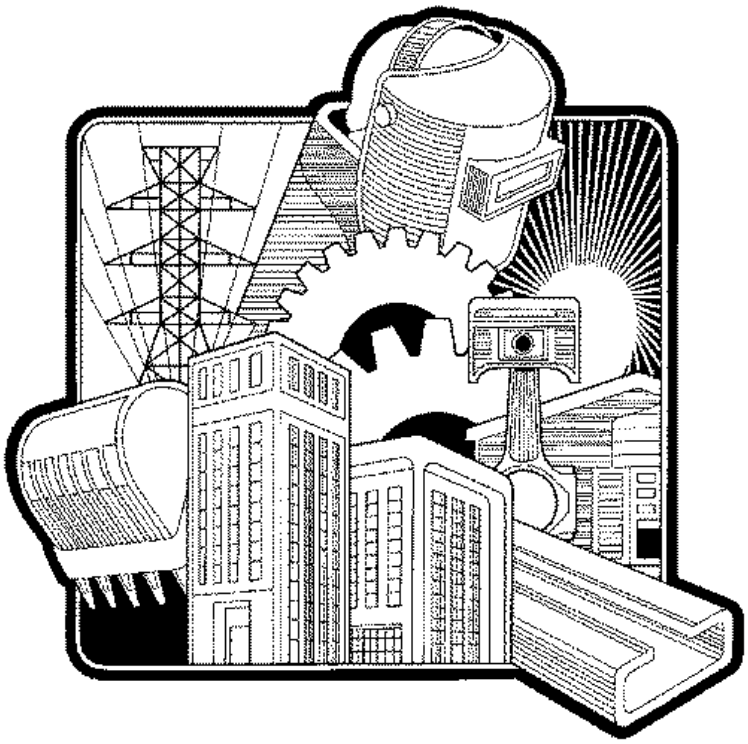
LEVELING THE PLAYING FIELD FOR RECYCLING



A Policy Report on Virgin Material Subsidies from the National Recycling Coalition

September 1999

Prepared by the NRC Policy Workgroup

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Acknowledgments

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NRC Mission Statement

The National Recycling Coalition is a not-for-profit organization dedicated to the advancement and improvement of recycling, and also source reduction, composting and reuse by providing technical information, education, training, outreach and advocacy services to its members in order to conserve resources and benefit the environment.

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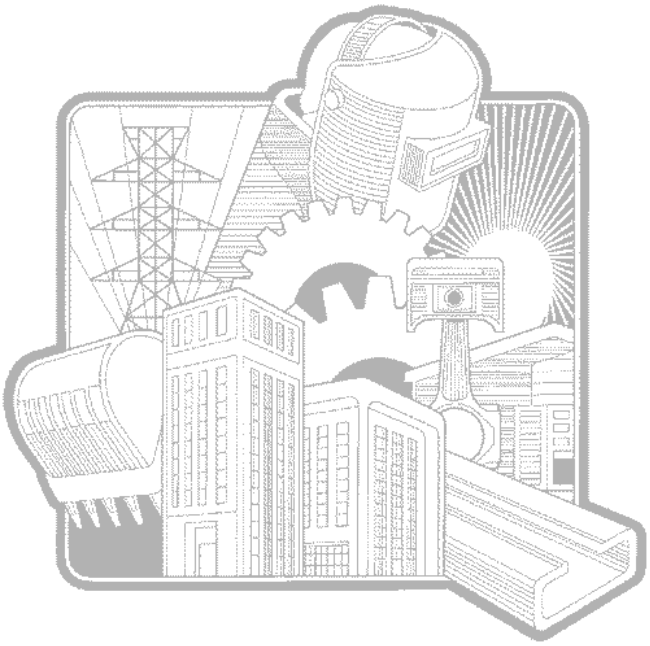


Executive Summary

This report by the National Recycling Coalition's Policy Workgroup identifies virgin material and waste disposal subsidies that negatively impact recycling. It also includes an action plan to work for the repeal of the targeted subsidies. The National Recycling Coalition's Board of Directors unanimously approved the following report, noting the high priority placed on the subsidies issue by state recycling organizations.

After an extensive review of the available research, the Policy Workgroup (PWG) identified nine significant federal subsidies that negatively impact recycling and resource conservation. These subsidies total approximately $3 to $5 billion annually in the United States. In addition to identifying the subsidies, the workgroup reported the following key findings to the National Recycling Coalition (NRC) Board.

- The historical justifications (e.g., to promote resource development and westward expansion) for the subsidies identified are no longer relevant.
- The system-wide impacts of the subsidies impede the shift away from an extractive-based economy to a more sustainable materials economy.
- The subsidies identified have the effect of artificially lowering the price of virgin materials and disposal, which negatively impacts recycling.
- When a subsidy to the receiving company is not passed on to the consumer as is sometimes the case in noncompetitive situations, the subsidy increases the company's profitability and ability to attract investment.
- Cross-elasticity studies that might quantify the impact of subsidies on recycling are dated, inconclusive, or nonexistent.
- Although important by themselves, the elimination of the subsidies will not address other environmental impacts. While most of the subsidies identified in this report focus on economic impacts, several (e.g., mine bonding, landfill regulations) also attempt to address environmental "subsidies," which admittedly are difficult to quantify.
- While the elimination of these subsidies is an important first step, their elimination alone will not guarantee an improvement in the market demand and prices paid for recovered materials.

