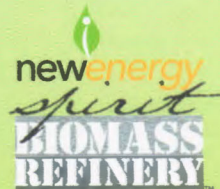




Renewable Energy Program

North Dakota Industrial
Commission

Application



Project Title:

ROWS - Replacing Oil With Straw

Applicant:

New Energy Spirit Biomass Refinery LLC

Principal Investigator:

New Energy Investors LLC

Date of Application:

May 1st 2016

Amount of Request:

\$500,000

Total Amount of Proposed Project:

\$1,035,000

Duration of Project:

4 months

Point of Contact (POC):

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ABSTRACT

Objective: The specific Objective of winning this grant is to accelerate Phase 2 and thereby the overall development of a biomass refinery at the Spiritwood Energy Park near Jamestown, North Dakota. The overall Goal is commercial production of an exceptionally low-carbon, high-value cellulosic ethanol for automotive fuel and an ultra-clean, solid lignin biofuel for generating renewable electric power from existing agricultural residues in the area. To do this efficiently, profitably, and sustainably, New Energy Spirit Biomass Refinery LLC (applicant and project owner), a North Dakota Company, will develop, build, own, and operate the refinery. New Energy Investors LLC will supply the financial and development talent for this inaugural step in building-out New Energy Biomass Refineries in North America. The refinery will use local corn stover and wheat straw for its feedstocks, converting this biomass residue into sugars, and the sugars into cellulosic ethanol, while separating out the lignin. Other outputs: a biogas for producing process steam and a potassium-rich nutrient for fertilizing farm fields. The refinery's enabling technology is Inbicon biomass conversion, a proprietary process protected by patents. It has been rigorously tested, scaled, proven, and optimized in Denmark by DONG Energy with a \$200M+ investment over the past 15 years. The refinery will produce 13.5 million gallons of cellulosic ethanol and 90,000 tons of lignin a year from 200,000 MT of biomass residues. Few biomass refineries anywhere will be larger.

Expected results: To complete the Project Start (Phase 2) and thereby accelerate the project into the FEED-phase (Phase 3). Phase 1, the feasibility study and concept design, will have been completed by end of summer 2016. There are 8 project phases in all.

Duration: The Project Start (Phase 2) will take 4-6 months to complete.

Total project cost: The total cost of Phase 2 will be \$1,035,000. The total project cost of the New Energy Spirit Biomass Refinery is \$155 million, hereof \$8,500,000 in direct Project Development.

Participants: New Energy Spirit Biomass Refinery LLC (applicant), New Energy Investors LLC (100% owner of applicant), Advanced Process Solutions, Inc. (APS) (owner's engineer), Midwest AgEnergy Group LLC (local energy and ethanol producer), Great River Energy, Jamestown/Stutsman Development Corp. (site selection), IEA (EPC and contributor), Processbio A/S (contributor), Pacques, Inc. (supplier), Eco Engineers (supplier), Inbicon A/S (*technology supplier*), Leifmark LLC (*owner's consultant, co-developer, liaison to the technology supplier, and contributor*), Pacific Ag (biomass logistics), and local organizations and universities.

PROJECT DESCRIPTION

Objectives: This Project Start – pre-FEED phase (Phase 2) includes the following tasks:

- Confirm and update the data gathered by New Energy Investors in the Phase 1 feasibility study.
- Develop the site plan necessary for detailed construction drawings to proceed.
- Transfer the Inbicon proprietary technology from DONG Energy to the project owner, New Energy Spirit Biomass Refinery LLC. This transfer applies to multiple key-unit operations. For example, pre-FEED package (FEL2-level) and a description of best practices in biomass harvesting, transport, handling, and storage based on data from the established biomass market in Denmark (mainly wheat straw) since early 1990s.

Phase 2 will address all major technical, environmental, logistic, economic, and organizational aspects of the biomass refinery. Upon completion of the pre-FEED phase, the project will have reached a maturity level where the conceptual and process design is determined. This will provide a solid basis for a decision to go to the next phase, where the final functional specifications sheet can be prepared for all unit operations and the Front End Engineering and Design can be completed along with other project development activities.

