NAU Sustainability Action Plan: Energy and Climate

Goal: Reach Climate Neutrality by 20xx

<u>Midterm Goal:</u> Develop a campus energy strategic plan to determine feasible climate neutrality date, interim dates, and detailed project options for reaching goals.

Objective 1: Complete administrative actions to develop the necessary foundation for achieving climate neutrality goal.

Action 1: Rewrite the University Master Plan to include principles of sustainability including:

- Building efficiency
- Space optimization
- Resource reuse and recycling
- Multimodal transportation
- Water conservation
- Renewable energy development

Responsible Party: Facility Services, campus community

<u>Action 2:</u> Support and engage classes that investigate options for NAU's development of clean energy¹. <u>Responsible Party:</u> All departments, Facility Services

Action 3: Develop a long-term funding plan for achieving carbon neutrality².

Responsible Party: Coordinating Committee for Campus Sustainability

<u>Action 4:</u> Continuously improve the quality and quantity of emissions data collected. Focus on purchased electricity, natural gas, campus fleet, air travel, student and employee commute, fugitive emissions – refrigeration, water consumption, solid waste.

Responsible Party: Office of Sustainability, Utility Services

Objective 2: Implement diverse and comprehensive energy conservation programs

<u>Action 1:</u> Develop new and expand existing energy conservation programs for NAU employees such as departmental policies, the Energy Mentor program, and promotion of participation in the Green Office Certification program.

Responsible Party: Green NAU Energy Initiative, All Departments, Residence Life, Office of Sustainability

<u>Action 2:</u> Develop new and expand existing energy conservation programs for NAU students on and off campus such as the Green NAU Energy Initiative's behavior change program, the "No Impact Jack" program, the EcoRep program, and residence hall conservation initiatives.

Responsible Party: Green NAU Energy Initiative, Residence Life, Office of Sustainability

Objective 3: Implement energy efficiency policies and upgrades

¹ Clean energy defined as: Services or processes that broadly reduce energy consumption and/or enable the transition to a renewable-based energy economy by increasing the supply of renewable energy, improving the efficiency of energy utilization, or improving the processes and systems that use energy.

² Potential plan components could include: increasing the Green Fund through student support, increasing the Green Fund through volunteer employee participation, establish a revolving fund from Green Fund project energy savings, establish a system where VPs and departments can contribute their discretionary and end-of-year unused funds towards carbon offsetting, implement a building/energy use carbon tax which proceeds are reinvested into carbon mitigation efforts, work with APS to maximize incentives, create institutional budget for climate neutrality initiatives, or pursue grants, endowments, and fund raising opportunities.

Action 1: Place heavy emphasis on the SAP's "Operations" section which actions include placing an emphasis on the LEED energy efficiency category for all new buildings, including a total cost of ownership analysis of new construction, and investigating opportunities for LEED EBOM.

<u>Responsible Party:</u> Construction, Design and Planning, Housing and Residence Life, Office of Sustainability

<u>Action 2:</u> Place heavy emphasis on the SAP's "Procurement" section in which actions include the purchasing of sustainable and energy efficient appliances, electronics, and HVAC units. Maintain up-to-date technical standards.

Responsible Party: Facility Services, Contracting and Purchasing Services

<u>Action 3:</u> Continuously investigate and invest in energy efficiency retrofits across campus. <u>Responsible Party:</u> Finance and Administration, Information Technology Services, Facility Services

Action 4: Develop and maintain a building recommissioning program.

Responsible Party: Facility Services

Action 5: Utilize data from automated and continuous utility metering across campus and make real-time usage available through an online "dashboard" system.

Responsible Party: Utilities, Green NAU Energy Initiative

Action 6: Continuously adopt Information Technology Services best practices such as:

- Maintain EPA Energy Star Computer Settings
- Upgrade to energy efficiency technology such as thin clients across campus
- Use cloud services for Blackboard, Salesforce, and other vendors to reduce on campus energy use
- Maintain certified Dell and Apple repair personal to reduce shipping products for repairs
- Promote centralized networked printers to achieve overall electricity reduction, reduced printing, and reduced e-waste

Responsible Party: Information Technology Services

Action 7: Work to become a partner with the US DoE/EPA Labs21 Program to expand campus laboratory energy savings and best practices.

Responsible Party: Facility Services

Objective 4: Utilize renewable energy

<u>Action 1:</u> Investigate and pursue opportunities for on-campus renewable energy development through discussions with the Energy Action Team, feasibility studies, class projects, and Green Fund proposals. <u>Responsible Party:</u> Utilities, Office of Sustainability, Green NAU Energy Initiative

<u>Action 2:</u> Investigate and pursue opportunities for off-campus renewable energy development through discussions with the Energy Action Team, APS, and community and state partnerships. <u>Responsible Party:</u> Utilities, Office of Sustainability, Green NAU Energy Initiative

Action 3: Accomplish the American College and University Presidents' Climate Commitment recommended action of "purchasing or producing at least 15% of our institution's electricity consumption from renewable sources."

Responsible Party: Finance and Administration, Utilities

Action 4: Continue to purchase Renewable Energy Credits³ to offset the negative externalities associated with NAU's energy consumption to the maximum amount that is financially feasible.

Responsible Party: Finance and Administration, Utilities, Office of Sustainability

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³ Renewable Energy Credits (RECs), are tradable, non-tangible energy commodities in the United States that represent proof that 1 megawatt-hour (MWh) of electricity was generated from an eligible renewable energy resource.