REPORT TO THE PRESIDENT

BY

THE STEEL TRIPARTITE ADVISORY COMMITTEE

ON

THE UNITED STATES STEEL INDUSTRY
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**NOTE:** Copies of the papers of the working groups of the Committee are available from the Executive Secretary of the Steel Tripartite Advisory Committee, Room S-5315, U. S. Department of Labor, Telephone 523-6227.
September 25, 1980

Dear Mr. President:

In our capacity as joint chairmen of the Steel Tripartite Advisory Committee we herein summarize the findings and recommendations of the Committee and transmit its working papers for your review and consideration.

The Steel Tripartite Advisory Committee was established on July 26, 1978, in conjunction with the Administration's acceptance of the recommendations of the Solomon Report. The purpose of the Committee is to serve as a mechanism to ensure a continuing cooperative approach to the problems and prospects of the American steel industry. Its current membership includes:

**Government**

Secretary of Labor Ray Marshall
Secretary of Commerce Philip M. Klutznick
United States Trade Representative Reubin O'D. Askew
Environmental Protection Agency Administrator Douglas M. Costle
Assistant Secretary of Treasury for Economic Policy Curtis A. Hessler

**United Steelworkers of America**

President Lloyd McBride
Vice President Joseph Odorcich
Director Paul Lewis
Director Edgar L. Ball
Director Buddy W. Davis
Director Frank J. Valenta
Director Howard Strevel
Assistant to the President John Sheehan

**Steel Industry**

William J. DeLancey, Chairman, Republic Steel Corp.; Chairman, American Iron and Steel Institute
Harry Holiday, Chief Executive Officer, Armco Steel Corp.
Edgar F. Kaiser, Jr., Chairman, Kaiser Steel Corp.
William H. Knoell, President, Cyclops Corp.
Robert B. Peabody, President, American Iron and Steel Institute
David M. Roderick, Chairman, U.S. Steel Corp.
George A. Stinson, Chairman, National Steel Corp.
Donald H. Trautlein, Chairman, Bethlehem Steel Corp.
Shortly after it was established, the Committee concluded that the fundamental problems of the industry could best be addressed by focusing on five areas: capital formation, trade, environmental and regulatory matters, worker and community adjustment, and technology. Working groups were established in each area and assigned the task of developing findings and recommendations. The results of the working groups were then reviewed by the full Committee members. Our report is based upon this process.

On behalf of the Committee we have endeavored to summarize the condition of the industry, its basic problems, objectives to guide action, and the major findings and recommendations Committee members believe are necessary to revitalize the steel industry. All represent tripartite views. The summary of the findings and recommendations is organized according to the five working groups mentioned above. Although there has not been agreement on all matters, we have been impressed by the substantial consensus that has emerged among labor, business, and government members of the Committee.

At the outset we wish to emphasize four points that we believe are central to understanding how to improve the performance of the domestic steel industry.

First, steelmaking constitutes a foundation for a substantial portion of our industrial base. Metals continue to be essential to industrial production, and steel represents about 90% of all metals consumed.

Second, the problems of the steel industry, although varying from firm to firm, are fundamental. At the same time, the inherent strength of the industry as a whole provides major opportunities for long-term progress.

Third, the problems of the industry reflect failings on the part of government, management, and labor. None has been sufficiently responsive to the changes affecting the industry. All share responsibility for contributing to a more vital industry.

And fourth, remedying the problems of steel will require a substantial period of time. A coordinated and integrated set of initiatives, maintained for a 3 to 5 year period, or longer, will be necessary to set the industry on a new path.

We believe that the conclusions of the Steel Tripartite Advisory Committee provide useful guidance towards developing policies and programs that will foster modernization of the American steel industry.

\[Signature\]

Secretary of Labor

\[Signature\]

Secretary of Commerce

Attachments
PART I

CONDITION OF THE STEEL INDUSTRY

The United States steel industry, once one of the strongest segments in our economy, is now in difficulty. That is especially the case for that part of the industry composed of the large integrated carbon steel producers, which account for about 85% of domestic steel output. The problems of the industry are fundamental in nature. The recent recession has exacerbated these problems and made them more obvious.

Shipments in 1980 are expected to be 20 percent below their 1979 level. From second quarter 1979 to second quarter 1980 the major integrated steel producers recorded a 63 percent decline in corporate profits, with outright losses on steelmaking operations as a result of the low level of capacity utilization. June 1980's output of raw steel was the lowest monthly total since 1962. Capacity utilization in July declined to just above the 50 percent level. Midsummer employment of steelworkers fell 22 percent from the best employment month in 1979. Imports as a share of domestic consumption reached the 21 percent level in May, a near record, though the import share headed back down toward lower levels in subsequent months. July did see an increase in domestic orders for steel, and by the end of August, according to industry statistics, its major producers were operating at a capacity utilization rate of 59 percent—an encouraging sign but still not relief for an industry that becomes profitable only when its capacity utilization rate gets into the 80 percent range.

