





MEMORANDUM OF UNDERSTANDING

BETWEEN

THE DEPARTMENT OF THE NAVY

AND

THE DEPARTMENT OF ENERGY

AND

THE DEPARTMENT OF AGRICULTURE

On 30 March 2011, President Barack Obama directed the Parties to work with private industry to create advanced drop-in biofuels that will power both the Department of Defense and private sector transportation throughout America.

This Memorandum of Understanding (MOU) by and between the Department of the Navy (DON), Department of Energy (DOE), and the Department of Agriculture (USDA), hereafter referred to as the Parties, is entered into to initiate a cooperative effort by the Parties to assist the development and support of a sustainable commercial biofuels industry and to foster mutual cooperation of the parties to achieve the goals and objectives further described herein.

I. Background

A robust advanced drop-in biofuels market is an essential element of our national energy security. Energy security for the Nation requires unrestricted, uninterrupted access to affordable energy sources to power our economy and our military. Traditional fossil-fuel based petroleum is derived from crude oil that has increasingly challenging market and supply constraints. Chief among these is limited, unevenly distributed, and concentrated global sources of supply. America's growing dependence on foreign sources of crude oil undermines foreign policy objectives and comes at an ever increasing impact to the Nation's trade imbalance. In recent

years, the cost of imported oil has exceeded \$300 billion per year. Advanced biomass-derived transportation fuels that use a domestic, renewable feedstock provide a secure alternative that reduces the risks associated with petroleum dependence.

Enhanced reliability of fuel supplies through diversification to advanced drop-in biofuels is also essential to sustain the U.S. military's mission capabilities, which are at risk due to potential disruptions of crude oil supplies. Accordingly, the DON has adopted a goal of, by 2020, replacing one-half of conventional petroleum-based fuel use with domestically sustainable fuel alternatives. Only a handful of production facilities for renewable jet fuel and diesel will operate in the foreseeable future. Current processes for producing advanced drop-in biofuels are expensive, and the resulting high cost of the end product continues to limit demand. Military and civilian end users of fuel have clear strategic incentives to adopt renewable drop-in fuels, but adoption is only possible when those fuels become cost-competitive.

Given the current economic environment, significant start-up risks, and competitive barriers posed by the firmly established crude oil markets, industry will not assume all of the uncertainty and risk associated with providing a commercially viable production capability for advanced drop-in biofuels. Therefore, it is necessary that the Federal Government cooperates with industry to create a strong demand signal and to make targeted investments to achieve the necessary production capacity required for a robust domestic advanced drop-in biofuels industry. Without these efforts, the Parties believe adequate production capability would not otherwise be established in a timely manner.

The objective of the initiative described herein is the construction or retrofit of multiple domestic commercial or pre-commercial scale advanced drop-in biofuel plants and refineries with the following characteristics:

- Capability to produce ready drop-in replacement advanced biofuels meeting military specifications at a price competitive with petroleum;
- Geographically diverse locations for ready market access; and
- No significant impact on the supply of agricultural commodities for the production of food.

IL Intent of Financial Participation

Under this MOU, the Parties will endeavor to fund this initiative at an aggregate of \$510 million over 3 years, with that aggregate amount divided equally among the Parties. Although the timelines and means through which the Parties will contribute to the initiative are subject to change, the following chart outlines the Parties' funding objectives for contributions:

	DPA (\$M)	CCC (\$M)	Total (\$M)
DOE	\$170		\$170
USDA		\$170	\$170
DON	\$170		\$170
Total	\$340	\$170	\$510

- A. The above funding objectives are subject to the availability of funds and subject to each Party's right to terminate this MOU as set forth below in section (X). No provision of this MOU shall be construed to require provision of resources in violation of the Anti-Deficiency Act, 31 U.S.C. 1341, *et seq.*, or any other applicable statute or regulation.
- B. The objective is to transfer funds in accordance with:
 - The Defense Production Act (DPA), (50 U.S.C. App. 2061 et seq);
 - The Commodity Credit Corporation (CCC) Charter Act (15 U.S.C 714 et seq);
 - The Economy Act (31 USC 1535); and/or
 - Other appropriate authority.
- C. Each Party agrees to assume liability for its own risks associated with activities undertaken in this MOU. Nothing in this MOU constitutes a guarantee by any Party of any obligation assumed by any other Party or of an agreement by any Party to indemnify another Party for any liability arising out of activities undertaken in this MOU.
- D. The Parties' current vision is for a coordinated/simultaneous release of a solicitation offering capital investment and production support funding that could be executed under the DPA, 50 U.S.C. App. 2061 *et seq*. Title III authority and/or the CCC Charter Act (15 U.S.C. 714(c)).

