



Iowa Department of **REVENUE**

Solar Energy System Tax Credit Annual Report for 2016 Released December 30, 2016 Revised January 4, 2017

Reporting Requirements

Iowa Code section 422.11L requires that the Iowa Department of Revenue (IDR) submit an annual report to the Governor and the General Assembly on or before January 1 regarding the number and value of the Solar Energy System Tax Credits claimed during the previous calendar year, and any other information IDR may deem relevant and appropriate. This report meets that requirement for 2016.

Tax Credit Eligibility

A Solar Energy System Tax Credit is available for individual and corporation income taxpayers for solar energy systems installed on property located in Iowa. The tax credit is nonrefundable, but any tax credit in excess of tax liability can be carried forward up to ten tax years. The tax credit was enacted in May 2012, but was retroactive to solar energy systems placed in service on or after January 1, 2012. For tax years beginning on or after January 1, 2014, the tax credit can be claimed against franchise tax paid by banks; for tax years beginning on or after January 1, 2015, the tax credit can also be claimed against the moneys and credits tax paid by credit unions.

The Iowa Solar Energy System Tax Credit equals a percentage of the federal tax credits offered for solar energy systems. Federal tax credits are available for property placed in service before January 1, 2022. Currently, the federal credit equals 30 percent of installation costs. After December 31, 2019 and before January 1, 2021 the federal credit will decrease to 26 percent of costs. The federal credit rate will decrease to 22 percent for property placed in service after December 31, 2020 and before January 1, 2022; therefore, the Iowa tax credit is available for tax years 2012 through 2021. Taxpayers who claim this tax credit are not eligible to claim a Renewable Energy Tax Credit under Iowa Code Chapter 476C for the production of solar electricity.

Solar Energy System Tax Credit

For residential installations completed on or after January 1, 2016, the Iowa Solar Energy System Tax Credit is equal to 50 percent of the federal Residential Energy Efficient Property Tax Credit related to solar systems provided in section 25D(a)(1) of the Internal Revenue Code for solar electric property and section 25D(a)(2) of the

Internal Revenue Code for solar water heating property. The federal tax credit is claimed on federal form 5695, Residential Energy Credits for individuals. The Iowa tax credit for an individual cannot exceed \$5,000.

For business installations completed on or after January 1, 2016, the Iowa Solar Energy System Tax Credit is equal to 50 percent of the federal energy credit as provided in sections 48(a)(2)(A)(i)(II) of the Internal Revenue Code for solar electric, heating and cooling property, and 48(a)(2)(A)(i)(III) of the Internal Revenue Code for equipment using solar energy to illuminate structures using fiber-optic distributed sunlight (available through December 31, 2016). The federal tax credit is claimed on federal form 3468, Investment Credit, for corporations, banks, and credit unions. The Iowa tax credit for a business cannot exceed \$20,000.

The aggregate amount of Solar Energy System Tax Credits awarded to individuals, banks, credit unions, partnerships, limited liability companies, S corporations, and C corporations per calendar year is capped at \$5 million beginning calendar year 2015, up from \$4.5 million in calendar year 2014. Beginning in 2014, \$1 million of the cap is reserved for residential installations. The calendar year cap in 2012 and 2013 was \$1.5 million each year. The tax credits are awarded on a first-come, first-served basis until the award cap is reached each year.

Although residential installations receive priority until the \$1 million set-aside for residential installations is met, if IDR receives applications for tax credit awards in excess of the \$5 million available in a calendar year, approved applications are waitlisted for the next available year's allocation of tax credit awards.

Receiving an Award

Taxpayers must submit an application to IDR to receive a tax credit award. At the end of September 2015, the paper application was replaced with an electronic application, available online through the Tax Credit Award, Claim & Transfer Administration System (CACTAS).

