



A Year of Living Sustainably

FB: @GreenCincinnatiPlan
Twitter: @living_year



Welcome and introduction



Ice-breaker: Ask participants to get into small groups or pairs and do 3 things:

1. Share something about themselves (be authentic – it could be your job, a nickname you have, the best Christmas gift you got)
2. Identify one pro-environment behavior you already practice (turning off the lights when you leave home, using a reusable travel mug, eating less meat, anything! If people are having trouble identifying a behavior, they can ask other members of the group for inspiration)
3. Tell the group what they'd like to get out of the day's session (make a note of anything that is mentioned but not included in the presentation so you can follow up where appropriate)

Have people report back about their conversation



3 of our 4 adult children (two live out of state) embraced the gift of "presence" over "presents." And the opportunity to discuss the options, rather than the "same old gifts," generated good conversation.

I enjoy experiences more than "things" so I assume others do as well, so it was fun to think of gifts like that. I also enjoy being creative with gift wrap by using old mail, maps, newspaper and nature items found in my yard.

Wrapping with things you already have, or even using a gift as the "wrapping" (i.e. a blanket, backpack, etc.) is easy and fun and just makes sense.

Introduce the 'Year of Living Sustainably' Campaign. Our goal is to provide individuals with the tools they need to connect with the 2018 update of the Green Cincinnati Plan. One of the 'measurable goals' of the GCP is to 'increase by 10% the number of people who can name 3 things they are doing to protect the environment.' More on this later.

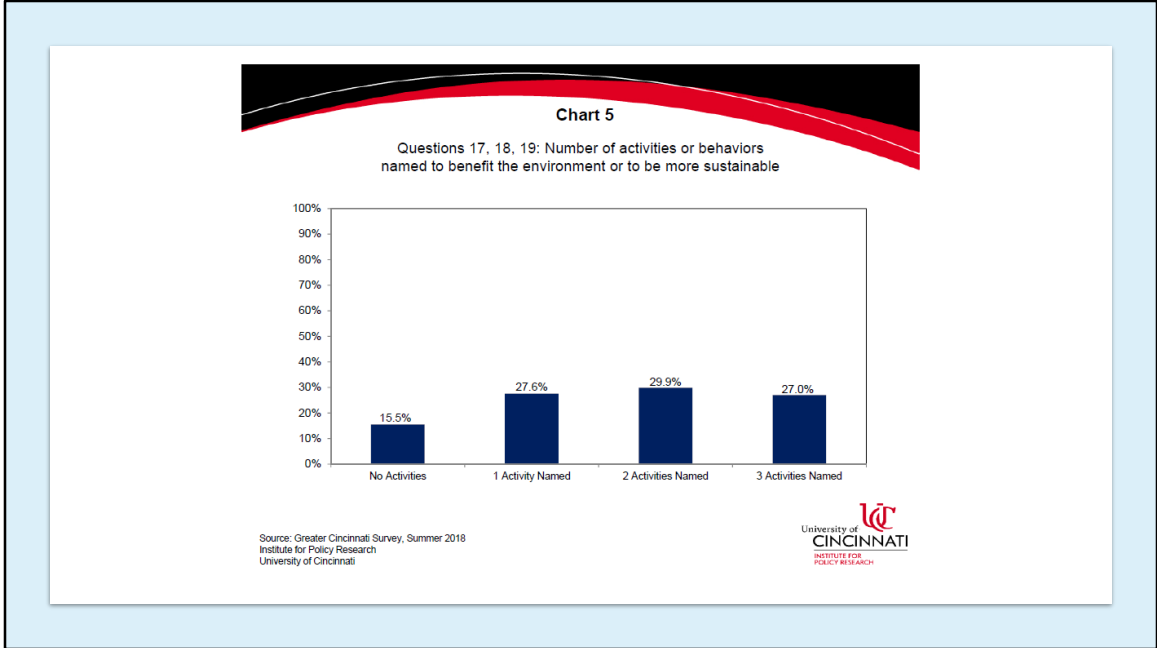
There are lots of ways to get involved:

1. Pledge to try a new sustainable behavior for 30 days. You'll be entered in a raffle to win a prize and at the end of the month you'll be sent a survey asking about your experience. After that it's up to you if you want to continue your new behavior—the idea is to find something that works for you and your lifestyle, so if your January pledge didn't work out, you'll get to try something new in February! Hopefully, by the end of 12 months you'll have found AT LEAST 3 pro-environment behaviors that you enjoy doing.
2. Educate yourself and others. You can attend an event like this one, organize an event at your work place, school, or community gathering, or even host your own YOLS event! OES is happy to provide whatever resources and support we can! You can also get daily tips on our monthly topics by following up on Facebook (@GreenCincinnatiPlan) or Twitter (@living_year).