Based on these findings, the NRC Board determined that a number of specific subsidies adversely affecting recycling should be targeted for elimination by the NRC.

The subsidies targeted for elimination by the NRC Board are listed below.

Subsidy	Annual Amount of Subsidy*	Total Accruing to Virgin Materials Industry*
Inadequate Bonding for Mine Closure and Reclamation	≥$1 billion	$150-$250 million
Depletion Allowances for Extraction of Oil, Gas, Aggregate, and Metals	Fuel: $600 - 900 million Nonfuel: $300 million	$60 - 90 million $300 million
Inadequate Regulation of MSW Landfills	<$100 million	<$100 million
Cross-Subsidies to Large Industrial Electricity Users	>$1 billion	$500 - $750 million
Defense of Oil Supplies from the Persian Gulf	$10 - $23 billion	$1 - $2.3 billion
Inadequate Cost Recovery for the Strategic Petroleum Reserve (SPR)	$1.6 - $5.4 billion	$160 - $540 million
Rate Subsidies for Industrial Wastewater Discharges	≥$1 billion	>$250 million
No Charge for Non-Consumptive Water Use	≥$1 billion	>$250 million
Tax-Exempt Financing for Waste Disposal Facilities	<$75 million	<$75 million

* The PWG's best estimates, except in the case of Persian Gulf oil defense and SPR cost recovery estimates, which are taken from the report *Fueling Global Warming: Federal Subsidies to Oil in the United States* (Koplow and Martin, Greenpeace) and the estimates of the depletion allowance, which are taken from data compiled by the Joint Committee on Taxation.

The PWG recommendations for specific subsidies vary from immediately lobbying for their elimination to further reviewing the subsidy before taking action. In some cases, rather than eliminating

the program itself, the PWG recommends reforming the financing of the programs away from general tax revenues and toward user-base fees (e.g., establishing a fee on oil consumption to pay for the Strategic Petroleum Reserve).

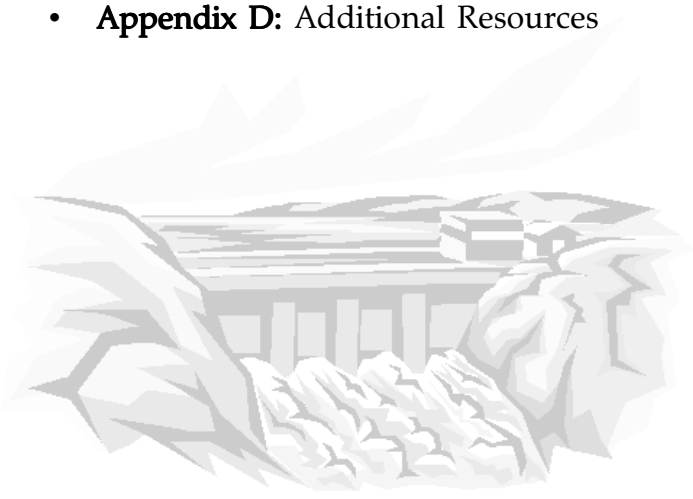
The NRC Board also approved an action plan that calls on NRC to:

- educate its members and the general public about the virgin material subsidies issue through a media outreach campaign,
- create a forum on NRC's web site for further discussion of the issue,
- coordinate advocacy efforts with other organizations working to eliminate the targeted subsidies, and
- lobby for changes in statutes and regulations to level the playing field for recycled materials and products.

At the same time, the Board decided that further research was required to determine the impact of federal timberland and tax policies on paper recycling. NRC staff and the PWG will develop a research plan to further quantify the impacts of these policies and the subsidies identified in this report. NRC also plans to hold a series of regional policy forums on issues associated with virgin material subsidies in general, including a session at NRC's annual conference in September 1999, to educate NRC's membership on these issues.

The report includes the following appendices:

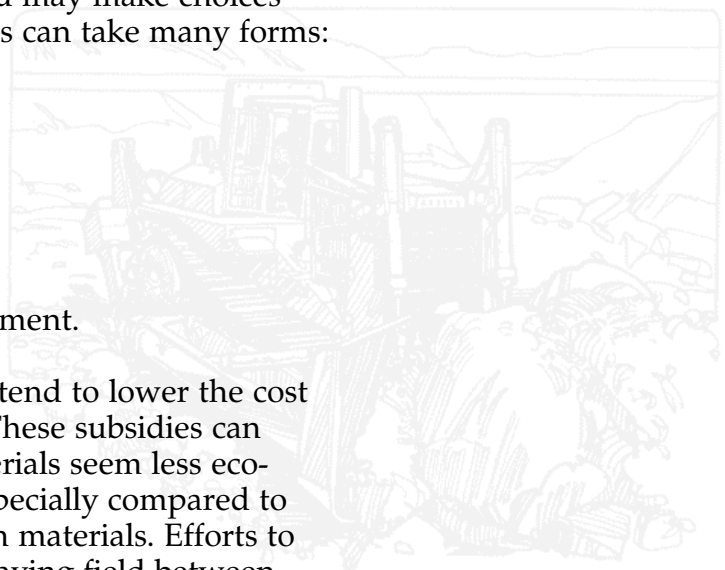
- **Appendix A:** History of NRC Policy Development on the Subsidies Issue
- **Appendix B:** NRC Board Motion Concerning Virgin Material and Waste Disposal Subsidies
- **Appendix C:** NRC Board Resolution Authorizing Staff Action
- **Appendix D:** Additional Resources



