# **DRAFT K-State 2025 Sustainability Strategic Action Plan**

**Overarching Goal:** K-State will leverage all its strengths to support a societal transition that addresses the sustainability challenges of our time through its capacities in: Academics, Engagement, Operations, and Leadership.

#### **Sustainability Preface/Assumptions:**

The world faces a major problem: to enhance human well-being while confronting global environmental changes that are undermining planetary stability. This problem entails deep interdependencies between economic, social, and environmental conditions and forces of change. These conditions are largely driven by human activities and governance at all scales: local, state, regional, national, and international. Within this societal problem there are a number of important challenges. Chief among these challenges are long-term food and energy security as well as human dignity, material well-being, and social justice for all. But these needs must be met in ways that do not irrevocably undermine the health of non-human ecological communities, which are vital to regulating and sustaining our air, water, soil, and other critical life support systems of our planet. Current efforts and social and environmental trajectories are a long way from balancing short-term human material needs and desires with long-term stability, resilience, and sustainability of social-ecological systems.

The concept of sustainability has emerged as a response to these challenges, entailing both efforts to better understand the complexity of human-environment relationships (sustainability science) and normative decision-making about what kind of conditions we wish to create and sustain over the long-term (sustainable development). The paradigm of sustainability thus involves a (very) long-term orientation toward understanding human-environment processes and making decisions and investments toward resilient and regenerative conditions. It requires immediate attention, as well as continued attention and thought well beyond 2025.

Important concepts for sustainability efforts include the centrality of systems thinking, the importance of both spatial and temporal scales, enhancing resilience, and consideration of multiple interacting components of sustainability: environmental, social, and economic ('triple bottom line' components). As a result, sustainability is a beneficial core concept for integrating ideas from diverse subject areas.

The dimensions of concern relevant to sustainability can be overwhelming (e.g., scale and scope of global issues, social norms, environmental health, and economic conditions). Given the complexity of these challenges and systems, sustainability efforts are necessarily adaptive, requiring continual reassessment of conditions and needs, and adjustments in efforts. The sustainability paradigm thus informs pathways of decision-making and orients decision-making toward ideal futures that nevertheless have no identifiable end-points (see NRC 1999¹). Education and research should help identify possible desirable future conditions and help move toward sustainability.

Higher education has a moral obligation to develop and share knowledge about how to responsibly and ethically address the grand sustainability challenge of our time. Responding to this call to action also is consistent with K-State's land-grant mission. We have a responsibility to leverage our strengths to serve societal needs.

In accordance with this rationale, K-State has four overarching goals for its sustainability efforts:

- 1) Academics: Research, Undergraduate Experience, Graduate Scholarly Experience: K-State will be an international leader in the development of sustainability knowledge among our students, scientists, and scholars.
- 2) Campus and Public Engagement: K-State will infuse sustainability into its engagement activities and leverage these enterprises to create communities of support for sustainability that drive progress toward the integration of sustainability goals throughout the institution.
- 3) **Operations:** Create a robust dynamic between operations and the teaching/research/service mission of the university that impacts decision-making at all levels in incorporating deep triple bottom line thinking with robust engagement of campus occupants and grassroots networks (EcoReps).
- 4) Leadership: Foster administrative leadership to ensure all university programs and departments/units are active partners in accomplishing the university's sustainability goals.

<sup>1</sup> National Research Council, Board on Sustainable Development (NRC). 1999. Our Common Journey: A Transition toward Sustainability. Washington, DC: National Academy Press.

#### Goal 1: Academics: Research, Undergraduate Experience, Graduate Scholarly Experience

2025 Overarching Goal: K-State will be an international leader in the development of sustainability knowledge among our students, scientists, and scholars.

This goal will be achieved through:

- I. Infusion of sustainability challenges into existing programs
- II. New interdisciplinary academic programs featuring sustainability
- III. Encouraging diverse learning communities around grand sustainability challenges
- IV. Engaged sustainability research and education that feature partnerships reflecting our land-grant mission
- V. Administrative support to identify and expand the university's strategic areas of academic and research emphases in sustainability
- VI. Initiate and develop a new synergistic center for sustainability knowledge development (Center for the Advancement of Sustainability Knowledge CASK)

#### **Assumptions:**

- 'Academics' (curricular and research activities) are oriented around knowledge production and dissemination.
- Advancing toward sustainable solutions to the world's grand challenges requires a robust response from higher education in knowledge production and dissemination. Academics is thus a central part of this K-State 2025 Sustainability Strategic Plan.
- Sustainability considerations help ground student learning in real world issues and needs.
- Sustainability is a beneficial core paradigm for integrating ideas from diverse subject areas.
- Research and curricular concerns overlap and are connected; therefore activities related to research and curriculum (knowledge enhancement) noted in this strategic plan overlap.
- Many of the activities and outcomes assume that K-State is successfully addressing activities specified in K-State 2025. For this section of the sustainability-focused plan, connections to progress toward goal activities in Themes 1, 2, and 3 are particularly relevant, but are not explicitly listed here.
- There are organizational and decision-making structures, cultures, existing distributions of resources, and competing priorities throughout the university (and professional association accreditations outside the university) that often present barriers to development of cross-disciplinary academic efforts.
- A coordinated effort from the administration (top down) to change university structures and to promote a sustainability curriculum and related research will be needed. Bottom-up efforts from faculty, staff, and students are already happening and will benefit from a change in institutional climate.

	Activities	Short Term (2013 – 2015)			ey Outcomes Impact Intermediate Term (2016 – 2020)	Long Term (2021 – 2025)	
I. Exi	sting Programs:		nt do we expect to pen by 2015?		t do we expect to pen by 2020?		t do we expect to pen by 2025?
under	on of sustainability challenges into existing programs, ensuring that all graduate students are exposed to sustainability principles and issues on their education	1.A.	Sustainability as an emphasis of the K-State First program is adopted	1.W.	All undergraduate students matriculated after 2014 will have	1.XX.	and scholarship are widely understood to be
b) r	include a sustainability component in the First Year Experience; modify K-State 8 to explicitly recognize required inclusion of sustainability- focused coursework for all undergraduates	1.B.	Creation of an annual event for professional		met a sustainability general education requirement for	4 3/3/	a core emphasis of K- State
c) i	include sustainability concerns in any consideration of modifications to the general education curriculum		development of faculty to support incorporation of sustainability content	1.X.	graduation  Identification of at	1.YY.	Sufficient courses are in place to enable all students to have
	encourage internships, interdisciplinary/ service learning courses, and study abroad opportunities that include sustainability components (some internships may be based in campus operations)		into teaching and/or research		least 12 courses across disciplines as K-State 8		exposure to sustainability principle and issues.
r	Support for College additions of <i>Sustainability</i> category to basic requirements (e.g., A&S adding Sustainability to Humanities, Social Science, and Natural Science categories.)	1.C.	Initiate change in K- State 8 to more explicitly incorporate sustainability principles	1.Y.	An inventory of sustainability courses	1.ZZ.	Additional increases i number of sustainabil related and focused

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				and courses with	courses
	1.D.	Inventory completed of		sustainability content	
		existing sustainability			1.AAA. Increased participation
		related and focused		(STARS)	in sustainability related
		courses			internships,
			1.Z.	Increases in number	interdisciplinary/ service
	1.E.	Inventories of		of sustainability	learning experiences
		internships,		related and focused	and study abroad
		interdisciplinary/service		courses	programs.
		learning experiences,			
		and study abroad	1.AA.	Increases in the	1.BBB. NRES or its successor
		opportunities that include		number of internships,	program has continued
		sustainability		interdisciplinary/servic	to increase enrollment
		components to create a		e learning experiences	and engage students at
		baseline measure.		and study abroad	all stages of their
		baseille Illeasule.		opportunities	university experience
	1.F.	NRES program		specifically	diliversity experience
	1.5	considers change in		incorporating	
		approach and name		sustainability learning	
		approach and hame	ì	sustainability learning	
			1 DD	Caraar & Employment	
			I.DD.	Career & Employment	
				Services attention to	
				interdisciplinary and	
				sustainability careers	
				in support of	
				undergraduate	
				programs	
			1.CC.	NRES/Successor	
				program has	
				increased enrollment	
				and features more	
				robust engagement of	
				students at all stages	
				of their university	
				experience	
II. New Interdisciplinary Academic Programs:					
New interdisciplinary academic programs featuring sustainability	1.G.	Creation of one or more	1.DD.		1.CCC. Begin graduating
a) create interdisciplinary undergraduate major, minor, and certificate options		100-level introductory		bachelors-level	PhD-level students in
in sustainability/sustainability science <sup>2</sup>		courses in sustainability		students in	sustainability-focused
b) Create interdisciplinary graduate degree options in				sustainability-focused	interdisciplinary
sustainability/sustainability science	1.H.	Develop working groups		interdisciplinary	programs
Sustamability/Sustamability Science		to identify and promote		programs	
		efforts toward flexible,			
		interdisciplinary graduate	1.EE.		
		degree programs		graduate degree	

<sup>&</sup>lt;sup>2</sup>Expected to reflect a high level of flexibility, innovative and in keeping with the needs of sustainability science and societal moves toward sustainability. A&S interdisciplinary physical science, social science, and life science degrees may serve as models. Geography now has an 'advising track' organized around "Nature, Society, and Sustainability." However, it is not an officially-recognized "Option" (yet), and is not "interdisciplinary" in terms of having non-Geography components. (Geography is by nature an "interdisciplinary discipline" which includes social science, physical science, humanities, and applications approaches.)

