

We can reverse climate change and improve earth's systems. You can work locally to foster connections, change behaviors, and improve infrastructure. In this guide, you will see where you fit within Earth's complex systems. You'll review important background materials to give you global context. First you will review the 17 sustainable development goals that 192 countries have agreed to make progress toward by 2030. You will see how Bard is working to achieve sustainability goals in our Sustainability, Tracking, Rating and Assessment System (STARS) report for the Annandale campus. Second you will review the 100 solutions to climate change as measured, mapped and modeled in [Project Drawdown](#), and you will see how Bard is trying to achieve climate neutrality goals by 2035 in our Climate Action Plan. With this context, you'll get to work mapping your local systems by drawing a campus map, and seeing how to incorporate some of the elements you have reviewed. Third, you will map community stakeholders. Once you have these pieces in place, you will be able to create robust solutions that work for you and your community.

1) Review some key background information

Sustainability: visit Bard College's [sustainability report](#) and the [UNSDGs](#)

Climate: Review Climate Solutions on [Project Drawdown](#) and Bard's [Climate Action Plan](#)

2) Conduct a Mapping Exercise - Using a pencil & some salvaged paper, spend 10-20 minutes drawing a map of your campus. Focus on key places/roads/buildings and don't be too detailed (it's fine to google to see your campus layout).

Sustainability - add content chosen from some of the 17 SDGs that you think apply to your campus:



For example:

- Good Health & Well-Being – *where are natural spaces, and how do you access them?*
- Clean Water & Sanitation – *what is the drinking water source, where does wastewater go?*
- Affordable & Clean Energy – *what are the energy sources for campus buildings?*
- Responsible Consumption – *where do you eat & buy things? What's left behind & where does it go?*
- Life Below Water & Life on Land - *habitats– where are the streams, wetlands, intermittent woodland pools, puddles? How about forests, meadows, or shorelines? What native and non-native plants and animals use them*

Climate - add some content chosen from some of the (7) Drawdown themes.

1. FOOD - *Where do people eat, and where does food waste go?*
2. TRANSPORT – *What infrastructure is there that supports different modes of travel?*
3. LAND USE – *Where is the “natural capital” (forest, water, soil, open space)*
4. ENERGY – *What are the sources of energy that power, heat, and cool your buildings?*
5. BUILDINGS & CITIES – *where can you walk and bike? Where is your your water source and how it is delivered? Are there heat pumps, green roofs, LED lighting?*
6. MATERIAL – *How are materials handled? (Climate Solution #1– where are the refrigerants of concern?)*
7. WOMEN & GIRLS - *Does your school have any connections to these issues (women smallholders, educating girls, family planning)?*

3) Review Bard's Sustainability map (Map 1)

A definition of capital is “wealth in the form of money or other assets owned by a person or organization or available or contributed for a particular purpose such as starting a company or investing.” It is helpful to expand this concept of financial capital to include manufactured/produced, natural, human and social capital. Ensuring we pay attention to all forms of capital is the best way to ensure a sustainable future. **Map 1 Bard's Campus** includes three types of sustainability capital – (1) produced/manufactured, (2) natural, and (3) human. Now it's time to think more about social capital – the networks of relationships among people that enable our community to function effectively. Think about how capital extends beyond the College's property by looking at **Map 2 Region Around Bard Campus**. Next, fill in the **Map 3 Community of Place**. This community includes people brought together by geographic boundaries and include residents, political and non-governmental organizations and businesses.

4) Identify/ refine your idea - how you want to intervene in a system

You have reviewed sustainability and climate resources and mapped the community (including identifying potential collaborators). Among your collaborators you may find connections to the various forms of capital.

When you understand the system – the place, practices, people and policies - you can identify and roll out robust sustainability projects. Piloting projects can evoke passion and can drive change. You are now well-positioned to generate pilot project ideas. Refer back to your maps. You will probably need to draw them a second time to map how a particular problem you want to solve fits in your system. We've used disposable plastic bags for our first example but you could easily map out how to reduce single occupancy car miles, or ways to decrease food waste. You may need to talk to peers or stakeholders, do research or conduct an audit early in this process if you find big information gaps.