I. Introduction

For our market economy to function properly, the prices of goods and services should reflect the full or true costs imposed on society by their extraction, production, and disposal. If some goods or services are artificially underpriced, either because they are subsidized or their environmental costs are not internalized, consumers cannot make educated decisions and may make choices detrimental to society's well being. Subsidies can take many forms:

- tax advantages,
- direct transfer payments,
- below-market loans and insurance,
- loan guarantees,
- below-market leasing policies,
- subsidized energy and water use,
- inadequate protection of the environment.



Subsidies for virgin materials industries tend to lower the cost of extraction, production, and/or disposal. These subsidies can make reducing, reusing, and recycling materials seem less economically attractive than they really are, especially compared to extracting, fabricating, and discarding virgin materials. Efforts to eliminate these subsidies aim to level the playing field between virgin and recycled materials.

Based on direction from the National Recycling Coalition's (NRC) Board of Directors in May 1996 and two years of subsequent research on the issue, the NRC Policy Workgroup (PWG) developed a list of specific virgin material and waste disposal subsidies it felt should be targeted for elimination. This report summarizes these findings and represents the conclusion of the NRC Board regarding which subsidies adversely impact waste reduction, reuse, and recycling.

II. Policy Workgroup Analysis

Before discussing the virgin material subsidies identified by the Policy Workgroup, it is important to recognize four caveats:

A. Historically, subsidies were justified as a means of economic development and were not intended to discourage recycling.

When Congress initially enacted these subsidies, the tax code was used to spur the growth of a natural resource-based, industrial economy and to encourage particular settlement patterns. The subsidies may have had a logic and rationale that made sense for that period.

The impact on recycling and a more sustainable materials economy was not a consideration, as it is now. In addition to the failure to consider sustainability, a study by Jeffrey Sachs at the

Harvard Institute of International Development has shown that economies that focus development on natural resource extraction perform much worse than those with a more sustainable development basis. Moreover, in the last 30 years, we have begun to leave the industrial age for the information age, and environmental considerations loom larger in the public's mind.

Increasingly, the original justifications for these subsidies make less sense. However, it serves no purpose to criticize the industries that legitimately arose to enjoy them in good faith.

B. Subsidies alone do not create an unlevel playing field for recycling.

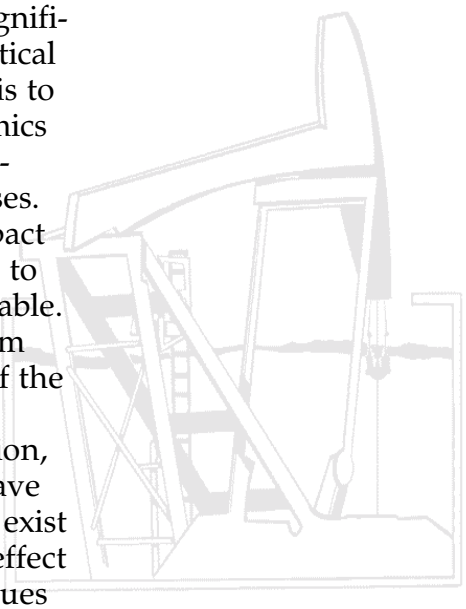
Virgin material subsidies are just one reason for the unlevel playing field for recycling. Externalized environmental costs and impacts also make virgin materials appear to be more economically attractive than waste reduction, reuse, and recycled materials. In the United States, many virgin material-related externalities shift environmental and health-related costs of production onto the worker, the environment, or the surrounding population rather than reflecting these costs in the price of the product. Another potentially significant area of concern is the adequacy of environmental regulations governing the liners for solid waste landfills. While other gaps in environmental controls and regulations do remain in the United States, the problems tend to be much larger in developing countries, some of which provide large shares of our raw material imports. Thus, large subsidies, even in other countries, can harm domestic recycling.

C. The magnitude of the impact of virgin subsidies on recycling is difficult to measure.

While subsidizing virgin materials extraction and production is generally unwise public policy in a free market economy, the magnitude of this impact on recycling is difficult to gauge. As yet there is no definitive study to document whether the elimination of these subsidies alone will have a decisive impact on the demand for recycling services and recycled materials. For example, as is often pointed out, while these subsidies may involve billions of dollars, they are not necessarily a large percentage of the cost of production or the value of the materials and products sold. However, the simple ratio of subsidies as a portion of the overall cost of production does not fully reflect the impact of these subsidies on recyclers.

