### Economic powerhouse

#### Energy
North Dakota lignite provides energy to 2 million people in the region (including 150,000 farm families) and to 225,000 homes and businesses in the eastern United States.

#### Tax Revenue
Since 1975, state lignite resources have generated more than $700 million in local and state tax revenues.

#### Economic Development
Inexpensive and plentiful, lignite keeps manufacturers of energy-intensive products competitive globally. Industry-funded research promises new, cleaner, and more efficient uses for lignite.

#### Business Activity
Firms involved in lignite-related activities generate state business activity of almost $1.3 billion.

### The future of the lignite industry in North Dakota is uncertain. Its importance to the North Dakota economy is not.

#### Jobs
Almost 18,000 state jobs are supported by the industry — 3,000 directly and 15,000 indirectly.

#### Income
The industry’s annual state payroll exceeds $135 million. The average lignite industry worker earns $44,000 annually in wages and benefits.

#### Sales for Export
Lignite energy sales for export comprise 7 percent of the state’s total sales for export, generating 5 percent of the state’s gross business volume.

### Lignite mining and conversion – creating end products of electricity and synthetic natural gas – are central forces in state economic development, business activity, job and income creation, and government support.
What’s Ahead?

The North Dakota Lignite Industry

- Valuable regional resource
- Major employer
- Diversifier of the rural economy
- Supplier of low-cost, reliable energy
- Economic stimulator
- Industry with a future

Challenges

A growing force in the state economy since the 1870s, North Dakota’s lignite industry has plateaued. Lignite production has leveled off, and no new lignite-fired power plants are planned in the region. Market conditions point to future industry declines:

Unstable Prices
Nationally, energy prices are unstable. Natural gas prices are especially volatile, destabilizing the market for synthetic natural gas made from lignite.

Greater Competition
Some customers of North Dakota lignite have turned to less expensive Montana and Wyoming coal. This competition may intensify. New railroad links will reduce shipping distances for Powder River Basin coal delivered to North Dakota.

Expensive Pollution Controls
New provisions of the Clean Air Act — such as the requirement for visibility improvements — will drive up costs, making older power plants uneconomical.

The Kyoto Protocol
Implementation of the Kyoto agreement could eliminate North Dakota’s lignite industry by 2008. U.S. carbon dioxide emissions might be capped at 7 percent below 1990 levels. Yet developing nations such as China and India would be exempt from emission caps.

Transmission Issues
Existing transmission line capacity limits the export of electrical power from North Dakota. Minimal new transmission lines are planned in the Upper Midwest, limiting industry growth.

Solutions

Positive action can reverse current trends. The lignite industry can be refueled, preserving and growing its economic benefits:

Lower Coal Taxes
Reducing state coal taxes would help North Dakota lignite compete with Powder River Basin coal from Montana and Wyoming.

Sensible U.S. Regulation
New federal air quality standards must be based on sound science and objectively applied. North Dakota — one of only fourteen states meeting existing federal air standards — should not be held to arbitrary standards.

Alternatives to Kyoto
The lignite industry — not a major source of carbon dioxide — should not be selectively and adversely impacted by international regulations. Global warming concerns can be addressed through voluntary emission reductions, new technologies, education, and research.

New Products, New Markets
Lignite can be converted to synthetic liquid fuels and nontoxic chemicals, replacing synthetic natural gas as a major product. Markets for North Dakota lignite byproducts — including carbon dioxide and ammonia-based fertilizer — can be aggressively expanded.

Intensive Research
Research and development — on topics such as lignite upgrading and advanced generating technology — can yield cleaner, more efficient, and more economical uses for North Dakota lignite. State research funds earn federal and private dollar matches.

It’s Our Choice.

What happens to lignite happens to all of North Dakota. Ups and downs in industry-generated jobs, income, and economic activity ripple through the state’s economy — through construction, transportation, agriculture, financial services, insurance, retail, and other sectors.

Reasonably preserved and enhanced, this industry that fuels North Dakota today can fuel a better tomorrow — a future of greater business opportunity and economic diversity, greater regional success in the global economy, more jobs, and an ever cleaner environment.