

e. Supplies

PLEASE READ!!!

Supplies are generally defined as an item with an acquisition cost of \$5,000 or less and a useful life expectancy of less than one year. Supplies are generally consumed during the project performance. Further definitions can be found at 10 CFR 600 found on the PMC Recipient Resources Forms page at <https://www.eere-pmc.energy.gov/Forms.aspx#regs>.

List all proposed supplies below, providing a bases of cost such as vendor quotes, catalog prices, prior invoices, etc., and briefly justifying the need for the Supplies as they apply to the Statement of Project Objectives. Note that Supply items must be direct costs to the project at this budget category, and not duplicative of supply costs included in the indirect pool that is the basis of the indirect rate applied for this project.

Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

General Category of Supplies	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
Budget Period 1					
EXAMPLE ONLY!!! Wireless DAS components	10	\$360.00	\$3,600	Catalog price	For Alpha prototype - Task 2.4
Exemption 4					
	0		\$0		
	0		\$0		
	0		\$0		
Budget Period 1 Total	Exemption 4				
Budget Period 2					
	0		\$0		
Exemption 4					
	0		\$0		
	0		\$0		
	0		\$0		
Budget Period 2 Total	Exemption 4				
Budget Period 3					
	0		\$0		

General Category of Supplies	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
Exemption 4					
	0		\$0		
	0		\$0		
	0		\$0		
	0		\$0		
	0		\$0		
Budget Period 3 Total					
PROJECT TOTAL					Exemption 4

Additional Explanations/Comments (as necessary)

The above was based on our historic usage and cost rates. These supplies are required in the normal course of running a biorefinery and for lab analysis and monitoring.

f. Contractual

Sub-Recipient Name/Organization	Purpose/Tasks in SOPO	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
EXAMPLE ONLY!!! XYZ Corp.	Partner to develop optimal fresnel lens for Gen 2 product - Task 2.4	\$48,000	\$32,000	\$16,000	\$96,000
Georgia Tech	Exemption 4				
MTR - Membrane Technology and Research, Inc.					
The Dow Chemical Company					
Sub-total		Exemption 4			

Vendor Name/Organization	Product or Service, Purpose/Need and Basis of Cost (Provide additional support at bottom of page as needed)	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
EXAMPLE ONLY!!! ABC Corp.	Vendor for developing custom robotics to perform lens inspection, alignment, and placement (Task 4). Required for expanding CPV	\$32,900	\$86,500		\$119,400
					\$0
Exemption 4					

Sub-Recipient Name/Organization	Purpose/Tasks in SOPO	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
Exemption 4					

Sub-Recipient Name/Organization	Purpose/Tasks in SOPO	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
Exemption 4					

FFRDC Name/Organization	Purpose	Budget Period 1 Costs	Budget Period 2 Costs	Budget Period 3 Costs	Project Total
NREL- National Renewable Energy Laboratory	Exemption 4				\$0

Total Contractual	Exemption 4				
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g. Construction

PLEASE READ!!!

Construction, for the purpose of budgeting, is defined as all types of work done on a particular building, including erecting, altering, or remodeling. Construction conducted by the award recipient is entered on this page. Any construction work that is performed by a vendor or subrecipient to the award recipient should be entered under f. Contractual.

List all proposed construction below, providing a basis of cost such as engineering estimates, prior construction, etc., and briefly justify its need as it applies to the Statement of Project Objectives.

Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

Overall description of construction activities:

Example Only!!! - Build wind turbine platform

General Description	Cost	Basis of Cost	Justification of need
Budget Period 1			
Three days of excavation for platform site EXAMPLE ONLY!!!	\$28,000	Engineering estimate	Site must be prepared for construction of platform.
Budget Period 1 Total	\$0		
Budget Period 2			
Budget Period 2 Total	\$0		

General Description	Cost	Basis of Cost	Justification of need
Budget Period 3			
Budget Period 3 Total	\$0		
PROJECT TOTAL	\$0		

Additional Explanations/Comments (as necessary)

Construction will be sub-contracted, one of our sub-recipient partners, The Dow Chemical Company, will provide ground clearing/ land prep work while the actual construction contractor is TBD. These amounts have been included on the Contractual tab. At the end of the this file there is a tab, Construct Recon, which summarizes the the capitalized costs.

h. Other Direct Costs

PLEASE READ!!!

