant information about the residents of the neighborhood. This survey is a tool to collect input from interested community members on their energy activities and priorities. The community acknowledges the limitations inherent in a survey randomly distributed with a self-selecting topic. It is unlikely that community members uninterested in energy issues will take the time to complete the survey.

The value of the survey lies in both the collated answers and the learning process that went into its creation. Creating an energy plan is a community process and, it is necessary to continually build community capacity through these efforts. The survey allowed the Roosevelt-Ravenna residents to increase their understanding of energy planning while collecting data that can help guide future steps. While the results are not statistically significant, they do allow members of the Roosevelt-Ravenna neighborhood to get a glance at the energy consumption behavior of area residents. The data also act as support for the final energy planning document, assuring the community that the projects in the energy plan are a result of their needs and wants.

### **Preliminary Results**

The following is an analysis of some preliminary results of the survey from data collected as of April 14<sup>th</sup>, 2009. As of that date, 87 people had taken the survey.

#### **Question 1**

Please confirm that you live in the project area outlined in yellow above. (n = 87)

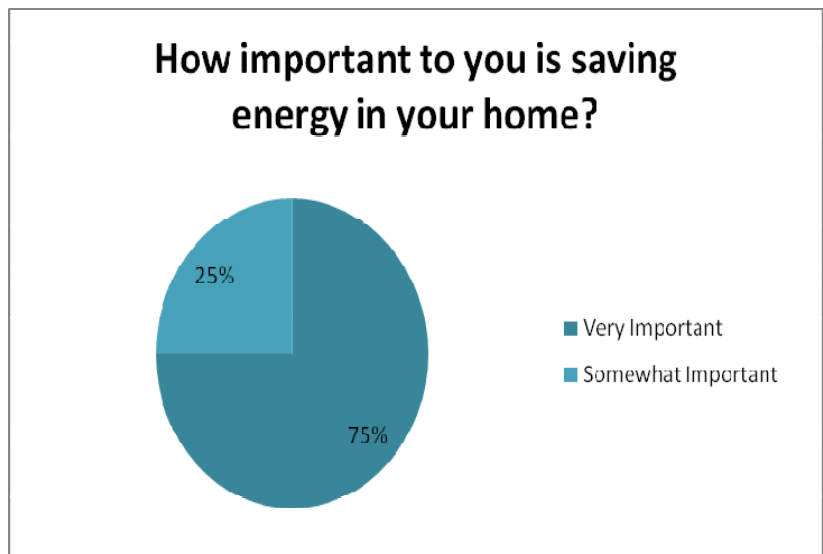
The first question was used to confirm that survey participants live in the delineated geographic area.

#### **Question 2**

How important to you is saving energy in your home? (n = 76)

This introductory question measures the respondent's interest in the topic. Unsurprisingly, seventy five percent of respondents felt that saving energy in their home was very important, and the rest felt it was somewhat important.

While it is likely that people taking the survey are more inclined to place higher importance on saving energy, this trend does suggest a burgeoning interest in energy consumption behavior.

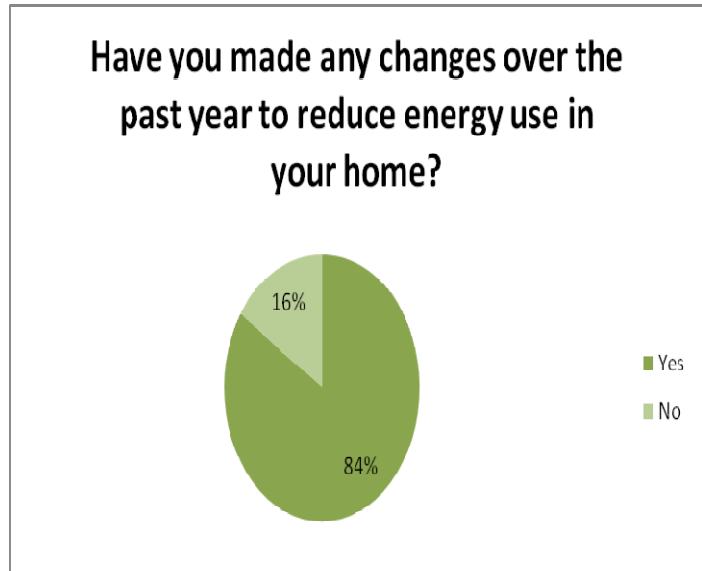


**Question 3**

Have you made any changes over the past year to reduce energy use in your home?