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				programs	
			1.FF.	By 2017 begin to matriculate graduate students into sustainability-oriented program(s)	
			1.GG.	By 2020 begin graduating masters- level students in sustainability-focused interdisciplinary programs	
III. Diverse Learning Communities:				. •	
challenges  a) improve academic venues and create structures for "unstructured" participation that encourage and integrate learning, social interaction, and community focused on sustainability  b) explore the building of living and learning communities where students become engaged with peers, scholars, and researchers focused on sustainability themes  c) foster development of topical networks similar in nature to the Prairie Studies Initiative around various sustainability challenges	1.J. T	semi-formal opportunities for faculty, faculty/staff, and/or faculty/staff, and/or faculty/student of sustainability-focused onterdisciplinary community of scholars/educators at K-State. (Possibilities onclude 'coffee hours,' roundtables, 'happy fours,' 'brownbags,' seminars  The number of onterdisciplinary faculty/activity topical of the tworks have increased of the properties of the stablished with		"Ongoing library support for sustainability research and learning in the form of research guides, materials selection policies and practices, curriculum development efforts, sustainability literacy promotion, and elearning objects focused on sustainability" (STARS)  Number of campus activities and programs from interdisciplinary networks has increased	1.DDD. Continued increase in interdisciplinary networks, fostering faculty and student communities of interest around sustainability topics/challenges
IV December and Education Partnerships	1	nigh degree of campus awareness			
IV. Research and Education Partnerships:					
reflecting our land-grant mission  a) encourage collaboration among faculty both explicitly and implicitly with greater 'credit' for collaborative research and teaching efforts  b) integrate sustainability research and education with university operations  c) promote and recognize international research about global sustainability challenges as the university seeks to increase its international research	, , , ,	ncentives/recognition orograms have been developed for faculty who use K-State campus as a basis for sustainability teaching and/or research work	1.JJ.	active collaborations between researchers and Facilities units/personnel to conduct applied	1.EEE. Additional increased numbers of applied research/teaching projects involving K-State campuses  1.FFF. Increased numbers of undergraduates and
collaborations	1.M. I	nventory completed of			graduate students

d) identify appropriate funding programs for sustainability research	1.N. 1.O.	sustainability research, including international research collaborations. (STARS) An inventory of sustainability research is publicly available by 2018.  Identified appropriate funding programs for sustainability research, with promotion plan for faculty	1.KK. 1.LL.	Increased number of undergraduate research experiences	1.GGC 1.HHF 1.III.	involved in research in applied campus and community sustainability projects  G. Increased numbers of faculty members and departments involved in interdisciplinary applied research/teaching projects on K-State campuses and communities  I. Additional increased number of undergraduate research experiences related to sustainability Additional increased extramural funding for sustainability research
V. Academic and Research Emphases in Sustainability:			1.NN.	sustainability research	1.JJJ.	Additional increased publications about sustainability topics
Administrative support to identify and expand the university's strategic areas of academic and research emphases in sustainability  a) development and implementation of guidelines, policies, and procedures that support the infusion of sustainability in academic and research endeavors  b) broad recognition and promotion of sustainability efforts by K-State's administrative leaders  c) focus on sustainability efforts as essential to addressing global challenges, including those faced specifically in Kansas  d) implementing an emphasis on sustainability as a key fundraising focus increasing the rewards and recognition for faculty and staff engaged in sustainability work	1.P. 1.Q.	A presidential commission/ committee has been created to develop recommended guidelines, policies, or other initiatives to infuse sustainability concerns in academic and research endeavors  Creation and implementation of a Provost's sustainability lecture series, with an annual high caliber speaker working in sustainability research or education to highlight university commitment  Annual report established for internal	1.PP.	K-State has "formally adopted policies and procedures that give positive recognition to interdisciplinary, transdisciplinary, and multidisciplinary research during faculty promotion and/or tenure decisions" (STARS)  Administration has established internal programs of dedicated financial support, resources, and incentives for sustainability research (STARS)  K-State administration		Achievement of top-tier status in Academics— curricular and research—components of STARS by 2025  Annual report for internal and external promotion of activities/recognition

VI. (	Center for the Advancement of Sustainability Knowledge:				creates recognition program for faculty achievements in sustainability research and education  Annual report for internal and external promotion of activities/recognition  University formally adopts a policy of open access availability of sustainability-related research findings in a designated OA repository (STARS). (This may be accomplished through K-REx.)		
deve	te and develop a new synergistic center for sustainability knowledge elopment (Center for the Advancement of Sustainability Knowledge – K³) with the following roles:  Encourage more faculty members to incorporate sustainability into their scholarship and teaching (see also activity 4 below)  build faculty expertise in sustainability/ sustainability science/sustainable development through strategic hiring, recognition of existing expertise, and institutionalizing professional development in sustainability expand and strengthen strategic partnerships and collaborations at all levels that encourage advancement of sustainability research/ scholarship and outreach activities  develop and support a campus community of sustainability teachers, scientists, and scholars  monitor Center accomplishments, status, and needs, applying an adaptive model to center activities  Identify and upgrade, or create, space for collaborative sustainability work	1.S.	analyze the current status of sustainability work at K-State, explore other models and innovative options, and make recommendations about the form of a center for sustainability  Communications of	1.UU.	Website developed publicizing campusbased projects and outcomes  Hiring needs identified for strengthened capacity in sustainability research and teaching  Departmental/college relationships built to enable strategic hiring to support desired university sustainability content strengths	1.NNN.	1. Ongoing annual symposium  1. Ten key hires made by 2021  2. Hiring coordinated with departments, infusing top scholars doing integrative sustainability research/scholarship throughout the university; at least 3 sustainability-focused members of the National Academies hired by 2025
1)	(i.e., physical core facilities for the Center)	1.U.	descriptions in several	1.WW	. Center established with involvement of faculty, staff, and students in every college		Ongoing leadership by the academic center for sustainability in offering programs and facilitating scholarly community

<sup>&</sup>lt;sup>3</sup>Alternatively, 'Institute' for the Advancement of Sustainability Knowledge: I-ASK

	reassignment of key faculty in leadership roles has begun.
1.V.	Initiation of efforts to obtain extramural funding for sustainability center and sustainability- oriented activities (identify and work with Foundation point- persons)

#### Goal 2. Campus and Public Engagement

**2025 Overarching Goal:** K-State will infuse sustainability into its engagement activities and leverage these enterprises to create communities of support for sustainability that drive progress toward the integration of sustainability goals throughout the institution.

#### Assumptions:

- At present, sustainability efforts do not sufficiently engage broader audiences and partners in engagement activities.
- Engagement is core to our value and identity as a public research land-grant university contributing to the public good.
- Community engagement refers, for the purposes of this plan, to local, state, national, and international scales.
- Engagement is synergistic with our research and education efforts, not an add-on.
- Internal and external communications are essential to continued support and development of the University's strategic interests toward sustainability.
- Potential external partners seek to be involved with and will put resources toward efforts that are highly successful.

