

Serving the Iowa Legislature

## **LEGISLATIVE GUIDE**

Legal Services Division



## **ENERGY EFFICIENCY PROGRAMS**

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Note to Reader:

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### I. Introduction

Rising demand for limited sources of energy has generated increasing levels of concern and attention internationally, at the federal level, and through various state initiatives. Efforts to enhance or achieve energy efficiency range from identifying and developing new and alternative forms of energy production to refining the manner in which existing energy sources are applied and utilized.

While the concept of energy efficiency is generally understood to refer to an action or approach which results in an energy "savings," definitions of the term vary. Some representative examples of the meaning of energy efficiency include the following:

- Reducing energy consumption on the basis of technological, economic, and behavioral changes, through which the same or a higher standard or degree of comfort is assured.
- Determining how much less energy it takes to perform a certain amount of work.
- Using products or systems that require less energy to do the same or a better job as compared to conventional products or systems.
- Doing the same thing but using less energy to do it.
- Using energy in the most economical way possible and keeping its use to a minimum.
- Using improved technology to decrease energy demand.

The lowa Code does not expressly define the term "energy efficiency," but the concept is addressed in the form of state agency programs, policies, and directives; building code regulations; project financing options; and requirements imposed on gas and electric utilities.<sup>1</sup> The objective of this Legislative Guide is to summarize existing lowa Code provisions dealing with energy efficiency, with a focus on energy efficiency programs and requirements. Unless otherwise indicated, references in this Guide are to the 2021 lowa Code. References to the lowa Administrative Code are current through October 2, 2020.

### II. State Agency Energy Efficiency Requirements

# A. Energy Efficiency and Comprehensive Engineering and Life Cycle Cost Analyses

State agencies and political subdivisions of the state are required to complete or perform energy-related reviews or analyses under specified circumstances involving the lease or lease-purchase of energy-related buildings or equipment, construction or renovation of public buildings, execution of competitive bidding or product purchasing procedures, and procurement of specified financing for energy efficiency improvements. Generally, these reviews or analyses involve the performance of one or a combination of three procedures: a comprehensive engineering analysis, a life cycle cost analysis, and an energy analysis.

<sup>&</sup>lt;sup>1</sup> Related concepts are defined in the Iowa Code, including "energy conservation measure" in Iowa Code section 7D.34(1) and "energy management improvement" in Iowa Code section 473.19(2), as subsequently discussed in this guide.



#### 1. State Agency Lease and Lease-Purchase Agreements

A state agency is permitted to enter into a lease or lease-purchase agreement relating to real or personal property or facilities to be used in connection with an energy conservation measure, subject to the approval of the Executive Council.<sup>2</sup> For this purpose, an energy conservation measure is defined as:

installation or modification of an installation in a building which is primarily intended to reduce energy consumption or allow the use of an alternative energy source, which may contain integral control and measurement devices.<sup>3</sup>

State agencies to which this provision applies include a board, department, commission, or authority of or acting on behalf of the state having the power to enter into contracts for the acquisition of property in its own name or in the name of the state. However, the General Assembly, the court system, the Governor, and political subdivisions of the state are excluded.<sup>4</sup>

Under terms of such an agreement, the state agency pays rental costs either from the annual appropriations by the General Assembly to the state agency or from other moneys legally available to the agency.<sup>5</sup> Prior to requesting council approval, an agency seeking to improve the energy efficiency of a building is required to submit the results of a comprehensive engineering analysis performed on the building by an engineering firm approved by the Economic Development Authority through a competitive selection process. Selection of the engineering firm is also subject to council approval.<sup>6</sup> Prior to approving a lease or lease-purchase agreement in connection with an energy conservation measure, the council, in conjunction with the authority, conducts a review of the engineering analysis to determine not only whether leasing or purchasing the properties or facilities will result in an energy cost savings to the state, but also whether the amount of the savings will allow for cost recovery within six years after initial acquisition.<sup>7</sup>

Financing agreements for energy conservation measures are exempt from the \$1 million maximum financing limitation otherwise applied to state agencies. Energy management improvements for which financing is facilitated with the assistance of the authority pursuant to Iowa Code chapter 473 are also exempt.<sup>8</sup>

#### 2. Facilitated Financing

An energy analysis is required to be performed by state agencies, political subdivisions of the state, school districts, area education agencies, and community colleges that receive financing for energy management improvements facilitated by the Economic Development Authority.<sup>9</sup> Financing programs to which this requirement applies are discussed in Part III of this guide.

<sup>&</sup>lt;sup>2</sup> Iowa Code §7D.34.

<sup>&</sup>lt;sup>3</sup> Iowa Code §7D.34(1)(a).

 <sup>&</sup>lt;sup>4</sup> Iowa Code §7D.34(1)(b).
 <sup>5</sup> Iowa Code §7D 34(2)(a).

 <sup>&</sup>lt;sup>5</sup> Iowa Code §7D.34(2)(a).
 <sup>6</sup> Iowa Code §7D.34(2)(b).

 <sup>&</sup>lt;sup>7</sup> Iowa Code §7D.34(2)(c).
 <sup>7</sup> Iowa Code §7D.34(2)(c).

 <sup>&</sup>lt;sup>8</sup> Iowa Code §12.28(6).

<sup>9</sup> Iowa Code §§473.13A, 473.20.

## 3. State Agency Purchases — Public Improvement Projects — Life Cycle Cost Analysis Application

The concept of life cycle cost analysis is utilized in connection with requirements relating to state agency purchases of energy-consuming products, public improvements, and public building construction and renovation efforts.

#### a. State Agency Product Procurement

The Department of Administrative Services, institutions under the control of the State Board of Regents, the Department of Transportation, the Department for the Blind, and other state agencies purchasing energy-consuming products either directly or through competitive bidding procedures are required to develop standards and specifications applicable to such purchases and to include life cycle cost and energy efficiency in criteria relating to those standards and specifications.<sup>10</sup> "Life cycle cost" is defined for this purpose as the expected total cost of ownership during the life of a product.<sup>11</sup>

#### b. Public Improvements and Construction

A contract for a public improvement or construction of a public building, including new construction or renovation of an existing public building, by the state or an agency of the state must, prior to being let for bidding, be subject to at least one design proposal reflecting the lowest life cycle cost possible in light of existing commercially available technology.<sup>12</sup> Intent language contained in the applicable lowa Code section discourages construction of public buildings based upon lowest acquisition cost in favor of contracts based upon life cycle costs to reduce, among other factors, energy consumption.<sup>13</sup>

More specific and stringent life cycle cost analysis provisions apply in the case of public buildings or facilities in excess of 20,000 square feet which are constructed or renovated by a state agency, political subdivision of the state, school district, area education agency, or community college.<sup>14</sup> lowa Code chapter 470 establishes a public policy that energy management is of primary importance in the design of such publicly owned facilities, and mandates that a public agency responsible for the construction or renovation of a facility include as a design criterion the requirement that a life cycle cost analysis be conducted with the objective of optimizing energy efficiency at an acceptable life cycle cost.<sup>15</sup> Elements of the analysis include specification of energy management objectives, identification of the energy needs of the facility and energy system alternatives to meet those needs, and the cost of energy system alternatives.<sup>16</sup>

A completed analysis is required to be submitted to the State Building Code Commissioner who reviews the analysis in consultation with the Economic Development Authority.<sup>17</sup> A public agency may request an exemption from

<sup>&</sup>lt;sup>10</sup> Iowa Code §8A.311(20).