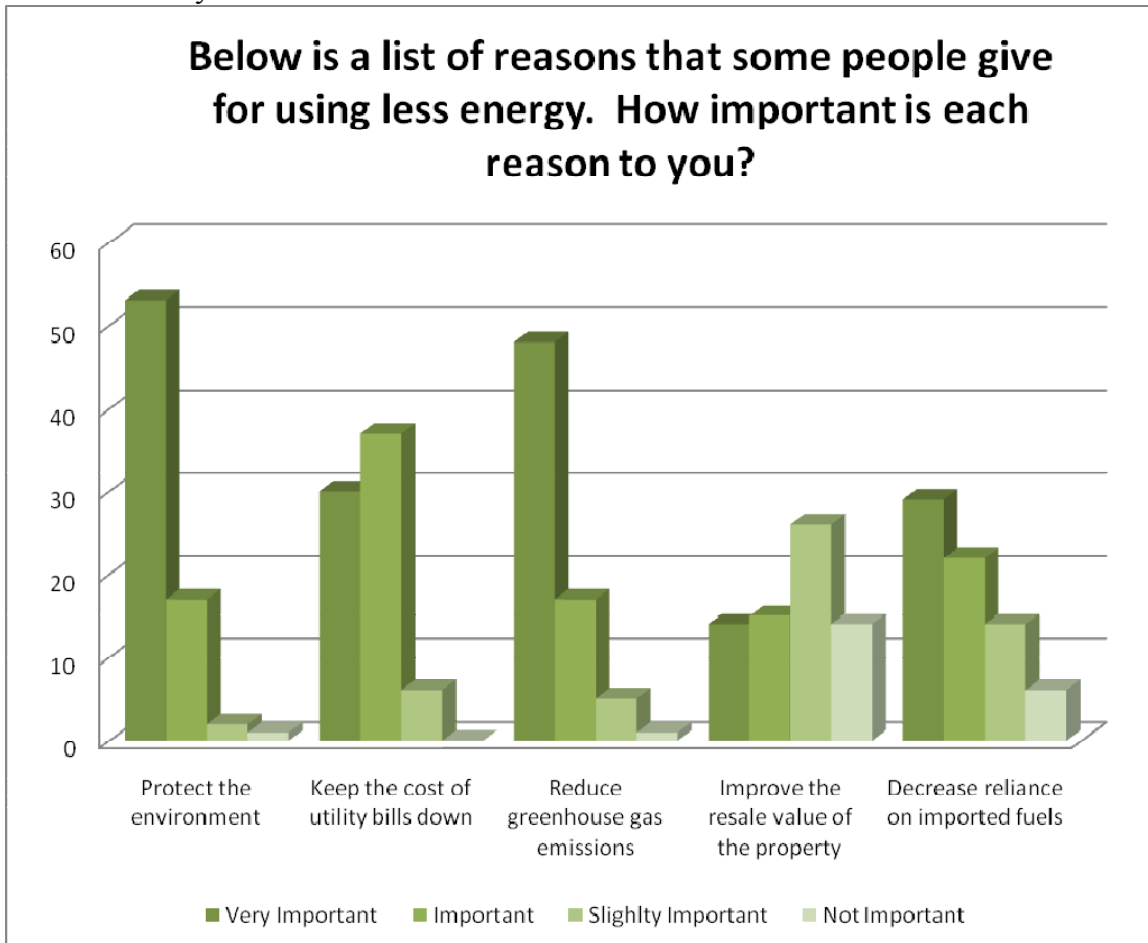
(n = 76)

A vast majority of respondents have already taken action to reduce energy use. This suggests that the data in question 2 is correct; people are interested in saving energy and are taking actions to do so. As well, it is useful for the neighborhood to know that this survey is by no means a starting point. Individuals have already begun their own efforts.



