We support the design and construction of buildings that reduce impact on our environment, use of materials that allow for the longevity of buildings combined with the strengths and resiliency to withstand natural disasters. In addition, we advocate for a holistic approach to total energy consumption as it relates to buildings, both the consumption of energy in its operation and the embodied energy used to create it in the first place.

**Recommendations for Action:**

1. Adoption of Energy Codes consistent with the edition of the Building Codes adopted by the State of Iowa and development of model code requirements for benchmarking performance of publicly funded buildings.

2. Foster education about the data available on energy use for buildings & improvement strategies for existing building stock.

3. Incentives for the retrofitting of existing buildings and construction of resilient, energy efficient buildings.

**Current Iowa Codes:**

State adopted Building Codes for State owned or regulated buildings*:
- 2015 International Building Code (IBC)
- 2015 International Residential Code (IRC)
- 2015 International Existing Building Code (IEBC)
- 2012 International Energy Conservation Code (IECC)
- And seven more building codes updated since 2018.

*Local jurisdictions can adopt/enforce locally and amend to include more stringent standards.
Model Codes are Families:

- Model codes are developed and maintained by an independent standards organization through a stakeholder process in response to changing needs of society and building industry.
- These codes are maintained on regular 3-year cycle with each edition of the code “family” developed and designed to function as a complete set.

Energy Efficiency + Resiliency is Cost-Effective:

Energy efficiency and resiliency are much more economical to incorporate while the building is initially being constructed. These initial investments contribute significantly to lower operational costs and significantly shorter recovery after disasters.

- Cost-effectiveness analysis of the Residential provisions of 2015 IECC for Iowa indicate*:
  - Simple payback is 2.5 years, without additional incentives
    - cost of implementing saving measures / energy cost saved
  - Life-cycle cost savings over 30 years is $2,181.97
  - Net annual consumer cash flow in year 1 is $121.82
  *from the currently adopted Iowa State Code

- Cost-effectiveness analysis of the Commercial provisions for ASHRAE 90.1 for Iowa**:
  - Simple payback is 9.6 years
  - Life-cycle cost savings over 30 years is $2.24/sf for publicly owned buildings and $1.33/sf for privately owned buildings

Note: Changes in Commercial Energy Cost Intensity by code adoption is $0.11/sf annually or 8.3% nationally, based on ASHREA 90.1 between 2013 and 2016. Though changes in residential codes have not been recorded by DOE, similar percentages of savings may be assumed.

Resources:

For more information contact AIA Iowa at 515-244-7502 or info@aiaiowa.org