

Plastic bags and ecology: the scientific facts, and the politics

by Corrado Perrone

Prof. Corrado Perrone, from Florence, Italy is the secretary of the Plastics and Environment Association and is one of the top experts in plastic materials in Italy. The following is translated from a transcript of his presentation to the conference commemorating the Council of Florence, which was held in Rome on May 5-6 under the sponsorship of the Schiller Institute (see report in EIR No. 23, June 2, 1989). Professor Perrone's term, i verdi, has been translated here as "Greenies," and refers not only to the small Green Party (Partito Verde) of Italy but to their many self-styled "ecologist" co-thinkers in the Radical, Communist, Socialist, and other parliamentary parties as well as in the media.

I work in an industry which produces plastic bags, those famous bags that, starting next week, you will find in the shops and supermarkets are no longer free or available for a few cents, but will cost between 150 and 200 liras [about 7-10¢ in U.S. currency]. This is because the Greenies caused Parliament to vote up, a few months ago, a law which imposes on every single plastic bag, no matter what its dimensions, a 100-lira tax, which becomes 119 liras due to the Value Added Tax. This has been done because, so say the Greenies, you have to create a disincentive for producing an object which they claim causes pollution. Unfortunately the Greenies have succeeded in convincing many people of this theory, so that the majority of Italian consumers probably will pay these 150-200 liras extra, totally convinced they have made their little sacrifice to contribute to safeguarding the natural environment in which we live.

Well, this is completely false. For four years a discussion has been going on about the environmental impact of plastics. There have been articles, conventions, congresses, and the conclusions that have been reached have demonstrated that the charges made by the Greenies against plastics in general, and plastic bags in particular, are completely unfounded. I don't wish to enter into technical details because that would take too long, but in short, they have started saying, for example, that when plastic bags are burned they produce dioxin; many people believe this, and they write newspaper articles about it, but this is completely false because dioxins are chlorine based, and the material from which plastic bags are made, polyethylene, has no chlorine in it whatsoever. So

it is chemically impossible to produce dioxin by burning plastic bags. It is as if you thought you would get drunk by drinking mineral water.

Then it has been said that the plastic bags kill marine life or suffocate dolphins or the like. Since we in the plastics field were not experts on marine biology, we commissioned a study from the University of Pisa's Marine Biology Institute. And after a little while they told us, on the basis of their own research into all the scientific literature and all the marine biology publications in the world, that there is nowhere any evidence that plastic residues or plastic materials in general, or bags in particular, are a cause—I am not saying a major cause, but even a *measurable* cause of danger or harm to marine ecosystems. This does not mean that it's a good thing for plastic bags to end up in the sea, on the contrary; not only should they not go there, but if necessary people should be trained not to throw them there. But it remains only an aesthetic problem or a problem of a few isolated episodes, which has no quantitative relevance to the equilibrium of the marine environment.

Next, it has been said that plastics in general and bags in particular should be limited because they build up continuously in the environment, because they cannot be recycled. This is so false that, in the industry where I work, every year we recycle 10,000 tons of polyethylene, which is the material the bags are made out of. Not only that: In Italy there exists an industrial sector devoted to recycling plastic materials. Now, the industrialists in this sector have made the following counterproposal to the Ministry of the Environment: Given that you environmentalists say that we have to have an incentive for recovery and recycling, okay let's keep the tax but exempt from it those bags that are produced with recycled plastic materials, so that there will be an incentive to recover more and more plastic and hence to remove it from the waste pile. Well the Environment Minister did not even want to receive them, and they were only able to make their proposal by letter.

'Biodegradables' are biggest polluters

Then the line comes up that the plastic bags pollute because they are not biodegradable. This is only partially true. What is true is that they are not biodegradable, but that does

not mean they pollute. If I pick up a rock, it is not biodegradable, but if I throw it into a river that does mean it is polluting it. Biodegradation and pollution are two different things. For example, the pollution phenomenon in the Adriatic Sea with the growth of algae, the increased eutrophy, and so forth, is due precisely to the phenomenon of biodegradation. In other words, the River Po pours too much biodegradable matter into the Adriatic, and it is precisely the decomposition of this material that creates pollution.

It is true that a substance that is non-biodegradable cannot be destroyed, but it is also true that it is sitting there and not bothering anybody, just like a rock. Not to mention the fact that almost all biodegradation phenomena produce carbon anhydride, which is responsible for the greenhouse effect that seems to disturb the Greenies so much. The law establishes an escape-clause; on the topic of biodegradability, it says that those bags that are made of 90% biodegradable material can escape the tax. This would be very nice except that this material does not exist on the market, and this is well known to the persons who proposed this bill. There is no plastic that is 90% biodegradable.

Hence, the only concrete effect of this law will be to create a disincentive for producing plastic bags which, as we saw before, do not pollute at all, and to build up an incentive instead for producing and selling paper bags, because paper happens to be biodegradable. It's no accident the tax amounts to 119 liras, because all the previous experiments by supermarkets with paper bags have failed; not only because paper is inconvenient to use (it tears easily, etc.), but because its production costs are three times as high as plastic. By imposing this tax on plastic bags, they end up costing more than paper, which gives an unfair advantage from the economic standpoint to the latter at the expense of the former. Now this could just be an economic distortion, a wrong way to favor one industrial product in place of another; except that paper bags are much more polluting than plastic ones, and whoever proposed this law, and the Environment Minister who defends it tooth and nail, have not made a law against, but indeed, in favor of pollution.

