



# Drawdown Course

## Session 4:



# UPS AND DOWNS

- China is the largest users of electric buses.
- The largest producer and consumer of coal
- Electric vehicles are propelled by coal-derived electricity
- Battery costs have plummeted by 90% over the past ten years
- Batteries contain toxic heavy metals which pose environmental hazard if not properly disposed.

# THE 3 R's



- Reduce



- Reuse



- Recycle

Amazon Video

# THE 5 R's



- Refuse



- Reduce



- Reuse



- Rot



- Recycle

# Getting Young People Involved



Habitat Protection Project  
clean up in the woods behind  
Park Royal South in West  
Vancouver



**FIVE-MINUTE BREAK**

# Three Measures Which Can Help Us Reduce Our Negative Impact On The Earth



ECOLOGICAL FOOTPRINT

CARBON FOOTPRINT

ECOLOGICAL HANDPRINT

# How Can We Reduce Our Ecological Footprint?

- Learn the 5 R's: Refuse, Reduce, Reuse, Rot, and Recycle
- Reduce water usage
- Reduce waste
- Switch to renewable energy
- Eat less meat
- Recycle responsibly
- Drive less

# How Can We Reduce Our Carbon Footprint?

- Reduce use of single-use, disposable plastic items such as plastic bags, plastic water bottles, cutlery, cups, plates etc
- Drive less and walk or bike more
- Use public transportation and carpool
- Switch to sustainable, clean energy
- Make sure your home is well insulated

# How Can We Increase Our Ecological Handprint?

- Volunteer with a conservation organization
- Start or join a group that encourages your municipal government to enact green measures
- Choose produce and other food varieties that are not wrapped in plastic
- Conduct cleanups at the beach or in the woods
- Use natural cleaning products: baking soda and vinegar
- Upgrade appliances in your home
- Support local farmer markets

Our Goal Is To Shrink Our Footprint And  
Increase Our Handprint

# What's Next for You

- Talk to everyone you know about the Drawdown Solutions
- Go to environmental websites
- Send HPP an email if you have suggestions for a group or would like to start a group.



# The Habitat Protection Project

*“Encouraging individuals to participate in the rebalancing of nature, one habitat at a time.”*

[www.habitatprotectionproject.org](http://www.habitatprotectionproject.org)



thehabitatprotectionproject



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# How Much Do You Know About Solving Global Warming?

Tatiana Schlossberg, New York Times, June 12, 2007

# How We Eat

What do you think would reduce greenhouse gas emissions more: if half the world switched to a plant-rich diet or if clean cook stoves, which reduce emissions of carbon dioxide, were adopted on a large scale in the developing world?

Eat More Plants

Clean up the  
stoves

## Eat More Plants

“Drawdown” ranks plant-based diets as the No. 4 climate change solution over all. Globally, food production – and the production of meat in particular – produces around the same amount of greenhouse gases as power plants. So eating less meat can lead to savings on emissions.

# How We Get Around

Do you think that getting more people to use mass transit would have a bigger or smaller impact on emissions than making the shipping industry more fuel efficient?

Hop on the bus

Ships Ahoy

## Ships ahoy

Aye, aye, captain! More than 80 percent of global trade by volume travels by ship, so getting even half the fleet to be more fuel efficient could save millions of barrels of oil.

# How We Use Energy

Which holds more promise: building wind farms or solar farms?

Go like the wind

Let the sunshine  
in

## Go like the wind

HOW WE LIVE

Yes. Both of these sources of renewable energy are extremely important in slowing global warming, but onshore wind turbines is even more effective than solar farms. Both are expensive to build, but they can also provide vast savings in the long run: more than \$10 trillion over the next few decades if installed at a wide scale.

What about green roofs and cool roofs? Green roofs provide natural insulation by growing plants on top of buildings, and cool roofs reflect solar energy back into space. They help save on heating and cooling costs. How do you think installing these roofs compares to almost exclusively using LED light bulbs in homes?

Change your roof

Get new light  
bulbs

## Get new light bulbs

LED bulbs use 90 percent less energy for the same amount of light than traditional incandescent bulbs. If most light bulbs were switched to LEDs, it would save about 10 times as much energy as if 90 percent of all roofs were either green or cool.

Waste less water  
#46

Restore #5  
tropical forests

Manage  
refrigerants #1

Recycle more  
paper #70

It turns out that changing how we use and dispose of refrigerants – the chemicals used in refrigerators and air conditioners – has the potential to reduce greenhouse gases more than any of the other 99 strategies in the book. When these chemicals leak or are improperly disposed, they are thousands of times more potent than carbon dioxide in warming the atmosphere. The 2016 Kigali Accord, signed by 160 countries, could reduce the emissions from refrigerants by 87%.

# Final Question

What's the No.1-ranked solution for fighting climate change?

Waste less water

Restore tropical  
forests

Manage  
refrigerants

Recycle more  
paper