



# WHOSE WORLD?

## NO TIME TO WASTE

Week 4

**Jeni: Welcome back (Crossroads, Connections and other Woodland Members.**

**So this is our final week of the seminar. It's been a whirlwind. There is so much we haven't covered, but we hope you are realizing that our climate is affecting every life and every area of life on this planet. We will see again today that we can each make a difference. And some of the changes we can make personally may affect more than one aspect of our lives and God's World**

**Lets start with a prayer:**

**We are grateful, Lord, for our lives and for Your Creation which sustains them. Help us to be better stewards of your world. Allow us to think beyond ourselves and the comfort of just our own families. Remind us that the best things in life are not things at all. Teach us to follow the example of Christ, our Lord, in making some comparatively very small sacrifices for the benefit of the rest of the world. We love you, Lord, and we want to be better stewards. AMEN**

## CREATING A TAILOR-MADE PERSONAL/FAMILY PLAN

- ***Everything you do makes a difference***
- ***Everyone can do something***
- ***Everyone doesn't have to do the same things***

Jeni: As we go through today's lesson, we hope you will be looking for behavioral changes *you can make* that will represent *your commitment to God* to be a better steward of God's earth. In some ways, it is like a financial stewardship campaign. No one will tell you what you must commit. That's between you and God. No one will know if you do it, and no one, other than who you choose to tell, might judge you for how much you did or didn't accomplish. Remember that everything you do makes a difference in God's world.

There are things on our lists today that are big commitments and things that are small. Everyone in this class can find something they can do if they really want to be better stewards. Some of the things on our lists may be things you are already doing. If so, we hope you will pick at least 2-3 other things to do *this year, in addition*. Pick things that FIT FOR YOU.

## CREATING A TAILOR-MADE PERSONAL/FAMILY PLAN

- **Pray about what God is calling you to do**
- **Consider behavioral changes that you can sustain over time**
- **Consider changes that have the most impact for good**
- **Make a commitment to God, to yourself and to the future of God's Creation**

Jeni: example, when Ray & I moved from the Chesapeake Bay area, we had already learned to recycle. So doing it here wasn't much of a hardship. We have to pay a bit in Comal county to do it, but for us, recycling was already a habit. So WE need to pick some things in addition to recycling this year. And recycling may be a bigger hardship for some of you than it is now for us.

Don't make your decisions in class today. Please pray about it and listen for what God would ask you to do. You want to be able to keep the commitments you make to God.

Ray and I can identify, if you want, some of the changes that would have the most impact, or you can research that too.

## START AT HOME

- Stop leakage by weather stripping windows & doors
- Reduce water waste
- Smart thermostats
- Look for the NFRC label when purchasing windows
- Energy Star Appliances can save up to 50% energy



**Jeni: Let's start by thinking about easy & simple things to do in your home or office. Use weather stripping if doors and windows are leaking, Turn off water when you aren't actually using it (like during tooth brushing or dish washing by hand).**

**You might install a smart thermostat which controls your heating and cooling units, even when you're out of town. Or just raise the temperature inside your home a few degree in the summer and lower it the same in the winter. If you can tolerate that and stay healthy, it can save a lot of energy and cost.**

**If you're ready to install new windows, or doors look for the NFRC (National Fenestration Rating Council) label. It allows you to compare products for energy efficiency.**

**Also...when buying new appliances, make sure they are Energy Star appliances which save a very significant amount of energy and costs.**

# MAKING YOUR HOME ENERGY EFFICIENT

## What difference does insulating your home make?

- Older homes lose 35% of their heat through walls
- If  $\frac{1}{2}$  energy inefficient buildings were better insulated
- We would reduce CO2 emissions by 3.8 Gigatons



Jeni: Older homes can lose up to 35 percent of heat through their walls. Modern insulation can be sprayed, blown in or installed by hand. Project Drawdown is a think tank that has analyzed how we can get the most bang for our buck in reducing climate change. They say that if even half of existing buildings installed thicker insulation, 8.3 gigatons, a gigaton is one billion tons, of emissions could be avoided—that's more than overhauling the efficiency for the entire international shipping industry.

# MAKING YOUR HOME ENERGY EFFICIENT

- LEDs use 90% less energy than incandescent bulbs and half as much as fluorescent lights.
- Switching your home to LED lights will reduce cooling bills.
- Last longer , give off brighter light.
- Universal adoption of LEDs could prevent 7.8 gigatons of carbon emissions.



Jeni: One amazing thing you can do to combat climate change is to change your light bulbs. LEDs (light-emitting diodes) use 90% less energy than incandescent bulbs and half as much as fluorescents.

They convert electrons to photons without giving off heat that drives up utilities. Switching your home to LED lights will reduce cooling bills.

They also last longer than other bulbs and give off brighter light.

