

Three ways to ensure that the Clean Energy Package will bring a fossil free and sustainable future for all Europeans

We, the Swedish Association of Local Authorities and Regions (SALAR), the Swedish Association of Public Housing Companies (SABO) and Swedenergy, represent municipalities, regions, energy companies and public housing companies in Sweden. As we speak for energy producers, energy distributors, energy consumers, building owners, local and regional governments, we represent the entire chain of stakeholders necessary to realize a full-blown energy transition. Sweden is a European leader on renewable energy and energy efficiency and our members are the ones taking local action on the ground. With our collected experiences and expertise, we can contribute to help the EU achieve its climate and energy targets for 2030 and beyond.

We fully support the rationale and the ambitions behind the Clean Energy Package. Europe needs an increased share of renewable energy sources, energy efficient buildings, well-informed and engaged customers and prosumers as well as increased market integration. With this letter, we would like to draw your attention to three articles in the Clean Energy Package that we fear will have an adverse effect to these goals. These articles might be counterproductive and instead increase energy consumption, discourage investments in efficient district heating and cooling systems, increase costs for our citizens and risk the introduction of energy poverty.

These are the three points and they will be further elaborated below:

- **Individual metering and billing of heating should not, unless cost-efficient, technically feasible and proportionate, be made compulsory** in countries with a gross rental model. This has proven to be counterproductive and could lead to increased costs, increased energy consumption and introduction of energy poverty in multi residential buildings (EED article 9)
- There is a need for a technologically neutral European **regulatory framework that treats renewable energy equal**, irrespective of whether it is produced on site or supplied by energy carriers such as district heating and cooling networks or the electricity grid. (EED article 7, EPBD Annex 1)
- **Third party actors should not be granted a non-discriminatory right to access the district heating and cooling grid in order to sell their heat/cold directly to end-users** as this would increase costs for end-users and reduce the competitiveness of district heating and cooling systems. Instead we advocate a **regulated access** for third party actors, where the district heating operator act as a single buyer. (REDII article 24)

Individual metering and billing should not be made compulsory

The Commission proposes to make individual metering and billing of heating and hot water compulsory for new buildings and buildings undergoing major renovations (EED article 9). In countries where landlords generally apply a gross rental model (heating costs included in the rent), as in Sweden and in Finland, temperature is controlled centrally for the whole building and the property owners endeavour to maintain the same temperature in all apartments in their property stock in order to minimise energy use.

The tenants are usually given a guaranteed indoor temperature of 20-21 °C and cannot increase the temperature themselves. The fact that heating is included in the rent means that there is no energy

poverty in Swedish apartment buildings and that the property owner has a strong incentive to maintain 20-21 degrees indoors with the least possible energy use.

There are no split incentives, and the property owner can take appropriate measures to reduce energy use. This may, for instance, involve supplementary insulation in the attic, insulation of the facade, change of windows, introduction of heat recovery and trimming of the heating system. Such measures do not only improve the building itself but also increase indoor comfort for the tenants. If the cost of the actual use of heating is to be metered and billed to the tenant separately, such investments would hardly be of interest to the property owner.

The introduction of individual metering and billing is also a risky investment as it does not result in the desired energy savings. On the contrary, in many cases it has shown to lead to increased energy use. Studies in publicly owned apartment buildings has disclosed that when the average tenant is given the opportunity to regulate the temperature, they tend to raise the indoor temperature and pay accordingly. This leads to increased energy consumption and counteracts the goals of the directive. In addition, in new, increasingly energy-efficient buildings, costs for installation and operation of meters will be disproportionately high. We therefore urge you to amend article 9a so that this requirement only applies when it is cost-effective, technically feasible and proportionate in relation to the potential energy savings.

Equal treatment of renewable energy produced on site or supplied by an energy carrier

It is important that the Clean Energy Package ensures a regulatory framework that treats renewable energy equal regardless of whether it is produced in/on buildings (such as solar panels and heat pumps) or produced nearby and supplied by an energy carrier (such as through district heating and cooling systems).

