







COESIONET EUROPEAN COHESION AND TERRITORIES RESEARCH NETWORK

Seminar 16 November 2012

Regional development policies and energy policies. A comparison between South East Asia, Latine America and Europe.

Synthesis

Afternoon session: Energy, infrastructures, accessibility and scales (continent, State, regions)

1. Challenges of the energy policy in Asia and ASEAN – Jean-Pierre Verbiest, Policy Advisor, Mekong Institute

The energy supply mix in Asia and ASEAN is still predominated by oil and gas. The Asian countries are characterized by a huge increase in energy demand, particularly in China and India. At the moment Asia is still an energy surplus region but with the increasing demand may become net importers.

Fossil fuels and hydroelectricity represent the main sources. The potential of hydropower is huge especially on the Mekong and reserves of coal, oil and gas are estimated quite high. But their exploitation raises big issues. First the use of the hydropower potential is facing opposition from the population because of the negative impacts of the construction of dams on the population, and especially on ethnic minorities in Myanmar, and on the environment (agricultural use) and climate change. Second, an active civil society in Thailand, Malaysia and Singapore is opposing the future building of coal fired plants and CCS projects are too expensive to be a counter-argument. Third, renewable energies could represent another important potential especially with geothermal energy, solar and biomass but few investments are carried out. Finally very few countries may use nuclear plants.

In such a context this region is facing important challenges. First, in order to ensure supply security, Asian countries need to diversify their sources and to introduce technical innovations. Second, regional cooperation is a must in order to promote exports of cross border hydropower and to connect power grid, ie pipelines and power grid in ASEAN countries. Without this cooperation, the countries are unlikely to produce enough to cover

their own needs. Third, energy efficiency needs to be addressed. But it is far from being the case yet. Finally, green logistics are needed but the concept is not addressed at all.

Pressure on exploration of new deposits of fossil fuels is very large. The fight for energy security represents a potential source of conflict today. The question is to know how ASEAN is going to solve the issue.

Discussion

- what is the role of court of justice in the construction of dams?
- 2. Energy integration and national cohesion in South America Sébastien Velut, Professor Paris 3 Sorbonne Nouvelle University, Director of Institut des Hautes Etudes d'Amérique latine, Silvina Carrizo, CEUR CONICET Buenos Aires

In South America there are many initiatives aiming to promote regional integration but it is a never ending history. The development of national and cross border infrastructures represents an important tool for integration and is boosted by Brazil on the basis of the energy sector.

The energy integration represents an element of national cohesion and needs to face the distribution of the 500 million inhabitants on a territory full of empty spaces. The hydropower and fossil fuel potential is huge but the consumption of energy is concentrated on the coast. Therefore the question of access to energy is a key issue and involves the connection to the grid of territories that are not yet connected and the access to quality services in metropolitan areas. This in turn raises the question of the energy efficiency of these cities to improve the sustainable management of natural resources.

South America is therefore facing important challenges. First, the continent is characterized by huge social and spatial inequalities. Second, the size of the continent represents a high technical challenge to energetically integrate the territory: 85,000 km of power lines are needed. This technical challenge means that energy connexion has been first developed in the metropolitan area gradually connection a north-south axis. Third, the increase in energy demand in the transformation activity of agricultural and mining products requires the countries to develop energy production and connexion in order to meet the needs of the driving economic sectors. Fourth, the way the countries will meet the increase in the demand may lead to heavy negative environmental consequences.

The energy integration raises the question of the redistribution of the mining benefits to the population. Clearly this profit is beneficial to the rich population but has also some spillover effects on the more popular classes with new demand in housing and equipment but which in turn contributes to the increase in energy consumption and therefore puts pressure on the energy integration.

The reorientation of international trade towards the Asian markets requires the decision makers to re-examine the choices of transport, logistics and energy. In this context, the regional integration initiative UNASUR sets the energy questions at the centre of the development model and considers energy infrastructures as a way to consolidate the continental integration. This raises the challenge of the interconnexion when the power grid in the different countries is not achieved yet and the challenge of the energy diversification.

This energy integration process takes place within a double move in the 1990s: first, the total or partial privatisation of large State energy companies and second, the deregulation of the energy markets in several countries of the continent. If both processes face variable levels of development in the different countries, it gave nevertheless the opportunity to develop large transnational companies to exploit deposits, to develop infrastructure etc. But again in the years 2000 the energy sector is transformed: in many countries the States launch a process of re-regulation with the creation of the public companies in order to stimulate the power grid interconnexion and investment in nuclear plants, sectors in which private companies didn't invest.