- PLACE - Where are plastic bags in our system?
- PRACTICES/PEOPLE - Who supplies, uses, re-uses, handles and disposes bags on campus and in the greater community?
- POLICY - Are any policies in place or projected at any levels of government?

Where can you intervene in the system? How do you intervene? Act with purpose and passion (yours and helping others find theirs).

- PURPOSE – what are the ways to rethink, reduce or re-use?
- PASSION – how do we get people to change? We can educate through lectures, movies or panels but building an audience is best served by integrating efforts into a larger outreach campaign. We also need to remove barriers in the way of the sustainable activity (this might be a collection bin that is missing or a lack of information). It helps to connect to values and emotions through art, games and challenges.

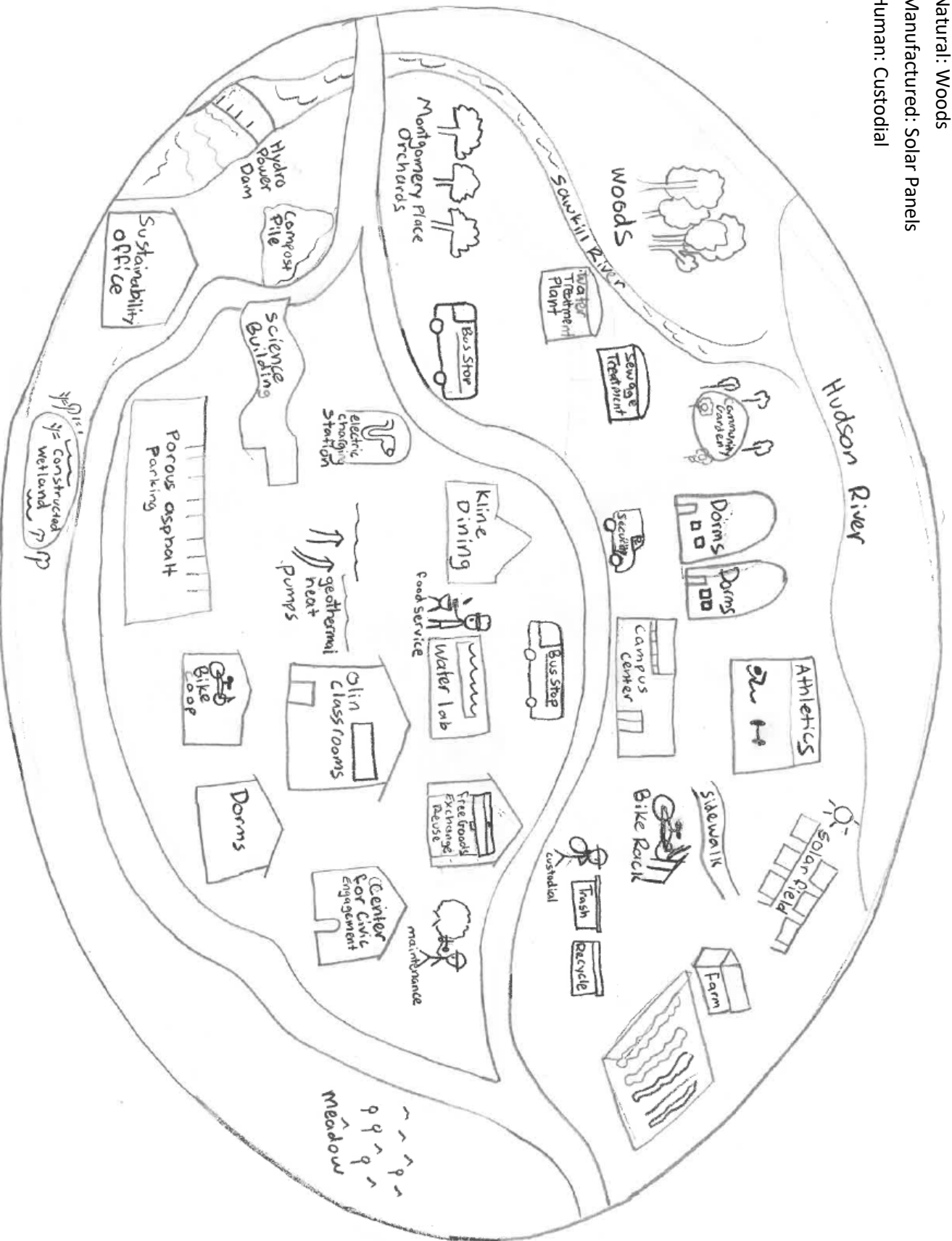
Institutional change can take time. A few last tips - Be sure to archive your work so you (and others) can learn and grow efforts over time. Get photos, quotes and pledges for use in marketing materials. You may want to focus on one “customer” in the beginning, like first year students. Make sure your outreach and efforts embody sustainable practices. For example, if you provide food at an event use the opportunity to buy healthy snacks from a local business. Keep growing your community map. Eventually repeat your efforts in other locations and extend to other customers, like staff. Have fun and reach out to the Bard Office of Sustainability for more information.

