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27 June 2013

Online at <https://mpra.ub.uni-muenchen.de/56756/>
MPRA Paper No. 56756, posted 28 Jun 2014 05:35 UTC

Aspects of Consumers' Rights Protection for the Centralised Urban Heating Services

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Abstract

This study approaches the issue of urban heating services in the current context of development and crisis. The importance of the energy area is highlighted in a globalised world as well as of knowledge, current state and the implications on the efficiency and sustainability of urban energy for the increase of the quality of the consumers' life.

In this paper the author aims to present the results of researches carried out on the protection of the consumers' rights, excepting top management in a utility service regarding the centralised supply with thermal energy (example the status of Petroșani municipality). This perspective, less common – as usually the consumers are consulted on how their rights are observed – wished to extend the vision on the issue of interest in the general interest economic services area. The research was based on the assumption that there is a contractual partnership between the service supplier and consumer and that both perspectives are important to be investigated. Based on a structured interview valuable information was obtained regarding the observance of consumers' rights in the area of urban centralised heating service. Some information highlights the actual state and other aim/target its improvement.

Keywords: urban centralised heating services, consumers' rights protection, sustainable development, sustainability of urban energy

Introduction

Nowadays two dominant demographic trends can be distinguished: increase of population and urbanisation. The year 2008 represents the milestone year for mankind as „urban species”, due to the fact that over half of the world's population lives in cities (Brown, 2008, p.181). From antiquity to modern cities, their evolution depended on the technical progress of transports (water networks, wastewater networks, thermal networks, electricity networks, shipping, rail road, road and air transports). Thus the food, water, energy, raw materials and materials were provided for large agglomerations/concentrations of people. Collection, discharge and pollution of air, soil and water represent major problems of the locale public administrations. The quality of urban life involves the existence of the services of general economic interest (SGEI), of facilities that correspond to the needs of people. They are provided by public intervention and for the general public use under quality, safety, affordability, equal treatment or universal access conditions. Usually, the services, in modern economies are the main engine for sustainable development, they increasingly present a dimension in our economic and social life. „Nowadays, services represent around 70 per cent of developed economies, in terms of both employment and added value”(Maroto, 2009, p.4). „The production structure of modern economies within the OECD is characterised by a large service sector that generates, on average, over 75% of gross value added” ((Navarro-Espigares and Martín Segura, 2011).

The energy problems are called „the energy's trilemma” which represent challenges for the development of energy supply and which must be solved in close interdependence and correlation (figure 1). The security of supply, affordability, the climate changes and environmental protection are elements of sustainable development and from the direct interest of the consumers of energy services.

In any state consumer protection is an essential component of social policies and a constant concern of public authorities. "The plenary manifestation of the complex mission for consumer protection has

