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#### **ENERGY WORKSHOP**

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#### 1. Current situation

In Belgium, liberalisation has given rise to a rapid and far-reaching separation of network activities from generation/production and trading.

In this context, the municipalities have taken control of <u>all</u> transport and distribution networks (seven groups) in which they hold more than 75% of the equity on average. This development has allowed the municipal companies to assume a greater role and take more responsibility for funding (see table 1).

Table 1 provides information on the scale of this change.

	Role of the municipalities			
	Prior to liberalisation		2012	
	Control	Participation <sup>1</sup>	Control	Participation (activities in Belgium)
Electricity transmission	No	13.0%	Yes	52.4% <sup>2</sup>
Gas transport	No	16.5%	Yes	80.0% <sup>3</sup>
Distribution	20% jointly and passively controlled: 80%	56.0%	Yes	85.0% <sup>4</sup>

<sup>&</sup>lt;sup>1</sup> Direct or indirect capital participation.

<sup>&</sup>lt;sup>2</sup> The company TSO-E Elia is quoted on the stock market. The municipal holdings are divided between Publi-T (45%), Publipart, Interfin and VEH.

<sup>&</sup>lt;sup>3</sup> Canadian group CDPQ holds a 20% stake in the holding company at the head of the TSO-G group, Fluxys, alongside the municipalities (Publigaz: 80%). National carrier Fluxys Belgium is quoted on the stock market, and the holding company owns a participating interest of 89%.

<sup>&</sup>lt;sup>4</sup> The sector is divided into 5 areas. In three of these, shares are 100% municipally owned (Infrax, Tecteo, Sibelga), while in two others stakes are held by Electrabel [Eandis: 25%] [Ores: 25% to 30%].

The equity of controlled companies (part of the municipalities) amounts to more than 10 billion euro. The RAB of these companies represents approximately 25 billion euro. Total annual investment by these companies is +/- 1.5 billion euros.

Some of the municipalities have also retained or acquired participating interests in traditional electricity generation, gas and electricity trading and wind power generation. The equity (municipal share) of these companies represents between 0.5 and 1 billion euro. The municipalities do not, however, control any companies of this type. It should be noted that Belgium has chosen to move towards the ownership unbundling (OU) model, so municipal share holdings in electricity generation and trading will probably be reduced in future.

The municipalities have not developed a "multi-activity" or "Stadtwerke" model. The companies only manage networks for one or two energy types. Companies are based at the regional or federal level. There are no links between municipal services and municipal companies.

The Belgian municipal energy model is therefore a "shareholders" model.

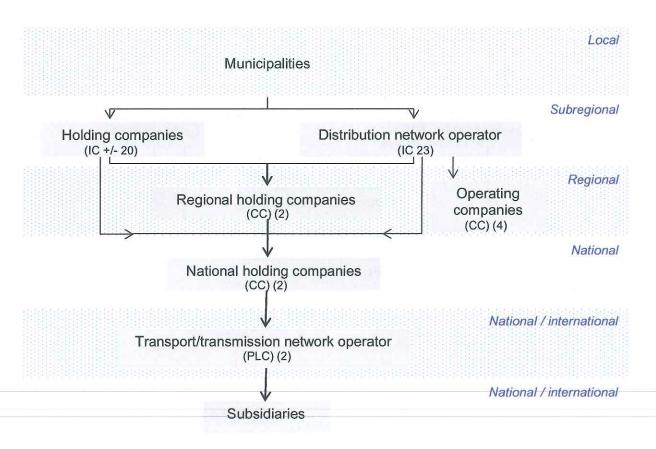
## 2. Problems

#### 2.1. Complexity in the sector

The work of municipal companies is shared between dozens of companies, which are incorporated under public or private law, have holding company, asset ownership or operating company functions and operate at the subregional, regional and federal levels (see tables 2 and 3).

<sup>&</sup>lt;sup>5</sup> With one exception.

Table 2

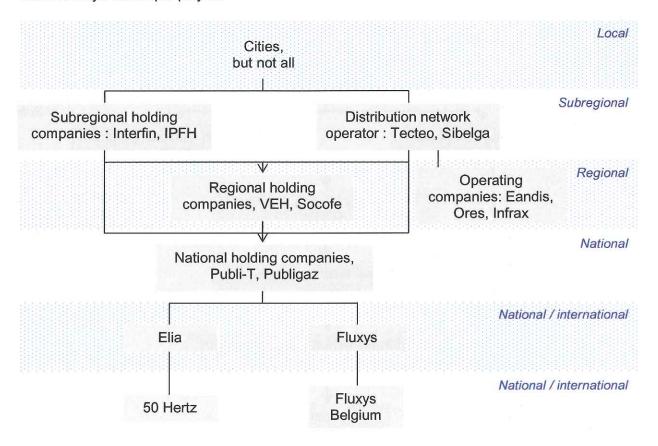


IC: Intermunicipal company (public body in the form of a company).