IDR awards the tax credit once the following information is provided:

- The completed application
- A copy of the invoice or other documentation showing the cost of the installed system
- A document verifying that the system qualifies for the federal tax credit
- The utility completion sheet
- Corporations, banks, and credit unions must also provide the date placed in service
- The amount of the Iowa tax credit to be reserved
- A signed copy of the Tax Credit Applicant Certification form available within the CACTAS application

During the 2016 legislative session, the due date for applications was extended for installations made in 2014 and 2015. Taxpayers with installations in 2016 or later must submit an application to IDR before May 1 of the year following the year of installation to be eligible for an award. An approved application is issued a tax credit certificate including a unique tax credit certificate number, the taxpayer's name, address, and the amount of the tax credit.

Summary of Solar Energy System Tax Credit Awards

Solar Energy System Tax Credit awards over the last five years are summarized in Table 1. In 2013, the \$1.5 million cap was met, although as a result of amended claims and revocations the final awarded amount is slightly below the cap. Amendments to awards made in 2014 also explain the total falling below the \$4.5 million cap available in that year. Effective with the 2014 award year, any unused awards are rolled over to the following year allowing awards in 2015 to slightly exceed the \$5 million cap.

Table 1. Solar Energy System Tax Credit Awards

Award Year	Residential Installations			Business Installations			Total	
	Number of Tax Credit Awards	Amount of Tax Credit Awards	Average Tax Credit Award	Number of Tax Credit Awards	Amount of Tax Credit Awards	Average Tax Credit Award	Number of Tax Credit Awards	Amount of Tax Credit Awards
2012	158	\$292,266	\$1,850	45	\$359,880	\$7,997	203	\$652,146
2013	168	\$356,270	\$2,121	114	\$1,143,076	\$10,027	282	\$1,499,346
2014	320	\$1,002,424	\$3,133	314	\$3,409,464	\$10,858	634	\$4,411,888
2015	397	\$1,402,779	\$3,533	306	\$3,680,975	\$12,029	703	\$5,083,754
2016	415	\$1,387,830	\$3,344	287	\$3,365,494	\$11,726	702	\$4,753,324
Total	1,458	\$4,441,569		1,066	\$11,958,889		2,524	\$16,400,458

Note: Reflects applications approved as of December 27, 2016

Source: Iowa Department of Revenue CACTAS Award Database

Total awards for 2016 to-date are \$4.75 million, with almost \$1.4 million awarded for residential installations, meeting the \$1 million residential set-aside. Additional applications received for installations in 2016 await review; applications approved after the 2016 cap is met will be placed on a waitlist and will receive awards under the 2017 cap. Awards during the first five years of the program total \$16.4 million to-date.

The average Solar Energy System Tax Credit award for residential and business installations both decreased from award year 2015 to 2016. In previous years, average awards increased, with the jump between 2013 and 2014 due to the legislative increase in the maximum awards for installations in 2014 and later. The maximum award for calendar years 2012 and 2013 for a residential installation was \$3,000; the maximum is \$5,000 for 2014 and later. The maximum award for a business installation was \$15,000 in 2012 and 2013; the maximum is \$20,000 in 2014 and later. The average 2016 award for a residential installation decreased slightly from 2015 to \$3,344 (see Table 1). This likely reflects the drop in the share of applications that received the maximum award. In 2016, 28 percent of the number of awards issued for residential installations equaled the maximum tax credit compared to 33 percent in 2015, and 46 percent in 2014. The

average award for a business installation also decreased to \$11,726. In 2016, only 19 percent of awards for business installations equaled the maximum, compared to 23 percent in 2015.

While the 2012 cap was not fully utilized, applications for installations completed after 2012 have easily exceeded the cap in all other years (see Table 2). For the 2013 cap, the first 282 installations during tax year 2013 used up the available funds, pushing the remaining 201 installations on a wait list with awards later issued under the 2014 cap. Likewise, for 2014 installations, 384 installations reviewed or amended after the \$4.5 million cap was met were pushed to a wait list and issued tax credit awards under the 2015 cap. In 2014, 20.5 percent of the cap was awarded for prior year installations; in 2015, 57.8 percent of the cap was awarded for prior year installations. Awards made for 2016 include 343 installations completed in 2015, 50.7 percent of the cap.