<sup>&</sup>lt;sup>11</sup> Iowa Code §8A.301(3).

<sup>&</sup>lt;sup>12</sup> Iowa Code §72.5(1). <sup>13</sup> Iowa Code §72.5(4)

 <sup>&</sup>lt;sup>13</sup> Iowa Code §72.5(4).
 <sup>14</sup> Iowa Code ch. 470.

<sup>&</sup>lt;sup>15</sup> Iowa Code §470.2.

<sup>&</sup>lt;sup>16</sup> Iowa Code §470.3(1).

<sup>&</sup>lt;sup>17</sup> Iowa Code §470.7(1).



implementing certain aspects of an analysis for specified reasons, including the particular purpose of the facility or renovation, preservation of historical architectural features, site considerations, and health and safety concerns.<sup>18</sup> Otherwise, the agency is required to implement the recommendations contained in the analysis.<sup>19</sup> These provisions do not apply to certain buildings used as maximum security detention facilities or to the renovation of property nominated to or entered in the National Register of Historic Places, designated by statute, or included in an established list of historic places compiled by the Historical Division of the Department of Cultural Affairs.<sup>20</sup>

#### **B. State Building Code Energy Efficiency Requirements**

The State Building Code contained in Iowa Code chapter 103A is applicable to all buildings and structures owned by the state or an agency of the state, to a governmental subdivision of the state where the governing body of the subdivision has enacted an ordinance accepting the application of the code, to a city with a population exceeding 15,000 that has not adopted a local building code substantially in accordance with nationally recognized standards, and to all newly constructed buildings and structures not owned by the state but with construction costs paid for in whole or in part with state-appropriated moneys.<sup>21</sup>

#### 1. Residential Construction

The building code requires new single-family or two-family residential construction to comply with energy conservation requirements adopted by the State Building Code Commissioner based upon a nationally recognized standard or code for energy conservation. The requirements previously did not prohibit a governmental subdivision from adopting or enacting a minimum energy standard that is substantially in accordance and consistent with energy codes and standards developed by a nationally recognized organization in existence on or after July 1, 2002. Legislation enacted during the 2008 Legislative Session eliminated the ability of a governmental subdivision to adopt a minimum energy standard other than energy conservation requirements of the State Building Code, expressly providing that energy conservation requirements adopted by the State Building Code Commissioner and approved by the State Building Code Advisory Council are applicable to new single-family or two-family residential construction commenced on or after July 1, 2008, and such requirements supersede and replace any minimum requirements enacted by a governmental subdivision prior to that date and applicable to such construction. The legislation also specified that the commissioner may provide training to builders, contractors, and other interested persons on the adopted energy conservation requirements.<sup>22</sup>

#### 2. Nonresidential Construction

The State Building Code also contains energy efficiency-related provisions applicable to larger-scale construction, requiring the specifications for all buildings

<sup>&</sup>lt;sup>18</sup> Iowa Code §470.8(2).

<sup>&</sup>lt;sup>19</sup> Iowa Code §470.8(1).

 <sup>&</sup>lt;sup>20</sup> Iowa Code §470.5.
 <sup>21</sup> Iowa Code §103A 1

<sup>&</sup>lt;sup>21</sup> Iowa Code §103A.10(2).

<sup>&</sup>lt;sup>22</sup> Iowa Code §103A.8A.



constructed after July 1, 1977, which exceed a total volume of 100,000 cubic feet of enclosed space that are heated or cooled, to be reviewed by a registered architect or licensed engineer for compliance with applicable energy efficiency standards. A statement that a review has been accomplished and that the design is in compliance with energy efficiency standards must be filed with the State Building Code Commissioner prior to commencement of construction. If the specifications relating to energy efficiency for a specific structure have been approved, additional buildings may be constructed from those same plans and specifications without need of further approval if construction begins within five years of the date of approval, and alterations of a structure which has previously been approved will not require another review if the basic structure of the building remains unchanged.<sup>23</sup>

#### 3. Thermal and Lighting Efficiency Standards

The State Building Code Commissioner adopts rules relating to the conservation of energy through thermal efficiency standards.<sup>24</sup> The standards are applicable to the construction of all buildings intended for human occupancy and which are heated or cooled, and include lighting efficiency standards applicable to the construction of all buildings intended for human occupancy which are lighted and applicable to new and replacement lighting in existing buildings.<sup>25</sup> Construction projects are exempt from thermal efficiency standards if the commissioner determines that their application to a particular building or class of buildings would be unreasonable or impracticable.<sup>26</sup> Notwithstanding these requirements, energy conservation standards are not to be interpreted as requiring the replacement or modification of any existing equipment or feature solely to ensure compliance with the standards.<sup>27</sup>

#### 4. Sustainable Design or Green Building Standards

The State Building Code Commissioner is also directed, after consulting with and receiving recommendations from the Department of Natural Resources, to adopt rules specifying standards and requirements for sustainable design and construction based upon or incorporating nationally recognized ratings, certifications, or classification systems, and procedures relating to documentation of compliance.<sup>28</sup> "Sustainable design" is defined as:

construction design intended to minimize negative environmental impacts and to promote the health and comfort of building occupants including but not limited to measures to reduce consumption of nonrenewable resources, minimize waste, and create healthy, productive environments.<sup>29</sup>

Application of these standards is limited, however, to instances expressly authorized by statute or as established by another state agency by rule, as opposed to having general applicability.30

<sup>23</sup> lowa Code §103A.19(3).

See Iowa Admin. Code 661-303. 24

<sup>25</sup> Iowa Code §§103A.7(2)(f), 103A.10(4). 26

lowa Code §§103A.8(7), 103A.10(4). 27

Iowa Code §103A.8(7). 28

Iowa Code §103A.8B, Iowa Admin. Code 661-310. 29

lowa Code §103A.3(23).

<sup>&</sup>lt;sup>30</sup> Iowa Code §103A.8B.