Methodology: Five major issues will be addressed in Phase 2:

- Biomass resources
- Process Technology
- Balance of Plant (includes energy supply)
- Carbon Intensity Score
- Permitting

In order to cover all areas, the project will source expertise from specialized businesses: DONG Energy will transfer an Inbicon pre-FEED package (FEL2) with proprietary technical information on the core process technology; Midwest Ag Energy will provide an updated biomass study and geotechnical knowledge around the site; Advanced Process Solutions will provide pre-FEED engineering on auxiliary systems, balance of plant, including energy supply, civil engineering, and conversion of Danish technology to U.S. standards; Leifmark will provide knowledge on biomass aggregation and best practices from Denmark and the past four years of studies performed in the U.S.; Processbio will provide technical descriptions of the automated biomass handling system; New Energy Investors will provide the business plan (Pro Forma) and financing models; third-party consultants will provide permitting and Carbon Intensity (CI) assessments.

Anticipated Results: While overall results from the entire project (the biomass refinery) will align with the outputs shared above, **specific results for Phase 2 will be funded by this grant and required for moving the refinery project into Phase 3:**

1. Validation of biomass availability and development of a robust feedstock-supply plan
2. Established contract set-up to support the project (partners and suppliers)
3. A pre-FEED technology package for the biomass refinery including (delivered in two parts):

Part 1:	Part 2:
• Conceptual design	• Process Flow Diagrams (PFDs)
• General process description	• Process model configuration data
• Plant parameters	• Environmental data/ Emission point list
• Mass and energy balances	• General layout, indicating area requirements (2D)
• Input/output figures	• General Construction Time Schedule
	• CAPEX estimate +/- 30%

4. A geotechnical study including soil survey (update of existing study by Midwest AgEnergy)
5. Civil engineering – drawings for steel and concrete constructions of the plant
6. Design of anaerobic digestion plant (technical solution, level of production, and capacity)
7. Design and dimensioning of energy center (calculation on suitable solutions for motors, boilers)
8. Balance of plant (layout and optimization of biomass refinery including auxiliary operations)
9. Carbon-intensity score report and pathway (calculation of potential CI-score and synergies with existing power plant and ethanol plant)
10. Report showing all required permits and expected road maps and priorities for the project
11. An updated business plan for the project (Pro Forma)

Facilities: Midwest AgEnergy will provide office and meeting facilities needed during the project.

Resources: The project partners will provide the resources needed, except for certain tasks requiring third-party consultants. Midwest AgEnergy can help point to local firms with the required skills. Three local agricultural groups—North Dakota Grain Growers, North Dakota Corn Growers, North Dakota Farmers Union have expressed their willingness to help align member/grower needs with best practices via nutrient, seed, and equipment suppliers.

Techniques to Be Used, Their Availability and Capability: In Phase 2, the pre-FEED work addresses all major technical, environmental, logistic, economic, and organizational aspects of a biomass refinery. The

data will derive from extensive experience with, and analysis of, the following major processes and systems:

Biomass harvesting, collection, storage and transport – U.S. farm equipment such as AGCO and New Holland has greatly improved speed and efficiency for aggregating large quantities of baled straw and corn stover. Working with Leifmark, the refinery will access best practices developed since 1990 in Denmark and biomass studies done in Iowa, Indiana, North Dakota, Idaho, and Michigan since 2010.

Biomass handling –Danish biomass handling equipment drives efficiency in some of the world’s largest biomass-fired power plants and will feed 25 MT per hour at New Energy Spirit Biomass Refinery.

Biomass conversion – New Energy Spirit will use the three-stage Inbicon biomass conversion process: mechanical conditioning of the biomass, hydrothermal pre-treatment, and enzymatic hydrolysis using an optimized 25 MT per hour reactor. In recent years, DONG Energy has boosted cellulosic ethanol yield by 40% and cut CapEx 30%. Process optimizations are expected to raise the value of the low-carbon liquid and solid fuels produced for the higher-value markets now established in the U.S. and globally.

Fermentation, distillation, dehydration – Standard equipment used at conventional ethanol plants.

Power island will generate steam and power from biogas. Exact configuration will depend on the potential synergies agreed to in Phase 2 with the adjacent power and ethanol plants.

Anaerobic digester will produce biogas from non-fermented hydrocarbons and either be used to produce steam driving a co-generator or sold as low-carbon compressed natural (bio-)gas to fuel trucks.

