

ECO-PARKS

A WV COAL FIELD ECONOMIC DEVELOPMENT STRATEGY

Wayne D. Brown

MRE, INC

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ECO-PARK DEFINED

- Network of Planned Industrial Park
“Manufacturing Communities”
- Synergistic Mix of Industrial Partners
(one companies output is another’s input)
- Clean-coal Co-generation Plant as
“Anchor” Tenant (PFBC)
- Local Coal Waste Piles as Primary Fuel
Source

INFRASTRUCTURE REQ'MTS

- Excellent Transportation Network
(Road and/or Rail)
- Water
- Proximity to Coal Waste Fuel
- Interconnection with National Power Grid
- High Speed Communication Links

“LEMONS”

- Rising National Demand for Electricity
- Excessive Oil Import Levels
- Acid Drainage from Coal Waste Piles is WV’s No. 1 Environmental Problem
- High Unemployment Levels in Coal Fields
- Declining Manufacturing Sector

“LEMONADE”

- Coal Waste a Viable Fuel
- Clean Coal Power Generation Available
- Environmental Clean-up Cash Positive
- Co-generation Incentive Structure
- ECO-PARK Focus for Manufacturing Reconstruction

ECO-PARK ATTRIBUTES

- Low Cost, Reliable, High Quality Power
- Low Cost Steam
- “Free” Hot Water
- Synergistic “Neighbors” by Design
- Special Financing for State-of-the-Art Energy Efficient Buildings
- Facilitation of Substantial In-State Markets
- Excellent Transportation Links
- Excellent Communication and Training Facilities

Coal Waste Estimates

- 3.5 million tons at 40 Acre Anjean, WV Site Alone
- Anjean Could Support 50 MW Co-Gen Facility for 20 years
- Total Coal Fields Waste Could Support 1000MW for 20 years (> 200 sites, 15,000 Acres)

ECO-PARK

TENANTS/PRODUCTS

- Highway Construction Materials from Combustion Ash
- Building Construction Materials from Combustion Ash
- Greenhouse “Food Factories” using Waste Low Grade Heat
- High Tech Users of Quality Power
- Volume Users of Electrical Power (e.g. ceramic manufacturing)

CLEAN-COAL POWR GENERATION

- Pressurized Fluidized Bed Combustion (PFBC)
- Technology Ready for Commercial Demonstration, > 50% Efficiency Possible
- Limestone for Sulfur Capture
- Hydraulic Compression for Feed Air
- 50 MW Plant for First ECO-PARK

ECO-PARK STUDY PARTNERS

- Small Business - MRE
- Transportation Network and Economic Development - ATI
- Clean-Coal Technology - DOE
- CRADA Signed Today