



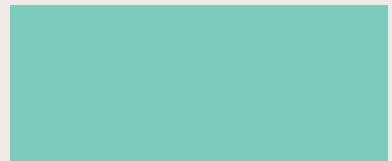
ENERGITILSYNET

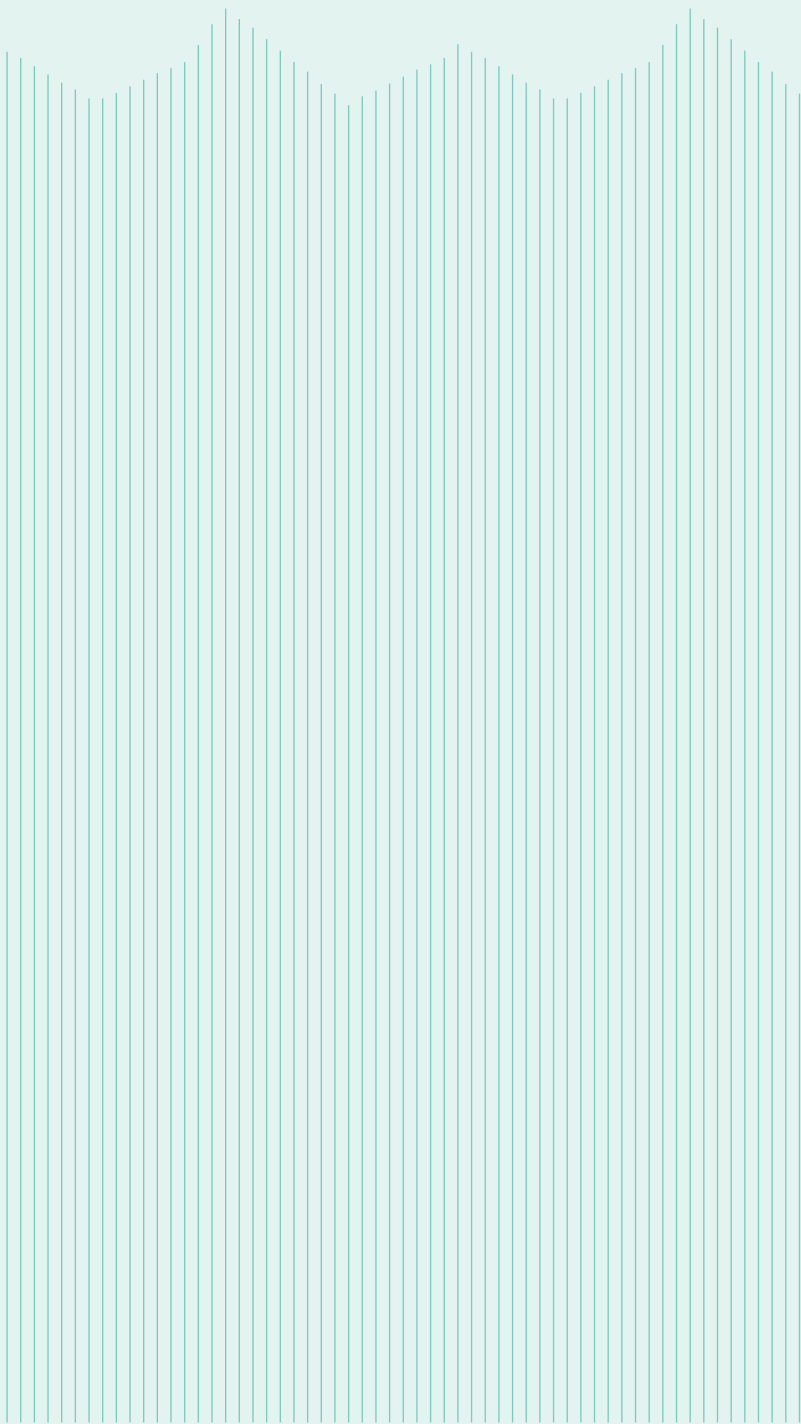
DANISH ENERGY
REGULATORY AUTHORITY



RESULTS AND
CHALLENGES

**20
15**





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PROFILE

The Danish Energy Regulatory Authority (DERA) is independent of the government. The tasks of DERA are stipulated in the supply acts for electricity, natural gas and heat, and pursuant to these acts DERA must:

INTERPRET THE ENERGY LEGISLATION

The energy acts are to a large extent framework legislation, meaning that in many cases DERA has wide powers to interpret implementation of them in cases where DERA is the authority.

DECIDE/STIPULATE

DERA sets specific levels for a number of areas, e.g. efficiency requirements for grid companies within electricity and natural gas, price caps for waste incineration plants, returns on capital in district heating plants, etc.

APPROVE

DERA approves methods applied by grid companies in the electricity and natural gas markets to set prices and terms of access for customers, and DERA approves that the price of heat from a district heating plant is reasonable and that reports

from municipalities on receipts of charges from energy enterprises are correct.

MONITOR

DERA monitors a number of areas such as the wholesale markets and the retail markets for electricity, natural gas and district heating, management of storage capacity on the natural-gas market, prices of electricity and natural gas on the wholesale and retail markets, sector guidelines, as well as various reports from energy enterprises to DERA. DERA also conducts analyses of the performance etc. of the regulated companies.

ENSURE TRANSPARENCY

DERA works to ensure transparency for customers on the energy markets, for example by publishing prices of energy, setting regulations on the information to be included in consumers' energy bills, operating the electricity price guide, Elpris.dk, and taking part in work groups on the gas price guide, etc.

DERA'S MISSION

The purpose of DERA is to secure well-functioning sectors within electricity, gas and heating.

THIS INCLUDES SECURING:

- reasonable terms and conditions for customers and businesses
- efficient solutions within the energy infrastructure
- the best possible framework conditions.

DERA'S VISION

To be known and recognised for its expertise, efficiency, drive and courage to travel down new paths.



The Danish Energy Regulatory Authority (DERA) is independent of the government. The tasks of DERA are stipulated in the supply acts for electricity, natural gas and heat.

FOREWORD

A central element in DERA's work is making decisions in specific cases and establishing practice for interpretation and implementation of the energy acts. In 2015 DERA decided 23 cases of principle with considerable financial implications for customers and companies. On the basis of legislation and guidelines from DERA, the Secretariat decided almost 800 cases.

In the district heating area, in 2015 DERA determined a number of principles for calculating capital in district heating companies. In this context, capital is not a clear concept and therefore DERA first has to stipulate how it is to be calculated. After this, a specific estimate can be made as to what is a reasonable return. A total of 55 district-heating companies have applied for permission to charge a return on capital. Processing these applications has high priority. However final stipulation of the specific rate of return is pending an examination of the same issue for electricity-grid companies.

With regard to the electricity area, in 2015 DERA received a considerable number of applications to increase the revenue caps for a number of

electricity grid companies. Revenue caps are set every year by DERA and they are a ceiling on the amount a company can demand from customers for operations. However, in principle grid companies can apply for an increase in their own revenue cap for all the years back to 2005, if they have made a necessary new investments, usually replacing overhead lines with underground cables. With the prospect of new legislation for the area, the grid companies have "tied up". The Secretariat has sharp focus on processing the 200 applications that have been received from grid companies to increase and set final their revenue caps.

The electricity market is in the middle of massive innovation with the introduction of the wholesale model on 1 April 2016. Preparations for the wholesale model, in which electricity suppliers take over customer contact, have therefore had an impact on work by DERA in 2015. Among other things, DERA has issued an Executive Order on the format of electricity bills, and this allows for the electricity supplier to send a simpler electricity bill to its consumers. DERA has also processed and considered a number of sector guidelines which reflect the changes in role-allocation and regulate the relationship between grid companies and electricity suppliers. DERA has approved the methodologies in a number of network codes from Energinet.dk that stipulate the "rules of play" for switching supplier, transfers of data between players, etc. Introduction of the wholesale model, and recommendations from the Energy Regulation Committee, have imposed an entirely new task on DERA, with responsibility to establish a website on which consumers can compare electricity suppliers' products and prices. The website has been set up under the name Elpris.dk.

DERA has not only been involved in developments on the domestic electricity market. An important element in the EU Single Electricity Market is to have the best possible exploitation of electricity links between countries. However, trade in electricity in the onshore electricity link between Denmark and Germany is obstructed by restrictions, partly as a result of the increasing amounts of wind power in northern Germany and bottlenecks in the German electricity grid. The restrictions do not just affect Denmark, they also impact the other Nordic countries. The situation is unsatisfactory and there is close dialogue between the German and Danish regulators on the matter, which is also being addressed by energy regulators in the other Nordic countries and at European level.

DERA has analysed how district-heating companies have applied the regulations on provisions in the budget years 2014 to 2016. District-heating companies can save up for specific investments by including provisions in their heating prices for consumers. The analysis is published in this edition of "Results & Challenges" and it shows that the district-heating companies have included a total of DKK 500 mill. of provisions in the three budget years. The analysis indicates that the provisions hide the true financing costs of the companies and in reality they function as involuntary interest-free loans from the consumers to the companies. DERA does not consider that provisions are an appropriate way to raise financing and, with this backdrop, DERA has contacted the Ministry of Energy, Utilities and Climate in order to consider whether to repeal the regulations on provisions.

The authorities, energy customers and energy companies are currently at a crossroads, with

extensive changes in the energy acts. The decision by the Danish Parliament (the Folketing) to introduce the wholesale model entails significant changes in the market conditions, and DERA now looks forward to seeing the model in action. The next great challenge for the electricity market is likely to be in association with the new financial regulation of the electricity-grid companies recommended by the Energy Regulation Committee. Work on this is in progress, and the DERA Secretariat is contributing to the basis for the political decision. Moreover, the government has announced changes in the regulation of natural-gas companies, of Energinet.dk and of district-heating companies, for which it seems efficiency regulation is in the pipeline. DERA looks forward to contributing to this work, for example with data and sector-specific knowledge, if this is in line with supervision of the energy sectors.

Uffe Bundgaard-Jørgensen
Chairman of DERA

SUMMARY

ENERGY PRICES

The average consumer price of electricity increased slightly in 2015. On the other hand, the average consumer prices of natural gas and district heating fell somewhat. Over the past eight years, the price of electricity has increased slightly more than consumer prices in general. District-heating prices have also risen, but by somewhat less than consumer prices in general. In contrast, the price of natural gas has fallen considerably.

HISTORICAL TRENDS IN NATURAL-GAS PRICES

In 2015, the average consumer price of natural gas was at its lowest level for the past eight years.

HISTORICAL TRENDS IN DISTRICT-HEATING PRICES

In 2015 the average consumer price for district heating was more or less the same as the price in 2007-2008. The drop in the price from 2012-2013 is linked to falling production costs.

HISTORICAL TRENDS IN ELECTRICITY PRICES

The average consumer price of electricity increased in line with consumer prices in general from 2014 to 2015. Over an eight-year period, the average electricity price increased slightly more than general price trends.

HOUSEHOLD ENERGY COSTS FOR THE HOME

Households' average costs for electricity and heating with either district heating or natural gas have been falling.

HISTORICAL TRENDS IN WHOLESALÉ PRICES OF ELECTRICITY AND NATURAL GAS

The average wholesale price of electricity has generally fallen since 2011 because of the financial crisis and weakening demand. The average wholesale price of natural gas generally fell in 2014 and 2015.

REQUIREMENT FOR EFFICIENCY IN THE ELECTRICITY SECTOR

In 2015, DERA lowered the cap on maximum permitted revenue for Denmark's 64 electricity-grid companies by about DKK 93 mill. The grid companies are natural monopolies and thus not subject to competition. DERA regulation aims at encouraging these companies to be more efficient.

ANALYSIS OF ELECTRICITY PRICES FOR PASSIVE CONSUMERS

A number of electricity consumers have been transferred to a commercial electricity product in connection with the phasing-out of supply-obligation regulation, because they have not taken an active choice of supplier or product at their own initiative. This transfer was with consumers' passive acceptance. A survey by DERA does not, however, indicate that prices for these consumers have become significantly more expensive.

ANALYSIS OF PROVISIONS IN THE DISTRICT-HEATING SECTOR

In the 2014-16 budget years, about one in three heating companies included provisions in their heating prices.

Heating companies have included provisions totalling about DKK 500 mill. over the period. The provisions conceal from consumers the true financing costs of the heating companies, and in reality they function as involuntary interest-free loans from the consumers to the companies. It has been assessed that there is no need for these provisions, as the companies can generally borrow funds easily and cheaply from professional lenders. From the perspective of society, assessments also indicate that provisions are not the best way for companies to raise finance. Therefore, DERA has contacted the Ministry of Energy, Utilities and Climate in order to consider whether to repeal the provisions regulations.

ENERGY PRICES

The average consumer price of electricity increased slightly in 2015. On the other hand, the average consumer prices of natural gas and district heating fell somewhat. Over the past eight years, the price of electricity has increased slightly more than consumer prices in general. District-heating prices have also risen, but by somewhat less than consumer prices in general. In contrast, the price of natural gas has fallen considerably.

TRENDS IN CONSUMER PRICES FROM 2014 TO 2015

Trends in average consumer prices, including energy, grid, subscription, taxes and VAT, of electricity, natural gas and district heating, were moderate in 2015. The average consumer price of electricity increased more or less in line with general increases in consumer prices, whereas the average consumer prices of natural gas and district heating fell by about 12% and about 7% respectively.

From 2014 to 2015, developments in average consumer prices for electricity, natural gas and district heating and the index of consumer prices¹ have been²:

- The electricity price³ rose by 0.6%.

¹ Statistics Denmark. The index of consumer prices shows the changes in average prices of consumer goods and services purchased by households.

² The DERA Secretariat's own calculations based on own price statistics, the Danish District Heating Association and Statistics Denmark.

³ The electricity price means the average, monthly consumer price reported by the Danish Energy Association to Statistics Denmark and Eurostat, including transport charges and taxes. The price is an average price paid by consumers, if they have never actively chosen an electricity product themselves. An electricity consumer is defined here as having an annual electricity consumption of 4000 kWh.

- The natural-gas price⁴ fell by 12.4%.
- The district-heating price fell by 7.1%.
- The index of consumer prices rose by 0.5%.

The natural-gas price and the district-heating price are prominent, with relatively large price drops compared to general changes in prices. The falling natural-gas price is due in particular to ⁵drops in gas wholesale prices and because the Danish Parliament (the Folketing) changed the tax on natural gas with effect from 1 January 2015.

The falling price of district heating seems to be linked to the general drops in production costs, including falls in the prices of natural gas, coal and biomass, which account for a significant proportion of the fuel consumption by district-heating companies.⁶

The average electricity price increased by 0.6% and this is almost in line with the index of consumer prices, despite declining wholesale prices⁷ in recent years. This is primarily due to changes in taxes and subsidies for renewables.

The average electricity price, defined here as the average price an “inactive” consumer pays, indicates some of the price developments on the market. Figure 1 shows both the average electricity price for “inactive” consumers (“Electricity price, Statistics Denmark”) and the average electricity price month by month for all electricity products on the Danish market (volume-weighted average price), excluding charges for distribution, tax, and subsidies for renewables and energy research.

4 The gas price means the element gas price from the quarterly DERA gas-price statistics. This element is a customer-weighted and volume-weighted list price of supply-obligation prices and prices of non-regulated products from DONG; HMN and NGF Nature Energy. DERA checks that the prices of supply-obligation natural gas follow the wholesale price of natural gas with an addition to cover the other costs incurred by gas suppliers for distribution and transmission as well as their contribution margin.

5 Trends in wholesale prices of natural gas and electricity are described in more detail in the section entitled “Historical trends in wholesale prices of electricity and natural gas”.

6 Extended price statistics 2015 (district heating), DERA Secretariat.

7 Trends in wholesale prices of natural gas and electricity are described in more detail in the section entitled “Historical trends in wholesale prices of electricity and natural gas”.

Figure 1 shows that prices have generally followed each other. However the price paid by inactive consumers is a little higher for most of the period than the average price paid by all consumers. The exceptions are August and September, when prices are almost identical.

TRENDS IN CONSUMER PRICES FROM 2008 TO 2015

Over an eight-year period from 2008 to 2015, the electricity price has increased by almost 13%. In the same period, the index of consumer prices went up by almost 11%. The increase in the electricity price is also linked to increases in taxes and subsidies for environmentally friendly electricity production in the form of Public Service Obligation (PSO). The prices of natural gas fell

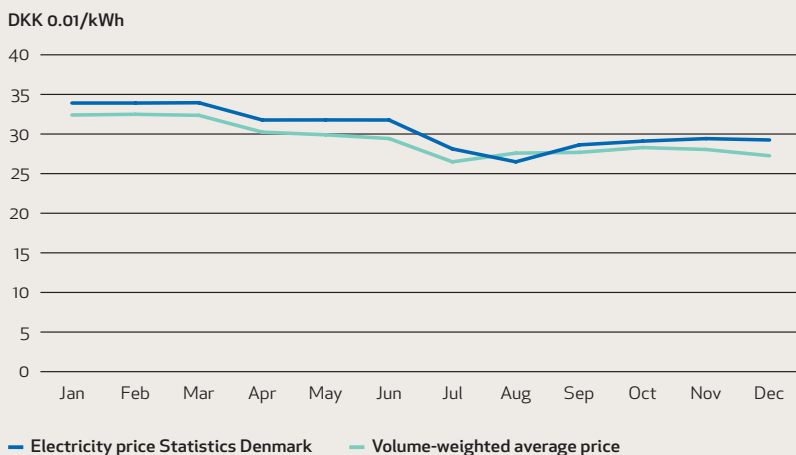
by about 18%, partly because of changes in taxes and price decreases on the wholesale market. The price of district heating increased by about 1% in the period, but the increase is somewhat less than the increase in the index of consumer prices. The weakening price developments for district heating are linked to declining production costs in recent years.

For the whole period 2008 to 2015, developments in average consumer prices for electricity, natural gas and district heating and the index of consumer prices have been⁸ (figure 2).

- The price of electricity price rose by 12.9%.
- The natural-gas price fell by 18.1%.
- The district-heating price rose by 1.2%.
- The index of consumer prices rose by 11.1%.

⁸ The DERA Secretariat's own calculations based on own price statistics, the Danish District Heating Association and Statistics Denmark.

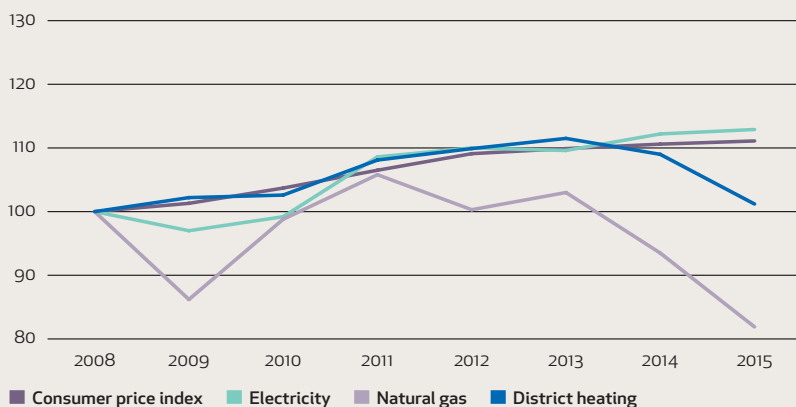
FIGURE 1 | Volume-weighted average electricity price for all electricity products on the market compared with average electricity price for consumers who have never actively selected an electricity product, 2015



Source: Danish Energy Association price guide, *Elpristavlen.dk* (now *elpris.dk*) and reports from electricity-trading companies in connection with the electricity price survey in 2015, DERA Secretariat.

Note: "Electricity price, Statistics Denmark" means the average, monthly consumer price reported by the Danish Energy Association to Statistics Denmark and Eurostat, including transport charges and taxes. The price is an average price paid by consumers if they have never actively chosen an electricity product themselves. An electricity consumer is defined here as having an annual electricity consumption of 4000 kWh.

FIGURE 2 | Price changes and index of consumer prices



Source: The DERA Secretariat price statistics, the Danish District Heating Association and Statistics Denmark

DOCUMENTATION: HISTORICAL TRENDS IN NATURAL GAS PRICES

In 2015, the average consumer price of natural gas was at its lowest level for the past eight years.

In 2015, the average consumer price of natural gas fell for the second successive year to its lowest level for the past eight years, measured in current prices (figure 3).

The average price for consumers has moved up and down over the period from 2008 to 2015. The price peaked in 2011 and has generally fallen since.