Other direct costs are direct cost items required for the project which do not fit clearly into other categories, and are not included in the indirect pool for which the indirect rate is being applied to this project. Examples are meeting costs, postage, couriers or express mail, telephone/fax costs, printing costs, etc.

Basis of cost are items such as vendor quotes, prior purchases of similar or like items, published price list, etc.

Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

General description	Cost	Basis of Cost	Justification of need
Budget Period 1			
EXAMPLE ONLY!!! Grad student tuition	\$16,000	Established UCD costs	Support of graduate students working on project
Exemption 4		Exemption 4	
Budget Period 1 Total			
Budget Period 2			
Exemption 4		Exemption 4	
Exemption 4			
Budget Period 3			
	\$0		

General description	Cost	Basis of Cost	Justification of need
Exemption 4			

i. Indirect Costs

	Budget Period 1	Budget Period 2	Budget Period 3	Total
Rate applied:	Exemption 4			
Total indirect costs requested:				

A federally approved indirect rate agreement, or rate proposed supported and agreed upon by DOE for estimating purposes is required if reimbursement of fringe benefits is requested. Please check (X) one of the options below and provide the requested information if it has not already been provided as requested, or has changed. Calculate the indirect rate dollars and enter the total in the Section B., line 6.j. (Indirect Charges) of form SF 424A.

- There is a federally approved indirect rate agreement. A copy is provided with this application and will be provided electronically to the Contracting Officer for this project.**
(When this option is selected, a presentation of the budget that demonstrates the application of the approved rate, to arrive at the proposed indirect charges proposed should also be provided.)
- There is no current, federally-approved indirect rate agreement.**
(When this option is checked, the entity preparing this form shall submit an indirect cost rate proposal in the format provided at the following website, or in a format that provides the same level of information and which supports the rate(s) being proposed for use in estimating the project. Go to <https://www.eere-pmc.energy.gov/forms.aspx> and select PMC 400.2 Sample Rate Proposal.)

Additional Explanations/Comments (as necessary)

Please see the Indirect Proposal tab at the end of this file for indirects calculation. The allowable rate per the calculation is ^{Construction} % and we request this rate during Phase II since we anticipate during the construction period this would require maximum overhead effort. Please note the overhead rate was not applied to Fringe, Travel nor construction costs.

Cost Share

PLEASE READ!!!

A detailed presentation of the cash or cash value of all cost share proposed for the project must be provided in the table below. Identify the source & amount of each item of cost share proposed by the award recipient and each sub-recipient or vendor. Letters of commitment must be submitted for all third party cost share (other than award recipient).

Note that "cost-share" is not limited to cash investment. Other items that may be assigned value in a budget as incurred as part of the project budget and necessary to performance of the project, may be considered as cost share, such as: contribution of services or property; donated, purchased or existing equipment; buildings or land; donated, purchased or existing supplies; and/or unrecovered personnel, fringe benefits and indirect costs, etc. For each cost share contribution identified as other than cash, identify the item and describe how the value of the cost share contribution was calculated.

Funds from other Federal sources MAY NOT be counted as cost share. This prohibition includes FFRDC sub-recipients. Non-Federal sources include private, state or local Government, or any source not originally derived from Federal funds. Documentation of cost sharing commitments must be provided, if not already provided with the original application and they have not changed since its submission.

