

Energy - Docket Optical System

From: James Kainz [jamesfkainz@yahoo.com]
Sent: Sunday, November 09, 2014 11:07 AM
To: Energy - Docket Optical System; Levy, Michael@Energy; Westmore, Rebecca@Energy; jeffery.ortega@energy.ca.gov; Celli, Ken@Energy; rosemaryavalos@energy.ca.gov
Cc: cbeale@resourceslawgroup.com; Flint, Scott@Energy; amanda.gonzales@wildlife.ca.gov; Vicki Campbell
Subject: DRECP NEPA/CEQA

The Desert Renewable Energy Conservation Plan seems to be overlooking Biomass solutions to Climate Change Mitigation.

Of all the renewable energy solutions only photosynthesis reduces carbon dioxide already in the atmosphere. The others prevent causing further damage to our environment, but they do not reverse greenhouse gasses which have been added in the past.

Growing a weed called switch grass on public property is the fastest and most cost efficient solution to dealing with our pollution problem.

Switch grass is a favored crop source for distilling ethanol for use in Flex Fuel cars. And it begins to substitute oxygen for carbon dioxide as soon as it starts growing.

I am including below the first 3 chapters of my new book below for your review. If you would like more info or to see the complete manuscript please contact me at jamesfkainz@yahoo.com.

Cheap Car Fuel from Switch Grass

"We have it within our power to make the world over again"
Thomas Paine *Common Sense* 1776

© 2014 James F Kainz, MBA

INDEX

Chapter	1	Tweets
Chapter	2	Mission Statement
Chapter	3	Basics ~ We Have it Within Our Power to Begin the World Over Again
Chapter	4	The National Security Threat of Our Addiction to Foreign Oil

Chapter 5	Defense Department Action
Chapter 6	Coordinated Action on the Part of Federal Government Cabinet Level Departments
Chapter 7	Switch Grass at the Salton Sea
Chapter 8	Boosting International Trade
Chapter 9	Photosynthesis
Chapter 10	A New Formula for Fostering Rapid Economic Growth

Chapter 1 Tweets

Ethanol 85 (85 % alcohol and 15% gasoline) made from switch grass is our best chance of lowering the cost of fuel in the near future.

OR

Photosynthesis reduces carbon dioxide in the air. Plant weeds (switch grass) on previously barren land to reduce greenhouse gasses.

Chapter 2 Mission Statement

Having a clear focus on 1 message is usually the best practice for presenting a new idea.

In the quest for revolutionizing how we lower transportation costs that tactic seems not so advisable. Money and Environment are intertwined in importance. You can't achieve one without the other. The amount of money in play boggles the mind. Hundreds of billions of dollars in profits are at stake every year . The benefit to the environment staggers the imagination. Saving planet earth is dependent on switching from fossil fuel to growing biomass renewable energy as a substitute. Trying to ignore one of these issues for the sake of having a single message does damage to the whole concept. Separating one side of this coin from the other is not possible So be it.

Big oil in the United States is a trillion dollar a year Industry. Growing a weed called switch grass can capture half of that market

in 6 years.

Reducing greenhouse gasses like carbon dioxide from the air is best accomplished by growing plants which use photosynthesis. Of all the renewable energy options available only Biomass (growing plants to make energy) removes carbon dioxide already in the air.

The other renewable energy options only prevent making the problem worse. That is a good thing and we should certainly take advantage of those other methods in addition to pursue cultivating biofuels. But taken individually they are too slow. They take 30 years to reach the goal. We don't have 30 years. Growing plants to make ethanol and making Flex Fuel cars is the only renewable energy strategy which is here right now.

In the long run we want to get to plug in cars which do not burn any fuel at all. Burning fuel is not as good as running batteries to make a car go. But to get to plug in cars we need to rewire America at great expense and it requires a complete restructuring as to how we manufacture cars. Not only is it an expensive task. It will take a long time.

President George W Bush in his 2006 State of the Union Address stated that we could eliminate our dependence on foreign oil within 6 years by growing switch grass. That is true. It takes 3 years from first planting to have a mature switch grass crop-stand. And we will probably need another 3 years for policy discussion and planning. But achieving our goal within 6 years is hands down better than the alternative taking 30 years to achieve the same inevitable result.

And the commitment must be massive. It will take 100 million acres of switch grass to substitute for just half of our energy needs for transportation in the US. The Amazon Rain Forrest is less than 2 million acres. So growing switch grass to provide for that half of our car fuel needs will cover 50 times the size of the Amazon Rain

Forrest. Growing that much new plant life on previously uncultivated land will have an enormously positive effect on reducing greenhouse gasses in the atmosphere.

Do we have 100 million acres? Sure. The Conservation Reserve Program where we pay farmers not to grow certain crops like wheat, corn and soybeans is 36 million acres. The Conservation Reserve Program already encourages planting the fallow land with ground cover and providing fodder and habitat for animals.

According to the Congressional Research Service we have another 640 million acres of public land owned by the US Government (about 28% of our entire country). Much of that is idle. It is not being used for National Forests, National Parks, Military Bases, or Government buildings. By comparison only 19 million acres are used by all the military bases and training ranges put together. Our natural resource of unused land is massive. All we need to harness this asset is raising public support for making this happen.

Current law prohibits growing biofuel crops on publicly owned land (the fossil fuel industry saw that threat to their stranglehold on the market for energy coming a long time ago and took advantage of their lobbying clout to sabotage that development from happening). But after a public debate that policy can be changed easily by passing new legislation. Surely all parties can come together on agreeing to that if the voters demand it.

