

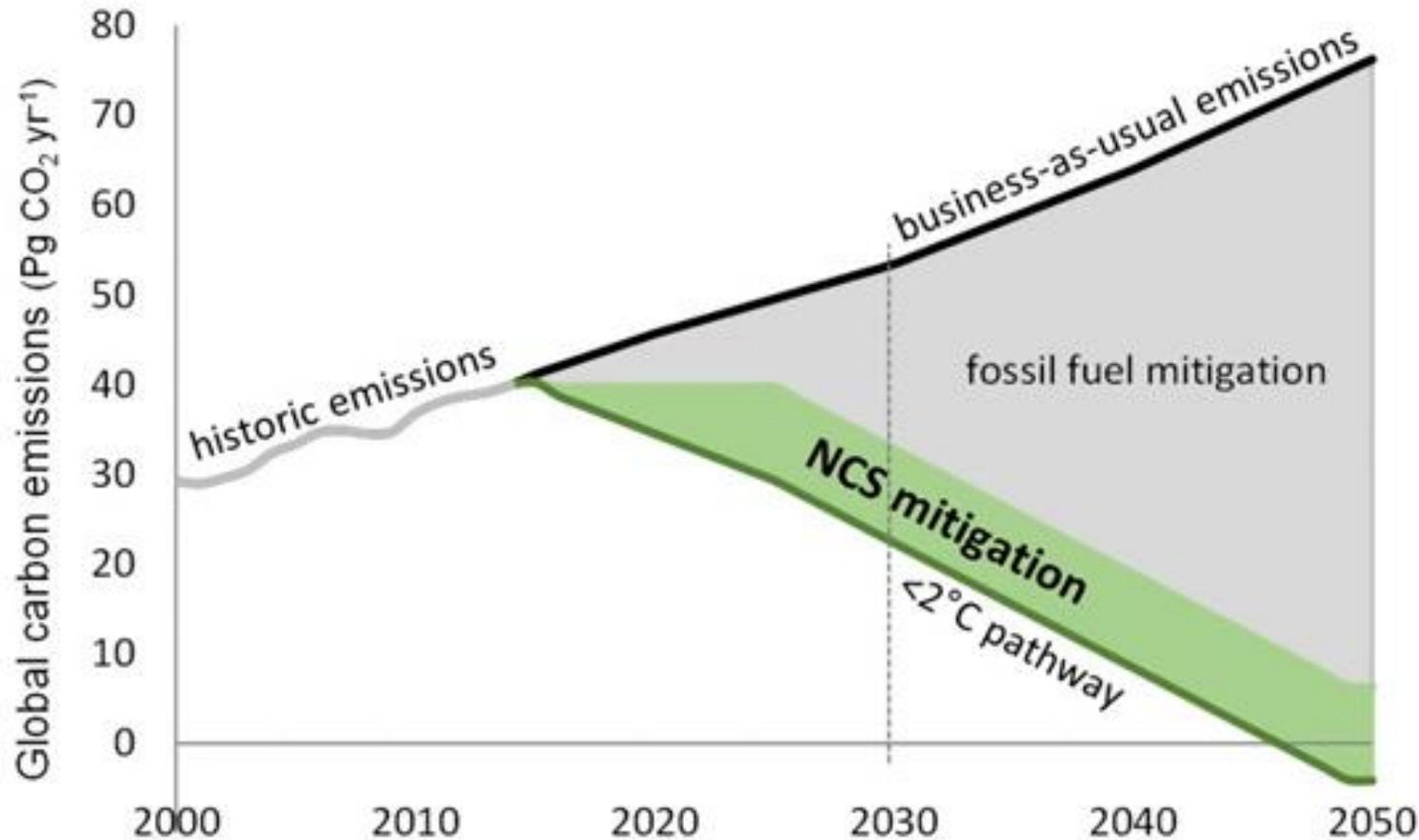
Renewables in Action: Benefiting Conservation and Communities



#solargrazingassociation

Natural Climate Solutions for the U.S.

