Redefining Sustainability
Through the Triple Bottom Line

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Can we find a new word for Sustainability? Do we need to? Liz York, FAIA shares three case studies that achieve balance using a three-part outlook: People, Planet, and Prosperity

When was the first time you heard the word sustainability used to describe the notion of protecting our environment with the choices we make? The term is founded on the idea that a good design or a well-considered decision will help sustain our world for future generations. My own recollection was from the late 1980s in design school at Georgia Tech. Since then, many conversations point out someone's dislike of the word. Not all of us seem to like the term "sustainability." We talk about it often. Can we find a better, more embraceable, actionable word? After all, understanding, commitment, and action are the point.

Few other terms offer such meaning or convey as many qualities: long lasting, enduring, transcending, climate protecting, carbon reducing, equitable, efficient, sublime, regenerative, natural, and systematic. But

> *If there is no struggle there is no progress. Those who profess to favor freedom and yet deprecate agitation are men who want crops without plowing up the ground; they want rain without thunder and lightning. They want the ocean without the awful roar of its many waters.*
>
> FREDERICK DOUGLASS

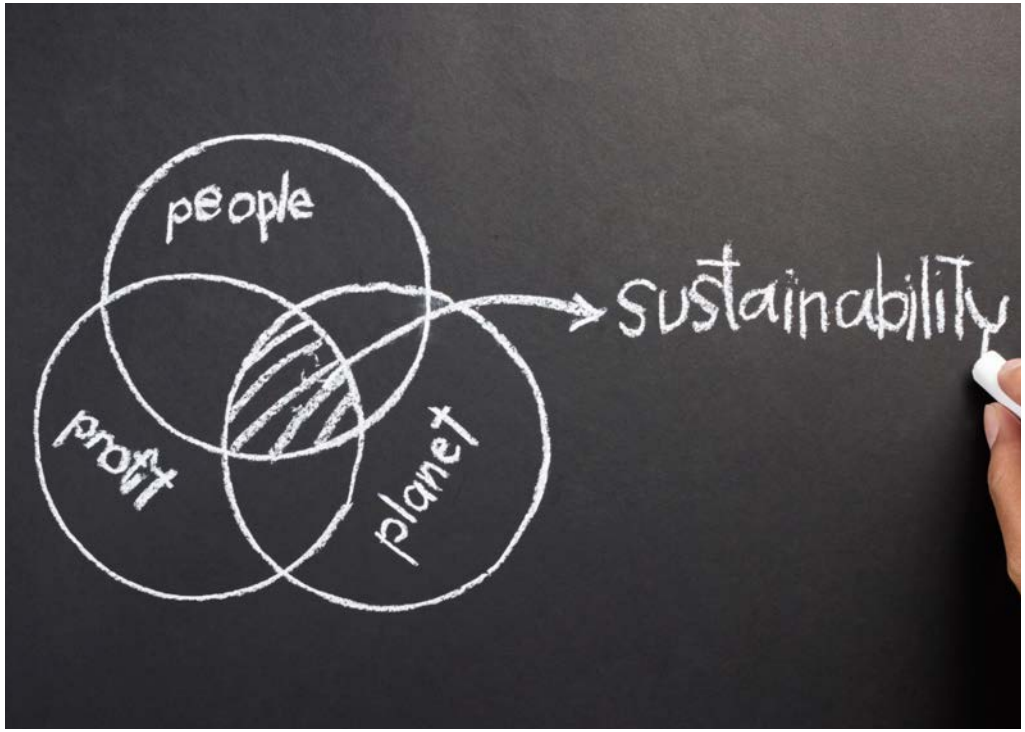
the term is no one of these aspects in a vacuum. The essence of the word is best described in the metaphor of the triple bottom line - a three-legged stool: People, Planet, and Prosperity. Each leg stands for a different priority, yet all support the overarching goal.

The beauty of this triad is that it displays how the whole fails when any one part – any of the stool's legs - is ignored or underrepresented in a design solution. Sustainability is about balance.