Fee or profit will not be paid to the award recipients or subrecipients of financial assistance awards. Additionally, foregone fee or profit by the applicant shall not be considered cost sharing under any resulting award. Reimbursement of actual costs will only include those costs that are allowable and allocable to the project as determined in accordance with the applicable cost principles prescribed in 10 CFR 600.127, 10 CFR 600.222 or 10 CFR 600.317. Also see 10 CFR 600.318 relative to profit or fee.

Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

Organization/Source	Type (cash or other)	Cost Share Item	Budget Period 1 Cost Share	Budget Period 2 Cost Share	Budget Period 3 Cost Share	Total Project Cost Share
ABC Company EXAMPLE ONLY!!!	Cash	Project partner ABC Company will provide 40 PV modules for product development at 50% off the of the retail price of \$680	\$13,600			\$13,600
Algenol Biofuels Inc	Exemption 4					
The Dow Chemical Company						
The Dow Chemical Company						
Membrane Technology and Research, Inc.						
						\$0
						\$0

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Exemption 4

Project Management Plan
Pilot-Scale Integrated Biorefinery Operations for Producing Ethanol From Algae
Algenol Biofuels Inc.

Table of Contents

- I. Introduction**
- II. Management Organization and Responsibilities**
- III. Work Breakdown Structure**
- IV. Project Schedule and Budget Management**
- V. Risk Management Plan Summary**
- VI. Summary of Acquisition, Procurement and Contracting Strategy**
- VII. Plans to Accomplish Post-Mechanical Completion if Pilot-Scale Identifies the Need for Substantial Fix-ups, Debottlenecking, etc.**
- VIII. Process Hazard Analysis / Environmental Health and Safety**
- IX. Resource Loaded Project Plan**

Proprietary Information: All information in this document is proprietary. Algenol Biofuels requests all information in this document not be released to persons outside the Government, except for the purposes of review and evaluation.

I. Introduction:

Exemption 4

Exemption 4

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Exemption 4

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Exemption 4

Attachment A: Resource Loaded Project Plan

ID	WBS	Task Name	Cost (\$)	FTE Hours	Duration	Start	Finish	20

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U.S. Department of Energy
Generic Pro-Forma
Form Revision 1

Name of Applicant
Name of Facility
Completion of Independent
Engineer Performance Test
Facility Capitalized Const Cost

Company Name Here
Facility Name Here
6/1/2009
Exemption 4

Projected Operating Results

Year Ending December 31, 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

PERFORMANCE

Plant Operating Days
Plant Availability Factor
Production
#1 Product Number One Name Here
#2 Product Number Two Name Here
#3 Product Number Three Name Here
#4 Product Number Four Name Here
Feedstock Consumption
A Feedstock Number One Name Here
B Feedstock Number Two Name Here
C Feedstock Number Three Name Here
D Feedstock Number Four Name Here
E Feedstock Number Five Name Here
Utility Consumption
Natural Gas Consumed
Net Electricity Consumed
Water Consumed
Other Consumed
Facility Emissions & Wastes
SO₂
NO_x
Other Wastes

Exemption 4

Units⁽¹⁾
XX/year
XX/year
XX/year
XX/year
Units⁽¹⁾
XX/year
XX/year
XX/year
XX/year
XX/year
MMBTU
MWh
kGal
XX
tons/yr
tons/yr
tons/yr

COMMODITY PRICES

General Inflation
Product Pricing
#1 Product Number One Name Here
#2 Product Number Two Name Here
#3 Product Number Three Name Here
#4 Product Number Four Name Here
Feedstock Pricing
A Feedstock Number One Name Here
B Feedstock Number Two Name Here
C Feedstock Number Three Name Here
D Feedstock Number Four Name Here
E Feedstock Number Five Name Here
Utility Consumption
Natural Gas Consumed
Net Electricity Consumed
Water Consumed
Other Consumed
Emissions & Waste Allowances
SO₂
NO_x
Other Wastes

Units⁽¹⁾
\$/XX
\$/XX
\$/XX
\$/XX
Units⁽¹⁾
\$/XX
\$/XX
\$/XX
\$/XX
\$/XX
\$/MMBTU
\$/MWh
\$/kGal
\$/XX
\$/ton
\$/ton
\$/ton