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	Activities		Short Term (2013 – 2015)	Ke	y Outcomes Impact Intermediate Term (2016 – 2020)		Long Term (2021 – 2025)	
			t do we expect to pen by 2015?	xpect to What d		What do we expect to happen by 2025?		
ı	I. Campus Engagement:				•		•	
	<ol> <li>Develop recruitment programming and information for prospective students to introduce them to sustainability opportunities at K-State and effectively promote K-State's successes.</li> <li>a) Infuse sustainability activities into student orientation programming, setting the tone for sustainability learning within a social experience.</li> </ol>	2.A.	Financial and academic resources are devoted to create sustainability programming for prospective students.	2.W. 2.X.	K-State is known for its sustainable focus by all future students.  The university's sustainability goals	2.MM.	K-State students, faculty, and staff prioritize sustainability in all that we do, developing a cultural change throughout the	
	emphasize sustainability a) Create a student sustainability representative network (EcoReps).	2.B.	Administration, academics and operations collaborate to identify and actively		and successes are being met and promoted.		campus that we are all stewards of the environment.	
	<ul> <li>Develop co-curricular student activities reaching the majority of the student population.</li> </ul>		promote K-State's sustainability goals and	2.Y.	Sustainability programming is	2.NN.	K-State has an actively campaigning and	
	<ul> <li>Leverage academic programming to build student communities of outreach and engagement.</li> </ul>		successes.		infused into all aspects of campus		organizing student voice regarding	
	d) Develop active residence hall programming and clustered living for special interests in sustainability.	2.C.	Student sustainability awareness is increased by robust sustainability	2.Z.	life. Sustainability-related		sustainability issues within and beyond the university.	

- e) Develop appropriate university services to share "green" job and internship opportunities with students and alumni.
- Create student sustainability challenges and incentives within the campus community.
- 3. Office of Corporate Engagement, Career and Employment Services, and relevant academic departments work to develop partnerships with sustainability-related employers and career tracks and facilitate students taking advantage of these opportunities
- 4. Create new and utilize existing networking activities for faculty and staff led by the Office of Sustainability and partners.
- a) Increase faculty and staff participation and enthusiasm for programs and initiative, enhancing the EcoReps network.
- Create sustainability challenges and incentives within the campus community.
- 5. Intra-University Sustainability Partnerships
- a) Develop a partnership with the Center for Engagement and Community Development to facilitate university sustainability engagement efforts.
- Develop a partnership with Athletics to include their sustainability practices in the university's sustainability efforts and goals.
- Develop a partnership with the Alumni Association to support and identify alumni with sustainability interests
- Develop a partnership with the KSU Foundation to cultivate donors in support of sustainability initiatives

- programming of activities and service learning for both undergraduate and graduate.
- 2.D. Student EcoRep network (based on faculty/staff EcoRep network).
- 2.E. Clustered living for students with special interest in sustainability in Residence Halls.
- 2.F. Student sustainability awareness on campus is enriched by sustainability challenges.
- 2.G. Existing interested employers and relevant departments identified.
- 2.H. Faculty/staff
  sustainability education
  programming
  emphasizes the
  connections between
  academics, research,
  operations, and campus
  life.
- 2.I. Robust EcoRep network infused across all departments/units on campus.
- 2.J. Faculty/staff
  sustainability awareness
  is improved by campus
  sustainability
  challenges.
- Initial sustainability
   engagement with
   campus and community.
- 2.L. Athletics staff sustainability committee

- employers look to K-State for interns and graduates
- 2.AA. Students are actively involved in promoting sustainability both on and off-campus.
- 2.BB. Increase in job and internship opportunities for students.
- 2.CC. Faculty and staff are actively involved in promoting sustainability both on and off-campus.
- 2.DD. K-State Athletics has implemented sustainable practices into day-to-day operations and game day events.
- 2.EE. Alumni are aware of and actively contribute to university's sustainability initiatives.
- 2.FF. Targeted
  sustainability
  initiatives are being
  funded.

- 2.00. Engagement activities increase student retention rates
- 2.PP. Several key partnerships in place with major employers.
- 2.QQ. K-State has a rich network of faculty collaborating and exploring research and instructional connections.
- 2.RR. K-State has a supportive environment for empowering university academics and operations to pursue their sustainability goals.
- 2.SS. K-State has dynamic intra-university sustainability partnerships between the university and ancillary units such as Athletics, the Alumni Association and the KSU Foundation to help engage students. faculty, staff and alumni to pursue the university's sustainability goals as well as those of these ancillary units.

		has developed plan for operational practices with university's office of sustainability.				
	2.M.	Athletics has developed a communication strategy to improve fan participation in athletics game day sustainability efforts.				
	2.N.	Alumni Association Sustainability Special Interest Group established.				
	2.0.	Targeted sustainability initiatives selected and sustainability-minded donors cultivated by KSU Foundation.				
II. Community Engagement:						
Actively promote the relevancy of sustainability and becoming involved in policy-making and debate.      Presiden sutreach and strengthen conscitute has a leader in sustainability.	2.P.	Increased engagement with stakeholders on sustainability issues	2.GG.	engagement with stakeholders on	2.TT.	Public views K-State as a place that places high priority on
2. Broaden outreach and strengthen capacity to be a leader in sustainability engagement reaching diverse populations and stakeholders.	2.Q.	Work with city of Manhattan officials to	2.HH.	sustainability issues.  Develop noncredit	2.UU.	sustainability. Increased engagement with stakeholders on
Identify and engage our stakeholders actively and regularly as partners.		create a framework for community stakeholder		certificates, conferences, and		sustainability issues
4. Develop targeted strategic partnerships with industry, government, NGOs, and other institutions involved in research, education, and extension.		engagement.		community lectures relating to	2.VV.	Increase number of noncredit sustainability
Support and enhance economically and environmentally responsible	2.R.	Create an external advisory committee of	2.II.	sustainability. Create event to work		programs available to the public.
business opportunities for our stakeholders.		community partners to develop/promote collaborative		with other Kansas higher education institutions on	2.WW.	Increase number of strategic private and public sector
		partnerships at the state, national, and		sustainability issues.		partnerships that support teaching,
		international levels on sustainability.	2.JJ.	Increase number of strategic private and public sector		research and/or extension in sustainability
	2.S.	Implement an interdisciplinary sustainability speaker's		partnerships that support teaching, research and/or		comparable to aspirational peers
		bureau and lecture series available and open to the public.	0.1414	extension in sustainability	2.XX.	Increase faculty and staff participating in sustainability
	2.T.	Identify number of	2.KK.	Increase faculty and staff participating in		engagement projects

	2.U.	strategic private and public sector partnerships that support teaching, research and/or extension in sustainability. Increase number of faculty and staff participating in sustainability engagement projects	2.LL.	sustainability engagement projects  Continue coordinating efforts with the K- State Office of Corporate Engagement to strengthen relationships with industry.	2.YY.	Continue coordinating efforts with the K-State Office of Corporate Engagement to strengthen relationships with industry.
	2.V.	Coordinate efforts with the K-State Office of Corporate Engagement to strengthen relationships with industry.				

#### Goal 3. Operations

**2025 Overarching Goal:** Create a robust dynamic between operations and the teaching/research/service mission of the university that impacts decision-making at all levels in incorporating deep triple bottom line thinking – with robust engagement of campus occupants and grassroots networks (EcoReps)

#### **Assumptions:**

## **Buildings, Energy, Water:**

- Social Dimensions:
  - Customer satisfaction is important
  - High quality and modernized campus operations and infrastructure are critical for increasing research output, as well as recruiting and retaining high quality students, faculty, and staff and empowering high levels of productivity
- Economic dimensions:
  - o Energy costs are major constraints on operational budgets for the university, and concern about increasing costs over time should impact strategic investment decisions
  - Sustainability buildings and utilities initiatives must be affordable in the short term and cost effective over the long term
- Environmental Dimensions:
  - Buildings and built environment are the biggest source of energy consumption for the university
  - Energy consumption is the primary driver of carbon emissions for the university, and potable water consumption is also an important form of indirect energy consumption
  - Reducing energy consumption and shifting remaining energy consumption to renewable and low-carbon intensity energy sources are vital strategies for addressing climate goals for the university
  - o Climate change may produce significant strain on available water resources, and the university should be prepared for this risk

#### Climate Change:

- Climate Change presents a number of "grand challenges", both in terms of the challenges the world faces in adapting to its consequences as well as in challenges to mitigate the severity of these consequences through changing energy supply and use. Students, faculty, staff, alumni, partners, the citizens of Kansas, and other stakeholders of K-State will be responding to the issue in various ways throughout their lives.
- There is an imbalance in the global carbon cycle due to preponderance of fossil carbon fuels. Human industrial activity and technology use is the central driver of climate change resulting from this imbalance.
- K-State has a responsibility to its students, program stakeholders, and the citizens of Kansas to model productive ways of both mitigating climate change (reducing or eliminating its contribution to the carbon imbalance) and adapting to climate change (carefully assessing potential impacts from climate change on campus operations and planning carefully

for future activities as well as making appropriate investments with these impacts in mind). This responsibility derives from our duty to provide students and stakeholders with knowledge about how they can also do such things, as well as how to be wise stewards of the public investments Kansans have made and continue to make in K-State.

