CITY COUNCIL/ELECTRICAL ADVISORY COMMITTEE

September 14, 2011 – 6:00 p.m.
Regular Meeting

CITY COUNCIL
Gilbert X. Cheves, Mayor
Leo Evans, Mayor Pro-tem
Patricia Baribeau, Council Member
Brady Nelson, Council Member
Walter Baker, Council Member

ADMINISTRATION
James V. O'Toole, City Manager
Robert S. Richards, CMC, City Clerk
Ralph B.K. Peterson, City Attorney
Mike Furmanski, Electrical Superintendent
Michael Dewar, City Controller
Thomas Butz, Power System Engineering

ELECTRICAL ADVISORY COMMITTEE
Ronald Beauchamp, Chairperson
Ann Bissell, Vice Chairperson
Larry Arkens, Committee Member
Glendon Brown, Committee Member
Donald Racicot, Committee Member
Tim Wilson, Committee Member
John Anthony, Committee Member
Vacant Seat

Escanaba City Council Chambers: 410 Ludington Street - Escanaba, MI 49829

Regular Meeting Agenda
Wednesday, September 14, 2011

CALL TO ORDER
ROLL CALL
APPROVAL/ADJUSTMENTS TO THE AGENDA
CONFLICT OF INTEREST DECLARATION

NEW BUSINESS

1. **Update - Electric Department –Distribution Operations**
   Explanation: Electrical Superintendent Mike Furmanski will discuss current departmental activities and operations.

2. **Update– Operation and Maintenance of Power Plant – Pro Energy Services, Inc.**
   Explanation: Pro Energy Services, Inc will update the City Council, Electrical Advisory Committee and Citizens of Escanaba on the status of the operation and maintenance of the power plant.

3. **Discussion - Power Cost Comparison – Ownership of Plant vs. Selling of Plant and Purchasing Power.**
   Explanation: Administration will present information which compares and summarizes historical and projected power costs for self generation of electricity versus purchasing power through a Power Purchase Agreement.

4. **Discussion - Plant Sale Options.**
   Explanation: Administration will discuss the alternative options that could be pursued in the event a sale of the power plant cannot be finalized.

5. **Update – Fuel Streamers Group Asset and Sales Status.**
Explanation: Administration will update the City Council and Electrical Advisory Committee on the status of negotiations with the Fuel Streamers Group including an update on due diligence, projected timelines and identifying the specific steps that will be needed in order to close on a plant sale.

6. **Update – Legal Review - Troutman Sanders L.L.C.**
Explanation: Administration will update the City Council and Electrical Advisory Committee on the status of legal costs incurred, to date, with Troutman Sanders, L.L.C.

GENERAL PUBLIC COMMENT
COMMISSION/STAFF COMMENT AND ANNOUNCEMENTS
ADJOURNMENT

The City of Escanaba will provide all necessary, reasonable aids and services, such as signers for the hearing impaired and audiotapes of printed materials being considered at the meeting to individuals with disabilities at the meeting/hearing upon five days notice to the City of Escanaba. Individuals with disabilities requiring auxiliary aids or services should contact the City of Escanaba by writing or calling City Hall at (906) 786-9402.

Respectfully Submitted,

James V. O'Toole
City Manager

OFFICIAL PROCEEDINGS
CITY COUNCIL
ELECTRICAL ADVISORY COMMITTEE
CITY OF ESCANABA, MICHIGAN
Special Joint Meeting
Wednesday, August 31, 2011

Pursuit to a special meeting posted August 23, 2011, the meeting was called to order by the Mayor Gilbert X. Cheves at 6:02 p.m. in the Council Chambers of City Hall located at 410 Ludington Street.

Present: Mayor Gilbert X. Cheves, Council Members Leo J. Evans, Patricia A. Baribeau, Pete Baker, and Brady L. Nelson.

Absent: None.

Present: Electrical Advisory Committee Members: Chairman Ronald Beauchamp, John Anthony, Larry Arkens, Glendon Brown, Don Racicot, and Tim Wilson.

Absent: Ann Bissell, and One Vacancy.

Also Present: City Manager James V. O'Toole, Electric Superintendent Mike Furmanski, City Controller Mike Dewar, City Attorney Ralph B.K. Peterson, Power Plant Manager Jerry Pirkola, PSE Consultant Tom Butz, City Power Plant Representative Pat Fulcher, Guests, members of the public, and Media.

Evans moved, Baker seconded, **CARRIED UNANIMOUSLY**, to approve the agenda as presented.

UNFINISHED BUSINESS - None

CONFLICT OF INTEREST - None

PUBLIC HEARING - None

NEW BUSINESS

Update - Electric Department – Renewable Energy Requirements Act 295.

Electrical Superintendent Mike Furmanski discussed projected requirements of Renewable Energy Requirements starting in 2012 and available resources for purchasing the renewable energy credits (RECs)(See Attachment – A).

- Reviewed history of the RECs, and plan to purchase RECs at $39;
- Current REC market was very soft. RECs were selling for $0.50. Enough RECs were purchased to carry City through 2013;
- REC Plan will need to be revised June 2012.

Update – Purchase Power Alternatives.

An update was presented regarding the purchase power options for a 3-5 year term power purchase agreement. Additionally, the Administration sought strategic direction of the value of moving forward with seeking a purchase power arrangement before the time when the plant sale was finalized. PSE Consultant Tom Butz provided a power point presentation for Administration and Board Members regarding Purchase Power Alternatives. (See Attachment – B)

- The timing of purchase power alternatives was critical along with the strategic direction for Administration;
- Reviewed how ATC would be involved during conversion of the Power Plant;
- Further information was needed and would be forwarded to Board Members as soon as possible.

Update– Power Plant Purchase Parties.

Information was provided regarding a Power Plant purchase offer update and a recommendation for selecting a Power Plant Purchase lead offer.

- PSE Consultant Tom Butz provided a power point presentation regarding a Power Plant Purchase. (See Attachment – C);
- It became obvious after further review, that a Power Plant conversion to biomass to operate the Power Plant was no longer profitable;
- Fuel Streamers has submitted a proposal to purchase the Power Plant to convert coal to a more profitable fuel source;
- Wording of the public referendum was being adhered to;
- Fuel Streamers representative Mr. Fred Solomon reviewed his company and their desire to purchase the City Power Plant. (See Attachment – D);
- Reviewed timelines for the sale of the Power Plant for possible sale by the end of the year with Fuel Streamers;
- Mr. Butz briefly reviewed the RFP scoring criteria which lead the negotiating team to recommend Fuel Streamers to purchase the City Power Plant.

Board Member Wilson moved, Board Member Arkens seconded, **CARRIED UNANIMOUSLY**, to authorize City administration to enter into negotiations for the purchase of the City Power Plant with Fuel Streamers of Indiana, LLC.

Council Member Baker moved, Council Member Nelson seconded, to authorize City Administration to enter into negotiations with Fuel Streamers of Indiana, LLC for the purchase of the City Power Plant.

Upon a call of the roll, the vote was as follows:

Ayes: Baker, Nelson, Evans, Baribeau, Cheves

Nays: None

MOTION CARRIED.

GENERAL PUBLIC COMMENT - None

COUNCIL/COMMITTEE, STAFF REPORTS

ADJOURNMENT

Hearing no further public comment, or further reports from the Electrical Advisory Committee or Council, the meeting adjourned at 7:33 p.m.

Respectfully submitted,

Robert S. Richards, CMC
City Clerk

Approved: _____
Gilbert X. Cheves, Mayor

Joint City Council and Electrical Advisory Committee Study Session
8/31/2011

Agenda Item 1 - Act 295 RECs

- Act 295 Passed in 2008
- Renewable Energy and Energy Efficiency Requirements
- Required Renewable Energy Source
  - 2% - 2012
  - 3.3% - 2013
  - 5% - 2014
  - 10% - 2015
- City has No long Term Renewable Energy Source
- Renewable Energy Credit (REC) Separable from Energy

City Plan of Renewable Energy

- Original Plan
  - Co-fire Biomass Fuel
  - In Timeframe of Not Selling Plant
  - Estimated Cost $39/REC (2011)
- Updated Plan
  - Excess RECs Available for 2012 and 2013
  - Market Price for RECs is extremely Soft
  - Price Quote for 2012 and 2013 of $0.50/REC
    - Much lower than previous plan
- 2012 & 2013 REC Purchases- 3,503 and 5,248 RECs ($4,380.50)

Next Steps

- Counter-Party
- Only Available through 2013
  - Current REC Production sold to Wolverine
- Pursue Future REC Needs
  - 2014 and Beyond

Impact on Electric Rate Collection

- Currently Based on $39/REC Plan
- June 2012 - Pause Collecting to Adjust REC Fund

Agenda Item 2 Purchase Power Alternatives

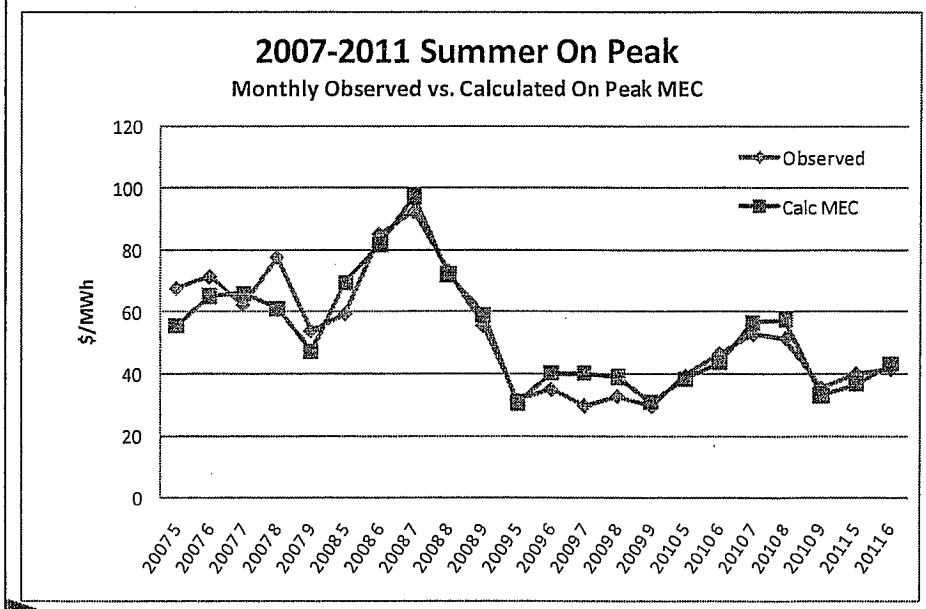
- Background
  - MISO Market Purchase Power Prices Remain Low
  - Natural Gas Futures Low
  - Prices Expected to Increase
    - EPA Regulations Could Precipitate Generation Retirements
- Update on Pricing
  - All Three Year Proposals
  - Three Parties Provided Pricing
    - AEP, Cargill, Nextera
  - Prices for Named Parties Not Disclosed

Strategy Questions

- When Will Prices Increase?
- Is There Support for Signing Deal Before Selling Plant?
- What is the expected LMP Price?
- Remain in the LMP market vs. Short-term market vs. Formula Based Rate?

