

# The Factor 10 Club

## The Alliance for Global Eco-Structuring (AGES)

### Carnoules, October 2001

We hope very much that this brochure may prove to be useful during the preparation of the 2002 "Rio plus 10" Conference in Johannesburg, Republic of South Africa, and for the difficult process of finding agreement on vital issues for the survival of humankind during that meeting.

The original language for the text of this brochure is English.

The international Factor 10 Club was founded in October 1994, and the Alliance for Global Eco-Structuring (AGES) in June 2000, both at the Factor 10 Institute. Their members hail from many countries, including Bulgaria, Canada, China, India, Japan, Poland, Thailand, the United States as well as from most Western European countries. The members have many years of practical experience in leading positions in politics, industry and academia.

The Factor 10 Club was called into being because of the mounting concerns over the uncharted role of human-induced global material flows, and the ecological ramifications of their unchecked growth.

The publications of the Factor 10 Club have influenced significantly the international debate on the need to increase the resource productivity of western economies dramatically.

The international Alliance for Global Eco-Structuring (AGES) focuses on the inadequacies of western economic frameworks for reaching sustainability and discusses ways to overcome these barriers with leaders in industry, mass media and politics.

The Factor 10 Institute at Carnoules, Provence, serves frequently as a meeting place for policy discussions on issues relating to economic, social, and ecological sustainability. The Statement contained in this Brochure was first formulated during the regular September 2001 meeting at the Factor 10 Institute ([www.factor10-institute.org](http://www.factor10-institute.org)).

The Aachen Foundation<sup>1</sup> supports a number of initiatives aiming at sustainability. It has instituted a prize for Resource Input Optimized (RIO) products, services and systems, and is the principal supporter of the AGES activities in Germany.

<sup>1</sup> english  
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In 1997, a "Board of Listeners" has stated the following with respect to the "1997 Statement to Government and Business Leaders" of the Factor 10 Club (see [www.factor10-institute.org](http://www.factor10-institute.org)):

"We have chosen to listen to the message of the Factor 10 Club. We see it as a bold and novel approach to sustainable development. We support the basic ideas presented in this brochure without necessarily agreeing with all the prepositions made therein. We shall welcome a worldwide discussion of the Factor 10 Concept and hope that practical steps in this direction will gain momentum".

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# Factor 10 Club

## Alliance for Global Eco-Structuring (AGES)

CARNOULES MEETING SEPTEMBER 2001

Statement to Leaders in Government, Business,  
International Organizations and NGO's

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### Preparing the Rio plus 10 Meeting at Johannesburg in 2002

In Vietnam, the average person consumes about two tons of non-renewable nature per year. The average European consumes close to 75 tons.

Already humans move more materials on the earth's surface than geological forces with devastating ecological consequences.

If the developing world would copy the western life-style, some two to three planets earth would be needed to supply the resources.

#### **So what is to be done?**

"Factor 10" is a concept aiming at lowering the world-wide use of nature in order to move toward sustainability while providing the environmental space for all people in the Third World to fulfill their hopes for a healthy, prosperous and secure life.

"Factor 10" offers the only chance for growth without moving ever further away from a sustainable world.

## Preamble

The current use of natural resources has already severely damaged the life-sustaining services of the environment. Climatic changes are now a reality. Shortages of potable water are on the rise.

Sustainability is not just an environmental issue: Social and economic sustainability is also at stake. This "*sustainability triad*" needs simultaneous and equitable policy attention. Urgently - and in all countries.

At the same time, the world population is growing, the gap between the rich and the poor is widening, and increasing resource demand leads to a dramatic challenge on the global scale.

The current economy and world trade prevent social, economic, and ecological sustainability. This is largely due to its focus on resource intensive products instead of providing dematerialized services. Pro-active companies and communities are hampered in their pioneering efforts by the outdated economic framework.

Incremental step by step approaches of governments have led to improvements in the past, but progress towards sustainability cannot be achieved through these approaches in a timely manner. Past actions have not reversed the deadly trend of destroying the vital functions of the eco-sphere that underpin all economies.

A courageous and significant paradigm shift is required as regards social equity, our management of natural resources, and the efficiency by which they are used for the benefit of all people. The resource productivity of the wealth production, distribution, and consumption system needs dramatic improvement.

