

# Geothermal Policies @ Illinois

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# eGen009: Geothermal Policies

- Facilities & Services should begin to identify options for campus policies related toward geothermal integration into building standards, to be informed by additional supporting information and studies as it is developed and supported through consultation with on-campus stakeholders and faculty.
- iWG recommends that care be taken with the development of the policy to ensure that projects remain in lockstep and an excessive number of different competing standards not take effect.

# Existing Policies

F&S replied: “We will review options for incorporating geothermal into existing campus documents, and share our thoughts with the iWG before proceeding.”

1. Campus Administrative Manual (CAM)
2. Energy Use Policy
3. Facility Standards
4. Illinois Climate Action Plan (iCAP)

# CAM: FO-55

- Procurement of Construction Services
  - Facilities & Services has the delegated authority and responsibility to supply or procure construction-related services for the university (Business and Financial Policies and Procedures Section 1.3.1).
  - All construction, remodeling, or renovation work must conform with University of Illinois at Urbana-Champaign Facilities Standards and applicable laws.
  - <https://cam.illinois.edu/policies/fo-55/>



# CAM: FO-48

- Organization and Responsibilities of Facilities & Services
  - Facilities & Services is a service unit that assists various University departments in their functions of teaching and research.
  - This lists the services from F&S, and it is out of date
  - <https://cam.illinois.edu/policies/fo-48/>



# CAM: FO-34

- Heating, Ventilating, and Air Conditioning (HVAC) in Campus Buildings
  - This policy applies to the Urbana-Champaign campus, and contains supplemental information and guidelines to support adherence to the Campus Energy Use Policy.
  - <https://cam.illinois.edu/policies/fo-34/>



# CAM: BF-05

- Energy-Efficient Equipment Acquisition
  - This policy is implemented to foster an energy-efficient campus environment, and to reduce energy usage and utility costs across all campus units and departments.
  - This policy applies to the Urbana-Champaign campus, and contains supplemental information and guidelines to support adherence to the Campus Energy Use Policy
  - <https://cam.illinois.edu/policies/bf-05/>



# CAM: FO-04

- Acquiring Energy-Consuming Equipment
  - The Campus Energy Use Policy addresses several areas related to energy-wise equipment application and use, e.g. the requirement that new computers and appliances be “Energy Star” rated. It is recognized, however, that many other acquisitions or purchases will be made during any given year that are not addressed explicitly in the Energy Use Policy.
  - <https://cam.illinois.edu/policies/fo-04/>



# CAM: FO-37

- Installation of Equipment Requiring Special or Controlled Climatic Conditions
  - The installation of equipment having a material effect upon surrounding climatic conditions must be provided to F&S Engineering Design by the building coordinator for review prior to purchase.
  - <https://cam.illinois.edu/policies/fo-37/>



# Energy Use Policy

1. Reduce energy consumption and cost by eliminating waste and increasing energy efficiency in buildings, electrical equipment used in offices and labs, and campus transportation systems.
2. Shift to renewable energy resources by systematically shifting our reliance on fossil fuels to an appropriate balance of energy conservation and alternative and renewable energy sources.
3. See Handout

# Facilities Standards

- Energy Conservation
- Cooling Systems
- Energy Management, Building Automation Systems
- Energy Recovery Systems
- Heating Systems
- HVAC Systems
- Hydraulic Heating/Cooling Systems



# iCAP 2020

- By FY25, use at least xx% green energy for thermal energy, in addition to renewable power supply. By FY35 use at least 25% carbon-neutral energy for thermal energy, in addition to renewable power supply.
  - By FY 25 we should set a goal of ~5% green energy for thermal energy.
- Add more energy storage: geothermal, batteries, and chilled water
- Transition to geothermal energy... <<*add specific metric*>>

# eGen010: Geothermal Projects

- iWG recommends that the Energy SWATeam conducts additional analysis of on-campus efforts and provides a summary with this recommendation and further detail in other relevant areas including best practices from peers, and work with F&S to recommend a detailed scope for a study.
- Andy Stumpf provided the following response for eGEN010, "Yes. The summary will be compiled as part of a 'Living Labs' project proposed by the Illinois Water Resources Center."