The industry's current situation is the result of problems that have been building for several decades. These problems have not, however, affected all steelmakers in the same way. Not all steel companies make the same line of products; some make basic carbon steel while others make a wide variety of specialized steels. Not all operate in the same way. Some are integrated producers; some are not. Some use one steelmaking technology, some another. The steel companies differ widely with respect to where they have located their plants. Some depend largely on raw materials from the United States; some import significant shares of their raw materials. Some steel companies have been better managed than others. The result of all these differences among steel companies, and the decisions made by their managements over the last several decades, means that the current efficiency, profitability, and competitiveness of all American steel companies is by no means identical.

Despite the differences, the core of American steelmaking still takes place within the large integrated carbon steel producers. Better than a dozen companies fall into this category, and they are referred to as the industry in the discussion that follows.

The industry's problems have centered around insufficient financial resources. To begin with, demand for steel products has not grown rapidly in recent decades. Moreover, during the same period, but especially since the mid 1970s, excessive steelmaking capacity has characterized the world steel industry.

In the 1965-1979 period United States domestic consumption of steel products increased at a rate of about 0.9 percent per year. Slow growth in demand is typical for mature products in mature economies; in the case of steel it can also be accounted for by some substitution of other materials for steel. Compounding
the problem of slow growth in domestic demand has been the fact that imports have been capturing an increasing share of the Nation's steel purchases. As a result, in the last two decades domestic output of steel has increased slowly, at a rate only about one-third of that for total U.S. industrial output. Sluggish volume gains in domestic sales of steel products, over a long period, have limited profits, giving the industry as a whole insufficient ability and incentive to adopt new steelmaking technology.

As evidence, in the 1950s steel companies around the world began to turn to the basic oxygen steelmaking process. At the beginning of the 1960s only a few of the smaller European steelmaking countries had adopted this innovation to any notable extent. Neither United States producers nor those in most of our major foreign competitor countries had made substantial commitments to basic oxygen steelmaking. By 1978 all European steelmaking countries (except for the United Kingdom, Italy, and Sweden) and Japan had higher proportions of their steel output produced in basic oxygen furnaces than in the United States.

In the early 1960s, a second major technical innovation, continuous casting, was introduced into the steelmaking industry. By the late 1970s about 50 percent of Japanese steelmaking used continuous casting; for the European Community the figure was 29 percent; for American steelmakers it was only 15 percent. In the international arena this reduced the competitiveness of our steel producers; at home it lessened their opportunities for efficiency gains.

Lack of investment in new facilities has left the industry with an aged capital stock, a condition accentuated in the last decade by the fact that allowable depreciation for the industry has failed to parallel the rapidly rising cost of modernizing investment. Although all major domestic steelmakers have engaged in some modernizing investment, average figures confirm that the industry contains many old facilities. For example, about 15% of basic steel production still occurs in open hearth furnaces; of these over 40% are more than 30 years old. Similarly, about 40% of all U.S. plate mills are over 30 years old.

Aggressive investment by foreign producers, in contrast, provided some countries not only more modern plants but also larger plants, with the accompanying economies of scale. By 1976 the average annual raw steel capacity of the ten largest plants in Japan was 12.7 million tons, in the European Community 7.1 million tons, and in the United States 6.5 million tons. Again, the consequences were twofold: declining competitiveness relative to the larger foreign producers and diminishing chances to hold down costs in the home market.

One additional consequence was declining industry employment. At the beginning of the 1960s steel companies employed about 450,000 production workers. At the close of the 1970s they employed only about 354,000 production workers.

Thus, within the U.S. economy the problems of the industry were rooted in eroding productivity and efficiency, plus obsolescence. These factors made it increasingly difficult for U.S. steel producers to compete with foreign producers. During the last several decades three other factors were also at work.
First, during the 1960s increases in the world supply of raw materials for steelmaking eliminated some of the U.S. industry's previous advantage of low-cost domestic supplies. Second, declining ocean shipping costs also contributed to the fall in raw material prices and, as they picked up in quantity, the price competitiveness of imports into the United States market. And finally, the rapid worldwide diffusion of new steelmaking technology made it possible for foreign producers to surpass the efficiencies of the older, established facilities in the United States. To these international trends an additional domestic one must be added: wage rate increases tended to outrun productivity gains during certain periods. As a result, during most of the last two decades Japanese (and some European) costs of steel production tended to decline relative to those of U.S. steel producers.

In part, imports have risen during the period that the domestic steel industry's relative cost advantage has withered. In part, however, there have been other factors accounting for the gain in foreign steel exports to the United States.

