What Is Sustainability? A Reflection on Seven Generations and Beyond

by Walter Simpson, CEM, LEED AP
Energy Officer
University at Buffalo
State University of New York

Ah, sustainability! Now there's a word we love to use. Sustainable this. Sustainable that. Everything these days is sustainable!

Sustainability sounds so good, it's hard to resist applying it to everything we think is positive or progressive. It's become a stamp of approval. Unfortunately, the liberal use of this word has led to misuse. The vast majority of activities and projects which are labeled sustainable are not.

Is there harm in that? Yes, I think so – because misuse cuts us off from the term's true power and meaning. It robs us of its benefit as a true measure of our behavior and achievements. It also undermines the ability of this important concept to serve as a guiding light – to help us meet the challenge of building a decent future on a finite planet with an increasing number of people making increasing demands on resources and ecosystems.

Let's start with a simple definition and build from there: for something to be sustainable, it must be able to continue on indefinitely. When taken literally, this is a tough standard. It is a criterion or threshold which few activities and projects can actually achieve.

The United Nations and other organizations have defined international development in terms of sustainability and in so doing have created authoritative definitions of this essential concept. These definitions include social and environmental components. Both are evident in this definition: sustainable development occurs when economic prosperity is pursued in the context of social equity, human rights, peaceful relations among peoples, and ecological balance.

Definitions of sustainability generally presume that there must be justice if we are to survive and prosper over the long run. Thus, it is said that sustainable development requires the alleviation of poverty and a more even distribution of wealth in the world. And no definition of sustainability would make sense without insisting on "intergenerational equity," a fancy name for respect for future generations.

The landmark 1987 Brundtland Report, entitled "Our Common Future," provided a definition of sustainability which has been repeated many times, namely, "meeting the needs of the present generation without compromising the ability of future generations to meet their own needs." Native Americans approximate this definition with their law of "seven generations" which requires that decisions be made based on consideration of the consequences of actions over seven generations.

World renown architect William McDonough has translated the sustainability challenge into a provocative question he poses whenever he speaks about the fundamental goals of design. He asks, in our lives and in our work, how do we love all the children of all species for all time? Clearly, McDonough believes that sustainability involves a shift in attitude and values and an expansion of our sphere of moral concern.

If all of this sounds difficult and complicated, that's because it is. Sustainability requires no less than solving the fundamental problems facing all of humanity so that a decent life on our planet will be possible for all, forever.

But what does all this mean for college and university facilities managers? How does the concept of sustainability get translated to our campuses?

While it would be valuable to consider how the teaching and research activities of colleges and universities contribute to or detract from sustainability in its full meaning, the campus sustainability movement has primarily focused on the environmental component of sustainability as applied to campus operations. Perhaps it was felt that this would be challenging enough!

Its important to realize that campus environmental sustainability involves more than just reducing campus environmental impacts. To achieve sustainability we must completely stop damaging and depleting the environment -- because even small increments of harm repeated over many years will produce significant degradation at some point in the future and thus undermine sustainability and the lives of future generations.

So, again, we see sustainability's high hurdle. What would it mean to run our campuses without causing any environmental damage? This deserves a lot more discussion and study, but in simple terms it most likely means:

- Minimal consumption of all natural resources
- Reuse or recycling of all waste
- No polluting or emitting of wastes beyond what ecosystems can breakdown and harmlessly recycle naturally
- Total reliance on clean, renewable energy technologies

Try to imagine a campus which consumes few natural resources, recycles all waste (what little of it there is), and abandons climate-changing fossil fuels and instead runs entirely on solar energy. We see that even schools with highly successful green campus programs don't come close to achieving sustainability when defined properly.

This standard of environmental sustainability may seem too high but what is the alternative? Should we instead compromise the earth and the lives of our children and those yet to come? Sustainability is not just a pretty word. It's a sobering challenge, maybe the ultimate challenge.

Of course, the above notwithstanding, I know that the term sustainability will continue to be misused. We will use it loosely, hopefully, to mean tending in a genuinely sustainable direction. And we should feel good about the steps we take even if in the grand scheme of things they are small steps.

Let's keep sustainability's true meaning in mind. That will encourage us to have a longer view, work harder, and not settle. Too much is at stake.