***China-Europe electric corridor: an issue of energy security and global geopolitics***

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## Overview

The European Union (EU) energy policy revolves for more than thirty years around the liberalization of gas and electricity infrastructure assets and the end of national monopolies in transmission and distribution (T&D). This purely economic orientation of the UE regarding gas and electricity – alongside with a strong free competition policy under the supervision of DG COMP – had contrasted results depending on the country, the companies considered and the national economic well-being. This policy, intending to allow the consumer to benefit from the best service possible, had unexpected results giving the most powerful European companies the upper hand over gas and electricity distribution all over Europe.

Yet the actual situation of T&D in Europe is showing a different picture as a new actor entered the European market at the eve of the 2010s: China. State-owned energy companies of China are buying important stakes in gas and electricity Transmission System Operators (TSO) and Distribution System Operators (DSO) all over Europe. Alongside this acquisition policy, China is also promoting the idea of creating an “electric corridor” between China and Europe to integrate the electric production and transmission from Asia to Europe through Central Asia and Russia. This electric corridor, promoted as a strategic energy security backbone by Chinese actors, could also be considered as a new dependence from the European point of view. Relying on a Chinese-owned architecture, Europe could be tempted to look eastward and rearrange its geopolitical orientations, traditionally centered on the Euro-Atlantic area.

## Methods

This paper considers both the economic issue of electric integration inside and outside the European Union and the geopolitical implication of a transcontinental network with China. It relies on the methods and tools of Economic geography to provide a multi-layer and multi-stakeholders analysis, underlying the contradictions in policy and practices within the EU and between European countries.

Alongside this analysis based on the assessment of the benefits of trans-continental electric integration, the paper also analyses the geopolitical implications of this potential integration from a global security point of view. As energy critical infrastructures could be considered, in a broader view, as major security infrastructure for European nations and the whole Europe as a continent, the cross analysis between security needs and liberalization of energy transmission and distribution is the structuring point of the paper.

The paper rely on the study of national energy strategies, European energy strategy, corporate orientations of European DSO and TSO and also Chinese state-owned energy companies (e.g. State Grid of China, Southern Grid, Three Gorges Corp, etc.). It also analyses the funding from Chinese state-owned banks and funds, the merger and acquisition policy from Chinese companies.

The paper also considers the national legislation of European countries and European Union regarding the monitoring of foreign investments (e.g. in France the Villepin Decree) and the use of this legislation in the energy sector. Alongside this analysis, the paper balance this “protectionist vision” with the analysis of the EU legislation towards competition – under DG COMP – and the different results in terms of energy security (e.g. the decision to not authorize the EDP-GDP merger in Portugal). The articulation between these two orientations and the whole competition within the European Union on protection vs. liberalization – between DG COMP and DG ENER notably – is also an important point to consider.

The whole methodology revolves around both a vertical multiple layer analysis articulating national, European and trans-continental levels. This analysis is be complemented by a horizontal one articulating the influence strategies between companies, administrations and international organizations (especially the Chinese-sponsored GEIDCO).

## Results

China may possibly use its position in the electric transmission and distribution sectors in Europe to promote the view of a transcontinental electric network, considered an “electric silk road”. This project relying on Chinese-based technologies in both electric transmission (UHV system) and data management (5G) could create dependencies in both technologies and supply of electricity, creating a super “pipeline effect” in terms of energy security.

The Chinese strategy, using State Grid as a spearhead, seems to create a consensus in Europe over the electric corridor in acquiring important stakes in TSO and DSO all over the continent (Italy, Greece, Portugal, UK, etc.). This merger and acquisition policy, combined with the promotion of technological norms through research centres (GEIRI Europe notably) and international organizations (GEIDCO) aims to develop the idea that relocating power plants out of Europe would help European countries to meet their climate goals and strengthen the fight against climate change.

The EU seems unable to define a global policy towards this Chinese strategy as the issue of a monitoring system of foreign investments is not desired by some countries that want to retain the upper-hand over their economic security and also by the EU Commission that considers such a system to be in contradiction with the EU free-market orientation.

## Conclusions

The project of China-Europe electric corridor appears to be a challenge for the EU energy policy as well as for the idea of a European policy to regulate foreign investments in strategic sectors. Regulation of competition has been the very deep core of EU policy for more than forty years, especially since 1996 in the energy sector. The results of this policy, emphasizing the liberalisation of electricity and gas market as beneficial for the European consumer, appears contrasted. On the one hand, the liberalization of national energy markets may have removed the burden of state-monopolies, sometimes considered a cumbersome bureaucracy. Nevertheless, on the other hand, this policy, going without any control of foreign investments, gave the opportunity to non-EU state-controlled companies to enter the European electric T&D markets, allowing non-EU states to influence national and European policies. To this extend the strategy of Chinese companies to buy stakes in multiple TSO and DSO all over Europe to achieve predominance over the continent could be considered a way to influence the European energy policy from the technical and infrastructural level.

European Union has to change its vision of the energy sector and the gas and electricity T&D infrastructure from a purely liberal point of view to a balanced orientation considering them critical infrastructures for the security of the whole continent as well as important economic assets.

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