• Climate change mitigation outcomes are produced through activities throughout all operations categories, rather than from activities solely related to climate change itself. Climate change itself is an outcome of wide-ranging human activities and technology use.

#### **Grounds and Water:**

- Grounds/landscapes offer significant ecosystem services with social and environmental benefits to the university and community attracting students, outdoor classroom space, pleasant work and study environments, retaining and filtering stormwater runoff, shading buildings and outdoor spaces, biodiversity, etc.
- Grounds/landscape management practices are significant consumers of energy, fertilizers, and other external inputs that are both costs to the university as well as having environmental impacts from production and use
- Grounds/landscape management hold significant opportunities for mitigating climate change through carbon sequestration and helping campus adapt to climate change through
  effective stormwater management of higher intensity storms and through drought/heat tolerant plantings
- Water availability is critically important for campus from a human needs standpoint and in terms of landscape management
- Landscapes that reflect the native ecosystems of their region and our climate can maximize the ecosystem services benefits they provide while minimizing external inputs
  required for management
- Customer experience is important to the university, but fostering a place-based connection to the uniqueness of the prairie can be a way of providing a distinctive and high quality customer experience through low-impact and highly resilient native landscapes
- Adequate funding for maintenance is necessary if we are to receive high quality ecosystem services benefits from our landscapes

#### **Transportation:**

- Transportation systems are key elements of campus operations, and have high levels of impact on key sustainability performance criteria, such as carbon emissions, stormwater management, health impacts of different transportation options (benefits of active commuting, air quality from vehicle emissions, etc.), and more.
- Lower environmental impact transportation options also enable alternative growth strategies that can be less expensive to construct and maintain.
- The campus master plan for K-State emphasizes growth in public transit and bikability/walkability of campus, as well as reductions in public access to parking in the campus core.

#### Waste, Purchasing, Dining:

- Dining, Purchasing, and Waste systems are key elements of campus operations, and have high levels of impact on key sustainability performance criteria, such as carbon emissions, environmental and social impacts of resource procurement and disposal, costs to the university, and more.
- The university has an opportunity to use its purchasing power to promote sustainable business practices and to reward more sustainable business models.
- Quality of products is an important criteria, alongside environmental and social performance attributes products need to be of good quality and economically affordable in addition to being sustainably sourced
- Waste and purchasing habits are prime areas of opportunity for building greater community sustainability awareness and behaviors/participation.
- Together, these topic areas constitute the major material flows of campus, and the university needs to pursue synergies between purchasing, use, and end-of-life disposal in ways
  that minimize waste and maximize the useful life of the material resources we utilize, in recognition of the need for responsible societal limits to resource extraction from valuable
  Earth systems and ecosystems.

Activities	Key Outcomes Impact   Short Term   Intermediate Term   (2013 – 2015)   (2016 – 2020)				Long Term (2021 – 2025)	
I. Buildings:		at do we expect to pen by 2015?		t do we expect to en by 2020?	What do we expect to happen by 2025?	
Design new buildings with strong energy performance, water management, and other environmental attributes, including integrating site- and project-appropriate renewable energy technologies (active solar, passive solar, geothermal, and/or other)      Budgetary and decision-making pressures toward value-engineering must be addressed	3.A.	Sustainability performance is a significant priority in planning for new College of Business, Residence Hall/Dining Center buildings, as well	3.HH.	New buildings with high sustainability performance become signature facilities that promote collaborative learning and working environments.	3.SSS. New buildings since 2015 have met the requirements of the 2012 International Green Construction Code (IGCC 2012)	
<ul> <li>Must find a way of incorporating life-cycle costing into value engineering processes for building design and design refinement</li> </ul>		as the Student Union renovation.			3.TTT. New buildings and those that have been	

- 2. Retrofit, renovate, or otherwise improve existing buildings to raise levels of energy and environmental performance relative to university climate mitigation commitment and goals for campus-wide energy intensity
- Develop robust preventative maintenance program for existing buildings integrated with energy management staff

# 3.B. Financial, planning, and Facilities management mechanisms identified to invest in facilities retrofits that strongly feature energy and sustainability performance features.

- interaction between students, faculty, researchers, staff, and administrators, especially featuring sustainability features to foster "living laboratories" for sustainability education and research.
- experience high levels of building user satisfaction

retrofitted will

- 3.II. Improved building sustainability performance due to retrofits, with increased workplace satisfaction and more engaging learning environments due to improved sustainability performance.
- 3.UUU. Signature facilities that leverage sustainability performance and promote collaborative learning and working environments, multidisciplinary work, and integrated interaction between students, faculty, researchers, staff, and administrators.

## II. Energy:

See activities above for buildings

- 1. Invest in energy programs within Facilities to increase its energy analysis, facility auditing, and planning capabilities for building-level and campus-wide energy infrastructure and performance
- 2. Develop active behavioral and energy education initiatives through partnerships between Facilities and campus occupants, academic programs, student organizations, central administration, communications and marketing, and other groups on campus to help achieve reductions in energy intensity for campus
- 3. Actively pursue multi-scale renewable energy projects to displace fossil fuel Scope 1 and 2 energy sources for campus as an important strategy for meeting climate mitigation goals for the university
- a) On-site behind the meter renewable generation (north hills wind turbines, rooftop solar PV and/or parking lot PV)
- Power purchase agreements (PPA's) with off-site renewables (e.g. western KS wind energy)

- 3.C. ASHRAE Level 1 Audits performed on all facilities, including performing an Energy Star EUI benchmark.
- A selection of key campus buildings will have been carefully audited and analyzed for opportunities, as well as current energy intensity levels.
- 3.E. Established a goal for 2025 for level of energy intensity of campus buildings
- 3.F. Behavioral/campus involvement campaign has been initiated
- Pilot rooftop solar and solar covered parking pilot installations implemented and

- 3.JJ. ASHRAE Level 2
  audits performed on
  high priority facilities
  identified in Level 1
  Audit that indicate
  promising ROI, and
  incorporate Energy
  Star Portfolio
  Manager rating for
  facilities.
- 3.KK. Funding and infrastructure planning undertaken for high priority facilities renovations identified through ASHRAE audits, and renovation of at least one high audit priority facility has begun.
- 3.LL. Energy management system in place covering entire main campus, with significant

- 3.VVV. Renovations of high priority facilities identified in ASHRAE Level 2 audit results has been accomplished, bringing significant numbers of older buildings up to a basic level of modern performance and improvements, with Energy Star building ratings between 50-75.
- 3.WWW. Overall building stock has reached a much lower level of energy intensity per square foot, and per campus weighted user (goals developed in 2013-2015 timeframe)
- 3.XXX. An excellent campus community experience supported by facilities and landscapes that

	3.H.	feasibility analysis studied for broader campus implementation  Feasibility study completed for north pastureland wind project, and planning/implementation pursued if viable	3.NN. 3.OO.	improvements in performance for low hanging fruit key buildings, operating in concert with behavioral campaigns for building occupants.  Improved building performance due to comprehensive energy management, with increased workplace satisfaction due to energy improvements and utility/operational cost savings being reinvested in further facilities improvements.  Widespread implementation of rooftop solar/parking lot solar if financially feasible  Implementation of behind the meter local wind if feasible  Other innovative behind-the-meter renewable energies considered and implemented where feasible (geothermal, passive solar water heating, and/or other)		enhance social interaction, learning and collaboration through leveraging campus as a living laboratory for energy management, education, and scholarship.  Carbon footprint for university operations will be reduced to levels appropriate for a trajectory of 80% reductions by 2050 (climate action plan developed in 2013-2015 timeframe)  A majority of university Scope 1 and 2 energy comes from renewable resources with that do not degrade the source of the renewable resource and are biophysically/ecologically sustainable over centuries-long time horizons
III. Water:				nealing, and/or other)		
technologies to reduce demands for fresh potable water use from Manhattan water system  2. Renovations of old buildings and grounds will implement water efficient systems	3.I. 3.J.	Inefficiencies in central plant, campus steam/chilled water loops, and indoor water use identified  Campus potable water consumption has been benchmarked against	3.QQ.	Statewide policies for public institution power purchase agreements changed and large-scale power purchase agreement for Kansas wind energy pursued	3.AAA	A. Reduced potable water consumption per square foot of campus buildings, tied to facilities and central plant renovations/improvements tied to energy goals

