



FOR IMMEDIATE RELEASE

ARA and Blue Sun Performing on Navy Certification Contract for 100% Drop-in Fuels

“We are proud to partner with the Navy to test and certify our 100% drop-in fuels, providing renewable fuels that can contribute to true energy security for our armed forces,” said Rob Sues, CEO of ARA.

Panama City, FL, April 2015 – Applied Research Associates, Inc. (ARA) and Blue Sun Advanced Fuels are performing on a Defense Logistics Agency Energy (DLA Energy) contract that was awarded for production of 100% drop-in renewable jet and diesel fuel utilizing ARA’s and Chevron Lummus Global’s (CLG) Biofuels ISOCONVERSION technology. The first contract fuel deliveries were made in January and February of 2015; the remainder of the fuel will be delivered in 2015 and 2016 to support certification and testing of renewable fuels for U.S. Navy ships and aircraft.

The contract calls for production of up to 210,000 gallons of CHCD-76 and CHCJ-5. CHCD-76 is a catalytic hydrothermal conversion diesel fuel that meets the Navy’s F-76 Naval Distillate Fuel specs, known commercially as ReadiDiesel®. CHCJ-5 denotes a catalytic hydrothermal conversion jet fuel that meets the Navy’s JP-5 jet fuel spec, known commercially as ReadiJet®.

Blue Sun Advanced Fuels, a licensee of the Biofuels ISOCONVERSION technology, is converting the renewable oils to crude oil in their 100 barrel-per-day (4,200 gallon-per-day) demonstration-scale Biofuels ISOCONVERSION facility in St. Joseph, Missouri. The hydrotreating and fractionation operations are being conducted at U.S. Gulf Coast facilities.

The U.S. Navy will test the fuels neat with the goal of MILSPEC certification of both diesel and jet fuels as 100% drop-in fuels in the 2017 timeframe. Among the benefits of fully fungible fuels such as these are:

- 100% renewable and sustainable and emissions reduced by over 50%
- Fully fungible with petroleum diesel and jet engines and can be used neat or blended in any proportion – no requirement for petroleum fuels for blending
- Requires no changes to fuel storage and transportation infrastructure or vehicle technology – fuels can be intermixed during distribution and storage without concerns relative to quality or specifications
- Can be stored over long periods of time with no deterioration in quality
- Excellent cold-flow properties – suitable for cold weather conditions

To continue to prove the feedstock agnostic nature of the technology, ARA and Blue Sun will utilize several different fat, oil, and grease feedstocks in the production of fuels, including Resonance™, an industrial oil feedstock from Agrisoma Biosciences.

In October 2012, ReadiJet, made from Agrisoma's Resonance crop, was flown in a Canadian National Research Council Falcon 20 jet, becoming the first 100% drop-in jet fuel flight with a fuel that meets petroleum specs without blending.

"We are a step closer to our goal of commercial scale production of 100% drop-in diesel and jet fuel from industrial and waste oils at prices competitive with their petroleum counterparts," said Chuck Red, Vice President of Fuels Development at ARA.

The Biofuels ISOCONVERSION process seamlessly processes renewable feedstocks such as plant oils, tallow, and waste vegetable oil into 100% drop-in diesel and jet fuels, which meet petroleum specs without blending, as well as naphtha that can be used as a gasoline blend stock and consists of:

- ARA's Catalytic Hydrothermolysis (CH) process, which mimics nature's way of converting biomass to petroleum crude. While nature's processes take millennia to produce petroleum crude, it takes less than a minute for the CH process to turn plant oils into a high quality crude oil intermediate. A U.S. patent was granted to ARA in 2010 on the CH process.
- CLG's ISOCONVERSION™ Catalysts which efficiently upgrade the crude oil intermediate produced by the CH reactor into on-specification, finished fuels. The final products are all fungible and nearly identical to petroleum-derived fuels. ReadiJet and ReadiDiesel can be tailored to meet all commercial and military jet fuel specifications.

Media Contacts:

ARA, Chuck Red, cred@ara.com, 850-914-3188

Blue Sun, Steve Bond, stevebond@gobluesun.com, 303-865-7700

CLG, David Wadsworth, DWKC@chevron.com, 973-893-3840

About ARA

ARA's alternative fuel effort began in 2006 in response to a U.S. military requirement for technologies that can convert renewable oils to jet fuel. To answer this challenge, ARA engineers conceived an idea of using high temperature water to create biocrude. A U.S. patent on the CH technology was granted to ARA in 2010. ARA's ReadiJet and ReadiDiesel fuels meet all petroleum specifications without blending. For more information about their fuel initiative, visit: www.ara.com/fuels. For more information about ARA's diverse and innovative capabilities, please visit www.ara.com.

About Chevron Lummus Global (CLG)

CLG licenses refining and hydroprocessing technologies and catalyst systems worldwide for production of clean fuels and high-quality lubricant base oils. CLG is a 50-50 joint venture between Chevron Products Company, a wholly owned subsidiary of Chevron Corporation, and CB&I Technology Ventures, Inc. CLG's research and development staff is continuously seeking advancements in catalyst and technology that will improve operating economics. CLG is the leading Process Technology Licensor for Alternate Sources of Fuels including: Oil Sands Bitumen, Shale Oil, Biofuels, and Extra Heavy Oils. For more information about Chevron Lummus Global please visit:

http://www.chevron.com/products/sitelets/refiningtechnology/about_che_tech.aspx.

Some of America's Best Fighter Jets Soar Without Oil

<http://www.cbsnews.com/news/some-of-americas-best-fighter-jets-soar-without-oil/>

No Petroleum Required - World's First: Navy Flies EA-18G Growler Fueled by ARA's 100% Renewable Jet Fuel

<https://www.ara.com/news/no-petroleum-required-world%E2%80%99s-first-navy-flies-ea-18g-growler-fueled-ara%E2%80%99s-100-renewable-jet>

About Blue Sun

Blue Sun has been a leader in the alternative fuels industry since 2001. Blue Sun is a technology commercialization company specializing in commercializing research breakthroughs in the field of transportation fuels. The current focus of Blue Sun is in the commercialization of advanced technologies to build near- and long-term competitive advantage, with a target of producing low-cost and consistently high-quality fuel from non-food feedstocks. Blue Sun's ultimate goal is to reduce production costs to allow commercial production without government support. Current projects in this area include renewable diesel technology development, military bio-jet fuels, biodiesel technology upgrades at the Blue Sun St. Joseph Refinery, and the acquisition of first-generation biodiesel facilities to upgrade using advanced Blue Sun technology. For more information, please visit www.gobluesun.com.