

040841

From The Party's Over by Richard Heinberg

From 1977 to 1987 9,000 new gas fields were discovered in the USA but the next decade under 2,500 new fields were found. **THERE IS A GENERAL DOWNWARD TREND IN DISCOVERY.** Between 1996 and 2000 the number of drilling rigs in the Gulf of Mex. Grew by 40% yet production remained virtually flat. The fields are smaller and the depletion ratio for new fields is 50% in the first year.

An 8/7/2001 AP story by Brad Foss: in 2000 16,000 new wells were drilled, up 60% from 10,400 drilled in 1999. But output rose 2% over the same time period acc. to the DOE. "Drillers in TX are chained to a tread mill" - Randy Udall of the Comm. Off. For Resource Effic., Aspen, CO. In June 1999 the Oil and Gas Journal described TX gas industry (producing 1/3 of the nation's gas) having to drill 6,400 new wells that year to keep production from plummeting.

TABLE 1

T. Cunilio, D. Post and Alex Green

Presented at the Gainesville City Commission Work Shop on Renewable Energy on March 22, 2004.

HEATING and ECONOMIC VALUES FOR NONRENEWABLE AND RENEWABLE FUELS

FUEL TYPE	Btu / Pound	Btu / ton	\$ / ton	\$ / MBtu
1. GRU coal (1998)	12,800	25.6 million	\$44	\$1.71
2. GRU coal (2010)	12,800	25.6 million	\$50	\$1.95
3. Natural Gas (fossil)	23,000 Btu/lb.	46 million	\$184 / ton	\$ 4 / MBtu
4. " "	"	"	\$230 / ton	\$5 / MBtu
5. " "	"	"	\$276 / ton	\$6 / MBtu
6. " "	"	"	\$322 / ton	\$7 / MBtu
7. Oven-dry wood	8-9,000	16 - 18 million	\$20	\$1.25 - \$1.11
8. Air-dried wood	6,500	13.0 million	\$20	\$1.53

(fuel moisture influences the heat required for combustion; large diameter waste wood needs approx. 1000 hours or 6 weeks to arrive at equilibrium moisture.)

9. Air-dried wood 6,500 13.0 million \$22.23 \$1.71

(when equated to the price we are now paying per million Btu of coal)

**CONCLUSION: LOCALLY PRODUCED CHIPPED WASTE WOOD
COMPETES FAVORABLY WITH BOTH NATURAL GAS AND COAL AT
\$22.23/ton.**

“ Ernst Mayr, one of the great figures of contemporary biology, a few years ago, said that the history of life on Earth refutes the claim that “it is better to be smart than to be stupid” at least judging by the biological successes of such species as beetles and bacteria. We are entering a period of human history that may provide an answer to the question of whether it is better to be smart than stupid. We can only hope that the question will not be answered. If it receives a definite answer, that answer can only be that humans were a kind of ‘biological error’ using their allotted 100,000 years to destroy themselves and in the process, much else” - NOAM CHOMSKY, 2003

TABLE 2

Tom Cunilio – Center of Sustainable Agroforestry, Inc.

“The problems that exist in the world today cannot be solved by the level of thinking that created them” – Albert Einstein

Presented at the Sierra Club monthly meeting, April 1, 2004

KEEPING ENERGY FEEDSTOCK DOLLARS AT HOME HERE IN GAINESVILLE

- Florida’s Utilities purchase \$3 billion per year in fuel much of it in polluting coal
- Economic Impact Flowing out of State for fuel: 137,000 jobs
- Natural Gas prices are at \$5.51 per million Btu. (\$6+ is historic high).
- Burlington, Vt., built a wood-fired power plant of 50 MW under Gov. H. Dean in 1984 and added a gasifier in 1997 after extensive community organizing.
- The price we pay for the raw material coming from Texas is 3.5 times the price we would have to pay for waste wood going into our own gasifier. One of the

technologies being considered by GRU is to gasify waste wood and feed the gas into a NG boiler.

▪ **We should:**

- 1. Consider forming a strategic alliance of environmental entities consisting of the UF School of Forestry's Center for Subtropical Agroforestry, Energy Conservation Service of N. FL, the Sierra Club, CoSAF and others;**
 - 2. Encourage the new mayor to establish an independent, expert panel to bring recommendations to the commission for renewable energy strategies;**
 - 3. Work together to develop teaching modules in the high schools to assist in the evolution of renewable energy strategies.**
-