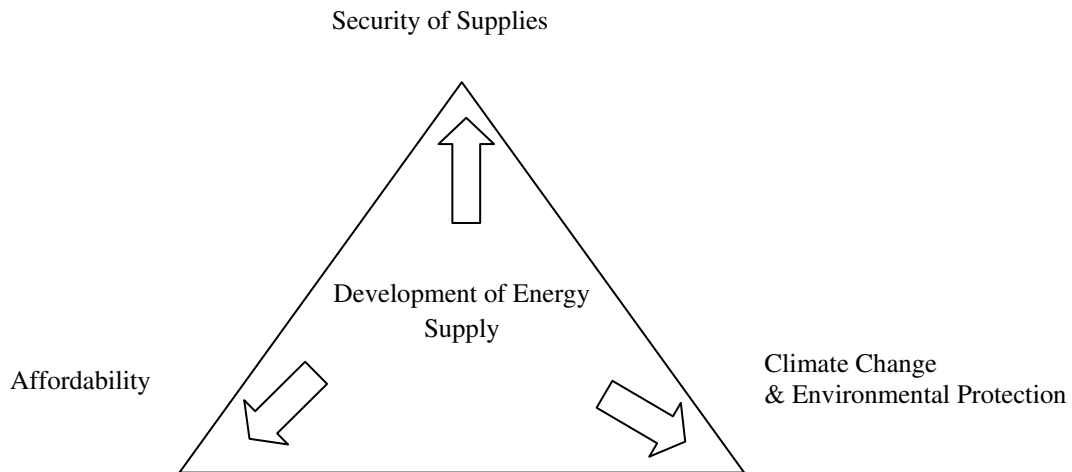


Fig 1. The energy trilemma
Source: CHPA, 2010, p.5

determined in the area of public concerns, a change in the hierarchy of priorities, so consumerist ideals were appreciated as essential, and through an ample evolutionary process each state, through its government, reconsidering the importance of consumer issues in the field of economic and social life, has provided security protection alongside regulation in the field and through the establishment of strong institutional structures." (Apan, 2007, p.392).

Sustainable Development

As stated in the Brundtland Report (WCED, 1987), the concept of sustainable development refers to the type of development that ensures satisfaction of the present generation's needs without compromising the ability of future generations to meet their own needs. In the context of sustainable development, the exploitation of resources, investments orientation, technological development and institutional changes are coordinated so that to increase both the present and the future potential of satisfying human aspirations. Sustainable development of humanity should aim at preserving and possibly improving living conditions for as many members of society, while maintaining dynamic stability for all the components of the macro-system's ecosphere, and of the macro-system itself.

It is noted that the utility function of sustainable development cumulates the utility functions of economic, social and environmental systems: maximizing welfare for as many members of society, in terms of maximizing the efficiency of the processes involved, safeguard biodiversity - to support the resilience of the biosphere - and maintain existing self-regulating mechanisms in the ecosphere.

The concept of sustainable development has been continuously enriched as concerning its meaning and scope, being adapted to national socio-economic characteristics (Cândea, 2006; Fărcaș, 2007; Nicolescu, 2007; Cândea, 2011).

In the context of the present paper one of the definitions for sustainable development given by Lester Brown is very suggestive: „ a sustainable society is the one that shapes its economic and social system so that the natural resources and life support systems are preserved” (Brown, 2008, p.VII). Since 1974 at the „World Watch Institute” through interdisciplinary research studies are carried out on the global issues of mankind („energy – the issue of preservation”, „limits of cities – required constraints of urban growth”, „water – reconsideration of management in an era of restrictions, etc.”). Systematically following the evolution of these issues the specialists signalled the necessity to „ensure sustainable development, based on the adaptability of the social and economic systems to the changes that take place in the area of natural resources” (Brown, 2008, p.VII). Moreover, the study „Energy in a finite world”, coordinated by professor Hafele (Austria), under the International

Institute for the Analysis of Applied Systems shows a clear trend of mankind for going from fossil resources to renewable ones and that we currently are in a transition phase (Brown, 2008, p.VI).

Starting with 2000 Brown set up a new institute „Earth Policy Institute” whose manifest book was „Eco-economics”, with the subtitle „Creating an economy for our planet”. From among the main action directions we could mention: design of sustainable cities, eradication of poverty and stabilising population, stabilising climate, building a new economy, etc.

Now, the global situation has significantly deteriorated and it underlines that all issues studied have aggravated (deterioration of energy and food security, effects of the major economic gaps, global climate changes, aggravation of the water sources issue, endangered natural systems). Thus, he warns that „the western economic pattern” cannot work for China, India and the developing countries. Why? The given explanation is that „in a global economy characterised by integration trends, where we all depend on the same resources – grain, oil and steel – it shall not work of industrialised countries any more either” (Brown, 2008, p.IX-X).