We are not saying this just because we are a party to the matter; it is also said by independent research institutes, by university professors, reports that have been commissioned by the Environment Ministries of the German and Swiss governments. In particular, the Swiss government made a comparison between the ecological impact of various packaging materials.

In the end, utilizing this data, it turns out that a paper bag requires almost 4 times as much energy to produce as a plastic bag, pollutes the atmosphere 6 times more, pollutes the water 75 times more (it is known that paper mills are the most pollution-causing industries that exist, from the standpoint of water pollution), and at the end of its life cycle produces almost 4 times as much solid waste. The German government report concludes: "For ecological reasons it does not seem to us to make sense to move from polyethylene shopping bags

to paper ones. The polyethylene shopping bags require less energy for production and overall induce less damage to the environment."

Cut Amazon to produce paper bags?

Based on this report, the German Environment Ministry refused categorically to submit to the demands of the Greenies who want Germany to adopt measures analogous to the Italian ones. Let us recall that, naturally, paper is made of wood, and that to get wood you must cut down trees. So, the very same Greenies who fight now so fervently to preserve the Amazon forests, and in this case may indeed be doing the right thing, have opened up the way to "Made in Brazil" paper bags with this law: We'll see them soon in our supermarkets, produced by those paper mills mounted on big floating barges which follow, year after year, the receding borders of the Amazon forests.

The paper industrialists say that trees can be replanted, and this may also be true, in the sense that in Europe there is a market equilibrium, and hence, as many trees as get cut down, get replanted. But when a law like this is passed, which makes the market explode because it deliberately favors one industrial product in the place of another, there goes your equilibrium. So there will be such a strong demand for paper products that to find the wood needed to satisfy it, it will be necessary to cut down trees, which will be cut down where they are, i.e., in the zones where tropical rain forests grow; this is inevitable.

Now the Greenies know all this perfectly well. There have been conventions, articles, and congresses. What they did was not in good faith. So why are they moving in such an obviously contradictory way with respect to what they say are their goals?

Political plot

For sure, there are economic reasons: In fact the paper and glass industries and those of other packaging materials which define themselves as ecological, are financing the Green movements. But this is just a partial reason, because in reality this support came after the Green movement had already started. I believe there is a deeper psychological reason, even if this is just my personal conviction. What I have said up to now are proven scientific facts; what comes next is my own opinion.

If we take a look at the biographies of the majority of Green leaders, which have been published in an interesting report by *EIR* which is called "The Ecologist Conspiracy" [in Italian], we see that almost all these persons have a past of protestation and violent opposition behind them. We are talking about the 1968'ers, people who in their youth believed that you could overturn our society by violence, failed at that, and now want to get revenge by other means.

The objective of most of the Greenies is not to safeguard nature, but to destroy industrial society; in the name of what, they honestly propose to achieve this, I do not know. Among



Five thousand plastics industrialists and workers demonstrate in Rome on May 11. The banners are all made of recyclable plastic; the one in the foreground features a "talking tree" which pleads, "Help me defend nature, use plastic bags." In the center background is the Schiller Institute banner, "No to the Green dictatorship!" Above: Corrado Perrone.

other things, a proof of this way of operating is also encountered in the systematic attack which the Greenies lead against every new proposal to improve our situation.

Everytime we propose to build an industry, to make an electrical power plant, to construct a highway, to erect a stadium, to make a waste-treatment plant or anything that would help better the environment in which we live, there is always the local Green on hand forming the committee that jumps up to block the project, by using a technique they call environmental impact analysis and which I would like to give you a very simple example of.

Let's suppose someone wants to build a high-speed highway and presents himself with the project. Out pops the Greenie and says: "This road should not be built because its environmental impact is negative, because automobiles travel down the road and they pollute with their fuel discharges, and therefore the lands and dwellings adjacent to the road would undergo a worsening of their quality of life. Building this road means pollution and the road should not be built." Now that all seems to follow, but it is really a trap, because it is not done in a comparative manner; what should be considered is the situation after the project were built, and what would happen if we did not carry out the project. Cars are not built because roads are built; cars exist because people need them to get from one place to another.

Now if I don't make a new road for people, to get from place A to place B, they will use the old roads; the old roads are inadequate and hence there will be more traffic, more congestion, more fuel emissions, more consumption of resources, labor time, and so forth. But the discussion is turned

upside down: The environmental impact analyses should always be made comparatively (and the Greenies know this well, because they have experts in their field who are technicians and are acquainted with all this). The Greenies instead, when they present their conclusions and their theories to public opinion, do them all one-way, not comparatively but dishonestly.

This way everything gets blocked. Power plants are not built, waste-treatment plants are blocked, the widening of the Bologna-Florence highway is blocked. Anyone who has had to drive on that accursed road (which I often have to do for work-related reasons) knows that it is a death-trap. Yet for years, projects have been presented to double its width; the highway company has the funds; but the local Greenies don't want it, because no one wants the new highway to run through his own property.

To sum up, I think that it is time, if we can, to say no to all of this. Honestly we have to say that the Greenies have conquered significant power by exploiting people's sympathies because we all instinctively love nature. But we have to realize that we have given our sympathy to people who did not deserve it, and we must tear off the mask and try to stop them before they wreak damage which is even more serious than what they have already done. I hope that the Schiller Institute, which has never let itself be conditioned by the overweening power of the mass media and has never been afraid to carry forward courageous and sometimes unpopular ideas, can be the aggregating point for this battle which we hope will succeed in defeating the Greenies' plan for destroying the industrial economy.