LMP Price Projection

- Correlation of MEC to Weather and Natural Gas Prices
- Add in Escanaba Congestion and Losses
  - Most Recent History – Higher Values to be Safe
- Use Extreme Weather Case for MEC
- Monthly Prices Created through 2015



Price Information

- LMP Projection / Price Quotes

	LMP Est	Party 1	Party 2	Party 3	Party 3
2012	55.78	55.27	47.30+	61.80	67.45
2013	57.27	58.83	47.30+	61.80	67.45
2014	58.38	63.13	47.30+	61.80	67.45
2015	59.55				67.45
2016					67.45
2012–2014		59.03	47.30+ 12 est		

Summary Points

- LMP Projection < Short Term Projection?
- Party 1 Prices Look Fairly Attractive
- Party 2 – Uncertainty on Delivery Costs to Escanaba
- Party 3 – Much higher Prices for 5 yr projection
- Indicative Pricing is not Firm
- Strong Direction on Pursing A Purchase?
- Decision Can Be Based on Plant Sale Dates

Agenda 3 – Power Plant Purchase Parties

- Key Updates
  - DTE and Consumers
    - Providing Update to Act 295 Status Filings
    - Updated PSCR Filings
    - Provide View of Expected Pricing and Resource Selection
  - DTE
    - No Current RFPs for seeking renewable energy
    - Act 295 and PSCR Filing
      - Show Extensive Growth in Wind Energy – Very Little in Biomass
      - Prices from mid 70's in 2013 to mid 80's by 2015

Power Plant Purchase Cont.

- Projected Biomass Costs for Plant Much Higher
- Significant Uncertainty in Signing Deal with Party Pursuing Biomass Build
  - Requires PPA Selling Biomass
  - Market Information Showing Very Soft Market
- REC Market Softening Verifies Change in Market
- Prudent to Pursue Entity Not Seeking Biomass Conversion

Likely Questions

- Why Doesn't the City Pursue Continued Coal Option?
  - Privately Owned Entity Able to Take Technology Development Risk on Lower Cost Fuel Source
- Why Isn't Biomass a Viable Plant Sale Option?
  - Renewable Market Changed to Pursue Wind – Lower Cost
  - Viability of Other Renewable Energy Sources Softens REC Prices
    - Observed From Recent Market Inquiry

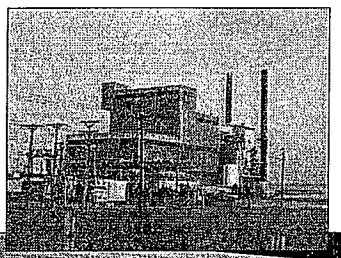
Questions Continued

- Why Can't City Buy Lower Priced Fuel
  - Not Available As Product in Market
  - Fuel Streamers Interested in Plant Ownership
  - EPA Regulations Expected to Result in Smaller Plants Closing Down – Private Entity Comfortable with Cost-Effectively Meeting Regulations

Plant Purchase Parties

- Negotiating Team Evaluated Proposals and Had Discussions with Three Parties
- High Value of Viability of Closing Deal
- Change in Renewable Market is HUGE
- Negotiating Team Recommending Pursing Contract Negotiations With Fuel Streamers
- Seeking Approval to Move Forward to Negotiate Agreements

Presentation to City of Escanaba

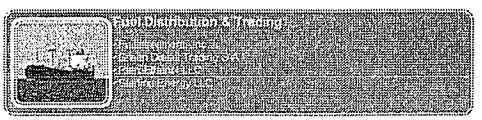


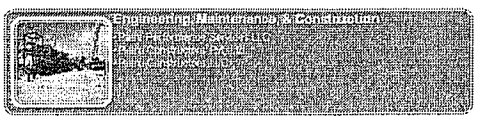
August 31, 2011

Fuel Streamers of Indiana, LLC

Who is Fuel Streamers?

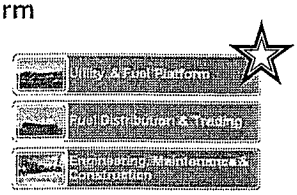
Fuel Streamers is a privately held corporation focused on fuel distribution and trading, utility and fuel platforms, and engineering, maintenance, and construction services.





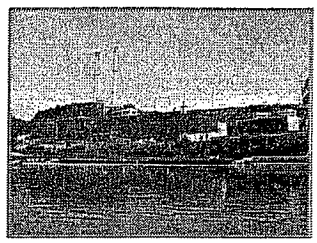
Founded	1995
Revenue	$500M

Fuel Streamers Utility & Fuel Platform



- Fuel Streamers of Indiana controls more than 10 million tons of coal reserves.
  - Developing a coal processing plant using propriety technologies to manufacture a low sulphur synthetic stoker coal
  - Definitive purchase agreement for a 24 megawatt coal-fired power station in Crawfordsville, Indiana
  - First of a series of purchases in the coal power market
  - Fitting new technologies for fuel flexibility and emissions

Crawsfordsville Stoker Boiler



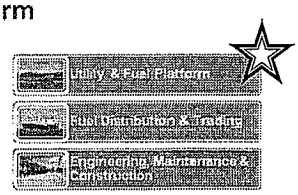
Crawfordsville Power Plant

Sterling Energy LLC holds licensing agreements to implement clean coal technologies in existing solid fuel generation facilities

- Retrofit of coal to take advantage of fuel flexibility and meet environmental standards.

Crawfordsville Turbine

Fuel Streamers Utility & Fuel Platform



- **Green Diesel LLC** is the owner/operator of a 42 million-gallon/year continuous run biodiesel processing facility
  - Located In Houston, TX
- **PetroEthanol LLC** is a joint operator of an ethanol facility in St. Croix, USVI

Green Diesel Store Tanks

Fuel Distribution & Trading

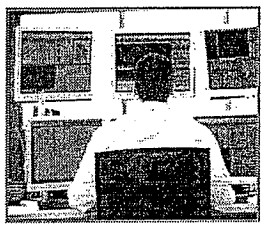
Product Profile
-Ultra Low Sulphur Diesel
-Fuel Ethanol
-Ethanol blends (E10, E85, E90, etc)
-Hydrous and Anhydrous Ethanol
-Biodiesel (B99.9)
-Biodiesel blends (B5, B10, B20, etc)
-Jet Fuel
-Gasoline
-Industrial Lubricants
-Bio-oxygenates ETBE and TAEE
-Renewable feedstocks for biodiesel production
-Biomass
-Biofuel by-products

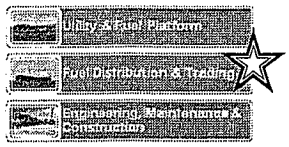
The fuel distribution and trading consists of

-Sales, distribution, and trading of all traditional and renewable fuels

-International trade of renewable fuels with a focus on biofuels and fuel blends

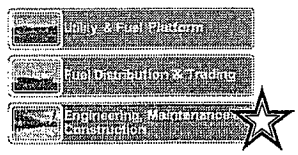
-Ethanol trading and blending





- **IFL terminal with over a quarter million barrels of storage capacity, serviced by the Teppco pipeline**

Engineering, Maintenance & Construction



Plant Performance Services LLC is the maintenance and construction provider for Fuel Streamers.

- Specializes in turnarounds, outages, welding, demolition and other specialty services for power, refining and chemical industries
- Services facilities across the US

P2S welder in a power plant

PetroConstructors Pvt. Ltd is a global provider of design and engineering services, focused on:

Biodiesel
Renewable Fuel
Ethyl Tertiary Butyl Ether
Solvent Extraction
Ethanol
Nutraceutical
Oil & Chemical

Sterling Energy LLC holds licensing agreements to implement clean coal technologies in existing solid fueled generation facilities

Involvement of the City of Escanaba

- Customary city services
- Transition to maintain air quality and other permits required to operate the plant
- Cooperate in developing incentives through "tax increment financing"

Technologies

- Features/Benefits

Water Cooled Oscillating Grate

Fuel Flexibility-Can burn run of mine coal and blend bio-mass

Will require baghouse & scrubber to meet future emissions regulations

Coal Gasification

Evaluating the use of Coal Gasification. Can use run of mine coal and meet emissions without adding scrubbers

Coal Beneficiation & Pelletizing

Can operate plant as is and reduce emissions by treating fuel in advance of pelletization

Environmental Aspects

- Environmental Concerns
  - Boiler MACT upon finalization
  - Potential impact of Cross State Rule
  - Boiler Modification Permitting (pollution control projects)

Project Implementation

- Timeline
  - Immediately begin process of finalizing an asset sale purchase agreement and any other required documents.
  - Will initiate third party activities such as environmental studies, survey, etc.
  - Engage an engineering firm to evaluate options for improving both the efficiency and meet future compliance needs.

- Questions

#5 CC/EAC
9/14/11

CITY OF Escanaba

P.O. Box 948 • Escanaba, MI 49829-0948 • (906) 786-0240 • fax (906) 786-4755
TDD (800) 649-3777

MEMORANDUM September 9, 2011

To: Jim O'Toole

From: Mike Furmanski

Re: Plant Sale Timeline

Fuel Streamers is interested in closing a deal with the City in the 30-60 day timeframe. This seems like a very aggressive target, and for that reason, we have been talking about completing it by the end of the year.

One important element in the timing of the closing is completing the environmental remediation. The current strategy is for the City to complete the remediation before closing, but the accelerated timing for closing will make this more of a challenge. If the remediation is not completed before closing, it will be important for the City to have a means of oversight for the cleanup that will provide assurance that the cleanup is completed in its entirety. Information from the earlier environmental assessments and the follow-up work provided by Mountain Engineering has given the City a good understanding of the contaminants on the site. What remains to be understood more clearly is the remediation work that must be done. More details of the environmental remediation will be explained as our options become more clear.

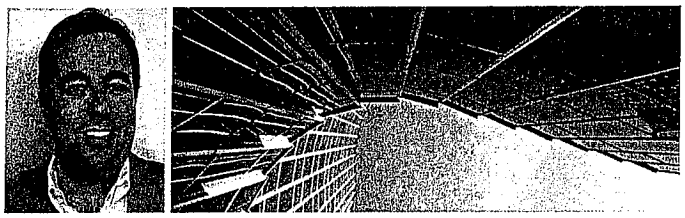
At our meeting last week, Fuel Streamers indicated that they will be able to provide comments from legal review in a 10-14 day timeframe. The City is looking forward to seeing their initial round of legal review comments in order to more accurately understand the amount of effort to work on getting an agreement ready for execution.

The timeline on closing the transaction will involve focusing on key elements for targeted months. The first month through the end of September will focus on environmental remediation and working on framing up all the documents required for closing the transaction. Reviewing comments from Fuel Streamers will be very important, as it will set the stage of identifying all major issues that need to be resolved before closing.

October and November will focus on completing the environmental remediation and working through the agreement comments with the goal of getting resolution on outstanding issues raised.

Early December will be focused on getting all documents ready for closing with a targeted closing date in mid December.