For a number of reasons many foreign governments have accorded their home steel industries privileged status. Furthermore, foreign governments have taken measures to protect home producers from import competition. The undeniable fact, therefore, is that some not inconsequential share, though nobody can be certain how much, of international trade in steel products occurs under conditions other than those dictated by market forces, for example where subsidization or dumping occur.

The sum of all the factors identified above has had a two-edged effect on the domestic steel industry. On the one hand, declining efficiency, rising costs, and increasing international competition, whether fair or unfair, have driven down the profitability of the industry. The poor financial performance of most domestic steelmakers has constrained reinvestment to levels that have not been sufficient to maintain a competitive capital stock on an industry-wide basis. Internal cash flows from profits and depreciation have not been adequate for modernization needs, and some firms have reached the limits of funds available from external sources. Over the long-term, and judged against general business standards, the major steel companies have not paid out an abnormal share of their cash flows in dividends, and their value has declined in real terms, although it is true that on average the level of the industry's dividends have held reasonably steady even during cyclical periods when industry profits were at low levels. Whatever the case for individual firms, the industry in general has lacked the capital to modernize sufficiently.

On the other hand, for the same reasons, the return on capital invested in steelmaking projects has frequently failed to justify reinvestment for modernization or for the building of entirely new plants. That is, given the market conditions facing the industry in the last decade or so, the buildup of foreign capacity, aggressive foreign exporting, and the problems posed by blending new investments into old plants, industry members have not always had clear economic signals to engage in all out modernization. Thus, a substantial part of the industry became trapped with both a declining capability and incentive to keep its facilities up to date.
All parties who have influenced the long course of events within the U.S. steel industry—management, labor, and government—share some responsibility for the developments outlined above. At times management has been shortsighted. At times wages have exceeded productivity gains. At times government policies towards the industry, particularly in the areas of capital formation, trade, and regulation, have been unrealistic given the industry's condition. There is, however, no way to rewrite the past. The basic problems of the industry now exist. The national challenge is to create a new environment for the American steel industry, to change policies and practices so that the industry's problems can be remedied in the future.
OBJECTIVES FOR A STEEL INDUSTRY PROGRAM

The deliberations of the Steel Tripartite Advisory Committee make it clear that modernization of the industry will require changes in the policies, practices, and attitudes of all parties who shape the direction of American steelmaking. Taken altogether the changes can constitute a program for revitalizing the industry. The changes require a shared sense of purpose. The work of the Steel Tripartite Advisory Committee emphasizes the need for a steel industry program aimed at achieving the following objectives.

1. Modernizing our economic base. Modernization of the American steel industry must be regarded as a key part of a larger effort to revitalize our overall industrial base and to increase productivity within our economy. Government policies should be oriented toward helping the steel industry modernize itself so that our entire economy can benefit by having a more productive and efficient steel sector. Modernizing the steel industry will require large investments in new facilities and new technologies. However, because the modernization of steel must proceed in parallel with the revitalization of other core industries, Government assistance for steel will be most effective if it is part of a program aimed at stimulating business investment in general.

2. Reducing the burdens of adjustment. Inevitably, the modernization of the steel industry will lead to the closure of some outdated steelmaking facilities or to their replacement by new facilities. New jobs may replace older ones. Of course, many workers and communities will benefit from the modernization of the industry. More efficient and competitive plants will provide more stable employment and more certain tax bases. Better plants should be cleaner plants. Still, some economic adjustment is unavoidable.

   Government, management, and labor share an obligation to assist workers and communities to adjust to the dislocations associated with these changes. Steelworkers and steel communities cannot be expected to bear the burden of modernization unassisted. A central element in a steel program must, therefore, be aggressive programs to assist workers to retrain for new jobs or to relocate to areas where jobs are more plentiful. The programs must also attract new employers to those communities where steelmaking jobs have declined. Fostering the revitalization of industry carries with it the matching responsibility of fostering the revitalization of those communities hurt by the process of change.

3. Responding to unfair import competition. A steel industry program should, consistent with our overall trade policy objectives, work toward a situation in which trade in steel products is free of barriers, determined by economic costs—not government inducements—and conducted without injury attributable to dumping or subsidization. Our import competition laws are fully consistent with the obligations we have undertaken under the Multilateral Trade Agreements. The government must enforce these laws rigorously. The government should be prepared to administer them expeditiously.
4. Environmental and safety and health improvement. Steelmaking is an inherently dirty process. Steelworkers face occupational hazards most workers do not. The industry, therefore, must comply with environmental and safety and health regulations. But such compliance by this industry will require, as it has in the past, extremely large capital expenditures, at a time when capital it vitally needed for modernization and the industry is facing a severe capital shortfall. As a result, to achieve compliance with environmental goals as well as to encourage modernization, government should find ways to allow the industry to make the investments in steel production which will assure that both objectives can be attained. Government reexamination of the reasonableness of its regulatory procedures may be required, too. But government action alone will not do the job. We should expect that industry, for its part, will use any funds that are saved through changes in regulatory requirements for investment in modernization and commit firmly to full and timely compliance with all environmental and occupational safety and health requirements.