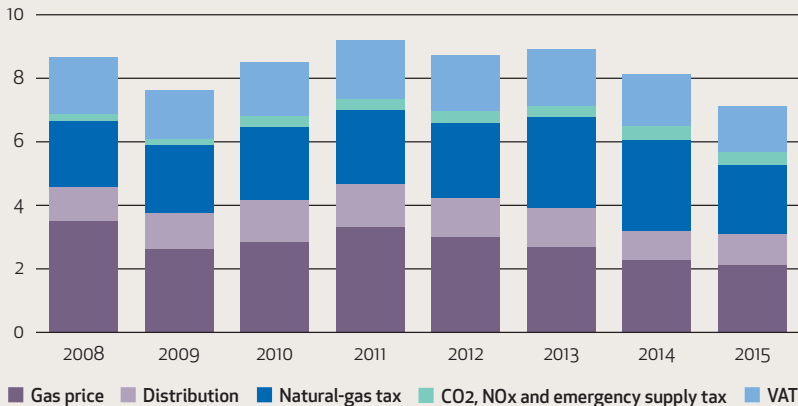
A direct comparison between the gas price in 2008 and the price in 2015 shows that the average gas price has fallen by 18%, reflecting a drop in the wholesale price⁹, changes in taxes, and falling distribution costs.

CHANGES IN DISTRIBUTION COSTS

The average consumer cost for distribution in the grids (excl. taxes) is an area supervised by DERA via efficiency regulations and the trend has been falling. Costs of distribution have fallen by 9% since 2008 (figure 4). The drop is linked to efficiency improvements by the grid companies.

⁹ Trends in wholesale prices of natural gas and electricity are described in more detail in the section entitled "Historical trends in wholesale prices of electricity and natural gas".

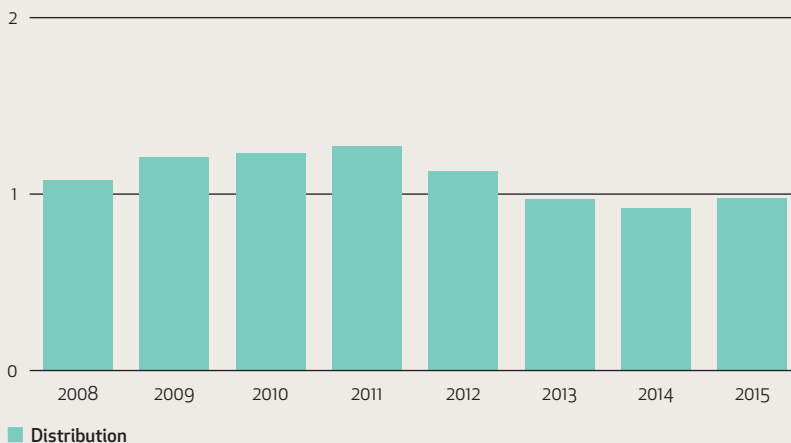
FIGURE 3 | Average consumer price of natural gas, DKK per m³/yr., distributed by price elements; current prices



Source: Price statistics, the DERA Secretariat

Note: The gas price means the element Gas price from the quarterly DERA gas-price statistics. This element is a customer-weighted and volume-weighted list price of supply-obligation prices and prices of non-regulated products from DONG; HMN and NGF Nature Energy. DERA checks that the prices of supply-obligation natural gas follow the wholesale price of natural gas with an addition to cover the other costs incurred by gas suppliers for distribution and transmission as well as their contribution margin.

FIGURE 4 | Consumer costs for distribution, DKK per m³/yr, current prices



Source: DERA Secretariat

Note: Since 2010, subscription costs have been included in the distribution payment.

FACTS | Change in natural-gas taxes

The Danish Parliament (the Folketing) changed the taxes on natural gas with effect from 1 January 2015. The change arose from a political agreement on the "Growth Package 2014" in July 2014.

The agreement includes phasing out the security of supply tax and repealing a previously adopted increase in taxes on fossil fuels.

FACTS | DERA and natural-gas prices

DERA monitors the prices of supply-obligation and basic products for natural gas.

Supply-obligation product: Customers who have not actively selected their natural-gas supplier automatically have their natural gas supplied by a supply-obligation company appointed by the Danish Energy Agency following a tendering procedure.

DERA checks that the price follows the wholesale price of natural gas with an addition to cover the other costs incurred by the gas supplier (distribution costs, contribution margin and costs of transmission in Denmark).

Basic product: In connection with the tenders for supply-obligation licences in 2013, customers were informed that they could actively select a specific product. If a customer did not make an active choice, and was already buying a supply-obligation product, the customer would automatically be transferred to a basic product offered by the customer's existing gas company.

DERA checks that the price of this product does not exceed the price that the supply-obligation product would have had if there had not been a tendering procedure.

DERA also monitors prices on the free commercial retail market and on the wholesale market.

DERA regulates the grid distribution companies' methods of setting prices for transmission of natural gas in the natural gas grid.

FACTS | The natural gas market

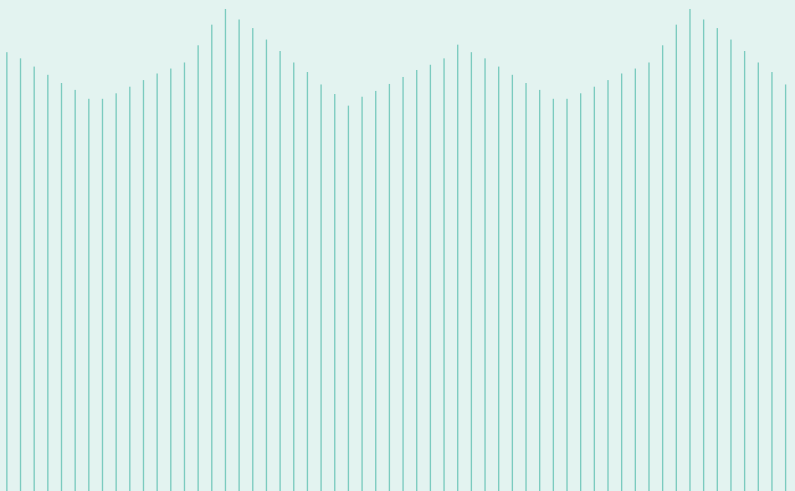
The natural gas market: Has been fully liberalised since 2004. Therefore, gas customers can choose supplier for themselves. There is a double-digit number of natural gas suppliers on the Danish end-customer market.

The wholesale market: Natural gas is traded on the wholesale market via the Danish gas exchange, Gaspoint Nordic, and via bilateral agreements. These agreements cover transport of natural gas from gas fields in the North Sea or from gas exchanges and gas hubs in Germany and the Netherlands, to the Danish market.

Products on the natural-gas market: Customers have several options when buying natural gas. Around 50 different natural-gas products are available to customers. The main options are gas at a fixed price agreed with a regular supplier, or a variable price that follows price fluctuations of natural gas on the market.

What should customers choose? Because the market prices for natural gas vary from day to day, it is impossible to determine the best product in advance. What to choose depends on expected price developments.

Overview: The website, gasprisguiden.dk, provides customers with a daily update of gas prices and what options and products are available on the retail market.



DOCUMENTATION: HISTORICAL TRENDS IN DISTRICT-HEATING- PRICES

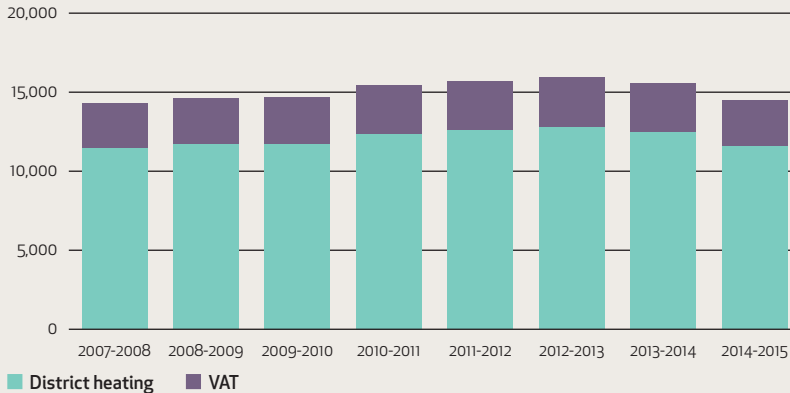
In 2015, the average consumer price for district heating was more or less the same as the price in 2007-2008. The drop in the price from 2013-2015 is linked to falling production costs.

The average consumer price of district heating, incl. VAT, decreased by 7.1% from 2013/2014 to 2014/2015 in current prices (figure 5). Thus the average consumer price in 2014/2015 was at par with the average in 2007/2008. The drop is linked to falling production costs at district heating companies.

However, the average district-heating price covers large differences in the prices charged by the individual plants (figure 6). However, there are three clear trends:

- the natural-gas-fired district heating plants have the highest average prices
- the large-scale CHP plants have the lowest average prices
- the largest span between district-heating plants with the lowest and highest prices is between the natural-gas-fired district-heating plants.

FIGURE 5 | Average consumer price of district heating, DKK/yr. current prices

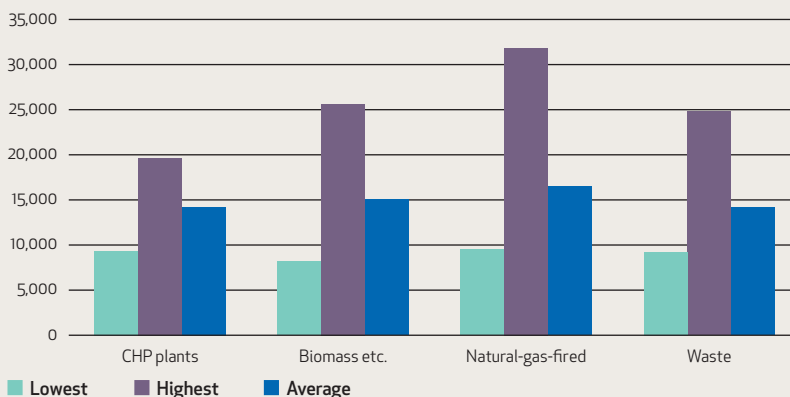


■ District heating ■ VAT

Source: Own calculations on the basis of data from the Danish District Heating Association and the DERA Secretariat

Note: The price has been calculated on the basis of the actual settlement prices during the heating season, incl. VAT, for a standard home of 130 m² and heating consumption of 18.1 MWh. The actual price of district heating includes taxes on the fuels used in district heating production. The statistic does not make it possible to break down the price of heating into subcomponents such as grid payment, subscription, etc.

FIGURE 6 | Lowest, highest and average price of heating analysed by type of plant DKK/yr.



■ Lowest ■ Highest ■ Average

Source: Own calculations on the basis of data from the Danish District Heating Association and the DERA Secretariat.

Note: Prices are calculated for a standard 130 m² house with room for four people and heating consumption of 18.1 MWh. Several conditions affect prices, e.g. differences in initial construction costs, type, size, number of consumers, etc. District heating plants are also subject to different framework conditions, e.g. choice of fuel and different connection rules for customers.

The district heating plants with the highest prices of heating are fueled by natural gas. The most expensive natural-gas-fired district-heating plants are the open-field plants. The high prices are primarily due to:

- large investments in production facilities and distribution lines,
- substantial transmission losses as a consequence of long transmission distances.

In general, the prices of district heating charged to customers are primarily determined by the fuel costs and financial efficiency of the individual district-heating plant. Therefore, it is crucial that the boards and management of the individual district-heating plants operate their plants as efficiently as possible.

FACTS | DERA and district-heating prices

DERA supervises district-heating-plant prices and these are regulated on the basis of the non-profit principle. This principle means that the price of district heating may only reflect necessary production, distribution and administration costs.

DOCUMENTATION: HISTORICAL TRENDS IN ELECTRICITY PRICES

The average consumer price of electricity increased in line with consumer prices in general from 2014 to 2015. Over an eight-year period, the average electricity price increased slightly more than general price trends.

The average price of electricity for consumers, including taxes and fees and the Public Service Obligation (PSO - support for renewable energy and research), rose by 0.6% in current prices from 2014 to 2015 (figure 7).

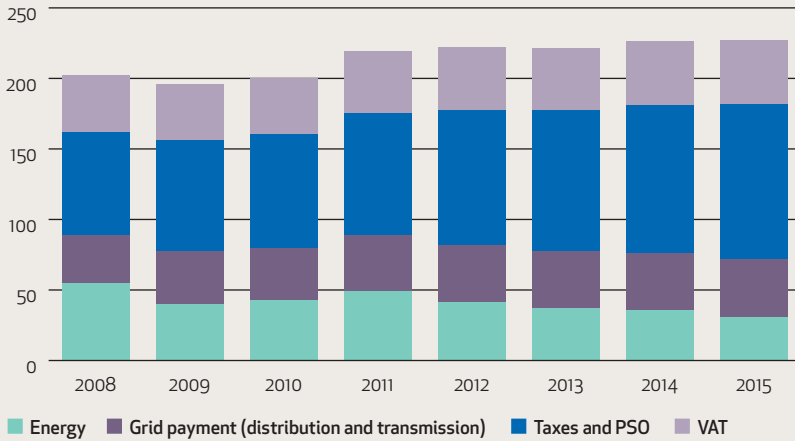
The average price of electricity has risen by about 13% over the past eight years. This is due to increasing taxes as well as increasing support for environmentally friendly production and research (PSO), despite falling wholesale prices¹⁰ over the past couple of years.

CHANGES IN DISTRIBUTION COSTS

The average consumer cost for distribution in the grids is an area supervised by DERA via efficiency regulations and it has risen by 22%, or DKK 0.06 per kWh, since 2008. This increase should be regarded in context, as the grid companies have made necessary new investments in replacing overhead lines with underground cables (figure 8).

¹⁰ Trends in wholesale prices of natural gas and electricity are described in more detail in the section entitled "Historical trends in wholesale prices of electricity and natural gas".

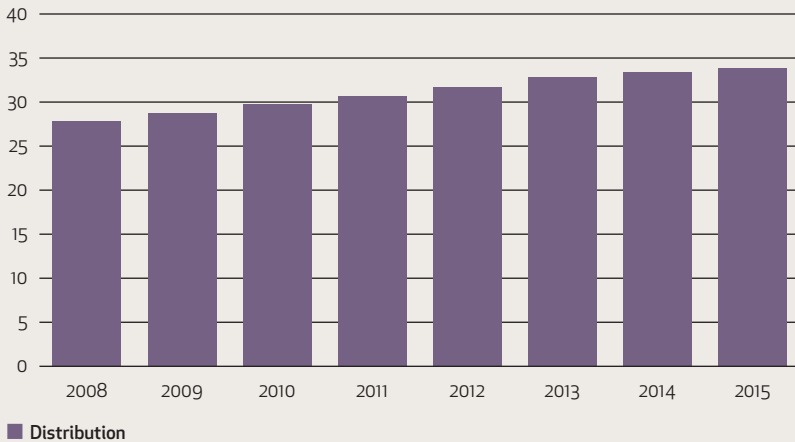
FIGURE 7 | Average consumer price of electricity, DKK 0.01/kWh/yr. current prices



Source: DERA electricity price statistics for supply-obligation electricity

Note: PSO is a charge for public obligations such as funding for renewable energy and research.

FIGURE 8 | Consumer costs for distribution, DKK 0.01/kWh/yr. current prices



Source: DERA Secretariat

Note: Distribution includes subscription and consumer payment for distribution in the grid.

COMPOSITION OF THE PRICE OF ELECTRICITY

The price of electricity for consumers is composed of several elements (figure 9).

The price of energy - the price of electricity without taxes, transport, supply and subscription - was DKK 0.307/kWh in 2015, or 13% of the price paid on average by consumers. Taxes and VAT constitute approx. DKK 1.558/kWh or about 69% of the electricity price. The remaining DKK 0.414 or about 18% goes toward grid payments and subscription.

Total costs of electricity paid by consumers are approximately DKK 23 bn. per year. This estimate is based on the total electricity consumption of households of about

10,000 GWh according to the latest figures from the Danish Energy Agency and the supply-obligation price.

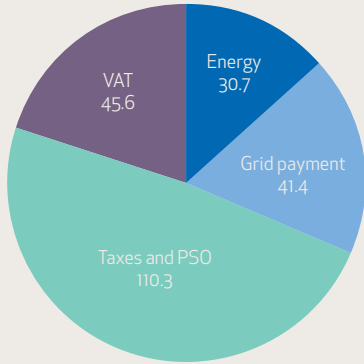
WHOLESALE AND RETAIL PRICE OF ELECTRICITY

The price of electricity - the energy price - is made up of a wholesale and a retail element (figure 10). Approximately 75% of the price of electricity goes toward the wholesale stage¹¹, and is set on the Nordic Electricity Exchange. The rest of the energy price is where companies at the retail stage can actually compete on the price.

According to DERA's price statistics, the average energy price in 2015 was DKK 0.307/kWh. Thus companies at the retail stage compete for almost DKK 0.076/kWh out of a total average consumer electricity price of DKK 2.278/kWh in 2015. In other words, energy retail companies have a relatively modest percentage of the individual consumer price.

¹¹ The wholesale price as the annual average for three months forward, including consumption profile.

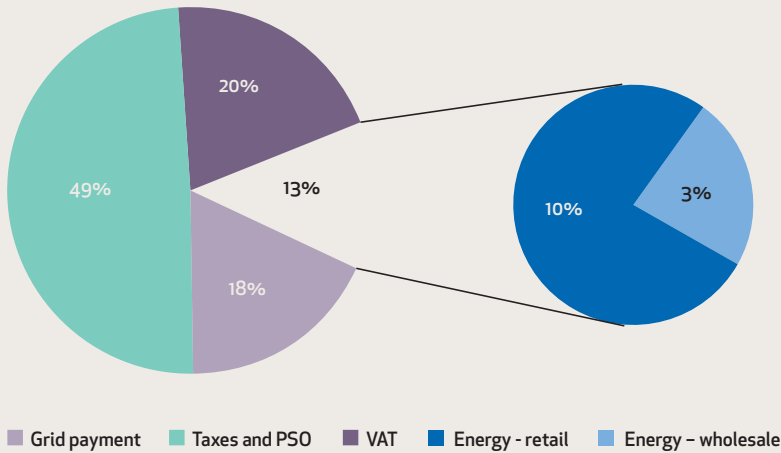
FIGURE 9 | Composition of the price of electricity 2015, DKK 0.01 per kWh



Source: DERA electricity-price statistics for supply-obligation electricity.

Note: Public Service Obligation (PSO) finances subsidies for renewable energy and energy research.

FIGURE 10 | Composition of the price of electricity in the wholesale and retail stage



Source: Own calculations, DERA Secretariat.

FACTS | DERA and electricity prices

DERA supervises the prices of the supply-obligation products that still exist. There are two types of supply-obligation product. Both products are sold to customers who are not active on market.

- **Original supply-obligation product.** Price-regulated product which the majority of consumers received before a tendering procedure for supply-obligation licences to cover certain geographical areas in Denmark. Originally, there were 39 supply-obligation licences, and of these, nine have not yet been sent to tender. DERA sets a maximum price for this product. In 2015, about 7% of consumers were still buying this product. The scheme will be phased out in 2017.
- **Supply-obligation product for tender.** Price regulated on the basis of the lowest bid in a tendering procedure. Introduced in early 2013 by tendering procedures in line with expiry of licences for the original supply-obligation product. DERA ensures that the price follows the price in the lowest bid in the tendering procedure. In 2015, about 2% of consumers were buying this product. The scheme will be phased out in April 2016.

Prices of the other products on the free commercial retail market are not subject to supervision by DERA, but they are monitored by DERA. Monitoring includes an annual survey of electricity prices for consumers, which among other things assesses whether these prices are reasonable. Monitoring focuses in particular on the products to which previous supply-obligation customers have been transferred.

DERA also regulates the grid distribution companies' methods of setting prices for transmission of electricity in the grid.

FACTS | The electricity market

The electricity market: Has been fully liberalised since 2003. This means that electricity customers can freely choose supplier and product.

The wholesale market: The Danish electricity market is an integrated part of the Nordic electricity market. Trading on the wholesale market is via the common Nordic electricity exchange, Nord Pool Spot. Here producers and electricity traders/suppliers trade with one another with a view to onward sale to the retail market.

Electricity prices: Retail prices depend primarily on changes in the prices on the Nordic electricity exchange; Nord Pool Spot. The exchange price is set hour by hour and is influenced by rainfall amounts in the Nordic countries, production of renewables, fuel prices for thermal power plants, customer demand and outages in the transmission grid.

Products: Electricity customers can buy different electricity products, often at different prices.

