

THE BEST PRACTICE EVALUATION·‘SPANISH NETWORK OF CITIES FOR THE CLIMATE’ FROM THE POINT OF VIEW OF THE SIXTH ENVIRONMENT ACTION PROGRAMME OF THE EUROPEAN COMMUNITY

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Abstract

The FEMP ‘*Spanish Network of Cities for the Climate*’ was awarded as one of the top best practices in the last Aid of Good Practices promoted by the United Nations Human Settlements Programme (UN-Habitat) and sponsored by the government and municipality of Dubai.

We propose in this communication a simple exercise consisting of evaluating this practice, which has international recognition, with a political strategy that pursues the same finality: the reduction of gases of greenhouse effect to our atmosphere.

From the Strategy of Climatic Change of the *Sixth Environment Action Programme of the European Community*, we will compare this one with the prior areas proposed by the FEMP, where the city halls committed with the problem have formed the Net of cities for the Climate.

Keywords: Cities / Greenhouse gases / ‘Spanish Network of Cities for the Climate’ / Transport / Urban planning

Introduction

In the last century the international community began a period of reflection that has lasted until today, the center of discussion was the Environment. In 1979 came the first World Climate Conference. It was first recognized that climate change was a serious problem. The scientific meeting discussed how it could affect human activity and issued a statement calling on world governments to anticipate and prevent potential changes in climate caused by man that could be adverse to the welfare and survival of humanity.

Along the line that first meeting the Kyoto Protocol was signed in December 1997. The protocol establishes binding and take effect in 2005.

Measures introduced by governments or agencies in Europe are generally difficult to monitor by the councils. The powers of them are far from concrete and can cope with the guidelines established by those entities.

In this context arises within the FEMP the '*Spanish Network of Cities for the Climate*' in order to unite local efforts, which in this field in our country.

This organization was awarded as one of the top best practices in the Aid of Good Practices promoted by the United Nations Human Settlements Programme (UN-Habitat) and sponsored by the government and municipality of Dubai in 2008.

Sixth Environment Action Programme of the European Community

In 2002 was adopted the *Sixth Environment Action Program of the European Community*. It identifies the priorities and main objectives of European Union's environmental policy for the next ten years. The program describes the steps to be taken to help implement the strategy of sustainable development.

Regardless of the initiative to work on is difficult to reach people and make them understand the importance of their actions in a process of global warming as little or nothing to their leaders speak more directly. And this is where there is the opportunity to develop specific local policies.

Table 1. Climate Change Strategy VI Community Action Program Environment. Source: EUROPEAN COMMUNITY (2002) *Environment 2010: Our Future, Our Choice*.

