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ENERGY SECURITY VIA IMPROVED GOVERNANCE

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The definition of security means the absence of danger. However when working to mitigate the potentially dangerous elements of a situation we must be careful not to focus on the easiest solutions, fitting them into a pre-defined equation of what constitutes "security". To do this in the case of energy security may indeed be placing our communities in greatest danger because we ignore some of the most important insights into the energy predicament.

In the past, the focus of climate change impact and vulnerability analysis — including energy system vulnerability—has focused on "top-down" climate model scenarios or forecasting approaches. Recently, a number of "bottom-up" approaches have been developed that focus on promoting local resilience strategies and localised energy planning. So far, however, they restrict their analysis mainly to quantities, prices, technologies and common externalities, items which can be somewhat measured, whereas the mortar of security and resilience are good social and cultural practices which cannot be quantitatively measured. It is this mortar that can ensure long-term energy security. To take this issue into consideration new social capital has to be developed and we will also suggest a tool that should be put at the citizens' disposition.

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The definition of energy security is multidimensional. Its obvious characteristics are first **quantitative**, hard, measurable facts and most analysts take security to be synonymous with abundance of supply, whereas some researchers have started to stress sobriety and sufficiency. Security is also reliability and long-term resilience of supply, as well as affordability (with cost control all along the chain).

The **qualitative** aspects of energy security are no less important: they are the physical safety and absence of danger for workers and the public, cleanliness, concern for impacts, wastes along the whole cycle. Some of these elements are taken into account and are considered quantitatively as other components of the energy externalities assessment, but this should be done routinely along a "systems" approach since the components are in fact neither independent, nor linearly related. While these issues are considered independently of energy security in other components of energy externalities analysis, they are critical to the integrity of the overall energy supply system and thus to energy security.

Finally energy security in the long-term requires policies that reflect full-cost accounting, i.e., the inclusion of quantifiable externalities as is traditional, but also

the disclosure and management of intangible items that can truly make energy a secure factor or source of production and wellbeing.

At present, at first sight, our energy security seems controllable and predictable. This judgement is, however, only based on quick-and-ready, relatively manageable, quantitative assessments. Traditional energy policy-making indeed deals mainly with immediate quantitative issues, therefore displays both tunnel vision and shortightedness. Relying on this framework, traditional energy policy cannot embrace the « big picture ». It is therefore not able, for example, to forecast anything, even major disasters, treating these instead as "probabilities" that are by and large independent of energy system choices.

Hence there is a crucial need for more enlightened and concerned decision-makers. Since energy infrastructure last for twenty to sixty years, there is a material urgency to take good decisions that give weight to the long-term rather than just managing immediate problems. We must improve or, in some cases even, create social capital that allow the full involvement of the final decision-makers, the citizens, so that they can **decide on the size of the energy footprint needed to fit their wish for energy security.**

The 10 January, 2007 Communication of the European Commission to the European Council and to the Parliament provides an adequate roadmap and stresses that « Renewable energy sources contribute to security of supply by an increase in the provision of domestic production, by a diversification of the energy sources, by a diversification of the sources of energy imports and by an increase in the share of energy coming from politically stable regions. The EU will reinforce its position on all these criteria by reaching the requested share of renewable energy. » (author's translation). This is a precious recommendation showing foresight and proving that the EC has been hearing the concerns of the citizenry of energy users. However, the tools to implement these recommendations are not yet available. A groundswell of organised and legitimate actors is missing.

On the energy scene, everything has changed, even while some energy suppliers are still functioning primarily in the mode of the mid-century oil era. It is time to add some collaborative bottom-up methods to the traditional exclusive top-down approach in order to reach a balance. This requires an improvement or, even in some OECD countries, the creation of social capital.

True social capital requires an equitable, fair and transparent **institutional framework** able to generate some collective « intelligence » and consensual decision-making processes. Only then can we have independent energy policies favouring the **triple bottom line of ecodevelopment (environmental, social and economic).**

To develop such social capital we also need stakeholders' networks able to sustain projects along their full cycle, uniting promoters, users, utilities, ESCOs, SME, ENGOs, technicians, banks, local authorities. These are the actors needed on the new energy scene.

One way to start this process is by creating a Council of Users (see the US CUBs). A similar proposal for the official establishment of Energy Users Research Organisations (EUROs) in Europe had been made and was well received by all. See the Annex 1.

With such a tool, citizens could contribute to the initiation of alternative safe energy planning to promote genuine ecodevelopment. A council of users is a local permanent repository of knowledge independent from energy suppliers. It can contribute to the development of a consensual Integrated Resource Planning (IRP). It can defend the interest of the local citizenry and cater to their need for accessible, clean, affordable services. By its very presence, it can prevent the emergence of unwanted, sometimes intangible and non-monetisable externalities. This could be a perfect complement to the work of ExternE/NEEDS as suggested in Annex 2.

