

the load of labour leads to increasing happiness. I personally have some nagging doubts concerning the fundamental truth of this principle. It would be quite out of place to attempt to debate its truth here. All I want to do now is to point out that it is the basis for many of our actions and that we as Canadians are every day acting as if we believed it to be true.

If therefore we agree that increasing material welfare and leisure lead to increasing peace and happiness for us it follows that if we are to have peace in the world we must help everyone else to have the same lavish material standard of living that we ourselves enjoy. If we are to go on providing even the existing standard for an increasing number of Canadians and at the same time help other nations of the world to achieve our standard of living we must have steadily increasing quantities of energy available and this energy must be available at existing real costs.

Looking at the development of the world for the next fifty years and assuming that there will be no major wars to interfere with our expansion it is clear that the very nature of our civilization would be substantially altered should there be any curtailment of our rapidly expanding use of power, whether due to a failure of supplies of fuel or to rising power costs. At present the world depends mainly upon wood and the so-called fossil fuels, coal, oil, and gas for its energy supply. Water power supplies less than one per cent of man's energy requirements and other sources such as windmills, solar furnaces, etc. supply even smaller quantities. There have in the past been many exhaustive studies of the resources of fossil fuels. These studies have sometimes disagreed widely concerning the extent and availability of usable reserves of the fossil fuels. However, all of them have agreed that the end of our readily available resources is already in sight and that some time during this century the cost of recovering these fuels will begin to rise so seriously as to limit their use. It is very important to try to view this problem in historical perspective since it is easy to be diverted from the main problem by arguments over the exact date at which one or other of the fuels will begin to be uneconomic. From the long-term point of view exact dates are unimportant. All that matters is that some time within the foreseeable future the rate at which our economic machine requires energy to keep it going will exceed the rate at which we can expand the recovery of fossil fuels. If this is accepted, then it is obvious that we must begin now to think about other possible sources of energy capable of supplying our steadily increasing needs. Scientists and engineers have already explored the path toward the development of nuclear power sufficiently to be certain that along this trail lies one certain solution to our problem. There is I think no doubt whatever that the means of utilizing nuclear energy in vast quantities and at costs well within the range of present energy costs will be perfected in ample time to take over from our dwindling resources of fossil fuels. Here again there is disagreement among the experts concerning the details but I think no fundamental disagreement in broad principle. There are certainly enough fossil fuels available in the world