Prices: Electricity customers can choose between different electricity products. The main product groups are products that have a fixed price (customers agree on a fixed price for electricity with their supplier for a shorter or longer period), variable price (the electricity price follows the fluctuations on the market, typically on Nord Pool Spot, and prices may vary from day to day or at longer intervals, depending on what the customer has agreed with the supplier).

Some customers can opt to buy products at prices supervised by DERA. These are supply obligation products.

What should customers choose? As market prices can vary from hour to hour, it is impossible to calculate in advance the price difference between products with variable and fixed prices. What to choose depends on several factors, e.g. the customer's expectations for how electricity prices will develop.

Overview: The elpris.dk website provides customers with an overview of electricity prices and the various products available on the retail market.

FACTS | Development in price elements supervised by DERA

DERA's supervision of the prices of electricity, natural gas and district heating is only targeted on part of the consumer prices. Elements supervised by DERA are:

DERA sets the maximum gross profit on supply-obligation electricity

DERA sets a maximum cap on the gross profit an electricity supply-obligation company can earn from offering a supply-obligation product in the nine licence areas in which the licences have not been sent to tender. The product is being phased out and will be fully phased out in 2017. In 2015, about 7% of consumers were buying this product.

DERA monitors the price of supply-obligation natural gas

The supply-obligation product for natural gas is offered by the company bidding the cheapest price in a tendering procedure held by the Danish Energy Agency. DERA monitors that the price follows the wholesale price for natural gas with a supplement to cover the other costs of the gas supplier. In 2015, about 5% of consumers were buying this product.

DERA supervises district-heating prices.

There is no competition on the district-heating market and therefore prices are regulated according to a non-profit principle. DERA checks that district heating prices are a direct reflection of the necessary costs of production, distribution and administration.



DOCUMENTATION: HOUSEHOLD ENERGY COSTS FOR THE HOME

Households' average costs for electricity and heating with either district heating or natural gas have been falling.

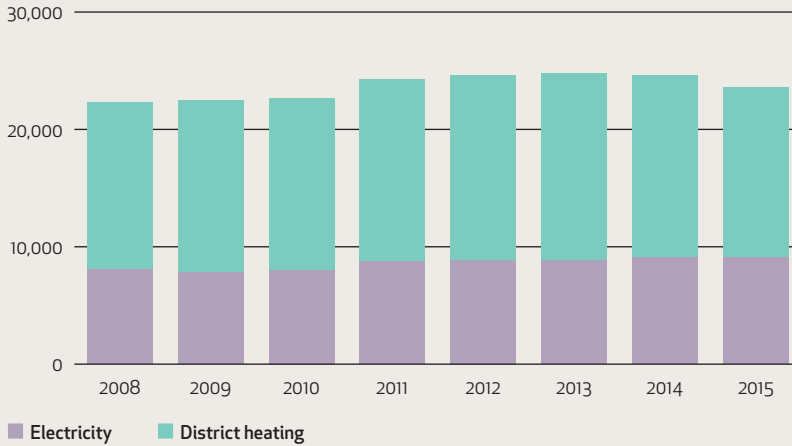
Households' costs of electricity and heating for the home account for a significant part of their total energy expenses. Almost all the 2.7 million households¹² in Denmark use electricity (for cooking, washing, refrigeration and freezing, as well as entertainment). About 1.7 million households (63%) have district heating, about 0.5 million households (about 15%) have natural-gas heating, about 0.3 million households (11%) have oil heating, and finally the remaining households (about 0.3 million) use heat pumps, electric heating or firewood for heating¹³.

Regulation by DERA aims at the electricity, natural-gas and district-heating areas. Therefore, regulation by DERA has an effect on the home-energy costs of by far the majority of households. The following is a more detailed description of how energy expenses linked to the home (electricity and district heating, as well as electricity and natural gas) for typical households have changed in current prices over the past eight years.

¹² Statistics Denmark

¹³ Energy Statistics 2014, Danish Energy Agency

FIGURE 11 | Costs of electricity and district heating for an average family*, DKK/yr. in current prices



Source: The DERA Secretariat's "Electricity price statistics" and the Danish District Heating Association's "Report on district heating prices in Denmark"

Note: An average family consists of 4 persons, who live in a standard 130m² house, with electricity consumption of 4000 kWh and heating consumption of 18.1 MWh.

HOUSEHOLD SPENDING ON ELECTRICITY AND DISTRICT HEATING

An average family had smaller electricity and heating bills in 2015 than in 2014 (figure 11). In current prices, average expenditure on electricity and district heating fell from about DKK 24,600 in 2014 to DKK 23,600 in 2015 for an average family, defined as a family of four persons residing in a standard house of 130m² with an annual electricity consumption of 4000 kWh and an annual heating consumption of 18.1 MWh.

The fall in average consumer expenditure on electricity and district heating corresponds to

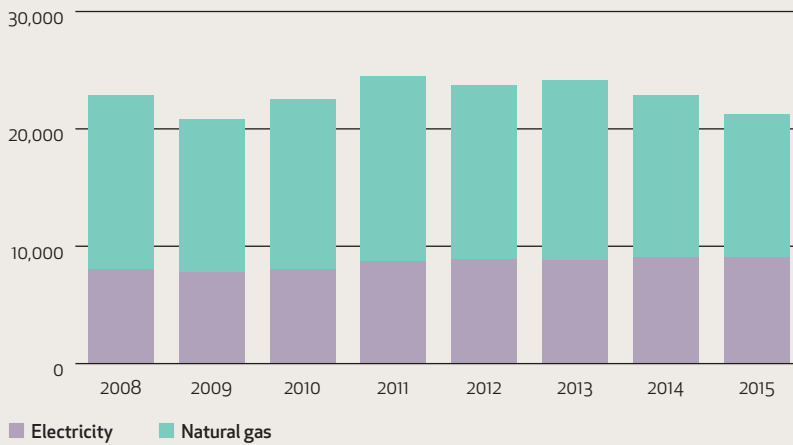
savings by an average family of 4.3% on their electricity and district-heating bills in 2015 compared with 2014, primarily because of a drop in the cost of district heating.

HOUSEHOLD SPENDING ON ELECTRICITY AND NATURAL GAS

An average family had a smaller total electricity and natural-gas bill in 2015 than in 2014 (figure 12). In current prices, average consumer expenditure on electricity and natural gas fell from about DKK 22,900 in 2014 to DKK 21,200 in 2015 for an average family.

The fall in average consumer expenditure on electricity and natural gas corresponds to savings by an average family of 7.2% on their electricity and natural-gas bills in 2015 compared with 2014, primarily because of a drop in the cost of natural gas.

FIGURE 12 | Costs of electricity and natural gas for an average family, DKK/yr. in current prices



Source: The DERA Secretariat's price statistics on electricity and natural gas.

Note: An average family consists of 4 persons, who live in a standard 130m² house, with electricity consumption of 4000 kWh and heating consumption of 18.1 MWh.

DOCUMENTATION: HISTORICAL TRENDS IN WHOLESALE PRICES OF ELECTRICITY AND NATURAL GAS

The average wholesale price of electricity has generally fallen since 2011 because of the financial crisis and weakening demand. The average wholesale price of natural gas generally fell in 2014 and 2015.

ELECTRICITY

The average wholesale price of electricity rose from about DKK 0.27 per kWh in March 2008 to DKK 0.58 per kWh in September 2008, after which the wholesale price fell to DKK 0.25 per kWh in May 2009 (figure 13).

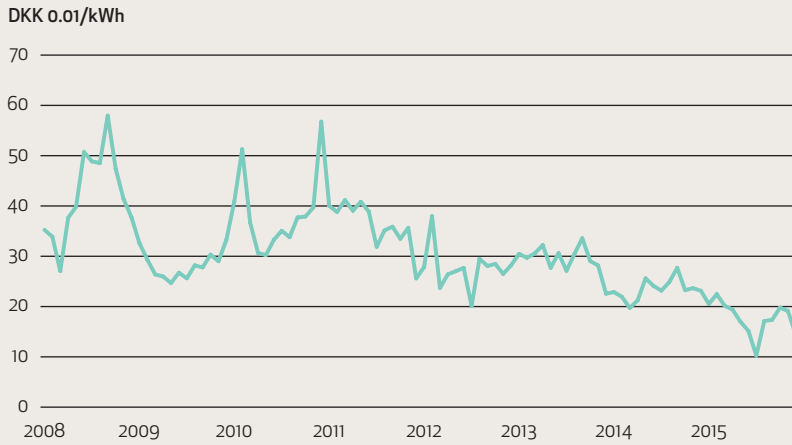
This increase in the wholesale price of electricity in the period described is partly attributable to increasing prices on global markets of coal, oil and carbon allowances¹⁴. The subsequent drop in electricity wholesale prices is due to the financial crisis and falling demand for energy.

The average wholesale price of electricity fell from about DKK 0.57 per kWh in December 2010 to DKK 0.14 per kWh in December 2015. According to ACER's Market Monitoring Report¹⁵, this five-year trend of falling prices is partly attributable to the increasing deployment of renewables (such as wind and solar energy), combined

¹⁴ http://www.ea-energianalyse.dk/reports/1068_husholdningernes_elpriser.pdf

¹⁵ http://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/ACER_Market_Monitoring_Report_2015.pdf

FIGURE 13 | Changes in the wholesale price of electricity in Denmark, 2008-2015



Source: Energinet.dk

Note: Data is monthly averages showing the average price for western and eastern Denmark.

with low coal prices and falling electricity demand. According to ACER, the lower gas prices in 2014 also pushed down wholesale prices of electricity.

The drop in the wholesale price of electricity has not had an impact on consumer prices. This is primarily due to changes in taxes and subsidies for renewables and energy research (PSO).

NATURAL GAS

Changes in consumer prices of natural gas are more directly connected to price changes on the wholesale market, especially because, in contrast to electricity, natural gas is not subject to a PSO tax (support for renewables and energy research).

Trends in the wholesale prices of natural gas are linked to the wholesale price of oil. Many supply contracts on the natural-gas market have been drawn up so that the price is adjusted in relation to changes in oil prices. In practice, changes in oil prices usually have an impact on gas prices with a time-lag of six to nine months (figure 14).

In the second half of 2008, the price of oil fell drastically (78%) following the financial crisis. At the end of 2008, the effects of the crisis could

also be seen in gas prices, which fell by almost 30% from October to December (figure 14). The drop in gas prices continued in 2009 because of lower demand and falling oil prices in the second half of 2008.¹⁶ However, 2009 ended with a relatively high gas price because of uncertainty about the capacity of the gas market.¹⁷

The prices of both gas and oil rose in 2010, and in December the price of gas on Gaspoint Nordic (GPN) reached the highest level yet, as there was a breakdown in gas imports from Germany at Ellund.

From 2011 to 2013, price trends for oil and gas were relatively stable, except for fluctuations in the gas price in February 2012 and spring 2013, driven in particular by cold weather and uncertainty regarding supplies in Russia. In March 2013, the price of gas on the GPN reached the highest ever because of the colder-than-expected weather, low gas stocks and reduced supplies from the North Sea.

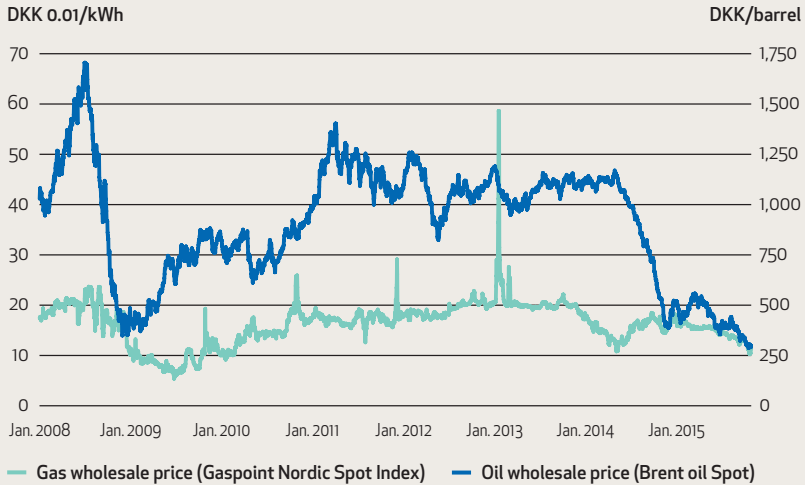
The price of oil has fallen since mid-2014, due in particular to the long-term shift in supply and demand and lower geo-political risks.¹⁸ Gas prices also fell in 2014 and 2015 because of weakening demand, falling oil prices and increased supply of LNG on the European market. All this pushed the price of gas downwards.¹⁹

¹⁶ DG Energy, quarterly report (fourth quarter of 2008).

¹⁷ DERA Sekretariat, "Overvågning af de danske engrosmarkeder for elektricitet og gas", Q1 2012.

¹⁸ World Bank Group, "The Great Plunge in Oil Prices: Causes, Consequences, and Policy Responses", March 2015.

¹⁹ ACER/CEER, "Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2014", November 2015

FIGURE 14 | Changes in the wholesale price of natural gas and oil

Source: Gaspoint Nordic, U.S. Government Energy Administration (eia.gov) and own calculations.

Note: Gaspoint Nordic (GPN) (originally NordPool Gas) opened for trading in March 2008, so the data series for the wholesale price of gas starts on 5 March 2008.

DOCUMENTATION: REQUIREMENT FOR EFFICIENCY IN THE ELECTRICITY SECTOR

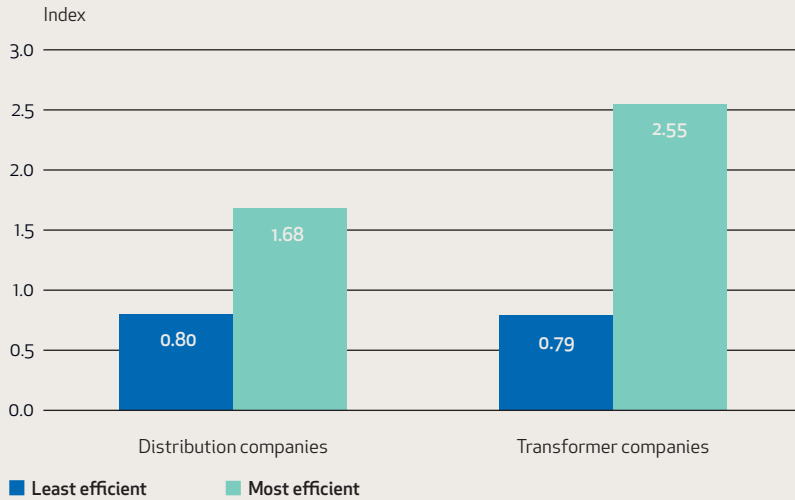
In 2015, DERA lowered the cap on maximum permitted revenue for Denmark's 64 electricity grid companies by about DKK 93 mill. The grid companies are natural monopolies and thus not subject to competition. DERA regulation aims at encouraging these companies to be more efficient.

DERA's analysis of the cost level of the electricity grid companies shows that there are still major differences between the companies in their financial efficiency. The most recent analysis and benchmarking of the cost level in the companies shows that the most efficient grid company is twice as efficient as the least efficient company in the group of medium-sized grid companies. In the group of small grid companies (transformer associations), the difference is more pronounced. The costs of the most efficient company are three-times lower than those of the least efficient company (figure 15).

These figures are from DERA's benchmark analysis of the financial efficiency of the electricity grid companies in 2015. The reason for benchmarking the grid companies and setting efficiency requirements is that the companies are natural monopolies and they are not subject to efficiency pressure from competition in the same way as enterprises in competitive markets.

DERA's benchmark analysis was conducted using a net-volume model on the basis of accounting figures for the grid companies for 2014. Therefore these are model-calculated efficiency differences between the grid companies.

FIGURE 15 | Differences between the calculated efficiencies of electricity grid companies



Source: DERA Secretariat own calculations on the basis of benchmarking analyses.

Note: The figure shows the index for the cost efficiency of the electricity grid companies. A high index means high efficiency, whereas a low index means low efficiency.

Note: The DERA benchmark analysis covers 64 electricity grid companies broken down by three categories: Two large grid companies with a grid of 50-60 kV, 45 medium-sized companies with a grid of 0.4-60 kV and 17 small companies (transformer associations), primarily with a grid of 0.4 kV. As the category of large companies with a grid of 50-60 kV only includes data for two companies, this group has been left out of the figure.

NEW REVENUE CAP

The new benchmark analysis of the grid companies' cost-effectiveness resulted in DERA reducing the maximum allowed revenue cap and setting new efficiency requirements for each grid company. Overall, the requirements involve a reduction in the grid companies' 2015 revenue cap of approximately DKK 93 mill., or about 4.6% of the companies' controllable costs such as costs of salaries, administration and maintenance.

The reduction in the revenue cap is spread over permanent efficiency requirements arising from low financial efficiency, and single-year efficiency requirements imposed on the grid companies for not having satisfactory quality of supply. The permanent efficiency requirement is about DKK 90 mill. and the one-year requirement amounts to DKK 3 mill. Figure 16 illustrates how the requirements have been implemented in each of the 64 grid companies.

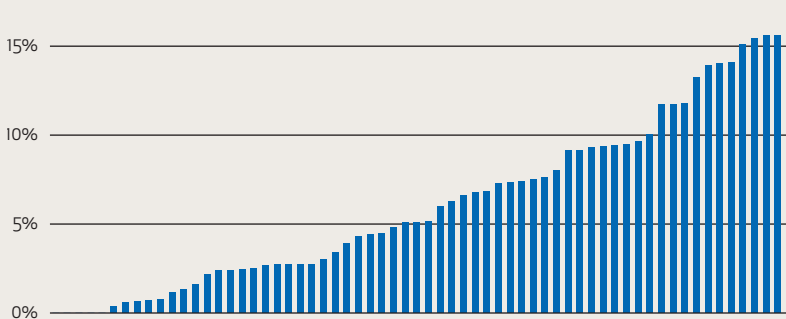
The efficiency improvement requirement for electricity grid companies comprises a quarter of the potential revealed by the benchmark analysis. Thus, 25% of the potential for efficiency improvements has been implemented as a requirement. The remaining 75% will not be implemented; partly to take into account the uncertainty there will always be in such benchmarks, and partly to enable the grid companies to adapt to new revenue conditions.

The efficiency requirement should be seen in relation to the size of the grid companies, as the implemented requirement in DKK is calculated on the basis of the controllable costs of each company. Controllable costs are grid companies' operating costs less costs of grid losses as well as approved extraordinary costs. The controllable costs, such as salaries, administration and maintenance, account for about 50% of the total costs of the grid companies.

TOTAL REDUCTION

This is the ninth time that DERA has set a cap on the maximum permitted revenues the electricity grid companies can charge from customers via their electricity bills. This means that, from 2008-2016, Danish electricity grid companies have been imposed a permanent reduction in the amount they can charge customers of almost DKK 800 mill. Table 1 illustrates the annual efficiency requirements implemented in the companies.

FIGURE 16 | Calculated efficiency requirements for electricity grid companies (% of controllable costs)

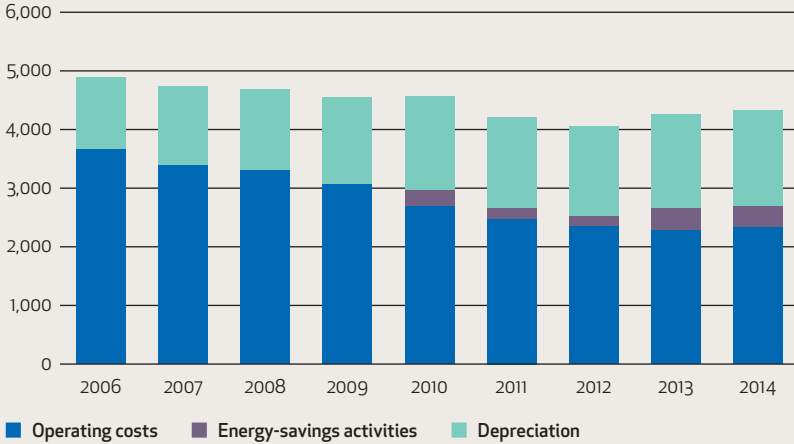


Source: DERA Secretariat own calculations on the basis of benchmarking analyses (2014-data) analysis.

Note: This figure shows how DERA implements the permanent efficiency requirements in Denmark's 64 electricity grid companies by reducing the maximum allowed revenue cap. Each company is shown as a column in the figure. The decision was made in 2015 for implementation in 2016. Five grid companies have not been imposed with a reduction in their revenue cap as a result of the financial benchmarking. The remaining 59 grid companies have all had their revenue caps reduced.