WITH RAIN COMES THUNDER AND LIGHTNING

Why is this distinction important? When we think about sustainability as being beyond an object it gives us a framework to work within, opening the conversation to all points of view. Such a framework implies an openness and creativity to account for many factors and make choices that positively affect the whole system, not just one outcome. In truth, sustainability requires defining values in advance and working toward a Venn diagram that includes those values. Too often, societal progress creates unintended consequences for those who aren't paying attention to all three values. On occasion, bad actors intend negative consequences. More often, this failing is the result of people interested in simply making "progress." Their plans don't fully account for the negative byproducts of their proposed solutions. These unintended consequences could be merely annoying or harmful and catastrophic.

The industrialized cities of the 1800s demonstrated many of these unintended consequences. Progress was the zeitgeist. Concurrent change was the norm. It was difficult to predict the consequences of such progress. As industrialization and mass production fueled civilization's boom, urban population densities increased, cities became crowded, and factories created dark clouds of thick, hard-to-breathe air. Poor water quality,



polluted air, and unhealthy living conditions caused the quality of life for many to decrease during a time of rapid growth and progress. Even the transportation of goods by horse and cart went from an annoyance to a public health issue as the manure of hundreds of thousands of horses accumulated daily on narrow city streets.

In response to these challenges, architects, engineers, planners, public health experts, and public officials worked together to establish new systems, codes and strategies to address these externalities of industrial progress. The public parks movement, and later, the City Beautiful movement resulted. Both movements influenced cities to become more green, open, and healthier for residents. Zoning laws, site setbacks and other water and sewage improvements shaped urban development to be healthier, increasing the quality of life broadly for city occupants. The unintended negative consequences of progress were felt for years until a holistic look at industry and the surrounding systems for worker living, transportation and public health were understood and addressed through design.

Sustainability demands intentional consequences. Beyond a no waste paradigm, this mindset needs a no harm paradigm. Case studies of two exemplar urban redevelopment projects and a personal tale demonstrate what can be achieved in more current times when we intentionally seek balanced consequences.

CASE STUDY: OLD FOURTH WARD PARK

The site was an old Excelsior mill, two miles from Atlanta's downtown. The area was a forgotten wasteland of broken-down warehouses, parking lots and deserted streets that invited crime and neglect. The city's hundred-year-old water system had been plagued with collapses, and the area was a catch basin for combined sewer overflows during typical summer rainstorms. A consent decree forced the city to act, but the price tag for a traditional tunnel sewer system was $70 million. The result would have been a largely invisible, uninspired design that would address the environmental concerns of the site while neglecting community needs.

Residents, neighbors and designers envisioned a way to adapt the water management project into an amenity. A 17-acre park was designed around an open stormwater detention pond. This pond, sized to detain a 100-year flood, is designed as a water feature instead of the typical "hole in the ground surrounded by chain link." Pathways, playgrounds, waterfalls, and a skate park were included to activate this recreational heart for the neighborhood. The amenities have drawn residents together and created a vibrant community where there was blight. And the price tag for the stormwater pond, brownfield cleanup and the land purchase? $25 million — a significant savings compared to original estimates. The project team addressed all three components of the triple bottom line simultaneously.

This project prepared the city for major weather events and created a beacon of vitality for the community. It demonstrates the rebirth of an industrial area into a regenerative center for recreation, gathering and civic community. It stands is a symbol of resilience and sustainability that can be enjoyed by residents and visitors alike.

CASE STUDY 2: AMANI PLACE

A few miles away, Edgewood Court apartments were another area crying out for rebirth. In 2015-2017, this Section 8 housing development was cited over 170 times by 911 callers to report shootings. The residents of the complex expressed concerns about their safety and one mother said that she would not let her children go out to play for fear of them being hurt by gunfire. Local blog posts called for demolishing the apartments while grandmothers lamented the fall of the neighborhood and the blight of crime.

Then entered a dream team of innovators, financiers, designers, standards groups, health experts, local government leaders and community members. The developer and operator led a process of inclusion around the concepts of people, planet, and prosperity. The project team asked questions that showed they valued the people and wanted to create a built environment that prioritized health, wellness and general prosperity. Residents were consulted about the issues they faced as the apartments were being renovated, and the

project found them places to live during the process. ADA units were created to serve residents with disabilities. Jobs were created and residents were employed by the new Amani Place property. The buildings themselves were renovated to improve energy efficiency and storm-water management. Roads, walkways, playgrounds, and gardens were repaired and created to increase resident fitness opportunities. A community center with a communal kitchen, garden and rec room helped residents connect with each other and build a sense of neighborhood. Through sustainable funder incentives all the 222 units were affordable, serving residents below the 60% of area median income.

