The Thematic Nuclei Coordinations aims to assure that all Thematic Transversal Areas embed simultaneously and permanently in their analyses and propositions the three dimensions of integration: social, economic and environmental development.

Hence, the Thematic Areas must exhibit a trans-disciplinary approach and contain fundamental concerns: the equal distribution of benefits of the economic development for the municipalities and their populations, reducing social inequalities, micro-regional and municipal; to enhance the RMBH structure and then inducing local economic investments; the socio-environmental inclusion, by widening the opportunities for income and work generation; the territorial use in line with the environmental sustainability, covering the preservation of natural and cultural heritage, as well as the sustainable and integrated use and valorization of these resources.

Economic Nucleus

The Economic Nucleus has the dual objective of ensuring that the most relevant matters are integrated with the Thematic Areas (ATs) and in line with the more wide economic development goals of the RMBH. In this sense, it looks for easing the unification of the many areas in two fronts: one by defining *a communication channel* to smoothen the interdisciplinary dialogue of the ATs and, from this point, setting the *main themes*

- directly or indirectly - studied by the ATs.

The creation of this communication channel follows the idea of *externalities*, an economic concept wide enough to cover aspects of the many areas, such as the positive and negative impacts of a given economic activity over not necessarily directly related agents and activities. By using this concept, the coordination of this Nucleus works to ensure planned interventions, particularly the projects with significant external impact, i.e. those projects with capacity to increase positive and reduce negative impacts.

The close themes of the distinct ATs were then organized in two groups. First, there are the measurable factors: the scale and concentration of economic sector in the RMBH and its implication on the project objectives; the infrastructure, as a regional transformation vector through changes in the cost structure of the economic activities, and the size and quality of the labor market of the RMBH. The second group covers the objects that are hard to measure

economically such as public services, habitation conditions, and urban services (communication, cultural activities, etc.). The themes include aspects related to increasing the economic development potential of the RMBH, be it directly by the increase of competitiveness of the present economic regional activities, be it indirectly through the enhance of the population quality of life by reverting the diseconomies of agglomeration because of the cities' disordered growth.

Hence, these themes shall work as linking lines of the economic sphere into the other thematic areas. In addition, broader economic objectives can be identified for policies and proposals for the other studies: the RMBH as a green and low carbon economy, as a pole of environmental services and high technology. These broad economic objectives can cover the many social, environmental and economic thematic and compose a coherent joint of studies and propositions. To do so, in some cases it will require the simulation of sceneries for the RMBH economy that allow the evaluation of existing and potential policies, aiming to capture results and modifications in variables of interest.

Social Nucleus

The Social Nucleus aims to ensure that the PDDI include the many areas influencing the regional life. The work involves a set of proposals to promote actions focused on the sustainable development of the RMBH. It includes, therefore, the reduction of socio-spatial inequality throughout the metropolitan territory; the proposition of alternatives to generate work and income opportunities; the treatment of habitation as a structuring metropolitan usage, increasing settlement opportunities and densification in locations privileged because of the metropolitan transportation, basic sanitation and the vicinity with great employment and opportunities centers. Besides these, it also allows a new infrastructure, services, and public and private ventures distribution, providing the widening of accessibility to the benefits of the city for the metropolitan citizens.

The social dimension of the Metropolitan Plan in characterized by a multilevel perspective, which cover from the metropolitan level until the micro-local everyday level. According to this view, three aspects are essential for the social approach of the metropolitan planning and management: the idea of a land use structure organized as a web; the understanding of the transportation system as inductor of this structure and, mainly, as a guarantee for the urban and metropolitan mobility; and the prioritization of the public spaces as leisure places, cultural expression, and practice of citizenship. It also covers the concept of vulnerability, which, differently of the poverty concept, allows to understand the social situation taking into consideration not only the necessities of the population, but mainly the resources it has to deal

with the risks caused by everyday shortages.

Furthermore, besides the social inclusion into the plan, the Social Coordination Nucleus shall also guarantee its articulation with the economic and environmental dimensions in the various Thematic Areas, as well as to the integrated focus on the elaboration of proposals guided by the principles needed to construct a sense of *metropolitan citizenship*. This meaning to strengthen solidarity among its constituent parts – municipalities, society and the State, to increase the integration and metropolitan population inclusion, and to enhance the sense of social and environmental justice, aiming a drastic reduction of acute socio-spatial and economic inequalities.

Environmental Nucleus

The goal of the Environmental Nucleus is to assure the discussion of the environment as central element in the thematic studies elaboration and the integration of its subjects, ensuring the centrality of this theme in the construction of the PDDI. The project covers the protection of natural heritage, sustainable management of natural resources, mechanisms to ensure a sustainable urban, population distribution and economic activities expansion, the production of the urban space, including the public power induction by adopting sustainable practices such as activities that promote the environment.

For this, the proposals must cover points such the integration of policies and actions for the use of natural resources with policies of preservation and valuation of the natural and cultural heritage of the RMBH, the environmental cleaning and the recovery and readjustment for new use of mined areas. They must also emphasize the development of researches and the public, environmental and cultural metropolitan knowledge, and sustainable environmental practices, besides solutions for reducing the dependency on traditional energetic resources through policies for better energetic use and funding renewable energy.

At the same time, the nucleus shall work with the organized civil society (municipal and regional forums) to build an integrated panorama for development and planning of the RMBH. This is a crucial perception because it considers not only the public capacity of altering non-sustainable social-environmental dynamics, but also the existent potential of the organized civil society, the private sector and communities to ensure better effectiveness of the proposed actions.

It is then important to think in generational terms, when arises the need to engage to the proposals actions of environmental education especially of informal characteristic. It is a bet on the construction of the idea of metropolitan identity through the enhancement of the collective environmental conscience. This, however, shall become solidary when the public policy is capable to associate the welfare of actual generations with minimal positive perspectives for future generations.

In brief, the construction of the Metropolitan Plan around the environmental thematic requires the construction of proposals to enable a territorial planning process towards socio-environmental sustainable initiatives and vulnerabilities and inequalities reduction. A systemic perception of the environment and society, in their many dimensions and interactions, is one basilar principles of the PDDI-RMBH.