So there are two possible uses of this technology.

Mr. Daddario. Then you get into subsidizing the removal of garbage

and other solid wastes.

Dr. Hibbard. It is going to cost a certain amount of money to dispose of municipal refuse and if we can minimize that cost through the recovery process, this will be helpful. The second angle is that we do need these metals, and we are going to need them more and more as

time goes or

I have had the opportunity to spend some time around the country this year lecturing in various areas where we have research centers, and I have pointed out to the housewife that when she takes a piece of aluminum foil and bakes a potato in it and throws it away, she is throwing away a valuable metal. Because we are importing 85 percent of our aluminum needs, the recovery from municipal refuse will benefit our total economic situation. I believe that the public can become responsive to this and I believe that if they see that this issue is important to the country and that they can contribute to it, they will respond to it.

May Î continue? In the scrap area, there is in existence a going industry which does reprocess scrap. Between 25 and 50 percent of our metals are recycled annually. Nevertheless, there is still a large amount of material that is not recycled. This is, in fact, the material which is difficult to separate. Part of our program is working on ways and means of helping with this separation. As I mentioned the silver waste in fixer and photographic materials is very valuable and the major photographic companies have programs for collecting spent

fixer and recycling the silver.

We believe this can be improved through a public awareness of

the need for such activity.

With respect to automobile scrap and refrigerator scrap, there is a very large inventory of iron and steel in this form, and it is, I think, absolutely essential that we find economically feasible ways to use this scrap from the standpoint of our natural resource requirements.

I have here a list of our existing projects. If I may I submit this to the staff. I do not know whether you want it in the record or not.

Mr. Daddario. Thank you, Dr. Hibbard, if you would give it to the staff.

(The information referred to may be found in the committee files.) Dr. Hibbard. In conclusion, we are continuing our programs both in-house and contract, and our joint venture research with industry in an effort to solve these problems in the most effective way.

We believe that much of the required technology already exists. The major problem is economics. I suspect this will require addi-

tional technology before it can be solved.

Mr. Daddario. Mr. Vaughan, do you have anything to add to the question of economic feasibility and the work that is going on in developing the necessary techniques?

Mr. VAUGHAN. I do not have anything to add.

I agree with Dr. Hibbard that we have the technology to do the job now. One of our major needs is for more widely applied economic technology.