The Framework for a More Sustainable SUNY

PREAMBLE

We live in complicated and changing times—perhaps more than at any other period in modern history. Long-term prosperity, growth and more holistic returns on capital investments are increasingly influenced by major megatrends like climate change, finite resources, a growing global population with diversified needs and the new lifestyle preferences of millennials and Z's. World leaders, innovators, investors, key thought leaders and forward-looking higher education administrators are transitioning to systems that are more circular, regenerative, inclusive, effective and that mirror the Haudenosaunee principle: *to make every decision considering the seventh generation to come*.

Private and public-sector leaders are working collaboratively through entities like the United Nations, World Economic Forum, the Association for the Advancement of Sustainability in Higher Education, Second Nature and others on the readiness of systems and economies to be more adaptive, resilient and responsive to the potentially disruptive economic and social impacts associated with these megatrends. This is creating new value chains and transforming how we think about mobility, the importance of water and ecosystem services, diversity and inclusion, energy generation, human capital, manufacturing and distribution of goods and services, equity, urban development and regeneration of natural resources. It is inspiring new forms of research, teaching, entrepreneurship and innovation that connects with the needs and values closely held by our younger generations, emerging marketplaces, natural systems and more regenerative economies.

These megatrends are not only driving change across the planet but more specifically here in New York and within the State University of New York (SUNY). Technology has created greater transparency and transparency is leading to student choice and with that systems change. These forces of change—while at times slow to gain momentum—are powerful and can position SUNY as a bold leader. The SUNY Sustainability Coalition (SSC), a network of sustainability leaders at SUNY campuses, not only recognizes the vital need to address these challenges but also the opportunity they create to design a new model of unified and integrated goals that can be leveraged to advance the scalable positive change we seek. Our 64 campuses that cover nearly every county of New York State and the 1.3 million students who, along with our faculty, create $1.2 billion of research expenditures and $20 billion in economic impact, are poised to act as living laboratories that can be strategically leveraged to drive long term sustainable change.

In the fall of 2017, SUNY Chancellor Kristina Johnson recognized this opportunity and asked the SSC to advance a process among sustainability professionals to create draft sustainability targets for SUNY (this was done in parallel with the NYPA and SUNY process to develop a Roadmap to a Sustainable SUNY). A few months later the Chancellor positioned sustainability as one of the core tenants of her strategy to strategically position SUNY as a leader in higher education and then played a key role in forming the University Climate Change Coalition. The SSC embraced the Chancellor's leadership and accepted her challenge by investigating best

practices at the global, national, state and local levels that could be leveraged—including the University of California system.

It became clear through the SSC's research and past practice that the framework to drive this change has already been created through the establishment of the United Nations Sustainable Development Goals (SDG's). The SDG's have been adopted by world leaders and universally apply to all, calling upon countries to mobilize efforts to end all forms of poverty, fight inequalities and tackle climate change, while ensuring that no one is left behind. This innovative framework, which builds from the success of the Millennial Goals, are a shared vision of humanity and a social contract between the world's leaders and its peoples and are a virtual "to-do list for people and planet, and a blueprint for success," as former UN Secretary-General Ban Ki-moon has stated. The SDG's also provide a more integrated framework to deal with the challenge of our time: climate change.   According to Paul Hawken's recently released *Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming* the key to dramatic reductions in greenhouse gas emissions stems from impactful strategies that include those issues that have been on the fringes of climate discussions such as reducing food waste, promoting plant-rich diets and educating girls. Greenhouse gas emissions originate in many sectors of our economy and society and the UN Sustainable Development Goals offer a holistic, broad framework to approach climate change and broader sustainability challenges.

