

“Energy transition for green growth” bill: Attempting to renovate the French Energy model by P. Geoffron

In 2015, the French Parliament passed a law that defines a strategy for energy transition after two years of open public debate. This legislative package outlines ambitious policy measures to reduce energy consumption and comprises an unprecedented effort to renovate homes and buildings. On the supply side, the Law aims for a diversification of energy sources with a phasing down of nuclear and the speeding up of renewable energy sources. Furthermore, by promoting a ‘circular’ economic model and positive-energy territories, it redefines the balance of power in favour of regional authorities, potentially leading to a turning point in French energy policy. But the Law also includes contradictions and grey areas. It is wishful thinking to believe in the phasing down of nuclear from 75% to 50% of the power production in 2025, combined with the stepping up of renewables to 40% of electricity consumption in 2030. And the current economic crisis puts a cap on the capacity of the State, as well as on local and regional authorities, to trigger the transition and, due to the same constraints, it is doubtful that households and corporations will be able to invest or bear the burden of higher energy prices. Finally, as with the German *Energiewende*, the French Law illustrates the European difficulties to define collectively a long-term energy strategy.

Keywords: French energy policy, energy transition, green economy

JEL classification: Q42, Q48, Q54

“Competition for the field” and pricing regulation: The case of the natural gas distribution in Italy by F. Gullì

Recently, looking at the incoming tenders for the new territorial districts in Italy, the Italian energy authority approved the new regulatory regime for the natural gas distribution where the difference between the VIR (residual industrial value) and the RAB (regulatory assets based) is recognized only to the new entrant (disparity of treatment). This article demonstrates that this decision is sub-optimal for firms and consumers. Compared to the situation under parity of treatment (the difference VIR-RAB is recognized for both new entrant and incumbent), the authority’s choice implies distorted results (the less efficient firm would win the tender) and higher final prices for consumers.

Keywords: Competition, natural gas, regulation

JEL classification: L11, L51

Climate change and natural gas: What is the relation? by M. Tavoni

One of the most visible innovations in the energy sector has been the development of unconventional gas extraction. At the same time, climate change appears to be one of the biggest societal challenges of this century. It is thus natural to wonder what is the relation between climate change and natural gas availability. Drawing from recent research, this paper reviews this relation availing of large scale energy economy models. We show that even if gas was available in vast supply, it would have limited impact on emissions and other determinants of climate change. Whether gas can facilitate the transition towards a low carbon world is shown to depend on a variety of factors, such as the stringency of the climate objective, policy support to renewables, and energy efficiency policies.

Keywords: Natural gas, shale gas, climate change

JEL classification: Q54, Q47, L71

CO₂ emissions and value added change: Assessing the trade-off through the Macro Multiplier approach by C. Socci, M. Ciaschini, A. K. El Meligi

Recently, political and scientific debate is strongly focused on issues questioning the economic sustainability of environmental policies at regional level. Following European directives and protocols and in accordance with the principles of sustainable development, the interventions designed by policy makers are required to aim at restructuring the final emissions. In this paper an effort is made to assess a new structure for the final demand which would be able to achieve a composite task: the economic sustainability and the environmental improvement. In this respect, the regional Social Accounting Matrix (SAM), referred to a typical region of the Mediterranean area, the Sardinia, will be integrated with the environmental accounting scheme in order to develop the regional multisectoral extended model. The resulting inverse matrix will be used to identify which composition of the final demand (policy control variable) is consistent with the complex emissions together with a positive variation of the aggregate total output (policy target variable). For this purpose the Macro Multipliers approach, through the use of a bidimensional decision-making index, will allow us to identify

the convenient structures for both economic and environmental target and assessing the expected negative trade-off.

