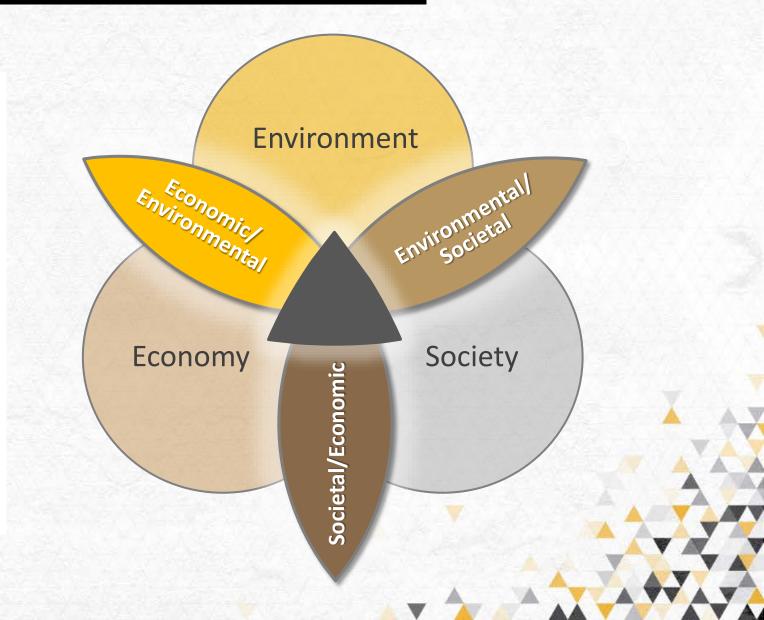


SLS' Approach to Creating Sustainable Communities

HOW DOES SLS APPROACH SUSTAINABLE COMMUNITIES?

1. As an Integrated System – with an emphasis on projects and initiatives that address two or more spheres



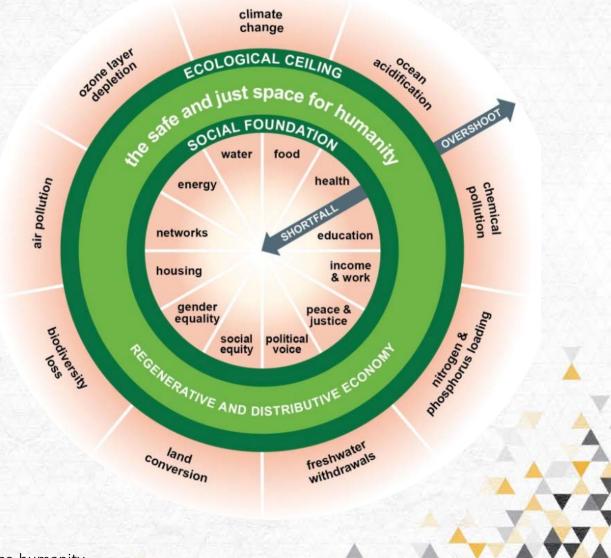
HOW DOES SLS APPROACH SUSTAINABLE COMMUNITIES?

With a special focus on Society, incl. Equity and Voice

"The overriding aim of global economic development must surely be to enable humanity to thrive in the safe and just space, ending human deprivation while keeping within safe boundaries of natural resource use locally, regionally, and globally."

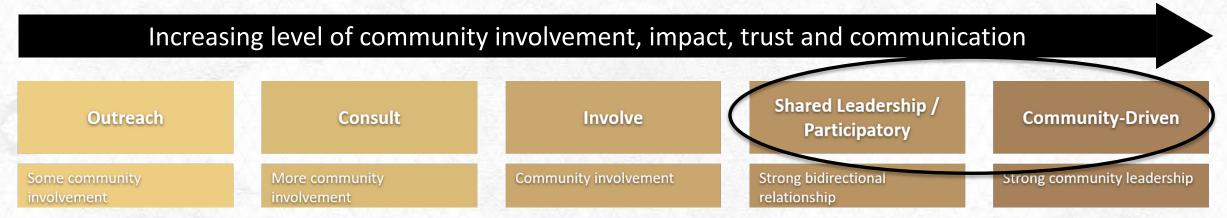
- Kate Raworth, Oxfam Doughnut

Website: http://www.kateraworth.com/doughnut/ Video: https://www.oxfam.org/en/video/2012/introducing-doughnut-safe-and-just-space-humanity



