

**Carnoules the 31<sup>th</sup> May, 2004**

**Sytemic Fiscal reforms for a future with future**  
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Laureate, The Takeda World Environment Award

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<sup>1</sup>. At the present time, worldwide use of natural resources increases dramatically, in part due to an increasing world population, but much more pronounced because of 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 and other threshold economies. BBC reported on 25th May, 2004 that up to USD 200,- are now being paid for scrap iron on the world market. And the current situation on the crude market - supposedly because of terrorism - is well publicized.
- On the average, more than 30 tons of non-renewable natural resources are invested today for every ton of goods, with increasing tendency. ICT is now 10 to 15 times more resource intensive on a kg/kg basis. And so is the consumption of water. 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 in western countries has to be increased by at least a Factor 10, compared to today<sup>2</sup>. A dematerialization of this magnitude will also dampen the energy demand by ca. 80% opening completely new vistas for de-carbonization and for supplying sufficient energy to the 2 billion poor of this world.
- 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, they attempt to increase the supply of "environmentally friendly" energy and materials 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 the reasons are:

- The current public budget situation in leading countries is unsustainable with respect to meeting known future social and economic needs<sup>3</sup>.
- The present taxation system is altogether economically wrong and unfair<sup>4</sup>. Whereas

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<sup>1</sup>Schmidt-Bleek and Cowokers: 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.

<sup>2</sup>F. Schmidt-Bleek, „Wieviel Umwelt braucht der Mensch – MIPS, das Mass fuer oekologisches Wirtschaften“, Birkhaeuser, 1993. A Chinese translation is on the market. The Finnish Version is in ist second and the japanese is in ist 4th edition. The English translation is available on these sites unter „The Fossil Makers“

<sup>3</sup>See for instance Report (in German) by the Future Council of the state of Northrhine Westfalia, March 2004, Düsseldorf. To be published in English in 2004

<sup>4</sup>Report of the Future Council of the German State of Northrhine Wetfalia, March 2004

labour cost 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<sup>5</sup>. 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 potential 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 traditional practices<sup>6</sup>. 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 of the study 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 modelling 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 and economically sustainable conditions. First, those dematerialization efforts would be launched that are already profitable under existing economic boundary conditions. Governments could simultaneously begin to re-orient their procurement procedures, giving increasingly preference to dematerialized products and services. Subsidies deleterious to saving resources would begin to be withdrawn. After some 2-3 years, fiscal reforms would commence in a carefully planned manner, previously shared and discussed with the public. Features protecting the sick and the poor would demand special attention. 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 and energy consumption. Among those to be eliminated could be the right to levy-free lifting of resources from nature, including minerals, sand, gravel, fish, and plants.

Failure to drastically dematerialize the economy in leading countries by a fiscal reform as indicated 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;

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5F. Schmidt-Bleek, „Das MIPS-Konzept – Faktor 10“ Droemer, Munich 1998 and Franz Lehner and F. Schmidt-Bleek, „Die Wachstumsmaschine – Der ökonomische Charme der Ökologie“, Droemer, Munich 2000.

6Hartmut Fischer, Karl Lichtblau, Bernd Meyer und Janina Scheelhaase, "Wachstum und Beschäftigungsimpulse rentabler Materialeinsparungen" Wirtschaftsdienst, Issue 4, April 2004. This study was financed by the Aachen Foundation Kathy Beys.

- 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 somewhat 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.

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