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***SUSTAINABLE DEVELOPMENT AND INCENTIVES IN  
FAVOUR OF SUSTAINABLE CONSUMPTION IN GREATER  
LYONS***

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## **INTRODUCTION**

With 1 134,689 inhabitants in 1990, Lyons urban district represents the second largest urban entity of France. The city of Lyons alone has 415,487 inhabitants. It is composed of 55 localities which together form an inter-communal cooperation structure, the Urban Community of Lyons, with a territory covering 48,721 hectares, 50% of which are green space and agricultural land.

The rapid development of the conurbation in the 1950's made it impossible to take ecological considerations into account. These now need to be reconsidered in order to give thought to built-up areas in the long-term and to foster sustainable development. From the notion of sustainable development, the necessity arises to actively search for solutions which permits both development and resources' preservation. This means fostering economic development and environmental balance together with social equity development. Such considerations require a new way of thinking and implementation and long-lasting attitudes.

It is accepted that sustainable development policies cannot be implemented without a strong local involvement. It is for this reason that the Urban Community of Lyons (Greater Lyons) is involved in promoting active policies to foster attainment of the above targets. Greater Lyons has adopted a pragmatic approach, when considering sustainable development requirements, in particular when related to urban expansion, urban transport, management of household refuse and water management.

Before dealing with those issues and related solutions dealt with at the local level (3), the French institutional setting (1) will be briefly explained, together with the over-all urban ecological policies of Greater Lyons (2). The conclusion of this document will enable to place the accent on the means used for raising public awareness and to improve attitudes towards sustainable consumption patterns.

### **1. THE FRENCH INSTITUTIONAL SETTING**

France is a centralized unitarian State. Decentralization exists at several levels within an international cooperation structure as follows: the European Community, the French State, the Regions, the "Départements" and the Localities.

Localities are grouped in inter-communal structures, such as the Urban Community of Lyons, the Regions, the Départements and Communes. These groupings are called "Collectivités Locales" (Local Authorities). All assignments at institutional level are determined by law, as defined by the National Assembly. Some of these laws originate from European directives, in particular in the field of environment.

All action carried out by Greater Lyons is compulsorily within legislative boundaries. It is submitted to administrative controls, but is also under the vigilance of the citizen who may contest an administrative decision before an administrative judge. This is common enough in the environmental context.

## **2. THE GREATER LYONS URBAN ENVIRONMENTAL CHART**

Laws that passed in recent years, reflect sustainable development concerns. They relate to each of the following sectors: elimination of refuse, protection and management of water resources, air quality and fight against noise. Regarding the protection of the natural and cultural heritage, legislation was established longer ago.

Action taken by Greater Lyons must fall within the legislative body. For several years, Greater Lyons has integrated the notion of “urban ecology” into the main sectors for which it is responsible (town planning, water, roadways, etc.).

Action taken by Greater Lyons in the field of sustainable development is found in a specific document : the Urban Environmental Chart, initiated within the First Greater Lyons Urban Environmental Chart (1992-1995) and was evaluated by the Greater Lyons Environmental Observatory. 161 campaigns were initiated in favour of the environment, which increased by 81% by the end of 1995. The results were taken as a basis to formulate the new Environmental Chart valid until the year 2001.

In the 1995-2001 mandate, which comprises a programme of local political action, it is stated that *“urban ecology and the environment are listed as a priority, intended to prepare the future of Greater Lyons. The implementation of a commitment to urban ecology is here presented as an efficient way by which the urban community will determine and assess the incidence of various anti-pollution campaigns and environmental protection ”* (Urban Environmental Chart).

*“The Environmental Chart on the one hand offers guidelines and on the other an action plan for the years 1997-2001. It is also Greater Lyons’s first Agenda 21”* (Urban Environmental Chart).

This programme groups each of the fields of responsibility of Greater Lyons fostering sustainable development. Ten fields of application were identified; these are the object of 103 special and operational measures. For each field of application (urban areas, peri-urban areas, water, air, refuse, noise, energy, environmental observatory, information) Greater Lyons is politically, financially and technically committed to incorporate requirements of sustainable development within its competences.

## **3. LOCAL ISSUES AND SOLUTIONS TO PROMOTE SUSTAINABLE DEVELOPMENT**

Not being possible to give special attention to each type of action taken, some areas of intervention were selected for this paper: control urban expansion; urban transportation; management of household refuse; water and water management.