Waste-water treatment plant – Process water cleaned as necessary for recirculation. Only at refinery start-up will fresh process water be required. Well-established suppliers have made the concept designs.

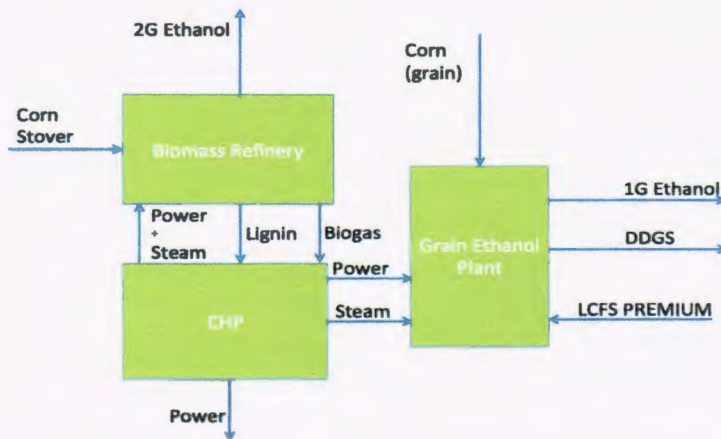
Computer control systems – Similar to those used in all U.S. ethanol plants.

Environmental and Economic Impacts while Project is Underway: During the execution of Phase 2, the direct impacts will not be substantial – mostly travel, local lodging, and boarding.

Ultimate Technological and Economic Impacts: Success of the refinery project hinges on its environmental contribution to America’s quest for clean air and reduced greenhouse gas emissions. Federal legislation has put a major emphasis on replacing fossil fuels with clean energy. Mandates and financial incentives such as RINs, established in the Renewable Fuels Standard 2, reward low-carbon scores and give cellulosic ethanol the highest RIN value. California now offers strong financial incentives

for low-carbon biofuel. New Energy Spirit is being designed to meet the strict CARB standards. Process integration with Dakota Spirit AgEnergy could also qualify its grain-ethanol.

What's more, the new refinery's lignin pellets can help power plants meet EPA requirements for a 30% reduction in 2005 levels of carbon emissions by 2030. And lignin competes with coal based on available energy value and low moisture content. So the refinery's low-carbon process and products could add environmental leadership to North Dakota's reputation for technological and economic progress.



Integrating the New Energy Spirit Biomass Refinery, Dakota Spirit AgEnergy ethanol plant, and Spiritwood Station power plant can achieve synergies that lower carbon scores and raise the value of all energy produced.

Why the Project is Needed: The overall biomass refinery project gives investors, suppliers, operators, farmers, aggregators, truckers, building-trade workers, universities, and the state a stake in America's technological, agricultural, and environmental leadership. Farm revenues will increase at least \$15M because the value of a ton of North Dakota biomass will be optimized. Hundreds of construction jobs and 42 well-paying permanent jobs operating the plant will be created. Renewable energy diversifies and helps balance the state economy. The refinery's products will aid compliance with federal clean air regulations and exports will expand state revenues. The refinery process promotes soil nutrient recovery and recycling. Well-managed crop residue removal has agronomic benefits, including faster soil warming in spring, improved availability of nitrogen, improved seed-to-soil contact when planting, reduced tillage or no-till farming, which results in less soil erosion and fewer emissions. Many farms will testify to higher crop yields that follow years of crop residue removal.

STANDARDS OF SUCCESS

Measurable deliverables: The goal of Phase 2 is to deliver a complete pre-FEED for the biomass refinery, comprising the deliverables mentioned previously, so that Phase 3 can proceed without delay.

Public and private sector use: Scientists at North Dakota State University and the University of North Dakota have said a biomass refinery will have a positive impact on their biomass research. For sectors involved in energy production, agricultural production, chemicals production, and transportation, this project can provide a natural transition from a hydrocarbon-based economy into an integrated biomass-based economy. When the biomass refinery opens in 2018, public use of renewable fuels should rise as they win greater acceptance for their home-grown environmental benefits.

