

# THE FACTOR 10 INSTITUTE

Prof. Dr. F. Schmidt-Bleek, President  
La Rabassière  
Carrère des Bravengues  
F - 83660 Carnoules/Var  
Provence

*"Within one generation, nations can achieve a ten-fold increase in the efficiency with which they use energy, resources and other materials"*

*and*

*"We call upon governments, industry, international and non-governmental organizations, to adopt a factor ten increase in energy and resource productivity as a strategic goal for the new Millennium"*

From the "1997 Carnoules Statement to Government and Business Leaders" of the FACTOR 10 CLUB:

A leap in energy and resource productivity of this magnitude will strengthen the basis for sustainable social, economic and environmental progress. It will also offer the opportunity to reduce total resource flows from nature significantly.

More and more business people, politicians, NGOs, and communities believe that such a goal is now within the reach of technology and management - and, with appropriate policy and institutional changes, could be brought within the reach of economics and politics. In the process, we should see a steady improvement in the quality of life, new opportunities and improved competitiveness for business, expanded possibilities for employment, and an increased potential for wealth creation and its more equitable distribution. The battle for sustainability will be won on the market or not at all.

The notion of increasing ten-fold the resource productivity would constitute a radical change from the traditional assumption that a healthy economy is one that uses increasing amounts of energy, materials, and resources to produce more

goods, more jobs, and more income - a holdover from the mass economy of a dying age, an age in which growth was marked by a steady expansion in the production of energy, the depletion of resources, and the degradation of the environment. Although passé, this assumption still dominates public policies in finance, energy, agriculture, forests and other sectors, slowing and sometimes stopping and even reversing the transition to a new, efficient and more sustainable economy.

Unfortunately, this traditional assumption also still dominates environmental policies, focussing as it does on the tail-end rather than the front-end of the economy, encouraging end-of-pipe solutions and treating or recycling resources, rather than increasing the productivity with which they are used to create human wealth. The result has been a steady increase in environmental protection costs.

The roots of unemployment and environmental degradation are largely the same: the single-minded improvement of industrial productivity at the expense employment and natural resources. The link between growth and its impact on the environment needs to be severed. The trend toward a service society should be strengthened wherever possible for the sake of a more sustainable economy.

The Factor 10 Institute has been created to provide practical support for achieving significant advances in resource productivity in the production and consumption sectors

through:

- the design of eco-efficient logistic systems, processes, and services;
- the development of dematerialised products, services, and infrastructures with high resource productivity;
- the construction of low-MIPS houses and the retrofitting of apartment buildings according to Factor 10 principles;
- appropriate marketing strategies, maintenance, recycling and disposal of goods;
- enhancing consumer information on the environmental quality of products and services;

- the creation and performance of research and development plans;
- offering seminars for firms, politicians and others, giving practical advice for implementing the Factor 10 and the MIPS-concepts at home, in the public domain, in firms, and in governments;
- small scale seminars for political and business leaders to identify long-term sustainable economic options;

The Factor 10 Institute takes particular interest in questions relating to the increase in employment and the sustainable financing of governments. At the present time, an international group of economic and physical science experts is in the process to describe the framework of a future economy that is socially, economically, and ecologically sustainable (Steilmann Commission: "The Wealth Of People"). The Factor 10 Institute also provides services to the international Factor 10 Club.

Internationally renowned experts from industry, consulting organisations and academia in several countries have joined in the Factor 10 Innovation Network.

**The Factor 10 and the MIPS-Concepts** were developed by Schmidt-Bleek, starting in 1991. MIPS stands for material input per unit service (utility), S/MI being a measure for resource productivity. He also coined the term "ecological rucksack" to designate the life-cycle-wide natural resources disturbed in their natural settings for producing, maintaining, and using a product, which he calls "service delivery machine". According to Dr. Fritz Vahrenholt, Member of the Board of Deutsche Shell AG, this is a comprehensive concept, which answers to the most pressing socio-economic and ecological needs of today. It does not lose itself in theoretical thoughts but shows a practical way out of a dilemma, offering profits and growth while making the path to sustainability accountable.

**The international Factor 10 Club** was founded in October 1994 in Carnoules, Provence. The members hail from 12 countries, including India, Canada, Japan, USA, as well as from most western European countries. The Factor 10 Club was called into being because of mounting concerns over the uncharted role of human-induced global material flows, and the ecological ramifications of their unchecked growth. The members wish to draw attention to the need for

substantially reducing global material flows in a timely manner. Some of the topics presently on the agenda include: policy and legal approaches to dematerialisation; changes in economic and cultural priorities; increasing resource productivity through lean technology and changing consumption patterns; re-financing national budgets, as well as work in a sustainable economy.

**The International Factor 10 Innovation Network** was founded in 1998 in Carnoules, Provence, as a response to increasing demands in industry and administrations for obtaining expert, non-bureaucratic help in answering questions relating to resource productivity increases and sustainability in general. A number of projects are now in progress and in the planning stage. Among them are the training of personell in small, medium, and large enterprises in eco-design, eco-innovation, and marketing of ecoefficient products and services; the training of trainers; analyses of successes and failures of firms in moving toward sustainable performances; consulting with governments on R&D plans and the development of legislation; "low-MIPS" retrofitting of housing developments; and developing models for sustainable economies.

Requests for information should be addressed to:

Dr. Willy Bierter,  
Vice Président  
Institut de Facteur 10  
Schulgasse 2  
CH - 4301 Giebenach  
Tel: ++ 41 61 81 14 988 (CH)  
Fax: ++ 41 61 81 15 144 (CH)  
e-mail: bierter@bluewin.ch

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