

that accurate measurements have not been available over a long enough period of time so that one can really say there is a trend that is unmistakable.

Mr. CONABLE. Other things remaining constant, then, we don't necessarily strike a new balance by increased plant growth. The carbon dioxide content could get far ahead of the increased photosynthetic capability of our foliage. There are other factors that might be at work in this such as the urbanization of our society which causes a great deal of our landscaping to go back to forest and this, therefore, increases the amount of photosynthesis actually going on. Is that a fact?

Dr. MACLEOD. I don't know in quantitative terms how much that amounts to. I think one should remember, however, that the largest sink, if I can use the word, for carbon dioxide is the oceans. The phytoplankton, the small green plants that grow there, also take up carbon dioxide and carbon dioxide is also removed by the weathering of rocks and release of salt such as calcium and magnesium which combine with it and then are washed into the seas.

Mr. CONABLE. Could the increase in the carbon dioxide content in the ocean add to the atmospheric content?

Dr. MACLEOD. The solubility of carbon dioxide in sea water is not enough, sir; I don't think, to make a significant difference.

Mr. CONABLE. It would not be likely to have secondary atmospheric effects?

Dr. MACLEOD. I don't think so.

Mr. ROUSH. This discussion concerning carbon dioxide reminds me of an experience I had last fall. I was in Ethiopia and I visited a class being conducted by a Peace Corps teacher, named Mrs. Miller, who was very vivacious and imaginative. It was a class in science and Mrs. Miller was teaching seventh graders about protons and electrons. She drew a picture of two rooms on the board. There was a door between the rooms, but she emphasized the fact that the door was closed. She said, "Supposing we put 200 people in one room and in the other room we put no people, what would happen?" There was a look of amazement on these bright-eyed youngsters and, finally, one little boy dared to raise his hand and he said there would be much carbon dioxide and they would all die.

Do you think there is a danger that there will be so much carbon dioxide that we will all die someday?

Dr. MACLEOD. No, sir; I don't believe so. The amount that could be produced from the consumption of the fossil fuels coupled with the rate of removal is not enough so that we would all die, but the accumulation in the atmosphere could very well have these undesirable effects which I referred to here and which I discussed with Mr. Conable.

Mr. ROUSH. In your statement, you emphasize the fact that we have no long-term plans to deal with the problems associated with carbon dioxide buildup in the atmosphere. You go on to say it is time that our Nation began to work diligently toward a goal of recycling fuels and of utilizing natural energies. It would seem to me that even if this Nation did this, the carbon dioxide problem is one that confronts the entire world since the atmosphere is involved. Do you know of any other nations which might be directing their thought and energies toward this problem?