It is important to remember that we need to increase the production of all kinds of renewable energy sources in order to realize the energy transition; we need more of solar, more wind power, more bioenergy and an increased utilization of waste heat and residual resources. In order to avoid an unjustified discrimination against renewable energy produced in district heating and cooling systems, it is crucial to ensure that our new legal environment becomes technologically neutral. For this reason, we welcome the statement in the Annex 1 of the EBPD that renewable energy should be treated equal regardless of whether it is generated on-site (behind the individual meter) or supplied through energy carriers.

We welcome that the Commission has kept the flexibility in article 7 of the EED. It provides member states with the possibility to choose between a system of white certificates *or* alternative measures to achieve the equivalent amount of energy savings, by using for instance a carbon tax as in the case of Sweden or energy agreements as in Finland and the Netherlands. The flexibility to choose alternative measures ensures that member states will introduce the most cost-effective and energy efficient measures in order to achieve the set targets.

In spite of this, it is troubling that article 7 on white certificates allows for renewable energy produced on-site to count as a saving that contributes to the proposed target of 1, 5 percent end user savings. This legal environment creates an unfortunate confusion of supplied and saved energy, which can result in an increase of energy consumption in buildings (as long as it is produced on site). This is at odds with the overall energy efficiency target and creates an irrational discrimination against renewable energy supplied through energy carriers.

The best option would be to separate the supply of renewable energy from the savings obligation completely. The other option is to keep renewable energy in the savings obligation and expand it to include renewable energy supplied through energy carriers.

We also suggest that a criteria on low power demand should be added to the definition of nearly zero energy buildings. The energy system is at most strained during power peaks, which results in higher costs and increased emissions. To reduce energy use it is also important to strengthen monitoring and control of energy performance.

Regulated third party access to the district heating and cooling networks (RED Article 24)

The European Commission proposes that member states shall lay down the necessary measures to ensure non-discriminatory access to district heating or cooling systems for third parties with direct supply of heat or cool produced from renewable energy sources and for waste heat or cool to customers. It is undoubtedly the case that European district heating networks in many places are based on fossil fuels and that it is important to integrate renewables and to exploit residual resources to a larger extent. We welcome increased competition in the heating market and especially increased use of waste heat from industries, data centers, super markets etc. However, the conditions for third party access must be market and business oriented and not cause extra costs for either the customer or the district heating companies as district heating is competing with other heating sources on the heating market. The issue of third party access has been thoroughly investigated several times in Sweden and a complete third party access has not been considered cost-effective by the government. Unbundling of the grid and the energy production operations would on the contrary lead to 10-15% increased costs for end-users and reduce competitiveness of district heating and cooling substantially.

At the same time, we recognize the need for mechanisms to facilitate fair agreements between net operators and third parties with available renewable or excess heat. The legislation should instead focus on fair competition in production of district heating and cooling and be limited to the access to the district heating and cooling networks. This would still lead to the same ambitions of facilitating the use of renewable and excess heat from industries and other services in the district heating and cooling systems. The Swedish model of regulated access could serve as a role model in this regard.

Please find detailed information as well as proposals for amendments attached to this letter. We hope that you will take action and ensure that the Clean Energy Package actually will bring us all a fossil free and sustainable future. Do not hesitate to contact us should you have any further questions. We are looking forward to liaising with you in the coming process.



Gunilla Glasare
Director, Department for
Growth and Community
Development
SALAR



Anders Nordstrand
CEO
SABO



Pernilla Winnhed
CEO
Swedenergy

Attachment 1: Proposal for amendments

Attachment 2: Further information on individual metering and billing (IMB)

Attachment 3: Background on Swedish investigations and regulations on third-party access to district heating networks

About SALAR:

SALAR, The Swedish Association of Local Authorities and Regions, is both an employers' organization and an interest organization advocating for local and regional governments in Sweden and in the EU. SALAR represents all of Sweden's 290 municipalities and 20 county councils and regions and acts on their initiative.

