Towards a consistent approach for regulating the multi-energy carrier energy system

Prof. Dr. S. Lavrijssen, professor Economic Regulation and Market Governance, Tilburg University, June 2019
Concept of good energy governance

- Transparency
- Participation
- Effectiveness/flexibility
- Independence
- Accountability
- Proportionality

Universal Access
Affordability
Sustainability
Security

Energy Democracy
Energy Justice
New regulatory approach required

The developments towards a Smart Energy System that require changes in the European and national regulatory frameworks are:

- a move from centrally generated energy from fossil fuels to energy generated (locally) from renewable sources which are more volatile and intermittent;
- a move from citizens acting only as energy consumers to them becoming more active as prosumers;
- the substitution of the traditional demand-driven system by a supply-driven system supported by the introduction of demand response programmes and the storage of energy;
- the transition towards a multi-carrier energy system in which power can be stored by transforming it to heat or to hydrogen; and
- the deployment of smart energy meters and related data protection concerns.
Clean Energy Package

Concept of active consumer

Rights for active consumers
- eg. rights to dynamic prices
- special consumer protection rights
- Access to flexibility markets

Distribution network operator as ‘neutral market facilitator’

Promotion of roll out of smart meters

Local citizen energy communities

But only applies to electricity.............
Gradual submission of a number of legislative proposals to prepare the relevant energy laws (e.g. the Electricity Act 1998, the Gas Act, the District Heating Act, the Wind Energy Act) in clear and coherent steps for the transition towards a low-carbon energy supply that also guarantees affordability, security and safety.
Regulatory patch work

- GAS
- ELECTRICITY
- DISTRICT HEATING
- HYDROGEN
- OTHER MOLECULES
- CCS
Energy law

1.0

Integrate Electricity Act, Gas Act, District Heating Act

Improve quality of legislation and facilitate energy transition;

- Eliminating consistencies and unnecessary overlap
- Improvement of transparency
- Technology neutral
Energy Act 1.0

Research question Lavrijssen, Van der Velde and others 2018:

“To what extent is the integration of the Electricity, Gas and Heat Act possible, in view of the applicable European and national legislative framework and the underlying market models of the electricity, gas and heat markets”? 

Main topics and key concepts

<table>
<thead>
<tr>
<th>Tasks and roles players</th>
<th>Access to the market</th>
<th>Access for network operators</th>
<th>Tariff regulation</th>
<th>Protection of small users</th>
<th>Supervision of market players</th>
</tr>
</thead>
</table>

Development of methodology to compare acts
Conclusions research

1. Great opportunities to create an integral Energy law, although this integration will be more limited in some areas than others;

2. Possibilities of creating an integral energy law are limited to the Electricity and Gas Act. The integration between the District Heating Act on the one hand, and the electricity and gas law on the other hand, is not yet possible considering the current structure of the heat market.

3. Most of the obstacles arise from Dutch policy and not from European law. As a result, it will be easier to create an integral law for electricity and gas, because the Dutch legislator can change policies and the various provisions themselves.

4. Integrating hundreds of European concepts into European network codes. There is now friction between national and European concepts (research by Chiel Bakker 2018).
Other market model and form of regulation than Electricity and Gas Acts;

No European liberalization directives;
Vertical integration of production, supply and network companies;
Transport over shorter distances;
No regulated network access;
Other form of price regulation; Maximum prices are determined by the ACM on the basis of no more than otherwise principle.
Main challenges/questions

- Not yet clear what adequate market organization is for heat;
- Technique neutral right to heat; What does that mean and is it enforceable?
- Heat delivery via district heating networks often leads to monopoly; No freedom of choice for citizens?;
- How do you prevent heat prices from becoming too high?
- Are regional differences in energy costs socially acceptable and if so to what extent?
- Role good governance principles?
Towards coherent legal framework using good governance principles