#### 5. Commission on Energy Efficiency Standards and Practices

Legislation enacted during the 2008 Legislative Session established a Commission on Energy Efficiency Standards and Practices within the Department of Public Safety for the two-year period beginning July 1, 2008, and ending June 30, 2010. Commission membership was comprised of specified state agency directors or designees; engineering, architectural, and utility professionals; planning and zoning commission or county board of supervisor members; local building officials; and consumers. The commission was charged with evaluating energy efficiency standards applicable to existing or newly constructed residential, commercial, and industrial buildings and vertical infrastructure at the state and local levels and making suggestions for their improvement and enforcement. The commission was also charged with developing recommendations for new energy efficiency standards, incentives for energy-efficient construction, and a statewide energy efficiency building labeling or rating system for residential, commercial, and industrial buildings or complexes. The commission submitted a report to the Governor and the General Assembly regarding its activities and recommendations on January 1, 2011.<sup>31</sup>

## C. Economic Development Authority — Transfer of Responsibility — Historical Perspective

Additional energy efficiency-related requirements or specifications concern the scope and responsibilities of the Economic Development Authority, previously referenced in this guide.

Legislation enacted during the 2007 Legislative Session established lowa Code chapter 469 creating an Office of Energy Independence. The director of the office was required to lead outreach and public education efforts concerning energy efficiency; coordinate and monitor all existing state and federal energy efficiency grants, programs, and policy; advise the Governor and General Assembly concerning energy efficiency policy and legislation; establish performance measures for determining the effectiveness of energy efficiency efforts; develop, with the assistance of public and private partners, an energy independence plan; and prepare and submit an annual report that includes an assessment of needs and fiscal recommendations relating to energy efficiency efforts.

The 2007 legislation also provided for the establishment of an Iowa Power Fund. Among other purposes, the fund was to be used to improve energy efficiency and encourage, support, and provide for research, development, commercialization, and the implementation of energy technologies and practices.<sup>32</sup> Legislation enacted during the 2009 Legislative Session transferred primary responsibility for a wide-ranging number of energy-related measures and programs from the Department of Natural Resources to the office.<sup>33</sup>

lowa Code chapter 469 was repealed during the 2011 Legislative Session, resulting in the reassignment of responsibility for energy-related measures and programs to the Economic Development Authority. The legislation provided for the transfer of moneys under the control of the office to the authority, continuation of licenses, permits, or

<sup>&</sup>lt;sup>31</sup> 2008 lowa Acts, ch. 1133 (SF 2386). Department of Public Safety, Commission on Energy Efficiency Standards and Practices Final Report is available at <u>www.legis.iowa.gov/docs/publications/DF/13565.pdf</u> (last visited Oct. 2, 2020).

<sup>&</sup>lt;sup>32</sup> 2007 Iowa Acts, ch. 168 (HF 918).

<sup>&</sup>lt;sup>33</sup> 2009 Iowa Acts, ch. 108 (SF 471).

contracts issued or entered into by the office by the authority, continued administration by the authority of grants or loans awarded from the Iowa Power Fund and federal grant funds, and transfer of responsibility to the authority for energy-related measures and programs previously transferred from the Department of Natural Resources to the office.<sup>34</sup> The authority continues to administer grants or loans awarded by the office prior to the repeal of Iowa Code chapter 469, but no new Iowa Power Fund applications have been or will be accepted by the authority.

One of the primary energy efficiency-related responsibilities acquired by the authority as a result of the repeal of Iowa Code chapter 469 concerns administration of Iowa Code chapter 473, relating to energy development and conservation. Iowa Code section 473.3 states:

1. The goal of this state is to efficiently utilize energy resources to enhance the economy of the state by decreasing the state's dependence on nonrenewable energy resources from outside the state and by reducing the amount of energy used. This goal is to be implemented through the development of policies and programs that promote energy efficiency, energy conservation, and alternative and renewable energy use by all lowans, through the development and enhancement of an energy efficiency and alternative and renewable energy industry, through the commercialization of energy resources and technologies that are economically and environmentally viable, and through the development and implementation of effective public information and education programs.

2. State government shall be a model and testing ground for the use of energy efficiency, energy conservation, and alternative and renewable energy systems.

In furtherance of this goal, the authority is directed to supply and annually update information relating to the historical use and distribution of energy in lowa; the growth rate of energy consumption in the state, including rates of growth for each energy source; a projection of lowa's energy needs at a minimum through the year 2025; the impact of meeting the state's energy needs on the state's economy and environment; and an evaluation of renewable energy sources and their potential.<sup>35</sup>

The authority is also required to collect and analyze data to use in forecasting future energy demand and supply for the state; to develop, recommend, and implement with other appropriate agencies public and professional education and communication programs in energy efficiency, energy conservation, and alternative and renewable energy; to develop a program to annually give public recognition to innovative methods of energy conservation, energy management, and alternative and renewable energy production; and to administer federal funds for energy conservation, energy management, and alternative and renewable energy management, and alternative and renewable energy management, and alternative and renewable energy programs.<sup>36</sup>

The authority is further directed to complete an annual report to assess the progress of state agencies in implementing energy management improvements, alternative and

<sup>&</sup>lt;sup>34</sup> 2011 Iowa Acts, ch. 118 (HF 590).

<sup>&</sup>lt;sup>35</sup> Iowa Code §473.7(1).

<sup>&</sup>lt;sup>36</sup> Iowa Code §473.7(2), (3), (8), (9).



renewable energy systems, and life cycle cost analyses, and on the use of renewable fuels, to provide an assessment of the economic and environmental impact of this progress, and to make recommendations on technological opportunities and policies necessary for continued improvement.<sup>37</sup>

The legislation repealing lowa Code chapter 469 also transferred to the authority responsibility for the administration of several other energy efficiency-related functions previously administered by the Department of Natural Resources (and not specifically addressed elsewhere in this guide). These include making available energy efficiency-related continuing education courses for design professionals in coordination with the State Board of Engineering and Land Surveyors, the Board of Architectural Examiners, and the Board of Landscape Architectural Examiners pursuant to Iowa Code section 272C.2, and receiving results relating to energy audits from school districts and performing related functions pursuant to Iowa Code section 279.44.

#### III. Energy Efficiency Programs and Services

Energy efficiency-related provisions in the Iowa Code also take the form of programs or services for which other state agencies, political subdivisions of the state, or citizens may qualify. As described below, these programs and services include energy efficiency recommendations for applicants from the Economic Development Authority, Iow-income energy assistance and weatherization programs, energy efficiency project financing options, qualification for designation as an energy city, requirements imposed by the Iowa Utilities Board on or offered by gas and electric utilities, energy efficiency programs conducted or administered by the Iowa Propane Education and Research Council, programs involving the Iowa Summer Youth Corps and Iowa Green Corps, and the availability of certain energy efficiency-related tax credits.

