

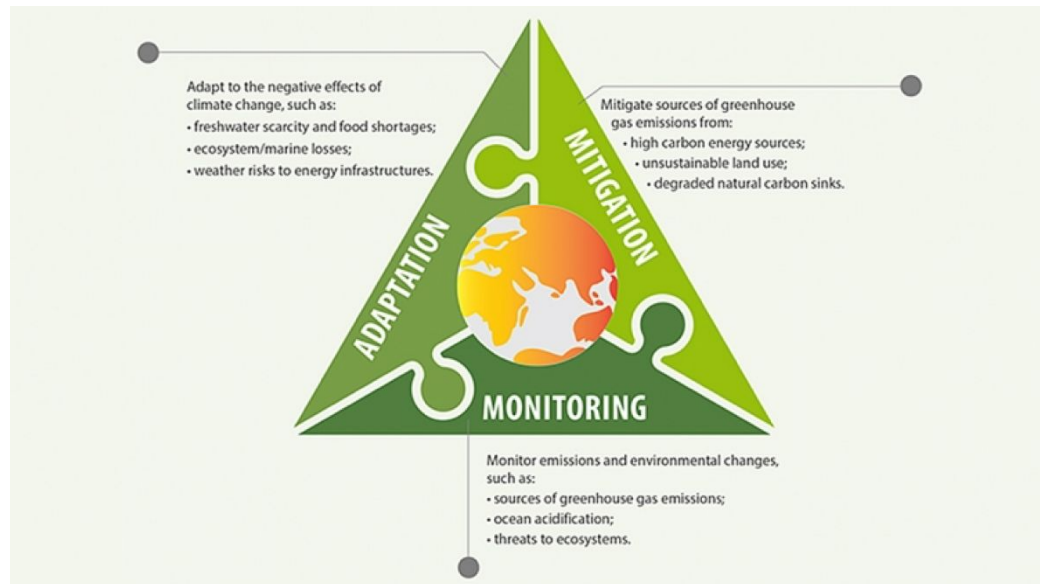
NAU CAP Update

Fall 2019 Climate Action Feedback

Mitigation

IPCC Definition:

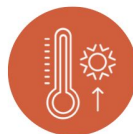
A human intervention to reduce the sources or enhance the sinks of greenhouse gases (GHGs).



Adaptation

IPCC Definition:

The process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effects.



Hotter temperatures

- Longer and hotter summers
- Difficulty for sensitive populations and those without air conditioning
- Increased risk of disease or illness from mosquitoes and other pests



Less snowpack

- More rainfall instead of snowfall
- Increased flooding of infrastructure and buildings from more intense rainstorms
- Increased risk of post-wildfire floods



Less healthy forests

- Increased wildfire risk for local forests
- Increased damage from forest pests due to hotter temperatures and drought-stressed trees



Drier conditions

- More severe drought conditions as temperatures rise
- Lower water quality of reservoirs

Feedback

- 1 Environmental Caucus Kickoff Meeting - April 2019
- 2 Public Forums - Mitigation Sept 17, Adaptation Nov 21, 2020
- 4 Public Work sessions - Sept. 23rd, Oct. 3th, Oct. 9th, Oct. 15th, 2020
- Weekly Tabling at the Open Air Market: August 28-Oct 16, 2019



Open Air Market Tabling



Forum 1 -Sept 17th, 2020

Academic

Priorities

- Mandatory sustainability course
- Push for Sustainable Campus Ecosystem Initiative (Living Laboratory) internship, research fellows, classroom engagement with solutions
- Promotion of sustainable actions and climate competencies

1st year goal (achieve by 2020)

- Recruited Lead and team for Academic Committee
- Identified key alliances and communities
- Developed 1 on 1 meetings & Orientation Week

Next steps

3rd year goal: Work with Faculty Senate – College Curriculum Committee

Key Players: All academic departments, Faculty Senate, Provost, SPAC, CSAC, ASNAU, Res Life, FUSD, etc.

Energy

Priorities

- Zero Carbon and 100% Renewable/clean energy
- Evaluation energy use and efficiency
- Minimizing cost; anticipation of future regulations and economic risks
- Stop adding to problem

1st year goal (achieve by 2020)

- Conversion to LED bulbs (maintenance)
- Establish revolving fund
- Develop Energy Outreach Coordinators
- Identify next phase of efficiency projects
- Explore feasibility of biomass CHP facility
- Strategies to shave peak demand

Next steps

3rd year goal: Create EUI mandate/zero net energy for contracting; design Energy Efficiency Phase III Project; establish internal price on carbon for procurement of carbon; prioritize building retrofits, evaluate cooling alternatives

Key Players: Facilities, Cabinet, all users on campus, ITS and Res Life

Justice

Priorities

- Eliminate food/housing insecurity on campus
- Decolonization of NAU's culture and practices
- Creation of space for minorities and equal representation
- CAP measures do not disproportionately impact vulnerable populations

Next steps

3rd year goal: Minimum wage increase; funding for DACA students, ethical procurement,

Key Players: AIS, ITEP, NACC, ES

1st year goal (achieve by 2020)