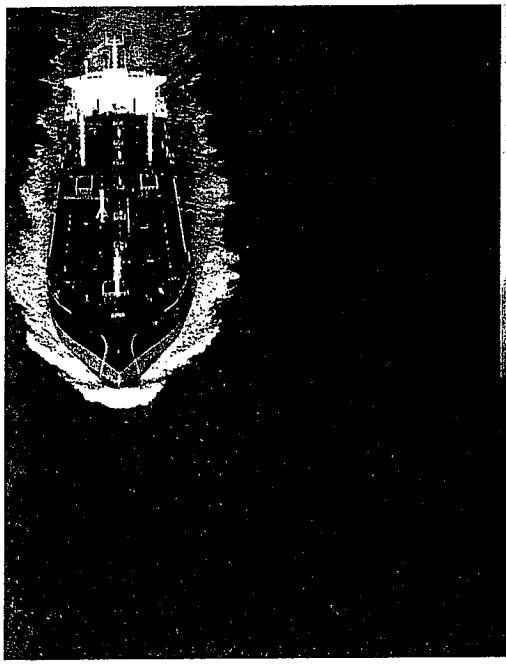
NB # 5
9/14/11



PHIL RIVKIN Chairman, Founder and Chief Executive Officer, Fuelstreamers Group

PRESIDENT'S MESSAGE

Fuelstreamers Group is made up of professionals with over 30 years of industry-leading experience in the very intricate business of the design, engineering, production, logistics and trading aspects of ethanol and renewable fuels on a global scale. I am confident that you will not find a better group of experts than our hand-picked team anywhere else in the world. Fuelstreamers moves quickly and confidently in the marketplace due to our years of successfully navigating in the world of petrochemicals, synthetic (GTL) fuels, biofuels - ethanol & biodiesel, and RINs trading. We rely on a well seasoned management team that excels in investment banking, international business, market development, global logistics, engineering and chemical process development. **Fuelstreamers Group truly is fueling tomorrow, today.**



FUELSTREAMERS GROUP

COMPANY PROFILE

Phil Rivkin
Chief Executive Officer
- Founder & Chairman
- New ventures, acquisitions, mergers, business stimulation, etc

Phil Rivkin
FUELSTREAMERS GROUP
3050 Post Oak Boulevard, Ste 500
Houston, TX 77056, USA
Office: +1-713-579-7870
Fax: +1-888-835-6364
Email: p.rivkin@fuelstreamers.com

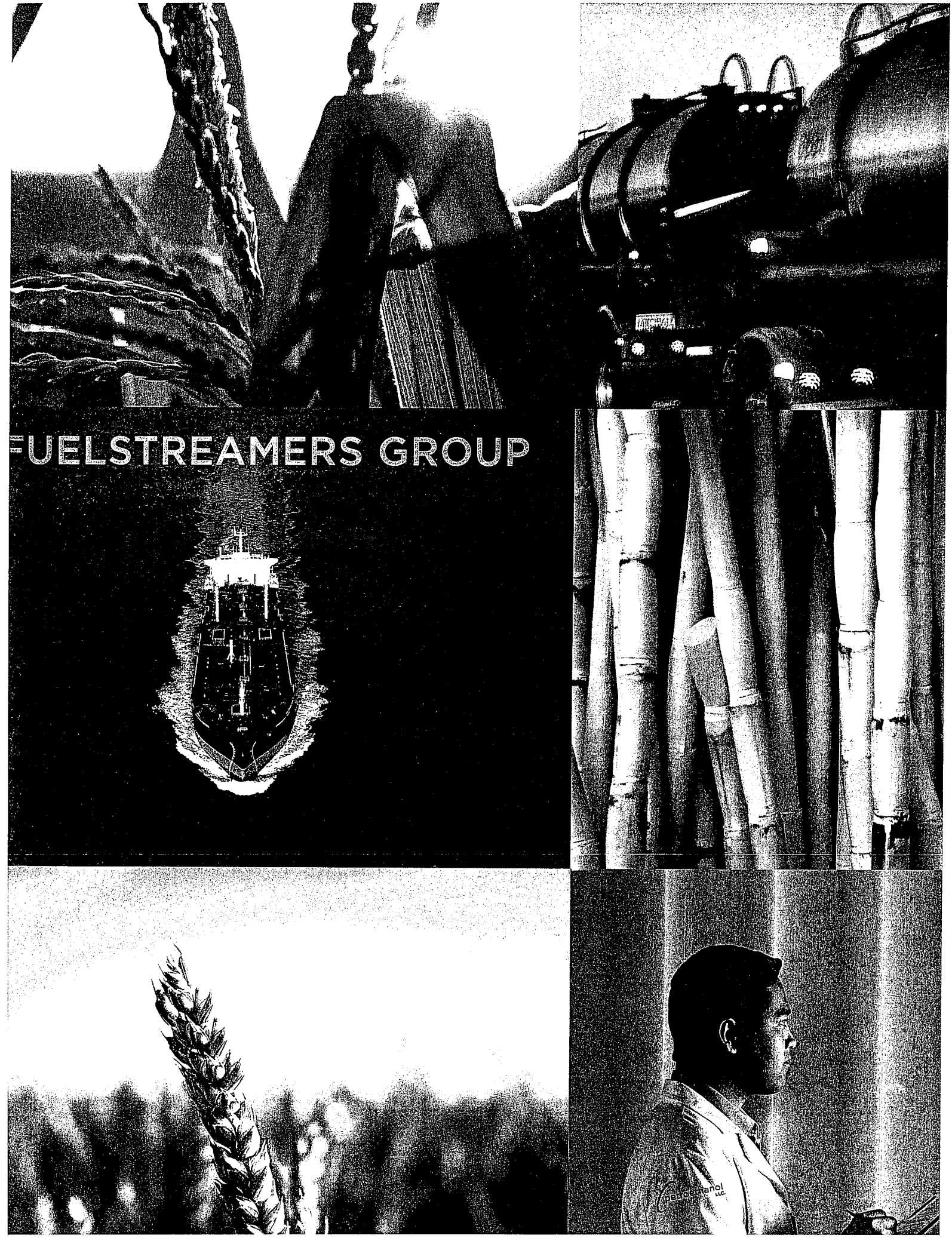
The Fuelstreamers Group is headquartered in Houston, Texas, USA. The company was formed in 2005 and is a privately held entity. We formed this consortium of companies to better service our customers' needs on a global scale. Because the energy world is ever changing, ever evolving it was imperative that we offer all services to all customers through one pipeline. By bringing all of these companies together we lower costs, eliminate redundancy and create a world in which cohesive execution is the means by which we operate on a daily basis.

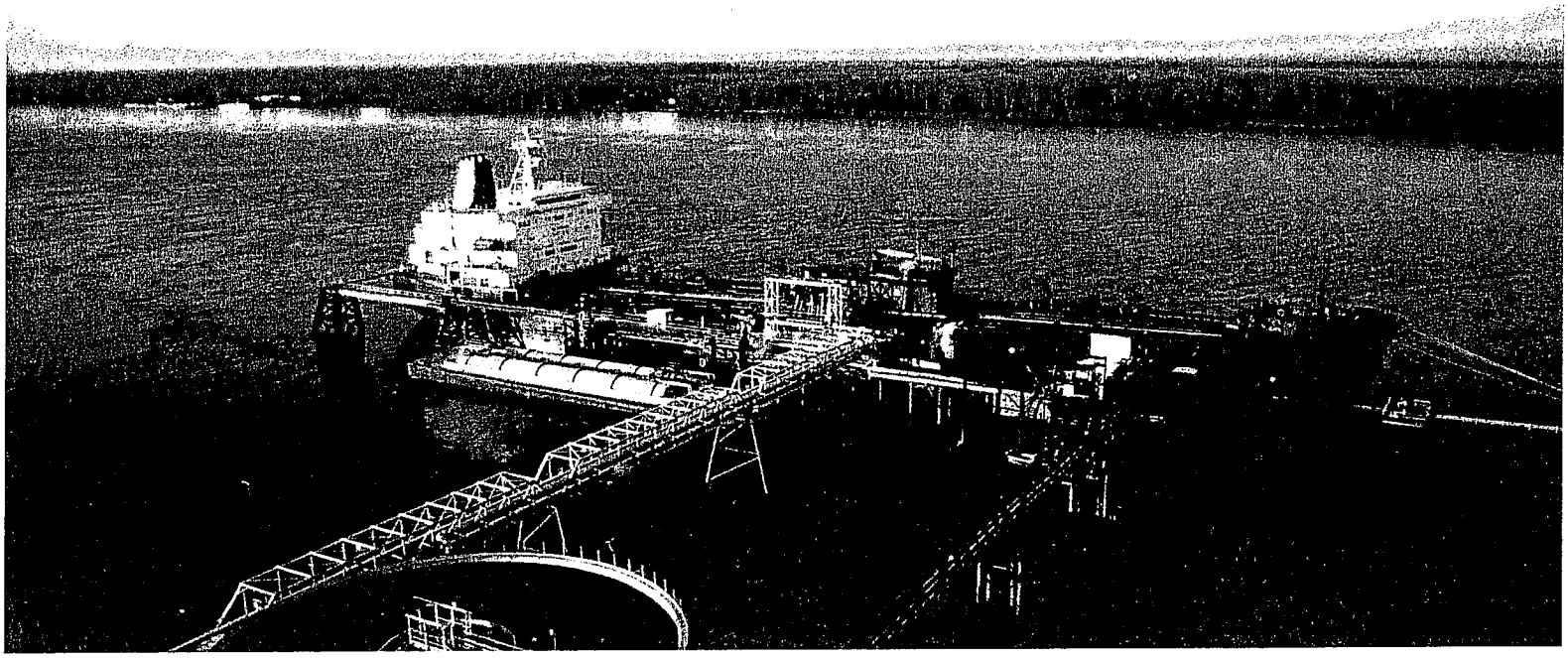
Although we are a global company with offices around the world, Fuelstreamers Group prides itself on customer service and its ability to execute on a local level anywhere around the globe. Whether in Europe, South America, the Middle East or Omaha, Nebraska - we can assist you with any energy issues by having people on the ground solving your challenges within 24 hours.

Fuelstreamers Group is comprised of the following companies:

- Fuel Streamers, Inc. - Houston, Texas, USA. - fuels distribution and trading
- Green Diesel LLC. - Houston, Texas, USA. - biodiesel plant
- Greendiesel Trading S.A. – Lugano, Switzerland. – EU biofuels trading & distribution
- PetroEthanol LLC. - Houston, Texas, USA. – Ethanol distribution and trading
- Petro Constructors Pvt. Ltd., - Chennai, India - Chemical process design & engineering
- Petro Constructors LLC, - Houston, Texas, USA. - Multi-disciplined engineering & construction
- Sterling Energy LLC, - Plainfield, Illinois, USA. – Retrofits coal fired energy plants

fuel
streamers


FUELSTREAMERS GROUP



FUEL STREAMERS, INC.

COMPANY PROFILE

Dan du Plessis
Director of Trading
- Biofuels Business Development
- Trading, Procurement & Logistics

Dan du Plessis
FUELSTREAMERS GROUP
3050 Post Oak Boulevard, Ste 500
Houston, TX 77056, USA
Office: +1-713-579-7883
Fax: +1-888-835-6364
Mobile: +1-713-213-6252
Email: d.duplessis@fuelstreamers.com

Fuel Streamers, Inc. headquartered in Houston, Texas, USA, is our sales, distribution and trading company for all traditional and renewable fuels. In addition, we offer a wide variety of lubricants to our diverse customer base. We not only provide service for the greater Houston area, but through our logistics and business network, we are both a regional and international provider for specific product needs.

