

Campus Sustainability and Energy: Indicators, Assessment and Issues

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Good Company
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Overview

- **Good Company** (in one slide)
- A definition of sustainability – in six minutes
- Campus sustainability: why?
- Measuring Energy



Good Company

- Sustainability research and consulting firm
- Mission-driven, for-profit
- Sustainability planning, strategy and assessment for complex organizations
- National leader in *streamlined campus sustainability assessment* (colleges and universities in six states)
- Greatly indebted to many collaborators

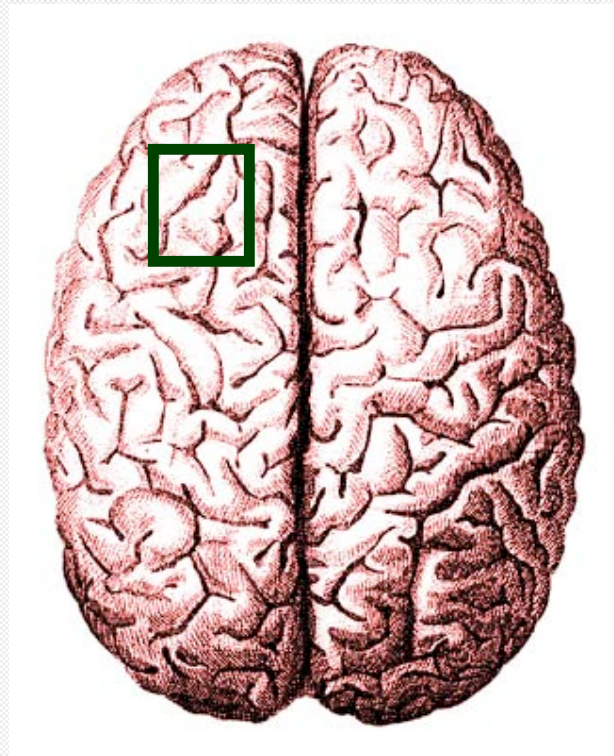
What Matters Most?

Typical answers:

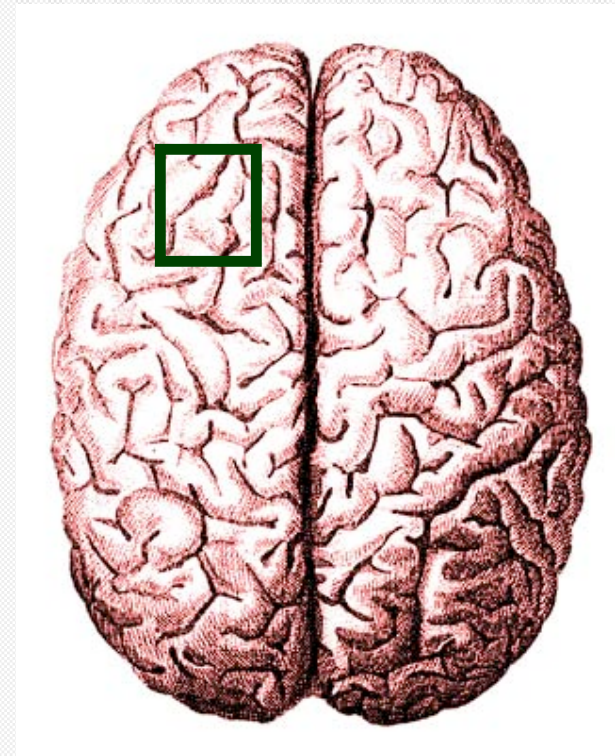
- Health, well being
- Children/family/friends/pets
- Job security and quality
- Learning/growing/knowledge/personal development
- Sense of purpose; doing a good job at work
- Sense of community/participation/belonging
- The well being of the planet/people/other species
- Clean air, clean water
- Respect
- Beauty
- Faith