OPERATING REVENUES

Product Revenues
#1 Product Number One Name Here
#2 Product Number Two Name Here
#3 Product Number Three Name Here
#4 Product Number Four Name Here

TOTAL OPERATING REVENUES



U.S. Department of Energy
 Generic Pro-Forma
 Form Revision 1

Name of Applicant
 Name of Facility
 Completion of Independent
 Engineer Performance Test
 Facility Capitalized Const Cost

Company Name Here
 Facility Name Here
 6/1/2009
 § Exemption 4

Projected Operating Results

Year Ending December 31, 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

OPERATING EXPENSES

Variable Operating Costs

Feedstock Costs

- A - Feedstock Number One Name Here
- B - Feedstock Number Two Name Here
- C - Feedstock Number Three Name Here
- D - Feedstock Number Four Name Here
- E - Feedstock Number Five Name Here

Exemption 4

Total Feedstock Costs

Utility Costs

- Natural Gas Consumed
- Net Electricity Consumed
- Water Consumed
- Other Consumed

Total Utility Costs

Emissions & Waste Allowance Costs

- SO₂
- NOx
- Other Wastes

Total Emissions Allowance Costs

Product Transportation Pricing

- #1 - Product Number One Name S/XX
- #2 - Product Number Two Name S/XX
- #3 - Product Number Three Name S/XX
- #4 - Product Number Four Name S/XX

Product Transportation Cost

- #1 - Product Number One Name
- #2 - Product Number Two Name
- #3 - Product Number Three Name
- #4 - Product Number Four Name

Total Product Transportation Cost

Feedstock Transportation Pricing

- A - Feedstock Number One Name S/XX
- B - Feedstock Number Two Name S/XX
- C - Feedstock Number Three Name S/XX
- D - Feedstock Number Four Name S/XX
- E - Feedstock Number Five Name S/XX

Feedstock Transportation Cost

- A - Feedstock Number One Name
- B - Feedstock Number Two Name
- C - Feedstock Number Three Name
- D - Feedstock Number Four Name
- E - Feedstock Number Five Name

Total Feedstock Transportation Cost

Product Marketing Pricing

- #1 - Product Number One Name % of Revenue
- #2 - Product Number Two Name % of Revenue
- #3 - Product Number Three Name % of Revenue
- #4 - Product Number Four Name % of Revenue

Product Marketing Cost

- #1 - Product Number One Name
- #2 - Product Number Two Name
- #3 - Product Number Three Name
- #4 - Product Number Four Name

Total Product Marketing Cost

Miscellaneous Process Supplies

- Z - Misc Number One Name
- Y - Misc Number Two Name
- X - Misc Number Three Name
- W - Misc Number Four Name
- V - Misc Number Five Name

Total Miscellaneous Supplies Cost

Total Variable Operating Costs



U.S. Department of Energy
 Generic Pro-Forma
 Form Revision 1

Name of Applicant
 Name of Facility
 Completion of Independent
 Engineer Performance Test
 Facility Capitalized Const Cost

Company Name Here
 Facility Name Here
 6/1/2009
 § Exemption 4

Projected Operating Results

Year Ending December 31, 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

Fixed Operating Costs
 Payroll & Benefits % of Revenue
 Fixed Operating Expenses % of Revenue
 Annual Maintenance % of Capex

Exemption 4

Total Fixed Operating Costs

General & Administrative
 Corporate Overhead % of Revenue
 Insurance % of Capex
 Property Tax % of Capex
 Management Fees % of Revenue
 IP Fees % of X

Total G&A Expenses

Contingency
 Contingency % of O&M, G&A

Total Contingency

TOTAL OPERATING EXPENSES

NET OPERATING REVENUES

DEBT SERVICE

Capitalized Construction Cost (from top of sheet)
 Equity Contribution
 Total Debt Financing

