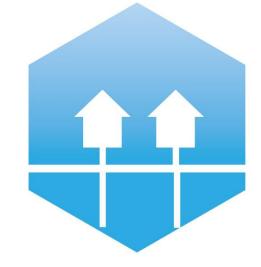




LUND UNIVERSITY

Costumer preferences on district heating price models





4th Generation District Heating Technologies and Systems

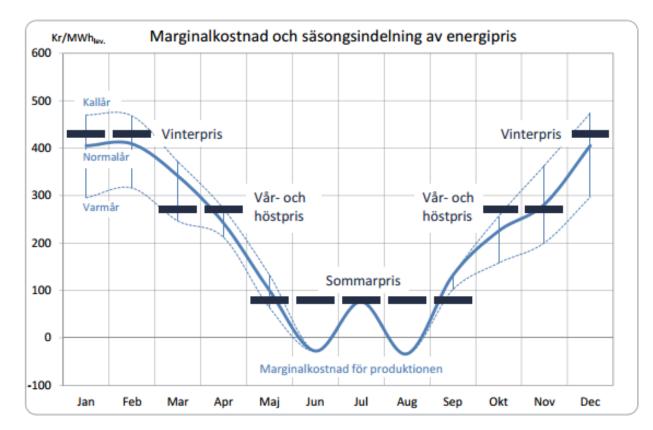


LUND

UNIVERSITY

Background

 Many Swedish DH companies are currently working to revise their price models. The key word is cost accuracy.



- Energy price with seasonal differences
- Higher share of fixed
 cost
- Pay for load demand
- Fee based on flow

Background



LUND UNIVERSITY

- We saw a need for an in-depth study of the customer perspective
 - -What should a good price model generally look like from a customer perspective?
 - -Are the customers "in the loop", ie do they think it is acceptable to have a more complex price model?
 - -How successful is the DH industry with its customer communications when changing price models?
 - In what way does the supplier and the customer's perspective differ? How can the DH industry work further with price models based on the study results can both suppliers and customers requirements be satisfied at the same time?



LUND UNIVERSITY

Aim of the study

- The purpose of the study is to highlight customers' views on price models based on questions concerning customer benefits, business benefit, fairness, sustainability, simplicity/complexity, choice and freedom of action.
- Research questions:
 - In cases where the company has changed its price model what have been the customer responses?
 - What do the customers think about the new pricing structure?
 - What do the customers think of the price models that they have, and what characteristics do they think that a good price model should have?
 - Feedback of experiences from the DH companies: thoughts and reasons for the choice of price models, experiences from the process to change price model



Method and selection

- DH companies in the study:
 - Öresundskraft
 - Södertörns Fjärrvärme
 - Sala-Heby Energi

Method:

- Interviews with staff in different companies strategists, sales and customer service
- Six focus group interviews with two customer segments for each of the companies
- - Smaller customers and larger customers

- > VARIABLE (about 70%)
- THREE SEASONS MAJOR DIFFERENCES
- ➢ FIXED (about 20 %)
- ➢ LOAD (ROLLING DAYS, 1 YEAR)
- ➢ FLOW BONUS
- ➢ BASE, FIXED AND TOP
- ➢ RELATIVELY HIGH FIXED COST
- THREE SEASONS FOR FULL-SERVICE COSTUMERS
- LOAD (POWER REQUIRED at -5 °
 C)
- > VARIABLE (100%)
- PRICE based on size
- TWO SEASONS SMALL DIFFERENCES
- ➢ FLOW FEE

Öresundskraft

Södertörn fjärrvärme

Sala-Heby

What do the customers want?– Results from focus group interviews

Question: What qualities should a good price model have? Gross list of priorities

ÖRESUNDSKRAFT

- Housing cooperatives / Residential customers:
 - Pay for what you use
 - Simple
 - Understandable

Real estate companies:

- Stimulate improved energy efficiency (14 p)
- Possible to to influence (5 p)
- Predictability so that you can prepare a budget (3 p)
- Freedom of choice (2 p)