### **3-1. CONTROLLING URBAN EXPANSION**

Both nationwide and locally, town planning has proved to be “outgrowing” since the drawing-up of land-use plans, which have regulated land use in France for the past 30 years. The idea of an “ingrowing” city should be fostered by an overall reform of land-use rights and rational reutilization of urban areas. Greater Lyons has taken steps in recent years, to reach targets set for control of urban expansion. These are, on the one hand, a general change of approach to town planning fostering new ideas. On the other, the application of an older policy, which is maintained and developed: the re-occupation of decayed and abandoned urban areas.

### **3.1.1. Urban planning and land-use planning**

Land-use plans clearly have only a partial incidence on urban development and cannot be a basis for all public policies. They are however the most important tool, being the only document dealing with all town-planning themes throughout the urban district. The land-use plan constitutes a political synthesis, an act of concertation and arbitration *par excellence* towards elaboration of aims for each part of a particular area.

Greater Lyons has undertaken a general review of its land-use plan. Among the weaknesses identified in the plan and consequently in its implementation, special mention can be made on its complexity, heaviness, inertia and legal procedures required, which increased the distance between these plans and the needs of the local public and their elected representatives. What is needed today is to find ways that makes town planning work better for the public.

The modernity of a land-use plan is also assessed by the suitability of its tools. Town-planning regulations should be simplified, and specify more firmly what clearly needs to be protected, and allow more flexibility concerning the suggested uses for given areas. The alleviation of a land-use plan is also evaluated by its reactivity in time. To this end it should accept “floating” factors, i.e. be both permanent and adaptable. The document must therefore include a set of guidelines, providing the means of assessment and adjustment to be applied efficiently rather than a stamp setting the seal to actions at a given time and for the following 6 to 10 years.

The land-use plan is one of the basic tools in fostering sustainable development within the Lyons urban district. Society’s priorities translated into policies and to be reflected into the land-use plan have been listed in four points for the current review:

- environmental balance;
- preservation of social links;
- economic development;
- control of urban expansion.

### **The translation of sustainable development in the land use plan**

More specific policies in favour of ecological balance and control of urban expansion, will be considered during this review:

- adaptation of town planning regulations also in such areas with green structures (networks of uninterrupted vegetal strips of greenspace and agricultural land) to enhance their continuity;
- upgrading and the valorization of water flows both as part of the landscape and with regard to their water quality, and at the same time adapting urbanization needs with the risks of floods;
- enhancement of a landscape identity and the natural and urban heritage of the main geographical sites of the urban district, by clearly defining urbanization boundaries for each locality and adapting the rules to their typological features (geographical lie, architecture,..);
- foreseeing the necessary space required for urbanization in years to come, based on economic management and a careful planning of amenities, which implies a better use of land available in the city-center and nearby;
- promoting attractive forms of housing as an alternative to the individual house, to avoid consumption of non-urbanized areas. Create alternatives to attract people back into the town, especially young and older persons no longer willing to put up with the constraints of isolated suburban lifestyles;
- limitation of the development of large peripheral commercial centres while providing support to small retail in town-centres, which enables to reduce modes of travel and the consumption of space.

### **“Consultation-participation”. A necessary step in the planning process**

The positive results of the land-use plan review will also be assessed on the basis of the participatory process. “Consultation/participation” is becoming the rule everywhere in Europe in the town-planning process. The extent of the support from participants (the public, trade-professionals, elected representatives, ..) for local authority projects tends to be more the result of how they are associated with options than the actual basic content of these options. National laws in the spatial planning sphere provide for specific and compulsory procedures such as public enquiries and pre consultation with the public. The way these are conducted is left to the discretion of the local authorities. In the case of Greater Lyons, public participation is conducted with a total transparency while fully involving the population in the process as early as possible. Thus, numerous thematic and specific meetings involving opinion leaders (local representatives, associations, trade-associations,..) are organized, notably by consultative town-planning committees. Public exhibitions, hand-outs and special documents (e.g. Business Development Plan) are also intended to present and explain the principles guiding political choices related to urban planning.

### **A preliminary evaluation**

A lively debate on the Greater Lyons land-use plan review is thus in progress. However results will not be known for several years, although the initial thematic meetings have met great success. The record of consultations should lead to the conclusion that less criticism will be expressed during public enquiries in the future.

Although town planning in general and the land-use plan in particular have a considerable influence on the promotion of sustainable development by translating adopted policies into regulations, those are not operational tools for the collectivity.