Interest Rate on Debt Annual %
 Term of Loan Years
 Monthly Payment on Loan

ANNUAL DEBT SERVICE

NET REVENUES

Notes:

- (1) Units should be converted to match between Performance and Pricing sections
- (2) Cells in Green should be manipulated per applicants pricing or other assumption information
- (3) Text in Blue should be modified to match applicants names, units, etc.
- (4) Grouped rows, for example product transportation pricing, may be rolled up after data entry to simplify pro-forma output
- (5) Applicant may manipulate spreadsheet to incorporate pertinent information not included in standard form



U.S. Department of Energy
 Generic Pro-Forma
 Form Revision 1

Name of Applicant
 Name of Facility
 Commercial Operation Date
 Facility Capitalized Const Cost

Algenol Biofuels, Inc/
 Commercial Scale Biorefinery
 12/31/2013
 § Exemption 4

Projected Operating Results

Year Ending December 31, 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

PERFORMANCE

Exemption 4

Plant Operating Days
 Plant Availability Factor
 Production Units⁽¹⁾
 #1 Fuel Grade Ethanol Gallons/year
 #2 XX/year
 #3 XX/year
 #4 XX/year
 Feedstock Consumption Units⁽¹⁾
 A CO2 Tons/year
 B Nitrogen Tons/year
 C Phosphorus Tons/year
 D XX/year
 E XX/year
 Utility Consumption
 Natural Gas Consumed MMBTU
 Net Electricity Consumed MWh
 Water Consumed kGal
 Other Consumed XX
 Facility Emissions & Wastes
 Biomass tons/yr
 tons/yr
 tons/yr

COMMODITY PRICES

General Inflation
 Product Pricing Units⁽¹⁾
 #1 Fuel Grade Ethanol \$/Gallon
 #2 \$/XX
 #3 \$/XX
 #4 \$/XX
 Feedstock Pricing Units⁽¹⁾
 A CO2 \$/Ton
 B Nitrogen \$/Ton
 C Phosphorus \$/Ton
 D \$/Ton
 E \$/Ton
 Utility Consumption
 Natural Gas Consumed \$/MMBTU
 Net Electricity Consumed \$/MWh
 Water Consumed \$/kGal
 Other Consumed \$/XX
 Emissions & Waste Allowances
 Biomass \$/ton
 NO_x \$/ton
 Other Wastes \$/ton

OPERATING REVENUES

Product Revenues
 #1 Fuel Grade Ethanol
 #2
 #3
 #4

TOTAL OPERATING REVENUES



U.S. Department of Energy
Generic Pro-Forma
Form Revision 1

Name of Applicant
Name of Facility
Commercial Operation Date
Facility Capitalized Const Cost

Algenol Biofuels, Inc/
Commercial Scale Biorefinery
12/31/2013
§ Exemption 4

Projected Operating Results

Year Ending December 31, 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

Fixed Operating Costs
Payroll & Benefits % of Reve
Fixed Operating Expenses % of Reve
Annual Maintenance % of Cap

Exemption 4

Total Fixed Operating Costs

General & Administrative
Corporate Overhead % of Reve
Insurance % of Cap
Property Tax % of Cap
Management Fees % of Reve
IP Fees % of X

Total G&A Expenses

Contingency
Contingency % of O&M, G

Total Contingency

TOTAL OPERATING EXPENSES

NET OPERATING REVENUES

DEBT SERVICE

Capitalized Construction Cost (from top of sheet)
Equity Contribution
Total Debt Financing

Interest Rate on Debt Annual
Term of Loan Years
Monthly Payment on Loan

ANNUAL DEBT SERVICE

NET REVENUES

Notes:

- (1) Units should be converted to match between Performance and Pricing sections
- (2) Cells in Green should be manipulated per applicants pricing or other assumption information
- (3) Text in Blue should be modified to match applicants names, units, etc.
- (4) Grouped rows, for example product transportation pricing, may be rolled up after data entry to simplify pro-forma output
- (5) Applicant may manipulate spreadsheet to incorporate pertinent information not included in standard form

Instructions for Use:

Applicants should enter data in cells shaded green and provide descriptions in place of the text formatted in blue. The numbers that are currently entered in these cells are simply illustrative and should not be used as is. Applicant may manipulate spreadsheet to incorporate pertinent information not included in standard form. If additional lines are inserted, make sure the totals include the inserted cells.

