

# CTR ANNUAL REPORT AND **FINANCIAL STATEMENTS 2009**



CTR - Centriskommunernes  
Transmissionselskab I/S



# PREFACE

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Globally and locally, the world today is faced with the enormous challenge from man-made changes in the global climate. At the climate summit in Copenhagen in December 2009, it was plain to see that the challenge has never been greater, more widely recognised or more urgent.

This is also true with regard to Denmark's capital city, yet there is one good reason to rejoice: we are in a reasonably good position to take up the challenge. We have an excellent foundation in terms of Copenhagen's heating supply. We have this because, more than 25 years ago, five municipalities – Frederiksberg, Gentofte, Gladsaxe, Copenhagen and Tårnby – were far-sighted enough to form the CTR I/S partnership for the purpose of securing for users a well-thought-out power and heating system for the long term.

Back then, the municipalities' own district heating companies expanded the district heating system, and under the auspices of CTR, a heat transmission grid was established which, combined with a comparable transmission grid in Vestegnen (West Greater Copenhagen), makes it possible for consumers in an entire region to draw on all the large CHP plants in the region. This means the purchase of heating from the production plants can be arranged so as to utilise surplus heat from power production and waste incineration in the best possible way.

As a result, the five municipalities make a combined saving each year of 955,000 tonnes of CO<sub>2</sub> compared to what the households would have used if they had their own oil-fired boilers instead of using district heating. And the result is an infrastructure that fulfils the key prerequisite for ensuring carbon-neutral heating supplies for the future.

In 2009, a large-scale analysis entitled "Heat Plan Greater Copenhagen" was conducted jointly by Vestegnens Kraftvarmeselskab I/S, Københavns Energi and CTR. The analysis shows different potential scenarios for future heating supplies, and one of the results is that, in the short term, a very substantial reduction in carbon emissions can be achieved if the heating and power producers convert their CHPs to use biomass instead of fossil fuels. A first step has been taken with Vattenfall's renewal of the oldest production plant at the Amager Power

Station. As from 2009, the renewed plant will be fuelled by biomass instead of coal, and in future CTR will buy one-third of the plant's district heating production. Further use of biomass is being discussed with both DONG Energy and Vattenfall.

Long term, the interconnected district heating system offers a unique opportunity for large-scale exploitation of geothermal energy and for using other renewable energy sources and surplus heat options for heating. The joint conversion to renewable energy which the district heating system allows for can be effected more economically than if the individual consumers each had to establish renewable energy solutions for their own homes.

CTR will continue its efforts to create world-class, climate-friendly heating. On behalf of CTR, I look forward to positive involvement on the part of the heating producers so that we can achieve the ambitious objectives set by each of the municipalities.



**Bo Asmus Kjeldgaard**

Mayor with responsibility for Technical and Environmental issues, City of Copenhagen  
*CTR chairman*

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## FIVE YEARS IN FIGURES

FINANCIAL FIGURES (MILLIONS OF DKK)	2005	2006	2007	2008	2009
Heating sales including sales of carbon quotas	1.445,9	1.494,8	1.464,1	1.525,9	1.710,4
Heating purchases including power supply to pumps	1.294,8	1.292,4	1.324,8	1.349,4	1.570,5
Profit on ordinary activities	151,1	202,4	139,2	176,5	139,9
Contribution ratio (%)	10,5	13,5	9,5	11,6	8,2
Other operating expenditure	85,4	86,8	92,3	88,2	97,9
Capital expenditure	91,5	56,2	26,1	31,6	24,2
Interest costs (net)	9,9	9,1	2,9	0,0	-3,6
Profit before depreciation, provision allowances and return on investment	57,8	108,6	46,5	88,3	41,9
Depreciation, provision allowances, yield geothermal and return on investment	-49,9	-75,0	-80,7	-87,7	-92,8
<b>Result for the year</b>	<b>8,0</b>	<b>33,6</b>	<b>-34,2</b>	<b>0,6</b>	<b>-54,4</b>
Average pool price (DKK/GJ)	80,00	80,00	84,00	87,00	92,0
Accumulated result	33,6	67,2	33,0	33,6	-20,8
Balance sheet	647,5	589,0	522,3	486,2	450,2
Long-term debt	173,6	231,2	174,7	154,2	133,6

STATISTICS	2005	2006	2007	2008	2009
Heating sales (TJ/year)	17.498	18.046	16.955	17.223	18.216
- Of which, sales to partner municipalities	17.349	17.586	16.698	16.841	17.626
- Sales to VEKS	149	460	257	382	590
Total heating purchases (including for VEKS) (TJ/year)	17.631	18.090	17.126	17.393	18.542
- Of which, waste incineration	3.790	4.322	4.629	4.963	4.623
- Geothermal	246	470	489	397	413
- Combined heat and power (CPH)	10.494	10.683	10.558	10.324	11.153
- Steam pool <sup>4</sup>	2.928	2.497	1.352	1.529	2.039
- Peak load HOB <sup>5</sup>	173	118	98	180	313
Heat loss (net loss and stand still heat) (TJ/year)	133	44	171	169	325
Water loss (m <sup>3</sup> /year)	89	77	40	75	95
Cooling (°C)	56	55	53	54	55
Electricity consumption (GWh) (from 2007, includes electricity for geothermal energy)	40	48	53	52	50
Accumulator at the Avedøre Power Station (TJ/year)					
- Delivered	503	346	324	536	540
- Received	399 <sup>1</sup>	294 <sup>2</sup>	297 <sup>2</sup>	498 <sup>2</sup>	463 <sup>3</sup>
Annual consumption reported for partner municipalities (TJ)	18.882	18.261	18.326	18.402	18.440
Connected production capacity (MJ/s)	1.972	1.958	1.958	1.958	1.931
Of which:					
- Base load	963	943	943	943	848
- Mid load	365	365	365	365	435
- Peak load	644	650	650	650	648
Maximum load (MJ/s)	1.301	1.443	1.337	1.330	1.368
Transmission lines in operation (km)	54	54	54	54	54
Number of stations in operation	34	34	34	34	34

1: Heating demand according to 2004 revision of the expansion plan connection values

2: Heating demand according to 2006 revision of the expansion plan connection values

3: Heating demand according to 2010 revision of the expansion plan connection values

4: Steam pool is a pool of different steam producing units in the area, some CHP and some HOB

5: HOB, heat only boiler



Copenhagen's waste is recycled or incinerated to become climate-friendly district heating for CTR's system

## DIRECTORS' REPORT 2009

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### 1: PURPOSE AND MAIN ACTIVITIES

CTR is a joint-municipal partnership established in 1984 by the municipalities of Frederiksberg, Gentofte, Gladsaxe, Copenhagen and Tårnby. CTR is regulated by the Local Government Act and comes under the supervision of central government administration on a par with a municipality.