**Question 4**

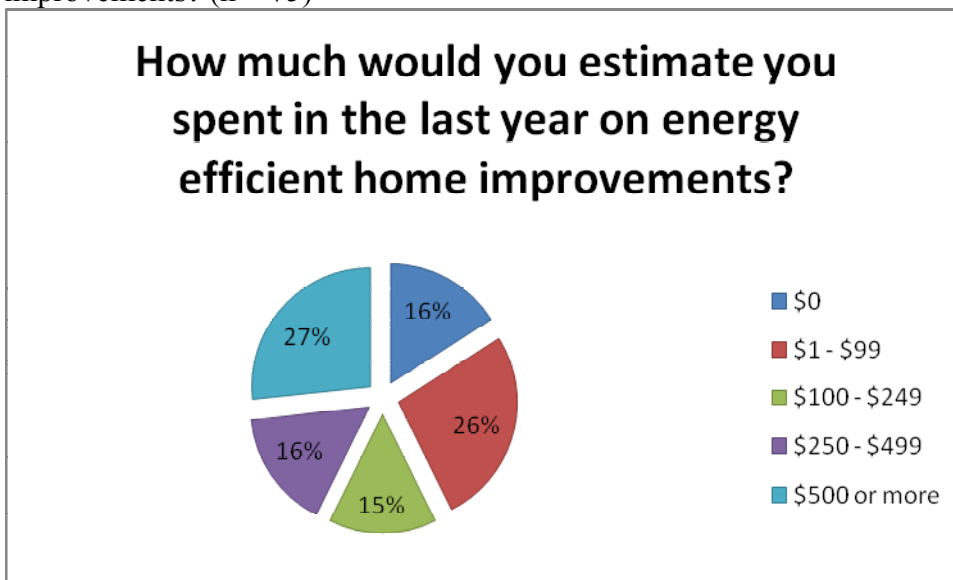
Below is a list of reasons that some people give for using less energy. How important is each reason to you?



Environmental concerns are highly important to those surveyed: a majority of people felt that protecting the environment and reducing greenhouse gas emissions were very important reasons for using less energy; as well, a plurality felt that reducing the United States dependence on foreign fuel was very important. Keeping the cost of utility bills down was considered “important” to residents, while improving resale value of property was seen as “slightly important.” This suggests that while economic issues are on people’s minds, they are not necessarily the driving factor behind energy efficiency improvements.

Question 5

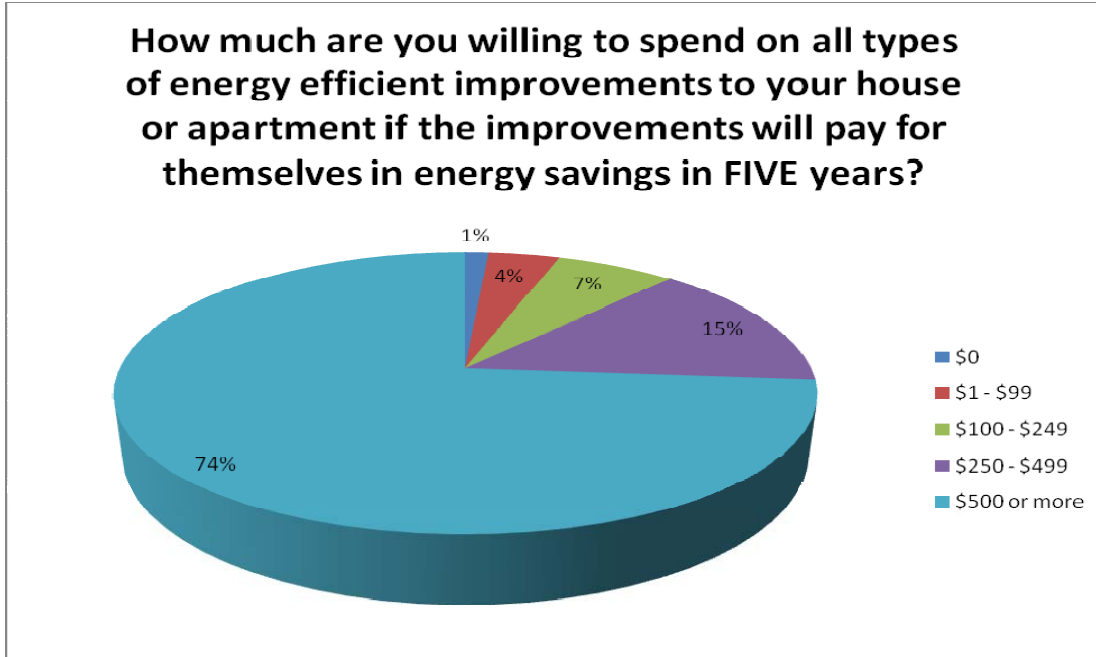
How much would you estimate you spent in the last = year on energy efficient home improvements? (n = 75)