5. Adopting the best technology. As regards the latest in steelmaking technology, the problem of the domestic industry lies not in the fact that it has ignored the technology but rather in the fact that, for lack of ability or incentives, it has adopted too little of it. Improved capital formation will permit the industry to expand its use of the technical advances that are now immediately available. New steelmaking technologies, however, are on the horizon. It is not sufficient, therefore, for a steel program to aim at helping domestic producers match the extent to which foreign producers use the latest of available technology. Rather, the aim must be to assist our industry in the development and testing of the possibilities so that they are positioned to incorporate new technologies into their operations as soon as they are proven. The great share of research and development should properly be carried out and financed by the steel companies themselves. But, as is the case with many evolving technologies, there are common scientific and engineering problems, which, if solved, could remove roadblocks to the widespread use of technical advances. A steel industry program should set into motion multi-firm collaboration and industry-government cooperation in R&D to find solutions in these common problem areas.

6. Competition should set capacity. The size of the industry should be determined by market forces. Trends in demand for steel products and competition in the U.S. market and in international trade must be the determinants of the industry's capacity. Government's role is to do all it can to assure open and fair competition at home and in the international marketplace. American consumers will not benefit if Government actions shield inefficient U.S. steel producers from competition. On the other hand, the industry and its workers will not benefit if, particularly through trade, they are exposed to economic pressures which are the result of foreign Government measures and support rather than the forces of open industry competition.

7. An integrated long-term approach. A piecemeal approach to the steel industry will accomplish little. The problems of the industry cover a number of areas including capital formation, trade, environmental regulation, technology, and the adjustment of workers and communities to changing industry conditions.
Programs in any one of these areas depends upon progress in others. With or without Government assistance, measures directed only at one of these areas cannot set the industry on a new path. A coordinated and integrated set of initiatives, maintained for a 3 to 5 year period, or longer, is required to remedy the industry's situation.

8. A **partnership commitment**. A commitment by management, labor and Government to support and contribute to a steel industry program will be an absolute prerequisite for its success. Changes in Government policies alone cannot make the industry modern and competitive. Indeed, the future success of the industry depends essentially upon the efforts of its managers and workers. Government, in collaboration with management and labor, can examine its policies and programs to make them as supportive as feasible for industry modernization, but true progress will depend upon the readiness of management and labor to do the same.
PART III

SUMMARY OF THE REPORTS OF THE STEEL TRIPARTITE ADVISORY COMMITTEE

A. MODERNIZATION AND CAPITAL FORMATION

Tripartite Findings

(1) The working group estimate for modernization expenditures was based on 1979 raw steel capacity of 155 million tons, a 4 percent annual replacement rate for steelmaking equipment, replacement costs of $1,130 per ton of finished steel, shipments of 85 million tons in 1980 (76% capacity utilization), and an average of 90 percent capacity utilization thereafter.

Given these assumptions, the average annual capital requirements for the steelmaking segments of the domestic steel industry over the 1980-84 period were estimated to be:

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<th>Billions</th>
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<tr>
<td>Modernization</td>
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<tr>
<td>Environment, Health and Safety</td>
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<tr>
<td>Increased Working Capital</td>
<td>.10</td>
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<tr>
<td>Dividends</td>
<td>.45</td>
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<td>$6.12</td>
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The modernization expenditures, because of the higher yields possible, would enable the industry to increase its shipped ton capacity each year by approximately one million tons. The group made no judgement as to the appropriate size of the industry, although a majority of the full Committee members felt that market forces should resolve the question.

(2) Total average annual capital sources were estimated to be $4.1 - 4.4 billion. To calculate the industry's capital sources, it was assumed that the above expenditures would be made; the industry could be divided into steel and non-steel segments; and the industry is a single company consisting of that steel segment and an agreed level of non-steel cash flows as a capital source. Other capital sources included net new debt, stock sales, retained earnings, depreciation and deferred taxes, and asset sales.

(3) On the basis of their assessments of projected sources and uses of funds in the steel industry, the working group estimates the average annual capital shortfall to be $1.7 to $2.0 billion. The annual shortfall peaks in 1980 at a level of $3.4 to $3.6 billion, and then declines to $0.4 to $0.7 billion by 1984.