In addition, as a district heating transmission company, CTR is regulated by the Danish Heat Supply Act.

The purpose of CTR is to purchase, transport and deliver

district heating and, in special situations, to supplement the districting heating by producing heat at its own peak-load plant. The heat is transported in a transmission network owned by CTR. Via CTR, heating users in CTR's partner municipalities are able to meet their heating requirements by utilising surplus heating from the waste incineration plants, CHPs, etc.

CTR is responsible for the planning, operation, financing and further development of the transmission system, including its own peak load and reserve plants. The transmission system consists of a supply network with two parallel

district heating pipes up to 900 mm in diameter, covering 54 km in length, predominantly underground. 1.6 km of this comprises CTR's tunnel drilled beneath the harbour fairway in Copenhagen. Three booster pumping stations and 26 heat exchanger stations ensure the heating is transferred to the local district heating systems in the partner municipalities. Fourteen peak-load plants – CTR is responsible for eight of these – ensure that, in particularly cold periods or in the event of insufficient capacity in the waste incineration facilities and CHP, there is sufficient heating for users of district heating in the central municipalities.

CTR is based at Frederiksberg, and from here, heating purchases, monitoring and delivery are controlled from a control room manned 24/7 via a digital control, regulation and monitoring system.

## 2: FINANCIAL DEVELOPMENT

CTR's key financial control parameter is self-financed. At the same time, the aim is for the pool price – the joint unit price for heating across all the partner municipalities – to develop evenly over a number of years. The benefit of uniform, even price development is that the municipalities which sell the heating are able to offer their users stability for one of the most important household running costs.

CTR made a loss of DKK 54.4 million in 2009, calculated in accordance with the rules of the Danish Heat Supply Act, where the items "return on injected capital" and "return on investments in geothermal heating production" are included in the calculation of the result.

At the start of 2009, CTR had an accumulated profit of DKK 33.6 million. The loss in 2009 eliminates this profit and results in an accumulated loss of DKK 20.8 million at the end of 2009. The expectation in the budget for 2009 was a loss of DKK 65 million. Capital reserves in the company at the end of the year amounted to DKK 34 million. The capital balance comprised injection capital from the company's establishment in 1984 of DKK 15 million and – since 2001 – approved return on injected capital of DKK 7 million, including compound interest in respect of 2003 and 2004 as approved by the Energy Board of Appeal. In addition, CTR's investments in the geothermal plant at Amager pursuant to Section 20b of the Danish Heat Supply Act generated accumulated returns of DKK 12 million.

Pursuant to the rules governing the presentation of municipal financial statements, operating activities in 2009 showed a profit of DKK 41.9 million, compared to the original budgeted profit of DKK 23.3 million. A comparison of the profit/loss from operating activities in 2008 shows a decrease of DKK 46.4 million.

The profit is deemed satisfactory as calculated both in accordance with the rules of the Danish Heat Supply Act and in accordance with the municipal form of presentation.

### Cash flow and financing

CTR's liquid funds as at 31 December 2009 amounted to DKK 137.2 million, deposited with Nordea Bank on day-to-day terms.

A further DKK 38.0 million is accessible as a credit facility under the rules of the Ministry of the Interior and Health. The credit facility was not utilised during the financial year.

At the end of the year, CTR's long-term loan obligations amounted to DKK 133.6 million. The loans are in Danish kroner, financed via KommuneKredit and interest is paid at a fixed rate until the end of the loan term in 2017.

### Financial risks

In line with normal practice, a specific assessment was made of material risks concerning the financial statements for the year.

Purchases of heating from the producers have not yet been calculated finally as at the financial year end. In collaboration with the producers, the value of purchased quantities of heating was assessed, and the anticipated difference between the value and the ongoing payments over the year resulted in accruals of the anticipated equalisation of negative and positive balances pertaining to the financial year.

Carbon quotas are administered based on an adopted risk policy for trading in carbon quotas, whereby it has to be respected that CTR does not enter into risky activities.

## 3: OPERATING ACTIVITIES

### Security of supply

CTR supplies district heating to approximately 250,000 homes via the five partner municipalities' distribution companies.

CTR's heating demand is covered by supplies from waste incineration facilities, CHPs, production of geothermal heat and heat production plants owned by partners, CTR or other regional heating supply companies as well as from major industrial companies and private district heating stations in the area.

The total subscribed capacity at the connected production plants amounts to 1,931 megajoules per second (MJ/s); of this, peak-load and reserve-load units account for a total of 648 MJ/s. Concerning security of supply of the system, CTR's design basis prescribes that surplus reserve capacity at a mean temperature over 24 hours of minus 12 degrees Celcius shall correspond to the largest production unit, which is Block 3 of the Amager Power Station at 330 MJ/s.

During CTR's hour of maximum delivery to stakeholder municipalities in 2009, total production of the CTR system was 1,368 MJ/s. Compared to the available capacity of 1,931 MJ/s, therefore, this left a reserve of 563 MJ/s available at

the time of maximum delivery. Overall, security of supply is unchanged compared to 2008.

### Heating purchases

For 2009, the scope of heating purchases amounted to 18,542 terajoules (TJ), of which 17,951 TJ was used to cover heating demand from the stakeholder municipalities. The difference of 591 TJ comprised sales of heating to Vestegnets Kraftvarmeselskab I/S (VEKS). The net loss can be specified as 325 TJ, corresponding to approx. 2 % of total purchases for partner municipalities, which is low compared with district heating distribution systems.

Compared to 2008, there was an increase in heating purchases of 1,149 TJ, or 6.6 %. The change in the purchase of heating should be compared to the change in the number of degree days, whereby there was an increase from 2008 to 2009 of 250 degree days, corresponding to a increase of 9.6 %.