The SDG's establish 17 goals (along with 230 targets and indicators to demonstrate progress) with the intent of creating a more sustainable world by 2030 and have not only been adopted by all countries but are also being embraced by the business community who sees both opportunity and purpose in achieving them. While the indicators and targets of the original SDGs are set at the nation-state level, recently, several efforts have been made to localize them for cities and counties—including the Sustainable Development Solutions Network's U.S. Cities SDG Index, the World Council on City Data's City Data report, and the Global Platform for Sustainable Cities' Urban Sustainability Framework. In addition, we have also seen early efforts at integrating the SDG's into higher education through the SDG Accord, the Association for the Advancement of Sustainability in Higher Education's 2018 focus on the SDG's and several campuses across the SUNY system itself who have recognized the value the SDG's provide in addressing their larger sustainability work.

While the specific 290 targets of the SDG's are aimed at the country level, the larger goals that are encompassed by the 17 categories are directly relevant to the work that occurs across SUNY, not only through our own operations but more importantly in our teaching, research and engagement. By adapting the specific targets across the SDG's, while working to maintain the goal structures and spirit of the outcomes, the SSC has constructed a draft set of targets that work to position SUNY as an innovative leader that is leveraging sustainability as a key strategy to achieve its mission.

We recognize that setting goals and targets is the easy part—creating broad, integrated and systemic change is the real challenge, and to achieve this, three key factors are needed by the campuses. First, as we strive to evolve, build resilience and minimize our environmental footprint, we must do so by leveraging a triple bottom line approach that works to steward our natural resources, empower our staff, students, faculty and community while creating smart long-term financially efficient strategies. This *purpose through people, planet and prosperity*

approach must be at the core of our internal strategy to achieve the SUNY SDG's. Second, the SUNY system is vastly diverse in mission, geography and the constituents it serves. A one size fits all strategy seldom works across the system and we must prioritize flexibility, innovation and organic campus based problem solving to achieve the targets. Third, while these are sustainable development goals, they will only be achieved if every corner of our campuses work to integrate them into day-to-day teaching, research, engagement, operations, planning and administration. We will fail in achieving this vision if it is viewed as only the sustainably coordinator's responsibility. Sustainability belongs in every job description and performance plan.

These are comprehensive and bold goals, and while they will require creativity, endurance, perseverance, innovation, purpose and entrepreneurship, they will also require tools from SUNY and New York State. While many key policy changes have been enacted recently that will assist the SUNY SDG's, there are more needed. Incentive structures also must to be assessed to ensure that campuses are being rewarded for achieving the targets in terms of both operating revenue and capital funds.

Finally, a robust system of metrics and measurement will need to be implemented to ensure that progress is being made. While the UN SDG's metrics provide a model, the [Sustainability Tracking Assessment Rating System](#) is more relevant to our work in higher education and can be looked to as a foundation and floor as it overlaps well with the Sustainable Development Goals. The following goals and targets are by no means comprehensive nor exhaustive. They are merely an attempt to leverage well thought out global sustainability work within our own SUNY context. With these targets, we seek to take responsibility for our own actions and address the grand challenges we face today in order to build the future of tomorrow. The heart of our sustainability work is about creating change. To do this, we and our many SUNY partners need to think of ourselves as change agents as we embark upon this journey.

THE GOALS AND DRAFT TARGETS

End Poverty in all its forms

1. Engage with New York State to ensure sustainable economic development through higher education across the state and nation in an effort to break the cycle of poverty

2. Support under-represented groups to succeed in college by
   - Increasing and improving student based aid through the Tuition Assistance Program, Excelsior Scholarships, federal aid and campus based scholarship funds
   - Enhancing access programs such as the Educational Opportunity Center, Educational Opportunity Program, CSTEP, STEP and others

3. Develop partnerships and resources to assist students dealing with housing insecurity

4. Ensure that SUNY employees receive living wage compensation including time for family medical leave

5. Invest in research and service that works to alleviate community, state, nation and worldwide poverty

6. Increase student engagement and service activities that work in partnership with communities to address poverty in host communities

7. Reduce student debt loads for lower income communities

End hunger, achieve food security and improved nutrition and promote sustainable agriculture

1. Ensure that no SUNY student goes hungry by establishing food pantries and or other mechanisms on all campuses by 2020

2. Each campus will ensure that all recoverable food is donated or used to feed those that are food insecure (on campus and in the community)