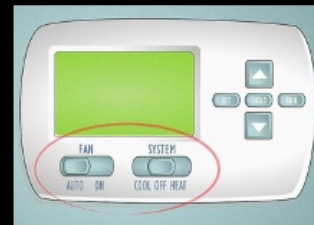
According to Project Drawdown, universal adoption of LEDs could prevent 7.8 gigatons of carbon emissions.

If you can't replace them all at once, you can decide to buy only LED lights and replace the old incandescent bulbs as they burn out.



## SAVE ENERGY

- Turn off lights and TVs when not needed
- Unplug small appliances when not in use
- Close your windows and doors when AC/Heating is on
- Draw your shades on bright, hot days
- Open your shades in winter months to warm the house



Jeni: Other pretty easy things to do are...READ

# INVEST IN CLEAN ENERGY

## Rooftop Solar – Options from San Antonio Municipal

- **Go solar at home.**
  - \$2500 rebate from CPS
  - Pay CPS for whatever you don't generate
- **Go solar at your business.**
  - Estimated rebate for Woodland is \$62,000



Ray: One of the biggest differences you can make is to install solar panels on your roof. That can be expensive, but it is a good return on investment in San Antonio with a ROI of less than 10 years.

CPS has two programs in place to help offset the costs. They will give you a \$2500 rebate upfront plus you enjoy the savings of generating your home's energy costs which is about a 70% reduction in your electric bill.

The only energy you purchase is at night or when the sun is not shining.



## INVEST IN CLEAN ENERGY

### Rooftop Solar – Options from San Antonio Municipal

#### SolarHost program

- If your home qualifies, city will install free solar panels on your roof
- You receive a credit from CPS on your electric bill of \$0.03 for every kilowatt-hour that your panels generate, resulting in average monthly electricity bill savings of 20-30%.



Ray: The other option from CPS is the SolarHost program. If your home qualifies, CPS will install and maintain solar panels on your roof for free. In turn you receive a credit of 3 cents per kilowatt hour generated by the panels. That's a savings of about 20 to 30 percent and you have paid nothing for the panels, installation or the maintenance.

## INVEST IN CLEAN ENERGY

- **Community solar** (not yet available in San Antonio)
  - Some utilities allow homeowners and renters to sign up for green energy
  - With Roofless Solar --no panels on your roof.
    - Buy "shares" in a solar farm .
    - You own them and sell the energy to the energy company for use by the entire community in exchange for credits on your bill.
    - The more "shares" you own, the more electricity you generate, the lower your bill



**Ray:** Some utilities allow homeowners and renters to sign up for green energy. With Roofless Solar (community solar), you have no panels on your roof.

Community solar is popular in some areas of the country but not in San Antonio yet. In essence, you purchase shares in a solar farm that sells electricity to your local power company. The more shares you own, the more credits you receive on your monthly bill.

## CITIES

**Your influence can bring about...**

- **District Heating (European neighborhoods shares same heating cooling system)**
- **Bike Infrastructure**
- **Net Zero Buildings (that produce their own energy)**
- **Better city building codes**
- **Walk around cities**



Ray:

## OUR CITY

### San Antonio a leader towards clean energy

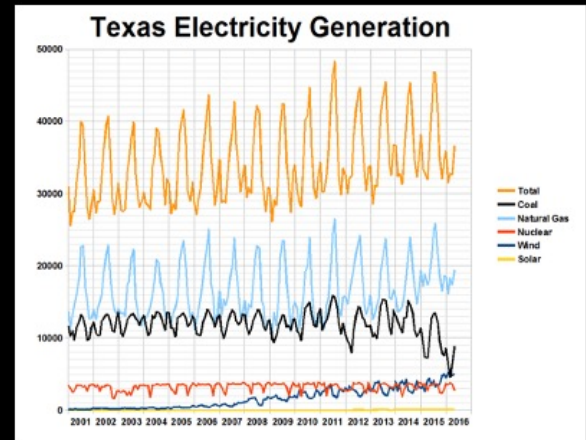
- Won The 2021 “Solar Superstars” (cities with 100 or more watts of solar PV per person, end of 2021)
- 5<sup>th</sup> in the nation; 247 watts/person
- Office of Sustainability
- FlexPOWER RFP program to replace outdated plants with renewable energy plants



Ray: San Antonio is a leader in solar energy per person.

# TEXAS

- Texas led the country in new renewable energy projects last year 2021
- 1<sup>st</sup> in the nation in wind-generated electricity
- Texas installed 7,352 megawatts of new wind, solar and energy installation in 2021
- But---Texas which still ranks 10th in the country in consuming fossil fuels,
- Nearly 90% of Texas energy is derived from fossil fuels.



Ray: Texas led the country in new renewable energy projects last year 2021.

Texas installed 7,352 megawatts of new wind and solar projects last year.

