Convergence of gas and electricity markets: opportunities and challenges from a business perspective

Rolf Künneke and Theo Fens

Delft University of Technology Faculty of Technology, Policy and Management P.O. Box 5015 2600 GA Delft, The Netherlands <u>R.W.Kunneke@tudelft.nl</u>

(1) Overview

This paper explores economic and technological drivers for converging gas- and electricity markets in the context of the market restructuring, and elaborates the opportunities and challenges from a business perspective. Under which circumstances are energy firms interested to be active in both, the gas- and electricity sector? Which parts of the value chain are most likely to converge, for instance electricity production, trade and/ or certain network activities? How does CCS (Carbon Capture and Storage) influence convergence between gas and electricity markets? Empirically the paper will focus on the situation in The Netherlands, i.e. a country with a very extensive gas infrastructure.

The paper is structured as follows. To start with, a brief characterization of the gas- and electricity sectors provides some fundamental insights into the relevant economics and technology of these infrastructures. Section 3 specifies four different categories of market convergence, i.e. products and services, regulation, business governance, and technology. Based on this classification, section 4 presents our empirical analysis of energy business convergence in The Netherlands. Finally section 5 summarizes the main findings and speculates on the impact of convergence for the business organization and regulation of the gas- and electricity markets.

(2) Methods

Desk research (literature overview and analysis, analysis of the new EU directives) Empirical research: Interviews with key actors in the Dutch energy sector

(3) Results

Identification of drivers and barriers for convergence, from a business perspective. Important categories are:

- converging products and services,
- converging regulation
- converging business governance
- converging technology.

(4) Conclusions

Impact of convergence for the business organization and regulation of the gas- and electricity markets. An important aspect of our research is the possible impact of Carbon Capture and Storage on converging gas- and electricity markets.

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