Note: The figure includes data for 64 companies broken down into three groups: Two large grid companies with a grid of 50-60 kV, 45 medium-sized companies with a grid of 0.4-60 kV and 17 small companies (transformer associations), primarily with a grid of 0.4 kV. The transformer associations are the smallest players among the grid companies, usually with just a few hundred customers, although they differ with regard to number of customers, electricity supply installations, number of employees, etc.

FIGURE 17 | Costs of electricity grid companies 2006-2014*, DKK mill./yr.



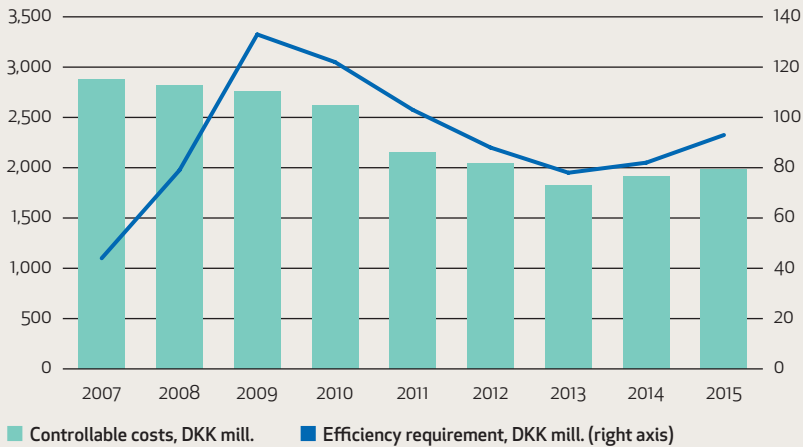
Source: DERA Secretariat

Note: *Costs are in DKK mill. in 2006 prices. Costs for 2006 have been included to show data used as the basis for the 2007 benchmark statement, from which requirements for the 2008 revenue caps are calculated, and so on. Data for 2015 will be available after the companies have presented their financial statements for 2016.

Note: Since 2010, see Executive Order no. 1294 of 24 November 2010 on Revenue Caps, there has been accounting separation between energy-saving activities and other operations. The electricity grid companies are obliged to advise customers on how to save energy and make their energy consumption more efficient. In 2014, the costs for energy-saving activities amounted to about DKK 450 mill. and this covered the costs incurred by the electricity grid companies to obtain total energy savings for their customers of about 968 GWh.

Note: In 2012, Energinet.dk purchased the regional transmission companies. This is shown for 2012 in the figure, and it explains part of the fall in costs for 2012.

FIGURE 18 | Controllable costs of the electricity grid companies compared with the efficiency requirements



■ Controllable costs, DKK mill.

■ Efficiency requirement, DKK mill. (right axis)

Source: DERA Secretariat

Note: Controllable costs as well as the efficiency requirements have been calculated in current prices.

Note: The figure has been prepared on the basis of the years for DERA benchmark decisions, i.e. the values for 2007 are calculated on the basis of accounting data for 2006 and the efficiency requirement was implemented in 2008 and so on. The controllable costs in 2007 therefore also show accounting data for 2006 etc.

Note: In 2012, Energinet.dk purchased the regional transmission companies. This is apparent from the figures for 2013, and explains part of the fall in costs for 2013, as the costs of operating these grids are no longer included in the figures.

Note: Since 2004, when the current regulation of the grid companies was introduced, there has been a consolidation. In 2004 there were 115 electricity grid companies at distribution level. In 2015, the number of electricity grid companies at distribution level fell to 64 companies.

The revenue caps set by DERA on the maximum permitted revenues for companies have been relatively stable since 2008, calculated in current prices (table 1). The companies may, however, have their revenue caps raised. This applies, for example, if the companies have costs for necessary new investments which are primarily investments in overhead to underground conversion of aerial cables and grid connection to new, large residential areas.

As a whole, the DERA requirements for efficiency improvements in the electricity grid companies accounted for between 0.6-2.0% of the total revenue cap in the period 2008-2014 (table 1). This takes into account the companies collectively as a whole, however, and the relationship between the requirement and revenue cap may differ if the companies are considered individually.

DEVELOPMENTS IN TOTAL COSTS

In the period 2006-2014, the operating costs of the electricity grid companies fell by about DKK 1,320 mill. (figure 17). The legislative framework was changed, however, in the period, and from 2010, the companies' costs for energy saving consultancy services and implementation of energy savings for customers, have been calculated separately. Considering this change, total operating costs fell by about DKK 954 mill. from 2006-2014. Depreciation increased in the same by around DKK 397 mill. (figure 17).

DEVELOPMENTS IN CONTROLLABLE COSTS

Electricity grid companies' controllable costs, for example salaries, administration and maintenance, fell by about DKK 900 mill. from 2007 to 2015 (figure 18).

At the same time as the costs of salaries, administration and maintenance, for example, have fallen, DERA's efficiency improvement requirements have also fallen from 2009 to 2015 in absolute figures (figure 18). Note, however, that this development is based on electricity grid companies collectively, and changes for the individual company may well deviate significantly from this.

TABLE 1 | Efficiency improvement requirements for electricity grid companies in current prices, DKK mill.

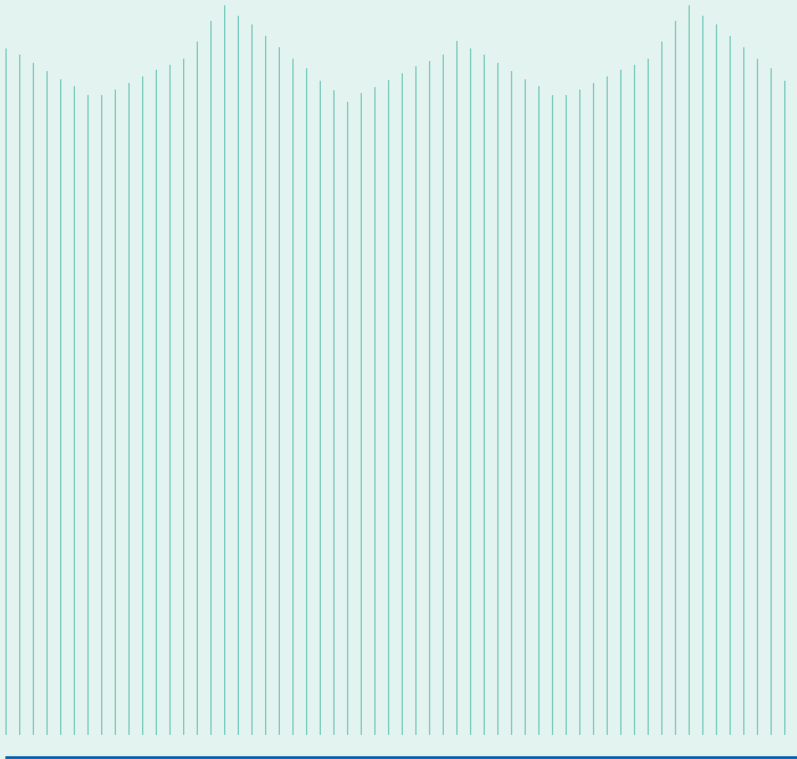
	2008	2009	2010	2011	2012	2013	2014	2015	2016
Efficiency requirement (DKK mill.), of which:									
Financial efficiency	44	79	133	122	103	88	77	82	93
Quality of supply	0.0	9.6	5.5	4.5	4.3	4.9	2.4	0.2	2.8
Revenue cap before efficiency requirements (DKK mill.)	6,646	6,512	6,582	6,515	6,707	6,926	6,905	* -	* -
Efficiency requirements according to the revenue cap (%)	0.67	1.21	2.01	1.87	1.54	1.27	1.12	* -	* -

Source: DERA Secretariat.

Note: If the grid companies have necessary new investments, for example because of overhead to underground conversion, new grids for new housing areas, requirements from authorities, etc., the regulation stipulates that the companies' revenue cap can be raised. This can only be on application from the company to DERA. Revenue caps can be raised retrospectively according to this provision in the regulation.

Note: *The revenue caps for 2015 and 2016 cannot be calculated until after the companies have submitted regulation accounts in May 2016 and in May 2017.

Note: Benchmarking of grid companies is conducted in advance of the regulation year in which the revenue caps are reduced. The reduction in the revenue caps in 2008 is therefore based on benchmarking by DERA in 2007 and so on.



FACTS | Regulation of electricity grid companies

Danish electricity grid companies are natural monopolies. As the distribution of electricity is a monopolistic activity, the grid companies generally do not have the same incentives for financial efficiency as enterprises on a free, competitive market.

The grid companies are therefore subject to financial regulation, managed by DERA. The regulation aims at reflecting the pressure on efficiency faced by enterprises subject to competition on the free market. The financial regulation primarily consists of three mechanisms: revenue caps, returns caps and benchmarks.

Revenue caps set a ceiling on the operating revenues of grid companies.

Companies are free to choose whether they wish to utilise the revenue caps set by DERA each year for each company. Some companies, usually cooperative societies, choose to keep operating revenues down through tariffs and therefore they do not charge the maximum allowed revenue cap from their consumers. About 7% of the operating revenues which the electricity grid companies are permitted to charge in Denmark are not charged to the customers. This corresponds to an amount of around DKK 430 mill.

The returns cap sets the maximum return for the grid companies. In practice, the returns cap indicates the maximum allowed operating profit. Over-runs of the returns cap result in a reduction in the company's revenue cap.

Benchmarking aims at ensuring that consumers do not pay more for the services of the grid companies than they would have done, if the companies were subject to competition. If the actual costs of a grid company are too high, efficiency improvement requirements will be imposed on the company by DERA.

Regulation of the system-operator transmission company

Energinet.dk, the system-operator transmission company, which owns and operates the overall transmission grid, is regulated in accordance with a non-profit principle under which the tariffs charged by the company may only cover its necessary costs for efficient operation.

DERA approves the majority of the company's methods of setting tariffs and can decide that a specific cost is not a necessary cost of efficient operation and therefore it cannot be fully or partly included in the company's tariffs.

ANALYSIS:

SURVEY OF ELECTRICITY PRICES FOR PASSIVE CONSUMERS

A number of electricity consumers were transferred to a commercial electricity product in connection with the phasing-out of the supply-obligation regulation because they did not make an active choice of supplier or product themselves. This transfer was with consumers' passive acceptance. A survey by DERA does not, however, indicate that prices for these consumers have become significantly more expensive.

With the phasing-out of the supply obligation on the electricity market, a large group of consumers were transferred to a market-based commercial product. The DERA Secretariat has monitored the prices etc. of these commercial products over the first year since the transfer. The survey indicates that:

- None of the commercial products to which consumers were transferred are significantly more expensive than other electricity products on the market.
- The average price of these products has fallen over the period and has generally followed trends in wholesale prices.
- The gross margin on the products to which the consumers were transferred has remained unchanged over the period.
- There is a trend towards higher prices and higher gross margins in eastern Denmark than in western Denmark.

The terms for the commercial product to which consumers were transferred have been changed considerably for many consumers. Five electricity-trading companies have transferred customers to a variable product, and this also transfers slightly more of the uncertainty from the wholesale market to the

consumer. Even though there are only five electricity trading companies, a large number of consumers are involved, as a large number of consumers has been transferred to one of these electricity trading companies.

BACKGROUND FOR THE ANALYSIS

Significant changes in the regulatory framework have been implemented in the Danish electricity retail market in recent years. One of the important changes is abolishment of the supply-obligation regulation. Electricity trading was liberalised on 1 January 2003. However, in connection with liberalisation, regulation of the price was maintained for a specific product; the supply-obligation product. Most consumers continued to purchase the supply-obligation product after liberalisation.

The supply-obligation regulation has been repealed, however, and the scheme is being phased out. This is being done by transferring purchasers of supply obligation products to another product when an electricity-trading company's supply-obligation licence expires. Consumers are free to choose a commercial product, but if they do not exercise this option, they are transferred to an electricity product chosen by the electricity-trading company by so-called passive acceptance.

From 1 October 2014, more than 90% of Danish consumers were receiving a market-based commercial electricity product. Slightly more than one-half of these consumers had been transferred by passive acceptance from a regulated product and had therefore not made an active choice of product. Note that 79% of Danish consumers were receiving a price-regulated supply-obligation product on 1 January 2013.

In relation to the transfer of consumers in October 2014, a provision in the Electricity Supply Act stated that all commercial products to which consumers were transferred by passive acceptance should be labelled such that DERA could monitor them. This analysis is a result of this labelling and it shows changes in prices, gross margins and terms and conditions over the first year since consumers were

transferred by passive acceptance. Therefore, the analysis examines the changes from 1 October 2014 to 1 October 2015.

The aim of the survey is to establish openness regarding changes in the prices of these products. It is likely that openness on changes in product prices that become significantly more expensive than electricity prices in general will be beneficial for competition. The price and gross margin of the regulated supply-obligation product, which about 7% of consumers continue to buy, has been included as a reference product.

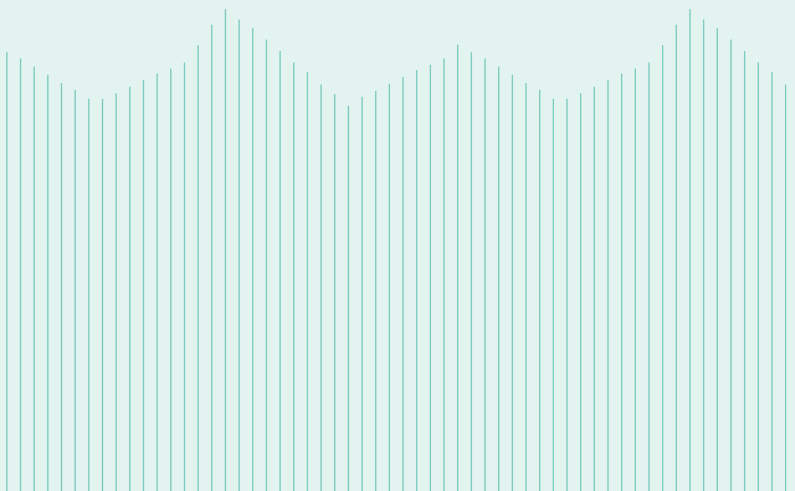
The following section only examines the labelled products, i.e. the products to which consumers have been transferred through passive acceptance. Therefore, each reference to "products" refers to "products to which consumers were transferred through passive acceptance".

PRICE CHANGES

The average price of products to which customers have been transferred by passive acceptance fell in every quarter from 1 October 2014 to 1 October 2015. In eastern Denmark, the average price fell from DKK 0.375 per kWh to DKK 0.301 per kWh. In western Denmark, the average price fell from DKK 0.346 per kWh to DKK 0.283 per kWh. With regard to western Denmark, therefore, the average price is more or less identical to the price of the supply-obligation product. In eastern Denmark, the average price has been slightly more than the supply-obligation price, except for in Q3 2015. The average price in eastern Denmark has been above the price for western Denmark throughout the period, except for in July 2015. Furthermore, all the prices have generally followed the wholesale price, which also fell throughout the period and is a little higher in eastern Denmark than in western Denmark. Note that in Q3 2015 a single electricity-trading company transferred its customers to a variable product, and this has a significant impact on the price in eastern Denmark. The changes in prices are illustrated in figure 19.

FACTS | Phasing-out of the supply-obligation regulation

- **Original supply-obligation product.** Price-regulated product received by all consumers before liberalisation. Planned to be abolished in early 2013, but not until expiry of licences for selling the product. In 2015, about 7% of consumers were still buying this product. Will finally be phased out in May 2017.
- **Supply-obligation product for tender.** Price regulated on the basis of the lowest bid in a tendering procedure. Introduced in early 2013 by tendering procedure in line with expiry of licences for the original supply-obligation product. In 2015, about 2% of consumers were buying this product. Abolished on 1 April 2016.
- **Basic product.** Indirectly price-regulated product introduced in early 2013. Consumers of the original supply-obligation product were transferred to this. Abolished on 1 October 2014.
- **Commercial product with consumers transferred by passive acceptance.** Not a regulated product, but labelled so that DERA can monitor changes. Consumers from the original supply-obligation product, the supply-obligation product for tender and the basic product have been transferred to this. In 2015, slightly more than 50% of consumers were transferred by passive acceptance to a labelled product.



Looking at price changes for the individual products instead of the average trend, the same falling trend over the period is apparent.

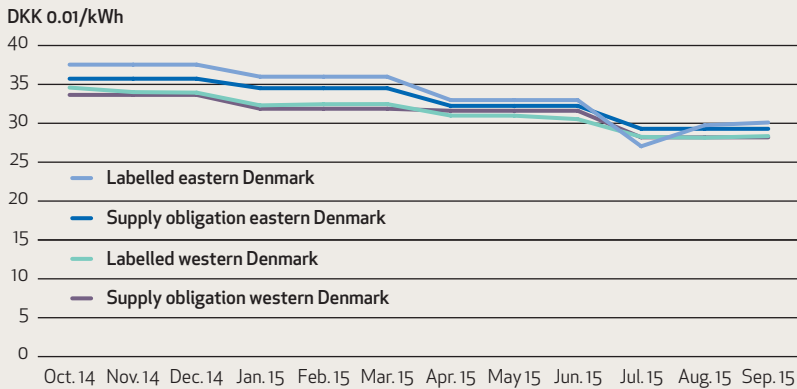
However, in western Denmark there is a significant price spread between products, and this price spread is unchanged over the period. The two most expensive products in western Denmark over the period are much closer to the mean price than the two cheapest. Over a one-year period, a consumer with an assumed average consumption of 4,000 kWh with the most expensive product in western Denmark will have paid just over DKK 100 more than the same consumer with an average product. A similar consumer with the cheapest product in western Denmark will have paid DKK 300 less than the average. The changes

in prices in western Denmark for the two most expensive products, the two cheapest as well as the mean price of all products is illustrated in figure 20.

The price has also fallen in eastern Denmark, but there is not the same price spread as in western Denmark. There are just three electricity-trading companies, each with one product, and they had identical prices in the two first quarters of the period examined. In Q2 2015, there was a small price spread, and in Q3 2015 there was a large difference because of a product change to a spot-price product for one of the electricity-trading companies. Consumers of this spot product benefitted from the large price difference on the wholesale market between the spot price and the forward price and they saved about DKK 80 in Q3 2015 compared with consumers of products from the other two electricity-trading companies.²⁰ The changes in prices for eastern Denmark are illustrated in figure 21.

²⁰ Calculated for a consumer with an annual consumption of 4,000 kWh.

FIGURE 19 | Average changes in prices of labelled products and the supply-obligation product, Oct. 2014 - Sept. 2015

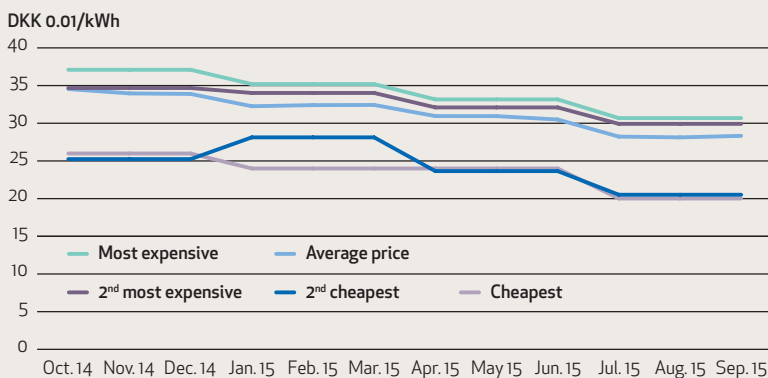


Source: Electricity price indicator Elpristavlen.dk (now Elpris.dk) and labelling of products by the electricity-trading companies.

Note 1: The price has been calculated by taking a simple average of the list price of all products plus subscription. The subscription is allocated on the basis of kWh by assuming an annual consumption of 4,000 kWh.

Note 2: Supply obligation is a simple average of the six regulated supply-obligation areas in western Denmark and the three regulated supply-obligation areas in eastern Denmark in the period.

FIGURE 20 | Price changes in western Denmark for the most expensive and the cheapest labelled products, Oct. 2014 - Sept. 2015



Source: Electricity price indicator Elpristavlen.dk (now Elpris.dk)

Note 1: The prices have been calculated by taking the list price of products plus subscription. The average price is a simple average of all the products, not just the four included in the graph. The subscription is allocated on the basis of kWh by assuming an annual consumption of 4,000 kWh.

Note 2: The products shown are the most expensive and cheapest, respectively, on average throughout the period, not necessarily at each date in the period.