If the United States leads the way in providing for massive cultivation of biofuels, the rest of the world is likely to follow. Imagine if China, India, Mexico, Canada, Russia, Saudi Arabia etc all get on board with growing more plants to make cheap energy. What a gigantic difference it will make for the world. Right now. Not 30 years from now.

Chapter 3 Basics ~ We have it within our power to begin the world over again.

Substituting alcohol for 85% of the gasoline in our car fuel is how we can slash the price we pay for transportation.

It is also the fastest path to kicking our addiction to foreign oil and reversing man made Climate Change.

Switch grass could be the cheapest feeder crop to make ethanol for Flex Fuel Ethanol 85 cars. Switch grass is a weed which will grow on marginal land which is not suitable for many traditional crops. It can be irrigated with brackish or salt water to hold down the cost of production (Switch grass is a Halophyte or salt loving plant). It requires little or no fertilization, pest control or cultivation effort. It is a perennial which only needs replanting every 10 - 20 years even though it is harvested every year. It is one of the fastest growing plants enhancing its production of biomass which is capable of being distilled into ethanol.

Growing switch grass is a solution to cutting the cost of fuel now - not decades from now. A fully mature crop stand can be established in 3 years from first planting.

Approximately 100 million acres planted with switch grass in the US could eliminate any requirement to buy petroleum from foreign countries.

Converting to E 85 Flex Fuel vehicles is the most dramatic option to lowering the cost of fuel available to consumers. New models are on the market now (At the start of 2014 the US already had 15 million Flex Fuel cars on the road) and gasoline only cars can be modified with an Ethanol 85 conversion kit for under \$ 400 in about 15 minutes without using tools. It is a quick fix to cutting the price of fuel.

Growing cellulosic ethanol crops will sustain a much larger job force than drilling for oil and natural gas or mining for coal even though it will be much more affordable energy for the consumer.

Getting the price at the pump for E 85 below half the price of gasoline will provide the incentive to sway the majority of drivers to change over to Flex Fuel vehicles. Money always trumps consumer choices in energy over everything else.

Using the land we pay farmers not to grow certain crops (36 million acres of Conservation Reserve Program set aside farmland) can be the shot heard round the world starting the war on high priced fuel. The balance of the needed farm acreage to reach our energy requirements could be the unused government owned land. This would subsidize the start-up costs of revolutionizing our energy and transportation infrastructure to lower fuel prices and improving the environment. Money is the key to implementing this new Energy Policy for our country. Using Conservation Reserve Program

acreage and unused publicly owned land can be the weapon we use to fight the battle on high prices.

Achieving self sufficiency in energy is a matter of National Security and a sense of urgency should dictate the speed at which we make the changes.

America could become an oil exporting nation again as well as an ethanol exporting nation if we dedicate 100 million acres of nonproductive real estate to growing switch grass. We would not need to develop any additional dirty fossil fuel sources such as by fracking and exploiting tar sands (e.g. Keystone XL Pipeline). The Amazon Rain Forest is less than 2 million acres. Cultivating weeds on 50 times that acreage of desolate property not only cuts costs it also protects the environment.

Coal mining could be terminated both domestically and for export. Most of the fossil fuels on earth should never be burned if we want to save the planet from annihilation.

Flex Fuel vehicles are seldom mentioned when renewable energy solutions are discussed. That is because we use corn as the crop of choice in the United States. Switch grass has many advantages over corn for making ethanol. Not only will it be cheaper. It also saves water and reduces the carbon footprint. Comparing corn to switch grass as the source crop for distilling alcohol for producing power is an unfair contest where switch grass always comes out on top. If we dismantle the corn lobby political influence a more rational public policy wins the day for cellulosic ethanol over corn ethanol.

When Henry Ford designed the Model T he expected that alcohol would be the fuel of choice. Lower cost for gasoline however

altered consumer behavior back then and we have been using gasoline ever since.

Now the market conditions have changed dramatically and we will be able in the future to make alcohol much cheaper than gasoline. It is time to make the world over. We have that decision of reinventing the cost structure of energy within our power.

Brazil decided decades ago that they wanted an alcohol based fleet of vehicles. Even though they have abundant petroleum resources today they drive their cars on ethanol and sell their oil to other countries because it makes more economic sense. Brazil is a world leader in growing sugar cane. The waste product called bagasse after the sugar is squeezed out of the plant makes an excellent source crop for distilling alcohol. In order to meet our cellulosic content requirement under the Renewable Fuel Standard mandated by the Environmental Protection Agency each year the United States is importing about a billion gallons of ethanol from Brazil. In the future we could substitute a much less expensive ethanol grown domestically from switch grass.

We can stop importing expensive oil from foreign countries who sponsor terrorists who are trying to kill us and start exporting ethanol biofuel ourselves. It is an easy choice. We turn an economic albatross into a profit center. By the way, the other name for ethanol is vodka. It is the exact same stuff chemically. Vodka is just watered down ethanol by another name.

Deciding to convert to switch grass ethanol over gasoline is a matter of educating the public to the facts and overcoming political vested interests in the oil and corn businesses. We can do this people.

Jim Kainz
Author
President
Bermuda Dunes Strategic Planning, Inc.
78650 Avenue 42 # 803
Bermuda Dunes, CA 92203
jamesfkainz@yahoo.com
213-533-6339