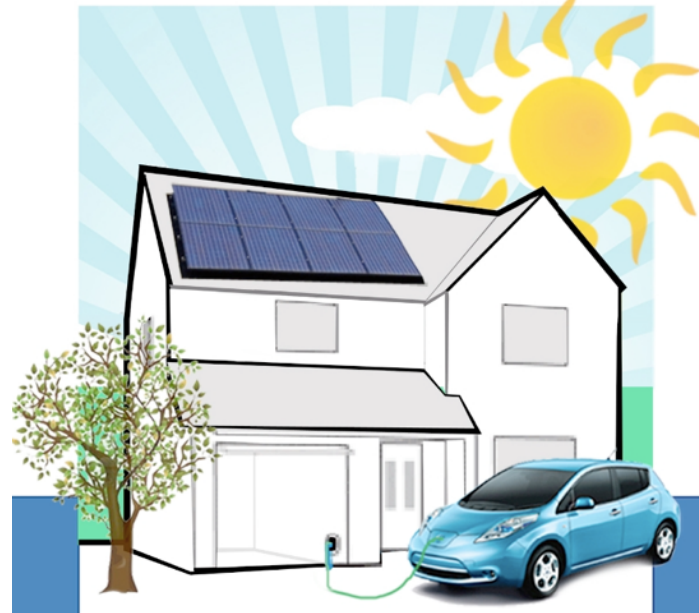
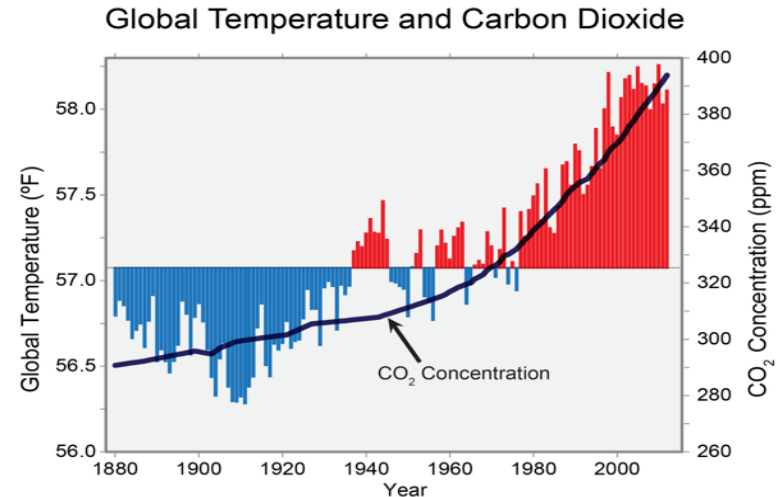


Climate Change Basics

- The scope and urgency of the climate crisis
- Who should I believe?
- What can I do about it?
- Visions of a brighter future