The costs of heating purchases rose by 13.7 % compared to 2008, and the reason why the increase in costs is higher than the rise in quantity is that the distribution of the year's purchases was different from in 2008. Thus, less waste-to-energy was purchased, which is the least expensive to buy, and more power-planted heat was bought and heat purchased from the steam pool, and also more peak-load running was required, which is relatively more expensive to use.

The year's breakdown into different production categories of heating purchases for CTR's partners, including loss from its own grid, was as follows:

PRODUCTION PLANT	Realised 2008 (TJ)	Budget 2009 (TJ)	Realised 2009 (TJ)
Waste-to-energy	4.956	4.769	4.584
Geothermal plants	268	354	280
Power-planted heat	10.126	11.531	10.799
Steam pool	1.481	1.580	1.975
Peak-load	180	153	313
<b>Total heating purchases</b>	<b>17.011</b>	<b>18.387</b>	<b>17.951</b>

TJ = terajoule

2009 was warmer than the reference year, which resulted in lower-than-expected heating purchases.

Twenty-five per cent more was purchased from the steam pool, and peak-load heating purchases were at least twice as much as had been budgeted for, due in part to the cold periods in January and December, and in part to the many production stoppages at the Amager Power Station during the year.

### Heating sales

Compared to sales in 2008, the year's heating sales to the five partner municipalities showed an increase of 5.8 %, which should be seen in relation to the degree-day increase of 9.6 %.

RECIPIENT	Realised 2008 (TJ)	Budget 2009 (TJ)	Realised 2009 (TJ)
Frederiksberg	2.634	2.870	2.761
Gentofte	1.064	1.101	1.140
Gladsaxe	400	450	420
Copenhagen	12.098	13.079	12.626
Tårnby	645	707	678
<b>Total, municipalities</b>	<b>16.841</b>	<b>18.207</b>	<b>17.625</b>
VEKS	382	1.017	590
<b>Total sales</b>	<b>17.223</b>	<b>19.224</b>	<b>18.215</b>

TJ = terajoule

Gentofte, Gladsaxe and Tårnby did not have any changes in customer connections and their heating purchases were also largely unchanged in 2009 compared to 2008 despite the higher number of degree-days in 2009. The unchanged level of heating purchases is therefore assumed to be the result of energy savings by those partner municipalities. Increased heating sales to Copenhagen and Frederiksberg are attributable to the connection of new customers, who more than offset the larger number of degree-days and the energy savings achieved in the municipalities.

The pool price for 2009 in the form of a uniform price for all heating purchases was DKK 92.00 per GJ. The pool price comprises a fixed element and a variable element. The pool price achieved can vary in relation to the fixed price, depending on heating sales. The realised pool price achieved in 2009 amounted to DKK 92.50 per GJ.

CTR's costs for the purchase of electricity for pumping fell by 10.4 % in 2009. The amount of kilowatt-hours (kWh) of electricity has decreased by 3 % as a result of changes in supply temperatures and operating conditions at the producers as well as cost-cutting measures implemented by CTR. On average, power consumption per heating unit decreased from 2.99 kWh of electricity per GJ of heating to 2.72.

### Maintenance

Total operating and maintenance costs in the transmission system during the financial year amounted to DKK 674 million. Operation costs for stock of spare parts, supplementary feed water and part flow cleaning account for DKK 5.5 million of this. Annual maintenance costs account for DKK 61.9 million, an increase of DKK 4.3 million compared to 2008.

Maintenance costs cover costs pertaining to buildings and sites, plant and mains, operation of IT installations including control, regulation and monitoring, as well as adjustments concerning the use of components in stock such as plates, wearing parts, etc.

Both preventive and remedial maintenance are undertaken by external suppliers for CTR. CTR has entered into multi-year service agreements with parties including the partner municipalities' operational organisations, which undertake ongoing servicing of the distribution system, stations and peak-load plants.

#### 4: CAPITAL EXPENDITURE

Since the establishment of CTR in 1984 and through to the end of 2009, investments in CTR's supply system consisting of mains, stations, peak-load plants, control, regulation and monitoring systems, spare-parts stocks, etc., have accounted for DKK 3,068 million. Civil engineering works in progress at the end of 2009 amounted to DKK 9.1 million.

With reference to the Danish Heat Supply Act and the depreciation policy applied by CTR prior to the depreciation regulation, the value of CTR's operational plants and systems at the end of 2009 was DKK 68 million. Using the rules of the Ministry of the Interior and Health governing the presentation of municipal financial statements, the value is DKK 1,488 million. Within the current construction phase from 1 January 2006 to 31 December 2009, systems worth DKK 215 million (according to the latest approved planning estimates), out of a four-year construction framework of DKK 295 million, were put into operation during the first four years.

##### Activities concluded in 2009

The value of CTR's systems increased by DKK 17 million, with CTR's exchange stations accounting for DKK 4 million. The exchange stations ensure that the heating is transferred from CTR's transmission pipes to the partner municipalities' distribution systems. The exchange stations are currently undergoing multiyear upgrade programmes involving the renewal of the electrical pump controls, improvements in

water purification and modernisation of the pressurisation system. These measures help to ensure the quality of heating deliveries to the partner municipalities as well as the service life of the entire transmission system.

Investments of DKK 1.6 million pertain to CTR's peak and reserve load stations, which are used in situations where there is a shortage of heating from the CHPs or during particularly cold periods.

