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SOME PERSPECTIVES ON THE FUTURE OF METALS RECYCLING

DAVID SERLS

Colonial Metals Company; Vice-President, National Association of Recycling Industries

The National Association of Recycling Industries (NARI) is unique among industry trade organizations. NARI's membership encompasses the firms that recover and produce all types of scrap metals and the consuming industries that utilize these vital raw materials.

It is obvious, then, that the views of this Association on recycling reflect a wide consensus of judgment. They provide what it believes is a well-rounded perspective on the industry's economic potentials, as well as the challenges it faces in the years ahead.

Certainly, there are basic economic factors that underscore strong growth potentials for scrap metals recycling.

The 1981–82 recession had a disastrous impact on many sectors of the scrap metals industry. In many case, the economic pressures changed the very structure of the industry and the ways in which recyclers operate their businesses, and market their materials. Despite these pressures, however, the overall long-term positive factors for the industry's economic growth are still in place.

These growth indicators include the following:

1. The ready availability of scrap metal supplies.
2. The available capacity of the nation's processors to produce competitively-priced recycled raw materials to meet the prompt needs of consuming industries.
3. The impact of many mine closures, and subsequent demand and price pressures for domestic alternatives to supplies of virgin ore.
4. The continuing commitment by American industry to reduce energy costs and to maximize the use of those materials that will bring this about.
5. The need for industries that generate metal scrap to save on their own waste disposal costs — and growing environmental disposal problems. By recycling, they help recapture part of their investment in the purchase of new raw materials.

While we are propelled forward by these basic growth potentials, the recycling industry simultaneously faces serious economic challenges. The rapid proliferation of regulations governing hazardous waste, right-to-know laws, and other measures impacting toxicity in metals *all* pose serious constraints to the industry's growth. Unless these measures are directed into positive channels, they may create insurmountable regulatory obstacles that could undermine the economic viability of many recycled metals operations, indeed, perhaps destroy them altogether.

Just how critical are recycled metals to the nation's raw materials needs? Consider the 1983 share of materials market data developed by NARI. Last year, scrap metals made up major percentages of the total raw material supplies utilized by American industry. For copper, the total was almost 47%. For aluminum, it was over 36%. For iron and steel, over 28%. For lead it reached over 48%. Stainless steel was over 37%, and for zinc the total share of market was close to 16%.

In fact, many scrap metals are absolutely essential to the nation's raw material base. This is clearly evident when we look at our dependence on imports. Of the metals mentioned, the United States is self-sufficient or almost self-sufficient, in only two — copper and lead.

Scrap metals not only reduce import dependence, they also help bolster the country's precarious balance of trade position. According to the Department of Commerce, U.S. scrap metal *exports* — excluding precious metals-bearing scrap — amounts to $1.23 billion dollars in 1983. At the same time, scrap metal imports totaled $318 million dollars. Obviously, with a difference of $912 million dollars on the side of exports, the favorable balance was clear and in welcome contrast to the nation's overall position. Consider that the United States has for years been experiencing a massive deficit in its trade balance, amounting to $72 billion in 1983 alone.

Export markets are very important to the economic health of the recycling industry and the nation's environmental efforts, as they provide needed outlets for scrap commodities surplus to domestic industry requirements.

Most importantly, with energy costs at record levels, and the availability of future energy resources an open question, recycled metals offer a viable cost alternative to the contained use of more energy-intensive virgin materials.

This is evident when you consider that the manufacture of products with recycled metallics substantially reduces the energy costs required to produce these same goods with virgin materials. Recycled aluminum is, perhaps, the most dramatically cost-effective. Only 5% of the energy input is required if recycled aluminum raw materials are used instead of virgin ore. Indeed, scrap's energy cost-effectiveness accounts largely for the increase in aluminum recycling in recent years, especially that of used beverage cans.

The industry's experiences with used aluminum beverage cans are, in fact, a dramatic indication of just what can be achieved through scrap usage. Aluminum can recycling has saved producers and manufacturers millions of dollars in operational costs, at the same time conserving countless kilowatts of energy power, and helping to alleviate serious disposal and litter problems.

For the other major recycled metals, the cost savings are also impressive. The energy conserved in the use of scrap is as high as 85% in copper. It is 65% in ferrous scrap and lead, and 60% in scrap zinc. With these kinds of cost saving available to them, it is little wonder that so many industries have accepted the voluntary mandate of the Resource Conservation and Recovery Act to maximize their utilization of recycled materials, whenever and wherever possible.

Unfortunately, the past few years have, in many ways, created economic hardships for many sectors of both the primary and secondary metals industries. Consumption of both primary and scrap materials in 1983 was down considerably from pre-recession 1979 levels. If inflation is factored in, the "real" price of all metals — scrap and primary — also declined sharply from pre-recession figures, with resulting negative effects on profit margins, capital investments and expanded marketing opportunities.

Last year, in comparison to pre-recession levels, the consumption of the major scrap metals declined in almost every case. The consumption of scrap copper was down 33%, scrap lead was off 27%, stainless steel scrap was off 5%, and scrap zinc consumption declined 8%. Only secondary aluminum showed an increase. It was up 16% over recession levels. This was due largely to the dramatic efforts that have been made year-to-year in the recycling of used beverage cans.