The results of this question have produced an odd dichotomy. A little more than one quarter of respondents (27%) estimated that they spent \$500 or more on energy efficient home improvements. Conversely, 42% of respondents estimated that they spent \$99 or less on energy efficient home improvements. This dichotomy is reflected in the costs of energy improvements. Some projects such as replacing light bulbs and thermostats have a very low upfront cost. Projects such as replacing appliances and windows and installing insulation come with a much higher price tag. There are few projects in the intermediate price zone.

Question 6

How much are you willing to spend on all types of energy efficient improvements to your house or apartment if the improvements will pay for themselves in energy savings in FIVE years? (n = 76)



The data suggests that an overwhelming portion of residents are willing to spend \$500 or more on energy efficient improvements. Since a later question reveals that very few residents have undertaken energy efficiency improvements, on this scale, we may be seeing a significant jump in interest or a lack of knowledge of this kind of opportunity.

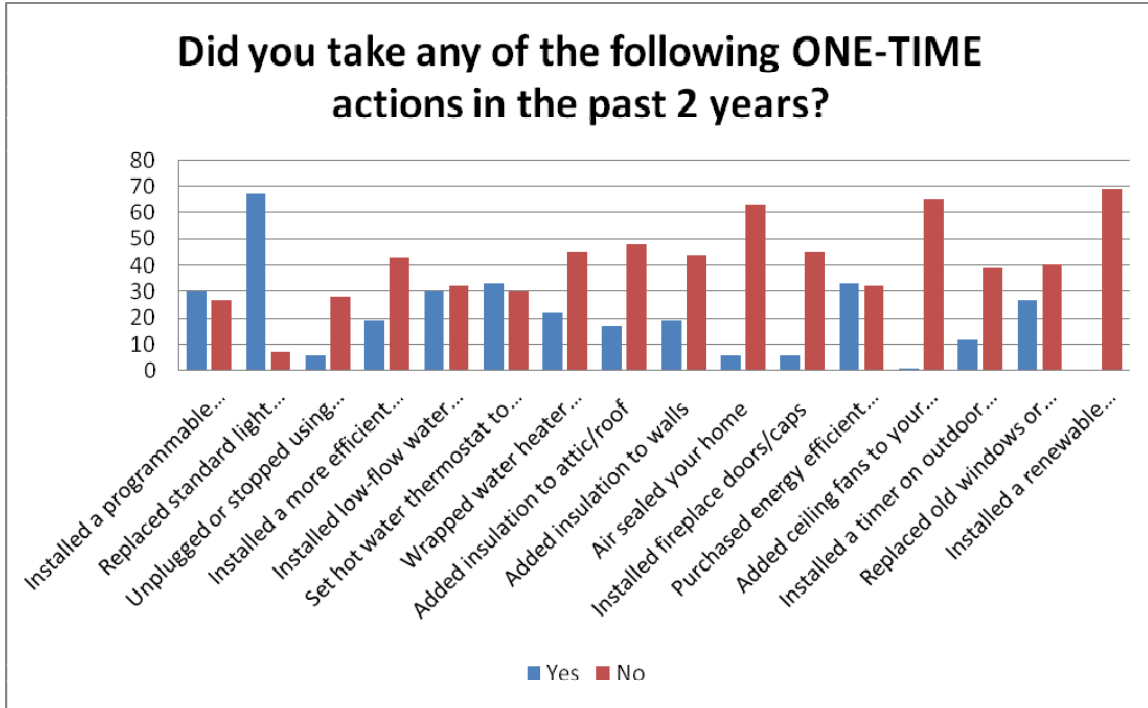
Question 7

Would you be willing to change one or more of your behaviors knowing it will not cost you any money and will lower your utility bills? (n = 75)