- Steel industry members of the working group believe that the estimated capital shortfall may be understated as a result of the following:
A 90 percent capacity utilization is assumed after 1980, a level that has rarely been achieved for sustained periods in the past.

The capital needs estimates do not provide for the domestic capacity expansion which industry assumes it will require to satisfy growth in domestic demand.

Current forecasts of industry shipments for 1980 and 1981 could be lower than those used in the analysis.

The government members of the working group believe the estimated capital shortfall may be overstated for the following reasons:

- Dividend payout ratios could be reduced.
- Working capital provisions could be reduced.
- Further facility closings would reduce modernization requirements.
- The proposed modernization rate is significantly higher than rates (annual modernizing investment outlays) previously achieved by the industry.
- The rate of labor cost increase could be moderated through productivity gains.

The working group also analyzed the effects of various tax options with respect to the projected capital shortfall.

The effects of various tax options are as follows:

- Elimination of the "minimum" tax would reduce the average annual shortfall by $50 million.
- Other tax reduction options, such as "10-5-3," would have little effect on the shortfall during the early years of a modernization program because of the expected low profitability in the steel industry over the next several years. A fully refundable 10 percent investment tax credit would reduce the shortfall by an average of $0.7 billion per year over the 1980-84 period.
- Accelerated capital recovery (in any of a number of variations) would provide significant benefits toward the end (1985-89) of a modernization period. For example, in the later years the industry would experience a $1.5 billion increase in capital availability under "10-5-3" provisions, versus a $0.7 billion surplus under current tax law.

The working group agrees that accelerated capital recovery for all industry would have the following immediate beneficial effects for the steel industry:
The demand for steel would increase as a result of the general stimulus to capital spending.

Diversified steel firms could use the liberalized tax provisions to offset taxes on profitable non-steel operations.

**Tripartite Recommendations**

In the area of capital formation, while the working group, given its assumptions, reached consensus on the dimensions of the industry's financial needs for modernization, it did not reach consensus on proposals for government measures to address these needs, save for agreement that acceleration in capital recovery, applicable across all industry, constitutes a cornerstone in a modernization program for the domestic steel industry. The industry and government positions on the specific options to aid capital formation for industry modernization were as follows:

1. The steel industry favors enactment of accelerated capital recovery legislation as soon as possible, particularly "10-5-3." In addition, in testimony before the House Ways and Means Committee on July 30, the industry proposed a refundable investment tax credit.

2. The Administration stated its opposition to the enactment of tax legislation before the election. It has since stated that it would support tax reduction next year and that any tax cut should include accelerated capital cost recovery, and a refundability provision for the investment tax credit.

In summary, the full Tripartite Committee agreed on the need to enhance capital formation in the steel industry, but disagreed on the precise measures to accomplish the goal. The Committee, however, endorsed tax changes that would encourage more rapid capital recovery.
B. INTERNATIONAL TRADE

Tripartite Findings

(1) Since 1950 the United States has moved from a position of being the world's leading exporter of steel to its largest importer of steel.

(2) The deterioration in the industry's financial health during this period was accompanied by a marked change in the U.S. position in international steel trade. It is recognized that while imports have not been the sole cause of declining profitability, there is a historic connection between the growth of imports and the low profitability of the industry, which in turn has hampered the industry's modernization efforts over time.

(3) The reasons for the change in the industry's net trade and financial situations are obviously complex, with many factors, both domestic and international, accounting for the change.

(4) Internationally, several factors help explain the growth in U.S. imports, including:

(a) the development of export-oriented steel industries in Japan, Europe, and a number of developing countries;

(b) the development, at least since 1974, of a considerable imbalance in world supply and demand, even including non-economic capacity additions in some countries;

(c) the propensity of some foreign producers to view exports as the adjustment mechanism in times of slack domestic demand, a propensity reflecting the sensitivity of profitability in the capital-intensive steel industry to high rates of capacity utilization and the desire to maintain employment regardless of demand conditions;

(d) the reliance on protectionist measures in major foreign markets, a policy which, when applied, enables steel exporters to compete aggressively on world markets without undermining their home market prices;

(e) the decline, in decades past, of ocean shipping rates, which lowered raw material costs to resource-poor producers and minimized transportation barriers to exports;

(f) the reduction in several stages, during recent decades, of steel tariffs; and

(g) in the view of the industry and labor members of the working group, the exposure of the domestic industry to a substantial amount of unfair import competition.
(5) Having observed that recent initiatives such as the Multilateral Trade Agreements, the Trade Agreements Act of 1979, and the establishment of the OECD Steel Committee together represent a promising framework for resolving the steel import problem, working group members noted that the test of their value will be their effectiveness in ending injurious dumping and subsidization.