SALA-HEBY

- Villa owners:
 - Variable (16 p)
 - Possible to influence from behaviour (6 p)
 - Understand what you pay for (1 p)
 - Environmental choices (1 p)
 - Easy to read (0 p)

Housing cooperatives/Industrial customers:

- Possible to influence from behaviour(13 p)
- Understand what you pay for (7 p)
- Simplicity (7 p)
- Justice (0 p)

SÖDERTÖRN

 Community association / housing cooperative:

- Variable easy to understand
- Possible to explain to other members
- To measure power in a fair manner
- Real estate companies:
 - Understandable (11 p)
 - Predictable being able to calculate (8 p)
 - Provide incentives to run district heating production better (2 p)
 - District heating companies' cost coverage (0 p)
 - Justice (0 p)
 - Freedom of choice (0 p)



LUND UNIVERSITY



LUND

UNIVERSITY

It is about...

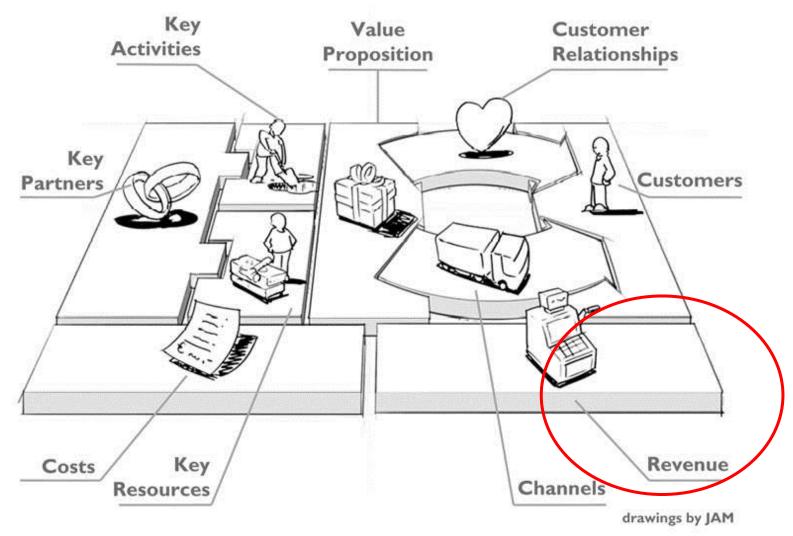
- 1. Customers want to know that it pays to improve energy efficiency and save energy (stimulating improved energy efficiency, influenced by behavior, variable)
- 2. Customers want to pay "for what you consume" (for many this is equal to variable costs)
- 3. Large customers want a model that is easy to make the budget after (predictability components based on load peaks often leads to unpredictable costs!)
- 4. Being able to understand what you pay for (simple, understandable, readable, able to explain to others components that are difficult to understand the power and flow)
- 5. Justice this is not justice between customer groups, but other things (like that the load level you are charged for should not remain a year or more)
- 6. Choice and environmental choice Not a priority

sweco 送

Lessons learned

LUND UNIVERSITY

- The myth that choice is always seen as something good - help customers in the choice
- To be careful with the words. Test on customer panel!
- The pricing model only a small part of the overall business model ...
 - Can we secure economic risks elsewhere in the business model?
 - Customer relations are very important to how changes are received



Model by Osterwalder & Pigneur

SWECO 本 LUND UNIVERSITY

Lessons learned

- It is a great advantage if the price model is in tune with the company's profile and goes hand in hand with the array of services provided
- It is difficult to understand the power components also a component of the price model that only make up a small part of the final price to the customer can have major consequences in the way customers think about pricing. Branch Standard?
- If you still want a more complex price model, also include...
 - costs for increased customer support
 - the difficulties that sales persons have to try to explain the pricing model
 - the time that must be spent on to developing PR and information materials that support a price model that is difficult to communicate

Finally - we give no recommendations, but our results show that the perspectives from DH companies and customers are not congruent!





LUND

UNIVERSITY

Thank you!

Kerstin Sernhed: <u>kerstin.sernhed@energy.lth.se</u>

LUND UNIVERSITY SWECO Z