About SABO

SABO, the Swedish Association of Public Housing Companies, is the organisation of the municipally owned public housing companies in Sweden. SABO's 306 member companies manage some 807 000 dwellings all together. The public housing sector represents almost 20 percent of the total housing stock in Sweden and half of the rental sector. Every 7th Swede lives in public housing.

About Swedenergy

Swedenergy is a non-profit industry and special interest organization for companies involved in the supply, distribution, selling and storing of electricity, heat and cool. As the united voice of the Swedish energy sector, the organisation monitors and promotes the interests of its members and the energy sector in general. Swedenergy has a total of 400 members. These include state-owned, municipal and private sector companies as well as associations of different types.

Attachment 1: Proposals for amendments

Energy Efficiency Directive (EED) Article 9a	
Metering, sub-metering and cost allocation for heating and cooling and domestic hot water	
Commission proposal	Proposal for change
2. In multi-apartment and multi-purpose buildings with a central heating or cooling source or supplied from district heating and cooling systems, individual meters shall be installed to measure the consumption of heat or cooling or hot water for each building unit. Where the use of individual meters is not technically feasible or where it is not cost-efficient to measure heating or cooling in each building unit, individual heat cost allocators shall be used to measure heat consumption at each radiator unless it is shown by the Member State in question that the installation of such heat cost allocators would not be cost efficient. In those cases, alternative cost-efficient methods of heat consumption measurement may be considered. The conditions of technical non-feasibility and non-cost effectiveness shall be clearly set out and published by each Member State. In new buildings of the kind referred to in the first sub-paragraph or when such a building undergoes major renovation, as set out in Directive 2010/31/EU, individual meters shall always be provided.	2. In multi-apartment and multi-purpose buildings with a central heating or cooling source or supplied from district heating and cooling systems, individual meters shall be installed to measure the consumption of heat or cooling or hot water for each building unit, <u>where technically feasible, cost effective and proportionate in relation to the potential of energy savings.</u> Where the use of individual meters is not technically feasible or where it is not cost-efficient to measure heating or cooling in each building unit, individual heat cost allocators shall be used to measure heat consumption at each radiator unless it is shown by the Member State in question that the installation of such heat cost allocators would not be cost efficient. In those cases, alternative cost-efficient methods of heat consumption measurement may be considered. The conditions of technical nonfeasibility and non-cost effectiveness shall be clearly set out and published by each Member State. In new buildings of the kind referred to in the first sub-paragraph or when such a building undergoes major renovation, as set out in Directive 2010/31/EU, individual meters shall always be provided.
Justification	
<i>New and renovated buildings have both lower heating demands and features - e.g. thick building envelope and light dividing walls - which make metering necessary at building-level only. Introducing requirements for individual heat meters in the existing piping system or in new projects will lead to higher investment costs without any benefits in terms of energy savings. As with existing buildings, an approach conditioned on cost-effectiveness and technical feasibility is necessary to avoid increased costs for users.</i> <i>A forced move from gross rent to net rent could also increase energy poverty. The model of gross rent should instead be used as a means to address energy poverty.</i>	

Energy Efficiency Directive (EED) Article 7.2

Energy savings obligation

<i>Commission proposal</i>	<i>Proposal for change</i>
2. Subject to paragraph 3, each Member State may: ... (e) exclude from the calculation of the energy savings requirement referred to in paragraph 1 the verifiable amount of energy generated on or in buildings for own use as a result of policy measures promoting new installation of renewable energy technologies.	2. Subject to paragraph 3, each Member State may: ... (e) exclude from the calculation of the energy savings requirement referred to in paragraph 1 the verifiable amount of energy generated on or in buildings for own use as a result of policy measures promoting new installation of renewable energy technologies. OR ... (e) exclude from the calculation of the energy savings requirement referred to in paragraph 1 the verifiable amount of energy generated on or in buildings for own use <u>and renewable energy supplied through common energy carriers (such as district heating, district cooling and the electricity grid)</u> as a result of policy measures promoting new installation of renewable energy technologies.

