

Delaware Cool Switch Low Impact Refrigerant Program

Program Guidelines and Operational Procedures

Version 2020.2

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1.0 Purpose

The purpose of these guidelines is to define procedures relating to the Cool Switch Low Impact Refrigerant Program (Cool Switch). Cool Switch promotes the use of refrigerants with a Global Warming Potential (GWP) lower than 1,500 by Delaware non-residential (commercial and industrial) customers. Refrigerants must also comply with existing Delaware regulations. Applicants should keep abreast of regulations currently under development that may affect the use of certain HFCs in Delaware, beginning as early as January 1, 2021. For more information, please visit <https://dnrec.alpha.delaware.gov/air/permitting/under-development/>.

The goal in establishing these guidelines is to provide a streamlined procedure for administering the Cool Switch Program in an efficient manner. These guidelines provide rules of practice and procedures for grant applications and disbursement of grants for energy efficiency projects in Delaware.

2.0 Cool Switch Program Appropriation

The Regional Green House Gas Initiative (RGGI) is a mandatory market-based program among eleven states including Delaware to reduce greenhouse gas emissions. These funds are subject to change due to auction results which may result in changes to program eligibility. DNREC receives RGGI funding from the state selling emission allowances through auctions to be used for investments in energy efficiency. DNREC has elected to utilize a portion of the RGGI proceeds to fund Cool Switch.

3.0 Cool Switch Program

3.1 General Provisions

All grants are on a first-come first-served basis. DNREC reserves the right to suspend, terminate or modify the Program at any time. DNREC is not obligated to approve any submitted application that may result in exceeding the program budget. In the event of a program change, submitted applications will be processed according to program terms at the time of application pre-approval.

3.1.1 Pre-Approval

DNREC will provide designated grant payments for qualifying refrigerants and equipment. All projects require pre-approval prior to any refrigerant or equipment purchase, or any services completed. Applications for grants are subject to approval by DNREC and DNREC reserves sole discretion to accept or reject any application under the program. DNREC makes no commitment to provide grant payment prior to final application approval. Once the grant is pre-approved, the applicant has 12 months to complete a retrofit project or 24 months to complete a new construction project or the application will be considered expired. Expired applications are considered closed and a new application is needed if project is restarted.

Upon pre-approval, new refrigerant and equipment (if applicable) must be purchased and installed before the grant payment can be issued.

3.1.2 Inspections

All applications are subject to pre-installation and/or post-installation inspections at the discretion of DNREC. All customers agree to allow access to proposed and installed refrigerants and equipment for the purposes of inspection and verification. If DNREC determines that the customer eligibility, proposed equipment or installed equipment does not meet the program's criteria, DNREC may withhold payment of the grant amount and/or require changes before issuing payment.

3.1.3 Invoices and Other Final Documentation

After the applicant received pre-approval and completed the installation, the customer or contractor performing services on behalf of the customer must provide copies of all itemized invoices. Invoices, and other documentation as necessary must verify the costs of purchasing and installing all qualifying equipment and refrigerant including material and installation costs. Quotes cannot be accepted. Itemized invoices are required, and the applicant must highlight any changes in the project scope on those invoices from the proposed quote which may result in an adjustment of the approved grant amount. Proof of payment must be submitted prior to grant payment being issued.

3.1.4 Program Limits

Individual grants will not exceed \$250,000 without written approval from the Division Director. The grant for a project will be paid at a rate of \$25 per avoided metric ton of CO₂-equivalent emissions.

No company or affiliated group of companies under common ownership/control can receive more than \$1,000,000 in grants awarded within a three-year period. By way of example, a parent and subsidiary (or sister entities with a common owner) would not be eligible to receive more than \$1,000,000 in total combined awards within three consecutive program years. DNREC's program years are deemed July 1st through June 30th.

3.1.5 State Energy Efficiency Investment Fund program

DNREC's Energy Efficiency Investment Fund (EEIF) can be used to supplement a Low GWP Program grant. EEIF offers both grants and low-interest loans to offset the upfront costs for energy-efficient improvements. The custom pathway grant option is designed to encourage non-standard energy-efficiency measures, including measures not listed in the prescriptive pathway. Cool Switch Program participants can apply for and receive EEIF grants based on the energy savings associated with Cool Switch projects. Additional information can be found on DNREC's website:

<https://dnrec.alpha.delaware.gov/climate-coastal-energy/efficiency/energy-efficiency-investment-fund/>.