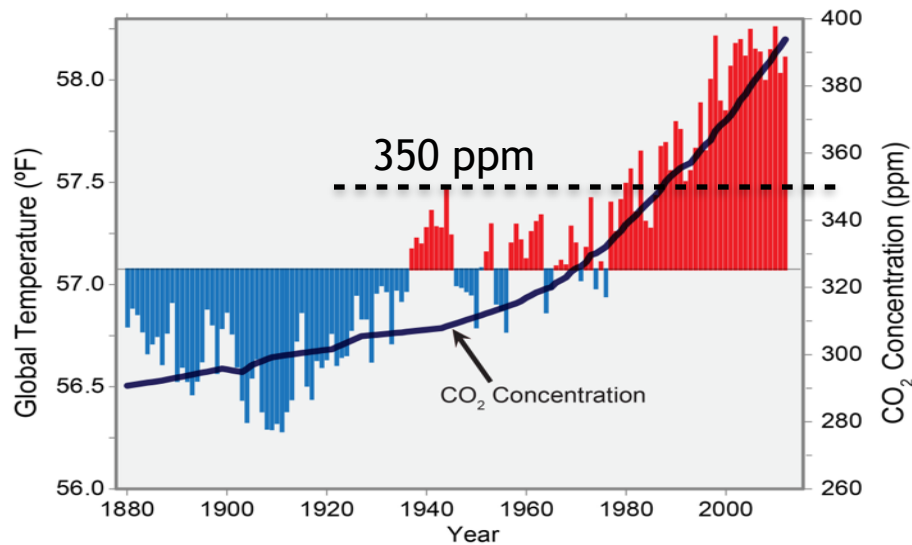


We're in a Crisis

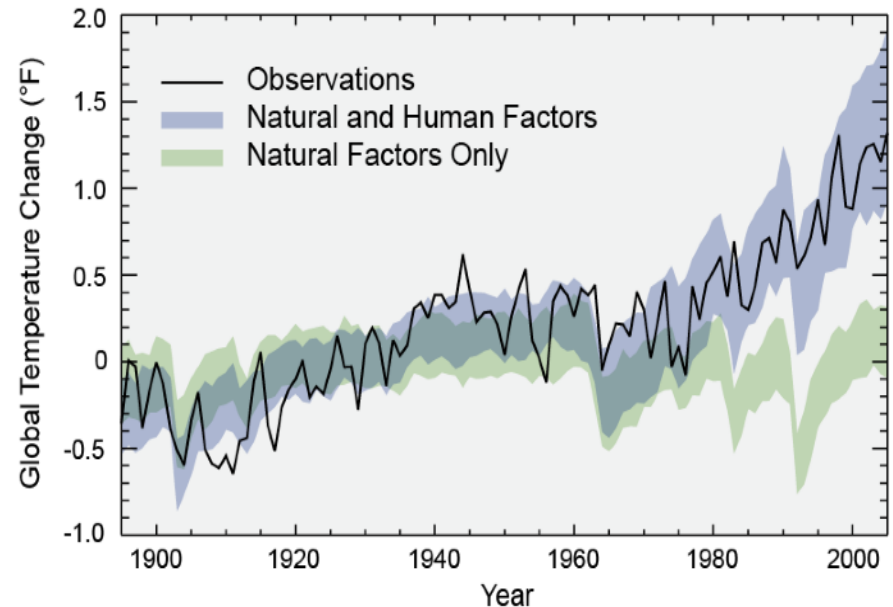
A very serious crisis...

And we're the cause

Global Temperature and Carbon Dioxide



Separating Human and Natural Influences on Climate

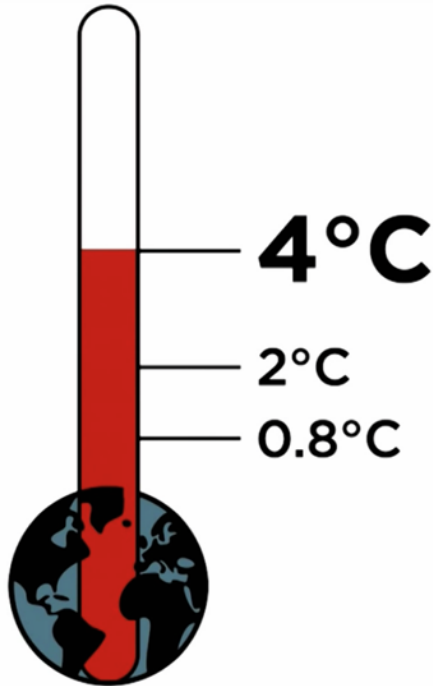


**Why a 4°C Warmer World
Must be Avoided**



THE WORLD BANK

We Must Act Decisively and Urgently



By 2100:

- Highest temps in 30 million years.
- Sea-level rise of 3-6 feet.
- Drought over 40% of inhabited land.
- Hundreds of millions of refugees.
- Half of all known species extinct.
- Prof. Kevin Anderson: “a 4°C future is incompatible with an organized global community.”

“2°C is dangerously high, and we’re headed for 6°C”

Are Humans Going Extinct?