Proceeding of the National Academy of Sciences. USA. 2017

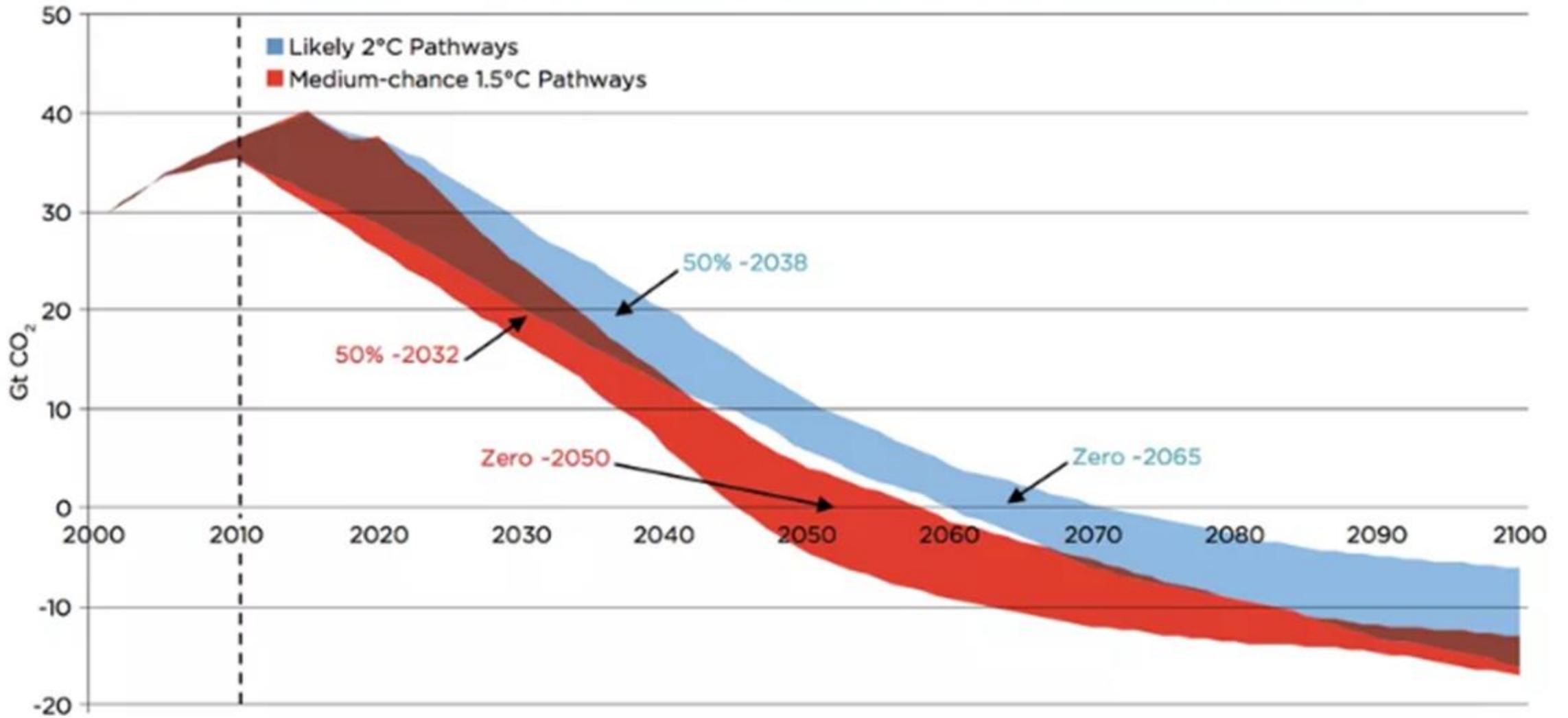


- Help people understand opportunities for change.
- Clarify misinformation
- **Timing is critical**, what was relevant five years ago many no longer be valid.

<https://www.pnas.org/content/114/44/11645/tab-article-info>

https://www.researchgate.net/figure/Contribution-of-natural-climate-solutions-NCS-to-stabilizing-warming-to-below-2-C_fig2_320536154

Figure 1: Range of Global Emissions Pathways in Scenarios Consistent with Likely Chance of 2°C or Medium Chance of 1.5°C¹⁸