3. Purchase a minimum of 25% of sustainably and/or locally sourced and produced food by 2030 through a long-term process of menu planning with seasonality of harvests considered

4. Increase food system and sustainable agriculture teaching, research and engagement to ensure that we can end hunger and provide access to all people, in particular the poor and those in vulnerable situations by 2030

Ensure healthy lives and promote well-being for all at all ages

1. Establish and enhance Wellness & Health Centers on campuses which provide accessible and affordable information on mental health, alcohol & drug abuse, sexually transmitted diseases, wellness programs, healthy eating habits and nutrition, fitness and other health and wellness issues that prohibit individuals from achieving their full potential

2. Ensure all campuses become smoke and tobacco free by 2020

3. Increase active commuting and mobility opportunities (biking/walking) by improving infrastructure

4. Phase out the use of all harmful chemicals included in the Living Building Challenge Red List to protect our workers and campus community

5. Contribute to addressing Global Goal 3 through direct research, teaching and engagement to advance desired outcomes as well as increasing awareness to our students and employees of these challenges and the role they can play in addressing them

 Ensure inclusive and quality education for all and promote lifelong learning

1. By 2030, ensure that our campuses achieve sustainability literacy through the development of sustainability learning outcomes for students and outreach to our campus and surrounding communities on lifestyles and operations that work to integrate the triple bottom line principles

2. Integrate sustainability literacy into teacher preparation

3. Ensure all SUNY campuses are open to all students by creating universally accessible buildings and grounds as well as an inviting campus environment for under-represented communities

4. Increase research, teaching and engagement efforts to ensure that all children complete free, equitable and quality primary and secondary education leading to relevant Global Goal 4 effective learning outcomes by 2030—in our host communities, state, nation and globe

5. Strengthen curricular opportunities for community service-based and experiential learning projects

 Achieve gender equality and empower all women, girls, and transgender peoples

1. End all forms of discrimination based on gender, gender identity and gender expression throughout every SUNY campus

2. Ensure women's and transgender people's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public university life throughout all SUNY campuses

3. Enforce existing discrimination and empowerment statutes (Title IX, discrimination compliant procedure, sexual violence initiative reporting, etc.)

4. Support and enable greater teaching, research and engagement opportunities throughout faculty, students and staff to achieve Global Goal 5 in our host communities, state, nation and world

 Ensure access to water and sanitation for all

1. Decrease potable water use consumption by 50% and half the amount of untreated wastewater discharged to campus and municipal sewers by 2030

2. Increase green infrastructure tactics and low impact development practices to dramatically reduce the amount of storm water runoff and resultant water pollution through the creation and implementation of comprehensive storm water master plans

3. Establish initiatives to reduce point source discharges and beyond that have an adverse effect on our waterways (sponsoring drug take back programs, labelling campus storm water drains, etc.)

4. Strive to create closed loop water systems on SUNY campuses

5. Play a key leadership role in supporting water quality improvement through teaching, research, and engagement through the Great Lakes and our regional watersheds
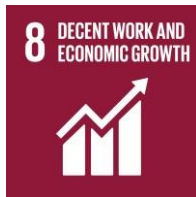
 Ensure access to affordable, reliable, sustainable and modern energy for all

1. Achieve 100% renewable electricity supply for campus operations (procurement) by 2025 with a sub goal of obtaining 50% renewable electricity supply for campus

operations by 2020

2. All new capital buildings and major renovations must be built within a framework of Zero Energy Buildings with a goal of < 25 EUI Site Energy

3. 25% decrease in energy consumption in all campus buildings (from 2012 levels) by 2030

4. Partner with host communities and assist them in achieving Global Goal 7 for their municipalities

5. Assist in the development of teaching, research and engagement solutions that will greatly contribute to ensuring universal access to renewable, affordable and reliable energy

6. Lead innovation in clean energy research and host demonstration projects of cutting edge technologies on campus

Promote inclusive and sustainable economic growth, employment and decent work for all