3. Recognize or become a community 'Leader in Sustainability'. Take on a role in your community helping to 'green' existing events (i.e. providing recycling bins, limiting single-use plastics) and even throwing a few of your own (i.e. a clothing swap, a neighborhood clean up). If you know someone who is already doing great things to help their environment and community, let us know by nominating them for a 'Leader in Sustainability' award!

Invite participants to define what 'sustainability' means. (From Wikipedia:

"Sustainability is the process of maintaining change in a balanced environment, in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations. For many in the field, sustainability is defined through the following interconnected domains or pillars: environment, economic and social.")



The University of Cincinnati conducts The Greater Cincinnati Survey (GCS) of residents of metropolitan Cincinnati twice a year. The GCS is operated on a cost-shared basis and gives policymakers, researchers and not-for-profit organizations an opportunity to gather reliable data in a cost effective manner. The OES purchased two questions in the most recent survey: “What one activity or behavior do you currently do most often to benefit the environment or be more sustainably?” Participants who were able to give an answer were then asked for a second and third activity.

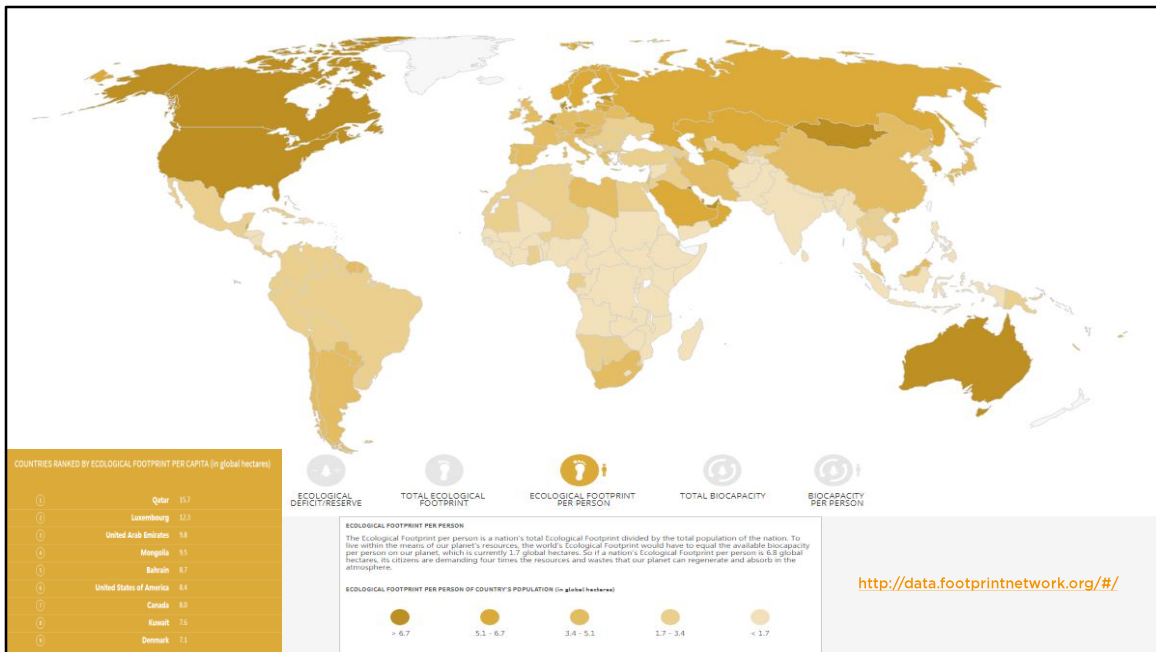
One of the measurable goals of the 2018 GCP is to raise by 10% the number of residents who can name 3 things they are doing to benefit the environment or live more sustainably. Here’s where we are now, and here’s to hoping this group can move the needle for 2019’s survey!

(The second question was, “During the past week, how many servings of meat did you eat?”)



This month's topic is 'Introduction to Sustainability'. We want to examine the lifestyle changes you're already making as your New Year Resolution and help you identify a 'leverage point' for your next step on the path to sustainability.