- **Objective 1. Implementing international climate commitments including the Kyoto Protocol by means of:**
 - 1.1. Reducing greenhouse gas emissions 70% by 1990;
 - 1.2. Plan for exchange of carbon dioxide;
 - **Objective 2. Reducing greenhouse gas emissions in the energy sector:**
 - 2.1. Inventory and review of energy subsidies;
 - 2.2. Encouraging renewable and lower carbon fossil fuels for power generation;
 - 2.3. Encouraging the use of renewable energy sources, including the use of incentives, including at the local level, with a view to meeting the indicative target of 12 % of total energy use by 2010;
 - 2.4. Introducing incentives to increase Combined Heat and Power and implement measures aiming at doubling the overall share of Combined Heat and Power in the Community as a whole to 18 % of the total gross electricity generation;
 - 2.5. Prevent and reduce methane emissions from energy production and distribution;
 - 2.6. Promoting energy efficiency;
 - **Objective 3. Reducing greenhouse gas emissions in the transport sector:**
 - 3.1. Identifying and undertaking specific actions to reduce greenhouse gas emissions from aviation; marine shipping and motor vehicles;
 - 3.2. Encouraging a switch to more efficient and cleaner forms of transport including better organisation and logistics;
 - 3.3. Promoting the development and use of alternative fuels and of low-fuel-consuming vehicles with the aim of substantially and continually increasing their share;
 - 3.4. Promoting measures to reflect the full environmental costs in the price of transport;
 - 3.5. Decoupling economic growth and the demand for transport with the aim of reducing environmental impacts;
 - **Objective 4. Reducing greenhouse gas emissions in industrial production:**
 - 4.1. Promoting eco-efficiency practices and techniques in industry;
 - 4.2. Developing means to assist SMEs to adapt, innovate and improve performance;
 - 4.3. Encouraging the development of more environmentally sound and technically feasible alternatives;
 - **Objective 5. Reducing greenhouse gas emissions in other sectors:**
 - 5.1. Promoting energy efficiency notably for heating, cooling and hot tap water in the design of buildings;
 - 5.2. Taking into account the need to reduce greenhouse gas emissions, alongside with other environmental considerations, in the Common agricultural policy and in the Community's waste management strategy;
 - **Objective 6. Using other appropriate instruments such as:**
 - 6.1. Promoting the use of fiscal measures;
 - 6.2. Encouraging environmental agreements with industry sectors on greenhouse gas emission reductions;
 - 6.3. Ensuring climate change as a major theme of Community policy for research and technological development and for national research programmes.
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'Spanish Network of Cities for the Climate'

It is necessary to bear in social and administrative levels, which reduce emissions of greenhouse gases must be aware that we who have created the problem and we grew with our lifestyle and our consumption patterns. That has not been another society that is abusing our resources and deteriorating environment. Thus, as a precursor of the problem we can not shirk our responsibility. We must promote change and reduce emissions.

National and international policies encompassing the institutional framework and the action lines, but can not reach the area closest to the citizen: the municipality. We must act locally, from our cities and propose actions that will help us to curb emissions. The municipalities have to create policies to those of other levels of government, but without expertise in the scale-up has great potential to influence the daily behavior of its citizens at the local level.

In this context was born in 2005, *'Spanish Network of Cities for the Climate'*. It was created with the original purpose of providing a methodology for a system of indicators for estimating emissions of greenhouse gases that occur in the municipalities members of the network. Also they want to develop comparative studies in an objective manner. Complete this activity to the spreading of municipal action in favor of the climate.

The network was created within the Spanish Federation of Municipalities and Provinces (FEMP) and brings together cities and towns committed to sustainable development and climate protection. The initiative is a collaboration agreement between the institutional FEMP and the Ministry of Environment to implement initiatives to curb and control the emissions of greenhouse gases.

The actions proposed by members of the *'Spanish Network of Cities for the Climate'* have to turn around one of the basic axes of action adopted by it.. These priorities are the energy efficiency and renewable energy development, bioclimatic architecture and urbanism sustainable.

Each category includes the practices presented in one of the priority areas of the network. A field is added to the previous Ecotechnology. This reflects those projects whose technological features allow a reduction of the environmental

impact of the activity. This can be done either by improving energy efficiency or reducing pollutant emissions.

Although there are a large number of local initiatives, which do not find their reflection in the network, we understand that this approach ensures a quality and interest enough to merit consideration as a catalog of best practices. So we look for a sign if the municipalities are adapted to all the objectives of the European Strategy, or if it is just focus on some specific areas, leaving others uncovered.

This initiative received a major award for his journey in this field in 2009. With this analysis we intend to evaluate the initiative from the *Sixth Environment Action Programme of the European Community*. Besides, this way we will be evaluating the worthiness of this award.

To analyze the network we will build on the unique exposure of these initiatives. The exhibition was held in Gijón (Spain) in October 2008.

The exhibition '*Actuaciones urbanas por el Clima*' featured 124 performances of 30 Spanish municipalities. While the catalog only listed 40 of them: one for each municipality, plus the award-winning practices and so-called 'Best Practices'. We believe that by analyzing the number and category in which they have competition, we can determine where to direct the municipal efforts to combat Climate Change and its consistency with the policies of the European Union.