Tripartite Recommendations

(1) Working group members agreed that the future agenda for steel trade policy discussions should include:

-- Close monitoring of the promptness and effectiveness of U.S. trade law enforcement;

-- Consideration of the special problems posed by non-market economies—including government-controlled steel sectors in market economies—in calculations of foreign market value and subsidization;

-- Effective implementation of the Subsidy Code, including bringing developing countries into full compliance with Code obligations.

-- Negotiation of an international safeguards code not specific to the steel sector but which would require greater transparency regarding import and export restraints that can divert steel trade to the U.S.;

-- The problems of worker adjustment;

-- More effective use of the OECD Steel Committee to monitor trends and developments in international steel trade so that potentially disruptive changes in trade flows may be identified at an early stage;

-- Maximization of the Steel Committee's analytical and consultative capabilities in order to foster government policies that will maintain profitable and economically viable steel industries throughout the OECD area; and

-- Development of more effective rules to curb subsidized export credits for steel plant and equipment.

(2) Working group members, emphasizing that steel trade policy measures alone cannot restore the health of the industry, agreed that the following matters warrant urgent attention in view of the crisis now confronting the industry:

(a) Full, prompt enforcement of U.S. trade laws, in accordance with Congress's legislative intent.
(b) The OECD Steel Committee must be energized in order to complete promptly the basic items already on its agenda, and to provide the consultative and liaison mechanism necessary while revitalization/restructuring programs in major steel producing regions are being completed.

(c) Worker adjustment problems may increase during the revitalization period and will be grossly distorted by import-related unemployment. Hence, a continued and more flexible trade adjustment program is needed as a complement to a steel trade policy.

(3) Industry members of the working group, while agreeing as to the urgency of point (a) above, also urged that, as an adjunct to full trade law enforcement, the TPM should be reinstated in a restructured form that would remedy the defects, asserted by industry, in the previous TPM and that, during the period of industry modernization, the U.S. market should not be disrupted by excess volumes of imports.

(4) Labor members of the working group additionally urged that there be instituted government-to-government discussions to implement a trade arrangement in which there would be sensitivity to fluctuating volumes of imports during a definitive and assured period of accelerated investments in the modernization of the steel industry.

(5) Government members of the working group noted that the government does not accept the contention that import relief beyond the full and prompt enforcement of the trade laws is necessary to permit the revitalization of the industry. In the full Committee discussions, the view was advanced and generally accepted that the trigger price mechanism (TPM) was within the existing trade laws because it was designed to facilitate the prompt implementation of the laws. Government spokesmen further noted that the TPM remained a viable option and that under appropriate conditions it could be reinstituted.

(6) During working group deliberations industry members also raised the possibility of extending TPM-type coverage to trade in specialty steel products. Government spokesmen, noting that it would be extremely difficult to administer such a program because it would entail monitoring a great number of product categories, emphasized that a necessary first step would be for the industry to suggest a practical means to carry out such a program. Spokesmen for the Department of Commerce indicated that they were prepared to review such recommendations on an expedited basis.
C. ENVIRONMENTAL PROTECTION

Tripartite Findings

(1) The steel industry's capital position relative to environmental requirements is unique. No other industry is so capital intensive and so in need of capital intensive modernization. Because of the nature and quantity of uncontrolled steel wastes and the physical magnitude of corrective actions needed, no industry has made or continues to face capital expenditures of such a magnitude and representing so great a percentage of its capital needs.

(2) The industry's ability to invest in environmental controls and other forms of modernization is closely related to its capital position. The industry anticipates a 4% annual replacement rate and expenditures of $4.7 billion a year for modernization and is now facing one of the most severe capital shortfalls in its history.

(3) For the above reasons, across the board adherence to the current Clean Air Act of 1982 compliance deadline has the potential for delaying modernization plans.

(4) Resolution of the major environmental regulatory issues potentially impeding steel industry modernization will not in isolation achieve the goals of the Tripartite effort. The agreements reached by the working group on environmental protection must be part of a broader industrial revitalization policy designed to promote modernization of the industry.

Tripartite Recommendations

(1) Because of the problems discussed above, all working group members endorse an amendment to the Clean Air Act which would grant authority to the Administrator of EPA, in his discretion, to delay the December 31, 1982 deadline for compliance by a steel facility of an individual company with Clean Air pollution control requirements for a period of up to three years, provided that the amendment is structured so as to assure that 1) the delay results in accelerated capital investment for modernization of steel-producing facilities within the company; 2) the company's steel facilities will come into compliance between now and the end of the deferral period; 3) means are established by the company to prevent degradation of air quality in the meantime; and 4) the delay is necessary to carry out the purposes of the amendment.

