

Communicating Climate Change
Solutions:
Solarize SOMA, a local campaign
to boost adoption of residential
solar

Bob McCoy

Maplewood Environmental Advisory Committee

rfmccoy@verizon.net

973 378-3114

Presentation outline

1. How a Community Solar Campaign addresses global warming
 - A. Global framework
 - B. Why a local campaign?
 - C. But why solar?
2. Solarize process
3. Solarize SOMA successes
4. Solarize SOMA challenges
5. Conclusions

How much GHG reduction is needed?

Ambitious goal (**requirement** for high emitters):

80% reduction by 2050

Adopted by:

- European Union
- California
- New York City
- New Jersey -- enacted in 2007--being carried out??

How do we get to 80% reduction?

- 2050 gives time to transition—4.5% reduction per year
- Most major investments will take place in those 35 years
- National and Global scale: Electric generation, public transportation, technological innovation
- Household scale: Many generations of cars, appliances, even home energy systems

Choosing priorities

- **80-20 rule:**

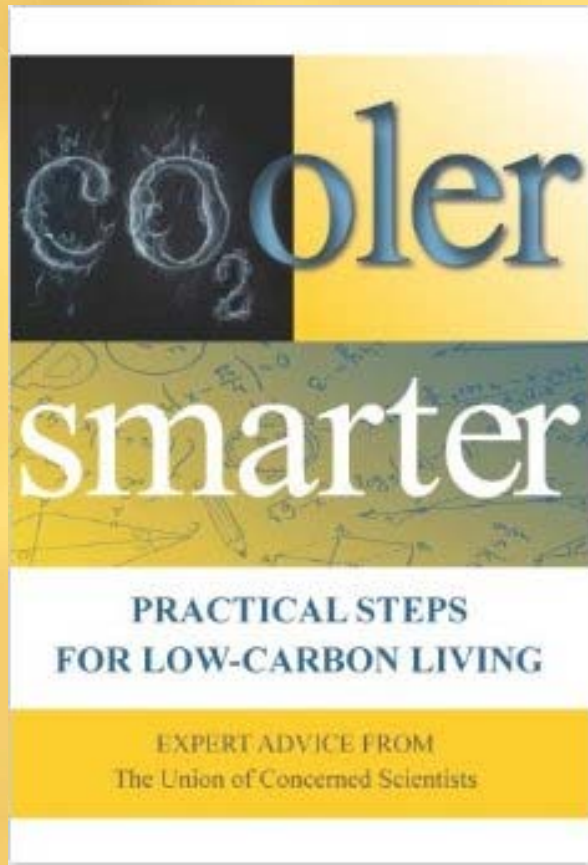
**80% of the effects are the result of
20% of the causes**

- National—efficiency standards, regulation of emissions
 - State—targets and incentives
 - Local—Household decisions
- Identify those actions that can make a difference at a magnitude that will yield enough results

Households make crucial decisions

- Regardless of scale, some actions make more of a difference than others
- Some very high priority actions have to take place at the household level— national and state policies can promote household decisions and restrict options but implementation still takes place at the household and individual level
- This is the level where local groups can have the biggest impact