#### A. Economic Development Authority Applicant Referral Assistance

Applicants receiving funding assistance from the Economic Development Authority in connection with efforts to encourage investment in low-income or other areas of the state to promote economic development also receive information from the authority regarding the nature and source of other technical assistance available in the state to assist the applicant on design and management matters concerning energy efficiency and waste reduction. The authority reviews the extent to which recommendations made to grant recipients are in fact implemented.<sup>38</sup>

#### **B.** Low-Income Energy and Weatherization Assistance

The Division of Community Action Agencies of the Department of Human Rights administers federal and state programs relating to the provision of assistance to low-income individuals regarding energy bill payments and weatherization programs to enhance energy efficiency. An Energy Utility Assessment and Resolution Program is directed at low-income individuals in need of a deferred payment agreement to address home energy utility costs.<sup>39</sup> Pursuant to the program, community action agencies are required to analyze a program participant's financial situation, review the participant's resource and money management options, assist in negotiating a deferred payment

<sup>&</sup>lt;sup>37</sup> Iowa Code §473.15.

<sup>&</sup>lt;sup>38</sup> Iowa Code §15.109(3).

<sup>&</sup>lt;sup>39</sup> Iowa Code §216A.104(1).



agreement with the participant's energy utility, develop a written household energy affordability plan, and provide energy-related training and assistance.<sup>40</sup>

Iowa Code section 216A.93 also directs the division, in addition to low-income energy assistance, to provide weatherization programs. As provided by administrative rule, the purpose of the program is:

to assist in achieving a healthful dwelling environment and maximum practicable energy conservation in the dwellings of low-income persons, particularly those of elderly and handicapped persons, in order to both aid those persons least able to afford higher utility costs and to conserve needed energy.<sup>41</sup>

Assistance in the form of weatherization materials, e.g., insulation, storm windows, caulking, weather stripping, and other related items, and related training and technical assistance is provided to qualifying low-income individuals pursuant to the program.<sup>42</sup> Notice of the existence of assistance programs is required to be provided to customers facing utility disconnection by rate-regulated gas and electric utilities.<sup>43</sup>

#### C. Energy Efficiency Financing and Investment

The Economic Development Authority administers programs involving financing options for energy efficiency improvements and upgrades.

#### 1. Building Energy Management Program

The Building Energy Management Program provides several forms of indirect financial assistance to the state, state agencies, political subdivisions of the state, school districts, area education agencies, community colleges, and nonprofit organizations. For these entities, the program is charged with promoting energy program availability; developing or identifying guidelines and model energy techniques for the completion of energy analyses; providing technical assistance for conducting or evaluating energy analyses; providing or facilitating loans, leases, and other methods of alternative financing to implement energy management improvements or energy analyses; providing assistance for obtaining insurance on the energy savings expected to be realized from the implementation of energy management improvements; facilitating self-liquidating financing; and assisting the Treasurer of State with financing agreements entered into on behalf of state agencies to finance energy management improvements pursuant to lowa Code section 12.28.<sup>44</sup>

An "energy management improvement" is defined as:

construction, rehabilitation, acquisition, or modification of an installation in a facility or vehicle which is intended to reduce energy consumption, or energy costs, or both, or allow the use of alternative and renewable energy.<sup>45</sup>

<sup>&</sup>lt;sup>40</sup> Iowa Code §216A.104(3).

<sup>&</sup>lt;sup>41</sup> Iowa Admin. Code 427-5.1. <sup>42</sup> Iowa Admin. Code 427-5.3

 <sup>&</sup>lt;sup>42</sup> Iowa Admin. Code 427-5.3.
 <sup>43</sup> Iowa Code §476.20(2).

<sup>&</sup>lt;sup>43</sup> Iowa Code §476.20(2). <sup>44</sup> Iowa Code §473.19(1).

<sup>&</sup>lt;sup>45</sup> Iowa Code §473.19(1).

<sup>&</sup>lt;sup>45</sup> Iowa Code §473.19(2).



Operational expenses and administrative costs incurred through operation of the program are funded through a Building Energy Management Fund under the control of the authority.<sup>46</sup> The maximum balance of the fund cannot exceed \$1 million.<sup>47</sup>

#### 2. Energy Loan Program

An Energy Loan Program is established in Iowa Code section 473.20 to facilitate the energy-related loan process for political subdivisions of the state, school districts, area education agencies, community colleges, and nonprofit organizations for implementation of energy management improvements identified in an energy analysis.

The Economic Development Authority may facilitate a loan for cost-effective energy management improvements which are the subject of an energy management plan, including an energy analysis, and is required to approve the facilitated loans.<sup>48</sup> "Loans" are defined as loans, leases, or alternative financing arrangements.<sup>49</sup> The authority has implemented the "facilitation" of loans by assisting with financing through private banks and lending institutions on a self-liquidated basis whereby the amount financed is gradually repaid through savings realized from implementation of the energy-efficient improvement or device.<sup>50</sup> Entities receiving loan facilitation are directed to design and construct the most energy cost-effective facilities feasible and may use the facilitated financing to cover the amount by which the cost of purchasing energy-efficient devices and materials specified in the plan exceeds the cost of complying with minimum building code energy efficiency standards, unless other lower cost financing is available.<sup>51</sup>

Not all energy management improvements identified in an energy analysis are required to be implemented in a facilitated financing situation, provided the entity that prepared the analysis demonstrates to the authority that the facility subject to the analysis is unlikely to utilize or operate the improvement over the full period of the expected savings payback of all costs associated with implementing the improvement.<sup>52</sup> Otherwise, the state, state agencies, political subdivisions of the state, school districts, area education agencies, and community colleges are required to implement all identified energy management improvements for which financing is facilitated by the authority for the entity.<sup>53</sup>

#### D. Energy City Designation Program

The Economic Development Authority administers an Energy City Designation Program, with the objective of encouraging cities to develop and implement innovative energy efficiency programs.

To qualify for designation as an energy city, a city must submit an application to the authority detailing community-based plans for energy reduction projects, energy-efficient building construction and rehabilitation, and alternative or renewable energy production;

<sup>51</sup> Iowa Code §473.20(5).

<sup>&</sup>lt;sup>46</sup> Iowa Code §473.19A(1).

<sup>&</sup>lt;sup>47</sup> Iowa Code §473.19A(3).

<sup>&</sup>lt;sup>48</sup> Iowa Code §473.20(2).

 <sup>&</sup>lt;sup>49</sup> Iowa Code §473.20(4).
 <sup>50</sup> Iowa Code §473.20A.

<sup>&</sup>lt;sup>52</sup> Iowa Code §473.20(6).

