



ONE WORLD cleanenergy

OWCE North America Build, Own, & Operate (NABOO) Case 2010

Achieving Energy Independence and Regional Job Creation for US Communities with a One World Clean Energy (Patented) Integrated Biorefinery via the Build, Own and Operate Model

Issues

“Energy is the single most important problem facing humanity today not just the U.S., but also worldwide.”
Nobel Laureate Dr. Richard Smalley - [Our Energy Challenge](#)

Brittle Power: Energy Strategy for National Security is a 1982 book by Amory B. Lovins and L. Hunter Lovins, prepared originally as a Pentagon study, and re-released in 2001 following the September 11 attacks. Lovins argues that the United States has for decades been running on energy that is "brittle" (easily shattered by accident or malice) and that this poses a grave and growing threat to national security, life, and liberty.

Electricity

The size, complexity, control structure of the electrical power system make it *inherently* vulnerable to large-scale failures. US Energy Information Administration (EIA) projects rolling brownouts in the US by 2012 due to generation capacity being outpaced by demand and grid instability.

Transportation Fuels

Over the last few decades, we have watched our economy rise and fall along with the price of a barrel of oil. US transportation fuel consumption accounts for over 70 percent of total US oil consumption, and more than 65 percent of that amount is for personal vehicles. (EIA) Today, over 80 percent of world petroleum reserves are state-owned, controlled by countries that have the power to manipulate supply and price with impunity. This fact goes directly to the heart of energy security.

Clean Water

Community water treatment facilities are overtaxed, especially those that combine drain water with sewer water. The rainy season overrun often spills into local tributaries, streams and rivers. Rural North America still uses septic systems as mainstay sewer treatment. This often leads to leakage into the aquifer. The population increase in these communities places pressure to expand water treatment capacity with little to no money allocated. The search continues for cost effective clean water and purification techniques.

Goal: *Energy Independence* means energy abundance and energy self-sufficiency derived from a variety of domestic energy resources. The United States must embrace the concept of energy independence from imported oil, electricity and natural gas. Energy independence can be achieved through the development of alternative transportation fuels and electricity.

From an economic point of view, *Energy Independence* means energy security (supply and price stability). We must explore renewable energy as a community economic development opportunity.

1. **Break Dependence on Imported Oil.** Promote the domestic production and consumption of alternative transportation fuels.
2. **Mitigate the effect of Electric Grid Instability.** Produce electricity generation near demand/consumption.
3. **Reduce Import/Export Imbalance.** Enhance US energy supplies through responsible development of domestic renewable energy.
4. **Achieve Community Sustainability & Supporting Local Farmers.** Community sustainability plans are based upon on low cost energy & economic development. Renewable transportation fuels and distributed electricity that utilizes regional feedstock will create regional jobs, local wealth, and attract business and industry.
5. **Clean Up Water Supplies.** Encourage move from septic to sewer. Increase water treatment capacity to accommodate population increases and septic system removal.

Optimal Municipality Economic Site Profile

50 Mile population: 500,000+

20 Acre Site Zoned Light Industrial – Build to Suit

Infrastructure Availability / Transportation Access

Idle/Marginal Land to grow Fuel Crop (Optional)

A potential site must be able to support the use of 35 million gallons of gray water or 30 million gallons potable water annually. Access to a natural gas pipeline capable of accepting “input” as well as supplying gas is required. The site must be near a high voltage electricity sub-station. Major road access able to support an average of 40 tractor trailer deliveries daily is required. Communities and/or economic development agencies must demonstrate a strong technical capability to support and facilitate state and federal energy related grant and loan programs. Strong localized incentives will also be evaluated.

Funding

The federal government has put many types of initiatives in place to spark interest in renewable energy projects. The purpose of the USDA Rural Development’s Renewable Energy Assistance Program (REAP) is to provide loan guarantees and grants for the development and construction of commercial-scale renewable energy/fuels production facilities or waste water cleanup.

The Best Community Answer for Build, Own, and Operating Renewable Energy Production The One World Clean Energy (Patented) Integrated Biorefinery

The One World Clean Energy (OWCE) model for a (patented) **integrated biorefinery** provides agile, adaptable, and ready operational capabilities best suited to serve the Nation’s community energy interests. The integrated biorefinery provides any community renewable electricity, renewable natural gas, ethanol and biodiesel.

Moreover, OWCE assesses each opportunity from the aspects of community energy demand, waste streams, natural resources and regional agriculture potential. With the data attained, OWCE will craft a unique project plan to implement this flexible technology resulting in symbiosis with the community and job stimulation in the region.

Return-On-Investment

Communities and Rural Electric Cooperatives are interested in the OWCE (patented) Integrated Biorefinery for alternative energy production because it provides the following *Return-On-Investment (ROI)*.

1. **Regional Production and Consumption** of alternative transportation fuels is a key factor in breaking US dependence on imported oil.
2. **Distributed Electricity Generation** is more economically viable than distributed energy/fuel. For instance the inefficiency of electricity realizes a 70% decrease in voltage at the greatest feasible transmission distance. Generation near consumption offsets risk associated with grid instability.
3. **Distributed Electricity Generation and Distributed Production of Renewable Fuel** creates local/rural jobs as well as supporting the region’s farming community.

4. **An Increase in Low-Cost Renewable Energy Production is a Solid Growth Strategy for Neighborhoods and Agricultural Communities.** When area industry and commerce benefits, the revenue cycle benefits all involved. The viability of going green is heightened with the build, own and operate model from an economical, functional, and environmental point-of-view, with at least a 20-plus-year operational return.
5. **Provides Water Reclamation Within the Community.** The reclamation and use of sewer water can be useful in adding capacity to current community water treatment system, as well as the stewardship of area waterways by encouraging the move from septic to sewer treatment in the local farming communities.

Next Steps

To schedule an appointment to discuss a feasibility assessment, contact Bill Bivins, CEO of One World Clean Energy and his team of professionals at bill.bivins@oneworldcleanenergy.com.