VOICE AND COMMUNITY ENGAGEMENT

Focusing on VOICE means supporting shared leadership and community-driven change

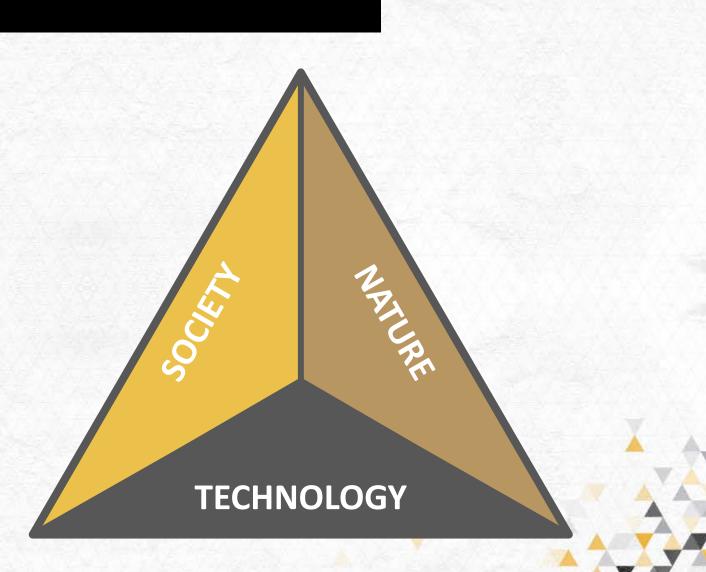


From <u>Schematic of Community Engagement Continuum (EPA, 2015; NCER CEnR Primer</u>; note that this is one piece of a larger diagram)

Read more about our Partnership Principles in our BIG IDEAS: <u>http://serve-learn-sustain.gatech.edu/big-ideas</u>

HOW DOES SLS APPROACH SUSTAINABLE COMMUNITIES?

3. And an emphasis on developing and using Technology to support community visions that benefit Society and Nature



HOW CAN TECHNOLOGY ASSIST COMMUNITIES IN SUPPORTING SOCIETY AND NATURE?

Address basic needs and advance equity

Nurture civic participation and amplify community voices

Strengthen social ties and other connections to place

Bolster human capital

Preserve cultural diversity

Nurture vibrant, diverse economies

Support local innovation, entrepreneurship, and ownership Protect natural resources

Preserve and restore biological diversity

Reduce energy use

Manage and recycle waste

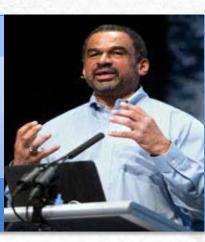
TECHNOLOGY

*Adapted in part from Jeffrey C. Bridger and A.E. Luloff, "Toward an interactional approach to sustainable community development," Journal of Rural Studies 15 (1999): 377-387

WHAT ARE SUSTAINABLE COMMUNITIES ANYWAY? WHAT ARE WE ASPIRING TO CREATE?

"Just sustainabilities is ...'the need to ensure a better quality of life for all, now and into the future, in a just and equitable manner, whilst living within the limits of supporting ecosystems'" - Julian Agyeman, Tufts University

- SLS does not have one definition of a "sustainable community"
- Rather, we bring diverse stakeholders together to continually create new visions of sustainable communities, and of the ways in which science and technology can help humans and nature flourish, now and in the future, in Georgia, the U.S., and around the globe
- With our strong emphasis on Social Sustainability, including equity and voice, we align well with the definition of "Just Sustainabilities" above from Julian Agyeman, Professor of Urban and Environmental Policy and Planning at Tufts University, who is a leading scholar on the intersections between justice and sustainability and a co-founder of the concept of "just sustainabilities"