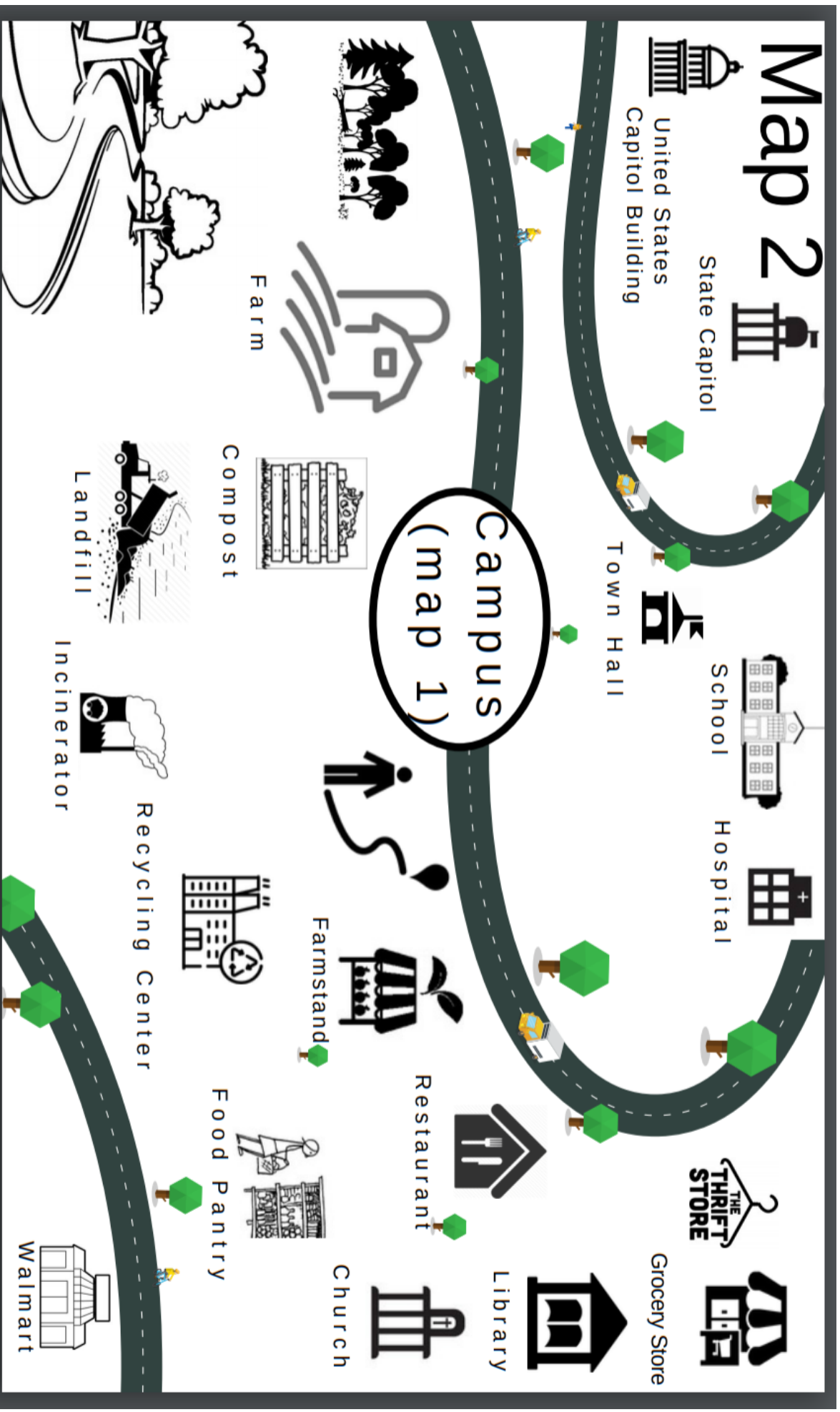
Attachments: Map 1 Bard Campus, Map 2 Region around Bard, Map 3 Community Stakeholders