CHANGES IN GROSS MARGINS

The average gross margin has remained more or less unchanged since Q3 2014, when consumers had a regulated basic product. However, the gross margin has been slightly higher in eastern Denmark than in western Denmark, which was not previously possible when prices were regulated. In western Denmark, the gross margin on products has also been more or less identical to the gross margin on regulated supply-obligation products. Q3 2015 for eastern Denmark cannot be directly compared with the previous quarters because of the transfer of consumers to a spot-price product by one of the electricity-trading companies. Changes in the gross margin are illustrated in Figure 22.

PRODUCT TERMS AND CONDITIONS

The only factor that differentiates electricity products, other than price, is the terms and conditions. The primary term is how prices are set. Fixed-price products have a pre-set fixed price in relation to the calendar (e.g. quarterly or annual

price), or fixed in relation to when the contract was established (e.g. six-months' fixed price from the start of supply).

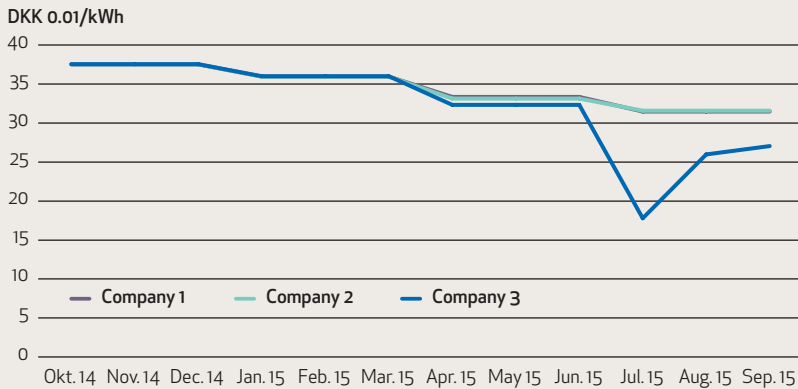
Prices for products with variable prices are usually set in arrears in relation to the spot price on the wholesale market for one month at a time. However, there are also other variations. Another difference in the terms and conditions is the binding period, which, according to legislation, can be up to six months for private consumers and therefore can vary from zero to six months.

The DERA Secretariat has investigated how terms and conditions have changed over the period for products supplied to customers transferred by passive acceptance.

Electricity-trading companies can transfer their customers to any product, provided just that consumer is notified three months in advance, see the fact box. However, most electricity-trading companies did not actually transfer customers to a new product in October 2014. Customers remained with the basic product they had been receiving previously, although this was now not subject to any regulation.

The basic product has a fixed price for each quarter that is set in advance on the basis of the price expected by the market, with ongoing supply periods and no binding period. These terms and conditions are identical with the original supply-obligation product.

FIGURE 21 | Price changes in eastern Denmark for the labelled products, Oct. 2014 - Sept. 2015

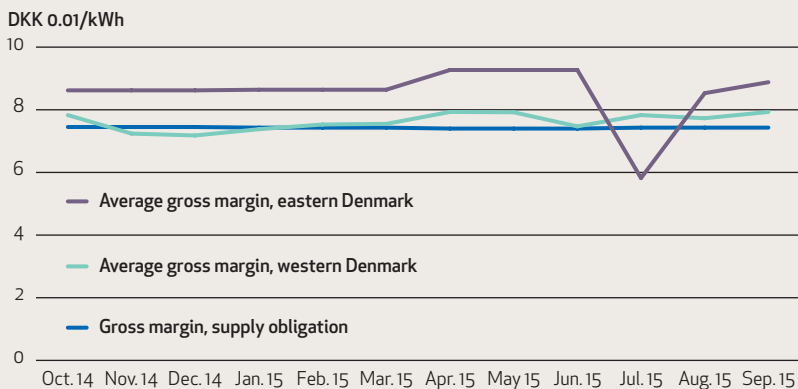


Source: Electricity price indicator Elpristavlen.dk (now Elpris.dk)

Note 1: The prices have been calculated by taking the list price of products plus subscription. The subscription is allocated on the basis of kWh by assuming an annual consumption of 4,000 kWh.

Note 2: Company 1 and company 2 have more or less identical prices.

FIGURE 22 | Price changes in average gross margin for labelled products and the supply-obligation product, Oct. 2014 - Sept. 2015



Source: Electricity price indicator Elpristavlen.dk (now Elpris.dk), Energinet.dk og Nasdaq OMX Nordic.

Note: Gross margin has been calculated by deducting three-months forward on the system price and EPAD (electricity price area differentials) as well as the average consumption profile from the retail price. EPAD and consumption profiles are different between eastern and western Denmark.

For transfers of customers on 1 October 2014, a total of 30 commercial products were transferred to customers by passive acceptance; 27 in western Denmark and three in eastern Denmark. Of these products, initially two were changed and were no longer basic products. Energi Fyn transferred many of its customers to a variable spot-price product, while Energi Viborg transferred many of its customers to a four-month fixed-price introductory offer that was succeeded by a basic product.

Subsequently several electricity-trading companies have transferred their customers by passive acceptance to another product than a basic product. Table 2 shows a summary.

In addition to the direct changes in prices and terms and conditions, some products have seen a change in the subscription. The subscription is included in the prices in this analysis. Prices are calculated by allocating the subscription on the basis of an annual consumption of 4,000 kWh, and this shows that there is no great difference. A consumer with a consumption of much less or much more than 4,000 kWh should note, however, that the ratio between price per kWh and subscription for the product to which the consumer is transferred is favourable for the consumer.

FACTS | Consumer terms and conditions for electricity products

Section 4 of the Consumer Protection Executive Order (after 1 April 2016, section 3 of the Electricity Supply Executive Order) states that an electricity-trading company must give notice to a consumer if the company intends to make significant changes in the terms of a contract that are detrimental to the consumer. The notice must be given at least three months before the intended change takes effect.

Significant changes means changes in existing prices or fees that increase the relevant price element by 10% or more and that also increase the total payment by at least DKK 40.00 per month, including VAT. Significant changes also include changes in terms of supply and terms of contract, new fees and terms as well as changes in unit prices in fixed-price agreements and changes in the basis for calculation of prices in variable-price agreements.

This legislation means that electricity-trading companies have to give three months' notice in connection with transferring a customer to a commercial product. They must also give notice of significant changes in commercial products.

TABLE 2 | Product changes for transferred electricity consumers

Electricity-trading company	Date	New product
Energi Fyn (not all customers)	October 2014	Variable spot price
Energi Viborg (not all customers)	October 2014	Four-month fixed introductory offer
Ideelle	May 2015	Variable monthly product
Dong Energy Salg & Service	July 2015	Variable spot price
RAH Elhandel	October 2015	Variable spot price
MES Elhandel	October 2015	Variable spot price

Source: Electricity price indicator *Elpristavlen.dk* (now *Elpris.dk*) and labelling of products by the electricity-trading companies.

ANALYSIS: PROVISIONS IN THE DISTRICT HEATING SECTOR

In the 2014-16 budget years, about one in three heating companies included provisions in their heating prices. Heating companies have included provisions totalling about DKK 500 mill. The provisions conceal the true financing costs of the heating companies from consumers, and in reality they function as involuntary interest-free loans from the consumers to the companies. It has been assessed that there is no need for these provisions, as the companies can generally borrow funds easily and cheaply from professional lenders. From the perspective of society, assessments also indicate that provisions are not the best way for companies to raise finance. Therefore, DERA has contacted the Ministry of Energy, Utilities and Climate in order to consider whether to repeal the provisions regulations.

This analysis has been prepared in connection DERA's checks on heating companies provisions in 2015.

PROVISIONS?

The Heating Supply Act enables heating companies to include provisions in the price of district heating. A provision is an amount set aside for a specific investment in the future. Therefore it acts as a sort of savings in a period up to when the investment is to be made and implemented, and it is an alternative to financing through loans. When a heating company makes provisions, in reality it corresponds to consumers lending money to the company free of interest for an investment that has not yet been made.

In order for provisions to be made, the Depreciation Executive Order (afskrivningsbekendtgørelsen) and the Notification Executive Order (anmeldelsesbekendtgørelsen) issued pursuant to the Heating Supply Act must be complied with. For example, at the same time as drawing up its budget, the heating company must submit an investment and provisions plan to DERA. Therefore, during begetting the heating company has to assess the size of a provision that may have to be budgeted for if future investments are to be implemented. The Depreciation Executive Order (afskrivningsbekendtgørelsen) also stipulates limits for the size of provisions. Provisions may be commenced no earlier than five years before the launch year of a planned investment. A maximum of 20% of the budgeted cost of acquisition may be provided each year and accumulated over the years to a maximum of 75% of the expected cost of acquisition.

If the provisions regulations are not observed, and a heating company includes provisions in the price of district heating that are non-compliant with the regulations, heating consumers will be charged a higher price of heating than the company is legally

FACTS | Regulations on provisions

The Depreciation Executive Order (Executive Order no. 175 of 18 March 1991 with later amendments) and the Notification Executive Order (Executive Order no. 1282 of 5 December 2015) were both issued pursuant to the Heating Supply Act and they stipulate the regulations for including provisions. DERA has also issued guidelines on provisions as well as a handbook ("Fjernvarmeprisen rigtig første gang"), which also describes the regulations.

Inclusion in the budget and notification of the investment and provisions

plan: In order for provisions to be recognised as appropriately notified to DERA, a district heating company must report a budget to DERA prior to the period in which the provisions will be charged in the price of heating. At the same time, the heating company must submit an investment and provisions plan that describes the purpose of the provisions, the budgeted cost of acquisition and the launch year of the investment as well as the budgeted provisions for each investment.

The period of provisions and amount limits: Provisions may be commenced no earlier than five years before the launch year of a planned investment. A maximum of 20% of the budgeted cost of acquisition may be provided each year and accumulated over the years to a maximum of 75% of the expected cost of acquisition. If the investment turns out to be less than the budgeted cost of acquisition, any surplus provisions should be set off in the price of heating in the launch year.

Reimbursement or utilisation of provisions: Provisions must be reimbursed to consumers through a reduction in prices, if they do not comply with the regulations, if an investment is not made anyway, or if an investment is postponed and the first year's provisions are out of date in relation to the five-year rule. In general, provisions cannot be utilised in, or transferred to, other investments. When the investment is made, the provisions must be set off in the sum qualifying for depreciation so that consumers do not pay for the same investment twice.

For example, if a company has included non-compliant provisions corresponding to 10% of its necessary costs, the district heating price will be 10% too high in the year the non-compliant provisions were included. Therefore, the prices must be reduced by an amount corresponding to the amount of the provision.

entitled to charge. The regulations on provisions are explained in more detail in the fact box.

THE SCOPE OF PROVISIONS IN THE HEATING SECTOR

As part of a more targeted control strategy for the heating area, in 2015 DERA launched an inspection survey of provisions by heating companies. This inspection is described in more detail in the appendix towards the end of this analysis.

Around 600 heating companies are subject to the pricing provisions in the Heating Supply Act. In the budget years 2014-16, 228 heating companies had included provisions totalling about DKK 500 mill., corresponding to a weighted average of provisions of about 7% of their necessary costs. This means:

- that in the 2014-16 budget years, about one in three heating companies included provisions in their heating prices.
- that companies have provided on average about DKK 167 mill. a year in the budget years 2014-2016.

THE SCOPE OF NON-COMPLIANT PROVISIONS

A total of 94 of the above 228 companies were selected for the inspection survey. The companies

had notified provisions corresponding to 7% or more of their necessary costs, i.e. companies with provisions percentages above average. This inspection limit was set in order to target the survey to companies for which the provisions had the greatest impact on their heating prices.

In total, 63 of the 94 companies had non-compliant provisions. Table 3 shows the percentages of the 63 companies' non-compliant provisions.

According to table 3, the 63 companies have included non-compliant provisions totalling about DKK 226 mill. There are several types of non-compliant provisions.

The four commonest breaches of the provisions regulations are:

- 12 companies have included higher provisions in their prices than budgeted
- 12 companies have not submitted an investment and provisions plan
- 12 companies have made provisions more than five years before the launch year
- 12 companies have submitted investment and provisions plans that fail to meet the provisions regulations, e.g. they lack information about the launch year or the investment project in not described in sufficient detail.

A number of companies are in breach of several provisions regulations simultaneously and it has not been possible to present the amount of each breach in DKK, as the sum of these figures will be greater than the above DKK 226 mill.

Furthermore, the Secretariat is also aware of errors, such as notifications as provisions that should have been notified as depreciation. Such errors are also

TABLE 3 | Distribution of companies with non-compliant provisions percentages in the budget years 2014-16

The size of non-compliant provisions compared with necessary costs	Number of companies total	Non-compliant provisions total (DKK mill.)
7% ≤ Provisions < 10%	19	31
10% ≤ Provisions < 15%	23	73
15% ≤ Provisions < 20%	9	27
20% ≤ Provisions < 30%	6	14
30% ≤ Provisions	6	81
Total	63	226

Source: DERA Secretariat

breaches of the regulations. Such errors have not been included in the figures above.

Once DERA has completed its inspection work on the 63 companies, the figures in table 3 could end higher or lower. Identifying companies with errors in their provisions will result in a reduction in the number of companies with non-compliant provisions and the associated financial amount. However, the inspection work by DERA has only examined the 63 companies for breaches in one of the financial years for the period 2014-16. Identifying breaches by companies over several years will result in an increase in the total financial amount of the non-compliant provisions.

Figure 23 shows that the provisions percentage for the 63 companies in the survey spans from about 7% to about 40%

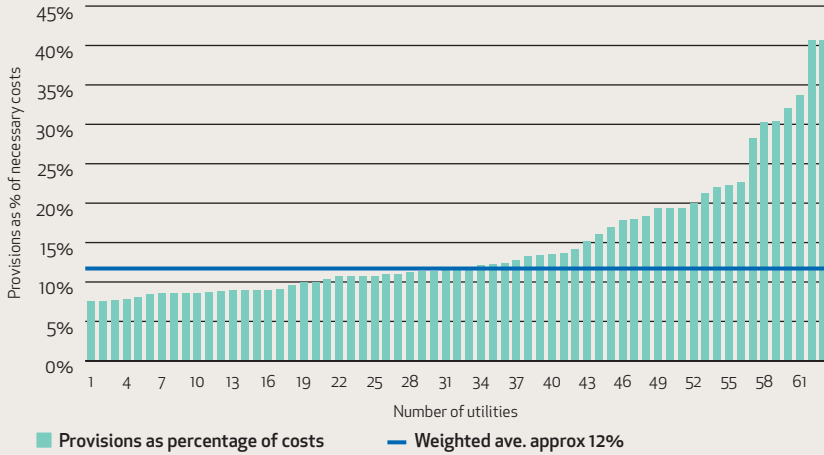
Of the 63 companies, 44 have non-compliant provisions percentages evenly distributed in the interval from 7% to about 15%. The provisions percentages for the remaining companies rise gradually from around 15% to about 40%.

THE RELATIONSHIP BETWEEN PROVISIONS PERCENTAGE AND TYPE OF COMPANY

Ownership of heating companies could be significant for a company's preference to finance investments through interest-free borrowed money from consumers via provisions.

Therefore, table 4 examines whether the consumer-owned heating companies, municipally owned heating companies or companies with commercial owners have large provisions, i.e. more than 7% of necessary costs. The table also examines whether non-compliant

FIGURE 23 | Distribution of companies' non-compliant provisions, measured as a percentage of the necessary costs of companies in the budget years 2014-16



Source: DERA Secretariat.

Note: The above percentages have been calculated for the budget year in which the relevant company made the non-compliant provision.

provisions are made by one type of company in particular.

It is likely that there are far more consumer-owned companies with large provisions than municipally owned and companies with commercial owners. This is simply because the consumer-owned companies account for the majority of the total number of heating companies. Therefore, table 4 shows the extent to which companies with large provisions are over or under represented in relation to the distribution of type of ownership among all the companies.

Of the companies with large provisions, companies with commercial owners accounted for 7%, while they only account for 4% of all the companies.

With regard to municipally owned companies, a slightly smaller per-

centage of these had large provisions in relation to the percentage they make up of all companies.

There is no difference for the consumer-owned companies.

On the current basis, it is not possible to determine why a higher proportion of companies with commercial owners has relatively larger provisions than consumer-owned companies and municipally owned companies. It is also outside the scope of this analysis to investigate this.

Table 4 also shows that there are no commercially owned companies with large non-compliant provisions, and that the consumer-owned companies are somewhat over-represented in having non-compliant provisions compared with the percentage they make up of all companies.

THE RELATIONSHIP BETWEEN PROVISIONS PERCENTAGE AND SIZE

The size of the heating companies could also be significant for a company's use of large provisions and whether they are non-compliant provisions. For example, it is conceivable that the larger the company, the larger the administrative resources it will have and thus it will be

TABLE 4 | Distribution of provisions by heating companies in the budget years 2014-16, analysed by type of ownership

Figures are in procent	Consumer-owned	Municipally owned	Owned by commercial owners	Total
All companies*	84	12	4	100
Companies with provisions \geq 7%	84	9	7	100
Companies with non-compliant provisions \geq 7%	92	8	0	100

Source: DERA Secretariat

Note *The term "All companies" refers to the about 400 heating companies supplying end-users. Only 400 heating companies have been included in the survey because DERA currently does not have data to describe the ownership of all the approximately 600 heating companies.

in a better position to comply with the provisions regulations. However, table 5 shows that there is no unequivocal correlation.

With regard to companies with relatively large provisions, the small and large companies are under-represented in relation to the percentage they make up of all companies. The medium-sized companies are over-represented as they account for 33% of all companies, but comprise less than half of all companies with large provisions.

With regard to large non-compliant provisions, the small companies are slightly over-represented in relation to the percentage that have large provisions, while the medium-sized and large companies are slightly under-represented. However, these differences are so small that the size of company is not immediately considered to have any great significance for the ability to comply with the provisions regulations. Using partial and multiple simple

linear regression analyses, DERA has examined whether there is a statistical correlation between the percentage of heating companies' non-compliant provisions and various characteristics of the companies. However, all of the test values in the regressions have shown that there is no statistically significant correlation between the characteristics selected and the percentage of provisions.

The regressions were completed on the basis of existing data held by the Secretariat. The same characteristics for the companies were used as in the DERA district heating statistics. These are price of heating in DKK for a standard detached house of 130 m² with an annual consumption of 18.1 MWh, size of company measured as budgeted annual sales in MWh, location (urban/rural), primary fuels, type of plant and ownership.

Other characteristics as explanatory variables such as the age of heating plants, changes in fuels, technological improvements and grid expansion, could possibly give statistically significant correlations with the percentage of companies' non-compliant provisions. However, DERA is not in possession of such data.

CONSIDERATIONS ON THE APPROPRIATENESS OF THE PROVISIONS REGULATIONS

The following are the arguments for and against provisions. The arguments can be summarised under four headings:

TABLE 5 | Distribution of provisions by heating companies in the budget years 2014-16, analysed by size

Figures are in percent	Small	Medium-sized	Large	Total
All companies*	55	32	13	100
Companies with provisions $\geq 7\%$	45	46	9	100
Companies with non-compliant provisions $\geq 7\%$	48	44	8	100

Source: DERA Secretariat

Note *The term 'All companies' refers to the about 400 heating companies supplying end-users. Therefore the figures in table 5 have been calculated in the same way as in table 4.

Note: In table 5, companies with heating sales of more than 100,000 MWh in their most recent price documentation have been categorised as large, while medium-sized companies have sales of more than 20,000 MWh.

- Savings and liquidity for investment
- Lower costs
- Price smoothing
- Liquidity for unforeseen expenses

Savings and liquidity for investment:

The objective of provisions is to enable heating companies to save and have liquidity for future investments. This may sound reasonable initially, because this means heating companies can secure liquidity for necessary investments.

DERA believes that, in general, heating companies can finance their activities easily and cheaply through borrowing because of the low risk linked to operating a heating-supply company. Moreover, the Heating Supply Act ensures that heating companies can have their costs covered by including depreciation and costs of borrowing in the price of heating.

Furthermore, if individual heating companies are unable to raise

financing for investment from a professional lender, for example if a lender will not grant a loan or will only do so at a very high interest rate, the company should reconsider whether the investment in itself is appropriate or whether the investment is appropriate in relation to the financial situation of the company. If a professional lender will not grant a loan to a heating company, it will usually not be advisable for the company to borrow for such investments from heating consumers via provisions.

Finally, savings in the form of provisions are in breach of the “simultaneity principle” by which users of a specific plant should bear the costs of such plant, as provisions are charged in advance of the launch of the investment. According to Statistics Denmark, on average about 10% of all households move between municipalities every year. Within the five-year period over which it is possible to make provisions, a relatively large proportion of households will therefore have to pay for provisions for a plant they will not be using. It is not possible to calculate precisely the percentage this applies to, as it depends on a large number of factors for which no information is available. For example, it depends on whether households move within the same heat-supply area, as moving between two municipalities does not necessarily mean a change in supply area. On the other hand, households that currently use district heating could move to a home without district heating, even if they move within the same municipality or heating area.