By a show of hands – How many people have a New Year's Resolution? Invite a few people to share theirs.



A good place to start your journey towards sustainability is to understand your ecological footprint. **Ask for someone to give their definition of an ecological footprint.**

What's the difference between an ecological and carbon footprint?

A carbon footprint is the amount of greenhouse gases—primarily carbon dioxide—released into the atmosphere by a particular human activity.

It's measure can be limited by a number of factors: number of people, types of activity, types of GHG (could be carbon dioxide alone or include methane, nitrous oxide, etc.)

An ecological footprint measures the ecological assets that a given population requires to produce the natural resources it consumes and to absorb its waste, especially carbon emissions. Essentially, it gives us an idea of Earth's 'carrying capacity' – how many people could live here if they consumed different amounts.

The map above shows how many hectares per person of land would be required to meet the consumption demand of an average citizen. The biocapacity for the US in 2014 was 3.6 gha (that is, we have enough land and resources to support the 2014 population with 3.6 hectares per person); the average consumption was 8.4 gha

(meaning we would need 8.4 hectares for every person to meet food, water, and energy demands).

Invite your audience to share their observations. What are the key takeaways?

- *While many people like to point at China and India as big polluters (and they do produce more CO₂ than the US, when calculated on a per capita basis, the average Chinese or Indian person consumes much less than the average American.*
- *While Canada has a similar footprint to the US (8.0 versus 8.4), they have more land and resources than the US, and so have a carrying capacity of 15.4 gha/person*
- *When you consider consumption and natural resource that actually offset global warming – Brazil, Canada, and Australia to name a few. However, on a global scale this doesn't really mean much– while Brazil has enough rainforest to absorb more carbon than it produces, the amount of 'carbon debt' produced by other countries puts us at a global deficit.*

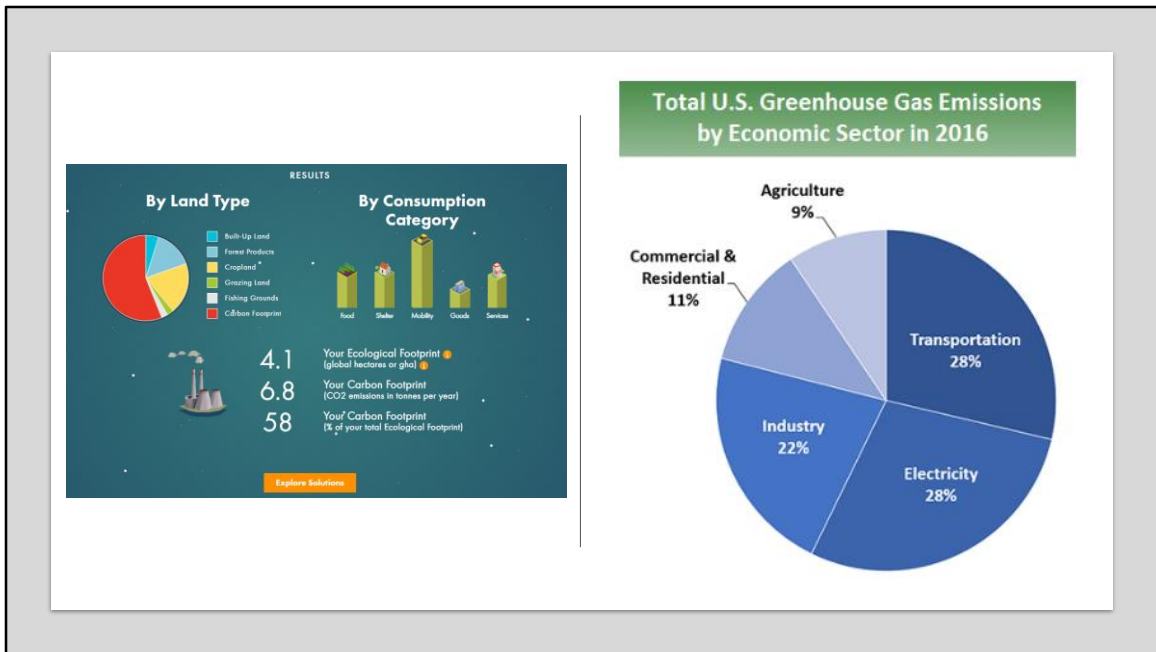
I highly recommend that you and your audience check out this very interesting interactive tool (where the image and data above was sourced):
<http://data.footprintnetwork.org/#/>



Have your audience log on and calculate their ecological footprint. Or, if they don't have smartphones or an internet connection, you or one of the participants can take it on screen as an example: <http://www.footprintcalculator.org>

Did any questions surprise them? Once you or the audience has calculated their ecological footprint, ask, “**Which of your daily activities do you think contributes most to your ecological footprint?**” Click ‘Details’ to learn more.