3.2 Eligibility

The Delaware Cool Switch Program is available to non-residential consumers that use at least 50 lbs of refrigerant in their current facility(ies). Usage may be based on one facility or multiple facilities in aggregate. To receive funding for energy efficiency savings through the EEIF program, participants must meet the eligibility requirements described in the program's guidelines:

http://www.dnrec.delaware.gov/energy/Documents/EEIF/EEIF_guidelines_FINAL10.17.pdf.

3.3 Permits

Cool Switch Program projects must obtain all relevant permits from DNREC and all other necessary state, local, regional, and federal permits to be considered for an application.

3.4 Installing Contractor Guidelines

3.4.1 Education and Licensure

Installing contractors shall maintain appropriate education, licenses, industry certificates and accreditations to ensure the program preserves the end-users' expectation of professional work. The installing contractor must have an active Delaware business license, Delaware trade specific license, certificate of general liability insurance, and training certificates. Where industry certification programs have been promulgated, program applicants are encouraged to use industry certified contractors.

3.4.2 Insurance Requirements

The installing contractor and anyone acting under its direction or control or on its behalf shall at its own expense procure and maintain in full force at all times Commercial General Liability Insurance with a bodily injury and property damage combined single limit of liability of at least one million dollars (\$1,000,000) for any occurrence.

3.4.3 Statement of Reliability and Good Standing

The contractor must be reliable and in good standing with a "Satisfactory Record" (or no negative reports) with the Better Business Bureau. The contractor shall provide a copy of their Better Business Bureau report to DNREC upon request. Reports may be obtained at the following address.

BBB of Delaware
60 Reads Way
New Castle, DE 19720
Phone: (302) 221-5255
Fax: (302) 221-5265

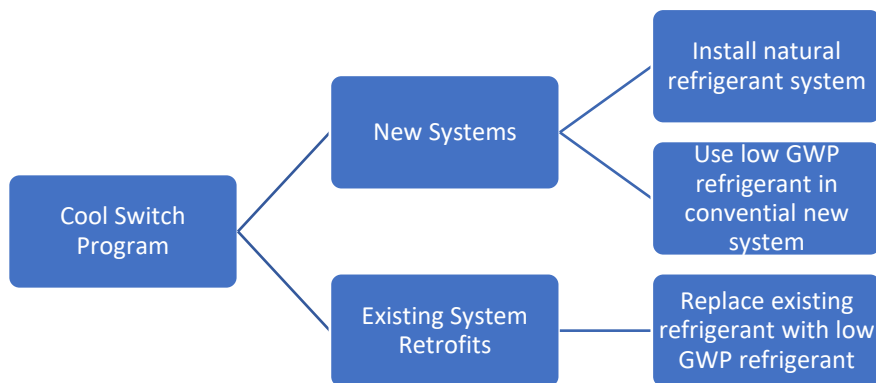
Web Site: www.delaware.bbb.org
Email: info@delaware.bbb.org

3.4.4 Limitation of Funds

The source of funding is limited and should be considered one-time monies. The installing contractor shall follow program guidelines to ensure reservation of funds prior to any equipment purchase or installing a qualifying system. DNREC will provide notice if program funds are close to being exhausted for the fiscal year.

4.0 Delaware Cool Switch Program Pathways

There are two pathways available to businesses interested in participating in the Cool Switch Program: existing system retrofits and new systems, as shown in the figure below.



Existing system retrofit projects will receive an incentive for switching from a high GWP refrigerant to a refrigerant with a GWP lower than 1,500. New system projects will be incentivized either to install natural refrigerant systems or to use low GWP refrigerants (as defined in Section 4.1 of these guidelines) in new conventional systems rather than high GWP alternative refrigerants.

Both of these pathways can be paired with the DNREC Energy Efficiency Investment Fund for energy savings achieved through Cool Switch projects.

4.1 Existing System Retrofit Pathway

Existing system retrofit projects are appropriate for businesses wishing to replace high GWP refrigerants in existing equipment with low GWP alternatives. High GWP refrigerants are those such as R-22, R-404A and R-407A, and others with GWP values greater than or equal to 1,500. Low GWP refrigerants are those such as R-449A, R-448A, and others with GWPs less than 1,500.