Analysis of Municipal Projects

As we can see in Table 2, the local priorities are not focused in the area of urban planning and configuration of the city when it comes to tackling the problem. Only 12.5% of the action is concerned with planning, and 25% of passenger transport. While the bulk of the practice are concentrated in the 'Energy', primarily in measures of energy consumption reduction and efficiency improvements, leaving other determinations on topics as relevant when dealing with climate change such as bioclimatic design of buildings, the city model or creating a sink for emissions of greenhouse gases.

Table 2. Distribution of actions according to priority areas. Source: FEMP (2006) *Actuaciones urbanas por el Clima*.

	N	%
Building and planning	5	12,5%
Ecotechnology	5	12,5%
Energy	20	50,0%
Transport	10	25,0%
Total honored practices	40	

But if we are to overcome the endogenous nature of the contest can be used as reference, the assessment of action, the objectives of the strategy. Analyzing the contents of each of the actions filed, we can associate with one or more of the objectives of the *Strategy of Climatic Change of the Sixth Environment Action Program of the European Community*. These are:

- Objective 1. Implementing international climate commitments.
- Objective 2. Reducing greenhouse gas emissions in the energy sector.
- Objective 3. Reducing greenhouse gas emissions in the transport sector.
- Objective 4. Reducing greenhouse gas emissions in industrial production.
- Objective 5. Reducing greenhouse gas emissions in other sectors.
- Objective 6. Using other appropriate instruments.

Once analyzed (Table 3) each of the 40 practices presented in the catalog, we can associate one or more goals (so that each can appear in different objectives), which allows us to know the percentage of each objective within the municipal actions that have been identified as exemplary. First we note that none of the objectives of the strategy is blank, which means more or less all of the actions presented covering all the objectives of the program. Consider then the level of municipal commitment to each goal.

As we saw in the analysis of Table 2, the areas of ‘Ecotechnology’ and ‘Energy’ accounted for more than 60% of the proceedings. Therefore not surprising that the

practices are related to the energy sector (Objective 2) the most numerous. This means that 30% of the municipal action is focused on reducing emissions in the energy sector. The second (24%) is occupied by other measures designed to achieve the decrease in emissions (Objective 6). With similar weight (23%) would find the measures to comply with international commitments (Objective 1). Fewer efforts are directed at reducing emissions in the industrial sector (6%), in other sectors (7%) and transport (10%).

Table 3. Distribution of actions according to the objectives of the Climate Change Strategy VI Community Action Program Environment. Source: FEMP (2006) *Actuaciones urbanas por el Clima*.

	N	%
Objetivo 1. Implementing international climate commitments	32	23%
Objetivo 2. Reducing greenhouse gas emissions in the energy sector	42	30%
Objetivo 3. Reducing greenhouse gas emissions in the transport sector	15	10%
Objetivo 4. Reducing greenhouse gas emissions in industrial production	9	6%
Objetivo 5. Reducing greenhouse gas emissions in other sectors	10	7%
Objetivo 6. Using other appropriate instruments	34	24%
Total performances	142	

If we make a more in-depth Analysis of the initiatives that could see the 42 actions aimed at reducing emissions from energy sector (Objective 2), direct their efforts, almost equal parts in ‘Promoting energy efficiency’ (48%) and encourage the ‘Encouraging use of renewable energy sources’ (43%). None of the measures seeks ‘Encouraging renewable and lower carbon fossil fuels for power generation’ or ‘Introducing incentives to increase Combined Heat and Power’. There is only one proposal for ‘Inventory and review of energy subsidies’.