98.7% of residents said “yes” to this question.

Again, a later question demonstrates that there are many such opportunities that not all residents are taking. This suggests an opportunity for education.

8) Did you take any of the following ONE-TIME actions in the past 2 years? (n = 76)



Question 8 listed sixteen “one-time” actions related to conservation, efficiency, and renewables, and asked residents if they taken any of them. Of the sixteen, only four “one-time” actions were taken by residents, either in majority or through plurality. These included replacing standard light bulbs with CFL’s, setting the hot water thermostat to 120 degrees (F), installing a programmable thermostat, and purchasing energy efficient appliances (refrigerator, washer, etc.)

One action, unplugging a second refrigerator or freezer, was not applicable to a majority of the residents.

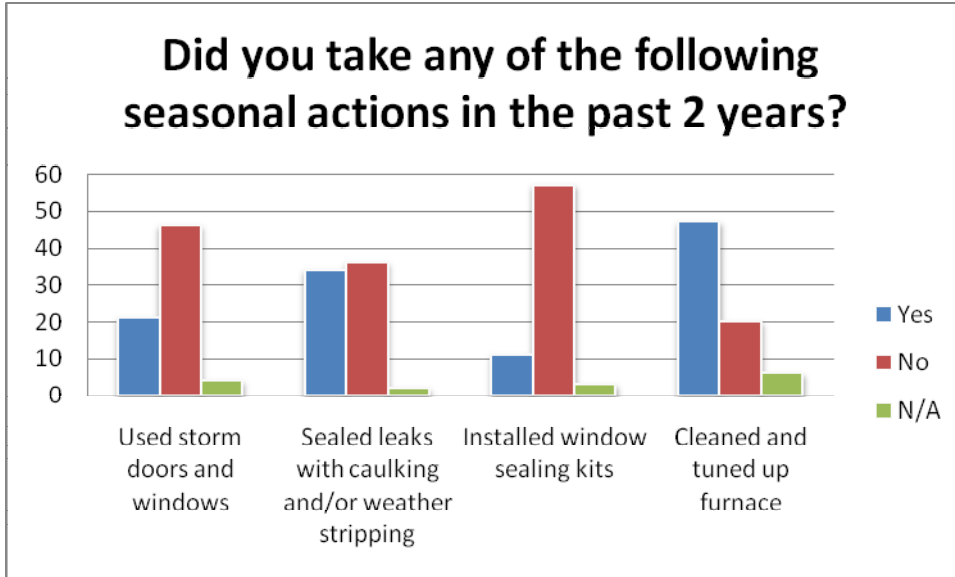
Thus, eleven of the sixteen action items received a majority or plurality “no” response. These are as follows:

- Installed a more efficient heating system
- Installed low-flow water fixtures
- Wrapped water heater and/or insulated pipes
- Added insulation to attic/roof
- Added insulation to walls
- Air sealed your home
- Installed fireproof doors/caps
- Added ceiling fans to your home
- Installed a timer on outdoor lights
- Replaced old windows or doors with more efficient models
- Installed a renewable energy system (solar panels)

To maximize energy savings, these 11 “one-time” actions should be targeted throughout the neighborhood.