Restructuring the global economy to make it socially, ecologically and economically sustainable, presents the greatest investment opportunity in human history.

## Trends

A number of small but promising trends can be observed that move economy and society towards a more sustainable development:

- Sustainability is an increasingly important part of the added value of consumer and financial products offered by corporations and demanded by customers. Even financial markets are using sustainability criteria in their decisions as the acceptance of the Dow Jones Sustainability Index shows.
- Increased efforts to reduce the demand for energy, water and transport by efficiency measures and spatial planning.
- A minute but increasing number of small and medium sized enterprises, as well as some global players, are

demonstrating that substantial dematerialization of their products can be achieved without the slightest loss of end-use satisfaction.

- The adoption of small and smart solutions and approaches (e.g. decentralized energy supplies like combined heat and power & renewables) and networked partnerships contribute to an increase of the overall efficiency and encourage local loops.
- More integrated approaches to reducing environmental impact via life-cycle management, BAT (best available technologies) cleaner production and closed-loop systems.
- The increasing importance of consumer brand integrity and global communications means that the environmental and ethical performance of corporations needs to be trusted, transparent and reported on.
- Small increases in environmental taxes and some moves towards fiscal reform focused on sustainability.
- Increasing desire for health and quality of life moving food and agriculture towards the quality of products therefore supporting high growth of organic food (in Europe: + 40%; US: +30% p.a.).
- Simple science and linear modeling being supplemented by the systems science of complexity and chaos theory leading to more use of precaution and more holistic approaches to decision making.

- The structure of demand is moving inexorably toward services. In industrialized countries, the share of manufacturing in business costs has already dwindled to some 20 - 25 %.

## Recommendations

- We recommend that countries and regions undertake strong efforts to minimize uses of natural resources. Industrialized countries in particular should take the lead in innovating dematerialized and safe goods that provide long-term quality service with sharply reduced inputs of natural materials and land use. The medium term goal is at least a *tenfold* increase in resource productivity for industrialized countries. Sustainability targets can best be achieved within a new service - oriented and knowledge - based economy, supported by market signals that reward advanced sustainability - oriented initiatives in manufacturing, distribution and consumption through market forces.
- We recommend that countries and regions launch comprehensive activities without delay in order to clarify the factual basis for new systemic policy options designed to approach sustainability. The G 20 ministers of finance are particularly invited to support these activities generously.

Clarifications, new data and instruments are needed in the following areas:

- Description of realistic and consistent "*landing places*" (*sustainable investment targets*), reflecting regional aspirations in terms of social, economic and ecological target conditions in 20 to 30 years. For the "ecological corner of the landing place", an average tenfold increase in resource productivity could be agreed to for industrialized countries.
- Identification of existing key barriers to reaching the "*landing places*", for instance in areas such as public and private policies, taxation systems, technical norms, subsidies, consumption patterns, and other economic framework conditions.
- Development of policy options for overcoming the barriers to reaching the "*landing places*" in a systematic step by step fashion.
- Agreement on small sets of operational indicators, allowing the design of directionally safe individual steps as well as for monitoring rebound effects and the distance between the actual situation and the "*landing places*". For approaching the "*ecological corner of the landing place*", the (natural) Material Input Per unit extracted value or Service (MIPS) could serve as a general indicator on the micro level. On the macro level, the Total Material Flow (TMF) could be adopted as an indicator. In both cases, the "ecological rucksacks" of the material inputs and of flows must be included <sup>1</sup>.

The envisioned improvements in resource productivity and social quality can only be accomplished if they:

- are carefully constructed to allow a smooth transition to the new paradigm;
  - can be technically accomplished and do not compromise end use satisfaction;
  - are financially attractive to manufacturers, distributors as well as consumers (prices must be right);
  - can be accomplished in a socially responsible way;
  - can be internationally harmonized;
  - are attractive to developing countries as part of a "catch-up" process, whereby the per capita resource consumption in these countries is expected to rise above today's levels.
- We recommend further that "landing places" as well as the chosen indicators be made public. To the highest possible degree they should be internationally harmonized so that they can serve as a basis for joint global moves towards sustainability.
  - We recommend that governments investing in investment funds under

<sup>1</sup> As an example: to make one kg of pure copper available, 500 kg of nature must be "harvested" first; in the case of aluminum this ratio is 85. With this type of information, the ecological rucksacks of products and services can be assessed.