Lower costs: Heating companies obtain interest-free borrowing by having consumers lend them money for investment through provisions. Initially, this may seem a very desirable situation, as interest-free loans mean cheaper prices of heating.

However, in fact it is usually more expensive for heating consumers if heating companies make provisions, rather than financing investment via borrowing, as the average financing interest paid by heating companies is very likely to be lower than the average financing interest paid by heating consumers.

Furthermore, provisions hide the true financing costs because they are not included in the price of heating. Provisions mean that heating consumers make involuntary interest-free loans to the companies without knowing that they are doing so, and it does not appear on their heating bills. In terms of general economic theory, there is a less optimal result for society if the price of heating does not reflect the true societal cost of heat supply.

Price smoothing: Price smoothing means spreading the impacts on prices from investments over several years. District heating prices can already fluctuate significantly from year to year. For example, fuel prices can be volatile and this affects the price of heating. On the face of things, it may seem desirable for companies to smooth out district-heating price fluctuations through provisions. For example, as the provisions regulations allow heat-

ing companies to provide for up to 75% of an investment over five years before the investment is made, this in itself may cause large price fluctuations. The regulations that companies can depreciate the investment over 30 years has been assessed as sufficient to spread the impact on prices from the investment over many years.

Furthermore it was hardly the intention of the legislators that provisions should be used to reduce fluctuations in the price of heating that occur naturally when, for example, fuel prices fluctuate over time. If the legislators had wanted to allow price smoothing, they would have made this clear in the legislation. However, the Heating Supply Act builds on the principle of necessary costs, which secures the intention that the district-heating price is to reflect the true costs. I.e. if the costs of heating rise, the price paid by consumers should also rise, and vice versa.

Liquidity for unforeseen

expenses: Heating companies need liquidity for unforeseen expenses, and provisions can provide such liquidity.

Here too, on the basis of an overall assessment, DERA considers that provisions for unforeseen expenses will be more expensive for consumers than if heating companies finance their liquidity needs via borrowing. Again, companies can borrow more cheaply than consumers, and costs of borrowing can be written off over a long period by including them in the price of heating.

Overall, DERA assessed that there is no need for the provisions regulations, that it is best for society if companies finance their liquidity needs for investments and unforeseen expenses through

professional lenders, and that the true costs of this are reflected in the price of heating.

DERA has contacted the Ministry of Energy, Utilities and Climate in order to consider whether to repeal the provisions regulations in legislation. In addition to repealing the provisions regulations, other simplifications in the regulations should be considered in light of the expected modernisation of the regulations for the district-heating sector, as introduction of revenue caps with efficiency requirements and benchmarks is likely to increase the content and complexity of the current regulations.

Even though DERA's inspection survey shows that many heating companies have made non-compliant provisions for considerable amounts, the proposal to repeal the provisions regulations is not based on the results of the survey. In other words, even if all the companies complied with the provisions regulations, DERA would still consider that the regulations should be repealed for the reasons described above.

APPENDIX | DERA's new, more targeted control strategy

On the basis of the self-evaluation work on the district-heating area in 2013, DERA adopted a new, more targeted control strategy for the heating area in spring 2014. In light of a specific assessment, DERA has since selected risky areas for examination. The risk assessment primarily focuses on areas at risk of setting unfair prices for consumers. Moreover, the assessment also focuses on whether the companies are in compliance with the Executive Order on Notification and the Secretariat guidelines for preparation of budgets and price documentation.

In 2014, non-repaid excessive revenues were selected as the first focus area. Companies, which had excessive revenues for two consecutive years, and a rate of excessive revenues of more than 10% in the second year, were included in this control initiative. A total of 133 companies were selected on the basis of these criteria. Overall, 104 of these companies had repaid their excessive revenues to their heating consumers in full or in part by the end of 2014, corresponding to a total of DKK 469 mill.

Control in 2015

The Secretariat has ascertained that many companies do not comply with the provisions regulations. Therefore, the Secretariat selected provisions as a focus area in 2015, in accordance with the new, targeted control strategy. If the provisions are not observed, and the companies include provisions for investments in the price of heating, heating consumers will be charged a higher price for heating than the company is legally entitled to charge. In other words, provisions that are non-compliant with the regulations result in an excessively high price of heating.

A total of 94 companies were selected for further control on the basis of the size of their provisions relative to their costs. Of these companies, 30 companies were assessed to comply with the provisions regulations and were subsequently not included in the control initiative. A total of 64 companies were contacted by DERA because they did not comply with the provisions regulations. This corresponds to two out of three of the companies inspected. The 63 companies have included provisions totalling about DKK 226 mill.

The purpose of examining the companies' provisions is partly to ensure that the companies address the conditions that are non-compliant with the provisions regulations, including that the companies repay the provisions, and partly that in future, with guidance from DERA, the companies report and charge provisions in accordance with the regulations.

Control of non-compliant provisions is expected to be completed during the first half of 2016.

MEMBERS OF DERA

DERA comprises a chairman, vice chairman, five members, and two alternates appointed by the Minister for Energy, Utilities and Climate.

The members represent expertise in legal, economic, technical, environmental, business and consumer matters.

DERA MEETINGS AND EVENTS

DERA held eight meetings in 2015. Moreover, DERA went on a seminar during which DERA held meetings with several companies in the district heating sector.

DERA also held an external information and debate meeting in the form of an Energy Forum that included presentations and debate about DERA analyses. Companies and organisations from the energy sector as well as other authorities and stakeholders took part in the Energy Forum.



Uffe Bundgaard-Jørgensen,
MSc (Econ.), PhD, CEO

CHAIRMAN

Appointed for the period
1 Jan. 2012 - 31 Dec. 2016.
Alternate from 2001 - 2003.
Chairman from 2004.



Peter Skak-Iversen,
MSc - Economics

VICE CHAIRMAN

Appointed for the period
1 Jan. 2015 - 31 Dec. 2019.
Alternate in 2012. Member from
2013. Vice Chairman from 2015.



Ella Maria Bisschop-Larsen,
MSc, President

MEMBER

Appointed for the period
1 Jan. 2012 - 31 Dec. 2016.
Member from 2010.



Anita Rønne,
Associate Professor in
energy law, MSc - Law

MEMBER

Appointed for the period
1 Jan. 2015 - 31 Dec. 2019.
Member from 2012.



Jørgen G. Jørgensen,
MSc - Economics, CEO

MEMBER

Appointed for the period
1 Jan. 2012 - 31 Dec. 2016.
Member from 2012.



Bjarke Pålsson,
Chief Executive Advisor, BA,
MSc, Economics

MEMBER

Appointed for the period
1 Jan. 2015 - 31 Dec. 2019.
Member from 2015.



Holger Blok,
MSc Economics, Director

MEMBER

Appointed for the period
1 Apr. 2015 - 31 Dec. 2019.
Member from 2015.



Niels Erik Andersen,
MSc, PhD

ALTERNATE

Appointed for the period
1 Apr. 2012 - 31 Dec. 2016.
Alternate from 2012.



Birgitte Sloth,
Professor, PhD, MSc -
Economics, Vice Dean

ALTERNATE

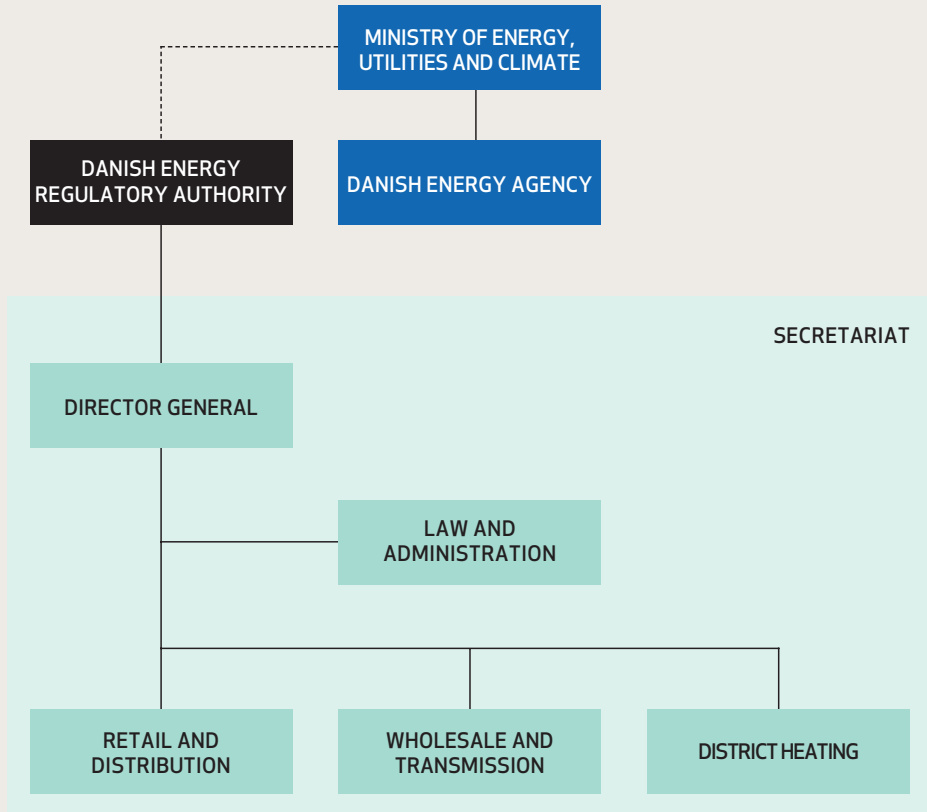
Appointed for the period
1 Jan. 2015 - 31 Dec. 2019.
Alternate from 2015.

THE DERA SECRETARIAT

The Secretariat prepares cases for processing by DERA and makes decisions in accordance with the practices and guidelines stipulated by DERA.

The management of the Secretariat comprises Finn Dehlbæk, director general, Pia Rønager, head of division for Law and Administration, Thorbjørn Nejsum, head of division for Retail and Distribution, Martin Windelin, head of division for District Heating, and Mads Lyndrup, head of division for Wholesale and Distribution.

DERA ORGANISATION



THE WORK OF DERA

DERA's main tasks are laid down in the three energy supply acts - the Electricity Supply Act, the Natural Gas Supply Act and the Heating Supply Act - as well as the Act on Energinet.dk.

DERA was established in 2000 as a regulator acting without powers of direction from the Minister and acting independently of sector interests and authorities. DERA is an independent authority the members of which are nominated by the Minister for, Energy, Utilities and Climate.

The DERA Secretariat is an independent authority which supervises the energy sector and provides secretarial services for DERA.

DERA can address issues and cases at its own initiative or on the basis of an enquiry by an enterprise or consumer etc. DERA will act in such matters if it assesses that the enquiry gives reason to suspect that there has been a violation of the law. If this is the case, the matter will be processed, irrespective of whether or not there is a formal complaint.

Rulings/decisions by DERA are published regularly on the DERA website www.energitilsynet.dk.

Decisions made by DERA can be brought before the Energy Board of Appeal by stakeholders with a significant and individual interest in the decision.

DANISH ENERGY REGULATORY AUTHORITY TASKS – IN BRIEF:

- supervises and regulates prices as well as terms and conditions for customers in the “natural monopolies” within the electricity, natural gas and district heating sectors.
- lays down efficiency requirements every year for electricity grid companies and natural-gas grid companies.
- supervises district-heating companies so as to ensure that they only include necessary costs in their prices.
- supervises and regulates Energinet.dk so as to ensure that only necessary costs are included in the company’s prices.
- regulates certain retail prices for electricity and monitors price developments on retail and wholesale markets for electricity and natural gas.
- participates in international collaborations for a well-functioning European market for electricity and natural gas.
- carries out specialist analyses of areas where mapping and innovative ideas are needed.

This means that DERA focuses on:

THE ELECTRICITY SECTOR

DERA’s tasks in the electricity sector focus on the natural monopolies; the electricity grid companies, as well as on the prices of electricity for supply-obligation customers and general monitoring of the prices on wholesale and retail markets.

The regulation covers electricity companies’ prices and terms for customers. Through revenue-cap regulation and benchmarking of the electricity grid companies, DERA puts an efficiency pressure on the companies which replaces the pressure from competition on free and well-functioning markets.

DERA regulates the electricity price of supply-obligation products and monitors developments in electricity prices on the rest of the

retail market and on the wholesale market.

Supervision also comprises approval of the methods applied by the grid companies to set tariffs and lay down terms and conditions for customers. Furthermore, the DERA Secretariat takes part in preparing legislation by issuing replies to consultations, and DERA also takes part in international partnerships etc.

THE NATURAL-GAS SECTOR

DERA's tasks in the natural-gas sector focus on the natural monopolies; the grid distribution companies, as well as on the prices for supply-obligation and basic-product customers.

The regulation covers grid companies' methods to set prices and lay down terms for customers. Through revenue-cap regulation and benchmarking of the grid companies, DERA puts an efficiency pressure on the companies. DERA also regulates the terms of use of the two Danish natural-gas storage facilities.

DERA supervises the prices of supply-obligation products and monitors gas prices on the retail and wholesale markets.

Furthermore, DERA takes part in preparing legislation by issuing replies to consultations, and DERA also takes part in international partnerships etc.

THE DISTRICT-HEATING SECTOR

DERA supervises consumer prices of district heating and the companies' delivery terms.

In the district-heating sector, the prices charged by companies are only allowed to reflect the costs necessary for production and distribution (non-profit regulation). DERA does not set efficiency targets for district-heating companies, but supervises that the costs are necessary costs.

THE SYSTEM-OPERATOR TRANSMISSION COMPANY, ENERGINET.DK

Energinet.dk is regulated in accordance with a non-profit principle, under which the tariffs charged by the company may only cover its necessary costs for efficient operation as well as a return to secure the real value of its basic capital as at 1 January 2005. DERA can determine that a specific cost, or the size of this, does not represent a necessary cost for efficient operation and therefore all or part of the cost cannot be included in Energinet.dk's tariffs.

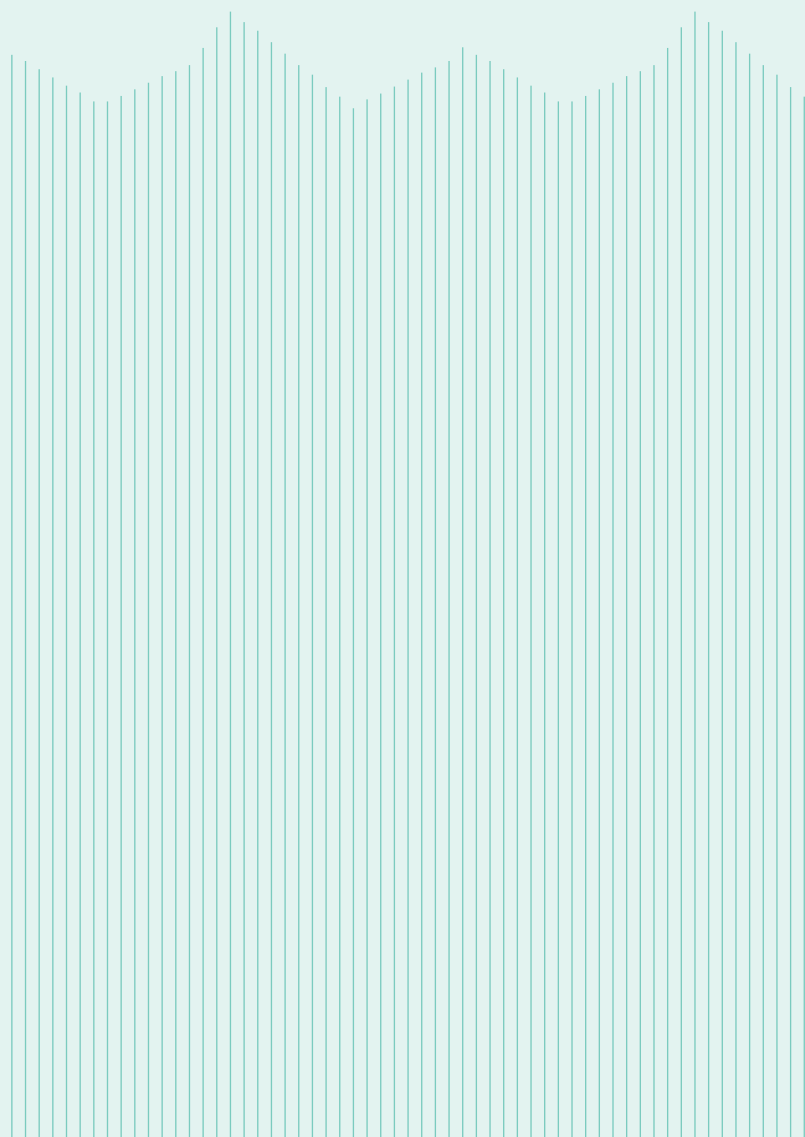


Figure 1. Percentage of respondents who believe that the U.S. should take more action to reduce global warming.

LARGER CASES FOR DERA

THE ELECTRICITY AREA

Supply-obligation prices

DERA has determined the maximum gross profit an electricity supply-obligation company is allowed to obtain by offering an electricity supply-obligation product to electricity consumers in 2016 and 2017. The maximum limit has been set at DKK 66.68/MWh, however, with the proviso that, if significant conditions or preconditions in the market for electricity are changed in this period, DERA can reassess the case. The maximum gross profit corresponds to an electricity supply-obligation company with a contribution margin of DKK 267 for delivery of supply-obligation electricity to an average household.

DERA's decision affects about ten percent of Danish consumers (2015 figures).

The Danish Parliament (the Folketing) has decided to abolish the supply obligation, which will cease completely in May 2017. Instead a delivery obligation will be introduced, which means that, in return for payment, all suppliers of electricity are to deliver electricity to household consumers who so request. In future, consumers themselves will have to actively choose their own electricity supplier instead of automatically receiving electricity from the supply-obligation supplier. Thus, consumers will no longer be able to passively receive electricity from a supply-obligation company.

Executive Order on Invoicing

In 2014, DERA laid down new rules on the format of electricity bills, so the rules reflect the changed division

of roles on the electricity market as a consequence of the wholesale model. The wholesale model and the new division of roles mean that in future suppliers of electricity have primary contact with customers.

These new rules were to have entered into force simultaneously with the wholesale model on 1 October 2015. However, the Electricity Supply Act was amended in May 2015, and the entry into force of the wholesale model was postponed until 1 April 2016. Moreover, amendments and clarifications were made to the Act regarding the wholesale model, and adjustments were made to the wholesale model in connection with amendments to the Electricity Tax Act.

Consequently, DERA has prepared a new Executive Order on Invoicing that reflects these changes. The new Executive Order²¹ enters into force on 1 April 2016, simultaneously with the wholesale model. Customers will no longer receive two electricity bills, and electricity suppliers will be able to send much simpler bills to customers. However, customers will be able to request a more detailed electricity bill.

Sector guidelines

According to the Electricity Supply Act, organisations in the energy sector can prepare standard guidelines that electricity companies can use as their own. DERA supervises such guidelines. DERA does not actually

approve these guidelines, but only reviews them.

The Danish Energy Association has prepared a number of new guidelines for the transition to the wholesale model on 1 April 2016. These guidelines reflect the changed division of roles in the electricity area, in which the electricity supplier is responsible for customer contact. DERA has subsequently reviewed all of these guidelines.

The Danish Energy Association has prepared a standard agreement between grid companies and electricity suppliers on the use of the distribution grid. This agreement regulates the relationship between grid companies and electricity suppliers on the use of the electricity grid, the electricity supplier's purchase of grid services from the grid company, division of responsibilities and payment terms between the parties.

As an annex to the standard agreement, the Danish Energy Association has drawn up terms and conditions for the level of service

²¹ Executive Order no. 1400 of 3 December 2015 on invoicing by electricity trading companies of their costs to electricity consumers

between grid companies and electricity suppliers. In a number of selected areas, the service terms and conditions contain detailed descriptions of the obligations of the parties according to the standard agreement. These include procedures and deadlines in connection with outages and re-opening the electricity supply as well as processing customer complaints.

With the wholesale model, the physical grid connection as well as the conditions and payment for this grid connection will still be regulated directly by agreement between the customer and the grid company. A set of guidelines on grid connection provisions has been drawn up to regulate this contractual obligation.