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IV. Buildings, Energy, and Water:		STARS framework/metrics	3.RR.	Water consumption reductions have been included in planning for building retrofits and central plant upgrades	
<ol> <li>Involve students, faculty, and staff in research and development of pilot-scale innovative building, energy, and water projects for managing efficiency, renewable energy, or other sustainability infrastructure issues</li> <li>Communicate successes to internal campus and external university constituencies, stakeholders, and audiences</li> </ol> V. Climate Change:	3.K. 3.L. 3.M.	pilot projects  Increase in numbers of students, faculty, and staff involved in pilot projects  Strengths, opportunities, and successes of existing campus sustainability efforts communicated to the campus public and external stakeholders.	3.SS.	departments throughout the university involved in campus facilities sustainability research and education opportunities/projects,	3.BBBB. Large numbers of students involved in experiential research and learning involving sustainability projects with campus infrastructure.  3.CCCC. National reputation for high quality, innovative, and site-appropriate implementation of sustainability into campus infrastructure as well as involvement of academic mission in campus infrastructure management
<ol> <li>Develop a Climate Action Plan for K-State, involving students and faculty in identifying and evaluating opportunities for climate mitigation and adaptation</li> <li>Integrate Climate Action Plan goals and outcomes into decision-making at all levels of Facilities capital investments, operational maintenance, and ongoing Facilities services</li> <li>Integrate climate awareness and leadership into campus activities/academic programs – promoting opportunities for involvement on campus as well as in the lives and lifestyles of students, faculty, and staff, including fostering opportunities for student and faculty research related to indicators and assessment and/or implementation of climate action plan items.</li> </ol>	3.O.	action plan to reduce carbon intensity and total carbon emissions		quantitative progress on climate action plan Campus and Community involvement in University climate efforts, including research and education outcomes	3.DDDD. Achieve a benchmark reduction in our carbon intensity and in total carbon emissions from university activities by 80% by 2050 vs our 2005 benchmark  3.EEEE. Campus and community-wide carbon reductions due to widespread involvement  3.FFFF. Student/faculty/staff involvement in updating climate action plan over time

#### VI. Grounds and Water:

- 1. Develop plan in concert with feasibility analysis for long-term substitution of prairie place-based identity landscapes and productive community gardens in place of current lawnscapes and impervious surfaces
- a) Create place-based native and/or resilient landscape design guidelines for new campus building projects, and enforce guidelines with architects/design professionals designing those projects
  - Consider Sustainable Sites Initiative standard for maximizing desirable ecosystem services from site planning
- Clarify responsibilities/role/membership of landscape advisory committee, and empower the committee to oversee major landscape investments and management plans
- c) Identify high maintenance and low maintenance needs areas for campus to prioritize Facilities staff time/resource investments in management, and work with stakeholders for those areas to identify areas for shifting to native prairie and/or more resilient landscapes
- 2. Develop education efforts for public acceptance of place-based prairie aesthetics leveraging academic departments for visualizations and signage as well as Extension for public engagement, all in partnership with campus landscape management planning and ground staff
- Rules, training, and enforcement for Facilities maintenance staff and contractors to reduce damaging impacts to landscaping and infrastructure due to indiscriminate vehicular access of sites.
  - especially for minor projects with minimal oversight/planning
- 3. Develop recruitment, training, and retention programs for departmental/unitstudent/faculty/staff co-management partnerships for key native landscapes and community gardens
- Use planning process to build relationships with building occupants, alumni with vested interests in landscape appearances, student groups, and other stakeholders of landscapes toward their participation in comanagement
- Foster research opportunities for students in designing landscape management strategies and evaluating benefits (social, environmental, economic)
- 4. Implement Tree Campus USA plan for managing trees as part the nativeoriented place-based landscape identity for campus
- 5. Install pockets of bioretention cells throughout campus in critical stormwater flow points to maximize infiltration and stormwater flow reductions from campus
- 6. Install permeable pavers and permeable concrete instead of impermeable sidewalks and road/parking surfaces, especially in key stormwater flow areas
- 7. Implement design guidelines in Campus Master Plan for reductions in stormwater runoff from all new building and landscaping projects for campus
- 8. Invest in modernizing irrigation technologies/infrastructure for more precise and environmentally sensitive management (using climate data, sensors, etc.)

- 3.Q. Plan developed, and priorities and responsibilities clarified
- 3.R. Community of landscape-oriented faculty, Extension personnel, and grounds staff, students, and other interested stakeholders has been developed, and education programs are being pursued by this community.
- 3.S. Training and encouragement practices are in place, enhancing coordination between Facilities grounds staff and other Facilities staff.
- 3.T. Students, faculty, and non-grounds staff are involved in growing community of stakeholders developing education programming and forms of comanagement/research in partnership with Facilities grounds staff.
- 3.U. Initial steps accomplished in Tree Campus USA plan
- 3.V. Opportunities for bioretention cells, permeable paved/improved surfaces, and irrigation technology improvements identified, and plan of priorities developed.
- 3.W. Campus engagement

- 3.WW. Begun to implement plan, with significant projects utilizing and demonstrating appropriate governance for landscape management
- 3.XX. Positive programming has been developed for prairie landscapes, and public acceptance has been secured, overcoming any potential push-back against native plantings, including any negative historical perceptions of K-State as "cow-tech" and "silo-tech" from times before campus invested significantly in lawn maintenance and landscaping.
- 3.YY. Extension and other forms of engagement leveraging student and academic research related to campus management of landscapes
- 3.ZZ. Substantial undergraduate and graduate student research projects that help improve landscape management and understanding of benefits
- 3.AAA. Next phase of progress accomplished in Tree Campus USA plan

- 3.GGGG. Large areas of high water use and high maintenance areas have been replaced with low-input native and appropriate alternative resilient landscaping
- 3.HHHH. Utilize landscape management as a key climate mitigation strategy in climate action plan for campus
- 3.IIII. Cultural acceptance and celebration of native and more resilient landscapes by campus occupants and stakeholders, viewed as a strength of K-State.
- 3.JJJJ. Substantial
  volunteerism, servicelearning, and/or other
  partnerships of
  students/faculty/staff
  co-managing placebased native, resilient,
  and productive
  landscapes in key
  areas alongside
  Facilities personnel
- 3.KKKK. Next phase of progress accomplished in Tree Campus USA plan
- 3.LLLL. Reduced stormwater runoff from campus (increased % managed by natural systems for stormwater management)
- 3.MMMM.Increased quality of stormwater runoff