Consumers’ legal rights and interests

The consumers rights charter defined by the former president of the USA J. E. Kenedy – in March 1962 as a special message addressed to the American Congress is the basis of the concept regarding the consumers’ rights (Morar, 2005, p. 88). Although unfinished, the Charter remains important by outlining the fundamental rights of consumers (free choice right, the right to be informed, petition and hearing right, right to protection), but especially by the fact that it served as reference model for the elaboration of the laws for the protection of consumers in the seventh and eighth decades in the USA and in other countries on the American continent (Canada, Mexico), as well as in Europe (Belgium, France, Germany, Sweden). For the countries of the European community, the European Council adopted in 1973 „The consumers’ rights charter”, where the principles of an active policy for assistance for damage repairing, information, education and consumers’ representation are specified (Morar, 2005, p. 90).

The consumers have the following main rights (Governmental Ordinance no. 21/1992) that are also observed in the research carried out:

- a) The right to be protected against the risk to purchase a product or to receive a service that might prejudice their life, health or security or to or to prejudice their legitimate rights and interests;
- b) The right to be fully, correctly and accurately informed on the essential characteristics of the products and services, so that the decision they make in connection with them corresponds as well as possible to their needs, and the right to be educated as consumers;
- c) The right to have access to markets that provide a wide range of quality products and services;
- d) The right to be effectively and appropriately compensated for the inappropriate quality of the products and services, using for this purpose the means provided by the law;
- e) The right to assemble in consumers’ associations, for the purpose of protecting their rights and interests;
- f) The right to refuse to conclude contracts that include abusive clauses, in accordance with the legal provisions in force;
- g) The right to not be forbidden by an economic operator to obtain a benefit expressly provided by the law.

The main regulations governing consumer protection and the activity of urban heating services that make up a rich scientific literature associated to the proliferation of specific legal rules in this area (the consumer code consumer law, regulations, ministerial orders) are:

- Government Ordinance no. 21/1992 on consumer protection, republished (2), as amended and supplemented;
- Law 148/2000 on advertising, as amended and supplemented;
- Law 193/2000 on unfair terms in contracts concluded between traders and consumers, republished 2012;

- Government Emergency Ordinance 5/2003 for the granting of aid for house heating as well as public facilities for payment of heating, as amended;
- Law no. 295/2004 regarding the Consumption Code.
- Decree 933/2004 regarding metering systems connected to public centralized heating energy supply system, as amended;
- Order 233/2004 for the approval of regulations on public metering systems connected to the centralized thermal energy supply systems, as amended and supplemented;
- Law 325/2006 on public service supply with thermal energy;
- Order 483/2008 for the approval of the Framework Contract for the supply of heat;
- Regulation for thermal energy supply and use, as amended;

According to these new regulations the fundamental universal rights of consumers were officially recognized/ granted, a new government agency - the Consumers Protection Office (the forerunner of today National Authority for Consumers` Protection - NACP) and its network - was founded and over hundred non-governmental associations for consumers protection were created within most important cities. NACP managing a national network of 41 regional/ countys` Offices for Consumers` Protection (Drăgulănescu and Drăgulănescu, 2003). The most important public institutions empowered in the field of consumer protection in our country are: NACP, Competition Council, Interministerial Committee for Market Surveillance, Products and Services, and Consumer Protection, advisory bodies, Advocate of the People, organizations and bodies with general competence and specialized bodies.

The urban centralised heating system worldwide and in Romania

In 2008, worldwide were 2370 operated coal-fired power plants. Coal provides 40% of global energy production, but generates 70% of CO₂ emissions from the energy sector. Only banning incandescent light bulb and replacing it with compact fluorescent lamps (CFL) would reduce world energy consumption for lighting from 19% to 7% of total energy consumption. "This would save electricity produced by 705 coal-fired power plants". (Brown, 2008, p.205). Savings through efficiency of lighting and appliances (including standby mode) "would allow us to avoid the construction of 1410 coal-fired power plants - more than the 1382 power plants foreseen by the International Energy Agency (IEA) to be constructed by 2020." (Brown, 2008, p.208).

Population growth and rising living standards could increase global energy demand by 40% by 2030. And, the high degree and growing EU dependency on imports requires policies that reflect and address these possible developments for the 490 million european inhabitants.

