

SUBCHAPTER 41C - ENERGY IMPROVEMENT LOAN PROGRAM

SECTION .0100 - GENERAL PROVISIONS

01 NCAC 41C .0101 DEFINITIONS

For the purposes of this Subchapter, the following definitions apply:

- (1) "Allowable Costs" means origination cost, letter of credit fee (first year), engineering design fee, and implementation of an eligible energy conservation measure. All allowable costs to be included in the loan shall be incurred after the execution date of the Letter of Intent.
- (2) "Applicant" means any commercial or industrial business, nonprofit organization local government entity, or resident applying for a loan under the Program.
- (3) "Combustion efficiency test" means a test performed as part of a heating system maintenance to measure how well the furnace or boiler is performing.
- (4) "Commercial or industrial business" means a commercial or industrial concern that provides goods or services for profit from a location in North Carolina.
- (5) "Commercially available" means available to the general public and does not include experimental or research-related technologies.
- (6) "Credit worthiness" means the ability of the applicant to meet the lending institution's standard lending criteria.
- (7) "Energy conservation measure" means a commercially available energy efficient device, technique, or technology, designed to reduce energy consumption, peak demand, or utility costs at an existing or proposed commercial or industrial business, nonprofit organization, local government entity, or residence.
- (8) "Financial Services Division" means the Fiscal Management Division within the N.C. Department of Environmental Quality.
- (9) "Letter of Intent" means written notification of the Department of Environmental Quality's intent to originate the loan, subject to the conditions and limitations of the Energy Improvement Loan Program.
- (10) "Payback" means the total energy conservation measure costs (including installation, equipment, and engineering design) divided by the total annual estimated utility cost savings for a period of years.
- (11) "Program" means the Energy Improvement Loan Program.
- (12) "Recycling Projects" means projects that extract and reprocess energy, water, and materials for reuse in buildings, transportation systems, environmental management, consumer products, or outreach.
- (13) "Renewable" means solar, wind, biomass, or hydropower resources.
- (14) "Repayment Schedule" means a schedule of periodic payments based upon payback as projected in the Technical Analysis rounded to the next quarter. Prepayments shall reduce the term of the loan with periodic payments remaining unchanged.
- (15) "State Energy Office" means the State Energy Office, Division of Energy, within the N. C. Department of Environmental Quality.
- (16) "Technical Analysis " means a report identifying and analyzing the cost-effective capital energy conservation improvements that the applicant wishes to implement.
- (17) "Technical Analyst" means a licensed engineer, architect, or certified Home Energy Rating System, "HERS" ®, rater that conducts the technical analysis for the purposes of this Subchapter.
- (18) "Third-Party Technical Analyst" means a Technical Analyst who performs the Technical Analysis and does not have a financial interest in the commercial or industrial business, nonprofit organization, residence or local government entity, or in the sale and installation of any proposed energy conservation measure.
- (19) "Useful life" means the period during which an asset or property is expected by the manufacturer to continue by the manufacturer to function for the purpose for which the asset or property was acquired.

History Note: Authority G.S. 143B-344.44(b)(3); 143B-344.44(b)(4);
Eff. September 1, 2004;
Readopted Eff. June 1, 2021.

SECTION .0200 – LOANS

01 NCAC 41C .0201 ELIGIBILITY

The following are eligible to apply for loans:

- (1) A commercial or industrial business, nonprofit organization, local government entity, or resident located in North Carolina that owns the existing building or site of planned construction where the energy conservation measures will be made, or that has a lease or management agreement for the proposed building site or building extending beyond the term of the loan. However, when the owner of the building or building site authorizes the approved energy conservation measures, the lease or management agreement need not extend beyond the term of the loan.
- (2) A commercial or industrial business, nonprofit organization, local government entity, or resident relocating to North Carolina that owns the site of planned construction where the energy conservation measures will be made, or that has a lease or management agreement for such proposed building or building site extending beyond the term of the loan. However, when the owner of the building or building site authorizes the approved energy conservation measures, the lease or management agreement need not extend beyond the term of the loan.

History Note: Authority G.S. 143B-344.44(b)(3); 143B-344.44(b)(4);
Eff. September 1, 2004;
Readopted Eff. June 1, 2021.