D. A definitive link between virgin subsidies and recycling has not been established.

It also has been correctly pointed out that statistical studies have not established a definitive link between subsidies and significant adverse impacts on recycling markets. The standard statistical method to measure the impact of these subsidies on recycling is to evaluate the "cross-elasticity" of various materials. This economics term measures how much the demand for recycled material increases when the price of the associated virgin material increases. While historical elasticity studies do not show a significant impact on recycling from increases in the price of virgin materials due to the elimination of a subsidy, these studies are no longer applicable. Because these studies are based on elasticity data compiled from the 1970s, they are not useful in assessing the current impact of the subsidies on recycling. Today there are many more processing facilities available to affect a shift to recycled material. In addition, the technologies for efficiently upgrading recycled materials have improved dramatically and entirely new markets for materials exist today. Consequently, studies built on old data understate the effect of subsidies on recycling. Furthermore, these statistical techniques are not useful in measuring the overall impact of the subsidies when considering other factors. For a more detailed analysis, see the section entitled "The Magnified Impact of Subsidies on Recycling" on page 10.



To date, no comprehensive study has updated the elasticity data and incorporated the aforementioned considerations that may well be more significant. Until then, we only speculate on how much recycling will be helped by eliminating these subsidies. Regardless of the precise quantification of the impact that these subsidies have on waste reduction, reuse, and recycling, eliminating them will have some — albeit unquantified — positive impact. Most importantly, it is in the public interest to level the playing field so that the marketplace can work properly.

III. Subsidies Targeted for Elimination

Subsidies targeted for elimination are presented on the next several pages. In addition to a description of the targeted provision, we provide a recommended action that, in some cases, proposes changes to program structure rather than program elimination. The subsidies also have been evaluated according to how they impact existing recycling markets, which virgin materials most benefit, and the share of the provision that we estimate flows to virgin versus recycled commodities.

Quantification of subsidies generally relies on informed judgment rather than actual data collection. (The exceptions are subsidies to oil and gas, which have been quantified based on detailed assessments). Given the difficulty in developing precise estimates

for some of these provisions, the PWG decided that a rough approximation was appropriate at this stage, since the estimates are being used only to set priorities rather than to make specific calculations.

The *total value per year* represents an approximation of the total annual value of the subsidy to the economy. Not all of this flows to virgin industries. Oil subsidies, for example, may also benefit consumers (through lower heating oil prices) or even recycling industries (through lower operating costs for their collection trucks). Thus, the degree to which the subsidies are likely to disadvantage recycling industries is the *net* subsidy share accruing to virgin industries.

As an example, the gross subsidy to virgin industries would be equal to the percentage of oil consumed in virgin industries relative to the entire economy multiplied by the total subsidy to oil. The share of oil consumed by recycling operations would then be subtracted to yield the incremental benefit to virgin production as a result of subsidies.

Tier One

The first four subsidies are targeted for immediate action subject to political feasibility.

1A. Inadequate Bonding for Mine Closure and Reclamation

Description

Mineral extraction is often quite disruptive to the surrounding environment. Bonding or other financial assurance mechanisms should ensure that environmental damages and the costs of properly closing mines do not fall on the public. Bonding also forces mineral extraction activities to reflect the cost of liability in their pricing. Existing bonding requirements tend to focus on closure and reclamation (often excluding environmental damages), and in many cases are too low to protect the public against bearing the liabilities.

Impact on Recycling

Inadequate bonding for minerals extraction allows domestic producers to mine affected minerals at an artificially low cost. Inadequate bonding for energy minerals (oil, gas, and coal) can reduce the cost of important feedstocks to virgin materials industries.

Virgin Materials Most Benefiting

Plastics (oil and gas); steel (coal and iron ore); other metals with significant domestic production (copper, gold, lead, molybdenum, silver, and zinc).

Share Benefiting Virgin Materials Versus Recycling

Almost all of this subsidy benefits production with virgin materials, rather than recycled materials. Recycling industries that also use oil, gas, and coal would potentially benefit from slightly reduced energy prices. However, in addition to relying on these fuel minerals as feedstocks, virgin industries tend to be substantially more energy-intensive than their recycling counterparts.

Total Annual Value of Subsidy
Greater than $1 billion

Estimated Net Share Accruing to Virgin Industries
15-25%

Recommendation
Bonding levels should be raised to meet expected liabilities. User fees should be levied on the materials to cover the cost of past site remediation.

1B. Depletion Allowances for Extraction of Oil, Gas, Aggregates, and Metals

Description

The percentage depletion allowance allows certain types of mining activities to deduct the gross sale price of minerals from their taxable income. The standard treatment for recovery of multi-year assets that are gradually consumed is cost-depletion, which is capped at the amount actually invested in the asset. Percentage depletion allows artificially high tax deductions.

Impact on Recycling

Percentage depletion allows minerals extraction to occur at an artificially low cost. As a result, mining activity occurs that would not occur without the subsidy, and returns on some mining activities increase. In both cases, recycled commodities have a more difficult time competing.

Virgin Materials Most Benefiting

Plastics (from oil and gas); virgin metals (such as lead, cadmium, copper, silver, copper, and iron); concrete.

Share Benefiting Virgin Materials Versus Recycling

The portion of this subsidy flowing to the materials sector entirely benefits virgin producers.

Total Annual Value of Subsidy
Oil and gas: $600-900 million
Nonfuel minerals: $300 million

Estimated Net Share Accruing to Virgin Industries
Oil and gas: less than 10%
Nonfuel minerals: nearly all.

Recommendation
Replace percentage depletion allowance with standard cost depletion treatment.