But Texas still ranks 10th in the country for fossil fuel consumption, as nearly 90% of our energy is derived from fossil fuels.

So why is there so much interest in building new solar and particularly wind farms? It's smart and good business. T. Boone Pickens was instrumental in pushing Republican Governor Rick Perry to subsidize wind driven energy.

Here's why.

## TEXAS

- The wind energy potential of Kansas, North Dakota, and Texas could meet electricity demand from coast to coast in US.
- Wind farms have small footprints, about 1 % of the land— leaving it for other uses
- Don't cause cancer
- New retrofits minimize bird and bat deaths



Ray: In the United States, the wind energy potential of just three states—Kansas, North Dakota, and Texas—would be sufficient to meet electricity demand from coast to coast. Wind farms have small footprints, typically using no more than 1 percent of the land they sit on, so grazing, farming, and recreation, can happen while generating power. By the way, wind mills don't cause cancer and new retrofits are reducing bird and bat deaths.



## TEXAS

### What about the cost subsidies of wind?

- IMF estimates fossil fuel industry received more than \$5.3 trillion in direct and indirect subsidies in 2015:
  - \$10 million a minute
  - 6.5 percent of global GDP
- Tax payers further subsidize fossil fuels by paying for health costs due to air pollution, environmental damage, congestion, and global warming
- U.S. wind-energy industry has received \$12.3 billion in direct subsidies since 2000.



Ray: The International Monetary Fund estimates that the fossil fuel industry received more than \$5.3 trillion in direct and indirect subsidies in 2015;, or about 6.5 percent of global GDP.

These industries pay nothing for problems created by air pollution, environmental damages and global warming—none of which are created by wind turbines.

In comparison, the U.S. wind-energy industry has received \$12.3 billion in direct subsidies since 2000.

## Wind energy is cheaper

- Wind generated energy is less costly to produce
- Wind power uses 98% less water than fossil fuel
- Coal, gas, and nuclear power require 22 trillion to 62 trillion gallons of water per year.
- Feds and states provide them with all that free water.

TEXAS



Ray: Ongoing cost reduction will soon make wind energy the least expensive source of electricity. A Goldman Sachs research paper published in June 2016 stated simply, “wind provides the lowest cost source of new capacity.”

Wind power uses 98 percent less water than fossil fuel-generated electricity. Coal, gas, and nuclear power require massive amounts of water for cooling, withdrawing more water than agriculture—22 trillion to 62 trillion gallons per year.

Water for these plant is “free,” bestowed by the federal government or the states, but it is hardly free. This represents another unacknowledged subsidy.

We are already experiencing water shortages around the world. Spending trillions of gallons of water to cool these carbon emitting power plants is not responsible stewardship.

## TEXAS

### Wind Energy: #1 Best Investment

- Increase onshore wind to 21.6% reduce emissions by 84.6 gigatons of CO2.
- Increase offshore wind, to 4% avoid 14.1 gigatons of CO2 emissions.
- Investment in wind of \$1.8 trillion, deliver net savings of \$7.7 trillion over 30 years.
- New technology increases capacity to generate more electricity at lower cost.



Ray: Project Drawdown lists wind generated energy as the first and best alternative energy source to reduce carbon emissions and the best financial investment the world can make now.

An increase in onshore wind to 21.6 percent by 2050 could reduce emissions by 84.6 gigatons of carbon dioxide. For offshore wind, growing to 4 percent could avoid 14.1 gigatons of emissions.

An investment of \$1.8 trillion, wind turbines can deliver net savings of \$7.7 trillion over 30 years of operation.

## LAND USE

- **Use native plants in landscaping – (Use less water)**
- **Landscape with more perennials**
- **Support building and maintaining Green Areas**
- **Volunteer to clean up public areas (parks, beaches, road & waterways)**
- **Donate to land and ocean conservation groups: Help save tropical forests (or any forest), and coastal wetlands**



**Jeni: Remember that God's OT commandments included the requirement of Sustainable Land Use? Well, we can do that today, too. There are people in our church who can advise you much better about gardening and landscaping than Ray or I. (Christyn, Vickie, Mary are some of our church experts) But the big picture suggestions are:**

**Use native plants...those that require less water. Plant more perennials, fewer annuals. Incorporate wildflowers.**

**Growing your family's own vegetables is more sustainable and wastes less food.**

**Or, you could...**

**Volunteer to clean up public lands and waterways**

**And donating to groups that conserve oceans, forests and wetlands is a terrific idea**

## LAND USE

### Plant more trees

- World had 6 trillion trees
- Now we have three trillion trees
- We need a trillion trees
- Trees are one of the most powerful tools that buy us time in the fight against the climate crisis.
- Restoring forests we will be able to keep temperature rise below 2°C.