01 NCAC 41C .0202 CRITERIA FOR ENERGY CONSERVATION LOANS

Energy conservation projects for which the loans are desired shall meet the following criteria:

- (1) The building site where the measures are to be installed shall be in North Carolina.
- (2) The project shall demonstrate in the Technical Analysis the ability to conserve energy through efficient energy use or the utilization of renewable energy resources that results in energy savings based upon a net reduction in the use of nonrenewable resources. The energy conservation measure shall be based on a Technical Analysis report as defined in Rule .0101 of this Subchapter, conducted within the previous year.
- (3) A maximum total loan indebtedness in accordance with G.S. 143B-344.44(b)(2).
- (4) The project shall utilize commercially available energy conservation measures.
- (5) The installation of the energy conservation measure may, at the discretion of the applicant, commence after the Financial Services Division issues the Letter of Intent; however, the origination of the loan shall still be subject to the conditions and limitations of the Program, pursuant to Rule .0203 of this Section.
- (6) The energy conservation measure shall be demonstrated, within the Technical Analysis, to have a payback of less than one over a period of 20 years or less.
- (7) Each energy conservation measure shall be demonstrated to have a payback of less than one over the useful life of the energy conservation measure.
- (8) Eligible energy conservation measures shall fall under one of the following categories:
 - (a) lighting systems;
 - (b) heating, ventilation, and air conditioning systems;
 - (c) electrical distribution systems (motors, variable speed drives, fans, etc.);
 - (d) energy management systems;
 - (e) boiler efficiency systems;
 - (f) energy recovery systems, including on-site generation of electricity;
 - (g) alternate/renewable energy systems;
 - (h) building envelope (doors, windows, roofs, etc.);
 - (i) industrial process or fabrication systems;
 - (j) load management systems;
 - (k) fuel conversion projects;
 - (l) other demand-related improvements; and
 - (m) recycling projects.
- (9) The energy conservation measure shall meet applicable State air and water quality standards, in accordance with 15A NCAC 02B, 02D, and 02L, which are incorporated by reference, including all subsequent amendments.

*History Note: Authority G.S. 143B-344.44(b)(3); 143B-344.44(b)(4);
Eff. September 1, 2004;
Readopted Eff. June 1, 2021.*

01 NCAC 41C .0203 LOAN PERCENTAGE AND CONDITIONS AND LIMITATIONS

(a) The interest rate on the loan shall be set pursuant to G.S. 143B-344.44(c) by the State Energy Office based on the following:

- (1) previous State Energy Office loan recipients get one percent deduction with closed loans and no defaults to zero percent;
- (2) loans made to residents and small businesses shall receive a one percent interest rate;
- (3) loans made to nonprofit organizations and local governments projects shall receive a two percent interest rate; and
- (4) loans made to commercial and industrial entities shall receive a three percent interest rate.

(b) Loans shall be made subject to the following conditions:

- (1) the repayment schedule shall be based on the estimated payback as shown in the Technical Analysis Report, pursuant to Rule .0303 of this Subchapter;
- (2) the commercial or industrial business, nonprofit organization, local government entity, or resident shall make payments at least once a month;
- (3) the total amount of the loan, or any portion thereof, may be repaid at any time before the total amount is due, without penalty;
- (4) rebates received through other program offerings of the State Energy Office for projects undertaken from loan proceeds shall be used to reduce the amount of principal;
- (5) the borrower shall warrant that all work or construction done with the proceeds of a loan under this program shall comply with all building codes;
- (6) project implementation shall begin within 90 days after approval of the application. If delays are encountered following loan closing, any arbitrage profits will be repaid to the Energy Loan Fund;
- (7) loan payments or drafts shall be sent or delivered to the Financial Service Division, in accordance with 04 NCAC 12D .0101; and
- (8) a letter of credit from a bank approved to do business in North Carolina shall secure the loan against non-payment and also serve as a quarterly drafting mechanism for loan repayment from the bank.

(c) Loans shall be made subject to the following limitations:

- (1) the amount of the loan shall not exceed allowable costs;
- (2) loans shall not be used to replace an existing loan; and
- (3) no loans shall be forgiven.

*History Note: Authority G.S. 143B-344.44;
Eff. August 1, 2004;
Readopted Eff. June 1, 2021.*

01 NCAC 41C .0204 PRE-APPLICATION CONFERENCE

(a) The potential applicant shall schedule a pre-application conference with the State Energy Office by email, telephone, or office visit at least one week prior to submission of a project application. During the pre-application conference, the parties shall:

- (1) ensure the application procedures are understood; and
- (2) reach an understanding among all parties that the project is eligible for approval in accordance with Rule .0202 of this Section.