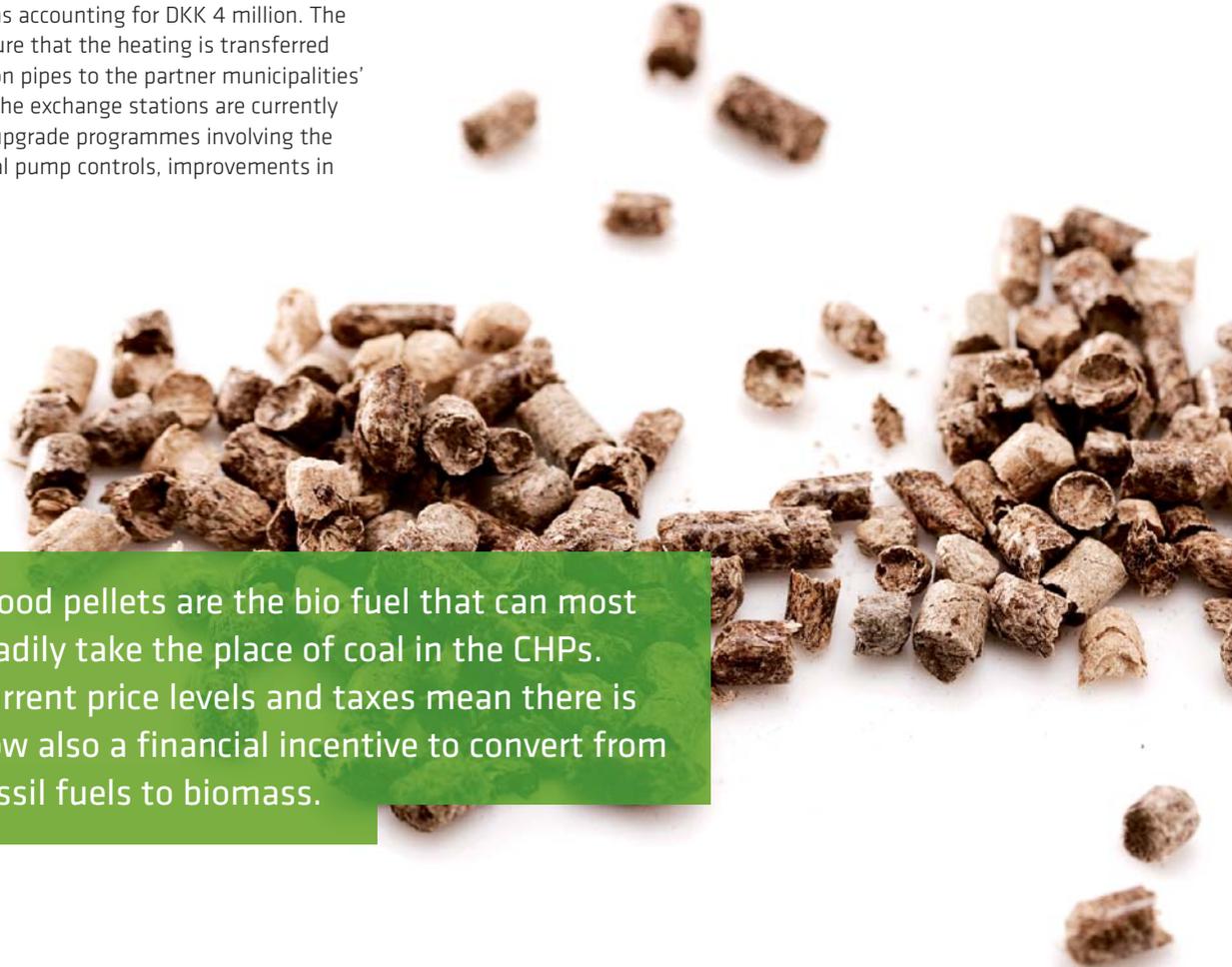
Other investments, totalling DKK 11.4 million, primarily concern investments in the combined control, regulation and monitoring systems.

#### 5: MANAGEMENT AND ORGANISATION

CTR's management has two members, and the total number of employees in 2009 was 28.

CTR is a member of the Danish District Heating Association, and CTR's managing director is technical deputy chairman of the board of the Danish District Heating Association.

CTR is a member of the Danish Board of District Heating (DBDH) export organisation and in this context receives visits from delegations and individuals from Denmark and abroad addressing matters relating to the Danish CHP concept in general and large-scale systems in particular.



Wood pellets are the bio fuel that can most readily take the place of coal in the CHPs. Current price levels and taxes mean there is now also a financial incentive to convert from fossil fuels to biomass.

Similarly, CTR also participates in campaigns abroad together with the DBDH and also contributes to international conferences. CTR is a member of the World Energy Council (WEC) with a view to participation in collaborative ventures in the field of district heating.

CTR's management also participates in exchanges of knowledge with foreign companies or politicians who are interested in expanding district heating. CTR's deputy director participates as a technical expert in connection with research projects under the auspices of the International Energy Agency IEA and assists the Danish Energy Agency in assessing proposals for Danish research projects. CTR's deputy director serves as chairman of the Danish standards group for district-heating pipe systems under Dansk Standard (DS) and participates actively in the European Committee for Standardization (CEN) in the field of district heating.

#### **Varmelast.dk**

CTR has an agreement concerning heating capacity collaboration with Vestegnens Kraftvarmeselskab I/S (VEKS) and Københavns Energi Varme P/S (KE). An operational unit as part of this venture – Varmelast.dk – is responsible for establishing the next 24 hours' heating requirements and for submitting daily orders for heating supplies from DONG Energy's and Vattenfall's CHPs using agreed criteria. These criteria ensure overall optimum utilisation of the power and heat production of the plants. Varmelast.dk is physically located at CTR, and CTR's control room serves as operator in collaboration with the control room at VEKS. CTR's financial stake in the venture is 55 %.

In 2009, the agreed procedures between the CHPs and Varmelast.dk were consolidated, and procedures were adjusted with a view to providing incentives for further optimisation of load distribution. In April 2009, Varmelast.dk took over load distribution of the steam network from DONG Energy, and CTR's control room took over monitoring the steam network once Block 1 at the Amager Power Station had been commissioned. Varmelast.dk has further developed tools to assess actual operation of the power stations, and a stronger focus has been put on reinforcing collaboration between the producers and the heating companies' control rooms.

## **6: EXPECTATIONS FOR THE YEARS AHEAD**

The financial result for 2010 was originally budgeted as a loss of DKK 44 million, but is now expected to be a profit of DKK 88 million because, using updated prognoses from the producers, the costs of heating purchases are expected to be considerably lower than when the pool price was set for 2010.

CTR's cash position is constantly monitored, and CTR takes loans to an extent equivalent to the investments of the current year and the years ahead. In 2010, CTR is also taking a loan to pre-pay CTR's share of the costs of establishing the recently renovated Block 1 at Amager Power Station, owned by Vattenfall. The objective of pre-payment is to save interest on capital expenditure which would otherwise have to be paid continuously via the price of heating purchases including interest to Vattenfall. Depreciation of the intangible asset is incorporated into CTR's pool price as a heating purchase cost.