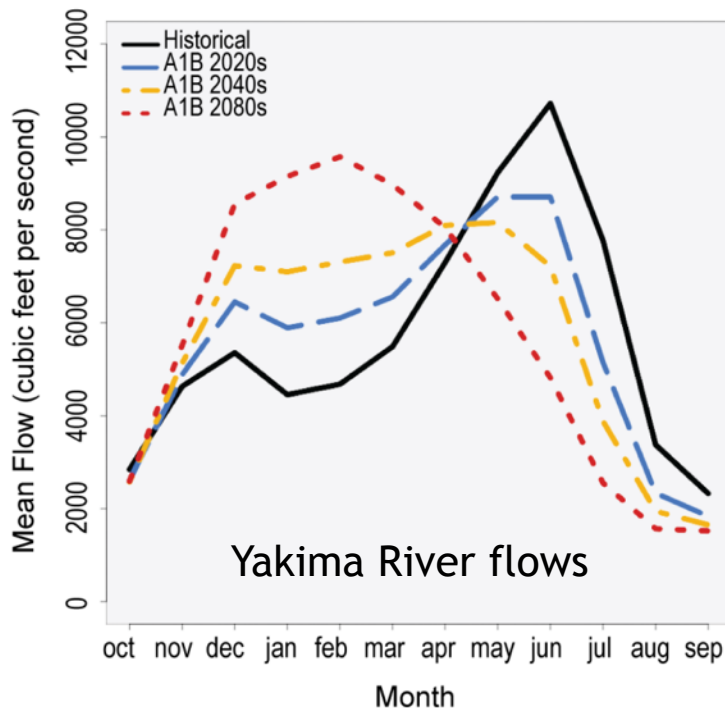
<https://www.youtube.com/watch?v=A7ktYbVwr90>



Climate Change in Our Backyard

April 1 snowpack projected to decline 37-44% on average in WA by the 2040s

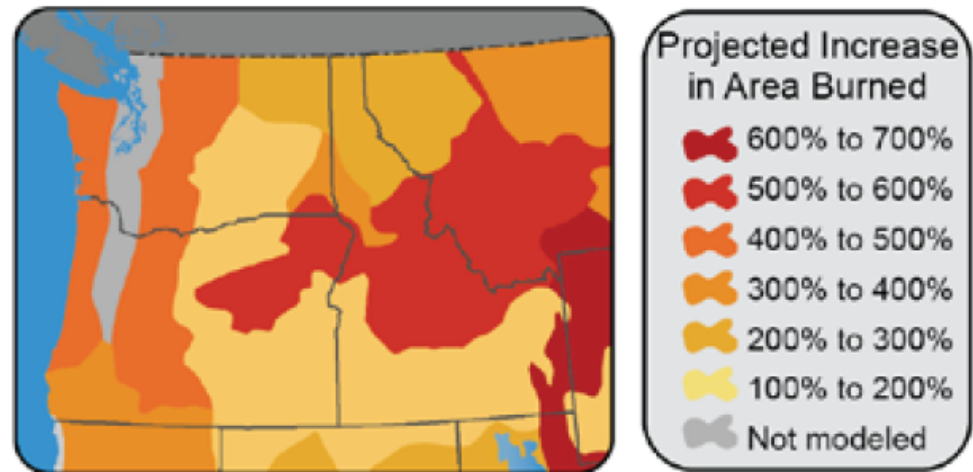
Future Shift in Timing of Stream Flows



1-4 feet of sea level rise by 2100

Ocean acidification threatens species like oysters and salmon

At 2.2° F of global warming, forests are weakened by drought and more insects



Who Should I Believe?

- 97% of climate scientists
 - All national academies of science
 - Pope Francis
 - State Department
 - Department of Defense
 - International Monetary Fund
 - World Bank
 - International Energy Agency
 - United Nations
 - Most nations
-
- Or a dinosaur industry?