The residents themselves named the new community – Amani means "peace" in Swahili. This collaboration has created a place for people to live and thrive. It has not been torn down and replaced with luxury townhouses. It has been redeveloped for people, for their health, with improvements that protect the earth and reduce utility costs while keeping rents affordable. At the grand opening, one resident shared that she finally felt comfortable letting her son go out and play.

CASE STUDY 3: A PERSONAL STRUGGLE - AND PROGRESS

How can we build personal resilience? In 2001, I was a new mother, returning to work, wanting to "do it all." After 12 weeks with my newborn, I wanted to reconnect with coworkers, take on my share of work, and contribute by returning to my job. I was ready for adult conversations and real-world discussions, but I also wanted to provide for my son by pumping breastmilk at work for his next day at preschool. I had a supportive employer and boss. I had access to a lactation consultant, a medical grade pump, and lactation rooms across several campuses. But I still faced challenges. I scheduled meetings around my pumping times – a regular schedule helped maintain a steady milk supply – but meetings sometimes ran long. Compounding my challenges, the lactation room was a ten-minute walk across campus. These hurried trips were made twice daily and after reaching the destination, I was supposed to relax. I searched for a place to pump closer to my office and settled on a wire-closet in my building. I set up shop there until an IT tech walked in one afternoon, not seeing the sign I had posted on the door. My personal realization of the need for more lactation rooms made me wonder why they weren't designed into every office building from the start.

For many years, building types such as office buildings, convention centers, airports, and universities had few women gracing their halls. But things have been changing. Occupant mixes are decidedly more feminine. The influx of women in the workplace that began in the 1960s was supported by the development of infant formula because it gave mothers of newborns the freedom to return to work after childbirth without worrying about milk.

Since then, public health research has shown that breastmilk is healthier for babies, mothers, families and communities. Breastfed babies are sick less often, which also keeps family

members well and allows them to be more productive. Mothers who breastfeed have lower incidences of breast cancer and ovarian cancer. Whole communities benefit as the increase in IQ for children who are breastfed for 12 months or more translates into increased productivity over their lifetimes. In short, this is a resilience issue. And architecture plays a part.

Do returning mothers have the physical resources they need to be productive in the workplace? How about as they travel for business or attend a meeting or conference?

In canvassing my colleagues, I found universally, that women returning to work lacked the full support of the workplace to keep breastfeeding until the 12-month mark. Some workplaces do not provide time for women to take breaks. Others make it challenging for mothers to stay on a regular schedule, which is crucial when collecting milk. Teachers and childcare workers, the women who dedicate their lives to our children, often have the greatest challenges with no time or place to take needed breaks for pumping milk. As an architect, I decided I would try to tackle the "place" problem by helping our industry understand what women needed in a lactation room. This issue touched my life, so I gave my expertise to it and did what I could to make it better for others — an act of balance, sustainability and resiliency.

Each of us has the power to give our skills and experience to causes greater than our own needs. Through generosity, we can improve situations for others and be part of building a more resilient society. I wrote a best practice article and talked to others in the field. Since those actions, legislation has been passed, rooms have been built, women have returned to work, and babies have been fed. Maybe it all would have happened anyway, but maybe my singular personal actions helped in some small way.

Each of us has an opportunity to improve the resilience of our communities. We can serve on local planning boards, work to help develop codes and standards, speak to owners about the way their buildings can change the surrounding community through simple site engagement strategies or improve health for occupants with light, views, and active design concepts. We can use the triple bottom line framework to help remind us of all that is at stake.

APPRECIATING THE OCEAN'S ROAR

When we make decisions, we must visualize the future with an eye toward people, planet and prosperity. Appreciating all possible consequences guides us to the most resilient decisions. Such a three-sided framework allows for creativity within its structure. It sets up a value system that encourages evolution of ideas and design over time without losing the overarching goals.

As you think about how to engage with resilience, commit to personally evolving the way you think about what you build. Think - and act - in ways that support our communal ability to be nimble and bounce back. No matter what you call it, sustainability is an expression of balance, empathy, and action.

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