(2) The working group members also agree that, for reasons similar to those given under the discussion of the Clean Air Act deadline, to the extent substantial additional expenditures will be required to meet new Clean Water Act requirements, an amendment to the Clean Water Act authorizing the Administrator of EPA to grant steel operations an extension of the compliance deadline for up to three years (from July 1, 1984 to no later than July 1, 1987) is warranted. The amendment would be similar to the Clean Air Act amendment described above.
(3) Members further agree that the current water discharge permits for steel facilities should be extended, or "rolled-over," until the middle of next year so that, to the maximum extent possible, determinations of new levels of pollution control under the Clean Water Act can be based on national regulations which are now being developed, or at least reflect the information obtained in the rulemaking proceeding.

(4) Finally, members agree that EPA should explore ways to make the important regulatory initiative represented by the bubble policy (which allows sources the flexibility to meet Clean Air Act requirements in more cost effective ways) more available to the industry. Every effort will be made to remove unnecessary obstacles to the use of this promising technique by steel companies, and to do so as quickly as possible.
D. COMMUNITY AND LABOR ADJUSTMENT ASSISTANCE

Tripartite Findings

(1) The working group found that the establishment of a company-specific steel task force under the Commerce-Labor Adjustment Action Committee (CLAAC) proved to be an effective tool for responding to the late 1979 U.S. Steel and J&L plant closings, when coupled with the significant efforts of the companies and union.

(2) Specifically, the CLAAC coordinated task force has accomplished the following:

--improved the flow of unemployment benefit and employability service information to the field;

--speeded up the application for, and payment of, benefits under the Trade Adjustment Assistance (TAA) program;

--in New Haven, Dolton, and Waukegan, helped to draw CETA prime sponsors into the effort to provide training and other services;

--developed a step-by-step specific action plan to:

a. provide local coordination;

b. provide access to available public programs for laid-off workers;

c. develop job opportunities;

d. develop training; and

e. provide community economic diversification.

(3) The need for temporarily assigning a Federally-funded official to work full-time with local government, labor, and management was tentatively established by the "Four-City Steel Adjustment Federal Advisor Demonstration Project," which responded to steel-related dislocations in Youngstown, Ohio; Torrance, California; Joliet, Illinois; and New Haven, Connecticut. These officials are responsible for assessing the dimensions of the problem at each identified location and for implementing available assistance programs as quickly as possible. These officials are intended to act as catalysts to coordinate with state and local officials, companies, the union, and other appropriate public and private organizations.

(4) In the context of developing a steel industry program, and given the industry's current cyclical downturn, there is need for a continuing evaluation of existing community and labor adjustment assistance programs--to ensure the meeting of readjustment needs. It should be noted that the vast majority of both actual and anticipated steel plant closures are geographically concentrated in the older industrial areas of the midwest.
Earlier Labor Department certifications of steelworkers have largely expired, leaving most without TAA coverage. In general, worker petitions filed in late 1979 and early 1980 have been denied. The Vanik Bill (revising TAA)—which might have afforded some steelworkers coverage because their firms were suppliers to companies with certified auto workers—is having a difficult time in this session of Congress.

Even if some steelworkers were certified for TAA, there will likely be little training money available under Title III of CETA—the regular funding source for training import-impacted workers. With auto and other certifications, thousands of worker applications for training are pending going into the new fiscal year. If only $10 million remains allocated for these purposes in FY 1981, there will clearly be little available for certified steelworker training.

To help meet some of these needs, the Department of Labor has announced that it will develop experimental assistance projects to improve the effectiveness of the Government's efforts to help dislocated workers, including training, job search and relocation assistance. One or more of these pilot projects will be launched in communities affected by steel related layoffs.

Federal community adjustment assistance has been effective in partially mitigating the economic impacts resulting from steel plant closures and in generating permanent reemployment opportunities for some unemployed steelworkers. However, additional community adjustment assistance resources may be needed to meet the adjustment needs of communities that may be impacted by future steel plant closures.

**Tripartite Recommendations**

1. The company-specific steel task force approach, coordinated under CLAAC, should be utilized to respond to any future major plant closings. The task force has uncovered and addressed some previously unrecognized problems among affected workers and communities, including the need for a fulltime Federal presence for at least a limited period in heavily impacted communities.

2. Although the action plans submitted by the CLAAC steel task force may need modification in details to respond most effectively to subsequent closings, at the moment this appears to be a sound approach for dealing with major shutdowns, one worthy of continued support by all interested parties. The 90-day advance notice provision in the new industry collective bargaining contract should permit even more effective, timely action.
(3) The designation of Federally-funded officials to communities heavily impacted by steel closings to coordinate adjustment efforts is just now getting underway. This undertaking should be fully analyzed, and, if found to be an effective tool, routinely used in responding to future major plant closings.