<sup>&</sup>lt;sup>53</sup> Iowa Code §473.13A.



efforts to secure local funding for energy efficiency plans; involvement of local schools and community organizations; and any existing or proposed ordinances encouraging energy efficiency, conservation, and community recycling efforts. Additionally, an applicant city is required to issue a proclamation and organize an energy day observance with a commemorating event and awards ceremony for leading energy-efficient community businesses, groups, schools, or individuals.<sup>54</sup> The authority is directed to award designations to cities of varying populations, to identify and publicize state grant and loan programs relating to energy efficiency, and to develop, with other state agencies, a procedure for coordinating preferences for the awarding of grants or making of loans to applicants designated as energy cities.<sup>55</sup>

## E. Iowa Utilities Board — Energy Efficiency Plans and Programs — Alternate Energy Production Facilities

Energy efficiency programs are required to be developed and offered to customers of gas and electric public utilities that are under the purview of the lowa Utilities Board. The programs can be offered either directly by the utility or by a third party or agent contracting with the utility.<sup>56</sup> The programs are detailed within energy efficiency plans which are filed with the board.<sup>57</sup> Energy efficiency plans other than programs for qualified low-income persons and programs relating to tree planting, education, and assessments of consumers' needs for information to make effective choices regarding energy use and energy efficiency, are, in general, required to be cost-effective.<sup>58</sup>

#### 1. Rate-Regulated (Investor-Owned) Utilities

With regard to gas and electric utilities subject to rate regulation pursuant to lowa Code chapter 476, energy efficiency plans are required to be developed and filed with the board and must include a range of programs offering energy efficiency opportunities tailored to the needs of all customer classes, including residential, commercial, and industrial customers. Programs relating to low-income energy assistance can take the form of a countywide or communitywide program in cooperation with one or more community action agencies within a utility's service area. lowa agencies and contractors are to be utilized to the maximum extent that is cost-effective in implementing programs contained within the plans.<sup>59</sup>

A customer of an electric utility subject to rate regulation pursuant to lowa Code chapter 476 may request an exemption from participating in an energy efficiency plan offered by the electric utility if the energy efficiency plan has a cumulative rate-payer impact test result of less than one. Upon the receipt of the customer's request, the electric utility is required to grant the exemption and,

beginning January 1 of the following year, the customer shall no longer be assessed the costs of the plan and shall be prohibited

<sup>&</sup>lt;sup>54</sup> Iowa Code §473.41(1).

<sup>&</sup>lt;sup>55</sup> Iowa Code §473.41(2).

<sup>&</sup>lt;sup>56</sup> Iowa Code §476.6(13).

<sup>&</sup>lt;sup>57</sup> lowa Code §476.6(15). For applicability to certain electric utilities, municipally owned utilities, and gas utilities, see lowa Code sections 476.1A(1), 476.1B(1), and 476.1C(1).

<sup>58</sup> Iowa Code §476.6(13).

<sup>&</sup>lt;sup>59</sup> Iowa Code §476.6(15)(a)(1)(a).



from participating in any program included in such plan until the exemption no longer applies, as determined by the board.<sup>60</sup>

Gas and electric utilities subject to rate regulation pursuant to lowa Code chapter 476 may request that the board permit them to modify an energy efficiency plan. A modification may be requested due to funding changes stemming from customers requesting exemptions, or for any other reason.<sup>61</sup>

Additionally, rate-regulated gas and electric utilities are required to submit to the board an assessment, based on actual and projected customer usage, of potential energy and capacity savings available through the application of commercially available technology and improved operating practices to energy-using equipment and buildings. Based on the assessments, and in consultation with the Economic Development Authority, the board develops specific capacity and energy savings performance standards for incorporation into a utility's energy efficiency plan.<sup>62</sup> The board may approve, reject, or modify submitted plans, may conduct contested case proceedings, and must periodically report the energy efficiency results, including energy savings of each utility, to the General Assembly.<sup>63</sup>

Notwithstanding any specific capacity or energy savings performance standards incorporated into an energy efficiency plan, the board is prohibited from requiring or allowing a gas or electric utility subject to rate regulation pursuant to lowa Code chapter 476 to adopt an energy efficiency plan that results in any of the following:

- Projected cumulative average annual costs that exceed 1.5 percent of a gas utility's expected annual lowa retail rate revenue from retail customers in the state.
- Projected cumulative average annual costs that exceed 2 percent of an electric utility's expected annual lowa retail rate revenue from retail customers in the state.<sup>64</sup>

Gas and electric utilities subject to rate regulation pursuant to Iowa Code chapter 476 may recover the costs of an energy efficiency plan approved by the board through an automatic adjustment mechanism over a period not to exceed the term of the energy efficiency plan.<sup>65</sup>

#### 2. Nonrate-Regulated (Consumer-Owned) Gas Utilities

Energy efficiency plans and results are also required to be filed with the board by nonrate-regulated gas utilities that are not subject to board approval. Gas public utilities having fewer than 2,000 customers must submit plans which are, on the whole, cost-effective. The board may waive in whole or in part the requirement related to the filing of energy efficiency plans and results if the gas utility demonstrates superior results with existing energy efficiency efforts.<sup>66</sup>

<sup>60</sup> Iowa Code §476.6(15)(a)(1)(b).

<sup>61</sup> Iowa Code §476.6(15)(a)(2).

<sup>&</sup>lt;sup>62</sup> Iowa Code §476.6(15)(b).

 <sup>&</sup>lt;sup>63</sup> Iowa Code §476.6(15)(b),(c).
 <sup>64</sup> Iowa Code §476.6(15)(c)(2).

<sup>&</sup>lt;sup>65</sup> Iowa Code §476.6(15)(e)(1).

<sup>&</sup>lt;sup>66</sup> Iowa Code §476.1C(1)(c).

#### 3. Alternate Energy Production Facilities

It is the policy of the state to conserve energy resources through the development of alternate energy production facilities and small hydro facilities.<sup>67</sup> For purposes of this policy, the term "alternate energy production facility" includes solar, wind turbine, waste management, resource recovery, refuse-derived fuel, agricultural crops or residues, a woodburning facility, and any land, buildings, and transmission facilities that are necessary for the operation of these types of facilities.<sup>68</sup> In addition, for purposes of this policy, the term "small hydro facility" includes a hydroelectric facility at a dam and any land, buildings, and distribution facilities that are necessary for the operation of the hydroelectric facility.69

With limited exceptions, the board requires electric utilities to provide for the availability of supplemental power to alternate energy production facilities or small hydro facilities on a nondiscriminatory basis and at just and reasonable rates.<sup>70</sup> In addition, with limited exceptions the board requires electric utilities to either own an alternate energy production facility or small hydro facility in the state or "[e]nter into long-term contracts to purchase or wheel electricity from alternate energy production facilities or small hydro facilities located in the utility's service area."71 The capacity of an alternate energy production facility or small hydro facility is not included in the calculation of an electric utility's excess generating capacity.72

The lowa Energy Center is required to administer an Alternate Energy Revolving Loan Program to encourage the development of alternate energy production facilities and small hydro facilities.<sup>73</sup> The program is supported by an Alternate Energy Revolving Loan Fund.<sup>74</sup> The moneys in the Fund are used to provide loans for the construction of alternate energy production facilities and small hydro facilities.<sup>75</sup> The loans provided as part of the program cannot exceed 20-year terms and bear no interest.76

Beginning January 1, 2004, electric utilities were required to offer their customers an Alternate Energy Purchase Program based on the energy produced by alternate energy production facilities.<sup>77</sup> Electric utilities are required to file their plans for alternate energy purchase programs with the board.<sup>78</sup> The plans that rate-regulated electric utilities file are required to allow their customers to contribute voluntarily to the development of alternate energy in Iowa.<sup>79</sup> Meanwhile, electric utilities that are not rate-regulated are required to offer alternate energy purchase programs at rates determined by their governing authority.80

- lowa Code §476.46(1) 74 Iowa Code §476.46(2)(a).
- <sup>75</sup> Iowa Code §476.46(2)(c).