1C. Inadequate Regulation of Municipal Solid Waste Landfills

Description

Subtitle D standards under the Resource Conservation and Recovery Act govern the disposal of municipal solid waste in landfills. Experts in the field of solid waste management argue that the requirements for these landfills, including financial assurance requirements, are inadequate to protect human health and the environment over the period necessary and should be upgraded.

Impact on Recycling

Higher standards would drive up landfill costs and tipping fees. This, in turn, would make recycling a more attractive alternative. Although some low-cost quick fixes have been proposed, a responsible resolution to address potential problems associated with closure and post-closure costs would require substantial financial investments.

Virgin Materials Most Benefiting

Benefits all virgin materials in proportion to their share of the waste stream.

Share Benefiting Virgin Materials Versus Recycling

This entire subsidy works against increased recycling.

Total Annual Value of Subsidy
Less than $100 million

Estimated Net Share Accruing to Virgin Industries
100%

Recommendation
Upgrade Subtitle D standards to ensure long-term liabilities are not being shifted to the public.

1D. Cross-Subsidies to Large Industrial Electricity Users

Description

Electricity sales to large industrial customers are generally made at rates substantially lower than those paid by commercial or residential customers. To some degree these differences reflect volume discounts and differences in the type of service provided (for example, some industries may purchase interruptible power, which can be shut off if demand from other customers grows too high). However, there are a number of examples where, as occurs with wastewater, there are cross-subsidies to industrial users that are not based on differences in the cost of service.

Impact on Recycling

Subsidies to large electricity consumers can substantially reduce the cost of production for some virgin materials, creating a competitive impediment to recycling industries. For example, inexpensive electricity is the single largest determinant of competitiveness in the primary aluminum sector.

Virgin Materials Most Benefiting

Primarily aluminum. While paper uses substantial electric energy, much of it is self-generated.

Share Benefiting Virgin Materials Versus Recycling

Virgin aluminum production benefits much more than secondary production from electricity subsidies. Recycled steel is actually more electricity-intensive than virgin steel. However, mini-mills are generally not located in the regions with the large federal power authorities that are responsible for much of this class of subsidies.

Total Annual Value of Subsidy

Potential cross-subsidies could be many billions per year, with cross-subsidies at federal facilities alone approaching $1 billion per year.

Estimated Net Share Accruing to Virgin Industries

Less than 20% for all facilities. Cross-subsidies at federal facilities accruing to virgin industries is 50-75%

Recommendation

Eliminate cross-subsidies on electricity sales to large industrial customers. An initial focus should be placed on federally-owned power facilities whose major customers are virgin industries.

Tier Two

The next five subsidies are targeted for action pending additional research.

2A. Defense of Oil Supplies from the Persian Gulf

Description

The United States government provides extensive military support to the Persian Gulf region. Defense of oil shipments and infrastructure in the region is one of three major missions of this force. Oil consumers, who benefit from stable prices and supply, pay nothing for this security service, allowing artificially low prices on imported oil.

Impact on Recycling

Without the subsidy, the delivered price of oil would rise, increasing the equilibrium price of oil domestically. This would increase the production costs for energy-intensive industries and transportation (natural gas prices would also rise somewhat).

Virgin Materials Most Benefiting

Plastics and steel.

Share Benefiting Virgin Materials Versus Recycling

Because virgin material production tends to be more energy-intensive than recycled production, recycling would be relatively better off as energy prices rose. Although both virgin and recycling industries use substantial road transportation services and thus would face rising costs, even here recycling would be relatively better off. Because recycling production tends to be located closer to population centers than virgin production, it is less transport-intensive.

Total Annual Value of Subsidy
$10 - 23 billion

Estimated Net Share Accruing to Virgin Industries
Less than 10%

Recommendation
Convert funding of the oil share of Persian Gulf defense from general tax revenues to a user fee on oil consumption.

2B. Inadequate Cost Recovery for the Strategic Petroleum Reserve

Description

The Strategic Petroleum Reserve (SPR) stockpiles oil domestically, protecting oil consumers against price spikes from supply disruptions. This reduces the financial incentive to diversify energy supply sources. The costs to build, finance, and maintain the SPR have not be borne by the Reserve's beneficiaries.

Impact on Recycling

The impacts of this reform will be similar to those described under "Defense of Oil Supplies from the Persian Gulf," though the magnitude will be smaller.

Virgin Materials Most Benefiting

Plastics and steel.

Share Benefiting Virgin Materials Versus Recycling

See explanation under "Defense of Oil Supplies from the Persian Gulf."

Total Annual Value of Subsidy
$1.6 - 5.4 billion

Estimated Net Share Accruing to Virgin Industries
Less than 10%

Recommendation
Convert funding for the Strategic Petroleum Reserve from general tax revenues to a user fee on oil consumption.

2C. Rate Subsidies to Industrial Wastewater Dischargers

Description

Many large industries discharge wastewater to publicly-owned treatment works (POTWs) for treatment or directly to rivers and streams. POTWs were built to treat primarily biological contaminants and have very limited ability to handle the metals and complex chemicals flowing from many virgin industries. Although the U.S. Environmental Protection Agency regulates industrial discharges, often requiring some in-plant treatment prior to discharge, many virgin industries do not pay the full costs associated with their discharges to POTWs and regulation by public agencies. Rather, these costs are shifted to residential and commercial customers. Some industries are permitted to discharge partially treated wastewater directly to lakes and streams. Often, the permit fees levied for this right to discharge do not recover the full cost of overseeing the industry.