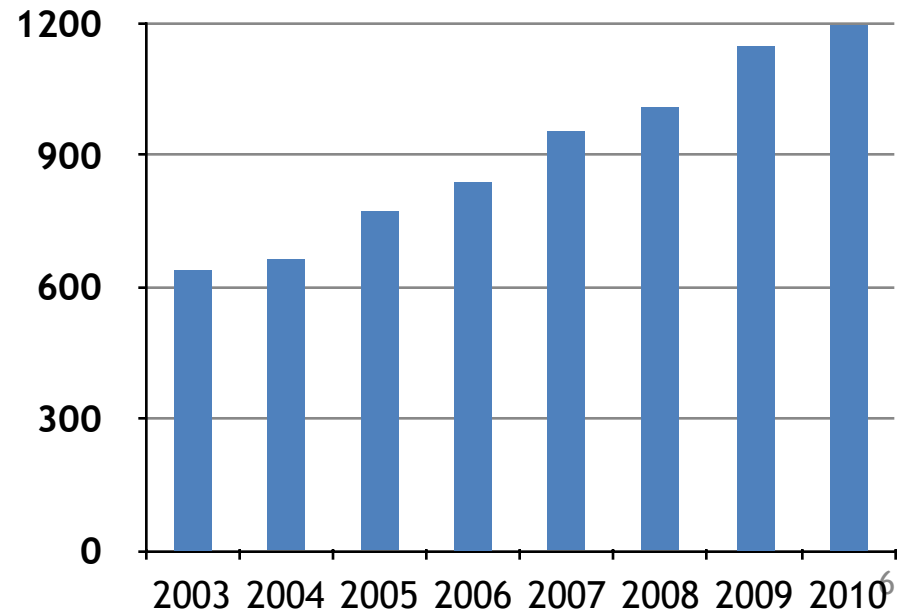


Who Should I Believe?

- *It's all about money and power*

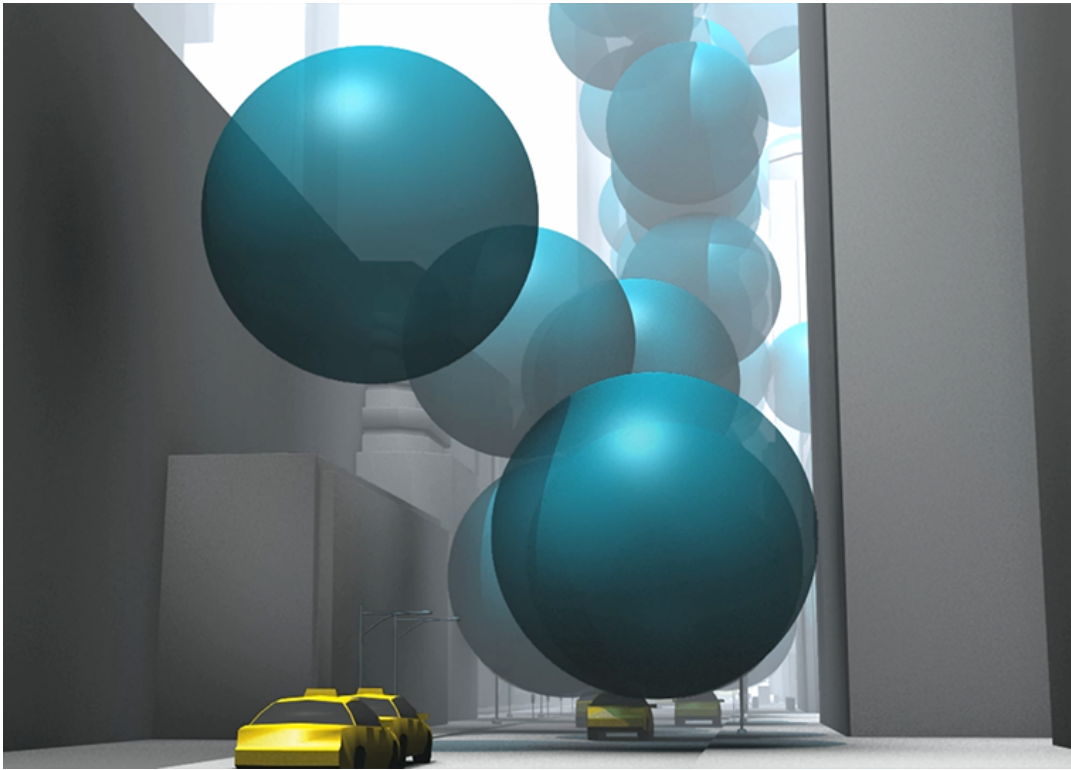
- Operating profits of 50 top US oil companies (2013): \$ 51B
- IMF estimated subsidies to US fossil fuel companies: \$500B
- Annual [disinformation](#) campaigns: \$ 1B
- Koch brothers' 2016 political contributions planned: \$ 1B

Climate Change Counter
Movement Funding (\$M)



- The only “climate conspiracy” is the conspiracy to confuse the public, buy votes, and delay the inevitable energy transition!