**Jeni: Trees are really our best friend in the fight against climate change. As you know, they take in carbon dioxide and produce oxygen. We have now destroyed half on the world's trees. From 6 trillion to 3 trillion. We need a trillion more trees because they buy us time in the fight against the climate crisis. Only by restoring these forests, will we be able to keep temperatures from rising to very dangerous levels. But how can we plant 1 trillion trees? It sounds impossible.**



## Plant more trees

- Plant-for-the-Planet initiative to sponsor tree-planting around the world.
- 92,000 children and youth around the world planting trees
- Began with 9 year-old Felix in class presentation on climate
- “Let’s plant a million trees in every country on earth!”
- Search for other organizations on line

<https://www1.plant-for-the-planet.org/>

## LAND USE



**To date: 14 billion trees have been planted**

Jeni: Well, here’s just one idea: Plant for the Planet is a world tree planting project. In January 2007, nine-year-old Felix Finkbeiner gave a class presentation of his climate crisis project. He ended his report with the words: “Let’s plant a million trees in every country on earth!” Other children joined in his project and when they UN heard about it, they joined too. Today over 91,666 children and youth have already been trained at 1,608 Academies in 75 countries, where they teach each other about the climate crisis and the reasons to plant trees. Kids are planting the trees, and in third world countries they are being reimbursed to do it.

You can donate and track the progress of this project, by country, with a simple phone app. To date Plant for the Planet has been responsible for 14 billion new trees. The U.S. ranks 12<sup>th</sup> in the overall competition to plant the most trees.

You can join as an individual, family, church group, company—and start planting trees. Or, you can donate and let someone else do it. Either way, it’s good for the environment. If you’re looking for a bigger way to make a difference, consider researching this project & make a presentation at a PTA meeting to see if you can get your school to sponsor a program in which classes compete to plant the most trees.



# WILDLIFE

- Become a member of World Wildlife Fund
- Adopt an animal/purchase gifts
- Set up a Facebook birthday fundraiser to encourage family & friends to donate to wildlife causes
- Read the WWF Living Planet Report – the latest flagship research series
- Explore the network of youth internship schemes across the world – be placed on a WWF team on one of their projects in the field. Work in the front line of nature conservation



CLIMATE



FOOD



FORESTS



FRESHWATER



WILDLIFE



OCEANS

Jeni: You recall from our first lesson that God instructs us to treat animals humanely. As you know, we haven't been doing a great job of that. So, if impacting this area of climate change problems is of most interest to you, here are a few good things you might want to do. The World Wildlife Fund does a lot more than you might think. Just becoming a member would help. You could "adopt" an animal on their website, or buy gifts from WWF online for those family members you just never know what to buy.

Maybe you could set up a social media birthday fundraiser for you or a child that would encourage others to donate to wildlife causes.

WWF has a research series that would be beneficial to any reader. Maybe just commit to learning more from their incredible Living Planet Report.

They also have an incredible network of opportunities for young people around the world. Explore with your child or grandchild any interest they might have in participating in an internship or shorter program one day.

## FOOD

- Giving thanks for food isn't just a habit or obligation
- Plan meals ahead to reduce waste
- Reduce food waste (more frequent trips for shopping v fuel to make them)
- Reusable grocery bags
- Compost waste



Jeni: Now we're going to move to the category of food. Giving thanks for food shouldn't be practiced as a habit or obligation. We can renew the meaning of blessings by remembering that God's Creation is what provides us with food. Often an animal *gave its life* for our meal. If we still lived on farms, we would be more aware of this. The sacrifice of the animal, as well as the sacrifices of farm laborers might help to instill in us more gratitude.

Planning meals reduces wasted food and costs. But it might also mean more frequent trips to the grocery store, so also weigh in the carbon cost of additional gas, depending on your distance from the store. But food waste in the US occurs mostly in stores and at home—because it spoils in either place before we eat it. Americans throw away up to 40 percent of the food they buy.

We can combat food waste by planning, shopping for only what we need, by eating leftovers, and composting scraps.

Project Drawdown estimates that curbing food waste could avoid a whopping 70.5 gigatons of CO<sub>2</sub>—that's a bigger impact than restoring 435 million acres of tropical forest.

## FOOD

- **Eat more plant-based meals**
- **Vegetarian is an option for some people**
- **Shift from higher to lower meat consumption can improve the health of many Americans, and the health of our planet**
- **Locate and try new recipes that require less meat**



**Jeni: Not everyone will want to, or maybe even should, become a vegetarian or Vegan. But if you want to consider it, transitioning to a vegetarian diet can cut your carbon footprint in half, and going vegan, even lower.**

**Even shifting from high to low meat consumption can shrink your footprint by a third.**

**If half of the world's population reduced meat consumption and avoided the associated deforestation caused by agriculture, we could reduce carbon emissions by 66 gigatons.**