With regard to the control over urban expansion, Greater Lyons has worked out planning tools which enables to recycle abandoned areas.

### **3.1.2. Reappropriation of abandoned areas**

A city is not a static, or “frozen” entity. In the course of its history, parts of it are “born ” in a more or less organized way, other parts “ die away ” in a planned or desired manner. Areas of Greater Lyons thus loose their dynamism, in particular old, central neighbourhoods, are totally abandoned by their original activities, becoming industrial wasteland. Such areas, can be potentially reused to avoid urbanizing new unbuilt areas. This contributes effectively to fight urban expansion.

#### **The rehabilitation of deteriorated housing**

Procedures provided by national legislation to renew housing enabled Greater Lyons to act upon home-owners by allocating bonus-rate subsidies provided by a national organism, for the rehabilitation of their property,, and in particular:

- offer to occupants, whether owners or tenants, better housing conditions; and reintroducing renewed housing onto the market;
- giving new drive to central neighbourhoods in which such operations have priority;
- guaranteeing a mixture of functions including the residential in the city centre and avoiding gentrification;
- avoiding the construction of new buildings in the new areas outside the city.

Such policy is addressed almost exclusively to the public. It is therefore necessary to promote communication, information and awareness-raising activities such as:

- necessary literature and media targeting owners and occupants concerned;
- public meetings, together with public consultation, awareness raising in business circles;
- planning boards;
- locally based teams to monitor and organize consultations among the population.

In the past 5 years, some 3,400 homes were renovated, which also means a saving of 340,000 square metres of building area. Such a result can be considered very positive as the renovated buildings are increasing. This kind of operation can however only be successful if the authorities are involved, not only to ensure that those concerned are made aware of their interests, but also to avoid that the most under-privileged population is excluded from staying in those buildings, once the property has been improved.

#### **The reappropriation of industrial wastelands**

Greater Lyons, directly or associated with other authorities, promotes the re-use and reappropriation of disaffected industrial sites, in particular in central areas. It is a fact that the technical evolution has imposed upon industries to change site, thus moving away from their original location. Economic problems have also led

companies to close down. Whatever the cause was, the result is that the urban fabric is “damaged” and must be reabsorbed for the functioning of the surrounding city, with the aim to avoid urbanization and the utilization of new areas. This means organizing an active partnership between Greater Lyons, industrialists and private developers, involved in public or semi-public town-planning operations, limiting financial investment by local authorities and the financing the public infrastructure necessary for the private sector’s development. This type of operation can modify in the short term the function as well as the image of a neighbourhood. By way of comparison, re-use of one hectare of industrial land “creates” 12,000 square meters of pluri-functional urban area. In the city of Lyons alone, in the past 10 years, about ten operations have been carried out over areas of 1 to 25 hectares.

Appropriation of a town-planning operation by the public is embodied by the use they make of it (living/shopping space, traffic areas,..). The new life of a neighbourhood is assessed by the way it works. The role of the public is not really active except in the final appropriation, a number of inhabitants sometimes regretting that some trace of the industrial heritage has not been preserved.

The control of urban expansion is essential especially within the framework of sustainable development, but it loses some of its effect if it is not coupled with the control on urban harmonisation. An urban transportation plan has therefore been drawn up to define a general policy, in compliance with French rules.

### **3-2. THE URBAN TRANSPORTATION PLAN**

Implementation of such a plan aims at facilitating current and future commuting within and toward the Lyons metropolitan area and the surrounding towns, as well as mobility of its inhabitants. The essential aspect of the Urban Transportation Plan lies in its ability to grant each means of transport its rightful place in a harmoniously balanced network and to imagine a city not dependent on cars.

#### **The inexorable increase of urban travels**

In the past ten years, the number of residents’ daily transfers has considerably increased, as a result of population growth and increased mobility. Today and every day within the perimeter of the Lyons urban district, 2 350,000 transfers are made by private car, 1 392,000 on foot, 635,000 by public transport and 550,000 by bicycle. Automobile transfers represent the greatest increase over 10 years (+ 38%) and for this reason increases in other modes of transfer have been less than the average increase. Today, more than one transfer in two within the Lyons urban district is by private car, this being partly explained by an increase in urban expansion. The urban area has enlarged by 140% over the past 40 years, and the population has grown by 60% over the same period. It is therefore logical to find that transfers have increased to a greater extent in peripheral areas (+ 39%) rather than centrally (+ 22%). What is seen today is alarming : street congestion, deteriorated living surroundings, crowded space, public health threatened by pollution, noise...