Commercial use: Biomass refinery end-products will bring about \$80M in revenue, much of it from out-of-state export to higher-value markets. The ethanol and power plants integrated with the refinery will increase their revenues by lowering their carbon intensity, making their products more valuable. Biomass supply businesses will thrive. Commercial success will foster similar biomass refineries that will harvest more of North Dakota's 10.75 million acres of corn and wheat crop residue.

Enhancing North Dakota's knowledge base: North Dakota universities will have the opportunity to become world leaders in cellulosic refining know-how based on direct access to our biomass refinery processes and products. Real-world exposure to commercial production opens new doors to research and development and encourages scientists and students to establish expertise in areas such as agricultural economics, biomass conversion technologies, or research and development of new bio-based chemicals and materials. Research-based programs can be shaped to industry's employment needs. Denmark has already undergone a similar transformation.

Preserving and creating jobs:

Not one North Dakota job is jeopardized. Several hundred good jobs will be created for plant construction; 42 permanent full-time jobs for plant operation a 24/7 basis; another 80-100 jobs for gathering, storing, and transporting the biomass to the refinery (some will likely be farm jobs). Expect more support-service jobs due to about \$80M a year in plant revenue and over \$15M in grower and handler income for biomass purchase, gathering, storage, and trucking.

Rural areas income will increase as farmers sell the refinery roughly 200,000 tons of low-moisture feedstock annually. This represents \$15 million annually in new farm and business revenues in the region, for the combined activities for stover and straw sales, baling, storage, and transportation.

BACKGROUND/QUALIFICATIONS

Participants: Local, regional, national, and international companies in the refinery consortium are expected to contribute to Project Start, Phase 2, according to their areas of specialization.

New Energy Spirit Biomass Refinery LLC (applicant) is a North Dakota company formed to build, own, and operate a commercial-scale biomass refinery at Spiritwood Energy Park.

New Energy Investors LLC (100% owner of applicant) is a consultant to New Energy Spirit and will provide financial and project development talent. The team has extensive renewable energy experience, including project management, process engineering, technical, analytic, marketing, operations, and CEO management. The team also possesses highly specialized understanding of the Inbicon process and the know-how to bring the project to commercial success.

Advanced Process Solutions, Inc. (APS) (owner's engineer) are high-level process engineers with extensive experience in ethanol plant design and engineering, including a 6-year working relationship acquiring deep knowledge of the Inbicon process.

Midwest AgEnergy Group LLC (local energy and ethanol producer) owns Dakota Spirit AgEnergy, a new 65 MGY biorefinery near Jamestown. New Energy and Midwest are presently defining a joint relationship to support line items in the Phase 2 development budget and schedule.

Great River Energy's Spiritwood Station is a steam supplier for Dakota Spirit AgEnergy and any potential future tenants of Spiritwood Energy Park.

Jamestown/Stutsman Development Corp. will assist in site selection, which impacts Phase 2 data.

IEA (contributor) is a leading engineering, procurement, and construction (EPC) contractor and one of the largest clean energy construction firms working throughout North America today.

Processbio A/S (contributor) is a Danish biomass-handling equipment supplier with U.S. representation. Processbio will deliver and install a complete front-end straw and stover handling and pre-processing system at the biomass refinery. They have provided biomass delivery systems to many of DONG Energy's power stations in the past 17 years. System efficiency impacts Phase 2 data.

Pacques, Inc. (supplier) global water treatment and process equipment company located in the Netherlands. They will integrate a biological treatment in a closed water loop, resulting in significant improvements in the quality of the process water of the biomass refinery. Impacts Phase 2 data.

Eco Engineers (supplier) will assess the refinery platform's integration with the existing grain-ethanol plant and power station; also prepare a pathway to low-carbon ethanol that meets CARB standards for California's higher-value fuel markets.

Inbicon A/S (*technology supplier*) is a rigorously tested, proven, and optimized lignocellulosic biomass conversion technology owned by DONG Energy, a leading Northern European energy groups headquartered in Denmark. DONG Energy will license the Inbicon technology and know-how to build the commercial-scale biomass refinery in Spiritwood Energy Park.

Leifmark LLC (*owner's consultant, co-developer, liaison to the technology supplier, and contributor*) Leifmark is an independent DONG Energy partner authorized to market the Inbicon technology in North America. Its founding principals have deep roots in the U.S. and Canadian ethanol industries, and its Danish principals have strong experience with the Inbicon technology as well as international markets and alliances.