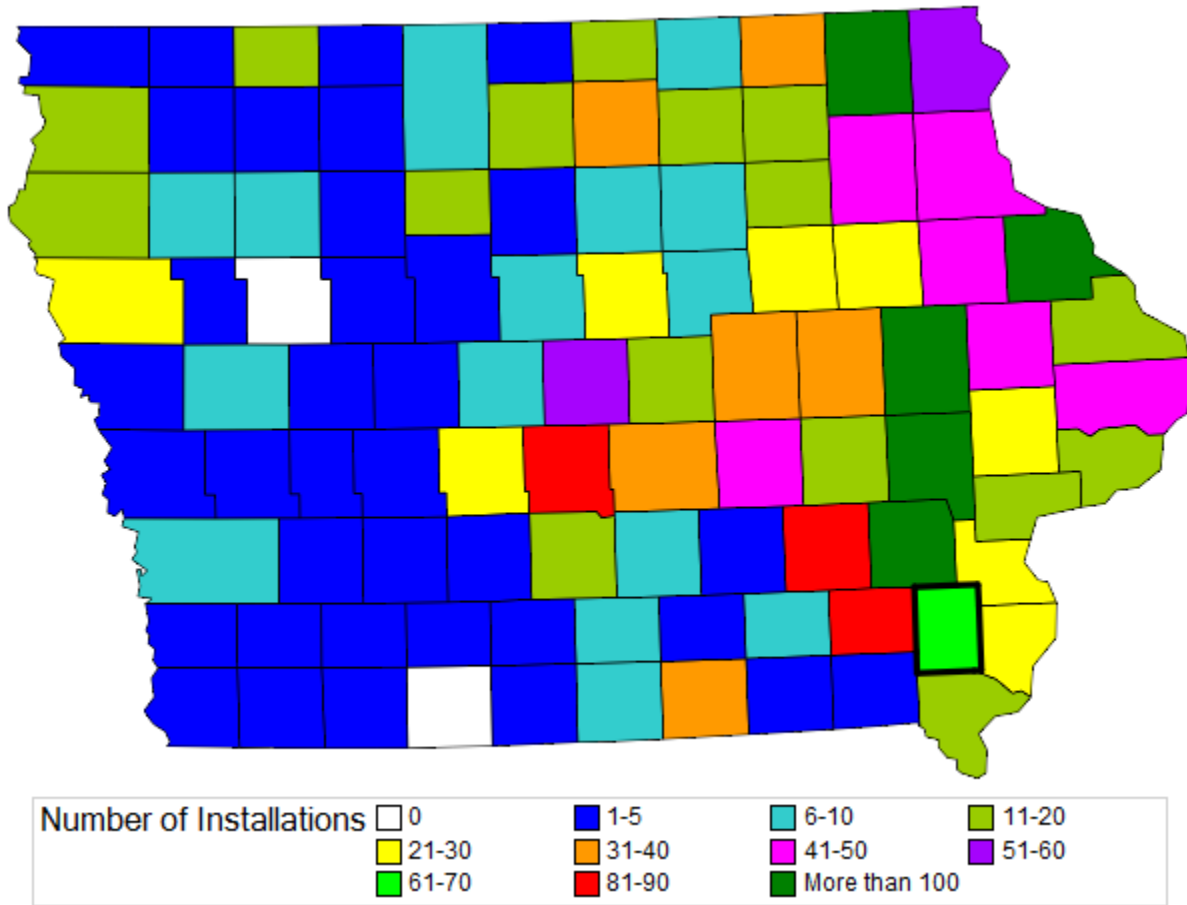
Table 2. Solar Energy System Tax Awards by Installation Year

Award Year	Current Installation Year		Installation in Prior Years		Percent of Cap Used by Installations from Prior Year
	Count of Awards	Total Awards	Count of Awards	Total Awards	
2012	203	\$652,144	0	\$0	0.0%
2013	282	\$1,499,346	0	\$0	0.0%
2014	433	\$3,506,113	201	\$905,778	20.5%
2015	319	\$2,191,933	384	\$2,891,821	57.8%
2016	359	\$2,217,305	343	\$2,536,018	50.7%
Total	1,596	\$10,066,841	928	\$6,333,617	