Question 9

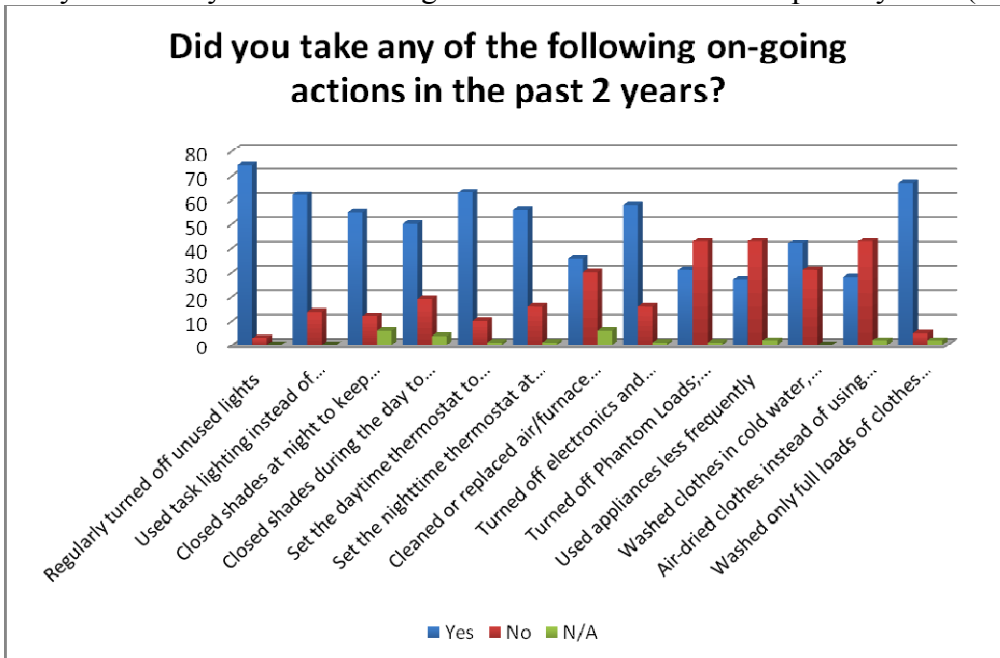
Did you take any of the following SEASONAL actions in the past 2 years? (n = 74)



Again, this questions show residents some examples of actions that could be done seasonally to conserve additional energy. In particular, few residents have installed window sealing kits or used storm doors and windows during the past two years.

Question 10

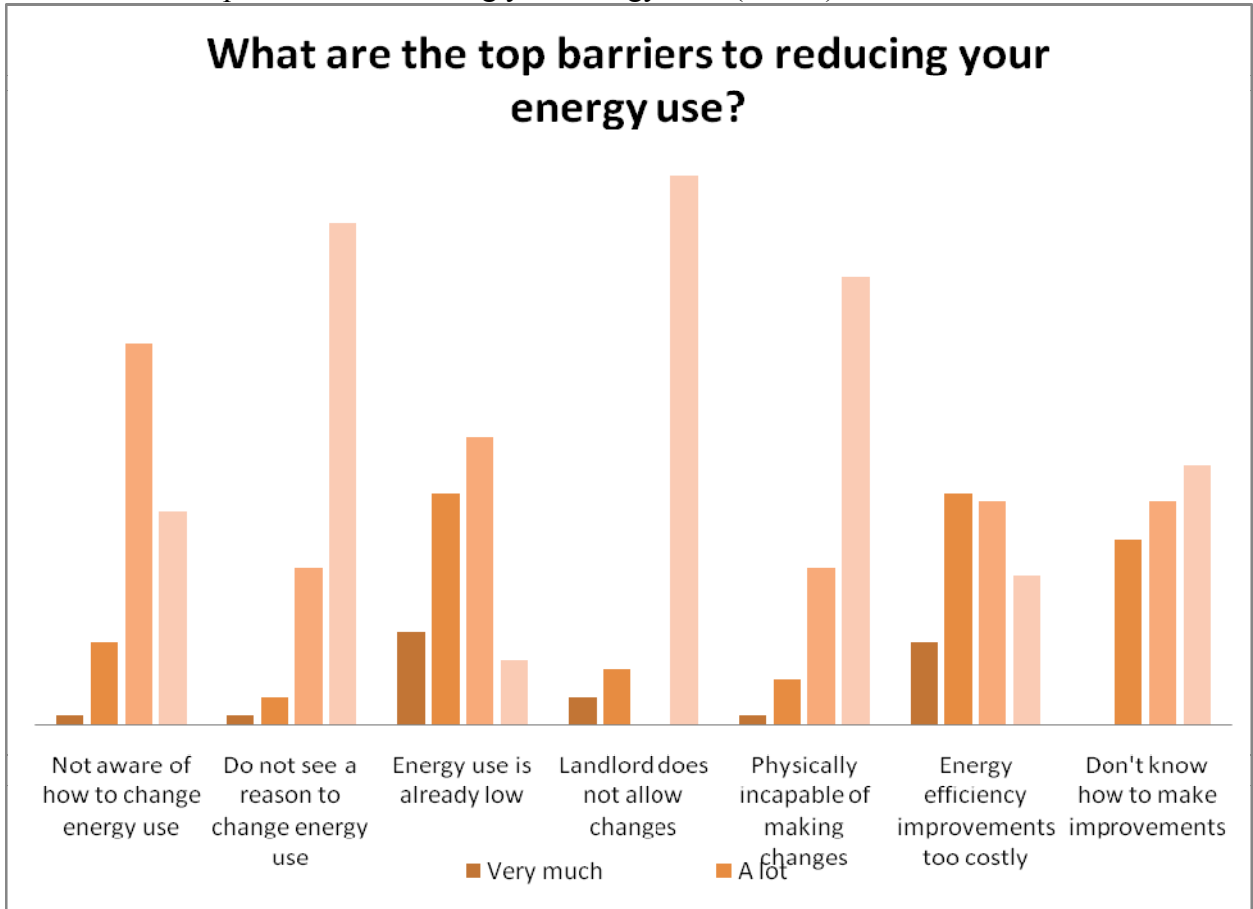
Did you take any of the following ON-GOING actions in the past 2 years? (n = 76)