Justification

Within EU the focus is to increase the energy efficiency at all stages of the value chain, from generation to final consumption. EU measures therefore focus on sectors where the potential for savings is greatest, such as buildings. Technology neutrality is required between on-site and energy supplied to the building. Excluding on-site energy from the end-use energy savings can lead to an increase of the energy used in buildings and thereby counteract the overall energy efficiency target. The energy used in buildings must include both energy sales to final customers as well as on-site energy.

Renewable Energy Directive (RED) Article 24

District Heating and Cooling

<i>Commission proposal</i>	<i>Proposal for change</i>
1. Member States shall ensure that district heating and cooling suppliers provide information to end-consumers on their energy performance and the share of renewable energy in their systems. Such information shall be in accordance with standards used under Directive 2010/31/EU.	1. Member States shall ensure that district heating and cooling suppliers provide information to end-consumers <u>customers</u> on their energy performance and the share of renewable energy <u>and waste heat or cold</u> in their systems. Such information shall be and in accordance with standards used under Directive 2010/31/EU.

Justification

District heating/cooling suppliers normally deliver heat/cold to property owners and not necessarily to end consumers. District heating is most common in multi block apartments. Therefore it is more relevant to use the term customer instead of end consumer. Further, it is important to include waste heat and cold in the information to customers as the aim of this article is to promote renewable and waste heat and cold.

Renewable Energy Directive (RED) Article 24

District Heating and Cooling

<i>Commission proposal</i>	<i>Proposal for change</i>
4. Member States shall lay down the necessary measures to ensure non-discriminatory access to DHC systems for heat and cold produced from renewable energy sources and for waste heat and cold. This non-discriminatory access shall enable direct supply of heating or cooling from such sources to customers connected to the district heating or cooling system by suppliers other than the operator of the district heating or cooling system.	4. Member States shall lay down the necessary measures to ensure non-discriminatory access to DHC systems for heat and cold produced from renewable energy sources and for waste heat and cold. This non-discriminatory access shall enable direct supply of heating or cooling from such sources to customers connected to the district heating or cooling system by suppliers other than the operator of the district heating or cooling system <u>when it is economically and technically feasible for DHC operators, possible for the DHC operator to off-set the product on the market and does not lead to increased costs for customers. The operator may charge an external supplier the extra cost related to the connection of the supplier.</u>

Justification

The proposal from the Commission will require unbundling of distribution and production/sales of heat and cold in the same way as in the electricity market. This has been investigated for instance in Sweden by the government, but was never implemented due to increased costs for district heating in the order of 10-15%. Such an increase of costs would substantially reduce the competitiveness of district heating compared to other heating sources. Third party access to the

grid for suppliers of renewable and waste heat is possible to establish through for instance a single buyer system where external suppliers can sell their heat to the district heating operator on the basis of a regulated access to the grid. Further, the conditions for access to the grid should be specified. It should be economically and technically feasible to connect third party suppliers. If for example a source of waste heat is situated too far from the district heating network, it would probably not be economically possible to connect it to the grid. Further, if waste heat has too low temperature for the heating purpose the technical conditions for connection are not fulfilled. Further, there need to be a demand for the heat supplied in order to connect new suppliers. It is rather common that customers have specific requirements that heat supplied should be renewable and waste heat is not always considered as renewable by customers. It should also be possible for district heating operators to charge the supplier for costs related to connection.