<sup>67</sup> lowa Code §476.41.

<sup>68</sup> lowa Code §476.42(1)(a).

lowa Code §476.42(4)(a). 70

Iowa Code §476.43(1)(b). For exceptions, see Iowa Code section 476.44.

<sup>&</sup>lt;sup>71</sup> Iowa Code §476.43(1)(a). For exceptions, see Iowa Code section 476.44. 72 Iowa Code §476.45.

<sup>73</sup> 

<sup>76</sup> lowa Code §476.46(2)(e).

<sup>77</sup> lowa Code §476.47(1).

<sup>&</sup>lt;sup>78</sup> Iowa Code §476.47(2).

<sup>79</sup> lowa Code §476.47(2)(a).

<sup>80</sup> Iowa Code §476.47(2)(b).



#### 4. Small Wind Innovation Zone Program

The Utilities Division of the Department of Commerce administers a Small Wind Innovation Zone Program.<sup>81</sup> The purpose of the program is to optimize local, regional, and state benefits from wind energy and to facilitate and expedite interconnection of small wind energy systems with electric utilities. Under the program, the owner of a small wind energy system located within a small wind innovation zone desiring to interconnect with an electric utility can receive certain benefits, including a streamlined application process. For purposes of the program, the term "small wind energy system" means a wind energy conversion system that collects and converts wind into energy to generate electricity which has a nameplate generating capacity of 100 kilowatts or less. In addition, the term "small wind innovation zone" means a political subdivision of this state or any other local commission which adopts, or is encompassed within a local government which adopts, the applicable model ordinance.

Political subdivisions must apply to the Utilities Division to be designated a small wind innovation zone. The Utilities Division is required to approve the application of a political subdivision to be designated a small wind innovation zone if the application indicates the political subdivision has adopted a model ordinance that establishes an expedited approval process for small wind energy systems.

#### F. Iowa Propane Education and Research Council

Programs and projects authorized for development by the Iowa Propane Education and Research Council include energy efficiency programs dedicated to weatherization; acquisition and installation of energy-efficient customer appliances that qualify for energy star certification; installation of low-flow faucets and showerheads; and energy efficiency education. Additionally, the council is authorized to establish by rule quality standards relating to weatherization and appliance installation.<sup>82</sup> The council is directed to include a summary of energy efficiency programs, if developed, in its annual report summarizing the council's activities.<sup>83</sup>

#### G. Iowa Summer Youth Corps and Iowa Green Corps Programs

Two volunteer youth service programs provide energy efficiency-related service opportunities. The Iowa Summer Youth Corps Program, administered by the Iowa Commission on Volunteer Service, was established to provide meaningful summer enrichment programming to Iowa youth. Included in specified service-learning activities available pursuant to the program are energy conservation activities in the youth's community, including conducting educational outreach on energy conservation and working to improve energy efficiency in Iow-income housing and public spaces.<sup>84</sup> The Iowa Green Corps Program, administered by the commission in collaboration with the Department of Natural Resources, the Department of Workforce Development, and the Iowa Utilities Board, was created to utilize federal AmeriCorps or Iowa Summer Youth Corps volunteers to provide capacity building activities, training, and implementation

<sup>&</sup>lt;sup>81</sup> Iowa Code §476.48.

<sup>&</sup>lt;sup>82</sup> Iowa Code §101C.3(8).

<sup>&</sup>lt;sup>83</sup> Iowa Code §101C.3(10).

<sup>&</sup>lt;sup>84</sup> Iowa Code §15H.5.

of major transformative projects in communities including, among other objectives, an emphasis on energy efficiency.<sup>85</sup>

#### H. Tax Credits

#### 1. Renewable Chemical Production Tax Credit Program

Pursuant to the Renewable Chemical Production Tax Credit Program, certain businesses are able to claim a tax credit for the production of renewable chemicals.<sup>86</sup> In order to be eligible to receive the renewable chemical production tax credit, a business must meet all of the following requirements:

- The business is physically located in lowa.
- The business is operated for profit and under single management.
- The business is not an entity providing professional services, health care services, or medical treatments or an entity engaged primarily in retail operations.
- The business organized, expanded, or located in lowa on or after April 6, 2016.
- The business is not relocating or reducing operations as described in Iowa Code section 15.329, subsection 1, paragraph "b," and as determined under the discretion of the Economic Development Authority.
- The business is in compliance with all agreements entered into under the program or other programs administered by the authority.<sup>87</sup>

Applications for the renewable energy production tax credit are made to the authority.<sup>88</sup> Before being issued the tax credit, eligible businesses are required to enter into an agreement with the authority that requires the eligible business to complete all requirements of the Renewable Chemical Production Tax Credit Program and provide certain information to the authority.<sup>89</sup>

The amount of the tax credit is determined by multiplying five cents by the number of pounds of renewable chemicals produced in Iowa from biomass feedstock by the eligible business during the calendar year in excess of the eligible business's pre-eligibility production threshold.<sup>90</sup> However, there are limits on the total amount of a tax credit that may be issued to an eligible business.<sup>91</sup> An eligible business that has been in operation in the state for five years or less is prohibited from receiving a tax credit in excess of \$1 million.<sup>92</sup> An eligible business that has been in operation in the state for more than five years is prohibited from receiving a tax credit in excess of \$500,000.<sup>93</sup>

<sup>&</sup>lt;sup>85</sup> Iowa Code §15H.6.

<sup>&</sup>lt;sup>86</sup> Iowa Code §15.319(1).

 <sup>&</sup>lt;sup>87</sup> Iowa Code §15.317.
 <sup>88</sup> Iowa Code §15.318(1).

<sup>&</sup>lt;sup>89</sup> Iowa Code §15.318(2).

<sup>&</sup>lt;sup>90</sup> Iowa Code §15.319(1).

<sup>&</sup>lt;sup>91</sup> Iowa Code §15.318(3).

<sup>&</sup>lt;sup>92</sup> lowa Code §15.318(3)(a)(1).

<sup>&</sup>lt;sup>93</sup> Iowa Code §15.318(3)(a)(2).