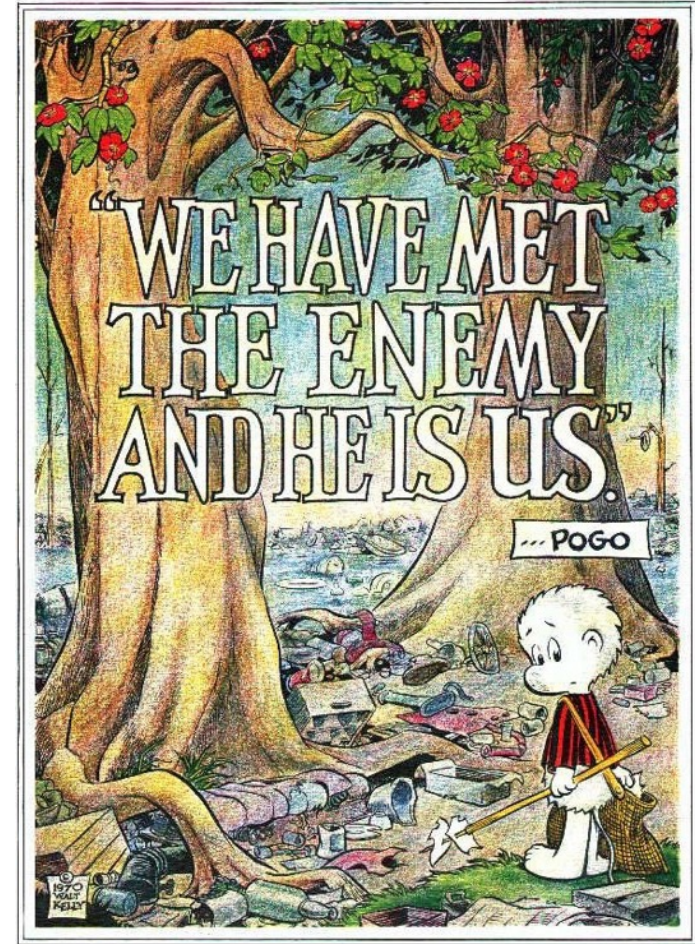
Visualizing CO₂ Emissions



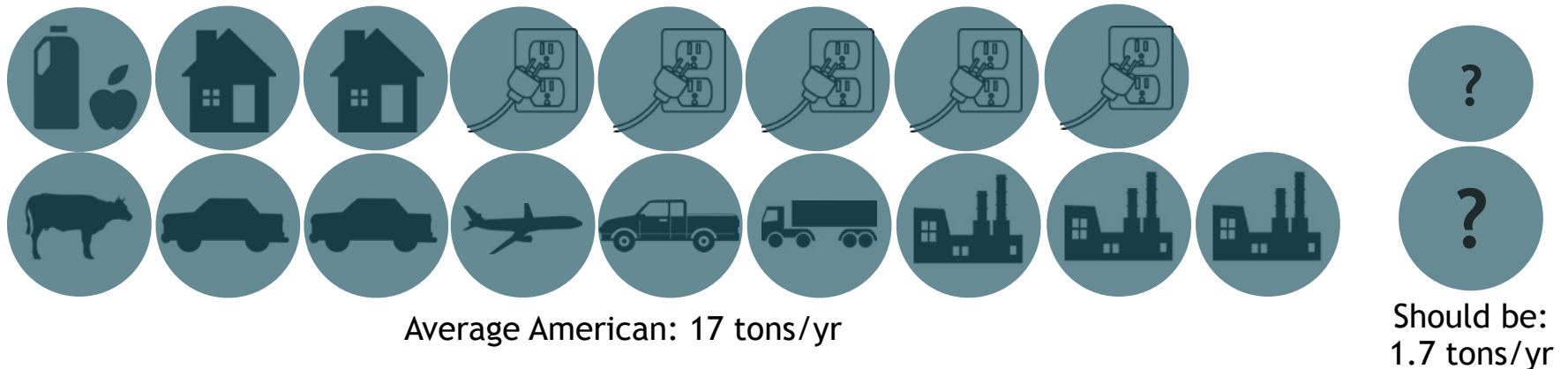
One ton of CO₂ pollution would fill a 33-foot sphere

Burning 80 gallons of gas or diesel creates one ton of CO₂ pollution

<https://www.youtube.com/watch?v=DtqSlplGXOA>



Our Emissions Decisions Determine Our Future



The bad news: You MUST change your behaviors...