(b) Parties present at the pre-application conference shall include representatives from the Financial Services Division, the State Energy Office, and the applicant or the applicant's engineer.

(c) The applicant shall offer verbal, and if available, written project descriptions.

(d) The applicant shall provide water and air quality permits required for the project.

(e) The applicant shall provide the final Technical Analysis.

*History Note: Authority G.S. 143B-344.44(b)(3); 143B-344.44(b)(4);
Eff. August 1, 2004;*

Readopted Eff. June 1, 2021.

01 NCAC 41C .0205 APPLICATION PROCEDURES

The applicant shall complete an application on a form provided by the Financial Service Division, which can be found at <http://portal.ncdenr.org/web/lr/state-energy-office>. The application shall contain the following information:

- (1) the name and mailing address, including the county, of the applicant;
- (2) the address, building name (where applicable) or site description, including photographs, to locate where the energy conservation measure(s) will be installed;
- (3) the name of a contact person, including title and telephone number;
- (4) the loan amount requested;
- (5) the estimated dates of implementation and completion of the project;
- (6) a copy of the Technical Analysis approved by the State Energy Office;
- (7) identification of the commercial lending institution that is providing the letter of credit, depository, and repayment services;
- (8) commercial or industrial business, nonprofit organizations, or local government entity applicants shall provide financial data, including financial statements from the last five years and profit and loss statements, on which to base a determination of the applicant's creditworthiness. Residential applicants shall provide a credit report.

*History Note: Authority G.S. 143B-344.44(b)(3); 143B-344.44(b)(4);
Eff. August 1, 2004;
Readopted Eff. June 1, 2021.*

01 NCAC 41C .0206 APPLICATION REVIEW

(a) The Department shall conduct concurrent administrative and Technical Analysis reviews as follows:

- (1) the administrative review shall be conducted by the Financial Services Division and may include any financial data or information needed to complete the review. Additional data may be requested if the initial data is incomplete.
- (2) the Technical Analysis review shall be conducted by the State Energy Office and shall consider each energy conservation measure for which funding is requested, including the accuracy of energy calculations, engineering principles considered, and labor and material costs relative to the current local market.

(b) Following the reviews in Paragraph (a) of this Rule, the State Energy Office shall approve those energy conservation measures that were determined to meet the requirements of this Subchapter.

*History Note: Authority G.S. 143B-344.44(b)(3); 143B-344.44(b)(4);
Eff. August 1, 2004;
Readopted Eff. June 1, 2021.*

01 NCAC 41C .0207 LOAN APPROVAL

Following the review set forth in Rule .0206 of this Section, the State Energy Office shall approve the application provided:

- (1) the administrative and Technical Analysis reviews satisfy the requirements of this Subchapter;
- (2) the credit worthiness of the applicant is established; and
- (3) funds are available.

*History Note: Authority G.S. 143B-344.44(b)(3); 143B-344.44(b)(4);
Eff. August 1, 2004;
Readopted Eff. June 1, 2021.*

01 NCAC 41C .0208 LOAN AGREEMENT AND PROMISSORY NOTE

After an application for a loan is approved, a loan agreement shall be executed between the Financial Services Division and the borrower. The loan agreement shall include a promissory note and other documents including security agreements, mortgages, and recordings. It shall also contain the covenants and representations as to the borrower's qualification to borrow for the loan, intended use of the loan proceeds, conditions under which the loan will be repaid, as well as events requiring the acceleration, the rights and responsibilities of the parties, and the terms

and conditions of the loan. The requirements to secure the loan shall be included in the loan agreement. Loans shall be secured through bank letter of credit.

*History Note: Authority G.S. 143B-344.44(b)(3); 143B-344.44(b)(4);
Eff. August 1, 2004;
Readopted Eff. June 1, 2021.*

01 NCAC 41C .0209 REPORTS

Reports shall be submitted by the borrower as follows:

- (1) progress reports shall be submitted quarterly to the State Energy Office during the period of implementation or while installation is in progress and shall include a description of:
 - (a) the current status;
 - (b) any problems; and
 - (c) a forecast of expectations or deviations from the Technical Analysis, prepared in accordance with Rule .0303 of this Subchapter.
- (2) a final report certified by the Technical Analyst shall be submitted to the State Energy Office upon completion of the project. The report shall include a description of:
 - (a) the measures implemented;
 - (b) the actual cost of each measure; and
 - (c) the adjusted estimated payback, based on the actual cost.