Creating The Sustainable Brain

The Typical Brain

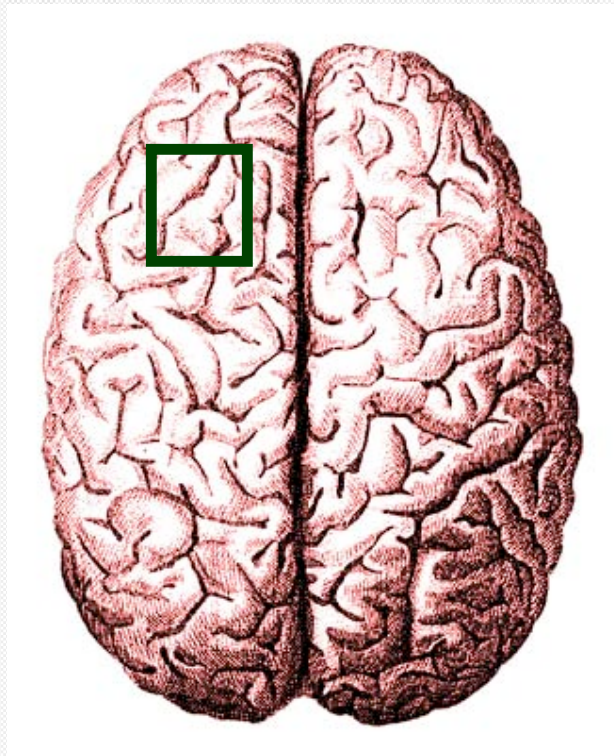


The Sustainable Brain



A Look Inside The Typical Brain

The Typical Brain

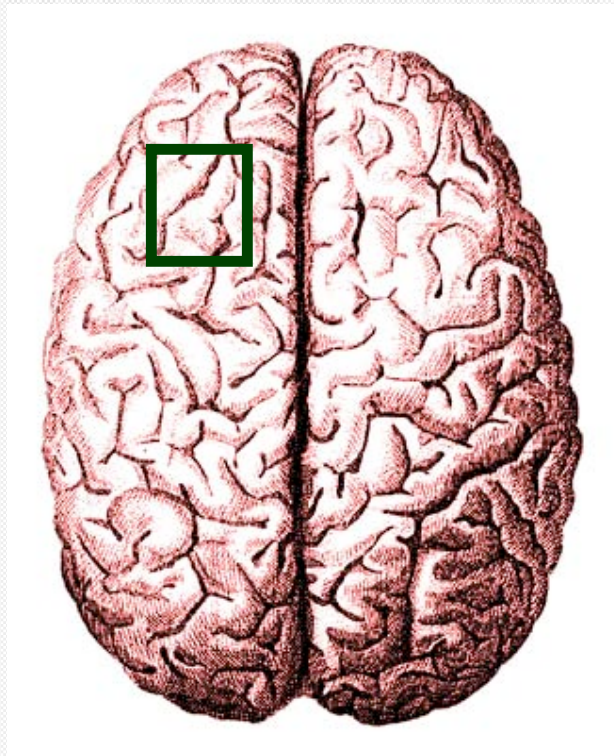


Enlarged View

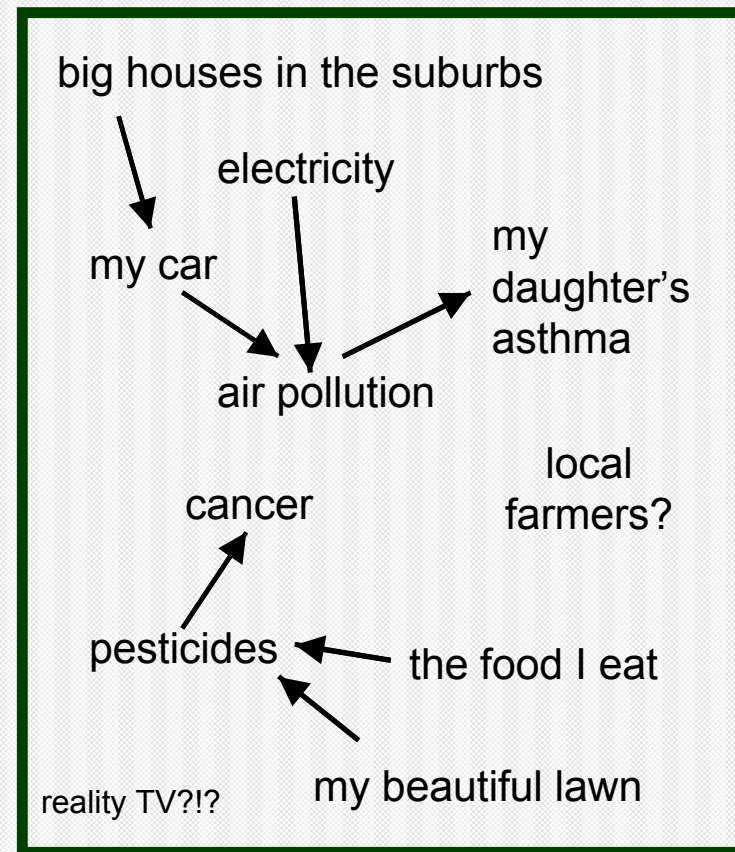


A Look Inside The Sustainable Brain

The Sustainable Brain



Enlarged View



So, sustainability is...