Renewable Energy Directive (RED) Article 24

District Heating and Cooling

Commission proposal

5. An operator of a district heating or cooling system may refuse access to suppliers where the system lacks the necessary capacity due to other supplies of waste heat or cold, of heat or cold from renewable energy sources or of heat or cold produced by high-efficiency cogeneration. Member States shall ensure that where such a refusal takes place the operator of the district heating or cooling system provides relevant information to the competent authority according to paragraph 9 on measures that would be necessary to reinforce the system.

Proposal for change

5. An operator of district heating or cooling system may refuse access to suppliers where the system lacks the necessary capacity due to other supplies of waste heat or cold, of heat or cold from renewable energy sources or of heat or cold produced by high-efficiency cogeneration, or where the system fulfils the criteria of Efficient District Heating and Cooling (within the meaning of Article 2(41) of Directive 2012/27/EU, or where the technical parameters of the energy carrier do not match those of the system at the connection point or where the proposed access of additional supply to the network would lead to an substantial increase of the costs for customers or district heating companies. Member States shall ensure that where such a refusal takes place the operator of the district heating or cooling system provides relevant information to the competent authority according to paragraph 9 on measures that would be necessary to reinforce the system.

Justification

A refusal to access should be possible due to technical or economical reasons in accordance with given examples in para 4. It should also be possible to refuse access if district heating systems fulfill the criteria of an efficient system in accordance with article 2.41 in the energy efficiency directive. In such systems the share of renewables or waste heat is already very high and the potential to further increase renewables and waste heat in the system may be limited.

**Further information about why individual
metering and billing of heating is neither cost-
effective nor results in energy savings in Sweden**

Summary

The European Commission proposed a revision of Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 on energy efficiency on the 30th November 2016.

The Swedish Association of Public Housing Companies (SABO), an industry and interest organisation for Sweden's public housing companies, shares the view of the Commission that energy use needs to decrease to reduce carbon dioxide emissions and make the Union less dependent on imported energy. In order for the implementation in the Member States to be in line with the purpose of the Directive, the wording "technically possible, financially reasonable and proportionate in relation to the potential energy savings" in Article 9 in the current directive must be retained as all Member States have different climates, energy systems, business models and structural engineering preconditions. SABO's position paper includes proposals for concrete wording in relation to the Commission's proposals for revision.

Individual metering and billing of heating is neither cost-effective nor results in energy savings in Sweden. The reason for this is that there are excess temperatures in the Swedish apartment block stock and that the financial incentives for residents to reduce the temperature are too small. A change of temperature of two degrees in a normal apartment of 70 m² corresponds to an estimated amount of SEK 24 to 48 (EUR 2.6 to 5.1) per month.

Energy efficiency improvements in respect of heating in the Swedish apartment block stock will cease if individual metering and billing of heating becomes mandatory because the property owners will not be able to share in the savings.

Successful energy efficiency improvements in municipal housing companies

Swedish municipal housing companies have a long tradition of successful energy efficiency improvements. SABO, together with member companies, launched a joint energy efficiency objective in 2008 in order to boost the rate of efficiency improvement. This objective meant that the companies that affiliated themselves were committed to reducing their energy use by 20 per cent between 2007 and 2016. This campaign currently covers 400,000 apartments, and we have reached more than 17 per cent energy savings up to 2015.

Concerning structural engineering preconditions in Sweden

The heating of apartments in apartment blocks has for many years been dominated by the use of a joint heating system with water as a medium for the building. Ninety-eight per cent of all apartments are supplied by pipe systems¹ with radiators as heaters. One pipe trunk can supply several apartments with heating and one apartment can be supplied by several pipe trunks. From a European perspective, Sweden has a cold climate with well-

¹ <http://www.boverket.se/sv/om-boverket/publicerat-av-boverket/publikationer/2010/statistiska-urval-och-metoder-i-boverkets-projekt-betsi/>

insulated climate shells that envelope buildings but without insulation between the apartments.

