

"Energy and Economics in the Future of Minnesota"

I. A period of rapid change, and adversity.

A. Limits to Growth -

1. Finite resources, infinitely growing demand (Lily pond).
2. Role of prices; Role of technology.
3. Malthus - plagues and famine = population control (a parson!)
 - a. Population growth - minor part of problem in developed world.
 - b. American - 24,000 lbs. of coal p.a., Swede 14,000, Nigerian 71.
 - c. Growing consumption per capita = real problem (3:1)
 - 1) Energy 2) Other resources 3) Pollution

II. Differing reactions to "shortages".

A. Moralism vs. Economist

1. Repent! Voluntarily change lifestyle; give up profligacy; harmony with nature. (Good guys vs. cheaters)
2. Changing relative prices will force us to change lifestyle, willy-nilly; rising food and energy costs; housing.
 - a. End result the same; attitude different.
 - b. Rising standard of living = rising labor productivity = rising energy/man hour. Relatively more costly energy = slower growth in standard of living.

B. Economists - two views.

1. Rationing with price controls.
2. Free prices to do the rationing.

Choice depends on -

- a. Degree of imbalance, its expected duration, social and economic costs of rapid change in prices vs. rationing (income redistribution).
- b. Whether you think market prices accurately reflect true economic costs.
 - 1) Depletion, i.e., appropriate provision for diminishing resources in future.
 - 2) Monopoly practices.
 - 3) External costs (e.g., pollution)
- c. Incentives/disincentives, i.e., rationing encourages cheating, no incentive to new resources, new technology (ex. govt. sponsored).

C. Inward looking vs. outward looking.

Inward: grain export embargo

let the bastards freeze in the dark.

energy self-sufficiency

Outward: invitation to LDC's as well as developed to users' conference on energy.

share U.S. energy resources, and technology.

1. Are Arabs our brothers?

Deliberate action that threatens world recession (i.e., a tax of tribute) and possibly starvation in LDC's.

- a. U.S. no longer policeman of world, but still only country with possibility of world view.

III. Energy and economic outlook in Minnesota.

A. U.S. headed for "slowdown" anyway; energy crisis compounded likelihood and potential severity.

B. Minnesota -

Adverse: Climate Jan. MN = 12° Wash. = 37°

End of supply lines - closing unprofitable stations.

No fossil fuels; little refinery capacity.

Distance from markets vs. rising transport costs.

Dependence on natural gas for residential and commercial heating.

Beneficial: Less dependent on energy for industry:

(ind. = 25% of energy vs. 40% nationally.)

Generally diversified employment -

Agricultural base especially important.

Links to major western coal resources.

1. Short-run - suffer less (cite New England)

2. Long-run - slower growth than nation by conventional measures.

Higher value to non-goods.

IV. Commission on Minnesota's Future.

Purpose, structure.