ON THE NEED FOR RADICAL NEW POLICIES

There are several reasons why a dramatic dematerialization of western economies is unavoidable:

- The root cause for the growing ecological crisis is the massive and frequently indiscriminate use of natural resources, including energy carriers, land and water. At the present time, worldwide use of natural resources increases dramatically, in part due to an increasing world population, but more pronounced because of the economic growth of emerging countries like China and India. Leading economic journals report regularly now about the considerable price increases due to mounting resource needs in China etc.

- On the average, more than 30 tons of non-renewable natural resources are invested today for every ton of goods, with increasing tendency. The intensity of water use is about ten times higher. On the average, citizens of OECD Member states consume some 20 times more non-renewable resources than the Vietnamese. In order to approach ecological sustainability, the resource productivity has to be increased in western countries by at least a Factor 10, compared to today.

- More than two planets earth would need be available for providing the natural resources necessary to allow globalization of the western life style.

- Current environmental policies cannot lead to sustainability because they essentially address the output-side of the economy, they do not focus on lowering resource consumption (in fact, they often spawn additional resource investments), they are basically non-precautionary and they cause enormous non-market-driven costs that most countries cannot afford.

At this time in history, a number of reasons call for serious re-orientation of the current economic framework in western countries. Among these reasons are:

1 Schmidt-Bleek and Coworkers,: The unfolding of the Factor 10- and MIPS- story (in English) at the Wuppertal Institute, Special Issue of the Fresenius Environmental Bulletin, Birkhaeuser, August 1993.


• The current public budget situation in leading countries is unsustainable with respect to meeting known future social and economic needs 3.

• The present taxation system is altogether economically wrong and unfair 4. Whereas labour costs are relatively high on account of considerable overheads, prizes of natural resources are kept low by not being taxed in tune with their contribution to the economic output, by perverse subsidies, by traditional cost-free extraction- and use rights and other politically motivated priorities 5. As a consequence, the market causes a massive misallocation of natural resources.

It is evident that only profound and systemic policy changes will secure the future and open the road to sustainability. It is no longer possible to continue introducing partial solutions to individual problems when they arise. Sustainable solutions require the simultaneous and evenhanded consideration of economic, social and ecological consequences of every impending decision.

A recent article illustrated the macro-economic gains in Germany under condition that all currently profitable dematerialization measures would be undertaken and further, that financial gains would not be negotiated away by increasing the income of labor in tune with current practices 6. Wage increases during the period of dematerialization were assumed to be those expected without the deliberate increase of resource productivity. Among the most interesting results were these: some 760 000 new jobs would be created, the GNP would rise by close to the 10 % and the government income would increase by ca. 20 billion Euro.

What is urgently needed now is a similarly exhaustive modeling effort to clarify the consequences of shifting the current overhead on labor to natural resources.

Based on such results one could conceive a step-by-step plan for approaching ecologically sustainable conditions in Germany. First, those dematerializations efforts would be launched that are already profitable under existing economic boundary conditions. Governments could simultaneously begin to re-orient their purchasing procedures, giving preference to dematerialized products and services. After some 2 – 3 years, fiscal reforms would commence in a carefully planned manner, previously shared and discussed with the public. Features protecting the

---

3 See, for instance, Report (in German) by the Future Council of the state of Northrhine-Westfalia, March 2004, Dusseldorf. To be published in English in 2004


6 Hartmut Fischer, Karl Lichtblau, Bernd Meyer and Janina Scheelhaase, „Wachstum und Beschäftigungsimpulse rentabler Materialeinsparungen”, Wirtschaftsdienst, Issue 4, April 2004. This study was financed by the Aachen Foundation Kathy Beys
sick and the poor would demand special attention. Subsidies deleterious to saving resources would begin to be withdrawn. 3 or 4 Years later, all measures leading to “Factor 10” would become fully operational, including the adjustment of norms, standards and practices and revoking special privileges of all kinds that provoke un-necessary resource consumption. Among these could be the right to levy-free lifting of resources from nature, including minerals, sand, gravel, fish, plants and trees.

Failure to drastically dematerialize the economy in leading countries - primarily by shifting present taxes and overheads on income to natural resources at the input side of the economic cycle = would yield dramatic consequences:

• Neither economic, social or ecological sustainability could be reached;
• In the long run, economic growth would no longer be possible;
• Unemployment would persist on a high level in industrialized countries;
• The unstable budgetary situation in industrialized countries and its unwanted social and economic consequences would continue;
• The export power would diminish over time;
• The destruction of life supporting environmental services would continue;
• Current non-market based and costly environmental policies would persist and cause an ever increasing financial burden on society in technical and administrative terms;
• Costly repair of environmental damages would increase;

While the basic concept of Factor 10 is straight-forward and the advantages of its implementation seem plentiful and self evident, potential economic “side-effects” have not as yet been sufficiently researched, including the identity of potential winners and losers.

Moreover, it is far from obvious how to incorporate the concept of dramatic dematerialization into the political and economic reality of today. The possibilities of unilateral national moves are limited because all national economies operate today in a complex network of international interests and contractual obligations. The necessary changes would obviously require courageous and farsighted political leaders.

Democratic process demands that voters, politicians and business people - most of them recipients of subsidies and enjoying special privileges of one sort or another within the present system - would agree to a new set of parameters, accept shifting focuses and priorities, be ready to consider all dimensions of sustainability before reaching decisions, and establish a new network of business partners. Perhaps the most serious barrier to change would be the ensuing initial uncertainty for a period of time about how to establish proper budgets, how to make profits and what to consume.

In earlier times natural catastrophes and wars lost and won left little choice but to take such risks. Fortunately, times have changed in some parts of the world. In the
future we will have to learn how to adjust to paradigmatically new realities on the basis of reason and dialogue. Are we ready for that? Do we have the right leaders for that in industry and politics?

In 2001, Japan has already incorporated the concept of dematerialization (Factor 8 to 10) into the framework of its strategic economic planning.