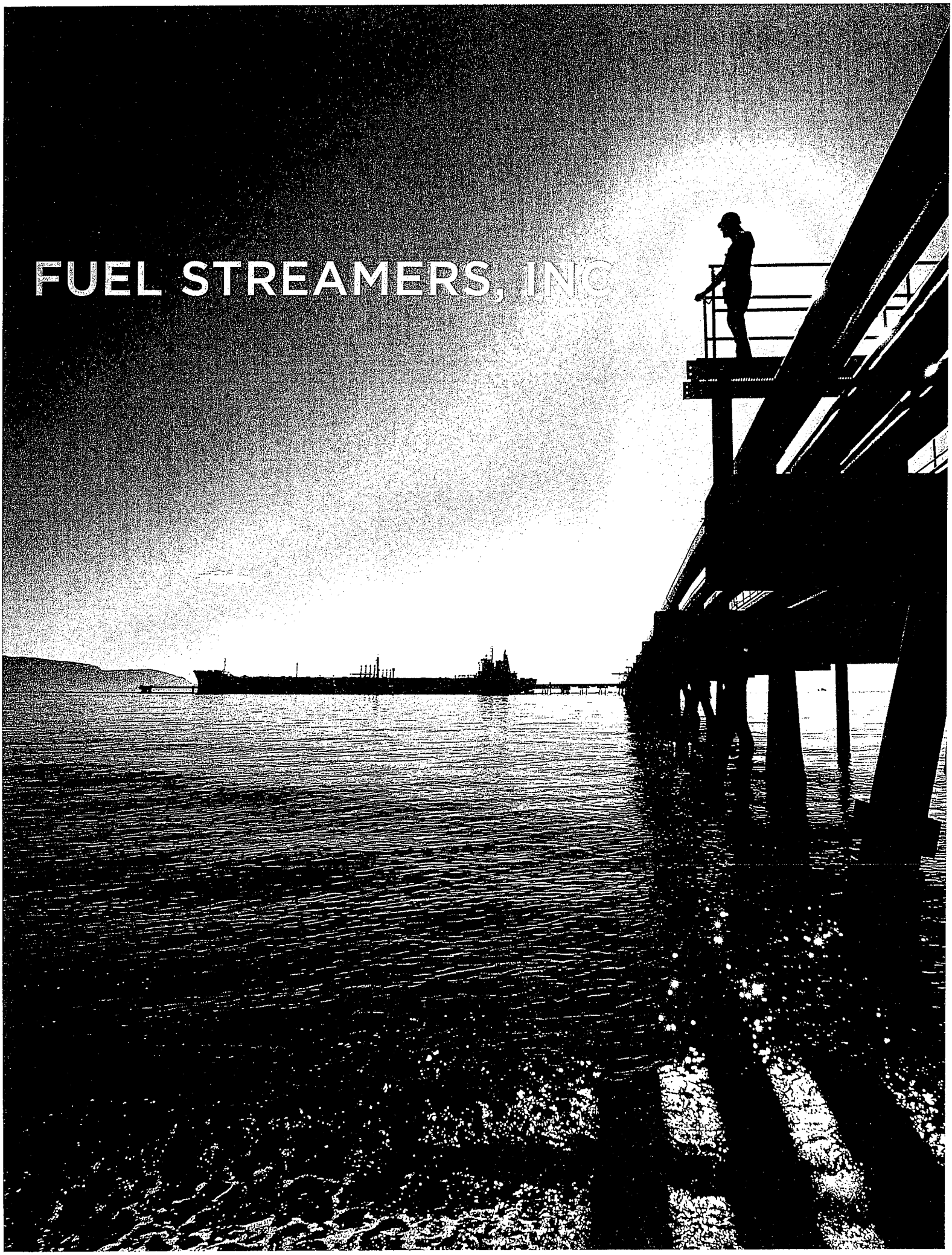
Fuel Streamers' operations are located at the IFL terminal in North Houston. We have over a quarter million barrels (over 40 million liters) of storage capacity in the Houston area; most of this is serviced by the Teppco pipeline. At IFL we have automated load racks with a capacity of over one million gallons a day. We also have the ability to utilize additional rack capacity to satisfy the demands of our customers.

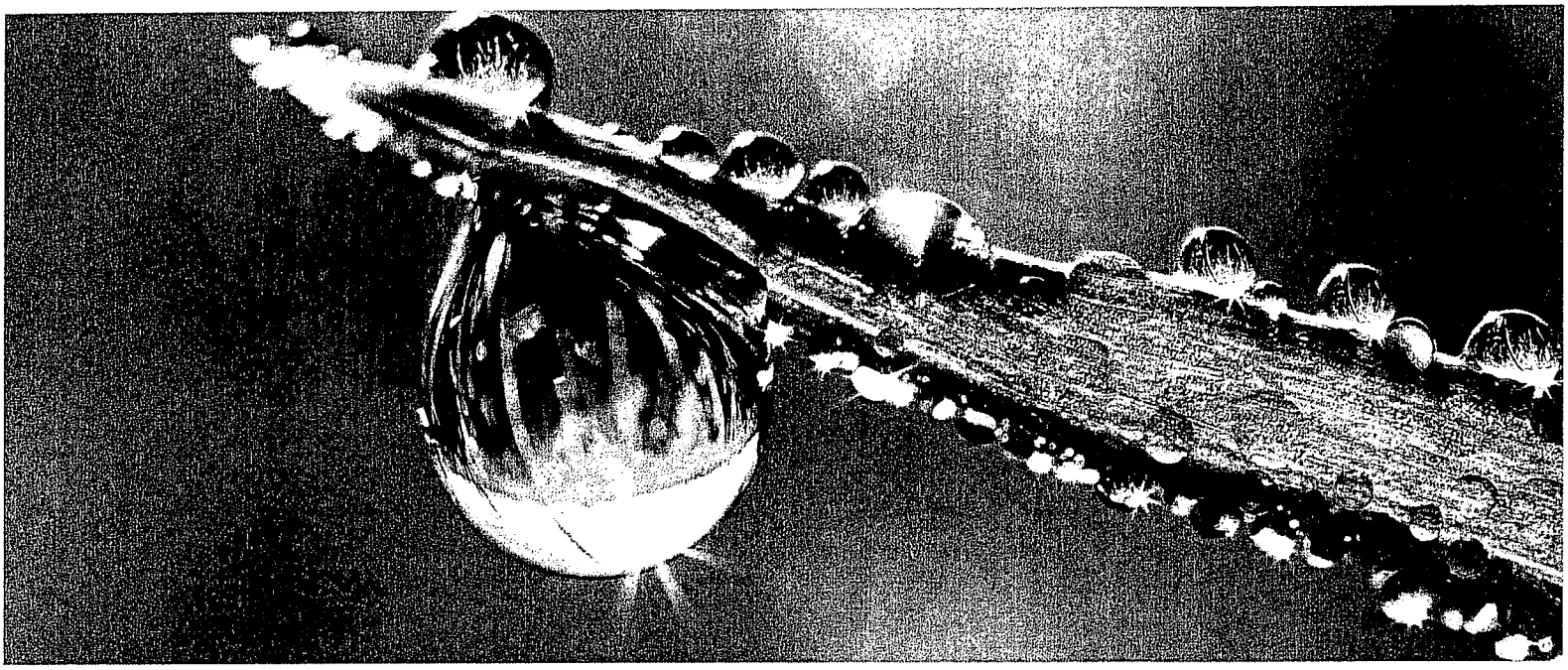
Fuel Streamers' international distribution network utilizes various capacity ocean-going vessels to deliver product to worldwide ports for discharging at storage terminals.

PRODUCT PROFILE

- Ultra Low Sulphur Diesel (ULSD)
- Fuel Ethanol
- Ethanol blends (E10, E85, etc)
- Biodiesel (B99.9)
- Biodiesel blends (B5, B10, B20, etc)
- Jet Fuel
- Gasoline
- Industrial lubricants

fuelstreamers INC.


FUEL STREAMERS, INC



GREEN DIESEL LLC.

COMPANY PROFILE

Jeremy Patrick
Sales Manager
- Alternative Fuels & Conventional Fuels
- Sales Biodiesel & Petro Diesel Blends
- Barrels of Feedstock

Jeremy Patrick
FUELSTREAMERS GROUP
3050 Post Oak Boulevard, Ste 500
Houston, TX 77056, USA
Office: +1-713-579-7873
Fax: +1-888-835-6364
Mobile: +1-832-492-7800
Email: j.patrick@greendieselllc.com

Green Diesel LLC., located in Houston, Texas, USA, is a 42-million gallon/year "continuous run" biodiesel processing facility. This operation is unique because of its ability to utilize multiple, fully-refined feedstocks. Our location allows us to take advantage of global market conditions for import of feedstock and export of finished biodiesel.

Green Diesel is strategically located on the Houston ship channel with inbound and outbound access to ocean-going vessels, barge, rail and truck. The capacity of the facility's storage is currently 50,000 barrels of feedstock and 35,000 barrels of finished product. Additional storage capacity of 100,000 barrels is available through Westway Terminal 2, which is located adjacent to the site.

greendiesel LLC.

GREEN DIESEL

PETRO CONSTRUCTORS LLC

COMPANY PROFILE

Petro Constructors LLC. is headquartered in Houston, Texas, USA. We are a multi-disciplined company specializing in engineering, procurement, shop fabrication, field construction and industrial maintenance for existing oil, gas, and petrochemical companies. We also offer systems design, expansion and ground-up construction of plant facilities and their components.

Petro Constructors has experience in all types of pressure vessels, industrial facilities, modular high pressure pipe skids, boiler inspection & repair and has the engineering certifications, resources and expertise available to accomplish a totally engineered solution for any plant system application in the world.

CERTIFICATIONS

ASME (American Society of Mechanical Engineers)
NBIC (National Board of Boiler and Pressure Vessel Inspectors)

Sandar Nyein
Director
- Finance
- Administration

Sandar Nyein
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Email: s.nyein@fuelstreamers.com

David Khan
Director of field operations
- Operations
- Construction

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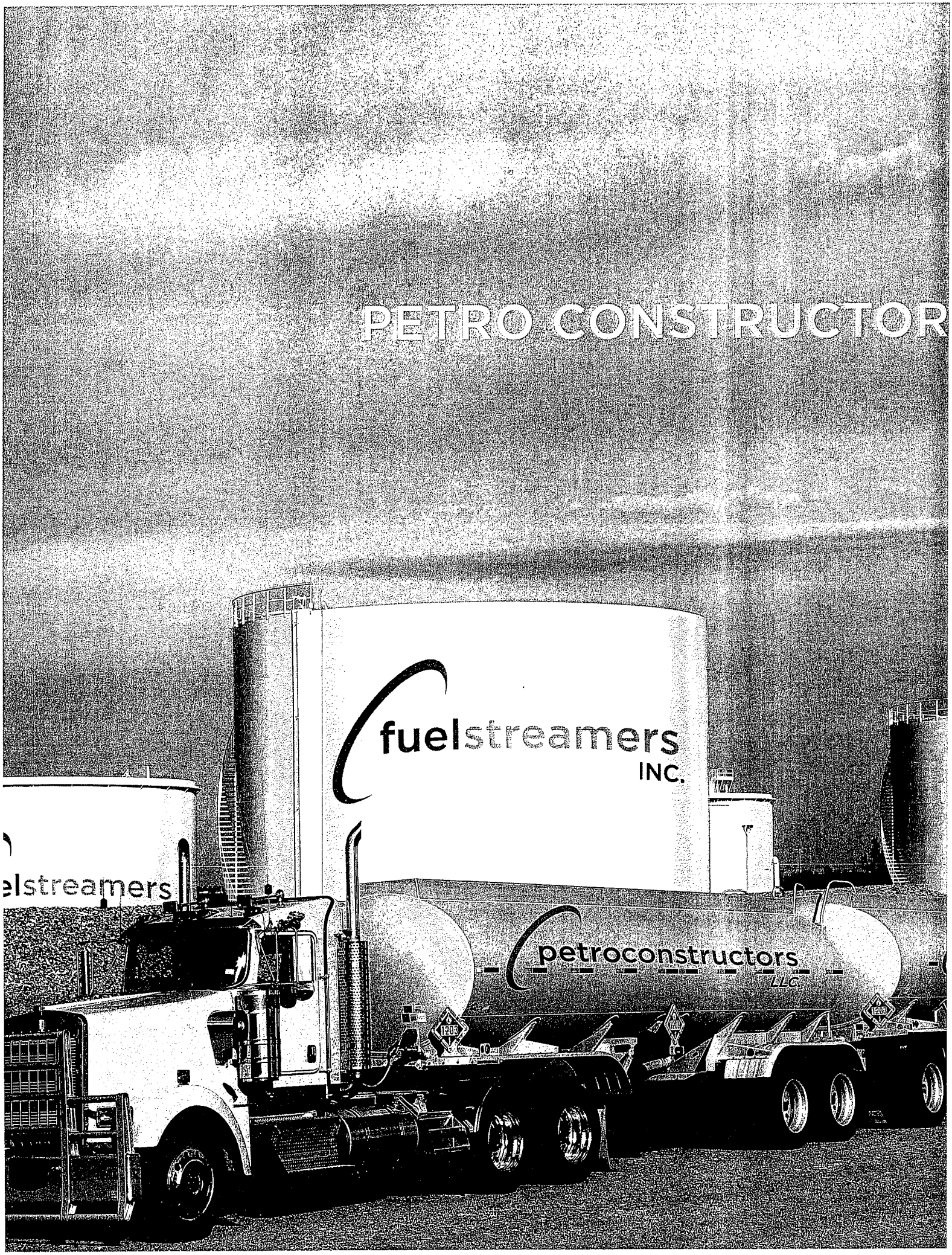
petroconstructors
LLC.