Pacific Ag will be working with us locally on the biomass business development. They are a wheat straw and corn stover harvester and soil management experts. We look to have them as part of our team in the initial studies and future contracted work.

North Dakota Grain Growers Association and North Dakota Corn Growers Association will be working with us to enhance grower relationships, organize grower meetings, and engage with local and state government agencies.

MANAGEMENT

This Phase 2, Project Start, will be managed by Christian Morgen, COO of New Energy Investors.

A management board will oversee the entire business and biomass refinery project. From New Energy Investors: Steve Rogers, Chairman; Robert Johnsen, CEO; Judith Giordan, PHD, CTO; Christian Morgen, COO; and Thomas Corle, CMO. Advisory to the Board: Robert Scaglione, CEO, APS. Other may be named later. Also included on this project, contracted directly: Jesper Bang Andersen, Paul Kamp, Roger Moore, all Partners at Leifmark; Roger McDaniel, Senior Managing Director, Mid-Market Securities.

Christian Morgen will oversee the biomass refinery project and ensure timely execution according to schedule. He has previously worked on commercial energy projects while employed by DONG Energy and on the development of the Inbicon technology from laboratory research, development, and execution of two scale-ups of pilot plants and the building of the commercial demonstration biomass refinery located at Kalundborg, Denmark. A monthly report summarizing the work executed, major

milestones achieved, and funds spent will be submitted to North Dakota Industrial Commission. An accountant will be appointed to manage funds.

TIMETABLE

Upon receipt of the grant funding, New Energy Spirit Biomass Refinery will develop a specific timetable, with start and end dates, to correspond with the individuals tasks listed on the chart below and with the weeks allotted for the completion of those tasks. Scheduling of interim reports will be done then.

Activity/Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	17
Project Dev. Activities																		
Feed stock supply								D1										
Contracts/agreements																		D2
Technology supplier																		
Pre-FEED package (part 1)							D3											
Pre-FEED package (part 2)													D4					
Owners engineer																		
Soil survey/geo tech.						D5												
Civil engineering																	D6	
Anaerobic digestion																	D7	
Energy center															D8			
Balance of plant																	D9	
3rd party engineering																		
CI-score & pathway															D10			
Permitting/Specialist																		
Report on Permitting															D11			
Project management																		
Pro Forma Update								D12									D13	
Monthly Report					M1				M2				M3					
Final Report																		M4

Deliverables Plan: Each line item on the timetable showing activities will result in a corresponding deliverable when the activity is ended (marked 'D1-D13') with main findings.

Milestone Plan: Each of the monthly reports will also form a deliverable (marked 'M1-M4') describing the activities executed in each line item. The final report will describe the Project Start Phase 2 results, which will be serve as a baseline information document that will lead to and enable other processes, plants, and activities in the state.

BUDGET

Project Associated Expense	NDIC's Share (Hard Cost)	NewEnergy Spirit Biomass Refinery LLC	NewEnergy Investors LLC	Other Project Sponsors'	Project Participant/ Execution
Project Dev. Activities					
Feed stock supply				40,000	MAG
Contracts/agreements			60,000		NEI
Assistant/controller	20,000				NEI
Travel	20,000				
Technology supplier					
Pre-FEED package	150,000		150,000		NEI
Owners engineer					
Soil survey/geo tech.				80,000	MAG
Civil engineering	50,000				APS
Anaerobic digestion	10,000		10,000		Pacques
Energy center	15,000		15,000		APS
Balance of plant	135,000				APS
3rd party engineering					
CI-score & pathway	20,000				Eco Engineers
Permitting/Specialist					
Specialist/consultant				80,000	MAG
Project management					
Project oversight			100,000		NEI
Project management	60,000				APS
Travel	20,000				
Total	500,000		335,000	200,000	

Following is a description justifying the expense budget associated with the Project Start Phase:

1. Develop a robust **feed stock supply plan** Midwest Ag Energy (partly owned by Great River Energy) will update the earlier *Feasibility Study of a Biomass Supply* for the Spiritwood Industrial Park (NDIC Contract No R001-003) as a part of their contribution to the Project Start, Phase 2. The work is estimated to have a value of \$40,000 (in-kind).
2. Establish **needed contract set-up** to support the project (partners and suppliers). A private placement memorandum will be issued to invite (local) private equity to finance some of the project. New Energy Investors expects project financing backed by the Danish Export Credit Fund (EKF) as guarantor to the debt covering the imported items and equipment contracts; cost is estimated to be \$60,000 (in-kind).
3. A **pre-FEED technology package** describing the main operations and layout of the refinery. The technology supplier Inbicon has priced their pre-FEED package at \$300,000. New Energy Investors expects to cover half of that cost and is seeking coverage for the other half (\$150,000) from NDIC (hard cost).