Discuss takeaways in small groups.



Source: <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>

Here is the EPA's data on GHG emissions from 2016.

- Over half of the emissions from transportation come from passenger vehicles and light-duty trucks (that is, non-commercial use).
- When it comes to electricity, coal combustion is by far the most carbon-intensive production of electricity. Coal accounted for about 67 percent of CO₂ emissions from the sector, but represents only about 32 percent of the electricity generated in the United States in 2016. Other sources of electricity are natural gas (33%), renewable and nuclear power (21%) and petroleum (>1%).
- The industry section represents the emissions associated with the production of the goods and raw materials we use every day.
- The residential and commercial sectors include all homes and commercial businesses (excluding agricultural and industrial activities). This figure includes direct emissions (fossil fuel combustion for heating and cooking needs, management of waste and wastewater, and leaks from refrigerants) and indirect emissions that occur offsite but are associated with use of electricity. See footnotes for more information about which commercial and residential activities produces which GHGs¹.
- Management of agricultural soils accounts for over half of the emissions from the

Agriculture economic sector. Application of synthetic and organic fertilizers, the growth of nitrogen-fixing crops, the drainage of organic soil, and irrigation practices result in emissions of nitrous oxide. Livestock, especially ruminants such as cattle, sheep, and goats, produce methane (CH₄) as part of their normal digestive processes. This represents almost one third of the emissions from the Agriculture economic sector. Other sources of Agricultural emissions include manure management (15%), liming and urea application, CH₄ from rice cultivation, and burning crop residues.

So how does this translate to YOUR lifestyle? Ask your audience to match the following to the sector represented on the chart: what you eat (agriculture), how you get around (transportation), how you power your home (electricity), and what you buy (industry).

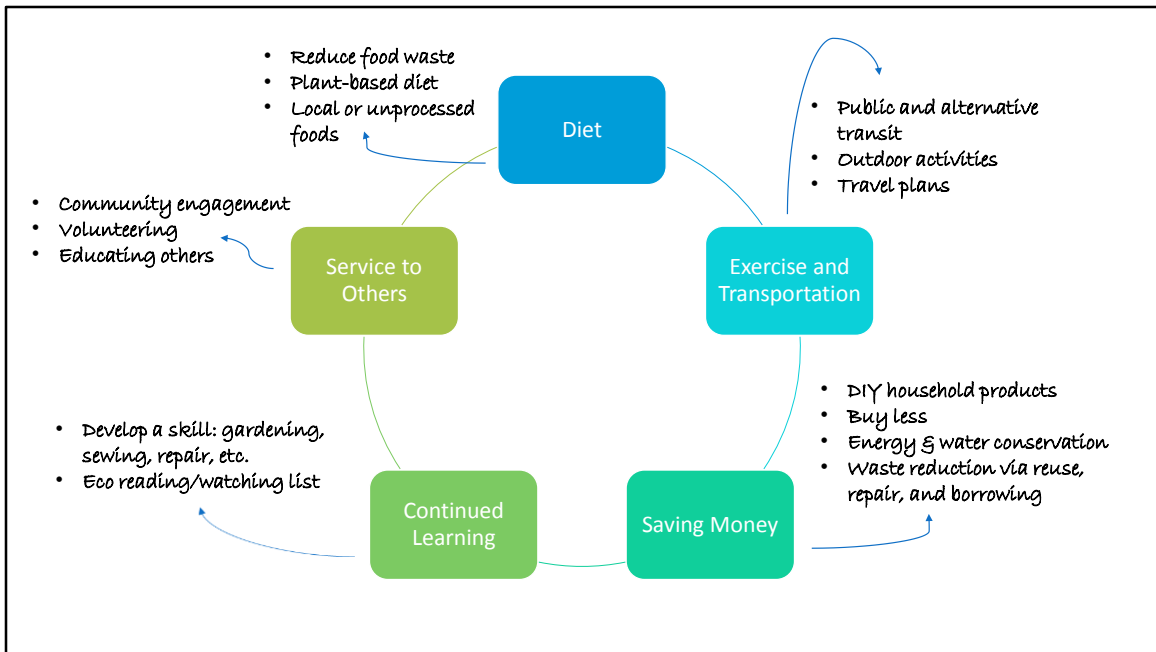
<https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>