**Consider recipes that use less meat and more vegetables and carbohydrates.**

**One of criticisms of the Green New Deal claimed that the government wanted to stop us from eating burgers and steak. But, eating LESS meat and more vegetables is not only better for Americans' health, it's also better for our planet.**

## FOOD

- **Use electric or induction cooktops**
- **Use toaster ovens whenever possible**
- **Avoid disposable plates, plastic ware, excessive condiment packets**
- **Avoid Palm Oil whenever possible**
- **Buy local & seasonal foods from environmentally responsible companies**
- **Grow your own vegetables, herbs, fruit**
- **Participate in your church's or community's garden**



**Jeni: Here are a few other things about food and food preparation that are good choices for the environment:**

**Rather than a gas stove or oven, an electric or induction oven cuts down on energy use and costs.**

**Young or larger families may not be able to do this, but now that we're down to just 2 eating together— using a toaster oven or air fryer is much quicker and more efficient. It heats up far faster than our oven and doesn't heat up the home nearly as much.**

**You know already that avoiding Styrofoam, paper plates, and plastic utensils is an important change. Also, refusing the handful of condiment packets handed to you through a drive through window— all of these cut back on our landfills.**

**Because Palm oil has been found to be a cheap preservative, CO2 trapping trees are being deforested to plant palm trees en masse. Palm trees just don't do the same thing for the environment. Avoiding palm oil might be a choice you can live with.**

**Buying local and seasonal foods help small business and reduces fossil fuel emissions associate with transport and cold chain storage. Find some good farmer's markets.**

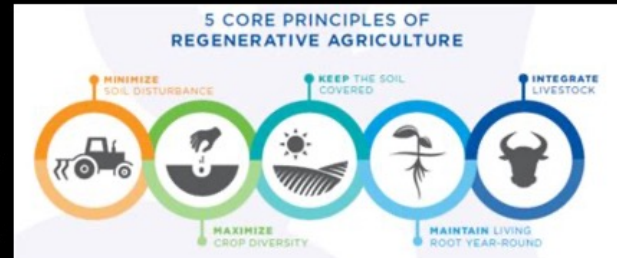
**Grow your own garden or participate in your church's or community garden. See members of our Oikonomos Team.**

# FOOD

## Speaking up as a consumer can help

### bring about:

- Humane treatment of animals in farming
- Conservation & regenerative agriculture
- Soil nutrient management



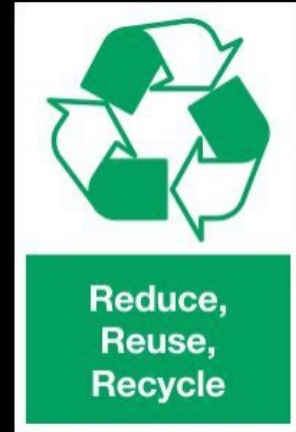
**Jeni: Food production is a major driver of wildlife extinction. What we eat contributes around a quarter of global warming gasses and emissions & is responsible for almost 60% of global biodiversity loss.**

**Farming animals for meat and dairy requires space and huge inputs of water and feed. Today, one of the biggest causes of forest loss is the expansion of agricultural land for animal feed production. Producing meat creates vastly more carbon dioxide than vegetables, grains and legumes. Moving away from a meat-dominated diet can lower your impact on the environment.**



## MATERIALS

- **Reduce/Reuse/Recycle**
- **Everything we spend money on affects the planet**
- **Consume LESS**
- **Avoid dumping harmful chemicals (fertilizers, weed killers, medications) into water supply**
- **Dispose of refrigerator, vehicle products appropriately**
- **Choose non-toxic cleaners for home and office**



Jeni: You've seen this symbol for a very long time. Reduce, reuse, recycle. We need to stop and realize that everything we buy affects the planet. Buying less will save money, reduce waste and improve your environmental footprint. Before we buy anything, from the standpoint of our budget AND from the standpoint of the CLIMATE, we could ask ourselves, "Is this a want or need?" Christians are not materialistic people...right? When you do buy, support eco-friendly products which are less damaging to the environment.

I was amazed to learn that the fashion industry accounts for 8-10% of global climate emissions – more than all international flights and maritime shipping combined. And 'fast fashion' has created a throwaway culture that sees that clothes end up in landfills. You could make a commitment to buying fewer clothes, wearing them longer and recycling them responsibly if they no longer fit. Just say "no" to the fashion police.

Of course, dispose of harmful household chemicals in ways that don't harm the land or water, and choose non-toxic materials whenever possible.



## MATERIALS

- **Buy less plastic (water bottles) and cans**
- **Purchase materials in bulk containers whenever possible**
- **Reduce use of paper and cardboard**
- **Recycle everything possible (paper, plastics, cardboard, furniture, clothing, etc.)**
- **Let business owners know you support bold change**



Ray: Water bottles and k-cups are some of the most wasteful products produced in the last 30 years. Avoid them and buy in bulk whenever possible to avoid packaging excess.