In Romania the heating methods are: - urban centralised heating systems (29%), - individual central heating systems for apartment buildings (8%), - (individual) heating with stoves using natural gas (12%), heating with stoves using other fuel (48%), - electrical heating (1%) and no heating systems (2%) (Ionescu, 2011, p.16).

Due to the economic difficulties and to the inappropriate decisions, the urban energy in Romania is a disadvantaged energy sub-sector. Currently, „in Romania there are approximately 85.000 apartment buildings with approximately 3 million apartments and 7 million tenants. Of 251 urban operators thermal energy suppliers in 1989, today only 107 are still operating, and their great majority with large financial deficits. The total energy losses of these systems in relation to fuel consumption are between 50-80%, of which 30-40% from heat sources and transport and distribution networks, and 40-50% in the multi-level residential buildings. These losses are paid by the final consumers (households) and, due to unbearable bills relative to the small incomes of many of them, through a complex and ample system of subsidies by the social services.” (Leca and Cremenescu, 2008, p.XVII).

The serious situation of the urban energy in Romania today has multiple causes: old and inefficient installations, buildings with high energy losses, legislation that does not produce practical results,

inadequate regulations, and lack of national policy in the area, lack of investments, declarative political will.

A solution for the modernisation and efficiency of the urban heating systems, which has been implemented in several large urban centres, is cogeneration. Cogeneration is a potential source for the efficient production of electric power when the industrial thermal consumption and the centralised heating system permit it. Cogeneration is the only method for the combined production of electric power and heat using fossil fuel with a overall efficiency exceeding 80%. In comparison with the separate production of heat (in thermal power plants) and of electricity (in thermoelectric power plants), the fuel economy resulted from the combined production of heat and electricity in cogeneration thermoelectric power plants can reach 30-34%.

The sustainability of urban energy, presented in figure 2, requires the existence of quality services that increase customer loyalty. But, due to lack of investments in centralized systems it is impossible to increase the quality of services. This current situation of urban heating is rather "un-sustainable". Implementation of the "Europe 2020" Strategy leads to a sustainable urban heating system. The situations presented in Figure 2 highlight how consumer satisfaction determines the sustainability of a system, as a crucial element specific to a free economy.

Issues in local communities: case study on the situation in the Jiu Valley

In the municipal energy management the local community made of consumers represent the main actors for the support of reduction of energy consumption and environmental protection. The objectives of the municipal energy management are: increase of energy efficiency on the entire chain from energy production to local energy consumption, increase of customers' satisfaction and affordability. For edification on concrete issues at this level, the the study conducted results are summarized in Petrosani - "pole of development" of the Jiu Valley (local community in the western region, Hunedoara county). The status of the technical urban and town management endowment of the urbane localities in Hunedoara County is presented in comparison with the other counties in the West Region (Table 1).

Table 1: Network of public urban utilities

County/Region	Municipalities	Towns	Total	Natural gas	Thermal energy	Drinking water	Public sewage
Arad	1	9	10	7	6	10	10
Caraş - Severin	2	6	8	5	2	8	8
Hunedoara	7	7	14	13	9	14	14
Timiș	2	8	10	7	3	10	9
West Region	12	30	42	32	20	42	41

Source: Agency for West Regional Development, p.6

The fossil fuels' market is made of coal, natural gas and fuel oil for the municipality of Petroșani. Fuel oil cannot represent an alternative for natural gas in order to provide the population with thermal energy. However, unfortunately, the issues related to pollution combine with its price that shall always be higher than that of natural gas lead to a reserved attitude towards this fuel. The current trend in respect of natural gas tariff is of accentuated increase, which shall constantly influence the bills for thermal energy. Irrespective of the heat supply system that shall be promoted in Petroșani, the impact of the increase in the natural gas tariff shall be huge.