Please share your materials with Laurie Husted, Chief Sustainability Officer for Bard College: husted@bard.edu, FB @BardOfficeOfSustainability, Instagram @bardsustainability, Twitter @BOSLaurie

Examples of three types of capital

- Natural: Woods
- Manufactured: Solar Panels
- Human: Custodial





Map 3: Community of Place

Social capital is generated by networks of relationships among people that enable a community to function. There are multiple types of communities. You can classify every type of community by the purpose that brings them together. The easiest to think about may be the community of place which is people brought together by geographic boundaries. Other communities are made up of people who share the same interest or passion, people in the same profession, or people brought together by external events.

We are looking at our **Community of Place** as a jumping off point:

Sector		Your Community
Government	Examples	Who represents your community?
<i>Federal</i>	(US) President, Congressional representatives	
<i>State</i>	(NY) Governor, Senator, Assembly	
<i>Local</i>	(NY) County Executive, County Legislator Town Supervisor, Town Board Village Mayor, Trustees	
Non-Governmental Organizations (NGO)	Examples	What organizations have formed in your community?
<i>Community-based Organizations</i>	sports clubs, women’s, neighborhood, religious or educational organizations (arise out of people’ own initiatives)	
<i>City-wide NGOs</i>	Rotary or Lion’s Club, Chamber of Commerce, coalitions of ethnic or educational groups and associations of community organizations, including GONGOs (government-organized)	
<i>National / International NGOs</i>	Red Cross, YMCA, Greenpeace, OXFAM, religiously motivated groups	

Businesses	Servicing, Merchandizing, Manufacturing	What businesses are present?
	Shopping & Retail	
	Lodging, Personal and Business Services, Automotive-related, Amusement and Recreation /Fitness Services, Health Legal, Educational, Social Services, Museums, Art Galleries, Botanical, Zoological Gardens, Membership Organizations Engineering, Accounting, Research, Management, Advertising	
	Finance, Insurance, Real Estate, Moving & Storage	
	Manufacturing	
	Agricultural, Forestry & Fishing, Agricultural Production Crops, Agriculture production livestock and animal specialties, Agricultural Services, Forestry, Fishing, hunting, and trapping	
	Transportation, Communications, Electric, Gas, And Sanitary Services	
	Wholesale Trade - durable and non-durable Goods	
	Transportation Services, Communications, Pipelines, Electric, Gas, Sanitary Services	
	Mining	
	Construction	
Utilities	Electric, gas, fuel oil, propane providers	