of the whole question of impacts upon the real estate market. We have seen some unfortunate results in some places on the Gulf of Mexico, in the Alaska area, and even in areas associated with New York City. These questions include problems of land use, of density, of concentration of activity versus dispersion of activity. All, I feel, must be addressed if one is to get some sense of what indeed we are facing, what is indeed possibly in store for New England and how best we can approach this matter. I think that industry wouldn't mind seeing the states and perhaps the towns start to address some of these issues.

In his paper Professor Devanney applied what he calls the net approach to estimating the economic impacts. Many of the studies that we at ADL and others have done for the Federal Government have adopted what Professor Devanney calls the gross approach to measuring these impacts. In the gross approach what we are identifying is the sum total of the jobs: the income, the earnings, the output and the other variables that would be associated with the development and that would occur in the particular area under study. On the other hand, the net approach tries to estimate the share of total regional effects that represent an increase in national income or national earnings and as a result all payments such as changes in income must be adjusted to reflect the real or opportunity cost of labor that is used in the region. That is, what would the regional resources be earning without the development? I think that is a fair process to go through. However, under conditions of widespread unemployment such as are present in New England most of the increase in income could be credited to the area and to the Nation, and would indeed be close to that estimated by the gross approach.

The final issue that I would like to address briefly is that no matter which measure we talk about, the gross or the net, there is a need to measure these impacts. One approach is to use input-output interindustry techniques. This procedure does allow for a more complete, more comprehensive identification of the possible impacts. The benefits received from this approach far exceed some of the inherent weaknesses.

In summary let me make the following two points. First I think that the studies made over the past four or five years have pretty well identified for the New England region at a macroeconomic level what lies ahead. The amount of oil that could possibly come ashore, the implications for regional income, and the regional number of jobs have been pretty well documented. On the other hand, I think that is a fair process to go through. However, under conditions of widespread unemployment such as are present in New England most of the increase in income could be credited to the area and to the Nation, and would indeed be close to that estimated by the gross approach.

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The title of my talk is the importance of a New England energy policy. However, we have some fairly disparate views among the New England Governors; these are strong people who occupy the Office of Governor in New England and not all agree on all issues. So I'd rather somewhat obviate the title of my speech today and instead address the parameters of an emerging New England energy policy as they relate to matters we have discussed in Councils of the New England Governors' Conference and the New England Regional Commission, and to some extent to the specific offerings that have been before this Conference this week.

I don't want to repeat the obvious. I think one of the most serious problems we have in this country and in New England is the unwillingness of people to recognize that we have an energy problem. We have a unique situation in this six-state region or rather a unique vulnerability; and I feel that we must reiterate the high points over and over again until we get a broader consensus and understanding of the situation.

When such disparate groups as the National Academy of Science, Mobil Oil Company and the United States Geological Service tell us that domestic petroleum supplies in this country may last no longer than 25 years, I think we ought to pay attention, particularly because New England, as we all know, runs on oil. We run on oil at very great cost -- $1.84 per million Btus of residual fuel to fire the generating plants in this region as opposed to $0.84 on the national level. To quote the Eisenmenger-Syron report, the cost of energy in manufacturing in this region is $2.82 as opposed to $1.22 on the national scene, that is a ratio of 2.3 to 1. The importance of this dependence on oil is shown by the fact that following the embargo in 1973 New England industrial production fell 11.4 percent as opposed to a national decline of 3.8 percent. We are pretty vulnerable.

We have no endogenous resources. Although some would disagree on the exact number, the cost of energy in all forms in New England is about 30 percent higher than in any region in the country, and transportation...
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costs are also high. As the Eisenmenger-Syron report pointed out so articu- late, if we were to do it over again the major industrial center of this country would be on the West Coast. In fact given our relatively poor land with our harsh climate and the high costs of skilled labor, it is remark able we have done as well as we have.

Obviously we need a strategy. Obviously we need a policy. Obviously we need inputs from the public and private sectors and the world of academia. The strategy or policy will have to be multifaceted. Let us consider some of the elements which should be included. Conservation — really a backburner item on the national scene. My largest single complaint with the emergence of the so-called national energy policy is the notion, implicit in much of what the present FEA administrator and others say, that it is business as usual in this country. There are certain caveats and disclaimers but that is what it comes down to. We are putting all our eggs in one basket on this issue. The basket is the Zarb-Simon syndrome which argues that the price mechanism will solve the energy problem because ultimately the free enterprise system of letting the price of energy rise to the appropriate market level will ration demand. Maybe it will, but it has not thus far. Gasoline in my state is up 20 cents per gallon in the last eight months. There has been no appreciable reduction in consumption. I think we will need a tough conservation policy. The effort must show up in fundamental modifications in the world we live in and in the way we live. To make this work requires tremendous moral leadership from the President of the United States, every governor of this country, every public official in this country and all the groups and associations of people of disparate political and ideological faiths who recognize that the issue is an indispensable component of any national energy policy.