CC: Cooperative companies.

PLC:: Public limited companies.

Table 3: Major municipal players



#### This structure is too complex:

- Five distribution network operating companies: insufficient economies of scale;
- 27 distribution network operating companies: 27 different distribution tariffs;
- Complexity:
  - insufficient visibility (financial markets, foreign operators, European regulators);
  - insufficient legitimacy (media and Belgian regulators);
  - o decision-making processes that are sometimes too slow.

## 2.2. Increased funding difficulties

Since the crisis in 2008, there has been very little access to bank loan funding for municipal companies, which are forced to issue bonds to fund their operations. Demand in this market is currently strong, but the process involved is more complex.

The total equity requirement of the municipal companies can currently be met, but the allocation process is not ideal (excess equity funding for some companies and an equity requirement in others). Reallocating this equity is difficult.

By the end of the decade there will be an overall net equity deficit unless the municipalities reduce their share of the capital, which is not impossible.

It will be difficult to meet new equity needs because tariff regulations have become progressively stricter:

- a lower cost of capital is allowed: the latest figure for this is currently 3.3% exante (decision by regulators in December 2011). After adding incentives, the ex-post rate is between 4% and 5%;
- funding from "normally" remunerated equity is limited to a ceiling of 33% of the RAB, which is lower than the European average;
- a reduction in the permitted amortization rate (from 3% on an indexed basis or 5% based on book value prior to liberalisation to 2% based on book value).
   As a result, the self-funding capacity is insufficient (particularly in gas, due to the risks of stranded costs).

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#### 2.3. Legitimacy of international investment

The two transmission companies (Elia / Fluxys) which are respectively 52% and 80% municipally funded, have initiated a major international development programme (buy-back of 50 Hertz, Transitgas, IUK, development of the terminal at Dunkerque).

These investments are being made in the following context:

- unbundling in Germany;
- market interconnection and integration;
- a predictable consolidation that will reduce the number of players in Europe.

The political legitimacy of these investments, however, is causing problems:

- higher risks associated with these investments;
- complete disconnection between democratic control of the municipalities and the activity.

## 2.4. Higher investment risk in the context of European Union energy policy.

European energy policy is built on 3 pillars:

- competition. To promote competition, the European Union favours interconnection and market integration, which in turn require specific investments (cross-border interconnection, additional capacity) without any increase in transmitted volumes;
- security of supply.
  - In the gas market, this means acquiring sufficient flexible capacity to allow swapping between LNG supply and pipeline supply and vice versa, i.e. gas from Russia and Central Asia or from the rest of the world, and gas from Russia entering from the north, the centre or the south. These increased capacities (volume and reverse flow) are again not linked to an increase in volumes:

sustainable development.

The development of non-schedulable green energies requires electricity networks to have a higher capacity and requires distribution networks to use smart technology. Investment in smart technology is promoted, while the underlying market model has not yet been defined.

In the longer term (roadmap 2050), decarbonification threatens the viability of gas networks, which require ongoing investment for security reasons.

The European Union's policy is therefore demanding huge investment in the network but creating a much greater risk of stranded volumes and stranded investment. Regulators have not yet recognised this problem.

# 2.5. Tightness and inadequate opportunity for the business models of network operators, particularly distribution network operators.

While the European Union's policy requires more and riskier investment, the opportunities offered to network operators are too vague or too restricted:

- a dogmatic vision of unbundling creates excessive restrictions on opportunities to develop electricity generation in niche markets where it would be possible to enhance business models of distribution network operators (no opportunity to develop cogeneration and renewable energy except to meet distribution losses);
- a lack of visibility as regards the future European electricity distribution market model is creating fears that the model may be restrictive for distribution network operators. Distribution network operators are being forced to introduce smart technologies in their networks and specifically to roll out expensive smart metering programmes without their future role in the flexibility and ESCO markets being defined;
- tariff regulations in Belgium that do not adequately take into account the constraints imposed by European energy policy:
  - inadequate amortization rates in the gas sector, taking risk volumes into account;
  - o insufficient incentives for diversification;
  - o insufficient profitability rates.

#### 3. Next moves and strategies of companies.

The following trends are emerging in the short and medium term:

- a reduction in the number of distribution network operators (which will have the effect of simplifying tariffs and structures but not reducing costs);
- complete withdrawal by the historical operator from those distribution network operators in which it still holds shares. Ownership unbundling of network companies will then be complete (currently 5 out of 7);
- probable arrival of new private shareholders in network management operators (while maintaining municipal control).

#### 4. Issues that have not yet been resolved:

- a clear image for share ownership in with a view to international development by
   Fluxys and Elia;
- opportunities to reduce the number of distribution network operators or create of service centres involving more than one operator in order to reduce costs;
- an answer to the question "at what level should strategy be defined and how can its political legitimacy and its democratic control be assured?"
- no strategy and constraints from the European Union to allow the business model to evaluate in the distribution.

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