In 2009, the Danish Parliament adopted a tax package that changes the previous rules regarding tax on combined heat and power, especially for deliveries from the central CHPs. The tax conversion results in significantly higher tax payments for the heat CTR buys from DONG Energy and Vattenfall. As a result of this, the rise in the pool price in 2010 was higher than for a normal price rise, and it was thus not possible to uphold the long-term trend where the increase in the pool price did not increase more than the retail price index over the years.

It should be noted that DONG Energy has informed the Danish Tax and Excise Administration that payment of fuel duty in respect of Block 8 of the H.C. Ørsted Power Station in the period 2004-2009 should be calculated according to a different thermal efficiency ratio than that assumed by the administration. This corresponds to a smaller tax cost for CTR of DKK 4 million per year over that period.

#### **Heat Plan Greater Copenhagen**

Together with VEKS and KE, CTR conducted an analysis which resulted in the report, "Heat Plan Greater Copenhagen". The report presents four heating supply scenarios in the combined supply area of the three companies. Calculations were made in respect of future supplies for 2025, and the long-term view for 2050 was also considered. The results indicate that a rapid conversion to increasing the use of biofuels at the CHPs will be appropriate both financially and environmentally. In the long term, the use of geothermal energy on a larger scale is also deemed relevant.

In continuation of "Heat Plan Greater Copenhagen", studies into future options for heating supplies are also being conducted. Together with VEKS and KE, CTR is analysing the future structure of the transmission network. In this connection, new supply line sections from the Avedøre Power Station to the H. C. Ørsted Power Station and from Gentofte to Lyngby are also envisaged. The supply of the converted steam network in Copenhagen, the conversion of natural gas into district heating in Gladsaxe and Gentofte as well as supplying heating to customers in Lyngby are included in the analyses. Studies are also examining how new end-customer connections can be supported with incentives from CTR.

Finally, studies are under way to examine the technical and economic feasibility of increased heat storage throughout the system, and geothermal collaboration, Copenhagen is heading up an analysis of opportunities for widening the use of geothermal energy in Copenhagen.



Increasing the use of biofuel will make for more climate-friendly heating in the future. The Amager and Avedøre power stations can both use straw for the production of combined heat and power.

Expectations concerning heating purchases from CHPs  
In line with "Heat Plan Greater Copenhagen", heating purchases from DONG Energy's and Vattenfall's CHP units are expected to be based more and more on biomass.

Commissioning of the recently rebuilt coal/wood pellet-fired Unit 1 at Amager Power Station has proved considerably more complex than anticipated, and the completion of guarantee tests and the official opening did not occur until 2010. The unit is to supply hot water to CTR and steam and hot water to KE. Future use of the unit will bring with it a transition from fossil fuels to wood pellets, and it is anticipated that heat production based on wood pellets will constitute more than the guaranteed 40 %.

In 2010, CTR and VEKS expect to enter into an agreement with DONG Energy concerning a change in the use of fuel at the Avedøre Power Station. Both units at the station are ripe for conversion - Unit 2 into being coal-fired, and Unit 1 into being biomass-fired. An agreement is generally expected to increase the use of biomass for heat supplies and thus reduce carbon emissions from heat production. The project involves investing in heating-related systems at the Avedøre Power Station and, on the basis of the currently applicable prerequisites, looks set to usher in lower prices for heating, all things being equal. CTR has also entered into negotiations with Vattenfall concerning wood pellet firing in Unit 3 of the Amager Power Station.

### Construction activities

In 2009, Carlsberg expected to begin urban development of "Our town" on the Carlsberg site. The project is behind schedule, however, so replacement peak and reserve load capacity are still required, and during a transition period CTR will cover this by means of subscription, but this will come to an end as and when the urban development goes ahead. CTR has agreed with KE that, over time, the peak and reserve load unit will be replaced by a new main pipe connection to the heat exchanger station on Vigerslev Allé.

Establishment of the new Metro City Ring means that CTR's mains must be re-routed at Vasbygade and Østerport Station over the next few years, and the work has already begun at Vasbygade. In addition, supply lines have to be re-routed at Strandvænget in connection with the establishment of a new road "Nordhavnsvej"

Over the next few years, civil engineering works are anticipated in connection with ongoing updating of technical installations. This applies, for instance, to the substation upgrade project for CTR's control, regulation and monitoring systems.

Concurrent with the planned conversion from natural gas to district heating for customers currently receiving natural gas in Gentofte and Gladsaxe, minor expansions of the transmission system will be required.

At the power stations, there are plans to upgrade certain heating installations to guarantee water quality and to further optimise operations.

# GENERAL ACCOUNTING POLICIES

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The financial statements are presented as an income statement and balance sheet with associated notes in accordance with operating policies in line with the provisions of the Danish Heat Supply Act in this regard.

Geothermal energy has special potential as a renewable energy source in the Copenhagen area. Geothermal systems are very inexpensive to operate, but the economic factors relating to expanding the production of geothermal energy remain uncertain.

## **2009 FINANCIAL STATEMENTS PURSUANT TO THE DANISH HEAT SUPPLY ACT**



## ACCOUNTING POLICIES APPLIED TO THE PREPARATION OF OPERATING ACCOUNTS PRESENTED IN ACCORDANCE WITH THE PROVISIONS OF THE DANISH HEAT SUPPLY ACT

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### Accruals

Expenditure and income are attributed to the financial year to which they pertain, irrespective of the time of payment. Thus, expenditure is recognised in the year when goods or services were received, and the income in the year in which rights were acquired; however, cf. the item concerning carbon quotas.

### Capital expenditure

In the operation specifications, directly attributable expenditure on assets, excluding interest during construction, are recognised under the items "civil engineering works in progress" and "commissioned plants and systems". Then depreciation is applied to commissioned plants and systems in accordance with the provisions of the Danish Heat Supply Act governing this.

Depreciation by the straight-line method is applied to construction stages, whereby plants/systems commissioned before 1 January 1992 were fully depreciated in 2002, whereas plants/systems commissioned in 2003 up to and including 2004 were fully depreciated at the end of 2009, irrespective of when they were commissioned. Plants/systems commissioned after this time are successively depreciated over 5 years.

### Provisions

In some financial years (1986, 1987, 1991, 1994, 1997, 1998, 1999, 2004), calculated provisions for future capital investments were recognised as expenditure in accordance with the stipulations of the Danish Heat Supply Act in this regard. The provisions made are offset in subsequent years on the basis of depreciation of commissioned plants/systems.