When supervising the guidelines, DERA must ensure that they do not contain terms and conditions in contravention of the Electricity Supply Act and other relevant provisions in the electricity area. DERA must ensure that use of the distribution grid according to the wholesale model is transparent, objective, fair and non-discriminatory. Finally, DERA must ensure that the terms and conditions in the guidelines do not go beyond what is required by the wholesale model and operation of the electricity system.

New website with electricity prices

The adoption of legislation on the wholesale model by the Danish Parliament (the Folketing) also meant that DERA became responsible for establishing a new website, Elpris.dk, on which consumers can compare products and prices from suppliers of electricity. The website will be available to consumers when the wholesale model is launched. The Danish Energy Association has previously run a similar website for companies in the sector.

According to legislation, the Elpris.dk website must:

- be free and available to the public on the internet
- ensure transparency about electricity prices, discounts and terms
- ensure that consumers can compare offers on an informed basis, and
- promote competition and a more efficient market.

All suppliers are obliged to report their prices to Elpris.dk, so that electricity customers with an annual consumption of up to 100,000 kWh can compare and view offers and prices.

Prior to the opening of Elpris.dk, DERA has been in close dialogue with stakeholders such as trade associations, suppliers of electricity, brokers, the Danish Consumer Council and other authorities. Moreover, a number of consumers have taken part in various tests to ensure that the website is easy to use.

Market regulations

The wholesale model has made Energinet.dk revise companies' market regulations and meter regulations.²² More specifically the regulations that regulate terms and

²² Energinet.dk's market regulations and meter regulations are Regulation D1: Settlement metering, Regulation H1: Change of supplier, move-in/move-out etc., Regulation H2: Load-profile settlement etc. and Regulation H3: Settlement of wholesale services and taxes.

conditions for access to the data hub at retail-market level, including rules on when to register and collect metering data.

In order for Energinet.dk to be able to use these regulations, DERA must approve the methodological elements in the regulations, and DERA has granted this approval. However, regulations still pending must also be in place before the wholesale model enters into force.

Energinet.dk's data hub manages metering data and business processes for the about 3.3 mill. metering points – places of consumption – in Denmark. For example, suppliers of electricity report change of supplier in the data hub, whereas grid companies submit consumer metering data to the data hub. These are the ground rules for the many processes laid down in codes and regulations from Energinet.dk.

The wholesale model is a new market model with rules set in advance. Therefore, it is uncertain whether all terms and conditions, deadlines etc. will make the data hub – and thereby the retail market – work optimally. DERA will therefore monitor phasing-in of the rules, and after a year Energinet.dk will conduct an evaluation to assess whether the rules and deadlines are appropriate.

Remotely-read electricity meters

All "traditional" meters registering and calculating customers' electricity consumption throughout Denmark must be replaced by remotely-read meters by 2020 in accordance with a decision by the Danish Parliament (the Folketing).

Remotely-read meters are a further development of "traditional" electricity meters, and have many benefits for customers and stakeholders on the electricity market. With remotely-read meters, electricity companies

receive more detailed knowledge about the supply grid and consumption patterns. With the new meters, customers no longer have to read their meters as this will take place automatically.

DERA has approved a model that the grid companies can use to finance the deployment of remotely-read electricity meters. This model entails an increase in the grid companies' regulation price; the companies' maximum permitted revenue per kWh. In practice, the approval means that grid companies that, following the decision by the Danish Parliament (the Folketing), have to bear costs of installing new remotely-read meters, can charge consumers for any additional costs associated with the investment.

Each year, by no later than 31 May in the accounting year, grid companies can submit an application to DERA to increase the regulation price.

Tariff model for flex charges

DERA has considered new sector guidelines from the Danish Energy Association on tariffs for grid customers. The most significant new aspect is that the guidelines contain a model on how electricity grid companies can introduce time-differentiated tariffs, also called flex charges, in connection

with the introduction of the whole-sale model. Time-differentiated tariffs enable grid companies to set high tariffs at some times during the day and low tariffs at other times. Hopefully, this will move consumption away from times when the demand is highest.

The sector guidelines are the Danish Energy Association's recommendations to the grid companies, and therefore do not replace the companies' own calculations of tariffs. Accordingly, each company's method to calculate tariffs must still be approved by DERA.

DERA has taken note of the guidelines on the condition that the Danish Energy Association resubmit the guidelines together with an evaluation of experience by no later than two years after the model has been introduced.

Necessary new investments

DERA has received an extraordinary number of applications to increase the revenue caps for electricity companies. The financial regulation of electricity grid companies is designed such that the grid companies can apply for an increase in their maximum permitted operating revenues, the so-called revenue caps, when the companies

have made certain types of new investment, e.g. supply to new building areas, significant reinforcement of the grid, overhead to underground conversion of aerial cables as well as collaboration with Energinet.dk. These investments are called "necessary new investments".

Up to 2015 there has been no deadline for when grid companies could submit applications for revenue cap increases as a consequence of necessary new investments. In practice this means that companies have been able to apply for revenue cap increases for fixed asset investments launched in each year since 2005 when the regulations entered into force.

However, in May 2015, DERA announced that in future the DERA Secretariat can transfer to a practice where grid companies are to submit applications for necessary new investments in connection with the financial reporting for the relevant launch year. Later that month, the DERA Secretariat informed the grid companies about the transition to the new practice. Furthermore, the Secretariat announced that applications based on necessary new investments launched in 2005-2014 had to be submitted to the Secretariat by no later than 31 December 2015, otherwise the right to retrospective revenue cap increases as a consequence of necessary new investments would lapse.²³

Following this announcement, the grid companies submitted an extraordinary number of applications. The DERA Secretariat received about 220 applications for necessary new investments in 2015. The Secretariat received 27 applications for necessary new investments in 2014 and 38 applications in 2013 for comparison.

²³ Unless the retrospective revenue cap increases are significant.

The applications primarily concern investments in overhead to underground conversion of aerial cables.

New financial regulation

The Minister for Energy, Utilities and Climate has set up two expert groups to help draw up new financial regulation for electricity grid companies. According to the terms of reference of the groups, new regulation is to increase the efficiency of grid companies, ensure the necessary investments in the electricity grid, and support the green transition.

The expert groups are to suggest a new benchmarking model and a market rate of return on future investments by electricity grid companies, called WACC.

Birgitte Sloth, an alternate in DERA, is the Vice Chairman of the WACC expert group. Holger Blok, a member of DERA, is the Vice Chairman of the new benchmarking-model expert group. Both working groups are receiving secretariat services from the DERA Secretariat.

Nord Pool Spot approved as market operator

DERA has appointed the Nord Pool Spot electricity exchange as the first market operator (Nominated Electricity Market Operator), in Denmark for the next four years.

A regulation adopted by the EU entailed that each Member State had to appoint one or more market operators in the electricity area. The appointment of Nord Pool Spot entails that Nord Pool Spot has been appointed to implement single day-ahead and intraday coupling in the two Danish bidding zones west and east of the Great Belt, respectively.

Method approval of strategic reserves procurement

DERA has approved the method behind Energinet.dk's procurement of 200 MW strategic electricity reserves in eastern Denmark for the period 2016-2018, and procurement of an as yet undetermined amount for 2019-2020. Energinet.dk's procurement of strategic reserves can be described as procurement of reserve capacity to be used as intervention in the market to ensure security of supply. In practice, when there is not enough capacity on the market.

DERA's approval of the method to procure strategic reserves requires DERA to approve Energinet.dk's procurement in accordance with the rules on security of supply, and the European Commission to approve any state aid issues.

DERA's approval is based on the requirement that all plants receiving a basic amount (decoupled subsidy for small-scale CHP plants) are able to take part in both tendering procedures, provided that the criteria for additional capacity have been met (i.e. the basic amount may not exceed 60% of the necessary costs to keep the plant operable). Any revenues earned by Energinet.dk in connection with procurement

of strategic reserves, including any penalty payments, will be included in the overall accounts for the strategic reserve and will help reduce the overall costs.

Two tendering procedures for procurement of strategic reserves can be held, as needs are different in the two periods. The necessary capacity to retain security of supply for the period 2019-2020 has not yet been determined, but is expected to be lower than from 2016-2018. A strategic reserve may not be necessary in 2019-2020.

However, Energinet.dk has subsequently announced that the European Commission is not currently able to approve Energinet.dk's plans to procure strategic reserves for the period 2016-2018. The European Commission believes that the planned tendering procedure for strategic reserves conflicts with the regulations on state aid. Thus Energinet.dk does not expect to complete the tendering procedure within the framework stipulated and has therefore cancelled the tendering procedure.

Bottleneck between Denmark and Germany

Since 2012, there have been restrictions in the transmission grid

between the Nordic countries and Germany, especially between western Denmark, DK1, and Germany. This is despite the fact that the nominal import and export capacity of the transmission line between western Denmark and Germany has increased since 2001 from 1,200 MW to 1,780 MW. However, the available capacity for the market – the trading capacity – has been decreasing since 2010.

The restrictions do not just affect Denmark, they also impact the other Nordic countries. The transmission grid between western Denmark and Germany is the only land connection between the Nordic countries and Central Europe.

The reduced trading capacity is attributable to an increasing volume of wind power in northern Germany and restrictions in the transmission capacity between north and south in Germany. However, the German transmission system operator (TSO) has started improving the transmission grid, although during the expansion phase the grid will be under further pressure, and the expansion has a long time horizon.

This situation is not satisfactory. Therefore, the Secretariat has been in close dialogue with the German regulator, Bundesnetzagentur, and the involved TSOs, TenneT TSO GmbH and Energinet.dk. The Nordic regulator cooperation, NordREG, has received a request from Nordenergi, a joint collaboration between the Nordic electricity organisations, regarding the compatibility of the capacity restrictions with European regulation. As a consequence NordREG has invited the German regulator, Bundesnetzagentur to present their view on the content of the letter from Nordenergi along with its establishing of a working group within the auspices of NordREG to address the capacity restrictions.

Energinet.dk's annual report 2014

DERA must approve Energinet.dk's annual reports as part of the financial regulation of the company. Energinet.dk plays a pivotal role on the electricity market as well as on the gas market, and the company's financial situation and performance are therefore important.

DERA has no accounting or auditing tasks and obligations in connection with processing Energinet.dk's annual report. However, DERA may impose corrections on the annual report.

DERA has two tasks with regard to financial regulation of Energinet.dk:

- supervising and approving calculations and settlement of over or under coverage
- indexation of Energinet.dk's basic capital.

In 2015, DERA informed Energinet.dk that DERA had no corrections to the company's annual report for 2014.

THE NATURAL GAS AREA

Efficiency requirements for gas-distribution companies

In 2013, DERA lowered the cap on the maximum permitted revenues for the three grid-distribution companies in Denmark. The revenue cap was lowered by a total of DKK 20 mill. from 2014 to 2017.

DERA's efficiency requirements are realised in annual, individual requirements for each of the three companies. These will be between 0.6% and 2.05% greater efficiency every year from 2014 to 2017.

Grid companies are not subject to competition and therefore DERA regulations aim at encouraging these

companies to be more efficient by lowering the cap on their revenues.

DERA has twice previously set efficiency requirements for the grid companies, in addition to the current regulation period from 2014 to 2017. DERA has lowered the maximum permitted revenues for the grid companies by a total of DKK 57 mill. (2012 prices) in the three regulation periods initiated in 2006.

Accelerated debt settlement

Dong Gas Distribution has received approval from DERA to shorten the term of years for the company's settlement of debts. This change means that settlement of the company's debt will be shortened by one year from 2024 to 2023, and that the tariff paid by the consumers will therefore be adjusted to reflect this. At the beginning of the settlement period, the new term will increase the average tariff. This is counterbalanced by a reduction in tariffs in the period up to the new date of settlement.

Competition on the Danish wholesale market for natural gas

An analysis conducted by DERA shows that competition on the

Danish wholesale market for natural gas is not strong enough.

The analysis indicates that the market is relatively concentrated, and just a few players dominate the gas market. The analysis also shows that market coupling to the Continent could be better. Thus DERA has concluded that, over a number of years, there has been a systematic export of gas to Germany in conflict with price signals.

However, the analysis also shows that the Danish wholesale gas market is developing positively: Expansion of the gas infrastructure has enabled imports of gas from the European Continent, and these imports can potentially cover Danish as well as Swedish gas consumption. Activity on the Danish gas exchange is also increasing, both in terms of number of transactions and volume.

Moreover, the general trend on the north and west European gas markets – and the Danish market – has resulted in the price on the Danish gas exchange now following prices on the other gas markets. The Danish wholesale price is now almost at the same level as on the largest gas markets in the Continent.

Congestion management

DERA has approved a method to manage contractual congestion; the CMP Guidelines. This method is a result of EU regulations that harmonise regulations in the gas area.

CMP is to help return to the market unused transmission capacity at interconnection points with contractual congestion. Contractual congestion occurs if the demand for transmission capacity is greater than the capacity a transmission company has available for sale.

The CMP Guidelines require a scheme to be in place in which network (grid) users are entitled to return firm capacity purchased by the network user at an interconnection point – except for capacity products with a maturity of 24 hours or less. The TSO can then offer the returned capacity to other users. Network (grid) users themselves decide whether they want to return their capacity, and this instrument can be viewed as a possible alternative to the secondary market to dispose of unused capacity.

The CMP guidelines also require a shipper to partially or fully lose its transmission capacity purchased on long-term contracts (more than one year), if the shipper has systematically “under-utilised” the capacity purchased. Systematic under-utilisation is defined as a situation in which a network user uses less than on average 80% of its longer-term capacity purchased.

A third tool is an over-subscription and buy-back scheme in which the TSO sells more capacity than is actually available in the transmission system. Typically, network users do not use all the transmission capacity they have bought because they make sure they buy plenty of capacity in relation to the gas they need to supply. Therefore, it makes sense to offer more capacity than the technical capacity, and the TSO must then buy back capacity from the market if the network users need to

use all the capacity bought at a given time. All network users with capacity must be entitled to offer a price at which they are willing to sell back their excess capacity.

The three CMP tools above were introduced in Denmark on 1 October 2015.

WHOLESALE MARKET FOR ELECTRICITY AND NATURAL GAS

REMIT

DERA is a national supervisory authority in relation to European Parliament and Council Regulation of October 2011 on integrity and transparency on the wholesale energy markets for electricity and natural gas, the REMIT Regulation. The purpose of REMIT is to encourage open and fair competition on the wholesale markets for the benefit of end consumers and market participants.

DERA is to ensure that prices set on wholesale energy markets, and which affect retail prices, reflect a fair and competitive interplay between supply and demand, and that no profits can be drawn from market abuse. Violations of REMIT are liable to imprisonment of up to six years.

For the first time ever, in spring 2015, DERA asked the Public Prosecutor for Serious Economic Crime to initiate a police investigation as to whether a company had violated the prohibition against market manipulation in connection with trade in an energy product on the Danish wholesale market for natural gas. The Public Prosecutor for Serious Economic Crime has closed the investigation. The Public Prosecutor for Serious Economic Crime based its decision on the fact that the investigation and collection of trading data carried out did not provide grounds for reasonable suspicion that a criminal act had been committed. DERA subsequently considered the case closed.

In summer 2015, the DERA Secretariat prioritised on providing assistance to market players in connection with registration of market participants. All market participants included in transactions on the wholesale energy markets for electricity and natural gas in Denmark must be registered in the register. Registration must be completed before a player enters into transactions which are to be data reported. Registration was therefore a very comprehensive task for the market players in the months preceding 7 October 2015 when the first part of ACER's data reporting began. Data reporting is working according to plan, and trade in all standard contracts is now being reported to ACER; the European regulations authority.

Furthermore, in 2015 DERA placed high priority on collaboration with ACER on IT security. Thanks to DERA, Denmark is the fourth European country to have been awarded preliminary approval of its IT security measures. The requirements were imposed by ACER, and all European inspection authorities are to live up to these requirements in order to gain access to the information reported to ACER.

Moreover, DERA has focused on collaboration with the Nordic

and Baltic regulators to ensure a coordinated and consistent regional approach to enforcement of the Regulation and regional monitoring.

THE DISTRICT-HEATING AREA Exemption from the Notification Executive Order (anmeldelses- bekendtgørelsen)

DERA has decided not to grant exemption from the Notification Executive Order (anmeldelses-bekendtgørelsen) in the heating area as requested by a heating supply company.

The company requested exemption such that the company: 1) is not obliged to report budgets, but only price documentation, 2) is not obliged to report depreciation in budgets, or may adjust the depreciation charged through the price of heating in its price documentation, such that over or under coverage does not occur, and 3) may budget under coverage of the price of heating.

DERA emphasised that the Heating Supply Act requires that the basis for the price of heating must be reported to DERA together with the price of heating, and that depreciation is a cost set by the management according to the depreciation rules at the time of budgetting. DERA found that the size of depreciation in the price documentation must correspond to the budget, and

that the depreciation rules cannot be applied to rectify an incorrectly charged price. Finally, DERA found that the company's settlement at the replacement price did not result in under coverage of the price of heating, but in a loss. The maximum price regulation in the Heating Supply Act means that losses can be budgetted and realised.

Refusal to enforce a decision

DERA has decided to cancel parts of the decision on supervision from 2002. In 2002, DERA ordered the former NESAs Varme A/S to pay either:

- the cost-determined price of heating from NESAs Produktion A/S for supplying heat to Boligforeningen AAB (a housing association), afd. 39 in Hjortekær
- or the substitution price for the same amount of heat from an alternative boiler, also to Boligforeningen AAB afd. 39.

The reason behind this case was a request from the housing association to impose the 2002 order. The price mentioned as the substitution price was not NESAs Varme's substitution price as understood pursuant the provisions on public pricing in the Heating Supply Act, but was a price agreed privately between the two companies. As a consequence of a number of subsequent decisions by the Danish Energy Board of Appeal, it was assessed that DERA was not able to enforce the decision with regard to the use of the substitution option laid down in the heating supply agreement.

Costs allocation at a CHP plant

DERA has declared that the allocation of costs between heating and waste at Odense Kraftvarmeværk must be 60/40 in the period 2000-2010. DERA's declaration meant that about DKK 59 mill. had to be reversed from waste to heating.

The case was remitted from the Danish Energy Board of

Appeal. The Board of Appeal remitted the case to DERA for renewed processing with regard to assessment of a number of aspects, including especially assessment of Odense Kraftvarmeværk's financial capacity to include the reversal, a more distinct division between specific and shared costs as well as assessment of the resulting prices with regard to relevant benchmarks. Following an overall assessment of the relevant benchmarks, DERA found that shared costs had to be allocated at 60% for heating and 40% for waste.

The parties in the case subsequently told the Secretariat that they would consider the declaration.

Retroactive reallocation of taxes

DERA decided that costs for taxes on waste used as fuel ("supplementary tax") and costs for CO₂ tax on non-renewable waste used as fuel, can only be included in the price of heating from the date of notification to DERA.

In 2014, Odense Kraftvarmeværk entered into an agreement with Gartnernes Fjernvarmeselskaber (a company that supplies heating to horticulture and private households) on allocation of the plant's costs between the horticulturists and the waste suppliers. The parties wanted the reallocation of taxes and other costs to be effective from 1 January 2010 and 1 January 2013, respectively. However, DERA assessed that taxes could not be included retroactively. DERA also rejected an exemption request. DERA assessed that exemption cannot be granted after the date of notification, as such exemption would conflict with the principles in the Heating Supply Act stating that notification must take place in advance. Furthermore, DERA assessed that exemption cannot be granted with a view to derogating from the time when taxes can be recognised in the price of heating pursuant to the Heating Supply Act.

DERA's decision was brought before the Danish Energy Board of Appeal, where it was upheld.

Principles when calculating the basis for return

DERA has issued a statement on how heating supply companies are to address several aspects relating to calculation of their basis of return. This statement includes a decision on how DERA's administrative basis from 2008 should be applied to calculate district-heating assets as at 1 March 1981 with associated list of components. Among other things, DERA decided the documentation requirements to be imposed on heating-supply companies that want to calculate their basis for return using this administrative basis. The statement will form the basis for the Secretariat's decisions in pending as well as future cases about application for permission to include the return on subscribed capital in the price of heating.

LARGER CASES IN INTERNATIONAL COOPERATION

International cooperation concentrates on two overall themes:

- Completion of the EU single market for energy, as decided by heads of state and government in 2011. The European regulator plays an important role in the design of common market rules and terms for the electricity and natural gas markets. The work focuses on forming common and harmonised rules for market access to the grids and tariffing methods.
- Establishment of a common Nordic end-user market for electricity to which the Nordic Council of Ministers has asked the Nordic regulators to contribute. The regulators assist in the work, but have also pointed out to the Nordic Council of Ministers that work on implementation of the market is proceeding at a different pace in the various Nordic countries.