Impact on Recycling

Because many virgin industries are both water-intensive and the source of complex pollutants, inadequate charges on wastewater treatment disproportionately benefit these sectors, allowing them to be more competitive than recycled substitutes.

Virgin Materials Most Benefiting

Plastics and aluminum for discharges to POTWs. Paper for discharges directly to lakes and rivers.

Share Benefiting Virgin Materials Versus Recycling

The quantity of wastewater discharged and the complexity of wastes are, in general, greater for virgin industries. Of the fraction of this subsidy benefiting materials production, most probably flows to virgin industries rather than recycled producers.

Total Annual Value of Subsidy
Greater than $1 billion

Estimated Net Share Accruing to Virgin Industries
More than 25%

Recommendation
Rate subsidies for industries discharging either to POTWs or directly to rivers should be eliminated.

2D. No Charge for Non-Consumptive Water Use

Description

Non-consumptive water use occurs when an industry withdraws water for use inside a plant, often for cooling purposes, then returns it to the lake or river from which it was drawn. Although the water isn't "consumed," it is often altered. Factory pipes may add contaminants or warm the water, which can hurt the wildlife and the ecosystem as a whole. Finally, stream flow patterns are altered.

Impact on Recycling

Large water consuming virgin industries benefit from artificially low production costs, disadvantaging recycled substitutes.

Virgin Materials Most Benefiting

Paper and aluminum.

Share Benefiting Virgin Materials Versus Recycling

Of the fraction flowing to the materials sector, most of this subsidy probably supports virgin production rather than recycling.

Total Annual Value of Subsidy
Greater than $1 billion

Estimated Net Share Accruing to Virgin Industries
More than 25%

Recommendation
Localities should evaluate non-consumptive use patterns and begin charging industries to use the water based on adverse affects on the surrounding ecosystem.

2E. Tax-Exempt Financing for Waste Disposal Facilities

Description

Tax-exempt municipal debt enables certain types of activities to borrow money at lower interest rates than would otherwise be possible. Because the lenders do not need to pay state or federal taxes on the interest they receive, they are willing to lend at lower rates. Of course, the government ends up with less tax revenue. Tax-exempt debt may be applied to waste collection and disposal infrastructure. Materials recovery facilities generally cannot access this inexpensive debt funding.

Impact on Recycling

Waste collection and disposal infrastructure such as transfer stations, landfills, and incinerators are extremely expensive, long-lived assets. A reduction of a few percentage points in the interest rate can make a substantial difference in project economics, placing alternative strategies such as recycling at a competitive disadvantage.

Virgin Materials Most Benefiting

Benefits all virgin materials, in proportion to their share of the waste stream. Thus, paper is probably the single largest beneficiary.

Share Benefiting Virgin Materials Versus Recycling

This entire subsidy works against increased recycling.

Total Annual Value of Subsidy
Probably less than $75 million

Estimated Net Share Accruing to Virgin Industries
100%

Recommendation
Eliminate the eligibility of waste collection and disposal infrastructure for tax exempt debt.

Federal timberland and tax policies benefiting the paper industry

At its May 1999 meeting, the NRC Board reviewed recommendations from the PWG regarding federal tax and timberland management policies that may impact recycling. The Board decided that additional research was necessary to determine the impact of these policies on paper recycling. NRC staff is working with the PWG to develop a research plan by the end of 1999 to more precisely identify the impact on recycling of federal tax and timberland management policies and possible actions targeting elimination of those policies.

IV. The Magnified Impact of Subsidies on Recycling

While the subsidies identified in this report involve billions of dollars, compared to the total cost of production or the value of the finished products, the subsidies may seem small and inconsequential. However, the simple ratio of subsidies as a portion of the overall cost of production does not fully reflect the impact of these subsidies on recyclers.

Consider these negative impacts on recyclers:

Marginal Impacts on Price. Processors who upgrade post-consumer material for end markets incur a fixed handling cost to recover discarded materials for reuse and recycling. In some cases, the price processors receive for their upgraded materials is a discount off of virgin materials prices because the recycled material often performs like off-specification virgin grades. When the price of virgin materials is artificially lowered, no matter how slightly, the discounted price for recycled material can fall below the fixed handling cost for recyclers, forcing them out of business completely. In plastics recycling, for example, this routinely occurs during troughs in the ups and downs of the resin commodity cycle.

At the same time, the price that processors need to pay community recycling programs for their recyclables is affected by the cost of the alternative, which is landfilling. Therefore, artificially lowering the cost of disposal through inadequate regulations or subsidized or discounted tipping fees can also impact recyclers' economic viability.

Impact on Recycling Program Revenues. For some materials, there is a substantial difference in the price between the feedstock and the finished product. While a subsidy may have only a small impact on the price of the finished product, it may equate to a significant share of the price of the virgin material feedstock. The subsidies in this report lower the cost of using virgin materials. For recycled materials to remain competitive with subsidized virgin material feedstocks in these cases, communities must sell their recyclables for a much lower price. Therefore, even though subsidies may only have a small impact on the price of a finished product, they can have a significant impact on recycling program revenues.