PETRO CONSTRUCTOR
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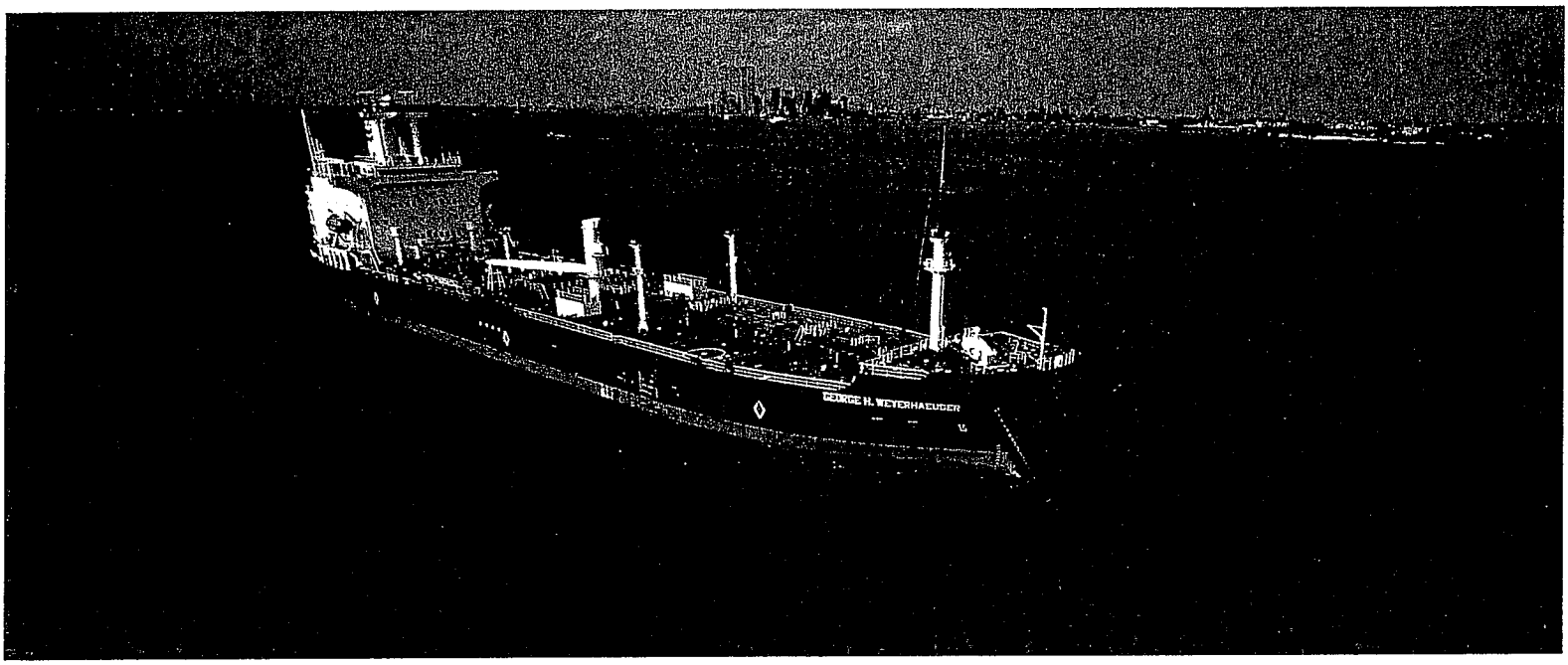

GREENDIESEL TRADING B.V.

COMPANY PROFILE

Greendiesel Trading B.V. is headquartered in Geneva, Switzerland with offices in Antwerp, Belgium and Amsterdam, The Netherlands. Active in the international trade of renewable fuels, the company has deployed a strategic and flexible international logistical system to accommodate the reliable off-take, shipping and delivery of its products. Their main focus, the distribution and marketing of biofuels and fuel blends, has contributed to genuine trading partnerships with customers. With this consortium of companies' storage and processing capabilities in the USA, Europe and the Caribbean, Greendiesel Trading B.V. meets both European and USA standards. This allows us, the Fuelstreamers Group, to guarantee suppliers and customers an efficient- and quality-controlled supply-chain solution.

Today, renewable fuels are an essential part of the energy sector. Renewable fuels' share in the total energy complex is growing exponentially as the world searches for more sustainable sources of energy to combat climate change. In Europe, the fast expansion of biofuels usage is driven by the European Union (EU) commitment to replace 20% of all transport fuels with biofuels by 2020. Greendiesel Trading B.V. creates markets for biofuels producers through strategic alliances with large fuel distributors, bio-oxygenate producers and refineries.

PRODUCT PORTFOLIO

- Biodiesel (Various Feedstocks; SME, CME, PME, etc.)
- Biodiesel (+5, FAME, 0, -5, etc.)
- Bioethanol (Sugarcane- and Corn-derived)
- Ethanol-Gasoline Blends (E85, E90 and E95)
- Bio-Oxygenates ETBE and TAEE
- Renewable Feedstocks for Biodiesel Production
- Biomass (Palm Kernel Shells, wood chips and Pellets, etc.)
- Biofuel Production By-Products (Glycerin and DDGS)

Marc Van Driessche
Trading Manager
- Greendiesel Trading S.A.
- Greendiesel Trading B.V.
- Trading & Business Development

Marc Van Driessche
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Keizersgracht 62-64
1015CS Amsterdam, The Netherlands

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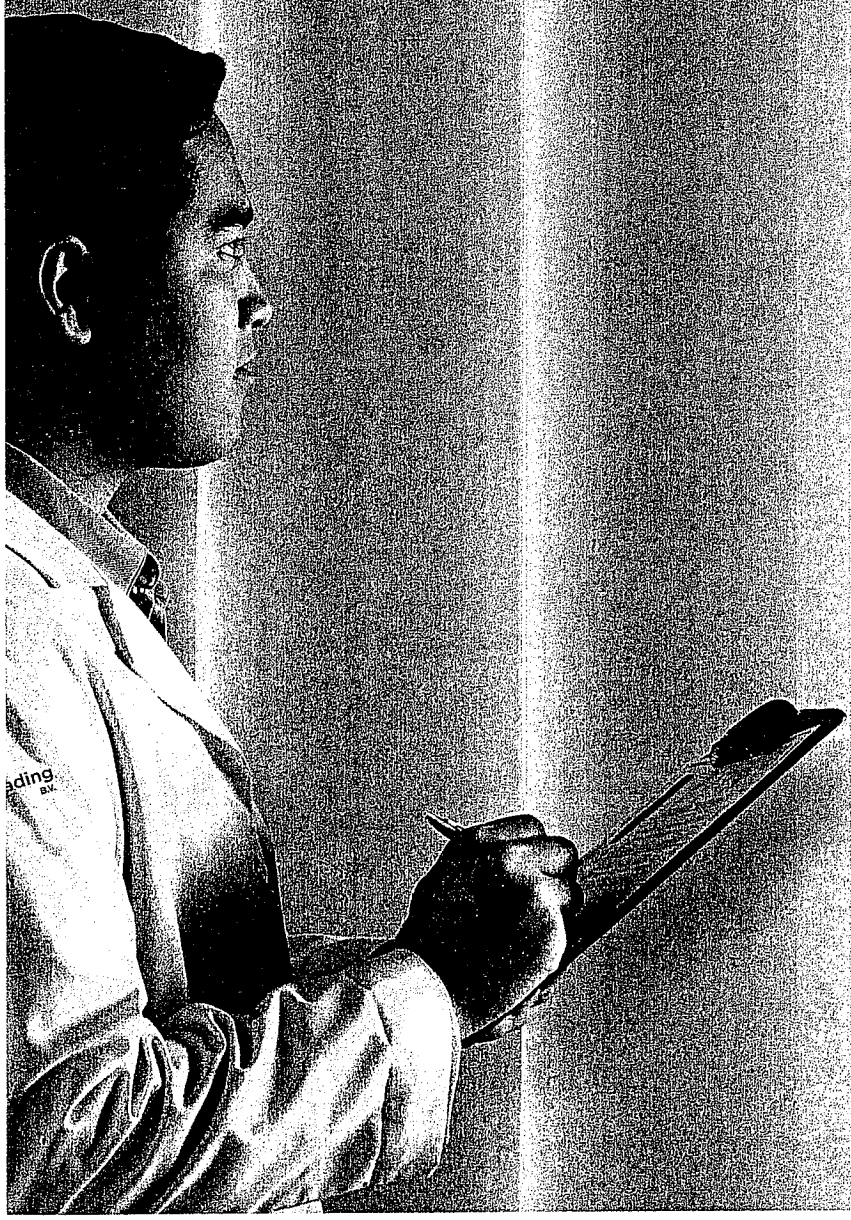

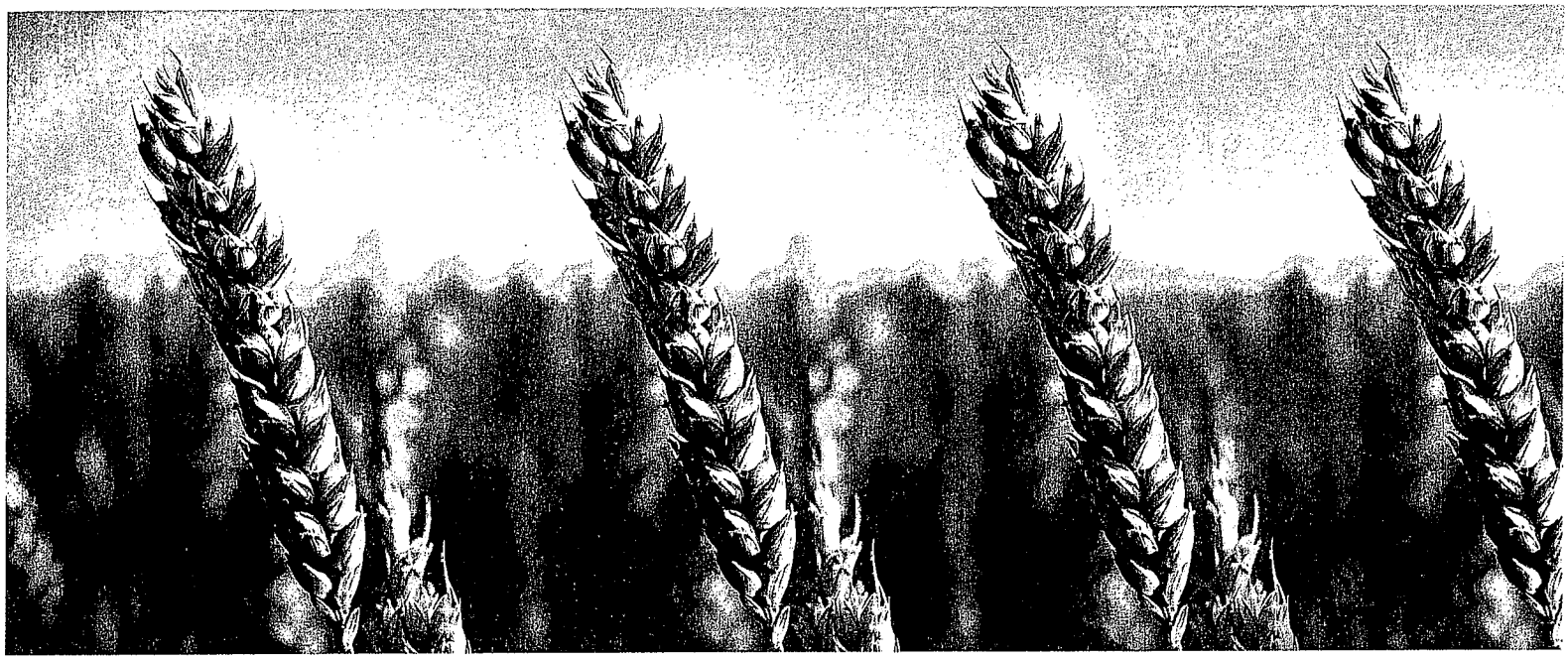

GREENDIESEL TRADING S.A.