### Return on injected capital

An application has been made to DERA for approval to recognise the return on injected capital. DERA had not given approval by the end of the financial year. The financial

statements do not recognise return on injected capital; instead, provision was made in the amount of DKK 2,843,494 to cover the return on injected capital in respect of 2008 and 2009 as well as returns on interest earned in years 2005 to 2009.

### Operating stocks

Purchases for operating stocks are recognised as expenditure at cost price in the financial statements as the components are put into use, and accordingly the closing value of operating stocks is not recognised as an asset in the accounts.

### Capital reserves

Pursuant to the Danish Heat Supply Act, capital reserves are calculated as the stakeholders' injection of capital with the addition of interest on the capital injected, together with the return from geothermal systems. In addition, compound interest from previous years is included in respect of the financial years 2003 and 2004, which is in accordance with the ruling of 17 September 2007 by the Energy Board of Appeal. Similar practice in respect of 2005 and the years that followed is on hold pending approval by DERA.

### Carbon quotas

Surplus carbon quotas acquired in return for payment are recognised in the financial statements as intangible fixed assets. Carbon quotas are measured at acquisition cost. Revenue from sales of surplus carbon quotas are recognised in the income statement at the time of realisation. Any deficiency in carbon quotas in terms of carbon emissions by stakeholders is recognised in the income statement on an ongoing basis. Deficiencies in carbon quotas are measured at the price in effect on the balance sheet date. To the extent that it is deemed probable that deficient carbon quotas will not be acquired by 30 April in the year following the financial year, an additional charge of EUR 40 per quota is recognised in the accounts.

# INCOME STATEMENT

1 JANUARY - 31 DECEMBER

NOTE	DKK	2008	2009
<b>INCOME</b>			
	Heating sales	1.525.867.498	1.684.839.724
	Sale of surplus carbon quotas	2.842	25.525.143
	<b>Total income</b>	<u>1.525.870.340</u>	<u>1.710.364.867</u>
<b>EXPENDITURE</b>			
<b>OPERATION</b>			
	Heating purchases	-1.302.003.810	-1.528.009.541
	Electricity for pumps	-47.409.980	-42.491.075
1	Depreciation	-83.555.281	-86.933.901
2	Return on injected capital	0	0
2	Return from geothermal systems	-3.000.000	-3.000.000
2	Provision for interest	-1.125.000	-2.843.494
3	Operation and maintenance	-63.532.519	-67.435.489
	<b>Total, operation costs</b>	<u>-1.500.626.590</u>	<u>-1.730.713.500</u>
<b>ADMINISTRATION</b>			
	Salaries	-14.737.474	-18.249.717
	External services	-5.898.130	-8.542.108
	Other administrative costs	-3.999.834	-3.698.395
	<b>Total, administrative costs</b>	<u>-24.635.438</u>	<u>-30.490.220</u>
<b>FINANCING COSTS</b>			
	Interests of loans	-5.572.008	-4.869.832
	Other interests	-158	-887.992
		<u>-5.572.166</u>	<u>-5.757.824</u>
	Interest on liquid funds, etc.	5.530.224	2.186.090
	<b>Total financing costs</b>	<u>-41.942</u>	<u>-3.571.734</u>
	<b>RESULT SUBSEQUENT TO BE INCLUDED IN HEAT PRICES</b>	<b>566.370</b>	<b>-54.410.587</b>

## BALANCE SHEET

### ASSETS AND LIABILITIES

NOTE	DKK	2008	2009
<b>ASSETS</b>			
	Land	544.300	544.300
4	<b>CONSTRUCTION WORK IN PROGRESS</b>		
	Heating pipes	723.541	3.992.927
	Exchange and pumping stations	480.692	1.252.809
	Peak-load systems	399.825	3.869.068
	Control and monitoring systems	342.008	21.670
	<b>Constructing work in progress, total</b>	<u>1.946.066</u>	<u>9.136.474</u>
5	<b>COMMISSIONED PLANTS/SYSTEMS</b>		
	Commissioned plants/systems	137.735.953	67.809.875
<b>LIQUID FUNDS</b>			
	Cash balance	1.347	4.907
	Bank accounts	151.488.852	137.236.073
	<b>Liquidfunds, total</b>	<u>151.490.199</u>	<u>137.240.980</u>
<b>OTHER RECEIVABLES</b>			
	Short-term receivables	194.517.293	265.528.525
7	<b>HEATING PRICE ADJUSTMENT</b>		20.826.750
	<b>TOTAL ASSETS</b>	<b>486.233.811</b>	<b>501.086.904</b>
<b>LIABILITIES</b>			
<b>CAPITAL RESERVES</b>			
	Injected capital from partners	15.000.000	15.000.000
	Accumulated return on injected capital	7.026.161	7.026.161
	Accumulated return from geothermal plant	9.000.000	12.000.000
	<b>Capital reserves, total</b>	<u>31.026.161</u>	<u>34.026.161</u>
<b>PROVISIONS</b>			
2	Provision for yield on equity	1.125.000	3.968.494
<b>DEBTS</b>			
	Short-term debt	266.332.146	329.481.138
<b>LOANS</b>			
6	Long-term loans	54.166.667	133.611.111
7	<b>HEATING PRICE ADJUSTMENT</b>	33.583.837	0
	<b>TOTAL LIABILITIES</b>	<b>486.233.811</b>	<b>501.086.904</b>

#### Contingent liabilities

Service contracts were entered into for a combined amount of DKK 14,083,563 per year. Either party can terminate the contracts with one year's notice from the start of a calendar year.

**NOTE 1: DEPRECIATION**

Depreciation by the straight-line method is applied to construction stages, whereby plants/systems commissioned before 1 January 1992 were fully depreciated in 2002, whereas plants/systems commissioned in 2003 up to and including

2004 were fully depreciated in 2009, irrespective of when they were commissioned. Plants/systems commissioned after this time are successively depreciated over 5 years.