Heating included in the rent and national guidelines on indoor temperature

Heating is included in the rent for apartments in Sweden. The Swedish municipal housing companies endeavour to maintain the same temperature in all apartments in their property stock in order to minimise energy use. The residents do not themselves have the opportunity of adjusting the temperature, but this is instead controlled centrally in the building. A guarantee is normally given of a temperature of 20 to 21 °C in apartments. The fact that heating is included in the rent means that there is no energy poverty in Swedish apartments. The Public Health Agency of Sweden (Folkhälsomyndigheten) stipulates in its General Advice on temperatures indoors² a recommended steady temperature of 20 to 23 °C for the general public and 22 to 24 °C for sensitive groups.

Experience of increased energy use with individual heat meters

A precondition for individual metering and billing (IMB) of heating to result in energy savings is that the vast majority of residents would prefer a lower temperature in their apartments. If the residents do not choose to have a lower temperature the installation of meters would be without effect. With a normal temperature of 20 to 21 degrees there is consequently basically no possibility of saving energy through reducing the indoor temperature if the advice of the Public Health Agency of Sweden is to be followed.

The experience gained from properties in Sweden that have introduced individual metering and billing of heating shows that most tenants choose to maintain their temperature at 20 to 21 degrees, some choose a lower temperature and some choose a higher indoor temperature if possible to so, and are prepared to pay for it. The greatest reason for residents in Sweden not choosing to reduce the temperature to a greater extent but in many cases actually increasing it instead is that the financial incentives for such residents to reduce the temperature are too small. An increase of two degrees in a normal apartment of 70 m² costs an estimated SEK 24 to 48 (EUR 2.6 to 5.1) per month. A study³ of 3,675 apartments from the housing company in Helsingborg actually indicates an increase in average temperature to 21.72 °C after introduction of individual metering and billing of heating.

A central heating system must have more energy input to be able to achieve a temperature above 20 to 21 degrees, even if this is only for individual apartments, which increases energy losses and energy use. This suggests that an introduction of individual metering and billing of heating in Sweden would tend to increase energy use rather than reduce it.

² <http://www.folkhalsomyndigheten.se/documents/publicerat-material/foreskrifter1/fohmfs-2014-17.pdf>

³ *Individuell mätning och debitering av komfortvärme och varmvatten* [Individual metering and billing for comfort heating and hot water], Thesis, Lund University

Retain incentives for future energy efficiency improvements

In Sweden heat is included in the rent, in contrast to many other countries in Europe. This means that the property owner has a strong reason to maintain 20 to 21 degrees indoors with the least possible energy use. No shared incentive exists, but the property owner can take appropriate measures to reduce energy use. This may, for instance, involve supplementary insulation in the attic, insulation of the facade, change of windows, introduction of heat recovery and trimming of the heating system. Such measures do not only improve the building itself but also increase indoor comfort for the tenants. If the cost of the actual use of heating is to be metered and billed to the tenant separately, such investments would hardly be of interest to the property owner. SABO's member companies have made it clear that the energy efficiency improvements to their property stocks will cease if they are compelled to install individual metering and billing of heating, as they will not be able to share in the savings.

Thanks to heating being included in the rent the energy efficiency of the Swedish property stock has been improved continuously, which is clearly shown by the key ratios presented in the ODYSSEE database.⁴ Sweden has a significantly lower heating energy use per dwelling than in Germany: 1.38 toe per dwelling in Sweden compared with 1.59 toe per dwelling in Germany. These figures are calculated so that the effect of climate differences between the two countries is eliminated.

Great deficiencies in metering methods

Individual metering of heating can be effected with different methods. A doctoral dissertation⁵ from Lund University contained a research review of the various metering methods in Swedish buildings. Heat transport between adjacent apartments is the most significant deficiency of the method of metering the heat input for individual apartments.