For each facility, similar information is gathered throughout the application package. Take care to provide the same information in each location as to aid the Merit Review Committee in evaluating the application.

Assumptions:

Inflation Rate:	Fixed at 2.4% (Line 41)
Interest Rate on Debt:	Fixed at 8% (Line 197)
Term of Loan:	15 years (Line 198)
Product Pricing:	2.5 cents per 1000 BTU, low heating value, 2009 dollars (Lines 44-47)

Clarifications:

Line 32 - "Other Consumed"

Include any other sources of energy in the plant, this should also include any coal, biomass, lignin, or syngas slipstreams. Insert additional lines for each source as necessary. To assign a value, if biomass feedstock is used in a direct fire boiler, use the same price/unit that is shown in "Feedstock Pricing." If lignin (or another potential waste product) is used, this could be shown as a credit equal to the cost that would be incurred to dispose of the waste. For syngas or other slipstreams, base the value on the foregone income that would be realized if the stream were directed to the final product.

Line 37 - "Other Wastes"

Include any ash, wastewater sludge, or any other waste streams that will need to be disposed of. In this section, report in tons/year.

Line 60 - "Other Consumed"

Include costs for all sources that were added in Line 32 - "Other Consumed." In this section, report in \$/unit.

Feedstock Costs

This should include any expenses incurred in processing (chipping, grinding) the feedstock into a form that can be fed into the reactor. For MSW, do not include the cost of transportation of the bulk material or separation/segration costs. Processing costs for MSW are restricted to post-sorted materials.

Miscellaneous Process Supplies

Examples of expenses to include in this section are (but not limited to): chemicals such as wastewater treatment consumables, catalyst and catalyst regeneration expenses, and fermenting organisms

IP Fees

Account for any IP fees or royalties related to the project. State the basis for calculating the expense, for example, annual flat-rate, as a percentage of revenue or other.

PROJECT NARRATIVE COVER SHEET
Recovery Act – Demonstration of Integrated Biorefinery Operations
 Funding Opportunity Announcement Number: DE-FOA-0000096
 CFDA Number: 81.087 Renewable Energy Research and Development

Applicant Information

Applicant Name: Algenol Biofuels Inc.
 Project Title: Pilot-Scale Integrated Biorefinery for Producing Ethanol from Hybrid Algae
 Major Project Subcontractors: The Dow Chemical Company, Georgia Institute of Technology, NREL, MTR Inc.
 Major Project Vendors: Exemption 4
 Key Individuals: Craig Smith, Ed Legere, Steve Gluck, John Coleman, Ron Chance

Topic Area (Select ONLY one)

Each applicant is allowed to submit only one application to this FOA. Applicants that submit to none or more than one topic area will be excluded from further review. Select one and only one topic area below.

- Topic Area 1 Topic Area 3 Topic Area 5
 Topic Area 2 Topic Area 4 Topic Area 6

Life-cycle Greenhouse Gas Emissions Reduction (mandatory for Topic Areas 5 and 6. Important – See Note):

Technical Description

Feedstock(s):	Carbon Dioxide	
Primary Product:	Ethanol	
Co-Products:	None	
Location of Proposed Facility:	Freeport, Texas	
Throughput of Proposed Facility (dry tonnes of feedstock per day):	Two (2) dry tonnes of carbon dioxide per day	
Conversion Technology:	<input type="checkbox"/> Biochemical	<input type="checkbox"/> Thermochemical
	<input checked="" type="checkbox"/> Algae	<input type="checkbox"/> Other (Describe)

Short Description: The proposed biorefinery will make ethanol directly from CO₂ and seawater using hybrid algae in sealed, clear plastic 4,500L proprietary flexible film photobioreactors through its patented Direct to Ethanol™ technology – all powered by the sun, with approximately 17 acres of photobioreactors and additional supporting areas for testing, distillation, and product storage in Freeport, Texas.