4. **Complete geotechnical study** including soil survey (update existing study by Midwest AgEnergy). As a part of the earlier NDIC Contract No R-009-202 originally made for Dakota Spirit AgEnergy, Midwest AgEnergy will update the geotechnical data developed for the site at SEPA. The work has an estimated value of \$80,000 (in-kind).
5. **Civil engineering.** Development of drawings for steel and concrete constructions of the plant and cost of civil work. Done by APS \$50,000 (hard cost),
6. **Design of anaerobic digestion plant** (technical solution, level of production and capacity. Validation and adjustment of standard concept. Done by Pacques \$20,000 (\$10,000 hard cost and \$10,000 in-kind by Pacques).
7. **Design and dimensioning of energy center.** Calculation on suitable solutions for motors, boilers. \$30,000 in total. Done by APS (\$15,000 hard cost and New Energy Investors as \$15,000 in-kind)
8. **Balance of plant.** Layout and optimization of biomass refinery including auxiliary operations. Done by APS \$135,000 (hard cost).
9. **Carbon-intensity score report** and pathway for cellulosic ethanol plant. Done by Eco Engineers \$20,000 according to offer from consultant. In addition a calculation of potential CI-score and synergies with existing facilities could be made.
10. **Report showing all required permits** and expected road maps and priorities for the project. Permit plan is done by MAG as an in-kind activity (estimated value \$80,000).
11. **Oversight and management** of the project. Project Oversight – 4 months @ \$25,000 FTE Project Director. Supplied by New Energy Investors as in-kind (\$100,000). Engineering Project Management – 4 months @ 15 FTE Technical Project manager supplied by APS (\$60,000 hard cost).
12. **Travel** is estimated as 10 interstate trips of \$1500 each and \$5000 for trips within the state. This estimate is for both projection development activities and project management. Total expense: 2 times \$20,000 (hard cost).

Duration: Shown below are the eight (8) refinery project phases with approximate length of time required. Project Start, Phase 2, (in bold italics), which this grant is helping fund, will take 4 - 6 months.

Phase #	Phase Topic	Phase Timing	Phase Cost \$1000
1	Feasibility study (Conceptual design) – completed Summer 2016	COMPLETED	600
2	<i>Project start, information gathering and sharing (Design for order of magnitude – FEL2 package)</i>	<i>4-6 Months</i>	<i>1,000</i>
3	Plant design and permitting All scope fully items identified, estimates refined to +/-10% (Front End Engineering & Design – FEL3 package)	6-9 Months	6,600
5	Commercial contracts and procurement	3-6 Months	1,300
4	Financing	3-6 Months	1,000
6	Detailed Engineering and Construction	12-18 Months	150,000
7	Commissioning	3-6 Months	
8	Operation (per year)	20 years	40,000+

Total Project Cost for the biomass refinery is \$155 million including:

Project Development Cost:	\$ 8.5 million
Other soft costs (financing):	\$6.5 million
Interest during construction:	\$7.5 million
Technology License:	\$7.0 million
CapEx:	\$125 million

Financing: The total project cost of \$155 million will be financed with a combination of guaranteed project debt (48%), non-guaranteed project debt (12%), and project equity (40%). The loan guarantee from Denmark's Export Credit Fund, and the financial incentives from the Renewable Fuel Standard, are expected to result in equity returns of 27% with a debt coverage ratio of 40/60. Additional revenue could come from meeting California's low-carbon fuel standards. The financial strength of DONG Energy, with its 18% Goldman Sachs ownership, improves the project's position within capital markets.