III. Interagency Coordination

An Executive Steering Group (ESG) will be established by and among the Parties to execute this MOU.

- A. The ESG will provide oversight and guidance to the initiative. ESG representatives will coordinate decisions with leadership of the respective Parties, including application of funding under DPA Title III, CCC, or other appropriate authority for the advanced drop-in biofuel initiative efforts.
- B. The first order of business of the ESG will be to articulate its structure and duties and develop a Plan of Actions and Milestones covering the timeframe through contract award(s).
- C. An Integrated Product Team (IPT) comprised of the Parties, Office of Secretary of Defense (OSD), Pacific Command (PACOM), Defense Advanced Research Projects Agency (DARPA), and other organizations as designated by the ESG members will be established by the ESG to work in coordination with the DPA Title III program in accordance with Section 711 of the DPA (50 U.S.C. App. § 2093) with the goal of development and release of a solicitation to industry by the end of calendar year 2011.

D. The ESG is authorized to establish other IPTs as appropriate.

IV. Term

This MOU shall be effective when signed by the authorized representatives of all Parties. Unless terminated by any Party as provided in section X, it shall remain in effect until the completion of all obligations of the Parties hereto.

V. Authority and applicable law

A. The Department of the Navy enters into this MOU pursuant to 10 U.S.C. section 5013(b)(4).

The Department of Energy enters into this Agreement under the authority of section 646 of the Department of Energy Organization Act (Pub. L. 95-91, as amended; 42 U.S.C. § 7256).

The Department of Agriculture enters into this Agreement under the authority of section 5(e) of the CCC Charter Act, 15 U.S.C 714c(e).

- B. Nothing in this MOU alters the statutory authorities of the Parties.
- C. This Agreement in no way restricts any of the Parties from participating in any activity with other public or private agencies, organizations, or individuals.

VI. Use and Release of Technical Data, Protection and Security of Information

- A. The Parties intend that the information and data exchanged in furtherance of the activities under this MOU will be exchanged without Federal-use restrictions unless required by law or regulations or otherwise agreed to by the Parties for specifically-identified information or data.
- B. The Parties agree that they will take appropriate measures to protect proprietary, privileged, classified, or otherwise confidential information that may come into their possession as a result of this MOU.
- C. Release of information associated with joint activities carried out under this MOU will appropriately recognize each Party and will be coordinated between the respective Parties in advance of the release.

VIL Intellectual property

Rights in inventions made as a consequence of, or in direct relation to, the performance of activities under this MOU will be administered in accordance with the Parties' respective governing laws and policies. In the event an invention is made jointly by employees of the Parties or an employee of a Party's contractor, the Parties will consult and agree as to future actions toward establishment of appropriate intellectual property protection for the invention.

VIII. Dispute resolution

The Parties may consult on any matter arising out of this MOU. An issue concerning the interpretation or implementation of the terms of this MOU shall first be referred to the points of contact for the Parties. If they are unable to come to agreement on any issue, the dispute will be referred to the MOU signatories or their designated representatives for resolution.

IX **Modifications**

This MOU may be modified upon the mutual written consent of all Parties. Modifications must be signed by the original signatories to the MOU, or their designees or successors. No oral statement by any person shall be interpreted as modifying or otherwise affecting the terms of this MOU.

This Agreement is strictly for internal management purposes for each of the Parties. It is not legally enforceable and shall not be construed to create any legal obligation on the part of the Parties. This Agreement shall not be construed to provide a private right or cause of action for or by any person or entity.

All agreements herein are subject to, and will be carried out in compliance with, all applicable laws, regulations, and other legal requirements.

X. **Termination**

Any Party may terminate this MOU at any time, with or without cause and without incurring any liability or obligation to the terminated Parties, by giving the other Parties at least thirty (30) days prior written notice of termination.

In consideration of the foregoing, the undersigned hereby execute this MOU.

XI. **Approvals**

The following individuals have authority to sign this Agreement on behalf of their respective agencies:

Ray Mabus

Secretary of the Navy

Steven Chu

Date: 6/28/1/

Jun Ohn-

Date: June 22, 2011

Secretary of Energy

Thomas L. Vilsack

Secretary of Agriculture

Date: 0 2011