		1 0 1	3.BBB. Reduced stormwater	(decreased pollutants
9. Develop behavioral water management campaign for building users based		features water use as an	runoff from campus	in runoff, appropriate
on building-level data, in concert with any energy, recycling, purchasing, or		important action-area.	(increased %	temperatures, etc.)
other sustainability behavioral campaigns with building occupants			managed by natural	
				3.NNNN. Reduced quantities
			stormwater	of irrigation, with
			management)	increased quality of
				landscape and
			3.CCC.Increased quality of	regionally/climate
			stormwater runoff	appropriate vegetation
			(decreased pollutants	
				3.0000. Campus
			temperatures, etc.)	engagement program
				development features
			3.DDD.Reduced quantities of	water use as an
			irrigation, with	important action-area.
			increased quality of	
			landscape and	
			regionally/climate	
			appropriate vegetation	
			2 FFF Commun annual annual	
			3.EEE. Campus engagement	
			program development	
			features water use as an important action-	
			area.	
VII. Transportation:			aica.	
····· ································				
Planning an integrated transportation system for campus	3.X.	Organized	3.FFF. Improvement in	3.PPPP. Further improvement
a) Improve transportation planning processes, potentially reorganizing		bicycle/alternative transit	Bicycle Friendly	in Bicycle Friendly
transportation-oriented programs and departments under a central		advisory	Campus status	Campus status – at
transportation department, with responsibilities for multi-modal systemic		group/committee to	•	least Silver level by
transportation planning, prioritization/allocation of resources, and		pursue 5E's planning for	3.GGG. Significant shift in	2025, perhaps Gold
implementation of transportation investments		alternate transit modes	mode-share of	level
b) Reformulate Parking Council into a university-wide committee with a			commuting, creating a	
	3.Y.	Designation as a Bicycle		3.QQQQ. Major shifts in mode-
of the overall transportation systems for campus, and not just parking.		Friendly Campus (base	personal-automobile	share toward less
c) Include campus fleets' management and university-related travel as part		level)	dependent and	personal-automobile
of the transportation system planning for meeting goals of the university			energy intensive	dependent and energy
Climate Action Plan.	3.Z.	Reorganized Parking	campus transportation	intensive campus
		Services into a campus	system	transportation system
2. Integrate campus planning with community long-range planning initiatives		transportation planning		(enabling substantial
like the Manhattan Comprehensive Plan – addressing issues such as			3.HHH.Multi-modal	progress toward
community-wide parking issues, demand for public transit, bicycle and		Facilities Planning	Transportation plan	Campus Master Plan
pedestrian planning/investments, etc.			developed to suit	transportation goals as
	3.AA.		needs of Campus	well as supporting
3. Public transit, bikability/walkability/alternative transit modes investments for		Council into more	Master Plan and	progress along
campus core		comprehensive	Climate Action Plan,	trajectory to climate
a) Using strategies from the 5E's framework from League of American		transportation system	with complementarity	action plan goals)
Bicyclists, but applying beyond just bicycles, as all modes of transit can		campus committee (with	to City of Manhattan	o DDDD - Dadwarf - :
benefit from planning across the 5E's for their particular mode		bicycle advisory	Comprehensive Plan	3.RRRR. Reduction in
b) Driven by more comprehensive transportation system planning as above		subcommittee, as well		numbers of students

<ul> <li>c) Leveraging avoided costs and targeted user fee increases (as below) to generate financial resources for some of these investments</li> <li>4. Align financial incentives for parking permits and other user fees with desired commuting behavior outcomes (increased fees for campus core parking, reduced fees for distant parking, subsidized public transit, investments in bike/ped infrastructure)</li> <li>5. Invest in energy efficient and alternative fuel/energy vehicles for campus fleet, and increase use of alternatives to transportation where possible (virtual meetings, carpooling, Zip Cars, etc.)</li> </ul>	as	s others as needed)		Implementation of strategic multi-modal transportation investments by newly formed transportation department	who bring cars with them to K-State  3.SSSS. Campus fleet becomes more energy efficient (supporting trajectory to climate action plan goals)
VIII. Waste:					
Continue investment in campus recycling program, and further refine operational efficiencies and reinforcement of recycling practices with Facilities staff     Need to work with Fire Marshall more collaboratively to improve recycling bin accessibility indoors	to ev	vivert 30% of material vaste from landfill byward goal of ventually being zero vaste	3.JJJ.	Divert 50% of material waste from landfill toward goal of eventually being zero waste	3.TTTT. Divert at least 75% of waste from the landfill toward goal of eventually being zero waste
<ol> <li>Increase programming engagement with faculty/staff/students and ancillary K-State units (Athletics, Foundation, Alumni Center, etc.) to increase participation in recycling and to promote waste minimization opportunities</li> <li>Revisit campus contracts that obligate campus to high waste production systems – to potentially minimize waste (e.g. Pepsi contract, etc.)</li> <li>Influence campus-wide beverage contract RFP drafting for waste minimization opportunities (winter 2014)</li> </ol>	th	lew beverage contract nat reflects waste ninimization priorities	3.KKK.	Continued beverage contract with waste minimization outcomes	3.UUUU. Waste minimization efforts have effectively reduced waste intensity per weighted campus user and per square foot
IX. Purchasing:					
<ol> <li>Develop university-wide purchasing policies that maximize environmental performance for university purchases and empower purchasing department to hold university units accountable to these standards except where explicit and clear exceptions are required to support the university mission</li> <li>a) Purchasing office staff begins revising specifications in all quote solicitations for key purchasing product categories (electronics, paper/office supplies, cleaning materials and pest control)</li> <li>b) Purchasing office includes recyclability of waste produced, impacts from manufacture and supply chains, and life-cycle cost of operating/maintaining products in revisions to product specifications for all quotes</li> <li>2. Purchasing department develops appropriate data gathering capabilities and</li> </ol>	ar es cc pr (p cl ot ot 3.EE. Im el el	nd policies developed, specially involving ommonly purchased roducts/materials paper, electronics, leaning materials, and ther office supplies)  nmediate increases in PEAT/Energy Star lectronics, recycled ontent paper, green	3.МММ	and policies lead to administrative commitment and enforcement of commitment by central Purchasing Office  1. 50% of electronics purchases are EPEAT certified	3.VVVV. 75% of electronics purchases are EPEAT certified  3.WWWW. 100% of paper at least 30% recycled content  3.XXXX. 100% of cleaning materials green certified products  3.YYYY. Major reduction of
supports analysis/assessment of environmental performance across university purchasing activities for purposes of revising product specifications, policy development and refinement, and performance tracking  a) includes recyclability of waste produced, impacts from manufacture and supply chains, and life-cycle cost of operating/maintaining products in revisions to product specifications for all quotes	cle	leaning products due to evised specifications	3.NNN. 3.OOO	.80% of paper purchased with at least 30% recycled content	non-recyclable materials purchases to enable diversion rate goal above

X. Dining:		materials are green certified products  3.PPP. Reduction of non-recyclable materials purchases to enable diversion rate goal above	
customers regarding the impacts of their food choices on their health, as well as environmental, economic, and social conditions of the food system  2. Develops policies and plans for dining centers to increase purchases of environmental/humanely certified and/or locally/community-based products, and increases healthy food options and choices for students (including special dietary needs such as vegan, gluten and other food sensitivities and dietary needs)	faculty related to increased capacity of community-based food systems in local area and region	of students especially, but also faculty and staff, of where food comes from, cultural significance, diversity of types of foods and ways of producing it  3.RRR. Engaged scholarship, including academic/community/ business partnerships, to support development of local and regional food systems capacity that can serve a large portion of university dining procurement	3.ZZZZ. Reduction in food waste  3.AAAAA.High percentage of food procurement from certified environmental/humane and/or local and community-based sources  3.BBBBB.Significant levels of service learning, experiential learning, and applied research by students and faculty regarding food procurement and dining services, and their relationships to environmental, social, and economic impacts of food procurement and use  3.CCCCC. Greatly increased percentage of campus food and nutrient flows that cycle locally/regionally in a closed loop  3.DDDDD. Significant influence of campus purchasing and food system educational practices on development of local/regional food system capacity and social/economic/environemental health

nmental health

		3.EEEEE.Healthy food and options for foodsensitivities and special diets readily available throughout campus
		3.FFFFF. Greatly increased awareness of social, environmental, and economic inequities in the food system as well as tradeoffs in seeking long-term sustainable solutions to food system challenges

### Goal 4: Leadership

2025 Overarching Goal: Foster administrative leadership to ensure all university programs and departments/units are active partners in accomplishing the university's sustainability goals.