Recycle anything possible, including bigger things like furniture, and let business owners know that you appreciate their attention to recycling and climate concerns.

## TRANSPORT

- **Consider purchasing an electric vehicle (EV)**
  - How to consider the actual cost pay off date...
- **OR consider purchasing a vehicle with high mileage per gallon (hybrid?)**
- **Keep vehicles maintained (no emissions, cleaner air)**
- **Utilize walking or biking options when possible (and have some fun!)**
- **Carpool**
- **Try mass transit when possible**



Ray: Consider buying an EV for transportation. Don't just factor in the actual payments you might make over 4 to 6 years, but also subtract the costs of the gas, oil and maintenance costs you won't incur. You will pay it off much faster than you thought.

If you don't feel comfortable with an EV, look at hybrid vehicles. Jeni and I have had one for 8 years and love the performance. We also love making about half the trips to the gas station. Hybrids use the motor to recharge the battery so you never need to plug in.

Walk more or ride your bike. My neighbor bought a moped to travel to and from work.

We carpoled in Dallas which saved gas and prevented excessive mileage on our cars. Try mass transit if you live near a route.

# EDUCATION

- **Educate yourself further!**
  - [UN.org/en/act now](http://UN.org/en/act now)
- **Educate Friends & Coworkers (in small bites)**
- **Educate Children (at church as well as school and clubs)**
  - **Impact of children on parents is surprising**
- **Focus education on women and girls – (especially abroad)**



Ray: On average, women make up 43 percent of the agricultural labor force and produce 60 to 80 percent of food crops in poorer parts of the world.

According to the Food and Agriculture Organization of the United Nations (FAO), if all women smallholders receive equal access to productive resources, their farm yields will rise by 20 to 30 percent and the number of undernourished people in the world will drop by 12 to 17 percent. 150 million people will no longer be hungry.

Women with more years of education have more options available to them in life. They also have fewer, healthier children and actively manage their reproductive health.

The UN says that if all nations enrolled 100 percent of girls in elementary and high school, by 2050 there would be 843 million fewer people worldwide than if current enrollment rates sustain.

According to the Brookings Institution, “The difference between a woman with no years of schooling and with 12 years of schooling is almost four to five children per woman. And it is precisely in those areas of the world where girls are having the hardest time getting educated that population growth is the fastest.”

Hawken, Paul. Drawdown (p. 81). Penguin Publishing Group. Kindle Edition.

Hawken, Paul. Drawdown (p. 79). Penguin Publishing Group. Kindle Edition.

Hawken, Paul. Drawdown (p. 77). Penguin Publishing Group. Kindle Edition.

Hawken, Paul. Drawdown (p. 76). Penguin Publishing Group. Kindle Edition.

**FINANCIAL**

- **Focus on planet-friendly investments**
- **Divest from emission producing companies**
- **Choose financial institutions that do not invest in carbon-polluting industries**

**Investment**

Ray: Consider pulling your investments out of organizations producing greenhouse gas emissions. This is called divesting which was one of the most effective tools used to end Apartheid.

So far, \$9.94 trillion dollars have been removed from fossil fuel companies by institutional divestments and \$5.2 billion from 58,000 individual portfolios.

We simply asked our investment advisor to make these divestments and she did.

## SPREAD THE WORD/USE YOUR INFLUENCE

- **Join a global movement like Count Us In**
- **Sign up to the UN's #ActNow campaign (See their great website)**
- **Keep up the political pressure (See ActNow Speak Up on political pressure and corporate action.**
- **Influence Service Providers and Retailers**
- **Make this an important issue in your voting decisions**

Ray: if we don't speak up, no one will know we care. If you want to join a bigger movement, join a global movement like Count Us In which aims to inspire 1 billion people to take practical steps and change their leaders to act more boldly on climate. Organizers say that if 1 billion people take action, they could reduce as much as 20 percent of global carbon emissions.

Or you can sign up to the UN's #ActNow Speak Up campaign on climate change and sustainability.

Use your voice as a consumer to influence service providers and retailers. Most of all, make Climate Change an important issue when making voting decisions.