Impact of Imported Materials. Depending on the virgin materials industries' reliance on the global economy and the nature of foreign subsidies, some industries may not pass the benefits

gained internationally through to the price of goods sold in the United States. The effect is to increase their profitability relative to the domestic recycling industry, while diminishing the ability of recyclers to attract working or expansion capital relative to virgin-based enterprises.

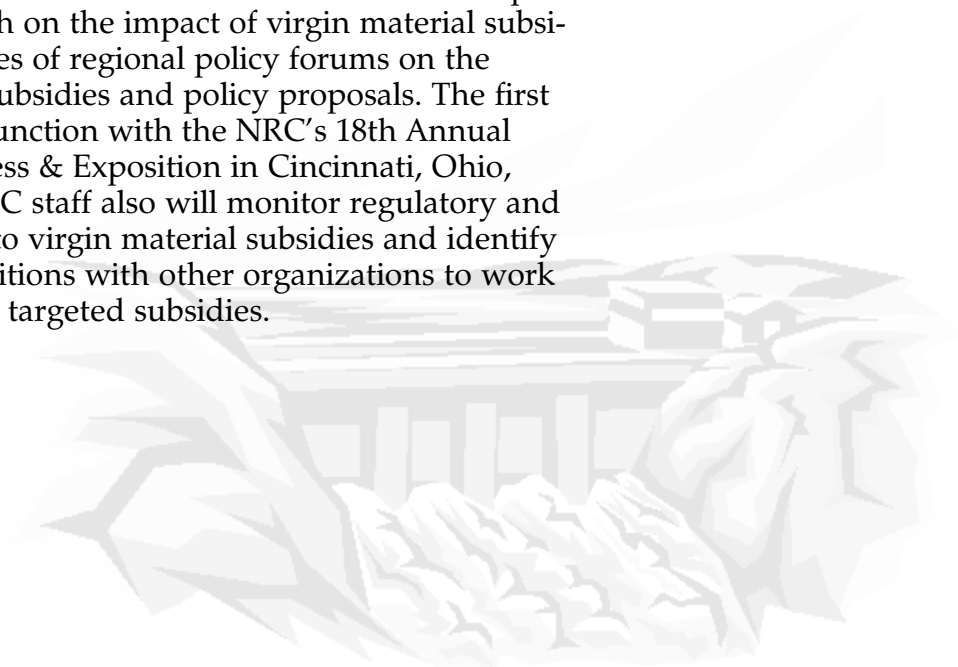
V. NRC Action Plan

To implement the recommendations in the report, the NRC Board of Directors adopted the following action plan.

1. Educate NRC members and State Recycling Organizations on the issues identified in the report.
2. Develop a media campaign to reach the general public.
3. Post the PWG report on the NRC web site and provide a bulletin board for members and interested parties to comment on the issue.
4. Coordinate NRC's efforts with other organizations that have similar interests, including but not limited to Taxpayers for Common Sense, Friends of the Earth, and the GrassRoots Recycling Network.
5. Lobby for changes in statutes and regulations to level the playing field as authorized by the following resolution (See Appendix C).

VI. Conclusion

This report targets nine subsidies that the NRC Board agrees should be eliminated to level the playing field for recycled materials and products. NRC staff will work with the PWG to develop a plan for additional research on the impact of virgin material subsidies and to organize a series of regional policy forums on the impact of virgin material subsidies and policy proposals. The first forum will be held in conjunction with the NRC's 18th Annual National Recycling Congress & Exposition in Cincinnati, Ohio, September 26-29, 1999. NRC staff also will monitor regulatory and legislative activity related to virgin material subsidies and identify opportunities to build coalitions with other organizations to work towards elimination of the targeted subsidies.



Appendix A:

History of NRC Policy Development on the Virgin Subsidies Issue

The National Recycling Coalition's (NRC) initial policy position on virgin material subsidies dates back to the organization's publication of its National Recycling Policy in 1989. At that time, NRC advocated the general position that federal tax reform measures and other tax laws be reviewed regularly to identify inequities and undue biases that provide tax advantages to the manufacture and distribution of products made from limited natural resources and virgin materials. The policy also recommended that federal tax policies be modified to equalize the benefits for recycled products and/or provide "countervailing" subsidies such as investment tax credits and other tax incentives for using or purchasing recycled materials and products.

In 1992, the NRC's Recycling Advisory Council (RAC), a blue-ribbon panel appointed by the NRC Board, adopted a formal policy resolution calling for "the elimination of virgin fiber subsidies which negatively impact the demand for recycled materials." Later in 1992, based on the RAC's recommendation, the NRC board adopted the following policy position:

"NRC encourages the federal government to conduct an ongoing review of all federal fiscal policy, such as federal subsidy programs and rate structures, to identify the environmental impact of these policies, especially as they relate to resource utilization, and to make appropriate changes. Such changes should include:

-elimination of virgin fiber subsidies associated with federal timber sales which artificially lower the price of wood fiber; and

-modification of freight rate structures to eliminate inequities in transporting recovered materials from generation sources to recycling facilities."