With a major conservation effort, growth in the consumption of electricity is unlikely to reach the 5 1/2 percent suggested earlier, and this should greatly alleviate the financing difficulties of New England’s private electric utilities. This in turn will reduce the need for rate increases; and while I am not an expert in this area, I do know that John Q. Public is particularly beguiling. In Camelot somehow we would find ways and means to tap a major find of oil or more significantly a major find of natural gas on the outer continental shelf for the poor long-suffering consumer of our region who doesn’t know anything about the split between taxpayer and investor, but knows a lot about inflation and the price of energy. However, I very much agree with Mr. Devanney’s analysis that, with the present national climate the notion of a major find of oil directly and immediately manifesting itself in terms of lower costs for the consumer in this region is unrealistic, unless the combined finds in the whole country are sufficiently significant to dry up our present 38 percent reliance on imported oil.

The debate in Congress today is on the subject of natural gas. In view of this conference, natural gas is not a backburner item because of the current energy mix here in New England. It is, however, still very important if we consider that natural gas is just about the most perfect fuel: it is clean and cheap; but there is not enough of it, and there will never be enough of it.

As a general proposition, New Englanders would reap significant benefits if the relative costs of imported oil and of natural gas came close together. Consequently, I think a rather strong case can be made here for some form of decontrol. But it is very important to recognize, as pointed out in Devanney’s paper, that the effects of decontrol of natural gas should be examined very closely by every region in this country. New England, in particular, should consider what would happen under the hypothesis suggested in the paper — a major find of gas in the Georges Bank.

Refineries.

I for one think we should actively explore the prospect of a refinery in New England, although we must keep in mind that domestic refineries are currently operating below capacity. However, the tendency most appears to be towards expanding existing plants as opposed to building new plants because of environmental considerations and the fastidious nature of people who object actively to the notion of a refinery in regions like New England. Also the OPEC countries may soon be doing more refining and our good neighbor up north, Canada and the Maritime Provinces specifically, already have a capacity to refine product on the
terms and conditions that might well be advantageous in the long term to
our interest here in the Northeast.

I mentioned Canada. New England Governors have a very interesting
dialogue going with the premiers of the five eastern provinces. It is now
three years old with the fourth edition to be right here in Cape Cod next
June. We are hoping to develop an agreement as to joint ownership of
some fairly awesome hydroelectric potential, which if adequately de-
veloped would far exceed these provinces' foreseeable needs. Funding does
not appear to be a problem but the role of the Canadian Federal gov-
ernment must still be worked out.

Alternate Resources

We have spoken about alternate resources. We in Vermont had a very
significant report recently by a Task Force that has examined the poten-
tial of wood as a significant energy resource. The conclusion, which ap-
ppears to be very bullish, says that we have a vast replenishable resource
right under our noses, particularly in the three states in Northern New
England. If we use it wisely, it can make a significant contribution, per-
haps 25 percent, to the electrical energy needs of the people of our state.
Instead of letting this report gather dust, as you know most Task Force
reports do in the United States, we are doing something. We have just
about identified a state institution in Vermont that will convert from oil
to wood as a demonstration, and we have hopes for an EPA grant that
would permit the Green Mountain Power Company to convert a small
plant from oil to wood. I will be supporting legislation this year to create
tax incentives encouraging the use of wood and potentially other energy
alternatives.

Trade-offs

We spoke during this conference of trade-offs. I see some significant
trade-offs. Again, no fantasies here. We are not going to reform the world
at this conference because we talked about these things. A choice must be
made between a significant contribution from coal and clean air — at
least until we have developed economical synthetic approaches such as
gasification — and I am inclined to think that if the American people
were consciously and intelligently given the choice, they would come
down on the side of clean air. I have skipped the nuclear power issue for I
did not see a position paper on nuclear power. However, I understand it
has been discussed at the conference. This is a very tender issue in the
country, perhaps more tender in some respects here in New England than
anywhere else. I see essentially three options on the issue of nuclear
power. One, we could have an outright moratorium. The cost of con-
version to fossil fuel would be extraordinarily high. That option is un-
likely. Option two, as I see it, is full speed ahead on development of the
fast breeder reactor. I sense for a variety of reasons that that option today
is somewhat unlikely, based on our current climate, and available tech-
ology on the subject. The third option is to continue developing the
present reactor but to stop short of going full speed on the fast breeder
and to hold off the recycling of highly processed petroleum until the fu-
ture process is safely in place. Very sensitive, very difficult issue, and I
didn't come down to Martha's Vineyard today to provide an answer.

Finally, I sense that for all of us, whether Governors, Members of
Congress, members of the business and academic communities, and the
advocacy groups from all the states, the politics of truth is suddenly com-
ing of age in this country and this region. We must come together and ad-
dress these problems and make tough decisions that will be significant not
only to our major allies but to the quality of life that our children and the
kids after that will enjoy.