



# ADVANCED REFINING CONCEPTS • CORPORATE FACT SHEET



## Advanced Refining Concepts

### Headquarters

6195 Ridgeview Court, Suite F  
Reno, Nevada  
89519-6341  
Tel: 775.826.2727

### European office

Singerstrasse 16/6  
1010 Vienna, Austria  
Tel: +43 (0) 151 487

### Principals

Dr. Rudolf Gunnerman  
Peter Gunnerman  
Gerhard Seidenkranz

### Founded

2008

### Media Contact

Robert Jaffe/Ron Neal  
PondelWilkinson Inc.  
1880 Century Park E.  
Suite 350  
Los Angeles, CA 90067  
Email: rjaffe@pondel.com  
Email: meal@pondel.com  
Phone: 310-279-5980

## COMPANY OVERVIEW

**Advanced Refining Concepts (ARC)**, a privately held company, is a new-generation energy company developing and manufacturing fuels that produce cleaner emissions and more efficient combustion. ARC's products are manufactured using the company's proprietary *ClearRefining™* process, a revolutionary method for liquefying natural gas, or other biogases, to form clean liquid motor and industrial fuels.

Replacing traditional petroleum-based fuels with the company's domestically produced fuel products reduces greenhouse gas emissions and reliance on imported oil. The company's family of products, *GDiesel™*, *GPetrol™* and *GJet™*, are compatible with existing fuel storage and dispensing equipment and require no modifications to vehicles or power generating equipment.

## THE PROCESS

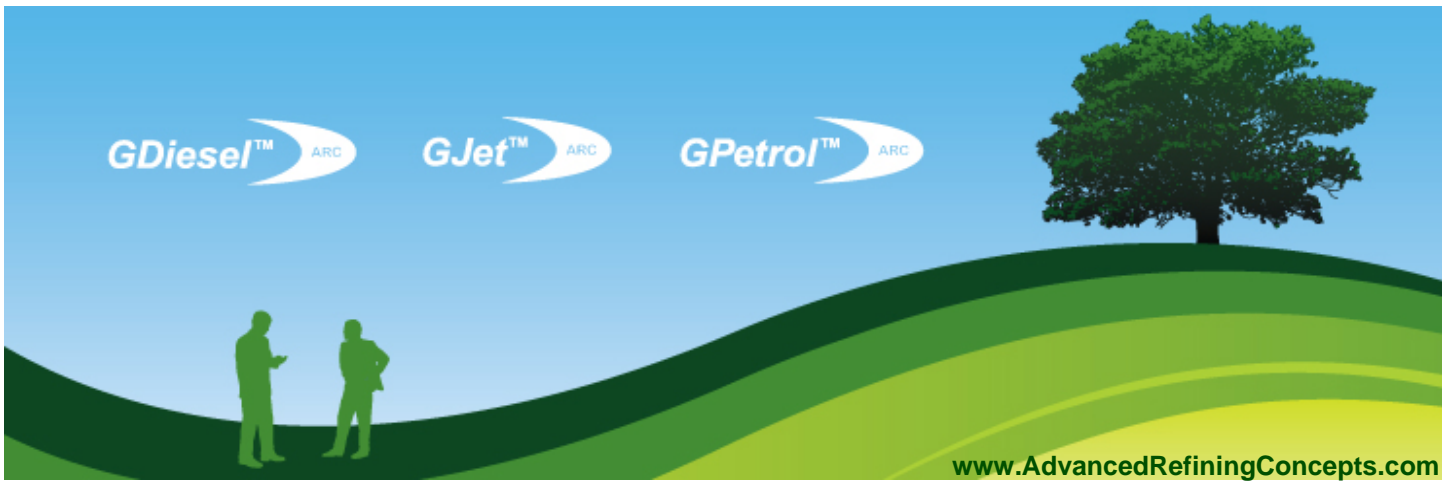
*ClearRefining™*, the world's first pollution-free refining system, is a proprietary gas liquefaction process that allows for a cost effective conversion of natural gas and other biogases into ultra clean liquid motor and industrial fuels. Developed by Advanced Refining Concepts, *ClearRefining™* is a safe and efficient low temperature, low pressure catalytic process.

Traditional gas-liquefaction methods require large refineries and major amounts of capital. In contrast, *ClearRefining™* has low capital requirements and beneficial operating conditions.



## ClearRefining™

- ▶ Capable of liquefying a wide variety of natural gas, biogases, and other gases.
- ▶ Pollution free, using closed-loop system.
- ▶ Natural gas feedstock is abundant domestic resource, reducing the need for imported fuel.



## MANAGEMENT



**Dr. Rudolf Gunnerman and Peter Gunnerman**, the principals of Advanced Refining Concepts, are pioneers in the energy industry. The Gunnerman family is responsible for bringing five clean energy technologies to world markets over the past four decades. Dr. Gunnerman, who has been awarded three honorary doctoral degrees, holds multiple patents both in the United States and internationally based on his inventions. Peter Gunnerman has spent the bulk of his career leading successful private and public companies based on Gunnerman family inventions.

**Gerhard Seidenkranz** is a principal in an international engineering company located in Germany that specializes in petrochemical engineering.

Along with the principals, Advanced Refining Concepts has a dedicated team of energy experts and industry professionals who manage the company's daily operations.

## THE PRODUCTS

The clean liquid fuel products manufactured through the *ClearRefining™* process – *GDiesel™*, *GPetrol™* and *GJet™* – are revolutionary in scope, containing extremely low sulfur and mineral contaminants typically found in crude oil based fuel. The lack of contaminants produces clean emissions and more efficient combustion. Product applications for ARC's fuel products include:

- ▶ Fleet vehicles
- ▶ Diesel trucks, autos and locomotives
- ▶ Power generating equipment
- ▶ Military vehicles/aircraft



ARC's inaugural product, *GDiesel™*, surpasses U.S. standards for high-quality No. 1 Diesel. Its cold weather capability is groundbreaking, with a cloud point of minus 53 degrees Celsius without requiring expensive or environmentally harmful additives. Low manufacturing and raw material costs allow *GDiesel™* to be offered at No. 2 diesel pricing. ARC's other two products, *GPetrol™* and *GJet™*, are in the late stages of development.

## THE ENVIRONMENTAL EDGE

The primary goal of Advanced Refining Concepts is to meet the world's energy demands while maintaining its commitment and passion toward environmental management. The major environmental advantage of ARC's technology is its capacity to counter the effects of methane, one of the most destructive greenhouse gas emissions. ARC's ability to use methane found in natural gas and other biogases in the production of its clean fuel products can significantly reduce the amount of air emissions, especially in applications where methane is vented or flared into the atmosphere.



The company's small, modular *ClearRefining™* units are suited to process methane associated with crude oil drilling, waste water treatment plants, chemical and industrial plants and coal mines. In concert with the clean characteristics of its fuel products, ARC's ability to process vented or flared methane makes its products one of the world's cleanest hydrocarbon fuels.