Individual metering and billing of heating is not cost-effective in Sweden

As empirical experience and research analyses of individual metering and billing of heating under Swedish conditions demonstrates that the installation of individual metering does not reduce energy use, but rather tends to present a risk of it being increased, it is not a cost-effective measure. Moreover, it presents a risk of there being an immediate increase in energy use following installation. This conclusion is confirmed by the National Board of Housing, Building and Planning (Boverket), which has investigated⁶ when individual metering and billing is cost-effective in existing buildings. This enquiry demonstrates that it is not generally a cost-effective measure in Sweden.

Information about SABO and contact person

Therese Rydstedt, energy expert, therese.rydstedt@sabo.se, +46-70-519 55 16

⁴ <http://www.indicators.odyssee-mure.eu/online-indicators.html>

⁵ Individual Metering and Charging of Heat and Hot Water in Multi-Apartment Buildings, Simon Siggelsten

⁶ <http://www.boverket.se/globalassets/publikationer/dokument/2015/individual-metering-and-charging-in-existing-buildings.pdf>

The Swedish Association of Public Housing Companies (SABO) is in industry and interest organisation for 300 municipal housing companies. Member companies jointly own and manage 800,000 dwellings. The companies are important actors on the Swedish housing market, both locally and nationally.

Policy and communication
Erik Thornström
08-677 27 08
erik.thornstrom@energiforetagen.se

Background on Swedish investigations and regulations on third-party access to district heating networks

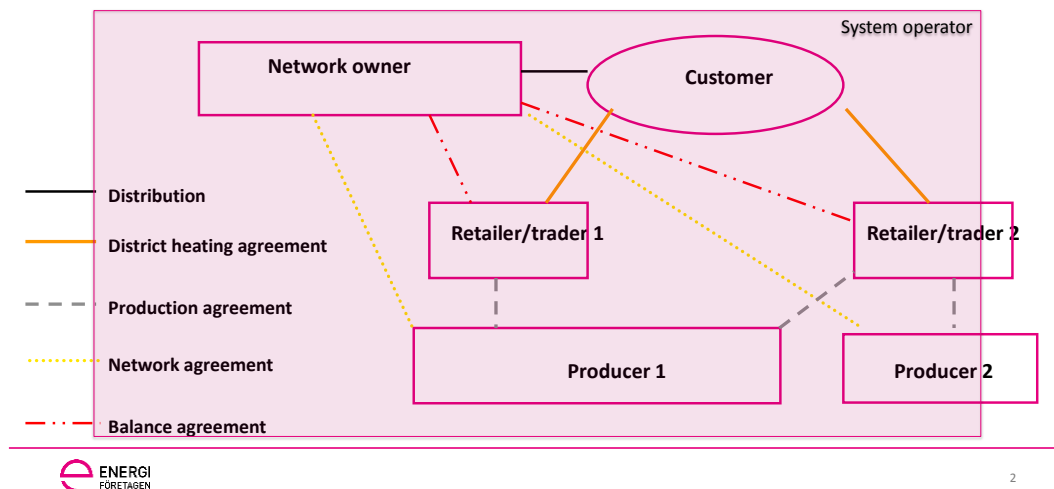
The issue on third-party access to district heating networks has been investigated thoroughly in Sweden by several governmental commissions of inquiries in 2005 (SOU 2005:33) and in 2011 (SOU 2011:44) as well in Governmental Agencies reports. The investigation in 2011 proposed a full third-party access to customers in district heating systems on the same basis as the regulation in the electricity market with separation of production, distribution, retail and system operations. The district heating *distribution* was also proposed to be subject of a price regulation and to be functionally and legally separated.

One example of the complexity this legislation would create was the need of about 16 contractual relationships with all actors involved to make each district heating system to function as a system. Since there are about 500 local district heating networks in Sweden it would be very far-reaching and create high complexity in the operations. This would especially affect smaller systems where there are very limited rooms for external suppliers due to small heat volumes delivered the legislation.