Keywords: Environmental policy, multisectoral extended model,
macro multipliers approach

JEL classification: D58, E16, H20, H76

Dutch disease and sustainability of the Russian political economy by
Giovanni Covi

The paper aims at investigating the dependency of the Russian economy on natural resources, underlining the causes and the possible consequences of this growth strategy. The analysis tries to evaluate if the Russian manufacturing has contracted the “Dutch Disease”, that is, if a boom in the oil and gas industry has led to a process of de-industrialization, directly through the resource movement effect and indirectly through the spending effect. In this investigation it will be emphasized the role played by the learning curves as a crucial factor in determining the comparative advantages of a country, and why an excessive reliance on exports of a single product may reduce the welfare of a nation in the long run. The research underlines how the structure of the Russian economy has been built to favor the energy industry instead of the manufacturing one. This strategy has strengthened the comparative advantage that Russia enjoyed in natural resources, so as to reduce the return on investment in the manufacturing sector, which has had to struggle also with the constant appreciation of the exchange rate. This, in the end, has produced the so called de-industrialization process, which has transformed Russia into a service-based economy. The problem resulting from this is that, when a shock happens, the economy is no more able to soften its effects. To absorb the shock, it is necessary a higher government’s expenditure or switching to a higher level of unemployment, producing instability and volatility in the country.

Keywords: Sustainable Development, Russia, Dutch Disease, natural resources, energy economics, economic growth

JEL classification: : E52, P28, O11, Q32, Q33, Q43

Performance of Electricity Distribution Companies in Delhi: An Evaluation Study by N. N. Dalei, A. Gupta

The distribution of electricity and its tariff has become a politically sensitive issue of the power sector. While political interventions in fixation of tariff have led to subsidization of electricity price, various reforms and restructuring tried to rationalize it. The reform and restructuring agenda has led to the rationalization of tariff in various states including Delhi in India. While before coming to power the Aam Admi Party (AAP) declared to reduce tariff by 50 percent in Delhi, the Distribution companies (Discoms) were of the view that bringing down tariff by 50 percent is an impossible task as they are already sitting on losses worth Rs. 110,000 million. In this context, we are trying to make a performance analysis of Discoms to investigate why 50 percent tariff reduction is impossible. The data used in this study were collected from secondary sources like Delhi Electricity Regulatory Commission (DERC), Central Electricity Authority (CEA) etc. The study is based on both qualitative and quantitative performance analysis of Discoms. The results we found that bringing down tariff by 50 percent are an impossible task and there is a need for effective reform and policy change in power sector in Delhi.

Keywords: Privatizations, tariff, discoms, revenue

JEL classification: K23, L11, L94

Hydropower production and environmental regulation: Opting for a performance-based tax approach by F. Pontoni, A. Goltara, A. de Carli, A. Massarutto

This paper discusses the case for reforming the actual mechanism for charging water abstractions for hydropower production in Italy and proposes to introduce a performance-based environmental fee. This should be able, on the one hand, to internalize the environmental costs that hydropower production causes and, on the other, to stimulate producers to opt for more environment-friendly management of hydropower plants. We think, in fact, that the re-issue of several expired hydropower concessions represents an opportunity to redefine the taxation system to which hydropower is currently subject to, in order to introduce finally a form of environmental taxation coherent with the Water Framework Directive. In particular, the proposed fee is a real environmental tax, as it aims at changing the environmentally impacting behavior by increasing the marginal cost of damaging river ecosystems. Therefore, it is equitable, as it does not tax all producers the same way, but according to the impacts that their production generates. Finally,

it is immediately applicable, as it is based on the successful experience of performance-based regulation in several other sectors.

Keywords: Environmental Fee, Water Framework Directive, Hydropower

JEL classification: H21, H23, L51, Q25, Q28, Q5

Market and policy shocks in economic systems: Interrelated dynamics in the sustainability transition by M. Mazzanti

This note addresses the issue of market and policy shocks in the transition to sustainability. Market Shocks may be driven by price volatility; policy shocks are likely to occur either given contingent conditions of policy feasibility - a concept that shifts over time – or in reaction to extreme climatic events. The paper questions the role of ‘events’ as drivers of change, with a focus on innovation responses. In doing so, it broadens the perspective on environmental policy’s role and effects. Environmental policy is connected to institutional and market dynamics. It is not limited to the Pigovian rationale – the mere minimization of current costs - but rather tied to a ‘standard and cost approach’ which attempts to incorporate efficiency concepts in a dynamic scenario, where learning and adaptation through technological and behavioral changes are crucial.

Keywords: Shocks, environmental performances, dynamics, policy

JEL classification: O1, Q5