Sources: Joeri Rogelj et al

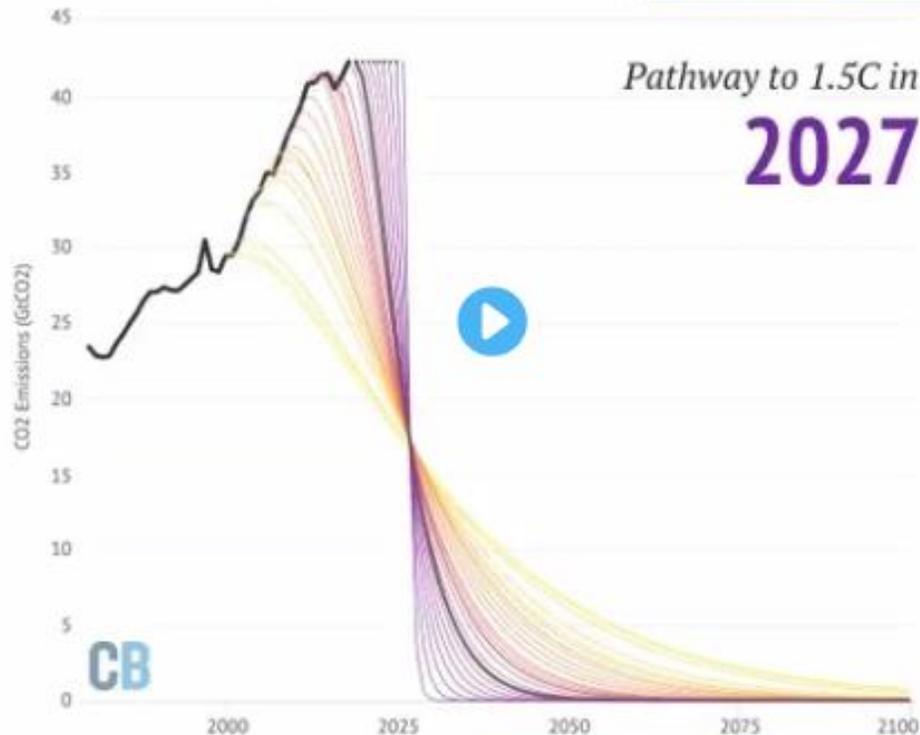
The trajectory to 1.5°C, in red. | Oil Change International

Vox: 01-03-2020



UNEP: 1.5C climate target 'slipping out of reach' | @hausfath
@robbie_andrew j.mp/2pQPnXg

If emissions fail to drop then the 1.5C carbon budget will be used up **within 8 years**



“The [National Audubon Study] raises the prospect that many bird species could struggle to cope as warming forces them into unfamiliar territory or shrinks their existing habitats.

And it illustrates how thoroughly the avian world as we know it may be remapped if humans continue pumping greenhouse gas emissions into the atmosphere.”





***Climate Change Is Accelerating,
Bringing World 'Dangerously
Close' to Irreversible Change***

NYTIMES, December 4, 2019

“Things are getting worse,” said Petteri Taalas, Secretary General of the World Meteorological Organization, which on Tuesday [late December 2019] issued its annual state of the global climate report, concluding a decade of what it called exceptional global heat.

“It’s more urgent than ever to proceed with mitigation.”

But reducing greenhouse gas emissions to fight climate change will require drastic measures, Dr. Taalas said. **“The only solution is to get rid of fossil fuels in power production, industry and transportation,”** he said.