1. Increase our research, education and engagement to decouple economic growth from environmental degradation

2. Achieve full and productive employment and decent work for all peoples on our campuses by 2030

3. Increase educational literacy rates of what sustainable economic growth looks like with students, staff and faculty

4. Develop and provide education and training programs to help move un- and under-employed people into jobs

5. Connect students of all ages with career and financial planning services, supplemented by continued education and skill training, so that all have the resources required for them to satisfy their personal and professional needs and long-term aspirations in the economy of this century

6. Increase each campus' rankings on the CollegeNET's Social Mobility Index

7. Create an advancement system based on merit not seniority across all SUNY campuses

8. Increase the long-term financial health of SUNY campuses and the System by diversifying funding streams

Build resilient infrastructure, promote sustainable development and foster innovation

1. Create the foundation to advance quality, reliable, sustainable and resilient infrastructure across our campuses to support economic development and human well-being, with a focus on affordable and equitable access for all faculty, students and staff

2. Upgrade campus infrastructure and retrofit to make it resilient and sustainable with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and processes with specific focus to increased flooding predictions throughout New York State due to climate change

3. Enhance our scientific research and teaching, upgrade our technological capabilities and encourage innovation and substantially increasing the number of research and development workers

4. Facilitate sustainable and resilient infrastructure in developing places

Reduce inequality and promote diversity and inclusion

1. By 2030, empower and promote the social, economic and political inclusion of all, irrespective of race, color, national origin, sex, religion, age, disability, gender, pregnancy, gender identity, sexual orientation, predisposing genetic characteristics, marital status, veteran status, military status, immigration status, domestic violence victim status, or ex-offender status

2. Increase opportunities for students to attend SUNY schools from developing countries and indigenous communities in New York State

3. Increase opportunities for sustainable development and civic engagement experiences in our international programs

4. Train students to be able to address the issues of inequality in their communities, states and nations

5. Recognize and value the identities and cultures of Indigenous Peoples, especially those of New York State; acknowledge that Indigenous Peoples can be among the most marginalized and vulnerable social groups; and incorporate teachings of "traditional ecological knowledge"

6. Infuse diversity into SUNY's faculty and employment hiring practice to reflect the general populations' proportions seen throughout New York State

Make cities and communities inclusive, safe, resilient an sustainable

1. By 2030, provide access to safe, affordable, accessible and sustainable transportation systems for all students, faculty and staff, improving road safety, notably by expanding carbon neutral public transport, with special attention to the needs of those in vulnerable situations, including: women, children, persons with disabilities and older persons

2. By 2030, our faculty, students and staff will have worked to:
   - Reduce the adverse per capita environmental impact of campuses including by paying special attention to air quality and municipal and other waste management
   - Ensure universal access to safe, inclusive, accessible sustainable public spaces, in particular for women and children, older persons and persons with disabilities
   - Support positive economic, social and environmental links between urban, and rural areas by strengthening national and regional development planning

3. Adopt ECO District six priorities:
   - Place Making: encouraging an engaged, inclusive, culturally rich, walkable and vibrant community
   - Prosperity: prioritizing education, employment, and economic opportunities that build prosperity and accelerate innovation
   - Health and Well-Being: creating a community that nurtures people's health and happiness
   - Connectivity: building the most equitable and efficient physical and digital connections between people and place
   - Living Infrastructure: enabling flourishing ecosystems and restoring natural capital
   - Resource Restoration: moving towards a net positive world through clean energy and reduced greenhouse gas emissions

Ensure sustainable consumption and production patterns

1. By 2030, achieve the sustainable management and efficient use of natural resources across all campuses

2. By 2030, achieve zero waste through sustainable materials management including prevention, reduction, reuse, and recycling

3. By 2030, halve per capita food waste at the retail and consumer levels and reduce food losses along production and supply chains in our dining operations

4. Begin phasing out single use plastics by 2020 and completely eliminate the use of all single use plastics on SUNY campuses by 2025

