



April 15, 2015

The Honorable John Thune
Co-Chair, Business Income Tax Working Group
511 Dirksen Senate Office Building
Washington, DC 20510

The Honorable Dean Heller
Co-Chair, Community Development &
Infrastructure Working Group
324 Hart Senate Office Building
Washington, DC 20510

The Honorable Ben Cardin
Co-Chair, Business Income Tax Working Group
509 Hart Senate Office Building
Washington, DC 20510

The Honorable Michael Bennet
Co-Chair, Community Development &
Infrastructure Working Group
458 Russell Senate Office Building
Washington, DC 20510

Dear Senators Thune, Heller, Cardin, and Bennet:

Siluria Technologies, Inc. (“Siluria”) is pleased to submit comments to the Senate Finance Committee tax reform working groups on Business Income and Community Development & Infrastructure. We believe that tax reform provides an important opportunity to improve the energy tax system by (1) embracing more technology-neutral, performance-based eligibility criteria and moving away from technology-specific incentives or, alternatively, (2) adding appropriate new technologies to existing tax incentives.

An Introduction to Siluria

Siluria is a fuels and chemicals company based in California that is developing an advanced process to convert natural gas into liquid transportation fuel and various chemicals, including ethylene. Siluria has been operating multiple pilot facilities since early 2012. In addition, earlier this month Siluria announced the successful startup of its demonstration plant located in La Porte, Texas. This facility represents the final scale-up of the company’s process technology and paves the way for the deployment of commercial-scale plants within the next several years. Our company is backed by a syndicate of top tier private equity and venture investors.

Natural Gas and Siluria’s Technology

Siluria’s technology could help America capitalize more fully on its domestic natural gas supply, which has experienced a renaissance in the past decade. Natural gas is less expensive and more widely available around the world than crude oil. It is also inherently cleaner and more environmentally friendly. Despite these advantages, natural gas is not commonly refined into the variety of products produced from crude oil (e.g., fuels, building materials, plastics, and electronics) because methane—the principal component of natural gas—is a very stable molecule. So today, most natural gas is consumed to produce heat. As a result, our current consumption patterns fail to maximize the full economic and environmental potential of natural gas.



Siluria intends to change this picture. Our innovative process uses breakthrough catalysts to chemically transform methane into an ingredient for making liquid fuels, chemicals, and plastics in an efficient, cost-effective, scalable manner.

At the core of Siluria's technology is a unique catalyst that enables a chemical process called the Oxidative Coupling of Methane ("OCM"). This process converts methane into ethylene, the world's most common and versatile chemical intermediate. Siluria then combines these ethylene molecules to produce long-chain hydrocarbons that form liquid fuels such as gasoline, diesel, or jet fuel. The resulting fuel products are chemically indistinguishable from petroleum-derived fuels and are fully compatible with today's existing infrastructure and vehicles. Importantly, Siluria is just one of many companies around the country developing the technology to chemically convert methane into transportation fuels and commodity chemicals.

Widespread use of fuels derived from OCM and other methane-to-products technologies could have significant benefits for the country. First, it would enhance U.S. energy security by helping the country capitalize on its vast domestic resources and reduce America's reliance on foreign oil. Second, the efficiency of Siluria's process, combined with the abundance of low-cost domestic natural gas, could result in lower fuel prices to consumers. Third, the adoption of these technologies could create thousands of new jobs in the natural gas and chemical industries and strengthen the U.S. economy. Fourth, the efficiency of OCM in particular may enable small-scale fuel plants in diverse locations throughout the United States. Fifth, the OCM process and other methane-to-products technologies should allow lower emissions than traditional industry processes. Importantly, this transition would not require the replacement or alteration of our existing energy infrastructure.

The Opportunity of Tax Reform

For the last century, the federal government has used tax policy to effectively support the adoption of energy technologies. Beginning with fossil fuel incentives in the early 1900s and continuing through renewable energy incentives in the 1970s until today, Congress has used the Tax Code to drive the energy industry and develop America's domestic energy supply. Today, the development of new technologies that produce affordable, American-made energy is essential to enhance our energy independence and secure our leading place in energy innovation.

The Tax Code has been an effective tool for developing the energy industry because it can provide the certainty and stability necessary to encourage private capital investment. Additionally, the self-executing nature of the Tax Code depends less on administrative discretion than other types of federal programs. However, the existing system of energy tax incentives relies heavily on technology-specific eligibility criteria that fail to anticipate and include the next generation of energy technologies. This drives private capital away from emerging technologies and towards mature industries that have already reached commercialization.

For example, despite the clear public policy benefits of adopting technologies that convert methane into products, this category of technologies do not qualify for any existing energy tax incentives. This situation is not the result of a conscious decision by Congress to exclude these technologies; rather, it is simply because they have never before been commercialized in this manner. Regardless of the origin of the problem, the result is that the current Tax Code puts innovative methane conversion technologies at a competitive disadvantage to technologies that have existed for years and have reached maturity.



Tax reform provides a significant opportunity to improve the energy tax system. We believe that Congress should use this opportunity to adopt technology-neutral, performance-based eligibility criteria for energy tax incentives. These criteria could focus on whether a particular fuel meets America's energy policy goals. For example, the criteria could determine whether a fuel would be more affordable than conventional fuel, bring us closer to energy independence, or have environmental benefits over conventional fuel.

At the same time, we understand the difficult choices that Congress will make in reforming the Tax Code's various energy incentives, particularly if Congress focuses on developing a truly technology-neutral system. Recognizing the complexity of this task, we believe that Congress should, at a minimum, add appropriate new technologies to the current system of energy tax incentives so that innovative American companies are not at a competitive disadvantage compared to older, more mature energy industries. For example, the Capitalizing on American Methane Act, led by Rep. Glenn Thompson (R-PA) and Rep. John Larson (D-CT), would add methane conversion technologies to two existing energy tax incentives in order to provide greater parity to the Tax Code. We believe this proposal represents sound public policy and is consistent with Congress' efforts to create a fairer and more neutral tax system.

Siluria's technology could play an important role in reshaping America's energy future by helping our country maximize the beneficial impact of its natural gas supply. A transition to fuel based on methane conversion technology from Siluria and other companies could enhance our energy security, create thousands of jobs, and lower fuel prices—all without requiring entirely new industrial infrastructure or vehicles. Siluria commends the Committee for its work in reforming the Tax Code, and we ask that Congress put innovative new technologies like Siluria's OCM process on a level playing field with established technologies.

Thank you for your consideration.

Sincerely,

A handwritten signature in blue ink, appearing to read "David J. Zaziski".

David J. Zaziski, Ph.D.
Director, Government Affairs
Siluria Technologies, Inc.