DBL INVESTORS

DOUBLE BOTTOM LINE VENTURE CAPITAL

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DBL Investors - Double Bottom Line Venture Capital

We are a San Francisco-based firm with a "Double Bottom Line" approach to venture capital investing

Our unique strategy:

- Venture capital investing with a goal of achieving top-tier financial returns
- Proprietary assistance to portfolio companies delivering social, environmental and economic benefits to our regions

Results:

- Fund I (\$75M) has consistently achieved top-tier financial returns
- Successfully closed Fund II in 2011 at \$150M
- Market leading companies creating thousands of jobs with meaningful impact





What Would Jefferson Do? The Historical Role of Federal Subsidies in Shaping America's Energy Future



- Our Goal Illuminate How Current Energy Subsidies Compare to Past Government Support for Energy
- Frame the ongoing debate about the appropriate size and scope of federal subsidies in the energy sector within context of U.S. energy transitions



The Motivation for Our Research





Overview of Subsidies Across Energy Source

Oil and Natural Gas:

- Expensing of intangible drilling costs (IDCs) and dry hole costs
- Excess of percentage cost depletion deferral

Nuclear: Nuclear has benefited in the form of costs of regulation, civilian R&D, the Price-Anderson Act, payments from the government to industry and government receipts from industry

Coal: Coal growth was encouraged through Federal protective tariffs and state subsidies

- Capital gains treatment- Owners of coal mining rights can reclassify income traditionally subject to the income tax as royalty payments allowing owners to pay a reduced tax rate, totaling well over \$1.3B in government tax expenditures from 2000-2009*
- The tariff on foreign coal added at least 10% to the price up through 1842
- Pennsylvania exempted anthracite from taxation and provided incentives for smelters

Timber: The early U.S. government made land grants to citizens at below-market prices.

 A conservative estimate that only 5% of the land grants subsidized the use of timber and only 50% of that was for energy purposes, amounts to about a \$25 billion per year energy subsidy as an equivalent percentage of today's federal budget

Biofuels: Biofuels have benefited from the income tax credit for alcohol fuels and the excise tax exemption for alcohol fuels



*David Sher, Environmental and Energy Study Institute, "Fossil Fuel Subsidies: A Closer Look at Tax Breaks, Special Accounting, and Societal Costs" (June 2011)

Key Findings - Highlights

- Historical federal commitment to new energy sources was much greater for non-renewables:
 - During the first 15 years of each subsidies' life the federal commitment to Oil & Gas was 5X greater than to renewables, and
 - **10X** greater for nuclear than to renewables
- Support for renewable energy as an emerging technology pales in comparison to that of oil & gas and nuclear energies (in inflation adjusted dollars over first 15 years of subsidy life):
 - Nuclear spending averaged \$3.3 billion
 - O&G subsidies averaged \$1.8 billion
 - Renewable energies averaged less than \$0.4 billion



Key Findings - Cumulative Historical Federal Subsidies Heavily Favor Oil and Gas





Key Findings - Average Annual Subsidies to Each Energy Sector Over Their Lifetime





Key Findings - Oil & Gas Support Always at Least 25% Higher than Renewables (Sometimes >10X)





Key Findings - Well over \$1.3 billion in Government Tax Expenditures from 2000-2009 for Cumulative Capital Gains Treatment of Royalties of Coal





Tax Treatment is Also Important to Understanding Direct Subsidies to Oil & Gas Development

- The Congressional Joint Committee on Taxation (JCT) estimates that from 2010-2014, the federal government will spend upwards of \$74 billion on an array of direct subsidies to support domestic oil and gas development and production¹
- Tax advantaged structures such as Master Limited Partnerships, which are targeted at oil, gas, and natural resource projects, have grown from just \$2 billion in 1994 to over \$220 billion in 2010²
 - MLPs are a financial structure used by pipeline operators, drillers and mine operators, as well as private-equity companies such as KKR and Blackstone that pay no corporate taxes, passing tax liability directly to investors
- While solar tax equity financing has grown significantly in the last 5 years, MLPs and other lower-cost financing mechanisms such as REITs are currently unavailable to solar projects



 Joint Committee on Taxation. Estimates of Federal Tax Expenditures for Fiscal Years 2010-2014. Government Printing Office, 2010.
2-American Petroleum Institute. Repealing the 199 Manufacturing Deduction for Oil and Gas Companies Puts Jobs at Risk. February 2011.

A Note About Natural Gas

- In 2009, domestic production of natural gas accounted for more than 90% of total consumption
- The U.S. government has supported the development of domestic natural gas in both direct and indirect but very significant ways, including:
 - 1. Infrastructure- One of the key factors in bringing natural gas to the East Coast was the conversion to natural gas of the Big Inch and Little Inch oil pipelines, which had been built during World War II as means of bringing crude oil to the East Coast without fear of German submarine attack.
 - 2. Combustion Turbine R&D- Decades and hundreds of millions of dollars of government funded R&D for combustion turbines for aircraft greatly improved the technology. In the 1990s, the independent power sector used these cheap, effective, government-enabled "aeroderivative" turbines to challenge the dominance of established utilities.**

*R.J. Cole, et. al., DOE Battelle Pacific Northwest Laboratory, "An Analysis of Federal Incentives Used to Stimulate Energy Consumption" (August 1981).

** Marshall Goldberg, Renewable Energy Policy Project, "Federal Energy Subsidies: Not All Technologies are Created Equal" (July 2000).

Conclusions

- America's energy needs and priorities have changed over time
- They will continue to evolve going forward, driven by:
 - Economics
 - Environmental concerns
 - Security issues

"Today's market for cheap power results in part from substantial investment by the federal government in innovative technology.

It takes a substantial amount of money, invested over several years, to bring an electricity generation technology to maturity.

Although energy subsidies can and do serve many policy purposes, the most basic relate to furthering the development and commercialization of technologies deemed to be in the public interest."

Source- Marshall Goldberg, Renewable Energy Policy Project, "Federal Energy Subsidies: Not All Technologies are Created Equal" (July 2000).



What Must Be Done...

- Support our country in a time of rapid change to::
 - Meet our energy needs while managing our energy costs
 - Drive innovation
 - Create jobs
 - Protect our environment
 - Enhance our national security
- This can only happen with the success of emerging technologies in all of the above energies including wind, solar and natural gas