Among the 34 actions included in other measures aimed at lowering emissions (Objective 6) are the so-called ‘Ensuring climate change as a major theme of Community policy for research and technological development’ that 80% of the proceedings makes it clear that cities seeking to increase awareness and information campaigns both to specific actions. Only 2 of the proceedings (5%) would respond to ‘Promoting the use of fiscal measures’. There are no measures to

‘Encouraging environmental agreements with industry sectors on greenhouse gas emission reductions’.

The third group that seeks the implementation of international commitments (Objective 1), has 32 actions to ‘Reducing greenhouse gas emissions’. Any action designed a ‘Plan for exchange of carbon dioxide’. This is not a municipal competence, so the central government is responsible.

To analyze the degree of homogeneity of the priority areas of the network with the objectives of the strategy, we have developed Table 4, which put the number of practices for each field associated with the six European targets, including the percentage of number of target practice.

Table 4. Distribution of actions according to priority areas and objectives of the Climate Change Strategy VI Community Action Program Environment. Source: FEMP (2006) *Actuaciones urbanas por el Clima*.

	Objective 1		Objective 2		Objective 3		Objective 4		Objective 5		Objective 6	
	N	%	N	%	N	%	N	%	N	%	N	%
Building and planning	4	12%	8	19%	-	-	1	11%	5	50%	2	6%
Ecotechnology	5	16%	6	14%	-	-	8	89%	5	50%	5	15%
Energy	14	44%	28	67%	1	7%	-	-	-	-	18	53%
Transport	9	28%	-	-	14	93%	-	-	-	-	9	26%
Total performances	32	100%	42	100%	15	100%	9	100%	10	100%	34	100%

An analysis of the contents of the table, we see the actions to ‘Implementing international climate commitments’ (Objective 1), are focusing their efforts in the field of energy (44%). As only a 12% do so from the city planning. For his part in the goal of reducing greenhouse gas emissions in the energy sector (Objective 2), mostly agree with the actions of the field of the same name (67%), although in this case the urban reach 19%. Within the field aimed at ‘Reducing greenhouse gas emissions in the transport sector’ (Objective 3) 93% municipal actions coincide with the priority area of the same name and only one in the energy field.

To achieve the ‘Reducing greenhouse gas emissions in industrial production’ (Objective 4) are key actions associated with Ecotechnology with 89% of

performances. The urban and ecotechnical divided equally for 'Reducing greenhouse gas emissions in other sectors' (Objective 5). And finally within 'Using other appropriate instruments' (Objective 6), we found that the majority is the area of energy (53%), followed by transportation (26%).

It should be noted that within the strategy related 'Reducing greenhouse gas emissions in the transport sector' (Objective 3), there is no initiative in the area of planning or ecotechnology

In any case we believe that the key sectors in the municipal action are the 'Building and planning' and 'Transport', which conducted a separate analysis of them.

'Building and planning' practices

As we can see in Table 5, this area contained only five projects. This shows the difficulty of creating new strategies in a key area for reducing emissions, such as management and urban planning. It is noted that only one of the activities is positively related to urban planning. The rest of them are 'Building' actions.

Only performance awards ('*The forest of children*' in Sagunto) is related to public space and urban planning. This project seeks to provide a solution to one problem that we are usually in the exercise of our profession. '*The forest of children*' born as a bridge between two very different realities: the historical center and the new area of the port of Sagunto. So with the creation of an urban forest and a transition zone between the industrial and population centers manages to integrate both realities. The project diversifies and improves the urban landscape while it is creating a small sink for carbon dioxide near the city.

The practice award only meets one of the requirements arising from the *Strategy of Climatic Change of the Sixth Environment Action Program of the European Community*.

This project does not reduce carbon dioxide emissions arising from any of the areas raised by the EU. What we get is to absorb part of the existing emission. But it highlights the capacity of awareness. The action was carried out through a participatory process, involving children in the planting of vegetation. They were

planted 7,000 trees. Nearly 3,000 were cared for in winter and spring by the children of the municipality.