#### **A necessary planning and diversification of means of transport**

Organization of transport in urban areas stands out as one of the most suitable answers to the acute problem related to pollution and to the deterioration of the quality of life in the city. So where does the future lie ? It is certain that if the policies related to transport are implemented as they are now, with the number of private cars still increasing, congestion will grow, service difficulties will be increasing, the situation will become less tolerable.

The Urban Transport Plan concept is based on the will to halt the drift of the system to give way to a more convivial city. Targets articulate around the three following main themes:

- give priority to transport means which preserve priceless treasures such as clean air, open spaces and decent living surroundings;
- revert trends among the various modes, without impairing greater individual mobility;
- reduce nuisance factors resulting from uncontrolled use of the private car, to offer inhabitants better living surroundings.

To reach such objectives, it is essential that flows of private cars be diminished where they bring about high nuisance factors. In exchange, a true alternative to the use of the private car must be found. This is what is at stake with the urban transportation plan.

Hereto, the answer to such requirements has been offered by “ underground ” technology. The ambition is to revert trends opposing the private car to public transport teamed with foot and bicycle. It comprises twelve main bus lines (regular schedule amplitude, well-equipped stops, schedule information) offering, with the “ underground ” network and the rest of the surface network, a high-performance web in the town centre as in peripheral areas. Two lines between the University campuses and the city centre will receive priority treatment in the form of a tram service. To complete the main lines, all other lines of the network are to be upgraded by a roadway development programme and bus traffic ‘black point’ enhancement, in particular better-adapted traffic regulation making it possible to guarantee all other lines a minimum schedule speed.

Promoting use of public transport, bicycles or “one’s legs” to improve traffic fluidity will only be effective if those instruments capable of controlling the development of the flows of automobile traffic are also improved. To limit the use of the private car, action should be taken on parking and tariffs . The urban zone which cannot be extended, is being increasingly taken up by private cars. Reclaiming this space is one of the most ambitious objectives of the Plan, in particular in view to reassigning this space for amenities conducive to better living surroundings and alternative means of transport. The total supply of parking space in the centre of the urban district will not be increased. Any offer of new space will be offset by removal of other space. The proposed strategy is therefore a better management of current parking supply and better compliance with relevant rules to avoid trouble-causing or dangerous parking. Local authorities will consequently implement a high-price system, in particular in car parks in the centre, to incentivate motorists not to use their vehicles for home-office commuting. This is justified when public transport provides good service within these central neighbourhoods.

To inform the public about the extension of an underground line, an extensive advertising campaign was launched through hand-outs and user guides for underground lines and new surface lines open to the public.

In the past ten years, underground services have more than doubled and have increased by 54% of passengers. 20 bus lines have been put into service and the number of kilometres per bus has increased by 10% for the innermost belt and by 20% for the second.

### **An involved population**

The new urban Transportation Plan has been submitted to the public. Three scenarios were developed. The first suggested that policies adopted over the past ten years be pursued, i.e. that transport supply be adapted to demand (with only little categorization of roadways and low constraints on automobile traffic). The second granted a priority to multi-passenger transport. The third foresaw a city with no cars. The latter scenario was agreed upon. This indicates that the public has become aware of the acuteness of issues related to pollution and to the degradation of the quality of life in the city.

### **3-2-2. The valorization of the bicycle**

Seen from the sustainable development viewpoint, the Lyons urban district must at all costs integrate the bicycle into its comprehensive urban transport policy.

### **A recent move**

Experimentation on using the bicycle in Greater Lyons exists but is only recent, it only began in 1992. The aim is to incentivate the use of the bicycle as in the urban commuting plan, as an alternative to the private car. It was proposed, within 5 years, to increase the use of the bicycle from 0.7% to 5%. To reach this aim, the strategy will be to eliminate one traffic or parking lane and to assign this to bicycle. It is also planned to implement a schedule defining facilities, priorities and targets (bicycle ways, road-marking, car parks). Clear assertion of the role of the bicycle in the city is presented in the draft General Development Plan and a Bicycle Charter (to be presented in January 1998). A technical guidebook (tool box) will complete this publication. With regard to budgeting, management and specific investment costs amount to FF. 10 Million for 1998, 1999 and 2000, as opposed to FF. 1.5 Million in previous year which includes comprehensive roadway and planning operations. The Urban Community has been meeting once every quarter since 1992 under the presidency of the Vice-President for Roadways, bringing together elected representatives of the various localities of the urban district, municipal technicians and also one representative from various Bicycle User Associations (Lyons Vélo, La Ville à Vélo, Regroupement pour une Ville sans Voiture). This group intervenes on actions which are in favour of the bicycle. Information is also spread out through special communications to motorists and cyclists.