COMPANY PROFILE

Marc Van Driessche
Trading Manager
- Greendiesel Trading S.A.
- Greendiesel Trading B.V.
- Trading & Business Development

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greendiesel trading S.A.

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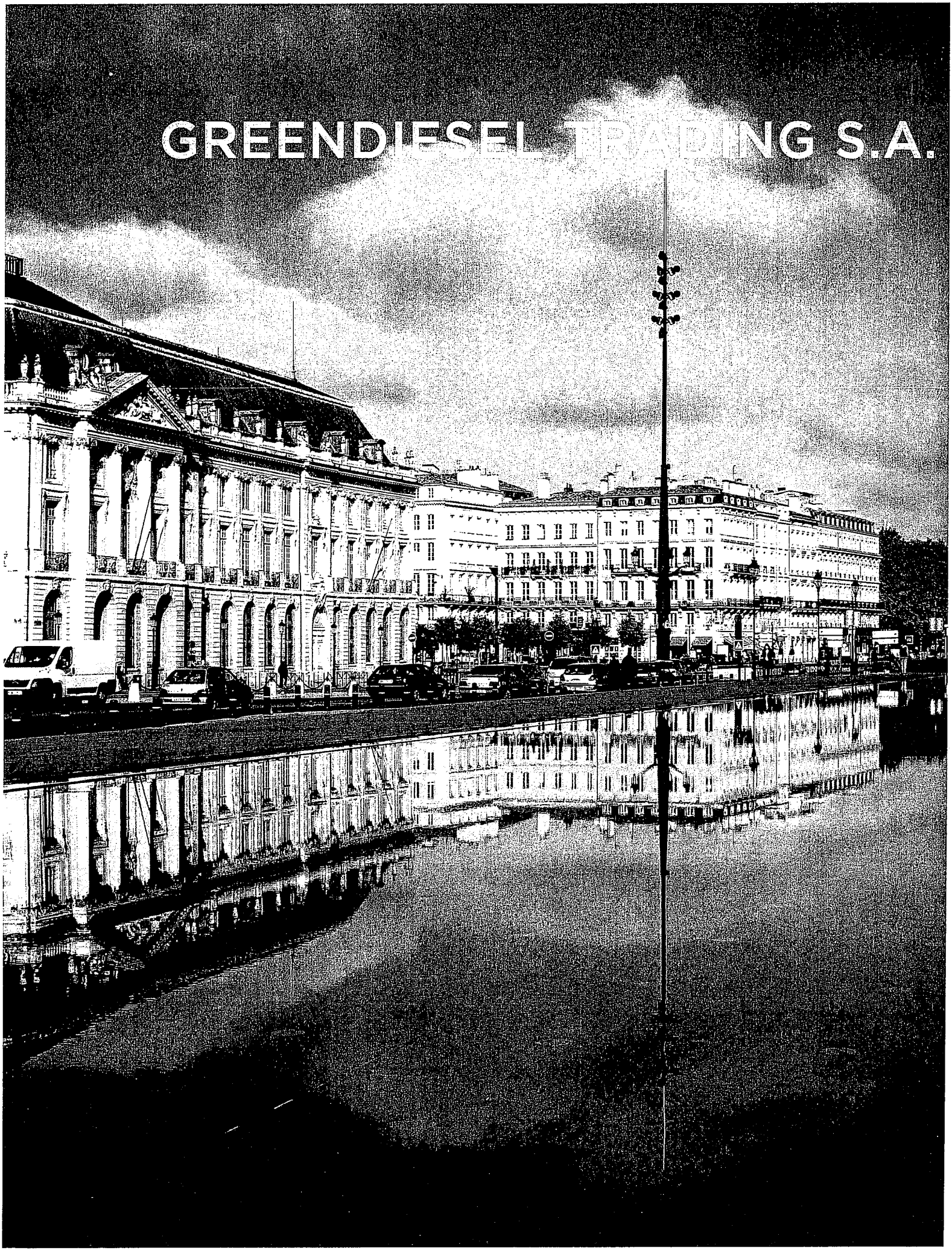

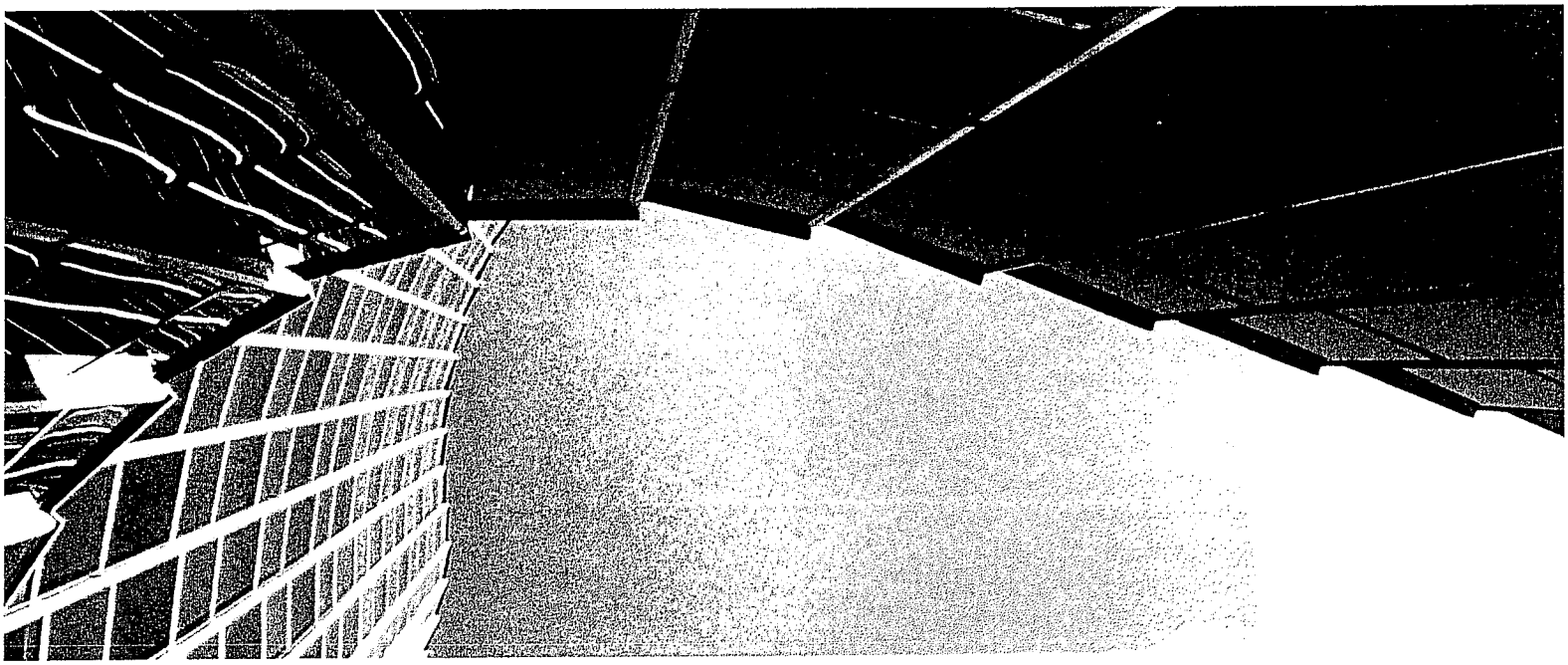

PETRO CONSTRUCTORS PVT. LTD.

COMPANY PROFILE

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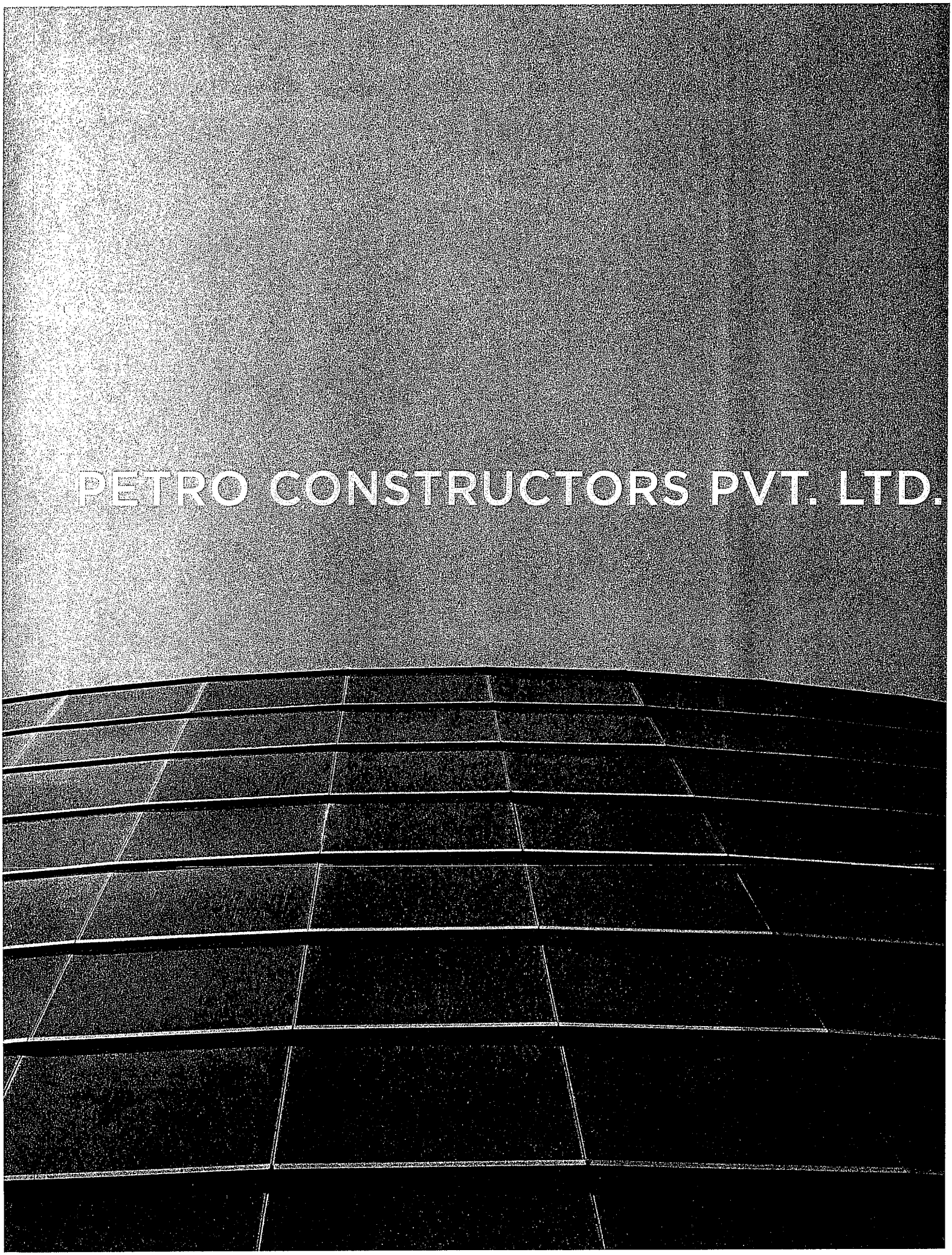
Petro Constructors Pvt. Ltd. is headquartered in Chennai, India. We are a Global provider of design and engineering services. Our expertise includes Biodiesel, Renewable Fuel, Ethyl Tertiary Butyl Ether, Solvent Extraction, Ethanol, Nutraceutical and Oleo-Chemical facilities.