**NOTE 2: OPERATION AND MAINTENANCE**

DKK	2008 FINANCIAL STATEMENTS	ORIGINAL BUDGET 2009	BUDGET INC. ADDITIONAL APPROVALS 2009	2009 FINANCIAL STATEMENTS
General maintenance	7.846.090	9.990.000	9.990.000	7.620.000
Preventive maintenance	18.344.200	20.350.000	20.350.000	19.063.498
Sale of supplementary feedwater	-1.517.570	-1.500.000	-1.500.000	-1.665.531
Purchase of supplementary feedwater	2.630.022	3.200.000	3.200.000	604.833
Sale of subflow cleansing	-157.054	-300.000	-300.000	-65.177
Purchase of subflow cleansing	716.808	550.000	550.000	551.261
Service contracts	16.970.866	19.000.000	19.000.000	14.083.563
Remedial maintenance	14.415.947	25.800.000	25.800.000	21.482.510
Plate storage	0	0	0	-264.565
Site lease	1.750.766	2.000.000	2.000.000	1.703.853
Operating stocks	2.532.444	4.600.000	4.600.000	4.321.244
<b>OPERATIONS AND MAINTENANCE, TOTAL</b>	<b>63.532.519</b>	<b>83.690.000</b>	<b>83.690.000</b>	<b>67.435.489</b>

**NOTE 3: CIVIL ENGINEERING WORKS IN PROGRESS**

BALANCE	BALANCE AS AT 1 JANUARY 2009	ADDITIONS DURING THE YEAR, BUDGET	ADDITIONS DURING THE YEAR, FINANCIAL STATEMENTS	PLANTS SYSTEMS COMMISSIONED	BALANCE AS AT 31 DECEMBER 2009
DKK					
Heating pipes	723.541	3.384.092	6.264.000	114.706	3.992.927
Exchange and pumping stations	480.692	4.817.105	17.441.000	4.044.989	1.252.809
Peak-load systems	399.825	4.710.583	5.450.000	1.241.340	3.869.068
Control and monitoring	342.008	11.090.865	16.750.000	11.411.203	21.670
CTR buildings	0	195.585	0	195.585	0
<b>CIVIL ENGINEERING WORKS IN PROGRESS, TOTAL</b>	<b>1.946.066</b>	<b>24.198.230</b>	<b>45.905.000</b>	<b>17.007.823</b>	<b>9.136.474</b>

**NOTE 4: PLANTS/SYSTEMS COMMISSIONED**

	BALANCE AS AT 1 JANUARY 2009	ADDITIONS IN RESPECT OF 1986-2008	PLANTS-SYSTEMS COMMISSIONED 2009	BALANCE AS AT 31 DECEMBER 2009
DKK				
Heating pipes	1.592.318.759	0	114.706	1.592.433.462
Exchange and pumping stations	589.677.514	0	4.044.989	593.722.504
Tunnel system	123.135.966	0	0	123.135.966
Peak-load systems	507.092.466	0	1.241.340	508.333.806
Control and monitoring	103.569.406	0	11.411.203	114.980.609
Planning, operation and maintenance	21.799.570	0	0	21.799.570
Other facilities	96.636.455	0	0	96.636.455
Warehouse and administration buildings	17.147.603	0	195.585	17.343.188
<b>PLANTS/SYSTEMS COMMISSIONED, TOTAL</b>	<b>3.051.377.739</b>	<b>0</b>	<b>17.007.823</b>	<b>3.068.385.560</b>
Provisions made in 1986, 1987, 1991, 1994, 1997, 1998, 1999 and 2004	-	-	-	-293.300.000
<b>Depreciation basis</b>	-	-	-	<u>2.775.085.560</u>
Balance as at 31 December 2009	-	-	-	3.068.385.560
Offset provisions	-	-	-	-293.300.000
				<u>2.775.085.560</u>
Accumulated depreciation				
Balance as at 1 January 2009	2.620.341.784			
Depreciation for the year	86.933.901			-2.707.275.685
<b>BALANCE, PLANTS/SYSTEMS COMMISSIONED, AS AT 31 DECEMBER 2009</b>				<b>67.809.875</b>

**NOTE 5: LONG-TERM LOANS**

DKK	REMAINING LOAN, CLOSING BALANCE	RATE, CLOSING BALANCE	FALLING DUE WITHIN 1-5 YEARS	FALLING DUE AFTER 5 YEARS	TOTAL
KOMMUNEKREDIT	133.611.111	100,00	102.777.778	30.833.333	<b>133.611.111</b>

**NOTE 6: HEATING PRICE ADJUSTMENT**

DKK	2008	2009
Balance as at 1 January	33.017.467	33.583.837
As per income statement	566.370	-54.410.587
	<b>33.583.837</b>	<b>-20.826.750</b>

**ADDITIONAL NOTE: PARTNER MUNICIPALITIES SHARES IN INVESTMENTS AND BORROWING, ETC.**

BREAKDOWN	%	THE YEAR'S INVESTMENTS	BORROWING	DEBT COMMITMENT
Copenhagen	69,0	16.696.779	0	319.533.652
Frederiksberg	16,0	3.871.717	0	74.094.760
Gentofte	6,5	1.572.885	0	30.100.996
Tårnby	5,0	1.209.911	0	23.154.612
Gladsaxe	3,5	846.938	0	16.208.229
	<b>100,0</b>	<b>24.198.230</b>	<b>0</b>	<b>463.092.249</b>



## STATEMENT BY THE MANAGEMENT AND BOARD ON THE FINANCIAL STATEMENTS PURSUANT TO THE DANISH HEAT SUPPLY ACT

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The management and board have this day presented the 2009 Financial Statements of Centralkommunernes Transmissionsselskab I/S. The financial statements are presented in compliance with the provisions of the Danish Heat Supply Act in this regard. We consider the accounting principles applied to be appropriate, and in our opinion, the Annual Accounts present a true and fair picture of the partnership's assets, liabilities and financial position as at 31 December 2009 as well as of the financial results of the activities of the partnership in the 2009 financial year.