The rest of the actions presented based their emission reductions in the use of renewable energies and promoting energy saving and energy efficiency. Highlight the work presented by the Mataró City Council (*'Housing for young people built with environmental criteria'*). In his description as a major objective not only cites concern for the generation of waste during construction, but also affects the intention of recycling the work so that all materials can be reused when the deconstruction of the building . Also poses solar preheating for hot water for the community and air conditioning system for heating, air filters on the taps and tanks double download.

The practice *'Energy rehabilitation municipal building units Can Marquet'* is a work entered under the Municipal Energy Efficiency Plan. This municipal equipment is emblematic of their type, and their uniqueness. It housed the offices of the Department of Environment. Therefore, the Sabadell City Council chose it to conduct the first performance of the Energy Efficiency Plan. The project has sought to reduce consumption of energy to the maximum, and thus its carbon dioxide emissions. It affects all facets of building, investments, maintenance, users and future challenges. The estimated results of the performance finally achieve emissions reductions around 60%. It is the only practical question that is accompanied by training for users.

In Table 5, we relate the actions of this field with the objectives of the strategy. None of the selected practices include the reduction of emissions in the transportation sector. The 60% of them would raise the reduction in the energy sector and another in the industrial and transportation. While we might understand that this type of practice will always fulfill the requirement of public awareness, it seems clear that not all of them do the same thing. Thus the construction of a private nature awareness (for it) to their residents, while those for public use as public space or Sagunto Sabadell City Council met this role and expand to a larger number of citizens. For this reason we believe that only 40% of them met the premise.

Table 5. Fulfilling the objectives of the Climate Change Strategy VI Community Action Program Environment from the urban projects in Building and Urban Planning. Source: FEMP (2006) *Actuaciones urbanas por el Clima*.

	Objetive 1	Objetive 2	Objetive 3	Objetive 4	Objetive 5	Objetive 6
The Housing and Land Madrid and climate change (Ayto. Madrid)	YES	YES			YES	
Performance of urban renewal “Quatre Cantons” (Ayto. Manresa)	YES	YES			YES	
Housing for young people built with environmental criteria (Ayto. Mataró)	YES	YES			YES	
Energy rehabilitation municipal building units “Can Marquet” (Ayto. Sabadell)	YES	YES		YES	YES	YES
AWARDED: The forest of children (Ayto. Sagunto)						YES

‘Transport’ practices

It seems reasonable to assume that within the transport can be done a lot of measures to reduce emissions of carbon dioxide produced in the cities. From the viewpoint of reducing emissions of greenhouse gases, is so important to reduce dependency on car and move to alternative modes of transport and less harmful. These systems are less polluting in terms of emissions of carbon dioxide ranging from cycling to the use of public transport like the subway or the bus. In any case, measures to improve accessibility in cities will only be effective if they are taken into account within the general framework of the planning system. Table 6 show the relationship of the practices presented by the network with the objectives of the strategy.

Actions related to transport submitted to the contest of local good practice can be clearly classified into three groups.

The largest group is made up of those actions that relate to restricted areas to traffic. Within this group we find for the creation of exclusive areas for the movement of pedestrian or cycling. Four of this measures would have made that connection.

Another large group would comprise those measures that relate to the type of energy used in transport. In various initiatives proposed for the municipal fleet use LPG (Las Palmas de Gran Canaria City Council), the use of biodiesel (Mataró City Council) and the use of CNG, biodiesel and hydrogen-electric and diesel traction (Madrid City Council).

Outside these two groups we find other interesting proposals. For example, the proposed measure from the town of Alcala de Henares is a eco-driving course that aims to reduce emissions by adopting a series of lines at the wheel. Measures are '*CarSharing Implantation*' (Badalona City Council) and '*Sustainable Urban Transport*' (Rota City Council)

The award-winning experience in this section was submitted by the City Council of Vitoria-Gasteiz, the draft '*Urban municipal trails and bike hire*'. This practice aims to promote cycling as a means of mobility that does not emit carbon dioxide and other greenhouse gases. For this purpose it is intended to give the city of preferential traffic routes for pedestrians and cyclists safe and articulated. The results presented in the contest were shown as registered in the project, nearly 20,000 people and 50,000 applications in 2006. With these data were estimated at an increase of close to 11.1% of the population cycling in the city.