## **Results difficult to evaluate**

In the current situation, and judging from what has been done it is difficult to provide quantifiable results. However, numerous events illustrate that the public wishes to see means of transport to develop in the spirit of sustainable development. Sustainable development must be taken fundamentally into consideration when “creating” the city, but this is not enough. The ideas linked to this must also be integrated by city management. Greater Lyons is thus implementing household refuse and water management policies compatible with sustainable development imperatives.

### **3-3. HOUSEHOLD REFUSE MANAGEMENT**

To respect rules on the subject, Greater Lyons has begun implementation of household refuse management policies, at the source and coupled with recycling policies such as:

- energy-producing enhancement, i.e. energy production from incineration of refuse with induced pollution control. Such energy then being used to produce electricity or to be piped into urban heating networks, 40% of burned waste thus being enhanced;
- recycling of refuse collected for use as raw materials.

#### **Selective sorting**

Recycling is more efficient as it is managed upstream via installation of selective sorting. Selective sorting on a Greater Lyons scale presents two aspects:

- voluntary depositing of used glass containers in siloes designed for the purpose;
- voluntary depositing of less common home refuse (debris, batteries, bulky objects, vegetal residues, ..) at specialized refuse reception centres;
- everyday sorting of refuse in the household.

The latter activity will especially hold our attention, being generally and gradually implemented throughout the urban district with special means to focalize public opinion.

Greater Lyons, working during an initial phase on a sample of 60,000 inhabitants for a year, then during a second phase late 1997 with 300,000 inhabitants, before gradual extension to the over-all population, is experimenting the “green bin”. This is a second refuse bin for potentially recyclable household refuse (paper, metal, plastics). The new salvaging system does not lead to extra costs in comparison with over-all collection, but rather to cost substitution; in fact sustainable development ideas do not necessarily lead to increased costs.

#### **Public participation**

As has been pointed out, the communication process with the public is very comprehensive. It takes place in 2 phases:

- selective salvaging is first launched by close-contact communication (public information meetings, delivery of the “green bin”, then a visit to each home by a sorting station “ambassador” to explain methods applied to the different materials);
- collection is then monitored for three months by one sorting agency per locality who meet users to hear their complaints and inform them. A news sheet is published over 3 years to give results and raise new awareness if there is a dip in the standard of results.

Further awareness-raising action is also undertaken in schools, by teams formed with associations, offering financial and technical backing to develop didactic work on sorting; organizing “Environment Fêtes” in each locality and by adapting the message according to the publics concerned.

### **A satisfactory acceptance**

Early results are satisfactory for paper, but further awareness needs to be raised for other waste materials. Care in sorting sometimes drops off, and the public needs further stimulation before the sorting reflex can be acquired. Vigilance is required and there must be no hesitation to voice the message again or to adapt it if this was not the case. A guidebook was prepared, for example, but it was too complex, and was re-written to enhance its legibility. Our past record is at this stage not long enough to attempt an assessment, but initial public acceptance of the principle, even regarding selective sorting, has been excellent. By way of example, in one locality 3,000 bins were delivered, only 7 were refused.

Household refuse is man-made and the services needs to be upgraded to weigh down less heavily on the environment. Water is a natural resource which needs to be managed and looked after in a highly rational way with a view to sustainable development.

## **3-4. WATER MANAGEMENT**

### **The respect of the water resource**

Greater Lyons must:

- inform the public and make it aware of the proper use of water resources and its depollution;
- encourage respect for and proper use of water to bring about a civic attitude towards natural resources;
- raise children’s awareness during early education; they will then pass this awareness on to their parents;
- show its technological advance in the field of water management.

It should here be specified that Lyons urban district has inexpensive, high-quality drinking water. Lyons users are not preoccupied by the cost of their water but by its quality.

