

Why the heating sector urgently needs a new policy

Thermal Energy Forum
22 February 2018



About ARPEE



Our commitments

A faint, light-colored graphic of a city skyline with various buildings is visible in the background of the commitments section.

-  Promoting energy efficiency and energy saving on the whole energy chain
-  Reducing energy dependence of Romania
-  Stating energy efficiency and energy saving as key priorities of Romania's energy and environment strategy
-  Energy efficiency- key factor against climate changes and global warming
-  Energy efficiency- major contribution to the growth of economic competitiveness, the creation of new jobs, the increase of the energy bills affordability
-  Buildings' energy rehabilitation

Our members

A collection of logos for ARPEE's member companies, arranged in a grid-like fashion.

-  ADREM INVEST
EXPERIENCE PROGRESS
-  B-TEAM
-  CIURTIN ASSOCIATES
-  ENGIE
-  GE
-  OMV Petrom
-  Schneider Electric
-  thermaflex®
-  TIAB
-  VEOLIA
-  vimetco alro

Influencing factors for the heating sector

- **Environmental & social**

- Gradual decrease of heat-degree days since 1990s
- Customers want more control over production & consumption of energy
- Significant split between:
 - Centralised systems
 - Decentralised systems in cities & urban areas
 - Decentralised systems in villages & remote areas

- **Market**

- The sector is depending on fossil fuels, being exposed to commodities' price volatility & environmental costs (mainly CO2 emission costs)
- Natural gas (the most important fuel) prices are linked to global oil price evolution → price volatility started impacting the heat production
- Scarcity of biomass & sustainability concerns (will) affect rural residents

- **Technology**

- Penetration of new heating technologies (mostly PV, but also heat pumps)
- Digitalization is transforming the way people consume energy (thermostats, digital controls)

- **Legislation / regulation**

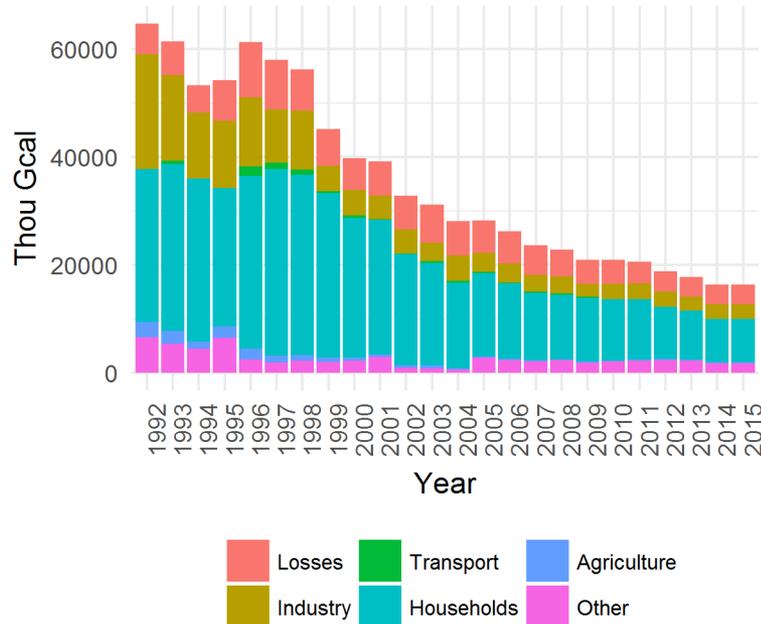
- Regulation of end-user prices and rigidity of adjusting them in face of volatile commodities
- Few incentives to invest in new production & distribution assets
- Little coordination regarding the regulation of the sector among various state entities

The heating sector has become reliant almost on the residential consumption

Derived heat consumption has decreased under the influence of restructuring of industry, disconnections of residential customers and weather related factors