SUSTAINABLE COMMUNITIES "BIG IDEAS" AT GEORGIA TECH – THIS IS HOW WE PREPARE STUDENTS TO DO THIS WORK

S	SERV	LEARN											
PARTNERSHIP PRINCIPLES			METHODS										
Honoring Multiple Ways		Valuing	Experimentation			Leadership			Community Research				
of Knowing Reciprocal Teaching and	Shared value		Scientific Method			Teamwork & Facilitative Leadership	Facilitative Values-Based		Prototyping Pr		n-Based ming	Design Thinking	
Learning	Asset-Based	Lona-Term	Environmental Assessme		nent	Sto	orytelling		nderstanding .ocal History	· · · · · · · · · · · · · · · · · · ·			
Doing Good in Your Neighborhood		Relationships	Ecological Footprint	IPAT Equation		Information Visualization			& Context Comm Ethnography		1000 C C C C C C C C C C C C C C C C C C	Participatory Research	
SUSTAIN			CONCEPTS										
ADAPTIVE LEARNING			Science & Technology				Governance						
Reflection		ng-Term Visioning	Social, Cultural & Environmental Context		Technology for Social Good		Voice & Agency	Democra Proces	Processes &		Managing the Commons		
Cognitive Flexibility Broad-Based Learning Communities		Urban Development				Systems							
		Smart Cities		Sustainable Urban Development		Infrastructure: Physical, Technological, Social		Social & Environmental Determinants of Health		Systems	Climate		
			Equity, Justice & Diversity			En anna Efficien		Life evole. This life		Thinking	Change		
GT as an Anchor Institution	Results-Based Social Accountability Entrepreneurship		Interconnectednes			Cultural,	Energy Efficiency		Lifecycle Thinking				
GT as a Living Lab	Local & Globa Collaborative Action		Environmental Justice		uity & imate	Linguistic & Biological Diversity	Rebound Effect Spatioten		Spatiotemp	oral Relations	Food-Energy-Water Nexu		

V

Lifecycle Analysis & Thinking

How would you describe this big idea?

Lifecycle Analysis (LCA) is a specific analytical approach to evaluating the impact of human artifacts. It is a engages lifecycle thinking by guiding decision makers to consider each stage of that artifact's lifecycle, from material extraction through production, use, and disposal, and consider the impacts of those stages. Social LCA (S-LCA) is a particular emerging form of LCA that focuses on the social impacts. Impacts include workers rights and safety, community building, living conditions, fair competition. These impacts may be negative or positive, and our understanding and definitions of types of impacts is still improving. Many researchers are still working on methodological approaches to S-LCA.

How is this big idea applied to your work?

Much of my work is in environmental LCA, and S-LCA shares its origins in this approach. In fact, the reasons we care about environmental LCA are for its impacts on worker safety and local health and fair use and stewardship of resources. The interconnections between the design of artifacts, environmental systems, and social systems are highly complex, and in order to make smarter decisions and be able to predict un-intended consequences, we need to model these social and environmental aspects of artifacts.

Learn more:

Social Hot Spot Database



Cassandra Telenko Professional Title: Assistant Professor

College: School of Industrial Desgin Woodruff School of Mechanical Engineering Read more by Cassandra Telenko

WE TEACH, RESEARCH, & TAKE ACTION ESPECIALLY AROUND THESE KEY ISSUES

- Good Health & Well-being
- Water & Green Infrastructure
- Climate Change & Energy
- Sustainability Education & Youth Leadership
- Innovation for Sustainable Communities
- Global Sustainability & Cultural Diversity
- GT Sustainable Campus
- Civic Data & Design

OUR ULTIMATE GOAL IS TO: ACT LOCAL TO ACHIEVE A GLOBAL VISION – UN SDGS



Learn more about our UN University Greater Atlanta Regional Centre of Expertise on Education for Sustainable Development (RCE): serve-learn-sustain.gatech.edu/atlanta-un-rce

= Priority SDG for the Greater ATL region