Copenhagen, 27 May 2010

### MANAGEMENT

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Inga Thorup Madsen  
*Managing Director*

Jan Elleriis  
*Deputy director*

### BOARD

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Bo Asmus Kjeldgaard  
*Chairman*

Nils-Ole Heggland  
*Vice-chairman*

Jesper Schou Hansen

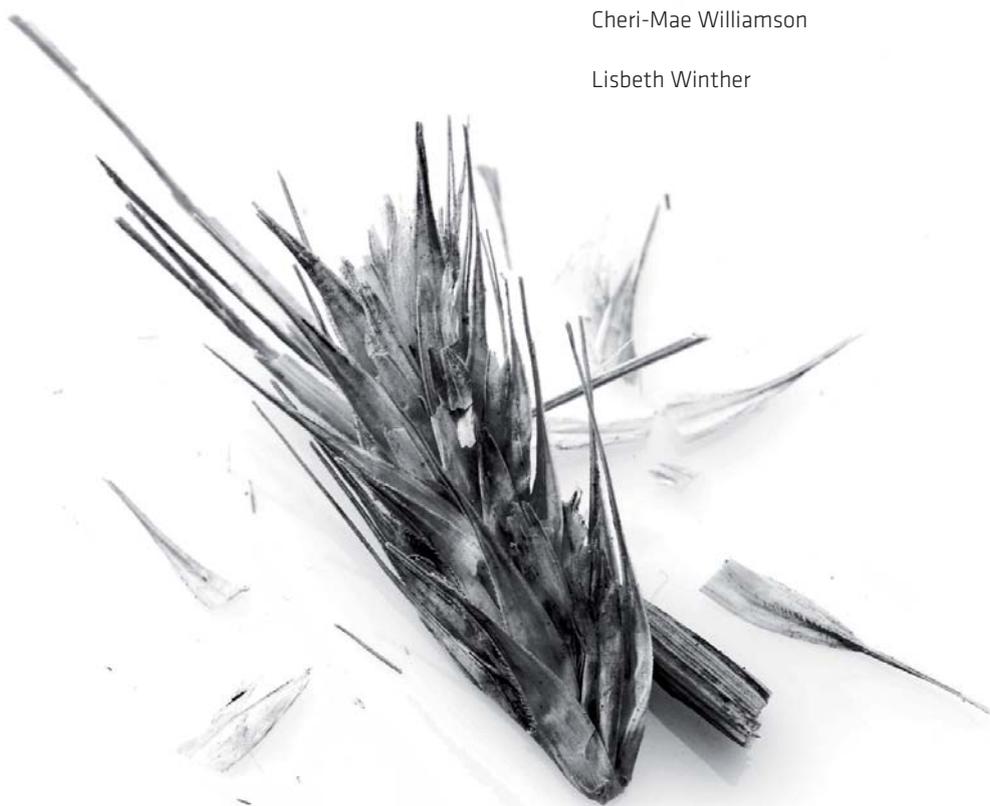
Jakob Hougaard

Axel Lunddahl

Lars Brandstrup Nielsen

Cheri-Mae Williamson

Lisbeth Winther



# AUDITORS' REPORT ON THE FINANCIAL STATEMENTS PURSUANT TO THE DANISH HEAT SUPPLY ACT SUBMITTED BY INDEPENDENT AUDITORS

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We have audited the financial statements of Centralkommunernes Transmissionselskab I/S for the financial year 1 January – 31 December 2009, which were presented in accordance with the Danish Heat Supply Act, and appear on pages 13–19.

## **Management responsibility for presenting the financial statements**

The Management and Board are responsible for preparing and presenting financial statements that give a true and fair view in accordance with the Danish Heat Supply Act. This responsibility includes formulating, implementing and maintaining internal controls that are relevant to the preparation and presentation of financial statements that give a true and fair view, without material misstatement, whether such misstatements are due to fraud or error, as well as the selection and application of appropriate accounting principles and the accounting estimates carried out, which are reasonable considering the circumstances.

## **Auditors' responsibility and the audit**

Our responsibility is to express an opinion concerning the financial statements, based on our audit. We executed our audit in accordance with Danish auditing principles and generally accepted public auditing standards. This requires us to live up to ethical requirements and to prepare and execute the audit with a view to achieving a high degree of certainty that the financial statements are free from any material misstatements.

An audit includes procedures to obtain audit evidence of the amounts and information given in the financial statements. The procedures selected depend on the assessment of the auditors, including assessment of the risk of material misstatements in the financial statements, regardless of whether such misstatements are due to fraud or error. In assessing risk, auditors consider internal controls relevant to the partnership's preparation and presentation of financial statements that give a true and fair view, with a view to formulating audit procedures that are appropriate to the circumstances, but not for the purpose of expressing a conclusion concerning the efficacy of the partnership's internal controls. An audit also involves assessing whether the accounting policies used by the management are appropriate, whether the accounting estimates made by management are reasonable, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence obtained is sufficient and provides a suitable basis for our opinion.

The audit has not given rise to any qualification.

## **Conclusion**

In our opinion, the financial statements give a true and fair view of the partnership's assets, liabilities and financial position as at 31 December 2009. It is also our opinion that the result of the partnership's activities in the financial year 1 January – 31 December 2009 is in accordance with the statutory requirements concerning the submission of financial statements proceeding from the Danish Heat Supply Act and the policies described on page 14.

## **Report on performance audit performed**

In connection with the financial audit of the partnership's 2009 Financial Statements, we have assessed whether due financial consideration has been given to economy in the administration of the partnership.

## **Management's responsibility**

The Management and Board are responsible for establishing guidelines and procedures to ensure that due consideration is given to economy in the administration of Centralkommunernes Transmissionselskab.

## **Auditor's responsibility and performance audit performed**

In accordance with good public auditing practice, we have examined whether Centralkommunernes Transmissionselskab has established procedures ensuring economically expedient administration of the organisation. Our work was performed to obtain limited assurance that the administration of the selected areas has been undertaken in an economical manner.

## **Conclusion**

Based on our performance audit, nothing has come to our attention that causes us to conclude that the administration in 2009 in the areas we have examined has not been undertaken in an economically expedient manner.

Copenhagen, 27 May 2010

## **Deloitte**

*Statsautoriseret Revisionsaktieselskab*

*Keld Østerdal, State-authorized public accountant  
Preben Bøgeskov Eriksen, State-authorized public accountant*

## **Ernst & Young**

*Godkendt Revisionspartnerselskab*

*Bo Colbe, State-authorized public accountant  
Carsten Blicher, State-authorized public accountant*

## INFORMATION CONCERNING THE PARTNERSHIP

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### **PARTNERSHIP**

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### **Management**

Inga Thorup Madsen, managing director  
Jan Elleriis, deputy director

### **Auditors**

Deloitte Statsautoriseret Revisionsaktieselskab  
and  
Ernst & Young Godkendt Revisionspartnerselskab



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Advice A/S

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