The Old vs. New American Dream

- More is better
- Time is money
- Greed is good
- We will dominate nature
- Disrespect for ecosystems
- Disrespect for species, others
- Etc.

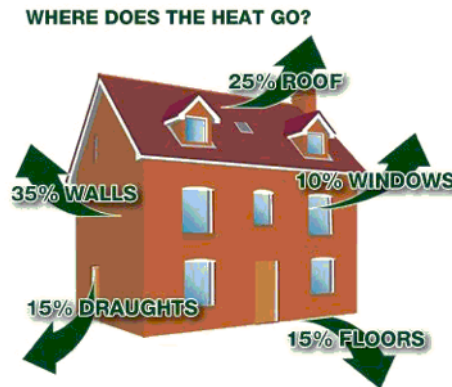
- Enough is better
- Time is life
- Compassion counteracts greed
- We are part of nature
- Economy is a subsidiary of Earth
- Decisions for next 7 generations
- Etc.



What Can I Do About It?

I. Direct your frustration at reducing your personal and community's emissions

- Calculate your CO₂ emissions, reduce, track

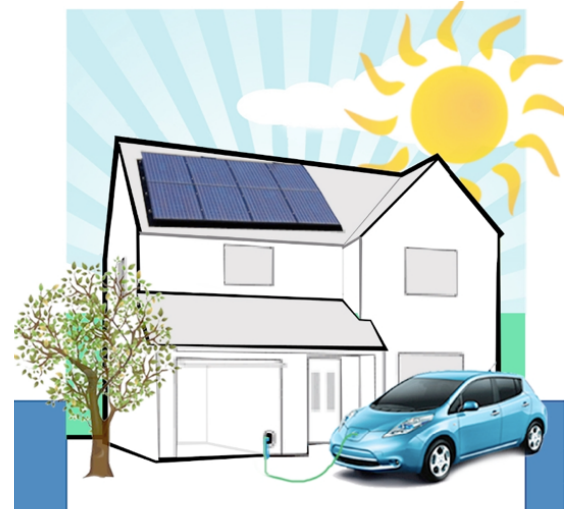
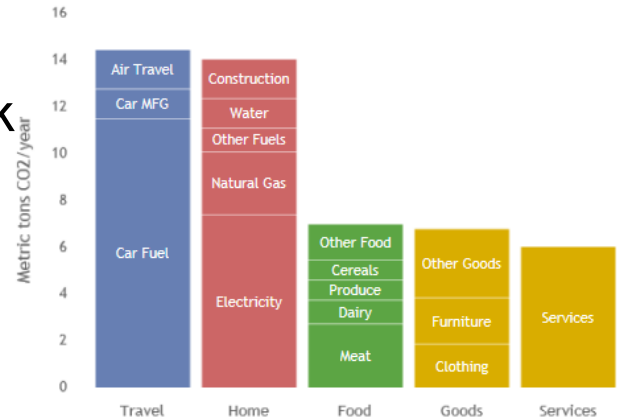


- Insulate your house

- Buy less gas

- Eat less meat

- Divest your fossil fuel infrastructure



Personal and local actions are necessary but not sufficient!

What Can I Do About It?