4.1.1 Existing System Savings and Grant Calculations

The grant for a project will be paid at a rate of \$25 per avoided metric ton of CO₂-equivalent emissions. Savings will be calculated using the following formula:

Formula 1. Avoided Emissions of CO₂-equivalent GHGs

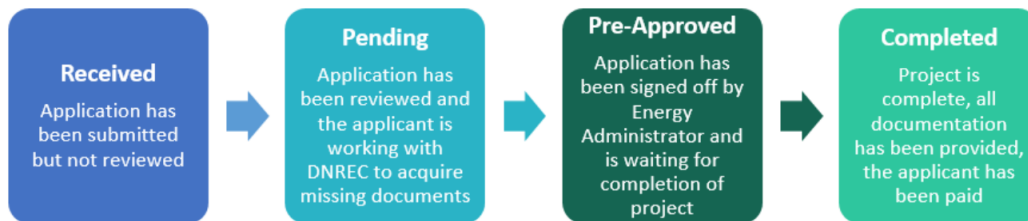
$$tCO_2e = \text{Years of Operation} * [(GWP_B * Charge_B * Leakage_B) - (GWP_N * Charge_N * Leakage_N)]$$

In the equation above, ‘GWP’ corresponds to refrigerant global warming potential defined as equivalent tons of CO₂ per pound of refrigerant, ‘charge’ corresponds to pounds of refrigerant, ‘leakage’ corresponds to annual estimated percent loss of refrigerant to atmospheric emissions, and the subscripts B and N correspond to baseline and new refrigerant systems, respectively.

Grants will not exceed \$250,000 or 50% of the total project cost, whichever is less.

4.1.4 Existing System Retrofit Application Process

The figure below shows the application process from the submission of the application through grant payment. The workflow steps are further detailed below.



The applicant (or contractor acting on behalf of the applicant) should confirm that the proposed Cool Switch project qualifies for a grant based on the program requirements. Then, submit a completed and signed Low GWP Existing System Retrofit Grant Application form. This should include copies of the manufacturer's technical specification sheets (cut sheets) for the refrigerant and materials to be purchased. After an application is received, it is classified as ‘pending’ status, and will expire after 3 months if any missing documentation is not provided. After receipt of the completed application and all required supplementary documentation, DNREC will evaluate the project for consideration of project pre- approval. The contractor and customer are fully responsible for ensuring that all forms and documentation have been supplied and the system meets all program requirements. If the requirements have been successfully met, a pre-approval letter will be issued by DNREC to the applicant.

After completing the installation of the project, the applicant or contractor acting on behalf of the applicant must submit the final documents pertaining to the project. DNREC will evaluate the project and the required accompanying documents for consideration of grant final approval. DNREC may conduct an inspection of the systems prior to final grant approval.

4.1.5 Existing System Retrofit Application Process

Applications submitted to DNREC will follow the timelines specified in these guidelines. DNREC will process the grant after receipt of the final application package and all supporting documentation, or after a scheduled inspection if required. DNREC will ordinarily process the payment to the purchaser, however, if the purchaser so requests in writing (through grant application) and documentation reflects the grant value was reduced directly from the purchase price, DNREC will process the payment to the retailer or installing contractor. The following flowchart shows an overview of the full process from application received through grant payment. Details of each workflow step are described below:



Application Received:

Contractor or applicant submits the project application to DNREC.

Application review:

DNREC reviews the application for completeness. If there is any missing information, or if anything is needed in order to accurately estimate the emissions reduction from the project, DNREC will follow up with the applicant. DNREC reserves the right to deny applications that are unreasonably incomplete or that fail to become complete after due diligence to collect the required information. The program manager may also decide the application needs additional study or metering data to be confident in the estimates, and may notify the applicant to request additional information or a site visit. Depending on the additional information required, there may be additional program funds available for these activities under the Energy Assessment grants opportunity.

Pre-Installation Site Visit:

If deemed necessary, DNREC will conduct a pre-installation site visit, in order to ensure that the installation has not yet begun and that baseline conditions were accurately described in the application. During the site visit, DNREC may also collect information to enable it to accurately calculate savings.

Project Technical Review and Grant Calculation:

If the project does not pass the initial review, the program manager will notify the applicant. The applicant may choose to modify the project or rescind the application. DNREC reserves the right to deny applications that are unreasonably incomplete or that fail to become complete after due diligence to collect the required information. The grant award calculation will be based on the technical review results as outlined in Section 5.0 of these guidelines.

Pre-Approval Grant Letter:

If the project passes the technical review, the applicant will be sent a preapproval letter that reserves the grant amount for not more than 12 months. The letter will also include a disclaimer that the grant award cannot be guaranteed if there are changes in scope or cost. The applicant is responsible for submitting the final documents once the project is installed and completed.

Post-Installation Site Visit

If deemed necessary, DNREC will conduct a post-installation site visit, in order to ensure that the project has been completed as described in the application.