## SPREAD THE WORD AND INFLUENCE

- **Join Oikonomous as we try to become the leader of Texas churches in combating climate change.**
- **Pick an environmental issue you care about, decide on a specific request for change to your audience, then plan how to make it happen**
- **Your voice deserves to be heard!**



# CORPORATIONS GOING GREEN

- **Consumer demand is driving thousands of companies to adopt green standards**
- **Employees are demanding climate action**
- **Peer pressure is driving corporations to act**
- **Civic responsibility**
- **Government regulations**
- **WE need to support corporations that are making responsible climate choices**



**Why more and more companies are finally going green**

## CORPORATIONS JOINING THE FIGHT

- Alan Jope, CEO of the large multinational corporation Unilever, says that "**any company that hasn't already got a net-zero ambition of some sort should be ashamed of themselves,**"
- 
- Bill Gates, founder of Microsoft, sets a net zero goal for Microsoft, commits his fortune to moving the world beyond fossil fuels, and says, "**As awful as the COVID pandemic is, climate change could be worse,**"



## CORPORATIONS JOINING THE FIGHT

- **Unilever** focused on reusable and recyclable packaging.
- Brands including Dove, Sure, Lynx, Seventh Generation, Signal and REN Clean Skincare are being sold in refillable stainless steel and glass packaging



Unilever focused on reusable and recyclable packaging. The brands including Dove, Sure, Lynx, Rexona, Seventh Generation, Signal and REN Clean Skincare are being sold in refillable stainless steel and glass packaging, so that you'll be able to hold onto product containers and refill them. Unilever has committed to halving its use of virgin plastic by 2025 by reducing its use of plastic packaging and increasing its use of recycled plastic.

## CORPORATIONS JOINING THE FIGHT

- **Microsoft** has unveiled a plan to become "**carbon negative**" by **2030**, meaning it will take more carbon out of the atmosphere than it emits.
- By **2050** Microsoft plans to have removed all of the carbon from the environment that it has ever emitted since **1975**.
- In order to achieve this it has planned for its new buildings to run entirely on renewables, with the Microsoft 'corporate campus' aiming to be entirely zero-waste too.



Microsoft has unveiled a plan to become "carbon negative" by 2030, meaning it will take more carbon out of the atmosphere than it emits. By 2050 Microsoft plans to have removed all of the carbon from the environment that it has ever emitted since 1975. In order to achieve this it has planned for its new buildings to run entirely on renewables, with the Microsoft 'corporate campus' aiming to be entirely zero-waste too.

# CORPORATIONS JOINING THE FIGHT

## **Mattel, Lego, Hasbro**

- **Goals of:**
  - **Using 100% recycled, recyclable or bio-based plastic materials by 2030**
  - **Reducing landfill wastes**
  - **Lowering energy consumption**
  - **Using recycled packaging materials**



Ray: read

## CORPORATIONS JOINING THE FIGHT

**Alphabet Inc. Google's parent company**

- **All offices and buildings powered by 100% renewable energy.**
- **Issued a sustainability bond with all proceeds from the \$5.75 billion going to support environmental and social initiatives.**



**Alphabet Inc. Google's parent company and one of the most powerful corporations in the world**

**All offices and company buildings, are powered by 100% renewable energy,  
Removes an estimated 5 million tons of CO2 from the atmosphere each year.**

**The company also issued the largest corporate sustainability bond in history in August, with all proceeds from the \$5.75 billion injection going towards supporting environmental and social initiatives.**



## CORPORATIONS JOINING THE FIGHT

### Danone

- **Activia yogurts, Evian water and Alpro plant-based food and drinks,**
- **In US, reduced soil degradation and helped dairy farmers reduce water usage.**
- **Over 80% of Danone North America's packaging is reusable, recyclable, or compostable; plans to go worldwide**
- **Signed deals with wind and solar energy providers**



Ray: Danone The company produces Activia yogurts, Evian water and Alpro plant-based food and drinks. In the US, it has reduced soil degradation and helped dairy farmers reduce their water usage. Now it's using maize-derived poly-lactic acid (PLA) packaging for its Activia yogurts. More than 80% of Danone North America's packaging is reusable, recyclable, or compostable, which the company plans to rollout worldwide by 2025.

Danone has also signed deals with sustainable energy providers in recent years which will provide the company with wind-generated energy, and solar-powered electricity across its Spanish operations.

# CORPORATIONS JOINING THE FIGHT

## Boeing

- **Announced in January that its entire fleet would be 100% reliant on biofuel by 2030.**



## Boeing

Currently blends of up to 50% sustainable aviation fuel (SAF) and 50% conventional jet fuel are certified for use in aircraft, but

Boeing announced in January that its entire fleet would be 100% reliant on biofuel by 2030.

Boeing has to meet stringent regulations and engineering adjustment to jet system alterations, fuel-blending requirement changes and global safety certification

# CORPORATIONS GOING GREEN

## NIKE

- **The Nike Air range of trainers uses 50% recycled materials and diverts 95% of waste from landfills**
- **SB Dunk sneakers feature animal-free leather**
- **Nike powers 100% of its North American operations with renewable energy and to do so globally by 2025**



## NIKE

With some recycled materials being present in three-quarters of its products, Nike is striving for building sustainability.

The Nike Air range of trainers uses at least 50% recycled materials and diverts more than 95% of waste from landfills.

The SB Dunk sneakers feature animal-free leather.