This overall decline in scrap metals consumption was essentially due to the drop in economic demand for *all* raw materials, as a consequence of the downturn in general economic activity. However, since the beginning of this year, we have experienced considerable recovery. Hopefully, it will continue.

We must not forget that the Federal tax structure clearly provides an incentive to produce virgin metals, particularly by integrated producers and manufacturers. Nevertheless, scrap metals are generally more readily available than virgin ore, and, under most circumstances, are

more responsive to production requirements and at lower prices than their primary counterparts.

There also are the critical environmental factors that work in the favor of recycling. The recycling industry effectively recovers materials that might otherwise be discarded in the solid waste stream.

Recycling has dramatic anti-inflationary effects in helping to deal with solid waste disposal, currently estimated to cost $8 billion annually and continuing to leap year-to-year. In fact, the costs of solid waste disposal are rising faster than inflation. Increased scrap recycling helps resolve many of these economic and environmental problems.

On the industrial side, scrap-generating companies have pragmatic financial reasons to cut back on their waste disposal costs, which amount to millions of dollars annually. The waste disposal taxes in pending "Superfund" legislation, directed to cleaning up hazardous waste sites, dramatically highlight the financial burdens of waste disposal that have been placed on the industrial community. Everything they can do to reduce these costs — to efficiently market their own scrap — maximizes their profit potentials, and creates additional incentives for processors to recover and recycle increased tonnages of metallic raw materials.

Indeed, the "Superfund" legislation and other regulatory factors pose serious challenges to the recycling industry. The rapidly growing regulation of metals — due to their presumed toxicity to humans, animals and plants — threatens to alter the industry's economic posture. These measures are growing both in the extent of regulatory control and in the number of governmental agencies and jurisdictions involved in promulgating them. We all know what the burdens of pollution control and workplace health costs have done to lead production in the United States. We are now seeing the first stages of extension of such regulatory management to a wide range of other metals.

Take, for instance, the U.S. Occupational Safety and Health Agency's employee "right-to-know" rules that require manufacturers — including secondary metal producers — to notify their employees and their customers of the toxic effects of metals, as well as any chemicals, used in the workplace.

OSHA refuses to recognize any "*degree* of hazard" in applying these rules. If there exists any kind of so-called scientific data to even suggest toxicity, a metal is regulated. All "transgressors" — serious and minor alike — are treated in the same way.

Given the vagueness of OSHA's "medical" research, virtually every recycled metal may soon be regulated. Moreover, the effects of these regulations will literally snare all metal sales into the ever-widening product liability arena, where producers of secondary metals may be liable for the health effects of metals beyond their own plants. The financial burdens of compliance, along with the potential liability costs, will be severe.

Numerous states are already adopting similar — even more stringent — toxic laws and regulations. Some go so far as to require extensive public disclosure of presumed toxicity of metals handled in a company's facilities. Given the great public concern over environmental health issues, this disclosure may create needless hostility towards metals facilities of all kinds. It may not be unlike that which has seriously injured the chemical industry. The metals industry — particularly the recycling sector — does not deserve such a label.

We in the recycled metals industry are as deeply concerned as anyone else about assuring the public health. But the problem is arising because of government agency failure to recognize any *degree of risk*. This "absolutist" approach to monitoring so-called health risks threatens to impose serious and needless operating costs on all metal producers.

Hazardous waste regulations, in particular, pose a unique challenge to metals recyclers. The commodity status of recycled metals, acknowledged in a recent ruling by the United States Supreme Court, is threatened by proposed hazardous waste actions of the Federal

Environmental Protection Agency and many state environmental administrations. In an effort to control illicit, improper disposal practices often involving "chemical recyclers," these agencies have proposed broad-based regulations to control *all* metals recovery and processing activity, including beneficial, legitimate metals recycling.

As metals recycling represents a positive *solution* to waste disposal problems, it is ironic that government would react in such a negative way. Any attempt to impose waste management controls and operating practices on recycling is counterproductive to the public interest, and simply ruinous to economically efficient scrap metals recovery and marketing.

The recycling industry has long been in the forefront of innovative responses to environmental and waste management problems. We created and developed automobile shredders, aluminum can recovery systems, metals separation techniques, and other technology to recover and process metallic values of all kinds. We are deeply committed to the nation's environmental well-being. A degree of regulation of selected metals handling and certain, specified metals operations may be justified. These costs will certainly have to be internalized in recycling economics. But we must not — indeed we *cannot* — allow governmental over-reaction to destroy our industry's integrity and undermine its resource and environmental effectiveness. To do so would be a great disservice to both the economic future of metals recycling, and the nation.

So there's the picture. On the one hand, the economic factors for the scrap metal industry's growth are in place. On the other hand, there are the serious potentials for over-regulation of scrap metals and recycling activities, which could literally force some companies out of business and force others to stop processing and recycling various commercially needed grades of metal.

We in NARI are actively involved in opposing these onerous regulatory burdens and projecting positive, workable alternatives. We have been successful in many states in convincing legislators that needless and economically infeasible over-regulation is *not* the constructive answer to the problems. The extent of our efforts at the Federal level and in the many states where the regulatory issues have reached the crucial stage will, in many ways, determine the continued economic viability of scrap metals recovery and recycling in the years to come.