Final Review

Once the final costs and project specifications are submitted to DNREC, a final review is performed to ensure that the program records reflect the actual site conditions. If the scope of the project changed enough to significantly lower savings, the grant amount will be changed to reflect the installed savings.

Grant Payment

Once the project passes the final review, the grant is ready to be disbursed to the applicant. DNREC will send a letter notifying the applicant of payment approval and will record the payment information in the Payment Summary sheet.

4.1.6 Existing System Retrofit Application Requirements

Applications must be completely and accurately submitted before grants can be paid. Required documentation includes:

- Specification (cut) sheets for all equipment, AND
- Quotes and estimates for all equipment and the scope of work, AND
- Installer's Commercial General Liability Insurance certificate, AND
- Installer's appropriate business license(s) for the State of Delaware and trade specific license, AND
- Delaware State Substitute W-9 form submitted electronically to <https://w9.accounting.delaware.gov/>, AND
- After project completion, itemized invoices for all installed and/or retrofitted equipment and refrigerants.

Additional information may be requested upon review of initial proposal as deemed appropriate by DNREC.

4.2 New System Pathway

New system projects are appropriate for businesses wishing to install a new refrigerant system, either in a newly constructed facility or a facility in which a major renovation is taking place. The new systems pathway encourages participants to install systems that use refrigerants with

low GWPs such as R-449A, R-448A, and others, or very low GWP refrigerants such as ammonia and carbon dioxide. New systems must use a refrigerant with a GWP less than 1,500 to be eligible for grants through the Cool Switch Program.

4.2.1 New System Savings and Grant Calculations

The grant for a project will be paid at a rate of \$25 per avoided metric ton of CO₂-equivalent emissions. Savings will be calculated using the following formula:

Formula 1. Avoided Emissions of CO₂-equivalent GHGs

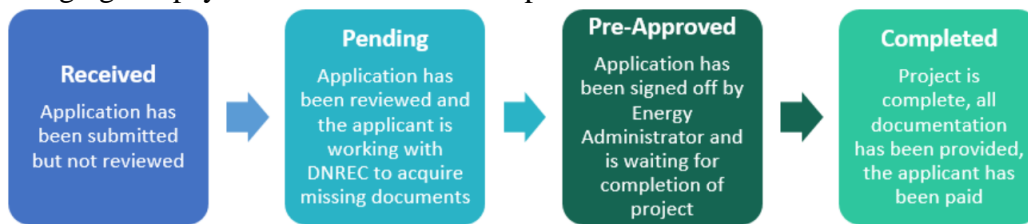
$$tCO_2e = \text{Years of Operation} * [(GWP_B * Charge_B * Leakage_B) - (GWP_N * Charge_N * Leakage_N)]$$

In the equation above, ‘GWP’ corresponds to refrigerant global warming potential defined as equivalent tons of CO₂ per pound of refrigerant, ‘charge’ corresponds to pounds of refrigerant, ‘leakage’ corresponds to annual estimated percent loss of refrigerant to atmospheric emissions, and the subscripts B and N correspond to baseline and new refrigerant systems, respectively.

For conventional systems, grants will not exceed \$250,000 or 25% of the total project cost. For natural refrigerant systems, grants will not exceed \$250,000 or 50% of the total project cost, whichever is less.

4.2.4 New System Application Process

The figure below shows the application process from the submission of the application through grant payment. The workflow steps are further detailed below.



The applicant or contractor acting on behalf of the applicant should confirm that the proposed Cool Switch project qualifies for a grant based on the program requirements. Then, submit a completed and signed Low GWP Existing System Retrofit Grant Application form with copies of the manufacturer's technical specification sheets (cut sheets) for the refrigerant and materials to be purchased. After an application is received, it is classified as ‘pending’ status, and will expire after 3 months if any missing documentation is not provided. After receipt of the completed application and all required supplementary documentation, DNREC will evaluate the project for consideration of project pre-approval. The contractor and customer are fully responsible for ensuring that all forms and documentation have been supplied and the system meets all program

requirements. If the requirements have been successfully met, a pre-approval letter will be issued by DNREC to the applicant.

After completing the installation of the project, the applicant or contractor acting on behalf of the applicant must submit the final documents pertaining to the project. DNREC will evaluate the project and the required accompanying documents for consideration of grant final approval. DNREC may conduct an inspection of the systems prior to final grant approval.