#### 2. Solar Energy System Tax Credit

Certain taxpayers are able to claim a tax credit for solar installations.<sup>94</sup> Applications for the solar energy system tax credit are made to the Department of Revenue.<sup>95</sup> The amount of the solar energy system tax credit is equal to the sum of the following:

- Sixty percent of the federal residential energy efficient property credit related to solar energy provided in section 25D(a)(1) and section 25D(a)(2) of the Internal Revenue Code, not to exceed \$5,000.
- Sixty percent of the federal energy credit related to solar energy systems provided in section 48(a)(2)(A)(i)(II) and section 48(a)(2)(A)(i)(III) of the Internal Revenue Code, not to exceed \$20,000.

However, for installations occurring on or after January 1, 2016, the applicable percentages of the federal residential energy efficiency property tax credit related to solar energy and the federal energy credit related to solar energy systems are 50 percent.<sup>96</sup>

The total amount of solar energy system tax credits claimed annually cannot exceed \$5 million unless there are unclaimed tax credits from prior years. Of this total amount, at least \$1 million in solar energy system tax credits are reserved for applications associated with residential solar energy installations.<sup>97</sup> A taxpayer cannot claim both a solar energy system tax credit and a renewable energy tax credit under lowa Code chapter 476C.<sup>98</sup>

#### 3. Fuel Tax Credits

There are several tax credits available to taxpayers who sell and dispense blended fuels. Retail dealers who sell and dispense E-85 gasoline are eligible for an E-85 gasoline promotion tax credit equal to \$.16 multiplied by the retail dealer's total E-85 gasoline gallonage.<sup>99</sup> The E-85 gasoline promotion tax credit expires January 1, 2025.<sup>100</sup>

Retail dealers who sell and dispense biodiesel blended fuel are also eligible for the biodiesel blended fuel tax credit.<sup>101</sup> The amount of the biodiesel blended fuel tax credit is determined by the classification of the biodiesel blended fuel. If the retail dealer sells and dispenses biodiesel blended fuel classified as B-5 or higher but not as high as B-11, the amount of the biodiesel blended fuel tax credit is equal to three and one-half cents multiplied by the retail dealer's total biodiesel blended fuel gallonage. If the retail dealer sells and dispenses biodiesel blended fuel classified as B-11 or higher, the amount of the biodiesel blended fuel tax credit is equal to five and one-half

<sup>94</sup> Iowa Code §422.11L.

 <sup>&</sup>lt;sup>95</sup> Iowa Code §422.11L(3)(d).
 <sup>96</sup> Iowa Code §422.11L(1)

 <sup>&</sup>lt;sup>96</sup> Iowa Code §422.11L(1).
 <sup>97</sup> Iowa Code §422.11L(4).

<sup>&</sup>lt;sup>98</sup> Iowa Code §422.11L(3)(b).

<sup>&</sup>lt;sup>99</sup> Iowa Code §422.11O(2)(a), (3).

<sup>&</sup>lt;sup>100</sup> Iowa Code §422.11O(8).

<sup>&</sup>lt;sup>101</sup> Iowa Code §422.11P(3).

cents multiplied by the retail dealer's total biodiesel blended fuel gallonage.<sup>102</sup> The biodiesel blended fuel tax credit expires January 1, 2025.<sup>103</sup>

Additionally, retail dealers who sell and dispense ethanol blended gasoline are eligible for the E-15 plus gasoline promotion tax credit.<sup>104</sup> Retail dealers may claim both the E-85 promotion tax credit and the E-15 plus gasoline promotion tax credit.<sup>105</sup> The total amount of the E-15 plus gasoline promotion tax credit is calculated by multiplying a certain designated rate by the retail dealer's total ethanol blended gasoline gallonage.<sup>106</sup> The designated rate is as follows:

- For the first period beginning January 1 and ending May 31, three cents.
- For the second period beginning June 1 and ending September 15, ten cents.
- For the third period beginning September 16 and ending December 31, three cents.

The E-15 plus gasoline promotion tax credit expires January 1, 2025.107

#### 4. Wind Energy Production Tax Credit

The owner of a certain type of facility that produces electricity from wind may apply to the lowa Utilities Board for a wind energy production tax credit.<sup>108</sup> In order for a taxpayer to claim the wind energy production tax credit, the facility must produce electricity from wind, be located in lowa, and have been placed in service on or after July 1, 2005, but before July 1, 2012.<sup>109</sup> In addition to those requirements, there are requirements based on when the taxpayer filed the application for the wind energy production tax credit. If the application was filed on or after March 1, 2008, the facility must consist "of one or more wind turbines connected to a common gathering line which have a combined nameplate capacity of no less than two megawatts and no more than thirty megawatts."<sup>110</sup> If the application was filed on or after July 1, 2009, by a "private college or university, community college, institution under the control of the state board of regents, public or accredited nonpublic elementary and secondary school, or public hospital, for the applicant's own use of qualified electricity," the facility must consist of "wind turbines with a combined nameplate capacity of three-fourths of a megawatt or greater."<sup>111</sup>

The amount of a wind energy production tax credit is equal to "the product of one cent multiplied by the number of kilowatt-hours of qualified electricity sold or used for on-site consumption by the owner during the taxable year."<sup>112</sup> However, a taxpayer cannot claim the wind energy production tax credit for any kilowatt-hour of electricity that is sold to a related person.<sup>113</sup>

<sup>&</sup>lt;sup>102</sup> Iowa Code §422.11P(4).

<sup>&</sup>lt;sup>103</sup> Iowa Code §422.11P(8).

<sup>&</sup>lt;sup>104</sup> Iowa Code §422.11Y.

 <sup>&</sup>lt;sup>105</sup> Iowa Code §§422.11O(5), 422.11Y(6).
 <sup>106</sup> Iowa Code §422.11Y(4).

<sup>&</sup>lt;sup>107</sup> Iowa Code §422.11Y(9).

<sup>&</sup>lt;sup>108</sup> Iowa Code §§476B.2, 476B.6(2).

<sup>&</sup>lt;sup>109</sup> Iowa Code §476B.1(4).

<sup>&</sup>lt;sup>110</sup> Iowa Code §476B.1(4)(d)(1).

<sup>&</sup>lt;sup>111</sup> Iowa Code §476B.1(4)(d)(2).

<sup>&</sup>lt;sup>112</sup> Iowa Code §476B.3.

<sup>&</sup>lt;sup>113</sup> Iowa Code §476B.4.