CONFIDENTIAL INFORMATION

Please treat as confidential the attached New Energy Investors' Executive Summary and the Detailed Project Development Budget. It reveals company business plans, some confidential second-party technical information, and detailed financials available only to investors who have signed a Non-Disclosure Agreement. Many years of work and experience is build in these figures and plans why the information represents a competitive edge. A potential competitive group would be put in a very fortunate position if the information were made public in this form. Further some of the technical

information in these documents is given to the project group as confidential information why the applicant wants to respect and protect the information given. At the same time the applicant want to show and express that the information, which this application is based on, is provided by different participants and not just developed by the applicant for this occasion.

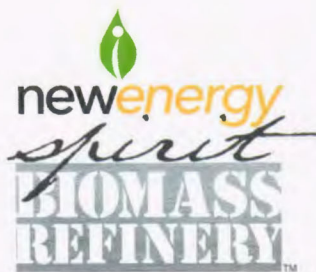
PATENTS/RIGHTS TO TECHNICAL DATA

The Project Start (Phase 2) involves the development of a pre-FEED package for the biomass refinery. This package will contain the description of a proprietary biomass conversion technology; the plant layout and design will be customized to the site at Spiritwood Energy Park (SEPA) and will belong to the applicant.

The technical data developed and technical data involved will not be public. Brochures and presentations will be produced for the public and visitors at the plant. Plant tours will be arranged as the refinery is expected to be a reference for future plants – when operational.

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Letter of Transmittal

North Dakota Industrial Commission
ATTN: Renewable Energy Development Program
State Capitol – Fourteenth Floor
600 East Boulevard
Bismarck, North Dakota 58505

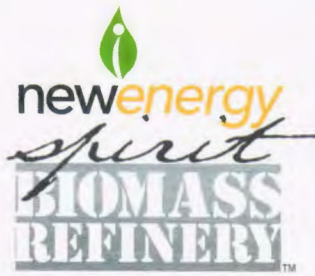
Dear Sirs,

I am affirming by way of this communication that New Energy Spirit Biomass refinery llc makes a binding commitment to fulfill the goals and activities outlined in our grant application if approved and funded by the North Dakota Industrial Commission's Renewable Energy Development Program.

We appreciate your consideration of this grant application and look forward to working with the Sate of North Dakota to meet its renewable energy goals.

Sincerely,

Stephan Rogers, Board Chair



Tax Liability Affidavit

North Dakota Industrial Commission
ATTN: Renewable Energy Development Program
State Capitol – Fourteenth Floor
600 East Boulevard
Bismarck, North Dakota 58505

Dear Sirs,

New Energy Spirit Biomass Refinery llc was formed as a North Dakota llc on 04/26/2016.

The company has sold no products nor received any revenue since inception. The company currently has no federal or state tax liabilities in the State of North Dakota.

Sincerely,

Stephan Rogers, Board Chair

NDSU**NORTH DAKOTA STATE UNIVERSITY**

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26 April, 2016

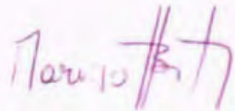
To whom it may concern:

I have recently learned about the renewed efforts to develop a biomass refinery project in North Dakota. This is exciting news for our state and research universities and a great example of the potential of lignocellulosic feedstocks production and utilization. The construction and operation of a biomass refinery in North Dakota will have a positive impact on the research in bioenergy, biomass, and biobased products development at North Dakota State University.

Potential areas of research related to the products of the biorefinery will include: a) impact of agricultural residues removal in soil fertility and farms economy; b) production and management of new biomass crops feedstocks; c) integration of biomass feedstocks into existing cropping systems; d) integration of cover crops in corn and wheat to reduce the impact of residue removal on soil health; e) logistics and transportation of agricultural residues to the biorefinery; f) densification of biomass; g) development of biobased products from the different output streams (final or intermediate); h) animal feed product development from different output streams; i) fertilizers development, and k) life cycle analysis and environmental impact assessment of parts or the whole process.

Many researchers, post-doctoral associates, and graduate students will benefit by such project at our universities. For all the potential positive impacts on research is that I am pleased to support New Energy Investors on this proposal.

Kind Regards,



Dr. Marisol Berti
Professor
Forages, Cover Crops, and Biomass Production
Department of Plant Sciences
North Dakota State University