THE MASSACHUSETTS PLAN:
THROUGH SURVIVAL TO STABILITY

I. Introduction

The single dominant phenomenon of the next 25 years is, and will be, energy. Its price -- and more critically, its supply -- will set in motion self-sustaining, market place dynamics that will reward the foresighted and crush the complacent.

As a nation, we are unprepared.

As a state, we are unprepared.

As communities, we are unprepared.

As individuals, almost all of us are unprepared.

This plan seeks to look into the future and prepare for it. It is based on the simple premise that our state can survive the inevitable body blows of the future if we so choose. And by so choosing, we can craft a position of relative invulnerability that will serve as our major economic foundation.

Adoption of this plan will not guarantee anything. It will, however, reverse our current situation -- namely the comfort of a warm tub oblivious to the hemorrhaging of our slit wrists.

Energy is, indeed, the moral equivalent of war. And in cold analysis, we must realize that the survival of the United States in this war does not mean the survival of Massachusetts.

War it is, and it's about time we began the mobilization.

II. The Plan

The plan asks: what resources don't we have? What resources do we have? What kind of economic base can we compete for, and how do we maximize that capacity to compete?

A. What resources don't we have? The fact is that we don't have fossil fuels within our borders. Naragansett coal notwithstanding, we have not and indeed cannot rely upon an indigenous fossil fuel base (unlike what would have been the case if the oil and gas said to be off Georges Bank were under Massachusetts terrain).

This means what? It means the following:

1. Every dollar spent on oil, gas and coal, for heating, transport and commercial use is a dollar exported from our state. The greater the use of these fossil fuels, the greater will be the hemorrhaging of our capital.

2. Every economic activity dependent upon the supply of these fossil fuels is just that -- dependent upon the supply of these fossil fuels. Or put another way, any wise decision-maker in a fossil fuel-based, energy-intensive industry will if possible locate, relocate, or expand where the supply is. Or put another way, hello Texas, goodbye Massachusetts.

3. Every personal activity (i.e., driving to work, heating one's home) is subject to wildly escalating

prices and supply interruptions, thus hindering those activities. Businesses dependent on a human resource base that engages in these activities will, if possible, gravitate to where the disruption is minimized.

B. What energy resources do we have? The fact is that we have remarkably diverse alternative energy resources (resource recovery, low head hydro, wood, solar, wind). We have enormous conservation potential that can drastically cut our per capita fossil fuel consumption, and we have the nuclear option.

This means the following:

1. Every dollar spent on indigenous energy sources (i.e. weatherizing one's home) is a dollar multiplying through the system, reinforcing our economy, not draining it.

2. Every economic activity based on an indigenous energy resource (i.e. the RESCO energy supply to GE in Lynn) is for all intents and purposes secure from supply and price disruptions -- and thus critically stable.

3. Every human activity based on an indigenous energy resource (i.e. passive solar heated homes, nuclear powered third rail mass transit, bicycling) is also secure and thus makes more attractive to the decision-maker the location in Massachusetts of human resource based industries.

C. What industries can we compete for and how do we increase our capacity to compete? We can compete for energy intensive industries to the extent that we can link those industries to indigenous energy supply. We can compete for non-energy intensive industries, (such as those involved with high technology, health, education, specialized-skills related traditional industries, service industries) if we provide the milieu that such industries favor (adequate supply of skilled personnel, assured access by those workers and management to the work place, reasonable independence from energy supply shocks by workers and management, and a quality of life addictive to these workers and management).

The Massachusetts Plan is a blueprint for action in each of these areas. It outlines possible federal, state, local, corporate and individual decisions, which taken as a whole, will build an economic ship of state faced into the wind and storm resistant. It will hopefully secure the continued presence of current industrial shipmates and attract others from less prepared vessels.

The Plan is not meant to be an end. It is a beginning. Purposely provocative, knowingly controversial. It is intended to chart a course and earnestly seek through discussion at all levels, mid-course corrections.

II. The Priority of Renewable Energy Resources and Energy Efficiency

Massachusetts simply must seriously embrace renewable resources and energy conservation, i.e. maximize a certain energy resource base, and minimize the capital outflow of Massachusetts petro dollars.

Energy Future, the report of the Harvard Business School, recommended this course. So has every study since.

The approach prevalent in Massachusetts can be termed as determinedly occasional. For a state 80% dependent on oil, of which 80% is foreign, to have 80% of its homes underweatherized is inviting economic disadvantage. We are leading with our glass jaw. This is a self-induced vulnerability and dollar drain that must be ended.

Massachusetts must seek to establish itself as first in the nation in energy conservation and renewable resource development.

