

TASK ONE: MATERIALS ASSESSMENTS FOR CONGRESS:  
STRESSES ON THE TOTAL MATERIALS CYCLE

A. TERMS OF REFERENCE

Future stresses on the Total Materials Cycle are expected to influence the costs and flow rates of materials through the cycle. Identifying the stresses and responses to avert or relieve them is essential in order to insure a healthy economy. A basic question arises: can the magnitudes of the anticipated adverse impacts of the stresses be ranked, thus setting priorities for developing effective responses to relieve the stresses?

Rationale

Many factors affect the prices and supplies of materials, and we have relied primarily on the marketplace to provide materials at what are loosely termed "reasonable" prices. There are growing concerns about new, and quite different, stresses on the total materials cycle that may not be dealt with by relying entirely on market adjustments. Some of these stresses are foreign in origin; others are domestic. The quadrupling of bauxite taxes is an example of the former; the increased costs associated with meeting new environmental regulations, the latter. The coupling of energy and material flows is yet another source of stress which has both foreign and domestic origin.

Identifying the stresses, their relative magnitudes, anticipated impacts, and possible responses to averting or relieving them, is essential in order to maintain a smooth flow (but most probably a redistributed flow) of materials through the materials cycle, and hence a healthy economy. Both Government and private sector roles must be properly balanced in considering these responses.

What is being requested is the development of a list of stresses and possible responses, a ranking of the relative importance of the stresses, the potential effectiveness of the responses, and suggestions of how a balance between Government and private-sector roles might be achieved.

Questions

Stresses on the Materials Cycle

1. From a final list of stresses to be prepared by the Task Force, which are expected to be most important and for which materials? Can this ranking be made other than

qualitatively? Which are the “principal” stresses and which the “component” stresses?

2. What are the expected impacts (e.g., economic, social, institutional, etc.) ?
3. What are the controlling factors that determine when the impacts of these stresses might be expected to be felt: 0-5 years, 5-10 years, 10-20 years?

### Responses to Relieve Stresses

1. From a final list of responses to be prepared by the Task Force, and for those stresses for which a time period for expected impacts has been generally agreed upon, which responses might be expected to be most effective and why?
2. What are the expected impacts of these responses?
3. What are the relative roles of Government and the private sector in applying these responses to deal with the stresses on the materials cycle? For example, can one distinguish areas of direct as opposed to indirect as opposed to no governmental action?
4. What motivations are available for swift Government and private actions in applying the responses to relieve the stresses ?

## B. SUMMARY OF TASK FORCE REPORTS

### Task One

Group A	Group B
<b>Points of Agreement</b>	
Major stresses on the materials cycle are the following:	Major stresses on the materials cycle are the following:
—the increasing per capita demand for materials largely attributable to rising standards of living;	—lack of availability of competitive domestic resources;
—environmental, occupational health and safety impacts and regulations:	— Federal legislative and regulatory constraints including environmental controls and health and safety laws;
— <b>Internal difficulties</b> In foreign countries and actions by foreign governments affecting supplies of imported materials; and	— uncertainty of foreign supply; and
— the declining long-term trend in materials investment	—financing difficulties —poor investment climate.

## Comments

The stresses on the materials cycle cannot be relieved within the **next 5-10 years**. For the foreseeable future most industrialized nations will be importing an increasing amount of materials from foreign sources.

An early warning system of changes in the international **environment** or local unrest endangering the flow of imported materials should be given more detailed study.

Part of the response to the stresses of uncertainty in foreign supply should be the establishment of a stockpiling policy.

There is a **lack of public understanding** in the **subject of materials— industry and Government** should formulate education programs involving the public, industry, and Government concerning the environment and land use in resource development.

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