Note: During the 2016 award year, installations in prior years may include tax year 2015 or earlier

Awards in the first five years of the Solar Energy System Tax Credit have been issued for 2,524 separate and distinct installations in Iowa, including installations in 97 different counties (see Figure 1). Although installations have been widespread, the prevalence is geographically concentrated in Eastern Iowa. Woodbury and Dallas counties were the only two western counties that have more than 20 installations. Eleven counties have 51 or more installations; Dubuque, Johnson, Linn, Washington, and Winneshiek counties each have over 100 installations.

Figure 1. Solar Energy System Tax Credit Awards by County, 2012-2016



Awards made to-date reflect over \$123 million in solar energy system investments by lowans (see Table 3). The average reported residential installation costs decreased from \$25,536 in 2015 to \$23,706 in 2016. The reported average cost of a business solar energy system installation also decreased from \$92,312 in 2015 to \$89,619 in 2016, based on applications approved to-date. The count of installations for which awards have been approved peaked in 2014 at 826, dropping to 632 installations in 2015.

The approved solar energy system applications for calendar year 2016 installations total 359 to-date. Recall that installations for 2016 are incomplete as taxpayers have until May 1, 2017 to submit their applications.

Table 3. Solar Energy System Tax Credit Installation Costs by Installation Year

Installation Year	Residential Installations			Business Installations			Total	
	Count	Total Cost	Average Cost	Count	Total Cost	Average Cost	Count	Total Cost
2012	159	\$2,749,004	\$17,289	45	\$3,057,192	\$67,938	204	\$5,806,196
2013	313	\$6,226,616	\$19,893	190	\$14,556,940	\$76,615	503	\$20,783,556
2014	398	\$11,407,183	\$28,661	428	\$33,819,665	\$79,018	826	\$45,226,848
2015	377	\$9,627,052	\$25,536	255	\$23,539,435	\$92,312	632	\$33,166,487
2016	211	\$5,001,947	\$23,706	148	\$13,263,561	\$89,619	359	\$18,265,508
Total	1,458	\$35,011,802	\$24,014	1,066	\$88,236,793	\$82,774	2,524	\$123,248,595

During the 2014 application year, IDR began collecting the total kilowatt capacity (KW) of each solar energy system installed. For 2015, 100 percent of installations for businesses and 97 percent of the number of residential applications included KW, which accounted for 100 percent of total business installation costs and almost 99 percent of residential installation costs (installations not reporting were solar fans). During 2016, for the applications processed to-date, business applicants reported a total of 4,814 KW installed and residential reported a total of 1,703 KW. The average capacity of a residential solar energy system was 8.9 KW in 2015, decreasing to 8.4 KW in 2016; the average capacity of a business solar energy system was 31.0 KW in 2015, increasing to 32.5 KW in 2016.

Table 4. Total KW of the Solar Systems Installed Yearly by Application Type

Total KW of the Solar Systems Installed Yearly

Installation Year	Application Type	Installations that Reported KW	Total Cost of Systems Reporting KW	Total KW	Average KW	Percent of Installation Costs with KW Reported	Percent of Installations Reporting KW
2014	Business	363	\$28,957,633	9,207	25.4	85.6%	84.8%
	Residential	273	\$8,111,999	2,385	8.7	71.1%	68.6%
2015	Business	255	\$23,539,435	7,909	31.0	100.0%	100.0%
	Residential	337	\$9,472,810	2,989	8.9	98.4%	89.4%
2016	Business	148	\$13,263,561	4,814	32.5	100.0%	100.0%
	Residential	203	\$4,985,566	1,703	8.4	99.7%	96.2%
Total		1,579	\$88,331,004	29,006	18		

Note: 2016 as of January 3, 2017

Claiming the Solar Energy System Tax Credit

Taxpayers receiving tax credit awards claim the Solar Energy System Tax Credit using the IA 148 Tax Credits Schedule. They must include the tax credit certificate number on the IA 148. Business tax credit awards received by pass-through entities or sole proprietors, such as farmers, can be claimed by the owners, partners, or shareholders on their individual income tax return. Therefore, the number and amount of claims used by individuals is greater than the number of awards issued for residential installations.