*History Note: Authority G.S. 143B-344.44(b)(3); 143B-344.44(b)(4);
Eff. September 1, 2004;
Readopted Eff. June 1, 2021.*

01 NCAC 41C .0210 MONITORING

The Financial Service Division shall monitor the use of the funds under this program through review of reports. The State Energy Office shall monitor those buildings or projects where the energy conservation projects are in progress to verify the installation of the energy conservation measures conforms to the approved Technical Analysis. At least one visit shall be made to the site of each energy conservation project during the life of the loan.

*History Note: Authority G.S. 143B-344.44(b)(3); 143B-344.44(b)(4);
Eff. August 1, 2004;
Readopted Eff. June 1, 2021.*

01 NCAC 41C .0211 DEFAULT

If the borrower violates any of the terms of the loan agreement, the Financial Services Division shall place the borrower in default. Borrowers determined to be in default shall be notified by certified mail and the terms of the loan agreement and letter of credit shall be executed.

*History Note: Authority G.S. 143B-344.44(b)(3); 143B-344.44(b)(4);
Eff. August 1, 2004;
Readopted Eff. June 1, 2021.*

SECTION .0300 - TECHNICAL ANALYSIS

01 NCAC 41C .0301 TECHNICAL ANALYSIS REQUIRED

- (a) An application for an energy conservation loan shall be accompanied by a Technical Analysis that has been conducted by a third-party Technical Analyst and approved by the State Energy Office as fulfilling the energy aspects of the Program.
- (b) The Technical Analysis shall address only the specific energy conservation measures for which the loan is being requested. Each energy conservation measure analyzed shall be an individual recommendation incorporating technical and economic analyses of the measure, considering building, process, and equipment characteristics, and energy use patterns pertinent to the improvement. The Technical Analysis shall include the estimated cost of the implementation, a construction schedule, and expected energy savings.

*History Note: Authority G.S. 143B-344.44(b)(3); 143B-344.44(b)(4);
Eff. September 1, 2004;
Readopted Eff. June 1, 2021.*

01 NCAC 41C .0302 TECHNICAL ANALYST DISQUALIFICATIONS

(a) A third-party Technical Analyst shall not have a financial interest in the commercial or industrial business, nonprofit organization, local government entity, or residence or in the sale and installation of any proposed energy conservation measure. However, the third-party Technical Analyst is permitted to provide construction management services to an approved applicant.

(b) An outline of qualifications of the Technical Analyst, documenting previous experience in energy conservation in building construction, mechanical systems, or manufacturing processes shall be submitted in writing to the State Energy Office.

*History Note: Authority G.S. 143B-344.44(b)(3); 143B-344.44(b)(4);
Eff. September 1, 2004;
Readopted Eff. June 1, 2021.*

01 NCAC 41C .0303 REPORT REQUIRED

A third-party Technical Analyst shall submit three copies of the results of a Technical Analysis in writing on a form provided by the State Energy Office, which can be found at <http://portal.ncdenr.org/web/lr/state-energy-office>. The report shall include the following:

- (1) a description of the facility characteristics and energy data, including the operational characteristics of the energy-using systems;
- (2) a description and engineering analysis of each energy conservation measure, including the following:
 - (a) an estimate of the cost of design, acquisition, and installation, including monitoring equipment to assess the performance of the measure, discussing assumptions as the Technical Analyst deems necessary;
 - (b) an estimate of the annual energy saved and energy cost savings by fuel type, using engineering standards and practices that are recognized by the North Carolina State Board of Examiners for Engineers and Surveyors, including all formulae, data, and assumptions presented in arriving at the estimate;
 - (c) the results of a combustion efficiency test, if furnace or boiler modifications or replacements are being implemented;
 - (d) the payback period of each energy conservation measure; and
 - (e) a proposed construction schedule for each energy conservation measure; and
- (3) the energy use and cost data for each fuel type used for the prior billing period.

*History Note: Authority G.S. 143B-344.44(b)(3); 143B-344.44(b)(4);
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