The proposed legislation was criticized by most stakeholders due to the heavy regulatory costs and burdens. There was also criticism of the proposed legislation's compliance with fundamental constitutional ownership rights. The proposal would not lead to functional competition and instead decrease the competitiveness for district heating on the heating market. The increased costs due to the legislation that was identified included:

- Separation of the today integrated district heating operations into production, distribution, retail and system operations which would require new staff and management resources which today is integrated
- Introduction of a price regulation model of district heating distribution which would lead to a heavy administrative framework and increase final costs for distribution
- Suboptimization of the system operations, the conditions for optimization would decrease and increase total costs for the district heating system
- Legal complexity and costs in about 16 contractual relationships with all different bodies of operations, producers and customers
- The costs of risk would increase for all involved actors due to increased uncertainties in operations as well as costs for marketing and customer services
- The costs for Government/tax payers would increase for annual financing of a supervising and regulatory authorities

Contractual relationships in a competitive market



The Swedish Government concluded in a memo in 2012 that the administrative costs for functional separation as well as introduction of price regulation on heat distribution were expected to increase the final district heating prices with about 10-15 percent. The overall conclusions from the Swedish Government were the conditions for efficient competition in the district heating systems are small. The grade of concentration in the heat production would also be higher than what the EU Commission in general deems as too high in examination of corporate mergers.

The Swedish Government decided instead to let the Swedish Energy Market Inspectorate to investigate a simpler regulation on access to district heating networks which was proposed in 2013. This proposal was accepted by most stakeholders in the consultation. The Swedish Government proposed a regulated access to district heating networks in winter 2014 as an amendment of the Swedish District Heating Act with rules on regulated third-party access to district heating networks. The legislation was approved unanimously by all parties in the Swedish Parliament in spring 2014. District cooling is not covered and is today unregulated in Sweden.

In summary the Swedish legislation contains following provisions:

- District heating companies must provide access for a third party to their networks on certain conditions. The legislation applies only to new entrants/third-parties which are not already connected to a district heating network.
- The access must be provided on “reasonable conditions” which should be submitted to the third-party from the district heating company in a proposal to an agreement. If the district heating company refuses access they must motivate it in a written communication. If the third party disagrees to the conditions in the proposed agreement and deem them unreasonable they may apply to the Energy Market Inspectorate for a decision which also may be appealed to a Court for a final decision.
- The District heating company may refuse to agree to a third party access if it will “harm the company” such as increase costs and if the heat is more expensive than it’s own heat production.

- The district heating company may charge additional costs for the connection of a third party such as pipe connection and for the work of providing an agreement proposal to the third party.
- The district heating company is only obliged to provide connection to “prima heat” to the supply pipe which means the supplied heat from third party must fulfill the requirements on temperature, pressure etc. in the actual district heating network.
- An agreement on third-party access on basis of the regulation is valid for a ten-year period. The price for the heat shall be equal to the benefit of the provided heat for the district heating company (this means the pricing may differ to such conditions as season and the actual demand of heat).

Swedenergy view on the proposal from the EU Commission in the Proposal for a revised Directive the promotion of the use of renewable energy sources

The proposal in article 24, point 4, is very far-reaching and would require very extensive legislative measures if implemented in Member States. The requirements on non-discriminatory access from third parties with direct supply to customers would in practice require the legislation that today exists in the electricity market and what was proposed by the above described Swedish TPA-inquiry in 2011. This means functional separation of heating and cooling distribution and price regulation of this activity which would lead to significantly increased district heating prices due to the administrative and regulatory procedures. Swedenergy also believes the proposed legislation would to a very small extent contribute to increased shares of renewable energy since other economic and fiscal policy by far are more efficient, such as the energy and carbon taxation on fossil fuels.

Swedenergy is despite those concerns positive to competition in the district heating and cooling production and especially increased use of waste heat from industries, data centers, super markets etc. should be used to an increased extent. However, the conditions for third party access must be market and business-oriented and not cause extra costs for either the customer or the district heating company.