Project Financing Description

Exemption 4

This form is required. It must be completely filled in and be included as the cover page for the “Project Narrative” (FOA, Subpart IV.C. b.). This form may contain confidential /business proprietary information IF it properly marked, but it must not contain any Personally Identifiable Information (PII). This form will count toward the page limit stated in the FOA, Subpart IV.C.b. Non-compliant applications will not be reviewed and will not be eligible for selection.

Application Table of Contents

I. SF 424 – Application for Federal Assistance

II. Project Site Location (PPSL.doc)

III. Other Attachments

- a. **Project Abstract**
- b. **Project Narrative** (Project.pdf)
 - i. **Appendix 1** – Resume File (resume.pdf)
 - ii. **Appendix 2** – Budget File (SF424A.xls)
 - iii. **Appendix 3** – Budget Justification File (BudgetJustification.xls)
 - iv. **Appendix 4** – Letters of Commitment
 1. Dow Chemical Company (DowLetter.pdf)
 2. The Georgia Institute of Technology (GATechLetter.pdf)
 3. Membrane Technology & Research Inc. (MTRLetter.pdf)
 - v. **Appendix 5** – Subaward Budget Files, Including Budget Justification
 1. Dow Chemical Company (Dow424.xls)
 2. The Georgia Institute of Technology (GATech424.xls)
 3. Membrane Technology & Research Inc. (MTR424.xls)
 - vi. **Appendix 6** – Budget for Federally Funded Research and Development Center (FFRDC) Contractor File (NREL.pdf)
 - vii. **Appendix 7** – Authorization From Cognizant Contracting Officer for FFRDC (FFRDC_Auth.pdf)
 - viii. **Appendix 8** – Environmental Questionnaire (Enviro.pdf)
 - ix. **Appendix 9** – Project Management Plan (pmp.pdf)
 - x. **Appendix 10** - Historical, Current, and Planned Technical and Financial Data (TechandFinData.pdf)
 - xi. **Appendix 11** – Business and Commercialization Plan (BusComPlan.pdf)
 - xii. **Appendix 12** – Pro Forma (ProForma.xls)
 - xiii. **Appendix 13** – Intellectual Property Statement and Supporting Documentation (ProjectIP.pdf)
 - xiv. **Appendix 14** – Process Flow Diagram and Supporting Data (PFD_Data)
 - xv. **Appendix 15** – Life-Cycle GHG Emission Reduction Data (LCA_GHG.xls)
 - xvi. **Appendix 16** – Petroleum Displacement Analysis (Petro.doc)
 - xvii. **Appendix 17** – Project Execution Plan (ProjExecPlan.pdf)

Proprietary Information: The data contained on pages 6-10 of the Project Narrative; pages 3-6 and 12-13 of Environmental Questionnaire; pages 1-10, 16-18 and 20 of the Business and Commercialization Plan; and pages 2-4 of the IP Statement and all information contained the files named Lifecycle Energy and Greenhouse Gas Emissions, SF424A, Budget, Subaward Budget Files, Process Flow Diagram, Project Management Plan and Project Executive Plan have been submitted in confidence and contain trade secrets or proprietary information, and such data shall be used or disclosed only for evaluation purposes, provided that if this applicant receives an award as a result of or in connection with the submission of this application, DOE shall have the right to use or disclose the data herein to the extent provided in the award.

Paragraphs in this application's respective files that are preceded by an asterisk (*) contain proprietary information that Algenol Biofuels requests not be released to persons outside the Government, except for the purposes of review and evaluation.