## Building resources – the greening of home, community and work

#### What is green? (It is not just a color!)

The ultimate goal of the Greening of America is to reduce or reverse the effects of human activity on the environment

- Reduce greenhouse gases
- Replace responsibility of manufacturers for 'cradle to grave' with 'cradle to cradle'

#### Sometimes greening means:

- no lead is the only good lead (substitution or elimination)
- keep electronics out of landfills (recycle and reuse)
- use wind or solar (constantly renewed, lower air pollution when in place)
- be more efficient with energy use (conservation)

This is a major shift in thinking, and impacts all of us. We are each part of the solution, every day.

#### Using resources during this exercise, you will

- List what you are doing that is green or could be greener (Activity 1)
- Review opportunities and successes in green areas important to you (Activity 2)
- Develop a plan to increase green (Activity 3)

This exercise is interactive and you are encouraged to provide feedback. We hope you will share your experiences with implementing the plan developed to increase green. This will help us document successes and improve training for others by improving information on approaches to potential challenges. We are evaluating training so that it can be improved for the next participants.

### Activity 1 – What are you doing that is 'green' or could be 'greener'?

This activity is opportunity to think about every-day activities where you are or would like to 'be more green'. For example, you may be recycling, but would like others in your family to consistently put aluminum cans in the correct place or you have changed to the use of energy-efficient light bulbs. The facilitator will introduce two resources.

#### Resource 1 – Green terms and examples of approaches

#### Resource 2 – Hierarchy of Controls for hazard reduction

Resource 1 is a listing of terms; Resource 2 is an outline of approaches that may be used to reduce waste and increase green.

Work in small groups and discuss what you are thinking about doing that will be greener.

Use the chart below to show each activity that is being 'greened' (use your own experiences and Resource 1), how the change is/will be made (see Resource 2 as appropriate), whether your activity eliminates waste (high level of greenness) or reduces waste (more green than now/past) and put a check in the column if this is ongoing or planned. Is this at work or home/leisure?

One of the group members should be ready to report back the work of the group to all participants.

		Level of 'g	green' ⁄ed	Sta	atus	Loc	ation
Activity	How is change made?	High ++++	More ++	On- going	Plan to do	Work	Home/ Leisure

#### Activity 2 – What's green at your work or in your community?

Continue to work in small groups and use technology and Resource 3 to find green successes or opportunities near you. Complete the table below, showing the option/activity, what is made 'greener' and who is impacted.

		Who is im	pacted?
Option/Activity	What is 'greener'?	Resident	Worker

As a total group, make a summary of activities.

Now, think about what you might want to do over the next few months to increase green-ness, as a follow up to what you have discussed in this exercise. Complete the table below:

Possible activity	Yes	No/ don't know
Get more information for myself or a friend at work		
Get more information for myself as a resident		
Organize with my neighbors to green the neighborhood		
Advocate to increase green at work		
Advocate to increase green in my community		
Other:		

The next step: make a plan!

#### Activity 3 - Make a plan to contribute to 'greener'.

From the list of possible activities to increase green from Activity 2, form groups with a similar goal and formulate a plan to achieve the goal. Work in small groups to develop a plan and timeline.

- What are the steps you need to work toward the goal?
- What barriers do you expect? How can these be overcome?
- What is the measure of success at each step of your plan?
- Who is responsible for each part of the plan?

Use the Worksheet provided (or use your own format) to organize your plan.

#### Personal plan example (I own all steps and will complete in two weeks)

Goal: Identify where locally to safely dispose of old paint

Actions: Search local government website; if not found, search county, then region

• Take my paint to the designated site (delay: only open June-October)

Share experience with training center:

- Where did you find location?
- You disposed of your paint?

#### Report back to the larger group regarding the

- planned steps
- who owns each step
- strategies to overcome barriers
- timeline

We hope you will provide feedback to us as the plan progresses, so we can improve training and document successes from the training. Identifying barriers that are encountered is also important and this information will be used improve training. Our goal is to improve training.

