

BEYOND 2000: STABILIZING GLOBAL GREENHOUSE GAS EMISSIONS AT A SUSTAINABLE LEVEL BY 2050

A. WHAT DO WE HAVE TO DO TO STABILIZE GREENHOUSE GAS EMISSIONS?

5.1 In our discussion of targets (para. 3.12), the Committee suggested the basic global objective should be to achieve stabilization of greenhouse gases by the middle of the next century, at levels that are well below the equivalent of doubling atmospheric carbon dioxide by comparison with the situation before the industrial era. Canada intends to stabilize its emissions by the year 2000, but we need to remember that this will only be a partial solution to what is a global problem. It is unreasonable to expect developing countries to place similar limits on their current emissions. This would be tantamount to saying: "We in Canada and other industrialized countries have achieved our level of development by a heavy reliance on fossil fuels for the last two centuries or more. But this has caused the crisis of global warming, and therefore the developing countries must not anticipate similar use of their energy resources."

5.2 Fig. 8 can be regarded as an "equity graph": it takes the total estimated carbon emissions throughout the world in a recent year (1984), and then allocates this on an equal *per capita* basis over the expected world population in 2025. It says, in other words, "Let us agree to limit global carbon emissions at their 1984 level, and accept that every human being in 2025 has an equal right to emit his or her share of this total." It is evident that this would mean an enormous reduction by those parts of the world that are already industrialized. The graph was prepared to assist in developing a national strategy for the Netherlands, and the Dutch government's witness remarked to our Committee that

[T]he target I initially mentioned of 80% reduction from a sustainability point of view was derived simply from looking at what the world emissions are, assuming you have to achieve an equitable distribution amongst the citizens of this world. If you do it at a level that is a little bit higher than what we have today, then you see that western Europe has to go back to 0.6 tonnes of carbon per capita. Given the fact that we [in Europe] are somewhat up to 2.6 or so, for us it would mean 80% reduction. I am afraid for Canada it would mean more.¹

Indeed it would.

5.3 In any case, limitations on emissions do not equate to a limitation on concentrations in the atmosphere. As the Intergovernmental Panel on Climate Change reported,

Atmospheric concentrations of the long-lived gases (carbon dioxide, nitrous oxide and the CFCs) adjust only slowly to changes in emissions. Present day emissions of these gases are committing us to increased concentrations for decades to centuries. The longer emissions continue at present day levels, the greater reductions would have to be to stabilise at a given concentration.