According to the National Institute of Statistics, Hunedoara County Department for Statistics, only 9 localities (of which 8 municipalities) exist in the county where thermal energy is distributed (on 31st December 2011). According to the legal provisions and in line with the principles of local autonomy and decentralisation of public services, the authorities of the local public administration have full competence, responsibility and freedom of decision in respect of setting up, organising and operation of the public services for town management, and therefore of the urban heating services. They are part of SGEI.

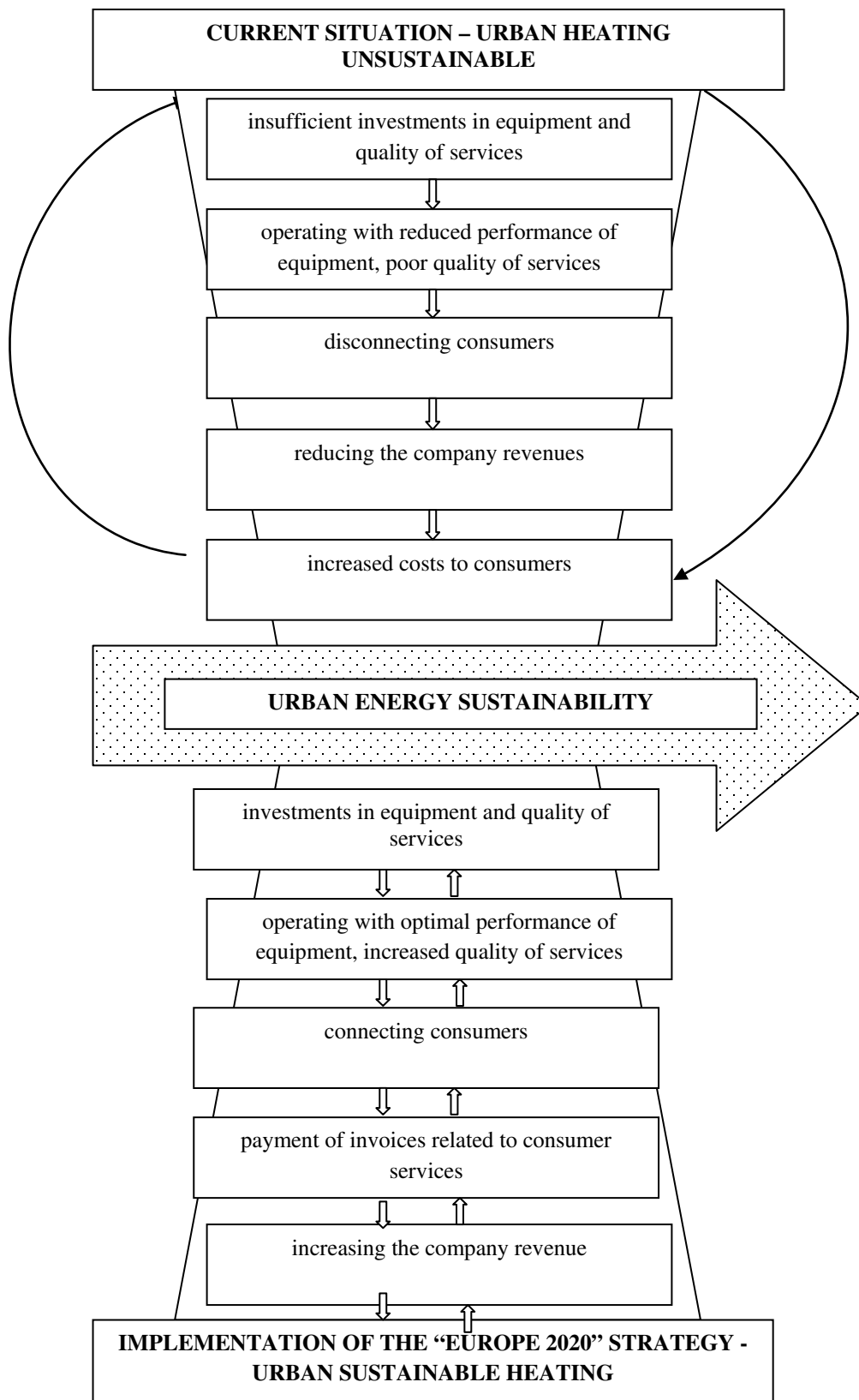


Fig. 2. Urban Energy Sustainability
 Source: Irimie, 2012

The local public administration has an important role in the elaboration of the medium and long term development strategy for this activity, in the local regulations in the area and in the elaboration of the pricing policy, which represents a vulnerable point of the consumers' protection. The permanent increase of the energy products' price, and in our case of natural gas, has led to the dramatic increase of the tariff for thermal energy. For this tariff to be bearable for the population it has been subsidized in various proportions along the years. At first subsidies were supported by the state budget, but for the past few years this task was transferred to the local councils. This represents a significant financial effort for the local budget. Thus, the supply of thermal energy has also become a social service provided by the local public administration. Another social service related to the supply of thermal energy was and still is the aid for heating granted to families with small incomes. The method for granting it changed from one year to the other along with the responsibilities for executing the action, but the local administration had a significant contribution to the development of the action both directly and through the service provider.

According to the data supplied by the S.C. Termoficare Petroșani, the prognosis for the demand of hourly and yearly thermal energy in the centralised heating supply system of the municipality of Petroșani is presented in Table 2.

