Metropolitan energy policies: the example of Turkish cities

Seminar at the French Institute of Anatolian Studies, co-organized by Eric Verdeil (Jean Moulin University in Lyon - UMR Environment City Corporation) and Jean-François Pérouse (Galatasaray University and IFEA)
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Rationale
The report Energy and Urban Innovation (2010) by the World Energy Council underlines the fundamental role of cities in the energy transition and the interlocking of several series of actions, related to technology, economy and policy. It's only the interaction between these different levels that can lead to a significant change of practices and to a limitation of GHG emissions. While the technology market is growing rapidly and allow for technological advances, it appears that the political and social practices are a major issue and justify an increased contribution of social sciences to the analysis of the implementation of these new policies.

The social sciences have developed several theoretical analytical frameworks for thinking about the energy transition. One of the most influential is the multi-level model for the study of socio-technical transitions (Geels 2002) which focuses on issues of governance and examines the parameters allowing innovations developed in niches to reconfigure techno-institutional systems (eg allowing the large-scale development of solar thermal collectors, through measures combining lower taxes, subsidized credit, etc ...).

But this model is criticized by several authors (Bulkeley, 2010; Hodson and Marvin 2010). First, it underestimates the role of conflict between actors in the management of socio-technical. Bulkeley shows that change is the result of the reconfiguration in the balance of power between social and economic groups. Therefore it is difficult to conceptualise transition in a stable system of interests. Hodson and Marvin believe that the energy transition, because it involves large technological innovations, favors a strengthening of dominant position of cities where business alliances can be built. Moreover, as the current analysis of Large technical systems has pointed out, the change cannot be conceptualized solely as a result of initiatives by a limited number of actors (industry, government) but requires a host of changes, even within organizations. Finally, the practices of ordinary actors of urban planning often tend to subvert the best-designed projects. For instance, in Istanbul, extending the natural gas network is curbed by the continuing consumption of domestic coal for reasons of political patronage.

The analysis of the introduction of new technological devices cannot rely solely on the optimization of governance instruments (legislation and tax). It must also take into consideration two other approaches. First, be attentive to the socio-economic contradictions in the organization of energy efficiency policies (central / local public / private, and conflicts between private actors in competition). And secondly, pay close attention to the people and ordinary users, their cultural habits, their economic decisions, etc..
The originality of energy transitions in Turkish cities

The seminar intends to address these issues in the case of large Turkish cities, following investigations by several French teams in other metropolitan contexts (Brazil, China, South Africa, the Arab world).

The cities in emerging countries are sensitive areas for the implementation of the energy transition. They experience fast demographic growth and strong increases in energy consumption (often above 10% / year) and therefore GHG emissions. Yet these cities remain much less studied than large Western cities with respect to energy policy. Poverty populations and the inherited structure of the energy sector impose to consider the adaptation of technology and business solutions based on local specificities in terms of geography, local political choices (pricing, distribution) and the population's customs and practices. These policies combine a variety of energy levers of technological nature at various scales (building insulation, decentralized energy (solar thermal), new network infrastructure (electricity and gas)). These policies must be designed in coordination.

Turkish cities form a market for many international and local energy firms. This is now attracting a lot of initiatives (seminar AFD, 2011). However, they remain poorly studied. Many of the issues mentioned above can be found but in specific configurations that need to be emphasized. For instance, Istanbul, the economic metropolis, is a new market for local and foreign groups developing these new technologies where they can find creditworthy customers. In Gaziantep, the municipality seems to engage in innovative policy of energy conservation (transport, heating).

Objectives of the seminar

The seminar's objective is not to present final results but rather to stimulate discussion on emerging issues and to identify similarities which could be topics for future collaborative research. Based on the responses of participants, presentations may take the form of a round table rather than formal presentations.

Several major issues are proposed to frame (without limitation) the submissions of the participants. The seminar is primarily designed to identify key features of energy policy in Turkish metropolis, especially in relation to the energy policy of the Turkish state, in connection with structuring of geopolitical constraints (energy dependence on hydrocarbons and development of national resources - hydro and wind). The fiscal issue is worth a close examination: to what extent has the State interest to promote the energy transition and to reduce the energy consumption, a major source of revenue thanks to the taxes on energy? It will also analyze the emergence of energy policies in major Turkish cities in connection with the context of decentralization and the establishment of other urban public policies, particularly related to the theme of sustainable development. The cases of Gaziantep and Istanbul come to mind here. In different cases, the new energy policies raise the question of liberalization and the rise of private actors (national or international) in this sector. In the background, this raises the question of the relationship between the ecological dimension, turned into a promising field for strong economic growth, and the social dimension. Indeed, such innovations are not accessible to all. From a methodological point of view, this leads to identify every situation in terms of the construction of the energy issue as a public problem, with its local and national dimensions.

Another topic is the identification of the urban governance of energy, and how it is linking central and local actors, private sector and local energy operators as well as the people and its representatives. In doing so, it is essential to assess how the dominant players conceptualize the energy issue at the metropolitan level: a challenge of technological innovation and therefore a chance for economic growth, with new logics of consumption that may produce a
new market linked to the emergence middle class (for example, the privatization of natural gas). Conversely, various examples, such as persistence of coal, lead to questioning the usages of residents and the way they react to the challenges of local political mobilization. Finally, one must address the issue of inequalities in the provision of different forms of energy (development of energy networks, new energy efficiency and decentralized devices), through the study of social and economic issues (pricing, distribution strategies and consumption practices) according to different social groups and housing forms. This will include measuring the impact of new technologies on energy practices, among politicians, professionals and users.

**Participation**
Interested researchers should contact Jean-François Pérouse (jeanfrancoisperouse@gmail.com) or Eric Verdeil (eric.verdeil @ normalesup.org) before April 20. The assistance is free, but for logistical reasons, thank you to announce your participation to the organizers.