

AN EVALUATION OF THE FLEMISH GREEN ELECTRICITY POLICY.

Van Humbeeck Peter, staff member Social Economic Council of Flanders (SERV), think tank and advisory board for the Flemish government and parliament, Wetstraat 34-36, 1040 Brussels, Belgium
pvhumbeeck@serv.be

Bollen Annemie, staff member SERV, think tank and advisory board for the Flemish government and parliament, Wetstraat 34-36, 1040 Brussels, Belgium
abollen@serv.be

Al Marchohi Mohamed, staff member SERV, think tank and advisory board for the Flemish government and parliament, Wetstraat 34-36, 1040 Brussels, Belgium
mamarchohi@serv.be

Overview

To promote renewable electricity, Flanders uses a system of tradable green certificates (TGC). Producers of green electricity receive a green certificate (GC) per MWh of electricity generated. Electricity suppliers are required to purchase these GCs on the certificate market (or produce green electricity themselves) in order to meet their required quota. Hence, this is also referred to as a quota system. In practice, the certificates system in Flanders consists of a hybrid system where quota have to be met by suppliers while minimum support is granted for some technologies when the certificate's market price is not sufficient to reach a break even. The distribution system operators (DSO) are obliged to buy the certificates as part of their Public Service Obligation (PSO). This hybrid system continues to be a source of controversy. Despite the many changes in past years, the problems have increased rather than decreased. Almost everyone now agrees that an important change in policy is needed. Because of the persistent criticism, the Flemish government decided to investigate potential reformations of the system. This paper evaluates the current TGC system in Flanders on different criteria and compares the TGC system with alternative policy instruments using the Regulatory Impact Assessment (RIA) procedure.

Method

The evaluation of the TGC system in Flanders follows the RIA-process. An essential phase in this process is the comparison of alternative policy instruments with the business as usual alternative. This paper adopts a multi-criteria evaluation which is typically applied when evaluating and selecting policy instruments in the RIA-process. The multi-criteria frame comprises 3 main criteria: effectiveness, efficiency and distribution. Moreover, we split up each criterion in 2 sub-criteria to obtain 6 evaluation criteria: macro-effectiveness, micro-effectiveness, societal cost efficiency, administrative efficiency, justice and competition effects. Furthermore, we add a seventh criterion: the secondary benefits with regard to the creation of new sustainable activities and jobs. After the evaluation of the current TGC system for the identified criteria, we identified 3 alternative policy instruments which we compared with the regard to their effects for the given criteria. The first alternative is the business as usual alternative (with which we compare) with no changes in policy. The two other alternatives are the Q-option and the NQ-option. In the former, we assume the quota-system is preserved with an extensive correction of the certificates (banding) to encounter the *windfall profits*. The latter, the NQ-option, or non-quota option, contains the elimination of the quota system and the corresponding certificates market. The support scheme will consist of a dynamic certificates pricing system comparable to the current minimum prices in the hybrid system. The prices are thus not a result of the certificates market.

Results

For each of the mentioned criteria we discuss the assessment of the GTC extensively in the paper. When comparing the Q and NQ-options, we find that the Q-option avoids windfall profits but does not succeed in excluding some fundamental disadvantages linked to the quota obligation. These shortcomings are: the difficulty to fix good quota which has implications on the stability of the system, the low efficiency as a result of the market risk premium and the use of market power on the certificates market, the amplification of the market concentration on the electricity market, the low investment incentive when certificate surpluses exist and the lack of transparency with regard to the price calculations of the electricity suppliers. The NQ-option scores much better in the applied multi-criteria analysis.

Conclusion

The Flemish TGC-system has its merits while experiencing many problems. Given the specific Flemish context, even with an extensively adjusted quota-system some fundamental disadvantages will still occur.

Moreover, a competitive electricity and certificate market are an essential condition for a quota-system. These competitive markets are difficult to realize in Flanders. The NQ-option is more effective and efficient and can function well in different markets, even very concentrated markets, such as the Flemish one.

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