This question again suggests some actions that are not being taken, but present a significant source of energy savings. These actions can be targeted as part of the energy plan.

Question 11

What were the top barriers to reducing your energy use? (n = 75)

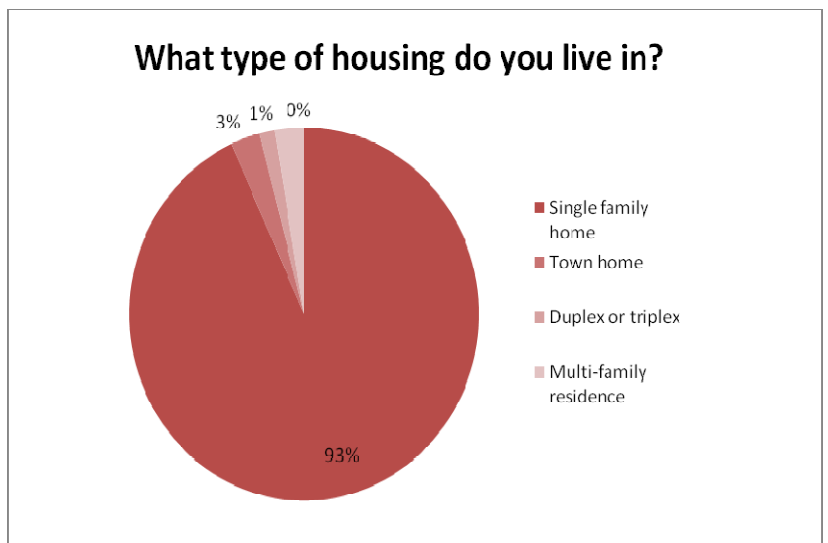


This question has revealed a number of very positive suggestions. Principally, it shows that there are limited barriers to reducing energy use. If this is true, then it is merely a matter of action. One area that does possess a serious barrier is the cost of energy efficiency improvements.

Question 12

What type of housing do you live in? (n = 74)

The vast majority of our respondents live in single family units. Any recommendations made from survey data should recognize that there were few respondents outside of these units.

