



## Rural Development – Oregon

Business & Cooperative Programs

[www.RuralOregon.biz](http://www.RuralOregon.biz)

or

<http://www.rurdev.usda.gov/ORbcp.html>

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## Feasibility study for energy projects

Requirements for REAP (Rural Energy for America) and for renewable energy projects

### What is a “feasibility study”?

A feasibility study is a report by an independent third-party that analyzes a business venture’s prospects for success. It impartially lays out the features of the business plan & critiques them, analyzing the strengths & weaknesses of the venture, & assessing its overall feasibility.

### When is a feasibility study required?

USDA sometimes requires an independent feasibility study as part of a complete application. Some investors & commercial lenders also ask for a feasibility study.

- Rural Energy for America Program (REAP) grants & guaranteed loans. Applicants seeking REAP assistance for renewable energy projects must obtain a feasibility study if the total project cost exceeds \$200,000.

### Who prepares the feasibility study?

The study must be prepared by an independent, qualified consultant with a recognized expertise in the type of operation being analyzed. The analyst cannot be “in-house”, a firm with a proprietary interest in the project, a vendor, or any other party with a potential conflict of interest or vested interest in the outcome of the study. Examples of acceptable consultants include industry association consultants, industry experts, specialized CPA’s, and specialty appraisers. USDA does *not* maintain a restrictive list of approved feasibility analysts.

### Contents of the feasibility study?

REAP regulations (Appendix E to RD Instruction 4280-B) provides an outline of considerations to be included in the feasibility study:

#### **Appendix E to Subpart B of Part 4280— Feasibility Study Content**

Elements in an acceptable feasibility study include, but are not necessarily limited to, the elements specified in Sections A through G, as applicable, of this Appendix. Both a technical report for the project and an economic analysis of the project are required as part of the feasibility study. (The technical report content must conform to that required in USDA’s regulations for the specific renewable energy technology proposed. Technical report outlines can be found online at: <http://www.rurdev.usda.gov/or/reapre.htm> )

**Section A. Executive Summary.** Provide an introduction and overview of the project. In the overview, describe the nature and scope of the proposed project, including purpose, project location, design features, capacity, and estimated total capital cost. Include a summary of each of the elements of the feasibility study, including:

- (1) Economic feasibility determinations;
- (2) Market feasibility determinations;
- (3) Technical feasibility determinations;
- (4) Financial feasibility determinations;
- (5) Management feasibility determinations; and
- (6) Recommendations for implementation of the proposed project.

**Section B. Economic Feasibility.** Provide information regarding project site; the availability of trained or trainable labor; and the availability of infrastructure, including utilities, and rail, air and road service to the site. Discuss feedstock source management, including feedstock collection, pre-treatment, transportation, and storage, and provide estimates of feedstock volumes and costs. Discuss the proposed project’s potential impacts on existing manufacturing plants or other facilities that use

similar feedstock if the proposed technology is adopted. Provide projected impacts of the proposed project on resource conservation, public health, and the environment. Provide an overall economic impact of the project including any additional markets created (*e.g.*, for agricultural and forestry products and agricultural waste material) and potential for rural economic development. Provide feasibility/plans of project to work with producer associations or cooperatives including estimated amount of annual feedstock and biofuel and byproduct dollars from producer associations and cooperatives.

**Section C. Market Feasibility.** Provide information on the sales organization and management. Discuss the nature and extent of market and market area and provide marketing plans for sale of projected output, including both the principal products and the by-products. Discuss the extent of competition including other similar facilities in the market area. Provide projected total supply of and projected competitive demand for raw materials. Describe the procurement plan, including projected procurement costs and the form of commitment of raw materials (*e.g.*, marketing agreements, etc.). Identify commitments from customers or brokers for both the principal products and the byproducts. Discuss all risks related to the industry, including industry status.

**Section D. Technical Feasibility.** The technical feasibility report shall be based upon verifiable data and contain sufficient information and analysis so that a determination may be made on the technical feasibility of achieving the levels of income or production that are projected in the financial statements. The project engineer or architect is considered an independent party provided neither the principals of the firm nor any individual of the firm who participates in the technical feasibility report has a financial interest in the project. If no other individual or firm with the expertise necessary to make such a determination is reasonably available to perform the function, an individual or firm that is not independent may be used.

(1) Identify any constraints or limitations in the financial projections and any other facility or design-related factors that might affect the success of the enterprise. Identify and estimate project operation and development costs and specify the level of accuracy of these estimates and the assumptions on which these estimates have been based.

(2) Discuss all risks related to construction of the project and regulation and governmental action as they affect the technical feasibility of the project.

**Section E. Financial Feasibility.** Discuss the reliability of the financial projections and assumptions on which the financial statements are based including all sources of project capital both private and public, such as Federal funds. Provide **3 years (minimum)** projected Balance Sheets and Income Statements and cash flow projections for the life of the project. Discuss the ability of the business to achieve the projected income and cash flow. Provide an assessment of the cost accounting system. Discuss the availability of short-term credit or other means to meet reasonable business costs and the adequacy of raw materials and supplies. Provide a sensitivity analysis, including feedstock and energy costs. Discuss all risks related to the project, financing plan, the operational units, and tax issues.

**Section F. Management Feasibility.** Discuss the continuity and adequacy of management. Identify applicant and/or management's previous experience concerning the receipt of federal financial assistance, including amount of funding, date received, purpose, and outcome. Discuss all risks related to the applicant as a company (*e.g.*, applicant is at the Development-Stage) and conflicts of interest, including appearances of conflicts of interest.

**Section G. Qualifications.** Provide a resume or statement of qualifications of the author of the feasibility study, including prior experience.

For more information, visit <http://www.ruraloregon.biz> or contact us:

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