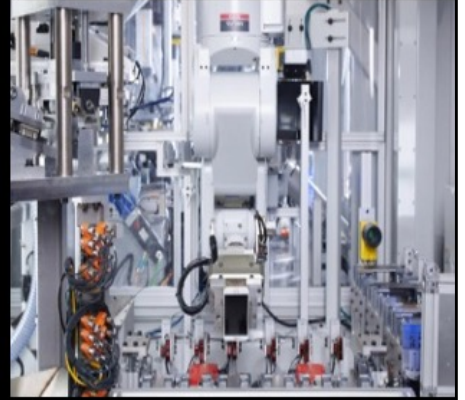
Nike powers 100% of its North American operations with renewable energy and is looking to do the same across its global operations by 2025.

The company has launched a "move to zero" initiative, which has set the goal of reducing carbon emissions across its global supply chain by 30% by 2030.

## CORPORATIONS JOINING THE FIGHT

### **Apple**

- **14 final assembly plants in China at zero-waste**
- **April 2018 the company was entirely powered by renewable energy**
- **Expanding its global recycling programs, with robots used to disassemble old products**
- **Fully carbon-neutral by 2030**



**Greenpeace named Apple as the most eco-friendly tech firm in the world for three years running between 2015-2017.**

**The 14 final assembly plants in China are all completely zero-waste, and in April 2018 Apple announced it was entirely powered by renewable energy.**

**Apple is currently working to expand its global recycling programs, with robots being used to disassemble old products so they can be turned into something new.**

**In July 2020, they promised to be fully carbon-neutral by 2030, a goal it hopes to achieve through low-carbon product designs, using renewable energy and planting forests to remove carbon from the atmosphere.**

# CORPORATIONS JOINING THE FIGHT

## Johnson and Johnson

- **Makers of Aveeno and Neutrogena brands, medicines, medical products**
- **Committed to making all packaging is recyclable, reusable or compostable by 2025.**
- **Operations are powered by 35% renewable energy and 100% by 2050.**



## Johnson and Johnson

The parent company of the Johnson's, Aveeno and Neutrogena brands, Johnson & Johnson has committed to making sure all packaging is recyclable, reusable or compostable by 2025.

Its operations are currently powered by 35% renewable energy, a figure it plans to increase to 100% by 2050.

# CORPORATIONS JOINING THE FIGHT

## Maersk

- **Danish shipping company powered by biofuel made from used cooking oil, from Rotterdam to China and back in 2019, saving an estimated 1.5 million kg of CO<sub>2</sub>.**
- **\$60 million research center to reduce carbon emissions across the shipping industry.**
- **Carbon neutral by 2050.**



## Maersk Danish shipping company

Danish shipping company Maersk hit headlines in early 2019 when it launched the largest ever eco-friendly shipping pilot.

Powered by biofuel made from used cooking oil, the cargo ship's maiden voyage saw it travel from Rotterdam in the Netherlands to Shanghai in China and back in July 2019, saving an estimated 1.5 million kg of carbon dioxide.

In June 2020, Maersk also announced it would be spearheading a \$60 million research center to reduce carbon emissions across the shipping industry.

The firm aims to be carbon neutral by 2050, and biofuels and funding research are two of the ways in which it may achieve this.



## CORPORATIONS JOINING THE FIGHT

### **Nestle**

- **Pod drop off: Leave the pods at 6,500 Yodel drop-off points across the UK**

### **Keurig**

- **Making pods of recyclable plastic.**
- **Directions on how to recycle**



### **Nestle**

As coffee pods continue to rise and become a problem for landfill wastes, Nespresso, which is owned by Nestlé, is making an attempt to tackle the rising number of discarded coffee pods and recycle them.

They are testing a program in the UK to leave the pods at 6,500 Yodel drop-off points across the UK for recycling.

Keurig announced that their pods will be made with recyclable plastic and the consumer simply needs to remove the cover, discard the coffee grounds, rinse it out and place it in recycle.

## CORPORATIONS JOINING THE FIGHT

### **IKEA**

- **98% of the wood used in its products either Forestry Stewardship Council-certified or recycled.**
- **Initiative in UK and Australia to buy back used furniture from customers offering vouchers for up to 50% of the item's original price, which can be redeemed in store.**
- **IKEA has also opened its first "energy positive" store in Adelaide, Australia, which generates more renewable energy than it uses.**
- **IKEA pledged to be entirely carbon negative by 2030**



### **IKEA**

**98 percent of the wood used by the Swedish furniture company is Forestry Stewardship Council-certified or recycled.**

**Ikea is tested and make permanent a buy back program of used furniture from customers in the UK, Portugal and Australia, offering vouchers for up to 50% of the item's original price, which can be redeemed in store. Buy back is not offered in the US yet.**

**IKEA has also opened its first "energy positive" store in Adelaide, Australia, which generates more renewable energy than it uses. IKEA has pledged to be entirely carbon positive by 2030.**