- Establish NAU as a Sanctuary University
- Recognition of Indigenous population across campus
- Develop screening tool for EJ in Climate Action and Sustainability action
- NAU Foundation divestment
- Broader involvement in CAP planning and implementation
- Increase outreach and input

Landscaping/Gardens/Operations

Priorities

- 100% rainwater harvesting and minimal outdoor irrigation
- Pesticide free
- Bolster habitat for wildlife and incorporate native plants (water conservation)
- No new turf
- Green belt (gardens, forests arb)

1st year goal (achieve by 2020)

- Increase visibility via interpretive signage
- Production of educational pieces for gardens, webpage, emails, and garden maps
- Explore electrification for grounds vehicles
- Enhance food production and involvement in on campus gardens

Next steps

3rd year goal: 100% Rainwater harvesting; removal of non-organic fertilizers & pesticides (-50%); add gardens to dorms; bioswales in landscaping; expand student involvement

Key Players: Facilities, Landscape Designer, Garden Groups, Student Ecological Restoration, etc.

Residence Life

Priorities

- Establish outreach/education programs for RA
- Creation of LEED Residence Halls
- Energy and water conservation, efficiency and waste habits improved via training and communication

1st year goal (achieve by 2020)

- Development of RA Training and sustainability mentor program
- Recycling in all halls
- Metering of all utilities / Data collection

Next steps

3rd year goal: Implementation of sustainability mentor program; all low-flow, more efficient lighting, retro fitting

Key Players: HR, undergraduate population, ACC, EMSA, Ras, RHD, RHA

Waste Min. / Recycling / Dining

Priorities

1st year goal (achieve by 2020)

- Zero waste: composting, reduction of food waste, ban single use plastics
- Increase sustainable building materials & techniques
- Monitor construction and waste reports (public & transparent)
- Maximize Recycling

- Recruit lead for idea implementation
- Sustainability education within new student orientation
- Improve logistics/signage for recycling and waste reduction
- Expand composting
- Excess food to Louie cupboard,
- Zero waste campaigns

Next steps

3rd year goal: External food waste composted & reduced; begin single use plastic alternatives in all Dining Services, real-time display of waste stream, more plant based food

Key Players: SODEXO, City of Flagstaff

Water

Priorities

- Collaboration with City, Advanced planning and campus
- Adhere to water budget in accordance with aquifer replenishment
- Regulate enrollment and campus growth as dictated by water availability

1st year goal (achieve by 2020)

- Begin data sharing between NAU-Flagstaff
- Water metering across campus
- Encourage action in classrooms via capstone or research

Next steps

3rd year goal: implement metering system; minimize athletic field's water usage, reclaimed water in buildings

Key Players: City, Facilities, Residents, Day-users, Landscaping companies, Athletics/Campus Rec.

Transportation

Priorities

- Emissions free fleet
- Reduced university related travel and fossil fuel commuting
- Carbon tax on travel/parking
- Enhance alternative transportation options (carpool, bike, bus)

1st year goal (achieve by 2020)

- Evaluate carbon pricing for fleet and commuting and air travel
- Assess feasibility of fleet transition to EV or low emission vehicle and buses
- Enhance utilization of university fleet
- Assess bus pass impacts and costs

Next steps

3rd year goal: implement fleet transition plans, tracking university travel and emissions, all NAU bus pass, extreme weather action plan

Key Players: NAIPTA, ITS, Transportation Services

Art, Media, Communications, Outreach

Priorities

- Incorporate CAP into NAU's mission
- Strengthen institutional marketing and communication
- Ensure transparency & bolster awareness

Next steps

3rd year goal: Collect/display real time data for buildings

Key Players: NAU marketing, Campus & Community media (LJ, AZ Daily Sun, KNAU, KJACK), Students, Professors

1st year goal (achieve by 2020)

- Create a reporting platform: utility to monitor NAU's carbon emissions, energy use, etc.
- Engage community and classrooms
- Strategy for awareness and communication of CAP goals and strategies
- Climate/Sustainability speaker series and funding

Purchasing and Procurement

Priorities

- Include price on carbon in lifecycle purchasing/procurement decisions
- Prioritize electric versus fossil fuel if alternatives exist

1st year goal (achieve by 2020)

- Initiate draft policy design and review and revise with stakeholders
- Identify key procurement areas to reduce current and future emissions