### **An important effort of communication**

No accurate budget has been calculated for prompting proper use of water, but for each operation related to water management, communication costs can be estimated at a total of FF. 4 Million per annum. Communication and awareness-raising action implemented by Greater Lyons are as follows:

- public exhibitions, information brochures, films, .. on the theme of water;
- industrial tours to technical installations in liaison with the Tourist Office;
- school visits to technical installations with conference guides;
- an interactive information terminal installed on request at trade fairs and in public areas;
- delivery to schools (7 to 15 year-olds) of a scientific and didactic set accompanied by an instructor;
- a quality commitment signed by water distributors.

In parallel, a more technical document intended for would-be house builders has been prepared. Three thousand school children visit the technical installations of Greater Lyons annually. Once a visit was made, they come back. The departments concerned appraise the success rate highly. As for the impact of the tools at disposal, these can be assessed by the following example. An initial experiment with a scientific set was attempted with schools but with no success, as there was no instructor. For this reason, it was thought that the presence of a person was necessary not only supplying information but providing a follow-up.

## CONCLUSION

In taking steps towards sustainable development, the city and urban development are consuming natural resources and space. Greater Lyons can still be considered a city in the country in spite of urban expansion over the last decades. It is essential to preserve and develop this natural heritage by initiating projects involving active members of the surrounding agricultural areas and granting nature its place within as well as outside the urban zone.

To carry such projects through, Greater Lyons is investing in numerous environmental fields. It acts alone or by teaming in with communal initiatives and weaving partnerships with institutional organizations, the State or private enterprise to favour sustainable development. The method applied to bringing sustainable development into everyday life begins by an appraisal of the existing situation; the objectives are then set. These objectives lead to the definition of multiple action to be taken between now and 2001. As already pointed out, all such action is listed in the action plan of the Greater Lyons Environmental Chart. Each action is described with its aims and costs are also estimated. Action taken is extensive, of numerous types and is situated at various levels. Action initiation depends on:

- urban district strategies;
- operations to be carried out;
- associated measures.

Greater Lyons has entered upon a process of in-depth modification of its general policies in order to take sustainable development imperatives into account. It is difficult to submit accurate results as the past record is as yet short. Comprehensive

results will not be known for some years. It is however possible to state the importance of placing the accent on information to the public. Of the hundred or more actions started up, more than 10% are devoted to informing, raising awareness and educating the public. It is considered by Greater Lyons that development will only be sustainable if it is understood by all and especially if all take a hand in it. To that end, Greater Lyons has opted for transparency and widely communicates on environmental objectives, action taken and results obtained. In the field of environmental information, Greater Lyons wishes to communicate with the public at large, with those collaborating and elected representatives, and also with its own departments and services, using implements adapted to each targeted body. To develop a feeling of responsibility among citizens users of the environment, they need to be kept permanently informed, just as the young people of Greater Lyons need to be educated. Because the children of today are the adults of tomorrow, going to see them in their schools is a priority. Such action is carried out by various environmental bodies (associations, teachers) on the initiative or under the aegis of Greater Lyons, through:

- didactic action on the right attitudes and gestures, renewable energies, hazards, natural sites in Greater Lyons;
- environment-initiation centres;
- a users' consultative commission on refuse;
- increased training and information on water management.

This information/education policy must be completed by respect for a number of principles resulting from daily experience.

### **The principle of accompanying information**

If one single principle is to be remembered when raising public awareness, it is that one cannot be satisfied with simply passing on information. Indeed, whatever the media used, newspapers, hand-outs, exhibitions or films, information does not play its full role if it is isolated. The presence of an instructor and the existence of follow-up materials in time are essential.

By way of example, it should be remembered that information on water resources was given to schools by sending them a pedagogical set. Results were not up to expectations. Since that time, other materials have been adopted and these are accompanied by an instructor, and this is a success. Monitoring is also essential. Selective sorting was launched by close-contact communication (door-to-door), then by the setting up of a sorting agency in each locality to hear inhabitants' observations, and finally by publishing every four months and over three years of a news sheet on sorting.

### **Raising children's awareness**

A third principle results from the Lyons experiment, that of making children aware. Children are more receptive to messages on environmental protection. They can thus each day influence those around them, and they are moreover the consumers of tomorrow. The sooner they acquire the right reflexes, the greater the impact on their behaviour.

If there is to be a final conclusion, it should bear on the difficulties encountered in changing the habits of the public. It is a fact that in western countries such as France, populations have grown into habits of comfort related to the consumer society. Sustainable development reflexes cannot become the rule without abandoning facilities and advantages, and the necessity to acquire new ways of behaving and have more respect towards the environment.