My favorite resource for setting priorities

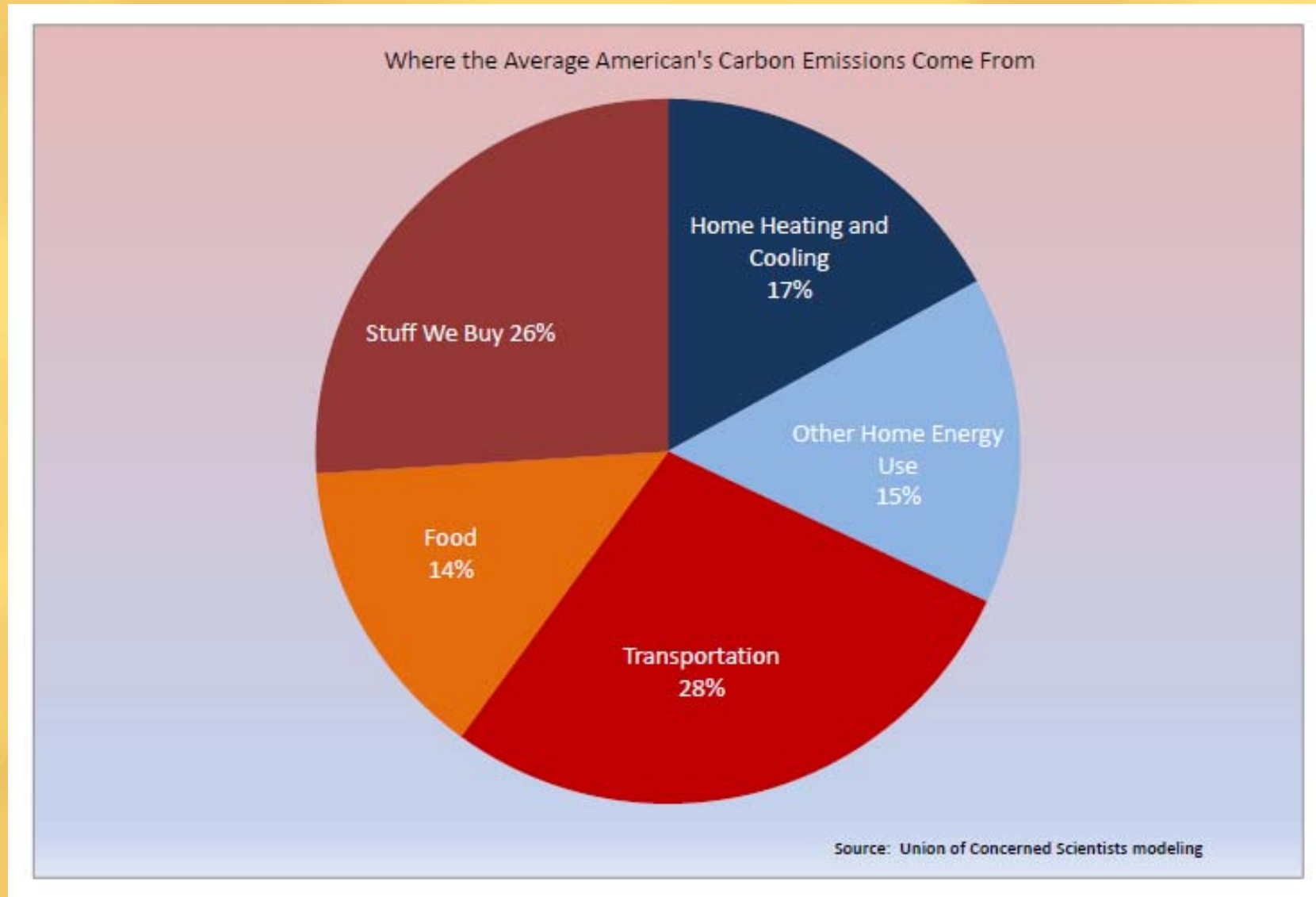


"Sweat the Right Stuff "

"What are the most effective steps each of us can take to reduce our carbon emissions?"

"A low-carbon future is within our reach, but only if all of us take steps toward it in our own lives and push for changes in the world around us."

Household priorities—the big picture



U.S average: about 20 tons per person per year—13 foot layer over N.J.

Picking energy as a starting point for reductions

- Energy use is the most tangible and well defined
- Rapid technological change is making excellent options available
- Many opportunities for saving money with little or no loss of comfort while reducing emissions

McKinsey report from 2009

McKinsey Global Energy and Materials

Unlocking Energy Efficiency in the U.S. Economy



Available for free online—Google the title for a pdf version

Impediments to taking energy saving actions

- Low level of awareness of the climate impact of various expenditures or even the specifics of utility use
- Expectation of a short payback period—often 2.5 years
- Concerns about what will happen when they need to sell the house
- Competing uses for money available (if any) for home improvement and for the time it takes to research and consider the potential improvement
- Misgivings about potential contractors

So why a Solarize campaign?

- First inclination has been energy efficiency—but despite considerable efforts not something that has snowballed
- Solar is visible, obvious, and takes a big chunk out of ongoing emissions in one action
- Financial terms are extremely attractive right now
- Most importantly: Solar is often a door to awareness and other reductions

SOLARIZE process:

Volunteer effort in **S**outh **O**range and **MA**plewood, hence—

Solarize SOMA



Used Solarize projects in Connecticut, Massachusetts, and New York as models:

- Solicited proposals from as many companies doing residential solar installations in NJ as we could find
- Option to purchase or lease a system was required
- Prices by tiers going lower as the volume sold during the campaign grew
- Selected Astrum Solar based on their price to residents and the expectation they would ensure a good experience

Let's Solarize

Solarize Connecticut[™] Phase 1 Report

September, 2013



energize **CT**
CONNECTICUT

SmartPower
Let's Get Energy Smart.

 **Solarize**
CONNECTICUT[™]

SolarizeCT.com

Solarize process (cont.)

Solarize SOMA's role:

- Create an awareness in the community of the value of residential solar and that this is a good time to take it on
- Provide enough volume of leads that the installer would be able to capture efficiencies in their operations from sales through installation

Astrum Solar's role:

- Carry the process through from expressed interest to installation and commissioning
- Give residents a high quality experience that would sell itself to others
- Pass on to residents the savings generated by volunteers
- No cost to residents until a contract to install was signed

A stylized sun icon with a yellow center and a purple outline, surrounded by yellow triangular rays.

**SOLARIZE
SOMA**

SOLARIZE successes:

- Created widespread community awareness of the solar option and the Solarize SOMA brand—yard signs, direct contact with flyers, online postings, email to lists, tables at community events
- Over 3.5% of households, 360 in all got assessments of their solar capability
- 21 (and counting) residents contracted to install, about a ¼ increase over the number over the previous 10 years
- Even those who could not or did not install raised their awareness of energy and climate change solutions

Solarize challenges:

- Failed to meet our goal of doubling the number (expectation based on comparable experience in Connecticut)
- Almost 2/3 of residents who sought assessments lacked qualified sites, then fewer than 20% of qualified households actually went through
- Local government was unable to provide direct support because the agreement was between a volunteer group and a specific installer
- Difficulty differentiating this initiative from numerous other installers, some of dubious reliability
- Unclear roles for the contractor vs. the local volunteers—source of friction and misunderstanding
- Long lag time from start to concrete results, so in-progress success stories came three months into a short timeframe

Solarize conclusions

- Despite falling well short of our goal the campaign has been worth it
- Much higher awareness of the solar option and a nudging forward of reducing energy purchases as a household goal
- Would spend more time developing the working relationship and comfort with roles with the chosen contractor
- Separate community roles: outreach (feels like sales to residents) ratification by outside authorities (elected officials, existing solar owners, religious congregations, etc.)

*I hope other NJ towns will
try this model*

Feel free to contact me for further
details or to talk more about our
experiences

Bob McCoy

rfmccoy@verizon.net

973 378-3114