Table 2: Prognosis for the thermal energy demand

No.	Name of P.T. (substation)	No. of apartments	Q _{heating} , kcal/h	Q _{a.c.c.} , kcal/h
1	P.T. - 1	1059	5989200	2008182
2	P.T. - 1A	926	5112030	1755974
3	P.T. - 2	389	2422140	737661
4	P.T. - 3	1232	6104070	2336242
5	P.T. - 3A	744	5043360	1410848
6	P.T. - 4	543	3711540	1029691
7	P.T. - 5	1526	6472725	1945604
8	P.T. - 6	412	2082570	781276
9	P.T. - 7	416	2447340	788861
10	P.T. - 8	654	4155060	1240180
11	P.T. - 9B	60	533190	221000
12	P.T. - 9C	162	1550000	521000
13	P.T. - 10	478	4423650	906431
14	P.T. - 10A	144	1300425	501638
15	P.T. - 11A	802	7004865	1521000
16	P.T. - 11B	850	4812885	1611855
17	P.T. - 12	1549	6653850	1989219
18	P.T. - 13	266	3651690	855000
19	P.T. - 14	0	0	
20	P.T. - 15	1264	4482660	785000
21	P.T. - 15A	326	1666035	618000
22	P.T. - 16		1894200	257250
23	P.T. - 17	1509	6000000	965000
24	P.T. - 18A	342	2512650	648535
25	P.T. - 18B	291	2458260	551823
26	P.T. - 19			459375
27	P.T. - 23	156	650000	471000
28	P.T. - 25		1786050	126000
29	Sc.gen.1		558600	73500
30	CRUCERU			115000
TOTAL		16,100		

Source of date: S.C. Termoficare Petroșani, 2012

Petrosani is powered by heat energy produced in S.E. Paroşeni plant. Through the thermal energy distribution network from the manufacturer through 29 thermal points and a heating thermal power plant, heating is running to consumers. From these are supplied with heat and domestic hot water dwellings and social and cultural amenities of the city. The thermal network is located underground in galleries, along with other underground networks, and some trails are ground mounted scaffold. This infrastructure - old or upgraded on certain sections, ensures the carrying the thermal energy supply service.

Also, there is a natural gas distribution network in the city. The works for natural gas introduction are ongoing on a series of side sections. The network distribution length is 18 km serving a total of 16,100 apartments, of which 12.5 km in the Airport district with 8700 apartments and 8.7 km in the Carpathian district with 7400 apartments.