In our firm we have over 50 engineers with international expertise in Chemical Process and Design, Mechanical Engineering, Instrumentation & Electrical Engineering and Procurement, managed by Director of Engineering, Dr. Huu-Nghia "Kiki" Vuong.

We are ISO 9001:2008 certified for "Design, Detailed Engineering and Procurement for Oil & Gas Projects." We design and engineer according to ASME, API and UL standards for the international market.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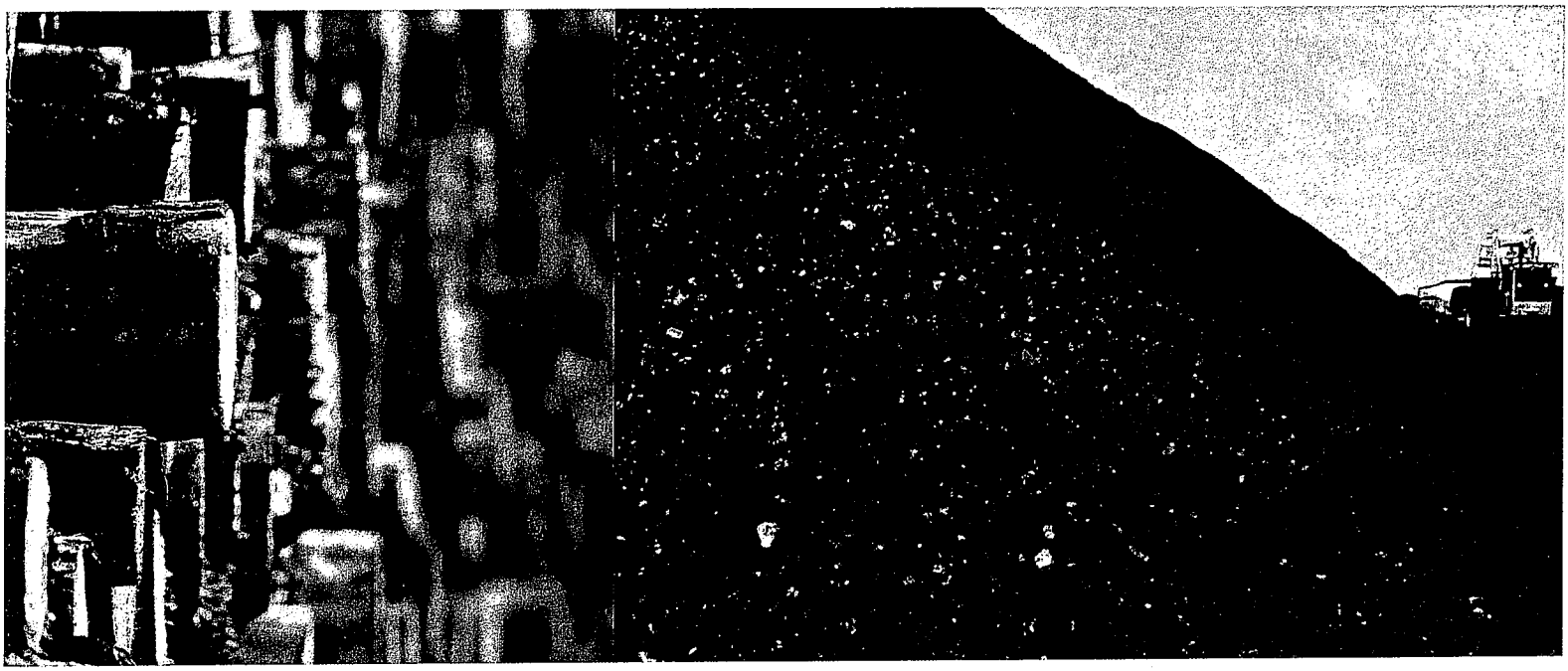

STERLING ENERGY LLC.

COMPANY PROFILE

Bill Harrington
Project Director
- Power Generation
- Power Project & Business Development

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Sterling Energy LLC. is headquartered in Plainfield, Illinois, USA. It is a company that owns strategic licensing agreements to implement clean coal technologies in existing solid fueled generation facilities. We maintain exclusive agreements for retrofitting existing coal fired units in order to enable them to take advantage of fuel flexibility and meet new more stringent environmental standards. These processes dramatically reduce fuel cost, the largest single overhead component in generating steam or electricity.

Sterling Energy's opportunity in the open market is to retrofit stoker coal fired units. There are in excess of 1,000 of these units still in operation in the contiguous United States. Our long-term strategy is to pursue an international market with our technological advances. Not only that, but we have answers for solid fueled utility boilers where the installation of conventional pollution control equipment is required to meet new emission standards. We also offer fuel treating which enhances the value of the current fuel, and options to create fuel flexibility, by introducing co-firing of cleaner and cheaper fuels. In addition to the technology led solutions to meet new standards in existing plants, Sterling Energy specializes in managing the complexity of the introduction of these technology solutions. Our staff has many years of experience in managing complex power generation projects from permitting through start up, commissioning, and operation.

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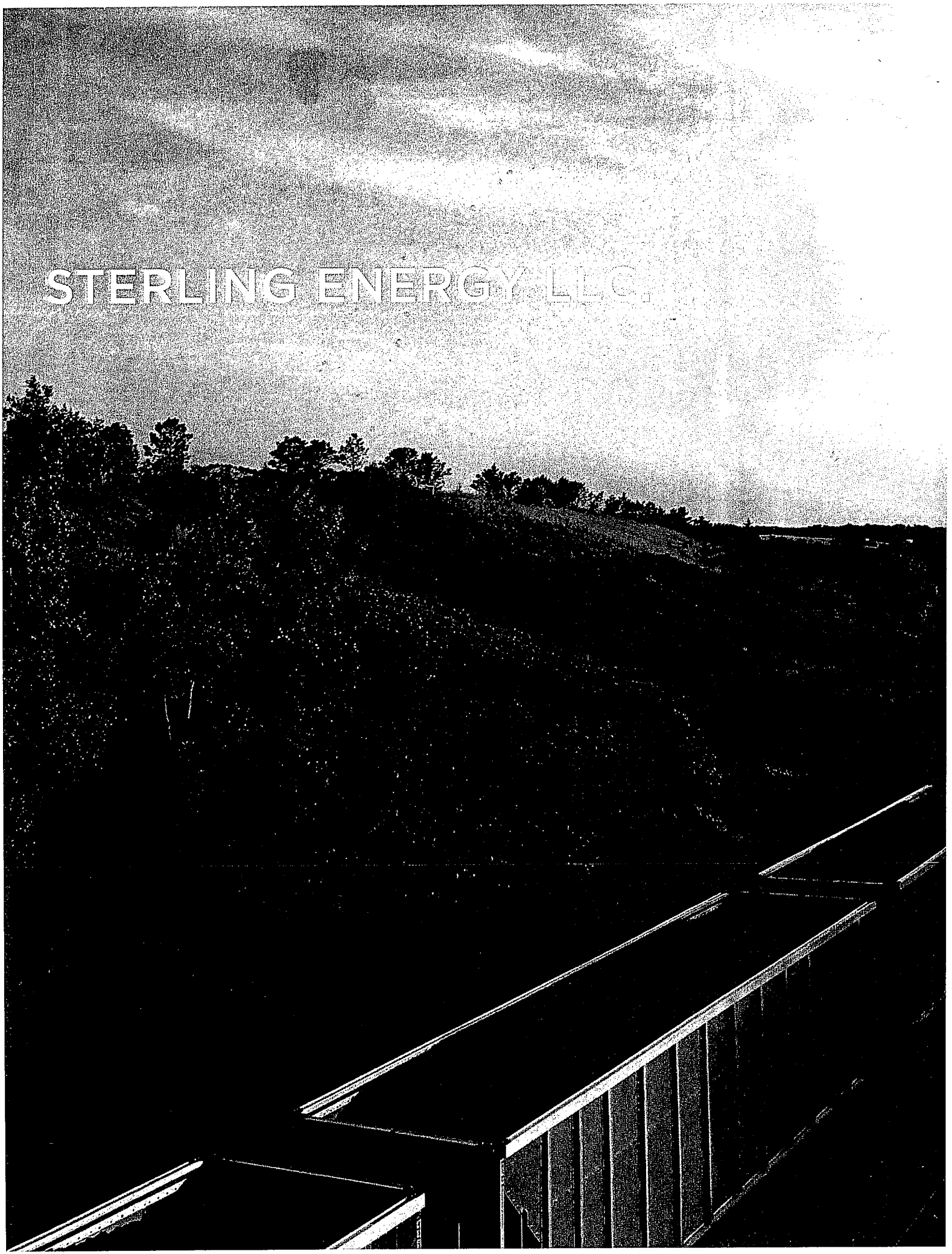
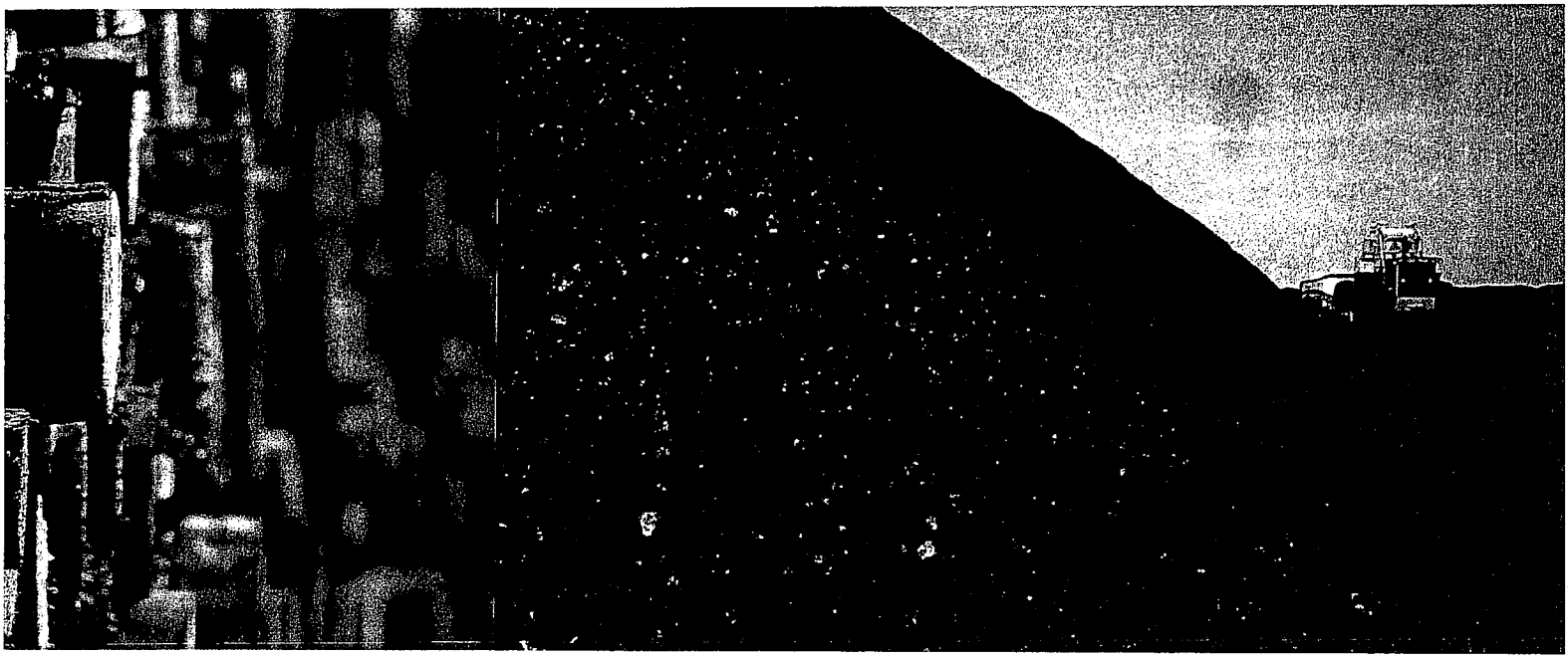
LLC.