(4) There should be continuing evaluation to ensure that the various adjustment programs, including Trade Adjustment Assistance, be maintained or modified so as to most effectively address the needs of impacted communities and workers. The Vanik Bill, properly modified, should be passed as soon as possible.
E. TECHNOLOGICAL RESEARCH AND DEVELOPMENT

Tripartite Findings

(1) The working group finds that a number of modern steelmaking technologies are moving from traditional batch operations towards continuous, closed operations. Progress on existing technologies is moving in the same direction.

(2) The working group believes that any progress in current continuous operations delivers benefits in the near term while also contributing technology, knowledge, and experience toward long-term development of integrated, continuous, closed operations. Such progress promises significant improvements in manufacturing productivity, energy utilization, environmental protection, and worker health and safety. Accordingly, the working group, noting the need to draw upon individuals with industry expertise, advocates tripartite planning and support for research and development and technology utilization in this area.

(3) The working group concludes, however, that such a tripartite commitment will be effective only if there is cooperative tripartite action on capital formation within the steel industry. The working group notes that if R&D is pursued without assuring the capability for implementation, the program will succeed in generating only knowledge and experience for overseas producers to use for their competitive advantage.

(4) The working group, which was specifically charged to study the adequacy of Federal funding for R&D in steel technology, examined the magnitude, content, and policies of the two major mission agency programs, those at the Environmental Protection Agency and the Department of Energy, finding:

--agency programs, though professionally managed and administered by dedicated staffs, have very limited resources for demonstration projects for new technologies. This lack of demonstration funding is a serious weakness, and it is in the national interest to support such efforts.

--a need for increased cooperation on a tripartite basis in planning the technology programs of the Federal Government, confirmed by the fact that the mere existence of the R&D working group resulted in significantly improved coordination among agencies and improved access to important information.

Tripartite Recommendations

(1) Continuous Steel Casting. The working group, convinced that the widespread adoption of continuous steel casting is the single most important step that industry can take to modernize steel technology, recommends a tripartite effort to identify government action which can encourage industry investment and R&D in this area.
(2) Formed-Coke Technology. Given that the technology for producing high-strength coke in uniform shapes is important to progress in continuous, closed processing, the working group recommends cooperative industry-government support of this technology, including rapid demonstration of formcoke technology, under Department of Commerce leadership of an interagency-industry group to financially support and plan coordinated technology development in this area.

(3) Sensors for Dynamic Control. Given that a key factor in obtaining the full benefits of continuous operation is the use of dynamic control systems, but that the full range of sensors needed for such systems is not available to the steel industry, the working group recommends that the Department of Commerce organize a national workshop in Dynamic Control Systems to define (1) the pattern of progress in the art, and (2) the areas in which government may effectively cooperate to aid in the development of needed generic knowledge.

(4) Coal Based, Continuous Operations. New coal-based direct reduction processes to produce a solid iron product are under development. Also, new processes that reduce iron ore to liquid, pig iron using coal (rather than coke) and electricity, such as the plasma arc process, are emerging. Given the potential for a competitive advantage to the U.S. in coal-based technology, we recommend Department of Commerce funding for process development and demonstration of new, coal-based processes.

(5) Recycling and Recovery Technology. Noting that an important step towards closed operations will be the development of technologies and plant practices for recycling the at times hazardous wastes produced in steel manufacturing, the working group recommends (1) Department of Commerce action to stimulate tripartite support for a national center, focused on solid waste R&D and technology utilization, stressing resource recovery of electric furnace dust, a feasible target of major importance to the industry, and (2) Federal agency (DOE and EPA) actions to encourage formation of university centers to perform the research and develop the skilled manpower pool needed by the industry.

(6) Advanced Process Technology. Noting the long-term potential of innovative steel technologies (e.g., plasma technology) yet observing the serious decline in process engineering capability in our universities and in the number of students graduating in these fields, the working group recommends that the National Science Foundation support basic and applied research on advanced topics such as plasma technology and encourage the generation of cooperative industry/university research activity in such advanced technologies.

(7) The working group recommends that R&D activity in the area of worker and environmental health and safety in existing steel plants should be increased.
(8) Finally, in view of the lack of existing resources devoted to demonstration projects, the working group recommends increased demonstration plant funding for such mission agencies as the Departments of Commerce, Energy, Interior, the Environmental Protection Agency and the National Institute for Occupational Safety and Health.

(9) In its review of the working group's report, the full Committee stressed that:

- the recommendations focused primarily on the technologies that were necessary for developing the next round of steel technology and should be viewed as a long-term development effort;

- improved technological development would only be successful if it fit into an overall program to revitalize the industry, with enhanced capital formation an essential component of such an effort; and

- the next step would require the development of appropriate criteria for deciding which concrete projects should be undertaken, by the industry, or on a collaborative basis.