Discussion:

- is there a discussion on shale gas and its impacts on gas price?
- With the come back of the State in the energy sector, what is the role and place of Petrobras in Brazil?

3. European Union and its renewable energy policies: the hidden factors of a success story - Joseph Szarka, Professor, Bath University

The presentation addresses the difficulty of the European Union to transform an internal policy on renewable energies into an external policy in the European neighbouring countries. The European Union sets ambitious targets for 2020 for the development of renewable energy. Some countries are doing well but it is difficult to know if the targets will be reached within 8 years. The potential of renewable energies is here but technological innovations need to be developed in order to exploit their potential. One way considered is to develop projects out of the European borders.

European countries have developed different tools to promote the production based on renewable energy: feed in tariffs, tenders or exchangeable certificates. But the European Union is not satisfied with feed in tariffs arguing that it is not compatible with the market governance. The EU is facing resistance from the Member States. In such conditions, how can the EU export its policy if internally there is no consensus. But the pressures in terms of low carbon energy and energy supply security are high. Super grid connexion and the diversification of the energy mix may represent some solutions. But here again there is an opposition between a vision based on local and decentralised production and distribution of electricity and heating and internationally based production that requires huge investment in grid connexion. The uncertainty level on the energy sector has increased. The international opening raises the question of the capacity of the European Union to reinvest its international experience with fossil fuels and gas into an external renewable energy policy. But even the multilateral initiatives for traditional fuels are quite limited. They are confronted with sovereignty reactions and national interests of the States which favour bilateral agreements.

In such circumstances, one can wonder if the model developed by the European Union may interest other non European countries. According to the difficulties faced internally, the lack of social acceptability of the cost of energy transition, a potential transfer of experience to non member states seems to be quite limited. The role and place of the market in the promotion of renewable energies is raised. If the European Union presents some good success stories, it is also facing huge difficulties linked to the challenge of reinventing energy public policies and new regulations to make the energy transition successful. The internationalisation of energy

partnership in the field of renewable energy rather implies flexible bilateralism rather than a central institutional coordination.

Discussion:

- the European Neighbourhood Policy is segmenting the issues. Isn't it a cause for the failure and the difficulties of an external energy policy?
- What led the Europeans to believe that they could export their model despite the lack of obvious advantages?

4. Comments by François Bafoil, DR CNRS, CERI-Sciences Po

Energy transition is the motto of the European Union but it is clearly not the case in other regional areas. Whereas the reduction of CO2 emissions and energy efficiency are key issues in Europe, it is different in South America and Asia. But at the same time the European Energy policy is facing difficulties since in the end the energy policy remains a competence of the national States. If the EU wants to develop the supergrid connexion it will require 2,000 billion Euros. Parallel to that the EU wants to reduce energy consumption. Who will be interested to invest in this supergrid?

From a geopolitical point of view:

- o is China determining the energy rules of the game in Asia? Is there a "containment" strategy of China in Asia?
- o In South America, does Brazil represent the hegemonic actor and how do the other countries accept the Brazilian domination?
- o How can the relations with North Africa be stabilised in the present political context?

From an institutional point of view:

- o is there a perspective of a supergrid in Asean?
- o In South America, regional integration seems to be fragile, what is therefore the role of UNASUR?
- o In Europe how far are we on the project of supergrid development?

5. Comments by Ruth Banomyong, Professor, Tamassat University, Thailand

In the discussion of today, the issue of the energy supply chain has not been tackled. The question we have in Asia and in the rest of the world is how to transport the primary energy sources to the producers and from there to the consumers? In Asia there is an increasing resistance of the population again energy infrastructures because of social and environmental constraints and raises the question of who is going to pay such a high cost. On the one hand the demand of energy increases but on the other hand no one is ready to pay more.

The GMS region plans to develop a power grid covering the whole region. ASEAN is good at creating new frameworks and cooperation master plans but is weak in their implementation. This situation questions the ability of the region to ensure the supply security, the sustainability of the grid, to promote energy efficiency and conservation, to develop a coherent regional energy policy and planning and to use or not civilian nuclear energy. Therefore a coherent management of the energy supply chain is key to ensure the supply of the energy market and to overcome the present segmented energy policy.

Discussion:

- what is the distribution of energy infrastructure competences between supra national initiatives, States and regions in the different geographical areas?
- How do you explain the fact that there seems to be a lot of interconnexions but a lack of integration?
- How do you see in South America the double process of re-nationalising the energy companies and the opening to foreign companies?