The main objectives from the strategic plan aimed at modernizing public services (chapter 3 p.9) refers to the following activities:

- Expanding the network of natural gas in the Colony neighborhood, stadium area and in the Parang tourist area.
- The rehabilitation and modernization of the heating system:
 - Rehabilitation and Modernization to thermal points and heating networks;
 - Thermal metering;
 - Automation and remote data transmission to thermal points;
 - Thermal rehabilitation to dwelling blocks.

The paper is based on the idea of Schneider et al, (2002) that quality services have become the central role of management in service organizations. To retain customers and to survive in the market, it is necessary to provide quality services. Consequently, a service organization that will provide quality services to its customers should adopt a broader perspective in the design, examining service offerings and ultimately to assess their customer service evaluation (Brown and Swartz, 1989).

Research Methodology

This is an exploratory study to further open up future researches to investigate and those who should respect consumer rights and provide SGEI. Therefore, from research area are part the 4 top managers (general, technical, economic and public relations). Raw data were recorded and observed directly in discussions based on a personal structured interview.

Results and discussions

The discussions in the interviews reflect the opinions of managers and include information about the perception regarding the protection of consumer rights and the quality of services provided:

- Services rendered are complex and their quality depends on the whole technological process (energy production, transmission and distribution of heating agent), of which only the transmission and distribution are subject to the activity of the service reviewed.
- Any modification of the delivery parameters from the manufacturer (temperature, flow, etc.) involves an adaptation of the service to maintain quality. But are slow processes over distances of kilometers and effects will be felt by consumers.
- These "incidents" affect consumers and they are dissatisfied.
- Interaction with consumers has passed strict contractual limit, with a policy of "open doors" for a permanent communication with consumers (telephone, dispatch, customer service department, leaflets, TV shows, advertisements, newspaper articles and in construction, the company website.)
- In the subjects perception, this policy of expansion, by improving information has facilitated consumer access. On the one hand, some aspects have been enlightened through information and they have become satisfied customers. On the other hand, some had the possibility to choose an alternative, a convenient heating solution for them through education.

- The availability of information helps consumers make an informed choice to adopt the required heating system: heat or gas.
- The consumer number is displayed and appears in leaflets.
- Leaflets are used for service offerings, technical innovations in the field, prices and awareness of services offered by the firm through its activity to consumers.
- Known fact, consumers typically address when they have dissatisfaction about the service provided, the price requested personal situations tangential to the business. However, more informal they receive positive feedback: the staff is very helpful, polite and "good craftsmen."
- Accessibility refers to the technical conditions of providing the service, provide information for consumers and the financial possibilities to pay the service provided.
- There is a petitions and complaints register, as well as specific procedures for complaints.
- It is possible to correct the situation amicably.
- Active involvement of nongovernmental organizations from the area for education, consultancy.

Interesting to follow, in time (1989-2012), district central heating the service of in terms of consumer response: the indifference for the most of the population, due to gratuities granted (coal vouchers, compensated thermal and electrical heating); voice, individual discussions; reaction of massive discontent; attitude / behavior: phase a) massive decoupling and phase b) recoupling to the centralized network. This is due to the comparison of heat and gas costs and energy efficiency, improving service quality because competition appeared and network sections have been upgraded and transition to metering.

By analogy with the survey conducted in E.U. countries (Figure 3) it can be concluded that managers investigated fit in average level of Romania concerning respect for rules and legislation which protects consumers.