## **Assumptions:**

- Sustainability goals and activities in this plan bridge all major organizational structures of the university as well as ancillary organizations such as KSU Foundation, Alumni Association, and Athletics, so administrative leadership must exist at the highest levels to facilitate partnerships across these silos
- Administrative leadership must be prepared to leverage the professional roles and responsibilities of university faculty and staff in acting on the university's sustainability goals.
   This includes encouraging and empowering especially upper- and middle-level administrators to embrace sustainability goals as well as develop policies and decision-making processes consistent with these goals
- Relatively permanent and reliable sources of funding are required in order to build programming and initiatives
- Some coordination and programming is most appropriate at a central administrative level through an Office of Sustainability, while other coordination and programming functions are most appropriately organized through academic units and structures or through relevant programmatic administrative structures
- Institutional inertia, silos, competing priorities, and time poverty of faculty and staff are serious barriers to unleashing creative engaged scholarship and teaching, as well as interdisciplinary investments in sustainability scholarly communities

Activities		Short Term (2013 – 2015)	Ke	ey Outcomes Impact Intermediate Term (2016 – 2020)		Long Term (2021 – 2025)
I. Leadership:		nt do we expect to pen by 2015?		t do we expect to pen by 2020?		it do we expect to ben by 2025?
Overarching University-Wide: University will pursue activities across all organizational structures of the university to improve its sustainability performance, and representing the spectrum of activities outlined in this strategic plan.	4.A.	Initial AASHE STARS assessment performed as university benchmark	4.L.	Consistent improvements in STARS rating score, assessed at least bi-	4.V.	Major improvement in STARS or other ratings score, assessed at least bi-annually, and
2. Create a <b>Presidential Commission on Sustainability</b> for ongoing oversight/guidance of university sustainability goals/priorities, internal institutional advocacy, and accountability to the President	4.B.	Governance structure/role/charge established and commission appointed	4.M.	annually  Commission members are acting as effective	4.W.	with STARS rating of at least Silver by 2025 Commission members

- Work with President's Cabinet to build effective partnerships throughout university and with ancillary university entities (Foundation, Athletics, Alumni Association)
- b) Utilize AASHE STARS or other widely used sustainability ratings system for benchmarking performance against peer universities
- 3. **Office of Sustainability:** Effectively resource and empower the Office for the purposes of:
- a) Fostering synergy and linkages among various campus constituencies
  - In order to build awareness, excitement, and social capital within the university related to sustainability
- b) Coordinating new initiatives
- Facilitating ongoing professional development of faculty and staff through sharing professional development opportunities with campus constituencies
- d) Assessing university performance relative to its goals
- Cultivating funding for sustainability programming and initiatives in partnership with senior university administration
- 4. **Senior Administrators and Office of Sustainability** pursue active efforts to generate buy-in of sustainability goals at all levels of the organization
- Sustainability leadership summits/retreats for senior administrators (vice presidential and associate vice presidential level administrators) as well as leaders of major campus units (directors)
- b) Cultivate buy-in and leadership from deans, department heads, and academic administrators in the colleges and academic programs
- c) Collaborative professional development workshops/experiences for midlevel administrators to better inform alignment of unit goals with university sustainability goals and to foster adjustments in policies and decisionmaking processes where needed
- d) Identify opportunities and act to hire/appoint/identify sustainability coordinators within major organizational structures outside central administration (residential life, student life services, retention programs and first year experience, functional units within Facilities, Athletics, Alumni Association, Foundation, and others identified as needs arise)
- 5. **Sustainability Center/Institute:** Create administrative structure for interdisciplinary research/teaching institutes and foster development of at least one major institute/center of sustainability scholarship
- a) Identify key multi-scalar strategic challenges that K-State will prioritize as its scholarly focus on sustainability
- Develop process and resources to seed development of trans-disciplinary problem-focused scholarly clusters related to these strategic challenges
- Work with clusters to further institutionalize cluster activities into a central institute/center or multiple institutes/centers related to these strategic challenges
- d) Outcomes/objectives of clusters/institutes/centers are to improve

- 4.C. Initial Office of
  Sustainability 5-year
  strategic plan is
  developed and aligned
  with targeted roles
  within this broader
  university sustainability
  strategic plan
- 4.D. Dedicated FTE allocated to enact roles in strategic plan and either directly supervised or co-supervised by director of sustainability
- 4.E. Two or more colleges have explicit sustainability goals and outcomes
- 4.F. Major non-academic units that are developing their 2025 plans have developed sustainability goals in their respective plans
- 4.G.

  University
  structures/units
  leveraging OoS for
  facilitation and
  coordination of
  sustainability
  performance within
  operational, academic,
  and support
  units/functions
- 4.H. Initial benchmark survey of campus community measuring attitudes toward sustainability, awareness, and interest/motivation for improved performance
- Multi-scalar sustainability challenges identified

- emissaries throughout the organization for facilitating progress on sustainability goals (measured through annual report)
- 4.N. President and leadership team are up-to-date on sustainability progress and opportunities for leadership
- 4.O. Large proportion of strategic goals of initial Office of Sustainability strategic plan have been reached, allowing some flexibility for adapting to new emerging opportunities, and new 5-year plan created
- 4.P. 50% of K-State 2025 college and department plans have explicit sustainability goals and outcomes
- 4.Q. Major non-academic units that did not have explicit sustainability goals in their first round of strategic planning have now updated their plans to include specific sustainability goals
- 4.R. Sustainability
  frequently featured in
  annual
  retreats/workshops of
  key university
  administrative
  partners in
  sustainability

- are acting as effective emissaries throughout the organization for facilitating progress on sustainability goals (measured through annual report)
- 4.X. President and leadership team are up-to-date on sustainability progress and opportunities for leadership
- 4.Y. Large proportion of strategic goals of second Office of Sustainability strategic plan have been reached, driving university-wide performance improvements in AASHE STARS or other ratings assessment
- 4.Z. 75% of K-State 2025 college and department plans have explicit sustainability goals and outcomes
- 4.AA. New students, faculty, and staff effectively acculturated to university expectations of sustainability performance
- 4.BB. Sustained increase in campus cultural acceptance, awareness, and interest in sustainability challenges and university performance responding to these challenges
- 4.CC. At least one major high

research/scholarly	v output and drive	overarching	K-State 2025 goals

- 6. **Celebrate and champion** innovative interdisciplinary and transdisciplinary sustainability scholarship, engaged scholarship
- a) Leverage Provost's lecture series to explicitly support university sustainability goals
- Identify and empower internal university leaders/champions for innovative and inter/trans-disciplinary sustainability scholarship
- Reward innovative sustainability scholarship with acknowledgments, additional opportunities, supplemental funding, and/or other incentives
- 7. **Support/encourage departments/colleges** in adjusting their annual evaluation criteria to reward interdisciplinary collaborations and engaged scholarship/teaching
- 8. **Promote Sustainability:** Identify and communicate external opportunities/threats for the value of sustainability in advancing university mission in order to better promote sustainability to various university leaders/audiences on the importance of sustainability
- 9. **Funding:** Identify funding for sustainability initiatives and allocate funding for faculty inducements, seed funding for sustainability living laboratory projects, and key administrative support functions for bridging institutional silos

- J. Funding strategies identified for enabling sustainability efforts by Office of Sustainability, campus operations and infrastructure, university co-curricular education/engagement programs, and support for innovative sustainability scholarship and teaching
- 4.K. Plan developed for funding key sustainability priorities, including K-State Foundation's active involvement

- performance
- 4.S. New clusters formed and at least one developed into an institute or center
- 4.T. Increased campus cultural acceptance, awareness, and interest in sustainability
- 4.U. Funding strategies enacted and funding secured for increasing capacity of Office of Sustainability and for targeted investment in key sustainability priorities
- profile center/institute exists and is supported by multiple funding sources, with capacities for active campus community engagement around scholarly challenges of sustainability and modelina transdisciplinary engaged scholarship. At least two major strategic challenges addressed by any centers/institutes.
- 4.DD. Sustainable funding model developed for stable operating environment for Office of Sustainability and key university sustainability initiatives

# Links to K-State 2025 University Benchmark Metrics, Common Elements, and Thematic Goals, Outcomes, and Metrics

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- B-1 Total research and development expenditures
- B-2 Endowment pool
- B-3 Number of national academy members
- B-4 Number of faculty awards
- B-5 Number of doctorates granted annually
- B-8 Percent of undergraduate students involved in research

## **Links to Common Elements**

- CE-1 Communications and Marketing
- CE-2 Culture
- CE-3 Diversity CE-4 External Constituents
- CE-5 Funding
- CE-6 International
- CE-7 Sustainability
- CE-8 Technology