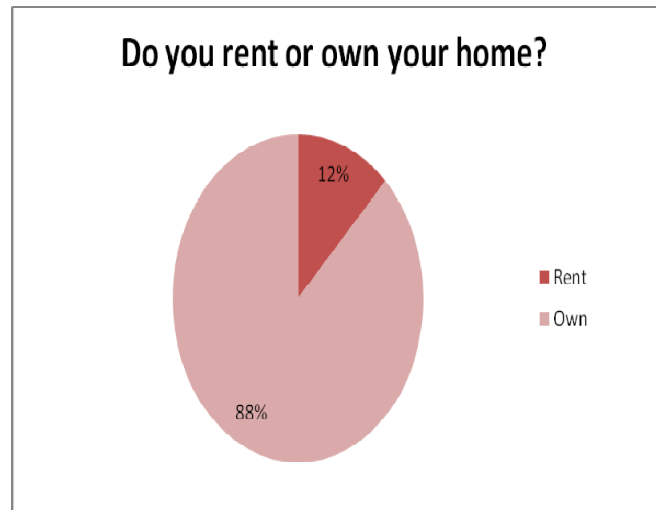


Question 13

Do you rent or own your home? (n = 73)

The question of whether one rents or own is important because it allow the neighborhood to get a more realistic sense of who has the ability to implement permanent changes.

As 88% of respondents own their own home's, interpretations of survey data should recognize that respondents likely have more incentive and ability to make adjustments to their infrastructure and life styles, as opposed to renters, who have less control over their residences.



Question 14

Would a discount on energy savings materials or appliances (e.g. caulk, insulation, refrigerators...) lead you to implement energy efficiency improvements? (n = 74)

82.4% of respondents state that discounts would be a strong incentive towards their purchasing of energy efficient appliances and materials.

Question 15

Would you be interested in attending an educational energy seminar in your neighborhood? (n = 75)

A majority of respondents (65.3%) said that they would be interested in attending an educational seminar in the Roosevelt-Ravenna neighborhood.

Question 16

Would you be interested in participating in an energy planning project for your neighborhood? (n = 71)

A slight majority of 53% answered yes to this question.

Question 17

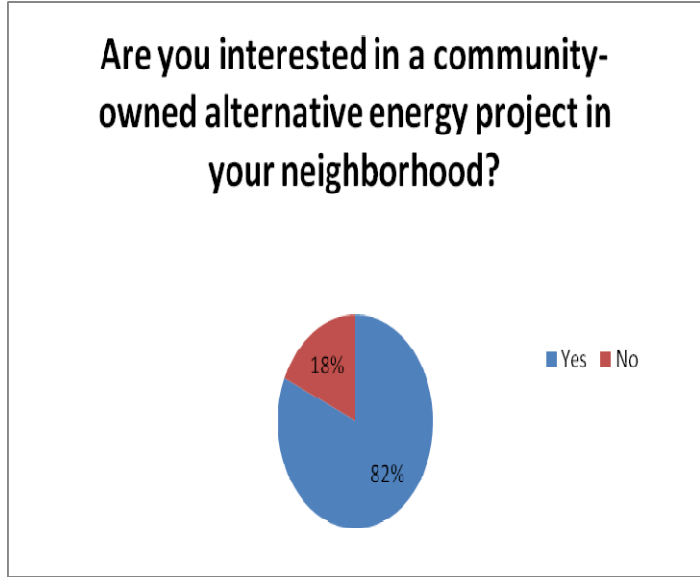
What time(s) of the week work best for you to attend seminars/meetings? (n = 60)

Roughly two-thirds (63.3%) stated a preference of weekday evenings meeting times.

Question 18

Are you interested in a community-owned alternative energy project in your neighborhood?

While community members agreed that conservation and efficiency improvements should be the main focus of an energy plan, there is also interest in an alternative energy project.



Question 19

How did you hear about/receive this survey? ( n = 74)

Block captain	24.3%
Community newsletter	21.6%
Posting in community space	12.2%
Email	44.6%
Notice at local business	4.1%

Question 20

If you would like to receive information about energy efficiency efforts in your neighborhood as a result of this survey, please provide us with the following information. (n = 48)

The response to this question will remain confidential for the sake of privacy.