A. Energy Conservation

1. Federal Role: The federal government should provide both the carrot and the stick to encourage conservation.

    a. pass and properly fund the Conservation Bank

    b. pass and properly fund the Community Energy Act

    c. Continue tax credits for conservation

    d. properly fund mass transit through additional gas tax revenues

    e. bicycle path funding from Highway Trust Fund

    f. Move Daylight Savings Time forward

    g. purchase fuel efficient automobiles

2. State Role: The state should be Davis, California multiplied 351 times.

   a. mandate time of transfer weatherization
   b. pursue mass transit with T and inter-city bus transportation
   c. enforce 55 mph limits with stiffer fines for violation
   d. structure tolls on highways and bridges to discourage one-car, one-passenger travel in favor of car pooling
   e. structure excise tax to fuel efficiency not age and cost of automobile
   f. weatherize state buildings
   g. purchase fuel efficient automobiles
   h. fund State Heritage Park program to provide close-in recreation
   i. mandate conservation in building codes
   j. provide tax breaks for van and car pools.
   k. discourage development of suburban shopping malls
   l. mandate 68-76 temperature in public and commercial buildings
   m. structure sales tax of automobiles to reflect fuel efficiency not total cost of vehicle
   n. restructure rate base for utilities to allow innovation

3. Local Role: Local communities should secure their own base and provide leadership to mobilize citizenry.

   a. undertake conservation education program in school system
   b. undertake community mobilization (i.e. Northampton)
   c. weatherize all municipal buildings
   d. require building code standards re:conservation
   e. purchase fuel efficient automobiles
   f. encourage bicycle use by reserving lanes etc.

4. Utilities: Massachusetts utilities should take the progressive steps already instituted elsewhere and demonstrate that they perceive the need for leadership. Our utilities have begun to emerge from the large-system mind set in the past year. This emergence is encouraging but far from proportionate to either needs or efforts elsewhere.

   a. encourage tie-in efforts such as the Franklin County Energy Conservation Task Force
   b. institute load management programs, ie. New England Electric plan, TVA, Detroit Edison
   c. offer loans on conservation equipment, ie. Pacific Power and Light program
   d. free energy audits for industries, ie. TVA
   e. purchase fuel efficient automobiles

5. Corporate Role: Corporations should designate liaison person to oversee conservation efforts

   a. encourage car pooling and van pooling
   b. institute flexible work hours
   c. provide shower facilities etc. for bikers
   d. weatherize buildings

6. Individual Role: Each individual decision maker should assume the worst as to future energy costs and energy supply availability. He should ask himself at each decision point the following "Will this decision protect me and my family from future energy shocks?"

   a. purchase only fuel efficient automobiles
   b. weatherize the home
   c. when buying a home or renting, live as close to mass transit as possible

d. live as close to work as possible, ie. assume rationing within the decade.

e. turn down water heater setting

f. join community based energy conservation citizen groups to lobby for action

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B. Renewable Sources of Energy

1. Federal Role .....
2. State Role .....
3. Local Role .....
4. Utility Role .....
5. Corporate Role .....
6. Individual Role ....

C. The Nuclear Option: The following premises should dictate our policy toward centralized power systems.

1. Oil-fired power plants should no longer be approved for construction.
2. The choice for all practical purposes lies between coal and nuclear. I believe coal to be the lesser alternative both environmentally and relative to supply. New coal-fired power plants should be avoided.
3. Nuclear safety and waste disposal programs should be given top priority and the lessons of Three Mile Island and the Kemeny Report adopted not resisted.
4. Utilities should not be allowed to build new nuclear capacity unless and until it demonstrates true leadership capacity in conservation and renewables. Incurring the risks of nuclear power while allowing benign alternatives remain unused can not be an acceptable practise.
5. Under no circumstances should the plutonium-cycle breeder reactor be considered.
6. Fusion should be reviewed as the long-term resource which coupled with renewables and conservation, will provide the electrical energy for future generations.

IV. Industrial Infrastructure and Energy:

The development of our industrial infrastructure should be based on the premise

A. Energy-Intensive Industries

1. Process heat: a. tie-in to resource recovery
   b. second line of defense: EG&G in Fall River

2. Tourism: mass transit:

B. Energy-Non Intensive Industries

1. development of skills availability

2. Mass port, rail facilities

3. export policies

4. tax policies: "Social Contract" etc.

   etc.

   etc.

C. Farming:

V. Energy Efficiency and Urban Revitalization

Cities

VII. Conclusion

This plan, if implemented, should provide a barrier between our state and the inevitable future energy shocks. That barrier will secure those within our boundaries to all but the most severe disruptions.

This barrier is intended to be interlocking with each piece valuable in and of itself, but also acting to reinforce all the others. It is then the totality of the plan that provides its strength.

It is a kind of geodesic dome, that is, strengthened by the inclusion of all the components, however small those components may appear to be.

This barrier, this security, is meant to be more than just serviceable and comforting to our people. It is meant as our chief marketable asset, the very foundation of our long-term economic viability in an increasingly competitive world.

The plan obviously is imperfect. It will be modified where modifications are shown to be prudent.

But it remains a challenge to the six million decision-makers in our state.

Criticize, probe, amend, question, change.

But do not reject without substituting an alternative.

This is my effort to contribute a basis for first discussion and then hopefully decision-making.

Let us begin in the recognition of the need for a beginning.