#### 5. Renewable Energy Tax Credit

Producers and purchasers of renewable energy may apply to the Iowa Utilities Board for a renewable energy tax credit.<sup>114</sup> For purposes of claiming the renewable energy tax credit, the term "producer of renewable energy" means a person who owns an eligible renewable energy facility.<sup>115</sup> Additionally, for purposes of claiming the renewable energy tax credit, the term "purchaser of renewable energy" means a person who buys electric energy, hydrogen fuel, methane gas, or other biogas used to generate electricity, or heat for a commercial purpose from an eligible renewable energy facility.<sup>116</sup>

The definition of "eligible renewable energy facility" is the key to determining whether a producer or purchaser of renewable energy is able to claim a renewable energy tax credit. The term means a wind energy conversion facility, a biogas recovery facility, a biomass conversion facility, a methane gas recovery facility, a solar energy conversion facility, or a refuse conversion facility that satisfies certain ownership requirements and was placed into service on or after July 1, 2005, and before January 1, 2018.<sup>117</sup> In addition to those requirements, there are requirements based on when the taxpayer filed the application for the renewable energy tax credit. If the application was filed on or after July 1, 2011, the facility must produce "not less than three-fourths megawatts of nameplate generating capacity or the energy produced is for on-site consumption by the producer."<sup>118</sup> If the application was filed on or after July 1, 2011, except for wind energy conversion facilities, the facility must be of "no greater than sixty megawatts of nameplate generating capacity or the energy produced."<sup>119</sup>

The amount of the renewable energy tax credit is equal to:

[O]ne and one-half cents per kilowatt-hour of electricity, or four dollars and fifty cents per million British thermal units of heat for a commercial purpose, or four dollars and fifty cents per million British thermal units of methane gas or other biogas used to generate electricity, or one dollar and forty-four cents per one thousand standard cubic feet of hydrogen fuel generated by and purchased from an eligible renewable energy facility or used for on-site consumption by the producer.<sup>120</sup>

A taxpayer cannot claim a renewable energy tax credit for purchases made from an eligible renewable energy facility if the taxpayer is a related person.<sup>121</sup> A taxpayer cannot claim both a renewable energy tax credit and a solar energy system tax credit under Iowa Code section 422.11L.<sup>122</sup>

<sup>&</sup>lt;sup>114</sup> Iowa Code §§476C.2(1), 476C.3(1).

<sup>&</sup>lt;sup>115</sup> Iowa Code §476C.1(11).

<sup>&</sup>lt;sup>116</sup> Iowa Code §476C.1(12).

<sup>&</sup>lt;sup>117</sup> Iowa Code §476C.1(6).

<sup>&</sup>lt;sup>118</sup> Iowa Code §476C.1(6)(e).

<sup>&</sup>lt;sup>119</sup> Iowa Code §476C.1(6)(f). <sup>120</sup> Iowa Code §476C.2(1).

<sup>&</sup>lt;sup>121</sup> Iowa Code §476C.2(2).

<sup>&</sup>lt;sup>122</sup> Iowa Code §476C.2(2).

#### IV. **Miscellaneous Provisions**

In addition to the provisions discussed in Parts I through III of this guide, several other references to energy efficiency programs or requirements exist in the Iowa Code.

#### A. State Vehicle Fleet

The Director of the Department of Administrative Services is required to consider energy efficiency in assigning motor vehicles for use directly by the department or through the department for other specified state agencies. Standards applicable to such assignments are required to be developed by the director to assure assignment of the most energy-efficient vehicle or combination of vehicles available for a trip. Special work vehicles and law enforcement vehicles are exempt from the standards.123

#### **B.** School District Physical Plant and Equipment Levy

One of the authorized uses for property tax revenue derived from the physical plant and equipment levy imposed by school districts is for energy conservation.<sup>124</sup>

#### C. Midwest Energy Compact

lowa is a member of the Midwest Energy Compact.<sup>125</sup> One of the purposes of the compact is to increase energy efficiency.<sup>126</sup> The member states of the compact make up the Interstate Midwest Energy Commission.<sup>127</sup> The commission is tasked with conducting energy efficiency studies and making recommendations for state legislation.<sup>128</sup>

#### D. Energy-Efficient Lighting

All exterior floodlighting owned by a city or by a public utility, including but not limited to street and security lighting, must be replaced when worn out with high-pressure sodium lighting or lighting with equivalent or better energy efficiency, as established by the lowa Utilities Board by administrative rule.<sup>129</sup> This requirement does not apply to period lighting that has a minimum efficiency rating of 58 lumens per watt or to stadium or ballpark lighting, but, in the latter case, worn-out lighting must be replaced with the most energy-efficient lighting available at the time of replacement.<sup>130</sup>

#### E. Iowa Energy Center

Iowa Code section 15.120 establishes an Iowa Energy Center within the Economic Development Authority.<sup>131</sup> The Iowa Energy Center has several objectives, including, among other objectives:

- To support technology-based development by encouraging public-private partnerships and innovative manufacturers to develop and bring to market new energy technologies.
- To support rural and underserved areas and vulnerable populations by creating opportunities for greater access to energy efficiency expertise, training, programs, and cyber security preparedness for small utilities.

<sup>&</sup>lt;sup>123</sup> Iowa Code §8A.362(4)(c).

<sup>&</sup>lt;sup>124</sup> Iowa Code §298.3(1)(g).

<sup>125</sup> Iowa Code ch. 473A.

<sup>126</sup> Iowa Code §473A.1(1).

<sup>&</sup>lt;sup>127</sup> Iowa Code §473A.1(2)(a)(1). 128 Iowa Code §473A.1(3).

<sup>&</sup>lt;sup>129</sup> Iowa Code §364.23.

<sup>&</sup>lt;sup>130</sup> Iowa Code §§364.23, 476.62.

<sup>&</sup>lt;sup>131</sup> Iowa Code §15.120.



- To promote and fund research, development, and commercialization of biomass technology to benefit the state economically and environmentally by further realizing the value-added attributes of biomass in the development of bioenergy, biofuels, and biochemicals.
- To encourage growth of the alternative fuel vehicle market, particularly for electric vehicles, and the infrastructure necessary to support the market.
- To support efforts to modernize the electric grid infrastructure of the state to support increased capacity and new technologies.

The lowa Energy Center is funded in part through remittances to the Treasurer of the State by gas and electric utilities.<sup>132</sup> For the fiscal year beginning July 1, 2020, the first \$2,910,000 of these remittances are to be transferred to the General Fund and the remainder is to be appropriated to the Iowa Energy Center.<sup>133</sup> For the fiscal year beginning July 1, 2021, the first \$3,530,000 of these remittances are to be transferred to the General Fund and the General Fund and the remainder is to be appropriated to the lowa Energy Center.<sup>134</sup> The Iowa Energy Center uses moneys appropriated to it to sponsor grants and programs and may solicit grants and funding from public and private nonprofit agencies and foundations.<sup>135</sup>

<sup>132</sup> Iowa Code §15.120(1)(g).

<sup>&</sup>lt;sup>133</sup> Iowa Code §476.10À(1).

<sup>&</sup>lt;sup>134</sup> Iowa Code §476.10A(1)(c).

<sup>&</sup>lt;sup>135</sup> Iowa Code §15.120(3)(a).