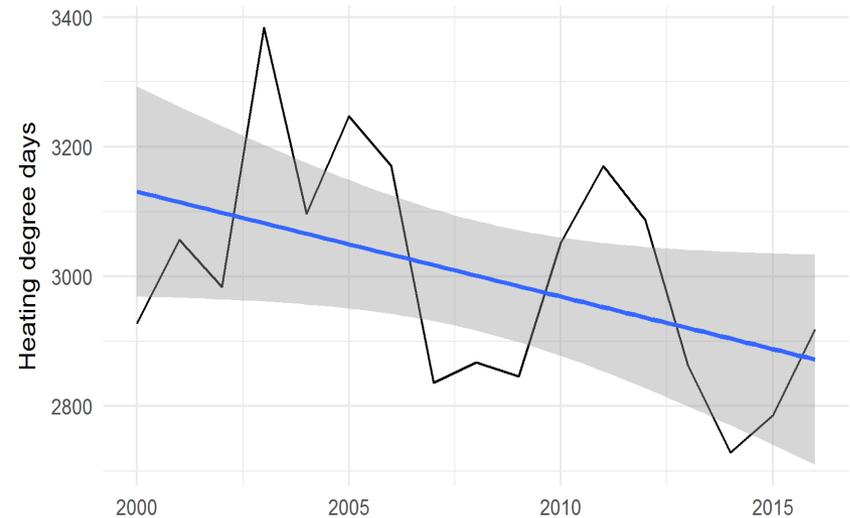
Evolution of heating balance

Households are main customers of the sector



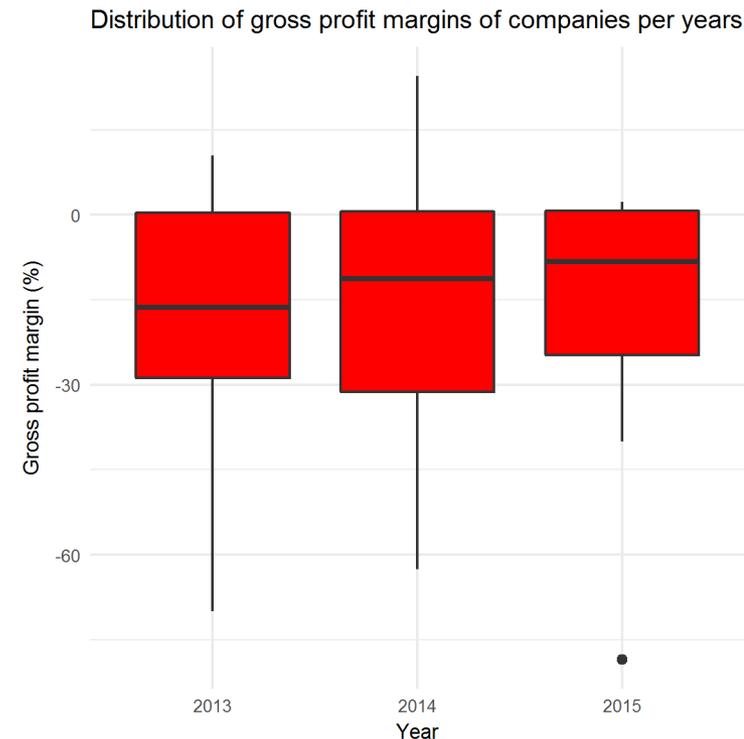
Heating degree days

Downward slope of HDDs in the long run



Very low profitability for 15 large heat supply companies

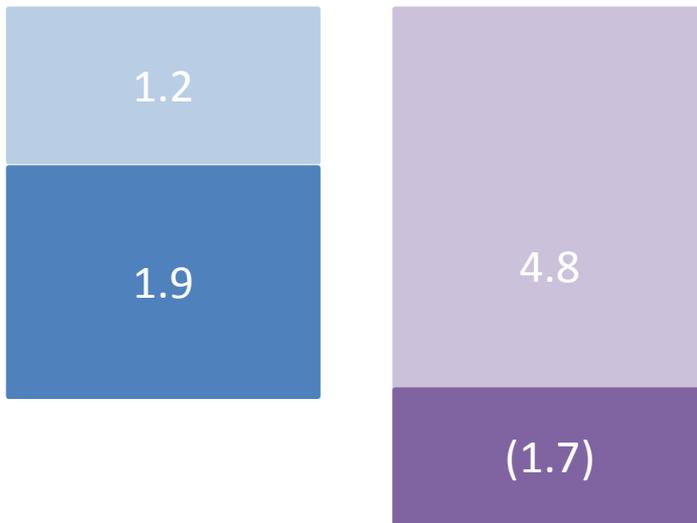
- We investigated 15 heat supply companies between 2013-2015
- The majority of these companies went through (or are in) insolvency
- Almost no company posted a net profit in 2015
- Very low overall profitability during the respective period of time