5. By 2025, achieve the environmentally sound management and operational use of chemicals and all wastes throughout their life cycle, working to eliminate all chemical use on campus that adversely impacts human health and the environment and banning all those included on the Living Building Challenge Red List

6. Promote procurement practices that are sustainable, in accordance with standards set by the Sustainable Purchasing Leadership Council

7. Promote a culture of sustainability on campus that seeks to reduce consumption and advocate for sustainable purchasing practices

8. Promote Shared Services program to procure and share goods and services from within and among the SUNY system to create a more closed loop cycle

9. Increase local purchasing and sharing that promotes collaboration, partnership and economic growth with host communities and beyond (circular economy)

10. Increase research solutions—specifically within the green chemistry space—to advance the creation of more sustainable materials and chemical use

Take urgent action to combat climate change and its impacts

1. Work to become climate neutral as soon as possible

2. Reduce greenhouse gas emissions by fifty percent by 2030, and ninety percent by 2050 from 1990 levels, across all emitting activities of SUNY campuses (Executive Order 166)

3. Play a leadership role in providing foundational knowledge to strengthen resilience and adaptive capacity to climate-related hazards and natural disasters throughout the globe

4. Improve education, awareness-raising (on campus and in our communities) and human and institutional capacity on climate science, climate change mitigation, adaptation, impact reduction and early warning

5. Increase climate change solution based research strategies across SUNY campuses through the UC3 initiative and other venues

6. Strongly support and contribute to the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change

7. Assess and work to mitigate the impacts of Scope 3 emissions

14 LIFE BELOW WATER

Conserve and sustainably use our waterways

1. Protect and positively affect regional watersheds and life within

2. Through research, minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels

3. Procure fish for campus dining from certified sustainable fisheries

4. Conduct research to protect vulnerable waterbodies in Upstate New York from harmful algal blooms

5. Reduce (through Integrated Pest Management practices) or eliminate harmful chemicals, including sprays on landscaping and salt on paved surfaces used on campus grounds that runoff into waterbodies

6. By 2030, ensure that all waterbodies on SUNY campuses are capable of supporting robust ecosystems

7. Protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes

8. Increase and support research that works to support Global Goal 14

15 LIFE ON LAND

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt & reverse land degradation and biodiversity loss

1. Protect or positively affect the species, habitats and/or environmentally sensitive areas owned or managed by campuses

2. Integrate ecosystem and biodiversity values into campus planning and development processes with a focus on repopulating our campuses with plants (flora/fauna) native to the region

3. Ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in alignment with the Department of Environmental Conservation policies

4. Preserve and protect campus-managed forests and life within

5. Support teaching, research and engagement that works to support Global Goal 15

6. Mitigate the increased population of invasive species

Promote just, peaceful and inclusive societies

1. Ensure responsive, inclusive, participatory and representative decision-making at all levels throughout campus governance

2. Promote and enforce non-discriminatory laws and policies for sustainable development

3. Encourage civic discourse and promote civic engagement through such programs as the American Democracy Project

4. Provide opportunities on campus for new voters to register, become educated on issues and participate in municipal, state and national government elections

5. Make the SUNY System a welcoming and safe space for people of all nations and cultures

6. Educate about historic injustices, contributing causes, and effective responses within justice movements to transfer change agent skills to students

Revitalize the global partnership for sustainable development

1. Develop partnerships within campuses, across the SUNY System, and with local, regional, state, national and global entities to meet UN Sustainable Development Goals

2. Promote the development, transfer, dissemination and diffusion of environmentally sound technologies, policy development and assistance to developing countries

3. Respect each campuses policy space and leadership to establish and implement policies to achieve the SUNY SDG's

4. By 2030, build on existing initiatives such as STARS and the Second Nature Climate Commitment to develop measurements of progress on sustainable development that are integrated within a triple bottom line approach to help build capacity across SUNY institutions, the state and the globe

5. Explore leveraging SUNY campuses to demonstrate sustainable technologies new to New York State but proven in other parts of the country and globe