Within this area are three projects that have more in common with the *Strategy of Climatic Change of the Sixth Environment Action Programme of the European Community*.

The first one is presented by the City of Las Palmas de Gran Canaria. His practice consists of two vehicles incorporating ecological Propane Gas in its bus fleet.

City Council of Mataró's Project is '*Carpooling and use of biodiesel in bus fleet*'. The results show a notable increase in the use of the vehicle from the beginning of shared experience. In the year of the initiative movement shared 12% of the population, increasing to reach 19.7% in 2005.

The third experience is presented by the Madrid's Municipal Transport Company. The aim of the experience is to show the level of commitment to the environment of the company managing the urban passenger transport in the city. Results are presented as the bus fleet of Compressed Natural Gas or CNG, the bus fleet of fuel battery, the bus fleet with biofuel, the combined fleet of diesel-electric propulsion and the bus fleet with ethanol.

As a new measure emphasizes the CarSharing¹ Implantation in the City of Badalona. This practice promotes the rational use of the vehicle provides an opportunity to use private vehicles only when you need it. The novelty of the service against the contract that we can give multinational car rental bill is the service. Through this assistance, the bill reflects not only the car use (hours of use and route), but also expresses the hidden costs of car (maintenance, cleaning, insurance), assisting in the differentiation of the use and abuse same.

Finally we would like to note the inclusion of the action called '*Sustainable Urban Transport in the municipality of Rota*', as long as it speaks only to renew the fleet of municipal buses to make it more "attractive" in their use. Does not change the fuel or reduce emissions of carbon dioxide while improving accessibility and service to encourage its use. I submitted a renewal of the fleet, existing solely to increase capacity.

None of the initiatives presented in this category found ways for the implementation of areas of coexistence between the vehicle and the temperate zones or pedestrian traffic areas (area 30²)

¹ The Carsharing is a new concept related to the ecomovility. It promotes rational use of transport and offers the possibility of using the vehicle only when needed without the need to own it.

² In relation to the implementation of traffic calmed areas we have a contradiction from the point of view as improving road safety and quality of life resulting from the restriction on speed of movement can lead to increased emissions from gaseous pollutants, if not to decrease the number of vehicles passing through the area pacified

Table 6. Fulfilling the objectives of the Climate Change Strategy VI Community Action Program Environment from the urban projects in Transport. Source: FEMP (2006) *Actuaciones urbanas por el Clima*.

	Objetivo 1	Objetivo 2	Objetivo 3	Objetivo 4	Objetivo 5	Objetivo 6
Eco-driving course (Ayto. Alcalá de Henares)	YES		YES			YES
Master plan for bike lanes and bus lanes (Ayto. Badalona)	YES		YES			
Implantation carsharing (Ayto. Badalona)	YES		YES			YES
Winning the city for pedestrians. Sustainable mobility and pedestrianization (Ayto. Getafe)	YES		YES			YES
Municipal fleet of bicycles (Ayto. Granollers)	YES		YES			YES
Guaguas liquefied propane gas (Ayto. Las Palmas de Gran Canaria)	YES		YES			YES
Carpooling and use of biodiesel in bus fleet (Ayto. Mataró)	YES		YES			YES
The Municipal Transport Company and the environment (Ayto. Madrid)	YES		YES			YES
Sustainable Urban Transport (Ayto. Rota)						YES
AWARDED: Urban trails and municipal bike hire (Ayto. Vitoria-Gasteiz)	YES		YES			YES

Conclusions

After analyzing the practices that have been presented as examples by the municipalities and collected by the network itself, we believe that there is still a long way to go in all areas and objectives. But above all we must note the lack of actions related to urban planning at all scales. These include the design of an urban neighborhood, street or place, the introduction of models of integrated transport

through measures to increase the variety or the writing of urban planning of the need to tackle the great environmental challenges.