Source: Own calculation, ANRSC data

The balance sheets of companies are worrisome

2014



2015



Fixed assets

Current assets

Shareholders' equity

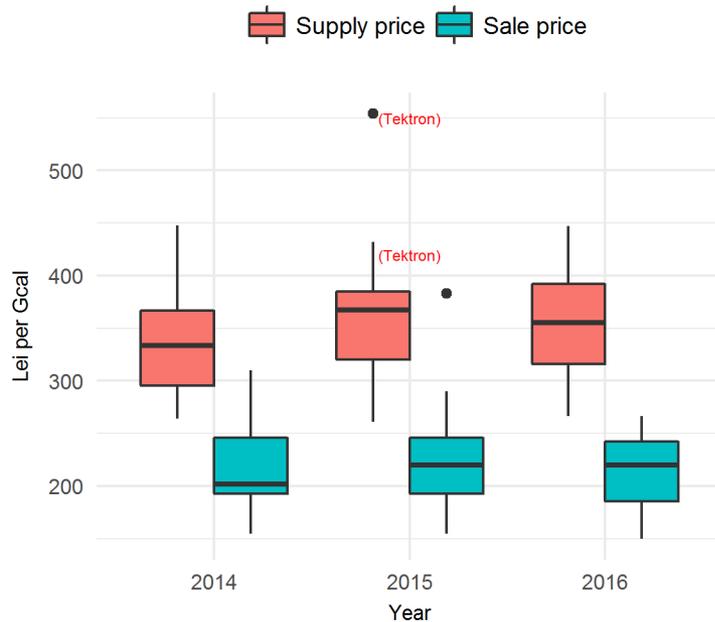
Net debt

Cumulative data for the 15 companies analyzed

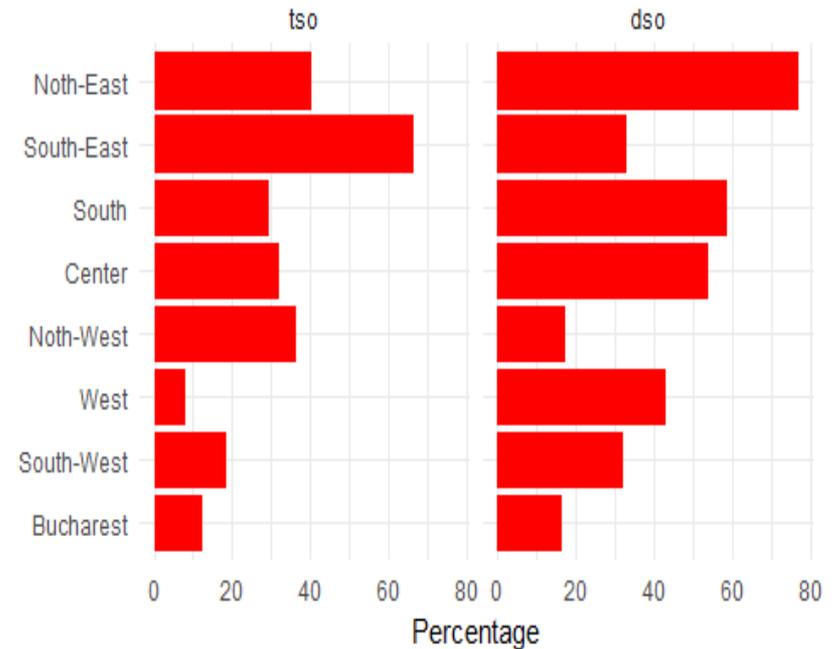
Untargeted subsidies lead to a snow-ball effect in the system

Supply and sale price spread evolution

The spread of supply and sale prices increases



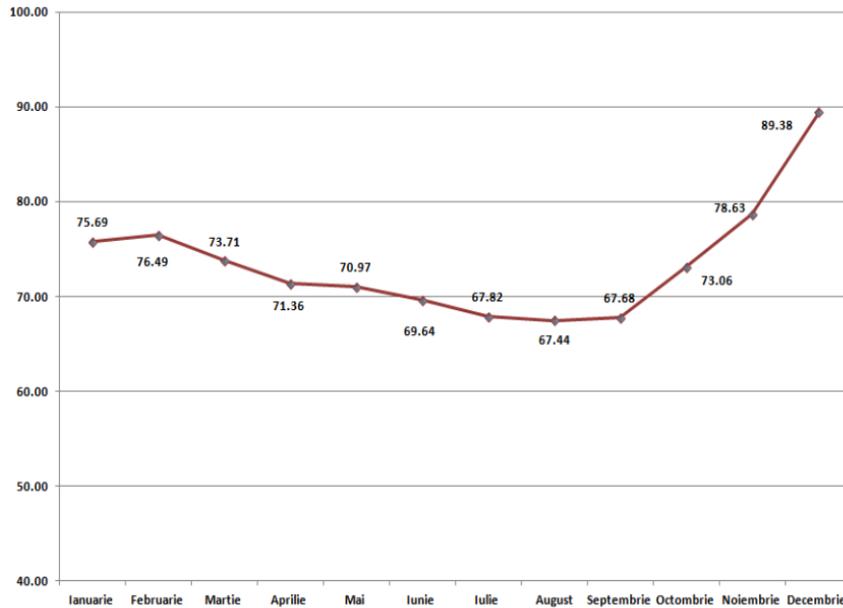
Share of preinsulated pipelines by network type



Source: Own calculation, ANRSC data

The sector will be more exposed to commodities volatility

Natural gas wholesale prices (forward, month ahead, 2017)



Source: BRM

CO2 European emission allowance price



Source: Business Insider

Conclusions and recommendations

- Important challenges lie in front of the sector in the following years
- Investments in infrastructure must come to address the acute technical problems of the sector
- Regulation must be thoroughly revised:
 - Move to incentive-based regulation for efficiency improvement
 - Increase the rate-of-return for infrastructure segment
 - Address the cash flow problems of companies which lead to insolvencies
- End-user heat prices must be made more elastic to market-based factors
- Reform the subsidies schemes
 - “Subsidies-for-all” philosophy does not work
 - CHP subsidies must be transformed from operational to investment state aid with efficiency improvement