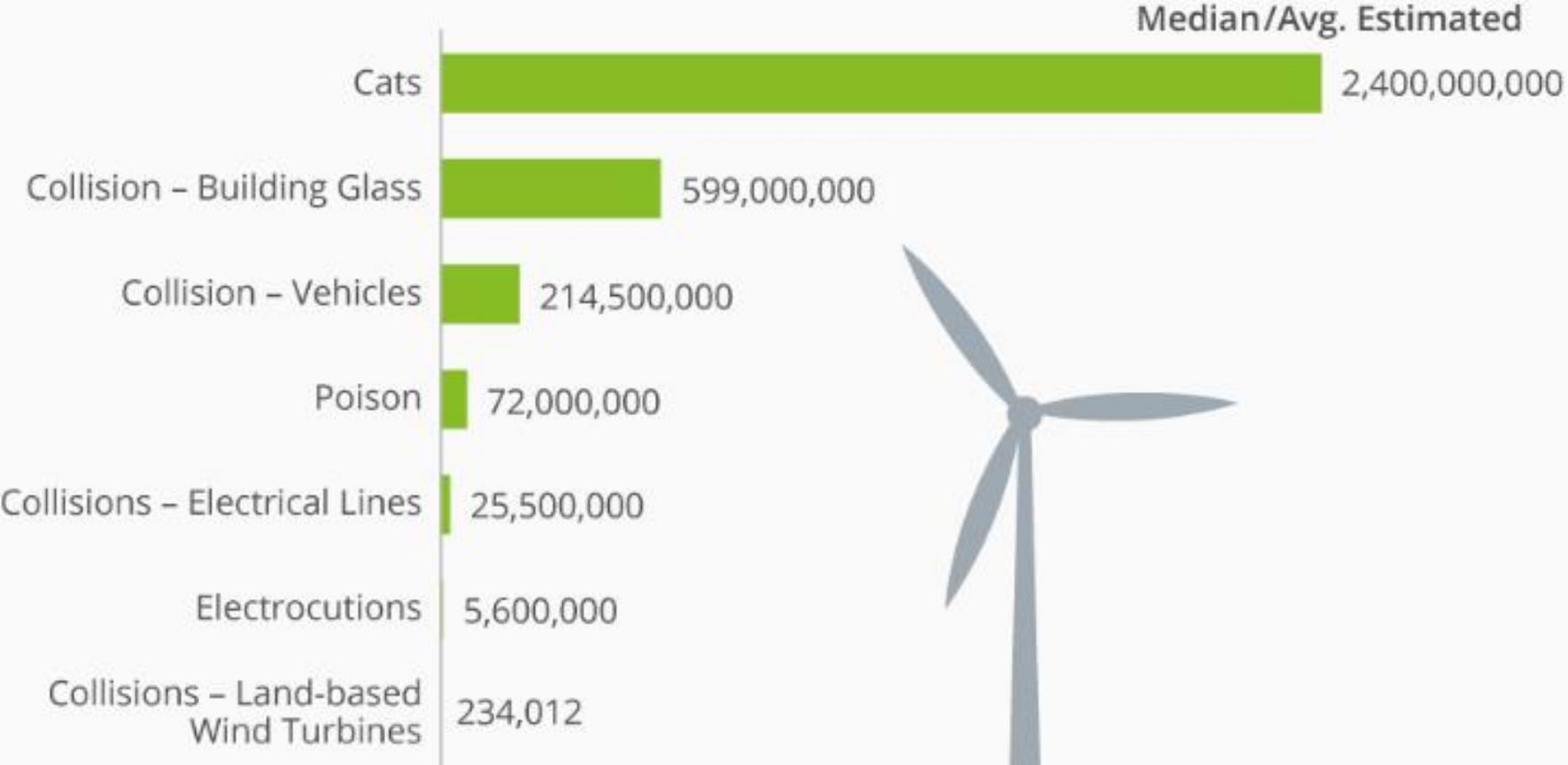
HOW TO OVERCOME RESISTANCE TO CHANGE

- ① LISTEN TO PEOPLE'S FEARS & CONCERNS
- ② PROVIDE CLARITY & CERTAINTY
- ③ DEMONSTRATE WHAT'S IN IT FOR EACH PERSON
- ④ MAKE THE STATUS QUO LESS APPEALING
- ⑤ MAKE PEOPLE PART OF THE STORY
- ⑥ SLOW DOWN



Wind Turbines Are Not Killing Fields for Birds

Annual estimated bird mortality from selected anthropogenic causes in the U.S.



It's a Great Year for Monarch Butterflies. Climate Change Means That Won't Last.

'We may never see a population this big ever again,' butterfly expert Chip Taylor says.



Michael Daly 10.17.18 4:57 AM ET



Renewable energy can pose a threat to wildlife - but remains the best alternative

Alycia Gordan | 31st July 2018

Help people understand what the problems are for wildlife and how renewables are critical

Can Large Solar Farms Create Pollinator Habitat?