The Solar Energy System Tax Credit is nonrefundable meaning that it can only be used to offset Iowa tax liability; any tax credit amount in excess of tax liability may be credited to the tax liability for the following 10 tax years or until depleted, whichever is earlier.

Summary of Solar Energy System Tax Credit Claims

During the first four tax years for which claims could be made, \$9.9 million of Solar Energy System Tax Credits have been reported on the IA 148, with \$6.8 million of those credits used to offset Iowa tax liability (see Table 5). Based on tax year 2015 claims verified to-date, new claims totaled \$3.8 million and claims carried forward from prior year awards totaled \$1.5 million. Of the total \$5.3 million claims available, \$2.9 million was applied against tax liability and \$2.6 million in credits will be carried forward to be claimed in tax years 2016 or later.

Table 5. Solar Energy System Tax Claims by Tax Year

Tax Year	Number of Tax Credit Claims	Total Amount of Tax Credits Carried Forward from Previous Year	Total Current Year Amount of Tax Credits	Total Amount of Tax Credits Available	Total Amount of Tax Credits Applied to Tax Liability	Total Amount of Tax Credits Carried Forward
2012	239	\$0	\$673,964	\$673,964	\$451,391	\$230,991
2013	424	\$167,563	\$1,532,284	\$1,699,847	\$987,656	\$720,162
2014	1,046	\$643,239	\$3,887,072	\$4,545,638	\$2,483,271	\$2,096,651
2015	1,189	\$1,473,525	\$3,811,689	\$5,285,214	\$2,868,026	\$2,576,606
Total	2,898	\$2,284,327	\$9,905,009		\$6,790,344	

Note: Claim collection and verification is incomplete for tax years 2014 or later.

Note that the total amount of tax credits applied to tax liability and the total amount of tax credits carried forward in a tax year can exceed the amount of tax credits awarded for installations completed for that same year. A fiscal year filer may claim the tax credit on the previous tax year return if the installation was completed at the start of the following year that falls within the fiscal year. For example, a taxpayer could have a 2014 tax year that began May 1, 2014 and extended through April 30, 2015. If the 2015 installation was completed prior to April 30, 2015, the 2015 award could be claimed on the 2014 tax return.

Tax year 2015 claims include both those credits awarded for 2015 installations and credits carried forward from tax year 2014 claims. IDR is in the process of verifying tax years 2014 and 2015 claims for 90 taxpayers that failed to include a valid tax credit

certificate number, and will deny those claims if an award cannot be identified. The claims without a valid tax credit certificate number, with a total of \$177,288 in applied claims and \$10,399 in carry forward, are included in the numbers above. All other claims have been matched to tax credit awards; however, ongoing tax compliance efforts can result in slight changes to historical counts and amounts.

Table 6 summarizes the Solar Energy System Tax Credit claims by tax type each year. The average amount of tax credits applied to tax liability for a corporation was \$3,000, franchise was \$9,691, and individuals was \$2,395 on 2015 tax returns filed and verified to-date.

Table 6. Solar Energy System Tax Credit Claims Applied by Tax Type

Tax Year	Tax Type	Total Amount of Tax Credits Applied to Tax Liability	Average Amount of Tax Credits Applied to Tax Liability
2012	Individual	\$407,248	\$1,755
	Corporation	\$45,390	\$5,674
2013	Individual	\$847,524	\$2,173
	Corporation	\$140,274	\$4,008
2014	Individual	\$2,303,048	\$2,283
	Corporation	\$181,537	\$2,751
	Franchise	\$67,027	\$16,757
2015	Individual	\$2,825,702	\$2,395
	Corporation	\$147,014	\$3,000
	Franchise	\$9,691	\$9,691

Contact: Questions can be addressed to Victoria Daniels of the Iowa Department of Revenue at (515) 281-8450 or Victoria.Daniels@iowa.gov.