4.2.5 New System Application Process

Applications submitted to DNREC will follow the timelines specified in these guidelines. DNREC will process the grant after receipt of the final application package and all supporting documentation, or after a scheduled inspection if required. DNREC will ordinarily process the payment to the purchaser, however, if the purchaser so requests in writing and documentation reflects the grant value was reduced directly from the purchase price, DNREC will process the payment to the retailer or installing contractor. The following flowchart shows an overview of the full process from application received through grant payment. Details of each workflow step are described below:



Application Received:

Contractor or applicant submits the project application to DNREC. The application and date received is logged into the tracking spreadsheet and a review is scheduled.

Application review:

DNREC reviews the application for completeness. If there is any missing information, or if anything is needed in order to accurately estimate the emissions reduction from the project, DNREC will follow up with the applicant. DNREC reserves the right to deny applications that are unreasonably incomplete or that fail to become complete after due diligence to collect the required information. The program manager may also decide the application needs additional study or metering data to be confident in the estimates, and may notify the applicant to request additional information or a site visit. Depending on the additional information required, there may be additional program funds available for these activities under the Energy Assessment grants opportunity.

Pre-Installation Site Visit:

If deemed necessary, DNREC will conduct a pre-installation site visit, in order to ensure that the installation has not yet begun and that baseline conditions were accurately described in the application. During the site visit, DNREC may also collect information to enable it to accurately calculate savings.

Project Technical Review and Grant Calculation:

If the project does not pass the initial review, the program manager will notify the applicant. The applicant may choose to modify the project or rescind the application. DNREC reserves the right to deny applications that are unreasonably incomplete or that fail to become complete after due diligence to collect the required information. The grant award calculation will be based on the technical review results as outlined in Section 5.2 of these guidelines.

Pre-Approval Grant Letter:

If the project passes the technical review, the applicant will be sent a preapproval letter that reserves the grant amount for not more than 24 months. The letter will also include a disclaimer that the grant award cannot be guaranteed if there are changes in scope or cost. The applicant is responsible for submitting the final documents once the project is installed and completed.

Post-Installation Site Visit:

If deemed necessary, DNREC will conduct a post-installation site visit, in order to ensure that the installation has been completed as described in the application.

Final Review:

Once the final costs and project specifications are submitted to DNREC, a final review is performed to ensure that the program records reflect the actual site conditions. If the scope of the project changed enough to significantly lower savings, the grant amount will be changed to reflect the installed savings.

Grant Payment:

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4.2.6 New System Application Requirements

Applications must be completely and accurately submitted before grants can be paid.

Required documentation includes:

- Specification (cut) sheets for all equipment, AND
- Quotes and estimates for all equipment and the scope of work, AND
- Installer's Commercial General Liability Insurance certificate, AND
- Installer's appropriate business license(s) for the State of Delaware and trade specific license, AND
- Delaware State Substitute W-9 form submitted electronically to <https://w9.accounting.delaware.gov/>, AND
- After project completion, itemized invoices for all installed equipment and refrigerants.

Additional information may be requested upon review of initial proposal as deemed appropriate by DNREC.

5.0 Proprietary Application Information

DNREC may make all applications submitted available to non-State personnel for the sole purpose of assisting in its evaluation of the applications. These individuals will be required to protect the confidentiality of any specifically identified proprietary information obtained as a result of their participation in the evaluation. Proposals submitted may contain trade secrets and/or privileged or confidential commercial or financial information which the applicant does not want to be used or disclosed for any purpose other than evaluation of the application. The use and disclosure of such data may be restricted, provided the applicant follows DNREC's "Request for Confidentiality" procedure contained in DNREC's "Freedom of Information Act" or "FOIA" regulation. It is important to understand that this FOIA regulation's confidentiality procedure is a necessary part of this regulation in that any information submitted to DNREC is subject to public review unless deemed to be confidential by the Secretary in accordance with the criteria and procedures established in the FOIA regulation. The burden lies with the applicant asserting the claim of confidentiality to meet the criteria established in the FOIA regulation.

6.0 Retirement and Disposal

The customer and contractor shall appropriately retire and dispose of any product replaced as a result of a Cool Switch Program grant. The customer is responsible for the proper disposal or recycling of any waste generated as a result of the project.

7.0 Dispute Resolution

Should an applicant be denied a grant and disagrees with outcome, the applicant must contact DNREC in writing. DNREC will respond after the determination. Should DNREC deem the application eligible, the application will be processed.

8.0 Tax Liability

The applicant is responsible for any tax liability imposed as a result of the payment of grants. Applicants are advised to contact a tax professional for more information.