1. *Combustion of natural gas and petroleum products for **heating and cooking** needs emits carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Emissions from natural gas consumption represent about 78 percent of the direct fossil fuel CO₂ emissions from the residential and commercial sectors. Coal consumption is a minor component of energy use in both of these sectors.*

Organic waste sent to landfills emits CH₄.

Wastewater treatment plants emit CH₄ and N₂O.

Fluorinated gases (mainly hydrofluorocarbons, or HFCs) used in **air conditioning and refrigeration** systems can be released during servicing or from leaking equipment.








Here we've identified 5 common topics that encompass most people's New Year's Resolution. For those participants who have a resolution, try to determine where it fits (There will be some overlap. Packing a healthy lunch could fit into 'saving money' and 'diet', losing weight could fit into both 'diet' and 'exercise and transportation'; have participants choose which topic interests them more). For those who do not have resolutions, ask them to identify which area for self-improvement appeals to them the most.

Have the audience break into 'affinity groups' for the topic they would like to discuss. The goal for each group is to identify 3 or 4 pro-environment actions or habits that fit the category. Feel free to use the text in black for inspiration.

After they've brainstormed a few ideas, ask them to share their ideas with the larger group. Hand out Fact Sheets for each affinity group and give them 5-10 minutes to discuss the information. They can use the following questions for guidance, or simply direct the conversation however they like.

1. Do you have any questions about this topic? (i.e. why is composting any different than sending food to a landfill)

2. Is any of this information surprising to you?
3. Do you have any experience with the behaviors you named earlier? Share them with the group.
4. What do you think will keep you motivated to stick to your resolution?

	<p>Diet</p> <ul style="list-style-type: none"> • 1 Week Food Challenge – audit your food waste and get tips for reducing food waste • List of Local Farmer's Markets and Local Recipes by Green Umbrella • International Vegan Union – Plant based recipe database and Local Harvest – CSA database
	<p>Exercise and Transportation</p> <ul style="list-style-type: none"> • Red Bike and MOBO – Bikeshare and Free store for repairing/building bikes • Zipcar and Share – Car share and carpooling service for UC students • Oggo and Gest – Free transportation Downtown
	<p>Saving Money</p> <ul style="list-style-type: none"> • Freecycle, Craigslist, Vargate Sale • Simply Zero and The Green Store • Building Value, HH Restore, Saint Vincent de Paul, etc.
	<p>Continued Learning</p> <ul style="list-style-type: none"> • Village Green Foundation – Community Garden and Lecture Series • The Environmental Literacy Council – Directory of museums, books, and resources by topic • The Oak Garden Center – Classes on organic gardening, composting, cooking, and more!
	<p>Service to Others</p> <ul style="list-style-type: none"> • Keep Cincinnati Beautiful – Organizes volunteer cleanups • Green Umbrella Action Teams - Meet monthly to share info and drive progress • People Working Cooperatively – Weatherization and mobility modifications for low-income households

Reconvene the group and invite people to share what they enjoyed about the conversation. **Tell participants that they should start to think about one action or behavior that they want to commit to doing for the next 30 days.** Encourage them to consider factors like time, energy level, season, and their daily habits. Lofty goals are great, but it's unlikely anyone is going to installing solar panels by the end of the month- remember that this campaign focuses on small steps and for many people this is only the first step of many.

Take a moment to go over the list of resources available. This information can be found on OES' website, or if people have specific questions or needs they can contact Liz and liz.congleton@Cincinnati-oh.gov. **Invite participants to share any resources we might have missed.**

Resources

Diet

Meat Eater's Guide To Climate Change and Health:

<https://www.ewg.org/meateatersguide/a-meat-eaters-guide-to-climate-change-health-what-you-eat-matters/reducing-your-footprint/>

University of Michigan U.S. Food Systems Fact Sheet:

http://css.umich.edu/sites/default/files/U.S._Food_System_Factsheet_CSS01-06_e2018.pdf