Conclusion

Since an insecure energy supply affects everyone negatively, all users should have access to objective information, the opportunity to discuss the issues and the right to decide what is best for them. The missing tool nowadays is the existence of councils of energy users. The EURO proposal could fill this gap but would require a European decision to be effective.

Every nation has assets that can be put to use in developing its own mode of energy resilience. The most important is undoubtedly an educated population imbued with civic responsibility, a population that enjoys the social capital required to participate authentically in public life.

Annex 1

Proposal to Support the Creation of Citizens Utility Boards/Energy Users Research Organisations (EUROs) in Europe (Conseils d'usagers en biens énergétiques - CUBE)

CUBs will allow citizens/energy users to have a better grasp of the impacts of energy policies on their environment and health, to be prepared to contribute to energy decision-making and to promote more actively climate stabilisation and sustainable development.

The liberalisation of the energy market makes it all the more important for governments and NGOs to initiate the creation of CUBs in each country. With a network of CUBs across Europe could emerge a genuine European energy policy based on citizens needs.

The Illinois Legislature in the State of Illinois in the United States formed the Citizens Utility Board (CUB) in 1983 to serve as a voice for residential and small-business utility ratepayers. CUB is a nonpartisan, nonprofit statewide organization funded by Illinois consumers and a grant from the Illinois Clean Energy Community Trust. CUB is guided by a 20-member board of directors, with one director elected by dues-paying CUB members in each of Illinois' Congressional Districts. Working as volunteers, board members determine CUB's policy and budget and serve as local representatives for the organization.

Subsequently similar organisations were established in the states of Wisconsin and Oregon. We believe that this type of organisation might be tailored to Eureopean countries and could provide strong stakeholder input to the choice of electric generation, the quality of service, etc. This input is particularly critical in light of the liberalisation of the electricity market within the EU. These users' councils would allow development of greater expertise among users with regard to energy conversion and end use. The CUB would be a point of diffusion of information to users, possibly through gas and electricity bills (this is how the American CUBs initially distributed information). These inserts might include details on energy efficiency measures and energy prices, information on environmental externalities, on renewable energy sources and information on the impacts of energy investments. The information provided would allow energy users to make informed choices regarding their preferences (technologies, type of fuels used, etc.) and help them initiate renewable energy projects.

The CUB would represent electricity users and ensure that their rights are respected. The CUB would be the conduit through which users (civil society) could participate in an informed and independent way in the transition to a new energy policy that is sustainable and environmentally sound.

In Denmark in May 2000 a new Energy Conservation Act (Act 450) was approved by Parliament, as part of a political agreement for the reform of the electricity sector. This Act provides a framework for co-ordination and the priority to be given to both centralised and decentralised initiatives in the future and introduces some new elements. Act 450 also created local energy conservation committees, which

are designed to co-ordinate energy efficiency activities of various local players (see below). To date, 32 local committees have been established. (Energy Charter Review of 2003).

The proposal regarding the French CUBE was included by the French National Committee for Sustainable Development (the Comité national de développement durable, or CNDD), in its recommendations to the government, because the CUBE is viewed as a critical instrument for sustainable economic, environmental and social development in the French energy sector. The members of the CNDD, including EDF, ADEME, and their partners in civil society have expressed hope that the recommendation for establishing a CUBE in France will be implemented as rapidly as possible, particularly due to the relative absence of independent information on energy in France, the opening of energy markets and the importance of the energy sector in guaranteeing sustainable development. The creation of such CUBs seems highly advisable in most other European countries.

See http://www.helio-international.org/projects/citizenparticipation.cfm for further information

Annex 2

Proposal to deal with the limitations of calculating externalities associated with full energy costs

Over the past few decades, energy economists and environment analysts have tried to combine their knowledge and research efforts to come to term with the difficulties of integrating externalities in energy prices and of having a level-playing field in the energy field. The following proposal has emerged from their joint recommendations:

- given that energy security includes several intangible elements that are not quantifiable, nor monetisable;
- given that many externalities are not "captured" via the process of monetisation and are of extreme importance and consequence in energy policy;
- given that most people consulted via the NEEDS questionnaire object to the use of monetisation of some external costs;
- given that even monetised externalities are not acted upon and that citizens are never compensated for the damages sustained;

It is therefore necessary that energy decision-making processes include citizens and NGOs participation at an early stage and that these groups are officially recognised and financially supported to carry out their duties. Such improvements in energy governance alone can insure that energy development can proceed in a rational, fair and socially acceptable manner.