II. Drive Climate-Repairing Policies at All Levels of Government

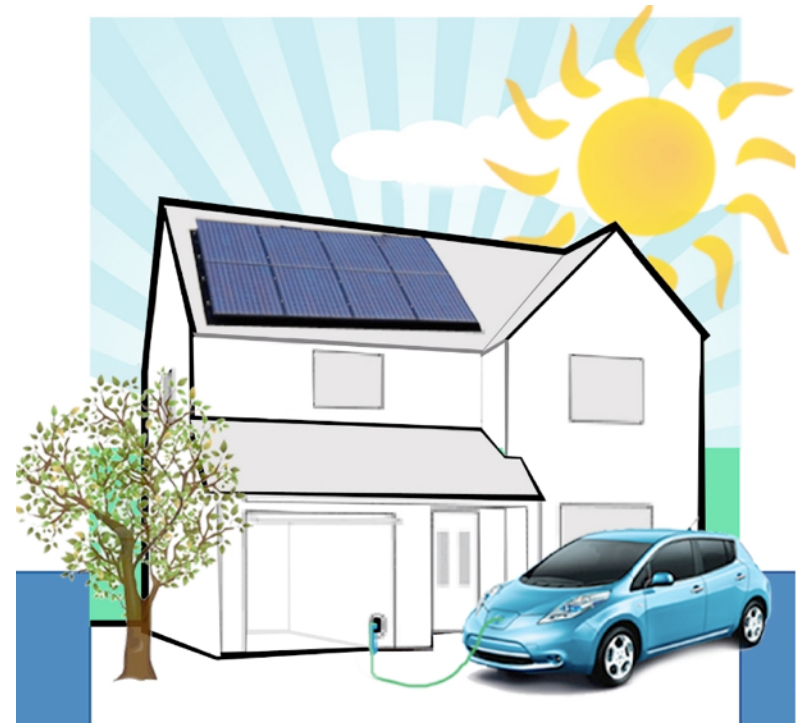
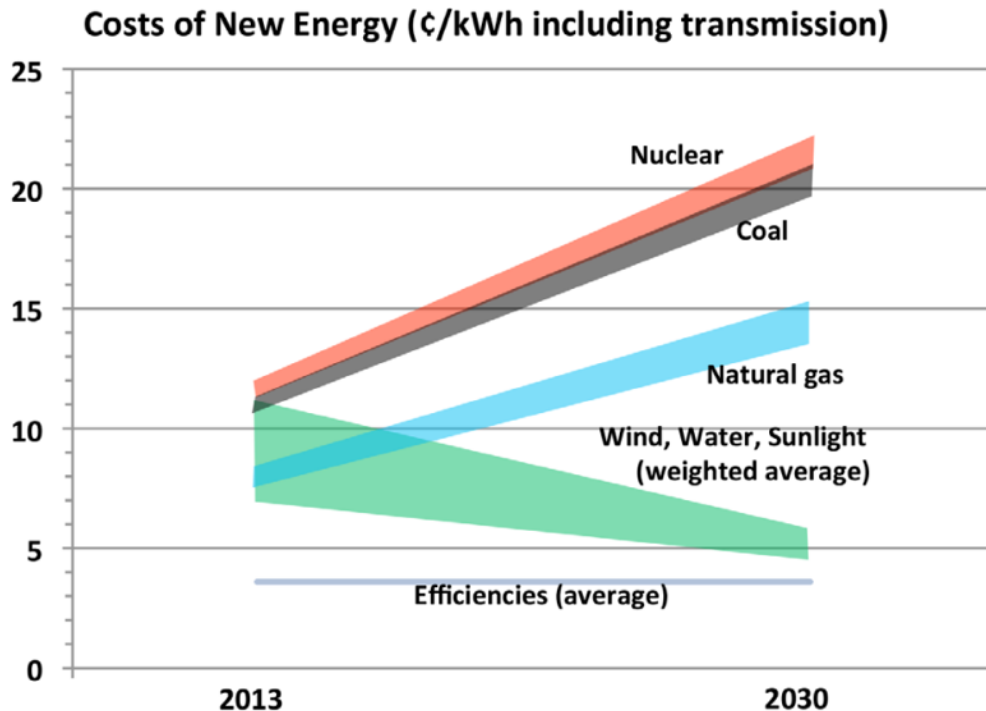
- Increase awareness
 - Teach-ins, LTEs, marches, protests, direct actions
- Lobby for the right policies to reduce greenhouse gas (GHG) emissions
 - No coal or oil terminals; RPS; vehicle feebates; RFS; PUC policies; organic farming; fossil fuel divestments;...
- Campaign for and fund the right candidates
- Lobby to get Big Money out of elections

“We know we have a problem and we know what to do about it, but we have no political will.”

—Tom Steyer

Visions of a Brighter Future

- The fossil fuel industry says renewables will be too costly, too small, and too unreliable—but exactly the opposite is true
- Costs of renewables and storage dropping rapidly
- Commuter EVs already the lowest cost of ownership!
- Solar financing now with zero-down!



Summary

- The climate crisis is urgent and existential
- Believe the climate scientists and progressives
- Reduce your emissions and lobby for better policies
- The fossil fuel industry is delaying your brighter future by any means they can