Next steps

3rd year goal: implement sustainable low carbon purchasing policy

Key Players: Purchasing and Procurement. VP Operations, CFO,

Implementation & Adaptation

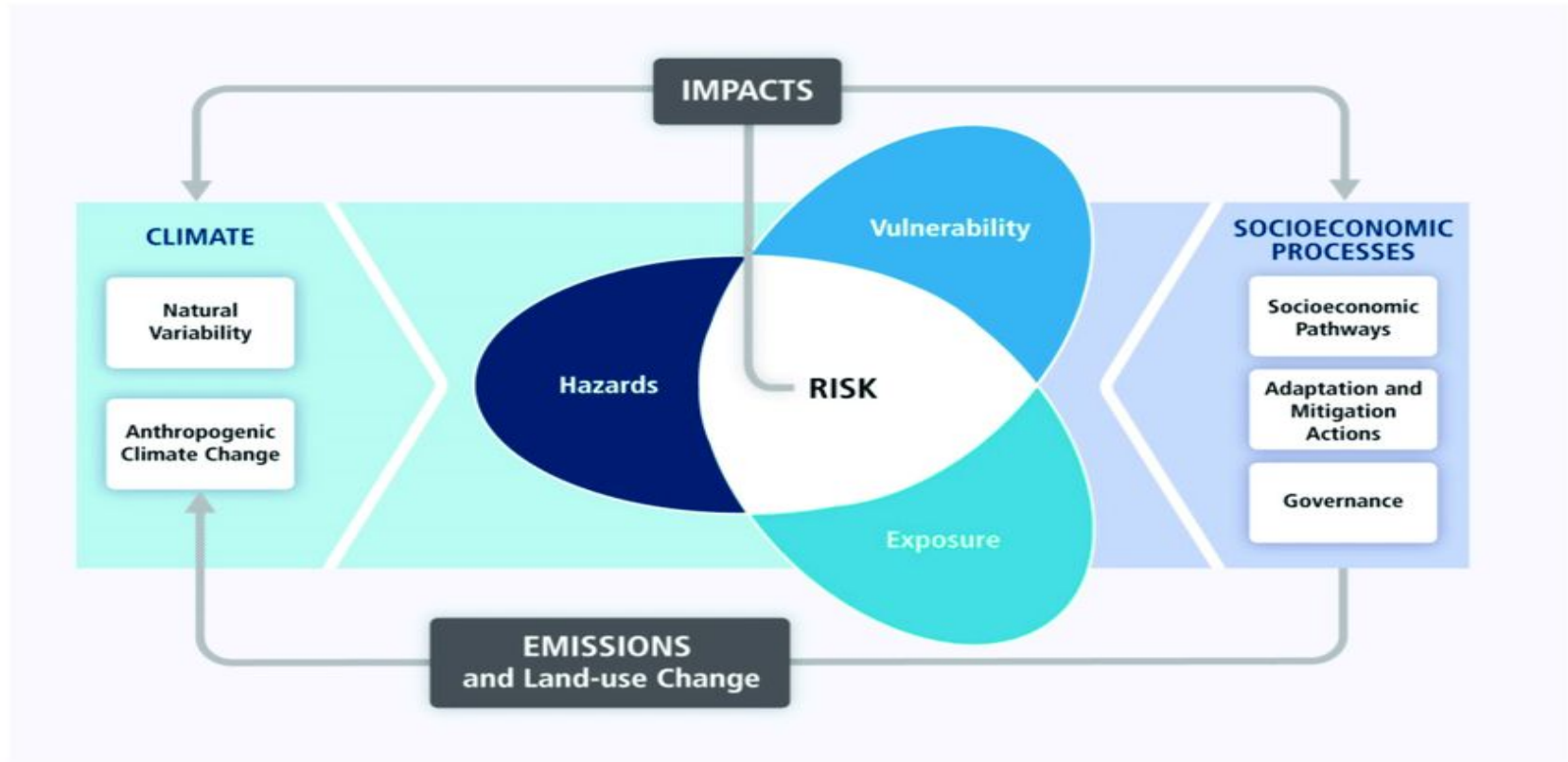
1st year goal (achieve by 2020)

- Punch pass for reusables
- Paid position in Sustainability

Big Picture:

- No Plastic Campus
 - Zero waste food systems
 - Recycling Program expanded
 - On Campus Bulk Store
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Connected Components



Energy Adaptation Strategies

- Retrofitting Buildings
- Social Cost of Carbon
- Student Trade Jobs
- Metering
- LEED Certification
- Partnerships
- Cooling Alternatives



Justice & Equity Adaptation Strategies

- Divestment from Fossil Fuels
- Insecurity Assistance
- Ethical Procurement
- Accessibility Improvements
- Surveying Needs
- Ethical Procurement
- Action Team Implementation
- Accountability



Waste Adaptation Strategies

- Promote Zero Waste Initiatives at Events
- Mandate Campus Wide Recycling and Improve Signage
- Expand Water Bottle Refilling Locations
- Continue Expansion of Composting
- Categorize, Measure, and Report Waste
- Encourage Waste Minimization through Education and Outreach.



Water Adaptation Strategies

- Audit all Irrigation Systems and Buildings
- Install Smart Irrigation Systems
- Increased Use of Reclaimed Water
- Integrate an App for Geopinning Water Issues
- Convert Turf Areas to Natural Landscapes
- Install Waterless Urinals
- Integrate Green Infrastructure (Bioswales)
- Ban Single Use Water Bottles on Campus



Transportation Adaptation Strategies

- Establish Electric Vehicle Procurement Policy
- Carbon Fee on Fleet
- Reduce Vehicle Miles Traveled
- Improve Fleet Efficiency
- Establish an Extreme Weather Action Plan
- Mobility Transportation Infrastructure Changes
- Universal Bus Pass



Takeaways

- Adaptation Strategies Vary
- No One Size Fits All
- Challenges Present Opportunities
- Engage in What You're Passionate About
- Talk to Us!