STERLING ENERGY LLC



STERLING ENERGY LLC.

COMPANY PROFILE

arrington
Director
r Generation
r Project & Business Development

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sterlingenergy
LLC.

fuelstreamers INC.

Modular Design Power Plants

Standard Fossil Fuel Plant

Sized from 10,000 kilowatts

Producing

Electricity

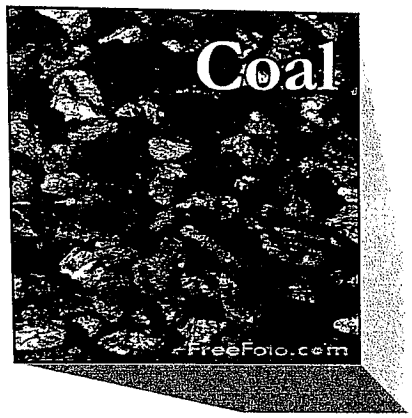
Industrial Steam for Process

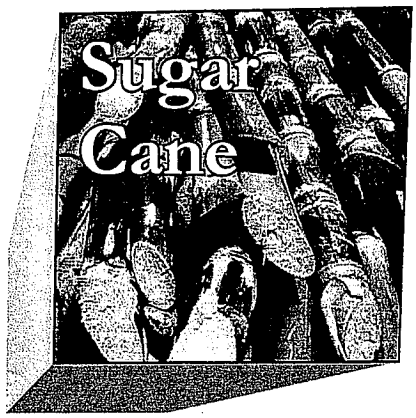
Chilled Water for Cooling

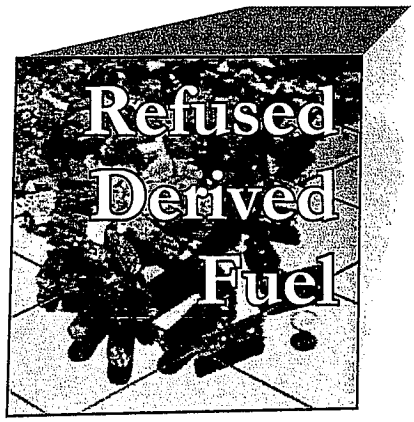
Steam for Water Purification

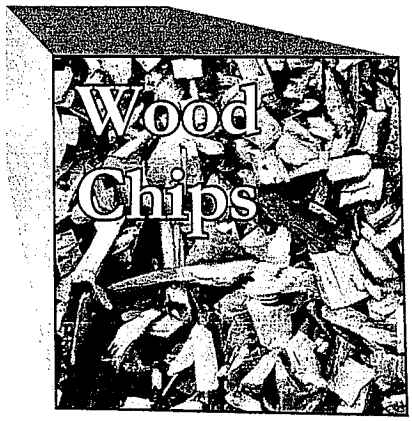
Reduces Volume of Waste Fuels

Fired with Locally Available Fossil Fuels









STERLING ENERGY, LLC
A WHOLLY OWNED SUBSIDIARY
OF FUEL STREAMERS, INC.

Contact: Bill Harrington
3050 Post Oak Blvd. Suite 500
Houston, TX 77056
713-579-7871-Phone
888-835-6364-Fax
219-712-4764-Cellular
Website: www.fuelstreamers.com

Sterling Energy has developed a standardized power plant, whose major pieces can be fabricated and assembled in a shop environment. The modular design allows expedited shipments by barge to any port in the world. Site installation is simplified and shortened, thus enhancing quality and reducing labor costs.

sterlingenergy LLC.

Modular Design Power Plants

Features and Benefits

Features and benefits of a standardized plant design include the following:

- Modular design reduces engineering and fabrication schedules and costs.
- Large components can be shop assembled, tested and shipped directly to the site; thus insuring quality and mitigating the need for skilled field labor.
- Modular design makes for fast, cost effective implementation at the site.
- Faster projects make for reduced construction costs.
- Defined piping allows for larger sections to be shop assembled.
- Standardized electrical components have been field-tested and are readily available.
- Plant's output can be modified to accommodate the use of varying percentages of biomass; i.e., trash, wood, grasses, etc., as a cost-effective, alternative fuel source.

Revenue Sources

The standard plant can be designed to create a revenue source in several ways:

- Electricity
- Steam supplied to an industrial application
- Reduction and disposal of municipal solid waste (MSW) material as an alternative to land filling
- Create chilled water for cooling
- Steam for water purification

General Requirements

Those considering the location of a modular power plant should consider the following issues:

- Adequate source of water.
- Available ash disposal area.
- Project financing package must be in place.
- Site geotechnical conditions.
- Plant site will occupy approximately 2.5 metric acres.
- Soil conditions will dictate the foundation work required.
- Roads should be capable of handling 45 metric ton loads.
- Railroad access will depend on size of plant and fuel delivery method.
- Adequate transmission line capacity to distribute the electricity being generated.
- Building and environmental permits for air emissions and water consumption.
- General Contractor must provide the balance of plant materials, supervision and labor.

Modular Plant Cost

A number of factors can affect the delivered cost of the Modular Standard Plant. Factors include fuel type, site conditions, air emission levels, amount of electricity and process steam required, building design, auxiliary systems required by the Owner. Generally the cost to provide a Modular Plant to a US port is:

$2500-3500 USD per kWh installed

fuelstreamers INC.

Locally Available Fossil Fuels

Coal

- Bituminous
- Sub-bituminous
- Lignite

Biomass

- Wood
- Bagasse

Municipal Solid Waste

Categories of MSW include the following:

- Biodegradable waste: food and kitchen waste, green waste, paper products, wood from demolition, tires
- Recyclable material: paper, glass, bottles, cans, metals, plastics
- Inert waste: construction and demolition waste, dirt, rocks, debris
- Composite wastes: waste clothing, waste plastic products
- Domestic hazardous waste & toxic waste: medications, paints, chemicals, light bulbs, fluorescent tubes, spray cans, fertilizer and pesticide containers, batteries

Our system is designed so that the total heat input (fuel consumed) can be derived from a ***combination*** of coal, biomass and MSW materials. The MSW can be composed of biodegradable material that has been sorted to remove recyclables, inert, composite and domestic hazardous waste. Items that have a high heating or BTU value, such as demolition wood-waste, shredded tires, and some types of garbage are excellent fuel sources.

Weight of Fuels

Typical amount of fuel needed to produce 10,000 kWh of electricity.
Values shown are needed if the system were to burn 100% of the fuel indicated

FUEL TYPE	AMOUNT OF FUEL		
	Btu/lb (average value)	Lbs/Hour	Metric Tons/Day
Coal	10,000	9753	106
Biomass			
• Wood	4000	46832	511
• Bagasse	3880	41760	456
Municipal Solid			
• Mass	4500	33792	369
• Refuse Derived	5000	27696	302

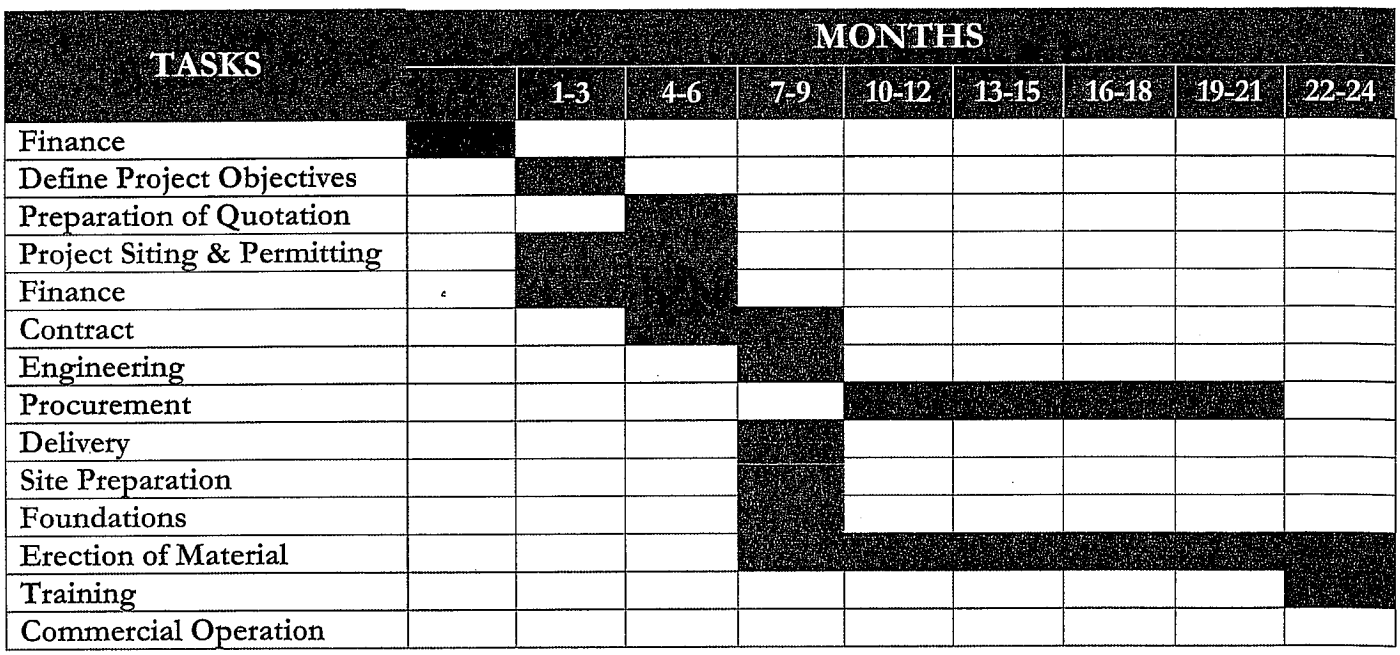
fuelstreamers INC.

Components

Basic equipment supplied with the Modular Design Power Plant includes:

BASIC EQUIPMENT		
Fuel Handling	Boiler Water Treatment	Transformer & Switchgear
Boiler Fuel Feed System	Boiler Water Storage	Design & Engineering
Boiler	Turbine & Generator	Feedwater Heater
Mechanical Dust Collector	Piping & Valves	Condenser or Cooling Tower
Fans & Ducts	Wiring	Air Heater
Stack	Instruments	Deaerator
Combustion Control	Black Start Generator	Structural Steel
OPTIONAL EQUIPMENT		
DeNOx	**Particulate Removal**	**SO_2 Removal**
Selective Catalytic Reactor	Electrostatic Precipitator	Dry Scrubber (desulfurization)
Selective Non-Catalytic Reactor	Baghouse	

Project Schedules



NB # 6
9/14/11

Troutman Sanders Payments to Date

Date	Check #	Amount
08/12/2009	79894	1,080.00
05/13/2010	82648	1,056.50
12/03/2010	85120	85,030.00
12/16/2010	85199	15,394.50
04/06/2011	86121	31,318.50
05/05/2011	86440	22,288.50
06/02/2011	86718	7,195.50
07/13/2011	87174	30,982.00
08/04/2011	87540	6,709.00
Total		**201,054.50**