HARMONISATION OF RULES ON THE SINGLE MARKET

As part of work on developing the single energy market in the EU, ACER, the European regulation authority, is focusing on collaborating with national regulators to complete the ground rules (framework guidelines and network codes) to produce minimum common rules for the energy markets.

Framework guidelines prepared by ACER and the national regulators set the framework for the network codes. On the basis of this framework, the European Network of

Transmission System Operators (TSOs) within electricity and gas will develop detailed rules in the network codes which define the common ground rules for market and network players. The codes will subsequently be presented to ACER, and ACER will check whether the network codes are compatible with the framework guidelines. If this is the case, ACER will recommend the European Commission to adopt the network codes. Finally, the Commission will submit the network codes to the decision-making process (comitology), after which the codes will be binding at EU level.

The DERA Secretariat is participating in harmonisation of the ground rules for both the electricity and natural-gas markets.

The status of this work can be summarised as follows:

Electricity: The Commission has issued a Regulation establishing a "Guideline on Forward Capacity Allocation (FCA)".

The specific purpose of this Regulation is to establish common rules on tenders of physical transmission rights (PTR) between bidding zones. PTR are used by market players primarily as a financial tool to hedge price differences between the different bidding zones. The Regulation is expected to enter into force in the first half of 2016.

In addition, the Commission has decided on three network codes concerning technical rules on connection to the electricity grid. The three network codes, Requirements for Generators (RfG), Demand Connection (DCC) and High Voltage Direct Current Systems and DC-connected Power Park Modules (HVDC), are expected to enter into force during 2016.

Gas: The EU has come relatively far in implementing the harmonised European network codes to be established pursuant to the European Gas Regulation. The most important network codes have either been adopted or are about to be adopted.

Capacity allocation

The capacity allocation network code, NC CAM, has already been published and is to be used from 1 November 2015. The network code harmonises the way in which transport capacity in the gas pipes is allocated. Thus, from 2015, all transmission capacity must be sold

via auctions, and these auctions must be carried out on one or a few online booking platforms. The network code harmonises transmission products (year – quarter – month – day-ahead – intra day) across Europe. The Danish Energinet.dk is a joint owner of the leading European booking platform, PRISMA. PRISMA holds regular auctions of the capacity products mentioned above, and the platform meets all the requirements of the network code.

Balancing

The balancing network code, NC BAL, has been published and is to be used from 1 October 2015. According to the network code, balancing must be market based, i.e. shippers (and not the system operator) must generally address their own imbalances, i.e. the difference between the supply of gas to the transmission system and consumer demand.

Therefore, the network code contains rules that shippers must generally be able to buy and sell

gas at short notice (intra-day and day-ahead) on trading platforms available for balancing. The network code also imposes minimum requirements on the demand data shippers have to receive in order to be able to balance their portfolios. Moreover, the network code defines rules for how to settle imbalances. The principle is that daily imbalance charges will provide shippers with an incentive to take action to remain balanced.

In Denmark, DERA has already approved a new balancing model for the Danish gas market. The model implemented the European network code, and the Danish gas exchange, Gaspoint Nordic, is now a trading platform for purchases/sales of short-term products for balancing.

A condition for approving the balancing model was that Energinet.dk had to evaluate the overall model together with the shippers, and submit the results of the evaluation to DERA by the end of 2015. The evaluation is currently being assessed by the Secretariat.

Interoperability and data exchange

The network code on interoperability and data exchange rules, NC INT, has been published and is to be used from 1 May 2016.

This network code is a technical code harmonising the contractual basis between system operators across borders. The network code also harmonises data exchange formats between system operators, and

includes provisions on common gas units, gas quality and control of gas flows.

So far, the network code has not given rise to DERA having to approve new methods for the Danish gas market.

The common Nordic end-user market

For many years, the organisation of Nordic energy regulators, NordREG, has worked on developing the Nordic electricity market. In recent years the organisation has focused on establishing a Nordic retail market for electricity through more competition, improved efficiency and greater consumer satisfaction.

Using a comparative analysis, NordREG has focused on three reports which have studied regulation and legislation on Nordic end-user markets.

One report surveys the positions of grid distribution companies and the system operators as well as their responsibility with regard to exchange of data and access to data. The report shows that regulation of the Nordic markets and their market rules on data exchange are comparable. However, progress on developing a data hub has been very different in the Nordic countries, and so far Denmark is the only country to have implemented a data hub.

The incentive to install remotely-read electricity meters is analysed in the second report. This report surveys consumers' possibilities for flexible electricity consump-

tion using remotely-read meters, thereby improving the efficiency of their energy consumption.

The third report shows the similarities and differences between the responsibilities and obligations of system operators and grid companies with regard to energy services on national markets.

Moreover, NordREG is currently examining the entry barriers faced by new suppliers before they enter the electricity market. In 2015, NordREG prioritised and identified the most significant barriers which should be given special attention in the onwards harmonisation of the Nordic electricity market.

Moreover, NordREG is currently examining inspection authorities' powers with respect to cross-border activity by foreign suppliers and grid companies.

CASE PROCESSING

The primary task of DERA is to decide important, principle cases which determine a practice for the area. The DERA Secretariat processes and decides cases on the basis of the practice set by DERA.

DERA

In 2015, DERA processed 23 decision cases and 6 briefing cases (see table 6). Decision cases are at par with the year before.

In 2015, DERA had average case-processing times for supervisory cases of nine months, as only case-processing times on decision cases are measured (see table 7).

Case-processing times for supervisory cases were 11 months in 2014. Case-processing times for DERA cases vary from year to year, see table 7. In recent years, the Secretariat has introduced a number of initiatives to improve case processing. However, complex and comprehensive cases still have a relatively long case-processing time.

THE DERA SECRETARIAT

The average processing time for secretariat cases was 4.5 months in 2015. The average processing time was five months in 2014 and seven months in 2013.

The total number of cases in the Secretariat was 1494 in 2015 against 1559 in 2014 (see table 8).

The calculation of the number of cases only includes cases which have been decided. Thus cases regarding advice by telephone and information to individuals, companies and the press are not covered by the statistics. This also applies to reporting by energy companies of prices, dialogue with international collaboration partners and similar.

TABLE 6 | Cases processed at DERA meetings 2014 and 2015

	2014 decision	2014 briefing	2015 decision	2015 briefing
Electricity	7	5	13	2
Natural gas	7	2	3	1
District heating	4	4	5	2
Cross-sectoral	5	7	2	1
Total	23	18	23	6

Source: The DERA Secretariat

TABLE 7 | Average processing time for supervisory cases from 2012 - 2015, months

	2012	2013	2014	2015
DERA (decision cases)	9	7	11	9

Source: The DERA Secretariat

TABLE 8 | Cases in the DERA Secretariat

	2012	2013	2014	2015
Total number of cases	1391	1831	1559	1494
Decided cases*	1210	1200	793	784

Source: The DERA Secretariat

Note *: The method of calculation for decided cases in 2012 and 2013 comprises decisions in a broader sense and also includes information, guidelines and replies to consultations for other authorities, etc. From and including the 2014 calendar year (marked in red), the calculation of decided cases only includes cases which are decisions in a narrow sense, i.e. statements where the authority, in relation to a specific addressee, or limited group of addressees, unilaterally decides what is or should be correct in a specific situation. This explains why there seems to be a fall in the number of decision cases in 2014 and 2015 compared to previous years.

THE ENERGY BOARD OF APPEAL

Among other things, the Energy Board of Appeal processes appeals against decisions by DERA and figures for 2015 show that the Energy Board of Appeal has decided 11 cases arising from DERA or the DERA Secretariat.

For developments in cases appealed to and decided by the Energy Board of Appeal see table 9.

The rate of cases reversed varies from year to year. Among other things, the differences are related to the fact that DERA is the first instance and therefore deals with cases where new legislation is to be interpreted and translated into practice for the first time. The number of appeals cases about such "new interpretations" may affect the number of remissions, for example.

The number of cases decided by the Energy Board of Appeal must also be seen in context with the number of cases decided by DERA and the DERA Secretariat. Around 800 cases a year are decided by DERA or the DERA Secretariat. Therefore, only a modest percentage of decisions are brought before the Energy Board of Appeal.

TABLE 9 | Cases in the Energy Board of Appeal arising from DERA

	2012	2013	2014	2015
Number of cases decided by the Board of Appeal. Of which:	15	17	23	11
- upheld	6	10	13	10
- repealed/partially changed, partially remitted	7	3	5	1
- concluded without decision	0	0	3	0
- dismissed by the Board of Appeal	2	4	2	0
Rate of cases reversed	54	23	28	9

Note: *The rate of cases reversed is calculated as the total number of cases annulled/amended/remitted divided by the total number of cases decided less cases dismissed or concluded without a decision.*

FINANCING

Work by DERA is financed by the enterprises that are supervised in accordance with the Electricity Supply Act, the Natural Gas Supply Act and the Heating Supply Act. The detailed regulations are included in executive orders on payment²⁴ for services supplied within each of the three areas.

Payroll costs increased by DKK 1.9 mill. from around DKK 45 mill. in 2014 to DKK 47 mill. in 2015 (table 10). This increase is primarily due to new assignments as a consequence of participating in two expert groups set up by the Minister for Energy, Utilities and Climate. The two expert groups are to help draw up new financial regulation for electricity grid companies. Both working groups are receiving secretariat services from the DERA Secretariat.

Furthermore, DERA has spent additional resources to settle cases in which electricity-grid companies have applied for increases in revenue caps in the form of necessary new investments launched in any year from 2005.

FEES ACCOUNTS

Results for 2015 show a total over coverage of DKK 2.5 mill. of which DKK 3.5 mill. are from the electricity sector and DKK 1.9 mill. are from the heating sector. In the gas sector, under coverage for the year is at DKK. 2.9 mill. Total under coverage in the gas sector rose from DKK 4 mill. in 2014 to DKK 6.8 mill. in 2015 (table 11).

The under coverage in the gas area is due to declining revenues from fees due to a fall in the amount of natural gas sold. In addition, new legislation has necessitated increased supervision measures. Fee income from the natural gas area is expected to increase as fees will be raised from 2016. Under coverage is expected to be settled over a four-year period.

The accumulated fee balance amounted to around DKK 19 mill. in the electricity area and around DKK 13 mill. in the heating area. The fee balance can be used for new assignments in the supervision area or be paid back to consumers. New known assignments include operation of a new electricity price guide, Elpris.dk, secretariat services for the expert groups about new electricity regulation and increased resource consumption for new assignments as a result of amendments to the Heating Supply Act (regulation of cooling and heating installations and rules about municipal guarantees).

²⁴Executive Order no. 835 of 27 June 2013 on payment for processing by authorities in accordance with the Electricity Supply Act, Executive Order no. 1358 of 30 November 2015 on payment for processing by authorities in accordance with the Heating Supply Act and Executive Order no. 1477 of 8 December 2015 on payment for processing by authorities in accordance with the Natural Gas Supply Act.

TABLE 10 | Costs in DKK mill.

	2014	2015
Payroll costs	29.5	30.7
Operating costs	15.6	16.3
Total costs	45.1	47.0

TABLE 11 | Fees, DKK mill.

	Electricity	Gas	Heating	Total
Balance brought forward from 2014	15.8	- 4.0	11.2	23.1
Fees 2015	27.0	7.3	15.2	49.5
Costs recognised	23.6	10.1	13.3	47.0
Accounting results	3.5	- 2.9	1.9	2.5
Balance carried forward	19.3	- 6.8	13.1	25.6

NEW LEGISLATION

Postponement and adjustment of the wholesale model (Act to amend the Electricity Supply Act no. 577 of 4 May 2015).

The wholesale model, which entails conversion of the electricity retail market and the distribution of roles between grid companies and electricity companies, was originally adopted in 2012 and was to enter into force on 1 October 2014, see the Electricity Supply Act no. 575 of 18 June 2012. The wholesale model has subsequently been adjusted and postponed to 1 October 2015 by Act no. 633 of 16 June 2014.

With the latest amendment to the Electricity Supply Act (Act no. 577 from 4 May 2015), the launch of the wholesale model and the delivery obligation were set at 1 April 2016, such that the necessary adjustments of IT systems and administrative procedures could be implemented before the launch.

Among other things, the latest amendment means that the grid

companies are responsible for payment of taxes instead of the electricity-trading companies. In connection with the introduction of the wholesale model, the electricity-trading companies were originally envisaged to be responsible for payments of taxes. The changed distribution of roles ensures the same guarantees regarding payment of electricity taxes as today, where the grid companies are responsible for this. In order to protect the grid companies against losses that may arise if an electricity-trading company does not pay electricity taxes to the grid company, the grid companies can include such losses in their revenue caps, so that the revenue caps do not limit the grid companies' possibilities to include losses on electricity taxes in their grid tariffs.

New Executive Order on the duties and obligations of electricity-trading companies in connection with the supply of electricity to electricity customers, the Electricity Supply Executive Order (Executive Order no. 1233 of 6 November 2015).

In connection with the introduction of the wholesale model and the delivery obligation on 1 April 2016, a new Executive Order on the duties and obligations of electricity-trading companies in connection with the supply of electricity to electricity customers was issued following the entry into force of the wholesale model.

This Executive Order includes regulations on consumer agreements regarding supply of electricity, including

regulations on contracts, notification of amendments to contracts, payments for supply of electricity, change of electricity-trading company, complaints etc.

Moreover, the Executive Order includes regulations on deadlines for household consumers to provide collateral for future payments, and regulations on notification of termination of supply agreements from electricity-trading companies if collateral is not provided, etc. The Executive Order also stipulates that fixed-term agreements with consumers are not allowed.

New executive order on invoicing by electricity-trading companies of their costs to electricity consumers (executive order no. 1400 of 3 december 2015).

In connection with the introduction of the wholesale model on 1 April 2016, a new Executive Order was issued describing invoicing by electricity-trading companies of their costs to electricity consumers.

This Executive Order includes regulations on the minimum information to be included in an energy bill in the form of the period statement and in the on-account invoicing. Overall this is a simplification of previous regulations. Moreover, the Executive Order stipulates that, on request, electricity consumers may be granted access to a more detailed period statement and on-account invoice.

Act to amend the heating supply act and the building act (municipalities' access to act as heating utilities as well as heating of buildings based on renewable energy etc.) (act no. 745 of 1 june 2015).

The Heating Supply Act has been amended, primarily to authorise in statute that municipalities can act as utility companies in the heating area. The purpose has been to provide clarity of both possibilities and limitations for municipalities in the heating area. Two new provisions were inserted in the part on prices, which is administered by DERA. Moreover, a number of minor amendments were made, including in the price differentiation provision.

The most significant change for DERA was the insertion of a provision in a new section 20c. Through a legislative amendment in 2012, heated water, steam or gas, except for natural gas, to heat buildings and supply them with hot water were removed from the price

regulation in the Heating Supply Act. Supply of heating for industrial processes was therefore no longer covered by the regulation of prices and could be carried out at market terms. Supply of heated water (not steam) from the CHP plants for industrial processes was exempt and continued to be covered by the regulation of prices.

By inserting the new section 20c in the Heating Supply Act, a heating-supply company that produces heated water etc. for both space heating and industrial processes in the same physical plant (co-production) must supply both services in accordance with the regulation of prices, unless the company reports costs allocation regarding the costs for space heating and process heating, respectively, to DERA. Heating supply companies have not always been aware of the purpose of the

heating etc. supplied. The purpose of the provision was therefore to allow production and supply of heated water etc. to be in accordance with the regulation of prices regardless of purpose, i.e. at the cost-determined price. If the company reports a costs allocation to DERA, the company will still be able to supply heating etc. for industrial processes on market terms.

The explanatory notes to the bill state that DERA must monitor whether the companies comply with the provision in the same way as DERA monitors the heating supply companies directly covered by the regulation of prices. Thus the insertion of the provision has led to an expansion of DERA's supervisory obligation, as in future DERA will also monitor whether the companies are complying with this provision.

In connection with the insertion of the provision in section 20c, section 21 was amended such that the obligation to report a costs allocation applies to all plants with combined production and not only waste incineration plants. This includes CHP plants producing electricity and heating, waste incineration plants carrying out waste management in addition to electricity production, and plants producing for both space heating and heating for industrial processes.

The price differentiation provision in the Heating Supply Act was amended such that all companies supplying services covered by the regulation of prices in the Heating Supply Act can differentiate prices between individual consumers, groups of consumers or geographical areas. Before this amendment, only collective heat supply plants could differentiate prices on the basis of the objective criteria that may be included in the differentiation. Regulation of prices covers more companies than the collective heat supply plants, such as CHP plants, and therefore the legislators found no reasons that these companies were to be excluded from the opportunity to carry out price differentiation.

The same legislative amendment stipulated requirements for heating distribution companies to make their services available to consumers on transparent, objective, fair and non-discriminatory conditions. Furthermore, the Minister was authorised to lay down regulations on heating supply outages, notice periods and binding periods with a view to committing heating distribution companies to ensuring consumer rights in connection with agreements on supply of services covered by the regulation of prices between consumers and these companies. Currently, the Minister has not used this authorisation to lay down more detailed regulations about this.

OTHER AUTHORITIES IN THE ENERGY AREA

The work of DERA borders up to other authorities which also have competence in the energy area: The Minister for Energy, Utilities and Climate, who is ultimately responsible for the energy area, the Danish Energy Agency, the Energy Board of Appeal, the Danish Competition and Consumer Authority, Energinet.dk (an independent public-sector company with a number of authority tasks in the electricity and natural gas sectors) as well as the Consumer Ombudsman.

The Department of the Ministry of Energy, Utilities and Climate is responsible for contact with the Danish Parliament, including the Parliament's Standing Committee on Energy, and it is responsible for legislation for the area etc.

The Danish Energy Agency is responsible for establishing the correct framework and tools for the energy area, ensuring security of energy supply, and making sure that developments are appropriate in a socio-economic, environmental and security context.

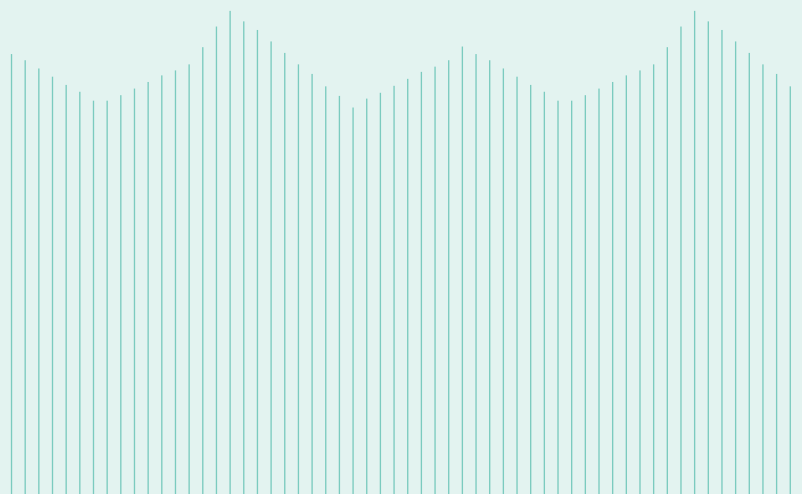
Energinet.dk owns the transmission grids for electricity and natural gas, however the company is also responsible for a number of other tasks, including upholding the overall security of supply in the electricity and gas areas in the short term as well as the long term, extending the overall Danish infrastructure in the electricity and gas areas, creating objective and transparent conditions for competition in the energy markets and monitoring that competition works, and implementing cohesive and holistic planning which includes future needs for transmission capacity and the long-term security of supply etc.

The Energy Board of Appeal processes appeals against decisions by the authorities in individual cases and appeals regarding misinterpretation of the legislation.

The Energy Supplies Complaint Board deals with personal complaints about purchase and supply of services from energy supply companies. The Complaint Board was set up on 1 November 2004 as a personal complaint board under the Consumer Complaints Act (forbrugerklagenævnsloven). The secretariat is managed by the Danish Competition and Consumer Authority.

The Danish Competition and Consumer Authority monitors that the liberalised companies are complying with competition legislation.

The Consumer Ombudsman supervises that the energy companies observe the Marketing Practices Act and other legislation to protect the consumers.



RESULTS AND CHALLENGES 2015 | DANISH ENERGY REGULATORY AUTHORITY

Carl Jacobsens Vej 35
DK-2500 Valby
Tel. +45 41 71 54 00
post@energitilsynet.dk
www.energitilsynet.dk

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DANISH ENERGY REGULATORY AUTHORITY, DERA

Carl Jacobsens Vej 35
DK-2500 Valby

Tel. +45 41 71 54 00

post@energitilsynet.dk
www.energitilsynet.dk