	Links to University Thematic	Goals, Outcomes, and Metrics	
Links to 2025 Thematic Goals and Metrics	Links to Short Term Outcomes (2011 – 2015)	Links to Intermediate Outcomes (2016 – 2020)	Links to Long Term Outcomes (2021 – 2025)
T1 - Research, Scholarly and Creative Activities, and Discovery (RSCAD)  Theme 1 Metrics: T1-1 - # of interdisciplinary research projects, institutes, and centers T1-2 - Total sponsored extramural funding expenditures T1-4 - # of refereed scholarly publications per academic year and allocated faculty member T1-5 - Total international research and development expenditures	T1-A - Increased intellectual and financial capital to support RSCAD  T1-B - More clusters/centers of collaborative RSCAD focus  T1-C - Increased funding for investigator-based research, research centers, and graduate training grants  T1-F - Enhanced and systematic approach for UG research  T1-G - Successful recruitment, retention, evaluation, compensation, and rewards strategies in place to support RSCAD needs  T1-H - Enhanced visibility and appreciation for research, discovery, and scholarly and creative activities	T1-I - Intellectual and financial capital in place for expanded RSCAD efforts  T1-J - Greater proportion of nationally and internationally recognized awardwinning faculty in RSCAD programs  T1-K - Nationally and internationally recognized research centers  T1-L - Recognized for prominent and productive placement of our graduates  T1-M - Increased participation by undergraduates in expanded opportunities in research	T1-N - Fifty nationally recognized K-State researchers, a high proportion of which are members of their national academies  T1-O - Extramural funding competitive with our benchmark institutions  T1-P - Research and development expenditures competitive with benchmark institutions  T1-Q - Competitive amongst our peers in the percentage of undergraduates involved in research
T2 - Undergraduate Educational Experience (UEE) Theme 2 Metrics:	T2-B - Engaged students benefitting from high impact educational practices used by excellent faculty and staff across the university	T2-I - Integrated learning communities experienced by students, faculty, and staff that promote student success within a culture of excellence	T2-O - An undergraduate educational experience recognized as one of the best among the nation's Top 50 Public Research Universities

	Links to University Thematic	Goals, Outcomes, and Metrics	
Links to 2025 Thematic Goals and Metrics	Links to Short Term Outcomes (2011 – 2015)	Links to Intermediate Outcomes (2016 – 2020)	Links to Long Term Outcomes (2021 – 2025)
T2-1 - # and % of undergraduate students participating in a meaningful international experience T2-2 - # and % of undergraduate students completing an experiential learning experience T2-5 - # of students awarded national and international prestigious scholarships T2-6 - % of undergraduate enrollment by demographic group T2-7 - Student satisfaction and utilization rates	T2-C - Increased participation by undergraduates in expanded opportunities for meaningful research  T2-D - Successful integration of undergraduate education and meaningful research is standard practice  T2-E - Effective evaluation practices that recognize and reward teaching, advising, and life-long learning/professional development  T2-G - Successful recruitment and retention strategies that address our entire student population	T2-L - All UG students engaged in a diversity of experiences that expand their viewpoint  T2-M - Increased undergraduate contributions in the creation of scholarship through research	T2-Q - Freshman to Sophomore retention ratios comparable to benchmark institutions
T3 - Graduate Scholarly Experience Theme 3 Metrics:	T3-C - Engaged graduate students integrated in university life with enhanced visibility and appreciation	T3-I - Increased participation by our graduate students in unique high level learning and experiential training	T3-N - National and international reputation for outstanding graduates with demonstrable career success
T3-1 - # and % of graduate students with assistantships, endowed scholarships, and fellowships T3-2 - Total funds awarded for graduate assistantships, endowed scholarships, and fellowships T3-3 - # and % of graduate programs offering competitive compensation and support packages T3-4 - # of private/public sector partnerships supporting graduate experiential training opportunities T3-5 - # of graduate students participating in a unique high level learning and experiential training T3-6 - # of graduate terminal degrees awarded T3-7 - Total graduate students	T3-G - Broader spectrum and greater overall number of courses offered at the graduate, and especially at the PhD level  T3-H - Expanded partnerships with industry and government to provide high level learning and experiential training opportunities for graduate students	T3-J - Expanded reputation for outstanding graduates with the critical skill sets needed to excel in their careers in a global environment  T3-L - Increased number of nationally and internationally recognized award-winning graduate faculty  T3-M - Increased number of Doctorates Awarded	T3-O - World-class reputation as a preferred destination for outstanding graduate students

	Links to University Thematic	Goals, Outcomes, and Metrics	
Links to 2025 Thematic Goals and Metrics	Links to Short Term Outcomes (2011 – 2015)	Links to Intermediate Outcomes (2016 – 2020)	Links to Long Term Outcomes (2021 – 2025)
enrolled by demographic group and degree type			
T3-8 - Graduate student satisfaction and utilization rates			
T4 - Engagement, Extension, Outreach and Service	T4-A - Enhanced integration between academics and student service learning	T4-H - Exposure on a national level as a leader/partner engaged in significant social, political, health, economic and, environmental issues	T4-N - Nationally recognized as a leader in and model for a re-invented and transformed land -grant university integrating research,
Theme 4 Metrics:	T4-B - Increased participation by	economic and, environmental issues	education, and engagement
T4-1 - # and % of undergraduate students participating in engagement/service learning	undergraduates in expanded opportunities for meaningful Engagement experiences	T4-I - All undergraduate students engaged in at least one engagement /service learning project	T4-O - Nationally and internationally recognized as leaders in
T4-2 - Total extramural-funded expenditures for Engagement initiatives at the local, state, national, and international level	T4-C - Increased recognition of our services as a source of expertise, information, and tools for disciplines	T4-J - Increased number of graduate students involved in Engagement	T4-P - Recognized as a leader in Engagement reaching both rural and
T4-3 - # of partnerships by sector and geographic boundary supporting collaborative research, education, and engagement	worldwide  T4-D - Increased numbers and diversity of faculty and staff participating in Engagement	T4-K - Increased appreciation by K- State graduates for lifelong involvement in engagement and service	urban communities
T4-4 - # of engagement activities and programs disaggregated by geographic boundaries	T4-F - Recognition as leaders in Engagement within our state and	T4-L - Increased capacity to respond to emergencies worldwide	
T4-5 - # of participants involved in community-based research and	nation T4-G - Enhanced visibility and	T4-M - Preferred destination for faculty, staff, and students who value Engagement as integral to their	
outreach projects T4-6 - Economic impacts on rural and urban communities in Kansas	appreciation for Engagement and its interconnectedness with research and education within our university community	academic and personal lives	
T5 - Faculty and Staff	T5-C - Career-long learning recognized by the university and its	T5-F - Faculty and staff current with developments in their fields and the	T5-H - Talented and high performing, diverse workforce recognized for
Theme 5 Metrics:	employees as a shared value and responsibility	skills needed to achieve excellence in performing their jobs	excellence and award-winning faculty and researchers
T5-1 - # of national and international faculty awards	T5-D - Effective evaluation	T5-G - Successful recruitment and	
T5-2 - # and % of faculty with endowed chairs, professorships, and fellowships	processes that result in accountable faculty and staff with a clear understanding of their job expectations and how they	retention of a talented and high performing, diverse workforce	

	Links to University Thematic	Goals, Outcomes, and Metrics	Links to University Thematic Goals, Outcomes, and Metrics						
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T5-3 - Competitive compensation packages for faculty and staff	contribute to the University's mission								
T5-4 - # and % of faculty and staff participating in international experiences									
T5-7 - % of faculty and staff reporting satisfaction in the work environment									
Theme 6 Metrics: T6-2 - Total expenditures for physical facilities and infrastructure projects T6-3 - Total annual expenditures for deferred maintenance T6-4 - Total funding available to support facilities and infrastructure needs T6-5 - % of faculty, staff, and students reporting satisfaction with facilities and infrastructure	T6-A - Responsive, timely, and strategic facilities services aligned with campus operational needs as well as future planning and implementation	T6-E - Enhanced campus community experience and collaborative learning and working environments promoted by facilities that support multidisciplinary work and integrated interaction between students, faculty, researchers, staff, and administrators  T6-F - Efficient, reliable, and cost-effective central and building utilities with the capacity for expansion as needed to support campus needs and guarantee the safety, comfort, and integrity of our research, animal, and human environments	T6-I - Well-maintained buildings, utilities, IT infrastructure, and grounds consistent with the expectations and image of a highly ranked land grant research and teaching institution  T6-J - An excellent campus community experience supported by facilities and landscapes that enhance social interaction, learning and collaboration  T6-K - Signature facilities that promote collaborative learning and working environments, multidisciplinary work, and integrated interaction between students, faculty, researchers, staff, and administrators						
T7 - Athletics	T7-B - Enhanced learning environments and relationships promoted by facilities and integrated activities that support interaction between students, student-athletes, and the campus community  T7-C - Enhanced integration between academics and athletics								