National Resource Defense Council Food Fact Sheet:

https://www.nrdc.org/sites/default/files/eatgreenfs_feb2010.pdf

Mission.org article *Is Going Vegan Actually impacting Climate Change?:*

<https://medium.com/the-mission/is-going-vegan-actually-helping-battle-climate-change-733d946b5226>

'1 Value Food Challenge': <https://challenge.ivaluefood.com/>

2018 List of Farmer's Markets: <https://cincinnati.citymomsblog.com/farmers-market/>

International Vegan Union: <https://ivu.org/recipes/>

VegWeb: <http://www.vegweb.com/recipes>

Green Umbrella Local Food Recipes: <https://www.greenumbrella.org/Local-Food-Recipes>

Local Harvest, CSA Database: <https://www.localharvest.org/cincinnati-oh/csa>

Exercise and Transportation

US EPA Article *What You Can Do to Reduce Pollution from Vehicles and Engines:*

<https://www.epa.gov/transportation-air-pollution-and-climate-change/what-you-can-do-reduce-pollution-vehicles-and-engines>

US Department of Energy *Tips for Driving More Efficiently:*

<https://www.fueleconomy.gov/feg/driveHabits.jsp>

American Public Transportation Association Fact Sheet:

<https://www.apta.com/mediacenter/ptbenefits/Pages/FactSheet.aspx>

Walk Score: <https://www.walkscore.com/>

Vacation travel Carbon Guide:

https://www.ucsusa.org/sites/default/files/legacy/assets/documents/clean_vehicles/vaca_trav_carbon_guide.pdf

Zimride @ UC: <https://www.zimride.com/uc/>

Metro: <http://www.go-metro.com/>

GEST: <http://www.gestcarts.com/>

Zipcar: <https://www.zipcar.com/universities/university-of-cincinnati>

Saving Money

morningchores.com *50 Products You Can Make at Home to Save Money (and Be Healthier):* <https://morningchores.com/homemade-products/>

Energy.gov *10 Energy Saving Tips for Spring:* <https://www.energy.gov/articles/10-energy-saving-tips-spring>

TheSimplifiedDollar.com *13 Ways to Save Money and Protect the Planet:*

<https://www.thesimplifieddollar.com/13-ways-to-save-money-and-protect-the-planet/>
www.freecycle.org

<https://www.simplyzero.co/>

Continued Learning

Wiki List of Environmental Films:

https://en.wikipedia.org/wiki/List_of_environmental_films

Environmental Literacy Council Directory: <https://enviroliteracy.org/>

Civic Garden Center - <https://www.civicgardencenter.org/>

Public Library Spotlight on Going Green:

<https://www.cincinnati.library.org/features/goinggreen.html>

Cincinnati Zoo Community Engagement: <http://cincinnati.zoo.org/conservation/go-green/community/>

Village Green Foundation: <http://www.northside.net/GetInvolved/VillageGreen.shtml>

Service to Others

Keep Cincinnati Beautiful: <http://www.keepcincinnatibeautiful.org/>

Green Umbrella Action Teams: <https://www.greenumbrella.org/action-teams>

People Working Cooperatively – <http://www.pwchomerepairs.org/support-pwc/volunteer.aspx>

A Year of Living Sustainably
I pledge to...

do my part to build a sustainable, equitable, and resilient Cincinnati!

city of
CINCINNATI
ENVIRONMENT & SUSTAINABILITY

Building a Sustainable, Equitable & Resilient Cincinnati.
2018 Green Cincinnati Plan
Visit www.cincinnati-oh.gov/oes to learn more.

With their recent discussion and available resources in mind, ask audience members to take a pledge. **Then go around the room and share them.** Remind everyone that we're here to support one another and keep each other accountable.

Our monthly surveys consistently show that 'forgetfulness' is the biggest barrier to most people successfully completing their pledges. Put pledgers in pairs (preferably with someone new) and ask them to share their pledge and their strategy for stay accountable with someone. This is their 'accountability buddy', so when tell participants that when we meet next month they should be prepared to tell their buddy about their experience.

Collect the pledges and distribute Post-It notes (optional) ask everyone to 'check-out' with one thing they learned from today's discussion OR one 'goal' they have for their engagement with YOLS (i.e. share what they learned with family members, bring a friend to the next meeting, nominate a community member, or ask about hosting an event at their workplace). Have them write it on a post it note and stick them onto a wall or into their planners. Once they've accomplished their goal, they can take down the note.