#### Resource 1 - Green terms and examples of approaches

#### Advanced biofuels for transportation, power generation

 Organic matter that can be broken down into usable, combustible fuels such as methane. Examples include sugar, sweet sorghum, switch grass, algae

#### **Clean Technology**

- Make chemicals used in industry, household and personal care products using sources other than crude oil/petroleum
- Replace a chemical with a less hazardous chemical

#### **Cradle to Cradle**

 Establishing and implementing processes that generate no waste, or the waste can be reused/recycled/repurposed

#### **Energy Efficiency (examples)**

- Lighting efficient bulbs and 'on when enter' sensors
- Thermostat controls heat and chilling
- Ratings: Appliance, automobiles
- Use less turn off lights or energy-drawing systems when not in use
- Use appliances during non-peak hours
- Use sleep modes
- Replace legacy equipment with more efficient models
- Energy audit with follow up actions

#### Green

Reduce or reverse the impact of human activity on the environment

#### **Green Chemistry (sustainable chemistry)**

 Design of processes and chemical products that eliminate or reduce the generation of hazardous wastes. Green chemistry spans the entire life cycle of a product.

#### **Green Building Guidelines**

- LEED Certified Buildings
- National Association of Home Builders Green guidance

#### **Green purchasing/procurement**

- Considering the impact on the environment of each purchase
- Considerations:
  - Can unused product be safely reused/recycled/repurposed/composted?
  - Does it contain recycled material?
  - Minimal packaging
  - Produced locally
  - Minimize quantity requiring hot/cold storage

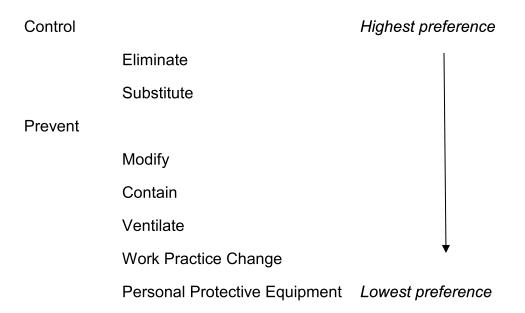
#### **Green Transportation**

- Reducing or eliminating use of fossil fuels
- Examples:
  - Bicycles or pedestrian travel
  - Energy-efficient vehicles—hybrid and electric cars
  - Car sharing
  - Public transportation—bus, train, streetcars, subways
  - Alternative fuels and electric car public infrastructure
  - Include walking options in community design/redesign

#### **Renewable Energy**

- Energy from sources that are continuously replenished.
- Examples:
  - Wind, Solar, Geothermal
  - Waste Heat, Agricultural Waste

#### **Resource 2 - Hierarchy of Controls for Hazard Reduction**



This scheme illustrates that the best and surest approaches to hazard reduction is to eliminate the exposure or substitute a lesser hazard; the prevention strategies rely on modifying the process, contain (build a box), removing through ventilation, a change in work practice that must be done diligently (day after day) or use of personal protective equipment (that may not be 100% effective even when used and maintained diligently).

#### Resource 3 – Find a Green success near you:

#### See what restaurants owners can do:

- www.dinegreen.com to search for a restaurant
- <a href="http://www.dinegreen.com/certification-standards">http://www.dinegreen.com/certification-standards</a> for the rating scales

#### See what building owners can do:

- Residential: <u>www.nahb.org</u>; click on "Consumers"
  - Find builders/remodelers in your area at this site
- Commercial: <a href="https://new.usgbc.org">https://new.usgbc.org</a>; click on "Directory"
  - Find Organizations, People, and Projects in your area

#### See what green industries are growing jobs in your area:

https://www.sustainablebusiness.com/greendreamjobs/jobs/

https://greenumbrella.org/Green-Jobs

http://www.greenjobs.net/

Urban development Health Risk Assessment: <a href="https://www.cdc.gov/healthyplaces/hia.htm">www.cdc.gov/healthyplaces/hia.htm</a>.

#### See what industries can do:

https://www.uml.edu/Research/Lowell-Center/

Do you know company personnel who might be interested in these successes?

www.epa.gov/dfe/product label manuf.html

www.epa.gov/epp/pubs/greenguides.htm

Do you know company personnel who use these sites to buy greener?

#### Find the principles of green chemistry

https://www.epa.gov/greenchemistry

How might this be used in industry?

#### **Guidance for small businesses to increase green**

www.epa.gov/osbp/greening.htm

Do you know a small business that could use this information?

All websites accessed May 5, 2019

# Worksheet: Build a plan

Goal:

Plan action item		Who 'owns'	Anticipated barriers and approach	Date to be completed	Reason for Delay	Date done
Action 1						
Action 2						
Finalize work plan and set deadlines for each	•					
additional action	•					
	•					
	•					
	•					
	•					
	•					
Report final results to participants/community						
Report results to Training Center						