In 1995, NRC circulated its existing policy positions, including the one above, to its affiliated and associated state recycling organizations (ROs) and specifically asked the ROs if the NRC should continue to advocate for the elimination of these subsidies. Of the 22 ROs responding, 19 said that NRC should continue to pursue the elimination of these subsidies. Of these 19, six indicated "overwhelming" support, nine "general" support and one "some" support for continuing to advocate on this issue. The remaining three

indicated their ongoing support for the current position. The 19 ROs represented approximately 54% of NRC's membership in 1996 and 60% of NRC's membership in 1998.

Based on the results of the RO survey, the NRC board adopted 10 "Areas of Agreement" as part of its overall Advocacy Message in May 1996, including a statement on virgin subsidies. The Board's resolution stated the following:

"NRC supports the elimination of virgin material subsidies which adversely impact the demand for recycled materials and products. NRC should gather information on federal policies which subsidize the extraction, use and disposal of virgin materials to determine their impact on the demand for recycled materials and products. NRC should work to build coalitions with other organizations attempting to eliminate these subsidies at the federal level."

In 1997, the NRC formed a Policy Workgroup to implement the resolution. During the following year, the Policy Workgroup gathered the information called for in the May 1996 resolution and enlisted the support of several outside experts including:

- Doug Koplow of Industrial Economics, primary author of the EPA study "Federal Disincentives: a Study of Federal Tax Subsidies and Other Programs Affecting Virgin Industries and Recycling."

- John Young, who has previously published research on this issue for World Watch Institute and Taxpayers for Common Sense and is currently doing additional research for the Materials Efficiency Project

- Dr. Stephen Swallow, Associate Professor, Department of Environmental and Natural Resource Economics, University of Rhode Island.

Based on this research, the PWG presented the list of subsidies contained in this report, which the NRC Board approved unanimously in September 1998.

Appendix B:

NRC Board Motion on Subsidies

MOTION CONCERNING VIRGIN MATERIAL AND WASTE DISPOSAL SUBSIDIES

APPROVED BY THE NRC BOARD
SEPTEMBER 1998

WHEREAS, polling of the NRC's state recycling organizations identified virgin material and waste disposal subsidies as one of the most important issues to the Coalition's members;

WHEREAS, the National Recycling Coalition went on record in May of 1996 in support of eliminating virgin and waste subsidies as part of its Advocacy Message:

"[NRC] [s]upport[s] the elimination of virgin material subsidies which adversely impact the demand for recycled materials and products. NRC should gather information on federal policies which subsidize the extraction, use and disposal of virgin materials to determine their impact on the demand for recycled materials and products. NRC should work to build coalitions with other organizations attempting to eliminate these subsidies at the federal level."

WHEREAS, the NRC Policy Workgroup has spent the past year gathering information on virgin material and waste disposal subsidies to implement the May 1996 Advocacy Message and finding common ground in this area among its diverse membership;

NOW THEREFORE BE IT RESOLVED that the Board accepts and adopts as official NRC policy the attached report from the Policy Workgroup, "Leveling the Playing Field."

BE IT FURTHER RESOLVED that the Board further directs staff to edit the report for publication and implement the recommendations contained in the report.

Appendix C:

NRC Board Resolution Authorizing Staff Action

RESOLUTION AUTHORIZING STAFF TO ACT ON SUBSIDY ISSUES

1. The staff is authorized to act on behalf of the National Recycling Coalition in whatever appropriate ways will lead to the abatement or termination of the following subsidies:

a. Inadequate Bonding for Mine Closure and Reclamation;
b. Percentage Depletion Allowance for Extraction of Oil, Gas, Aggregates, and Metals;
c. Cross-Subsidies to Large Industrial Electricity Users; and
d. Inadequate Regulation of MSW Landfills.

2. In addition, staff is authorized to act on behalf of the National Recycling Coalition in whatever appropriate ways will lead to the abatement or termination of another virgin material or waste subsidy if:

a. There is clear evidence that the subsidy disproportionately benefits the virgin or waste industries; and
b. A majority of the Policy Workgroup that can be reached by telephone within two days recommends the proposed activity and a majority of the Executive Committee that can be reached by telephone within two days approves that recommendation.

Appendix D:

Additional Resources

Kinsella, Susan (editor). (1999). *Welfare for Waste: How Federal Taxpayer Subsidies Waste Resources and Discourage Recycling*. Atlanta, GA: GrassRoots Recycling Network.

Koplow, Doug and Martin, Aaron. (1998). *Fueling Global Warming: Federal Subsidies to Oil in the United States.* Washington, DC: Greenpeace. http://www.greenpeace.org/~climate/oil/fdsub.html

Koplow, Doug and Dietly, Kevin. (1994). *Federal Disincentives: A Study of Federal Tax Subsidies and Other Programs Affecting Virgin Industries and Recycling*. Washington, DC: United States Environmental Protection Agency Report # EPA 230-R-94-005.

Koplow, Doug. (1993). *Federal Energy Subsidies: Energy, Environment and Fiscal Impacts.* Washington, DC: The Alliance to Save Energy.

Kripke, Gawain and Cuff, Courtney. (1997). *Green Scissors 1997.* Washington, DC: Friends of the Earth.

Weidenbaum, Murray; Douglass, Christopher; and Orlando, Michael. (1997). *Toward a Healthier Environment and a Stronger Economy: How to Achieve Common Ground.* St. Louis, MO: Center for the Study of American Business, Washington University.

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