□ Sarah Lozanova □ September 18, 2018



109
SHARES



Pollinators play a crucial role in ecosystems. They are instrumental in the reproduction of 80 to 95 percent of plant species in natural habitats and three-quarters of our major food crops. A diverse group of species fulfills this essential work, including bats, bees, birds, flies, wasps, moths, butterflies, and beetles. Unfortunately, many of these populations are in rapid decline. Habitat loss, degradation, and

National Audubon has outlined five key steps land trusts could consider sharing:

1. **Reduce your use of energy** at home and ask **your elected officials to support energy-saving policies** that reduce the overall demand for electricity and that save consumers money.
2. **Ask your elected officials to expand consumer-driven clean energy development that grows jobs in your community – like solar or wind power.**
3. **Reduce the amount of carbon pollution released into the atmosphere.** In order to drive down carbon emissions, we will need innovative economy-wide solutions that address every sector of the economy – **like a fee on carbon.** Another option is to address carbon emissions one sector at a time like setting a clean energy standard for electricity generation.
4. **Advocate for natural solutions**, from increasing wetlands along coasts and rivers that absorb soaking rains to protecting forests and grasslands that are homes to birds and serve as carbon storage banks, and putting native plants everywhere to help birds adapt to climate change.
5. **Ask elected leaders to be climate and conservation champions.**

OVER HALF OF U.S. FARMS LOSE MONEY, USDA STUDY SHOWS

SMALLER FARMS DOMINATE THE PROFIT-LOSS PICTURE.

Successful **Farming**

State's dairy farms struggle to survive

Rell signs into law new subsidies, but some owners say it may not be enough

By Ken Dixon, STAFF WRITER Published 6:05 pm EDT, Monday, August 31, 2009

November 13, 2017

Farming Renewable Energy – Five Reasons Farmers
Love Wind & Solar

Solar and Wind can, and will need to be, an important part of the conservation solution

1. Designed to avoid soil scraping; enhance soil health; compatible for conservation efforts (farming, wildlife)
Address:
 - Slope/Run-off
 - Roads, Design, Compatible uses (farming, wildlife)
 - Disturbance, Prior use
 - Energy hook up, energy storage
2. Pollinator plantings with solar/wind will need intensive management
3. Fencing is required by law—what kind of fencing seems to be changing
4. Parking lots have significant challenges

CONSERVATION

SHOW Positive Examples:

Explain why its needed to save farms, wildlife and communities.



Land trusts can help encourage renewables while steering installations away from sensitive lands.

- 1. Renewables need to go on rooftops, parking lots and open land.** Economics are real. Find ways in your community where they will be compatible.
- 2. Remember eco-social justice issues.**
- 3. Encourage policies** that provide incentives to create renewables where we want them, and how we want them. Get involved.
- 4. Help the community understand** why renewables are important along with natural climate solutions. Avoid being seen as NIMBY.

Communicating “Yes In My Back Yard”

The sad truth about our boldest climate target

Limiting global warming to 1.5°C is almost certainly not going to happen. **Admitting that need not end hope.**

By David Roberts@drvoxdavid@vox.com Jan 3, 2020, 10:30am EST

YIMBY Renewables Toolkit



Because Supporters Need Support!



Our toolkit will support public participation:

- Help supporters to understand how local government works and how to participate.
- How to identify and target key decision makers.
- How to participate in the Article 10 process and submit comments to the siting board.
- How to write letters to the editor and tips for engaging media.
- Make connections with and develop testimonials from community members in other towns that have benefitted from solar and wind projects.
- Provide materials for tabling at community events to demonstrate the benefits of clean energy.
- Provide materials to address myths about renewable energy.

And provide an organizing blueprint:

- How to create a name, logo, website, social media pages and other tools when forming local supporter groups.
- Help to identify potential allies and grow the numbers of supporters.
- Help organize meetings, draft agendas, facilitate.
- Help to capture and organize contacts of supporters.

Land Trusts are Taking Action to Promote Renewables

1. Linking it to their **mission of long-term conservation** (generations to come).
2. Promoting thoughtful **siting of renewables**, recognizing that they need to go somewhere, and we need a lot of them.
3. **Combatting myths and misinformation** about renewables, helping with a paradigm shift.
4. **Telling stories** about climate change, connecting the dots for people.
5. Recognizing **they don't have to be the experts**, just team up with them.
6. Including **renewables in their easements**.
7. Creating renewables/solar farms on the **edge of their preserves when appropriate**.
8. **Installing solar** on their office building.
9. **Assisting communities** to transition to more renewables.
10. **Elevating policy work** to include incentives for renewables and energy conservation, in addition to natural climate solutions.

Let's be proactive and integrate it into our conservation work. Renewables have to be part of the solution to save what we love.

Stan Lilly