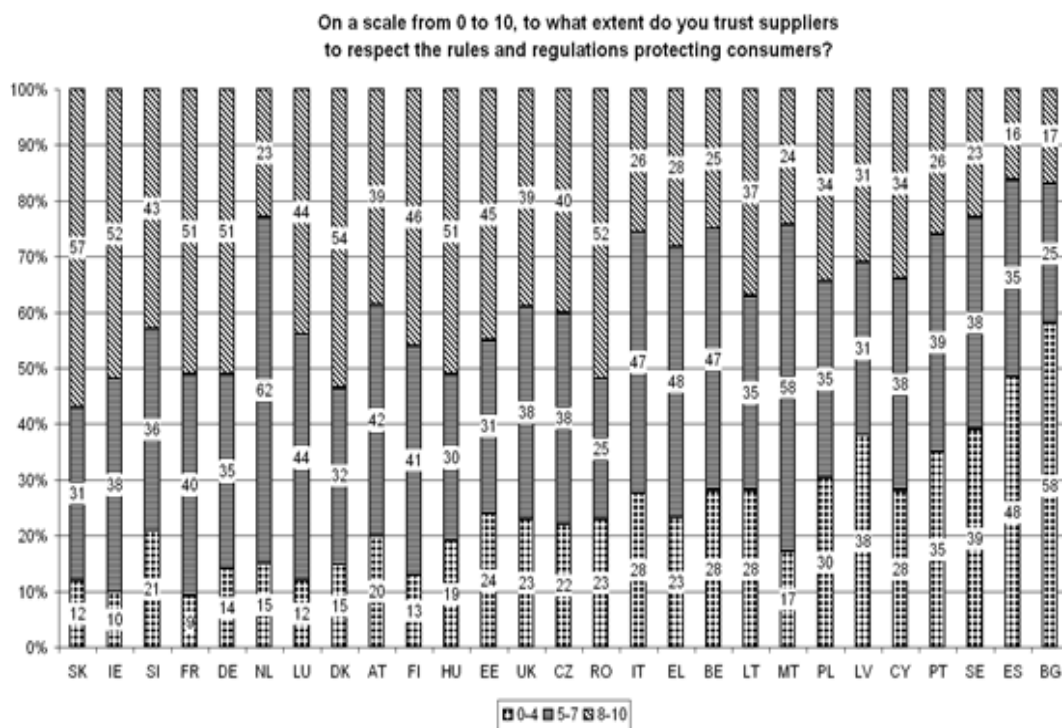


Fig. 3. The level of trust in suppliers of European consumers
 Source: http://ec.europa.eu/energy/gas_electricity/doc/20121115_iem_slides_presentation.pdf, p.10

Conclusions

The present study extends previous studies concerning the protection of consumer rights SGEI, with an emphasis on utility service concerning the district heating in Romania (Cernicova, 2003; Matei, 2003; Dinu, 2011) addressing the studies to the perceptions of top management of such organizations.

The study results confirm that this research deserves to be deepened, it provides empirical data to support future research. After the discussions it appears that the subjects not only want to ensure consumer rights at a declarative level, but also are steps in this direction. It is normal for every individual to perceive quality in a different way (Janawade, 2011).

Currently, Romania has significant reserves of coal, oil and gas, with a large potential for renewable energy but with a poor culture of energy savings. This requires the consumers' education and information. Models, practical examples (how much they save if they use an adjustable thermostat on a radiator, etc.) presented even to students in schools represent a step forward in this direction. Persuasive advertising of good practices that ensure energy efficiency (metering, individual or collective connection according to the situation) slowly change behaviour and mentalities: „Does it really cost less? I should try it myself!”

Before we can reach Richard Register's vision (2006) with buildings „designed to be heated and cooled naturally, whenever possible” (Brown, 2008, p.184), we must provide quality services and we must improve them. This is to have happy customers and to ensure the sustainability of services. In the area of SGEI innovation is extremely beneficial for consumers, even with minimum expenses (posters, fliers, site). Also, for service suppliers innovation represents a way to get involved and solve new requirements, and requests from consumers, developing their portfolio of services. Thus, they win new works and, implicitly, money along with a good image. They become more and more „useful” and sought after!

Acknowledgment

“This work was partially supported by the strategic grant POSDRU 107/1.5/S/77265 (2010) of the Ministry of Labor, Family and Social Protection, Romania, co-financed by the European Social Fund – Investing in people.”

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