We must remember that nearly 40% of total emissions of greenhouse gases are produced in cities and the urban environment of the same³ and that the cities themselves are major consumers of energy and resources. We must also not ignore the ability of information and awareness are the municipalities, with advertising and consciousness campaigns are capable of mobilizing people for many reasons.

National and international efforts need to reach people and do understand the importance of their actions in a process such as global warming. On the other hand, is the town hall, the scale which is closer to the citizen, who can understand the message and has the ability to modulate and make it suitable to local conditions.

The measures presented by the government or the European agencies do not always correspond with the capacity and competences of municipalities. Municipalities' competences are specific and they are so far from being able to stimulating *'Identifying and undertaking specific actions to reduce greenhouse gas emissions from aviation, shipping and marine motor vehicles'* as provided for in the Sixth Environment Action Program of the European. But in other areas can pose further action in the field of planning and management of cities, in areas closest to the citizen.

From urban planning can make eco-design, as well as measures of urban design strategies to bioclimatic architecture, and the drafting of rules to ensure the natural air conditioning and energy optimization of all public buildings. Other measures to take could include avoid urban plans in the different models adopted land scattered increase transport needs and the segregation of activities (work, housing, trade, study and leisure), or developing policies based on principles of planning long-term strategic programs in the short term and continuous feedback.

Public transport policies can bring many options such as policies and design measures to ensure smooth transition from private to public transport since the investment in public transport that can be done does not solve the problems if not accompanied by action to give priority to public transport on cars, or set goals in their transport policies that cover environmental issues such as occupation of land and pollution.

³ IDAE (2007) Guía del planeamiento urbanístico energéticamente eficiente. Pág. 10.

Traffic management is also vital to reducing emissions of greenhouse gases because of the high weight of the emissions from the transport sector in the computation of global emissions. In addition to the emissions from the combustion engine of the vehicle occurs, large amounts of ozone to react with the nitrogen oxides and hydrocarbons in the presence of sunlight, damaging people's health, crops, trees and plants in general. Some measures could be taken by the city would extend the pedestrian areas and reduce occupied by cars or expand the parking as an additional deterrent to the improvement of public transportation.

The urban system is controlled by the current property market, which disseminates housing and land filling activities on an infrastructure that destroy their quality and encourage the mobility and energy consumption. This is characterized by their need to consume vast amounts of energy and other natural resources such as land and materials. The result is a city that is blurred in the field occupying increasingly large areas. Thus, we are multiplying the consumption of land, energy and materials, and thus carbon dioxide into the atmosphere. The citizens are reduced to the category of consumers for the correlation of loss of Quality of Life and the appropriation of space. Increasing social segregation linked to the poorer classes to the suburbs of large cities and central areas of lower quality. Accompanied by a marked deterioration of public space and environmental quality by increasing the presence of the car and reduced vegetation.

As planners, we believe it is necessary to reflect on the city model that we built and the need to redirect to a model that best fits the needs of Quality of Life, Social Cohesion and Environmental Protection including the need to reduce emissions of greenhouse gases. This city more sustainable and responsible for its effects on the environment can be characterized as having a density and compactness does not conflict with the formal continuity, multifunctional, heterogeneity and diversity found in its entirety. Emissions of greenhouse gases would be significantly lower in this model. It also saves consumption of soil (producing no emissions change of use), energy (the energy required to move a car necessarily increases with distance and speed) and material resources. And it would be possible for people to regain their status of citizenship, including awareness of the impact of their activities on the planet as a whole, including therefore the responsibility for stabilizing the climate.

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