- “What matters most” (consensus)
- The ability to make connections
- Main points common to many/most definitions:
 - Individual and collective health
 - Economic vitality
 - Current and intergenerational equity
 - Some sort of triple bottom line or three-legged stool

Connecting energy to what matters most

Why does energy matter?

Things that don't "matter most" for most people:

- Resources
- Energy
- "The environment"

Connect these dots:

- Energy, electricity, fossil fuels, CO₂, global climate change, hurricanes, property damage, ...?

Why *campus* sustainability?

1. Campuses look like the rest of our society:

- Buildings (offices, housing, libraries, labs, athletic centers, etc.)
- Transportation
- Energy and water
- Landscapes
- Stuff (computers, furniture, paper, etc.)

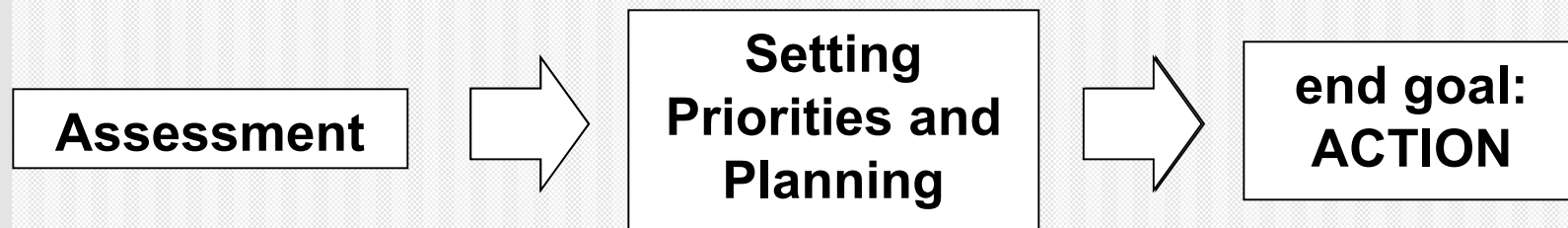
Therefore, they can experiment with innovations and model solutions.

Why *campus* sustainability?

2. They are special places for and in our minds:
 - They teach.
 - They do research.
 - They have authority, credibility and reputations.

Therefore, they influence our ability *as individuals* and *as a society* to generate innovations and solutions.

Assessment: how and why



A snapshot of the path

Assessment & Indicators

Assessment

- A snapshot of performance
- A collection of indicators, preferably with a theme

Indicators

- A measure of a particular aspect of performance that is (ideally):
 - Linked to things that matter
 - Measurable
 - Actionable!

Ask me for more resources if you are interested.

Five tips for campus indicators

1. Connect to what matters most
2. Balancing acts: breadth vs. depth, quant vs. qual, stakeholder involvement
3. Empathize
4. Talk dollars and sense – and effectiveness
5. Integrate with and serve the mission

In all cases, the right answer is (in part) specific to the institution and its context.

One set of indicators

OPERATIONAL CATEGORY	INDICATOR	GENERAL CONCERN
Energy & Water	1. Energy use and tracking 2. Water use and tracking	Environment & Health
Materials & Waste	3. Recycling rate and infrastructure 4. Waste reduction and reuse 5. Computer hardware purchasing and disposal 6. Paper use and purchasing 7. Landscape maintenance	
Health & Safety	8. Ergonomic safety 9. Indoor air quality (IAQ) 10. Chemical use: custodial and maintenance	
Planning & Purchasing	11. Campus construction and development: planning and policy 12. Transportation infrastructure and incentives 13. Purchasing tools and strategies	
Learning & Governance	14. Curriculum for environmental studies 15. Governance for sustainability	

Measuring energy

What matters about energy? What can we measure and then take action on? Five points:

1. Where it comes from
2. How it is used
3. Who owns it
4. Cost – and *risk*
5. How you communicate about it

Measuring energy

Ways to slice it:

1. GHG inventory
2. Ecological footprint
3. Percent of solar income (total, per capita)



Thank You!

This presentation is available from me:

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